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September 2, 2020

Mr. Matthew Dunham
Project Manager
Division of Environmental Remediation
Remedial Bureau E, 12th Floor
New York State Department of Environmental Conservation
625 Broadway
Albany, New York 12233-7016

Subject: **Dinaburg Distributing, Inc. (NYSDEC Site 828103)**
July 2020 Groundwater Sampling Report
MACTEC Engineering and Geology, P. C., Project No. 3617187420

Dear Mr. Dunham:

MACTEC Engineering and Geology, P.C. (MACTEC), under contract to the New York State Department of Environmental Conservation (NYSDEC) is submitting this Letter Report (Report) for groundwater sampling at the Dinaburg Distribution, Inc. site (Site). The Site is listed as Class 2 hazardous waste Site No. 828103 in the Registry of Hazardous Waste Sites in New York State (Figure 1). This Report has been prepared in accordance with the NYSDEC requirements in Work Assignment No. D007619-44.

OBJECTIVES

This Report presents results of groundwater monitoring of site contaminants. The purpose of the sampling is to assess if there are any temporal trends in groundwater conditions at and in the vicinity of the Site and to monitor effects of the electrical resistance heating (ERH) remedial action conducted in the contaminant source area from May through December 2015. ERH was chosen as the approved remedial approach for the Site as outlined in the Record of Decision (ROD) (NYSDEC, 2011). Implementation of the site remedy is described in the Construction Completion Report (MACTEC, 2017a).

BACKGROUND

The Site is located at 1012 South Clinton Avenue in the City of Rochester in Monroe County, New York (see Figure 1). The property, vacant since 1995, consists of two parcels totaling 0.25 acres and is located in a mixed commercial/residential area just inside the Rochester City limits.

The property and buildings were reportedly used as an automobile repair shop from around 1950 through approximately 1969. From 1971 to 1993, the Site was occupied by Dinaburg Distributing, Inc., which operated a dry-cleaning supply company and sold chemical solvents to various dry cleaners in the area. Dinaburg stored trichloroethylene (TCE) and tetrachloroethene (PCE) in above ground storage tanks located within the north area of the former site building. Because of previous site operations, solvents and fuels were either spilled to the ground surface or to floor drains, where they flowed/leaked into the soils at the Site. The former site building and an adjacent house at 350 Benton Street were demolished in 2004 (MACTEC, 2011).

Previous investigations at the Site identified high concentrations of PCE, TCE, and their breakdown products in Site soils and groundwater. Previous remediations at the Site included a multi-phase extraction system (MPE) installed in shallow overburden that ran from 2006 to 2011 and an ERH system installed to the top of bedrock that ran from May to December 2015. The ERH system was installed as per the 2011 ROD (NYSDEC, 2011).

Several rounds of groundwater samples have been collected post the ERH remedial action, including the installation and sampling of additional wells as part of the Operable Unit 2 (groundwater) RI conducted in 2018 and 2019.

The groundwater sampling conducted in July 2020 described in this Report includes the collection and analysis of groundwater from the same wells 33 wells sampled in November 2018 and February 2019 during the OU2 RI.

FIELD ACTIVITIES

The performance of this field work was governed by MACTEC's Field Activities Plan (MACTEC, 2018). The NYSDEC call-out contractor TestAmerica Laboratories, Inc., provided the laboratory analytical services.

The field work included completion of the following activities:

- collection of groundwater samples from the 33 Site monitoring wells for analysis of Target Compound List VOCs.

The field activities were performed by MACTEC during the week of July 17, 2020.

Synoptic water levels were not recorded during this monitoring event, but initial depth to water was measured at each well (Figure 2) during sampling. resulting groundwater elevation measurements are presented in Table 1. As per previous reports, groundwater elevations generally indicate that groundwater flow from the site in both overburden and bedrock/overburden interface is to the west and northwest, with some apparent groundwater mounding in the overburden at the Site.

Groundwater Sampling. Sampling of the 33 available Site wells was conducted using low-flow sampling techniques. Samples were submitted for analysis of VOCs by United States Environmental Protection Agency (USEPA) Method 8260C.

Field measurements for pH, temperature, specific conductivity, oxidation reduction potential, and dissolved oxygen were collected through a flow through cell from each monitoring well during pre-sample purging. Turbidity was measured separately with a turbidity meter. Field measurements and monitoring well sampling activities were documented on Low Flow Groundwater Data Records included in Attachment 1.

Groundwater purged during monitoring well sampling was containerized and treated on-site using a portable granular activated carbon unit and allowed to infiltrate into the ground in an impervious area of the Site.

Used disposable equipment and personal protective clothing was double bagged in polyethylene trash bags and sealed with twist ties. The disposable equipment was disposed of as nonhazardous municipal solid waste.

ANALYTICAL RESULTS

Laboratory analytical results were validated and found to be usable as reported by the laboratory or qualified as documented in the Data Usability Summary Report (DUSR). VOC analytical data for the groundwater samples collected in July 2020 are summarized in Table 2. Analytical results and the DUSR are included in Attachment 2.

VOCs

Figure 3 presents isoconcentration lines for total chlorinated VOCs (CVOCs) for the overburden wells sampled in July 2020. The CVOCs that comprise the totals include cis-1,2-dichloroethene (cis-1,2-DCE), PCE, TCE, and vinyl chloride (VC). As presented, the data is reported to two significant figures. The wells with the highest concentrations of CVOCs are MW-20S and MW-19S, both of which are in the same area of the Site that has historically shown the highest contaminant concentrations.

Figure 4 presents isoconcentration lines for total CVOCs for the overburden/bedrock interface wells sampled in July 2020. The highest areas for total CVOCs are centered around MW-14KA and MW-13K, and although neither of these wells are in the vicinity of the historic discharge areas, they have historically contained some of the highest overburden/bedrock interface groundwater concentrations. As discussed in previous reports, it is possible that the contaminants originally migrated as dense nonaqueous-phase liquid (DNAPL), following permeable lenses within the till; DNAPL can flow counter to groundwater flow. The vertical hydraulic gradients are in the downward direction, and it is also likely that contaminants have migrated in the dissolved phase from the apparent historic overburden source areas to the groundwater in the overburden/bedrock interface.

ANALYTICAL TRENDS

The VOC groundwater data was reviewed to evaluate contaminant trends from before and after the ERH remedial action. Specifically, concentrations of the CVOCs PCE, TCE, cis-1,2-DCE, and VC detected in groundwater were compared in seven select wells for the following time periods (historic data presented in the referenced documents):

- just prior to commencement of ERH treatment (in April 2015) (MACTEC, 2017a)
- four months after the completion of ERH treatment (in April 2016) (MACTEC, 2017a)
- one year and five months following the completion of the ERH treatment (in May 2017) (MACTEC, 2017b)
- two years and eleven months following the completion of the ERH treatment (in November 2018) (MACTEC, 2020)
- four years and seven months following the completion of the ERH treatment (in July 2020) (this document)

In addition, concentrations in one well, MW-13K, were compared for the following time periods: May 2009 (MACTEC, 2011), July 2012 (MACTEC, 2012), May 2017 (MACTEC, 2017b), November 2018 (MACTEC, 2020), and July 2020.

Trend plots from the select wells are presented in Attachment 3. Although concentrations continue to exceed groundwater standards, total CVOC groundwater concentrations in the overburden source area at MW-21S have decreased from 34,000 micrograms per liter (µg/L) in April 2015 to 10 µg/L in July 2020. CVOC concentrations in most of the overburden monitoring wells near the perimeter of the Site exhibit downward trends, although not as significantly as concentrations in source area wells; however, concentrations of total CVOCs in well MW-20S increased from 4,058 µg/L in April 2015 to a maximum of 22,280 µg/L in May 2016. Concentrations decreased in subsequent sampling events and have approached their initial values in the most recent round of sampling, 4,284 µg/L in July 2020.

The concentration of total CVOCs in the overburden/bedrock interface well MW-03A, located in

the former source area, decreased from 16,900 µg/L prior to the commencement of the ERH treatment to 85 µg/L in May 2017; concentration has since increased to 713 µg/L in July 2020. Total CVOCs in the bedrock well MW-03CA, located in the former source area, increased from 7,651.5 µg/L in May 2015 to 9,060 µg/L in May 2017, but have since decreased to 309.2 in July 2020.

Concentrations of total CVOCs in MW-13K, located approximately 120 feet downgradient of the former source area, have fluctuated over time, but have generally decreased since prior to the ERH treatment, from 24,590 µg/L in July 2012 to 9,310 µg/L in July 2020.

In general, groundwater concentrations have decreased at most monitored locations in the source area as reported before and after ERH treatment; however, New York Class GA groundwater standards are currently exceeded at many locations in the site area.

If you have any questions or concerns, please feel free to call us at 207-775-5401.

Sincerely,

MACTEC Engineering and Geology, P.C.

Charles Staples, PG
Project Manager

Jean Firth, PG.
Technical Reviewer

Attachments:

Attachment 1: Field Data Records
Attachment 2: Data Usability Summary Report
Attachment 3: Groundwater Containment Trend Plots

REFERENCES

MACTEC, 2020. Remedial Investigation/Feasibility Report, Dinaburg Distributing, Inc., Operable Unit 2. Prepared for New York State Department of Environmental Conservation, Albany, New York. February 2020.

MACTEC, 2018. Remedial Investigation Field Activities Plan, Dinaburg Distributing, Inc., Operable Unit 2. Prepared for New York State Department of Environmental Conservation, Albany, New York

MACTEC, 2017a. Final Construction Completion Report, Former Dinaburg Distributing, Inc., Remedial Action. Prepared for New York State Department of Environmental Conservation, Albany, New York. March 2017.

MACTEC, 2017b. Dinaburg Distributing, Inc. (NYSDEC Site 828103), May 2017 Groundwater Sampling Report. November 30, 2017.

MACTEC, 2012. Remedial Design Baseline Groundwater Sampling Letter Report, Dinaburg Distributing, Inc., Site No. 828103, prepared for the New York State Department of Environmental Conservation. September 7, 2012.

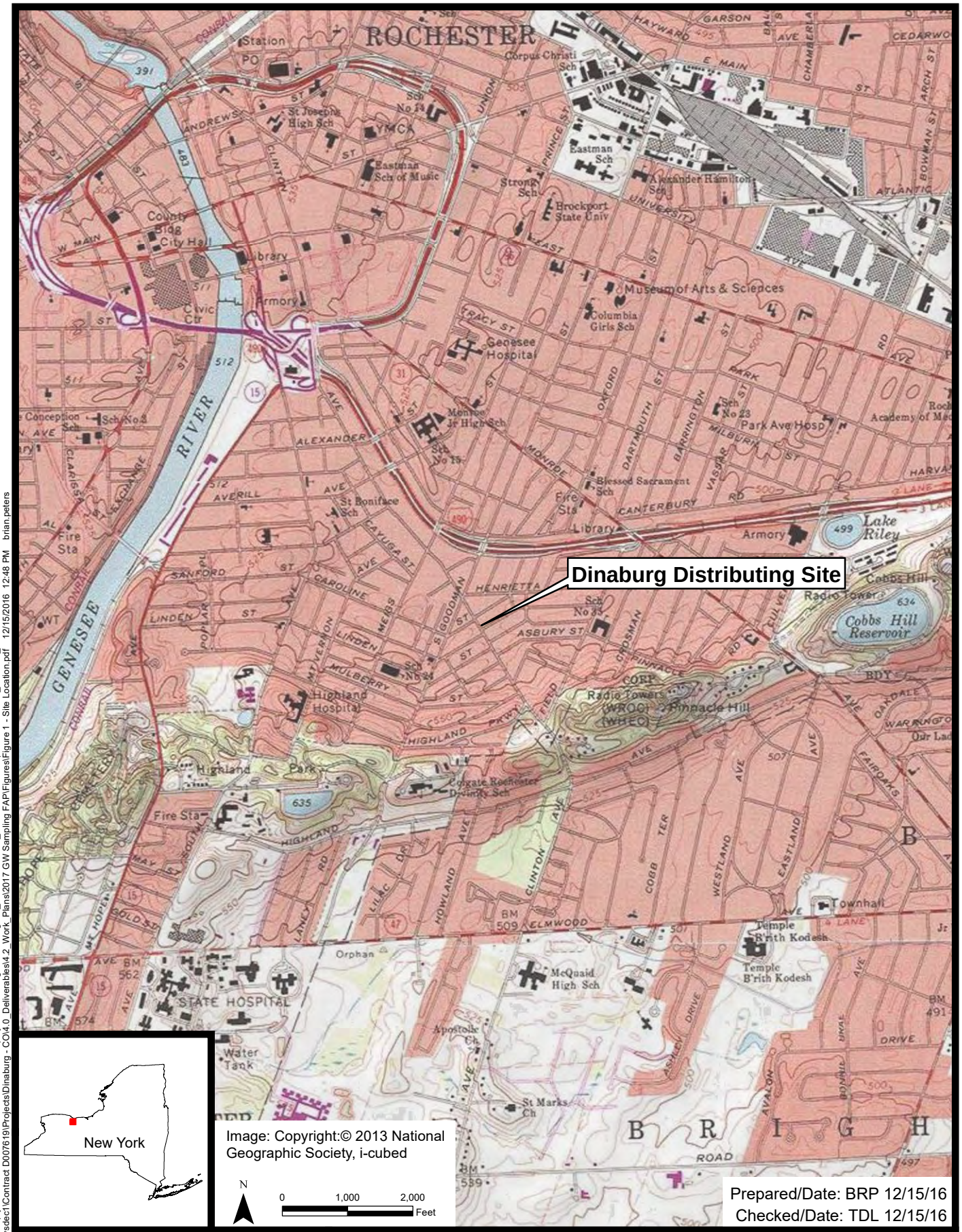
MACTEC, 2011. Final Remedial Investigation/Feasibility Study Report, Dinaburg Distributing, Inc., prepared for the New York State Department of Environmental Conservation. February 2011.

New York State Department of Environmental Conservation (NYSDEC), 2011, Record of Decision, Dinaburg Distributing, Inc., Operable Unit Number: 01, City of Rochester, Monroe County, New York, Site Number 828103. March 2011.

LIST OF ACRONYMS AND ABBREVIATIONS

CVOC	Chlorinated Volatile Organic Compound
DCE	dichloroethene
DNAPL	dense nonaqueous-phase liquid
DUSR	Data Usability Summary Report
ERH	electrical resistance heating
MACTEC	MACTEC Engineering & Geology, P.C.
µg/L	micrograms per liter
MPE	multi-phase extraction
NYSDEC	New York State Department of Environmental Conservation
PCE	tetrachloroethene
RI	Remedial Investigation
ROD	Record of Decision
Site	Dinaburg Distributing site
TCE	trichloroethylene
TCL	Target Compound List
USEPA	United States Environmental Protection Agency
VC	vinyl chloride
VOC	volatile organic compound

FIGURES



Prepared/Date: BRP 12/15/16
Checked/Date: TDL 12/15/16

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Site Location

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N

0 15 30 Feet

Legend

Monitoring Well Property Lines

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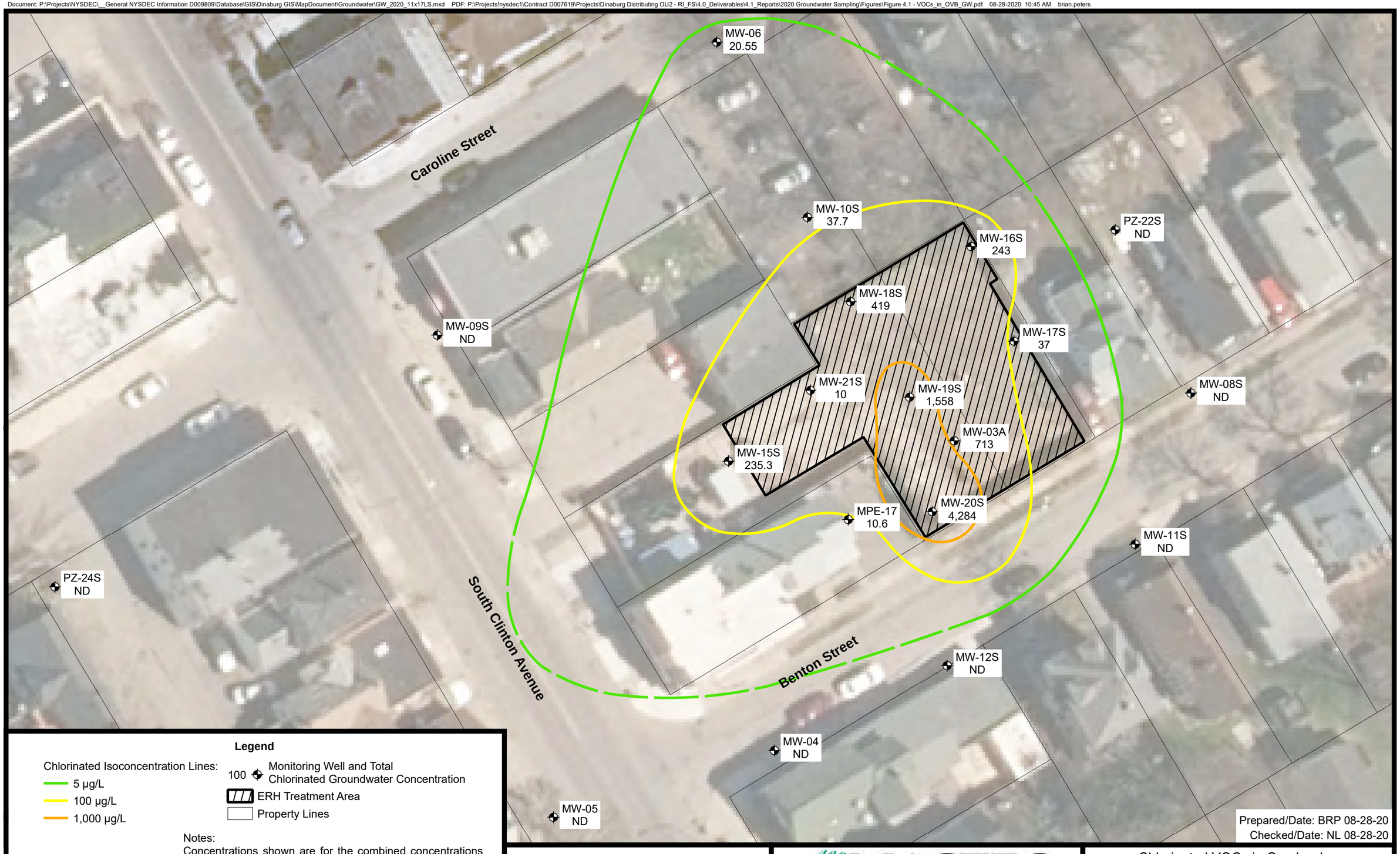
Site Monitoring Locations

Project 3617187420 Figure 2



Legend

Chlorinated Isoconcentration Lines:
- 5 µg/L
- 100 µg/L
- 1,000 µg/L

100 Monitoring Well and Total Chlorinated Groundwater Concentration

ERH Treatment Area

Property Lines

Notes:
Concentrations shown are for the combined concentrations of cis-1,2-dichloroethene tetrachloroethene, trichloroethene and vinyl chloride. (ND = Not Detected)

N

0 15 30 Feet

Prepared/Date: BRP 08-28-20
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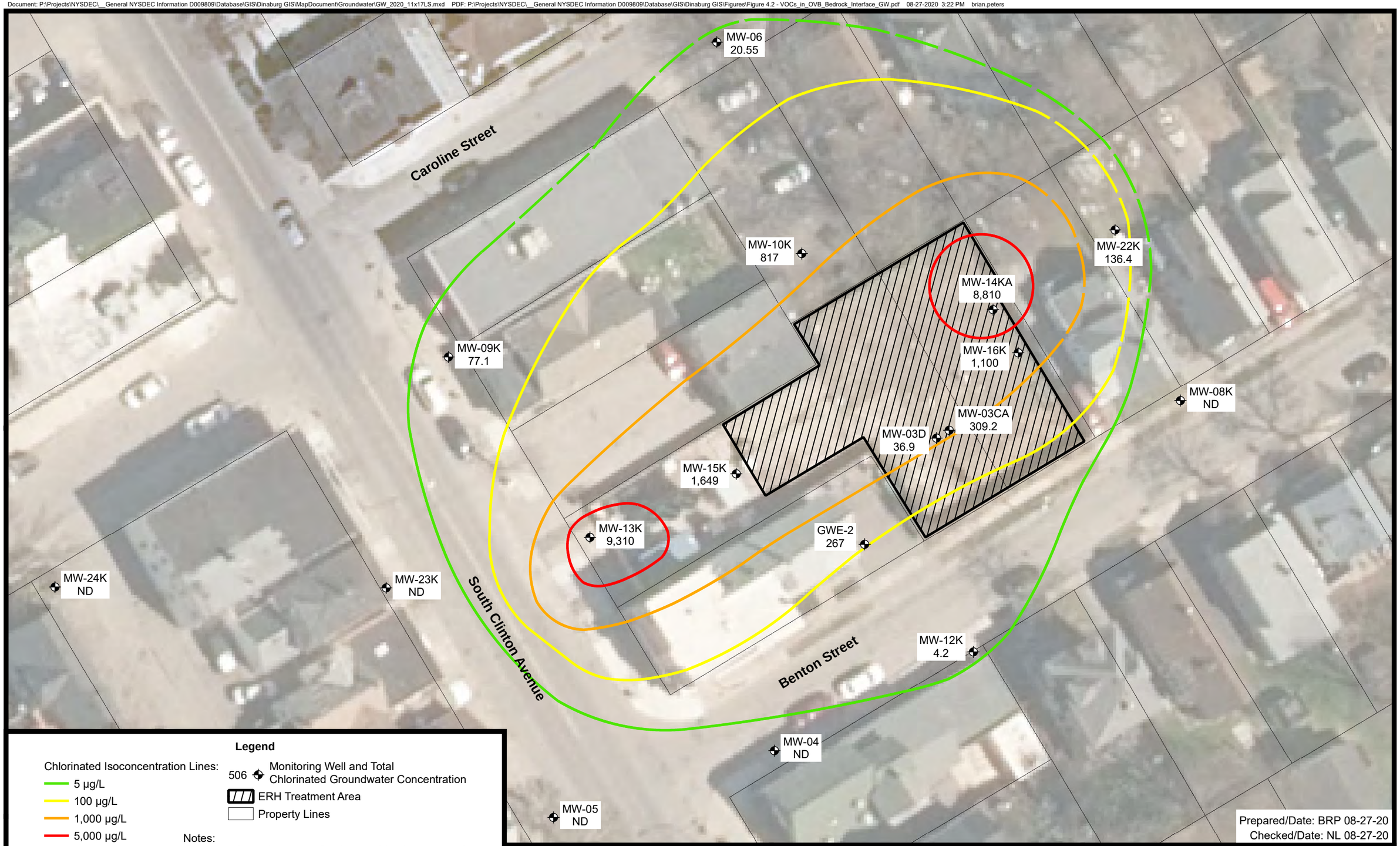
Chlorinated VOCs in Overburden
Groundwater July 2020
Project 3617187420 Figure 3



Legend

Chlorinated Isoconcentration Lines:
- 5 µg/L
- 100 µg/L
- 1,000 µg/L
- 5,000 µg/L

506 Monitoring Well and Total Chlorinated Groundwater Concentration

ERH Treatment Area

Property Lines

Notes:
Concentrations shown are for the combined concentrations of cis-1,2-dichloroethene tetrachloroethene, trichloroethene and vinyl chloride. (ND = Not Detected)

N

0 15 30 Feet

Prepared/Date: BRP 08-27-20
Checked/Date: NL 08-27-20

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Chlorinated VOCs in Overburden/
Bedrock Interface Groundwater July 2020
Project 3617187420 Figure 4

TABLES

Table 1: Groundwater Elevation Data 5/22/2017, 11/27/2018, and 7/13/2020

Well ID	Total Depth			Depth Bedrock Encountered (ft)	Screen Length	Screened Length in Bedrock (ft)	Screened Zone	Measuring Point (TOR, ft)	Depth to Water (ft, BTOR) (5/22/17)	Water Elevation (ft) 2017	Depth to Water (ft, BTOR) (11/27/18)	Water Elevation (ft) 2018	Depth to Water (ft, BTOR) (7/13/20)	Water Elevation (ft) 2020
	As Built (ft BGS?)	As (ft TOR) Measured (11/27/18)	TOR to TOC/Ground Surface (ft)											
MW-01	20.4	NA	NA	NA	5	20.7	interface	512.06	NA	NA	NA	NA	NA	NA
MW-01A	8	NA	NA	NA	5	--	overburden	512.05	NA	NA	NA	NA	NA	NA
MW-04	24.1	23.05	0.19	23.1	15	1	overburden/interface	512.01	8.80	503.21	8.86	503.15	9.23	502.78
MW-05	24.6	22.65	0.22	23.6	15	1	overburden/interface	512.49	8.86	503.63	9.12	503.37	9.55	502.94
MW-06	20.6	19.85	0.50	19.9	15	0.7	overburden/interface	510.54	7.22	503.32	6.52	504.02	7.63	502.91
MW-08K	19.2	18.80	0.35	17.8	10	1.4	interface	511.24	5.63	505.61	6.22	505.02	6.86	504.38
MW-08S	16.0	10.30	0.13	NA	10	--	overburden	511.27	6.41	504.86	5.85	505.42	7.11	504.16
MW-09K	22.7	23.50	0.19	23.3	10	--	interface	512.01	8.82	503.19	8.84	503.17	9.24	502.77
MW-09S	16	14.90	0.15	NA	10	--	overburden	511.87	7.60	504.27	7.28	504.59	7.94	503.93
MW-10K	21.8	21.60	0.37	22	10	--	interface	511.49	7.63	503.86	6.58	504.91	7.77	503.72
MW-10S	16	15.25	0.18	NA	10	--	overburden	511.25	5.81	505.44	5.32	505.93	5.81	505.44
MW-11K*	18.2	NM	NM	17.50	10	0.70	interface	511.12	NA	NA	NA	NA	NA	NA
MW-11S	14	13.65	0.18	NA	10	--	overburden	511.36	6.98	504.38	4.85	506.51	7.81	503.55
MW-12K	19.5	18.70	0.48	19.3	5	0.2	interface	511.67	8.17	503.5	8.17	503.50	8.63	503.04
MW-12S	14	13.65	0.48	NA	5	--	overburden	511.53	6.01	505.52	5.48	506.05	6.65	504.88
MW-13K	21.5	20.25	0.25	19.2	5	0.6	interface	512.13	8.78	503.35	8.77	503.36	9.17	502.96
MW-03A	24.5	24.40	0.29	21.8	5	2.7	interface	512.12	8.80	503.32	8.85	503.27	9.24	502.88
MW-03CA	30.5	30.05	0.53	22.9	5	5	bedrock	511.78	12.30	499.48	7.61	504.17	12.12	499.66
MW-03D	51.65	51.65	0.69	22	10	10	bedrock	511.84	NA	NA	17.26	494.58	18.20	493.64
MW-14KA	24.4	24.10	0.30	21	5	3.4	interface	511.78	9.08	502.7	8.60	503.18	8.89	502.89
MW-15K	25.3	25.00	0.27	23.5	5	1.8	interface	512.74	9.69	503.05	9.47	503.27	9.86	502.88
MW-15S	15	14.95	0.52	NA	10	--	overburden	512.52	6.23	506.29	4.64	507.88	6.11	506.41
MW-16K	25.5	25.00	0.42	23.2	5	2.3	interface	511.83	8.60	503.23	8.54	503.29	9.02	502.81
MW-16S	15	15.25	0.20	NA	10	--	overburden	512.48	7.04	505.44	7.14	505.34	7.77	504.71
MW-17S	15	14.95	0.58	NA	10	--	overburden	511.59	6.42	505.17	4.40	507.19	4.39	507.20
MW-18S	15	14.90	0.24	NA	10	--	overburden	512.74	7.71	505.03	7.41	505.33	7.80	504.94
MW-19S	15	14.95	0.15	NA	10	--	overburden	512.54	7.50	505.04	5.84	506.70	7.04	505.50
MW-20S	15	14.95	0.21	NA	10	--	overburden	512.67	7.42	505.25	6.20	506.47	6.22	506.45
MW-21S	15	14.95	0.39	NA	10	--	overburden	512.44	6.95	505.49	6.08	506.36	7.13	505.31
MW-22K	28.2	28.20	0.35	17.5	10	10	interface	511.48	NA	NA	8.36	503.12	9.12	502.36
PZ-22S	12.7	12.70	0.37	NA	10	--	overburden	511.47	NA	NA	4.54	506.93	6.88	504.59
MW-23K	30.25	30.25	0.77	21.5	10	9.3	interface	511.69	NA	NA	8.37	503.32	8.70	502.99
MW-24K	27.9	27.90	0.41	18	10	9.9	interface	512.06	NA	NA	8.71	503.35	9.08	502.98
PZ-24S	12.3	12.30	0.41	NA	10	--	overburden	512.06	NA	NA	7.53	504.53	7.63	504.43

Notes:
Elevation in feet above mean sea level
TOR = top of riser
BTOR = below top of riser
ft = feet
interface = overburden/bedrock interface well
NA = not available/not located
NM = not measured
* = well is not usable due to siltation/kink
-- = overburden well not screened in bedrock

Prepared by: NRL 8/30/20
Checked by: CRS 8/31/20

Table 2: VOC Results

			Location	GWE-2		MPE-17		MW-03A		MW-03C		MW-03D		MW-04		MW-05	
			Sample Date	7/16/2020		7/16/2020		7/16/2020		7/16/2020		7/16/2020		7/15/2020		7/14/2020	
			Sample ID	828103-GWE2021		828103-MPE17012		828103-MW03A015		828103-MW03CA030		828103-MW03D50		828103-MW040020		828103-MW050020	
			Qc Code	FS		FS		FS		FS		FS		FS		FS	
Parameter	**GA**	**GV**		Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
1,1-Dichloroethane	5	NS		**4.8**		1	U	4	U	5	U	1	U	1	U	1	U
1,1-Dichloroethene	5	NS		**2**	J	1	U	4	U	5	U	1	U	1	U	1	U
Acetone	NS	50		40	U	10	U	40	U	50	U	10	U	10	U	10	U
cis-1,2-Dichloroethene	5	NS		**97**		1	U	**310**		**260**		**12**		1	U	1	U
Methyl Tertbutyl Ether	NS	10		4	U	1	U	4	U	5	U	1	U	**0.22**	J	1	U
Tetrachloroethene	5	NS		**110**		**10**		**24**		**8.2**		**6.5**		1	U	1	U
trans-1,2-Dichloroethene	5	NS		4	U	1	U	4	U	5	U	1	U	1	U	1	U
Trichloroethene	5	NS		**60**		**0.6**	J	**19**		**11**		**14**		1	U	1	U
Vinyl chloride	2	NS		4	U	1	U	**360**		**30**		**4.4**		1	U	1	U

Notes:
Samples analyzed for VOCs, USEPA Method 8260C.
Results in micrograms per liter (µg/L)
(detections in bold)
GA = Class GA Groundwater standards
GV = Groundwater Guidance Value
Results exceed GA Standard or Guidance Value
Qualifier: J = estimated value; U = compound not detected at concentrations above reporting limit
QC Code: FS = Field Sample
FD = Field Duplicate

Table 2: VOC Results

	Location		MW-06		MW-08K		MW-08S		MW-09K		MW-09S		MW-10K		MW-10S	
	Sample Date		7/14/2020		7/15/2020		7/15/2020		7/15/2020		7/15/2020		7/15/2020		7/14/2020	
	Sample ID		828103-MW06018		828103-MW08K		828103-MW08S011		828103-MW09K018		828103-MW09S012		828103-MW10K018		828103-MW10S012	
	Qc Code		FS		FS		FS		FS		FS		FS		FS	
Parameter	**GA**	**GV**	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
1,1-Dichloroethane	5	NS	1	U	1	U	1	U	1	U	1	U	**5.8**	J	1	U
1,1-Dichloroethene	5	NS	1	U	1	U	1	U	1	U	1	U	10	U	1	U
Acetone	NS	50	10	U	10	U	10	U	10	U	10	U	100	U	10	U
cis-1,2-Dichloroethene	5	NS	**12**		1	U	1	U	**44**		1	U	**260**		**2.7**	
Methyl Tertbutyl Ether	NS	10	1	U	1	U	1	U	1	U	1	U	10	U	1	U
Tetrachloroethene	5	NS	**2.5**		1	U	1	U	**14**		1	U	**67**		**16**	
trans-1,2-Dichloroethene	5	NS	1	U	1	U	1	U	1	U	1	U	10	U	1	U
Trichloroethene	5	NS	**5.1**		1	U	1	U	**15**		1	U	**490**		**19**	
Vinyl chloride	2	NS	**0.95**	J	1	U	1	U	**4.1**		1	U	10	U	1	U

Notes:
Samples analyzed for VOCs, USEPA Method 826(
Results in micrograms per liter (µg/L)
(detections in bold)
GA = Class GA Groundwater standards
GV = Groundwater Guidance Value
Results exceed GA Standard or Guidance Value
Qualifier: J = estimated value; U = compound not detected at concentrations above reporting limit
QC Code: FS = Field Sample
FD = Field Duplicate

Table 2: VOC Results

		Location	MW-11S		MW-12K		MW-12S		MW-12S		MW-13K		MW-14K		MW-14K	
		Sample Date	7/14/2020		7/14/2020		7/15/2020		7/15/2020		7/14/2020		7/17/2020		7/17/2020	
		Sample ID	828103-MW11S010		828103-MW12K018		828103-MW12S010		828103-MW12S010D		828103-MW13K018		828103-MW14KA022		28103-MW14KA022	
		Qc Code	FS		FS		FS		FD		FS		FS		FD	
Parameter	**GA**	**GV**	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
1,1-Dichloroethane	5	NS	1	U	1	U	1	U	1	U	130	U	130	U	130	U
1,1-Dichloroethene	5	NS	1	U	1	U	1	U	1	U	130	U	130	U	130	U
Acetone	NS	50	10	U	10	U	10	U	10	U	1300	U	1300	U	1300	U
cis-1,2-Dichloroethene	5	NS	1	U	1	U	1	U	1	U	**3100**		**3300**		**3200**	
Methyl Tertbutyl Ether	NS	10	1	U	1	U	1	U	1	U	130	U	130	U	130	U
Tetrachloroethene	5	NS	1	U	1	U	1	U	1	U	**4300**		**1700**		**1600**	
trans-1,2-Dichloroethene	5	NS	1	U	1	U	1	U	1	U	130	U	130	U	130	U
Trichloroethene	5	NS	1	U	**4.2**		1	U	1	U	**1500**		**3700**		**3900**	
Vinyl chloride	2	NS	1	U	1	U	1	U	1	U	**410**		**110**	J	**110**	J

Notes:
Samples analyzed for VOCs, USEPA Method 826(
Results in micrograms per liter (µg/L)
(detections in bold)
GA = Class GA Groundwater standards
GV = Groundwater Guidance Value
Results exceed GA Standard or Guidance Value
Qualifier: J = estimated value; U = compound not detected at concentrations above reporting limit
QC Code: FS = Field Sample
FD = Field Duplicate

Table 2: VOC Results

			Location	MW-15K		MW-15S		MW-16K		MW-16S		MW-17S		MW-18S		MW-19S	
			Sample Date	7/15/2020		7/15/2020		7/16/2020		7/17/2020		7/17/2020		7/16/2020		7/17/2020	
			Sample ID	828103-MW15K022		828103-MW15S010		828103-MW16K022		828103-MW16S010		828103-MW17S010		828103-MW18S010		828103-MW19S010	
			Qc Code	FS		FS		FS		FS		FS		FS		FS	
Parameter	**GA**	**GV**		Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
1,1-Dichloroethane	5	NS		**12**	J	2	U	20	U	8	U	1	U	5	U	4	U
1,1-Dichloroethene	5	NS		**11**	J	2	U	20	U	8	U	1	U	5	U	4	U
Acetone	NS	50		200	U	20	U	200	U	80	U	10	U	50	U	40	U
cis-1,2-Dichloroethene	5	NS		**280**		**3.3**		**420**		8	U	1	U	**140**		**1300**	
Methyl Tertbutyl Ether	NS	10		20	U	2	U	20	U	8	U	1	U	5	U	4	U
Tetrachloroethene	5	NS		**930**		**150**		**300**		**23**		**25**		**220**		**110**	
trans-1,2-Dichloroethene	5	NS		20	U	2	U	20	U	8	U	1	U	5	U	**8.9**	
Trichloroethene	5	NS		**420**		**82**		**380**		**220**		**12**		**59**		**120**	
Vinyl chloride	2	NS		**19**	J	2	U	20	U	8	U	1	U	5	U	**28**	

Notes:
Samples analyzed for VOCs, USEPA Method 826(
Results in micrograms per liter (µg/L)
(detections in bold)
GA = Class GA Groundwater standards
GV = Groundwater Guidance Value
Results exceed GA Standard or Guidance Value
Qualifier: J = estimated value; U = compound not detected at concentrations above reporting limit
QC Code: FS = Field Sample
FD = Field Duplicate

Table 2: VOC Results

	Location		MW-20S		MW-21S		MW-22K		MW-23K		MW-24K		PZ-22S		PZ-24S	
	Sample Date		7/17/2020		7/16/2020		7/15/2020		7/14/2020		7/14/2020		7/15/2020		7/14/2020	
	Sample ID		828103-MW20S010		828103-MW21S010		828103-MW22K028		828103-MW23K025		828103-MW24K025		828103-PZ22S010		828103-PZ24S010	
	Qc Code		FS		FS		FS		FS		FS		FS		FS	
Parameter	**GA**	**GV**	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
1,1-Dichloroethane	5	NS	80	U	8	U	1	U	1	U	1	U	1	U	1	U
1,1-Dichloroethene	5	NS	80	U	8	U	**0.3**	J	1	U	1	U	1	U	1	U
Acetone	NS	50	800	U	80	U	10	U	10	U	10	U	10	U	10	U
cis-1,2-Dichloroethene	5	NS	80	U	**10**		**97**		1	U	1	U	1	U	1	U
Methyl Tertbutyl Ether	NS	10	80	U	8	U	1	U	1	U	1	U	1	U	1	U
Tetrachloroethene	5	NS	**4200**		8	U	**13**		1	U	1	U	1	U	1	U
trans-1,2-Dichloroethene	5	NS	80	U	8	U	1	U	1	U	1	U	1	U	1	U
Trichloroethene	5	NS	**84**		8	U	**21**		1	U	1	U	1	U	1	U
Vinyl chloride	2	NS	80	U	8	U	**5.4**		1	U	1	U	1	U	1	U

Notes:
Samples analyzed for VOCs, USEPA Method 826(
Results in micrograms per liter (µg/L)
(detections in bold)
GA = Class GA Groundwater standards
GV = Groundwater Guidance Value
Results exceed GA Standard or Guidance Value
Qualifier: J = estimated value; U = compound not detected at concentrations above reporting limit
QC Code: FS = Field Sample
FD = Field Duplicate

ATTACHMENT 1

FIELD DATA RECORDS

FIELD INSTRUMENTATION CALIBRATION RECORD

PROJECT NAME: Dinaburg Distributing OU2 RI
PROJECT NUMBER: 3617187420
PROJECT LOCATION: City of Rochester, NY
WEATHER CONDITIONS (AM): 70°F, SUNNY, CLEAR
WEATHER CONDITIONS (PM): 80°F, SUNNY, P.C.

TASK NO:
MACTEC CREW: JR AND MB
SAMPLER NAME: MARY BRUNO
SAMPLER SIGNATURE: M. B
CHECKED BY: JRudd
DATE: 7-14-2020
DATE: 7/20/20

MULTI-PARAMETER WATER QUALITY METER

METER TYPE: YSI
MODEL NO.: 556 MPS
UNIT ID NO.: M015-05

AM CALIBRATION Start Time 0715 /End Time 0740

POST CALIBRATION CHECK Start Time 1715 /End Time 1730

	Units	Standard Value	Meter Value	*Acceptance Criteria (AM)	Standard Value	Meter Value	*Acceptance Criteria (PM)
pH (4)	SU	4.0	4.00	+/- 0.1 pH Units			
pH (7)	SU	7.0	7.00	+/- 0.1 pH Units	7.0	7.17	+/- 0.3 pH Units
pH (10)	SU	10.0	—	+/- 0.1 pH Units			
Redox	+/- mV	240	240.0	+/- 10 mV	240	230.5	+/- 10 mV
Conductivity	mS/cm	1.413	1.413	+/- 0.5 % of standard	1.413	1.419	+/- 5% of standard
DO (saturated)	%	100	99.5	+/- 2% of standard			
DO (saturated)	mg/L[1] (see Chart 1)	9.25	9.27	+/- 0.2 mg/L	=8.6 8.82 (JM)	8.73	+/- 0.5 mg/L of standard
DO (<0.1)	mg/L	<0.1	—	< 0.5 mg/L			
Temperature	°C		13.61			22.01	
Baro. Press.	mmHg		752.0			754.3	

TURBIDITY METER

METER TYPE: HACH
MODEL NO.: 2100Q
UNIT ID NO.: M024-27

	Units	Standard Value	Meter Value	Standard Value	Meter Value	*Acceptance Criteria (PM)
<0.1 Standard	NTU	<0.1	0.78	<0.1	0.83	+/- 0.3 NTU of stan.
20 Standard	NTU	20	20.3	20	19.4	+/- 5% of standard
100 Standard	NTU	100	97.6	100	97.1	+/- 5% of standard
800 Standard	NTU	800	789	800	788	+/- 5% of standard

PHOTOIONIZATION DETECTOR

METER TYPE:
MODEL NO.:
UNIT ID NO.:

Background	ppmv	<0.1		<0.1	within 5 ppmv of BG
Span Gas	ppmv	100		100	+/- 10% of standard

O_2-LEL 4 GAS METER

METER TYPE:
MODEL NO.:
UNIT ID NO.:

Methane	%	50		50	+/- 10% of standard
O_2	%	20.9		20.9	+/- 10% of standard
H_2S	ppmv	25		25	+/- 10% of standard
CO	ppmv	50		50	+/- 10% of standard

OTHER METER

METER TYPE:
MODEL NO.:
UNIT ID NO.:

See Notes Below for Additional Information

☑ Equipment calibrated within the Acceptance Criteria specified for each of the parameters listed above.
☐ Equipment (not) calibrated within the Acceptance Criteria specified for each of the parameters listed above**.

MATERIALS RECORD

		Cal. Standard Lot Number	Exp. Date
Deionized Water Source:	Portland FOS	pH (4) 9GE1020	5-21
Lot#/Date Produced:		pH (7) 9GE1325	5-21
Trip Blank Source:	LAB	pH (10) —	—
Sample Preservatives Source:	LAB	ORP 0GB510	11-20
Disposable Filter Type:	~~0.45µm cellulose~~	Conductivity 0GD741	4-21
Calibration Fluids / Standard Source:		<0.1 Turb. Stan. A9270	1-21
- DO Calibration Fluid (<0.1 mg/L)	~~Portland FOS~~	20 Turb. Stan. A9287	1-21
- Other		100 Turb. Stan. A9277	1-21
- Other		800 Turb. Stan. A9275	1-21
- Other		PID Span Gas —	—
		O_2-LEL Span Gas —	—
		Other —	—

NOTES:
NONE

* = Unless otherwise noted, calibration procedures and acceptance criteria are in general accordance with USEPA Region 1 SOPs for Field Instrument Calibration (EQASOP-FieldCalibrat) and Low Stress Purging and Sampling (EQASOP-GW001), each dated 1/19/2010. Additonal acceptance criteria obtained from instrument specific manufacturer recommendations.
** = If meter reading is not within acceptance criteria, clean/replace probe and re-calibrate, or use calibrated back-up meter if available. If project requirements necessitate use of the instrument, clearly document any deviations from acceptance criteria on all data sheets and log book entries.
1 = DO Saturated standard value is calculated based on Oxygen Solubility at Indicated Pressure Chart from the USEPA Region 1 SOP for Field Instrument Calibration (EQASOP-FieldCalibrat), dated 1/19/2010.

FIELD INSTRUMENTATION CALIBRATION RECORD

PROJECT NAME: Dinaburg Distributing OU2 RI
PROJECT NUMBER: 3617187420
PROJECT LOCATION: City of Rochester, NY
WEATHER CONDITIONS (AM): Sunny, 65°F, calm
WEATHER CONDITIONS (PM): Sunny, 80°F, light breeze

TASK NO: 02 DATE: 7/14/20
MACTEC CREW: LFGW
SAMPLER NAME: Jerry Rawcliffe
SAMPLER SIGNATURE: Jerry Rawcliffe
CHECKED BY: MAC DATE: 7/15/20

MULTI-PARAMETER WATER QUALITY METER

METER TYPE: YSI
MODEL NO.: 556 MPS
UNIT ID NO.: MUS-02

AM CALIBRATION Start Time 0655 /End Time 0735
POST CALIBRATION CHECK Start Time 1745 /End Time 1800

	Units	Standard Value	Meter Value	*Acceptance Criteria (AM)	Standard Value	Meter Value	*Acceptance Criteria (PM)
pH (4)	SU	4.0	4.00	+/- 0.1 pH Units			
pH (7)	SU	7.0	7.00	+/- 0.1 pH Units	7.0	6.97	+/- 0.3 pH Units
pH (10)	SU	10.0	—	+/- 0.1 pH Units			
Redox	+/- mV	240	237.6	+/- 10 mV	240	230.2	+/- 10 mV
Conductivity	mS/cm	1.413	1.413	+/- 0.5 % of standard	1.413	1.413	+/- 5% of standard
DO (saturated)	%	100	98.5	+/- 2% of standard			
DO (saturated)	mg/L[1] (see Chart 1)	8.8	8.81	+/- 0.2 mg/L	≈7.8	7.43	+/- 0.5 mg/L of standard
DO (<0.1)	mg/L	<0.1	—	< 0.5 mg/L			
Temperature	°C		20.80			27.56	
Baro. Press.	mmHg		749.7			749.9	

TURBIDITY METER

METER TYPE: HACH
MODEL NO.: 2100Q
UNIT ID NO.: MU24-29

	Units	Standard Value	Meter Value	Standard Value	Meter Value	*Acceptance Criteria (PM)
<0.1 Standard	NTU	10 ~~<0.1~~	10.5	10 ~~<0.1~~	9.42	5% +/- ~~0.3~~ NTU of stan.
20 Standard	NTU	20	20.3	20	20.1	+/- 5% of standard
100 Standard	NTU	100	100	100	102	+/- 5% of standard
800 Standard	NTU	800	795	800	783	+/- 5% of standard

PHOTOIONIZATION DETECTOR

METER TYPE:
MODEL NO.:
UNIT ID NO.:

	Units	Standard Value	Meter Value	Standard Value	Meter Value	*Acceptance Criteria (PM)
Background	ppmv	<0.1		<0.1		within 5 ppmv of BG
Span Gas	ppmv	100		100		+/- 10% of standard

O_2-LEL 4 GAS METER

METER TYPE:
MODEL NO.:
UNIT ID NO.:

	Units	Standard Value	Meter Value	Standard Value	Meter Value	*Acceptance Criteria (PM)
Methane	%	50		50		+/- 10% of standard
O_2	%	20.9		20.9		+/- 10% of standard
H_2S	ppmv	25		25		+/- 10% of standard
CO	ppmv	50		50		+/- 10% of standard

OTHER METER

METER TYPE:
MODEL NO.:
UNIT ID NO.:

See Notes Below for Additional Information

☑ Equipment calibrated within the Acceptance Criteria specified for each of the parameters listed above.
☐ Equipment (not) calibrated within the Acceptance Criteria specified for each of the parameters listed above**.

MATERIALS RECORD

Deionized Water Source: Portland FOS
Lot#/Date Produced:
Trip Blank Source:
Sample Preservatives Source:
Disposable Filter Type: 0.45µm cellulose
Calibration Fluids / Standard Source:
- DO Calibration Fluid (<0.1 mg/L): Portland FOS
- Other
- Other
- Other

	Cal. Standard Lot Number	Exp. Date
pH (4)	96E1020	5/21
pH (7)	96E1325	5/21
pH (10)	—	—
ORP	0GB510	11/20
Conductivity	0GD741	4/21
~~10~~ ~~<0.1~~ Turb. Stan.	A9155	9/20
20 Turb. Stan.	A9151A	
100 Turb. Stan.	A9155	
800 Turb. Stan.	A9155	
PID Span Gas		
O_2-LEL Span Gas		
Other		

NOTES:

* = Unless otherwise noted, calibration procedures and acceptance criteria are in general accordance with USEPA Region 1 SOPs for Field Instrument Calibration (EQASOP-FieldCalibrat) and Low Stress Purging and Sampling (EQASOP-GW001), each dated 1/19/2010. Additonal acceptance criteria obtained from instrument specific manufacturer recommendations.
** = If meter reading is not within acceptance criteria, clean/replace probe and re-calibrate, or use calibrated back-up meter if available. If project requirements necessitate use of the instrument, clearly document any deviations from acceptance criteria on all data sheets and log book entries.
1 = DO Saturated standard value is calculated based on Oxygen Solubility at Indicated Pressure Chart from the USEPA Region 1 SOP for Field Instrument Calibration (EQASOP-FieldCalibrat), dated 1/19/2010.

WTPS

FIELD INSTRUMENTATION CALIBRATION RECORD

PROJECT NAME: Dinaburg Distributing OU2 RI
PROJECT NUMBER: 3617187420
PROJECT LOCATION: City of Rochester, NY
WEATHER CONDITIONS (AM): Sunny, 65°F, calm
WEATHER CONDITIONS (PM): Sunny to Partly cloudy 85°F, light breeze

TASK NO: 02 DATE: 7/15/20
MACTEC CREW: LF GW (Corp, MB)
SAMPLER NAME: Terry Rawcliffe
SAMPLER SIGNATURE: Terry Rawcliffe
CHECKED BY: MMR DATE: 7/22/20

MULTI-PARAMETER WATER QUALITY METER

METER TYPE: YSI
MODEL NO.: 556 MPS
UNIT ID NO.: MO15-02

AM CALIBRATION Start Time 0655 / End Time 0735

POST CALIBRATION CHECK Start Time 1715 / End Time 1755

	Units	Standard Value	Meter Value	*Acceptance Criteria (AM)	Standard Value	Meter Value	*Acceptance Criteria (PM)
pH (4)	SU	4.0	4.00	+/- 0.1 pH Units			
pH (7)	SU	7.0	7.00	+/- 0.1 pH Units	7.0	6.94	+/- 0.3 pH Units
pH (10)	SU	10.0	—	+/- 0.1 pH Units			
Redox	+/- mV	240	236.2	+/- 10 mV	240	227.5 (RA)	+/- 10 mV
Conductivity	mS/cm	1.413	1.412	+/- 0.5 % of standard	1.413	1.415	+/- 5% of standard
DO (saturated)	%	100	99.1	+/- 2% of standard		92.5%	
DO (saturated)	mg/L [1 (see Chart 1)]	=8.65	8.65	+/- 0.2 mg/L	≈7.13	6.87	+/- 0.5 mg/L of standard
DO (<0.1)	mg/L	<0.1	—	< 0.5 mg/L			
Temperature	°C		22.			31.07	
Baro. Press.	mmHg		752.8			751.0	

TURBIDITY METER

METER TYPE: HACH
MODEL NO.: 2100 Q
UNIT ID NO.: MO24-29

	Units	Standard Value	Meter Value	Standard Value	Meter Value	*Acceptance Criteria (PM)
10 ~~<0.1~~ Standard	NTU	10 ~~<0.1~~	10.0	10 ~~<0.1~~	9.94	5% +/- ~~0.3~~ NTU of stan.
20 Standard	NTU	20	19.9	20	19.8	+/- 5% of standard
100 Standard	NTU	100	100	100	98.6	+/- 5% of standard
800 Standard	NTU	800	793	800	795	+/- 5% of standard

PHOTOIONIZATION DETECTOR

METER TYPE:
MODEL NO.:
UNIT ID NO.:

	Units	Standard Value	Meter Value	Standard Value	Meter Value	*Acceptance Criteria (PM)
Background	ppmv	<0.1		<0.1		within 5 ppmv of BG
Span Gas	ppmv	100		100		+/- 10% of standard

O_2-LEL 4 GAS METER

METER TYPE:
MODEL NO.:
UNIT ID NO.:

	Units	Standard Value	Meter Value	Standard Value	Meter Value	*Acceptance Criteria (PM)
Methane	%	50		50		+/- 10% of standard
O_2	%	20.9		20.9		+/- 10% of standard
H_2S	ppmv	25		25		+/- 10% of standard
CO	ppmv	50		50		+/- 10% of standard

OTHER METER

METER TYPE:
MODEL NO.:
UNIT ID NO.:

See Notes Below for Additional Information

☑ Equipment calibrated within the Acceptance Criteria specified for each of the parameters listed above.
☐ Equipment (not) calibrated within the Acceptance Criteria specified for each of the parameters listed above**.

MATERIALS RECORD

Deionized Water Source: Portland FOS
Lot#/Date Produced:
Trip Blank Source:
Sample Preservatives Source:
Disposable Filter Type: 0.45µm cellulose
Calibration Fluids / Standard Source:
- DO Calibration Fluid (<0.1 mg/L): Portland FOS
- Other
- Other
- Other

	Cal. Standard Lot Number	Exp. Date
pH (4)	9GE1070	5/21
pH (7)	9GE1325	5/21
pH (10)	—	
ORP	0GB510	11/20
Conductivity	0GD741	4/21
10 ~~<0.1~~ Turb. Stan	A9155	9/20
20 Turb. Stan.	A9151A	
100 Turb. Stan.	A9155	
800 Turb. Stan.	A9155	
PID Span Gas		
O_2-LEL Span Gas		
Other		

NOTES: (RA) ORP slightly low at end of day. It is slowly trending up towards criteria but I do not want to wait 30 minutes for it to come in.

* = Unless otherwise noted, calibration procedures and acceptance criteria are in general accordance with USEPA Region 1 SOPs for Field Instrument Calibration (EQASOP-FieldCalibrat) and Low Stress Purging and Sampling (EQASOP-GW001), each dated 1/19/2010. Additonal acceptance criteria obtained from instrument specific manufacturer recommendations.
** = If meter reading is not within acceptance criteria, clean/replace probe and re-calibrate, or use calibrated back-up meter if available. If project requirements necessitate use of the instrument, clearly document any deviations from acceptance criteria on all data sheets and log book entries.
1 = DO Saturated standard value is calculated based on Oxygen Solubility at Indicated Pressure Chart from the USEPA Region 1 SOP for Field Instrument Calibration (EQASOP-FieldCalibrat), dated 1/19/2010.

FIELD INSTRUMENTATION CALIBRATION RECORD

PROJECT NAME: Dinaburg Distributing OU2 RI
PROJECT NUMBER: 3617187420
PROJECT LOCATION: City of Rochester, NY
WEATHER CONDITIONS (AM): 70°F SUNNY CLEAR
WEATHER CONDITIONS (PM): 85°F, SUNNY

TASK NO: DATE: 7-15-2020
MACTEC CREW: JR + MB
SAMPLER NAME: M. BRUNO
SAMPLER SIGNATURE: M. B
CHECKED BY: JRuffo DATE: 7/20/20

MULTI-PARAMETER WATER QUALITY METER

METER TYPE: YSI
MODEL NO.: 556 MPS
UNIT ID NO.: M015-05

AM CALIBRATION Start Time 0700 /End Time 0735

POST CALIBRATION CHECK Start Time 1830 /End Time 1840

	Units	Standard Value	Meter Value	*Acceptance Criteria (AM)	Standard Value	Meter Value	*Acceptance Criteria (PM)
pH (4)	SU	4.0	4.01	+/- 0.1 pH Units			
pH (7)	SU	7.0	7.00	+/- 0.1 pH Units	7.0	7.20	+/- 0.3 pH Units ✓
pH (10)	SU	10.0	–	+/- 0.1 pH Units			
Redox	+/- mV	240	240.0	+/- 10 mV	240	225.2	+/- 10 mV ^
Conductivity	mS/cm	1.413	1.413	+/- 0.5 % of standard	1.413	1.403	+/- 5% of standard ✓
DO (saturated)	%	100	100.5	+/- 2% of standard			
DO (saturated)	mg/L[1] (see Chart 1)	9.00	9.06	+/- 0.2 mg/L	7.90	8.03	+/- 0.5 mg/L of standard ✓
DO (<0.1)	mg/L	<0.1	–	< 0.5 mg/L			
Temperature	°C		19.92			27.06	
Baro. Press.	mmHg		755.8			755.2	

9.08
19.9
19.4
27.06
8.03

TURBIDITY METER

METER TYPE: HACH
MODEL NO.: 2100Q
UNIT ID NO.: M024-27

	Units	Standard Value	Meter Value	Standard Value	Meter Value	*Acceptance Criteria (PM)
<0.1 Standard	NTU	<0.1	10.3	<0.1	9.72	+/- 0.3 NTU of stan.
20 Standard	NTU	20	20.5	20	20.2	+/- 5% of standard
100 Standard	NTU	100	96.0	100	98.8	+/- 5% of standard
800 Standard	NTU	800	799	800	789	+/- 5% of standard

PHOTOIONIZATION DETECTOR

METER TYPE:
MODEL NO.:
UNIT ID NO.:

	Units	Standard Value	Meter Value	Standard Value	Meter Value	
Background	ppmv	<0.1		<0.1		within 5 ppmv of BG
Span Gas	ppmv	100		100		+/- 10% of standard

O_2-LEL 4 GAS METER

METER TYPE:
MODEL NO.:
UNIT ID NO.:

	Units	Standard Value	Meter Value	Standard Value	Meter Value	
Methane	%	50		50		+/- 10% of standard
O_2	%	20.9	MB	20.9		+/- 10% of standard
H_2S	ppmv	25		25		+/- 10% of standard
CO	ppmv	50		50		+/- 10% of standard

OTHER METER

METER TYPE:
MODEL NO.:
UNIT ID NO.:

See Notes Below for Additional Information

☐ Equipment calibrated within the Acceptance Criteria specified for each of the parameters listed above.
☑ Equipment (not) calibrated within the Acceptance Criteria specified for each of the parameters listed above**. SEE NOTE

MATERIALS RECORD

		Cal. Standard Lot Number	Exp. Date
Deionized Water Source:	Portland FOS	pH (4) 9GE1020	5-21
Lot#/Date Produced:		pH (7) 9GE1325	5-21
Trip Blank Source:	LAB	pH (10)	
Sample Preservatives Source:	VWR	ORP ZGBS10	11-00
Disposable Filter Type:	0.45µm cellulose	Conductivity ZGD741	4-21
Calibration Fluids / Standard Source:		<0.1 Turb. Stan. A9270	1-21
- DO Calibration Fluid (<0.1 mg/L)	Portland FOS	20 Turb. Stan. A9287	
- Other		100 Turb. Stan. A9271	
- Other		800 Turb. Stan. A9275	
- Other	MB	PID Span Gas	
		O_2-LEL Span Gas	
		Other	

NOTES:
ORP slightly low during PM bump check

* = Unless otherwise noted, calibration procedures and acceptance criteria are in general accordance with USEPA Region 1 SOPs for Field Instrument Calibration (EQASOP-FieldCalibrat) and Low Stress Purging and Sampling (EQASOP-GW001), each dated 1/19/2010. Additional acceptance criteria obtained from instrument specific manufacturer recommendations.
** = If meter reading is not within acceptance criteria, clean/replace probe and re-calibrate, or use calibrated back-up meter if available. If project requirements necessitate use of the instrument, clearly document any deviations from acceptance criteria on all data sheets and log book entries.
1 = DO Saturated standard value is calculated based on Oxygen Solubility at Indicated Pressure Chart from the USEPA Region 1 SOP for Field Instrument Calibration (EQASOP-FieldCalibrat), dated 1/19/2010

FIELD INSTRUMENTATION CALIBRATION RECORD

PROJECT NAME: Dinaburg Distributing OU2 RI
PROJECT NUMBER: 3617187420
PROJECT LOCATION: City of Rochester, NY
WEATHER CONDITIONS (AM): Partly cloudy, 75F, mound light breeze
WEATHER CONDITIONS (PM): Rain, 70°F, calm to breezy

TASK NO: 02 DATE: 7/16/20
MACTEC CREW: LFGW-JR, MB
SAMPLER NAME: Jerry Rawcliffe
SAMPLER SIGNATURE: Jerry Rawcliffe
CHECKED BY: MR DATE: 7/28/20

MULTI-PARAMETER WATER QUALITY METER

METER TYPE: YSI
MODEL NO.: 556 MPS
UNIT ID NO.: M015-02

AM CALIBRATION Start Time 0655 /End Time 0730
POST CALIBRATION CHECK Start Time 1800 /End Time 1815

	Units	Standard Value	Meter Value	*Acceptance Criteria (AM)	Standard Value	Meter Value	*Acceptance Criteria (PM)
pH (4)	SU	4.0	4.00	+/- 0.1 pH Units			
pH (7)	SU	7.0	7.00	+/- 0.1 pH Units	7.0	7.05	+/- 0.3 pH Units
pH (10)	SU	10.0	—	+/- 0.1 pH Units			
Redox	+/- mV	240	240.0	+/- 10 mV	240	243.2	+/- 10 mV
Conductivity	mS/cm	1.413	1.413	+/- 0.5 % of standard	1.413	1.410	+/- 5% of standard
DO (saturated)	%	100	100.1	+/- 2% of standard		95.2	
DO (saturated)	mg/L[1] (see Chart 1)	≈8.1	8.23	+/- 0.2 mg/L	≈8.35	8.12	+/- 0.5 mg/L of standard
DO (<0.1)	mg/L	<0.1	—	< 0.5 mg/L			
Temperature	°C		25.27			23.28	
Baro. Press.	mmHg		750.7			749.3	

TURBIDITY METER

METER TYPE: HACH
MODEL NO.: 2100Q
UNIT ID NO.: M024-29

	Units	Standard Value	Meter Value	Standard Value	Meter Value	*Acceptance Criteria (PM)
~~0~~ 0.1 Standard	NTU	10 ~~<0.1~~	10.3	10 ~~<0.1~~	10.1	5% ~~+/- 0.3~~ NTU of stan.
20 Standard	NTU	20	20.1	20	20.1	+/- 5% of standard
100 Standard	NTU	100	100	100	100	+/- 5% of standard
800 Standard	NTU	800	791	800	802	+/- 5% of standard

PHOTOIONIZATION DETECTOR

METER TYPE:
MODEL NO.:
UNIT ID NO.:

	Units					
Background	ppmv	<0.1		<0.1		within 5 ppmv of BG
Span Gas	ppmv	100		100		+/- 10% of standard

O_2-LEL 4 GAS METER

METER TYPE:
MODEL NO.:
UNIT ID NO.:

Methane	%	50		50	+/- 10% of standard
O_2	%	20.9		20.9	+/- 10% of standard
H_2S	ppmv	25		25	+/- 10% of standard
CO	ppmv	50		50	+/- 10% of standard

OTHER METER

METER TYPE:
MODEL NO.:
UNIT ID NO.:

See Notes Below for Additional Information

☑ Equipment calibrated within the Acceptance Criteria specified for each of the parameters listed above.
☐ Equipment (not) calibrated within the Acceptance Criteria specified for each of the parameters listed above**.

MATERIALS RECORD

		Cal. Standard Lot Number	Exp. Date
Deionized Water Source:	Portland FOS	pH (4) 96E1020	5/21
Lot#/Date Produced:		pH (7) 96E1325	5/21
Trip Blank Source:		pH (10) —	—
Sample Preservatives Source:		ORP 06B510	11/20
Disposable Filter Type:	0.45µm cellulose	Conductivity 06B741	4/21
Calibration Fluids / Standard Source:		NO ~~<0.1~~ Turb. Stan. A9155	9/20
- DO Calibration Fluid (<0.1 mg/L)	Portland FOS	20 Turb. Stan. A9151A	
- Other		100 Turb. Stan. A9155	↓
- Other		800 Turb. Stan. A9155	
- Other		PID Span Gas	
		O_2-LEL Span Gas	
		Other	

NOTES:

* = Unless otherwise noted, calibration procedures and acceptance criteria are in general accordance with USEPA Region 1 SOPs for Field Instrument Calibration (EQASOP-FieldCalibrat) and Low Stress Purging and Sampling (EQASOP-GW001), each dated 1/19/2010. Additional acceptance criteria obtained from instrument specific manufacturer recommendations.
** = If meter reading is not within acceptance criteria, clean/replace probe and re-calibrate, or use calibrated back-up meter if available. If project requirements necessitate use of the instrument, clearly document any deviations from acceptance criteria on all data sheets and log book entries.
1 = DO Saturated standard value is calculated based on Oxygen Solubility at Indicated Pressure Chart from the USEPA Region 1 SOP for Field Instrument Calibration (EQASOP-FieldCalibrat), dated 1/19/2010.

FIELD INSTRUMENTATION CALIBRATION RECORD

PROJECT NAME: Dinaburg Distributing OU2 RI
PROJECT NUMBER: 3617187420
PROJECT LOCATION: City of Rochester, NY
WEATHER CONDITIONS (AM): 75° light breeze, partly cloudy
WEATHER CONDITIONS (PM): 70°, rain

TASK NO:
DATE: 7-16-2020
MACTEC CREW: JR + MB
SAMPLER NAME: M. BRUNO
SAMPLER SIGNATURE: MB
CHECKED BY: JBrumfield DATE: 7/29/20

MULTI-PARAMETER WATER QUALITY METER

METER TYPE: YSI
MODEL NO.: 556 MPS
UNIT ID NO.: M015-05

AM CALIBRATION Start Time 0705 /End Time 0720

POST CALIBRATION CHECK Start Time 1740 /End Time 1800

	Units	Standard Value	Meter Value	*Acceptance Criteria (AM)	Standard Value	Meter Value	*Acceptance Criteria (PM)
pH (4)	SU	4.0	4.00	+/- 0.1 pH Units			
pH (7)	SU	7.0	7.00	+/- 0.1 pH Units	7.0	7.25	+/- 0.3 pH Units
pH (10)	SU	10.0	–	+/- 0.1 pH Units			
Redox	+/- mV	240	240.0	+/- 10 mV	240	232.8	+/- 10 mV
Conductivity	mS/cm	1.413	1.413	+/- 0.5 % of standard	1.413	1.432	+/- 5% of standard
DO (saturated)	%	100	101.0	+/- 2% of standard			
DO (saturated)	mg/L [1 (see Chart 1)]	8.65	8.65	+/- 0.2 mg/L	≈ 8.61	7.40 (x)	+/- 0.5 mg/L of standard
DO (<0.1)	mg/L	<0.1	–	< 0.5 mg/L			
Temperature	°C		22.31			22.10	
Baro. Press.	mmHg		754.1			752.8	

TURBIDITY METER

METER TYPE: HACH
MODEL NO.: 2100Q
UNIT ID NO.: M024-27

	Units	Standard Value	Meter Value	Standard Value	Meter Value	*Acceptance Criteria (PM)
<0.1 Standard	NTU	<0.1	9.75	<0.1	9.85	+/- 0.3 NTU of stan.
20 Standard	NTU	20	19.8	20	19.5	+/- 5% of standard
100 Standard	NTU	100	100	100	98.7	+/- 5% of standard
800 Standard	NTU	800	793	800	793	+/- 5% of standard

PHOTOIONIZATION DETECTOR

METER TYPE:
MODEL NO.:
UNIT ID NO.:

	Units	Standard Value	Meter Value	Standard Value	Meter Value	*Acceptance Criteria (PM)
Background	ppmv	<0.1		<0.1		within 5 ppmv of BG
Span Gas	ppmv	100		100		+/- 10% of standard

O_2-LEL 4 GAS METER

METER TYPE:
MODEL NO.:
UNIT ID NO.:

	Units	Standard Value	Meter Value	Standard Value	Meter Value	*Acceptance Criteria (PM)
Methane	%	50	NR	50		+/- 10% of standard
O_2	%	20.9		20.9		+/- 10% of standard
H_2S	ppmv	25		25		+/- 10% of standard
CO	ppmv	50		50		+/- 10% of standard

OTHER METER

METER TYPE:
MODEL NO.:
UNIT ID NO.:

See Notes Below for Additional Information

☑ Equipment calibrated within the Acceptance Criteria specified for each of the parameters listed above.
☐ Equipment (not) calibrated within the Acceptance Criteria specified for each of the parameters listed above**. *

MATERIALS RECORD

		Cal. Standard Lot Number	Exp. Date
Deionized Water Source:	Portland FOS	pH (4) 9GE1020	5-21
Lot#/Date Produced:	LAB	pH (7) 9GE1325	5-21
Trip Blank Source:	LAB	pH (10) –	–
Sample Preservatives Source:		ORP ØGB510	11-20
Disposable Filter Type:	0.45µm cellulose	Conductivity ØGB741	4-21
Calibration Fluids / Standard Source:		<0.1 Turb. Stan. A9270	1-21
- DO Calibration Fluid (<0.1 mg/L)	Portland FOS	20 Turb. Stan. A9287	1-21
- Other		100 Turb. Stan. A9277	1-21
- Other	NR	800 Turb. Stan A9275	1-21
- Other		PID Span Gas –	
		O_2-LEL Span Gas –	
		Other –	

NOTES:
* DO TRENDED LOW AT AM BUMP CHECK

* = Unless otherwise noted, calibration procedures and acceptance criteria are in general accordance with USEPA Region 1 SOPs for Field Instrument Calibration (EQASOP-FieldCalibrat) and Low Stress Purging and Sampling (EQASOP-GW001), each dated 1/19/2010. Additonal acceptance criteria obtained from instrument specific manufacturer recommendations.
** = If meter reading is not within acceptance criteria, clean/replace probe and re-calibrate, or use calibrated back-up meter if available. If project requirements necessitate use of the instrument, clearly document any deviations from acceptance criteria on all data sheets and log book entries.
1 = DO Saturated standard value is calculated based on Oxygen Solubility at Indicated Pressure Chart from the USEPA Region 1 SOP for Field Instrument Calibration (EQASOP-FieldCalibrat), dated 1/19/2010.

FIELD INSTRUMENTATION CALIBRATION RECORD

PROJECT NAME: Dinaburg Distributing OU2 RI
PROJECT NUMBER: 3617187420
PROJECT LOCATION: City of Rochester, NY
WEATHER CONDITIONS (AM): Overcast, light showers, 70° F
WEATHER CONDITIONS (PM): Partly cloudy, 80°F, light breeze

TASK NO: .02 DATE: 7/17/20
MACTEC CREW: LPGW JR/MP
SAMPLER NAME: Jerry Randolph
SAMPLER SIGNATURE: Jerry Randolph
CHECKED BY: MPL DATE: 7/17/20

MULTI-PARAMETER WATER QUALITY METER

METER TYPE: YSI
MODEL NO.: 556 MPS
UNIT ID NO.: MU15-02

	Units	Standard Value	AM CALIBRATION Meter Value (Start 0705 / End 0740)	*Acceptance Criteria (AM)	POST CALIBRATION CHECK (Start 1300 / End 1320) Standard Value	Meter Value	*Acceptance Criteria (PM)
pH (4)	SU	4.0	4.00	+/- 0.1 pH Units			
pH (7)	SU	7.0	7.00	+/- 0.1 pH Units	7.0	6.98	+/- 0.3 pH Units
pH (10)	SU	10.0	—	+/- 0.1 pH Units			
Redox	+/- mV	240	240.0	+/- 10 mV	240	233.9	+/- 10 mV
Conductivity	mS/cm	1.413	1.413	+/- 0.5 % of standard	1.413	1.417	+/- 5% of standard
DO (saturated)	%	100	101.4	+/- 2% of standard		102.3	
DO (saturated)	mg/L[1] (see Chart 1)	≈8.5	8.70	+/- 0.2 mg/L	≈7.7	7.90	+/- 0.5 mg/L of standard
DO (<0.1)	mg/L	<0.1	—	< 0.5 mg/L			
Temperature	°C		22.94			28.75	
Baro. Press.	mmHg		750.0			750.7	

TURBIDITY METER

METER TYPE: HACH
MODEL NO.: 2100Q
UNIT ID NO.: M024-29

	Units	Standard Value	Meter Value	Standard Value	Meter Value	*Acceptance Criteria (PM)
~~0~~ 10 Standard	NTU	~~0~~ 10	10.5	~~0~~ 10	9.96	+/- ~~0.3 NTU~~ 5% of stan.
20 Standard	NTU	20	20.3	20	20.6	+/- 5% of standard
100 Standard	NTU	100	101	100	101	+/- 5% of standard
800 Standard	NTU	800	799	800	784	+/- 5% of standard

PHOTOIONIZATION DETECTOR

METER TYPE:
MODEL NO.:
UNIT ID NO.:

	Units	Standard Value	Meter Value	Standard Value	Meter Value	
Background	ppmv	<0.1		<0.1		within 5 ppmv of BG
Span Gas	ppmv	100		100		+/- 10% of standard

O_2-LEL 4 GAS METER

METER TYPE:
MODEL NO.:
UNIT ID NO.:

	Units	Standard Value	Meter Value	Standard Value	Meter Value	
Methane	%	50		50		+/- 10% of standard
O_2	%	20.9		20.9		+/- 10% of standard
H_2S	ppmv	25		25		+/- 10% of standard
CO	ppmv	50		50		+/- 10% of standard

OTHER METER

METER TYPE:
MODEL NO.:
UNIT ID NO.:

See Notes Below for Additional Information

☑ Equipment calibrated within the Acceptance Criteria specified for each of the parameters listed above.
☐ Equipment (not) calibrated within the Acceptance Criteria specified for each of the parameters listed above**.

MATERIALS RECORD

Deionized Water Source: Portland FOS
Lot#/Date Produced:
Trip Blank Source:
Sample Preservatives Source:
Disposable Filter Type: 0.45µm cellulose
Calibration Fluids / Standard Source:
- DO Calibration Fluid (<0.1 mg/L) Portland FOS
- Other
- Other
- Other

	Cal. Standard Lot Number	Exp. Date
pH (4)	9GE1020	5/21
pH (7)	9GE1325	5/21
pH (10)	—	—
ORP	0GB510	4/20
Conductivity	0GD741	4/21
~~0~~ 10 Turb. Stan.	A4155	9/20
20 Turb. Stan.	A4157A	↓
100 Turb. Stan.	A4151	
800 Turb. Stan.	A4151	
PID Span Gas		
O_2-LEL Span Gas		
Other		

NOTES:

* = Unless otherwise noted, calibration procedures and acceptance criteria are in general accordance with USEPA Region 1 SOPs for Field Instrument Calibration (EQASOP-FieldCalibrat) and Low Stress Purging and Sampling (EQASOP-GW001), each dated 1/19/2010. Additonal acceptance criteria obtained from instrument specific manufacturer recommendations.
** = If meter reading is not within acceptance criteria, clean/replace probe and re-calibrate, or use calibrated back-up meter if available. If project requirements necessitate use of the instrument, clearly document any deviations from acceptance criteria on all data sheets and log book entries.
1 = DO Saturated standard value is calculated based on Oxygen Solubility at Indicated Pressure Chart from the USEPA Region 1 SOP for Field Instrument Calibration (EQASOP-FieldCalibrat), dated 1/19/2010.

FIELD INSTRUMENTATION CALIBRATION RECORD

PROJECT NAME: Dinaburg Distributing OU2 RI
PROJECT NUMBER: 3617187420
PROJECT LOCATION: City of Rochester, NY
WEATHER CONDITIONS (AM): OVERCAST, 75°F
WEATHER CONDITIONS (PM): SUNNY, 80°F

TASK NO: 02 DATE: 7-17-2020
MACTEC CREW:
SAMPLER NAME: M. BRUNO
SAMPLER SIGNATURE: Madeline Bruno
CHECKED BY: JR DATE: 7/20/20

MULTI-PARAMETER WATER QUALITY METER

METER TYPE: YSI
MODEL NO.: 556 MPS
UNIT ID NO.: MO15-05

AM CALIBRATION Start Time 0705 /End Time 0725

POST CALIBRATION CHECK Start Time 1126 /End Time 1138

	Units	Standard Value	Meter Value	*Acceptance Criteria (AM)	Standard Value	Meter Value	*Acceptance Criteria (PM)
pH (4)	SU	4.0	4.00	+/- 0.1 pH Units			
pH (7)	SU	7.0	7.00	+/- 0.1 pH Units	7.0	7.19	+/- 0.3 pH Units
pH (10)	SU	10.0	—	+/- 0.1 pH Units			
Redox	+/- mV	240	240.0	+/- 10 mV	240	242.0	+/- 10 mV
Conductivity	mS/cm	1.413	1.412	+/- 0.5 % of standard	1.413	1.483	+/- 5% of standard
DO (saturated)	%	100 (WB)	99.1	+/- 2% of standard			
DO (saturated)	mg/L[1] (see Chart 1)	21.03	8.83	+/- 0.2 mg/L	8.25 (WB)	8.65 (WB)	+/- 0.5 mg/L of standard
DO (<0.1)	mg/L	<0.1 8.82	—	< 0.5 mg/L	(PM) ~~8.49~~ ~8.5	22.96	8.65
Temperature	°C		21.03			75.7	
Baro. Press.	mmHg		753.4				

TURBIDITY METER

METER TYPE: HACH
MODEL NO.: 2100Q
UNIT ID NO.: MO24-27

	Units	Standard Value	Meter Value	Standard Value	Meter Value	*Acceptance Criteria (PM)
<0.1 Standard	NTU	~~10~~ <0.1	9.8	~~10~~ <0.1	9.95	5% +/- ~~0.3~~ NTU of stan.
20 Standard	NTU	20	20.0	20	20.7	+/- 5% of standard
100 Standard	NTU	100	96.7	100	98.1	+/- 5% of standard
800 Standard	NTU	800	797	800	807	+/- 5% of standard

~~PHOTOIONIZATION~~ DETECTOR

METER TYPE:
MODEL NO.:
UNIT ID NO.:

	Units			Standard Value	Meter Value	
Background	ppmv	<0.1		<0.1		within 5 ppmv of BG
Span Gas	ppmv	100		100		+/- 10% of standard

O_2-LEL 4 GAS METER

METER TYPE:
MODEL NO.:
UNIT ID NO.:

	Units			Standard Value	Meter Value	
Methane	%	50		50		+/- 10% of standard
O_2	%	20 (AIR)		20.9		+/- 10% of standard
H_2S	ppmv	25		25		+/- 10% of standard
CO	ppmv	50		50		+/- 10% of standard

OTHER METER

METER TYPE:
MODEL NO.:
UNIT ID NO.:

See Notes Below for Additional Information

☑ Equipment calibrated within the Acceptance Criteria specified for each of the parameters listed above.
☐ Equipment (not) calibrated within the Acceptance Criteria specified for each of the parameters listed above**.

MATERIALS RECORD

		Cal. Standard Lot Number	Exp. Date
Deionized Water Source:	Portland FOS	pH (4) 9GE1020	5/21
Lot#/Date Produced:		pH (7) 9GE1325	5/21
Trip Blank Source:	LAB	pH (10) —	—
Sample Preservatives Source:	LAB	ORP 0GB510	11.20
Disposable Filter Type:	0.45µm cellulose	Conductivity 0GB7A1	4.21
Calibration Fluids / Standard Source:		<0.1 Turb. Stan. A9276	1-21
- DO Calibration Fluid (<0.1 mg/L)	Portland FOS	20 Turb. Stan. A9287	
- Other		100 Turb. Stan. A9277	
- Other		800 Turb. Stan. A9275	
- Other		PID Span Gas —	—
		O_2-LEL Span Gas —	—
		Other —	—

NOTES: NONE

* = Unless otherwise noted, calibration procedures and acceptance criteria are in general accordance with USEPA Region 1 SOPs for Field Instrument Calibration (EQASOP-FieldCalibrat) and Low Stress Purging and Sampling (EQASOP-GW001), each dated 1/19/2010. Additonal acceptance criteria obtained from instrument specific manufacturer recommendations.
** = If meter reading is not within acceptance criteria, clean/replace probe and re-calibrate, or use calibrated back-up meter if available. If project requirements necessitate use of the instrument, clearly document any deviations from acceptance criteria on all data sheets and log book entries.
1 = DO Saturated standard value is calculated based on Oxygen Solubility at Indicated Pressure Chart from the USEPA Region 1 SOP for Field Instrument Calibration (EQASOP-FieldCalibrat), dated 1/19/2010.

FIELD INSTRUMENTATION CALIBRATION RECORD - PORTLAND FOS

Please Retain For Project Records

PROJECT NAME: _____ DATE: 7/6/2020 TIME: _____

PROJECT NUMBER: 361718 7420.02 CALIBRATED BY: BC

MULTI-PARAMETER WATER QUALITY METER METER TYPE YSI MODEL NO. 556 UNIT ID NO. _____

	Units	Standard Value	Meter Value	Acceptance Criteria*	Cal. Standard Lot #	Exp. Date
pH (4)	SU	4.0		+/- 0.2 pH Units		
pH (7)	SU	7.0		+/- 0.2 pH Units		
pH (10)	SU	10.0		+/- 0.2 pH Units		
Redox	+/- mV	240		+/- 10 mV		
Conductivity	mS/cm	1.413		+/- 0.5% of standard		
DO (saturated)	%	100		+/- 2% of standard	**DO Cal. Solution Source**	**Prep. Date**
DO (saturated)	mg/L[1]			+/- 0.2 mg/L	Portland FOS	
DO (<0.1)	mg/L	<0.1		≤ 0.5 mg/L		
Baro. Press.	mmHg				**NIST Serial #**	**Certificate #**
Temperature	°C			+/- 0.2 °C	4F2160	2448.01

TURBIDITY METER mg/L[1] METER TYPE HACH MODEL NO. 2100Q UNIT ID NO. M024-29

					Cal. Standard Lot #	Exp. Date
<0.1 Standard	NTU	<0.1	10.7	w/in 0.3 NTU	A9155	9/20
20 Standard	NTU	20	19.7	+/- 5% of standard	A9151A	9/20
100 Standard	NTU	100	99.6	+/- 5% of standard	A9155	9/20
800 Standard	NTU	800	795	+/- 5% of standard	A9155	9/20

PHOTOIONIZATION DETECTOR METER TYPE _____ MODEL NO. _____ UNIT ID NO. _____

					Cal. Standard Lot #	Exp. Date
Background (BG)	ppmv	<0.1		within 5 ppmv of BG		
Span Gas	ppmv	100		+/- 10% of standard		

☐ Equipment calibrated within the Acceptance Criteria specified for each of the parameters listed above.

☐ Equipment (not) calibrated within the Acceptance Criteria** specified for each of the parameters listed above.

NOTES:

wood. 511 Congress Street, Portland Maine 04101

* = Unless otherwise noted, calibration procedures and acceptance criteria are in general accordance with USEPA Region 1 SOPs for Field Instrument Calibration (EQASOP-FieldCalibrat) and Low Stress Purging and Sampling (EQASOP-GW001), each dated 1/19/2010. Additional acceptance criteria obtained from instrument specific manufacturer recommendations.

** = If meter reading is not within acceptance criteria, clean/replace probe and re-calibrate, or use calibrated back-up meter if available. If project requirements necessitate use of the instrument, clearly document any deviations from acceptance criteria on all data sheets and log book entries.

1 = DO Saturated standard value is calculated based on Oxygen Solubility at Indicated Pressure Chart from the USEPA Region 1 SOP for Field Instrument Calibration (EQASOP-FieldCalibrat), dated 1/19/2010.

FIELD INSTRUMENTATION CALIBRATION RECORD - PORTLAND FOS

Please Retain For Project Records

PROJECT NAME: _____ DATE: 7/9/2020 TIME: _____

PROJECT NUMBER: 36171874 20.02.xxxx CALIBRATED BY: BC

MULTI-PARAMETER WATER QUALITY METER METER TYPE YSI MODEL NO. 556 UNIT ID NO. M015-02

	Units	Standard Value	Meter Value	Acceptance Criteria*	Cal. Standard Lot #	Exp. Date
pH (4)	SU	4.0	4.00	+/- 0.2 pH Units	9GE1020	5/21
pH (7)	SU	7.0	7.00	+/- 0.2 pH Units	9GE1325	5/21
pH (10)	SU	10.0		+/- 0.2 pH Units		
Redox	+/- mV	240	240	+/- 10 mV	ØGBBTO	11/20
Conductivity	mS/cm	1.413	1.413	+/- 0.5% of standard	ØGD741	4/21
DO (saturated)	%	100	100.0	+/- 2% of standard	**DO Cal. Solution Source**	**Prep. Date**
DO (saturated)	mg/L[1]			+/- 0.2 mg/L	Portland FOS	
DO (<0.1)	mg/L	<0.1		≤ 0.5 mg/L		
Baro. Press.	mmHg				**NIST Serial #**	**Certificate #**
Temperature	°C	22.5	22.7	+/- 0.2 °C	4F2160	2448.01

TURBIDITY METER mg/L[1] METER TYPE HACH MODEL NO. 2100Q UNIT ID NO. _____

					Cal. Standard Lot #	Exp. Date
<0.1 Standard	NTU	<0.1		w/in 0.3 NTU		
20 Standard	NTU	20		+/- 5% of standard		
100 Standard	NTU	100		+/- 5% of standard		
800 Standard	NTU	800		+/- 5% of standard		

PHOTOIONIZATION DETECTOR METER TYPE _____ MODEL NO. _____ UNIT ID NO. _____

					Cal. Standard Lot #	Exp. Date
Background (BG)	ppmv	<0.1		within 5 ppmv of BG		
Span Gas	ppmv	100		+/- 10% of standard		

☐ Equipment calibrated within the Acceptance Criteria specified for each of the parameters listed above.

☐ Equipment (not) calibrated within the Acceptance Criteria** specified for each of the parameters listed above.

NOTES:

wood. 511 Congress Street, Portland Maine 04101

* = Unless otherwise noted, calibration procedures and acceptance criteria are in general accordance with USEPA Region 1 SOPs for Field Instrument Calibration (EQASOP-FieldCalibrat) and Low Stress Purging and Sampling (EQASOP-GW001), each dated 1/19/2010. Additional acceptance criteria obtained from instrument specific manufacturer recommendations.

** = If meter reading is not within acceptance criteria, clean/replace probe and re-calibrate, or use calibrated back-up meter if available. If project requirements necessitate use of the instrument, clearly document any deviations from acceptance criteria on all data sheets and log book entries.

1 = DO Saturated standard value is calculated based on Oxygen Solubility at Indicated Pressure Chart from the USEPA Region 1 SOP for Field Instrument Calibration (EQASOP-FieldCalibrat), dated 1/19/2010.

FIELD INSTRUMENTATION CALIBRATION RECORD - PORTLAND FOS

Please Retain For Project Records

PROJECT NAME: _____ DATE: 7/9/2020 TIME: _____

PROJECT NUMBER: 361718742O-02.xxxx CALIBRATED BY: BC

MULTI-PARAMETER WATER QUALITY METER METER TYPE YSI MODEL NO. 556 UNIT ID NO. M015-05

	Units	Standard Value	Meter Value	Acceptance Criteria*	Cal. Standard Lot #	Exp. Date
pH (4)	SU	4.0	4.00	+/- 0.2 pH Units	9GE1020	5/21
pH (7)	SU	7.0	7.00	+/- 0.2 pH Units	9GE1325	5/21
pH (10)	SU	10.0		+/- 0.2 pH Units		
Redox	+/- mV	240	240	+/- 10 mV	ØGB510	11/20
Conductivity	mS/cm	1.413	1.413	+/- 0.5% of standard	ØGD741	4/21
DO (saturated)	%	100	100.5	+/- 2% of standard	**DO Cal. Solution Source**	**Prep. Date**
DO (saturated)	mg/L[1]			+/- 0.2 mg/L	Portland FOS	
DO (<0.1)	mg/L	<0.1		≤ 0.5 mg/L		
Baro. Press.	mmHg				**NIST Serial #**	**Certificate #**
Temperature	°C	22.4	22.7	+/- 0.2 °C	4F2160	2448.01

TURBIDITY METER mg/L[1] METER TYPE HACH MODEL NO. 2100Q UNIT ID NO. _____

					Cal. Standard Lot #	Exp. Date
<0.1 Standard	NTU	<0.1		w/in 0.3 NTU		
20 Standard	NTU	20		+/- 5% of standard		
100 Standard	NTU	100		+/- 5% of standard		
800 Standard	NTU	800		+/- 5% of standard		

PHOTOIONIZATION DETECTOR METER TYPE _____ MODEL NO. _____ UNIT ID NO. _____

					Cal. Standard Lot #	Exp. Date
Background (BG)	ppmv	<0.1		within 5 ppmv of BG		
Span Gas	ppmv	100		+/- 10% of standard		

☐ Equipment calibrated within the Acceptance Criteria specified for each of the parameters listed above.

☐ Equipment (not) calibrated within the Acceptance Criteria** specified for each of the parameters listed above.

NOTES:

wood. 511 Congress Street, Portland Maine 04101

* = Unless otherwise noted, calibration procedures and acceptance criteria are in general accordance with USEPA Region 1 SOPs for Field Instrument Calibration (EQASOP-FieldCalibrat) and Low Stress Purging and Sampling (EQASOP-GW001), each dated 1/19/2010. Additional acceptance criteria obtained from instrument specific manufacturer recommendations.

** = If meter reading is not within acceptance criteria, clean/replace probe and re-calibrate, or use calibrated back-up meter if available. If project requirements necessitate use of the instrument, clearly document any deviations from acceptance criteria on all data sheets and log book entries.

1 = DO Saturated standard value is calculated based on Oxygen Solubility at Indicated Pressure Chart from the USEPA Region 1 SOP for Field Instrument Calibration (EQASOP-FieldCalibrat), dated 1/19/2010.

FIELD INSTRUMENTATION CALIBRATION RECORD - PORTLAND FOS

Please Retain For Project Records

PROJECT NAME: _____ DATE: 9/6/2020 TIME: _____

PROJECT NUMBER: 361718742002 CALIBRATED BY: BC

MULTI-PARAMETER WATER QUALITY METER METER TYPE YSI MODEL NO. 556 UNIT ID NO. _____

	Units	Standard Value	Meter Value	Acceptance Criteria*	Cal. Standard Lot #	Exp. Date
pH (4)	SU	4.0		+/- 0.2 pH Units		
pH (7)	SU	7.0		+/- 0.2 pH Units		
pH (10)	SU	10.0		+/- 0.2 pH Units		
Redox	+/- mV	240		+/- 10 mV		
Conductivity	mS/cm	1.413		+/- 0.5% of standard		
DO (saturated)	%	100		+/- 2% of standard	**DO Cal. Solution Source**	**Prep. Date**
DO (saturated)	mg/L[1]			+/- 0.2 mg/L	Portland FOS	
DO (<0.1)	mg/L	<0.1		≤ 0.5 mg/L		
Baro. Press.	mmHg				**NIST Serial #**	**Certificate #**
Temperature	°C			+/- 0.2 °C	4F2160	2448.01

TURBIDITY METER mg/L[1] METER TYPE HACH MODEL NO. 2100Q UNIT ID NO. 4024-21

					Cal. Standard Lot #	Exp. Date
<0.1 Standard	NTU	<0.1	9.64	w/in 0.3 NTU	A9270	1/21
20 Standard	NTU	20	19.7	+/- 5% of standard	A9287	1/21
100 Standard	NTU	100	98.5	+/- 5% of standard	A9277	1/21
800 Standard	NTU	800	802	+/- 5% of standard	A9275	1/21

PHOTOIONIZATION DETECTOR METER TYPE _____ MODEL NO. _____ UNIT ID NO. _____

					Cal. Standard Lot #	Exp. Date
Background (BG)	ppmv	<0.1		within 5 ppmv of BG		
Span Gas	ppmv	100		+/- 10% of standard		

☐ Equipment calibrated within the Acceptance Criteria specified for each of the parameters listed above.

☐ Equipment (not) calibrated within the Acceptance Criteria** specified for each of the parameters listed above.

NOTES:

wood. 511 Congress Street, Portland Maine 04101

* = Unless otherwise noted, calibration procedures and acceptance criteria are in general accordance with USEPA Region 1 SOPs for Field Instrument Calibration (EQASOP-FieldCalibrat) and Low Stress Purging and Sampling (EQASOP-GW001), each dated 1/19/2010. Additional acceptance criteria obtained from instrument specific manufacturer recommendations.

** = If meter reading is not within acceptance criteria, clean/replace probe and re-calibrate, or use calibrated back-up meter if available. If project requirements necessitate use of the instrument, clearly document any deviations from acceptance criteria on all data sheets and log book entries.

1 = DO Saturated standard value is calculated based on Oxygen Solubility at Indicated Pressure Chart from the USEPA Region 1 SOP for Field Instrument Calibration (EQASOP-FieldCalibrat), dated 1/19/2010.

LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME: Dinaburg Distributing OU2 RI		LOCATION ID: MW03A	DATE: 7-16-2020
PROJECT NUMBER: 3617187420		START TIME: 1015	END TIME: 1225
SAMPLE ID: 828103-MW03A015	SAMPLE TIME: 1220	SITE NAME/NUMBER: 828103	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)	9.24 FT	FINAL DTW (BMP)	9.41 FT	PROT. CASING STICKUP (AGS)	0 FT	TOC/TOR DIFFERENCE	0.3 FT
WELL DEPTH (BMP)	24.92 FT	SCREEN LENGTH	5 FT	PID AMBIENT AIR	– PPM	REFILL TIMER SETTING	– SEC
WATER COLUMN	15.68 FT	DRAWDOWN VOLUME (initial DTW - final DTW X well diam. squared X 0.041)	+0.03 GAL	PID WELL MOUTH	– PPM	DISCHARGE TIMER SETTING	– SEC
CALCULATED GAL/VOL (column X well diameter squared X 0.041)	2.57 GAL	TOTAL VOL. PURGED (mL per minute X total minutes X 0.00026 gal/mL)	3.52 GAL	DRAWDOWN/ TOTAL PURGED	0.008	PRESSURE TO PUMP	– 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
1022	BEGIN PURGING									
1030	9.39	110	17.32	0.606	7.43	0.46	52.3	-74.7	~15	↑ PUMP SPEED RAISED
1040	9.41	150	15.74	0.606	7.44	0.27	56.5	-85.8	~15	
1050	9.41	150	15.56	0.604	7.49	0.22	59.3	-99.4	~15	
1055	9.41	150	15.32	0.606	7.44	0.22	71.9	-94.1	~15	
1100	9.41	150	15.32	0.605	7.44	0.21	90.9	-95.9	~15	
1105	9.41	150	15.49	0.609	7.43	0.24	109	-98.9	~15	
1110	9.41	150	15.45	0.612	7.43	0.23	112	-100.3	~15	↓ PUMP SPEED
1115	9.41	150	15.60	0.618	7.43	0.28	113	-102.1	~15	
1120	9.41	120	15.83	0.625	7.41	0.31	94.1	-106.3	~15	
1125	9.41	120	14.98	0.639	7.45	0.34	108	-81.1	~15	
1130	9.41	120	14.36	0.643	7.41	0.21	94.0	-88.7	~15	
1135	9.41	120	14.39	0.648	7.40	0.18	90.6	-95.4	~15	
1140	9.41	120	15.28	0.656	7.40	0.21	83.7	-91.0	~15	
1145	9.41	120	15.27	0.689	7.40	0.27	59.3	-98.6	~15	
1150	9.41	120	13.39	0.718	7.37	0.31	52.8	-99.7	~15	
1155	9.41	120	13.45	0.742	7.36	0.38	50.1	-102.4	~15	
1200	9.41	120	15.47	0.747	7.36	0.40	38.3	-102.9	~15	
1205	9.41	120	15.84	0.884	7.30	0.49	25.6	-101.2	~15	
1210	9.41	120	15.76	0.906	7.29	0.52	15.9	-105.6	~15	
1215	9.41	120	15.66	0.945	7.27	0.55	16.4	-105.8	~15	Purged 2 hours collecting sample-
1220	SAMPLE									

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

16	0.945	7.3	0.6	16.4	-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: ☑ PERISTALTIC Geo pump ☐ SUBMERSIBLE ☐ BLADDER ☐ _____ ☐ WATTERA ☐ OTHER ☐ OTHER

DECON FLUIDS USED: ☐ LIQUINOX ☐ DEIONIZED WATER ☑ POTABLE WATER ☐ NITRIC ACID ☐ HEXANE ☐ METHANOL ☑ OTHER Deionized

TUBING/PUMP/BLADDER MATERIALS: ☑ SILICON TUBING ☐ TEFLON TUBING ☐ TEFLON LINED TUBING ☐ HDPE TUBING ☑ LDPE TUBING ☐ OTHER ☐ OTHER

☐ S. STEEL PUMP MATERIAL ☐ PVC PUMP MATERIAL ☐ GEOPROBE SCREEN MB ☐ TEFLON BLADDER ☐ OTHER ☐ OTHER ☐ OTHER

EQUIPMENT USED: ☐ WL METER ☐ PID ☑ WQ METER ☑ TURB. METER ☑ PUMP ☐ OTHER ☐ FILTERS NO. ___ TYPE ___

ANALYTICAL PARAMETERS

PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS
VOCs	8260B	NO	HCl, 4°C	3 x 50	YES	NO	828103-MW03A015

PURGE OBSERVATIONS

PURGE WATER CONTAINERIZED: ☑ YES ☐ NO

NUMBER OF GALLONS GENERATED: ~4.0

NO-PURGE METHOD UTILIZED: ☐ YES ☑ NO

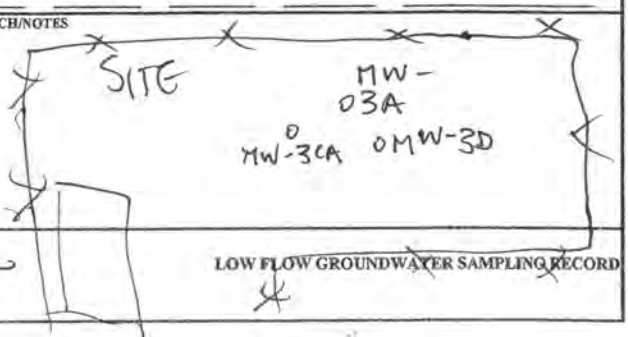
If yes, purged approximately 1 standing volume prior to sampling or _____ mL for this sample location.

Maddy Bruno
Sampler Signature:

Print Name:

Checked By: Jerry Ruffley Date: 7/20/20

SKETCH/NOTES



MACTEC
511 Congress Street, Portland Maine 04101

LOW FLOW GROUNDWATER SAMPLING RECORD

LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME	Dinaburg Distributing OU2 RI
PROJECT NUMBER	3617187420
SAMPLE ID	828103-MW03CA030
SAMPLE TIME	1000
LOCATION ID	MW-03CA
DATE	7-16-2020
START TIME	0740
END TIME	1015
SITE NAME/NUMBER	828103
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)	12.12 FT	FINAL DTW (BMP)	12.54 FT	PROT. CASING STICKUP (AGS)	0 FT	TOC/TOR DIFFERENCE	0.53 FT
WELL DEPTH (BMP)	29.98 FT	SCREEN LENGTH	5 FT	PID AMBIENT AIR	— PPM	REFILL TIMER SETTING	— SEC
WATER COLUMN	17.86 FT	DRAWDOWN VOLUME (initial DTW - final DTW X well diam. squared X 0.041)	+0.07 GAL	PID WELL MOUTH	— PPM	DISCHARGE TIMER SETTING	— SEC
CALCULATED GAL/VOL (column X well diameter squared X 0.041)	2.93 GAL	TOTAL VOL. PURGED (mL per minute X total minutes X 0.00026 gal/mL)	3.432 GAL	DRAWDOWN/ TOTAL PURGED	~~+0.42~~ 0.02	PRESSURE TO PUMP	— 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
0810	BEGIN PURGING - WATER HAS HIGH LEVELS OF SED (SOFT BOTTOM)									
0820	12.88	110	15.75	1.126	7.03	0.42	>1000	-14.9	~28	
0830	12.56	120	16.67	1.154	7.04	0.50	434	-19.3	~28	
0840	12.51	110	16.61	1.209	7.09	0.63	235	-21.6	~28	↑ SPEED
0845	12.57	150	16.57	1.228	7.08	0.64	153	-22.3	~28	
0850	12.59	150	16.20	1.285	7.06	1.76	122	-23.0	~28	
0855	12.59	150	16.34	1.293	7.07	1.66	108	-23.6	~28	
0900	12.60	150	16.13	1.318	7.06	1.60	54.8	-17.7	~28	REDOX = -18.5
0905	12.61	140	16.08	1.357	7.06	1.72	40.9	-16.1	~28	REDOX = -14.3
0910	12.61	140	16.02	1.384	7.06	1.76	34.1	-15.8	~28	
0915	12.59	140	16.58	1.392	7.05	1.73	26.1	-20.5	~28	
0920	12.49	140	16.81	1.396	7.06	1.71	25.5	-19.0	~28	
0925	12.51	150	16.79	1.402	7.07	1.72	25.6	-18.6	~28	
0930	12.53	150	16.77	1.410	7.05	1.67	21.5	-21.1	~28	
0935	12.53	150	16.59	1.418	7.05	1.66	17.5	-22.2	~28	
0940	12.55	150	16.17	1.423	7.05	1.62	16.2	-23.2	~28	
0945	12.53	150	16.15	1.423	7.06	1.55	18.2	-22.5	~28	
0950	12.54	150	16.39	1.421	7.07	1.53	16.1	-21.9	~28	
0955	12.54	150	16.41	1.423	7.06	1.49	17.0	-21.1	~28	
1000	SAMPLE									

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

	16	1.42	7.0	1.5	17.0	-21

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 Geopump ☐ SUBMERSIBLE ☐ BLADDER ☐ WATTERA ☐ OTHER ☐ OTHER

DECON FLUIDS USED: ☐ LIQUINOX ☐ DEIONIZED WATER ☐ POTABLE WATER ☐ NITRIC ACID ☐ HEXANE ☐ METHANOL ☑ OTHER Dedicated

TUBING/PUMP/BLADDER MATERIALS: ☑ SILICON TUBING ☐ TEFLON TUBING ☐ TEFLON LINED TUBING ☐ HDPE TUBING ☑ LDPE TUBING ☐ OTHER ☐ OTHER

☐ S. STEEL PUMP MATERIAL ☐ PVC PUMP MATERIAL ☐ GEOPROBE SCREEN ☐ TEFLON BLADDER ☐ OTHER ☐ OTHER ☐ OTHER

EQUIPMENT USED: ☑ WL METER MD03-79 ☐ PID ☑ WQ METER MO15-05 ☑ TURB. METER MO24-27 ☑ PUMP S008-44 ☐ OTHER ☐ FILTERS NO. ___ TYPE ___

ANALYTICAL PARAMETERS

PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS
VOCs	8260B	N10	HCl, 4°C	3x50	YES	N10	828103-MW03CA030

PURGE OBSERVATIONS

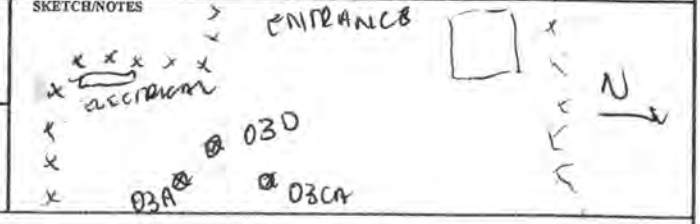
PURGE WATER CONTAINERIZED: ☑ YES ☐ NO

NO-PURGE METHOD UTILIZED: ☐ YES ☑ NO

NUMBER OF GALLONS GENERATED: ~5

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

SKETCH/NOTES



Sampler Signature: M. Bra Print Name: M. BRAKO

Checked By: Jerry Ruhl Date: 7/20/20

MACTEC
511 Congress Street, Portland Maine 04101

LOW FLOW GROUNDWATER SAMPLING RECORD

LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME	Dinaburg Distributing OU2 RI
PROJECT NUMBER	3617187420
SAMPLE ID	828103-MW03D50
SAMPLE TIME	1340
LOCATION ID	MW03D
DATE	7-16-2020
START TIME	1220
END TIME	1350
SITE NAME/NUMBER	828103
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)	18.20 FT	FINAL DTW (BMP)	19.96 FT	PROT. CASING STICKUP (AGS)	0 FT	TOC/TOR DIFFERENCE	0.69 FT (first DMP)
WELL DEPTH (BMP)	51.55 FT	SCREEN LENGTH	10 FT	PID AMBIENT AIR	– PPM	REFILL TIMER SETTING	– SEC
WATER COLUMN	33.35 FT	DRAWDOWN VOLUME (initial DTW- final DTW X well diam. squared X 0.041)	0.29 (0.31) GAL	PID WELL MOUTH	– PPM	DISCHARGE TIMER SETTING	– SEC
CALCULATED GAL/VOL (column X well diameter squared X 0.041)	5.47 GAL	TOTAL VOL. PURGED (mL per minute X total minutes X 0.00026 gal/mL)	2.03 GAL	DRAWDOWN/ TOTAL PURGED	0.15	PRESSURE TO PUMP	– 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
1222	BEGIN PURGING									
1230	19.70	120	14.81	4.976	7.10	0.16	9.26	-284.8	~48	↓ PUMP SPEED
1240	19.81	90	17.12	4.990	7.07	0.83	28.1	-303.0	~48	
1250	19.79	100	16.73	5.145	7.05	1.60	22.2	-309.9	~48	↑ PUMP SPEED
1255 1300	19.81	100	16.62	5.137	7.06	1.92	19.8	-318.6	~48	
1300	20.01	100	17.35	4.985	7.07	1.95	13.2	-309.5	~48	
1305	20.01	100	17.52	4.915	7.06	1.91	9.53	-304.1	~48	
1310	19.99	100	17.62	4.899	7.06	1.96	5.28	-306.3	~48	
1315	19.99	100	17.45	4.988	7.05	2.03	4.88	-307.7	~48	
1320	19.99	100	17.42	5.128	7.04	2.01	8.80	-309.4	~48	
1325	19.97	100	17.29	5.132	7.05	1.99	8.95	-309.0	~48	
1330	19.96	100	17.17	5.128	7.05	1.99	8.68	-309.5	~48	
1335	19.96	100	17.08	5.123	7.06	1.95	7.54	-308.5	~49	TURB = 6.97
1340	SAMPLE									

← MS

MSD

WMP

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

	17	5.12	7.1	2.0	7.5	-316

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 (Geopump) ☐ SUBMERSIBLE ☐ BLADDER ☐ WATTERA ☐ OTHER ☐ OTHER

DECON FLUIDS USED: ☐ LIQUINOX ☑ DEIONIZED WATER ☐ POTABLE WATER ☐ NITRIC ACID ☐ HEXANE ☐ METHANOL ☐ OTHER (DEDICATED)

TUBING/PUMP/BLADDER MATERIALS: ☐ SILICON TUBING ☐ TEFLON TUBING ☐ TEFLON LINED TUBING ☐ HDPE TUBING ☐ LDPE TUBING ☐ OTHER ☐ OTHER; ☐ S. STEEL PUMP MATERIAL ☐ PVC PUMP MATERIAL ☐ GEOPROBE SCREEN ☐ TEFLON BLADDER ☐ OTHER ☐ OTHER ☐ OTHER (WP)

EQUIPMENT USED: ☑ WL METER n203-79 ☐ PID ☑ WQ METER M015-08 ☑ TURB. METER n024-27 ☑ PUMP S008-14 ☐ OTHER FILTERS NO. ___ TYPE ___

ANALYTICAL PARAMETERS

PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS
☑ 8OCs	8260b	NO	HCl, 4°C	3x50	YES	NO	828103-MW03D50 3

PURGE OBSERVATIONS

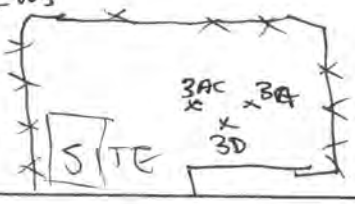
PURGE WATER CONTAINERIZED: ☑ YES ☐ NO

NO-PURGE METHOD UTILIZED: ☐ YES ☑ NO

NUMBER OF GALLONS GENERATED: 2.5

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

SKETCH/NOTES



- ROTTEN EGG-LIKE ODOR.

Sampler Signature: M Bruno Print Name: M. BRUNO

Checked By: Jerry Ruhlf Date: 7/20/20

MACTEC
511 Congress Street, Portland Maine 04101

LOW FLOW GROUNDWATER SAMPLING RECORD

LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME	Dinaburg Distributing OU2 RI	LOCATION ID	MW-04	DATE	7-15-2020
PROJECT NUMBER	3617187420	START TIME	1415	END TIME	1610
SAMPLE ID	828103-MW04020 (MS/MSD)	SAMPLE TIME	1540	SITE NAME/NUMBER	828103
				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)	9.23 FT	FINAL DTW (BMP)	9.74 FT	PROT. CASING STICKUP (AGS)	0 FT	TOC/TOR DIFFERENCE	0.2 FT
WELL DEPTH (BMP)	23.04 FT	SCREEN LENGTH	10 FT	PID AMBIENT AIR	— PPM	REFILL TIMER SETTING	— SEC
WATER COLUMN	13.81 FT	DRAWDOWN VOLUME (initial DTW- final DTW X well diam. squared X 0.041)	+0.08 GAL	PID WELL MOUTH	— PPM	DISCHARGE TIMER SETTING	— SEC
CALCULATED GAL/VOL (column X well diameter squared X 0.041)	2.26 GAL	TOTAL VOL. PURGED (mL per minute X total minutes X 0.00026 gal/mL)	2.57 GAL	DRAWDOWN/ TOTAL PURGED	~~+0.32~~ 0.032	PRESSURE TO PUMP	— 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
1423	BEGIN PURGING									
1435	9.73	180	18.12	1.038	7.13	1.16	230	54.1	~20	↓ PUMP SPEED
1440	9.74	150	17.62	1.014	7.12	0.81	101	53.9	~20	
1445	9.74	150	17.99	1.008	7.11	0.59	78.4	55.4	~20	
1450	9.74	150	17.83	1.009	7.11	0.51	38.3	54.0	~20	
1455	9.74	150	17.85	1.000	7.11	0.43	19.4	52.3	~20	
1500	9.74	150	17.44	0.996	7.10	0.45	10.8	50.9	~20	
1505	9.74	150	17.58	0.996	7.11	0.50	7.50	50.4	~20	
1510	9.74	150	17.84	0.993	7.12	0.56	4.74	50.1	~20	
1515	9.74	150	18.21	0.997	7.12	0.82	7.66	48.6	~20	
1520	9.74	150	18.30	0.995	7.10	[illegible]	4.80	42.8	~20	DO=1.05
1525	9.74	150	17.76	0.993	7.12	1.29	3.49	41.1	~20	
1530	9.74	150	17.47	0.993	7.10	1.33	6.10	41.7	~20	
1535	9.74	150	17.23	0.992	7.11	1.29	3.34	38.2	~20	
1540	COLLECT SAMPLES									

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

	17	0.992	7.1	1.3	3.3	38

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 ☐ OTHER ☐ OTHER

DECON FLUIDS USED: ☐ LIQUINOX ☐ DEIONIZED WATER ☑ POTABLE WATER ☐ NITRIC ACID ☐ HEXANE ☑ METHANOL ☐ OTHER Dedicated

TUBING/PUMP/BLADDER MATERIALS: ☑ SILICON TUBING ☐ TEFLON TUBING ☐ TEFLON LINED TUBING ☐ HDPE TUBING ☐ LDPE TUBING ☐ OTHER ☐ OTHER

☐ S. STEEL PUMP MATERIAL ☐ PVC PUMP MATERIAL ☐ GEOPROBE SCREEN ☐ TEFLON BLADDER ☐ OTHER ☐ OTHER ☐ OTHER

EQUIPMENT USED: ☐ WL METER MJ03-79 ☐ PID ☑ WQ METER MO15-05 ☐ TURB. METER MO24-27 ☑ PUMP S008-99 (Grundfos) ☐ OTHER ☐ FILTERS NO. ___ TYPE ___

ANALYTICAL PARAMETERS

PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS
VOCs	8260B	NO	HCl, 4°C	9x50	YES	YES	828103-MW04020

PURGE OBSERVATIONS

PURGE WATER CONTAINERIZED: ☑ YES ☐ NO

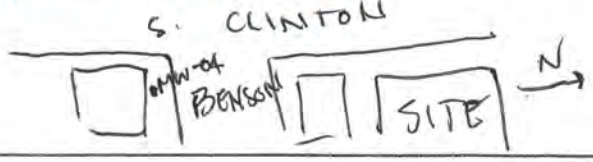
NO-PURGE METHOD UTILIZED: ☐ YES ☑ NO

NUMBER OF GALLONS GENERATED: ~2.6

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

SKETCH/NOTES

MS/MSD COLLECTED



Sampler Signature: M. Bruno Print Name: M. BRUNO.

Checked By: Jerry Radliff Date: 7/20/20

MACTEC
511 Congress Street, Portland Maine 04101

LOW FLOW GROUNDWATER SAMPLING RECORD

LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME	Dinaburg Distributing OU2 RI
PROJECT NUMBER	3617187420
SAMPLE ID	828103-MW05020
SAMPLE TIME	1540
LOCATION ID	MW-5
DATE	7/14/20
START TIME	1425
END TIME	1550
SITE NAME/NUMBER	828103
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)	9.55 FT	FINAL DTW (BMP)	9.65 FT	PROT. CASING STICKUP (AGS)	0 FT	TOC/TOR DIFFERENCE	0.27 FT
WELL DEPTH (BMP)	22.65 FT	SCREEN LENGTH	10. ~~0.412~~ (D) FT	PID AMBIENT AIR	— PPM	REFILL TIMER SETTING	— SEC
WATER COLUMN	13.1 FT	DRAWDOWN VOLUME (initial DTW- final DTW X well diam. squared X 0.041)	.016 GAL	PID WELL MOUTH	— PPM	DISCHARGE TIMER SETTING	— 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)	2.2 GAL	DRAWDOWN/ TOTAL PURGED	.007	PRESSURE TO PUMP	— 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
1435	BEGIN PURGING									
1445	9.65	160	15.3	1.624	7.6	2.9	8.6	93		
1455	9.62	140	15.1	1.581	7.5	2.1	3.6	79		
1500	9.64	140	15.1	1.543	7.5	1.9	2.9	77		
1505	9.65	140	15.1	1.476	7.4	1.7	2.6	74		
1510	9.65	145	15.1	1.437	7.4	1.5	2.5	72		
1515	9.65	150	15.1	1.402	7.4	1.3	2.1	72		
1520	9.65	145	15.3	1.368	7.4	1.3	1.7	66		
1525	9.65	145	15.1	1.344	7.4	1.3	1.9	63		
1530	9.65	150	15.0	1.327	7.4	1.4	1.6	62		

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

	15	1.327	7.4	1.4	1.6	62

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 ☐ OTHER ☐ OTHER

DECON FLUIDS USED: ☐ LIQUINOX ☐ DEIONIZED WATER ☐ POTABLE WATER ☐ NITRIC ACID ☐ HEXANE ☐ METHANOL ☑ OTHER Dedicated

TUBING/PUMP/BLADDER MATERIALS: ☑ SILICON TUBING ☐ TEFLON TUBING ☐ TEFLON LINED TUBING ☑ HDPE TUBING ☐ LDPE TUBING ☐ OTHER ☐ OTHER

☐ S. STEEL PUMP MATERIAL ☐ PVC PUMP MATERIAL ☐ GEOPROBE SCREEN ☐ TEFLON BLADDER ☐ OTHER ☐ OTHER ☐ OTHER

EQUIPMENT USED: ☑ WL METER ☐ PID ☑ WQ METER ☑ TURB. METER ☑ PUMP ☐ OTHER ☐ FILTERS NO. ___ TYPE ___

ANALYTICAL PARAMETERS

	PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS
☑	VOC	8260C	N	4°C HCl	3x40ml	✓		

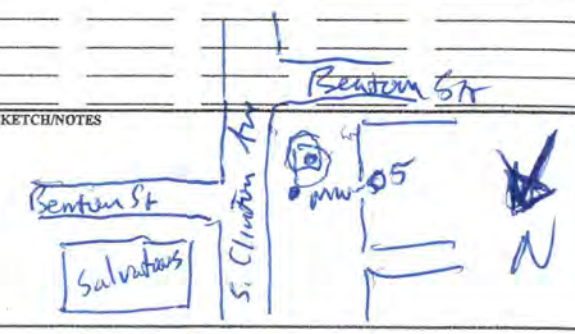
PURGE OBSERVATIONS

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

NUMBER OF GALLONS GENERATED: 2.2

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

SKETCH/NOTES



Sampler Signature: Jerry Rawcliffe Print Name: Jerry Rawcliffe

Checked By: [signature] Date: 7/22/20

MACTEC
511 Congress Street, Portland Maine 04101

LOW FLOW GROUNDWATER SAMPLING RECORD

LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME	Dinaburg Distributing OU2 RI	LOCATION ID	MW-6
PROJECT NUMBER	3617187420	DATE	7/14/20
SAMPLE ID	828103-MW06018	START TIME	0755
SAMPLE TIME	0920	END TIME	0935
		SITE NAME/NUMBER	828103
		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 OD

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

WELL INTEGRITY

	YES	NO	N/A
CAP	✓		
CASING	✓		No well cap
LOCKED		✓	
COLLAR	✓		No bolts

INITIAL DTW (BMP)	7.63 FT	FINAL DTW (BMP)	8.48 FT	PROT. CASING STICKUP (AGS)	0 FT	TOC/TOR DIFFERENCE	0.52 FT
WELL DEPTH (BMP)	19.8 FT	SCREEN LENGTH	15 FT	PID AMBIENT AIR	— PPM	REFILL TIMER SETTING	— SEC
WATER COLUMN	12.17 FT	DRAWDOWN VOLUME (initial DTW- final DTW X well diam. squared X 0.041)	.14 GAL	PID WELL MOUTH	— PPM	DISCHARGE TIMER SETTING	— 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)	2.2 GAL	DRAWDOWN/ TOTAL PURGED	.062	PRESSURE TO PUMP	— 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
0902	BEGIN PURGING									
0815	8.54	120	15.7	1.482	7.0	3.3	4.8	131		
0825	8.47	120	15.7	1.485	7.1	2.5	3.5	-1		
0830	8.46	115	15.6	1.486	7.1	3.2	2.7	-37		
0835	8.45	120	15.6	1.488	7.1	3.2	1.9	-49		
0840	8.46	120	15.6	1.485	7.1	2.8	1.7	-52		
0845	8.47	110	15.5	1.489	7.1	2.3	1.3	-51		
0850	8.44	115	15.6	1.489	7.1	2.0	0.9	-47		
0855	8.45	120	15.5	1.490	7.1	1.8	1.0	-45		
0900	8.48	—	15.5	1.491	7.1	1.6	1.1	-37		
0905	8.48	125	15.4	1.492	-2.6	1.4	—	490		pH + ORP suddenly went way out of criteria. Water for DO to was in flow cell until reflow then restart with new water.
0910	8.48	125	15.4	1.492	-3.2	1.4	1.5	520		
0915	8.48	125	15.4	1.493	-3.5	1.3	1.4	543		Going to attempt recall.

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

15	1.493	7.1	1.3	1.4	-37	

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 ☐ OTHER ☐ OTHER

DECON FLUIDS USED: ☐ LIQUINOX ☐ DEIONIZED WATER ☐ POTABLE WATER ☐ NITRIC ACID ☐ HEXANE ☐ METHANOL ☑ OTHER Dedicated

TUBING/PUMP/BLADDER MATERIALS: ☑ SILICON TUBING ☐ TEFLON TUBING ☐ TEFLON LINED TUBING ☐ HDPE TUBING ☑ LDPE TUBING ☐ OTHER ☐ OTHER

☐ S. STEEL PUMP MATERIAL ☐ PVC PUMP MATERIAL ☐ GEOPROBE SCREEN ☐ TEFLON BLADDER ☐ OTHER ☐ OTHER ☐ OTHER

EQUIPMENT USED: ☑ WL METER Heron ☑ ~~PID~~ ☑ WQ METER YSI 556 MPS ☑ TURB. METER HACH 2100Q ☑ PUMP Geopump ☐ OTHER ☐ FILTERS NO. ___ TYPE ___

ANALYTICAL PARAMETERS

	PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS
✓	VOCs	8260C	N	4 x HCl	3 x 40ml	Yes	—	

PURGE OBSERVATIONS

PURGE WATER CONTAINERIZED: YES ☑ NO ☐

NO-PURGE METHOD UTILIZED: YES ☐ NO ☐

NUMBER OF GALLONS GENERATED: 2.2

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

SKETCH/NOTES

Sampler Signature: Jerry Rawcliffe Print Name: Jerry Rawcliffe

Checked By: [signature] Date: 7/22/20

MACTEC
511 Congress Street, Portland Maine 04101

LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME	Dinaburg Distributing OU2 RI
PROJECT NUMBER	3617187420
SAMPLE ID	S28103-MW08S011
SAMPLE TIME	1145
LOCATION ID	MW-8S
DATE	7/15/20
START TIME	1010
END TIME	1200
SITE NAME/NUMBER	S28103
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		✓	Bolted
COLLAR	✓		

INITIAL DTW (BMP)	7.11 FT	FINAL DTW (BMP)	8.04 FT	PROT. CASING STICKUP (AGS)	0 FT	TOC/TOR DIFFERENCE	0.13 FT
WELL DEPTH (BMP)	10.25 FT	SCREEN LENGTH	10.0 FT	PID AMBIENT AIR	— PPM	REFILL TIMER SETTING	— SEC
WATER COLUMN	3.14 FT	DRAWDOWN VOLUME (initial DTW- final DTW X well diam. squared X 0.041)	0.15 GAL	PID WELL MOUTH	— PPM	DISCHARGE TIMER SETTING	— 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)	2.6 GAL	DRAWDOWN/ TOTAL PURGED	.06	PRESSURE TO PUMP	— 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
1022	BEGIN PURGING									
1030	7.35	125	19.1	1.183	7.1	2.6	4.2	135		lowest setting on pump
1042	7.56	115	19.0	1.198	7.1	2.0	2.4	136		
1050	7.64	130	19.1	1.203	7.1	2.2	1.4	125		
1055	7.70	130	19.0	1.206	7.1	2.2	1.2	125		
1100	7.74	130	18.9	1.210	7.1	2.1	1.2	123		
1105	7.80	140	18.8	1.212	7.1	2.0	1.1	121		
1110	7.84	145	18.7	1.214	7.1	1.8	0.9	119		
1115	7.89	145	18.6	1.218	7.1	1.6	0.7	118		
1120	7.93	140	18.5	1.224	7.1	1.5	0.7	117		
1125	7.97	140	18.5	1.228	7.1	1.4	0.8	114		
1130	7.99	140	18.5	1.231	7.1	1.2	0.7	114		
1135	8.01	140	18.4	1.233	7.1	1.2	0.7	113		
1140	8.04	140	18.4	1.234	7.1	1.1	0.8	113		

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

18	1.23	7.1	1.1	0.8	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
- ☒ PERISTALTIC
- ☐ SUBMERSIBLE
- ☐ BLADDER
- ☐ WATTERA
- ☐ OTHER
- ☐ OTHER

DECON FLUIDS USED
- ☐ LIQUINOX
- ☐ DEIONIZED WATER
- ☐ POTABLE WATER
- ☐ NITRIC ACID
- ☐ HEXANE
- ☐ METHANOL
- ☑ OTHER Dedicated

TUBING/PUMP/BLADDER MATERIALS
- ☑ SILICON TUBING
- ☐ TEFLON TUBING
- ☐ TEFLON LINED TUBING
- ☑ HDPE TUBING
- ☐ LDPE TUBING
- ☐ OTHER
- ☐ OTHER

- ☐ S. STEEL PUMP MATERIAL
- ☐ PVC PUMP MATERIAL
- ☐ GEOPROBE SCREEN
- ☐ TEFLON BLADDER
- ☐ OTHER
- ☐ OTHER
- ☐ OTHER

EQUIPMENT USED
- ☑ WL METER Heron
- ☐ PID
- ☑ WQ METER YSI 556 MPS
- ☑ TURB. METER HACH 2100Q
- ☑ PUMP Geopump
- ☐ OTHER
- ☐ FILTERS NO. ___ TYPE

ANALYTICAL PARAMETERS

	PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ~~ID~~ NUMBERS
✓	VOC	8260C	N	4°C/HCl	3x40ml		—	3

PURGE OBSERVATIONS

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

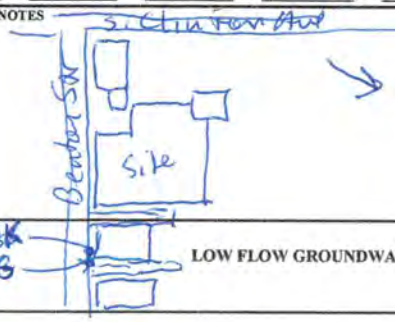
NUMBER OF GALLONS GENERATED: 2.6

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

Sampler Signature: Terry Rawcliffe Print Name: Terry Rawcliffe

Checked By: Date: 7/22/20

SKETCH/NOTES



MACTEC
511 Congress Street, Portland Maine 04101

LOW FLOW GROUNDWATER SAMPLING RECORD

LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME	Dinaburg Distributing OU2 RI	LOCATION ID	MW-8K	DATE	7/15/20
PROJECT NUMBER	3617187420	START TIME	0820	END TIME	1005
SAMPLE ID	828103-MW08K017 (MS/MSD)	SAMPLE TIME	1000	SITE NAME/NUMBER	828103
				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)	6.86 FT	FINAL DTW (BMP)	9.08 FT	PROT. CASING STICKUP (AGS)	0 FT	TOC/TOR DIFFERENCE	0.34 FT
WELL DEPTH (BMP)	18.85 FT	SCREEN LENGTH	10 FT	PID AMBIENT AIR	— PPM	REFILL TIMER SETTING	— SEC
WATER COLUMN	11.99 FT	DRAWDOWN VOLUME (initial DTW- final DTW X well diam. squared X 0.041)	0.37 GAL	PID WELL MOUTH	— PPM	DISCHARGE TIMER SETTING	— 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)	2.5 GAL	DRAWDOWN/ TOTAL PURGED	0.15	PRESSURE TO PUMP	— 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
0837	BEGIN PURGING									
0850	7.57	110	17.4	1.061	7.2	2.2	9.3	170		
0900	7.84	120	17.0	1.061	7.2	1.7	10.8	158		
0910	8.04	115	16.9	1.055	7.2	1.5	9.5	152		
0915	8.19	125	16.9	1.054	7.2	1.5	10.0	152		
0920	8.32	130	16.8	1.053	7.2	1.6	9.8	149		
0925	8.47	120	16.8	1.051	7.2	1.6	8.1	146		
0930	8.59	125	16.8	1.044	7.2	1.7	6.3	144		Lowest setting on pump
0935	8.70	120	16.8	1.037	7.2	1.9	5.3	143		
0940	8.82	120	16.8	1.034	7.2	2.0	4.4	141		
0945	8.93	125	16.7	1.034	7.2	2.0	4.7	139		
0950	9.08	120	16.8	1.033	7.2	2.0	4.0	137		

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

17	1.03	7.2	2.0	4.0	140	

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 ☐ OTHER _____ ☐ OTHER _____

DECON FLUIDS USED: ☐ LIQUINOX ☐ DEIONIZED WATER ☐ POTABLE WATER ☐ NITRIC ACID ☐ HEXANE ☐ METHANOL ☑ OTHER Dedicated

TUBING/PUMP/BLADDER MATERIALS: ☑ SILICON TUBING ☐ TEFLON TUBING ☐ TEFLON LINED TUBING ☑ HDPE TUBING ☐ LDPE TUBING ☐ OTHER _____ ☐ OTHER _____

☐ S. STEEL PUMP MATERIAL ☐ PVC PUMP MATERIAL ☐ GEOPROBE SCREEN ☐ TEFLON BLADDER ☐ OTHER _____ ☐ OTHER _____ ☐ OTHER _____

EQUIPMENT USED: ☑ WL METER Heron ☐ PID _____ ☑ WQ METER YSI 556 MPS ☑ TURB. METER HACH 2100Q ☑ PUMP Geopump ☐ OTHER _____ ☐ FILTERS NO. ___ TYPE _____

ANALYTICAL PARAMETERS

	PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS
☑	VOCs	8260C	N	4°C/HCl	3x40ml	Y	MS/MSD	9

PURGE OBSERVATIONS

PURGE WATER CONTAINERIZED: ☑ YES ☐ NO

NO-PURGE METHOD UTILIZED: ☐ YES ☑ NO

NUMBER OF GALLONS GENERATED: 2.5

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

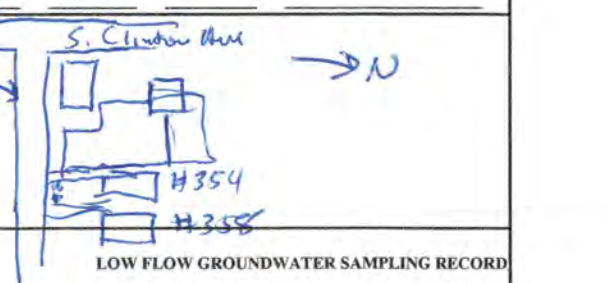
Sampler Signature: Jerry Rawcliffe

Print Name: Jerry Rawcliffe

Checked By: [signature]

Date: 7/22/20

SKETCH/NOTES



MACTEC
511 Congress Street, Portland Maine 04101

LOW FLOW GROUNDWATER SAMPLING RECORD

LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME	Dinaburg Distributing OU2 RI
PROJECT NUMBER	3617187420
SAMPLE ID	828103-MW09595012
SAMPLE TIME	0910
LOCATION ID	MW-09S
DATE	7-15-2020
START TIME	0735
END TIME	0920
SITE NAME/NUMBER	828103
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)	7.94 FT	FINAL DTW (BMP)	9.89 FT	PROT. CASING STICKUP (AGS)	0 FT	TOC/TOR DIFFERENCE	~0.1 FT we move
WELL DEPTH (BMP)	14.90 FT	SCREEN LENGTH	10 FT	PID AMBIENT AIR	- PPM	REFILL TIMER SETTING	- SEC
WATER COLUMN	6.96 FT	DRAWDOWN VOLUME (initial DTW- final DTW X well diam. squared X 0.041)	~0.33 GAL	PID WELL MOUTH	- PPM	DISCHARGE TIMER SETTING	- SEC
CALCULATED GAL/VOL (column X well diameter squared X 0.041)	1.19 GAL	TOTAL VOL. PURGED (mL per minute X total minutes X 0.00026 gal/mL)	2.03 GAL	DRAWDOWN/ TOTAL PURGED	~~0.16~~ 0.15	PRESSURE TO PUMP	- 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
0752	BEGIN PURGING									
0755	8.64	100	19.22	2.921	7.49	1.27	23.3	89.7	~12	
0800	8.80	100	19.48	2.911	7.48	1.41	16.0	86.3	~12	
0805	8.89	100	19.64	2.900	7.50	1.38	14.6	85.2	~12	
0810	9.05	100	19.65	2.892	7.53	1.86	13.7	83.5	~12	
0815	9.13	100	19.88	2.839	7.57	2.12	8.28	80.4	~12	
0820	9.21	100	19.93	2.839	7.56	2.15	7.16	80.2	~12	
0825	9.27	100	20.03	2.854	7.60	2.21	5.80	80.1	~12	
0830	9.35	100	20.10	2.896	7.62	2.10	4.98	78.9	~12	
0835	9.41	100	20.03	2.949	7.62	2.05	4.11	77.2	~12	
0840	9.50	100	19.90	2.968	7.62	1.91	3.97	75.8	~12	
0845	9.62	100	19.89	2.973	7.62	1.78	3.30	75.3	~12	
0850	9.70	100	19.91	2.984	7.62	1.68	2.60	75.1	~12	
0855	9.80	100	20.02	3.019	7.62	1.49	2.54	74.9	~12	Replaced protective casing, cut down riser a little bit.
0900	9.83	100	20.17	3.023	7.62	1.41	2.48	74.3	~12	
0905	9.89	100	20.30	3.028	7.62	1.46	2.56	74.2	~12	
0910	SAMPLE									
0915										

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

20	3.03	7.6	1.5	2.6	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: ☐ PERISTALTIC ☐ SUBMERSIBLE ☐ BLADDER ☐ WATTERA ☐ OTHER ☐ OTHER

DECON FLUIDS USED: ☐ LIQUINOX ☒ DEIONIZED WATER ☐ POTABLE WATER ☐ NITRIC ACID ☐ HEXANE ☐ METHANOL ☑ OTHER Dedicated

TUBING/PUMP/BLADDER MATERIALS: ☑ SILICON TUBING ☐ TEFLON TUBING ☐ TEFLON LINED TUBING ☐ HDPE TUBING ☐ LDPE TUBING ☐ OTHER ☐ OTHER

☐ S. STEEL PUMP MATERIAL ☐ PVC PUMP MATERIAL ☐ GEOPROBE SCREEN ☐ TEFLON BLADDER ☐ OTHER ☐ OTHER ☐ OTHER

EQUIPMENT USED: ☐ WL METER M203-79 ☐ PID ☑ WQ METER M015-05 ☑ TURB. METER M024-27 ☑ PUMP S008-94 ☐ OTHER ☐ FILTERS NO. ___ TYPE ___

ANALYTICAL PARAMETERS

	PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS
✓	VOCs	8260B	No	HCl, 4°C	3x40	YES	NO	828103-MW09S012

PURGE OBSERVATIONS

PURGE WATER CONTAINERIZED: ☑ YES ☐ NO

NO-PURGE METHOD UTILIZED: ☐ YES ☑ NO

NUMBER OF GALLONS GENERATED: ~2

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

SKETCH/NOTES

WELL HAS HAD NO CAP OR CASING AND IS OPEN TO SIDEWALK. JE FIXING THIS WEEK.

Sampler Signature: M Bruno Print Name: M. BRUNO

Checked By: Jerry Randolph Date: 7/20/20

MACTEC
511 Congress Street, Portland Maine 04101

.9S .9K
S. CLINTON

LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME	Dinaburg Distributing OU2 RI	LOCATION ID	MW-09K
PROJECT NUMBER	3617187420	START TIME	0950
SAMPLE ID	828103-MW09K018	SAMPLE TIME	1135
SITE NAME/NUMBER	828103	DATE	7-15-2020
		END TIME	1150
		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)	9.24 FT	FINAL DTW (BMP)	9.26 FT	PROT. CASING STICKUP (AGS)	0 FT	TOC/TOR DIFFERENCE	~0.2 FT
WELL DEPTH (BMP)	23.5 FT	SCREEN LENGTH	10 FT	PID AMBIENT AIR	– PPM	REFILL TIMER SETTING	– SEC
WATER COLUMN	14.26 FT	DRAWDOWN VOLUME (initial DTW- final DTW X well diam. squared X 0.041)	+0.003 GAL	PID WELL MOUTH	– PPM	DISCHARGE TIMER SETTING	– SEC
CALCULATED GAL/VOL (column X well diameter squared X 0.041)	2.34 GAL	TOTAL VOL. PURGED (mL per minute X total minutes X 0.00026 gal/mL)	2.88 GAL	DRAWDOWN/ TOTAL PURGED	+0.001	PRESSURE TO PUMP	– 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
1000	BEGIN PURGING									
1005	9.25	90	17.21	2.397	7.16	0.40	69.7	-20.3	~18	INCREASED ↑ SPEED
1010	9.26	115	17.82	2.338	7.20	0.39	69.6	-21.9	~18	SEE NOTE
1015	9.26	140	17.35	2.259	7.15	0.39	72.2	-23.5	~18	
1020	9.25	125	17.42	2.158	7.12	0.30	54.7	-21.3	~18	
1025	9.25	125	17.12	2.124	7.10	0.29	46.6	-23.0	~18	
1030	9.25	125	17.18	2.108	7.10	0.28	43.8	-23.9	~18	
1035	9.24	125	17.18	2.080	7.09	0.31	42.7	-21.1	~18	
1040	9.24	125	17.25	2.013	7.05	0.66	39.8	-21.5	~18	
1045	9.25	125	17.34	1.990	7.07	0.73	38.0	-22.6	~18	
1050	9.24	125	17.68	1.942	7.07	0.90	32.3	-22.0	~18	
1055	9.24	125	17.75	1.939	7.08	1.17	27.8	-18.8	~18	
1100	9.26	125	17.53	1.910	7.06	1.15	22.4	-21.6	~18	
1105	9.26	125	17.24	1.865	7.07	1.07	23.1	-22.2	~18	
1110	9.27	125	17.12	1.846	7.07	1.00	25.7	-22.6	~18	
1115	9.26	125	16.70	1.844	7.07	0.99	23.8	-22.5	~18	
1120	9.26	125	16.52	1.818	7.07	0.97	21.6	-21.9	~18	
1125	9.26	125	16.39	1.807	7.01	0.95	20.2	-20.8	~18	
1130	9.26	125	16.34	1.808	7.07	0.94	19.4	-19.0	~18	
1135	SAMPLE									

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

	16	1.81	7.1	0.9	19.4	-19

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 M203-79
☐ SUBMERSIBLE	☐ DEIONIZED WATER	☐ TEFLON TUBING	☐ PVC PUMP MATERIAL	☐ PID
☐ BLADDER	☑ POTABLE WATER	☐ TEFLON LINED TUBING	☐ GEOPROBE SCREEN	☑ WQ METER M013-05
☐ _____	☐ NITRIC ACID	☐ HDPE TUBING	☐ TEFLON BLADDER	☑ TURB. METER M029-07
☐ WATTERA	☐ HEXANE	☑ LDPE TUBING	☐ OTHER _____	☑ PUMP S008-44
☐ OTHER _____	☐ METHANOL	☐ OTHER _____	☐ OTHER _____	☐ OTHER
☐ OTHER _____	☑ OTHER Dedicated	☐ OTHER _____	☐ OTHER _____	☐ FILTERS NO. ____ TYPE ____

ANALYTICAL PARAMETERS

PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS
☑ 8260B	VOCs	NO	HCl, 4°C	3x50	YES	NO	828103-MW09K018 3 VOA

PURGE OBSERVATIONS

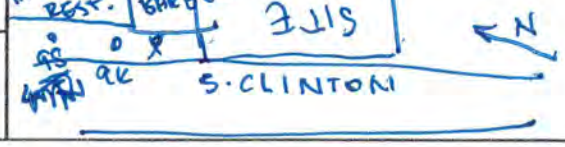
	YES	NO
PURGE WATER CONTAINERIZED	☒	☐
NO-PURGE METHOD UTILIZED	☐	☒

NUMBER OF GALLONS GENERATED: ~3.0

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

SKETCH/NOTES

HAVING TROUBLE W/ PUMP SPEED CONSISTENCY.



Sampler Signature: M. Bruno Print Name: M. BRUNO

Checked By: Jerry Ruff Date: 7/20/20

LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME	Dinaburg Distributing OU2 RI
PROJECT NUMBER	3617187420
SAMPLE ID	828103-MW105012
SAMPLE TIME	1200
LOCATION ID	MW-10S
DATE	7/14/20
START TIME	1050
END TIME	1205
SITE NAME/NUMBER	828103
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)	5.81 FT	FINAL DTW (BMP)	7.75 FT	PROT. CASING STICKUP (AGS)	0 FT	TOC/TOR DIFFERENCE	0.15 FT
WELL DEPTH (BMP)	15.25 FT	SCREEN LENGTH	10' FT	PID AMBIENT AIR	— PPM	REFILL TIMER SETTING	— SEC
WATER COLUMN	9.44 FT	DRAWDOWN VOLUME (initial DTW - final DTW X well diam. squared X 0.041)	0.31 GAL	PID WELL MOUTH	— PPM	DISCHARGE TIMER SETTING	— SEC
CALCULATED GAL/VOL (column X well diameter squared X 0.041)	1.5 GAL	TOTAL VOL. PURGED (mL per minute X total minutes X 0.00026 gal/mL)	1.8 GAL	DRAWDOWN/ TOTAL PURGED	17	PRESSURE TO PUMP	— 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
1058	BEGIN PURGING									
1110	6.52	110	16.6	1.381	6.8	3.5	2.9	146	14'	
1120	6.81	110	16.7	1.377	6.8	2.1	1.9	134		Checked on MW8
1135	7.23	115	16.6	1.348	6.5	1.8	3.0	128		
1140	7.34	115	16.6	1.341	6.8	2.0	1.8	124		
1145	7.47	115	16.7	1.341	6.8	2.1	1.7	121		
1150	7.61	120	16.7	1.345	6.8	2.1	1.2	119		
1155	7.75	120	16.7	1.347	6.8	1.9	1.1	117		
							Parameters still have yet 5x drawdown.			

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

17	1.35	6.8	1.9	1.1	120	

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
- ☐ OTHER
- ☐ OTHER

DECON FLUIDS USED
- ☐ LIQUINOX
- ☐ DEIONIZED WATER
- ☐ POTABLE WATER
- ☐ NITRIC ACID
- ☐ HEXANE
- ☐ METHANOL
- ☑ OTHER Deionized

TUBING/PUMP/BLADDER MATERIALS
- ☑ SILICON TUBING
- ☐ TEFLON TUBING
- ☐ TEFLON LINED TUBING
- ☑ HDPE TUBING
- ☐ LDPE TUBING
- ☐ OTHER
- ☐ OTHER
- ☐ S. STEEL PUMP MATERIAL
- ☐ PVC PUMP MATERIAL
- ☐ GEOPROBE SCREEN
- ☐ TEFLON BLADDER
- ☐ OTHER
- ☐ OTHER
- ☐ OTHER

EQUIPMENT USED
- ☑ WL METER Heron
- ☐ PID
- ☑ WQ METER YSI 556 MPS
- ☑ TURB. METER 17HCH 2100Q
- ☑ PUMP Geopump
- ☐ OTHER
- ☐ FILTERS NO. ___ TYPE

ANALYTICAL PARAMETERS

	PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS
X	VOCs	8260C	N	4°C HCl	3x40ml	Yes	—	— 3

PURGE OBSERVATIONS

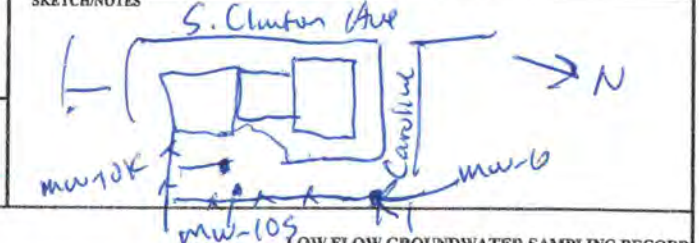
	YES	NO
PURGE WATER CONTAINERIZED	☑	☐
NO-PURGE METHOD UTILIZED	☐	☑

NUMBER OF GALLONS GENERATED: 1.8

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

Sampler Signature: Jerry Rawcliffe
Print Name: Jerry Rawcliffe
Checked By: [signature]
Date: 7/22/20

SKETCH/NOTES



MACTEC
511 Congress Street, Portland Maine 04101

LOW FLOW GROUNDWATER SAMPLING RECORD

LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME: Dinaburg Distributing OU2 RI		LOCATION ID: MW-101K	DATE: 7/14/20
PROJECT NUMBER: 3617187420		START TIME: 1205	END TIME: 7/15/20 0515
SAMPLE ID: 828103-MW101K0715	SAMPLE TIME: 0810 7/15/20	SITE NAME/NUMBER: 828103	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 OD

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)	7.77 FT	FINAL DTW (BMP)	21.55 FT	PROT. CASING STICKUP (AGS)	0 FT	TOC/TOR DIFFERENCE	0.41 FT
WELL DEPTH (BMP)	21.55 FT	SCREEN LENGTH	10 FT	PID AMBIENT AIR	— PPM	REFILL TIMER SETTING	— SEC
WATER COLUMN	13.78 FT	DRAWDOWN VOLUME (initial DTW- final DTW X well diam. squared X 0.041)	— GAL	PID WELL MOUTH	— PPM	DISCHARGE TIMER SETTING	— 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)	3.8 GAL	DRAWDOWN/ TOTAL PURGED	—	PRESSURE TO PUMP	— 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
1212	BEGIN PURGING									
1230	10.77	150	14.8	1.488	6.9	1.1	30	18		Iron floch in well
1235	11.31	140	15.0	1.487	6.9	0.9	28	20		
		Pump at lowest setting.								
1240	11.89	130	15.2	1.489	6.9	0.9	30	23		Casing cap missing well cap on riser.
1250	12.54	135	15.1	1.489	6.9	0.9	27	26		
1300	13.42	130	15.1	1.486	6.9	0.9	25	23		casing when key placed
1310	14.39	135	15.2	1.484	6.9	0.9	22	22		
1320	15.35	140	15.0	1.481	6.9	1.0	17	17		
1330	16.44	130	14.9	1.479	6.9	1.1	16	12		
1340	17.49	130	14.9	1.478	6.9	1.2	23	10		
~~1350~~	Well looks like it will purge dry before 2 hours - going to increase rate									
1350	19.41	340	14.5	1.485	7.0	1.5	470	2		Iron Floch
1356	21.5	Purged Dry.								
7/15/20										
0505	8.01									
0810	Collected grab sample of Recharge.									

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 ☐ OTHER ☐ OTHER

DECON FLUIDS USED: ☐ LIQUINOX ☐ DEIONIZED WATER ☐ POTABLE WATER ☐ NITRIC ACID ☐ HEXANE ☑ METHANOL ☑ OTHER Dedicated

TUBING/PUMP/BLADDER MATERIALS: ☑ SILICON TUBING ☐ TEFLON TUBING ☐ TEFLON LINED TUBING ☐ HDPE TUBING ☑ LDPE TUBING ☐ OTHER ☐ OTHER

☐ S. STEEL PUMP MATERIAL ☐ PVC PUMP MATERIAL ☐ GEOPROBE SCREEN ☐ TEFLON BLADDER ☐ OTHER ☐ OTHER ☐ OTHER

EQUIPMENT USED: ☑ WL METER Heron ☐ PID ☑ WQ METER YSI 556 MPS ☑ TURB. METER HACH 2100Q ☑ PUMP Geopump ☐ OTHER ☐ FILTERS NO. ___ TYPE ___

ANALYTICAL PARAMETERS

	PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS
✓	VOCs	8260C	N	4°C/HCl	3x40 ml	✓		

PURGE OBSERVATIONS

PURGE WATER CONTAINERIZED: YES ✓ NO

NO-PURGE METHOD UTILIZED: YES NO ✓

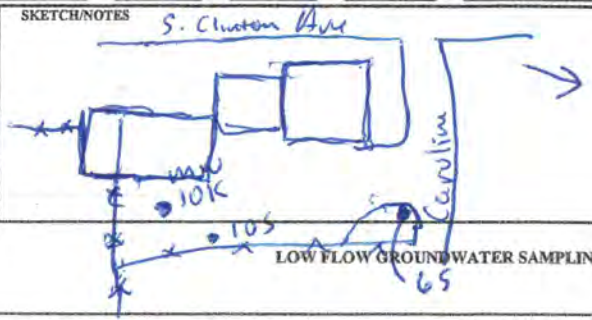
NUMBER OF GALLONS GENERATED: 3.8

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

Sampler Signature: Jerry Rawlitt Print Name: Jerry Rawlitt

Checked By: [signature] Date: 7/22/20

SKETCH/NOTES



MACTEC
511 Congress Street, Portland Maine 04101

LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME	Dinaburg Distributing OU2 RI
PROJECT NUMBER	3617187420
SAMPLE ID	828103-MW115010
SAMPLE TIME	1240
LOCATION ID	MW-115
DATE	7-14-2020
START TIME	1125
END TIME	1155
SITE NAME/NUMBER	828103
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)	7.81 FT	FINAL DTW (BMP)	9.68 FT	PROT. CASING STICKUP (AGS)	0 FT	TOC/TOR DIFFERENCE	0.18 FT
WELL DEPTH (BMP)	13.6 FT	SCREEN LENGTH	10 FT	PID AMBIENT AIR	— PPM	REFILL TIMER SETTING	— SEC
WATER COLUMN	5.79 FT	DRAWDOWN VOLUME (initial DTW- final DTW X well diam. squared X 0.041)	+0.39 ~~6.22~~ GAL	PID WELL MOUTH	— PPM	DISCHARGE TIMER SETTING	— 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)	1.3 GAL	DRAWDOWN/ TOTAL PURGED	+0.28	PRESSURE TO PUMP	— 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
1140	BEGIN PURGING									
1145	8.21	100	17.72	0.937	6.79	1.50	79.1 (MB)	65.5	~10	LOWERED PUMP SPEED
1150	8.39	90	18.31	0.954	6.79	1.28	15.2	66.3	~10	
1155	8.51	90	18.76	0.979	6.77	1.19	25.9	66.1	~10	
1200	8.87	90	18.08	0.996	6.77	1.28	21.9	65.0	~10	
1205	9.09	90	18.22	0.984	6.77	1.21	19.5	64.1	~10	
1210	9.13	90	18.76	0.957	6.78	1.24	13.6	62.8	~10	
1215	9.22	90	18.94	0.932	6.77	1.19	12.1	61.5	~10	
1220	9.34	90	18.48	0.915	6.81	+2 (MB)	7.86	62.8	~10	DO = 1.53 mg/L
1225	9.44	90	18.56	0.893	6.82	1.97	8.90	64.5	~10	
1230	9.53	90	17.99	0.898	6.82	2.00	4.70	65.5	~10	
~~1235~~	~~SAMPLE~~ MB									done
1235	9.68	90	17.02	0.913	6.82	2.12	—	66.3	~10	
1240	SAMPLE									

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

	17	0.913	6.8	2.1	4.7	66

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 ☐ OTHER ☐ OTHER

DECON FLUIDS USED: ☐ LIQUINOX ☑ DEIONIZED WATER ☐ POTABLE WATER ☐ NITRIC ACID ☐ HEXANE ☐ METHANOL ☐ OTHER

TUBING/PUMP/BLADDER MATERIALS: ☑ SILICON TUBING ☐ TEFLON TUBING ☐ TEFLON LINED TUBING ☑ HDPE TUBING ☐ LDPE TUBING ☐ OTHER ☐ OTHER; ☐ S. STEEL PUMP MATERIAL ☐ PVC PUMP MATERIAL ☐ GEOPROBE SCREEN ☐ TEFLON BLADDER ☐ OTHER ☐ OTHER ☐ OTHER

EQUIPMENT USED: ☑ WL METER M200-79 ☐ PID ☑ WQ METER M016-05 ☑ TURB. METER M24-27 ☐ PUMP ☐ OTHER ☐ FILTERS NO. ___ TYPE ___

ANALYTICAL PARAMETERS

PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS
VOCs	8260B	NO	HCl	3x 50m	YES		828103-MW115010
							MB

PURGE OBSERVATIONS

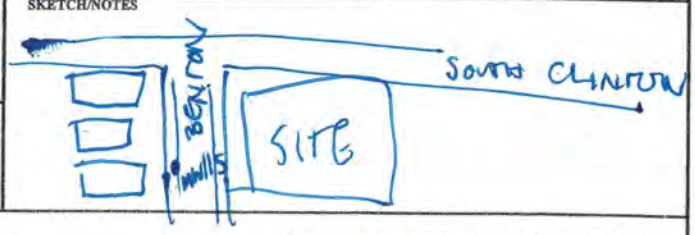
PURGE WATER CONTAINERIZED: ☑ YES ☐ NO

NO-PURGE METHOD UTILIZED: ☐ YES ☑ NO

NUMBER OF GALLONS GENERATED: 1.3

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

SKETCH/NOTES



Sampler Signature: MB Print Name: M. BRUNO

Checked By: Jerry Ruff Date: 7/20/20

MACTEC
511 Congress Street, Portland Maine 04101

LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME	Dinaburg Distributing OU2 RI	LOCATION ID	MW-12S	DATE	7-15-2020
PROJECT NUMBER	3617187420	START TIME	1235	END TIME	1345
SAMPLE ID	828103-MW12S010 DUPLICATE	SAMPLE TIME	1330	SITE NAME/NUMBER	828103
				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)	6.65 FT	FINAL DTW (BMP)	8.71 FT	PROT. CASING STICKUP (AGS)	0 FT	TOC/TOR DIFFERENCE	0.48 FT
WELL DEPTH (BMP)	13.65 FT	SCREEN LENGTH	10.06 FT	PID AMBIENT AIR	— PPM	REFILL TIMER SETTING	— SEC
WATER COLUMN	7.0 FT	DRAWDOWN VOLUME (initial DTW- final DTW X well diam. squared X 0.041)	0.39 GAL	PID WELL MOUTH	— PPM	DISCHARGE TIMER SETTING	— SEC
CALCULATED GAL/VOL (column X well diameter squared X 0.041)	1.148 GAL	TOTAL VOL. PURGED (mL per minute X total minutes X 0.00026 gal/mL)	1.1 GAL	DRAWDOWN/ TOTAL PURGED	~~0.3~~ 0.30	PRESSURE TO PUMP	— 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
1245	BEGIN PURGING									
1250	7.35	90	17.38	0.630	7.20	0.67	14.6	61.2	10	
1255	7.78	90	17.72	0.630	7.19	0.58	6.04	60.0	10	
1300	7.94	90	17.62	0.629	7.19	0.56	6.36	59.0	10	
1305	8.12	100	17.67	0.630	7.20	0.58	6.60	58.5	10	
1310	8.45	90	17.59	0.639	7.21	0.67	7.20	57.9	10	
1315	8.54	90	17.90	0.638	7.22	0.71	6.98	57.8	10	
1320	8.62	90	17.94	0.640	7.22	0.71	7.20	57.6	10	
1325	8.71	90	17.90	0.642	7.23	0.72	8.40	57.5	10	
1330	SAMPLE									Did not meet 5% drawdown criteria. MW

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

18	0.642	7.2	0.7	8.4	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 M203-09
☐ SUBMERSIBLE	☑ DEIONIZED WATER	☐ TEFLON TUBING	☐ PVC PUMP MATERIAL	☐ PID
☐ BLADDER	☐ POTABLE WATER	☐ TEFLON LINED TUBING	☐ GEOPROBE SCREEN	☑ WQ METER M015-05
☐ _____	☐ NITRIC ACID	☐ HDPE TUBING	☐ TEFLON BLADDER	☑ TURB. METER M024-37
☐ WATTERA	☐ HEXANE	☐ LDPE TUBING	☐ OTHER	☐ PUMP S808-94 (Geopump)
☐ OTHER	☐ METHANOL	☐ OTHER	☐ OTHER	☐ OTHER
☐ OTHER	☑ OTHER Dedicated	☐ OTHER	☐ OTHER	☐ FILTERS NO. ___ TYPE ___

ANALYTICAL PARAMETERS

PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS
VOCs	8260B	NO	HCl, 4°C	6 x 5D	YES	YES, DUP 3	828103-MW12S010D

PURGE OBSERVATIONS

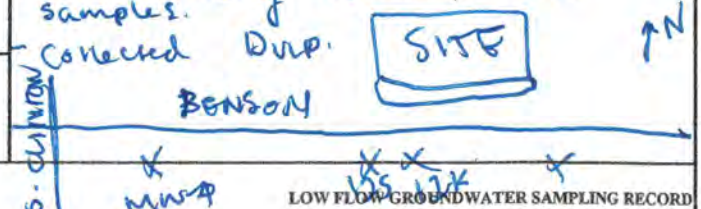
	YES	NO
PURGE WATER CONTAINERIZED	✓	
NO-PURGE METHOD UTILIZED		✓

NUMBER OF GALLONS GENERATED: ~1.2

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

SKETCH/NOTES

- Brown flocking in water and samples.
- Collected DUP.



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

Checked By: [signature] Date: 7/20/20

MACTEC
511 Congress Street, Portland Maine 04101

LOW FLOW GROUNDWATER SAMPLING RECORD

LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME	Dinaburg Distributing OU2 RI
PROJECT NUMBER	3617187420
SAMPLE ID	828103-MW12K08
SAMPLE TIME	1450
LOCATION ID	MW-12K
DATE	7-14-2020
START TIME	1340
END TIME	1500
SITE NAME/NUMBER	828103
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)	8.63 FT	FINAL DTW (BMP)	9.62 FT	PROT. CASING STICKUP (AGS)	0 FT	TOC/TOR DIFFERENCE	0.98 FT
WELL DEPTH (BMP)	18.7 FT	SCREEN LENGTH	10 FT	PID AMBIENT AIR	– PPM	REFILL TIMER SETTING	– SEC
WATER COLUMN	10.07 FT	DRAWDOWN VOLUME (initial DTW- final DTW X well diam. squared X 0.041)	*0.16 GAL	PID WELL MOUTH	– PPM	DISCHARGE TIMER SETTING	– SEC
CALCULATED GAL/VOL (column X well diameter squared X 0.041)	1.65 GAL	TOTAL VOL. PURGED (mL per minute X total minutes X 0.00026 gal/mL)	1.59 GAL	DRAWDOWN/ TOTAL PURGED	*0.01 (22)	PRESSURE TO PUMP	– 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
1345	BEGIN PURGING									
1351	9.80	120	15.43	0.929	6.95	2.79	22.4	42.9	~18	LOWERED PUMP SPEED
1355	9.81	100	15.79	0.899	6.96	1.94	14.6	46.9	~18	
1400	9.85	100	16.04	0.889	6.97	1.81	6.82	49.6	~18	
1405	9.85	100	15.67	0.880	6.97	1.75	7.96	51.1	~18	
1410	9.89	100	16.28	0.888	6.96	3.18	9.74	54.1	~18	
1415	9.71	100	16.06	0.899	7.00	5.69	8.89	63.2	~18	
1420	9.65	100	17.05	0.911	7.02	5.44	8.26	63.8	~18	
1425	9.65	100	17.14	0.914	7.03	5.36	7.07	64.6	~18	
1430	9.64	100	17.12	0.920	7.03	5.12	4.50	66.2	~18	
1435	9.62	100	17.23	0.927	7.02	4.81	4.37	68.1	~18	
1440	9.61	100	17.30	0.932	7.03	4.78	4.22	68.2	~18	
1445	9.62	100	17.36	0.936	7.05	4.71	4.58	69.0	~18	
1450	SAMPLE									

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

17.4	0.936	7.1	4.7	4.6	69	

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 ☐ OTHER ☐ OTHER

DECON FLUIDS USED: ☐ LIQUINOX ☐ DEIONIZED WATER ☐ POTABLE WATER ☐ NITRIC ACID ☐ HEXANE ☐ METHANOL ☑ OTHER Dedicated

TUBING/PUMP/BLADDER MATERIALS: ☑ SILICON TUBING ☐ TEFLON TUBING ☐ TEFLON LINED TUBING ☐ HDPE TUBING ☑ LDPE TUBING ☐ OTHER ☐ OTHER

☐ S. STEEL PUMP MATERIAL ☐ PVC PUMP MATERIAL ☐ GEOPROBE SCREEN ☐ TEFLON BLADDER ☐ OTHER ☐ OTHER ☐ OTHER

EQUIPMENT USED: ☐ WL METER M200-79 ☐ PID ☑ WQ METER M015-05 ☑ TURB. METER M24-27 ☑ PUMP Geopump ☐ OTHER ☐ FILTERS NO. ___ TYPE ___

ANALYTICAL PARAMETERS

PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS
VOCs	8260B	NO	HCl, 4°C	3x40	YES	NO	828103-MW12K018

PURGE OBSERVATIONS

PURGE WATER CONTAINERIZED: ☑ YES ☐ NO

NO-PURGE METHOD UTILIZED: ☐ YES ☑ NO

NUMBER OF GALLONS GENERATED: 1.6

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

SKETCH/NOTES

HAD TO CONSTANTLY ADJUST PUMP TO KEEP SPEED CONSISTENT

Sampler Signature: M. Brand Print Name: M. BRAND

Checked By: Jeremy Hulbert Date: 7/20/20

MACTEC
511 Congress Street, Portland Maine 04101

LOW FLOW GROUNDWATER SAMPLING RECORD

LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME: Dinaburg Distributing OU2 RI		LOCATION ID: MW-131C	DATE: 7/14/20
PROJECT NUMBER: 3617187420		START TIME: 1600	END TIME: 1740
SAMPLE ID: 828103-MW131C0718	SAMPLE TIME: 1725	SITE NAME/NUMBER: 828103	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 OD

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

WELL INTEGRITY

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

INITIAL DTW (BMP)	9.17 FT	FINAL DTW (BMP)	9.39 FT	PROT. CASING STICKUP (AGS)	0 FT	TOC/TOR DIFFERENCE	0.25 FT
WELL DEPTH (BMP)	20.2 FT	SCREEN LENGTH	5.0 FT	PID AMBIENT AIR	— PPM	REFILL TIMER SETTING	— SEC
WATER COLUMN	11.03 FT	DRAWDOWN VOLUME (initial DTW- final DTW X well diam. squared X 0.041)	0.22 GAL	PID WELL MOUTH	— PPM	DISCHARGE TIMER SETTING	— 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)	2.9 GAL	DRAWDOWN/ TOTAL PURGED	.076	PRESSURE TO PUMP	— 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
1611	BEGIN PURGING									
1620	9.39	150	16.9	1.395	7.4	2.0	46	-90		
1630	9.39	170	16.6	1.408	7.3	1.5	32	-71		
1635	9.40	170	16.4	1.417	7.3	1.3	12.9	-67		
1640	9.40	175	16.4	1.424	7.3	1.2	6.6	-63		
1645	9.38	145	16.4	1.428	7.3	1.0	5.6	-61		
1650	9.39	150	16.6	1.433	7.3	1.0	4.2	-60		
1655	9.39	155	16.6	1.437	7.3	0.9	7.3	-58		
1700	9.39	150	16.5	1.441	7.3	0.8	2.3	-61		
1705	9.39	155	16.4	1.444	7.3	0.8	3.3	-57		
1710	9.39	155	16.4	1.446	7.3	0.7	2.4	-54		
1715	9.39	155	16.3	1.450	7.3	0.7	1.7	-57		
1720	9.39	150	16.3	1.451	7.3	0.7	1.6	-53		

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

	16	1.45	7.3	0.7	1.6	-53

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 ☐ OTHER ☐ OTHER

DECON FLUIDS USED: ☐ LIQUINOX ☐ DEIONIZED WATER ☐ POTABLE WATER ☐ NITRIC ACID ☐ HEXANE ☐ METHANOL ☑ OTHER Dedicated

TUBING/PUMP/BLADDER MATERIALS: ☑ SILICON TUBING ☐ TEFLON TUBING ☐ TEFLON LINED TUBING ☐ HDPE TUBING ☑ LDPE TUBING ☐ OTHER ☐ OTHER

☐ S. STEEL PUMP MATERIAL ☐ PVC PUMP MATERIAL ☐ GEOPROBE SCREEN ☐ TEFLON BLADDER ☐ OTHER ☐ OTHER ☐ OTHER

EQUIPMENT USED: ☑ WL METER Heron ☐ PID _____ ☑ WQ METER YSI 556 MPS ☑ TURB. METER HACH 2100Q ☑ PUMP Geopump ☐ OTHER ☐ FILTERS NO. ___ TYPE ___

ANALYTICAL PARAMETERS

	PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS
✓	VOCs	8260C	N	4°C/HCl	3x40ml	X	—	3

PURGE OBSERVATIONS

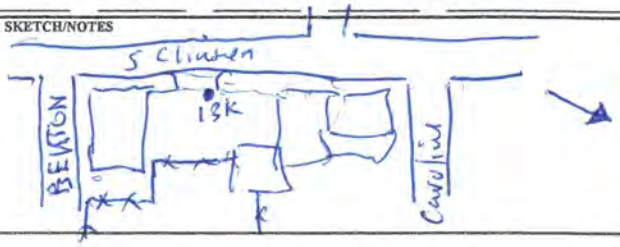
PURGE WATER CONTAINERIZED: YES ☑ NO ☐

NO-PURGE METHOD UTILIZED: YES ☐ NO ☑

NUMBER OF GALLONS GENERATED: 2.9

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

SKETCH/NOTES



Sampler Signature: Jerry Rawcliffe Print Name: Jerry Rawcliffe

Checked By: [signature] Date: 7/22/20

MACTEC
511 Congress Street, Portland Maine 04101

LOW FLOW GROUNDWATER SAMPLING RECORD

LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME: Dinaburg Distributing OU2 RI		LOCATION ID: MW-14KA	DATE: 7-17-2020
PROJECT NUMBER: 3617187420		START TIME: 0948	END TIME: 1130
SAMPLE ID: 828103-MW14KA022	SAMPLE TIME: 1110	SITE NAME/NUMBER: 828103	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)	8.89 FT	FINAL DTW (BMP)	9.36 FT	PROT. CASING STICKUP (AGS)	0 FT	TOC/TOR DIFFERENCE	0.30 FT
WELL DEPTH (BMP)	24.1 FT	SCREEN LENGTH	10 FT	PID AMBIENT AIR	– PPM	REFILL TIMER SETTING	– SEC
WATER COLUMN	15.21 FT	DRAWDOWN VOLUME (initial DTW- final DTW X well diam. squared X 0.041)	1.92 GAL	PID WELL MOUTH	– PPM	DISCHARGE TIMER SETTING	– SEC
CALCULATED GAL/VOL (column X well diameter squared X 0.041)	2.49 GAL	TOTAL VOL. PURGED (mL per minute X total minutes X 0.00026 gal/mL)	3.12 GAL	DRAWDOWN/ TOTAL PURGED	0.62	PRESSURE TO PUMP	– 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
0950	BEGIN PURGING									
1000	9.50	200	13.51	0.886	7.12	1.82	17.3	63.1	~22	
1010	9.50	200	13.49	0.981	7.13	0.57	6.64	12.0	~22	
1015	9.50	160	13.65	1.011	7.15	0.72	9.76	-9.5	~22	
1020	9.34	160	13.74	1.029	7.16	0.74	5.22	-11.2	~22	
1025	9.31	160	13.77	1.044	7.16	0.80	2.04	-14.9	~22	
1030	9.39	160	13.62	1.060	7.16	0.92	1.88	-17.8	~22	
1035	9.38	160	13.61	1.066	7.16	0.96	2.46	-19.2	~22	
1040	9.39	160	13.63	1.091	7.16	1.63	2.99	-15.8	~22	
1045	9.39	160	13.57	1.098	7.17	1.73	3.09	-16.3	~22	
1050	9.39	160	13.55	1.098	7.17	1.77	5.57	-16.7	~22	
1055	9.39	160	13.50	1.118	7.17	1.89	2.09	-19.4	~22	
1100	9.38	160	13.50	1.112	7.18	1.90	1.24	-19.0	~22	
1105	9.38	160	13.52	1.115	7.17	1.92	3.79	-20.0	~22	
1110	SAMPLED									

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

	14	1.12	7.2	2.0	3.8	-20

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
- ☐ OTHER
- ☐ OTHER

DECON FLUIDS USED
- ☐ LIQUINOX
- ☐ DEIONIZED WATER
- ☑ POTABLE WATER
- ☐ NITRIC ACID
- ☐ HEXANE
- ☐ METHANOL
- ☑ OTHER DEDICATED

TUBING/PUMP/BLADDER MATERIALS
- ☑ SILICON TUBING
- ☐ TEFLON TUBING
- ☐ TEFLON LINED TUBING
- ☐ HDPE TUBING
- ☐ LDPE TUBING
- ☐ OTHER
- ☐ OTHER
- ☐ S. STEEL PUMP MATERIAL
- ☐ PVC PUMP MATERIAL
- ☐ GEOPROBE SCREEN
- ☐ TEFLON BLADDER
- ☐ OTHER
- ☐ OTHER
- ☐ OTHER

EQUIPMENT USED
- ☑ WL METER M003-79
- ☐ PID
- ☑ WQ METER M015-05
- ☑ TURB. METER M024-27
- ☑ PUMP 8008-99
- ☐ OTHER
- ☐ FILTERS NO. ___ TYPE ___

ANALYTICAL PARAMETERS

	PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS
☑	VOCs	8260B	NO	HCl, 4°C	3x50	YES	YES	828103-MW14KA022 3

PURGE OBSERVATIONS

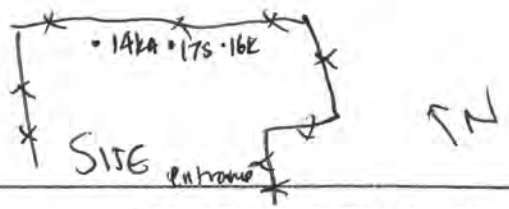
PURGE WATER CONTAINERIZED: ☑ YES ☐ NO

NO-PURGE METHOD UTILIZED: ☐ YES ☑ NO

NUMBER OF GALLONS GENERATED: ~3.5

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

SKETCH/NOTES



Sampler Signature: M. Bruno Print Name: M. BRUNO

Checked By: Jerry Ruhlff Date: 7/20/20

MACTEC
511 Congress Street, Portland Maine 04101

LOW FLOW GROUNDWATER SAMPLING RECORD

LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME: Dinaburg Distributing OU2 RI		LOCATION ID: MW-155	DATE: 7/15/20
PROJECT NUMBER: 3617187420		START TIME: 1530	END TIME: 1715
SAMPLE ID: 828103-MW155 010	SAMPLE TIME: 1705	SITE NAME/NUMBER: 828103	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)	6.11 FT	FINAL DTW (BMP)	7.70 FT	PROT. CASING STICKUP (AGS)	0 FT	TOC/TOR DIFFERENCE	0.52 FT
WELL DEPTH (BMP)	14.95 FT	SCREEN LENGTH	10 FT	PID AMBIENT AIR	— PPM	REFILL TIMER SETTING	— SEC
WATER COLUMN	8.84 FT	DRAWDOWN VOLUME (initial DTW- final DTW X well diam. squared X 0.041)	.26 GAL	PID WELL MOUTH	— PPM	DISCHARGE TIMER SETTING	— SEC
CALCULATED GAL/VOL (column X well diameter squared X 0.041)	1.4 GAL	TOTAL VOL. PURGED (mL per minute X total minutes X 0.00026 gal/mL)	2.1 GAL	DRAWDOWN/ TOTAL PURGED	<.12	PRESSURE TO PUMP	— 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
1549	BEGIN PURGING									
1600	6.60	125	19.4	1.120	7.2	1.9	10.9	-58		
1610	6.82	105	19.8	1.100	7.2	1.2	7.6	-56		Dr lower pump setting
1615	6.96	120	19.8	1.055	7.3	1.0	2.6	-45		
1620	7.06	110	19.6	1.050	7.3	0.9	2.4	-36		
1625	7.15	105	19.7	1.069	7.3	0.9	2.1	-29		
1630	7.24	120	19.7	1.067	7.3	1.0	1.6	-26		
1635	7.33	130	19.4	1.058	7.3	1.1	1.6	-22		
1640	7.40	130	19.3	1.053	7.3	1.3	1.5	-13		
1645	7.49	130	19.2	1.054	7.3	1.3	1.1	5		
1650	7.56	120	19.3	1.055	7.3	1.4	1.3	7		
1655	7.64	115	19.3	1.057	7.3	1.4	0.9	12		
1700	7.70	120	19.4	1.061	7.3	1.4	1.1	15		

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

	19	1.06	7.3	1.4	1.1	15

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 ☐ OTHER ☐ OTHER

DECON FLUIDS USED: ☐ LIQUINOX ☐ DEIONIZED WATER ☐ POTABLE WATER ☐ NITRIC ACID ☐ HEXANE ☐ METHANOL ☑ OTHER Dedicated

TUBING/PUMP/BLADDER MATERIALS: ☑ SILICON TUBING ☐ TEFLON TUBING ☐ TEFLON LINED TUBING ☑ HDPE TUBING ☐ LDPE TUBING ☐ OTHER ☐ OTHER

☐ S. STEEL PUMP MATERIAL ☐ PVC PUMP MATERIAL ☐ GEOPROBE SCREEN ☐ TEFLON BLADDER ☐ OTHER ☐ OTHER ☐ OTHER

EQUIPMENT USED: ☑ WL METER Heron ☐ PID ☑ WQ METER YSI 556 MPS ☑ TURB. METER HACH 2100Q ☑ PUMP Geopump ☐ OTHER ☐ FILTERS NO. ___ TYPE ___

ANALYTICAL PARAMETERS

	PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS
☑	VOCs	8260C	N	4°C/HCl	3x40ml	Y	—	3

PURGE OBSERVATIONS

PURGE WATER CONTAINERIZED: ☑ YES ☐ NO

NO-PURGE METHOD UTILIZED: ☐ YES ☑ NO

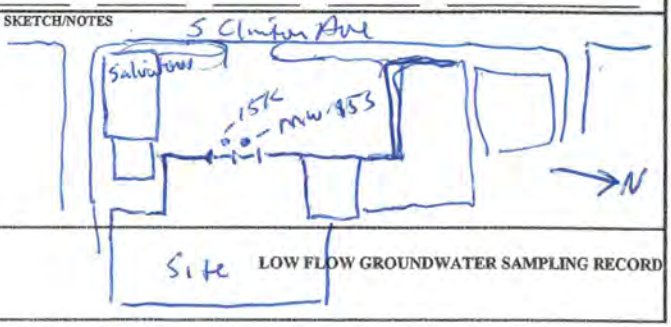
NUMBER OF GALLONS GENERATED: 2.1

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

Sampler Signature: Jerry Rawcliffe Print Name: Jerry Rawcliffe

Checked By: Date: 7/22/20

SKETCH/NOTES



MACTEC
511 Congress Street, Portland Maine 04101

LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME: Dinaburg Distributing OU2 RI		LOCATION ID: MW-15K	DATE: 7-15-2020
PROJECT NUMBER: 3617187420		START TIME: 1630	END TIME: 1830
SAMPLE ID: 828103-MW15K022	SAMPLE TIME: 1810	SITE NAME/NUMBER: 828103	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)	9.86 FT	FINAL DTW (BMP)	10.11 FT	PROT. CASING STICKUP (AGS)	0 FT	TOC/TOR DIFFERENCE	0.2 FT
WELL DEPTH (BMP)	24.95 FT	SCREEN LENGTH	10 FT	PID AMBIENT AIR	- PPM	REFILL TIMER SETTING	- SEC
WATER COLUMN	15.09 FT	DRAWDOWN VOLUME (initial DTW- final DTW X well diam. squared X 0.041)	-0.091 GAL	PID WELL MOUTH	- PPM	DISCHARGE TIMER SETTING	- SEC
CALCULATED GAL/VOL (column X well diameter squared X 0.041)	2.47 GAL	TOTAL VOL. PURGED (mL per minute X total minutes X 0.00026 gal/mL)	3.16 GAL	DRAWDOWN/ TOTAL PURGED	-0.013	PRESSURE TO PUMP	- 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
1638	BEGIN PURGING									
1650	10.14	140	18.40	0.872	7.47	0.39	4.35	45.2	~22	
1655	10.12	125	18.12	0.874	7.43	0.22	9.38	30.7	~22	
1700	10.11	140	18.89	0.879	7.49	0.24	5.81	28.8	~22	
1705	10.10	125	18.81	0.883	7.42	0.21	4.22	33.7	~22	
1710	10.13	160	18.00	0.888	7.41	0.21	9.30	10.9	~22	
1715	10.12	140	18.20	0.887	7.40	0.19	11.30	1.8	~22	
1720	10.13	140	18.51	0.896	7.39	0.17	9.08	-20.5	~22	
1725	10.12	140	18.30	0.927	7.33	0.17	9.24	-30.2	~22	
1730	10.12	150	17.55	1.199	7.16	0.19	3.56	-40.3	~22	
1735	10.12	150	17.51	1.240	7.16	0.20	2.15	-44.0	~22	
1740	10.11	150	17.73	1.258	7.15	0.23	1.29	-45.9	~22	
1745	10.11	140	17.59	1.280	7.15	0.33	2.87	-44.7	~22	
1750	10.11	140	17.49	1.288	7.15	0.53	1.84	-43.0	~22	
1755	10.11	150	17.71	1.301	7.15	0.77	0.82	-45.2	~22	
1800	10.11	150	17.83	1.297	7.15	0.81	0.81	-46.5	~20	
1805	10.11	150	18.04	1.298	7.13	0.79	3.80	-44.0	~22	
								MNR		

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

	18	1.30	7.2	0.8	3.8	-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: ☑ PERISTALTIC ☐ SUBMERSIBLE ☐ BLADDER ☐ WATTERA ☐ OTHER ☐ OTHER

DECON FLUIDS USED: ☐ LIQUINOX ☐ DEIONIZED WATER ☐ POTABLE WATER ☐ NITRIC ACID ☐ HEXANE ☑ METHANOL ☑ OTHER Deionized

TUBING/PUMP/BLADDER MATERIALS: ☑ SILICON TUBING ☐ TEFLON TUBING ☐ TEFLON LINED TUBING ☐ HDPE TUBING ☑ LDPE TUBING ☐ OTHER ☐ OTHER

☐ S. STEEL PUMP MATERIAL ☐ PVC PUMP MATERIAL ☐ GEOPROBE SCREEN ☐ TEFLON BLADDER ☐ OTHER ☐ OTHER ☐ OTHER

EQUIPMENT USED: ☑ WL METER M203-79 ☐ PID ☑ WQ METER M015-05 ☑ TURB. METER M024-2 ☑ PUMP S008-44 ☐ OTHER ☑ FILTERS NO. ___ TYPE ___

ANALYTICAL PARAMETERS

PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS
VOCs	8260B	NO	HCl, 4°C	3x50	YES	NO	828103-MW15K022
							MW2

PURGE OBSERVATIONS

PURGE WATER CONTAINERIZED: ☑ YES ☐ NO

NO-PURGE METHOD UTILIZED: ☐ YES ☑ NO

NUMBER OF GALLONS GENERATED: ~3.5

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

SKETCH/NOTES

HAVING TROUBLE W/ PUMP CONSISTENCY
15K x15S
S. CLINTON

GATE
SITE

Sampler Signature: M. Bruno Print Name: M. BRUNO

Checked By: Jerry Rudolph Date: 7/20/20

MACTEC
511 Congress Street, Portland Maine 04101

LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME: Dinaburg Distributing OU2 RI		LOCATION ID: MW-165	DATE: 7/12/20
PROJECT NUMBER: 3617187420		START TIME: 0805	END TIME: 1325
SAMPLE ID: 828103-MW165010	SAMPLE TIME: 1320	SITE NAME/NUMBER: 828103	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)	7.77 FT	FINAL DTW (BMP)	15.2 FT	PROT. CASING STICKUP (AGS)	0 FT	TOC/TOR DIFFERENCE	0.14 FT
WELL DEPTH (BMP)	15.2 FT	SCREEN LENGTH	10 FT	PID AMBIENT AIR	— PPM	REFILL TIMER SETTING	— SEC
WATER COLUMN	7.43 FT	DRAWDOWN VOLUME (initial DTW - final DTW X well diam. squared X 0.041)	— GAL	PID WELL MOUTH	— PPM	DISCHARGE TIMER SETTING	— SEC
CALCULATED GAL/VOL (column X well diameter squared X 0.041)	1.2 GAL	TOTAL VOL. PURGED (mL per minute X total minutes X 0.00026 gal/mL)	3.0 GAL	DRAWDOWN/ TOTAL PURGED	—	PRESSURE TO PUMP	— 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
0818	BEGIN PURGING									
0825	9.02	185	14.2	1.084	7.2	1.6	5.4	158		
0830	9.34	135	14.1	1.080	7.2	1.1	4.9	150		
0840	10.15	140	14.1	1.076	7.3	0.9	6.1	141		
0845	10.46	140	14.1	1.074	7.3	1.0	8.1	138		
0850	10.82	140	14.0	1.073	7.3	1.1	7.8	135		
0855	11.19	135	14.0	1.072	7.3	1.2	7.7	132		
0900	11.53	140	14.1	1.071	7.3	1.3	7.0	131		
0905	11.85	140	14.1	1.074	7.3	1.5	5.6	128		
0910	12.21	140	14.0	1.076	7.3	1.7	4.6	126		2 Gallons purged
0915	12.52	140	14.0	1.075	7.3	1.6	5.0	125		
0920	12.85	140	14.0	1.073	7.3	1.5	5.7	123		
	Increased rate to purge dry. Will collect grab sample of recharge									
0930	15.2	Purged Dry								3 Gallons purged well dry
1315	8.53									
1320	8.53	Collected grab sample of recharge								

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

14	1.07	7.3	1.5	5.7	120	

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 ☐ OTHER ☐ OTHER

DECON FLUIDS USED: ☐ LIQUINOX ☐ DEIONIZED WATER ☐ POTABLE WATER ☐ NITRIC ACID ☐ HEXANE ☐ METHANOL ☑ OTHER Dedicated

TUBING/PUMP/BLADDER MATERIALS: ☑ SILICON TUBING ☐ TEFLON TUBING ☐ TEFLON LINED TUBING ☑ HDPE TUBING ☐ LDPE TUBING ☐ OTHER ☐ OTHER

☐ S. STEEL PUMP MATERIAL ☐ PVC PUMP MATERIAL ☐ GEOPROBE SCREEN ☐ TEFLON BLADDER ☐ OTHER ☐ OTHER ☐ OTHER

EQUIPMENT USED: ☑ WL METER Heron ☐ PID ☑ WQ METER YSI 556 MPS ☑ TURB. METER HACH 2100Q ☑ PUMP Geopump ☐ OTHER ☐ FILTERS NO. ___ TYPE ___

ANALYTICAL PARAMETERS

	PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE NUMBERS
☑	VOCs	8260C	N	4°C/HCl	3x40ml		—	3

PURGE OBSERVATIONS

PURGE WATER CONTAINERIZED: ☑ YES ☐ NO

NO-PURGE METHOD UTILIZED: ☐ YES ☑ NO

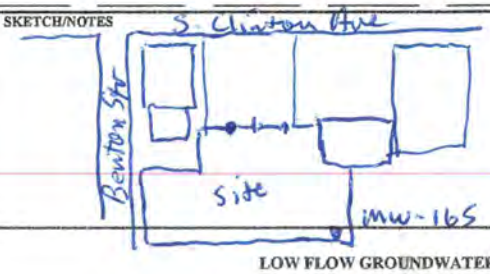
NUMBER OF GALLONS GENERATED: 3.0

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

Sampler Signature: Jerry Rawcliffe Print Name: Jerry Rawcliffe

Checked By: [signature] Date: 7/12/20

SKETCH/NOTES



MACTEC
511 Congress Street, Portland Maine 04101

LOW FLOW GROUNDWATER SAMPLING RECORD

LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME	Dinaburg Distributing OU2 RI	LOCATION ID	MW-16K
PROJECT NUMBER	3617187420	DATE	7-16-2020
SAMPLE ID	828103-MW16K022	START TIME	1555
SAMPLE TIME	1725	END TIME	1735
		SITE NAME/NUMBER	828103
		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)	9.02 FT	FINAL DTW (BMP)	9.05 FT	PROT. CASING STICKUP (AGS)	— FT	TOC/TOR DIFFERENCE	0.42 FT
WELL DEPTH (BMP)	25.0 FT	SCREEN LENGTH	5 FT	PID AMBIENT AIR	— PPM	REFILL TIMER SETTING	— SEC
WATER COLUMN	15.98 FT	DRAWDOWN VOLUME (initial DTW- final DTW X well diam. squared X 0.041)	0.005 GAL	PID WELL MOUTH	✓ PPM	DISCHARGE TIMER SETTING	— SEC
CALCULATED GAL/VOL (column X well diameter squared X 0.041)	26.21 GAL	TOTAL VOL. PURGED (mL per minute X total minutes X 0.00026 gal/mL)	3.64 GAL	DRAWDOWN/ TOTAL PURGED	0.001	PRESSURE TO PUMP	— 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
1605	BEGIN PURGING									
1615	9.00	200	14.23	0.714	7.35	2.25	NS 0 14.5	0.1	~23	↑ HP TURN SPEED UP
1625	9.03	200	13.95	1.122	7.13	1.55	9.25	-17.6	~23	
1630	9.03	200	14.03	1.284	7.13	1.42	3.66	-18.6	~23	
1635	9.05	200	13.92	1.362	7.13	2.45	2.20	-18.9	~23	
1640	9.05	200	13.96	1.382	7.13	5.79	4.85	-29.0	~23	
1645	9.05	200	16.12	0.992	6.97	4.79	1.21	18.0	~23	+ see note
1650	9.06	200	13.83	1.357	7.14	7.19	2.34	-14.8	~23	
1655	9.05	200	13.78	1.362	7.14	7.11	1.81	-13.9	~23	
1700	9.05	200	13.84	1.374	7.14	6.67	1.50	-12.7	~23	
1705	9.05	200	1418	1.375	7.15	6.45	1.40	-13.3	~23	
1710	9.05	200	14.39	1.370	7.15	6.40	1.21	-13.3	~23	
1715	9.05	200	14.23	1.374	7.15	6.44	2.04	-11.7	~23	
1720	9.05	200	14.36	1.377	7.16	6.45	1.89	-11.4	~23	
1725	SAMPLE									

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

	14	1.38	7.2	6.5	1.9	-11

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. 3.31 = 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 (Geopump) ☐ SUBMERSIBLE ☐ BLADDER ☐ WATTERA ☐ OTHER ☐ OTHER

DECON FLUIDS USED: ☐ LIQUINOX ☐ DEIONIZED WATER ☐ POTABLE WATER ☐ NITRIC ACID ☐ HEXANE ☐ METHANOL ☒ OTHER DEDICATED

TUBING/PUMP/BLADDER MATERIALS: ☒ SILICON TUBING ☐ TEFLON TUBING ☐ TEFLON LINED TUBING ☐ HDPE TUBING ☐ LDPE TUBING ☐ OTHER ☐ OTHER

☐ S. STEEL PUMP MATERIAL ☐ PVC PUMP MATERIAL ☐ GEOPROBE SCREEN ☐ TEFLON BLADDER ☐ OTHER ☐ OTHER ☐ OTHER

EQUIPMENT USED: ☒ WL METER M203-79 ☐ PID ☒ WQ METER M015-02 ☒ TURB. METER M024-27 ☒ PUMP S008-A4 ☐ OTHER ☐ FILTERS NO. ___ TYPE ___

ANALYTICAL PARAMETERS

PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS
VOCs	8260b	NO	HCl, 4°C	3×50	YES	NO	828103-MW16K022

PURGE OBSERVATIONS

PURGE WATER CONTAINERIZED: ☒ YES ☐ NO

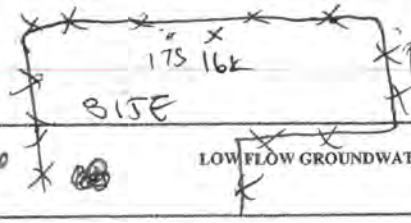
NUMBER OF GALLONS GENERATED: ~2.8

NO-PURGE METHOD UTILIZED: ☐ YES ☒ NO

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

SKETCH/NOTES

1645 - temp. pump shut off to adjust set up so it remained dry.



Sampler Signature: M. Bruno Print Name: M. BRUNO

Checked By: Jerry Ruff Date: 7/20/20

MACTEC
511 Congress Street, Portland Maine 04101

LOW FLOW GROUNDWATER SAMPLING RECORD

LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME	Dinaburg Distributing OU2 RI
PROJECT NUMBER	3617187420
SAMPLE ID	828103 ~~MW175010~~ MB MW175010
SAMPLE TIME	0940
LOCATION ID	MW-175
DATE	7-17-2020
START TIME	0805
END TIME	0945
SITE NAME/NUMBER	828103
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)	4.39 FT	FINAL DTW (BMP)	5.39 FT	PROT. CASING STICKUP (AGS)	0 FT	TOC/TOR DIFFERENCE	0.58 FT
WELL DEPTH (BMP)	14.90 FT	SCREEN LENGTH	10 FT	PID AMBIENT AIR	– PPM	REFILL TIMER SETTING	– SEC
WATER COLUMN	10.51 FT	DRAWDOWN VOLUME (initial DTW- final DTW X well diam. squared X 0.041)	0.164 GAL	PID WELL MOUTH	– PPM	DISCHARGE TIMER SETTING	– SEC
CALCULATED GAL/VOL (column X well diameter squared X 0.041)	1.72 GAL	TOTAL VOL. PURGED (mL per minute X total minutes X 0.00026 gal/mL)	2.13 GAL	DRAWDOWN/ TOTAL PURGED	0.08	PRESSURE TO PUMP	– 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
0825	BEGIN PURGING									
0825	5.89	120	15.82	0.692	6.88	4.15	53.0	79.1	~13	
0845	4.98	110	15.80	0.692	6.90	4.21	52.1	79.9	~13	
0850	5.02	120	15.99	0.692	6.93	4.12	45.8	83.1	~13	
0855	5.09	120	15.87	0.686	6.94	4.96	39.1	85.8	~13	
0900	5.17	110	15.90	0.685	6.95	4.96	28.0	87.8	~13	
0905	5.19	110	15.84	0.683	6.96	4.83	25.7	89.4	~13	
0910	5.21	120	15.79	0.683	6.96	4.87	21.2	90.7	~13	
0915	5.25	120	15.71	0.684	6.97	5.23	17.0	92.1	~13	
0920	5.31	150	15.70	0.685	6.99	5.16	14.5	93.2	~13	↓SPEED READJUSTED
0925	5.41	110	15.64	0.688	7.06	5.10	13.6	92.8	~13	
0930	5.36	110	15.72	0.689	7.00	5.02	10.8	93.1	~13	
0935	5.39	110	15.89	0.691	7.01	5.04	9.18	92.5	~13	
0940	SAMPLE									MB

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

	16	0.691	7.0	5.0	9.2	93

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)

1.001
0.936

EQUIPMENT DOCUMENTATION

TYPE OF PUMP: ☑ PERISTALTIC ☐ SUBMERSIBLE ☐ BLADDER ☐ WATTERA ☐ OTHER ☐ OTHER

DECON FLUIDS USED: ☐ LIQUINOX ☐ DEIONIZED WATER ☐ POTABLE WATER ☐ NITRIC ACID ☐ HEXANE ☐ METHANOL ☑ OTHER Dedicated

TUBING/PUMP/BLADDER MATERIALS: ☑ SILICON TUBING ☐ TEFLON TUBING ☐ TEFLON LINED TUBING ☑ HDPE TUBING ☐ LDPE TUBING ☐ OTHER ☐ OTHER ☐ S. STEEL PUMP MATERIAL ☐ PVC PUMP MATERIAL ☐ GEOPROBE SCREEN ☐ TEFLON BLADDER ☐ OTHER ☐ OTHER ☐ OTHER

EQUIPMENT USED: ☐ WL METER M003-79 ☐ PID – ☑ WQ METER M015-05 ☑ TURB. METER M024-27 ☑ PUMP S008-99 ☐ OTHER – ☐ FILTERS NO. ___ TYPE ___

ANALYTICAL PARAMETERS

PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS
VOCs	8260B	NO	HCl, 4°C	3x50mL	YES	NO	828103-MW175010

PURGE OBSERVATIONS

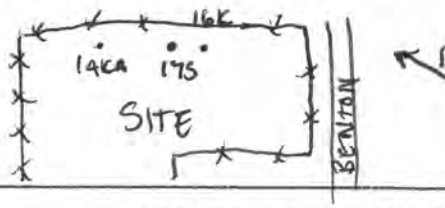
PURGE WATER CONTAINERIZED: ☑ YES ☐ NO

NO-PURGE METHOD UTILIZED: ☐ YES ☑ NO

NUMBER OF GALLONS GENERATED: ~2.5

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

SKETCH/NOTES



Sampler Signature: M. B Print Name: M. BRUNO

Checked By: Jerry Ruhlf Date: 7/20/20

MACTEC
511 Congress Street, Portland Maine 04101

LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME	Dinaburg Distributing OU2 RI	LOCATION ID	MW-185
PROJECT NUMBER	3617187420	DATE	7/16/20
SAMPLE ID	828103-MW185010	START TIME	1300
SAMPLE TIME	1440	END TIME	1500
SITE NAME/NUMBER	828103	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)	7.80 FT	FINAL DTW (BMP)	8.25 FT	PROT. CASING STICKUP (AGS)	0 FT	TOC/TOR DIFFERENCE	0.24 FT
WELL DEPTH (BMP)	14.95 FT	SCREEN LENGTH	10 FT	PID AMBIENT AIR	— PPM	REFILL TIMER SETTING	— SEC
WATER COLUMN	7.1 FT	DRAWDOWN VOLUME (initial DTW- final DTW X well diam. squared X 0.041)	.07 GAL	PID WELL MOUTH	— PPM	DISCHARGE TIMER SETTING	— SEC
CALCULATED GAL/VOL (column X well diameter squared X 0.041)	1.1 GAL	TOTAL VOL. PURGED (mL per minute X total minutes X 0.00026 gal/mL)	2.7 GAL	DRAWDOWN/ TOTAL PURGED	.027	PRESSURE TO PUMP	— 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									Rain Starting
1320	8.02	130	15.6	1.151	7.1	1.9	370	56		
1330	8.07	125	15.7	1.125	7.1	1.7	120	35		
1340	8.13	150	15.7	1.077	7.1	1.7	45	35		Setting up rain shelter
1410	8.33	145	15.5	1.039	7.1	2.7	5.8	64		
1415	8.35	140	15.6	1.036	7.1	2.8	3.0	67		
1420	8.37	135	15.5	1.033	7.1	3.0	2.6	68		Pump at lowest setting
1425	8.37	125	15.7	1.028	7.1	2.9	2.3	70		
1430	8.36	100	15.7	1.026	7.1	2.9	2.0	72		
1435	8.25	50	15.9	1.024	7.0	3.0	2.9	73		Battery losing charge

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

	16	1.02	7.0	3.0	2.9	73

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 ☐ OTHER ☐ OTHER

DECON FLUIDS USED: ☐ LIQUINOX ☐ DEIONIZED WATER ☐ POTABLE WATER ☐ NITRIC ACID ☐ HEXANE ☐ METHANOL ☑ OTHER Dedicated

TUBING/PUMP/BLADDER MATERIALS: ☑ SILICON TUBING ☐ TEFLON TUBING ☐ TEFLON LINED TUBING ☑ HDPE TUBING ☐ LDPE TUBING ☐ OTHER ☐ OTHER

☐ S. STEEL PUMP MATERIAL ☐ PVC PUMP MATERIAL ☐ GEOPROBE SCREEN ☐ TEFLON BLADDER ☐ OTHER ☐ OTHER ☐ OTHER

EQUIPMENT USED: ☑ WL METER Heron ☐ PID ☑ WQ METER YSI 556 MPS ☑ TURB. METER HACH 2100Q ☑ PUMP Geopump ☐ OTHER ☐ FILTERS NO. ___ TYPE ___

ANALYTICAL PARAMETERS

	PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS
☒	VOCs	8260C	N	4°C/HCl	3x40ml			3

PURGE OBSERVATIONS

PURGE WATER CONTAINERIZED: ☑ YES ☐ NO

NO-PURGE METHOD UTILIZED: ☐ YES ☑ NO

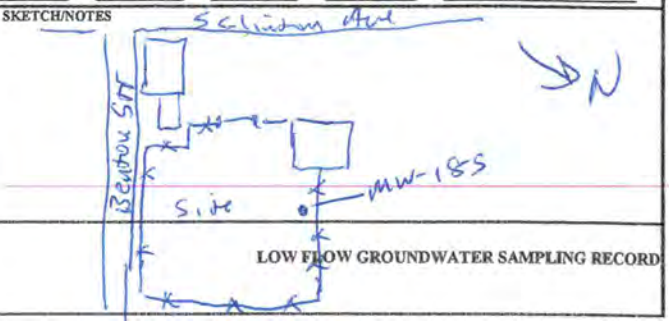
NUMBER OF GALLONS GENERATED: 2.7

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

Sampler Signature: Jerry Rawcliffe Print Name: Jerry Rawcliffe

Checked By: [signature] Date: 7/22/20

SKETCH/NOTES



MACTEC
511 Congress Street, Portland Maine 04101

LOW FLOW GROUNDWATER SAMPLING RECORD

LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME	Dinaburg Distributing OU2 RI	LOCATION ID	MW-195
PROJECT NUMBER	3617187420	START TIME	1400
SAMPLE ID	828103-MW195010	SAMPLE TIME	0741
		END TIME	0805
		SITE NAME/NUMBER	828103
		PAGE	1 OF 1
		DATE	7-16-20 → 7-17-2020

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)	7.04 FT	FINAL DTW (BMP)	15.0 DRY FT	PROT. CASING STICKUP (AGS)	0 FT	TOC/TOR DIFFERENCE	0.15 FT
WELL DEPTH (BMP)	15 FT	SCREEN LENGTH	10 FT	PID AMBIENT AIR	— PPM	REFILL TIMER SETTING	— SEC
WATER COLUMN	6.96 FT	DRAWDOWN VOLUME (initial DTW- final DTW X well diam. squared X 0.041)	— GAL	PID WELL MOUTH	— PPM	DISCHARGE TIMER SETTING	— SEC
CALCULATED GAL/VOL (column X well diameter squared X 0.041)	1.14 GAL	TOTAL VOL. PURGED (mL per minute X total minutes X 0.00026 gal/mL)	— GAL	DRAWDOWN/ TOTAL PURGED	—	PRESSURE TO PUMP	— 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
1420	BEGIN PURGING									
1430	8.74	100	16.77	0.990	6.87	0.69	31.8	-16.0	~14	↓PUMP SPEED
1440	9.50	100	16.37	0.980	6.85	2.52	31.6	-23.5	~14	
1450	9.92	100	16.39	0.976	6.86	2.97	24.6	-23.3	~14	
1455	10.26	100	16.31	0.974	6.86	2.56	20.3	-20.0	~14	
1500	10.72	100	16.31	0.974	6.86	2.51	15.0	-17.6	~14	
1505	11.25	100	16.31	0.973	6.88	2.35	12.4	-15.5	~14	
1510	11.65	100	16.14	0.975	6.91	2.10	15.8	-18.0	~14	
1515	12.23	100	15.51	0.979	6.91	2.16	29.9	-12.1	~14	↑SPEED SEE LOG
1520	13.01	350	16.12	0.992	6.97	3.25	38.25	-18.8	~14	DO = 4.79, TVRB = 32.5
1525	14.09	350	15.22	0.999	7.03	5.20	28.8	-22.0	~14	
	WELL DRY. SAMPLING RECHARGE.									
7-17-20 0741	5.58	COLLECT GRAB SAMPLE FROM RECHARGE.								

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

15	1.00	7.0	5.2	28.8	-22	

TEMP.: nearest degree (ex. 10.1 = 10)
COND.: 3 SF max (ex. 3333 = 3330, 0.696 = 0.696)
pH: nearest tenth (ex. 5.33 = 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 ☐ OTHER ☐ OTHER

DECON FLUIDS USED: ☐ LIQUINOX ☑ DEIONIZED WATER ☐ POTABLE WATER ☐ NITRIC ACID ☐ HEXANE ☐ METHANOL ☑ OTHER DI BLANK

TUBING/PUMP/BLADDER MATERIALS: ☑ SILICON TUBING ☐ TEFLON TUBING ☐ TEFLON LINED TUBING ☐ HDPE TUBING ☐ LDPE TUBING ☐ OTHER ☐ OTHER

☐ S. STEEL PUMP MATERIAL ☐ PVC PUMP MATERIAL ☐ GEOPROBE SCREEN ☐ TEFLON BLADDER ☐ OTHER ☐ OTHER ☐ OTHER

EQUIPMENT USED: ☑ WL METER M003-79 ☐ PID ☑ WQ METER M015-08 ☑ TURB. METER M024-27 ☑ PUMP S008-44 ☐ OTHER ☑ FILTERS NO. ___ TYPE ___

ANALYTICAL PARAMETERS

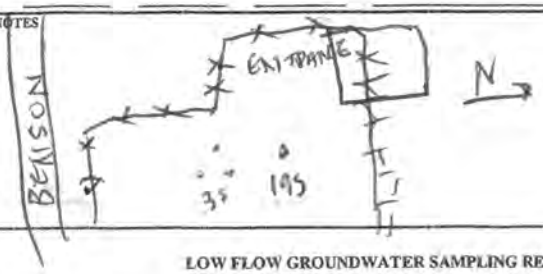
	PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS
☑	VOCs	8260B	NO	HCl, 4°C	3x40	YES	NO	828103-MW195010

PURGE OBSERVATIONS

PURGE WATER CONTAINERIZED: YES ☑ NO ☐ — NUMBER OF GALLONS GENERATED: 25

NO-PURGE METHOD UTILIZED: YES ☐ NO ☑ — If yes, purged approximately 1 standing volume prior to sampling or _____ mL for this sample location.

SKETCH/NOTES



Sampler Signature: M. Brend — Print Name: M. BRENO

Checked By: Jerry Ratliff — Date: 7/20/20

MACTEC
511 Congress Street, Portland Maine 04101

LOW FLOW GROUNDWATER SAMPLING RECORD

LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME: Dinaburg Distributing OU2 RI		LOCATION ID: MW-205	DATE: 7/17/20
PROJECT NUMBER: 3617187420		START TIME: 0940	END TIME: 1055
SAMPLE ID: 828103-MW205010	SAMPLE TIME: 1050	SITE NAME/NUMBER: 828103	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)	6.72 FT	FINAL DTW (BMP)	8.62 FT	PROT. CASING STICKUP (AGS)	0 FT	TOC/TOR DIFFERENCE	0.22 FT
WELL DEPTH (BMP)	14.95 FT	SCREEN LENGTH	10 FT	PID AMBIENT AIR	— PPM	REFILL TIMER SETTING	— SEC
WATER COLUMN	8.73 FT	DRAWDOWN VOLUME (initial DTW- final DTW X well diam. squared X 0.041)	.38 GAL	PID WELL MOUTH	— PPM	DISCHARGE TIMER SETTING	— SEC
CALCULATED GAL/VOL (column X well diameter squared X 0.041)	1.4 GAL	TOTAL VOL. PURGED (mL per minute X total minutes X 0.00026 gal/mL)	2.3 GAL	DRAWDOWN/ TOTAL PURGED	.17	PRESSURE TO PUMP	— 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
0945	BEGIN PURGING									
0955	6.74	155	16.2	1.334	7.1	1.4	6.6	134		Pump at lowest setting
1000	6.92	155	16.3	1.119	7.1	2.3	10.4	127		
1010	7.25	150	16.3	0.798	7.2	5.3	13.9	121		
1015	7.44	155	16.4	0.727	7.2	5.7	12.8	120		
1020	7.58	150	16.3	0.706	7.2	5.7	11.0	120		
1025	7.75	155	16.3	0.693	7.2	5.9	9.3	119		
1030	7.98	155	16.2	0.690	7.2	6.1	8.5	119		
1035	8.35	155	16.2	0.688	7.2	6.1	7.0	118		
1040	8.49	160	16.2	0.688	7.3	6.1	7.7	116		
1045	8.62	155	16.2	0.690	7.2	6.1	8.6	116		

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

16	0.690	7.2	6.1	8.6	120	

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 ☐ OTHER ☐ OTHER

DECON FLUIDS USED: ☐ LIQUINOX ☐ DEIONIZED WATER ☐ POTABLE WATER ☐ NITRIC ACID ☐ HEXANE ☑ METHANOL ☐ OTHER

TUBING/PUMP/BLADDER MATERIALS: ☑ SILICON TUBING ☐ TEFLON TUBING ☐ TEFLON LINED TUBING ☑ HDPE TUBING ☐ LDPE TUBING ☐ OTHER ☐ OTHER

☐ S. STEEL PUMP MATERIAL ☐ PVC PUMP MATERIAL ☐ GEOPROBE SCREEN ☐ TEFLON BLADDER ☐ OTHER ☐ OTHER ☐ OTHER

EQUIPMENT USED: ☑ WL METER Heron ☐ PID ☑ WQ METER YSI 556 MPS ☑ TURB. METER HACH 2100Q ☑ PUMP Geopump ☐ OTHER ☐ FILTERS NO. ___ TYPE ___

ANALYTICAL PARAMETERS

	PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS
☑	VOC	8260C	N	4°C/HCl	3x40ml		—	3

PURGE OBSERVATIONS

PURGE WATER CONTAINERIZED: YES ☑ NO ☐

NO-PURGE METHOD UTILIZED: YES ☐ NO ☑

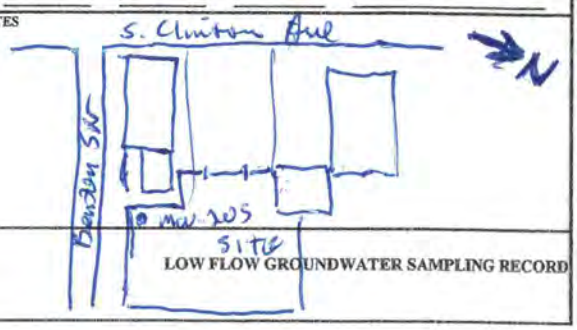
NUMBER OF GALLONS GENERATED: 2.3

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

Sampler Signature: Jerry Rawcliffe Print Name: Jerry Rawcliffe

Checked By: [signature] Date: 7/22/20

SKETCH/NOTES



MACTEC
511 Congress Street, Portland Maine 04101

LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME: Dinaburg Distributing OU2 RI		LOCATION ID: MW-215	DATE: 7/16/20
PROJECT NUMBER: 3617187420		START TIME: 1025	END TIME: 1245
SAMPLE ID: 828103+MW215010	SAMPLE TIME: 1235	SITE NAME/NUMBER: 828103	PAGE: 1 OF 1

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

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)	7.13 FT	FINAL DTW (BMP)	12.74 FT	PROT. CASING STICKUP (AGS)	0 FT	TOC/TOR DIFFERENCE	0.40 FT
WELL DEPTH (BMP)	14.95 FT	SCREEN LENGTH	10 FT	PID AMBIENT AIR	— PPM	REFILL TIMER SETTING	— SEC
WATER COLUMN	7.82 FT	DRAWDOWN VOLUME (initial DTW- final DTW X well diam. squared X 0.041)	.90 GAL	PID WELL MOUTH	— PPM	DISCHARGE TIMER SETTING	— SEC
CALCULATED GAL/VOL (column X well diameter squared X 0.041)	1.25 GAL	TOTAL VOL. PURGED (mL per minute X total minutes X 0.00026 gal/mL)	4.5 GAL	DRAWDOWN/ TOTAL PURGED	.20	PRESSURE TO PUMP	— 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
1031	BEGIN PURGING									
1040	7.85	155	18.4	0.944	7.2	1.9	10.3	65		Pump at lowest setting
1050	8.50	165	17.5	0.945	7.1	1.5	12.6	81		
1055	8.72	140	17.4	0.948	7.2	1.4	10.6	87		Some iron floc
1100	9.01	145	17.8	0.957	7.1	1.4	12.9	92		
1105	9.26	145	17.9	0.967	7.1	1.4	10.5	95		
1110	9.52	155	17.6	0.971	7.1	1.4	9.7	86		
1115	9.75	155	17.5	0.976	7.1	1.3	8.1	58		
1120	9.98	155	17.5	0.971	7.1	1.3	7.4	42		
1125	10.27	150	17.5	0.959	7.2	1.1	3.9	17		
1130	10.46	150	17.4	0.929	7.2	1.0	2.6	-8		
1140	10.98	135	17.4	0.906	7.3	0.9	2.6	-31		
1150	11.33	140	17.4	0.898	7.3	0.9	1.8	-43		
1200	11.70	145	17.4	0.893	7.3	0.8	1.9	-49		Water has organic odor
1210	12.08	145	17.4	0.890	7.3	1.0	3.1	-58		
1215	12.25	145	17.4	0.888	7.3	0.8	2.2	-62		
1220	12.44	145	17.2	0.886	7.3	0.8	3.1	-64		
1225	12.60	145	17.2	0.886	7.3	0.8	2.5	-63		
1230	12.74	145	17.2	0.885	7.3	0.8	3.6	-58		

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

	17	0.885	7.3	0.8	3.6	-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: ☑ PERISTALTIC ☐ SUBMERSIBLE ☐ BLADDER ☐ _____ ☐ WATTERA ☐ OTHER ☐ OTHER

DECON FLUIDS USED: ☐ LIQUINOX ☐ DEIONIZED WATER ☐ POTABLE WATER ☐ NITRIC ACID ☐ HEXANE ☐ METHANOL ☑ OTHER Dedicated

TUBING/PUMP/BLADDER MATERIALS: ☑ SILICON TUBING ☐ TEFLON TUBING ☐ TEFLON LINED TUBING ☑ HDPE TUBING ☐ LDPE TUBING ☐ OTHER ☐ OTHER

☐ S. STEEL PUMP MATERIAL ☐ PVC PUMP MATERIAL ☐ GEOPROBE SCREEN ☐ TEFLON BLADDER ☐ OTHER ☐ OTHER ☐ OTHER

EQUIPMENT USED: ☑ WL METER Heron ☐ PID ☑ WQ METER YSI 556 MPS ☑ TURB. METER HACH 2100Q ☑ PUMP Geopump ☐ OTHER ☐ FILTERS NO. ___ TYPE ___

ANALYTICAL PARAMETERS

	PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE NUMBERS
☒	VOCs	8260C	N	4°C HCl	3x40ml	Y	—	3

PURGE OBSERVATIONS

PURGE WATER CONTAINERIZED: YES ☑ NO ☐

NO-PURGE METHOD UTILIZED: YES ☐ NO ☒

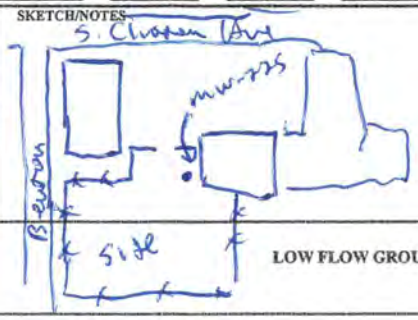
NUMBER OF GALLONS GENERATED: 4.5

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

Sampler Signature: Jerry Rawcliffe Print Name: Jerry Rawcliffe

Checked By: Michael H. Jones Date: 7/17/20

SKETCH/NOTES



MACTEC
511 Congress Street, Portland Maine 04101

LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME: Dinaburg Distributing OU2 RI		LOCATION ID: PZ-22S	DATE: 7/15/10
PROJECT NUMBER: 3617187420		START TIME: 1220	END TIME: 1510
SAMPLE ID: 828103-PZ22S010	SAMPLE TIME: 1500	SITE NAME/NUMBER: 828103	PAGE: 1 OF 1

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 OD

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)	6.88 FT	FINAL DTW (BMP)	13.7 FT	PROT. CASING STICKUP (AGS)	0 FT	TOC/TOR DIFFERENCE	0.40 FT
WELL DEPTH (BMP)	13.97 FT	SCREEN LENGTH	10 FT	PID AMBIENT AIR	— PPM	REFILL TIMER SETTING	— SEC
WATER COLUMN	6.82 FT	DRAWDOWN VOLUME (initial DTW - final DTW X well diam. squared X 0.041)	— GAL	PID WELL MOUTH	— PPM	DISCHARGE TIMER SETTING	— SEC
CALCULATED GAL/VOL (column X well diameter squared X 0.041)	.28 GAL	TOTAL VOL. PURGED (mL per minute X total minutes X 0.00026 gal/mL)	2.2 GAL	DRAWDOWN/ TOTAL PURGED	—	PRESSURE TO PUMP	— 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
1240	BEGIN PURGING									
1245	7.74	145	15.8	0.808	7.0	3.3	690	159		Pump at lowest setting.
1250	7.86	145	15.5	0.792	7.0	2.9	760	154		
1255	8.05	145	15.5	0.795	7.0	2.6	450	147		
1300	8.31	145	15.4	0.797	7.0	2.0	290	142		
1310	10.24	140	15.3	0.793	7.1	1.1	680	136		
1320	11.42	110	15.2	0.791	7.1	1.1	180	129		
1330	12.35	130	15.0	0.786	7.1	1.3	75	125		
1335	12.63	135	14.8	0.786	7.1	1.0	390	121		
1340	12.71	130	14.6	0.786	7.1	0.8	180	118		
	Well will go dry before stabilization or 2 hour purge limit. - Increased rate but pump will dry. Will collect grab sample of recharge.									
1455	7.81									
1500		Collected grab sample of recharge.								

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

15	0.786	7.1	0.8	180	120	

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 [ ] OTHER [ ] OTHER

DECON FLUIDS USED: [ ] LIQUINOX [ ] DEIONIZED WATER [ ] POTABLE WATER [ ] NITRIC ACID [ ] HEXANE [ ] METHANOL [✓] OTHER Dedicated

TUBING/PUMP/BLADDER MATERIALS: [✓] SILICON TUBING [ ] TEFLON TUBING [ ] TEFLON LINED TUBING [ ] HDPE TUBING [✓] LDPE TUBING [ ] OTHER [ ] OTHER

[ ] S. STEEL PUMP MATERIAL [ ] PVC PUMP MATERIAL [ ] GEOPROBE SCREEN [ ] TEFLON BLADDER [ ] OTHER [ ] OTHER [ ] OTHER

EQUIPMENT USED: [✓] WL METER Heron [ ] PID [✓] WQ METER YSI 556 MPS [✓] TURB. METER HACH 2100Q [✓] PUMP Geopumps. [ ] OTHER [ ] FILTERS NO. ___ TYPE ___

ANALYTICAL PARAMETERS

	PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS
[✓]	VOCs	8260C	N	4°C/HCl	3x40ml	Y	—	3

PURGE OBSERVATIONS

PURGE WATER CONTAINERIZED: YES [✓] NO [ ]

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

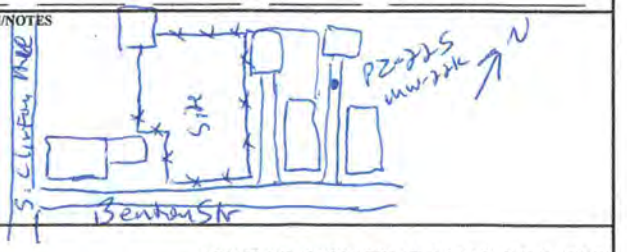
NUMBER OF GALLONS GENERATED: 2.2

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

Sampler Signature: Terry Rawcliffe Print Name: Terry Rawcliffe

Checked By: Date: 7/22/10

SKETCH/NOTES



MACTEC
511 Congress Street, Portland Maine 04101

LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME: Dinaburg Distributing OU2 RI		LOCATION ID: MW-22K	DATE: 7/15/20
PROJECT NUMBER: 3617187420		START TIME: 1350	END TIME: 1455
SAMPLE ID: 828103-MW22K028	SAMPLE TIME: 1450	SITE NAME/NUMBER: 828103	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 OD

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)	9.12 FT	FINAL DTW (BMP)	9.30 FT	PROT. CASING STICKUP (AGS)	0 FT	TOC/TOR DIFFERENCE	0.91 FT
WELL DEPTH (BMP)	28.3 FT	SCREEN LENGTH	10 FT	PID AMBIENT AIR	— PPM	REFILL TIMER SETTING	— SEC
WATER COLUMN	19.18 FT	DRAWDOWN VOLUME (initial DTW- final DTW X well diam. squared X 0.041)	.03 GAL	PID WELL MOUTH	— PPM	DISCHARGE TIMER SETTING	— SEC
CALCULATED GAL/VOL (column X well diameter squared X 0.041)	3.1 GAL	TOTAL VOL. PURGED (mL per minute X total minutes X 0.00026 gal/mL)	1.9 GAL	DRAWDOWN/ TOTAL PURGED	.015	PRESSURE TO PUMP	— 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
1354	BEGIN PURGING									
1400	9.37	160	14.7	1.045	7.2	1.6	24	-23		
1410	9.31	145	14.5	1.055	7.2	0.8	18	-44		
1420	9.30	145	14.5	1.083	7.2	0.6	9.9	-45		
1425	9.29	135	14.5	1.090	7.2	0.6	10.8	-48		
1430	9.29	135	14.5	1.093	7.2	0.6	11.6	-48		
1435	9.30	140	14.5	1.095	7.2	0.6	7.5	-49		
1440	9.30	140	14.5	1.097	7.2	0.5	8.1	-51		
1445	9.30	140	14.5	1.099	7.2	0.5	8.7	-52		

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

15	1.10	7.2	0.5	8.7	-52	

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 ☐ OTHER ☐ OTHER

DECON FLUIDS USED: ☐ LIQUINOX ☐ DEIONIZED WATER ☐ POTABLE WATER ☐ NITRIC ACID ☐ HEXANE ☐ METHANOL ☑ OTHER Deluted

TUBING/PUMP/BLADDER MATERIALS: ☑ SILICON TUBING ☐ TEFLON TUBING ☐ TEFLON LINED TUBING ☐ HDPE TUBING ☑ LDPE TUBING ☐ OTHER ☐ OTHER

☐ S. STEEL PUMP MATERIAL ☐ PVC PUMP MATERIAL ☐ GEOPROBE SCREEN ☐ TEFLON BLADDER ☐ OTHER ☐ OTHER ☐ OTHER

EQUIPMENT USED: ☑ WL METER ☐ PID ☑ WQ METER ☑ TURB. METER ☑ PUMP ☐ OTHER ☐ FILTERS NO. ___ TYPE ___

ANALYTICAL PARAMETERS

	PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ~~ID~~ NUMBERS
✓	VOCs	8260C	N	4°C/HCl	3x40ml	Y	—	3

PURGE OBSERVATIONS

PURGE WATER CONTAINERIZED: YES ☑ NO ☐

NO-PURGE METHOD UTILIZED: YES ☐ NO ☑

NUMBER OF GALLONS GENERATED: 1.9

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

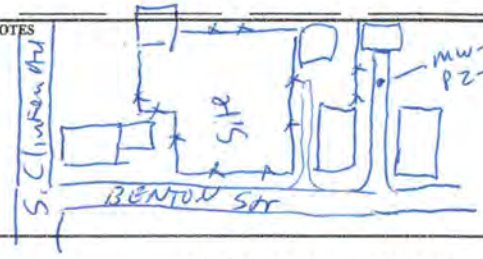
Sampler Signature: Jerry Rawcliffe

Print Name: Jerry Rawcliffe

Checked By:

Date: 7/22/20

SKETCH/NOTES



MACTEC
511 Congress Street, Portland Maine 04101

LOW FLOW GROUNDWATER SAMPLING RECORD

LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME		LOCATION ID	DATE
Dinaburg Distributing OU2 RI		MW23K	7-14-2020
PROJECT NUMBER		START TIME	END TIME
3617187420		1530	1700
SAMPLE ID	SAMPLE TIME	SITE NAME/NUMBER	PAGE
828103-MW23K025	1650	828103	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)	8.70 FT	FINAL DTW (BMP)	8.71 FT	PROT. CASING STICKUP (AGS)	0 FT	TOC/TOR DIFFERENCE	0.77 FT
WELL DEPTH (BMP)	30.29 FT	SCREEN LENGTH	10 FT	PID AMBIENT AIR	– PPM	REFILL TIMER SETTING	– SEC
WATER COLUMN	21.54 FT	DRAWDOWN VOLUME (initial DTW- final DTW X well diam. squared X 0.041)	+ 0.002 GAL	PID WELL MOUTH	– PPM	DISCHARGE TIMER SETTING	– SEC
CALCULATED GAL/VOL (column X well diameter squared X 0.041)	3.53 GAL	TOTAL VOL. PURGED (mL per minute X total minutes X 0.00026 gal/mL)	2.37 GAL	DRAWDOWN/ TOTAL PURGED	+0.001	PRESSURE TO PUMP	– 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
1545	BEGIN PURGING									
1550	8.71	180	16.66	1.177	6.85	0.56	72.7	34.8	~25	DECREASE PUMP SPEED
1555	8.71	150	17.03	1.173	6.88	0.22	32.7	1.0	~25	DECREASE PUMP SPEED
1600	8.71	140	17.41	1.192	6.93	0.15	26.1	-12.7	~25	
1605	8.71	140	17.65	1.198	6.94	0.15	19.2	-13.9	~25	
1610	8.71	140	17.82	1.202	6.95	0.18	13.0	-15.3	~25	
1615	8.71	140	17.89	1.212	6.96	0.23	9.40	-16.8	~25	
1620	8.71	140	17.99	1.215	6.96	0.29	5.47	-17.9	~25	
1625	8.71	140	17.69	1.225	6.97	0.50	3.98	-19.2	~25	
1630	8.71	140	18.26	1.224	6.98	1.06	4.31	-20.5	~25	
1635	8.71	140	17.99	1.233	6.99	1.29	4.84	-22.1	~25	
1640	8.71	140	17.54	1.227	6.99	1.30	4.41	-23.6	~25	
1645	8.71	140	17.49	1.227	6.99	1.26	4.71	-24.9	~25	
1650	SAMPLE									

MB

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

17	1.23	7.0	1.3	4.7	-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: ☑ PERISTALTIC ☐ SUBMERSIBLE ☐ BLADDER ☐ WATTERA ☐ OTHER ☐ OTHER

DECON FLUIDS USED: ☐ LIQUINOX ☐ DEIONIZED WATER ☑ POTABLE WATER ☐ NITRIC ACID ☐ HEXANE ☐ METHANOL ☑ OTHER Dedicated

TUBING/PUMP/BLADDER MATERIALS: ☑ SILICON TUBING ☐ TEFLON TUBING ☐ TEFLON LINED TUBING ☐ HDPE TUBING ☑ LDPE TUBING ☐ OTHER ☐ OTHER

☐ S. STEEL PUMP MATERIAL ☐ PVC PUMP MATERIAL ☐ GEOPROBE SCREEN ☐ TEFLON BLADDER ☐ OTHER ☐ OTHER ☐ OTHER

EQUIPMENT USED: ☑ WL METER M200-79 ☐ PID ☑ WQ METER M015-05 ☑ TURB. METER M124-27 ☑ PUMP Geopump ☐ OTHER ☐ FILTERS NO. ___ TYPE ___

ANALYTICAL PARAMETERS

PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS
VOCs	8260B	NO	HCl, 4°C	3x50	YES	NO	828103-MW23K025

MB

PURGE OBSERVATIONS

PURGE WATER CONTAINERIZED: ☑ YES ☐ NO

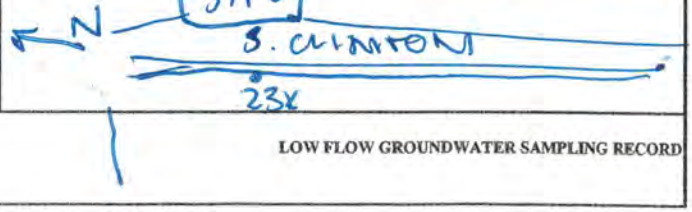
NO-PURGE METHOD UTILIZED: ☐ YES ☑ NO

NUMBER OF GALLONS GENERATED: ~2.4

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

SKETCH/NOTES

PUMP UNABLE TO GO BELOW 140 AT 25' AND MAKE CONSISTENT WATER.



Sampler Signature: M. Bruno Print Name: M. BRUNO

Checked By: Jerry Ruff Date: 7/20/20

MACTEC
511 Congress Street, Portland Maine 04101

LOW FLOW GROUNDWATER SAMPLING RECORD

LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME	Dinaburg Distributing OU2 RI
PROJECT NUMBER	3617187420 , 02
SAMPLE ID	828103-PZ245010
SAMPLE TIME	1035
LOCATION ID	PZ245
DATE	7-14-2020
START TIME	0810
END TIME	1045
SITE NAME/NUMBER	828103
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)	7.63 FT	FINAL DTW (BMP)	10.90 ~~11.10~~ FT	PROT. CASING STICKUP (AGS)	0 FT	TOC/TOR DIFFERENCE	0.41 FT
WELL DEPTH (BMP)	12.3 FT	SCREEN LENGTH	10 FT	PID AMBIENT AIR	– PPM	REFILL TIMER SETTING	– SEC
WATER COLUMN	4.67 FT	DRAWDOWN VOLUME (initial DTW- final DTW X well diam. squared X 0.041)	~~-0.134~~ GAL (D)	PID WELL MOUTH	– PPM	DISCHARGE TIMER SETTING	– SEC
CALCULATED GAL/VOL (column X well diameter squared X 0.041)	0.192 GAL	TOTAL VOL. PURGED (mL per minute X total minutes X 0.00026 gal/mL)	0.78 GAL	DRAWDOWN/ TOTAL PURGED	~~-0.17~~ (D)	PRESSURE TO PUMP	– 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
0815	BEGIN PURGING								~10	
0820	11.93	100	16.24	1.707	6.63	1.82	131	61.8	~12	
0825	12.90	100	16.38	1.699	6.67	1.94	129	12.1	~12	
	WELL DRY		ALLOWING TO RECHARGE							
1025	8.51	100	17.20	1.705	6.99	2.02	120	-9.7	10	
1030	9.26	100	17.36	1.695	6.97	2.15	82.3	-17.4	10	MOVED INTAKE DOWN ~0.5' BETWEEN 10 + 11 A.
1035	10.90	SAMPLE → GRAB SAMPLE								
	FINAL DTW AFTER SAMPLING WAS 11.10' BTOR									

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

	17	1.70	7.0	2.2	82	-17

TEMP.: nearest degree (ex. 10.1 = 10)
COND.: 3 SF max (ex. 4333 = 4330; 0.6963 = 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 [ ] OTHER [ ] OTHER

DECON FLUIDS USED: [ ] LIQUINOX [ ] DEIONIZED WATER [/] POTABLE WATER [ ] NITRIC ACID [ ] HEXANE [ ] METHANOL [/] OTHER Dedicated

TUBING/PUMP BLADDER MATERIALS: [/] SILICON TUBING [ ] TEFLON TUBING [ ] TEFLON LINED TUBING [ ] HDPE TUBING [/] LDPE TUBING [ ] OTHER [ ] OTHER

[ ] S. STEEL PUMP MATERIAL [ ] PVC PUMP MATERIAL [ ] GEOPROBE SCREEN [ ] TEFLON BLADDER [ ] OTHER [ ] OTHER [ ] OTHER

EQUIPMENT USED: [/] WL METER M200-79 [ ] PID [/] WQ METER MQIS-05 [/] TURB. METER M24-27 [/] PUMP Geopump [ ] OTHER [ ] FILTERS NO TYPE

ANALYTICAL PARAMETERS

PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS
VOCs	8260B	NO	HCl, 4°C	3x50	YES	NO	828103-PZ245010 3

PURGE OBSERVATIONS

PURGE WATER CONTAINERIZED: [/] YES [ ] NO

NUMBER OF GALLONS GENERATED: ~0.8

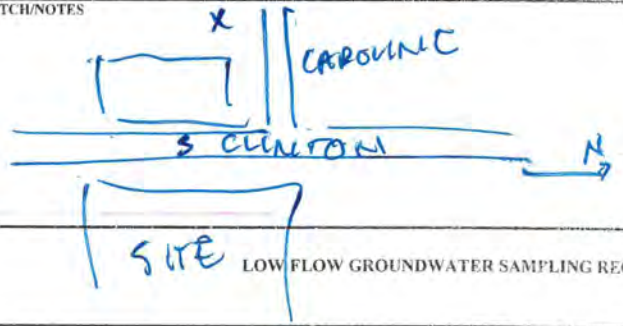
NO-PURGE METHOD UTILIZED: [ ] YES [/] NO

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

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

Checked By: Jerry Randolph Date: 7/20/20

SKETCH/NOTES



LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME: Dinaburg Distributing OU2 RI		LOCATION ID: MW-24K	DATE: 7-14-2020
PROJECT NUMBER: 3617187420		START TIME: 0830	END TIME: 0945
SAMPLE ID: 828103-MW24K025	SAMPLE TIME: 0940	SITE NAME/NUMBER: 828103	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)	9.08 FT	FINAL DTW (BMP)	9.11 FT	PROT. CASING STICKUP (AGS)	0 FT	TOC/TOR DIFFERENCE	0.40 FT
WELL DEPTH (BMP)	27.9 FT	SCREEN LENGTH	10 FT	PID AMBIENT AIR	- PPM	REFILL TIMER SETTING	- SEC
WATER COLUMN	18.82 FT	DRAWDOWN VOLUME (initial DTW- final DTW X well diam. squared X 0.041)	+0.005 GAL	PID WELL MOUTH	- PPM	DISCHARGE TIMER SETTING	- SEC
CALCULATED GAL/VOL (column X well diameter squared X 0.041)	3.09 GAL	TOTAL VOL. PURGED (mL per minute X total minutes X 0.00026 gal/mL)	2.171 GAL	DRAWDOWN/ TOTAL PURGED	+0.002	PRESSURE TO PUMP	- 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
0835	BEGIN PURGING									
0840	9.10	160	15.34	1.399	6.89	0.83	17.4	29.1	~25	
0845	9.12	140	15.99	1.394	6.85	0.67	18.6	38.9	~25	
0850	9.11	130	15.46	1.393	6.83	0.78	18.5	42.7	~25	
0855	9.11	140	15.17	1.385	6.85	1.00	17.5	46.1	~25	
0900	9.11	140	15.17	1.383	6.86	1.54	16.9	48.6	~25	
0905	9.12	140	15.15	1.384	6.86	2.01	15.6	50.5	~25	
0910	9.11	130	15.42	1.378	6.88	2.33	14.1	52.0	~25	
0915	9.11	130	15.48	1.380	6.86	2.32	12.3	53.8	~25	
0920	9.11	140	15.48	1.385	6.88	2.31	11.9	53.7	~25	
0925	9.12	140	15.40	1.384	6.88	2.25	9.57	54.2	~25	
0930	9.11	140	15.52	1.383	6.87	2.22	9.80	53.9	~25	
0935	9.11	140	15.57	1.384	6.87	2.18	9.42	54.2	~25	
0940	COLLECT		SAMPLE							
								MW3		
FINAL STABILIZED FIELD PARAMETERS (to appropriate significant figures[SF])			16	1.38	6.9	2.2	9.4	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: ☑ PERISTALTIC ☐ SUBMERSIBLE ☐ BLADDER ☐ WATTERA ☐ OTHER ☐ OTHER

DECON FLUIDS USED: ☐ LIQUINOX ☑ DEIONIZED WATER ☐ POTABLE WATER ☐ NITRIC ACID ☐ HEXANE ☐ METHANOL ☑ OTHER Dedicated

TUBING/PUMP/BLADDER MATERIALS: ☐ SILICON TUBING ☐ TEFLON TUBING ☐ TEFLON LINED TUBING ☐ HDPE TUBING ☑ LDPE TUBING ☐ OTHER ☐ OTHER; ☐ S. STEEL PUMP MATERIAL ☐ PVC PUMP MATERIAL ☐ GEOPROBE SCREEN MW3 ☐ TEFLON BLADDER ☐ OTHER ☐ OTHER ☐ OTHER

EQUIPMENT USED: ☑ WL METER M200-79 ☐ PID ☑ WQ METER M015-05 ☑ TURB. METER M24-27 ☐ PUMP ☐ OTHER ☐ OTHER FILTERS NO. ___ TYPE ___

ANALYTICAL PARAMETERS

	PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS
☒	VOCs	8260B	NO	HCl, 4°C	3x50	YES	NO	828103-MW24K025
								MW3

PURGE OBSERVATIONS

PURGE WATER CONTAINERIZED: ☑ YES ☐ NO

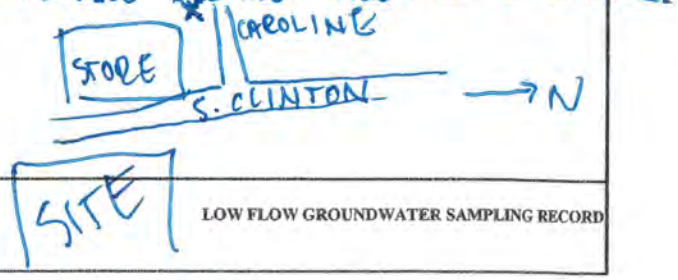
NO-PURGE METHOD UTILIZED: ☐ YES ☑ NO

NUMBER OF GALLONS GENERATED: ~2.2

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

SKETCH/NOTES

HAD TROUBLE KEEPING PURGE RATE STABLE.



Sampler Signature: M. Bruno Print Name: M. BRUNO

Checked By: Jerry Ruelf Date: 7/20/20

MACTEC
511 Congress Street, Portland Maine 04101

LOW FLOW GROUNDWATER SAMPLING RECORD

LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME: Dinaburg Distributing OU2 RI		LOCATION ID: GWE-2	DATE: 7/16/20
PROJECT NUMBER: 3617187420		START TIME: 1520	END TIME: 1755
SAMPLE ID: 828103-GWE2021	SAMPLE TIME: 1745	SITE NAME/NUMBER: 828103	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 OD

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)	8.98 FT	FINAL DTW (BMP)	9.91 FT	PROT. CASING STICKUP (AGS)	0 FT	TOC/TOR DIFFERENCE	0.42 FT
WELL DEPTH (BMP)	22.1 FT	SCREEN LENGTH	UNK FT	PID AMBIENT AIR	— PPM	REFILL TIMER SETTING	— SEC
WATER COLUMN	13.12 FT	DRAWDOWN VOLUME (initial DTW- final DTW X well diam. squared X 0.041)	.61 GAL	PID WELL MOUTH	— PPM	DISCHARGE TIMER SETTING	— SEC
CALCULATED GAL/VOL (column X well diameter squared X 0.041)	8.7 GAL	TOTAL VOL. PURGED (mL per minute X total minutes X 0.00026 gal/mL)	≈40 GAL	DRAWDOWN/ TOTAL PURGED	.15	PRESSURE TO PUMP	— 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
1532	BEGIN PURGING									
1540	9.51	180	16.7	1.565	7.5	6.6	2.1	—		
1551	9.53	140	17.3	1.573	7.5	6.3	2.2	84		
1600	9.73	165	16.6	1.572	7.5	6.0	1.6	82		
1610	9.83	150	16.9	1.569	7.5	5.5	1.3	81		
1615	9.87	150	16.8	1.570	7.5	5.5	1.8	81		
1620	9.89	150	16.6	1.571	7.5	5.3	1.7	81		
1625	9.89	160	17.0	1.571	7.5	5.2	0.7	81		Purge at lowest setting.
1630	9.94	160	16.5	1.576	7.4	5.2	0.9	82		
1635	9.98	165	16.3	1.575	7.4	5.0	1.0	82		
1640	Some thunder going to shelter in car while well purges									
1715	9.55	165	16.5	1.594	7.3	2.4	3.6	54		
1720	9.64	165	16.5	1.592	7.3	2.2	1.1	44		
1725	9.74	170	16.4	1.593	7.3	2.2	0.8	45		
1730	9.84	170	16.4	1.593	7.3	2.0	0.5	40		
1735	9.91	170	16.5	1.594	7.2	2.1	0.9	30		Purged for >2 hours, going to collect sample.

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

17	1.59	7.2	2.1	0.9	30	

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 ☐ OTHER ☐ OTHER

DECON FLUIDS USED: ☐ LIQUINOX ☐ DEIONIZED WATER ☐ POTABLE WATER ☐ NITRIC ACID ☐ HEXANE ☐ METHANOL ☑ OTHER Dedicated

TUBING/PUMP/BLADDER MATERIALS: ☑ SILICON TUBING ☐ TEFLON TUBING ☐ TEFLON LINED TUBING ☐ HDPE TUBING ☑ LDPE TUBING ☐ OTHER ☐ OTHER

☐ S. STEEL PUMP MATERIAL ☐ PVC PUMP MATERIAL ☐ GEOPROBE SCREEN ☐ TEFLON BLADDER ☐ OTHER ☐ OTHER ☐ OTHER

EQUIPMENT USED: ☑ WL METER Heron ☐ PID ☑ WQ METER YSI 556 MPS ☑ TURB. METER LaMotte 2020 ☑ PUMP Geopump ☐ OTHER ☐ FILTERS NO. ___ TYPE ___

ANALYTICAL PARAMETERS

	PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS
✓	VOC	8260C	N	4°C/HCl	3x40ml	Yes	—	

PURGE OBSERVATIONS

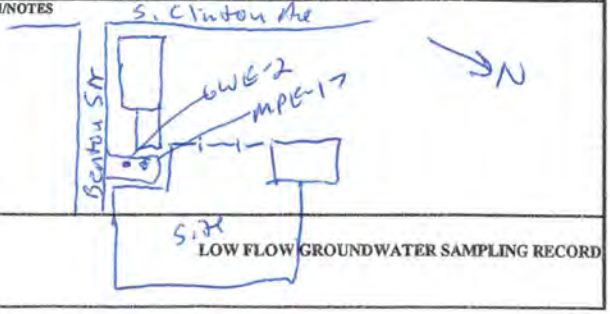
PURGE WATER CONTAINERIZED: ☑ YES ☐ NO

NO-PURGE METHOD UTILIZED: ☐ YES ☑ NO

NUMBER OF GALLONS GENERATED: ≈40

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

SKETCH/NOTES



Sampler Signature: Jerry Rawcliffe Print Name: Jerry Rawcliffe

Checked By: Date: 7/17/20

MACTEC
511 Congress Street, Portland Maine 04101

LOW FLOW GROUNDWATER SAMPLING RECORD

PROJECT NAME: Dinaburg Distributing OU2 RI		LOCATION ID: MPE-17	DATE: 7/16/20
PROJECT NUMBER: 3617187420		START TIME: 0740	END TIME: 1005
SAMPLE ID: 828103-MPE17012	SAMPLE TIME: 0955	SITE NAME/NUMBER: 828103	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 OD

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)	5.36 FT	FINAL DTW (BMP)	7.52 FT	PROT. CASING STICKUP (AGS)	0 FT	TOC/TOR DIFFERENCE	0.58 FT
WELL DEPTH (BMP)	13.2 FT	SCREEN LENGTH	UNK FT	PID AMBIENT AIR	— PPM	REFILL TIMER SETTING	— SEC
WATER COLUMN	7.94 FT	DRAWDOWN VOLUME (initial DTW- final DTW X well diam. squared X 0.041)	1.4 GAL	PID WELL MOUTH	— PPM	DISCHARGE TIMER SETTING	— SEC
CALCULATED GAL/VOL (column X well diameter squared X 0.041) ,656	5.2 GAL	TOTAL VOL. PURGED (mL per minute X total minutes X 0.00026 gal/mL)	3.6 GAL	DRAWDOWN/ TOTAL PURGED	0.40	PRESSURE TO PUMP	— 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
0752	BEGIN PURGING									
0810	5.80	95	18.3	1.084	7.2	3.4	1.4	138		Pump at lowest setting.
0820	5.96	115	18.2	0.962	7.2	4.2	1.7	130		
0825	6.02	110	18.2	0.935	7.2	4.4	1.5	128		
0830	6.10	90	18.3	0.911	7.2	4.4	1.2	125		
0835	6.21	100	18.5	0.893	7.2	4.5	1.4	123		
0840	6.27	110	18.4	0.879	7.2	5.0	1.3	122		Drawdown volume
0845	6.43	115	18.4	0.868	7.2	5.3	1.5	121		vs purge volume
0850	6.53	120	18.4	0.860	7.2	5.2	1.4	120		indicates recharge is
0900	6.73	120	18.3	0.849	7.1	5.2	1.7	119		≈ ½ of purge rate
0910	6.87	120	18.3	0.841	7.2	5.2	1.7	118		will not get 5x
0920	7.01	120	18.4	0.835	7.1	5.3	2.5	118		drawdown before
0930	7.16	110	18.4	0.825	7.1	5.4	2.5	118		going dry.
0935	7.23	110	18.4	0.826	7.1	5.2	2.1	119		Will purge for 2
0940	7.34	120	18.5	0.825	7.1	5.4	2.1	117		hours and collect
0945	7.42	120	18.4	0.826	7.1	5.2	3.4	116		grab sample
0950	7.52	125	18.3	0.825	7.1	5.0	2.0	116		
										Soft muddy bottom.

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

18	0.825	7.1	5.0	2.0	120	

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 ☐ OTHER ☐ OTHER

DECON FLUIDS USED: ☐ LIQUINOX ☐ DEIONIZED WATER ☐ POTABLE WATER ☐ NITRIC ACID ☐ HEXANE ☐ METHANOL ☑ OTHER Dedicated

TUBING/PUMP/BLADDER MATERIALS: ☑ SILICON TUBING ☐ TEFLON TUBING ☐ TEFLON LINED TUBING ☐ HDPE TUBING ☑ LDPE TUBING ☐ OTHER ☐ OTHER

☐ S. STEEL PUMP MATERIAL ☐ PVC PUMP MATERIAL ☐ GEOPROBE SCREEN ☐ TEFLON BLADDER ☐ OTHER ☐ OTHER ☐ OTHER

EQUIPMENT USED: ☑ WL METER Heron ☐ PID ☑ WQ METER YSI 556 MPS ☑ TURB. METER LaMotte 2020 ☑ PUMP Geopump ☐ OTHER ☐ FILTERS NO. ___ TYPE ___

ANALYTICAL PARAMETERS

	PARAMETER	METHOD NUMBER	FIELD FILTERED	PRESERVATION METHOD	VOLUME REQUIRED	SAMPLE COLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS
☑	VOC	8260C	N	4°C/HCl	3x40ml	Y-S	—	3

PURGE OBSERVATIONS

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

NUMBER OF GALLONS GENERATED: 3.6

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

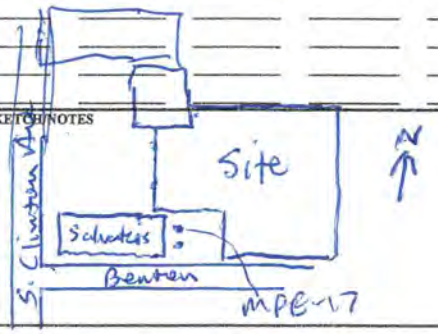
Sampler Signature: Jerry Rawcliffe

Print Name: Jerry Rawcliffe

Checked By:

Date: 7/17/20

SKETCH/NOTES



MACTEC
511 Congress Street, Portland Maine 04101

LOW FLOW GROUNDWATER SAMPLING RECORD

ATTACHMENT 2

DATA USABILILTY SUMMARY REPORT

DATA USABILITY SUMMARY REPORT
JULY 2020 GROUNDWATER SAMPLING
DINABURG DISTRIBUTING, INC.
OPERABLE UNIT 2
ROCHESTER, NEW YORK

1.0 INTRODUCTION

Groundwater samples were collected at the Dinaburg Distributing, Inc., Operable Unit 2 Site in July 2020 and submitted to Test America Laboratories (TAL-BUF) located in Amherst, New York, for analysis. Samples included in this review were analyzed by the following method:

- Volatile Organic Compounds (VOCs) by Method SW8260C

Results were reported in the following sample delivery groups (SDGs):

- 480-172474-1
- 480-172646-1

A Data Usability Summary Report (DUSR) review was completed based on the New York State Department of Environmental Conservation (NYSDEC) Division of Environmental Remediation guidance (NYSDEC, 2010). Sample event information included in this DUSR is presented in the following Tables:

- Table 1 – Summary of Samples and Analytical Methods
- Table 2 – Summary of Analytical Results

Laboratory deliverables included:

- Category B deliverables as defined in the NYSDEC Analytical Services Protocols (NYSDEC, 2005).

The DUSR review included the following evaluations. A table of the project control limits is presented in Attachment A. Applicable laboratory quality control (QC) summary forms are included in Attachment B to document QC outliers associated with qualification actions.

- Lab Report Narrative Review
- Data Package Completeness and COC Records (Table 1 verification)
- Sample Collection and Holding Times
- Instrument Calibration (report narrative/lab-qualifier evaluation)
- QC Blanks
- Laboratory Control Samples (LCS)
- Matrix Spike/Matrix Spike Duplicate (MS/MSD)
- Field Duplicates
- Target Analyte Identification and Quantitation
- Raw Data (chromatograms), Calculation Checks and Transcription Verifications
- Reporting Limits
- Electronic Data Qualification and Verification

Data qualification actions are applied when necessary based on general procedures in USEPA validation guidelines (USEPA, 2016) and the judgment of the project chemist. The following laboratory or data review qualifiers are used in the final data presentation:

U = target analyte is not detected above the reported detection limit or was qualified not detected
J = concentration is estimated

Results are interpreted to be usable as reported by the laboratory or as qualified in the following sections.

2.0 POTENTIAL DATA LIMITATIONS

Based on the DUSR review the data meet the data quality objectives, and no potential limitations were identified. Samples results are usable as reported by the laboratory.

3.0 ADDITIONAL QC EXCEEDANCES AND OBSERVATIONS

Sample 828103-MW14KA022 and associated field duplicate 828103-MW14KA022D were recorded incorrectly on the chain of custody and logged into the laboratory and reported as 828103-MWKA022 and 828103-MWKA022D. The sample identifications were corrected during data validation.

A subset of samples was analyzed at dilutions due to high concentrations of target analytes. Reporting limits for non-detects are elevated.

There were no additional observations or quality control exceedances not specifically addressed above (Section 2.0). Sample results are usable as reported by the laboratory.

Reference:

New York State Department of Environmental Conservation (NYSDEC), 2005. "Analytical Services Protocols"; June 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, 2016. “Analysis of Volatile Organic Compounds in Air Contained in Canisters by Method TO-15”; HW-31, Revision 6; Hazardous Waste Support Section; September 2016.

Data Validator: Madison Dinsmore

August 13, 2020

Reviewed by: Julie Ricardi

August 14, 2020

Standard Table Notes:

Sample Type (QC Code)

FS – field sample

FD – field duplicate

TB – trip blank

EB – equipment blank

FB – field blank

Matrix

GW – ground water

BW – blank water

TW – tap water

SV – soil vapor

SED - sediment

Units

mg/L – milligrams per liter

ng/L – nanograms per liter

µg/L – micrograms per liter

mg/kg – milligrams per kilogram

µg/kg – micrograms per kilogram

µg/m^3 – micrograms per cubic meter

Qualifiers

U – not detected above quantitation limit

J – estimated quantity

J+ - estimated quantity, biased high

J- - estimated quantity, biased low

R – data unusable

Fraction

T – total

D – dissolved

N – normal

Qualification Reason Codes

BL1 – method blank qualifier

BL2 – field or trip blank qualifier

CCV – continuing calibration verification recovery outside limits

CCV%D – continuing calibration verification percent difference exceeds goal

CCVRRF – continuing calibration relative response factor low

CI – chromatographic interference present

DCPD – dual column percent difference exceeds limit

E – result exceeds calibration range

FD – field duplicate precision goal exceeded

FP – false positive interference

HT – holding time for prep or analysis exceeded

HTG – holding time for prep or analysis grossly exceeded

ICV – initial calibration verification recovery outside limit

ICVRRF – initial calibration verification relative response factor low

ICVRSD – initial calibration verification % relative standard deviation exceeds goal

ISH – internal standard response greater than limit

ISL – internal standard response less than limit

LCSH – laboratory control sample recovery high

LCSL – laboratory control sample recovery low

LCSRPD – laboratory control sample/duplicate relative % difference precision goal exceeded

LD – lab duplicate precision goal exceeded

MSH – matrix spike and/or MS duplicate recovery high

MSL – matrix spike and/or MS duplicate recovery low

MSRPD – matrix spike/duplicate relative % difference precision goal exceeded

N – analyte identification is not certain

PEM – performance evaluation mixture exceeds limit

PM – sample percent moisture exceeds EPA guideline

SD – serial dilution result exceeds percent difference limit

SP – sample preservation/collection does not meet method requirement

SSH – surrogate recovery high

SSL – surrogate recovery low

TD – dissolved concentration exceeds total

TABLE 1 - SUMMARY OF SAMPLES AND ANALYTICAL METHODS
DATA USABILITY SUMMARY REPORT
JULY 2020 GROUNDWATER SAMPLING
DINABURG DISTRIBUTING, INC.
OPERABLE UNIT 2
ROCHESTER, NEW YORK

					Analysis Method	SW8260C
					Method Class	VOCs
					Fraction	N
Lab SDG	**Location**	**Sample ID**	**Sample Date**	**Media**	**Qc Code**	Param_Count
480-172474-1	MW-04	828103-MW040020	7/15/2020	GW	FS	51
480-172474-1	MW-05	828103-MW050020	7/14/2020	GW	FS	51
480-172474-1	MW-06	828103-MW06018	7/14/2020	GW	FS	51
480-172474-1	MW-08K	828103-MW08K	7/15/2020	GW	FS	51
480-172474-1	MW-08S	828103-MW08S011	7/15/2020	GW	FS	51
480-172474-1	MW-09K	828103-MW09K018	7/15/2020	GW	FS	51
480-172474-1	MW-09S	828103-MW09S012	7/15/2020	GW	FS	51
480-172474-1	MW-10K	828103-MW10K018	7/15/2020	GW	FS	51
480-172474-1	MW-10S	828103-MW10S012	7/14/2020	GW	FS	51
480-172474-1	MW-11S	828103-MW11S010	7/14/2020	GW	FS	51
480-172474-1	MW-12K	828103-MW12K018	7/14/2020	GW	FS	51
480-172474-1	MW-12S	828103-MW12S010	7/15/2020	GW	FS	51
480-172474-1	MW-12S	828103-MW12S010D	7/15/2020	GW	FD	51
480-172474-1	MW-13K	828103-MW13K018	7/14/2020	GW	FS	51
480-172474-1	MW-15K	828103-MW15K022	7/15/2020	GW	FS	51
480-172474-1	MW-15S	828103-MW15S010	7/15/2020	GW	FS	51
480-172474-1	MW-22K	828103-MW22K028	7/15/2020	GW	FS	51
480-172474-1	MW-23K	828103-MW23K025	7/14/2020	GW	FS	51
480-172474-1	MW-24K	828103-MW24K025	7/14/2020	GW	FS	51
480-172474-1	PZ-22S	828103-PZ22S010	7/15/2020	GW	FS	51
480-172474-1	PZ-24S	828103-PZ24S010	7/14/2020	GW	FS	51
480-172474-1	QC	828103-TRIPBLANK #1	7/14/2020	BW	TB	51
480-172646-1	GWE-2	828103-GWE2021	7/16/2020	GW	FS	51
480-172646-1	MPE-17	828103-MPE17012	7/16/2020	GW	FS	51
480-172646-1	MW-03A	828103-MW03A015	7/16/2020	GW	FS	51
480-172646-1	MW-03C	828103-MW03CA030	7/16/2020	GW	FS	51
480-172646-1	MW-03D	828103-MW03D50	7/16/2020	GW	FS	51
480-172646-1	MW-14K	828103-MW14KA022	7/17/2020	GW	FS	51
480-172646-1	MW-14K	828103-MW14KA022D	7/17/2020	GW	FD	51
480-172646-1	MW-16K	828103-MW16K022	7/16/2020	GW	FS	51
480-172646-1	MW-16S	828103-MW16S010	7/17/2020	GW	FS	51
480-172646-1	MW-17S	828103-MW17S010	7/17/2020	GW	FS	51
480-172646-1	MW-18S	828103-MW18S010	7/16/2020	GW	FS	51
480-172646-1	MW-19S	828103-MW19S010	7/17/2020	GW	FS	51
480-172646-1	MW-20S	828103-MW20S010	7/17/2020	GW	FS	51
480-172646-1	MW-21S	828103-MW21S010	7/16/2020	GW	FS	51
480-172646-1	QC	TRIP BLANK 2	7/15/2020	BW	TB	51

Created by: KMS 8/13/2020
Checked: MAD 8/13/2020

TABLE 2 - SUMMARY OF ANALYTICAL RESULTS
DATA USABILITY SUMMARY REPORT
JULY 2020 GROUNDWATER SAMPLING
DINABURG DISTRIBUTING, INC.
OPERABLE UNIT 2
ROCHESTER, NEW YORK

		Location	GWE-2		MPE-17		MW-03A	
		Lab SDG	480-172646-1		480-172646-1		480-172646-1	
		Sample Date	7/16/2020		7/16/2020		7/16/2020	
		Sample ID	828103-GWE2021		828103-MPE17012		828103-MW03A015	
		Qc Code	FS		FS		FS	
Method	**Parameter**	**Units**	Result	Qualifier	Result	Qualifier	Result	Qualifier
SW8260C	1,1,1-Trichloroethane	ug/l	4	U	1	U	4	U
SW8260C	1,1,2,2-Tetrachloroethane	ug/l	4	U	1	U	4	U
SW8260C	1,1,2-Trichloro-1,2,2-Trifluoroethane (Freon 113)	ug/l	4	U	1	U	4	U
SW8260C	1,1,2-Trichloroethane	ug/l	4	U	1	U	4	U
SW8260C	1,1-Dichloroethane	ug/l	4.8		1	U	4	U
SW8260C	1,1-Dichloroethene	ug/l	2	J	1	U	4	U
SW8260C	1,2,3-Trichlorobenzene	ug/l	4	U	1	U	4	U
SW8260C	1,2,4-Trichlorobenzene	ug/l	4	U	1	U	4	U
SW8260C	1,2-Dibromo-3-chloropropane	ug/l	4	U	1	U	4	U
SW8260C	1,2-Dibromoethane	ug/l	4	U	1	U	4	U
SW8260C	1,2-Dichlorobenzene	ug/l	4	U	1	U	4	U
SW8260C	1,2-Dichloroethane	ug/l	4	U	1	U	4	U
SW8260C	1,2-Dichloropropane	ug/l	4	U	1	U	4	U
SW8260C	1,3-Dichlorobenzene	ug/l	4	U	1	U	4	U
SW8260C	1,4-Dichlorobenzene	ug/l	4	U	1	U	4	U
SW8260C	1,4-Dioxane	ug/l	160	U	40	U	160	U
SW8260C	2-Butanone	ug/l	40	U	10	U	40	U
SW8260C	2-Hexanone	ug/l	20	U	5	U	20	U
SW8260C	4-Methyl-2-pentanone	ug/l	20	U	5	U	20	U
SW8260C	Acetic acid, methyl ester	ug/l	10	U	2.5	U	10	U
SW8260C	Acetone	ug/l	40	U	10	U	40	U
SW8260C	Benzene	ug/l	4	U	1	U	4	U
SW8260C	Bromochloromethane	ug/l	4	U	1	U	4	U

TABLE 2 - SUMMARY OF ANALYTICAL RESULTS
DATA USABILITY SUMMARY REPORT
JULY 2020 GROUNDWATER SAMPLING
DINABURG DISTRIBUTING, INC.
OPERABLE UNIT 2
ROCHESTER, NEW YORK

		Location	GWE-2		MPE-17		MW-03A	
		Lab SDG	480-172646-1		480-172646-1		480-172646-1	
		Sample Date	7/16/2020		7/16/2020		7/16/2020	
		Sample ID	828103-GWE2021		828103-MPE17012		828103-MW03A015	
		Qc Code	FS		FS		FS	
Method	**Parameter**	**Units**	Result	Qualifier	Result	Qualifier	Result	Qualifier
SW8260C	Bromodichloromethane	ug/l	4	U	1	U	4	U
SW8260C	Bromoform	ug/l	4	U	1	U	4	U
SW8260C	Bromomethane	ug/l	4	U	1	U	4	U
SW8260C	Carbon disulfide	ug/l	4	U	1	U	4	U
SW8260C	Carbon tetrachloride	ug/l	4	U	1	U	4	U
SW8260C	Chlorobenzene	ug/l	4	U	1	U	4	U
SW8260C	Chloroethane	ug/l	4	U	1	U	4	U
SW8260C	Chloroform	ug/l	4	U	1	U	4	U
SW8260C	Chloromethane	ug/l	4	U	1	U	4	U
SW8260C	cis-1,2-Dichloroethene	ug/l	97		1	U	310	
SW8260C	cis-1,3-Dichloropropene	ug/l	4	U	1	U	4	U
SW8260C	Cyclohexane	ug/l	4	U	1	U	4	U
SW8260C	Dibromochloromethane	ug/l	4	U	1	U	4	U
SW8260C	Dichlorodifluoromethane	ug/l	4	U	1	U	4	U
SW8260C	Ethylbenzene	ug/l	4	U	1	U	4	U
SW8260C	Isopropylbenzene	ug/l	4	U	1	U	4	U
SW8260C	Methyl cyclohexane	ug/l	4	U	1	U	4	U
SW8260C	Methyl Tertbutyl Ether	ug/l	4	U	1	U	4	U
SW8260C	Methylene chloride	ug/l	4	U	1	U	4	U
SW8260C	Styrene	ug/l	4	U	1	U	4	U
SW8260C	Tetrachloroethene	ug/l	110		10		24	
SW8260C	Toluene	ug/l	4	U	1	U	4	U
SW8260C	trans-1,2-Dichloroethene	ug/l	4	U	1	U	4	U

TABLE 2 - SUMMARY OF ANALYTICAL RESULTS
DATA USABILITY SUMMARY REPORT
JULY 2020 GROUNDWATER SAMPLING
DINABURG DISTRIBUTING, INC.
OPERABLE UNIT 2
ROCHESTER, NEW YORK

		Location	GWE-2		MPE-17		MW-03A	
		Lab SDG	480-172646-1		480-172646-1		480-172646-1	
		Sample Date	7/16/2020		7/16/2020		7/16/2020	
		Sample ID	828103-GWE2021		828103-MPE17012		828103-MW03A015	
		Qc Code	FS		FS		FS	
Method	**Parameter**	**Units**	Result	Qualifier	Result	Qualifier	Result	Qualifier
SW8260C	trans-1,3-Dichloropropene	ug/l	4	U	1	U	4	U
SW8260C	Trichloroethene	ug/l	60		0.6	J	19	
SW8260C	Trichlorofluoromethane	ug/l	4	U	1	U	4	U
SW8260C	Vinyl chloride	ug/l	4	U	1	U	360	
SW8260C	Xylenes, Total	ug/l	8	U	2	U	8	U

TABLE 2 - SUMMARY OF ANALYTICAL RESULTS
DATA USABILITY SUMMARY REPORT
JULY 2020 GROUNDWATER SAMPLING
DINABURG DISTRIBUTING, INC.
OPERABLE UNIT 2
ROCHESTER, NEW YORK

		Location	MW-03C		MW-03D		MW-04	
		Lab SDG	480-172646-1		480-172646-1		480-172474-1	
		Sample Date	7/16/2020		7/16/2020		7/15/2020	
		Sample ID	828103-MW03CA030		828103-MW03D50		828103-MW040020	
		Qc Code	FS		FS		FS	
Method	**Parameter**	**Units**	Result	Qualifier	Result	Qualifier	Result	Qualifier
SW8260C	1,1,1-Trichloroethane	ug/l	5	U	1	U	1	U
SW8260C	1,1,2,2-Tetrachloroethane	ug/l	5	U	1	U	1	U
SW8260C	1,1,2-Trichloro-1,2,2-Trifluoroethane (Freon 113)	ug/l	5	U	1	U	1	U
SW8260C	1,1,2-Trichloroethane	ug/l	5	U	1	U	1	U
SW8260C	1,1-Dichloroethane	ug/l	5	U	1	U	1	U
SW8260C	1,1-Dichloroethene	ug/l	5	U	1	U	1	U
SW8260C	1,2,3-Trichlorobenzene	ug/l	5	U	1	U	1	U
SW8260C	1,2,4-Trichlorobenzene	ug/l	5	U	1	U	1	U
SW8260C	1,2-Dibromo-3-chloropropane	ug/l	5	U	1	U	1	U
SW8260C	1,2-Dibromoethane	ug/l	5	U	1	U	1	U
SW8260C	1,2-Dichlorobenzene	ug/l	5	U	1	U	1	U
SW8260C	1,2-Dichloroethane	ug/l	5	U	1	U	1	U
SW8260C	1,2-Dichloropropane	ug/l	5	U	1	U	1	U
SW8260C	1,3-Dichlorobenzene	ug/l	5	U	1	U	1	U
SW8260C	1,4-Dichlorobenzene	ug/l	5	U	1	U	1	U
SW8260C	1,4-Dioxane	ug/l	200	U	40	U	40	U
SW8260C	2-Butanone	ug/l	50	U	10	U	10	U
SW8260C	2-Hexanone	ug/l	25	U	5	U	5	U
SW8260C	4-Methyl-2-pentanone	ug/l	25	U	5	U	5	U
SW8260C	Acetic acid, methyl ester	ug/l	13	U	2.5	U	2.5	U
SW8260C	Acetone	ug/l	50	U	10	U	10	U
SW8260C	Benzene	ug/l	5	U	1	U	1	U
SW8260C	Bromochloromethane	ug/l	5	U	1	U	1	U

TABLE 2 - SUMMARY OF ANALYTICAL RESULTS
DATA USABILITY SUMMARY REPORT
JULY 2020 GROUNDWATER SAMPLING
DINABURG DISTRIBUTING, INC.
OPERABLE UNIT 2
ROCHESTER, NEW YORK

		Location	MW-03C		MW-03D		MW-04	
		Lab SDG	480-172646-1		480-172646-1		480-172474-1	
		Sample Date	7/16/2020		7/16/2020		7/15/2020	
		Sample ID	828103-MW03CA030		828103-MW03D50		828103-MW040020	
		Qc Code	FS		FS		FS	
Method	**Parameter**	**Units**	Result	Qualifier	Result	Qualifier	Result	Qualifier
SW8260C	Bromodichloromethane	ug/l	5	U	1	U	1	U
SW8260C	Bromoform	ug/l	5	U	1	U	1	U
SW8260C	Bromomethane	ug/l	5	U	1	U	1	U
SW8260C	Carbon disulfide	ug/l	5	U	1	U	1	U
SW8260C	Carbon tetrachloride	ug/l	5	U	1	U	1	U
SW8260C	Chlorobenzene	ug/l	5	U	1	U	1	U
SW8260C	Chloroethane	ug/l	5	U	1	U	1	U
SW8260C	Chloroform	ug/l	5	U	1	U	1	U
SW8260C	Chloromethane	ug/l	5	U	1	U	1	U
SW8260C	cis-1,2-Dichloroethene	ug/l	260		12		1	U
SW8260C	cis-1,3-Dichloropropene	ug/l	5	U	1	U	1	U
SW8260C	Cyclohexane	ug/l	5	U	1	U	1	U
SW8260C	Dibromochloromethane	ug/l	5	U	1	U	1	U
SW8260C	Dichlorodifluoromethane	ug/l	5	U	1	U	1	U
SW8260C	Ethylbenzene	ug/l	5	U	1	U	1	U
SW8260C	Isopropylbenzene	ug/l	5	U	1	U	1	U
SW8260C	Methyl cyclohexane	ug/l	5	U	1	U	1	U
SW8260C	Methyl Tertbutyl Ether	ug/l	5	U	1	U	0.22	J
SW8260C	Methylene chloride	ug/l	5	U	1	U	1	U
SW8260C	Styrene	ug/l	5	U	1	U	1	U
SW8260C	Tetrachloroethene	ug/l	8.2		6.5		1	U
SW8260C	Toluene	ug/l	5	U	1	U	1	U
SW8260C	trans-1,2-Dichloroethene	ug/l	5	U	1	U	1	U

TABLE 2 - SUMMARY OF ANALYTICAL RESULTS
DATA USABILITY SUMMARY REPORT
JULY 2020 GROUNDWATER SAMPLING
DINABURG DISTRIBUTING, INC.
OPERABLE UNIT 2
ROCHESTER, NEW YORK

		Location	MW-03C		MW-03D		MW-04	
		Lab SDG	480-172646-1		480-172646-1		480-172474-1	
		Sample Date	7/16/2020		7/16/2020		7/15/2020	
		Sample ID	828103-MW03CA030		828103-MW03D50		828103-MW040020	
		Qc Code	FS		FS		FS	
Method	**Parameter**	**Units**	Result	Qualifier	Result	Qualifier	Result	Qualifier
SW8260C	trans-1,3-Dichloropropene	ug/l	5	U	1	U	1	U
SW8260C	Trichloroethene	ug/l	11		14		1	U
SW8260C	Trichlorofluoromethane	ug/l	5	U	1	U	1	U
SW8260C	Vinyl chloride	ug/l	30		4.4		1	U
SW8260C	Xylenes, Total	ug/l	10	U	2	U	2	U

TABLE 2 - SUMMARY OF ANALYTICAL RESULTS
DATA USABILITY SUMMARY REPORT
JULY 2020 GROUNDWATER SAMPLING
DINABURG DISTRIBUTING, INC.
OPERABLE UNIT 2
ROCHESTER, NEW YORK

		Location	MW-05		MW-06		MW-08K	
		Lab SDG	480-172474-1		480-172474-1		480-172474-1	
		Sample Date	7/14/2020		7/14/2020		7/15/2020	
		Sample ID	828103-MW050020		828103-MW06018		828103-MW08K	
		Qc Code	FS		FS		FS	
Method	**Parameter**	**Units**	Result	Qualifier	Result	Qualifier	Result	Qualifier
SW8260C	1,1,1-Trichloroethane	ug/l	1	U	1	U	1	U
SW8260C	1,1,2,2-Tetrachloroethane	ug/l	1	U	1	U	1	U
SW8260C	1,1,2-Trichloro-1,2,2-Trifluoroethane (Freon 113)	ug/l	1	U	1	U	1	U
SW8260C	1,1,2-Trichloroethane	ug/l	1	U	1	U	1	U
SW8260C	1,1-Dichloroethane	ug/l	1	U	1	U	1	U
SW8260C	1,1-Dichloroethene	ug/l	1	U	1	U	1	U
SW8260C	1,2,3-Trichlorobenzene	ug/l	1	U	1	U	1	U
SW8260C	1,2,4-Trichlorobenzene	ug/l	1	U	1	U	1	U
SW8260C	1,2-Dibromo-3-chloropropane	ug/l	1	U	1	U	1	U
SW8260C	1,2-Dibromoethane	ug/l	1	U	1	U	1	U
SW8260C	1,2-Dichlorobenzene	ug/l	1	U	1	U	1	U
SW8260C	1,2-Dichloroethane	ug/l	1	U	1	U	1	U
SW8260C	1,2-Dichloropropane	ug/l	1	U	1	U	1	U
SW8260C	1,3-Dichlorobenzene	ug/l	1	U	1	U	1	U
SW8260C	1,4-Dichlorobenzene	ug/l	1	U	1	U	1	U
SW8260C	1,4-Dioxane	ug/l	40	U	40	U	40	U
SW8260C	2-Butanone	ug/l	10	U	10	U	10	U
SW8260C	2-Hexanone	ug/l	5	U	5	U	5	U
SW8260C	4-Methyl-2-pentanone	ug/l	5	U	5	U	5	U
SW8260C	Acetic acid, methyl ester	ug/l	2.5	U	2.5	U	2.5	U
SW8260C	Acetone	ug/l	10	U	10	U	10	U
SW8260C	Benzene	ug/l	1	U	1	U	1	U
SW8260C	Bromochloromethane	ug/l	1	U	1	U	1	U

TABLE 2 - SUMMARY OF ANALYTICAL RESULTS
DATA USABILITY SUMMARY REPORT
JULY 2020 GROUNDWATER SAMPLING
DINABURG DISTRIBUTING, INC.
OPERABLE UNIT 2
ROCHESTER, NEW YORK

		Location	MW-05		MW-06		MW-08K	
		Lab SDG	480-172474-1		480-172474-1		480-172474-1	
		Sample Date	7/14/2020		7/14/2020		7/15/2020	
		Sample ID	828103-MW050020		828103-MW06018		828103-MW08K	
		Qc Code	FS		FS		FS	
Method	**Parameter**	**Units**	Result	Qualifier	Result	Qualifier	Result	Qualifier
SW8260C	Bromodichloromethane	ug/l	1	U	1	U	1	U
SW8260C	Bromoform	ug/l	1	U	1	U	1	U
SW8260C	Bromomethane	ug/l	1	U	1	U	1	U
SW8260C	Carbon disulfide	ug/l	1	U	1	U	1	U
SW8260C	Carbon tetrachloride	ug/l	1	U	1	U	1	U
SW8260C	Chlorobenzene	ug/l	1	U	1	U	1	U
SW8260C	Chloroethane	ug/l	1	U	1	U	1	U
SW8260C	Chloroform	ug/l	1	U	1	U	1	U
SW8260C	Chloromethane	ug/l	1	U	1	U	1	U
SW8260C	cis-1,2-Dichloroethene	ug/l	1	U	12		1	U
SW8260C	cis-1,3-Dichloropropene	ug/l	1	U	1	U	1	U
SW8260C	Cyclohexane	ug/l	1	U	1	U	1	U
SW8260C	Dibromochloromethane	ug/l	1	U	1	U	1	U
SW8260C	Dichlorodifluoromethane	ug/l	1	U	1	U	1	U
SW8260C	Ethylbenzene	ug/l	1	U	1	U	1	U
SW8260C	Isopropylbenzene	ug/l	1	U	1	U	1	U
SW8260C	Methyl cyclohexane	ug/l	1	U	1	U	1	U
SW8260C	Methyl Tertbutyl Ether	ug/l	1	U	1	U	1	U
SW8260C	Methylene chloride	ug/l	1	U	1	U	1	U
SW8260C	Styrene	ug/l	1	U	1	U	1	U
SW8260C	Tetrachloroethene	ug/l	1	U	2.5		1	U
SW8260C	Toluene	ug/l	1	U	1	U	1	U
SW8260C	trans-1,2-Dichloroethene	ug/l	1	U	1	U	1	U

TABLE 2 - SUMMARY OF ANALYTICAL RESULTS
DATA USABILITY SUMMARY REPORT
JULY 2020 GROUNDWATER SAMPLING
DINABURG DISTRIBUTING, INC.
OPERABLE UNIT 2
ROCHESTER, NEW YORK

		Location	MW-05		MW-06		MW-08K	
		Lab SDG	480-172474-1		480-172474-1		480-172474-1	
		Sample Date	7/14/2020		7/14/2020		7/15/2020	
		Sample ID	828103-MW050020		828103-MW06018		828103-MW08K	
		Qc Code	FS		FS		FS	
Method	**Parameter**	**Units**	Result	Qualifier	Result	Qualifier	Result	Qualifier
SW8260C	trans-1,3-Dichloropropene	ug/l	1	U	1	U	1	U
SW8260C	Trichloroethene	ug/l	1	U	5.1		1	U
SW8260C	Trichlorofluoromethane	ug/l	1	U	1	U	1	U
SW8260C	Vinyl chloride	ug/l	1	U	0.95	J	1	U
SW8260C	Xylenes, Total	ug/l	2	U	2	U	2	U

TABLE 2 - SUMMARY OF ANALYTICAL RESULTS
DATA USABILITY SUMMARY REPORT
JULY 2020 GROUNDWATER SAMPLING
DINABURG DISTRIBUTING, INC.
OPERABLE UNIT 2
ROCHESTER, NEW YORK

		Location	MW-08S		MW-09K		MW-09S	
		Lab SDG	480-172474-1		480-172474-1		480-172474-1	
		Sample Date	7/15/2020		7/15/2020		7/15/2020	
		Sample ID	828103-MW08S011		828103-MW09K018		828103-MW09S012	
		Qc Code	FS		FS		FS	
Method	**Parameter**	**Units**	Result	Qualifier	Result	Qualifier	Result	Qualifier
SW8260C	1,1,1-Trichloroethane	ug/l	1	U	1	U	1	U
SW8260C	1,1,2,2-Tetrachloroethane	ug/l	1	U	1	U	1	U
SW8260C	1,1,2-Trichloro-1,2,2-Trifluoroethane (Freon 113)	ug/l	1	U	1	U	1	U
SW8260C	1,1,2-Trichloroethane	ug/l	1	U	1	U	1	U
SW8260C	1,1-Dichloroethane	ug/l	1	U	1	U	1	U
SW8260C	1,1-Dichloroethene	ug/l	1	U	1	U	1	U
SW8260C	1,2,3-Trichlorobenzene	ug/l	1	U	1	U	1	U
SW8260C	1,2,4-Trichlorobenzene	ug/l	1	U	1	U	1	U
SW8260C	1,2-Dibromo-3-chloropropane	ug/l	1	U	1	U	1	U
SW8260C	1,2-Dibromoethane	ug/l	1	U	1	U	1	U
SW8260C	1,2-Dichlorobenzene	ug/l	1	U	1	U	1	U
SW8260C	1,2-Dichloroethane	ug/l	1	U	1	U	1	U
SW8260C	1,2-Dichloropropane	ug/l	1	U	1	U	1	U
SW8260C	1,3-Dichlorobenzene	ug/l	1	U	1	U	1	U
SW8260C	1,4-Dichlorobenzene	ug/l	1	U	1	U	1	U
SW8260C	1,4-Dioxane	ug/l	40	U	40	U	40	U
SW8260C	2-Butanone	ug/l	10	U	10	U	10	U
SW8260C	2-Hexanone	ug/l	5	U	5	U	5	U
SW8260C	4-Methyl-2-pentanone	ug/l	5	U	5	U	5	U
SW8260C	Acetic acid, methyl ester	ug/l	2.5	U	2.5	U	2.5	U
SW8260C	Acetone	ug/l	10	U	10	U	10	U
SW8260C	Benzene	ug/l	1	U	1	U	1	U
SW8260C	Bromochloromethane	ug/l	1	U	1	U	1	U

TABLE 2 - SUMMARY OF ANALYTICAL RESULTS
DATA USABILITY SUMMARY REPORT
JULY 2020 GROUNDWATER SAMPLING
DINABURG DISTRIBUTING, INC.
OPERABLE UNIT 2
ROCHESTER, NEW YORK

		Location	MW-08S		MW-09K		MW-09S	
		Lab SDG	480-172474-1		480-172474-1		480-172474-1	
		Sample Date	7/15/2020		7/15/2020		7/15/2020	
		Sample ID	828103-MW08S011		828103-MW09K018		828103-MW09S012	
		Qc Code	FS		FS		FS	
Method	**Parameter**	**Units**	Result	Qualifier	Result	Qualifier	Result	Qualifier
SW8260C	Bromodichloromethane	ug/l	1	U	1	U	1	U
SW8260C	Bromoform	ug/l	1	U	1	U	1	U
SW8260C	Bromomethane	ug/l	1	U	1	U	1	U
SW8260C	Carbon disulfide	ug/l	1	U	1	U	1	U
SW8260C	Carbon tetrachloride	ug/l	1	U	1	U	1	U
SW8260C	Chlorobenzene	ug/l	1	U	1	U	1	U
SW8260C	Chloroethane	ug/l	1	U	1	U	1	U
SW8260C	Chloroform	ug/l	1	U	1	U	1	U
SW8260C	Chloromethane	ug/l	1	U	1	U	1	U
SW8260C	cis-1,2-Dichloroethene	ug/l	1	U	44		1	U
SW8260C	cis-1,3-Dichloropropene	ug/l	1	U	1	U	1	U
SW8260C	Cyclohexane	ug/l	1	U	1	U	1	U
SW8260C	Dibromochloromethane	ug/l	1	U	1	U	1	U
SW8260C	Dichlorodifluoromethane	ug/l	1	U	1	U	1	U
SW8260C	Ethylbenzene	ug/l	1	U	1	U	1	U
SW8260C	Isopropylbenzene	ug/l	1	U	1	U	1	U
SW8260C	Methyl cyclohexane	ug/l	1	U	1	U	1	U
SW8260C	Methyl Tertbutyl Ether	ug/l	1	U	1	U	1	U
SW8260C	Methylene chloride	ug/l	1	U	1	U	1	U
SW8260C	Styrene	ug/l	1	U	1	U	1	U
SW8260C	Tetrachloroethene	ug/l	1	U	14		1	U
SW8260C	Toluene	ug/l	1	U	1	U	1	U
SW8260C	trans-1,2-Dichloroethene	ug/l	1	U	1	U	1	U

TABLE 2 - SUMMARY OF ANALYTICAL RESULTS
DATA USABILITY SUMMARY REPORT
JULY 2020 GROUNDWATER SAMPLING
DINABURG DISTRIBUTING, INC.
OPERABLE UNIT 2
ROCHESTER, NEW YORK

		Location	MW-08S		MW-09K		MW-09S	
		Lab SDG	480-172474-1		480-172474-1		480-172474-1	
		Sample Date	7/15/2020		7/15/2020		7/15/2020	
		Sample ID	828103-MW08S011		828103-MW09K018		828103-MW09S012	
		Qc Code	FS		FS		FS	
Method	**Parameter**	**Units**	Result	Qualifier	Result	Qualifier	Result	Qualifier
SW8260C	trans-1,3-Dichloropropene	ug/l	1	U	1	U	1	U
SW8260C	Trichloroethene	ug/l	1	U	15		1	U
SW8260C	Trichlorofluoromethane	ug/l	1	U	1	U	1	U
SW8260C	Vinyl chloride	ug/l	1	U	4.1		1	U
SW8260C	Xylenes, Total	ug/l	2	U	2	U	2	U

TABLE 2 - SUMMARY OF ANALYTICAL RESULTS
DATA USABILITY SUMMARY REPORT
JULY 2020 GROUNDWATER SAMPLING
DINABURG DISTRIBUTING, INC.
OPERABLE UNIT 2
ROCHESTER, NEW YORK

		Location	MW-10K		MW-10S		MW-11S	
		Lab SDG	480-172474-1		480-172474-1		480-172474-1	
		Sample Date	7/15/2020		7/14/2020		7/14/2020	
		Sample ID	828103-MW10K018		828103-MW10S012		828103-MW11S010	
		Qc Code	FS		FS		FS	
Method	**Parameter**	**Units**	Result	Qualifier	Result	Qualifier	Result	Qualifier
SW8260C	1,1,1-Trichloroethane	ug/l	10	U	1	U	1	U
SW8260C	1,1,2,2-Tetrachloroethane	ug/l	10	U	1	U	1	U
SW8260C	1,1,2-Trichloro-1,2,2-Trifluoroethane (Freon 113)	ug/l	10	U	1	U	1	U
SW8260C	1,1,2-Trichloroethane	ug/l	10	U	1	U	1	U
SW8260C	1,1-Dichloroethane	ug/l	5.8	J	1	U	1	U
SW8260C	1,1-Dichloroethene	ug/l	10	U	1	U	1	U
SW8260C	1,2,3-Trichlorobenzene	ug/l	10	U	1	U	1	U
SW8260C	1,2,4-Trichlorobenzene	ug/l	10	U	1	U	1	U
SW8260C	1,2-Dibromo-3-chloropropane	ug/l	10	U	1	U	1	U
SW8260C	1,2-Dibromoethane	ug/l	10	U	1	U	1	U
SW8260C	1,2-Dichlorobenzene	ug/l	10	U	1	U	1	U
SW8260C	1,2-Dichloroethane	ug/l	10	U	1	U	1	U
SW8260C	1,2-Dichloropropane	ug/l	10	U	1	U	1	U
SW8260C	1,3-Dichlorobenzene	ug/l	10	U	1	U	1	U
SW8260C	1,4-Dichlorobenzene	ug/l	10	U	1	U	1	U
SW8260C	1,4-Dioxane	ug/l	400	U	40	U	40	U
SW8260C	2-Butanone	ug/l	100	U	10	U	10	U
SW8260C	2-Hexanone	ug/l	50	U	5	U	5	U
SW8260C	4-Methyl-2-pentanone	ug/l	50	U	5	U	5	U
SW8260C	Acetic acid, methyl ester	ug/l	25	U	2.5	U	2.5	U
SW8260C	Acetone	ug/l	100	U	10	U	10	U
SW8260C	Benzene	ug/l	10	U	1	U	1	U
SW8260C	Bromochloromethane	ug/l	10	U	1	U	1	U

TABLE 2 - SUMMARY OF ANALYTICAL RESULTS
DATA USABILITY SUMMARY REPORT
JULY 2020 GROUNDWATER SAMPLING
DINABURG DISTRIBUTING, INC.
OPERABLE UNIT 2
ROCHESTER, NEW YORK

		Location	MW-10K		MW-10S		MW-11S	
		Lab SDG	480-172474-1		480-172474-1		480-172474-1	
		Sample Date	7/15/2020		7/14/2020		7/14/2020	
		Sample ID	828103-MW10K018		828103-MW10S012		828103-MW11S010	
		Qc Code	FS		FS		FS	
Method	**Parameter**	**Units**	Result	Qualifier	Result	Qualifier	Result	Qualifier
SW8260C	Bromodichloromethane	ug/l	10	U	1	U	1	U
SW8260C	Bromoform	ug/l	10	U	1	U	1	U
SW8260C	Bromomethane	ug/l	10	U	1	U	1	U
SW8260C	Carbon disulfide	ug/l	10	U	1	U	1	U
SW8260C	Carbon tetrachloride	ug/l	10	U	1	U	1	U
SW8260C	Chlorobenzene	ug/l	10	U	1	U	1	U
SW8260C	Chloroethane	ug/l	10	U	1	U	1	U
SW8260C	Chloroform	ug/l	10	U	1	U	1	U
SW8260C	Chloromethane	ug/l	10	U	1	U	1	U
SW8260C	cis-1,2-Dichloroethene	ug/l	260		2.7		1	U
SW8260C	cis-1,3-Dichloropropene	ug/l	10	U	1	U	1	U
SW8260C	Cyclohexane	ug/l	10	U	1	U	1	U
SW8260C	Dibromochloromethane	ug/l	10	U	1	U	1	U
SW8260C	Dichlorodifluoromethane	ug/l	10	U	1	U	1	U
SW8260C	Ethylbenzene	ug/l	10	U	1	U	1	U
SW8260C	Isopropylbenzene	ug/l	10	U	1	U	1	U
SW8260C	Methyl cyclohexane	ug/l	10	U	1	U	1	U
SW8260C	Methyl Tertbutyl Ether	ug/l	10	U	1	U	1	U
SW8260C	Methylene chloride	ug/l	10	U	1	U	1	U
SW8260C	Styrene	ug/l	10	U	1	U	1	U
SW8260C	Tetrachloroethene	ug/l	67		16		1	U
SW8260C	Toluene	ug/l	10	U	1	U	1	U
SW8260C	trans-1,2-Dichloroethene	ug/l	10	U	1	U	1	U

TABLE 2 - SUMMARY OF ANALYTICAL RESULTS
DATA USABILITY SUMMARY REPORT
JULY 2020 GROUNDWATER SAMPLING
DINABURG DISTRIBUTING, INC.
OPERABLE UNIT 2
ROCHESTER, NEW YORK

		Location	MW-10K		MW-10S		MW-11S	
		Lab SDG	480-172474-1		480-172474-1		480-172474-1	
		Sample Date	7/15/2020		7/14/2020		7/14/2020	
		Sample ID	828103-MW10K018		828103-MW10S012		828103-MW11S010	
		Qc Code	FS		FS		FS	
Method	**Parameter**	**Units**	Result	Qualifier	Result	Qualifier	Result	Qualifier
SW8260C	trans-1,3-Dichloropropene	ug/l	10	U	1	U	1	U
SW8260C	Trichloroethene	ug/l	490		19		1	U
SW8260C	Trichlorofluoromethane	ug/l	10	U	1	U	1	U
SW8260C	Vinyl chloride	ug/l	10	U	1	U	1	U
SW8260C	Xylenes, Total	ug/l	20	U	2	U	2	U

TABLE 2 - SUMMARY OF ANALYTICAL RESULTS
DATA USABILITY SUMMARY REPORT
JULY 2020 GROUNDWATER SAMPLING
DINABURG DISTRIBUTING, INC.
OPERABLE UNIT 2
ROCHESTER, NEW YORK

		Location	MW-12K		MW-12S		MW-12S	
		Lab SDG	480-172474-1		480-172474-1		480-172474-1	
		Sample Date	7/14/2020		7/15/2020		7/15/2020	
		Sample ID	828103-MW12K018		828103-MW12S010		828103-MW12S010D	
		Qc Code	FS		FS		FD	
Method	**Parameter**	**Units**	Result	Qualifier	Result	Qualifier	Result	Qualifier
SW8260C	1,1,1-Trichloroethane	ug/l	1	U	1	U	1	U
SW8260C	1,1,2,2-Tetrachloroethane	ug/l	1	U	1	U	1	U
SW8260C	1,1,2-Trichloro-1,2,2-Trifluoroethane (Freon 113)	ug/l	1	U	1	U	1	U
SW8260C	1,1,2-Trichloroethane	ug/l	1	U	1	U	1	U
SW8260C	1,1-Dichloroethane	ug/l	1	U	1	U	1	U
SW8260C	1,1-Dichloroethene	ug/l	1	U	1	U	1	U
SW8260C	1,2,3-Trichlorobenzene	ug/l	1	U	1	U	1	U
SW8260C	1,2,4-Trichlorobenzene	ug/l	1	U	1	U	1	U
SW8260C	1,2-Dibromo-3-chloropropane	ug/l	1	U	1	U	1	U
SW8260C	1,2-Dibromoethane	ug/l	1	U	1	U	1	U
SW8260C	1,2-Dichlorobenzene	ug/l	1	U	1	U	1	U
SW8260C	1,2-Dichloroethane	ug/l	1	U	1	U	1	U
SW8260C	1,2-Dichloropropane	ug/l	1	U	1	U	1	U
SW8260C	1,3-Dichlorobenzene	ug/l	1	U	1	U	1	U
SW8260C	1,4-Dichlorobenzene	ug/l	1	U	1	U	1	U
SW8260C	1,4-Dioxane	ug/l	40	U	40	U	40	U
SW8260C	2-Butanone	ug/l	10	U	10	U	10	U
SW8260C	2-Hexanone	ug/l	5	U	5	U	5	U
SW8260C	4-Methyl-2-pentanone	ug/l	5	U	5	U	5	U
SW8260C	Acetic acid, methyl ester	ug/l	2.5	U	2.5	U	2.5	U
SW8260C	Acetone	ug/l	10	U	10	U	10	U
SW8260C	Benzene	ug/l	1	U	1	U	1	U
SW8260C	Bromochloromethane	ug/l	1	U	1	U	1	U

TABLE 2 - SUMMARY OF ANALYTICAL RESULTS
DATA USABILITY SUMMARY REPORT
JULY 2020 GROUNDWATER SAMPLING
DINABURG DISTRIBUTING, INC.
OPERABLE UNIT 2
ROCHESTER, NEW YORK

		Location	MW-12K		MW-12S		MW-12S	
		Lab SDG	480-172474-1		480-172474-1		480-172474-1	
		Sample Date	7/14/2020		7/15/2020		7/15/2020	
		Sample ID	828103-MW12K018		828103-MW12S010		828103-MW12S010D	
		Qc Code	FS		FS		FD	
Method	**Parameter**	**Units**	Result	Qualifier	Result	Qualifier	Result	Qualifier
SW8260C	Bromodichloromethane	ug/l	1	U	1	U	1	U
SW8260C	Bromoform	ug/l	1	U	1	U	1	U
SW8260C	Bromomethane	ug/l	1	U	1	U	1	U
SW8260C	Carbon disulfide	ug/l	1	U	1	U	1	U
SW8260C	Carbon tetrachloride	ug/l	1	U	1	U	1	U
SW8260C	Chlorobenzene	ug/l	1	U	1	U	1	U
SW8260C	Chloroethane	ug/l	1	U	1	U	1	U
SW8260C	Chloroform	ug/l	1	U	1	U	1	U
SW8260C	Chloromethane	ug/l	1	U	1	U	1	U
SW8260C	cis-1,2-Dichloroethene	ug/l	1	U	1	U	1	U
SW8260C	cis-1,3-Dichloropropene	ug/l	1	U	1	U	1	U
SW8260C	Cyclohexane	ug/l	1	U	1	U	1	U
SW8260C	Dibromochloromethane	ug/l	1	U	1	U	1	U
SW8260C	Dichlorodifluoromethane	ug/l	1	U	1	U	1	U
SW8260C	Ethylbenzene	ug/l	1	U	1	U	1	U
SW8260C	Isopropylbenzene	ug/l	1	U	1	U	1	U
SW8260C	Methyl cyclohexane	ug/l	1	U	1	U	1	U
SW8260C	Methyl Tertbutyl Ether	ug/l	1	U	1	U	1	U
SW8260C	Methylene chloride	ug/l	1	U	1	U	1	U
SW8260C	Styrene	ug/l	1	U	1	U	1	U
SW8260C	Tetrachloroethene	ug/l	1	U	1	U	1	U
SW8260C	Toluene	ug/l	1	U	1	U	1	U
SW8260C	trans-1,2-Dichloroethene	ug/l	1	U	1	U	1	U

TABLE 2 - SUMMARY OF ANALYTICAL RESULTS
DATA USABILITY SUMMARY REPORT
JULY 2020 GROUNDWATER SAMPLING
DINABURG DISTRIBUTING, INC.
OPERABLE UNIT 2
ROCHESTER, NEW YORK

		Location	MW-12K		MW-12S		MW-12S	
		Lab SDG	480-172474-1		480-172474-1		480-172474-1	
		Sample Date	7/14/2020		7/15/2020		7/15/2020	
		Sample ID	828103-MW12K018		828103-MW12S010		828103-MW12S010D	
		Qc Code	FS		FS		FD	
Method	**Parameter**	**Units**	Result	Qualifier	Result	Qualifier	Result	Qualifier
SW8260C	trans-1,3-Dichloropropene	ug/l	1	U	1	U	1	U
SW8260C	Trichloroethene	ug/l	4.2		1	U	1	U
SW8260C	Trichlorofluoromethane	ug/l	1	U	1	U	1	U
SW8260C	Vinyl chloride	ug/l	1	U	1	U	1	U
SW8260C	Xylenes, Total	ug/l	2	U	2	U	2	U

TABLE 2 - SUMMARY OF ANALYTICAL RESULTS
DATA USABILITY SUMMARY REPORT
JULY 2020 GROUNDWATER SAMPLING
DINABURG DISTRIBUTING, INC.
OPERABLE UNIT 2
ROCHESTER, NEW YORK

		Location	MW-13K		MW-14K		MW-14K	
		Lab SDG	480-172474-1		480-172646-1		480-172646-1	
		Sample Date	7/14/2020		7/17/2020		7/17/2020	
		Sample ID	828103-MW13K018		828103-MW14KA022		828103-MW14KA022D	
		Qc Code	FS		FS		FD	
Method	**Parameter**	**Units**	Result	Qualifier	Result	Qualifier	Result	Qualifier
SW8260C	1,1,1-Trichloroethane	ug/l	130	U	130	U	130	U
SW8260C	1,1,2,2-Tetrachloroethane	ug/l	130	U	130	U	130	U
SW8260C	1,1,2-Trichloro-1,2,2-Trifluoroethane (Freon 113)	ug/l	130	U	130	U	130	U
SW8260C	1,1,2-Trichloroethane	ug/l	130	U	130	U	130	U
SW8260C	1,1-Dichloroethane	ug/l	130	U	130	U	130	U
SW8260C	1,1-Dichloroethene	ug/l	130	U	130	U	130	U
SW8260C	1,2,3-Trichlorobenzene	ug/l	130	U	130	U	130	U
SW8260C	1,2,4-Trichlorobenzene	ug/l	130	U	130	U	130	U
SW8260C	1,2-Dibromo-3-chloropropane	ug/l	130	U	130	U	130	U
SW8260C	1,2-Dibromoethane	ug/l	130	U	130	U	130	U
SW8260C	1,2-Dichlorobenzene	ug/l	130	U	130	U	130	U
SW8260C	1,2-Dichloroethane	ug/l	130	U	130	U	130	U
SW8260C	1,2-Dichloropropane	ug/l	130	U	130	U	130	U
SW8260C	1,3-Dichlorobenzene	ug/l	130	U	130	U	130	U
SW8260C	1,4-Dichlorobenzene	ug/l	130	U	130	U	130	U
SW8260C	1,4-Dioxane	ug/l	5000	U	5000	U	5000	U
SW8260C	2-Butanone	ug/l	1300	U	1300	U	1300	U
SW8260C	2-Hexanone	ug/l	630	U	630	U	630	U
SW8260C	4-Methyl-2-pentanone	ug/l	630	U	630	U	630	U
SW8260C	Acetic acid, methyl ester	ug/l	310	U	310	U	310	U
SW8260C	Acetone	ug/l	1300	U	1300	U	1300	U
SW8260C	Benzene	ug/l	130	U	130	U	130	U
SW8260C	Bromochloromethane	ug/l	130	U	130	U	130	U

TABLE 2 - SUMMARY OF ANALYTICAL RESULTS
DATA USABILITY SUMMARY REPORT
JULY 2020 GROUNDWATER SAMPLING
DINABURG DISTRIBUTING, INC.
OPERABLE UNIT 2
ROCHESTER, NEW YORK

		Location	MW-13K		MW-14K		MW-14K	
		Lab SDG	480-172474-1		480-172646-1		480-172646-1	
		Sample Date	7/14/2020		7/17/2020		7/17/2020	
		Sample ID	828103-MW13K018		828103-MW14KA022		828103-MW14KA022D	
		Qc Code	FS		FS		FD	
Method	**Parameter**	**Units**	Result	Qualifier	Result	Qualifier	Result	Qualifier
SW8260C	Bromodichloromethane	ug/l	130	U	130	U	130	U
SW8260C	Bromoform	ug/l	130	U	130	U	130	U
SW8260C	Bromomethane	ug/l	130	U	130	U	130	U
SW8260C	Carbon disulfide	ug/l	130	U	130	U	130	U
SW8260C	Carbon tetrachloride	ug/l	130	U	130	U	130	U
SW8260C	Chlorobenzene	ug/l	130	U	130	U	130	U
SW8260C	Chloroethane	ug/l	130	U	130	U	130	U
SW8260C	Chloroform	ug/l	130	U	130	U	130	U
SW8260C	Chloromethane	ug/l	130	U	130	U	130	U
SW8260C	cis-1,2-Dichloroethene	ug/l	3100		3300		3200	
SW8260C	cis-1,3-Dichloropropene	ug/l	130	U	130	U	130	U
SW8260C	Cyclohexane	ug/l	130	U	130	U	130	U
SW8260C	Dibromochloromethane	ug/l	130	U	130	U	130	U
SW8260C	Dichlorodifluoromethane	ug/l	130	U	130	U	130	U
SW8260C	Ethylbenzene	ug/l	130	U	130	U	130	U
SW8260C	Isopropylbenzene	ug/l	130	U	130	U	130	U
SW8260C	Methyl cyclohexane	ug/l	130	U	130	U	130	U
SW8260C	Methyl Tertbutyl Ether	ug/l	130	U	130	U	130	U
SW8260C	Methylene chloride	ug/l	130	U	130	U	130	U
SW8260C	Styrene	ug/l	130	U	130	U	130	U
SW8260C	Tetrachloroethene	ug/l	4300		1700		1600	
SW8260C	Toluene	ug/l	130	U	130	U	130	U
SW8260C	trans-1,2-Dichloroethene	ug/l	130	U	130	U	130	U

TABLE 2 - SUMMARY OF ANALYTICAL RESULTS
DATA USABILITY SUMMARY REPORT
JULY 2020 GROUNDWATER SAMPLING
DINABURG DISTRIBUTING, INC.
OPERABLE UNIT 2
ROCHESTER, NEW YORK

		Location	MW-13K		MW-14K		MW-14K	
		Lab SDG	480-172474-1		480-172646-1		480-172646-1	
		Sample Date	7/14/2020		7/17/2020		7/17/2020	
		Sample ID	828103-MW13K018		828103-MW14KA022		828103-MW14KA022D	
		Qc Code	FS		FS		FD	
Method	**Parameter**	**Units**	Result	Qualifier	Result	Qualifier	Result	Qualifier
SW8260C	trans-1,3-Dichloropropene	ug/l	130	U	130	U	130	U
SW8260C	Trichloroethene	ug/l	1500		3700		3900	
SW8260C	Trichlorofluoromethane	ug/l	130	U	130	U	130	U
SW8260C	Vinyl chloride	ug/l	410		110	J	110	J
SW8260C	Xylenes, Total	ug/l	250	U	250	U	250	U

TABLE 2 - SUMMARY OF ANALYTICAL RESULTS
DATA USABILITY SUMMARY REPORT
JULY 2020 GROUNDWATER SAMPLING
DINABURG DISTRIBUTING, INC.
OPERABLE UNIT 2
ROCHESTER, NEW YORK

		Location	MW-15K		MW-15S		MW-16K	
		Lab SDG	480-172474-1		480-172474-1		480-172646-1	
		Sample Date	7/15/2020		7/15/2020		7/16/2020	
		Sample ID	828103-MW15K022		828103-MW15S010		828103-MW16K022	
		Qc Code	FS		FS		FS	
Method	**Parameter**	**Units**	Result	Qualifier	Result	Qualifier	Result	Qualifier
SW8260C	1,1,1-Trichloroethane	ug/l	20	U	2	U	20	U
SW8260C	1,1,2,2-Tetrachloroethane	ug/l	20	U	2	U	20	U
SW8260C	1,1,2-Trichloro-1,2,2-Trifluoroethane (Freon 113)	ug/l	20	U	2	U	20	U
SW8260C	1,1,2-Trichloroethane	ug/l	20	U	2	U	20	U
SW8260C	1,1-Dichloroethane	ug/l	12	J	2	U	20	U
SW8260C	1,1-Dichloroethene	ug/l	11	J	2	U	20	U
SW8260C	1,2,3-Trichlorobenzene	ug/l	20	U	2	U	20	U
SW8260C	1,2,4-Trichlorobenzene	ug/l	20	U	2	U	20	U
SW8260C	1,2-Dibromo-3-chloropropane	ug/l	20	U	2	U	20	U
SW8260C	1,2-Dibromoethane	ug/l	20	U	2	U	20	U
SW8260C	1,2-Dichlorobenzene	ug/l	20	U	2	U	20	U
SW8260C	1,2-Dichloroethane	ug/l	20	U	2	U	20	U
SW8260C	1,2-Dichloropropane	ug/l	20	U	2	U	20	U
SW8260C	1,3-Dichlorobenzene	ug/l	20	U	2	U	20	U
SW8260C	1,4-Dichlorobenzene	ug/l	20	U	2	U	20	U
SW8260C	1,4-Dioxane	ug/l	800	U	80	U	800	U
SW8260C	2-Butanone	ug/l	200	U	20	U	200	U
SW8260C	2-Hexanone	ug/l	100	U	10	U	100	U
SW8260C	4-Methyl-2-pentanone	ug/l	100	U	10	U	100	U
SW8260C	Acetic acid, methyl ester	ug/l	50	U	5	U	50	U
SW8260C	Acetone	ug/l	200	U	20	U	200	U
SW8260C	Benzene	ug/l	20	U	2	U	20	U
SW8260C	Bromochloromethane	ug/l	20	U	2	U	20	U

TABLE 2 - SUMMARY OF ANALYTICAL RESULTS
DATA USABILITY SUMMARY REPORT
JULY 2020 GROUNDWATER SAMPLING
DINABURG DISTRIBUTING, INC.
OPERABLE UNIT 2
ROCHESTER, NEW YORK

		Location	MW-15K		MW-15S		MW-16K	
		Lab SDG	480-172474-1		480-172474-1		480-172646-1	
		Sample Date	7/15/2020		7/15/2020		7/16/2020	
		Sample ID	828103-MW15K022		828103-MW15S010		828103-MW16K022	
		Qc Code	FS		FS		FS	
Method	**Parameter**	**Units**	Result	Qualifier	Result	Qualifier	Result	Qualifier
SW8260C	Bromodichloromethane	ug/l	20	U	2	U	20	U
SW8260C	Bromoform	ug/l	20	U	2	U	20	U
SW8260C	Bromomethane	ug/l	20	U	2	U	20	U
SW8260C	Carbon disulfide	ug/l	20	U	2	U	20	U
SW8260C	Carbon tetrachloride	ug/l	20	U	2	U	20	U
SW8260C	Chlorobenzene	ug/l	20	U	2	U	20	U
SW8260C	Chloroethane	ug/l	20	U	2	U	20	U
SW8260C	Chloroform	ug/l	20	U	2	U	20	U
SW8260C	Chloromethane	ug/l	20	U	2	U	20	U
SW8260C	cis-1,2-Dichloroethene	ug/l	280		3.3		420	
SW8260C	cis-1,3-Dichloropropene	ug/l	20	U	2	U	20	U
SW8260C	Cyclohexane	ug/l	20	U	2	U	20	U
SW8260C	Dibromochloromethane	ug/l	20	U	2	U	20	U
SW8260C	Dichlorodifluoromethane	ug/l	20	U	2	U	20	U
SW8260C	Ethylbenzene	ug/l	20	U	2	U	20	U
SW8260C	Isopropylbenzene	ug/l	20	U	2	U	20	U
SW8260C	Methyl cyclohexane	ug/l	20	U	2	U	20	U
SW8260C	Methyl Tertbutyl Ether	ug/l	20	U	2	U	20	U
SW8260C	Methylene chloride	ug/l	20	U	2	U	20	U
SW8260C	Styrene	ug/l	20	U	2	U	20	U
SW8260C	Tetrachloroethene	ug/l	930		150		300	
SW8260C	Toluene	ug/l	20	U	2	U	20	U
SW8260C	trans-1,2-Dichloroethene	ug/l	20	U	2	U	20	U

TABLE 2 - SUMMARY OF ANALYTICAL RESULTS
DATA USABILITY SUMMARY REPORT
JULY 2020 GROUNDWATER SAMPLING
DINABURG DISTRIBUTING, INC.
OPERABLE UNIT 2
ROCHESTER, NEW YORK

		Location	MW-15K		MW-15S		MW-16K	
		Lab SDG	480-172474-1		480-172474-1		480-172646-1	
		Sample Date	7/15/2020		7/15/2020		7/16/2020	
		Sample ID	828103-MW15K022		828103-MW15S010		828103-MW16K022	
		Qc Code	FS		FS		FS	
Method	**Parameter**	**Units**	Result	Qualifier	Result	Qualifier	Result	Qualifier
SW8260C	trans-1,3-Dichloropropene	ug/l	20	U	2	U	20	U
SW8260C	Trichloroethene	ug/l	420		82		380	
SW8260C	Trichlorofluoromethane	ug/l	20	U	2	U	20	U
SW8260C	Vinyl chloride	ug/l	19	J	2	U	20	U
SW8260C	Xylenes, Total	ug/l	40	U	4	U	40	U

TABLE 2 - SUMMARY OF ANALYTICAL RESULTS
DATA USABILITY SUMMARY REPORT
JULY 2020 GROUNDWATER SAMPLING
DINABURG DISTRIBUTING, INC.
OPERABLE UNIT 2
ROCHESTER, NEW YORK

		Location	MW-16S		MW-17S		MW-18S	
		Lab SDG	480-172646-1		480-172646-1		480-172646-1	
		Sample Date	7/17/2020		7/17/2020		7/16/2020	
		Sample ID	828103-MW16S010		828103-MW17S010		828103-MW18S010	
		Qc Code	FS		FS		FS	
Method	**Parameter**	**Units**	Result	Qualifier	Result	Qualifier	Result	Qualifier
SW8260C	1,1,1-Trichloroethane	ug/l	8	U	1	U	5	U
SW8260C	1,1,2,2-Tetrachloroethane	ug/l	8	U	1	U	5	U
SW8260C	1,1,2-Trichloro-1,2,2-Trifluoroethane (Freon 113)	ug/l	8	U	1	U	5	U
SW8260C	1,1,2-Trichloroethane	ug/l	8	U	1	U	5	U
SW8260C	1,1-Dichloroethane	ug/l	8	U	1	U	5	U
SW8260C	1,1-Dichloroethene	ug/l	8	U	1	U	5	U
SW8260C	1,2,3-Trichlorobenzene	ug/l	8	U	1	U	5	U
SW8260C	1,2,4-Trichlorobenzene	ug/l	8	U	1	U	5	U
SW8260C	1,2-Dibromo-3-chloropropane	ug/l	8	U	1	U	5	U
SW8260C	1,2-Dibromoethane	ug/l	8	U	1	U	5	U
SW8260C	1,2-Dichlorobenzene	ug/l	8	U	1	U	5	U
SW8260C	1,2-Dichloroethane	ug/l	8	U	1	U	5	U
SW8260C	1,2-Dichloropropane	ug/l	8	U	1	U	5	U
SW8260C	1,3-Dichlorobenzene	ug/l	8	U	1	U	5	U
SW8260C	1,4-Dichlorobenzene	ug/l	8	U	1	U	5	U
SW8260C	1,4-Dioxane	ug/l	320	U	40	U	200	U
SW8260C	2-Butanone	ug/l	80	U	10	U	50	U
SW8260C	2-Hexanone	ug/l	40	U	5	U	25	U
SW8260C	4-Methyl-2-pentanone	ug/l	40	U	5	U	25	U
SW8260C	Acetic acid, methyl ester	ug/l	20	U	2.5	U	13	U
SW8260C	Acetone	ug/l	80	U	10	U	50	U
SW8260C	Benzene	ug/l	8	U	1	U	5	U
SW8260C	Bromochloromethane	ug/l	8	U	1	U	5	U

TABLE 2 - SUMMARY OF ANALYTICAL RESULTS
DATA USABILITY SUMMARY REPORT
JULY 2020 GROUNDWATER SAMPLING
DINABURG DISTRIBUTING, INC.
OPERABLE UNIT 2
ROCHESTER, NEW YORK

		Location	MW-16S		MW-17S		MW-18S	
		Lab SDG	480-172646-1		480-172646-1		480-172646-1	
		Sample Date	7/17/2020		7/17/2020		7/16/2020	
		Sample ID	828103-MW16S010		828103-MW17S010		828103-MW18S010	
		Qc Code	FS		FS		FS	
Method	**Parameter**	**Units**	Result	Qualifier	Result	Qualifier	Result	Qualifier
SW8260C	Bromodichloromethane	ug/l	8	U	1	U	5	U
SW8260C	Bromoform	ug/l	8	U	1	U	5	U
SW8260C	Bromomethane	ug/l	8	U	1	U	5	U
SW8260C	Carbon disulfide	ug/l	8	U	1	U	5	U
SW8260C	Carbon tetrachloride	ug/l	8	U	1	U	5	U
SW8260C	Chlorobenzene	ug/l	8	U	1	U	5	U
SW8260C	Chloroethane	ug/l	8	U	1	U	5	U
SW8260C	Chloroform	ug/l	8	U	1	U	5	U
SW8260C	Chloromethane	ug/l	8	U	1	U	5	U
SW8260C	cis-1,2-Dichloroethene	ug/l	8	U	1	U	140	
SW8260C	cis-1,3-Dichloropropene	ug/l	8	U	1	U	5	U
SW8260C	Cyclohexane	ug/l	8	U	1	U	5	U
SW8260C	Dibromochloromethane	ug/l	8	U	1	U	5	U
SW8260C	Dichlorodifluoromethane	ug/l	8	U	1	U	5	U
SW8260C	Ethylbenzene	ug/l	8	U	1	U	5	U
SW8260C	Isopropylbenzene	ug/l	8	U	1	U	5	U
SW8260C	Methyl cyclohexane	ug/l	8	U	1	U	5	U
SW8260C	Methyl Tertbutyl Ether	ug/l	8	U	1	U	5	U
SW8260C	Methylene chloride	ug/l	8	U	1	U	5	U
SW8260C	Styrene	ug/l	8	U	1	U	5	U
SW8260C	Tetrachloroethene	ug/l	23		25		220	
SW8260C	Toluene	ug/l	8	U	1	U	5	U
SW8260C	trans-1,2-Dichloroethene	ug/l	8	U	1	U	5	U

TABLE 2 - SUMMARY OF ANALYTICAL RESULTS
DATA USABILITY SUMMARY REPORT
JULY 2020 GROUNDWATER SAMPLING
DINABURG DISTRIBUTING, INC.
OPERABLE UNIT 2
ROCHESTER, NEW YORK

		Location	MW-16S		MW-17S		MW-18S	
		Lab SDG	480-172646-1		480-172646-1		480-172646-1	
		Sample Date	7/17/2020		7/17/2020		7/16/2020	
		Sample ID	828103-MW16S010		828103-MW17S010		828103-MW18S010	
		Qc Code	FS		FS		FS	
Method	**Parameter**	**Units**	Result	Qualifier	Result	Qualifier	Result	Qualifier
SW8260C	trans-1,3-Dichloropropene	ug/l	8	U	1	U	5	U
SW8260C	Trichloroethene	ug/l	220		12		59	
SW8260C	Trichlorofluoromethane	ug/l	8	U	1	U	5	U
SW8260C	Vinyl chloride	ug/l	8	U	1	U	5	U
SW8260C	Xylenes, Total	ug/l	16	U	2	U	10	U

TABLE 2 - SUMMARY OF ANALYTICAL RESULTS
DATA USABILITY SUMMARY REPORT
JULY 2020 GROUNDWATER SAMPLING
DINABURG DISTRIBUTING, INC.
OPERABLE UNIT 2
ROCHESTER, NEW YORK

		Location	MW-19S		MW-20S		MW-21S	
		Lab SDG	480-172646-1		480-172646-1		480-172646-1	
		Sample Date	7/17/2020		7/17/2020		7/16/2020	
		Sample ID	828103-MW19S010		828103-MW20S010		828103-MW21S010	
		Qc Code	FS		FS		FS	
Method	**Parameter**	**Units**	Result	Qualifier	Result	Qualifier	Result	Qualifier
SW8260C	1,1,1-Trichloroethane	ug/l	4	U	80	U	8	U
SW8260C	1,1,2,2-Tetrachloroethane	ug/l	4	U	80	U	8	U
SW8260C	1,1,2-Trichloro-1,2,2-Trifluoroethane (Freon 113)	ug/l	4	U	80	U	8	U
SW8260C	1,1,2-Trichloroethane	ug/l	4	U	80	U	8	U
SW8260C	1,1-Dichloroethane	ug/l	4	U	80	U	8	U
SW8260C	1,1-Dichloroethene	ug/l	4	U	80	U	8	U
SW8260C	1,2,3-Trichlorobenzene	ug/l	4	U	80	U	8	U
SW8260C	1,2,4-Trichlorobenzene	ug/l	4	U	80	U	8	U
SW8260C	1,2-Dibromo-3-chloropropane	ug/l	4	U	80	U	8	U
SW8260C	1,2-Dibromoethane	ug/l	4	U	80	U	8	U
SW8260C	1,2-Dichlorobenzene	ug/l	4	U	80	U	8	U
SW8260C	1,2-Dichloroethane	ug/l	4	U	80	U	8	U
SW8260C	1,2-Dichloropropane	ug/l	4	U	80	U	8	U
SW8260C	1,3-Dichlorobenzene	ug/l	4	U	80	U	8	U
SW8260C	1,4-Dichlorobenzene	ug/l	4	U	80	U	8	U
SW8260C	1,4-Dioxane	ug/l	160	U	3200	U	320	U
SW8260C	2-Butanone	ug/l	40	U	800	U	80	U
SW8260C	2-Hexanone	ug/l	20	U	400	U	40	U
SW8260C	4-Methyl-2-pentanone	ug/l	20	U	400	U	40	U
SW8260C	Acetic acid, methyl ester	ug/l	10	U	200	U	20	U
SW8260C	Acetone	ug/l	40	U	800	U	80	U
SW8260C	Benzene	ug/l	4	U	80	U	8	U
SW8260C	Bromochloromethane	ug/l	4	U	80	U	8	U

TABLE 2 - SUMMARY OF ANALYTICAL RESULTS
DATA USABILITY SUMMARY REPORT
JULY 2020 GROUNDWATER SAMPLING
DINABURG DISTRIBUTING, INC.
OPERABLE UNIT 2
ROCHESTER, NEW YORK

		Location	MW-19S		MW-20S		MW-21S	
		Lab SDG	480-172646-1		480-172646-1		480-172646-1	
		Sample Date	7/17/2020		7/17/2020		7/16/2020	
		Sample ID	828103-MW19S010		828103-MW20S010		828103-MW21S010	
		Qc Code	FS		FS		FS	
Method	**Parameter**	**Units**	Result	Qualifier	Result	Qualifier	Result	Qualifier
SW8260C	Bromodichloromethane	ug/l	4	U	80	U	8	U
SW8260C	Bromoform	ug/l	4	U	80	U	8	U
SW8260C	Bromomethane	ug/l	4	U	80	U	8	U
SW8260C	Carbon disulfide	ug/l	4	U	80	U	8	U
SW8260C	Carbon tetrachloride	ug/l	4	U	80	U	8	U
SW8260C	Chlorobenzene	ug/l	4	U	80	U	8	U
SW8260C	Chloroethane	ug/l	4	U	80	U	8	U
SW8260C	Chloroform	ug/l	4	U	80	U	8	U
SW8260C	Chloromethane	ug/l	4	U	80	U	8	U
SW8260C	cis-1,2-Dichloroethene	ug/l	1300		80	U	10	
SW8260C	cis-1,3-Dichloropropene	ug/l	4	U	80	U	8	U
SW8260C	Cyclohexane	ug/l	4	U	80	U	8	U
SW8260C	Dibromochloromethane	ug/l	4	U	80	U	8	U
SW8260C	Dichlorodifluoromethane	ug/l	4	U	80	U	8	U
SW8260C	Ethylbenzene	ug/l	4	U	80	U	8	U
SW8260C	Isopropylbenzene	ug/l	4	U	80	U	8	U
SW8260C	Methyl cyclohexane	ug/l	4	U	80	U	8	U
SW8260C	Methyl Tertbutyl Ether	ug/l	4	U	80	U	8	U
SW8260C	Methylene chloride	ug/l	4	U	80	U	8	U
SW8260C	Styrene	ug/l	4	U	80	U	8	U
SW8260C	Tetrachloroethene	ug/l	110		4200		8	U
SW8260C	Toluene	ug/l	4	U	80	U	8	U
SW8260C	trans-1,2-Dichloroethene	ug/l	8.9		80	U	8	U

TABLE 2 - SUMMARY OF ANALYTICAL RESULTS
DATA USABILITY SUMMARY REPORT
JULY 2020 GROUNDWATER SAMPLING
DINABURG DISTRIBUTING, INC.
OPERABLE UNIT 2
ROCHESTER, NEW YORK

		Location	MW-19S		MW-20S		MW-21S	
		Lab SDG	480-172646-1		480-172646-1		480-172646-1	
		Sample Date	7/17/2020		7/17/2020		7/16/2020	
		Sample ID	828103-MW19S010		828103-MW20S010		828103-MW21S010	
		Qc Code	FS		FS		FS	
Method	**Parameter**	**Units**	Result	Qualifier	Result	Qualifier	Result	Qualifier
SW8260C	trans-1,3-Dichloropropene	ug/l	4	U	80	U	8	U
SW8260C	Trichloroethene	ug/l	120		84		8	U
SW8260C	Trichlorofluoromethane	ug/l	4	U	80	U	8	U
SW8260C	Vinyl chloride	ug/l	28		80	U	8	U
SW8260C	Xylenes, Total	ug/l	8	U	160	U	16	U

TABLE 2 - SUMMARY OF ANALYTICAL RESULTS
DATA USABILITY SUMMARY REPORT
JULY 2020 GROUNDWATER SAMPLING
DINABURG DISTRIBUTING, INC.
OPERABLE UNIT 2
ROCHESTER, NEW YORK

		Location	MW-22K		MW-23K		MW-24K	
		Lab SDG	480-172474-1		480-172474-1		480-172474-1	
		Sample Date	7/15/2020		7/14/2020		7/14/2020	
		Sample ID	828103-MW22K028		828103-MW23K025		828103-MW24K025	
		Qc Code	FS		FS		FS	
Method	**Parameter**	**Units**	Result	Qualifier	Result	Qualifier	Result	Qualifier
SW8260C	1,1,1-Trichloroethane	ug/l	1	U	1	U	1	U
SW8260C	1,1,2,2-Tetrachloroethane	ug/l	1	U	1	U	1	U
SW8260C	1,1,2-Trichloro-1,2,2-Trifluoroethane (Freon 113)	ug/l	1	U	1	U	1	U
SW8260C	1,1,2-Trichloroethane	ug/l	1	U	1	U	1	U
SW8260C	1,1-Dichloroethane	ug/l	1	U	1	U	1	U
SW8260C	1,1-Dichloroethene	ug/l	0.3	J	1	U	1	U
SW8260C	1,2,3-Trichlorobenzene	ug/l	1	U	1	U	1	U
SW8260C	1,2,4-Trichlorobenzene	ug/l	1	U	1	U	1	U
SW8260C	1,2-Dibromo-3-chloropropane	ug/l	1	U	1	U	1	U
SW8260C	1,2-Dibromoethane	ug/l	1	U	1	U	1	U
SW8260C	1,2-Dichlorobenzene	ug/l	1	U	1	U	1	U
SW8260C	1,2-Dichloroethane	ug/l	1	U	1	U	1	U
SW8260C	1,2-Dichloropropane	ug/l	1	U	1	U	1	U
SW8260C	1,3-Dichlorobenzene	ug/l	1	U	1	U	1	U
SW8260C	1,4-Dichlorobenzene	ug/l	1	U	1	U	1	U
SW8260C	1,4-Dioxane	ug/l	40	U	40	U	40	U
SW8260C	2-Butanone	ug/l	10	U	10	U	10	U
SW8260C	2-Hexanone	ug/l	5	U	5	U	5	U
SW8260C	4-Methyl-2-pentanone	ug/l	5	U	5	U	5	U
SW8260C	Acetic acid, methyl ester	ug/l	2.5	U	2.5	U	2.5	U
SW8260C	Acetone	ug/l	10	U	10	U	10	U
SW8260C	Benzene	ug/l	1	U	1	U	1	U
SW8260C	Bromochloromethane	ug/l	1	U	1	U	1	U

TABLE 2 - SUMMARY OF ANALYTICAL RESULTS
DATA USABILITY SUMMARY REPORT
JULY 2020 GROUNDWATER SAMPLING
DINABURG DISTRIBUTING, INC.
OPERABLE UNIT 2
ROCHESTER, NEW YORK

		Location	MW-22K		MW-23K		MW-24K	
		Lab SDG	480-172474-1		480-172474-1		480-172474-1	
		Sample Date	7/15/2020		7/14/2020		7/14/2020	
		Sample ID	828103-MW22K028		828103-MW23K025		828103-MW24K025	
		Qc Code	FS		FS		FS	
Method	**Parameter**	**Units**	Result	Qualifier	Result	Qualifier	Result	Qualifier
SW8260C	Bromodichloromethane	ug/l	1	U	1	U	1	U
SW8260C	Bromoform	ug/l	1	U	1	U	1	U
SW8260C	Bromomethane	ug/l	1	U	1	U	1	U
SW8260C	Carbon disulfide	ug/l	1	U	1	U	1	U
SW8260C	Carbon tetrachloride	ug/l	1	U	1	U	1	U
SW8260C	Chlorobenzene	ug/l	1	U	1	U	1	U
SW8260C	Chloroethane	ug/l	1	U	1	U	1	U
SW8260C	Chloroform	ug/l	1	U	1	U	1	U
SW8260C	Chloromethane	ug/l	1	U	1	U	1	U
SW8260C	cis-1,2-Dichloroethene	ug/l	97		1	U	1	U
SW8260C	cis-1,3-Dichloropropene	ug/l	1	U	1	U	1	U
SW8260C	Cyclohexane	ug/l	1	U	1	U	1	U
SW8260C	Dibromochloromethane	ug/l	1	U	1	U	1	U
SW8260C	Dichlorodifluoromethane	ug/l	1	U	1	U	1	U
SW8260C	Ethylbenzene	ug/l	1	U	1	U	1	U
SW8260C	Isopropylbenzene	ug/l	1	U	1	U	1	U
SW8260C	Methyl cyclohexane	ug/l	1	U	1	U	1	U
SW8260C	Methyl Tertbutyl Ether	ug/l	1	U	1	U	1	U
SW8260C	Methylene chloride	ug/l	1	U	1	U	1	U
SW8260C	Styrene	ug/l	1	U	1	U	1	U
SW8260C	Tetrachloroethene	ug/l	13		1	U	1	U
SW8260C	Toluene	ug/l	1	U	1	U	1	U
SW8260C	trans-1,2-Dichloroethene	ug/l	1	U	1	U	1	U

TABLE 2 - SUMMARY OF ANALYTICAL RESULTS
DATA USABILITY SUMMARY REPORT
JULY 2020 GROUNDWATER SAMPLING
DINABURG DISTRIBUTING, INC.
OPERABLE UNIT 2
ROCHESTER, NEW YORK

		Location	MW-22K		MW-23K		MW-24K	
		Lab SDG	480-172474-1		480-172474-1		480-172474-1	
		Sample Date	7/15/2020		7/14/2020		7/14/2020	
		Sample ID	828103-MW22K028		828103-MW23K025		828103-MW24K025	
		Qc Code	FS		FS		FS	
Method	**Parameter**	**Units**	Result	Qualifier	Result	Qualifier	Result	Qualifier
SW8260C	trans-1,3-Dichloropropene	ug/l	1	U	1	U	1	U
SW8260C	Trichloroethene	ug/l	21		1	U	1	U
SW8260C	Trichlorofluoromethane	ug/l	1	U	1	U	1	U
SW8260C	Vinyl chloride	ug/l	5.4		1	U	1	U
SW8260C	Xylenes, Total	ug/l	2	U	2	U	2	U

TABLE 2 - SUMMARY OF ANALYTICAL RESULTS
DATA USABILITY SUMMARY REPORT
JULY 2020 GROUNDWATER SAMPLING
DINABURG DISTRIBUTING, INC.
OPERABLE UNIT 2
ROCHESTER, NEW YORK

		Location	PZ-22S		PZ-24S		QC	
		Lab SDG	480-172474-1		480-172474-1		480-172474-1	
		Sample Date	7/15/2020		7/14/2020		7/14/2020	
		Sample ID	828103-PZ22S010		828103-PZ24S010		828103-TRIPBLANK #1	
		Qc Code	FS		FS		TB	
Method	**Parameter**	**Units**	Result	Qualifier	Result	Qualifier	Result	Qualifier
SW8260C	1,1,1-Trichloroethane	ug/l	1	U	1	U	1	U
SW8260C	1,1,2,2-Tetrachloroethane	ug/l	1	U	1	U	1	U
SW8260C	1,1,2-Trichloro-1,2,2-Trifluoroethane (Freon 113)	ug/l	1	U	1	U	1	U
SW8260C	1,1,2-Trichloroethane	ug/l	1	U	1	U	1	U
SW8260C	1,1-Dichloroethane	ug/l	1	U	1	U	1	U
SW8260C	1,1-Dichloroethene	ug/l	1	U	1	U	1	U
SW8260C	1,2,3-Trichlorobenzene	ug/l	1	U	1	U	1	U
SW8260C	1,2,4-Trichlorobenzene	ug/l	1	U	1	U	1	U
SW8260C	1,2-Dibromo-3-chloropropane	ug/l	1	U	1	U	1	U
SW8260C	1,2-Dibromoethane	ug/l	1	U	1	U	1	U
SW8260C	1,2-Dichlorobenzene	ug/l	1	U	1	U	1	U
SW8260C	1,2-Dichloroethane	ug/l	1	U	1	U	1	U
SW8260C	1,2-Dichloropropane	ug/l	1	U	1	U	1	U
SW8260C	1,3-Dichlorobenzene	ug/l	1	U	1	U	1	U
SW8260C	1,4-Dichlorobenzene	ug/l	1	U	1	U	1	U
SW8260C	1,4-Dioxane	ug/l	40	U	40	U	40	U
SW8260C	2-Butanone	ug/l	10	U	10	U	10	U
SW8260C	2-Hexanone	ug/l	5	U	5	U	5	U
SW8260C	4-Methyl-2-pentanone	ug/l	5	U	5	U	5	U
SW8260C	Acetic acid, methyl ester	ug/l	2.5	U	2.5	U	2.5	U
SW8260C	Acetone	ug/l	10	U	10	U	4.2	J
SW8260C	Benzene	ug/l	1	U	1	U	1	U
SW8260C	Bromochloromethane	ug/l	1	U	1	U	1	U

TABLE 2 - SUMMARY OF ANALYTICAL RESULTS
DATA USABILITY SUMMARY REPORT
JULY 2020 GROUNDWATER SAMPLING
DINABURG DISTRIBUTING, INC.
OPERABLE UNIT 2
ROCHESTER, NEW YORK

		Location	PZ-22S		PZ-24S		QC	
		Lab SDG	480-172474-1		480-172474-1		480-172474-1	
		Sample Date	7/15/2020		7/14/2020		7/14/2020	
		Sample ID	828103-PZ22S010		828103-PZ24S010		828103-TRIPBLANK #1	
		Qc Code	FS		FS		TB	
Method	**Parameter**	**Units**	Result	Qualifier	Result	Qualifier	Result	Qualifier
SW8260C	Bromodichloromethane	ug/l	1	U	1	U	1	U
SW8260C	Bromoform	ug/l	1	U	1	U	1	U
SW8260C	Bromomethane	ug/l	1	U	1	U	1	U
SW8260C	Carbon disulfide	ug/l	1	U	1	U	1	U
SW8260C	Carbon tetrachloride	ug/l	1	U	1	U	1	U
SW8260C	Chlorobenzene	ug/l	1	U	1	U	1	U
SW8260C	Chloroethane	ug/l	1	U	1	U	1	U
SW8260C	Chloroform	ug/l	1	U	1	U	1	U
SW8260C	Chloromethane	ug/l	1	U	1	U	1	U
SW8260C	cis-1,2-Dichloroethene	ug/l	1	U	1	U	1	U
SW8260C	cis-1,3-Dichloropropene	ug/l	1	U	1	U	1	U
SW8260C	Cyclohexane	ug/l	1	U	1	U	1	U
SW8260C	Dibromochloromethane	ug/l	1	U	1	U	1	U
SW8260C	Dichlorodifluoromethane	ug/l	1	U	1	U	1	U
SW8260C	Ethylbenzene	ug/l	1	U	1	U	1	U
SW8260C	Isopropylbenzene	ug/l	1	U	1	U	1	U
SW8260C	Methyl cyclohexane	ug/l	1	U	1	U	1	U
SW8260C	Methyl Tertbutyl Ether	ug/l	1	U	1	U	1	U
SW8260C	Methylene chloride	ug/l	1	U	1	U	1	U
SW8260C	Styrene	ug/l	1	U	1	U	1	U
SW8260C	Tetrachloroethene	ug/l	1	U	1	U	1	U
SW8260C	Toluene	ug/l	1	U	1	U	1	U
SW8260C	trans-1,2-Dichloroethene	ug/l	1	U	1	U	1	U

TABLE 2 - SUMMARY OF ANALYTICAL RESULTS
DATA USABILITY SUMMARY REPORT
JULY 2020 GROUNDWATER SAMPLING
DINABURG DISTRIBUTING, INC.
OPERABLE UNIT 2
ROCHESTER, NEW YORK

		Location	PZ-22S		PZ-24S		QC	
		Lab SDG	480-172474-1		480-172474-1		480-172474-1	
		Sample Date	7/15/2020		7/14/2020		7/14/2020	
		Sample ID	828103-PZ22S010		828103-PZ24S010		828103-TRIPBLANK #1	
		Qc Code	FS		FS		TB	
Method	**Parameter**	**Units**	Result	Qualifier	Result	Qualifier	Result	Qualifier
SW8260C	trans-1,3-Dichloropropene	ug/l	1	U	1	U	1	U
SW8260C	Trichloroethene	ug/l	1	U	1	U	1	U
SW8260C	Trichlorofluoromethane	ug/l	1	U	1	U	1	U
SW8260C	Vinyl chloride	ug/l	1	U	1	U	1	U
SW8260C	Xylenes, Total	ug/l	2	U	2	U	2	U

TABLE 2 - SUMMARY OF ANALYTICAL RESULTS
DATA USABILITY SUMMARY REPORT
JULY 2020 GROUNDWATER SAMPLING
DINABURG DISTRIBUTING, INC.
OPERABLE UNIT 2
ROCHESTER, NEW YORK

		Location	QC	
		Lab SDG	480-172646-1	
		Sample Date	7/15/2020	
		Sample ID	TRIP BLANK 2	
		Qc Code	TB	
Method	**Parameter**	**Units**	Result	Qualifier
SW8260C	1,1,1-Trichloroethane	ug/l	1	U
SW8260C	1,1,2,2-Tetrachloroethane	ug/l	1	U
SW8260C	1,1,2-Trichloro-1,2,2-Trifluoroethane (Freon 113)	ug/l	1	U
SW8260C	1,1,2-Trichloroethane	ug/l	1	U
SW8260C	1,1-Dichloroethane	ug/l	1	U
SW8260C	1,1-Dichloroethene	ug/l	1	U
SW8260C	1,2,3-Trichlorobenzene	ug/l	1	U
SW8260C	1,2,4-Trichlorobenzene	ug/l	1	U
SW8260C	1,2-Dibromo-3-chloropropane	ug/l	1	U
SW8260C	1,2-Dibromoethane	ug/l	1	U
SW8260C	1,2-Dichlorobenzene	ug/l	1	U
SW8260C	1,2-Dichloroethane	ug/l	1	U
SW8260C	1,2-Dichloropropane	ug/l	1	U
SW8260C	1,3-Dichlorobenzene	ug/l	1	U
SW8260C	1,4-Dichlorobenzene	ug/l	1	U
SW8260C	1,4-Dioxane	ug/l	40	U
SW8260C	2-Butanone	ug/l	10	U
SW8260C	2-Hexanone	ug/l	5	U
SW8260C	4-Methyl-2-pentanone	ug/l	5	U
SW8260C	Acetic acid, methyl ester	ug/l	2.5	U
SW8260C	Acetone	ug/l	10	U
SW8260C	Benzene	ug/l	1	U
SW8260C	Bromochloromethane	ug/l	1	U

TABLE 2 - SUMMARY OF ANALYTICAL RESULTS
DATA USABILITY SUMMARY REPORT
JULY 2020 GROUNDWATER SAMPLING
DINABURG DISTRIBUTING, INC.
OPERABLE UNIT 2
ROCHESTER, NEW YORK

		Location	QC	
		Lab SDG	480-172646-1	
		Sample Date	7/15/2020	
		Sample ID	TRIP BLANK 2	
		Qc Code	TB	
Method	Parameter	Units	Result	Qualifier
SW8260C	Bromodichloromethane	ug/l	1	U
SW8260C	Bromoform	ug/l	1	U
SW8260C	Bromomethane	ug/l	1	U
SW8260C	Carbon disulfide	ug/l	1	U
SW8260C	Carbon tetrachloride	ug/l	1	U
SW8260C	Chlorobenzene	ug/l	1	U
SW8260C	Chloroethane	ug/l	1	U
SW8260C	Chloroform	ug/l	1	U
SW8260C	Chloromethane	ug/l	1	U
SW8260C	cis-1,2-Dichloroethene	ug/l	1	U
SW8260C	cis-1,3-Dichloropropene	ug/l	1	U
SW8260C	Cyclohexane	ug/l	1	U
SW8260C	Dibromochloromethane	ug/l	1	U
SW8260C	Dichlorodifluoromethane	ug/l	1	U
SW8260C	Ethylbenzene	ug/l	1	U
SW8260C	Isopropylbenzene	ug/l	1	U
SW8260C	Methyl cyclohexane	ug/l	1	U
SW8260C	Methyl Tertbutyl Ether	ug/l	1	U
SW8260C	Methylene chloride	ug/l	1	U
SW8260C	Styrene	ug/l	1	U
SW8260C	Tetrachloroethene	ug/l	1	U
SW8260C	Toluene	ug/l	1	U
SW8260C	trans-1,2-Dichloroethene	ug/l	1	U

TABLE 2 - SUMMARY OF ANALYTICAL RESULTS
DATA USABILITY SUMMARY REPORT
JULY 2020 GROUNDWATER SAMPLING
DINABURG DISTRIBUTING, INC.
OPERABLE UNIT 2
ROCHESTER, NEW YORK

		Location	QC	
		Lab SDG	480-172646-1	
		Sample Date	7/15/2020	
		Sample ID	TRIP BLANK 2	
		Qc Code	TB	
Method	**Parameter**	**Units**	Result	Qualifier
SW8260C	trans-1,3-Dichloropropene	ug/l	1	U
SW8260C	Trichloroethene	ug/l	1	U
SW8260C	Trichlorofluoromethane	ug/l	1	U
SW8260C	Vinyl chloride	ug/l	1	U
SW8260C	Xylenes, Total	ug/l	2	U

Created by: KMS 8/13/2020
Checked by: MAD 8/13/2020

ATTACHMENT A
SUMMARY OF VALIDATION QC LIMITS FOR SURROGATES, SPIKES, AND DUPLICATES
BASED ON THE REGION 2 VALIDATION GUIDELINES

PARAMETER	QC TEST	ANALYTE	WATER (%R)	Water (RPD)
Volatiles	Surrogate	All Surrogate Compounds	80 - 120	
	LCS	All Target Compounds	70 - 130	
	MS/MSD	All Target Compounds	70 - 130	20
	Field Duplicate	All Target Compounds		50

Notes:
LCS - Laboratory Control Sample
MS/MSD - Matrix spike/ Matrix Spike Duplicate
RPD = Relative percent difference
%R = percent recovery
QC Limits are based on USEPA Region II Data Validation Guidelines and Project QA/QC Objectives

ATTACHMENT B

VOCs

NYSDEC DUSR PROJECT CHEMIST REVIEW RECORD

Project: Dinaburg July 2020 GW

Method: VOCs 8260C

Laboratory: TAL Buffalo **SDG(s):** J172474-1 and J172646-1

Date: 8/11/20

Reviewer: Madison Dinsmore

Review Level [X] NYSDEC DUSR [ ] USEPA Region II Guideline

Check if Reviewed

1. [✔] **Case Narrative Review and COC/Data Package Completeness**
Were problems noted? YES [✔] NO [ ]

Are Field Sample IDs and Locations assigned correctly? YES [ ] NO [✔]

Were all the samples on the COC analyzed for the requested analyses? YES [✔] NO [ ]

828103-MWKA022 + dup recorded on COC incorrectly - changed to 828103-MW14KA022 + dup in validation

2. [✔] **Holding time and Sample Collection**
All samples were analyzed within the 14-day holding time. YES [✔] NO [ ]

3. [✔] **QC Blanks**
Are method blanks free of contamination? YES [✔] NO [ ]

Are Trip blanks free of contamination? YES [ ] NO [✔]

Are Rinse blanks free of contamination? YES [ ] NO [ ] NA [✔]

TB #1 Acetone (J) - ND in all FS -ok, TB #2 - ok

4. [✔] **Instrument Tuning – Data Package Narrative Review**
Did the laboratory narrative identify any results that were not within method criteria?
YES [ ] NO [✔]

If yes, use professional judgment to evaluate data and qualify results if needed

5. [✔] **Instrument Calibration – Data Package Narrative Review**
Did the laboratory narrative identify compounds that were not within criteria in the initial and/or continuing calibration standards? YES [✔] NO [ ]

Initial Calibration %RSD = 20% **(30% for 1,1-DCE, chloroform, 1,2-DCP, toluene, ethylbenzene, VC)**
Initial Avg RRF and Continuing RRF should be ≥ 0.05 and 0.10 for Chloromethane, 1,1-Dichloroethane, Bromoform and 0.30 for Chlorobenzene and 1,1,2,2-Tetrachloroethane

Continuing Calibration %D = 20%

Did the laboratory qualify results based on initial or continuing calibration exceedances?
YES [ ] NO [✔]

If yes to above, use professional judgment to evaluate data and qualify results if needed

6. **Internal Standards – Data Package Narrative Review**
(Area Limits = -50% to +100%, RTs within 30 seconds of daily CCAL standard (or ICAL mid-point if samples follow ICAL)

Did the laboratory narrative identify any sample internal standards that were not within criteria? YES ☐ NO ☑

Did the laboratory qualify results based on internal standard exceedances? YES ☐ NO ☑
If yes to above, use professional judgment to evaluate data and qualify results if needed

7. ☑ **Surrogate Recovery** - Region II limits (water 80-120%, soil 70-130%)
Were all results within Region II limits? YES ☑ NO ☐

8. ☑ **Matrix Spike** - Region II limits (water and soil 70-130%, water RPD 20, soil RPD 35)
Were MS/MSDs submitted/analyzed? YES ☑ NO ☐

Were all results within the Region II limits? YES ☐ NO ☑ NA ☐

828103-MW040020 - OK- no quals, see attached, 828103-MW08K - OK

9. ☑ **Duplicates** - Region II Limits (water RPD 50, soil RPD 100)
Were Field Duplicates submitted/analyzed? YES ☑ NO ☐

Were all results within Region II limits? (soil RPD<100, water RPD<50) YES ☑ NO ☐ NA ☐

MW125010 - all ND - ok, MW14KA022

10. ☑ **Laboratory Control Sample Results** - Region II (Water and soil 70-130%)
Were all results within Region II control limits? YES ☑ NO ☐

11. ☑ **Reporting Limits:** Were samples analyzed at a dilution? YES ☑ NO ☐

828103-MW13K018, 828103-MW10K018, 828103-MW15S010, 828103-MW15K022 + subset in J172646

12. ☑ **Raw Data Review and Calculation Checks**

13. ☑ **Electronic Data Review and Edits**
Does the EDD match the Form Is? YES ☑ NO ☐

14. ☑ **Tables and TIC Review**
Table 1 (Samples and Analytical Methods)
Table 2 (Analytical Results)
Table 3 (Qualification Actions)
Were all tables produced and reviewed? YES ☑ NO ☐

Table 4 (TICs) Did lab report TICs? YES ☐ NO ☑

Sample Summary

Client: Wood E&I Solutions Inc
Project/Site: NYSDEC Dinaburg Dist. site

Job ID: 480-172474-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
480-172474-1	828103-MW06018	Water	07/14/20 09:20	07/16/20 10:30	
480-172474-2	828103-MW10S012	Water	07/14/20 10:50	07/16/20 10:30	
480-172474-3	828103-MW050020	Water	07/14/20 15:40	07/16/20 10:30	
480-172474-4	828103-MW13K018	Water	07/14/20 17:25	07/16/20 10:30	
480-172474-5	828103-MW24K025	Water	07/14/20 09:40	07/16/20 10:30	
480-172474-6	828103-PZ24S010	Water	07/14/20 10:35	07/16/20 10:30	
480-172474-7	828103-MW11S010	Water	07/14/20 12:40	07/16/20 10:30	
480-172474-8	828103-MW12K018	Water	07/14/20 14:50	07/16/20 10:30	
480-172474-9	828103-MW23K025	Water	07/14/20 16:50	07/16/20 10:30	
480-172474-10	828103-MW10K018	Water	07/15/20 08:10	07/16/20 10:30	
480-172474-11	828103-MW08K	Water	07/15/20 10:00	07/16/20 10:30	
480-172474-12	828103-MW08S011	Water	07/15/20 11:45	07/16/20 10:30	
480-172474-13	828103-MW22K028	Water	07/15/20 14:50	07/16/20 10:30	
480-172474-14	828103-PZ22S010	Water	07/15/20 15:00	07/16/20 10:30	
480-172474-15	828103-MW15S010	Water	07/15/20 17:05	07/16/20 10:30	
480-172474-16	828103-TRIPBLANK #1	Water	07/14/20 12:00	07/16/20 10:30	
480-172474-17	828103-MW09S012	Water	07/15/20 09:10	07/16/20 10:30	
480-172474-18	828103-MW09K018	Water	07/15/20 11:35	07/16/20 10:30	
480-172474-19	828103-MW12S010	Water	07/15/20 13:30	07/16/20 10:30	
480-172474-20	828103-MW12S010D	Water	07/15/20 13:30	07/16/20 10:30	
480-172474-21	828103-MW040020	Water	07/15/20 15:40	07/16/20 10:30	
480-172474-22	828103-MW15K022	Water	07/15/20 18:10	07/16/20 10:30	

Job Narrative
480-172474-1

Comments
No additional comments.

Receipt
The samples were received on 7/16/2020 10:30 AM; the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 3.5º C.

GC/MS VOA
Method 8260C: The following samples were diluted to bring the concentration of target analytes within the calibration range: 828103-MW13K018 (480-172474-4) and 828103-MW10K018 (480-172474-10). Elevated reporting limits (RLs) are provided. memo

Method 8260C: The continuing calibration verification (CCV) associated with batch 480-541984 recovered above the upper control limit for 2-Hexanone and 4-Methyl-2-pentanone (MIBK). The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated samples are impacted: 828103-MW24K025 (480-172474-5), 828103-PZ24S010 (480-172474-6), 828103-MW15S010 (480-172474-15), 828103-TRIPBLANK #1 (480-172474-16), 828103-MW09S012 (480-172474-17), 828103-MW09K018 (480-172474-18), 828103-MW12S010 (480-172474-19), 828103-MW12S010D (480-172474-20), 828103-MW040020 (480-172474-21) and 828103-MW15K022 (480-172474-22). OK

Method 8260C: The following samples were diluted to bring the concentration of target analytes within the calibration range: 828103-MW15S010 (480-172474-15) and 828103-MW15K022 (480-172474-22). Elevated reporting limits (RLs) are provided. memo

Method 8260C: The continuing calibration verification (CCV) associated with batch 480-541690 recovered above the upper control limit for 2-Hexanone and 4-Methyl-2-pentanone (MIBK). The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated samples are impacted: 828103-MW06018 (480-172474-1), 828103-MW10S012 (480-172474-2), 828103-MW050020 (480-172474-3), 828103-MW13K018 (480-172474-4), 828103-MW11S010 (480-172474-7), 828103-MW12K018 (480-172474-8), 828103-MW23K025 (480-172474-9), 828103-MW10K018 (480-172474-10), 828103-MW08K (480-172474-11), 828103-MW08S011 (480-172474-12), 828103-MW22K028 (480-172474-13) and 828103-PZ22S010 (480-172474-14). OK

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Client Sample ID: 828103-TRIPBLANK #1
Lab Sample ID: 480-172474-16

Date Collected: 07/14/20 12:00
Matrix: Water

Date Received: 07/16/20 10:30

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			07/24/20 14:52	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			07/24/20 14:52	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			07/24/20 14:52	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			07/24/20 14:52	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			07/24/20 14:52	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			07/24/20 14:52	1
1,2,3-Trichlorobenzene	ND		1.0	0.41	ug/L			07/24/20 14:52	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			07/24/20 14:52	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			07/24/20 14:52	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			07/24/20 14:52	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			07/24/20 14:52	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			07/24/20 14:52	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			07/24/20 14:52	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			07/24/20 14:52	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			07/24/20 14:52	1
1,4-Dioxane	ND		40	9.3	ug/L			07/24/20 14:52	1
2-Butanone (MEK)	ND		10	1.3	ug/L			07/24/20 14:52	1
2-Hexanone	ND		5.0	1.2	ug/L			07/24/20 14:52	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			07/24/20 14:52	1
Acetone	**4.2**	**J**	10	3.0	ug/L			07/24/20 14:52	1
Benzene	ND		1.0	0.41	ug/L			07/24/20 14:52	1
Bromodichloromethane	ND		1.0	0.39	ug/L			07/24/20 14:52	1
Bromoform	ND		1.0	0.26	ug/L			07/24/20 14:52	1
Bromomethane	ND		1.0	0.69	ug/L			07/24/20 14:52	1
Carbon disulfide	ND		1.0	0.19	ug/L			07/24/20 14:52	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			07/24/20 14:52	1
Chlorobenzene	ND		1.0	0.75	ug/L			07/24/20 14:52	1
Chlorobromomethane	ND		1.0	0.87	ug/L			07/24/20 14:52	1
Chloroethane	ND		1.0	0.32	ug/L			07/24/20 14:52	1
Chloroform	ND		1.0	0.34	ug/L			07/24/20 14:52	1
Chloromethane	ND		1.0	0.35	ug/L			07/24/20 14:52	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			07/24/20 14:52	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			07/24/20 14:52	1
Cyclohexane	ND		1.0	0.18	ug/L			07/24/20 14:52	1
Dibromochloromethane	ND		1.0	0.32	ug/L			07/24/20 14:52	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			07/24/20 14:52	1
Ethylbenzene	ND		1.0	0.74	ug/L			07/24/20 14:52	1
Isopropylbenzene	ND		1.0	0.79	ug/L			07/24/20 14:52	1
Methyl acetate	ND		2.5	1.3	ug/L			07/24/20 14:52	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			07/24/20 14:52	1
Methylcyclohexane	ND		1.0	0.16	ug/L			07/24/20 14:52	1
Methylene Chloride	ND		1.0	0.44	ug/L			07/24/20 14:52	1
Styrene	ND		1.0	0.73	ug/L			07/24/20 14:52	1
Tetrachloroethene	ND		1.0	0.36	ug/L			07/24/20 14:52	1
Toluene	ND		1.0	0.51	ug/L			07/24/20 14:52	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			07/24/20 14:52	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			07/24/20 14:52	1
Trichloroethene	ND		1.0	0.46	ug/L			07/24/20 14:52	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			07/24/20 14:52	1

ND in all Field samples - no impact no qual

Client Sample ID: 828103-MW13K018
Date Collected: 07/14/20 17:25
Date Received: 07/16/20 10:30

Lab Sample ID: 480-172474-4
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		130	100	ug/L			07/23/20 14:10	125
1,1,2,2-Tetrachloroethane	ND		130	26	ug/L			07/23/20 14:10	125
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		130	39	ug/L		MEMO DILUTIONS	07/23/20 14:10	125
1,1,2-Trichloroethane	ND		130	29	ug/L			07/23/20 14:10	125
1,1-Dichloroethane	ND		130	48	ug/L			07/23/20 14:10	125
1,1-Dichloroethene	ND		130	36	ug/L			07/23/20 14:10	125
1,2,3-Trichlorobenzene	ND		130	51	ug/L			07/23/20 14:10	125
1,2,4-Trichlorobenzene	ND		130	51	ug/L			07/23/20 14:10	125
1,2-Dibromo-3-Chloropropane	ND		130	49	ug/L			07/23/20 14:10	125
1,2-Dibromoethane	ND		130	91	ug/L			07/23/20 14:10	125
1,2-Dichlorobenzene	ND		130	99	ug/L			07/23/20 14:10	125
1,2-Dichloroethane	ND		130	26	ug/L			07/23/20 14:10	125
1,2-Dichloropropane	ND		130	90	ug/L			07/23/20 14:10	125
1,3-Dichlorobenzene	ND		130	98	ug/L			07/23/20 14:10	125
1,4-Dichlorobenzene	ND		130	110	ug/L			07/23/20 14:10	125
1,4-Dioxane	ND		5000	1200	ug/L			07/23/20 14:10	125
2-Butanone (MEK)	ND		1300	170	ug/L			07/23/20 14:10	125
2-Hexanone	ND		630	160	ug/L			07/23/20 14:10	125
4-Methyl-2-pentanone (MIBK)	ND		630	260	ug/L			07/23/20 14:10	125
Acetone	ND		1300	380	ug/L			07/23/20 14:10	125
Benzene	ND		130	51	ug/L			07/23/20 14:10	125
Bromodichloromethane	ND		130	49	ug/L			07/23/20 14:10	125
Bromoform	ND		130	33	ug/L			07/23/20 14:10	125
Bromomethane	ND		130	86	ug/L			07/23/20 14:10	125
Carbon disulfide	ND		130	24	ug/L			07/23/20 14:10	125
Carbon tetrachloride	ND		130	34	ug/L			07/23/20 14:10	125
Chlorobenzene	ND		130	94	ug/L			07/23/20 14:10	125
Chlorobromomethane	ND		130	110	ug/L			07/23/20 14:10	125
Chloroethane	ND		130	40	ug/L			07/23/20 14:10	125
Chloroform	ND		130	43	ug/L			07/23/20 14:10	125
Chloromethane	ND		130	44	ug/L			07/23/20 14:10	125
cis-1,2-Dichloroethene	**3100**		130	100	ug/L			07/23/20 14:10	125
cis-1,3-Dichloropropene	ND		130	45	ug/L			07/23/20 14:10	125
Cyclohexane	ND		130	23	ug/L			07/23/20 14:10	125
Dibromochloromethane	ND		130	40	ug/L			07/23/20 14:10	125
Dichlorodifluoromethane	ND		130	85	ug/L			07/23/20 14:10	125
Ethylbenzene	ND		130	93	ug/L			07/23/20 14:10	125
Isopropylbenzene	ND		130	99	ug/L			07/23/20 14:10	125
Methyl acetate	ND		310	160	ug/L			07/23/20 14:10	125
Methyl tert-butyl ether	ND		130	20	ug/L			07/23/20 14:10	125
Methylcyclohexane	ND		130	20	ug/L			07/23/20 14:10	125
Methylene Chloride	ND		130	55	ug/L			07/23/20 14:10	125
Styrene	ND		130	91	ug/L			07/23/20 14:10	125
Tetrachloroethene	**4300**		130	45	ug/L			07/23/20 14:10	125
Toluene	ND		130	64	ug/L			07/23/20 14:10	125
trans-1,2-Dichloroethene	ND		130	110	ug/L			07/23/20 14:10	125
trans-1,3-Dichloropropene	ND		130	46	ug/L			07/23/20 14:10	125
Trichloroethene	**1500**		130	58	ug/L			07/23/20 14:10	125
Trichlorofluoromethane	ND		130	110	ug/L			07/23/20 14:10	125

Client Sample ID: 828103-MW10K018
Lab Sample ID: 480-172474-10

Date Collected: 07/15/20 08:10
Matrix: Water

Date Received: 07/16/20 10:30

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		10	8.2	ug/L			07/23/20 16:35	10
1,1,2,2-Tetrachloroethane	ND		10	2.1	ug/L		MEMO DILUTIONS	07/23/20 16:35	10
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		10	3.1	ug/L			07/23/20 16:35	10
1,1,2-Trichloroethane	ND		10	2.3	ug/L			07/23/20 16:35	10
1,1-Dichloroethane	**5.8**	**J**	10	3.8	ug/L			07/23/20 16:35	10
1,1-Dichloroethene	ND		10	2.9	ug/L			07/23/20 16:35	10
1,2,3-Trichlorobenzene	ND		10	4.1	ug/L			07/23/20 16:35	10
1,2,4-Trichlorobenzene	ND		10	4.1	ug/L			07/23/20 16:35	10
1,2-Dibromo-3-Chloropropane	ND		10	3.9	ug/L			07/23/20 16:35	10
1,2-Dibromoethane	ND		10	7.3	ug/L			07/23/20 16:35	10
1,2-Dichlorobenzene	ND		10	7.9	ug/L			07/23/20 16:35	10
1,2-Dichloroethane	ND		10	2.1	ug/L			07/23/20 16:35	10
1,2-Dichloropropane	ND		10	7.2	ug/L			07/23/20 16:35	10
1,3-Dichlorobenzene	ND		10	7.8	ug/L			07/23/20 16:35	10
1,4-Dichlorobenzene	ND		10	8.4	ug/L			07/23/20 16:35	10
1,4-Dioxane	ND		400	93	ug/L			07/23/20 16:35	10
2-Butanone (MEK)	ND		100	13	ug/L			07/23/20 16:35	10
2-Hexanone	ND		50	12	ug/L			07/23/20 16:35	10
4-Methyl-2-pentanone (MIBK)	ND		50	21	ug/L			07/23/20 16:35	10
Acetone	ND		100	30	ug/L			07/23/20 16:35	10
Benzene	ND		10	4.1	ug/L			07/23/20 16:35	10
Bromodichloromethane	ND		10	3.9	ug/L			07/23/20 16:35	10
Bromoform	ND		10	2.6	ug/L			07/23/20 16:35	10
Bromomethane	ND		10	6.9	ug/L			07/23/20 16:35	10
Carbon disulfide	ND		10	1.9	ug/L			07/23/20 16:35	10
Carbon tetrachloride	ND		10	2.7	ug/L			07/23/20 16:35	10
Chlorobenzene	ND		10	7.5	ug/L			07/23/20 16:35	10
Chlorobromomethane	ND		10	8.7	ug/L			07/23/20 16:35	10
Chloroethane	ND		10	3.2	ug/L			07/23/20 16:35	10
Chloroform	ND		10	3.4	ug/L			07/23/20 16:35	10
Chloromethane	ND		10	3.5	ug/L			07/23/20 16:35	10
cis-1,2-Dichloroethene	**260**		10	8.1	ug/L			07/23/20 16:35	10
cis-1,3-Dichloropropene	ND		10	3.6	ug/L			07/23/20 16:35	10
Cyclohexane	ND		10	1.8	ug/L			07/23/20 16:35	10
Dibromochloromethane	ND		10	3.2	ug/L			07/23/20 16:35	10
Dichlorodifluoromethane	ND		10	6.8	ug/L			07/23/20 16:35	10
Ethylbenzene	ND		10	7.4	ug/L			07/23/20 16:35	10
Isopropylbenzene	ND		10	7.9	ug/L			07/23/20 16:35	10
Methyl acetate	ND		25	13	ug/L			07/23/20 16:35	10
Methyl tert-butyl ether	ND		10	1.6	ug/L			07/23/20 16:35	10
Methylcyclohexane	ND		10	1.6	ug/L			07/23/20 16:35	10
Methylene Chloride	ND		10	4.4	ug/L			07/23/20 16:35	10
Styrene	ND		10	7.3	ug/L			07/23/20 16:35	10
Tetrachloroethene	**67**		10	3.6	ug/L			07/23/20 16:35	10
Toluene	ND		10	5.1	ug/L			07/23/20 16:35	10
trans-1,2-Dichloroethene	ND		10	9.0	ug/L			07/23/20 16:35	10
trans-1,3-Dichloropropene	ND		10	3.7	ug/L			07/23/20 16:35	10
Trichloroethene	**490**		10	4.6	ug/L			07/23/20 16:35	10
Trichlorofluoromethane	ND		10	8.8	ug/L			07/23/20 16:35	10

Client Sample ID: 828103-MW15S010
Lab Sample ID: 480-172474-15

Date Collected: 07/15/20 17:05
Matrix: Water

Date Received: 07/16/20 10:30

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		2.0	1.6	ug/L			07/24/20 14:28	2
1,1,2,2-Tetrachloroethane	ND		2.0	0.42	ug/L		MEMO DILUTIONS	07/24/20 14:28	2
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		2.0	0.62	ug/L			07/24/20 14:28	2
1,1,2-Trichloroethane	ND		2.0	0.46	ug/L			07/24/20 14:28	2
1,1-Dichloroethane	ND		2.0	0.76	ug/L			07/24/20 14:28	2
1,1-Dichloroethene	ND		2.0	0.58	ug/L			07/24/20 14:28	2
1,2,3-Trichlorobenzene	ND		2.0	0.82	ug/L			07/24/20 14:28	2
1,2,4-Trichlorobenzene	ND		2.0	0.82	ug/L			07/24/20 14:28	2
1,2-Dibromo-3-Chloropropane	ND		2.0	0.78	ug/L			07/24/20 14:28	2
1,2-Dibromoethane	ND		2.0	1.5	ug/L			07/24/20 14:28	2
1,2-Dichlorobenzene	ND		2.0	1.6	ug/L			07/24/20 14:28	2
1,2-Dichloroethane	ND		2.0	0.42	ug/L			07/24/20 14:28	2
1,2-Dichloropropane	ND		2.0	1.4	ug/L			07/24/20 14:28	2
1,3-Dichlorobenzene	ND		2.0	1.6	ug/L			07/24/20 14:28	2
1,4-Dichlorobenzene	ND		2.0	1.7	ug/L			07/24/20 14:28	2
1,4-Dioxane	ND		80	19	ug/L			07/24/20 14:28	2
2-Butanone (MEK)	ND		20	2.6	ug/L			07/24/20 14:28	2
2-Hexanone	ND		10	2.5	ug/L			07/24/20 14:28	2
4-Methyl-2-pentanone (MIBK)	ND		10	4.2	ug/L			07/24/20 14:28	2
Acetone	ND		20	6.0	ug/L			07/24/20 14:28	2
Benzene	ND		2.0	0.82	ug/L			07/24/20 14:28	2
Bromodichloromethane	ND		2.0	0.78	ug/L			07/24/20 14:28	2
Bromoform	ND		2.0	0.52	ug/L			07/24/20 14:28	2
Bromomethane	ND		2.0	1.4	ug/L			07/24/20 14:28	2
Carbon disulfide	ND		2.0	0.38	ug/L			07/24/20 14:28	2
Carbon tetrachloride	ND		2.0	0.54	ug/L			07/24/20 14:28	2
Chlorobenzene	ND		2.0	1.5	ug/L			07/24/20 14:28	2
Chlorobromomethane	ND		2.0	1.7	ug/L			07/24/20 14:28	2
Chloroethane	ND		2.0	0.64	ug/L			07/24/20 14:28	2
Chloroform	ND		2.0	0.68	ug/L			07/24/20 14:28	2
Chloromethane	ND		2.0	0.70	ug/L			07/24/20 14:28	2
cis-1,2-Dichloroethene	**3.3**		2.0	1.6	ug/L			07/24/20 14:28	2
cis-1,3-Dichloropropene	ND		2.0	0.72	ug/L			07/24/20 14:28	2
Cyclohexane	ND		2.0	0.36	ug/L			07/24/20 14:28	2
Dibromochloromethane	ND		2.0	0.64	ug/L			07/24/20 14:28	2
Dichlorodifluoromethane	ND		2.0	1.4	ug/L			07/24/20 14:28	2
Ethylbenzene	ND		2.0	1.5	ug/L			07/24/20 14:28	2
Isopropylbenzene	ND		2.0	1.6	ug/L			07/24/20 14:28	2
Methyl acetate	ND		5.0	2.6	ug/L			07/24/20 14:28	2
Methyl tert-butyl ether	ND		2.0	0.32	ug/L			07/24/20 14:28	2
Methylcyclohexane	ND		2.0	0.32	ug/L			07/24/20 14:28	2
Methylene Chloride	ND		2.0	0.88	ug/L			07/24/20 14:28	2
Styrene	ND		2.0	1.5	ug/L			07/24/20 14:28	2
Tetrachloroethene	**150**		2.0	0.72	ug/L			07/24/20 14:28	2
Toluene	ND		2.0	1.0	ug/L			07/24/20 14:28	2
trans-1,2-Dichloroethene	ND		2.0	1.8	ug/L			07/24/20 14:28	2
trans-1,3-Dichloropropene	ND		2.0	0.74	ug/L			07/24/20 14:28	2
Trichloroethene	**82**		2.0	0.92	ug/L			07/24/20 14:28	2
Trichlorofluoromethane	ND		2.0	1.8	ug/L			07/24/20 14:28	2

Client Sample ID: 828103-MW15K022
Lab Sample ID: 480-172474-22

Date Collected: 07/15/20 18:10
Matrix: Water

Date Received: 07/16/20 10:30

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		20	16	ug/L			07/24/20 17:17	20
1,1,2,2-Tetrachloroethane	ND		20	4.2	ug/L		MEMO DILUTIONS	07/24/20 17:17	20
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		20	6.2	ug/L			07/24/20 17:17	20
1,1,2-Trichloroethane	ND		20	4.6	ug/L			07/24/20 17:17	20
1,1-Dichloroethane	**12**	**J**	20	7.6	ug/L			07/24/20 17:17	20
1,1-Dichloroethene	**11**	**J**	20	5.8	ug/L			07/24/20 17:17	20
1,2,3-Trichlorobenzene	ND		20	8.2	ug/L			07/24/20 17:17	20
1,2,4-Trichlorobenzene	ND		20	8.2	ug/L			07/24/20 17:17	20
1,2-Dibromo-3-Chloropropane	ND		20	7.8	ug/L			07/24/20 17:17	20
1,2-Dibromoethane	ND		20	15	ug/L			07/24/20 17:17	20
1,2-Dichlorobenzene	ND		20	16	ug/L			07/24/20 17:17	20
1,2-Dichloroethane	ND		20	4.2	ug/L			07/24/20 17:17	20
1,2-Dichloropropane	ND		20	14	ug/L			07/24/20 17:17	20
1,3-Dichlorobenzene	ND		20	16	ug/L			07/24/20 17:17	20
1,4-Dichlorobenzene	ND		20	17	ug/L			07/24/20 17:17	20
1,4-Dioxane	ND		800	190	ug/L			07/24/20 17:17	20
2-Butanone (MEK)	ND		200	26	ug/L			07/24/20 17:17	20
2-Hexanone	ND		100	25	ug/L			07/24/20 17:17	20
4-Methyl-2-pentanone (MIBK)	ND		100	42	ug/L			07/24/20 17:17	20
Acetone	ND		200	60	ug/L			07/24/20 17:17	20
Benzene	ND		20	8.2	ug/L			07/24/20 17:17	20
Bromodichloromethane	ND		20	7.8	ug/L			07/24/20 17:17	20
Bromoform	ND		20	5.2	ug/L			07/24/20 17:17	20
Bromomethane	ND		20	14	ug/L			07/24/20 17:17	20
Carbon disulfide	ND		20	3.8	ug/L			07/24/20 17:17	20
Carbon tetrachloride	ND		20	5.4	ug/L			07/24/20 17:17	20
Chlorobenzene	ND		20	15	ug/L			07/24/20 17:17	20
Chlorobromomethane	ND		20	17	ug/L			07/24/20 17:17	20
Chloroethane	ND		20	6.4	ug/L			07/24/20 17:17	20
Chloroform	ND		20	6.8	ug/L			07/24/20 17:17	20
Chloromethane	ND		20	7.0	ug/L			07/24/20 17:17	20
cis-1,2-Dichloroethene	**280**		20	16	ug/L			07/24/20 17:17	20
cis-1,3-Dichloropropene	ND		20	7.2	ug/L			07/24/20 17:17	20
Cyclohexane	ND		20	3.6	ug/L			07/24/20 17:17	20
Dibromochloromethane	ND		20	6.4	ug/L			07/24/20 17:17	20
Dichlorodifluoromethane	ND		20	14	ug/L			07/24/20 17:17	20
Ethylbenzene	ND		20	15	ug/L			07/24/20 17:17	20
Isopropylbenzene	ND		20	16	ug/L			07/24/20 17:17	20
Methyl acetate	ND		50	26	ug/L			07/24/20 17:17	20
Methyl tert-butyl ether	ND		20	3.2	ug/L			07/24/20 17:17	20
Methylcyclohexane	ND		20	3.2	ug/L			07/24/20 17:17	20
Methylene Chloride	ND		20	8.8	ug/L			07/24/20 17:17	20
Styrene	ND		20	15	ug/L			07/24/20 17:17	20
Tetrachloroethene	**930**		20	7.2	ug/L			07/24/20 17:17	20
Toluene	ND		20	10	ug/L			07/24/20 17:17	20
trans-1,2-Dichloroethene	ND		20	18	ug/L			07/24/20 17:17	20
trans-1,3-Dichloropropene	ND		20	7.4	ug/L			07/24/20 17:17	20
Trichloroethene	**420**		20	9.2	ug/L			07/24/20 17:17	20
Trichlorofluoromethane	ND		20	18	ug/L			07/24/20 17:17	20

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 480-541690/5
Matrix: Water
Analysis Batch: 541690

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyclohexane	25.0	22.1		ug/L		89	59 - 135
Dibromochloromethane	25.0	23.5		ug/L		94	75 - 125
Dichlorodifluoromethane	25.0	26.1		ug/L		104	59 - 135
Ethylbenzene	25.0	24.5		ug/L		98	77 - 123
Isopropylbenzene	25.0	24.2		ug/L		97	77 - 122
Methyl acetate	50.0	44.4		ug/L		89	74 - 133
Methyl tert-butyl ether	25.0	23.3		ug/L		93	77 - 120
Methylcyclohexane	25.0	21.5		ug/L		86	68 - 134
Methylene Chloride	25.0	21.9		ug/L		88	75 - 124
Styrene	25.0	25.0		ug/L		100	80 - 120
Tetrachloroethene	25.0	22.1		ug/L		88	74 - 122
Toluene	25.0	24.0		ug/L		96	80 - 122
trans-1,2-Dichloroethene	25.0	22.2		ug/L		89	73 - 127
trans-1,3-Dichloropropene	25.0	25.0		ug/L		100	80 - 120
Trichloroethene	25.0	22.7		ug/L		91	74 - 123
Trichlorofluoromethane	25.0	22.5		ug/L		90	62 - 150
Vinyl chloride	25.0	22.3		ug/L		89	65 - 133
Xylenes, Total	50.0	48.4		ug/L		97	76 - 122

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*96*		*77 - 120*
4-Bromofluorobenzene (Surr)	*96*		*73 - 120*
Dibromofluoromethane (Surr)	*93*		*75 - 123*
Toluene-d8 (Surr)	*99*		*80 - 120*

Lab Sample ID: 480-172474-11 MS
Matrix: Water
Analysis Batch: 541690

Client Sample ID: 828103-MW08K
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	ND		25.0	28.8		ug/L		115	73 - 126
1,1,2,2-Tetrachloroethane	ND		25.0	28.3		ug/L		113	76 - 120
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		25.0	28.1		ug/L		113	61 - 148
1,1,2-Trichloroethane	ND		25.0	28.7		ug/L		115	76 - 122
1,1-Dichloroethane	ND	F1	25.0	30.4	F1	ug/L		121	77 - 120
1,1-Dichloroethene	ND		25.0	29.3		ug/L		117	66 - 127
1,2,3-Trichlorobenzene	ND	Region 2 limits 70-130% - oK	25.0	26.6		ug/L		106	75 - 123
1,2,4-Trichlorobenzene	ND		25.0	26.3		ug/L		105	79 - 122
1,2-Dibromo-3-Chloropropane	ND		25.0	27.9		ug/L		112	56 - 134
1,2-Dibromoethane	ND		25.0	28.3		ug/L		113	77 - 120
1,2-Dichlorobenzene	ND		25.0	27.3		ug/L		109	80 - 124
1,2-Dichloroethane	ND		25.0	27.9		ug/L		112	75 - 120
1,2-Dichloropropane	ND	F1	25.0	30.8	F1	ug/L		123	76 - 120
1,3-Dichlorobenzene	ND		25.0	27.5		ug/L		110	77 - 120
1,4-Dichlorobenzene	ND		25.0	27.3		ug/L		109	78 - 124
1,4-Dioxane	ND		500	605		ug/L		121	50 - 150
2-Butanone (MEK)	ND		125	157		ug/L		126	57 - 140
2-Hexanone	ND	F1 high recovery- ND in sample - no impact - no qual	125	173	F1	ug/L		139	65 - 127

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 480-172474-11 MS
Matrix: Water
Analysis Batch: 541690

Client Sample ID: 828103-MW08K
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
4-Methyl-2-pentanone (MIBK)	ND	F1 recovery high ND in sample no impact - OK	125	169	F1	ug/L		135	71 - 125
Acetone	ND		125	150		ug/L		120	56 - 142
Benzene	ND		25.0	29.5		ug/L		118	71 - 124
Bromodichloromethane	ND		25.0	28.4		ug/L		114	80 - 122
Bromoform	ND		25.0	26.0		ug/L		104	61 - 132
Bromomethane	ND		25.0	27.1		ug/L		108	55 - 144
Carbon disulfide	ND		25.0	27.4		ug/L		110	59 - 134
Carbon tetrachloride	ND		25.0	27.2		ug/L		109	72 - 134
Chlorobenzene	ND		25.0	28.1		ug/L		112	80 - 120
Chlorobromomethane	ND		25.0	27.2		ug/L		109	72 - 130
Chloroethane	ND		25.0	27.0		ug/L		108	69 - 136
Chloroform	ND		25.0	27.7		ug/L		111	73 - 127
Chloromethane	ND	F1 OK reg 2 limits	25.0	31.6	F1	ug/L		126	68 - 124
cis-1,2-Dichloroethene	ND		25.0	29.3		ug/L		117	74 - 124
cis-1,3-Dichloropropene	ND		25.0	27.7		ug/L		111	74 - 124
Cyclohexane	ND		25.0	28.3		ug/L		113	59 - 135
Dibromochloromethane	ND		25.0	27.9		ug/L		112	75 - 125
Dichlorodifluoromethane	ND		25.0	28.1		ug/L		113	59 - 135
Ethylbenzene	ND		25.0	29.0		ug/L		116	77 - 123
Isopropylbenzene	ND		25.0	29.1		ug/L		116	77 - 122
Methyl acetate	ND		50.0	56.4		ug/L		113	74 - 133
Methyl tert-butyl ether	ND		25.0	28.4		ug/L		114	77 - 120
Methylcyclohexane	ND		25.0	26.7		ug/L		107	68 - 134
Methylene Chloride	ND		25.0	27.9		ug/L		112	75 - 124
Styrene	ND		25.0	29.0		ug/L		116	80 - 120
Tetrachloroethene	ND		25.0	27.5		ug/L		110	74 - 122
Toluene	ND		25.0	28.7		ug/L		115	80 - 122
trans-1,2-Dichloroethene	ND		25.0	29.7		ug/L		119	73 - 127
trans-1,3-Dichloropropene	ND		25.0	28.7		ug/L		115	80 - 120
Trichloroethene	ND		25.0	28.2		ug/L		113	74 - 123
Trichlorofluoromethane	ND		25.0	26.3		ug/L		105	62 - 150
Vinyl chloride	ND		25.0	27.0		ug/L		108	65 - 133
Xylenes, Total	ND		50.0	57.5		ug/L		115	76 - 122

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*99*		*77 - 120*
4-Bromofluorobenzene (Surr)	*96*		*73 - 120*
Dibromofluoromethane (Surr)	*94*		*75 - 123*
Toluene-d8 (Surr)	*100*		*80 - 120*

Lab Sample ID: 480-172474-11 MSD
Matrix: Water
Analysis Batch: 541690

Client Sample ID: 828103-MW08K
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane	ND		25.0	28.3		ug/L		113	73 - 126	2	15
1,1,2,2-Tetrachloroethane	ND		25.0	28.5		ug/L		114	76 - 120	1	15
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		25.0	26.7		ug/L		107	61 - 148	5	20

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 480-172474-11 MSD
Matrix: Water
Analysis Batch: 541690

Client Sample ID: 828103-MW08K
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,2-Trichloroethane	ND		25.0	29.1		ug/L		117	76 - 122	1	15
1,1-Dichloroethane	ND	F1 ok	25.0	30.5	F1	ug/L		122	77 - 120	0	20
1,1-Dichloroethene	ND		25.0	28.7		ug/L		115	66 - 127	2	16
1,2,3-Trichlorobenzene	ND		25.0	26.9		ug/L		107	75 - 123	1	20
1,2,4-Trichlorobenzene	ND		25.0	25.7		ug/L		103	79 - 122	2	20
1,2-Dibromo-3-Chloropropane	ND		25.0	28.9		ug/L		116	56 - 134	4	15
1,2-Dibromoethane	ND		25.0	29.3		ug/L		117	77 - 120	3	15
1,2-Dichlorobenzene	ND		25.0	27.3		ug/L		109	80 - 124	0	20
1,2-Dichloroethane	ND		25.0	27.8		ug/L		111	75 - 120	0	20
1,2-Dichloropropane	ND	F1 ok	25.0	30.5	F1	ug/L		122	76 - 120	1	20
1,3-Dichlorobenzene	ND		25.0	27.9		ug/L		111	77 - 120	1	20
1,4-Dichlorobenzene	ND		25.0	26.5		ug/L		106	78 - 124	3	20
1,4-Dioxane	ND		500	673		ug/L		135	50 - 150	11	20
2-Butanone (MEK)	ND		125	158		ug/L		127	57 - 140	1	20
2-Hexanone	ND	F1 High Rec	125	174	F1	ug/L		140	65 - 127	1	15
4-Methyl-2-pentanone (MIBK)	ND	F1 ND in sample OK	125	170	F1	ug/L		136	71 - 125	1	35
Acetone	ND		125	150		ug/L		120	56 - 142	0	15
Benzene	ND		25.0	28.9		ug/L		116	71 - 124	2	13
Bromodichloromethane	ND		25.0	28.6		ug/L		114	80 - 122	1	15
Bromoform	ND		25.0	26.8		ug/L		107	61 - 132	3	15
Bromomethane	ND		25.0	24.5		ug/L		98	55 - 144	10	15
Carbon disulfide	ND		25.0	27.5		ug/L		110	59 - 134	0	15
Carbon tetrachloride	ND		25.0	27.6		ug/L		110	72 - 134	1	15
Chlorobenzene	ND		25.0	27.6		ug/L		110	80 - 120	2	25
Chlorobromomethane	ND		25.0	26.6		ug/L		107	72 - 130	2	15
Chloroethane	ND		25.0	26.7		ug/L		107	69 - 136	1	15
Chloroform	ND		25.0	27.3		ug/L		109	73 - 127	1	20
Chloromethane	ND	F1 ok	25.0	30.9		ug/L		124	68 - 124	2	15
cis-1,2-Dichloroethene	ND		25.0	30.0		ug/L		120	74 - 124	2	15
cis-1,3-Dichloropropene	ND		25.0	27.8		ug/L		111	74 - 124	0	15
Cyclohexane	ND		25.0	27.3		ug/L		109	59 - 135	3	20
Dibromochloromethane	ND		25.0	27.9		ug/L		112	75 - 125	0	15
Dichlorodifluoromethane	ND		25.0	26.0		ug/L		104	59 - 135	8	20
Ethylbenzene	ND		25.0	28.7		ug/L		115	77 - 123	1	15
Isopropylbenzene	ND		25.0	28.4		ug/L		114	77 - 122	2	20
Methyl acetate	ND		50.0	56.9		ug/L		114	74 - 133	1	20
Methyl tert-butyl ether	ND		25.0	28.9		ug/L		116	77 - 120	2	37
Methylcyclohexane	ND		25.0	26.0		ug/L		104	68 - 134	3	20
Methylene Chloride	ND		25.0	28.0		ug/L		112	75 - 124	0	15
Styrene	ND		25.0	29.3		ug/L		117	80 - 120	1	20
Tetrachloroethene	ND		25.0	27.0		ug/L		108	74 - 122	2	20
Toluene	ND		25.0	28.9		ug/L		116	80 - 122	1	15
trans-1,2-Dichloroethene	ND		25.0	29.6		ug/L		118	73 - 127	0	20
trans-1,3-Dichloropropene	ND		25.0	29.5		ug/L		118	80 - 120	3	15
Trichloroethene	ND		25.0	28.4		ug/L		114	74 - 123	1	16
Trichlorofluoromethane	ND		25.0	25.3		ug/L		101	62 - 150	4	20
Vinyl chloride	ND		25.0	26.6		ug/L		106	65 - 133	1	15
Xylenes, Total	ND		50.0	57.2		ug/L		114	76 - 122	1	16

Sample Summary

Client: Wood E&I Solutions Inc
Project/Site: NYSDEC Dinaburg Dist. site

Job ID: 480-172646-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
480-172646-1	828103-MW03CA030	Water	07/16/20 10:00	07/21/20 10:00	
480-172646-2	828103-MW03A015	Water	07/16/20 12:20	07/21/20 10:00	
480-172646-3	828103-MW03D50	Water	07/16/20 13:40	07/21/20 10:00	
480-172646-4	828103-MW16K022	Water	07/16/20 17:25	07/21/20 10:00	
480-172646-5	828103-MPE17012	Water	07/16/20 09:55	07/21/20 10:00	
480-172646-6	828103-MW21S010	Water	07/16/20 12:35	07/21/20 10:00	
480-172646-7	828103-MW18S010	Water	07/16/20 14:40	07/21/20 10:00	
480-172646-8	828103-GWE2021	Water	07/16/20 17:45	07/21/20 10:00	
480-172646-9	TRIP BLANK 2	Water	07/15/20 12:00	07/21/20 10:00	
480-172646-10	828103-MW19S010	Water	07/17/20 07:41	07/21/20 10:00	
480-172646-11	828103-MW17S010	Water	07/17/20 09:40	07/21/20 10:00	
480-172646-12	828103-MW20S010	Water	07/17/20 10:50	07/21/20 10:00	
480-172646-13	~~828103-MWKA022~~ 828103-MW14KA022	Water	07/17/20 11:10	07/21/20 10:00	
480-172646-14	~~828103-MWKA022D~~ 828103-MW14KA022D	Water	07/17/20 11:10	07/21/20 10:00	
480-172646-15	828103-MW16S010	Water	07/17/20 13:20	07/21/20 10:00	

Job Narrative
480-172646-1

Comments
No additional comments.

Receipt
The samples were received on 7/21/2020 10:00 AM; the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 3.4° C.

GC/MS VOA
Method 8260C: The continuing calibration verification (CCV) associated with batch 480-541926 recovered outside acceptance criteria, low biased, for Cyclohexane, 1,1,2-Trichloro-1,2,2-trifluoroethane and Methylcyclohexane. A reporting limit (RL) standard was analyzed, and the target analytes were detected. Since the associated samples were non-detect for these analytes, the data have been reported. The associated samples are impacted: 828103-MW03A015 (480-172646-2), 828103-MW16K022 (480-172646-4), 828103-MPE17012 (480-172646-5), 828103-MW18S010 (480-172646-7), 828103-GWE2021 (480-172646-8), TRIP BLANK 2 (480-172646-9), 828103-MW19S010 (480-172646-10), 828103-MW17S010 (480-172646-11), 828103-MWKA022 (480-172646-13), 828103-MWKA022D (480-172646-14) and 828103-MW16S010 (480-172646-15). OK

Method 8260C: The following samples were diluted to bring the concentration of target analytes within the calibration range: 828103-MW03A015 (480-172646-2), 828103-MW16K022 (480-172646-4), 828103-MW18S010 (480-172646-7), 828103-GWE2021 (480-172646-8), 828103-MW19S010 (480-172646-10), 828103-MWKA022 (480-172646-13), 828103-MWKA022D (480-172646-14) and 828103-MW16S010 (480-172646-15). Elevated reporting limits (RLs) are provided. MEMO

Method 8260C: The following volatiles sample was diluted due to foaming at the time of purging during the original sample analysis: 828103-MW21S010 (480-172646-6). Elevated reporting limits (RLs) are provided. MEMO

Method 8260C: The following samples were diluted to bring the concentration of target analytes within the calibration range: 828103-MW03CA030 (480-172646-1), 828103-MW19S010 (480-172646-10) and 828103-MW20S010 (480-172646-12). Elevated reporting limits (RLs) are provided. MEMO

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Client Sample ID: 828103-MW19S010
Date Collected: 07/17/20 07:41
Date Received: 07/21/20 10:00

Lab Sample ID: 480-172646-10
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		4.0	3.3	ug/L			07/24/20 17:31	4
1,1,2,2-Tetrachloroethane	ND		4.0	0.84	ug/L			07/24/20 17:31	4
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.0	1.2	ug/L			07/24/20 17:31	4
1,1,2-Trichloroethane	ND		4.0	0.92	ug/L			07/24/20 17:31	4
1,1-Dichloroethane	ND		4.0	1.5	ug/L			07/24/20 17:31	4
1,1-Dichloroethene	ND		4.0	1.2	ug/L			07/24/20 17:31	4
1,2,3-Trichlorobenzene	ND		4.0	1.6	ug/L			07/24/20 17:31	4
1,2,4-Trichlorobenzene	ND		4.0	1.6	ug/L			07/24/20 17:31	4
1,2-Dibromo-3-Chloropropane	ND		4.0	1.6	ug/L			07/24/20 17:31	4
1,2-Dibromoethane	ND		4.0	2.9	ug/L			07/24/20 17:31	4
1,2-Dichlorobenzene	ND		4.0	3.2	ug/L			07/24/20 17:31	4
1,2-Dichloroethane	ND		4.0	0.84	ug/L			07/24/20 17:31	4
1,2-Dichloropropane	ND		4.0	2.9	ug/L			07/24/20 17:31	4
1,3-Dichlorobenzene	ND		4.0	3.1	ug/L			07/24/20 17:31	4
1,4-Dichlorobenzene	ND		4.0	3.4	ug/L			07/24/20 17:31	4
1,4-Dioxane	ND		160	37	ug/L			07/24/20 17:31	4
2-Butanone (MEK)	ND		40	5.3	ug/L			07/24/20 17:31	4
2-Hexanone	ND		20	5.0	ug/L			07/24/20 17:31	4
4-Methyl-2-pentanone (MIBK)	ND		20	8.4	ug/L			07/24/20 17:31	4
Acetone	ND		40	12	ug/L			07/24/20 17:31	4
Benzene	ND		4.0	1.6	ug/L			07/24/20 17:31	4
Bromodichloromethane	ND		4.0	1.6	ug/L			07/24/20 17:31	4
Bromoform	ND		4.0	1.0	ug/L			07/24/20 17:31	4
Bromomethane	ND		4.0	2.8	ug/L			07/24/20 17:31	4
Carbon disulfide	ND		4.0	0.76	ug/L			07/24/20 17:31	4
Carbon tetrachloride	ND		4.0	1.1	ug/L			07/24/20 17:31	4
Chlorobenzene	ND		4.0	3.0	ug/L			07/24/20 17:31	4
Chlorobromomethane	ND		4.0	3.5	ug/L			07/24/20 17:31	4
Chloroethane	ND		4.0	1.3	ug/L			07/24/20 17:31	4
Chloroform	ND		4.0	1.4	ug/L			07/24/20 17:31	4
Chloromethane	ND		4.0	1.4	ug/L			07/24/20 17:31	4
cis-1,2-Dichloroethene	**1200**	E analyzed at aditional dilution	4.0	3.2	ug/L			07/24/20 17:31	4
cis-1,3-Dichloropropene	ND		4.0	1.4	ug/L			07/24/20 17:31	4
Cyclohexane	ND		4.0	0.72	ug/L			07/24/20 17:31	4
Dibromochloromethane	ND		4.0	1.3	ug/L			07/24/20 17:31	4
Dichlorodifluoromethane	ND		4.0	2.7	ug/L			07/24/20 17:31	4
Ethylbenzene	ND		4.0	3.0	ug/L			07/24/20 17:31	4
Isopropylbenzene	ND		4.0	3.2	ug/L			07/24/20 17:31	4
Methyl acetate	ND		10	5.2	ug/L			07/24/20 17:31	4
Methyl tert-butyl ether	ND		4.0	0.64	ug/L			07/24/20 17:31	4
Methylcyclohexane	ND		4.0	0.64	ug/L			07/24/20 17:31	4
Methylene Chloride	ND		4.0	1.8	ug/L			07/24/20 17:31	4
Styrene	ND		4.0	2.9	ug/L			07/24/20 17:31	4
Tetrachloroethene	**110**		4.0	1.4	ug/L			07/24/20 17:31	4
Toluene	ND		4.0	2.0	ug/L			07/24/20 17:31	4
trans-1,2-Dichloroethene	**8.9**		4.0	3.6	ug/L			07/24/20 17:31	4
trans-1,3-Dichloropropene	ND		4.0	1.5	ug/L			07/24/20 17:31	4
Trichloroethene	**120**		4.0	1.8	ug/L			07/24/20 17:31	4
Trichlorofluoromethane	ND		4.0	3.5	ug/L			07/24/20 17:31	4

DUSR Calculations Sheet
J172474-1

Sample ID: 828103-MW13K018
TC: cis-1,2-dichloroethene
ICAL Level: 3
Val File Result for TC: 3100

Ical Calc

Area TC	21115
Area IS	183354
Conc TC	2
Conc IS	25
RRF =	1.439497

1	1.2047
2	1.1489
3	1.4395
4	1.5351
5	1.5206
6	1.4848
7	1.4532
8	1.5367
9	
10	
Avg RRF =	1.415438
Std Dev =	0.152293
%RSD =	10.75941

Sample Calc

Area TC	217950
Area IS	154713
Conc IS	25
Avg RRF	1.415438
Conc TC =	24.88166 µg/L

DF	125

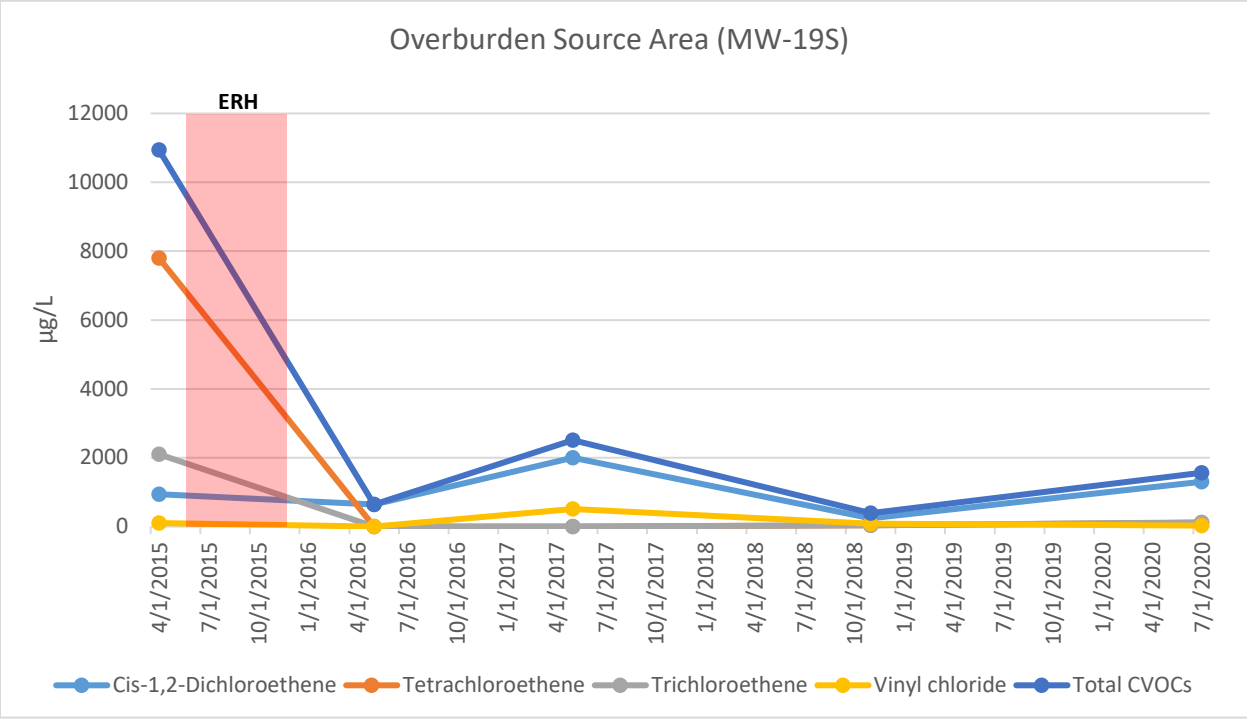
Notes:
Green = matched reported value
Red = did not match reported value

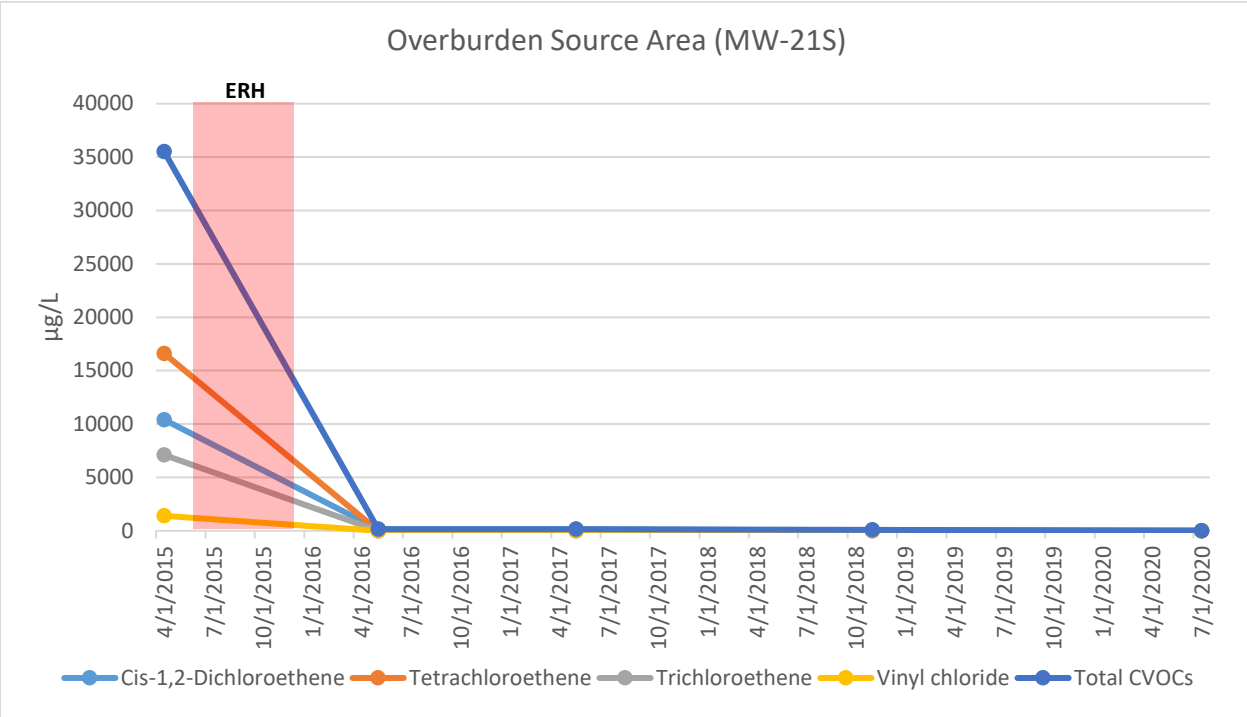
ATTACHMENT 3

GROUNDWATER CONTAMINANT TREND PLOTS

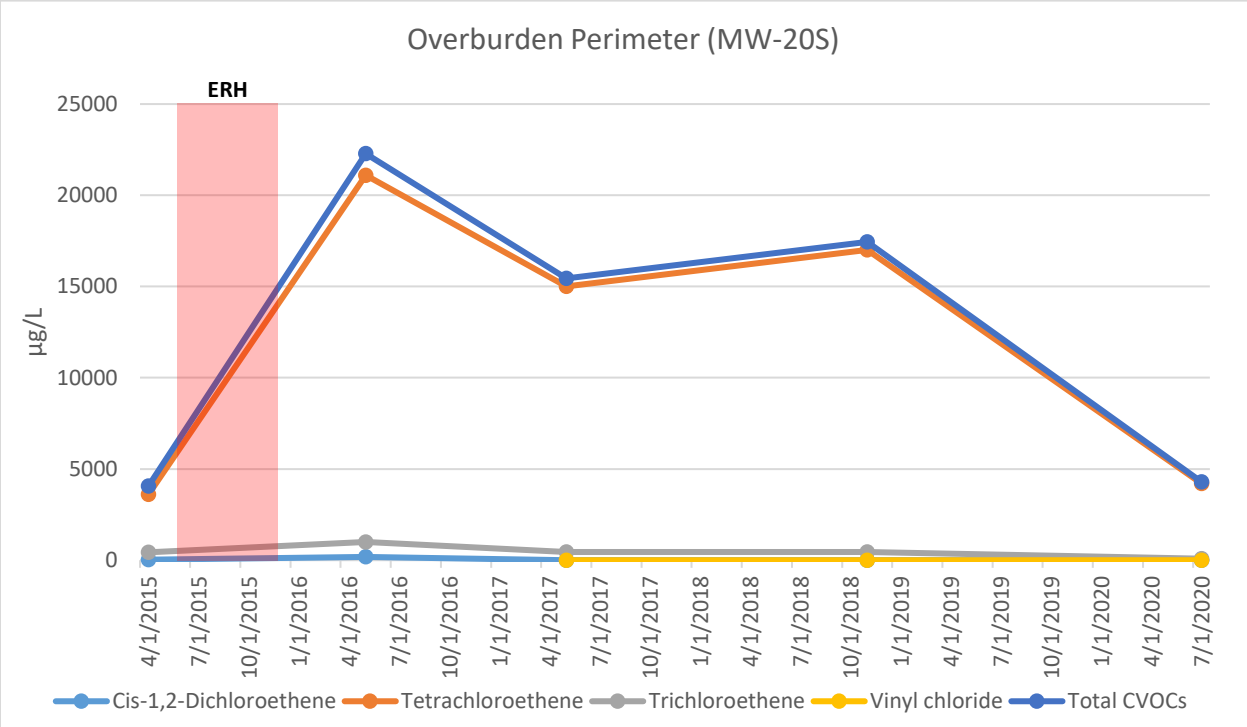
GROUNDWATER CONTAMINANT TREND PLOTS

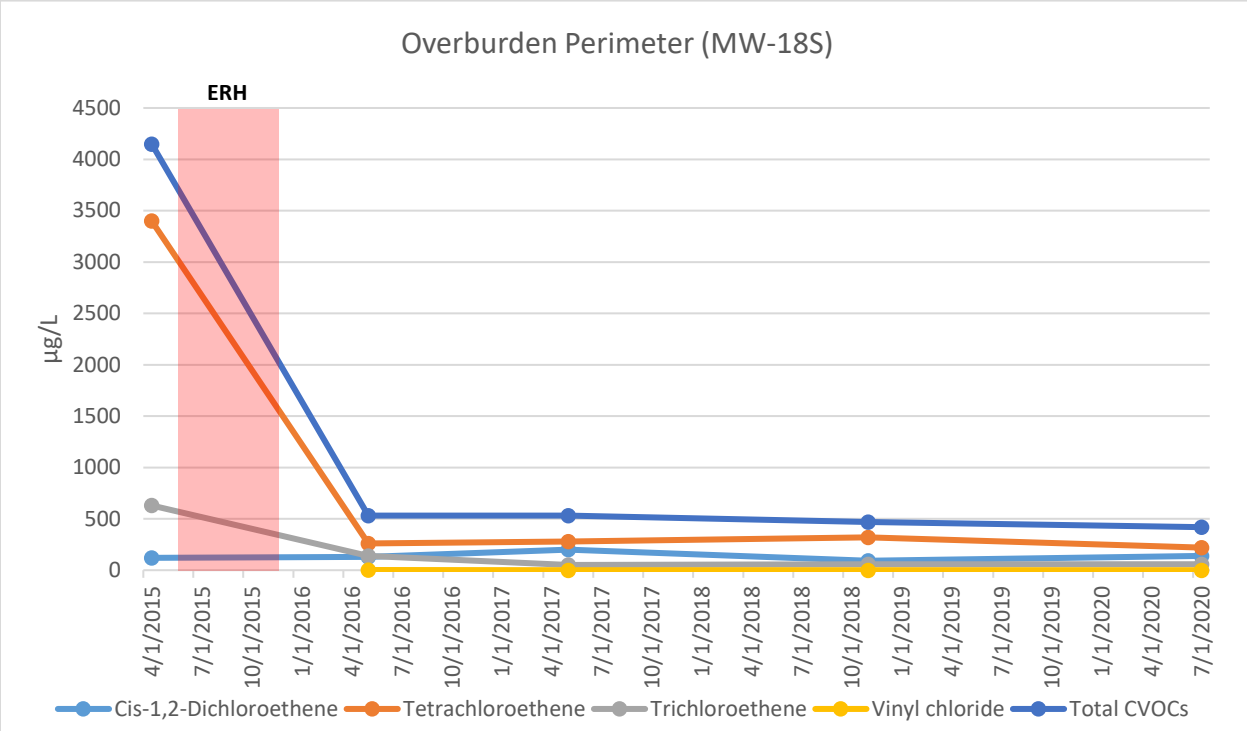
(ERH Operated from 5/28/2015 through 12/9/2015)





Created By: NRL 8/28/20
Checked By: CRS 8/28/20





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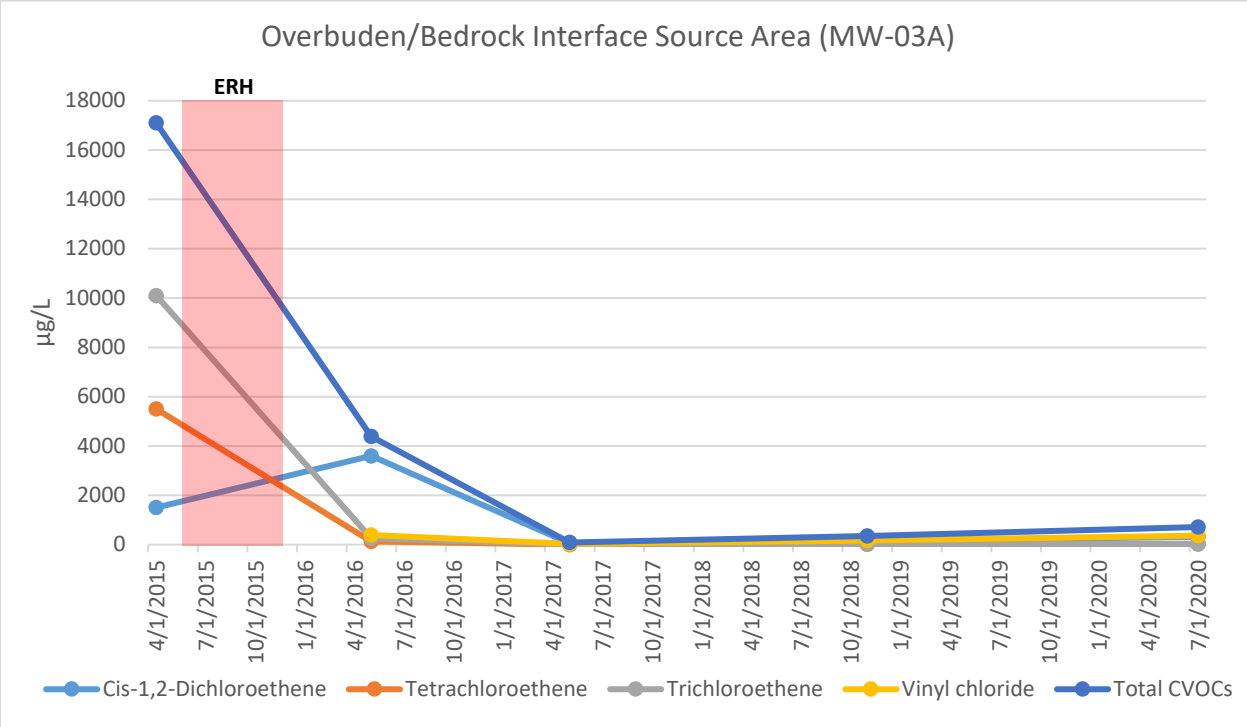
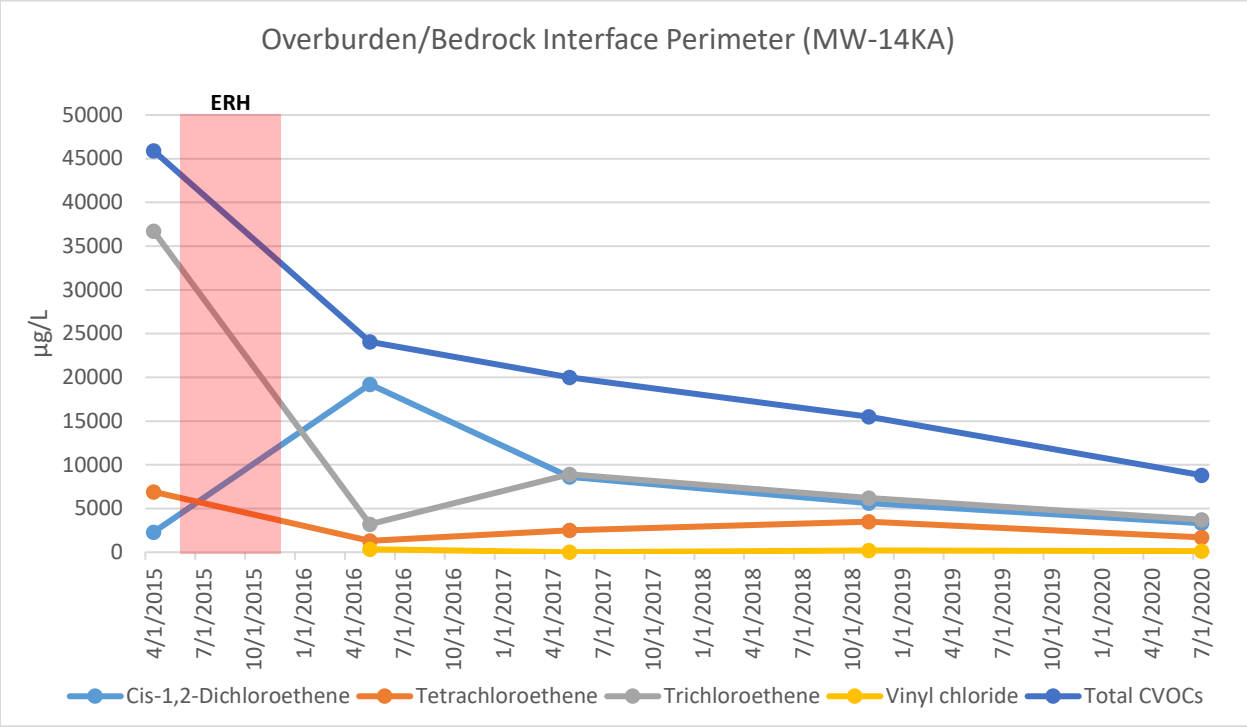
Checked By: CRS 8/28/20





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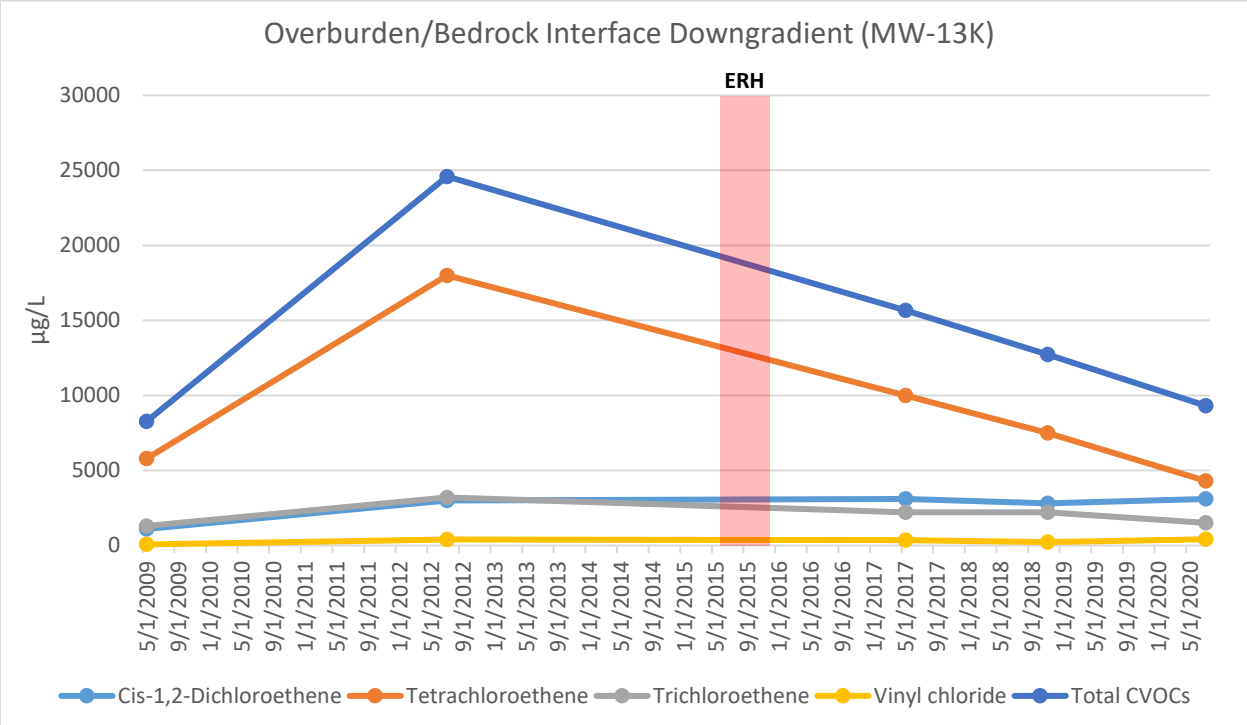
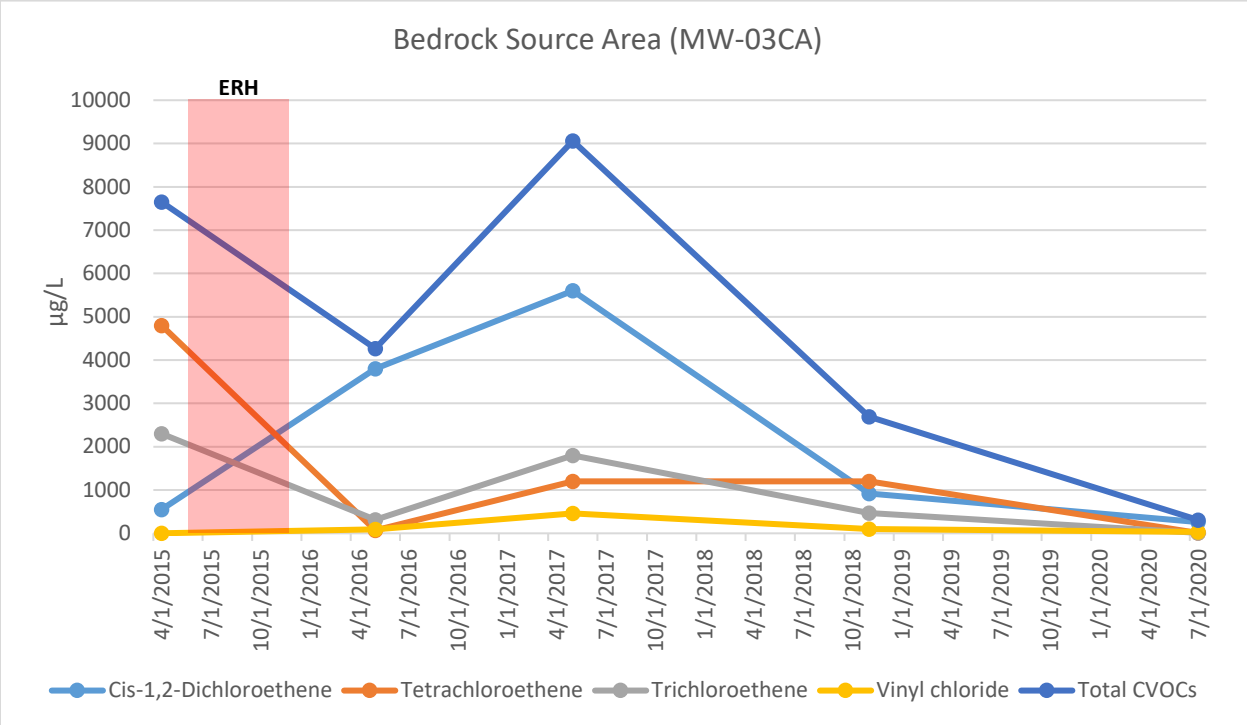
Checked By: CRS 8/28/20





Created By: NRL 8/28/20
Checked By: CRS 8/28/20