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November 29, 2019

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

Dear Mr. Radon:

NIAGARA PLANT THIRD QUARTER 2019 DATA PACKAGE

Enclosed is the Groundwater Remediation System Third Quarter 2019 (3Q19) 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 3Q19.

Pumping well uptime was 88.7 percent for the original GWRS pumping wells, 95 percent for pumping well PW-37, and 95 percent for PW-39 during 3Q19. There was one scheduled and no unscheduled system shutdowns greater than 24 hours in 3Q19. On August 10 the pumping wells were shut down and on August 11 the treatment system was shutdown. During this scheduled shutdown multiple inspections and preventative maintenance actions were taken (see enclosed for details). On August 13, the pumping wells were restarted (except for pumping well PW-37 and PW-39) with a downtime of 78.5 hours. On August 14 pumping wells PW-37 and PW-39 were restarted (total downtime was 102.0 hours) and the treatment system was restarted (total downtime of 103.0 hours).

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 3Q19 Data Package

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



**GROUNDWATER REMEDIATION SYSTEM
THIRD 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**

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November 2019

TABLE OF CONTENTS

	Page
SECTION 1 DATA PACKAGE SUMMARY	1
1.1 Introduction.....	1
1.2 Operational Summary	1
TABLES.....	1
Table 1 – Refined Indicator Parameters	
Table 2 – GWRS Operations Statistics, Third Quarter 2019	
Table 3 – Total Volatile Organic Compounds Removed by GWRS, Third Quarter 2019	
Table 4 – Summary of Organic Compounds Removed by GWRS	
Table 5 – Summary of Organic Compounds Removed by Olin Production Well	
Table 6 – Point Source Contaminant Loading Rates, Loading Indicator Organics- Third Quarter 2019	
FIGURES	
Figure 1 – Potentiometric Surface Map: A-Zone Overburden - July 30, 2019	
Figure 2 – Potentiometric Surface Map: A-Zone Bedrock - July 30, 2019	
Figure 3 – Potentiometric Surface Map: B-Zone Bedrock - July 30, 2019	
Figure 4 – Potentiometric Surface Map: C-Zone Bedrock - July 30, 2019	
Figure 5 – Potentiometric Surface Map: D-Zone Bedrock - July 30, 2019	
APPENDIX A CHEMOURS NIAGARA PLANT GROUNDWATER ELEVATION DATA THIRD QUARTER 2019	3
APPENDIX B CHEMOURS NIAGARA PLANT SUMMARY OF ANALYTICAL RESULTS THIRD QUARTER 2019 SYSTEM MONITORING	4
APPENDIX C SILICONE OIL REMEDIATION.....	5

SECTION 1

DATA PACKAGE SUMMARY

1.1 INTRODUCTION

This data package presents a summary of operating and monitoring data collected during the third quarter of 2019 (3Q19) 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 Third 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 88.7 percent for the original GWRs pumping wells, 95 percent for pumping well PW-37, and 95 percent for PW-39 during 3Q19. There was one scheduled and no unscheduled system shutdowns greater than 24 hours in 3Q19. On August 10 the pumping wells were shut down and on August 11 the treatment system was shutdown. During this scheduled shutdown: the equalization tank was inspected; an inspection and annual maintenance were completed on the scrubber; conduits between RTO chambers were replaced and new wiring installed; annual inspection and maintenance activities for the RTO were completed; and the pump, motor, and hose were changed out at PW-39 and the well casing was vacuumed out. Conveyance lines were also cleaned from pumping wells PW-37 and PW-39. On August 13, the pumping wells were restarted except for pumping well PW-37 and PW-39. These wells had a downtime of 78.5 hours. On August 14 pumping wells PW-37 and PW-39 were restarted (total downtime was 102.0 hours) and the treatment system was restarted (total downtime of 103.0 hours).

Other than the aforementioned PW-39 pump, no other well pumps were replaced during 3Q19.

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 1,389 pounds of volatile organic compounds were removed from groundwater during operation of the Groundwater Remediation System (GWRs) in 3Q19 (see Tables 2 and 3). Historical organic compound removal by the GWRs is summarized in Table 4.

Olin Production Well uptime was 100 percent during 3Q19. Organics removal at the Olin Production Well treatment system was estimated to be 267.6 pounds for 3Q19 (see Tables 2 and 5). Estimated organic compound removal for the Olin Production Well from October 1992 through September 2019 is approximately 45,092 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 0.25 pounds of organics per day during 3Q19. Since effluent discharged through this outfall is treated at the NFWWF, this represents an additional 22 pounds of organics (Table 2) that were removed and treated during 3Q19.

Groundwater elevation data collected during 3Q19 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 3Q19, no silicone oil was observed in PW-20 and 1.5 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 1,987.5 gallons of Silicone Oil have been recovered from PW-20 and PW-24 respectively. A total of 2,051.5 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
Third Quarter 2019
Chemours Niagara**

Treatment System Operations		
GWRS		
Original 23 Pumping Wells System Uptime		88.7%
Pumping Well 37 Uptime		95.0%
Pumping Well 39 Uptime		95.0%
Total Gallons Pumped		3,323,160
Average System Pumping Rate for Quarter (GPM)		24.8
Estimated Pounds of Organics Treated		1,389
Number of unscheduled treatment shutdowns (> 24 hours)		0
Number of scheduled treatment shutdowns (> 24 hours)		1
Olin System		
Pumping System Uptime		100.0%
Estimated Pounds of Organics Treated		267.6
Carbon vessel changes		3
	V-2	9/27/19
	V-3	9/27/19
	V-4	9/27/19
Outfall 023		
Estimated Pounds of Organics Treated		22

GWRS Pumping Well Operations	
Total Pump Replacements:	0
Number of Individual Pumps down > 48 hours:	1

Table 3

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

Quarterly Total Flow (gallons)	Influent Total VOC Concentration (µg/l)	Effluent Total VOC Concentration (µg/l)	Estimated VOC Removal (lbs.)
3,323,160	50,170	11.2	1,389

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	
3Q19	1,389	
TOTAL	200,765	

⁽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
3Q19	618	413	20.7	2.9	268
TOTAL					45,092

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
Third 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	267	77.1	0.25
Olin GAC ⁽²⁾	618	20.7	0.15

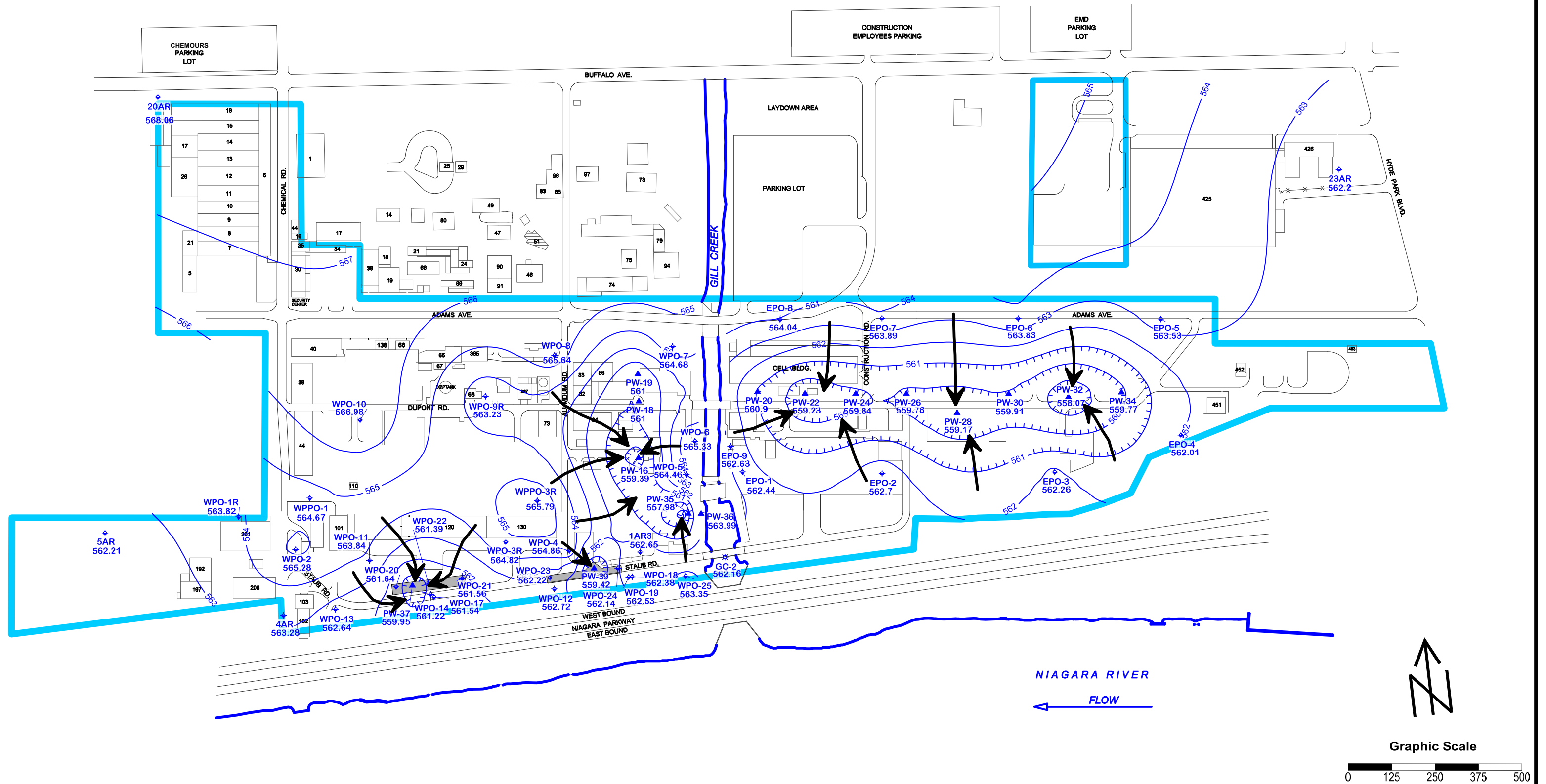
GAC = Granular Activated Carbon (Olin Treatment Effluent)

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

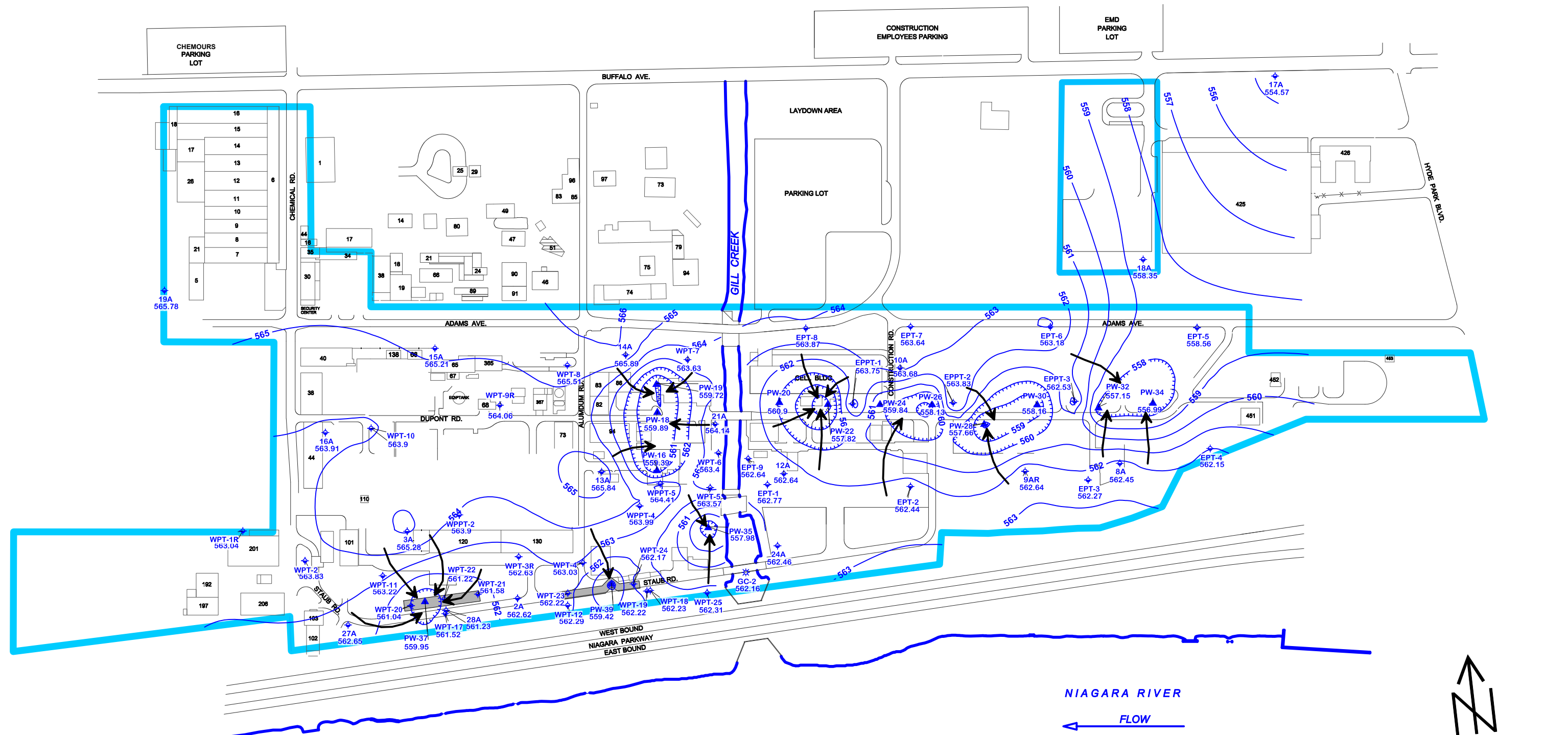


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Created by: RBP	Date: 9/10/19
Checked by: JWS	Date: 9/11/19
Project Manager: EAF	Date: 9/11/19
Job number: 451477.02024	

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 1
POTENTIOMETRIC SURFACE MAP
A-ZONE OVERBURDEN - JULY 30, 2019
CHEMOURS NIAGARA PLANT, NIAGARA FALLS, NY



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(716) 541-0730

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Checked by: JWS	Date: 9/11/19
Project Manager: EAF	Date: 9/11/19
Job number: 451477.02024	

LEGEND

- BUILDING
- ROAD
- CHEMOURS PROPERTY BOUNDARY
- SURFACE WATER

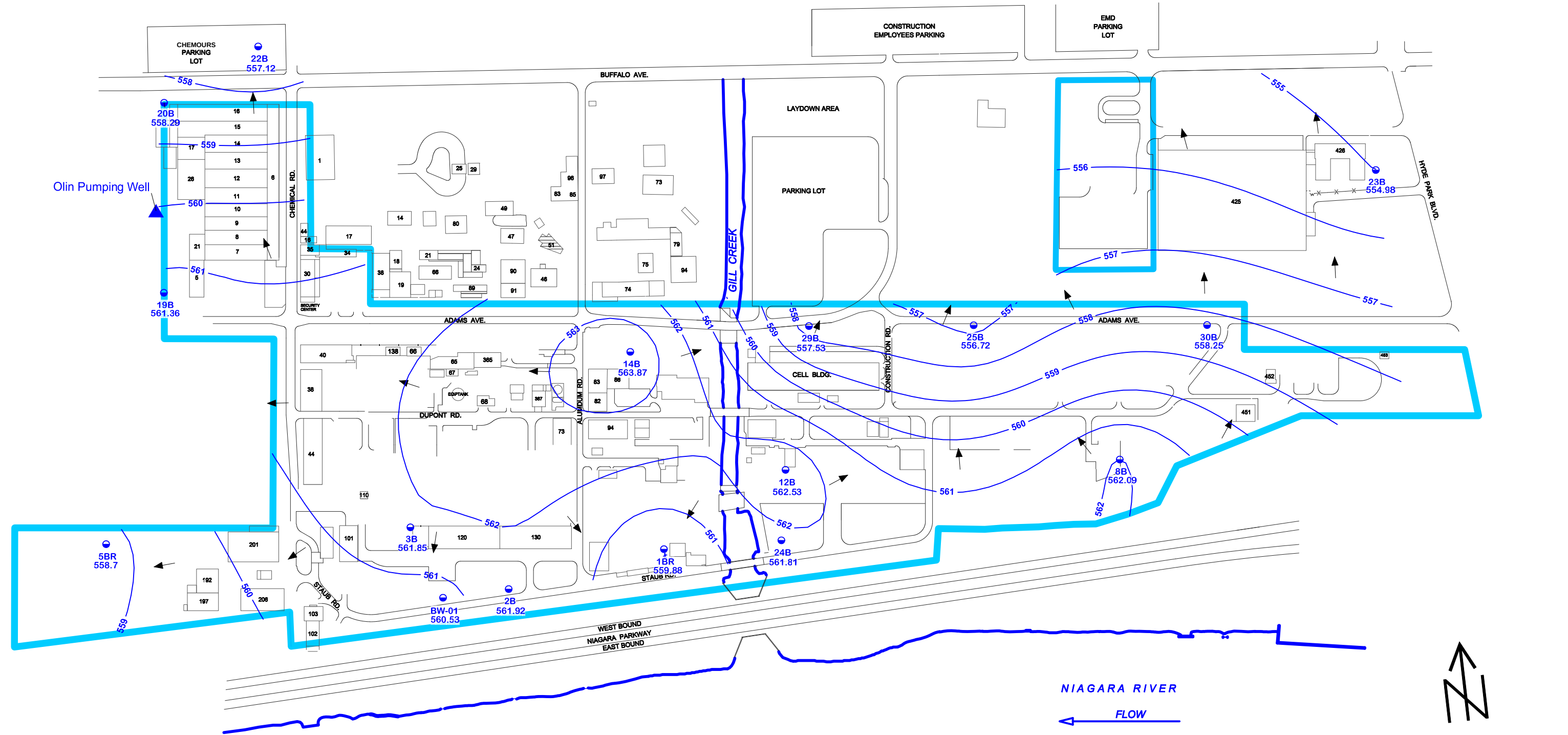
CHEMOURS WELLS

- 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 - JULY 30, 2019
CHEMOURS NIAGARA PLANT, NIAGARA FALLS, NY



Note:
New well casing installed at well 12B on 6/4/2019. Top of casing manually measured as 2.5 ft above ground surface.

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Job number: 451477.02024	

LEGEND

BUILDING

ROAD

CHEMOURS PROPERTY BOUNDARY

SURFACE WATER

CHEMOURS WELLS

1BR

WELL ID

PIEZOMETER

PUMPING WELL

MONITORING WELL

UNDERGROUND UTILITY WELL

GROUNDWATER CONTOUR

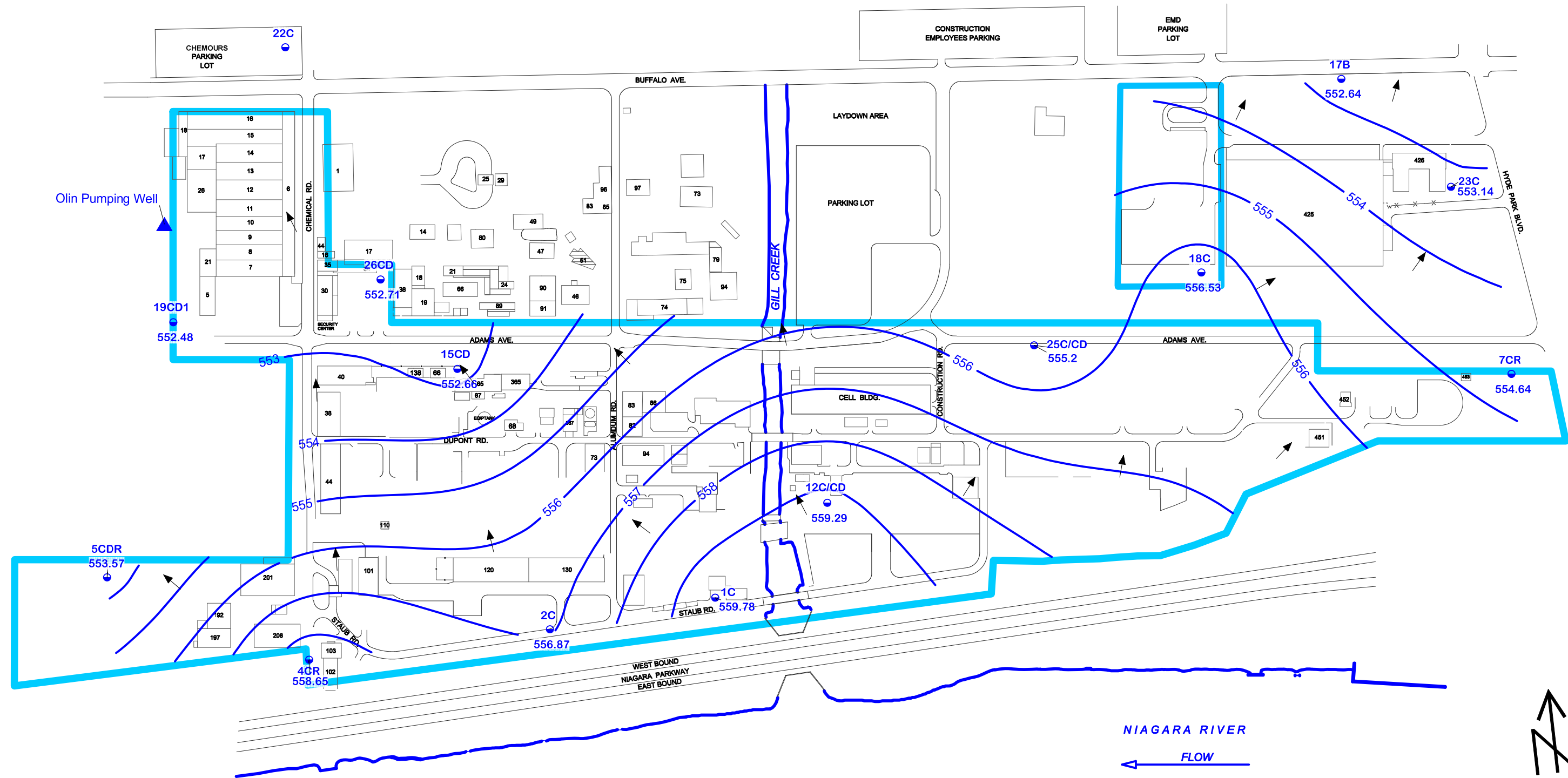
GROUNDWATER CONTOUR DEPRESSION

561

GROUNDWATER CONTOUR ELEVATION

FIGURE 3
POTENTIOMETRIC SURFACE MAP
B-ZONE BEDROCK - JULY 30, 2019
CHEMOURS NIAGARA PLANT, NIAGARA FALLS, NY

//NYBUF03FS01/Dupont\$/Niagara/NiaPlant/Hydrogeo/Hydro/GW_contours/2019-07-30 NIA Contour Tool/2019-07-30-BZPZ.erf



Note:
The water level collected from 22C was anomalous in 3Q2019 and was not used in the generation of the contours.

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Checked by: JWS	Date: 9/11/19
Project Manager: EAF	Date: 9/11/19
Job number: 451477.02024	

LEGEND

- 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 - JULY 30, 2019
CHEMOURS NIAGARA PLANT, NIAGARA FALLS, NY

APPENDIX A

CHEMOURS NIAGARA PLANT
GROUNDWATER ELEVATION DATA
THIRD QUARTER 2019

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

SAMPLE POINT	DATE	DEPTH TO WATER (FT)	CASING ELEVATION (FT AMSL)	GW ELEVATION (FT AMSL)	TIME
BW-01	07/30/2019	11.00	571.53	560.53	12:52
DEC-3R	07/30/2019	12.25	574.39	562.14	11:22
DEC-4R	07/30/2019	14.01	575.81	561.80	11:32
DEC-5	07/30/2019	20.48	582.13	561.65	11:38
EPO-1	07/30/2019	10.23	572.67	562.44	13:32
EPO-2	07/30/2019	9.61	572.31	562.70	12:06
EPO-3	07/30/2019	10.41	572.67	562.26	11:43
EPO-4	07/30/2019	8.74	570.75	562.01	11:30
EPO-5	07/30/2019	6.82	570.35	563.53	12:35
EPO-6	07/30/2019	6.63	570.46	563.83	12:40
EPO-7	07/30/2019	6.82	570.71	563.89	12:52
EPO-8	07/30/2019	6.65	570.69	564.04	12:59
EPO-9	07/30/2019	9.73	572.36	562.63	13:30
EPPT-1	07/30/2019	5.21	568.96	563.75	12:36
EPPT-2	07/30/2019	8.58	572.41	563.83	12:01
EPPT-3	07/30/2019	9.52	572.05	562.53	11:52
EPT-1	07/30/2019	10.09	572.86	562.77	13:31
EPT-2	07/30/2019	9.78	572.22	562.44	12:04
EPT-3	07/30/2019	10.24	572.51	562.27	11:41
EPT-4	07/30/2019	8.88	571.03	562.15	11:31
EPT-5	07/30/2019	11.72	570.28	558.56	12:35
EPT-6	07/30/2019	7.34	570.52	563.18	12:39
EPT-7	07/30/2019	6.89	570.53	563.64	12:51
EPT-8	07/30/2019	6.79	570.66	563.87	12:57
EPT-9	07/30/2019	9.15	571.79	562.64	13:29
GC-2	07/30/2019	10.63	572.79	562.16	13:49
MW-10A	07/30/2019	8.45	572.13	563.68	12:12
MW-10C	07/30/2019	10.99	568.10	557.11	12:23
MW-10D	07/30/2019	13.0	568.49	555.5	12:25
MW-12A	07/30/2019	9.92	572.56	562.64	13:36
MW-12B	07/30/2019	9.61	572.40	562.79	13:34
MW-12C/CD	07/30/2019	13.48	572.77	559.29	13:37
MW-13A	07/30/2019	7.29	573.13	565.84	13:13
MW-14A	07/30/2019	6.41	572.30	565.89	13:07
MW-14B	07/30/2019	8.42	572.29	563.87	13:10
MW-14C	07/30/2019	15.78	572.10	556.32	13:08
MW-14D	07/30/2019	16.71	572.68	555.97	13:06
MW-15A	07/30/2019	3.40	568.61	565.21	11:15
MW-15C	07/30/2019	11.12	568.52	557.40	11:13
MW-15CD	07/30/2019	15.89	568.55	552.66	11:16
MW-15D	07/30/2019	12.50	568.57	556.07	11:14
MW-16A	07/30/2019	8.42	572.33	563.91	14:14
MW-16B	07/30/2019	10.35	572.96	562.61	14:16

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

SAMPLE POINT	DATE	DEPTH TO WATER (FT)	CASING ELEVATION (FT AMSL)	GW ELEVATION (FT AMSL)	TIME
MW-17A	07/30/2019	17.41	571.98	554.57	12:18
MW-17B	07/30/2019	19.30	571.94	552.64	12:16
MW-18A	07/30/2019	12.46	570.81	558.35	12:09
MW-18C	07/30/2019	14.18	570.71	556.53	12:09
MW-18D	07/30/2019	15.45	570.89	555.44	12:11
MW-19A	07/30/2019	7.89	573.67	565.78	13:58
MW-19B	07/30/2019	11.90	573.26	561.36	13:56
MW-19C	07/30/2019	17.21	573.59	556.38	13:54
MW-19CD1	07/30/2019	20.81	573.29	552.48	13:52
MW-19D	07/30/2019	17.29	573.08	555.79	13:49
MW-1AR3	07/30/2019	9.03	571.68	562.65	14:09
MW-1BR	07/30/2019	11.50	571.38	559.88	14:07
MW-1C	07/30/2019	11.60	571.38	559.78	14:05
MW-1D	07/30/2019	15.50	572.13	556.63	14:04
MW-20AR	07/30/2019	2.45	570.51	568.06	14:06
MW-20B	07/30/2019	11.80	570.09	558.29	14:04
MW-21A	07/30/2019	9.27	573.41	564.14	12:49
MW-22B	07/30/2019	12.74	569.86	557.12	11:53
MW-22C	07/30/2019	0.00	570.09	570.09	11:56
MW-22D	07/30/2019	14.45	570.11	555.66	12:00
MW-23AR	07/30/2019	11.30	573.50	562.20	12:23
MW-23B	07/30/2019	17.72	572.70	554.98	12:23
MW-23C	07/30/2019	19.60	572.74	553.14	12:24
MW-23D	07/30/2019	17.22	572.81	555.59	12:25
MW-24A	07/30/2019	10.11	572.57	562.46	13:44
MW-24B	07/30/2019	10.88	572.69	561.81	13:43
MW-25B	07/30/2019	12.99	569.71	556.72	12:48
MW-25C/CD	07/30/2019	15.51	570.71	555.20	12:47
MW-25D	07/30/2019	14.88	570.53	555.65	12:46
MW-26C	07/30/2019	13.03	568.39	555.36	13:06
MW-26CD	07/30/2019	16.16	568.87	552.71	13:43
MW-27A	07/30/2019	10.95	573.60	562.65	12:35
MW-28A	07/30/2019	9.25	570.48	561.23	12:16
MW-29B	07/30/2019	14.00	571.53	557.53	12:56
MW-2A	07/30/2019	9.20	571.82	562.62	12:03
MW-2B	07/30/2019	11.63	573.55	561.92	12:06
MW-2C	07/30/2019	14.75	571.62	556.87	12:04
MW-30B	07/30/2019	12.58	570.83	558.25	12:33
MW-3A	07/30/2019	7.15	572.43	565.28	12:24
MW-3B	07/30/2019	10.40	572.25	561.85	12:23
MW-4AR	07/30/2019	10.54	573.82	563.28	12:58
MW-4CR	07/30/2019	11.20	569.85	558.65	13:01
MW-5AR	07/30/2019	12.80	575.01	562.21	13:15

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

SAMPLE POINT	DATE	DEPTH TO WATER (FT)	CASING ELEVATION (FT AMSL)	GW ELEVATION (FT AMSL)	TIME
MW-5BR	07/30/2019	16.23	574.93	558.70	13:14
MW-5CDR	07/30/2019	21.43	575.00	553.57	13:14
MW-5CR	07/30/2019	15.90	574.91	559.01	13:12
MW-5DR	07/30/2019	18.79	575.10	556.31	13:11
MW-6AR	07/30/2019	8.38	576.41	568.03	13:06
MW-7AR	07/30/2019	16.89	571.90	555.01	11:21
MW-7CR	07/30/2019	16.96	571.60	554.64	11:19
MW-8A	07/30/2019	9.19	571.64	562.45	11:39
MW-8B	07/30/2019	9.34	571.43	562.09	11:37
MW-9AR	07/30/2019	10.02	572.66	562.64	11:45
MW-U-1	07/30/2019	13.91	573.25	559.34	13:40
MW-U-14	07/30/2019	3.82	571.26	567.44	13:46
MW-U-16	07/30/2019	11.10	573.78	562.68	11:42
PW-16	07/30/2019	14.06	573.45	559.39	13:16
PW-18	07/30/2019	10.24	570.13	559.89	12:56
PW-19	07/30/2019	13.58	573.30	559.72	12:58
PW-20	07/30/2019	8.85	569.75	560.90	12:46
PW-22	07/30/2019	11.68	569.50	557.82	12:43
PW-24	07/30/2019	8.91	568.75	559.84	12:33
PW-26	07/30/2019	10.27	568.40	558.13	12:09
PW-28	07/30/2019	9.71	567.37	557.66	11:48
PW-30	07/30/2019	10.65	568.81	558.16	11:50
PW-32	07/30/2019	11.02	568.17	557.15	11:55
PW-34	07/30/2019	11.93	568.92	556.99	11:57
PW-35	07/30/2019	14.70	572.68	557.98	13:24
PW-36	07/30/2019	5.52	569.51	563.99	13:26
PW-37	07/30/2019	9.09	569.04	559.95	12:44
PW-38	07/30/2019	10.83	572.07	561.24	12:12
PW-39	07/30/2019	12.34	571.76	559.42	14:17
TPW-01	07/30/2019	9.80	570.85	561.05	12:55
WPO-10	07/30/2019	5.05	572.03	566.98	11:02
WPO-11	07/30/2019	9.41	573.25	563.84	14:23
WPO-12	07/30/2019	11.11	573.83	562.72	12:00
WPO-13	07/30/2019	11.01	573.65	562.64	12:39
WPO-14	07/30/2019	9.29	570.51	561.22	12:17
WPO-15	07/30/2019	13.90	575.98	562.08	11:33
WPO-16	07/30/2019	12.67	574.84	562.17	11:23
WPO-17	07/30/2019	9.30	570.84	561.54	12:20
WPO-18	07/30/2019	10.00	572.38	562.38	13:58
WPO-19	07/30/2019	9.96	572.49	562.53	14:01
WPO-1R	07/30/2019	9.61	573.43	563.82	13:21
WPO-2	07/30/2019	8.04	573.32	565.28	13:24
WPO-20	07/30/2019	10.00	571.64	561.64	12:30

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

SAMPLE POINT	DATE	DEPTH TO WATER (FT)	CASING ELEVATION (FT AMSL)	GW ELEVATION (FT AMSL)	TIME
WPO-21	07/30/2019	10.50	572.06	561.56	12:10
WPO-22	07/30/2019	9.47	570.86	561.39	12:48
WPO-23	07/30/2019	9.62	571.84	562.22	11:56
WPO-24	07/30/2019	9.27	571.41	562.14	14:11
WPO-25	07/30/2019	8.42	571.77	563.35	13:52
WPO-3R	07/30/2019	8.02	572.84	564.82	14:26
WPO-4	07/30/2019	7.52	572.38	564.86	11:53
WPO-5	07/30/2019	8.53	572.99	564.46	13:21
WPO-6	07/30/2019	12.40	577.73	565.33	12:53
WPO-7	07/30/2019	6.84	571.52	564.68	13:02
WPO-8	07/30/2019	2.70	568.34	565.64	11:29
WPO-9R	07/30/2019	9.71	572.94	563.23	11:19
WPPO-1	07/30/2019	3.99	568.66	564.67	13:57
WPPO-3R	07/30/2019	5.99	571.78	565.79	11:38
WPPT-2	07/30/2019	8.25	572.15	563.90	14:31
WPPT-4	07/30/2019	8.31	572.30	563.99	11:45
WPPT-5	07/30/2019	12.24	576.65	564.41	13:18
WPT-10	07/30/2019	8.25	572.15	563.90	11:00
WPT-11	07/30/2019	10.04	573.26	563.22	14:22
WPT-12	07/30/2019	11.12	573.41	562.29	11:58
WPT-17	07/30/2019	9.29	570.81	561.52	12:19
WPT-18	07/30/2019	10.72	572.95	562.23	13:57
WPT-19	07/30/2019	10.51	572.73	562.22	14:00
WPT-1R	07/30/2019	10.98	574.02	563.04	13:19
WPT-2	07/30/2019	9.30	573.13	563.83	13:26
WPT-20	07/30/2019	11.15	572.19	561.04	12:29
WPT-21	07/30/2019	10.91	572.49	561.58	12:09
WPT-22	07/30/2019	10.42	571.64	561.22	12:49
WPT-23	07/30/2019	9.47	571.69	562.22	11:57
WPT-24	07/30/2019	9.29	571.46	562.17	14:12
WPT-25	07/30/2019	10.19	572.50	562.31	13:53
WPT-3R	07/30/2019	10.35	572.98	562.63	14:27
WPT-4	07/30/2019	9.53	572.56	563.03	11:51
WPT-5	07/30/2019	8.94	572.51	563.57	13:22
WPT-6	07/30/2019	14.30	577.70	563.40	12:52
WPT-7	07/30/2019	7.95	571.58	563.63	13:00
WPT-8	07/30/2019	3.15	568.66	565.51	11:34
WPT-9R	07/30/2019	8.56	572.62	564.06	11:23

APPENDIX B

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

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

		Location	GWRs-INF	GWRs-EFF	GWRs-EFF	OLIN-INF	OLIN-EFF	Outfall 023 (MS-8)	TRIP BLANK
Method	Parameter Name	Date Units	7/30/2019 FS	7/30/2019 FS	7/30/2019 DUP	7/30/2019 FS	7/30/2019 FS	7/2/2019 FS	7/30/2019 TB
	Field Parameters								
	COLOR	NONE	Clear	Clear	Clear	Clear	Clear	--	--
	ODOR	NONE	Slight	None	None	None	None	--	--
	OXIDATION REDUCTION POTENTIAL	MV	213	250	201	-56	48	--	--
	PH	STD UNITS	7.09	6.55	8.28	7.74	7.96	--	--
	SPECIFIC CONDUCTANCE	UMHOS/CM	3050	3050	2620	367	359	--	--
	TEMPERATURE	DEGREES C	24.15	24.31	20.84	15.51	18.28	--	--
	TURBIDITY QUANTITATIVE	NTU	0.32	0.66	6.43	0.48	0.44	--	--
	Volatile Organics								
8260C	1,1,1-Trichloroethane	UG/L	<500	<1	<2	<5	<1	<2	<1
8260C	1,1,2,2-Tetrachloroethane	UG/L	810	10	55	14	<1	2.9	<1
8260C	1,1,2-Trichloroethane	UG/L	<500	<1	<2	<5	<1	<1.5	<1
8260C	1,1-Dichloroethane	UG/L	<500	<1	<2	<5	<1	--	<1
8260C	1,1-Dichloroethene	UG/L	<500	<1	<2	<5	<1	<1	<1
8260C	1,2-Dichlorobenzene	UG/L	<500	<1	<2	<5	<1	<5	<1
8260C	1,4-Dichlorobenzene	UG/L	<500	<1	<2	<5	<1	<5	<1
8260C	1,4-Dichlorobutane	UG/L	<500	<1	<2	<5	<1	--	<1
8260C	Benzene	UG/L	<500	<1	<2	<5	<1	--	<1
8260C	Carbon Tetrachloride	UG/L	<500	<1	<2	<5	<1	<1	<1
8260C	Chlorobenzene	UG/L	<500	<1	<2	<5	<1	--	<1
8260C	Chloroform	UG/L	19000	<1	19.5	48	2	8.1	<1
8260C	cis-1,2 Dichloroethene	UG/L	11000	<1	11.1	44	12	18	<1
8260C	Methyl Chloride	UG/L	<500	<1	<2	<5	<1	--	<1
8260C	Methylene Chloride	UG/L	<2500	<5	<10	<25	<5	<1	<5
8260C	Tetrachloroethene	UG/L	4800	<1	9.8	110	<1	19	<1
8260C	Tetrahydrothiophene	UG/L	<1000	<2	<4	<10	<2	--	<2
8260C	Toluene	UG/L	<500	<1	<2	<5	<1	--	<1
8260C	trans-1,2-Dichloroethene	UG/L	<500	<1	<2	<5	<1	0.57	<1
8260C	Trichloroethene	UG/L	14000	1.2	15.8	180	3.9	26	<1
8260C	Vinyl Chloride	UG/L	560	<1	<2	17	2.8	2.5	<1
	Total VOCs	UG/L	50170	11.2	111	413	20.7	77.1	0
	Other Organics								
8270D	Bis(2-Ethylhexyl)Phthalate	UG/L	--	<6.1	<5.9	--	--	<2.2	--
8270D	Hexachlorobutadiene	UG/L	--	<10	<9.9	--	--	<2	--
8270D	Hexachloroethane	UG/L	--	<10	<9.9	--	--	--	--
8270D	Naphthalene	UG/L	--	<10	<9.9	--	--	--	--
8081B	Alpha-BHC	UG/L	--	2.9	3.2	--	--	--	--
8081B	beta-BHC	UG/L	--	<0.24	<0.24	--	--	--	--
8081B	delta-BHC	UG/L	--	<0.24	<0.24	--	--	--	--
8081B	Lindane	UG/L	--	1.1	1.1	--	--	--	--
8082A	PCB 1221	UG/L	--	<0.97	<0.97	--	--	<0.05	--
8082A	PCB 1232	UG/L	--	<0.97	<0.97	--	--	<0.05	--
8082A	PCB 1242	UG/L	--	<0.97	<0.97	--	--	<0.05	--
8082A	PCB 1248	UG/L	--	<0.97	<0.97	--	--	<0.05	--
8082A	PCB 1254	UG/L	--	<0.97	<0.97	--	--	0.042 J	--
8082A	PCB 1260	UG/L	--	<0.97	<0.97	--	--	<0.05	--
	Inorganics								
6010C	Barium, dissolved	UG/L	--	<200	<200	--	--	--	--
9012B	Cyanide, total	UG/L	--	1000	1000	--	--	143	--

< Not detected at stated reporting limit

J Estimated concentration

APPENDIX C

CHEMOURS NIAGARA PLANT SILICONE OIL REMEDIATION

TABLE 1
Silicone Oil Recovery Summary - 3Q2019
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			1986.0
07/08/19	0.0	0.0	64.0	0.0	0.0	1,986.0
07/15/19	0.0	0.0	64.0	0.0	0.0	1,986.0
07/23/19	0.0	0.0	64.0	0.0	0.0	1,986.0
07/29/19	0.0	0.0	64.0	0.0	0.0	1,986.0
08/05/19	0.0	0.0	64.0	0.0	0.0	1,986.0
08/12/19	0.0	0.0	64.0	0.0	0.0	1,986.0
08/19/19	0.0	0.0	64.0	0.0	0.0	1,986.0
08/26/19	0.0	0.0	64.0	0.0	1.0	1,987.0
09/05/19	0.0	0.0	64.0	0.0	0.0	1,987.0
09/09/19	0.0	0.0	64.0	0.0	0.0	1,987.0
09/16/19	0.0	0.0	64.0	0.0	0.0	1,987.0
09/23/19	0.0	0.0	64.0	0.0	0.0	1,987.0
09/30/19	0.0	0.0	64.0	0.0	0.5	1,987.5
3Q19 Totals	0.0	0.0	64.0	0.0	1.5	1,987.5
TOTAL SILICONE OIL RECOVERED SINCE JUNE 1999:					2,051.5	GALLONS
comments:	9/5/2019: Empty 1.5 gals into 5 gallon pail and add solidification material/PPE for disposal.					