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August 30, 2019

Mr. Stanley Radon
New York State Department of
Environmental Conservation
270 Michigan Avenue
Buffalo, NY 14203-2999

Dear Mr. Radon:

NIAGARA PLANT SECOND QUARTER 2019 DATA PACKAGE

Enclosed is the Groundwater Remediation System First Quarter 2019 (2Q19) Data Package for the Chemours Niagara Plant pursuant to Order on Consent No. B9-0206-87-09. The data package includes an operational summary, potentiometric surface contour maps, and process sample analytical data for 2Q19.

Pumping well uptime was 95.8 percent for the original GWRS pumping wells, 100 percent for pumping well PW-37, and 100 percent for PW-39 during 2Q19. There were no scheduled or unscheduled system shutdowns greater than 24 hours in 2Q19. Two wells were down for greater than 48 consecutive hours during the quarter and with outages ranging from 65-69 hours (see data package for more details).

Please contact me at (716) 221-4723 if you have any questions or comments regarding this submittal.

Sincerely,

Chemours

A handwritten signature in black ink, appearing to read "Paul F. Mazierski", written in a cursive style.

Paul F. Mazierski
Project Director

PFM/EAF
Enc. NIAGARA 2Q19 Data Package

cc: Brain Sadowski/NYSDEC (elec.)
Charlotte Bethoney/NYSDOH (elec.)
Dawn Hettrick/NYSDOH (elec.)
Chemours Records Retentions (elec.)



**GROUNDWATER REMEDIATION SYSTEM
SECOND QUARTER 2019
GROUNDWATER MONITORING DATA PACKAGE
CHEMOURS NIAGARA PLANT
NIAGARA FALLS, NIAGARA COUNTY, NEW YORK**

Prepared For:

**THE CHEMOURS COMPANY FC LLC
CORPORATE REMEDIATION GROUP**

Buffalo Avenue and 26th Street
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August 2019

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SECTION 1

DATA PACKAGE SUMMARY

1.1 INTRODUCTION

This data package presents a summary of operating and monitoring data collected during the second quarter of 2019 (2Q19) for groundwater remediation measures at the Chemours Niagara Plant (the Plant) in Niagara Falls, New York. The Niagara Plant remediation program was implemented pursuant to an Administrative Consent Order with the New York State Department of Environmental Conservation (NYSDEC), Index Number B9-0206-87-09. This Data Package also includes the Silicone Oil Remediation Second Quarter Progress Report.

Tables 1 through 6 provide information related to the quarterly sampling program and operational statistics. Figures 1 through 5 provide groundwater potentiometric maps. Appendix A and B provide supporting data.

1.2 OPERATIONAL SUMMARY

Pumping well uptime was 95.8 percent for the original GWRS pumping wells, 100 percent for pumping well PW-37, and 100 percent for PW-39 during 2Q19. There were no scheduled or unscheduled system shutdowns greater than 24 hours in 2Q19. Two wells were down for greater than 48 consecutive hours during the quarter:

- As documented in the 1Q19 report, PW-26 was down between March 29 through April 1 for a total of 65 hours due to an electrical malfunction within the MCC bucket. Since this downtime extended into 2Q19, it is documented again here.
- As documented in the 1Q19 report, PW-39 was down between March 29 and April 1 for a total of 69 hours while maintenance of the variable frequency drive (VFD) and MCC bucket were completed. Since this downtime extended into 2Q19, it is documented again here.

No well pumps were replaced during 2Q19.

From an operations standpoint, the air strippers effectively remove organics from groundwater. The refined indicator parameters for process sampling are summarized in Table 1. It is estimated that 1,393 pounds of volatile organic compounds were removed from groundwater during operation of the Groundwater Remediation System (GWRS) in 2Q19 (see Tables 2 and 3). Historical organic compound removal by the GWRS is summarized in Table 4.

Olin Production Well uptime was 95.0 percent during 2Q19. Organics removal at the Olin Production Well treatment system was estimated to be 191.0 pounds for 2Q19 (see Tables 2 and 5). Estimated organic compound removal for the Olin Production Well from October 1992 through June 2019 is approximately 44,825 pounds (Table 5).

Point source contaminant loading rates are provided in Table 6. Loading to the Niagara Falls Wastewater Facility (NFWWF) from Outfall 023 is estimated to have been 1.40 pounds of organics per day during 2Q19. Since effluent discharged through this outfall is treated at the NFWWF, this represents an additional 127 pounds of organics (Table 2) that were removed and treated during 2Q19.

Groundwater elevation data collected during 2Q19 indicated that inward hydraulic gradients exist in the A-Zone throughout most plant areas while the GWRS is operating, thereby decreasing off-plant groundwater flow. Inward gradients are coincident with the southern border of the West Plant along Staub Road in both the A-Zone overburden (Figure 1) and A-Zone top-of-rock (Figure 2) and are largely attributed to pumping of the two BFBTs.

Investigation and recovery activities related to Silicone Oil Recovery have been conducted in accordance with the technical scope of work submitted on July 21, 1999 and approved by NYSDEC on August 26, 1999. During 2Q19, no silicone oil was observed in PW-20 and 0.5 gallons were recovered from PW-24. Silicone oil has never been observed at PW-22 since inspections began at this location in 3Q00. To date, 64 gallons and 1,986 gallons of Silicone Oil have been recovered from PW-20 and PW-24 respectively. A total of 2,050 gallons of silicone oil have been removed from GWRS pumping wells since recovery began in June 1999.

As noted in the 2016 through 2018 Periodic Review Reports, Chemours has ceased Reactive Metals production and prepared certain areas of the site for future (undetermined) use. Meanwhile, Olin Production (on leased portion of the Site) will continue for the foreseeable future. Site groundwater remediation responsibilities related to Order on Consent No. B9-0206-87-09 will remain with Chemours without change. Current institutional and engineering controls associated with Site 932013 will remain in place and under Chemours control.

TABLES

Table 1

**Refined Indicator Parameters
Chemours Niagara**

Volatiles	Base/Neutrals¹
Benzene	1,4-dichlorobutane
Carbon tetrachloride	bis(2-ethylhexyl)phthalate
Chlorobenzene	Naphthalene
Chloroform	1,2-dichlorobenzene
Chloromethane	1,4-dichlorobenzene
1,1-dichloroethane	Hexachlorobutadiene
1,1-dichloroethene	Hexachloroethane
trans-1,2-dichloroethene	Pesticides/PCBs¹
cis-1,2-dichloroethene	alpha-BHC
Methylene chloride	beta-BHC
1,1,2,2-tetrachloroethane	delta-BHC
Tetrachloroethene	gamma-BHC
Tetrahydrothiophene	Total PCBs
Toluene	
1,1,1-trichloroethane	
1,1,2-trichloroethane	
Trichloroethene	
Vinyl chloride	
Inorganics and Other Parameters	
Total cyanide ¹	
Soluble barium ¹	
pH*	
Temperature*	
Specific Gravity*	
Specific Conductivity*	

¹ Analyses required once per year for these parameters
on select samples.

* Field measurement

Table 2

**GWRS Operations Statistics
First Quarter 2019
Chemours Niagara**

Treatment System Operations	
<i>GWRS</i>	
Original 23 Pumping Wells System Uptime	95.8%
Pumping Well 37 Uptime	100.0%
Pumping Well 39 Uptime	100.0%
Total Gallons Pumped	3,603,186
Average System Pumping Rate for Quarter (GPM)	27.5
Estimated Pounds of Organics Treated	1,393
Number of unscheduled treatment shutdowns (> 24 hours)	0
Number of scheduled treatment shutdowns (> 24 hours)	0
<i>Olin System</i>	
Pumping System Uptime	95.0%
Estimated Pounds of Organics Treated	191.0
Carbon vessel changes	0
<i>Outfall 023</i>	
Estimated Pounds of Organics Treated	127

GWRS Pumping Well Operations	
<i>Total Pump Replacements:</i>	0
<i>Number of Individual Pumps down > 48 hours:</i>	2

Table 3

**Total Volatile Organic Compounds Removed by GWRS
First Quarter 2019
Chemours Niagara**

Quarterly Total Flow (gallons)	Influent Total VOC Concentration (µg/l)	Effluent Total VOC Concentration (µg/l)	Estimated VOC Removal (lbs.)
3,603,186	46,530	130.0	1,393

Table 4
Summary of Organic Compounds Removed by GWRS
Chemours Niagara

Time Period	Estimated Organic Removal (lbs) ⁽¹⁾	
1991 ⁽²⁾	4,700	
1992	10,350	
1993	7,220	
1994	7,320	
1995	7,840	
1996	9,436	
1997	6,463	
1998	7,000	
1999	3,382	
2000	3,010	
2001	3,224	
2002	3,848	
2003	2,820	
2004	2,645	
2005	2,237	
2006	11,589	
2007	8,678	
2008	7,932	
2009	12,128	
2010	7,854	
2011	9,004	
1Q12	2,114	2012 Total 8,453
2Q12	2,060	
3Q12	2,065	
4Q12	2,215	
1Q13	2,167	2013 Total 9,433
2Q13	2,560	
3Q13	2,022	
4Q13	2,684	
1Q14	2,224	2014 Total 8,567
2Q14	2,085	
3Q14	1,958	
4Q14	2,300	
1Q15	2,031	2015 Total 8,255
2Q15	2,215	
3Q15	1,945	
4Q15	2,064	
1Q16	1,999	2016 Total 6,629
2Q16	2,232	
3Q16	1,216	
4Q16	1,182	
1Q17	3,127	2017 Total 10,815
2Q17	2,581	
3Q17	2,930	
4Q17	2,177	
1Q18	1,454	2018 Total 5,794
2Q18	1,410	
3Q18	1,321	
4Q18	1,609	
1Q19	1,357	
2Q19	1,393	
TOTAL	199,376	

⁽¹⁾ Estimated based on influent/effluent data and daily groundwater flow rates, except as noted.

⁽²⁾ Estimated based on influent/effluent data and instantaneous flow to treatment system.

Table 5
Summary of Organic Compounds Removed by Olin Production Well
Chemours Niagara

Date	Average Pumping Rate (gpm)	Influent Total VOC (µg/l)	Effluent Total VOC (µg/l)	Total VOC Removed (lbs/day)	Total VOC Removed (lbs)
1992					5,470
1993					3,580
1994					3,530
1995					2,378
1996					2,240
1997					1,887
1998					1,392
1999					1,695
2000					1,214
2001					1,185
2002					1,374
2003					1,124
2004					1,044
2005					1,066
2006	590	491	71	3.0	1,096
2007	527	514	56	2.9	1,068
2008	529	547	6.7	3.4	1,257
2009	536	534	14	3.3	1,222
2010	557	483	5	3	1,168
2011	595	546	9	4	1,386
2012	578	459	11	3	1,137
2013	541	461	24	3	1,042
2014	574	534	32	3	1,269
2015	566	511	23	3	1,197
1Q16	562	487	27.6	3.1	282
2Q16	578	501	5.5	3.4	313
3Q16	597	441	1	3	276
4Q16	556	444	10.0	2.9	266
1Q17	550	452	9.6	2.9	263
2Q17	569	430	1	3	273
3Q17	583	540	14.2	3.7	338
4Q17	570	616	17.5	4.1	377
1Q18	550	454	1	3	270
2Q18	567	299	14.6	1.9	176
3Q18	604	369	41.5	2.4	218
4Q18	590	453	18.3	3.1	283
1Q19	545	388	1.0	2.5	228
2Q19	533	356	28.1	2.1	191
TOTAL					44,825

An average analytical result is used when a field duplicate is reported.

All averages are italicized.

Annual VOCs removed is sum of quarterly VOCs removed

Table 6

**Point Source Contaminant Loading Rates
Loading Indicator Organics
First Quarter 2019
Chemours Niagara**

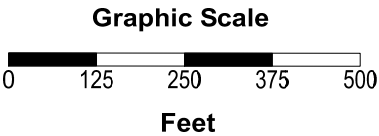
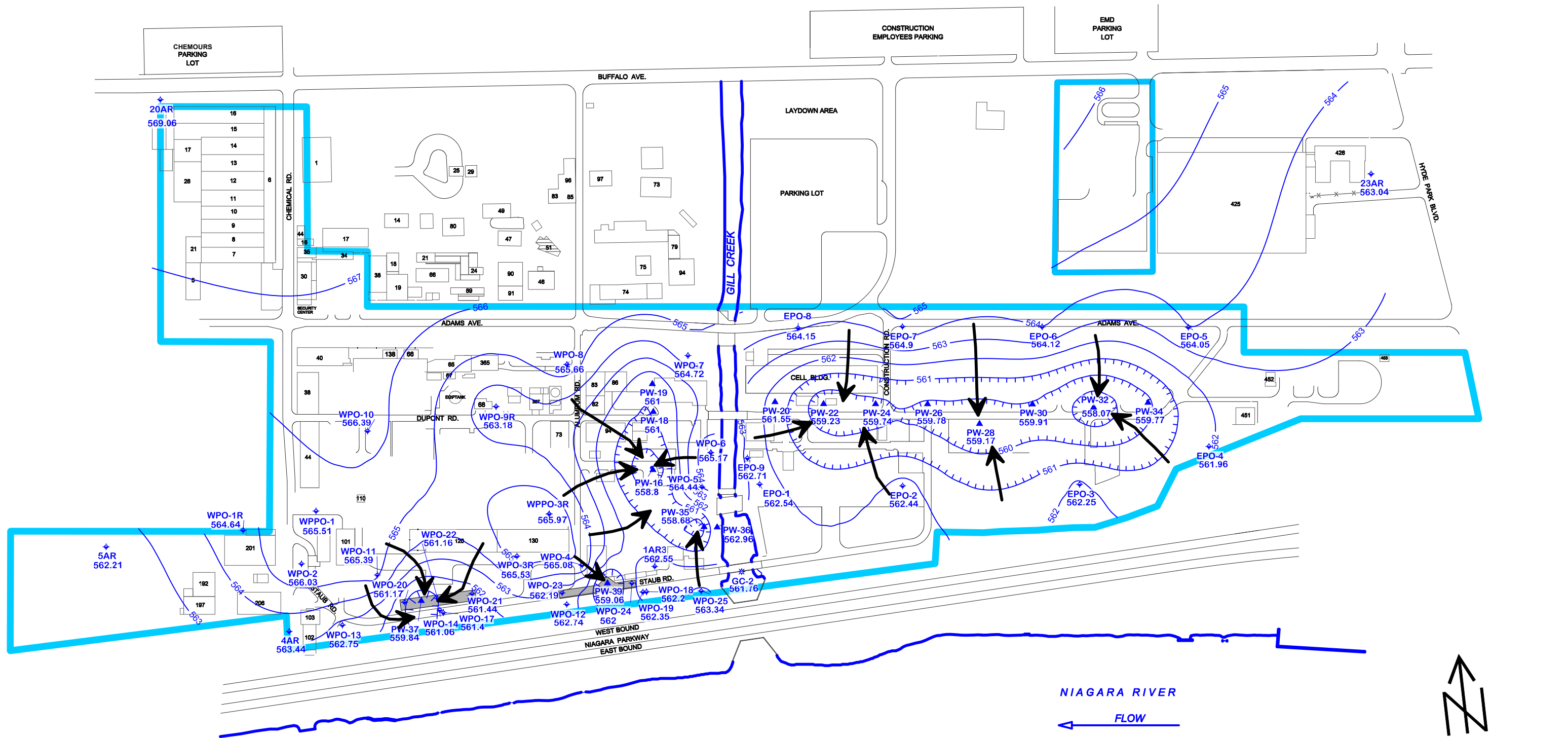
Outfall Sample Location*	Quarterly Average Flow Rate (gpm)	Total Indicator Organic Concentration (µg/l)⁽¹⁾	Quarterly Average Loading Rate (lb/day)⁽¹⁾
023	323	359.8	1.40
Olin GAC ⁽²⁾	533	28.1	0.18

GAC = Granular Activated Carbon (Olin Treatment Effluent)
TIO average of field duplicate results are *italicized*.

⁽¹⁾ Values are not adjusted to account for concentrations of loadings indicator organics which may be present in the raw intake water.

⁽²⁾ Average pumping rate for Olin well through quarter.

FIGURES



PARSONS
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Checked by: JWS	Date: 7/10/19
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Job number: 451477.02024	

LEGEND

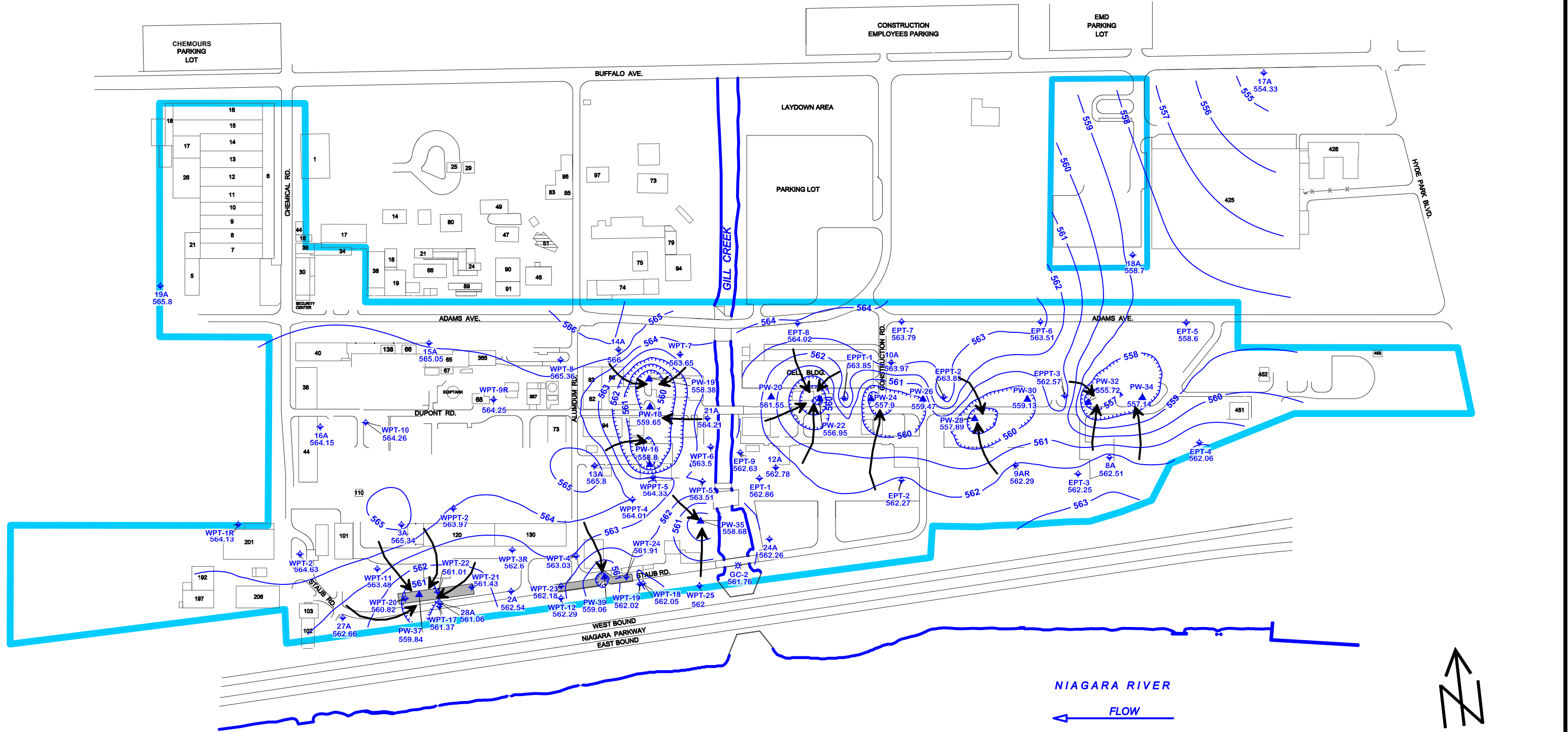
- BUILDING
- ROAD
- CHEMOURS PROPERTY BOUNDARY
- SURFACE WATER

CHEMOURS WELLS

- 1AR3
- WELL ID
- PIEZOMETER
- PUMPING WELL
- MONITORING WELL
- UNDERGROUND UTILITY WELL
- GILL CREEK SURFACE WELL or WATER SAMPLE LOCATION

- BLAST FRACTURED BEDROCK TRENCH
- GROUNDWATER CONTOUR
- GROUNDWATER CONTOUR DEPRESSION
- GROUNDWATER CONTOUR ELEVATION

FIGURE 1
POTENTIOMETRIC SURFACE MAP
A-ZONE OVERBURDEN - JUNE 7, 2019
CHEMOURS NIAGARA PLANT, NIAGARA FALLS, NY



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Project Manager: EAF	Date: 7/10/19
Job number: 451477.02024	

LEGEND

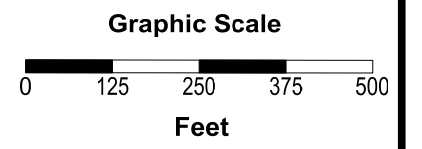
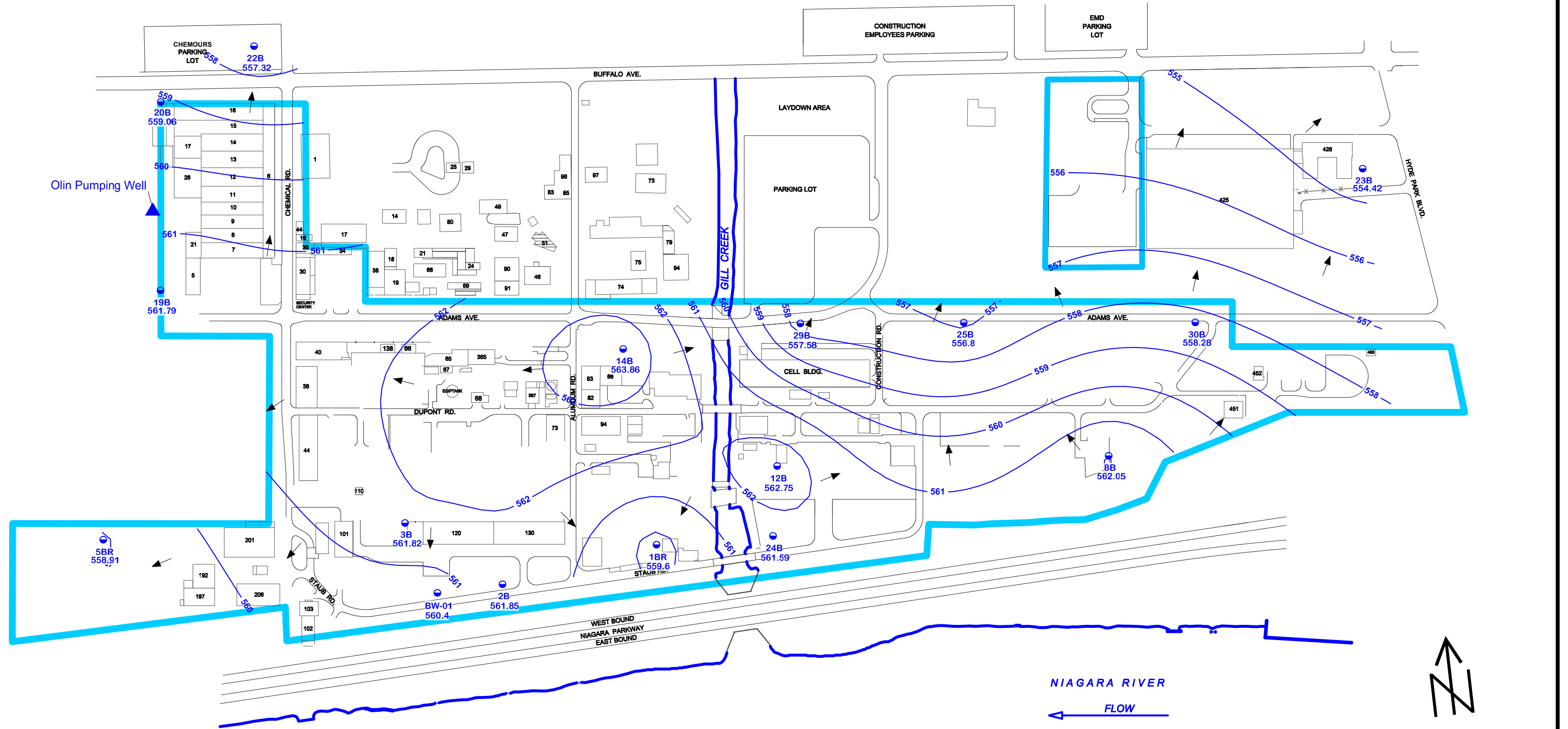
- BUILDING
- ROAD
- CHEMOURS PROPERTY BOUNDARY
- SURFACE WATER

CHEMOURS WELLS

- WELL ID
- PIEZOMETER
- PUMPING WELL
- MONITORING WELL
- UNDERGROUND UTILITY WELL
- GILL CREEK SURFACE WELL or WATER SAMPLE LOCATION

- BLAST FRACTURED BEDROCK TRENCH
- GROUNDWATER CONTOUR
- GROUNDWATER CONTOUR DEPRESSION
- GROUNDWATER CONTOUR ELEVATION

FIGURE 2
POTENTIOMETRIC SURFACE MAP
A-ZONE BEDROCK - JUNE 7, 2019
CHEMOURS NIAGARA PLANT, NIAGARA FALLS, NY

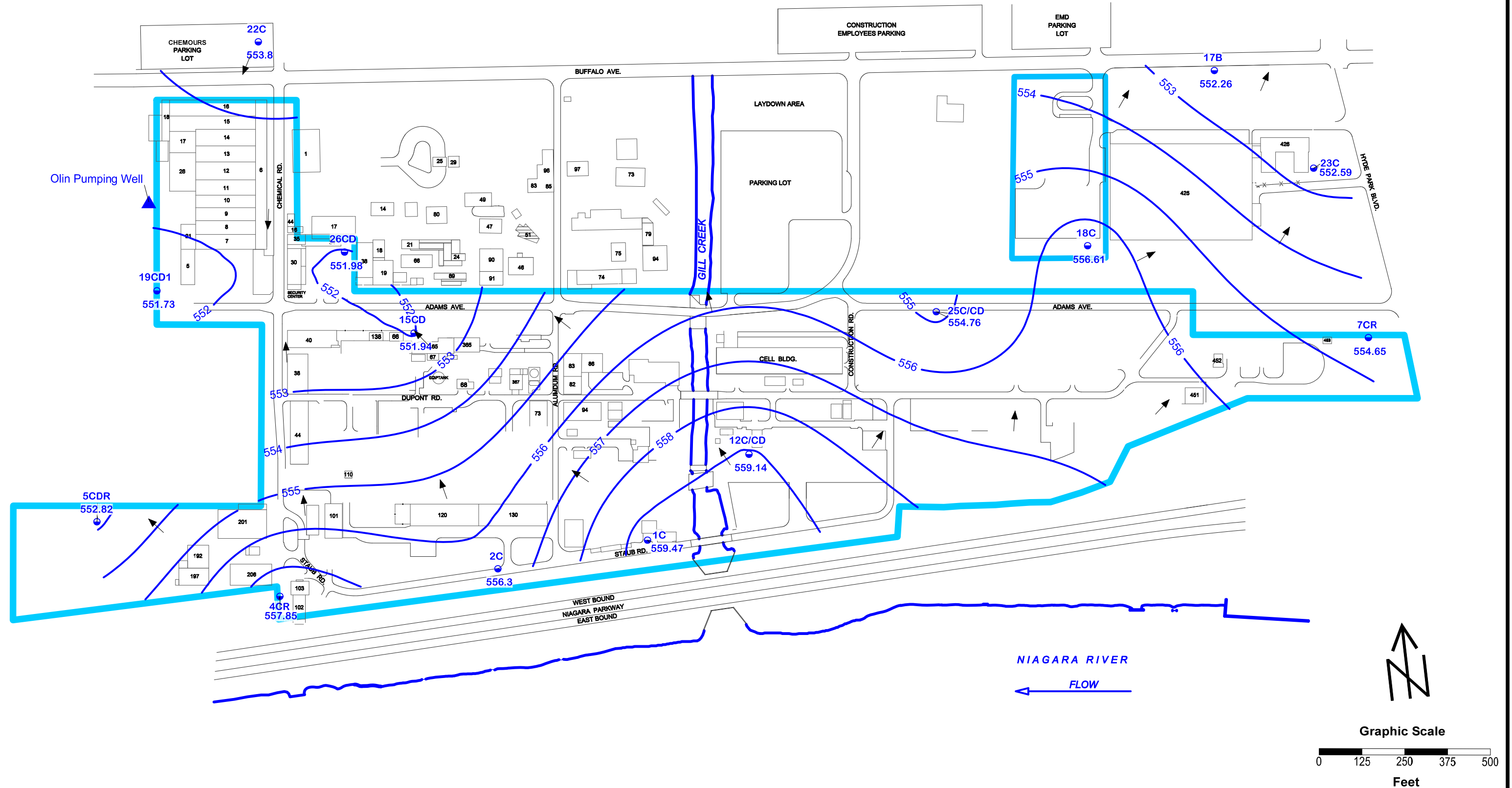


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Project Manager: EAF	Date: 7/10/19
Job number: 451477.02024	

LEGEND		CHEMOURS WELLS	
	BUILDING		WELL ID
	ROAD		PIEZOMETER
	CHEMOURS PROPERTY BOUNDARY		PUMPING WELL
	SURFACE WATER		MONITORING WELL
			UNDERGROUND UTILITY WELL
			GROUNDWATER CONTOUR
			GROUNDWATER CONTOUR DEPRESSION
			GROUNDWATER CONTOUR ELEVATION

FIGURE 3
POTENTIOMETRIC SURFACE MAP
B-ZONE BEDROCK - JUNE 7, 2019
CHEMOURS NIAGARA PLANT, NIAGARA FALLS, NY



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Checked by: JWS	Date: 7/10/19
Project Manager: EAF	Date: 7/10/19
Job number: 451477.02024	

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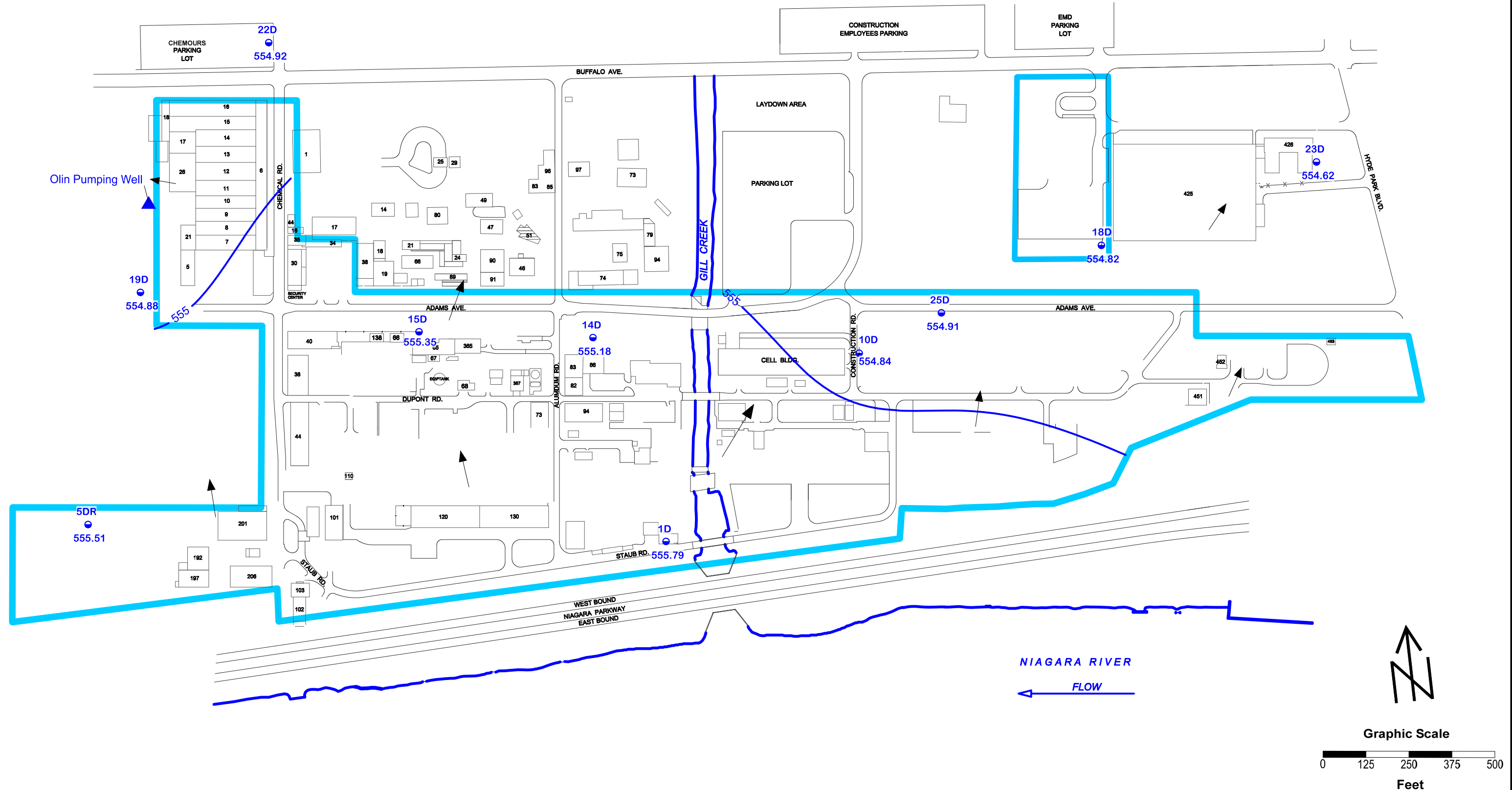
- BUILDING
- ROAD
- CHEMOURS PROPERTY BOUNDARY
- SURFACE WATER

CHEMOURS WELLS

- 1C WELL ID
- PIEZOMETER
- PUMPING WELL
- MONITORING WELL

- GROUNDWATER CONTOUR
- GROUNDWATER CONTOUR DEPRESSION
- GROUNDWATER CONTOUR ELEVATION

FIGURE 4
POTENTIOMETRIC SURFACE MAP
C/CD-ZONE BEDROCK - JUNE 7, 2019
CHEMOURS NIAGARA PLANT, NIAGARA FALLS, NY



PARSONS
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Buffalo, NY 14202
(716) 541-0730

Created by: RBP	Date: 7/8/19
Checked by: JWS	Date: 7/10/19
Project Manager: EAF	Date: 7/10/19
Job number: 451477.02024	

LEGEND

- BUILDING
- ROAD
- CHEMOURS PROPERTY BOUNDARY
- SURFACE WATER

CHEMOURS WELLS

- 1D WELL ID
- PIEZOMETER
- PUMPING WELL
- MONITORING WELL

- GROUNDWATER CONTOUR
- GROUNDWATER CONTOUR DEPRESSION
- GROUNDWATER CONTOUR ELEVATION

FIGURE 5
POTENTIOMETRIC SURFACE MAP
D-ZONE BEDROCK - JUNE 7, 2019
CHEMOURS NIAGARA PLANT, NIAGARA FALLS, NY

APPENDIX A

CHEMOURS NIAGARA PLANT
GROUNDWATER ELEVATION DATA
SECOND QUARTER 2019

APPENDIX A
GROUNDWATER ELEVATION DATA - SECOND QUARTER 2019
CHEMOURS NIAGARA PLANT

SAMPLE POINT	DATE	DEPTH TO WATER (FT)	CASING ELEVATION (FT AMSL)	GW ELEVATION (FT AMSL)	TIME
BW-01	06/07/2019	11.13	571.53	560.40	11:40
DEC-3R	06/07/2019	12.30	574.39	562.09	12:50
DEC-4R	06/07/2019	14.06	575.81	561.75	13:04
DEC-5	06/07/2019	20.53	582.13	561.60	13:13
EPO-1	06/07/2019	10.13	572.67	562.54	13:06
EPO-2	06/07/2019	9.87	572.31	562.44	13:25
EPO-3	06/07/2019	10.42	572.67	562.25	11:46
EPO-4	06/07/2019	8.79	570.75	561.96	11:31
EPO-5	06/07/2019	6.30	570.35	564.05	11:25
EPO-6	06/07/2019	6.34	570.46	564.12	11:21
EPO-7	06/07/2019	5.81	570.71	564.90	11:08
EPO-8	06/07/2019	6.54	570.69	564.15	11:05
EPO-9	06/07/2019	9.65	572.36	562.71	13:07
EPPT-1	06/07/2019	5.11	568.96	563.85	12:26
EPPT-2	06/07/2019	8.56	572.41	563.85	12:02
EPPT-3	06/07/2019	9.48	572.05	562.57	11:57
EPT-1	06/07/2019	10.00	572.86	562.86	13:05
EPT-2	06/07/2019	9.95	572.22	562.27	13:27
EPT-3	06/07/2019	10.26	572.51	562.25	11:44
EPT-4	06/07/2019	8.97	571.03	562.06	11:33
EPT-5	06/07/2019	11.68	570.28	558.60	11:26
EPT-6	06/07/2019	7.01	570.52	563.51	11:20
EPT-7	06/07/2019	6.74	570.53	563.79	11:09
EPT-8	06/07/2019	6.64	570.66	564.02	11:04
EPT-9	06/07/2019	9.16	571.79	562.63	13:08
GC-2	06/07/2019	11.03	572.79	561.76	13:35
MW-10A	06/07/2019	8.16	572.13	563.97	12:06
MW-10C	06/07/2019	11.01	568.10	557.09	12:12
MW-10D	06/07/2019	13.65	568.49	554.84	12:08
MW-12A	06/07/2019	9.78	572.56	562.78	13:22
MW-12B	06/07/2019	9.65	572.14	562.49	13:25
MW-12C/CD	06/07/2019	13.63	572.77	559.14	13:21
MW-13A	06/07/2019	7.33	573.13	565.80	12:59
MW-14A	06/07/2019	6.30	572.30	566.00	12:42
MW-14B	06/07/2019	8.43	572.29	563.86	12:45
MW-14C	06/07/2019	16.24	572.10	555.86	12:43
MW-14D	06/07/2019	17.50	572.68	555.18	12:41
MW-15A	06/07/2019	3.56	568.61	565.05	11:11
MW-15C	06/07/2019	11.22	568.52	557.30	11:12
MW-15CD	06/07/2019	16.61	568.55	551.94	11:13
MW-15D	06/07/2019	13.22	568.57	555.35	11:14
MW-16A	06/07/2019	8.18	572.33	564.15	13:27

APPENDIX A
GROUNDWATER ELEVATION DATA - SECOND QUARTER 2019
CHEMOURS NIAGARA PLANT

SAMPLE POINT	DATE	DEPTH TO WATER (FT)	CASING ELEVATION (FT AMSL)	GW ELEVATION (FT AMSL)	TIME
MW-16B	06/07/2019	9.92	572.96	563.04	13:28
MW-17A	06/07/2019	17.65	571.98	554.33	11:47
MW-17B	06/07/2019	19.68	571.94	552.26	11:46
MW-18A	06/07/2019	12.11	570.81	558.70	11:57
MW-18C	06/07/2019	14.10	570.71	556.61	11:54
MW-18D	06/07/2019	16.07	570.89	554.82	12:01
MW-19A	06/07/2019	7.87	573.67	565.80	13:12
MW-19B	06/07/2019	11.47	573.26	561.79	13:11
MW-19C	06/07/2019	17.08	573.59	556.51	13:10
MW-19CD1	06/07/2019	21.56	573.29	551.73	13:09
MW-19D	06/07/2019	18.20	573.08	554.88	13:06
MW-1AR3	06/07/2019	9.13	571.68	562.55	14:29
MW-1BR	06/07/2019	11.78	571.38	559.60	14:44
MW-1C	06/07/2019	11.91	571.38	559.47	13:47
MW-1D	06/07/2019	16.34	572.13	555.79	13:46
MW-20AR	06/07/2019	1.45	570.51	569.06	13:16
MW-20B	06/07/2019	11.03	570.09	559.06	13:18
MW-21A	06/07/2019	9.20	573.41	564.21	12:33
MW-22B	06/07/2019	12.54	569.86	557.32	12:14
MW-22C	06/07/2019	16.29	570.09	553.80	12:12
MW-22D	06/07/2019	15.19	570.11	554.92	12:11
MW-23AR	06/07/2019	10.46	573.50	563.04	11:37
MW-23B	06/07/2019	18.28	572.70	554.42	11:36
MW-23C	06/07/2019	20.15	572.74	552.59	11:40
MW-23D	06/07/2019	18.19	572.81	554.62	11:42
MW-24A	06/07/2019	10.31	572.57	562.26	13:32
MW-24B	06/07/2019	11.10	572.69	561.59	13:30
MW-25B	06/07/2019	12.91	569.71	556.80	11:16
MW-25C/CD	06/07/2019	15.95	570.71	554.76	11:15
MW-25D	06/07/2019	15.62	570.53	554.91	11:13
MW-26C	06/07/2019	13.60	568.39	554.79	10:54
MW-26CD	06/07/2019	16.89	568.87	551.98	10:51
MW-27A	06/07/2019	10.94	573.60	562.66	12:28
MW-28A	06/07/2019	9.42	570.48	561.06	12:10
MW-29B	06/07/2019	13.95	571.53	557.58	11:03
MW-2A	06/07/2019	9.28	571.82	562.54	11:51
MW-2B	06/07/2019	11.70	573.55	561.85	11:48
MW-2C	06/07/2019	15.32	571.62	556.30	11:52
MW-30B	06/07/2019	12.55	570.83	558.28	11:28
MW-3A	06/07/2019	7.09	572.43	565.34	11:34
MW-3B	06/07/2019	10.43	572.25	561.82	11:33
MW-4AR	06/07/2019	10.38	573.82	563.44	12:54

APPENDIX A
GROUNDWATER ELEVATION DATA - SECOND QUARTER 2019
CHEMOURS NIAGARA PLANT

SAMPLE POINT	DATE	DEPTH TO WATER (FT)	CASING ELEVATION (FT AMSL)	GW ELEVATION (FT AMSL)	TIME
MW-4CR	06/07/2019	12.00	569.85	557.85	12:55
MW-5AR	06/07/2019	12.80	575.01	562.21	12:41
MW-5BR	06/07/2019	16.02	574.93	558.91	12:42
MW-5CDR	06/07/2019	22.18	575.00	552.82	12:43
MW-5CR	06/07/2019	16.67	574.91	558.24	12:44
MW-5DR	06/07/2019	19.59	575.10	555.51	12:45
MW-6AR	06/07/2019	7.39	576.41	569.02	12:49
MW-7AR	06/07/2019	14.82	571.90	557.08	11:24
MW-7CR	06/07/2019	16.95	571.60	554.65	11:21
MW-8A	06/07/2019	9.13	571.64	562.51	11:42
MW-8B	06/07/2019	9.38	571.43	562.05	11:41
MW-9AR	06/07/2019	10.37	572.66	562.29	11:50
MW-U-1	06/07/2019	14.14	573.25	559.11	13:21
MW-U-14	06/07/2019	5.35	571.26	565.91	13:04
MW-U-16	06/07/2019	11.04	573.78	562.74	13:16
PW-16	06/07/2019	14.65	573.45	558.80	14:30
PW-18	06/07/2019	10.48	570.13	559.65	12:48
PW-19	06/07/2019	14.92	573.30	558.38	12:50
PW-20	06/07/2019	8.20	569.75	561.55	12:29
PW-22	06/07/2019	12.55	569.50	556.95	12:24
PW-24	06/07/2019	10.85	568.75	557.90	12:20
PW-26	06/07/2019	8.93	568.40	559.47	12:04
PW-28	06/07/2019	9.48	567.37	557.89	11:53
PW-30	06/07/2019	9.68	568.81	559.13	11:54
PW-32	06/07/2019	12.45	568.17	555.72	11:58
PW-34	06/07/2019	11.78	568.92	557.14	11:38
PW-35	06/07/2019	14.00	572.68	558.68	13:18
PW-36	06/07/2019	6.55	569.51	562.96	13:17
PW-37	06/07/2019	9.20	569.04	559.84	12:17
PW-38	06/07/2019	10.97	572.07	561.10	11:43
PW-39	06/07/2019	12.70	571.76	559.06	14:30
TPW-01	06/07/2019	10.04	570.85	560.81	11:41
WPO-10	06/07/2019	5.64	572.03	566.39	13:30
WPO-11	06/07/2019	7.86	573.25	565.39	12:25
WPO-12	06/07/2019	11.09	573.83	562.74	12:05
WPO-13	06/07/2019	10.90	573.65	562.75	12:28
WPO-14	06/07/2019	9.45	570.51	561.06	12:10
WPO-15	06/07/2019	13.99	575.98	561.99	13:05
WPO-16	06/07/2019	12.84	574.84	562.00	12:52
WPO-17	06/07/2019	9.44	570.84	561.40	12:14
WPO-18	06/07/2019	10.18	572.38	562.20	13:58
WPO-19	06/07/2019	10.14	572.49	562.35	13:59

APPENDIX A
GROUNDWATER ELEVATION DATA - SECOND QUARTER 2019
CHEMOURS NIAGARA PLANT

SAMPLE POINT	DATE	DEPTH TO WATER (FT)	CASING ELEVATION (FT AMSL)	GW ELEVATION (FT AMSL)	TIME
WPO-1R	06/07/2019	8.79	573.43	564.64	12:35
WPO-2	06/07/2019	7.29	573.32	566.03	12:31
WPO-20	06/07/2019	10.47	571.64	561.17	12:22
WPO-21	06/07/2019	10.62	572.06	561.44	11:45
WPO-22	06/07/2019	9.70	570.86	561.16	11:38
WPO-23	06/07/2019	9.65	571.84	562.19	12:02
WPO-24	06/07/2019	9.41	571.41	562.00	14:04
WPO-25	06/07/2019	8.43	571.77	563.34	13:39
WPO-3R	06/07/2019	7.31	572.84	565.53	11:54
WPO-4	06/07/2019	7.30	572.38	565.08	11:59
WPO-5	06/07/2019	8.55	572.99	564.44	13:02
WPO-6	06/07/2019	12.56	577.73	565.17	13:11
WPO-7	06/07/2019	6.80	571.52	564.72	12:37
WPO-8	06/07/2019	2.68	568.34	565.66	11:22
WPO-9R	06/07/2019	9.76	572.94	563.18	11:17
WPPO-1	06/07/2019	3.15	568.66	565.51	14:07
WPPO-3R	06/07/2019	5.81	571.78	565.97	11:29
WPPT-2	06/07/2019	8.18	572.15	563.97	11:31
WPPT-4	06/07/2019	8.29	572.30	564.01	11:27
WPPT-5	06/07/2019	12.32	576.65	564.33	12:54
WPT-10	06/07/2019	7.89	572.15	564.26	13:31
WPT-11	06/07/2019	9.78	573.26	563.48	12:24
WPT-12	06/07/2019	11.12	573.41	562.29	12:06
WPT-17	06/07/2019	9.44	570.81	561.37	12:12
WPT-18	06/07/2019	10.90	572.95	562.05	13:57
WPT-19	06/07/2019	10.71	572.73	562.02	14:00
WPT-1R	06/07/2019	9.89	574.02	564.13	12:37
WPT-2	06/07/2019	8.50	573.13	564.63	12:32
WPT-20	06/07/2019	11.37	572.19	560.82	12:21
WPT-21	06/07/2019	11.06	572.49	561.43	11:46
WPT-22	06/07/2019	10.63	571.64	561.01	11:37
WPT-23	06/07/2019	9.51	571.69	562.18	12:03
WPT-24	06/07/2019	9.55	571.46	561.91	14:31
WPT-25	06/07/2019	10.50	572.50	562.00	13:37
WPT-3R	06/07/2019	10.38	572.98	562.60	11:55
WPT-4	06/07/2019	9.53	572.56	563.03	11:58
WPT-5	06/07/2019	9.00	572.51	563.51	13:03
WPT-6	06/07/2019	14.20	577.70	563.50	13:12
WPT-7	06/07/2019	7.93	571.58	563.65	12:38
WPT-8	06/07/2019	3.30	568.66	565.36	11:21
WPT-9R	06/07/2019	8.37	572.62	564.25	11:18

APPENDIX B

CHEMOURS NIAGARA PLANT SUMMARY OF ANALYTICAL RESULTS SECOND QUARTER 2019 SYSTEM MONITORING

Appendix B
Summary of Analytical Results
Chemours Niagara Plant
Second Quarter 2019

		Location	GWRS-INF	GWRS-EFF	OLIN-INF	OLIN-EFF	OUTFALL-023	OUTFALL-023	TRIP BLANK
Method	Parameter	Date	6/7/2019	6/7/2019	6/7/2019	6/7/2019	6/7/2019	6/7/2019	6/7/2019
		Units	FS	FS	FS	FS	FS	DUP	TB
	Field Parameters								
	COLOR	NONE	Clear	Clear	Clear	Clear	Clear	Clear	--
	ODOR	NONE	None	None	Slight	None	None	None	--
	OXIDATION REDUCTION POTENTIAL	MV	135	162	-20	37	168	168	--
	PH	STD UNITS	7.47	8.07	8.27	7.96	8.42	8.42	--
	SPECIFIC CONDUCTANCE	UMHOS/CM	3650	3740	517	461	3730	3730	--
	TEMPERATURE	DEGREES C	16.57	16.91	14.72	13.5	15.62	15.62	--
	TURBIDITY QUANTITATIVE	NTU	1.48	0.72	18.8	0.53	1.1	1.1	--
	Volatile Organics								
8260C	1,1,1-Trichloroethane	UG/L	<500	<6.7	<8	<1	<1	<6.7	<1
8260C	1,1,2,2-Tetrachloroethane	UG/L	550	130	13	<1	30	48	<1
8260C	1,1,2-Trichloroethane	UG/L	<500	<6.7	<8	<1	<1	<6.7	<1
8260C	1,1-Dichloroethane	UG/L	<500	<6.7	<8	<1	<1	<6.7	<1
8260C	1,1-Dichloroethene	UG/L	<500	<6.7	<8	<1	<1	<6.7	<1
8260C	1,2-Dichlorobenzene	UG/L	<500	<6.7	<8	<1	<1	<6.7	<1
8260C	1,4-Dichlorobenzene	UG/L	<500	<6.7	<8	<1	<1	<6.7	<1
8260C	1,4-Dichlorobutane	UG/L	<500	<6.7	<8	<1	<1	<6.7	<1
8260C	Benzene	UG/L	<500	<6.7	<8	<1	<1	<6.7	<1
8260C	Carbon Tetrachloride	UG/L	<500	<6.7	<8	<1	<1	<6.7	<1
8260C	Chlorobenzene	UG/L	<500	<6.7	<8	<1	<1	<6.7	<1
8260C	Chloroform	UG/L	18000	<6.7	46	19	19	230	<1
8260C	cis-1,2 Dichloroethene	UG/L	10000	<6.7	40	6.1	8.2	120	<1
8260C	Methyl Chloride	UG/L	<500	<6.7	<8	<1	<1	<6.7	<1
8260C	Methylene Chloride	UG/L	<2500	<33	<40	<5	<5	<33	<5
8260C	Tetrachloroethene	UG/L	4300	<6.7	83	<1	1.9 J	75	<1
8260C	Tetrahydrothiophene	UG/L	<1000	<13	<16	<2	<2	<13	<2
8260C	Toluene	UG/L	<500	<6.7	<8	<1	<1	<6.7	<1
8260C	trans-1,2-Dichloroethene	UG/L	<500	<6.7	<8	<1	<1	<6.7	<1
8260C	Trichloroethene	UG/L	13000	<6.7	160	3	7.5	180	<1
8260C	Vinyl Chloride	UG/L	680	<6.7	14	<1	<1	<6.7	<1
	Total VOCs	UG/L	46530	130	356	28.1	66.6	653	0
	Other Organics								
8270D	Bis(2-Ethylhexyl)Phthalate	UG/L	--	--	--	--	<5.8	<5.8	--
8270D	Hexachlorobutadiene	UG/L	--	--	--	--	<9.7	<9.7	--
8270D	Hexachloroethane	UG/L	--	--	--	--	<9.7	<9.7	--
8270D	Naphthalene	UG/L	--	--	--	--	<9.7	<9.7	--
8081B	Alpha-BHC	UG/L	--	--	--	--	1.7	1.6	--
8081B	beta-BHC	UG/L	--	--	--	--	<0.48	<0.49	--
8081B	delta-BHC	UG/L	--	--	--	--	<0.48	<0.49	--
8081B	Lindane	UG/L	--	--	--	--	0.73	0.66	--
8082A	PCB 1016	UG/L	--	--	--	--	<0.48	<0.097 UJ	--
8082A	PCB 1221	UG/L	--	--	--	--	<0.48	<0.097	--
8082A	PCB 1232	UG/L	--	--	--	--	<0.48	<0.097	--
8082A	PCB 1242	UG/L	--	--	--	--	<0.48	<0.097	--
8082A	PCB 1248	UG/L	--	--	--	--	<0.48	<0.097	--
8082A	PCB 1254	UG/L	--	--	--	--	<0.48	<0.097	--
8082A	PCB 1260	UG/L	--	--	--	--	<0.48	<0.097	--
	Inorganics								
6010C	Barium, dissolved	UG/L	--	--	--	--	<200	<200	--
9012B	Cyanide, total	UG/L	--	--	--	--	1400	1400	--

< Not detected at stated reporting limit

J Estimated concentration

APPENDIX C

CHEMOURS NIAGARA PLANT SILICONE OIL REMEDIATION

TABLE 1
Silicone Oil Recovery Summary - 2Q2019
Niagara Plant
Niagara Falls, NY

DATE	PW-20			PW-24		
	PRODUCT THICKNESS (FT)	AMOUNT RECOVERED (GALLONS)	CUMULATIVE TOTAL (GALLONS)	PRODUCT THICKNESS (FT)	AMOUNT RECOVERED (GALLONS)	CUMULATIVE TOTAL (GALLONS)
			64.0			1985.5
04/01/19	0.0	0.0	64.0	0.0	0.5	1,986.0
04/08/19	0.0	0.0	64.0	0.0	0.0	1,986.0
04/15/19	0.0	0.0	64.0	0.0	0.0	1,986.0
04/22/19	0.0	0.0	64.0	0.0	0.0	1,986.0
04/29/19	0.0	0.0	64.0	0.0	0.0	1,986.0
05/06/19	0.0	0.0	64.0	0.0	0.0	1,986.0
05/13/19	0.0	0.0	64.0	0.0	0.0	1,986.0
05/20/19	0.0	0.0	64.0	0.0	0.0	1,986.0
05/28/19	0.0	0.0	64.0	0.0	0.0	1,986.0
06/03/19	0.0	0.0	64.0	0.0	0.0	1,986.0
06/10/19	0.0	0.0	64.0	0.0	0.0	1,986.0
06/17/19	0.0	0.0	64.0	0.0	0.0	1,986.0
06/24/19	0.0	0.0	64.0	0.0	0.0	1,986.0
2Q19 Totals	0.0	0.0	64.0	0.0	0.5	1,986.0
TOTAL SILICONE OIL RECOVERED SINCE JUNE 1999:					2,050.0	GALLONS
comments:	None					