



Tom D. Antonoff
Senior Project Manager
GE
Global Operations – EHS
1 River Road, Bldg 5-7W
Schenectady, NY 12345

T (518) 388-4142
F (518) 388-7657
Tom.Antonoff@ge.com

VIA ELECTRONIC MAIL

January 15, 2020

Mr. Aaron Fischer
Remedial Bureau B
Division of Environmental Remediation
New York State Department of Environmental Conservation
625 Broadway – 12th Floor
Albany, New York 12233-7016

**Subject: Monthly Progress Report
GE Main Plant (Site No. 4-47-004)
Schenectady, New York**

Dear Aaron:

Pursuant to Section III of the Order on Consent and Administrative Settlement (Index No. A4-0562-0806) regarding General Electric Company's (GE's) Main Plant in Schenectady, New York, please find attached the Monthly Progress Report covering December 2019. As always, please call me if you have any questions.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Tom D. Antonoff'.

Tom D. Antonoff
Senior Project Manager

Attachment

cc: Stephanie Selmer, NYSDOH (via email)
Ben Conlon, Esq., NYSDEC (via email)
Damian Foti, GE (via email)
Eric Merrifield, GE (via email)
Angelica Todd, GE (via email)
Matt Sausville, Ramboll (via email)
Paul Hare, Ramboll (via email)

MONTHLY PROGRESS REPORT

Order on Consent and Administrative Settlement (Index No. A4-0562-0806) GE Main Plant (Site No. 4-47-004) Schenectady, New York

Month Covered: December 2019

I. Actions Taken During Month:

- The Monthly Progress Report (MPR) was submitted to the New York State Departments of Environmental Conservation and Health (NYSDEC and NYSDOH, respectively) on or before December 15, 2019 (or the next business day if on a weekend or holiday).
- O'Brien & Gere Engineers, Inc. (OBG, a Ramboll company) continued operation, maintenance and monitoring (OM&M) of the Seep Collection and Treatment System (SCTS) throughout the month. OBG performed weekly sampling events on December 4, 11, 18 and 23, 2019. System information was collected and recorded during each site visit on operations log sheets, which are attached.
- OBG completed well sampling for the annual groundwater monitoring program on December 9, 2019.
- OBG completed the fourth quarter Shallow Groundwater Treatment System (SGTS) performance monitoring event on December 4, 5, 6 and 9, 2019.
- OBG completed the fourth quarter Polychlorinated Biphenyl (PCB) Minimization Work Plan sampling on December 11, 2019.
- OBG completed the fourth quarter light non-aqueous phase liquid (LNAPL) gauging and recovery event on December 17 and 18, 2019. Approximately 264 ounces of LNAPL was recovered. The LNAPL gauging and recovery measurement data sheet is attached.
- OBG completed the 2019 Agronomic Cover System Inspection Report. The report is attached. This report will also be included as an appendix to the 2019 Annual OM&M Report.
- GE continued working with NYSDEC's real estate group to draft the site's environmental covenant. The preparation of a site plan is pending approval from NYSDEC real estate group. Note that the Final Engineering Report cannot be submitted until (a) NYSDEC approves the Construction Completion Reports (CCRs) and (b) the environmental covenant is finalized and executed

II. Analytical and Other Results Obtained During Month:

- Weekly analytical results are attached for the samples collected from the SCTS on December 4, 11, 18 and 23, 2019.
- Analytical results are attached for the fourth quarter SGTS samples and the annual groundwater and surface water samples collected from December 4, 5, 6 and 9, 2019.

III. Deliverables Submitted or Approved During Month:

- OBG submitted the 2018 Annual OM&M Report to NYSDEC on December 20, 2019.

IV. Actions Scheduled for Following Month:

- GE will submit this MPR to NYSDEC and NYSDOH on or before January 15, 2020 (or the following business day if on a weekend or holiday).
- OBG will continue OM&M of the SCTS, including weekly effluent sampling.

V. Anticipated Delays and Mitigative Measures:

- None in December 2019.

VI. Proposed or Approved Modifications:

- None in December 2019.

VII. Citizen Participation Activities:

- None in December 2019.

Attachments

Operations Logs for Seep Collection & Treatment System

OPERATIONS LOG SHEET
 ENHANCED SEEP COLLECTION SYSTEM
 GENERAL ELECTRIC MAIN PLANT
 SCHENECTADY, NEW YORK

PARAMETER	UNITS	EQUIPMENT TAG	DESCRIPTION	DATE:	11/27/19	12/2/19	12/3/19	12/4/19
				TIME:	2:00	1:00	1:15	1:00
				INITIALS:	TS	TR	TS	TS
SEEP COLLECTION PUMP STATIONS (SEEP 1 - 4, SEEP 5 AND SEEP 6)								
SEEP 1 - 4 PUMP RUN	Y/N	P-100A	SEEP 1-4 P-STATION PUMP		yes	yes	yes	yes
SEEP 5 PUMP RUN	Y/N	P-100B	SEEP 5 P-STATION PUMP		yes	yes	yes	yes
SEEP 6 PUMP RUN	Y/N	P-100C	SEEP 6 P-STATION PUMP		NO	NO	NO	NO
INFLUENT TANK (T-101)								
FLOW METER - 100A (FM-A)	GPM	FQIT-100A	S1-4 IN-FLOW		20.25	19.8	26.1	20.3
FLOW METER - 100B (FM-B)	GPM	FQIT-100B	S5 IN-FLOW		43.82	42.75	43	39.8
FLOW METER - 100C (FM-C)	GPM	FQIT-100C	S6 IN-FLOW		—	—	—	—
FLOW METER - 101	GPM	FQIT-101	INF TK OUT-FLOW		33.1	37.8	36.8	39.1
FLOW METER - 100A	TOTAL	FQIT-100A	S1-4 IN-FLOW		14,974,117	15,112,610	15,147,206	15,178,123
FLOW METER - 100B	TOTAL	FQIT-100B	S5 IN-FLOW		2,016,104	2,097,875	2,118,177	2,136,018
FLOW METER - 100C	TOTAL	FQIT-100C	S6 IN-FLOW		640,044	640,044	640,044	640,044
FLOW METER - 101	TOTAL	FQIT-101	INF TK OUT-FLOW		5,490,960	5,717,590	5,776,142	5,829,450
BLOWER RUNNING	Y/N	B-101	INF TK BLOWER		yes	yes	yes	yes
BLOWER PRESSURE	PSI	PI-101	INF TK BLOWER PRESS.		3	3 psi	3 psi	3 psi
VFD RATE	Hz	B-101	INF TK BLOWER VFD		50 Hz	50 Hz	50	50 Hz
INF. PUMP A RUNNING	Y/N	P-101A	PUMP TO CLARIF.		NO	NO	NO	NO
VFD RATE	Hz	P-101A	PUMP TO CLARIF. VFD		—	—	—	—
INF PUMP PRESSURE	PSI	PI-101A	PI FOR INF. PUMP		—	—	—	—
INF. PUMP B RUNNING	Y/N	P-101B	PUMP TO CLARIF.		NO	NO	NO	NO
VFD RATE	Hz	P-101B	PUMP TO CLARIF. VFD		—	—	—	—
INF PUMP PRESSURE	PSI	PI-101B	PI FOR INF. PUMP		—	—	—	—
INF Ph	SU	AIT-101	pH FOR INF. WATER		7.52	7.49	7.58	7.53
pH Probe checked	Y/N	AIT-101	pH Probe at influent tank		yes	yes	yes	yes
pH Probe clean (1X/week min)	Y/N	AIT-101	pH Probe at influent tank		yes	yes	yes	yes
INF TANK LEVEL	inwc	T-101	LEVEL TRANSMIT.		60.1	55.76	25.00	33.91
RECIRC PUMP RUNNING	Y/N	P-102	IN TK RECIRC PUMP		yes	yes	yes	yes
VFD RATE	Hz	P-102	IN TK RECIRC VFD		30 Hz	30 Hz	35 Hz	35 Hz
CAUSTIC PUMP RUNNING	Y/N	P-201	IN TK CAUSTIC		yes	yes	yes	yes
CAUSTIC TANK LEVEL	GAL	T-201	IN TK CAUSTIC		65 gal / 34"	61 gal / 32"	56 gal / 29"	50 gal / 26"
CAUSTIC USAGE	GAL	T-201	CAUSTIC USAGE		4 gal	4 gal	5 gal	6 gal
CAUSTIC USAGE	TOT	T-201	CAUSTIC USAGE		—	—	—	—
CLARIFIER SYSTEM (T-103B)								
FLASH MIX TANK MIXER RUN.	Y/N	M-102	COAG MIXER		yes	yes	yes	yes
COAGULANT PUMP RUNNING	Y/N	P-202	COAG PUMP		yes	yes	yes	yes
COAGULANT LEVEL	% Full	T-202	COAG TANK		# 29 gal / 16"	72 gal / 38"	70 gal / 37 1/4"	67 gal / 35"
COAGULANT DOSE RATE	mg/l	FE-202	COAG FLOW TO TANK		16 mg/L	16 mg/L	16 mg/L	16 mg/L
FLOC TANK MIXER RUNNING	Y/N	M-103A	FLOC MIXER		yes	yes	yes	yes
FLOCCULANT PUMP RUNNING	Y/N	P-203	FLOC PUMP		yes	yes	yes	yes
FLOC LEVEL	% Full	T-203	FLOC TANK LEVEL		9.3 gal / 12 1/2"	6 1/2 gal / 12 1/2"	6 1/2 gal / 12	6 gal / 11 1/2"

OPERATIONS LOG SHEET
ENHANCED SEEP COLLECTION SYSTEM
GENERAL ELECTRIC MAIN PLANT
SCHENECTADY, NEW YORK

PARAMETER	UNITS	EQUIPMENT TAG	DESCRIPTION	DATE:	11/27/14	12/2/14	12/3/14	12/4/14
				TIME:	11:12	12:00	12:00	12:00
				INITIALS:	TS	TS	T.B	T.B
FLOCCULANT DOSE RATE	GPM	FE-203	DILUTED FLOC TO FLOC MIX TK		1.00	0.80	.75	.75
CLARIFIER RAKE MIXER RUN.	Y/N	M-103B	CLARIFIER MIXER		yes	yes	yes	yes
CLARIFIER SLUDGE PUMP RUN.	Y/N	P-103	SLUDGE PUMP TO GEOTUBE		yes	yes	yes	yes
AIR COMPRESSOR RUNNING	Y/N	C-302	SLUDGE PUMP POWER		yes	yes	yes	yes
AIR COMPRESSOR PRESSURE	PSI	PI-302	AIR COMP. PRESSURE		140	135	140	140
CLARIFIER EFF TANK LEVEL	FEET	T-104	GRAVITY TANK POST CLAR.		2	3	3 1/2	2 1/2
CLARIFIER EFF PUMP A RUN	Y/N	P-104A	PUMP TO FILTRATION		yes	yes	yes	yes
VFD RATE	Hz	P-104A	PUMP RATE TO FILTRATION		38	38	35	35 Hz
CLARIFIER EFF. PUMP PRESSURE	PSI	PI-104A	PUMP PRESSURE TO FILT.		40	40	40	38
CLARIFIER EFF PUMP B RUN	Y/N	P-104B	PUMP TO FILTRATION		NO	NO	NO	NO
VFD RATE	Hz	P-104B	PUMP RATE TO FILTRATION		—	—	—	—
CLARIFIER EFF. PUMP PRESSURE	PSI	PI-104B	PUMP PRESSURE TO FILT.		—	—	—	—
GEOTUBE SYSTEM								
GEOTUBE CONTAINER 1 LEVEL	EST.	G-101	GEOTUBE DEWATERING BOX		100 %	100 %	Pick up	Drop off
GEOTUBE CONTAINER 2 LEVEL	EST.	G-102	GEOTUBE DEWATERING BOX		42	45	48	55 %
GEOTUBE DISPOSAL	Y/N	G-101/G-102	GEOTUBE DEWATERING BOX		NO	NO	NO	NO
GEOTUBE DISPOSAL QTY	TON	G-101/G-102	WEIGHT OF MATERIAL DISPOSED		—	—	—	—
POLYMER PUMP RUNNING	Y/N	P-205	POLY ADD TO SLUDGE		yes	yes	yes	yes
POLYMER DOSE	GPM	FE-205	POLY FLOW TO SLUDGE		.341	.341	.341	.341
POLYMER TANK LEVEL	% Full	T-205	POLYMER LEVEL IN TANK		6"	8"	7"	11"
FILTRATION SYSTEM								
SAND FILTER A IN-USE	Y/N	TA-105A	SAND FILTER		yes	yes	yes	yes
SAND FILTER A BACKWASH	Y/N	TA-105A	SAND FILTER		yes	yes	yes	yes
INLET PRESSURE	PSI	PI-105A/PI-703	INLET PRESSURE TO SAND		30	30	30	33
OUTLET PRESSURE	PSI	PDSH-105A	OUTLET PRESS. TO BAG FIL.		18	17	16	18
PRESSURE DIFFERENTIAL	PSI	PDSH-105A	PRESSURE DIFFERENTIAL		12	13	14	15
SAND FILTER B IN-USE	Y/N	TA-105B	SAND FILTER		yes	yes	yes	yes
SAND FILTER B BACKWASH	Y/N	TA-105B	SAND FILTER		yes	yes	yes	yes
INLET PRESSURE	PSI	PI-105B/PI-703	INLET PRESSURE TO SAND		30	32	31	35
OUTLET PRESSURE	PSI	PDSH-105B	OUTLET PRESS. TO BAG FIL.		18	18	18	19
PRESSURE DIFFERENTIAL	PSI	PDSH-105B	PRESSURE DIFFERENTIAL		12	14	13	16
BAG FILTER 701 IN-USE	Y/N	F-701A	10, 5 and 1 MICRON BAG FILTER		NO	NO	NO	NO
INLET PRESSURE	PSI	PI-701A	INLET PRESSURE IN BF		—	—	—	—
OUTLET PRESSURE	PSI	PI-704	OUTLET PRESSURE IN BF		—	—	—	—
PRESSURE DIFFERENTIAL	PSI	PDSH-701A	PRESSURE DIFFERENTIAL		—	—	—	—
BAG CHANGES	Y/N	F-701A	BAG FILTER		NO	NO	NO	NO
BAG FILTER 702 IN-USE	Y/N	F-702A	10, 5 and 1 MICRON BAG FILTER		NO	NO	NO	NO
INLET PRESSURE	PSI	PI-702A	INLET PRESSURE IN BF		—	—	—	—
OUTLET PRESSURE	PSI	PI-704	OUTLET PRESSURE IN BF		—	—	—	—
PRESSURE DIFFERENTIAL	PSI	PDSH-702A	PRESSURE DIFFERENTIAL		—	—	—	—

* Ready to ship.

OPERATIONS LOG SHEET
ENHANCED SEEP COLLECTION SYSTEM
GENERAL ELECTRIC MAIN PLANT
SCHENECTADY, NEW YORK

PARAMETER	UNITS	EQUIPMENT TAG	DESCRIPTION	DATE:	11/27/19	12/2/19	12/3/19	12/4/19
				TIME:	12:00	1:00	1:00	1:00
				INITIALS:	T.B	T.B	T.B	T.B
BAG CHANGE	Y/N	F-702A	BAG FILTER		NO	NO	NO	NO
CARBON FILTER 1 IN-USE	Y/N	TA-106A	CARBON FILTER		yes	yes	yes	yes
CARBON FILTER 1 BACKWASH	Y/N	TA-106A	CARBON FILTER		NO	NO	NO	NO
INLET PRESSURE	PSI	PI-106A	INLET PRESSURE FROM BF		5	5	5	5
OUTLET PRESSURE	PSI	PI-106B	OUTLET PRESS. TO EFF-TK		9	8	7	8
PRESSURE DIFFERENTIAL	PSI		PRESSURE DIFFERENTIAL		4	3	2	3
CARBON FILTER 2 IN-USE	Y/N	TA-106B	CARBON FILTER		yes	yes	yes	yes
CARBON FILTER 2 BACKWASH	Y/N	TA-106B	CARBON FILTER		NO	NO	NO	NO
INLET PRESSURE	PSI	PI-106B	INLET PRESSURE FROM BF		5	5	5	5
OUTLET PRESSURE	PSI		OUTLET PRESS. TO EFF-TK		10	9	10	9
PRESSURE DIFFERENTIAL	PSI		PRESSURE DIFFERENTIAL		5	4	5	4
BACKWASH PUMP A RUN	Y/N	P-305A	BACKWASH PUMP TO FILT.		NO	NO	NO	NO
BACKWASH PRESSURE	PSI	PI-305A	BACKWASH PRESSURE		—	—	—	—
BACKWASH PUMP B RUN	Y/N	P-305B	BACKWASH PUMP TO FILT.		yes	yes	yes	yes
BACKWASH PRESSURE	PSI	PI-305B	BACKWASH PRESSURE		90	90	85	90
EFFLUENT AND FINAL HOLDING TANK (T-107 AND T-401)								
EFFLUENT FLOW METER	GPM	FQIT-107	FLOW RATE FROM FILTERS		43.59	43.39	42.19	43.1
EFF. FLOW METER TOTAL	TOT.	FQIT-107	TOTAL FLOW		3,924,345	4,112,697	4,161,636	4,205,171
EFFLUENT TANK LEVEL	inwc	T-107	TANK LEVEL		75.40	94.94	104.4	93.63
pH METER	SU	AIT-107	EFF. pH		8.42	8.39	8.43	8.34
DISSOLVED OXYGEN (DOM-107)	DO	AIT-107A	EFF. DO READING		.02	.02	.02	.02
TURBIDITY (TBM-107)	NTU	AIT-107B	EFF. TURBIDITY		.47	.47	.46	.46
FINAL HOLDING TANK LEVEL	FEET	T-401	FH TK LEVEL		3ft	2ft	3	1ft
IRRIG. PUMP RUNNING	Y/N	P-401	IRRIGATION SYSTEM		NO	NO	NO	NO
VFD RATE	Hz	P-401	IRRIGATION SYSTEM		—	—	—	—
GRAVITY OUTFALL IN-USE	Y/N	OF-101	OUTFALL TO POENTIC KILL		yes	yes	yes	yes
BUILDING SYSTEM COMPONENTS								
EXHAUST FAN NW IN-USE	Y/N	EF-1	EXHAUST FANS		NO	NO	NO	NO
EXHAUST FAN NE IN-USE	Y/N	EF-2	EXHAUST FANS		NO	NO	NO	NO
BUILDING HEATERS IN-USE	Y/N	UH-1-8	HEATERS		yes	yes	yes	yes
BUILDING TEMPERATURE	DEG. F		BLDG. TEMP		71°	69°	74°	75°
OVERHEAD DOOR SW OPER.	Y/N		OVERHEAD DOOR		yes	yes	yes	yes
OVERHEAD DOOR NE OPER.	Y/N		OVERHEAD DOOR		yes	yes	yes	yes
OVERHEAD DOOR SE OPER.	Y/N		OVERHEAD DOOR		yes	yes	yes	yes
BLDG CONT SYS OPERATIONAL	Y/N		REMOTE TELEMETRY SYS		yes	yes	yes	yes
GENERAL COMMENTS								

OPERATIONS LOG SHEET
ENHANCED SEEP COLLECTION SYSTEM
GENERAL ELECTRIC MAIN PLANT
SCHENECTADY, NEW YORK

PARAMETER	UNITS	EQUIPMENT TAG	DESCRIPTION	DATE:	12/5/19	12/10/19	12/11/19	12/16/19
				TIME:	4:20	4:35	11:00	13:00
				INITIALS:	4.76	4.15	7.3	2.7
SEEP COLLECTION PUMP STATIONS (SEEP 1 - 4, SEEP 5 AND SEEP 6)								
SEEP 1 - 4 PUMP RUN	Y/N	P-100A	SEEP 1-4 P-STATION PUMP		Yes	Yes	Yes	Yes
SEEP 5 PUMP RUN	Y/N	P-100B	SEEP 5 P-STATION PUMP		Yes	Yes	Yes	Yes
SEEP 6 PUMP RUN	Y/N	P-100C	SEEP 6 P-STATION PUMP		NO	NO	NO	NO
INFLUENT TANK (T-101)								
FLOW METER - 100A (FM-A)	GPM	FQIT-100A	S1-4 IN-FLOW		19.5	19.8	20.51	21.13
FLOW METER - 100B (FM-B)	GPM	FQIT-100B	S5 IN-FLOW		38.9	35.7	35.46	36.01
FLOW METER - 100C (FM-C)	GPM	FQIT-100C	S6 IN-FLOW		—	—	—	—
FLOW METER - 101	GPM	FQIT-101	INF TK OUT-FLOW		37.5	41.2	38.2	37.2
FLOW METER - 100A	TOTAL	FQIT-100A	S1-4 IN-FLOW		15,202,649	15,341,890	15,322,305	15,517,665
FLOW METER - 100B	TOTAL	FQIT-100B	S5 IN-FLOW		2,150,836	2,250,962	2,252,533	2,355,229
FLOW METER - 100C	TOTAL	FQIT-100C	S6 IN-FLOW		640,044	646,044	646,044	640,045
FLOW METER - 101	TOTAL	FQIT-101	INF TK OUT-FLOW		5,869,094	6,892,842	6,154,343	6,814,761
BLOWER RUNNING	Y/N	B-101	INF TK BLOWER		Yes	Yes	Yes	Yes
BLOWER PRESSURE	PSI	PI-101	INF TK BLOWER PRESS.		3 psi	3 psi	3 psi	5 psi
VFD RATE	Hz	B-101	INF TK BLOWER VFD		50 Hz	50 Hz	50 Hz	50 Hz
INF. PUMP A RUNNING	Y/N	P-101A	PUMP TO CLARIF.		NO	NO	NO	NO
VFD RATE	Hz	P-101A	PUMP TO CLARIF. VFD		—	—	—	—
INF PUMP PRESSURE	PSI	PI-101A	PI FOR INF. PUMP		—	—	—	—
INF. PUMP B RUNNING	Y/N	P-101B	PUMP TO CLARIF.		NO	NO	NO	NO
VFD RATE	Hz	P-101B	PUMP TO CLARIF. VFD		—	—	—	—
INF PUMP PRESSURE	PSI	PI-101B	PI FOR INF. PUMP		—	—	—	—
INF Ph	SU	AIT-101	pH FOR INF. WATER		7.58	7.64	7.42	7.50
pH Probe checked	Y/N	AIT-101	pH Probe at influent tank		Yes	Yes	Yes	Yes
pH Probe clean (1X/week min)	Y/N	AIT-101	pH Probe at influent tank		Yes	Yes	NO	NO
INF TANK LEVEL	inwc	T-101	LEVEL TRANSMIT.		29.84	64.1	35.87	78.01
RECIRC PUMP RUNNING	Y/N	P-102	IN TK RECIRC PUMP		Yes	Yes	Yes	Yes
VFD RATE	Hz	P-102	IN TK RECIRC VFD		35 Hz	35 Hz	35 Hz	30 Hz
CAUSTIC PUMP RUNNING	Y/N	P-201	IN TK CAUSTIC ADD		Yes	Yes	Yes	Yes
CAUSTIC TANK LEVEL	gal	T-201	IN TK CAUSTIC ADD	①	35 gal	0	24 gal	41 gal
CAUSTIC USAGE	GAL	T-201	CAUSTIC USAGE		45 gal/24"	52 gal/27"	68 gal/25"	48 gal/25"
CAUSTIC USAGE	TOT	T-201	CAUSTIC USAGE		5 gal	28 gal	5 gal	11 gal
CLARIFIER SYSTEM (T-103B)								
FLASH MIX TANK MIXER RUN.	Y/N	M-102	COAG MIXER		Yes	Yes	Yes	Yes
COAGULANT PUMP RUNNING	Y/N	P-202	COAG PUMP		Yes	Yes	Yes	Yes
COAGULANT LEVEL	% Full	T-202	COAG TANK		66 gal/35"	57 gal/30 3/4"	55 gal/29 3/4"	48 gal/25"
COAGULANT DOSE RATE	mg/l	FE-202	COAG FLOW TO TANK		16 mg/l	16 mg/l	16 mg/l	16 mg/l
FLOC TANK MIXER RUNNING	Y/N	M-103A	FLOC MIXER		Yes	Yes	Yes	Yes
FLOCCULANT PUMP RUNNING	Y/N	P-203	FLOC PUMP		Yes	Yes	Yes	Yes
FLOC LEVEL	% Full	T-203	FLOC TANK LEVEL		57 gal/11"	5 gal/19 3/4"	17 gal/19 3/4"	5 gal/19.5"

Added 35 gal of Caustic

OPERATIONS LOG SHEET
ENHANCED SEEP COLLECTION SYSTEM
GENERAL ELECTRIC MAIN PLANT
SCHENECTADY, NEW YORK

PARAMETER	UNITS	EQUIPMENT TAG	DESCRIPTION	DATE:	12/5/19	12/10/19	12/17/19	12/16/19
				TIME:	12:00	12:00	11:00	12:00
				INITIALS:	E.T.	E.T.	E.T.	E.T.
FLOCCULANT DOSE RATE	GPM	FE-203	DILUTED FLOC TO FLOC MIX TK		.75	.75	.75	.75
CLARIFIER RAKE MIXER RUN.	Y/N	M-103B	CLARIFIER MIXER		yes	yes	yes	yes
CLARIFIER SLUDGE PUMP RUN.	Y/N	P-103	SLUDGE PUMP TO GEOTUBE		yes	yes	yes	yes
AIR COMPRESSOR RUNNING	Y/N	C-302	SLUDGE PUMP POWER		yes	yes	yes	yes
AIR COMPRESSOR PRESSURE	PSI	PI-302	AIR COMP. PRESSURE		140	140	140psi	140 psi
CLARIFIER EFF TANK LEVEL	FEET	T-104	GRAVITY TANK POST CLAR.		3ft	2ft	3ft	3.5 ft.
CLARIFIER EFF PUMP A RUN	Y/N	P-104A	PUMP TO FILTRATION		yes	yes	yes	yes
VFD RATE	Hz	P-104A	PUMP RATE TO FILTRATION		35Hz	35Hz	35Hz	35Hz
CLARIFIER EFF. PUMP PRESSURE	PSI	PI-104A	PUMP PRESSURE TO FILT.		34 psi	30psi	30psi	40psi
CLARIFIER EFF PUMP B RUN	Y/N	P-104B	PUMP TO FILTRATION		NO	NO	NO	NO
VFD RATE	Hz	P-104B	PUMP RATE TO FILTRATION		—	—	—	—
CLARIFIER EFF. PUMP PRESSURE	PSI	PI-104B	PUMP PRESSURE TO FILT.		—	—	—	—
GEOTUBE SYSTEM								
GEOTUBE CONTAINER 1 LEVEL	EST.	G-101	GEOTUBE DEWATERING BOX		0%	5%	5%	15%
GEOTUBE CONTAINER 2 LEVEL	EST.	G-102	GEOTUBE DEWATERING BOX		60%	70%	75%	75%
GEOTUBE DISPOSAL	Y/N	G-101/G-102	GEOTUBE DEWATERING BOX		yes	@ yes NO	NO	NO
GEOTUBE DISPOSAL QTY	TON	G-101/G-102	WEIGHT OF MATERIAL DISPOSED		10	—	—	—
POLYMER PUMP RUNNING	Y/N	P-205	POLY ADD TO SLUDGE		yes	yes	yes	yes
POLYMER DOSE	GPM	FE-205	POLY FLOW TO SLUDGE		.341	.345	.345	.345
POLYMER TANK LEVEL	% Full	T-205	POLYMER LEVEL IN TANK		8"	11"	9"	9"
FILTRATION SYSTEM								
SAND FILTER A IN-USE	Y/N	TA-105A	SAND FILTER		yes	yes	yes	yes
SAND FILTER A BACKWASH	Y/N	TA-105A	SAND FILTER		yes	yes	yes	yes
INLET PRESSURE	PSI	PI-105A/PI-703	INLET PRESSURE TO SAND		25	28	24	33
OUTLET PRESSURE	PSI	PDSH-105A	OUTLET PRESS. TO BAG FIL.		18	20	10	11
PRESSURE DIFFERENTIAL	PSI	PDSH-105A	PRESSURE DIFFERENTIAL		7	8	14	22
SAND FILTER B IN-USE	Y/N	TA-105B	SAND FILTER		yes	yes	yes	yes
SAND FILTER B BACKWASH	Y/N	TA-105B	SAND FILTER		yes	yes	yes	yes
INLET PRESSURE	PSI	PI-105B/PI-703	INLET PRESSURE TO SAND		25	29	28	38
OUTLET PRESSURE	PSI	PDSH-105B	OUTLET PRESS. TO BAG FIL.		20	20	20	17
PRESSURE DIFFERENTIAL	PSI	PDSH-105B	PRESSURE DIFFERENTIAL		5	9	8	21
BAG FILTER 701 IN-USE	Y/N	F-701A	10, 5 and 1 MICRON BAG FILTER		NO	NO	NO	NO
INLET PRESSURE	PSI	PI-701A	INLET PRESSURE IN BF		—	—	—	—
OUTLET PRESSURE	PSI	PI-704	OUTLET PRESSURE IN BF		—	—	—	—
PRESSURE DIFFERENTIAL	PSI	PDSH-701A	PRESSURE DIFFERENTIAL		—	—	—	—
BAG CHANGES	Y/N	F-701A	BAG FILTER		NO	NO	NO	NO
BAG FILTER 702 IN-USE	Y/N	F-702A	10, 5 and 1 MICRON BAG FILTER		NO	NO	NO	NO
INLET PRESSURE	PSI	PI-702A	INLET PRESSURE IN BF		—	—	—	—
OUTLET PRESSURE	PSI	PI-704	OUTLET PRESSURE IN BF		—	—	—	—
PRESSURE DIFFERENTIAL	PSI	PDSH-702A	PRESSURE DIFFERENTIAL		—	—	—	—

**OPERATIONS LOG SHEET
ENHANCED SEEP COLLECTION SYSTEM
GENERAL ELECTRIC MAIN PLANT
SCHENECTADY, NEW YORK**

PARAMETER	UNITS	EQUIPMENT TAG	DESCRIPTION	DATE:	12/5/19	12/10/19	12/11/19	12/16/19
				TIME:	12:00	11:30	11:00	13:00
				INITIALS:	T.B	T.B	T.B	E.T.
BAG CHANGE	Y/N	F-702A	BAG FILTER		NO	NO	NO	NO
CARBON FILTER 1 IN-USE	Y/N	TA-106A	CARBON FILTER		Yes	Yes	Yes	Yes
CARBON FILTER 1 BACKWASH	Y/N	TA-106A	CARBON FILTER		NO	Yes	NO	NO
INLET PRESSURE	PSI	PI-106A	INLET PRESSURE FROM BF		5	4	5	5
OUTLET PRESSURE	PSI	PI-106B	OUTLET PRESS. TO EFF-TK		6	5	10	9
PRESSURE DIFFERENTIAL	PSI		PRESSURE DIFFERENTIAL		1	1	5	4
CARBON FILTER 2 IN-USE	Y/N	TA-106B	CARBON FILTER		Yes	Yes	Yes	Yes
CARBON FILTER 2 BACKWASH	Y/N	TA-106B	CARBON FILTER		NO	Yes	NO	NO
INLET PRESSURE	PSI	PI-106B	INLET PRESSURE FROM BF		5	4	5	5
OUTLET PRESSURE	PSI		OUTLET PRESS. TO EFF-TK		7	5	10	10
PRESSURE DIFFERENTIAL	PSI		PRESSURE DIFFERENTIAL		2	1	5	5
BACKWASH PUMP A RUN	Y/N	P-305A	BACKWASH PUMP TO FILT.		NO	NO	NO	NO
BACKWASH PRESSURE	PSI	PI-305A	BACKWASH PRESSURE		—	—	—	—
BACKWASH PUMP B RUN	Y/N	P-305B	BACKWASH PUMP TO FILT.		Yes	Yes	Yes	Yes
BACKWASH PRESSURE	PSI	PI-305A	BACKWASH PRESSURE		95	90 psi	85 psi	90 psi
EFFLUENT AND FINAL HOLDING TANK (T-107 AND T-401)								
EFFLUENT FLOW METER	GPM	FQIT-107	FLOW RATE FROM FILTERS		42.6	38.9	48.9	40.36
EFF. FLOW METER TOTAL	TOT.	FQIT-107	TOTAL FLOW		4,241,144	4,435,492	4,477,660	5,974,689
EFFLUENT TANK LEVEL	inwc	T-107	TANK LEVEL		92.96	95.24	96.62	102.32
pH METER	SU	AIT-107	EFF. pH		7.51	8.04	7.68	7.65
DISSOLVED OXYGEN (DOM-107)	DO	AIT-107A	EFF. DO READING		.02	.02	.02	.02
TURBIDITY (TBM-107)	NTU	AIT-107B	EFF. TURBIDITY		.46	.46	.46	.46
FINAL HOLDING TANK LEVEL	FEET	T-401	FH TK LEVEL		3 ft	1 ft	2 ft	2'
IRRIG. PUMP RUNNING	Y/N	P-401	IRRIGATION SYSTEM		NO	NO	NO	NO
VFD RATE	Hz	P-401	IRRIGATION SYSTEM		—	—	—	—
GRAVITY OUTFALL IN-USE	Y/N	OF-101	OUTFALL TO POENTIC KILL		Yes	Yes	Yes	Yes
BUILDING SYSTEM COMPONENTS								
EXHAUST FAN NW IN-USE	Y/N	EF-1	EXHAUST FANS		NO	NO	NO	NO
EXHAUST FAN NE IN-USE	Y/N	EF-2	EXHAUST FANS		NO	NO	NO	NO
BUILDING HEATERS IN-USE	Y/N	UH-1-8	HEATERS		Yes	Yes	Yes	Yes
BUILDING TEMPERATURE	DEG. F		BLDG. TEMP		71	72	73	72
OVERHEAD DOOR SW OPER.	Y/N		OVERHEAD DOOR		Yes	Yes	Yes	Yes
OVERHEAD DOOR NE OPER.	Y/N		OVERHEAD DOOR		Yes	Yes	Yes	Yes
OVERHEAD DOOR SE OPER.	Y/N		OVERHEAD DOOR		Yes	Yes	Yes	Yes
BLDG CONT SYS OPERATIONAL	Y/N		REMOTE TELEMETRY SYS		Yes	Yes	Yes	Yes
GENERAL COMMENTS								

OPERATIONS LOG SHEET
ENHANCED SEEP COLLECTION SYSTEM
GENERAL ELECTRIC MAIN PLANT
SCHENECTADY, NEW YORK

PARAMETER	UNITS	EQUIPMENT TAG	DESCRIPTION	DATE:	12/18/19	12/20/19	12/23/19	12/27/19
				TIME:	12:00	12:00	14:15	12:00
				INITIALS:	E.T.	E.T.	E.T.	E.T.
SEEP COLLECTION PUMP STATIONS (SEEP 1 - 4, SEEP 5 AND SEEP 6)								
SEEP 1 - 4 PUMP RUN	Y/N	P-100A	SEEP 1-4 P-STATION PUMP		yes	yes	yes	yes
SEEP 5 PUMP RUN	Y/N	P-100B	SEEP 5 P-STATION PUMP		yes	yes	yes	yes
SEEP 6 PUMP RUN	Y/N	P-100C	SEEP 6 P-STATION PUMP		No	No	NO	NO
INFLUENT TANK (T-101)								
FLOW METER - 100A (FM-A)	GPM	FQIT-100A	S1-4 IN-FLOW		23.4	22.9	21.82	22.11
FLOW METER - 100B (FM-B)	GPM	FQIT-100B	S5 IN-FLOW		38.7	37.9	33.23	31.55
FLOW METER - 100C (FM-C)	GPM	FQIT-100C	S6 IN-FLOW		-	-	-	-
FLOW METER - 101	GPM	FQIT-101	INF TK OUT-FLOW		38.8	37.4	40.5	36.99
FLOW METER - 100A	TOTAL	FQIT-100A	S1-4 IN-FLOW		15,579,536	15,642,611	15,738,731	15,861,113
FLOW METER - 100B	TOTAL	FQIT-100B	S5 IN-FLOW		2,395,935	2,438,468	2,505,510	2,591,188
FLOW METER - 100C	TOTAL	FQIT-100C	S6 IN-FLOW		616,045	646,045	649,045	640,045
FLOW METER - 101	TOTAL	FQIT-101	INF TK OUT-FLOW		6,508,907	6,612,496	6,769,984	6,970,955
BLOWER RUNNING	Y/N	B-101	INF TK BLOWER		yes	yes	yes	yes
BLOWER PRESSURE	PSI	PI-101	INF TK BLOWER PRESS.		5psi	5psi	5 PSI	5 PSI
VFD RATE	Hz	B-101	INF TK BLOWER VFD		50Hz	50Hz	50 Hz	50 Hz
INF. PUMP A RUNNING	Y/N	P-101A	PUMP TO CLARIF.		NO	NO	NO	NO
VFD RATE	Hz	P-101A	PUMP TO CLARIF. VFD		-	-	-	-
INF PUMP PRESSURE	PSI	PI-101A	PI FOR INF. PUMP		-	-	-	-
INF. PUMP B RUNNING	Y/N	P-101B	PUMP TO CLARIF.		NO	NO	NO	NO
VFD RATE	Hz	P-101B	PUMP TO CLARIF. VFD		-	-	-	-
INF PUMP PRESSURE	PSI	PI-101B	PI FOR INF. PUMP		-	-	-	-
INF Ph	SU	AIT-101	pH FOR INF. WATER		7.53	7.61	7.52	7.47
pH Probe checked	Y/N	AIT-101	pH Probe at influent tank		yes	yes	yes	yes
pH Probe clean (1X/week min)	Y/N	AIT-101	pH Probe at influent tank		NO	NO	NO	yes
INF TANK LEVEL	inwc	T-101	LEVEL TRANSMIT.		60.7	36.2	78.14	79.29
RECIRC PUMP RUNNING	Y/N	P-102	IN TK RECIRC PUMP		yes 35Hz	yes	yes	yes
VFD RATE	Hz	P-102	IN TK RECIRC VFD		35Hz	35Hz	35 Hz	35 Hz
CAUSTIC PUMP RUNNING	Y/N	P-201	IN TK CAUSTIC ADD		yes	yes	yes	yes
CAUSTIC TANK LEVEL	gal	T-201	IN TK CAUSTIC ADD		42gal	0	67 gal	0
CAUSTIC USAGE	GAL	T-201	CAUSTIC USAGE		84gal/143"	78gal/40 1/2"	67gal/35.25"	57gal/28.75"
CAUSTIC USAGE	TOT	T-201	CAUSTIC USAGE		6gal	6gal	11gal	10 gal
CLARIFIER SYSTEM (T-103B)								
FLASH MIX TANK MIXER RUN.	Y/N	M-102	COAG MIXER		yes	yes	yes	yes
COAGULANT PUMP RUNNING	Y/N	P-202	COAG PUMP		yes	yes	yes	yes
COAGULANT LEVEL	% Full	T-202	COAG TANK		43gal/23"	40gal/21"	34gal/18.25"	70gal/37.5"
COAGULANT DOSE RATE	mg/l	FE-202	COAG FLOW TO TANK		16mg/L	16mg/L	16 mg/L	16 mg/L
FLOC TANK MIXER RUNNING	Y/N	M-103A	FLOC MIXER		yes	yes	yes	yes
FLOCCULANT PUMP RUNNING	Y/N	P-203	FLOC PUMP		yes	yes	yes	yes
FLOC LEVEL	% Full	T-203	FLOC TANK LEVEL		5gal/9.5"	4.9gal/9"	4.5gal/8.5"	4gal/8"

Coag 14.5" / 26 gal - 37.5" / 70 gal added 40 gal. - 12/27/19 E.T.

**OPERATIONS LOG SHEET
ENHANCED SEEP COLLECTION SYSTEM
GENERAL ELECTRIC MAIN PLANT
SCHENECTADY, NEW YORK**

PARAMETER	UNITS	EQUIPMENT TAG	DESCRIPTION	DATE:	12/18/19	12/20/19	12/23/19	12/27/19
				TIME:	12:00	12:00	14:15	12:00
				INITIALS:	T.B	T.B	E.T.	E.T.
FLOCCULANT DOSE RATE	GPM	FE-203	DILUTED FLOC TO FLOC MIX TK		.60	1.0 gpm/L	1.0	1.0
CLARIFIER RAKE MIXER RUN.	Y/N	M-103B	CLARIFIER MIXER		Yes	Yes	Yes	Yes
CLARIFIER SLUDGE PUMP RUN.	Y/N	P-103	SLUDGE PUMP TO GEOTUBE		Yes	Yes	Yes	Yes
AIR COMPRESSOR RUNNING	Y/N	C-302	SLUDGE PUMP POWER		Yes	Yes	Yes	Yes
AIR COMPRESSOR PRESSURE	PSI	PI-302	AIR COMP. PRESSURE		140 psi	140	170	150
CLARIFIER EFF TANK LEVEL	FEET	T-104	GRAVITY TANK POST CLAR.		3ft	2ft	3.5'	3'
CLARIFIER EFF PUMP A RUN	Y/N	P-104A	PUMP TO FILTRATION		Yes	Yes	Yes	Yes
VFD RATE	Hz	P-104A	PUMP RATE TO FILTRATION		35 Hz	35	35	35
CLARIFIER EFF. PUMP PRESSURE	PSI	PI-104A	PUMP PRESSURE TO FILT.		40 psi	39 psi	38 psi	36 psi
CLARIFIER EFF PUMP B RUN	Y/N	P-104B	PUMP TO FILTRATION		No	No	No	No
VFD RATE	Hz	P-104B	PUMP RATE TO FILTRATION		—	—	—	—
CLARIFIER EFF. PUMP PRESSURE	PSI	PI-104B	PUMP PRESSURE TO FILT.		—	—	—	—
GEOTUBE SYSTEM								
GEOTUBE CONTAINER 1 LEVEL	EST.	G-101	GEOTUBE DEWATERING BOX		18%	20	25%	30%
GEOTUBE CONTAINER 2 LEVEL	EST.	G-102	GEOTUBE DEWATERING BOX		75%	70%	65%	60%
GEOTUBE DISPOSAL	Y/N	G-101/G-102	GEOTUBE DEWATERING BOX		No	No	No	No
GEOTUBE DISPOSAL QTY	TON	G-101/G-102	WEIGHT OF MATERIAL DISPOSED		—	—	—	—
POLYMER PUMP RUNNING	Y/N	P-205	POLY ADD TO SLUDGE		Yes	Yes	Yes	Yes
POLYMER DOSE	GPM	FE-205	POLY FLOW TO SLUDGE		.345	.587	.503	.506
POLYMER TANK LEVEL	% Full	T-205	POLYMER LEVEL IN TANK		11"	11"	14"	10"
FILTRATION SYSTEM								
SAND FILTER A IN-USE	Y/N	TA-105A	SAND FILTER		Yes	Yes	Yes	Yes
SAND FILTER A BACKWASH	Y/N	TA-105A	SAND FILTER		No	No	Yes	Yes
INLET PRESSURE	PSI	PI-105A/PI-703	INLET PRESSURE TO SAND		30	30	30	32
OUTLET PRESSURE	PSI	PDSH-105A	OUTLET PRESS. TO BAG FIL.		10	10	10	12
PRESSURE DIFFERENTIAL	PSI	PDSH-105A	PRESSURE DIFFERENTIAL		20	20	20	20
SAND FILTER B IN-USE	Y/N	TA-105B	SAND FILTER		Yes	Yes	Yes	Yes
SAND FILTER B BACKWASH	Y/N	TA-105B	SAND FILTER		No	No	Yes	Yes
INLET PRESSURE	PSI	PI-105B/PI-703	INLET PRESSURE TO SAND		30	30	30	32
OUTLET PRESSURE	PSI	PDSH-105B	OUTLET PRESS. TO BAG FIL.		10	10	12	14
PRESSURE DIFFERENTIAL	PSI	PDSH-105B	PRESSURE DIFFERENTIAL		20	20	18	18
BAG FILTER 701 IN-USE	Y/N	F-701A	10, 5 and 1 MICRON BAG FILTER		No	No	No	No
INLET PRESSURE	PSI	PI-701A	INLET PRESSURE IN BF		—	—	—	—
OUTLET PRESSURE	PSI	PI-704	OUTLET PRESSURE IN BF		—	—	—	—
PRESSURE DIFFERENTIAL	PSI	PDSH-701A	PRESSURE DIFFERENTIAL		—	—	—	—
BAG CHANGES	Y/N	F-701A	BAG FILTER		No	No	No	No
BAG FILTER 702 IN-USE	Y/N	F-702A	10, 5 and 1 MICRON BAG FILTER		No	No	No	No
INLET PRESSURE	PSI	PI-702A	INLET PRESSURE IN BF		—	—	—	—
OUTLET PRESSURE	PSI	PI-704	OUTLET PRESSURE IN BF		—	—	—	—
PRESSURE DIFFERENTIAL	PSI	PDSH-702A	PRESSURE DIFFERENTIAL		—	—	—	—

OPERATIONS LOG SHEET
 ENHANCED SEEP COLLECTION SYSTEM
 GENERAL ELECTRIC MAIN PLANT
 SCHENECTADY, NEW YORK

PARAMETER	UNITS	EQUIPMENT TAG	DESCRIPTION	DATE:	12/18/19	12/20/19	12/23/19	12/27/19
				TIME:	12:30	12:00	14:15	12:00
				INITIALS:	E.T.	E.T.	E.T.	E.T.
BAG CHANGE	Y/N	F-702A	BAG FILTER		No	No	No	No
CARBON FILTER 1 IN-USE	Y/N	TA-106A	CARBON FILTER		Yes	Yes	Yes	Yes
CARBON FILTER 1 BACKWASH	Y/N	TA-106A	CARBON FILTER		No	No	No	No
INLET PRESSURE	PSI	PI-106A	INLET PRESSURE FROM BF		5	5	5	5
OUTLET PRESSURE	PSI	PI-106B	OUTLET PRESS. TO EFF-TK		10	10	10	10
PRESSURE DIFFERENTIAL	PSI		PRESSURE DIFFERENTIAL		-5	-5	-5	-5
CARBON FILTER 2 IN-USE	Y/N	TA-106B	CARBON FILTER		Yes	Yes	Yes	Yes
CARBON FILTER 2 BACKWASH	Y/N	TA-106B	CARBON FILTER		No	No	No	No
INLET PRESSURE	PSI	PI-106B	INLET PRESSURE FROM BF		5	5	5	5
OUTLET PRESSURE	PSI		OUTLET PRESS. TO EFF-TK		10	10	10	10
PRESSURE DIFFERENTIAL	PSI		PRESSURE DIFFERENTIAL		-5	-5	-5	-5
BACKWASH PUMP A RUN	Y/N	P-305A	BACKWASH PUMP TO FILT.		No	No	No	No
BACKWASH PRESSURE	PSI	PI-305A	BACKWASH PRESSURE		—	—	—	—
BACKWASH PUMP B RUN	Y/N	P-305B	BACKWASH PUMP TO FILT.		Yes	Yes	Yes	Yes
BACKWASH PRESSURE	PSI	PI-305A	BACKWASH PRESSURE		90 psi	89 psi	90 psi	90 psi
EFFLUENT AND FINAL HOLDING TANK (T-107 AND T-401)								
EFFLUENT FLOW METER	GPM	FQIT-107	FLOW RATE FROM FILTERS		46.79	45.9	44.64	34.82
EFF. FLOW METER TOTAL	TOT.	FQIT-107	TOTAL FLOW		4,772,264	4,858,009	4,988,876	5,154,859
EFFLUENT TANK LEVEL	inwc	T-107	TANK LEVEL		101.7	98.26	89.77	83.41
pH METER	SU	AIT-107	EFF. pH		7.76	7.81	7.72	7.68
DISSOLVED OXYGEN (DOM-107)	DO	AIT-107A	EFF. DO READING		.00	.02	.02	.02
TURBIDITY (TBM-107)	NTU	AIT-107B	EFF. TURBIDITY		.46	.47	.46	.46
FINAL HOLDING TANK LEVEL	FEET	T-401	FH TK LEVEL		3ft	2ft	2'	2'
IRRIG. PUMP RUNNING	Y/N	P-401	IRRIGATION SYSTEM		No	No	No	No
VFD RATE	Hz	P-401	IRRIGATION SYSTEM		—	—	—	—
GRAVITY OUTFALL IN-USE	Y/N	OF-101	OUTFALL TO POENTIC KILL		Yes	Yes	Yes	Yes
BUILDING SYSTEM COMPONENTS								
EXHAUST FAN NW IN-USE	Y/N	EF-1	EXHAUST FANS		No	No	No	No
EXHAUST FAN NE IN-USE	Y/N	EF-2	EXHAUST FANS		No	No	No	No
BUILDING HEATERS IN-USE	Y/N	UH-1-8	HEATERS		Yes	Yes	Yes	Yes
BUILDING TEMPERATURE	DEG. F		BLDG. TEMP		72°	70°	74°	72°
OVERHEAD DOOR SW OPER.	Y/N		OVERHEAD DOOR		Yes	Yes	Yes	Yes
OVERHEAD DOOR NE OPER.	Y/N		OVERHEAD DOOR		Yes	Yes	Yes	Yes
OVERHEAD DOOR SE OPER.	Y/N		OVERHEAD DOOR		Yes	Yes	Yes	Yes
BLDG CONT SYS OPERATIONAL	Y/N		REMOTE TELEMETRY SYS		Yes	Yes	Yes	Yes
GENERAL COMMENTS								

OPERATIONS LOG SHEET
ENHANCED SEEP COLLECTION SYSTEM
GENERAL ELECTRIC MAIN PLANT
SCHENECTADY, NEW YORK

PARAMETER	UNITS	EQUIPMENT TAG	DESCRIPTION	DATE:	12/31/19	1/2/2020	1/3/2020	1/6/2020
				TIME:	12:00	12:00	10:30	12:00
				INITIALS:	E.T.	T.R.	T.R.	T.R.
SEEP COLLECTION PUMP STATIONS (SEEP 1 - 4, SEEP 5 AND SEEP 6)								
SEEP 1 - 4 PUMP RUN	Y/N	P-100A	SEEP 1-4 P-STATION PUMP		yes	yes	yes	yes
SEEP 5 PUMP RUN	Y/N	P-100B	SEEP 5 P-STATION PUMP		yes	yes	yes	yes
SEEP 6 PUMP RUN	Y/N	P-100C	SEEP 6 P-STATION PUMP		yes	NO	NO	NO
INFLUENT TANK (T-101)								
FLOW METER - 100A (FM-A)	GPM	FQIT-100A	S1-4 IN-FLOW		24.45	24.6	24.0	24
FLOW METER - 100B (FM-B)	GPM	FQIT-100B	S5 IN-FLOW		30.49	29.1	25.8	20.8
FLOW METER - 100C (FM-C)	GPM	FQIT-100C	S6 IN-FLOW		44.73	0	0	0
FLOW METER - 101	GPM	FQIT-101	INF TK OUT-FLOW		52.23	44.5	47.26	47.30
FLOW METER - 100A	TOTAL	FQIT-100A	S1-4 IN-FLOW		15,989,760	16,054,999	16,088,708	16,197,414
FLOW METER - 100B	TOTAL	FQIT-100B	S5 IN-FLOW		2,690,860	2,745,909	2,773,685	2,866,547
FLOW METER - 100C	TOTAL	FQIT-100C	S6 IN-FLOW		642,304	642,304	643,997	646,106
FLOW METER - 101	TOTAL	FQIT-101	INF TK OUT-FLOW		7,189,424	7,306,784	7,366,814	7,564,659
BLOWER RUNNING	Y/N	B-101	INF TK BLOWER		yes	yes	yes	yes
BLOWER PRESSURE	PSI	PI-101	INF TK BLOWER PRESS.		5.5	5.5	5.0	5.0
VFD RATE	Hz	B-101	INF TK BLOWER VFD		50 Hz	50 Hz	50 Hz	50 Hz
INF Ph	SU	AIT-101	pH FOR INF. WATER		7.45	7.45	7.45	7.41
pH Probe checked	Y/N	AIT-101	pH Probe at influent tank		yes	yes	yes	yes
pH Probe clean (1X/week min)	Y/N	AIT-101	pH Probe at influent tank		NO	NO	yes	NO
INF TANK LEVEL	inwc	T-101	LEVEL TRANSMIT.		90.45	44.0	75.53	59.4
RECIRC PUMP RUNNING	Y/N	P-102	IN TK RECIRC PUMP		yes	yes	yes	yes
VFD RATE	Hz	P-102	IN TK RECIRC VFD		50 Hz	50 Hz	50 Hz	50 Hz
CAUSTIC PUMP RUNNING	Y/N	P-201	IN TK CAUSTIC ADD		yes	yes	yes	yes
CAUSTIC TANK LEVEL	L	T-201	IN TK CAUSTIC ADD		13 gal	35	0	0
CAUSTIC USAGE	GAL	T-201	CAUSTIC USAGE		42 gal/22"	80 gal/42"	26 gal/39"	64 gal/33"
CAUSTIC USAGE	TOT	T-201	CAUSTIC USAGE		15	10 gal	4 gal	12 gal
CLARIFIER SYSTEM (T-103B)								
FLASH MIX TANK MIXER RUN.	Y/N	M-102	COAG MIXER		yes	yes	yes	yes
COAGULANT PUMP RUNNING	Y/N	P-202	COAG PUMP		yes	yes	yes	yes
COAGULANT LEVEL	% Full	T-202	COAG TANK		62 gal/32.5"	57 gal/31"	55 gal/30"	49 gal/26"
COAGULANT DOSE RATE	mg/l	FE-202	COAG FLOW TO TANK		16 mg/l	16 mg/L	16 mg/L	16 mg/L
FLOC TANK MIXER RUNNING	Y/N	M-103A	FLOC MIXER		yes	yes	yes	yes
FLOCCULANT PUMP RUNNING	Y/N	P-203	FLOC PUMP		yes	yes	yes	yes
FLOC LEVEL	% Full	T-203	FLOC TANK LEVEL		7 gal/13.5"	7 gal/13.5"	6 gal/12.5"	5 gal/9.5"
FLOCCULANT DOSE RATE	GPM	FE-203	DILUTED FLOC TO FLOC MIX TK		1.0	1.5	1.5	1.5
CLARIFIER RAKE MIXER RUN.	Y/N	M-103B	CLARIFIER MIXER		yes	yes	yes	yes
CLARIFIER SLUDGE PUMP RUN.	Y/N	P-103	SLUDGE PUMP TO GEOTUBE		yes	yes	yes	yes
AIR COMPRESSOR RUNNING	Y/N	C-302	SLUDGE PUMP POWER		yes	yes	yes	yes

*2 - added 13 gallons of Caustic - new lvl 55 gal/29" - 12/31/19 E.T.
2 - Added 35 gal of 50% Caustic. New level = 80 gal

OPERATIONS LOG SHEET
ENHANCED SEEP COLLECTION SYSTEM
GENERAL ELECTRIC MAIN PLANT
SCHENECTADY, NEW YORK

PARAMETER	UNITS	EQUIPMENT TAG	DESCRIPTION	DATE:	12/31/19	1/2/2020	1/3/2020	1/6/2020
				TIME:	12:00	12:00	10:30	12:00
				INITIALS:	E.T.	T.B.	T.B.	T.B.
AIR COMPRESSOR PRESSURE	PSI	PI-302	AIR COMP. PRESSURE		170	170	170	170
CLARIFIER EFF TANK LEVEL	FEET	T-104	GRAVITY TANK POST CLAR.		2.8'	3ft	3ft	2.5ft
CLARIFIER EFF PUMP A RUN	Y/N	P-104A	PUMP TO FILTRATION		yes	yes	yes	yes
VFD RATE	Hz	P-104A	PUMP RATE TO FILTRATION		35Hz	35Hz	35Hz	35
CLARIFIER EFF. PUMP PRESSURE	PSI	PI-104A	PUMP PRESSURE TO FILT.		35psi	38psi	40	40
CLARIFIER EFF PUMP B RUN	Y/N	P-104B	PUMP TO FILTRATION		no	no	no	no
VFD RATE	Hz	P-104B	PUMP RATE TO FILTRATION		—	—	—	—
CLARIFIER EFF. PUMP PRESSURE	PSI	PI-104B	PUMP PRESSURE TO FILT.		—	—	—	—
GEOTUBE SYSTEM								
GEOTUBE CONTAINER 1 LEVEL	EST.	G-101	GEOTUBE DEWATERING BOX		35%	40%	40%	40%
GEOTUBE CONTAINER 2 LEVEL	EST.	G-102	GEOTUBE DEWATERING BOX		60%	60%	65%	70%
GEOTUBE DISPOSAL	Y/N	G-101/G-102	GEOTUBE DEWATERING BOX		no	no	no	no
GEOTUBE DISPOSAL QTY	TON	G-101/G-102	WEIGHT OF MATERIAL DISPOSED		—	—	—	—
POLYMER PUMP RUNNING	Y/N	P-205	POLY ADD TO SLUDGE		yes	yes	yes	yes
POLYMER DOSE	GPM	FE-205	POLY FLOW TO SLUDGE		.580	.576	.568	.610
POLYMER TANK LEVEL	% Full	T-205	POLYMER LEVEL IN TANK		9"	11"	7"	11"
FILTRATION SYSTEM								
SAND FILTER A IN-USE	Y/N	TA-105A	SAND FILTER		yes	yes	yes	yes
SAND FILTER A BACKWASH	Y/N	TA-105A	SAND FILTER		no	yes	yes	yes
INLET PRESSURE	PSI	PI-105A/PI-703	INLET PRESSURE TO SAND		32	32	32	28
OUTLET PRESSURE	PSI	PDSH-105A	OUTLET PRESS. TO BAG FIL.		12	18	20	20
PRESSURE DIFFERENTIAL	PSI	PDSH-105A	PRESSURE DIFFERENTIAL		20	14	12	8
SAND FILTER B IN-USE	Y/N	TA-105B	SAND FILTER		yes	yes	yes	yes
SAND FILTER B BACKWASH	Y/N	TA-105B	SAND FILTER		no	yes	yes	yes
INLET PRESSURE	PSI	PI-105B/PI-703	INLET PRESSURE TO SAND		32	32	37	30
OUTLET PRESSURE	PSI	PDSH-105B	OUTLET PRESS. TO BAG FIL.		14	20	22	29
PRESSURE DIFFERENTIAL	PSI	PDSH-105B	PRESSURE DIFFERENTIAL		18	12	15	1
BAG FILTER 701 IN-USE	Y/N	F-701A	10, 5 and 1 MICRON BAG FILTER		no	no	no	no
INLET PRESSURE	PSI	PI-701A	INLET PRESSURE IN BF		—	—	—	—
OUTLET PRESSURE	PSI	PI-704	OUTLET PRESSURE IN BF		—	—	—	—
PRESSURE DIFFERENTIAL	PSI	PDSH-701A	PRESSURE DIFFERENTIAL		—	—	—	—
BAG CHANGES	Y/N	F-701A	BAG FILTER		—	—	—	—
BAG FILTER 702 IN-USE	Y/N	F-702A	10, 5 and 1 MICRON BAG FILTER		no	no	no	no
INLET PRESSURE	PSI	PI-702A	INLET PRESSURE IN BF		—	—	—	no
OUTLET PRESSURE	PSI	PI-704	OUTLET PRESSURE IN BF		—	—	—	—
PRESSURE DIFFERENTIAL	PSI	PDSH-702A	PRESSURE DIFFERENTIAL		—	—	—	—
BAG CHANGE	Y/N	F-702A	BAG FILTER		—	—	—	—

**OPERATIONS LOG SHEET
ENHANCED SEEP COLLECTION SYSTEM
GENERAL ELECTRIC MAIN PLANT
SCHENECTADY, NEW YORK**

PARAMETER	UNITS	EQUIPMENT TAG	DESCRIPTION	DATE:	12/31/19	1/2/2020	1/3/2020	1/6/2020
				TIME:	12:00	12:00	10:30	12:00
				INITIALS:	E.T.	T.B.	J.B.	T.B.
CARBON FILTER 1 IN-USE	Y/N	TA-106A	CARBON FILTER		yes	yes	yes	yes
CARBON FILTER 1 BACKWASH	Y/N	TA-106A	CARBON FILTER		no	no	yes	yes
INLET PRESSURE	PSI	PI-106A	INLET PRESSURE FROM BF		5	5	5	5
OUTLET PRESSURE	PSI	PI-106B	OUTLET PRESS. TO EFF-TK		10	10	6	5
PRESSURE DIFFERENTIAL	PSI		PRESSURE DIFFERENTIAL		-5	5	1	0
CARBON FILTER 2 IN-USE	Y/N	TA-106B	CARBON FILTER		yes	yes	yes	yes
CARBON FILTER 2 BACKWASH	Y/N	TA-106B	CARBON FILTER		no	no	yes	yes
INLET PRESSURE	PSI	PI-106B	INLET PRESSURE FROM BF		5	5	5	5
OUTLET PRESSURE	PSI		OUTLET PRESS. TO EFF-TK		10	10	8	6
PRESSURE DIFFERENTIAL	PSI		PRESSURE DIFFERENTIAL		-5	5	3	1
BACKWASH PUMP A RUN	Y/N	P-305A	BACKWASH PUMP TO FILT.		no	no	no	no
BACKWASH PRESSURE	PSI	PI-305A	BACKWASH PRESSURE		-	-	-	-
BACKWASH PUMP B RUN	Y/N	P-305B	BACKWASH PUMP TO FILT.		no	no	yes	yes
BACKWASH PRESSURE	PSI	PI-305B	BACKWASH PRESSURE		-	-	100 psi	110 psi
EFFLUENT AND FINAL HOLDING TANK (T-107 AND T-401)								
EFFLUENT FLOW METER	GPM	FQIT-107	FLOW RATE FROM FILTERS		44.29	44.5	44.3	50.9
EFF. FLOW METER TOTAL	TOT.	FQIT-107	TOTAL FLOW		5,333,925	5,430,316	5,478,858	5,639,692
EFFLUENT TANK LEVEL	inwc	T-107	TANK LEVEL		76.03	101.1	106.6	90.9
pH METER	SU	AIT-107	EFF. pH		7.74	7.73	7.71	7.68
DISSOLVED OXYGEN (DOM-107)	DO	AIT-107A	EFF. DO READING		.28	5.96	5.20	8.28
TURBIDITY (TBM-107)	NTU	AIT-107B	EFF. TURBIDITY		.46	.46	.46	.46
FINAL HOLDING TANK LEVEL	FEET	T-401	FH TK LEVEL		2'	2ft	3ft	3ft
IRRIG. PUMP RUNNING	Y/N	P-401	IRRIGATION SYSTEM		no	no	no	no
VFD RATE	Hz	P-401	IRRIGATION SYSTEM		-	-	-	-
GRAVITY OUTFALL IN-USE	Y/N	OF-101	OUTFALL TO POENTIC KILL		yes	yes	yes	yes
BUILDING SYSTEM COMPONENTS								
EXHAUST FAN NW IN-USE	Y/N	EF-1	EXHAUST FANS		no	no	no	no
EXHAUST FAN NE IN-USE	Y/N	EF-2	EXHAUST FANS		no	no	no	no
BUILDING HEATERS IN-USE	Y/N	UH-1-8	HEATERS		yes	yes	yes	yes
BUILDING TEMPERATURE	DEG. F		BLDG. TEMP		72°	73°	72°	72°
OVERHEAD DOOR SW OPER.	Y/N		OVERHEAD DOOR		yes	yes	yes	yes
OVERHEAD DOOR NE OPER.	Y/N		OVERHEAD DOOR		yes	yes	yes	yes
OVERHEAD DOOR SE OPER.	Y/N		OVERHEAD DOOR		yes	yes	yes	yes
BLDG CONT SYS OPERATIONAL	Y/N		REMOTE TELEMETRY SYS		yes	yes	yes	yes
GENERAL COMMENTS								

Analytical Data for Seep Collection & Treatment System

ANALYTICAL RESULTS

Project: GE MAIN PLANT FACILITY WEEKLY

Pace Project No.: 70114135

Sample: EFFLUENT		Lab ID: 70114135001	Collected: 12/04/19 15:00	Received: 12/05/19 10:55	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
608.3 GCSV PCB LOW		Analytical Method: EPA 608.3 Preparation Method: EPA 608.3						
PCB-1016 (Aroclor 1016)	<0.065	ug/L	0.065	1	12/05/19 20:34	12/06/19 12:20	12674-11-2	
PCB-1221 (Aroclor 1221)	<0.065	ug/L	0.065	1	12/05/19 20:34	12/06/19 12:20	11104-28-2	
PCB-1232 (Aroclor 1232)	<0.065	ug/L	0.065	1	12/05/19 20:34	12/06/19 12:20	11141-16-5	
PCB-1242 (Aroclor 1242)	<0.065	ug/L	0.065	1	12/05/19 20:34	12/06/19 12:20	53469-21-9	
PCB-1248 (Aroclor 1248)	<0.065	ug/L	0.065	1	12/05/19 20:34	12/06/19 12:20	12672-29-6	
PCB-1254 (Aroclor 1254)	<0.065	ug/L	0.065	1	12/05/19 20:34	12/06/19 12:20	11097-69-1	
PCB-1260 (Aroclor 1260)	<0.065	ug/L	0.065	1	12/05/19 20:34	12/06/19 12:20	11096-82-5	
PCB, Total	<0.065	ug/L	0.065	1	12/05/19 20:34	12/06/19 12:20	1336-36-3	
Surrogates								
Tetrachloro-m-xylene (S)	36	%	10-149	1	12/05/19 20:34	12/06/19 12:20	877-09-8	
Decachlorobiphenyl (S)	74	%	10-149	1	12/05/19 20:34	12/06/19 12:20	2051-24-3	
200.7 Metals, Total		Analytical Method: EPA 200.7 Preparation Method: EPA 200.7						
Aluminum	<200	ug/L	200	1	12/12/19 09:20	12/12/19 20:18	7429-90-5	
Iron	<100	ug/L	100	1	12/12/19 09:20	12/12/19 20:18	7439-89-6	
Lead	<5.0	ug/L	5.0	1	12/12/19 09:20	12/12/19 20:18	7439-92-1	
5210B BOD, 5 day		Analytical Method: SM22 5210B Preparation Method: SM22 5210B						
BOD, 5 day	<2.0	mg/L	2.0	1	12/05/19 16:58	12/10/19 11:46		
5210B cBOD, 5 day		Analytical Method: SM22 5210B Preparation Method: SM22 5210B						
Carbonaceous BOD, 5 day	<2.0	mg/L	2.0	1	12/05/19 16:58	12/10/19 11:44		
351.2 Total Kjeldahl Nitrogen		Analytical Method: EPA 351.2 Preparation Method: EPA 351.2						
Nitrogen, Kjeldahl, Total	1.5	mg/L	0.10	1	12/12/19 09:19	12/12/19 16:51	7727-37-9	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: GE MAIN PLANT FACILITY WEEKLY

Pace Project No.: 70114135

Sample: EFFLUENT		Lab ID: 70114135002		Collected: 12/04/19 13:40		Received: 12/05/19 10:55		Matrix: Water	
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual	
624.1 Volatile Organics		Analytical Method: EPA 624.1							
Benzene	<1.0	ug/L	1.0	1		12/09/19 17:03	71-43-2		
Chlorobenzene	1.0	ug/L	1.0	1		12/09/19 17:03	108-90-7		
Ethylbenzene	<1.0	ug/L	1.0	1		12/09/19 17:03	100-41-4		
Toluene	<1.0	ug/L	1.0	1		12/09/19 17:03	108-88-3		
m&p-Xylene	<1.0	ug/L	1.0	1		12/09/19 17:03	179601-23-1		
o-Xylene	<1.0	ug/L	1.0	1		12/09/19 17:03	95-47-6		
Surrogates									
4-Bromofluorobenzene (S)	103	%	79-124	1		12/09/19 17:03	460-00-4		
Toluene-d8 (S)	117	%	69-127	1		12/09/19 17:03	2037-26-5		
1,2-Dichloroethane-d4 (S)	101	%	68-153	1		12/09/19 17:03	17060-07-0		
2540C Total Dissolved Solids		Analytical Method: SM22 2540C							
Total Dissolved Solids	652	mg/L	20.0	1		12/09/19 10:33			
2540D Total Suspended Solids		Analytical Method: SM22 2540D							
Total Suspended Solids	<2.0	mg/L	2.0	1		12/09/19 15:15			

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ANALYTICAL RESULTS

Project: GE MAIN PLANT FACILITY WEEKLY

Pace Project No.: 70114135

Sample: TRIP BLANK		Lab ID: 70114135003		Collected: 12/04/19 13:40		Received: 12/05/19 10:55		Matrix: Water	
Parameters		Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
624.1 Volatile Organics		Analytical Method: EPA 624.1							
Benzene	<1.0	ug/L	1.0	1			12/09/19 16:41	71-43-2	
Chlorobenzene	<1.0	ug/L	1.0	1			12/09/19 16:41	108-90-7	
Ethylbenzene	<1.0	ug/L	1.0	1			12/09/19 16:41	100-41-4	
Toluene	<1.0	ug/L	1.0	1			12/09/19 16:41	108-88-3	
m&p-Xylene	<1.0	ug/L	1.0	1			12/09/19 16:41	179601-23-1	
o-Xylene	<1.0	ug/L	1.0	1			12/09/19 16:41	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	98	%	79-124	1			12/09/19 16:41	460-00-4	
Toluene-d8 (S)	112	%	69-127	1			12/09/19 16:41	2037-26-5	
1,2-Dichloroethane-d4 (S)	99	%	68-153	1			12/09/19 16:41	17060-07-0	

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ANALYTICAL RESULTS

Project: GE MAIN PLANT FACILITY 12/11

Pace Project No.: 70115058

Sample: EFFLUENT		Lab ID: 70115058001	Collected: 12/11/19 14:40	Received: 12/12/19 10:50	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
608.3 GCSV PCB LOW		Analytical Method: EPA 608.3 Preparation Method: EPA 608.3						
PCB-1016 (Aroclor 1016)	<0.065	ug/L	0.065	1	12/12/19 21:25	12/12/19 23:56	12674-11-2	
PCB-1221 (Aroclor 1221)	<0.065	ug/L	0.065	1	12/12/19 21:25	12/12/19 23:56	11104-28-2	
PCB-1232 (Aroclor 1232)	<0.065	ug/L	0.065	1	12/12/19 21:25	12/12/19 23:56	11141-16-5	
PCB-1242 (Aroclor 1242)	<0.065	ug/L	0.065	1	12/12/19 21:25	12/12/19 23:56	53469-21-9	
PCB-1248 (Aroclor 1248)	<0.065	ug/L	0.065	1	12/12/19 21:25	12/12/19 23:56	12672-29-6	
PCB-1254 (Aroclor 1254)	<0.065	ug/L	0.065	1	12/12/19 21:25	12/12/19 23:56	11097-69-1	
PCB-1260 (Aroclor 1260)	<0.065	ug/L	0.065	1	12/12/19 21:25	12/12/19 23:56	11096-82-5	
PCB, Total	<0.065	ug/L	0.065	1	12/12/19 21:25	12/12/19 23:56	1336-36-3	
Surrogates								
Tetrachloro-m-xylene (S)	58	%	10-149	1	12/12/19 21:25	12/12/19 23:56	877-09-8	C2
Decachlorobiphenyl (S)	87	%	10-149	1	12/12/19 21:25	12/12/19 23:56	2051-24-3	C2
200.7 Metals, Total		Analytical Method: EPA 200.7 Preparation Method: EPA 200.7						
Aluminum	<200	ug/L	200	1	12/17/19 11:23	12/17/19 23:41	7429-90-5	
Iron	132	ug/L	100	1	12/17/19 11:23	12/17/19 23:41	7439-89-6	
Lead	<5.0	ug/L	5.0	1	12/17/19 11:23	12/17/19 23:41	7439-92-1	
5210B BOD, 5 day		Analytical Method: SM22 5210B Preparation Method: SM22 5210B						
BOD, 5 day	<2.0	mg/L	2.0	1	12/13/19 12:31	12/18/19 11:25		
5210B cBOD, 5 day		Analytical Method: SM22 5210B Preparation Method: SM22 5210B						
Carbonaceous BOD, 5 day	<2.0	mg/L	2.0	1	12/13/19 12:30	12/18/19 11:23		
351.2 Total Kjeldahl Nitrogen		Analytical Method: EPA 351.2 Preparation Method: EPA 351.2						
Nitrogen, Kjeldahl, Total	1.9	mg/L	0.10	1	12/19/19 09:33	12/19/19 17:09	7727-37-9	

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ANALYTICAL RESULTS

Project: GE MAIN PLANT FACILITY 12/11

Pace Project No.: 70115058

Sample: EFFLUENT		Lab ID: 70115058002		Collected: 12/11/19 13:00		Received: 12/12/19 10:50		Matrix: Water	
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual	
624.1 Volatile Organics		Analytical Method: EPA 624.1							
Benzene	<1.0	ug/L	1.0	1		12/13/19 19:14	71-43-2		
Chlorobenzene	<1.0	ug/L	1.0	1		12/13/19 19:14	108-90-7		
Ethylbenzene	<1.0	ug/L	1.0	1		12/13/19 19:14	100-41-4		
Toluene	<1.0	ug/L	1.0	1		12/13/19 19:14	108-88-3		
m&p-Xylene	<1.0	ug/L	1.0	1		12/13/19 19:14	179601-23-1		
o-Xylene	<1.0	ug/L	1.0	1		12/13/19 19:14	95-47-6		
Surrogates									
4-Bromofluorobenzene (S)	94	%	79-124	1		12/13/19 19:14	460-00-4		
Toluene-d8 (S)	104	%	69-127	1		12/13/19 19:14	2037-26-5		
1,2-Dichloroethane-d4 (S)	107	%	68-153	1		12/13/19 19:14	17060-07-0		
2540C Total Dissolved Solids		Analytical Method: SM22 2540C							
Total Dissolved Solids	630	mg/L	20.0	1		12/16/19 09:40			
2540D Total Suspended Solids		Analytical Method: SM22 2540D							
Total Suspended Solids	<2.0	mg/L	2.0	1		12/16/19 15:31			

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ANALYTICAL RESULTS

Project: GE MAIN PLANT FACILITY 12/11

Pace Project No.: 70115058

Sample: TRIP BLANK		Lab ID: 70115058003		Collected: 12/11/19 13:00		Received: 12/12/19 10:50		Matrix: Water	
Parameters		Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
624.1 Volatile Organics		Analytical Method: EPA 624.1							
Benzene	<1.0	ug/L	1.0	1			12/13/19 18:52	71-43-2	
Chlorobenzene	<1.0	ug/L	1.0	1			12/13/19 18:52	108-90-7	
Ethylbenzene	<1.0	ug/L	1.0	1			12/13/19 18:52	100-41-4	
Toluene	<1.0	ug/L	1.0	1			12/13/19 18:52	108-88-3	
m&p-Xylene	<1.0	ug/L	1.0	1			12/13/19 18:52	179601-23-1	
o-Xylene	<1.0	ug/L	1.0	1			12/13/19 18:52	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	93	%	79-124	1			12/13/19 18:52	460-00-4	
Toluene-d8 (S)	107	%	69-127	1			12/13/19 18:52	2037-26-5	
1,2-Dichloroethane-d4 (S)	103	%	68-153	1			12/13/19 18:52	17060-07-0	

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ANALYTICAL RESULTS

Project: GE MAIN PLANT FACILITY 12/18

Pace Project No.: 70115957

Sample: EFFLUENT		Lab ID: 70115957001	Collected: 12/18/19 14:30	Received: 12/19/19 11:15	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
608.3 GCSV PCB LOW		Analytical Method: EPA 608.3 Preparation Method: EPA 608.3						
PCB-1016 (Aroclor 1016)	<0.065	ug/L	0.065	1	12/19/19 21:47	12/20/19 12:07	12674-11-2	
PCB-1221 (Aroclor 1221)	<0.065	ug/L	0.065	1	12/19/19 21:47	12/20/19 12:07	11104-28-2	
PCB-1232 (Aroclor 1232)	<0.065	ug/L	0.065	1	12/19/19 21:47	12/20/19 12:07	11141-16-5	
PCB-1242 (Aroclor 1242)	<0.065	ug/L	0.065	1	12/19/19 21:47	12/20/19 12:07	53469-21-9	
PCB-1248 (Aroclor 1248)	<0.065	ug/L	0.065	1	12/19/19 21:47	12/20/19 12:07	12672-29-6	
PCB-1254 (Aroclor 1254)	<0.065	ug/L	0.065	1	12/19/19 21:47	12/20/19 12:07	11097-69-1	
PCB-1260 (Aroclor 1260)	<0.065	ug/L	0.065	1	12/19/19 21:47	12/20/19 12:07	11096-82-5	
PCB, Total	<0.065	ug/L	0.065	1	12/19/19 21:47	12/20/19 12:07	1336-36-3	
Surrogates								
Tetrachloro-m-xylene (S)	54	%	10-149	1	12/19/19 21:47	12/20/19 12:07	877-09-8	
Decachlorobiphenyl (S)	81	%	10-149	1	12/19/19 21:47	12/20/19 12:07	2051-24-3	
200.7 Metals, Total		Analytical Method: EPA 200.7 Preparation Method: EPA 200.7						
Aluminum	<200	ug/L	200	1	12/23/19 12:00	12/27/19 13:11	7429-90-5	
Iron	196	ug/L	100	1	12/23/19 12:00	12/27/19 13:11	7439-89-6	
Lead	<5.0	ug/L	5.0	1	12/23/19 12:00	12/27/19 13:11	7439-92-1	
5210B BOD, 5 day		Analytical Method: SM22 5210B Preparation Method: SM22 5210B						
BOD, 5 day	3.2	mg/L	2.0	1	12/19/19 18:01	12/24/19 13:21		
5210B cBOD, 5 day		Analytical Method: SM22 5210B Preparation Method: SM22 5210B						
Carbonaceous BOD, 5 day	2.9	mg/L	2.0	1	12/19/19 18:12	12/24/19 13:19		
351.2 Total Kjeldahl Nitrogen		Analytical Method: EPA 351.2 Preparation Method: EPA 351.2						
Nitrogen, Kjeldahl, Total	2.1	mg/L	0.10	1	12/26/19 08:48	12/26/19 16:30	7727-37-9	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: GE MAIN PLANT FACILITY 12/18

Pace Project No.: 70115957

Sample: EFFLUENT		Lab ID: 70115957002		Collected: 12/18/19 14:30		Received: 12/19/19 11:15		Matrix: Water	
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual	
624.1 Volatile Organics		Analytical Method: EPA 624.1							
Benzene	<1.0	ug/L	1.0	1		12/19/19 18:12	71-43-2		
Chlorobenzene	<1.0	ug/L	1.0	1		12/19/19 18:12	108-90-7		
Ethylbenzene	<1.0	ug/L	1.0	1		12/19/19 18:12	100-41-4		
Toluene	<1.0	ug/L	1.0	1		12/19/19 18:12	108-88-3		
m&p-Xylene	<1.0	ug/L	1.0	1		12/19/19 18:12	179601-23-1		
o-Xylene	<1.0	ug/L	1.0	1		12/19/19 18:12	95-47-6		
Surrogates									
4-Bromofluorobenzene (S)	96	%	79-124	1		12/19/19 18:12	460-00-4		
Toluene-d8 (S)	103	%	69-127	1		12/19/19 18:12	2037-26-5		
1,2-Dichloroethane-d4 (S)	104	%	68-153	1		12/19/19 18:12	17060-07-0		
2540C Total Dissolved Solids		Analytical Method: SM22 2540C							
Total Dissolved Solids	674	mg/L	20.0	1		12/23/19 09:17			
2540D Total Suspended Solids		Analytical Method: SM22 2540D							
Total Suspended Solids	<2.0	mg/L	2.0	1		12/24/19 11:38			

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ANALYTICAL RESULTS

Project: GE MAIN PLANT FACILITY 12/18

Pace Project No.: 70115957

Sample: TRIP BLANK		Lab ID: 70115957003		Collected: 12/18/19 10:00		Received: 12/19/19 11:15		Matrix: Water	
Parameters		Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
624.1 Volatile Organics		Analytical Method: EPA 624.1							
Benzene	<1.0	ug/L	1.0	1			12/19/19 17:50	71-43-2	
Chlorobenzene	<1.0	ug/L	1.0	1			12/19/19 17:50	108-90-7	
Ethylbenzene	<1.0	ug/L	1.0	1			12/19/19 17:50	100-41-4	
Toluene	<1.0	ug/L	1.0	1			12/19/19 17:50	108-88-3	
m&p-Xylene	<1.0	ug/L	1.0	1			12/19/19 17:50	179601-23-1	
o-Xylene	<1.0	ug/L	1.0	1			12/19/19 17:50	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	101	%	79-124	1			12/19/19 17:50	460-00-4	
Toluene-d8 (S)	106	%	69-127	1			12/19/19 17:50	2037-26-5	
1,2-Dichloroethane-d4 (S)	99	%	68-153	1			12/19/19 17:50	17060-07-0	

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ANALYTICAL RESULTS

Project: GE MIAN PLANT FACILITY 12/23

Pace Project No.: 70116400

Sample: EFFLUENT		Lab ID: 70116400001	Collected: 12/23/19 15:10		Received: 12/24/19 11:20		Matrix: Water	
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
608.3 GCSV PCB LOW		Analytical Method: EPA 608.3 Preparation Method: EPA 608.3						
PCB-1016 (Aroclor 1016)	<0.065	ug/L	0.065	1	12/26/19 18:04	12/27/19 19:18	12674-11-2	
PCB-1221 (Aroclor 1221)	<0.065	ug/L	0.065	1	12/26/19 18:04	12/27/19 19:18	11104-28-2	
PCB-1232 (Aroclor 1232)	<0.065	ug/L	0.065	1	12/26/19 18:04	12/27/19 19:18	11141-16-5	
PCB-1242 (Aroclor 1242)	<0.065	ug/L	0.065	1	12/26/19 18:04	12/27/19 19:18	53469-21-9	
PCB-1248 (Aroclor 1248)	<0.065	ug/L	0.065	1	12/26/19 18:04	12/27/19 19:18	12672-29-6	
PCB-1254 (Aroclor 1254)	<0.065	ug/L	0.065	1	12/26/19 18:04	12/27/19 19:18	11097-69-1	
PCB-1260 (Aroclor 1260)	<0.065	ug/L	0.065	1	12/26/19 18:04	12/27/19 19:18	11096-82-5	
PCB, Total	<0.065	ug/L	0.065	1	12/26/19 18:04	12/27/19 19:18	1336-36-3	
Surrogates								
Tetrachloro-m-xylene (S)	59	%	10-149	1	12/26/19 18:04	12/27/19 19:18	877-09-8	C2
Decachlorobiphenyl (S)	68	%	10-149	1	12/26/19 18:04	12/27/19 19:18	2051-24-3	
200.7 Metals, Total		Analytical Method: EPA 200.7 Preparation Method: EPA 200.7						
Aluminum	<200	ug/L	200	1	12/27/19 12:00	12/31/19 19:06	7429-90-5	
Iron	317	ug/L	100	1	12/27/19 12:00	12/31/19 19:06	7439-89-6	
Lead	<5.0	ug/L	5.0	1	12/27/19 12:00	12/31/19 19:06	7439-92-1	
5210B BOD, 5 day		Analytical Method: SM22 5210B Preparation Method: SM22 5210B						
BOD, 5 day	<2.0	mg/L	2.0	1	12/24/19 16:55	12/29/19 10:26		
5210B cBOD, 5 day		Analytical Method: SM22 5210B Preparation Method: SM22 5210B						
Carbonaceous BOD, 5 day	<2.0	mg/L	2.0	1	12/24/19 16:55	12/29/19 10:24		
351.2 Total Kjeldahl Nitrogen		Analytical Method: EPA 351.2 Preparation Method: EPA 351.2						
Nitrogen, Kjeldahl, Total	2.0	mg/L	0.10	1	12/31/19 07:56	12/31/19 15:18	7727-37-9	

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ANALYTICAL RESULTS

Project: GE MIAN PLANT FACILITY 12/23

Pace Project No.: 70116400

Sample: EFFLUENT		Lab ID: 70116400002		Collected: 12/23/19 15:15		Received: 12/24/19 11:20		Matrix: Water	
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual	
624.1 Volatile Organics		Analytical Method: EPA 624.1							
Benzene	<1.0	ug/L	1.0	1		12/27/19 21:14	71-43-2		
Chlorobenzene	3.5	ug/L	1.0	1		12/27/19 21:14	108-90-7		
Ethylbenzene	<1.0	ug/L	1.0	1		12/27/19 21:14	100-41-4		
Toluene	<1.0	ug/L	1.0	1		12/27/19 21:14	108-88-3		
m&p-Xylene	<1.0	ug/L	1.0	1		12/27/19 21:14	179601-23-1		
o-Xylene	<1.0	ug/L	1.0	1		12/27/19 21:14	95-47-6		
Surrogates									
4-Bromofluorobenzene (S)	90	%	79-124	1		12/27/19 21:14	460-00-4		
Toluene-d8 (S)	122	%	69-127	1		12/27/19 21:14	2037-26-5		
1,2-Dichloroethane-d4 (S)	105	%	68-153	1		12/27/19 21:14	17060-07-0		
2540C Total Dissolved Solids		Analytical Method: SM22 2540C							
Total Dissolved Solids	738	mg/L	20.0	1		12/27/19 13:38			
2540D Total Suspended Solids		Analytical Method: SM22 2540D							
Total Suspended Solids	<2.0	mg/L	2.0	1		12/27/19 11:13			

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ANALYTICAL RESULTS

Project: GE MIAN PLANT FACILITY 12/23

Pace Project No.: 70116400

Sample: TRIP BLANK		Lab ID: 70116400003		Collected: 12/23/19 15:15		Received: 12/24/19 11:20		Matrix: Water	
Parameters		Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
624.1 Volatile Organics		Analytical Method: EPA 624.1							
Benzene	<1.0	ug/L	1.0	1			12/27/19 21:36	71-43-2	
Chlorobenzene	<1.0	ug/L	1.0	1			12/27/19 21:36	108-90-7	
Ethylbenzene	<1.0	ug/L	1.0	1			12/27/19 21:36	100-41-4	
Toluene	<1.0	ug/L	1.0	1			12/27/19 21:36	108-88-3	
m&p-Xylene	<1.0	ug/L	1.0	1			12/27/19 21:36	179601-23-1	
o-Xylene	<1.0	ug/L	1.0	1			12/27/19 21:36	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	87	%	79-124	1			12/27/19 21:36	460-00-4	
Toluene-d8 (S)	119	%	69-127	1			12/27/19 21:36	2037-26-5	
1,2-Dichloroethane-d4 (S)	103	%	68-153	1			12/27/19 21:36	17060-07-0	

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Shallow Groundwater Treatment System Analytical Data

Sample Description: SW-4-120419 Grab Surface Water
General Electric Schenectady Main Plant

GE-O'Brien & Gere, Inc.
ELLE Sample #: WW 1215503
ELLE Group #: 2077620
Matrix: Surface Water

Project Name: GE Schenectady Main Plant

Submittal Date/Time: 12/05/2019 11:12
Collection Date/Time: 12/04/2019 13:15
SDG#: SMP18-01

CAT No.	Analysis Name	CAS Number	Result	Limit of Quantitation*	Method Detection Limit	Dilution Factor
GC/MS Volatiles		SW-846 8260C 25mL	ug/l	ug/l	ug/l	
		purge				
11996	Acetone	67-64-1	N.D.	5.0	0.9	1
11996	Benzene	71-43-2	0.07 J	0.5	0.05	1
11996	2-Butanone	78-93-3	N.D.	5.0	0.6	1
11996	Chlorobenzene	108-90-7	0.2 J	0.5	0.06	1
11996	Chloroethane	75-00-3	0.1 J	0.5	0.07	1
11996	Cyclohexane	110-82-7	N.D.	0.5	0.05	1
11996	1,2-Dichlorobenzene	95-50-1	N.D.	0.5	0.06	1
11996	1,3-Dichlorobenzene	541-73-1	N.D.	0.5	0.06	1
11996	1,4-Dichlorobenzene	106-46-7	N.D.	0.5	0.07	1
11996	1,1-Dichloroethane	75-34-3	N.D.	0.5	0.07	1
11996	1,2-Dichloroethane	107-06-2	N.D.	0.5	0.05	1
11996	1,1-Dichloroethene	75-35-4	N.D.	0.5	0.06	1
11996	cis-1,2-Dichloroethene	156-59-2	0.07 J	0.5	0.05	1
11996	trans-1,2-Dichloroethene	156-60-5	N.D.	0.5	0.06	1
11996	1,2-Dichloroethene (Total) ¹	540-59-0	N.D.	1.0	0.1	1
11996	Ethylbenzene	100-41-4	0.5	0.5	0.06	1
11996	Isopropylbenzene	98-82-8	N.D.	0.5	0.05	1
11996	4-Methyl-2-Pentanone	108-10-1	N.D.	5.0	0.7	1
11996	Methylcyclohexane	108-87-2	N.D.	0.5	0.05	1
11996	Methylene Chloride	75-09-2	N.D.	0.5	0.07	1
11996	Tetrachloroethene	127-18-4	N.D.	0.5	0.06	1
11996	Toluene	108-88-3	2.5	0.5	0.07	1
11996	1,1,1-Trichloroethane	71-55-6	0.1 J	0.5	0.06	1
11996	Trichloroethene	79-01-6	N.D.	0.5	0.06	1
11996	Vinyl Chloride	75-01-4	N.D.	0.5	0.1	1
11996	Xylene (Total)	1330-20-7	2.9	1.0	0.2	1
GC Miscellaneous		RSKSOP-175 modified	ug/l	ug/l	ug/l	
07105	Ethane	74-84-0	1.1 J	5.0	1.0	1
07105	Ethene	74-85-1	N.D.	5.0	1.0	1
07105	Methane	74-82-8	100	5.0	3.0	1
Wet Chemistry		EPA 300.0	mg/l	mg/l	mg/l	
00224	Chloride	16887-00-6	169	20.0	10.0	50
00368	Nitrate Nitrogen	14797-55-8	1.5	0.50	0.25	5
Sample was analyzed within the 48 hour holding time; however the client requirement of analyzing a high and low standard with the sample was not done. Sample was repeated outside of the hold on 12/09/2019 with a result of 1.5 mg/l and with the client requirement of analyzing a high and low standard.						
00228	Sulfate	14808-79-8	36.3	5.0	1.5	5

*=This limit was used in the evaluation of the final result

Analysis Report

Sample Description: SW-4-120419 Grab Surface Water
General Electric Schenectady Main Plant

GE-O'Brien & Gere, Inc.
ELLE Sample #: WW 1215503
ELLE Group #: 2077620
Matrix: Surface Water

Project Name: GE Schenectady Main Plant

Submission Date/Time: 12/05/2019 11:12
Collection Date/Time: 12/04/2019 13:15
SDG#: SMP18-01

CAT No.	Analysis Name	CAS Number	Result	Limit of Quantitation*	Method Detection Limit	Dilution Factor
Wet Chemistry						
00273	Total Organic Carbon	SM 5310 C-2011 n.a.	mg/l 2.5	mg/l 1.0	mg/l 0.50	1
12150	Total Alkalinity to pH 4.5	SM 2320 B-2011 n.a.	mg/l as CaCO3 186	mg/l as CaCO3 8.0	mg/l as CaCO3 2.6	1
12149	Bicarbonate Alkalinity	n.a.	186	8.0	2.6	1

Sample Comments

State of New York Certification No. 10670

¹ = This analyte was not on the laboratory's NYSDOH Scope of Accreditation at the time of analysis.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11996	VOCs 8260C	SW-846 8260C 25mL purge	1	H193401AA	12/06/2019 12:50	Don V Viray	1
01163	GC/MS VOA Water Prep	SW-846 5030C	1	H193401AA	12/06/2019 12:49	Don V Viray	1
07105	Methane, Ethane, Ethene	RSKSOP-175 modified	1	193400002A	12/09/2019 14:54	Johanna C Kennedy	1
00224	Chloride	EPA 300.0	2	19339720117B	12/09/2019 15:34	Kevin Litwa	50
00368	Nitrate Nitrogen	EPA 300.0	1	19339720117B	12/05/2019 18:30	Samantha Faverio	5
00228	Sulfate	EPA 300.0	2	19339720117B	12/09/2019 15:16	Kevin Litwa	5
00273	Total Organic Carbon	SM 5310 C-2011	1	19345304501A	12/11/2019 13:43	Bethany Sandone	1
12150	Total Alkalinity to pH 4.5	SM 2320 B-2011	1	19340003102A	12/06/2019 21:22	Jeremy L Bolf	1
12149	Bicarbonate Alkalinity	SM 2320 B-2011	1	19340003102A	12/06/2019 21:22	Jeremy L Bolf	1

*=This limit was used in the evaluation of the final result

Sample Description: SW-4-120419 Filtered Grab Surface Water
General Electric Schenectady Main Plant

GE-O'Brien & Gere, Inc.
ELLE Sample #: WW 1215504
ELLE Group #: 2077620
Matrix: Surface Water

Project Name: GE Schenectady Main Plant

Submittal Date/Time: 12/05/2019 11:12
Collection Date/Time: 12/04/2019 13:15
SDG#: SMP18-02

CAT No.	Analysis Name	CAS Number	Result	Limit of Quantitation*	Method Detection Limit	Dilution Factor
Metals Dissolved		SW-846 6010D Rev.4, July 2014	mg/l	mg/l	mg/l	
01754	Iron	7439-89-6	0.307	0.200	0.0400	1

Sample Comments

State of New York Certification No. 10670
This sample was field filtered for dissolved metals.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01754	Iron	SW-846 6010D Rev.4, July 2014	1	193431404406	12/10/2019 12:33	Lisa J Cooke	1
14044	ICP-WW, 3005A (tot rec) - U345	SW-846 3005A	1	193431404406	12/10/2019 04:17	James L Mertz	1

*=This limit was used in the evaluation of the final result

Sample Description: SW-3-120419 Grab Surface Water
General Electric Schenectady Main Plant

GE-O'Brien & Gere, Inc.
ELLE Sample #: WW 1215505
ELLE Group #: 2077620
Matrix: Surface Water

Project Name: GE Schenectady Main Plant

Submittal Date/Time: 12/05/2019 11:12
Collection Date/Time: 12/04/2019 15:00
SDG#: SMP18-03

CAT No.	Analysis Name	CAS Number	Result	Limit of Quantitation*	Method Detection Limit	Dilution Factor
GC/MS Volatiles		SW-846 8260C 25mL	ug/l	ug/l	ug/l	
		purge				
11996	Acetone	67-64-1	N.D.	5.0	0.9	1
11996	Benzene	71-43-2	0.07 J	0.5	0.05	1
11996	2-Butanone	78-93-3	N.D.	5.0	0.6	1
11996	Chlorobenzene	108-90-7	0.08 J	0.5	0.06	1
11996	Chloroethane	75-00-3	0.1 J	0.5	0.07	1
11996	Cyclohexane	110-82-7	0.1 J	0.5	0.05	1
11996	1,2-Dichlorobenzene	95-50-1	N.D.	0.5	0.06	1
11996	1,3-Dichlorobenzene	541-73-1	N.D.	0.5	0.06	1
11996	1,4-Dichlorobenzene	106-46-7	N.D.	0.5	0.07	1
11996	1,1-Dichloroethane	75-34-3	N.D.	0.5	0.07	1
11996	1,2-Dichloroethane	107-06-2	N.D.	0.5	0.05	1
11996	1,1-Dichloroethene	75-35-4	N.D.	0.5	0.06	1
11996	cis-1,2-Dichloroethene	156-59-2	0.08 J	0.5	0.05	1
11996	trans-1,2-Dichloroethene	156-60-5	N.D.	0.5	0.06	1
11996	1,2-Dichloroethene (Total) ¹	540-59-0	N.D.	1.0	0.1	1
11996	Ethylbenzene	100-41-4	0.7	0.5	0.06	1
11996	Isopropylbenzene	98-82-8	N.D.	0.5	0.05	1
11996	4-Methyl-2-Pentanone	108-10-1	N.D.	5.0	0.7	1
11996	Methylcyclohexane	108-87-2	N.D.	0.5	0.05	1
11996	Methylene Chloride	75-09-2	N.D.	0.5	0.07	1
11996	Tetrachloroethene	127-18-4	N.D.	0.5	0.06	1
11996	Toluene	108-88-3	3.2	0.5	0.07	1
11996	1,1,1-Trichloroethane	71-55-6	0.2 J	0.5	0.06	1
11996	Trichloroethene	79-01-6	N.D.	0.5	0.06	1
11996	Vinyl Chloride	75-01-4	N.D.	0.5	0.1	1
11996	Xylene (Total)	1330-20-7	3.7	1.0	0.2	1
GC Miscellaneous		RSKSOP-175 modified	ug/l	ug/l	ug/l	
07105	Ethane	74-84-0	N.D.	5.0	1.0	1
07105	Ethene	74-85-1	N.D.	5.0	1.0	1
07105	Methane	74-82-8	39	5.0	3.0	1
Wet Chemistry		EPA 300.0	mg/l	mg/l	mg/l	
00224	Chloride	16887-00-6	173	20.0	10.0	50
00368	Nitrate Nitrogen	14797-55-8	1.6	0.50	0.25	5
Sample was analyzed within the 48 hour holding time; however the client requirement of analyzing a high and low standard with the sample was not done. Sample was repeated outside of the hold on 12/11/2019 with a result of 1.7 mg/l and with the client requirement of analyzing a high and low standard.						
00228	Sulfate	14808-79-8	38.9	5.0	1.5	5

*=This limit was used in the evaluation of the final result

Analysis Report

Sample Description: SW-3-120419 Grab Surface Water
General Electric Schenectady Main Plant

GE-O'Brien & Gere, Inc.
ELLE Sample #: WW 1215505
ELLE Group #: 2077620
Matrix: Surface Water

Project Name: GE Schenectady Main Plant

Submission Date/Time: 12/05/2019 11:12
Collection Date/Time: 12/04/2019 15:00
SDG#: SMP18-03

CAT No.	Analysis Name	CAS Number	Result	Limit of Quantitation*	Method Detection Limit	Dilution Factor
Wet Chemistry						
00273	Total Organic Carbon	SM 5310 C-2011 n.a.	mg/l 2.4	mg/l 1.0	mg/l 0.50	1
12150	Total Alkalinity to pH 4.5	SM 2320 B-2011 n.a.	mg/l as CaCO3 180	mg/l as CaCO3 8.0	mg/l as CaCO3 2.6	1
12149	Bicarbonate Alkalinity	n.a.	180	8.0	2.6	1

Sample Comments

State of New York Certification No. 10670

¹ = This analyte was not on the laboratory's NYSDOH Scope of Accreditation at the time of analysis.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11996	VOCs 8260C	SW-846 8260C 25mL purge	1	H193401AA	12/06/2019 13:11	Don V Viray	1
01163	GC/MS VOA Water Prep	SW-846 5030C	1	H193401AA	12/06/2019 13:10	Don V Viray	1
07105	Methane, Ethane, Ethene	RSKSOP-175 modified	1	193400002A	12/09/2019 15:12	Johanna C Kennedy	1
00224	Chloride	EPA 300.0	2	19339720117B	12/11/2019 13:47	Samantha Faverio	50
00368	Nitrate Nitrogen	EPA 300.0	1	19339720117B	12/05/2019 19:15	Samantha Faverio	5
00228	Sulfate	EPA 300.0	2	19339720117B	12/11/2019 13:29	Samantha Faverio	5
00273	Total Organic Carbon	SM 5310 C-2011	1	19345304501A	12/11/2019 13:56	Bethany Sandone	1
12150	Total Alkalinity to pH 4.5	SM 2320 B-2011	1	19340003103B	12/06/2019 23:38	Jeremy L Bolf	1
12149	Bicarbonate Alkalinity	SM 2320 B-2011	1	19340003103B	12/06/2019 23:38	Jeremy L Bolf	1

*=This limit was used in the evaluation of the final result

Sample Description: SW-3-120419 Filtered Grab Surface Water
General Electric Schenectady Main Plant

GE-O'Brien & Gere, Inc.
ELLE Sample #: WW 1215506
ELLE Group #: 2077620
Matrix: Surface Water

Project Name: GE Schenectady Main Plant

Submittal Date/Time: 12/05/2019 11:12
Collection Date/Time: 12/04/2019 15:00
SDG#: SMP18-04

CAT No.	Analysis Name	CAS Number	Result	Limit of Quantitation*	Method Detection Limit	Dilution Factor
Metals Dissolved		SW-846 6010D Rev.4, July 2014	mg/l	mg/l	mg/l	
01754	Iron	7439-89-6	0.0535 J	0.200	0.0400	1

Sample Comments

State of New York Certification No. 10670
This sample was field filtered for dissolved metals.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01754	Iron	SW-846 6010D Rev.4, July 2014	1	193431404406	12/10/2019 12:39	Lisa J Cooke	1
14044	ICP-WW, 3005A (tot rec) - U345	SW-846 3005A	1	193431404406	12/10/2019 04:17	James L Mertz	1

*=This limit was used in the evaluation of the final result

Analysis Report

Sample Description: TB-09-120419 Water
General Electric Schenectady Main Plant

GE-O'Brien & Gere, Inc.
ELLE Sample #: WW 1215507
ELLE Group #: 2077620
Matrix: Water

Project Name: GE Schenectady Main Plant

Submission Date/Time: 12/05/2019 11:12
Collection Date/Time: 12/04/2019
SDG#: SMP18-05TB

CAT No.	Analysis Name	CAS Number	Result	Limit of Quantitation*	Method Detection Limit	Dilution Factor
GC/MS Volatiles		SW-846 8260C 25mL	ug/l	ug/l	ug/l	
		purge				
11996	Acetone	67-64-1	N.D.	5.0	0.9	1
11996	Benzene	71-43-2	N.D.	0.5	0.05	1
11996	2-Butanone	78-93-3	N.D.	5.0	0.6	1
11996	Chlorobenzene	108-90-7	N.D.	0.5	0.06	1
11996	Chloroethane	75-00-3	N.D.	0.5	0.07	1
11996	Cyclohexane	110-82-7	N.D.	0.5	0.05	1
11996	1,2-Dichlorobenzene	95-50-1	N.D.	0.5	0.06	1
11996	1,3-Dichlorobenzene	541-73-1	N.D.	0.5	0.06	1
11996	1,4-Dichlorobenzene	106-46-7	N.D.	0.5	0.07	1
11996	1,1-Dichloroethane	75-34-3	N.D.	0.5	0.07	1
11996	1,2-Dichloroethane	107-06-2	N.D.	0.5	0.05	1
11996	1,1-Dichloroethene	75-35-4	N.D.	0.5	0.06	1
11996	cis-1,2-Dichloroethene	156-59-2	N.D.	0.5	0.05	1
11996	trans-1,2-Dichloroethene	156-60-5	N.D.	0.5	0.06	1
11996	1,2-Dichloroethene (Total) ¹	540-59-0	N.D.	1.0	0.1	1
11996	Ethylbenzene	100-41-4	N.D.	0.5	0.06	1
11996	Isopropylbenzene	98-82-8	N.D.	0.5	0.05	1
11996	4-Methyl-2-Pentanone	108-10-1	N.D.	5.0	0.7	1
11996	Methylcyclohexane	108-87-2	N.D.	0.5	0.05	1
11996	Methylene Chloride	75-09-2	N.D.	0.5	0.07	1
11996	Tetrachloroethene	127-18-4	N.D.	0.5	0.06	1
11996	Toluene	108-88-3	N.D.	0.5	0.07	1
11996	1,1,1-Trichloroethane	71-55-6	N.D.	0.5	0.06	1
11996	Trichloroethene	79-01-6	N.D.	0.5	0.06	1
11996	Vinyl Chloride	75-01-4	N.D.	0.5	0.1	1
11996	Xylene (Total)	1330-20-7	N.D.	1.0	0.2	1

Sample Comments

State of New York Certification No. 10670

¹ = This analyte was not on the laboratory's NYSDOH Scope of Accreditation at the time of analysis.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11996	VOCs 8260C	SW-846 8260C 25mL purge	1	H193401AA	12/06/2019 12:28	Don V Viray	1
01163	GC/MS VOA Water Prep	SW-846 5030C	1	H193401AA	12/06/2019 12:27	Don V Viray	1

*=This limit was used in the evaluation of the final result

Sample Description: SW-5-120419 Grab Surface Water
General Electric Schenectady Main Plant

GE-O'Brien & Gere, Inc.
ELLE Sample #: WW 1215509
ELLE Group #: 2077622
Matrix: Surface Water

Project Name: GE Schenectady Main Plant

Submission Date/Time: 12/05/2019 11:12
Collection Date/Time: 12/04/2019 10:40
SDG#: SMP18-06

CAT No.	Analysis Name	CAS Number	Result	Limit of Quantitation*	Method Detection Limit	Dilution Factor
GC/MS Volatiles		SW-846 8260C 25mL	ug/l	ug/l	ug/l	
	purge					
11996	Acetone	67-64-1	N.D.	5.0	0.9	1
11996	Benzene	71-43-2	N.D.	0.5	0.05	1
11996	2-Butanone	78-93-3	N.D.	5.0	0.6	1
11996	Chlorobenzene	108-90-7	0.2 J	0.5	0.06	1
11996	Chloroethane	75-00-3	0.08 J	0.5	0.07	1
11996	Cyclohexane	110-82-7	0.08 J	0.5	0.05	1
11996	1,2-Dichlorobenzene	95-50-1	N.D.	0.5	0.06	1
11996	1,3-Dichlorobenzene	541-73-1	N.D.	0.5	0.06	1
11996	1,4-Dichlorobenzene	106-46-7	N.D.	0.5	0.07	1
11996	1,1-Dichloroethane	75-34-3	N.D.	0.5	0.07	1
11996	1,2-Dichloroethane	107-06-2	N.D.	0.5	0.05	1
11996	1,1-Dichloroethene	75-35-4	N.D.	0.5	0.06	1
11996	cis-1,2-Dichloroethene	156-59-2	0.06 J	0.5	0.05	1
11996	trans-1,2-Dichloroethene	156-60-5	N.D.	0.5	0.06	1
11996	1,2-Dichloroethene (Total) ¹	540-59-0	N.D.	1.0	0.1	1
11996	Ethylbenzene	100-41-4	0.4 J	0.5	0.06	1
11996	Isopropylbenzene	98-82-8	N.D.	0.5	0.05	1
11996	4-Methyl-2-Pentanone	108-10-1	N.D.	5.0	0.7	1
11996	Methylcyclohexane	108-87-2	N.D.	0.5	0.05	1
11996	Methylene Chloride	75-09-2	N.D.	0.5	0.07	1
11996	Tetrachloroethene	127-18-4	N.D.	0.5	0.06	1
11996	Toluene	108-88-3	1.7	0.5	0.07	1
11996	1,1,1-Trichloroethane	71-55-6	0.1 J	0.5	0.06	1
11996	Trichloroethene	79-01-6	N.D.	0.5	0.06	1
11996	Vinyl Chloride	75-01-4	N.D.	0.5	0.1	1
11996	Xylene (Total)	1330-20-7	1.9	1.0	0.2	1

Sample Comments

State of New York Certification No. 10670

¹ = This analyte was not on the laboratory's NYSDOH Scope of Accreditation at the time of analysis.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11996	VOCs 8260C	SW-846 8260C 25mL purge	1	H193401AA	12/06/2019 13:33	Don V Viray	1
01163	GC/MS VOA Water Prep	SW-846 5030C	1	H193401AA	12/06/2019 13:32	Don V Viray	1

*=This limit was used in the evaluation of the final result

Sample Description: SW-2-120419 Grab Surface Water
General Electric Schenectady Main Plant

GE-O'Brien & Gere, Inc.
ELLE Sample #: WW 1215510
ELLE Group #: 2077622
Matrix: Surface Water

Project Name: GE Schenectady Main Plant

Submittal Date/Time: 12/05/2019 11:12
Collection Date/Time: 12/04/2019 11:50
SDG#: SMP18-07

CAT No.	Analysis Name	CAS Number	Result	Limit of Quantitation*	Method Detection Limit	Dilution Factor
GC/MS Volatiles		SW-846 8260C 25mL	ug/l	ug/l	ug/l	
		purge				
11996	Acetone	67-64-1	N.D.	5.0	0.9	1
11996	Benzene	71-43-2	N.D.	0.5	0.05	1
11996	2-Butanone	78-93-3	N.D.	5.0	0.6	1
11996	Chlorobenzene	108-90-7	N.D.	0.5	0.06	1
11996	Chloroethane	75-00-3	N.D.	0.5	0.07	1
11996	Cyclohexane	110-82-7	0.07 J	0.5	0.05	1
11996	1,2-Dichlorobenzene	95-50-1	N.D.	0.5	0.06	1
11996	1,3-Dichlorobenzene	541-73-1	N.D.	0.5	0.06	1
11996	1,4-Dichlorobenzene	106-46-7	N.D.	0.5	0.07	1
11996	1,1-Dichloroethane	75-34-3	N.D.	0.5	0.07	1
11996	1,2-Dichloroethane	107-06-2	N.D.	0.5	0.05	1
11996	1,1-Dichloroethene	75-35-4	N.D.	0.5	0.06	1
11996	cis-1,2-Dichloroethene	156-59-2	N.D.	0.5	0.05	1
11996	trans-1,2-Dichloroethene	156-60-5	N.D.	0.5	0.06	1
11996	1,2-Dichloroethene (Total) ¹	540-59-0	N.D.	1.0	0.1	1
11996	Ethylbenzene	100-41-4	N.D.	0.5	0.06	1
11996	Isopropylbenzene	98-82-8	N.D.	0.5	0.05	1
11996	4-Methyl-2-Pentanone	108-10-1	N.D.	5.0	0.7	1
11996	Methylcyclohexane	108-87-2	N.D.	0.5	0.05	1
11996	Methylene Chloride	75-09-2	N.D.	0.5	0.07	1
11996	Tetrachloroethene	127-18-4	N.D.	0.5	0.06	1
11996	Toluene	108-88-3	N.D.	0.5	0.07	1
11996	1,1,1-Trichloroethane	71-55-6	N.D.	0.5	0.06	1
11996	Trichloroethene	79-01-6	N.D.	0.5	0.06	1
11996	Vinyl Chloride	75-01-4	N.D.	0.5	0.1	1
11996	Xylene (Total)	1330-20-7	N.D.	1.0	0.2	1

Sample Comments

State of New York Certification No. 10670

¹ = This analyte was not on the laboratory's NYSDOH Scope of Accreditation at the time of analysis.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11996	VOCs 8260C	SW-846 8260C 25mL purge	1	H193401AA	12/06/2019 13:55	Don V Viray	1
01163	GC/MS VOA Water Prep	SW-846 5030C	1	H193401AA	12/06/2019 13:54	Don V Viray	1

*=This limit was used in the evaluation of the final result

Analysis Report

Sample Description: DM-433G-120419 Grab Groundwater
General Electric Schenectady Main Plant

GE-O'Brien & Gere, Inc.
ELLE Sample #: GW 1215511
ELLE Group #: 2077622
Matrix: Groundwater

Project Name: GE Schenectady Main Plant

Submittal Date/Time: 12/05/2019 11:12
Collection Date/Time: 12/04/2019 13:50
SDG#: SMP18-08

CAT No.	Analysis Name	CAS Number	Result	Limit of Quantitation*	Method Detection Limit	Dilution Factor
GC/MS Volatiles		SW-846 8260C 25mL	ug/l	ug/l	ug/l	
		purge				
11996	Acetone	67-64-1	1.6 J	5.0	0.9	1
11996	Benzene	71-43-2	N.D.	0.5	0.05	1
11996	2-Butanone	78-93-3	N.D.	5.0	0.6	1
11996	Chlorobenzene	108-90-7	N.D.	0.5	0.06	1
11996	Chloroethane	75-00-3	N.D.	0.5	0.07	1
11996	Cyclohexane	110-82-7	N.D.	0.5	0.05	1
11996	1,2-Dichlorobenzene	95-50-1	N.D.	0.5	0.06	1
11996	1,3-Dichlorobenzene	541-73-1	N.D.	0.5	0.06	1
11996	1,4-Dichlorobenzene	106-46-7	N.D.	0.5	0.07	1
11996	1,1-Dichloroethane	75-34-3	8.0	0.5	0.07	1
11996	1,2-Dichloroethane	107-06-2	0.1 J	0.5	0.05	1
11996	1,1-Dichloroethene	75-35-4	4.9	0.5	0.06	1
11996	cis-1,2-Dichloroethene	156-59-2	58	5.0	0.5	10
11996	trans-1,2-Dichloroethene	156-60-5	10	0.5	0.06	1
11996	1,2-Dichloroethene (Total) ¹	540-59-0	66	10	1.1	10
11996	Ethylbenzene	100-41-4	N.D.	0.5	0.06	1
11996	Isopropylbenzene	98-82-8	N.D.	0.5	0.05	1
11996	4-Methyl-2-Pentanone	108-10-1	N.D.	5.0	0.7	1
11996	Methylcyclohexane	108-87-2	N.D.	0.5	0.05	1
11996	Methylene Chloride	75-09-2	N.D.	0.5	0.07	1
11996	Tetrachloroethene	127-18-4	N.D.	0.5	0.06	1
11996	Toluene	108-88-3	N.D.	0.5	0.07	1
11996	1,1,1-Trichloroethane	71-55-6	N.D.	0.5	0.06	1
11996	Trichloroethene	79-01-6	0.1 J	0.5	0.06	1
11996	Vinyl Chloride	75-01-4	7.1	0.5	0.1	1
11996	Xylene (Total)	1330-20-7	N.D.	1.0	0.2	1

Sample Comments

State of New York Certification No. 10670

¹ = This analyte was not on the laboratory's NYSDOH Scope of Accreditation at the time of analysis.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11996	VOCs 8260C	SW-846 8260C 25mL purge	1	H193401AA	12/06/2019 14:17	Don V Viray	1
11996	VOCs 8260C	SW-846 8260C 25mL purge	1	H193423AA	12/09/2019 00:30	Don V Viray	10
01163	GC/MS VOA Water Prep	SW-846 5030C	1	H193401AA	12/06/2019 14:16	Don V Viray	1

*=This limit was used in the evaluation of the final result

Sample Description: DM-433G-120419 Grab Groundwater
General Electric Schenectady Main Plant

GE-O'Brien & Gere, Inc.
ELLE Sample #: GW 1215511
ELLE Group #: 2077622
Matrix: Groundwater

Project Name: GE Schenectady Main Plant

Submittal Date/Time: 12/05/2019 11:12
Collection Date/Time: 12/04/2019 13:50
SDG#: SMP18-08

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01163	GC/MS VOA Water Prep	SW-846 5030C	2	H193423AA	12/09/2019 00:29	Don V Viray	10

*=This limit was used in the evaluation of the final result

Analysis Report

Sample Description: P-10R-120419 Grab Groundwater
General Electric Schenectady Main Plant

GE-O'Brien & Gere, Inc.
ELLE Sample #: GW 1215512
ELLE Group #: 2077622
Matrix: Groundwater

Project Name: GE Schenectady Main Plant

Submittal Date/Time: 12/05/2019 11:12
Collection Date/Time: 12/04/2019 14:15
SDG#: SMP18-09

CAT No.	Analysis Name	CAS Number	Result	Limit of Quantitation*	Method Detection Limit	Dilution Factor
GC/MS Volatiles		SW-846 8260C 25mL	ug/l	ug/l	ug/l	
		purge				
11996	Acetone	67-64-1	2.7 J	5.0	0.9	1
11996	Benzene	71-43-2	0.09 J	0.5	0.05	1
11996	2-Butanone	78-93-3	N.D.	5.0	0.6	1
11996	Chlorobenzene	108-90-7	0.2 J	0.5	0.06	1
11996	Chloroethane	75-00-3	0.3 J	0.5	0.07	1
11996	Cyclohexane	110-82-7	0.5	0.5	0.05	1
11996	1,2-Dichlorobenzene	95-50-1	0.3 J	0.5	0.06	1
11996	1,3-Dichlorobenzene	541-73-1	N.D.	0.5	0.06	1
11996	1,4-Dichlorobenzene	106-46-7	0.2 J	0.5	0.07	1
11996	1,1-Dichloroethane	75-34-3	0.2 J	0.5	0.07	1
11996	1,2-Dichloroethane	107-06-2	N.D.	0.5	0.05	1
11996	1,1-Dichloroethene	75-35-4	N.D.	0.5	0.06	1
11996	cis-1,2-Dichloroethene	156-59-2	0.3 J	0.5	0.05	1
11996	trans-1,2-Dichloroethene	156-60-5	0.2 J	0.5	0.06	1
11996	1,2-Dichloroethene (Total) ¹	540-59-0	0.4 J	1.0	0.1	1
11996	Ethylbenzene	100-41-4	0.2 J	0.5	0.06	1
11996	Isopropylbenzene	98-82-8	1	0.5	0.05	1
11996	4-Methyl-2-Pentanone	108-10-1	N.D.	5.0	0.7	1
11996	Methylcyclohexane	108-87-2	1.0	0.5	0.05	1
11996	Methylene Chloride	75-09-2	N.D.	0.5	0.07	1
11996	Tetrachloroethene	127-18-4	N.D.	0.5	0.06	1
11996	Toluene	108-88-3	0.2 J	0.5	0.07	1
11996	1,1,1-Trichloroethane	71-55-6	N.D.	0.5	0.06	1
11996	Trichloroethene	79-01-6	N.D.	0.5	0.06	1
11996	Vinyl Chloride	75-01-4	0.1 J	0.5	0.1	1
11996	Xylene (Total)	1330-20-7	0.6 J	1.0	0.2	1

Sample Comments

State of New York Certification No. 10670

¹ = This analyte was not on the laboratory's NYSDOH Scope of Accreditation at the time of analysis.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11996	VOCs 8260C	SW-846 8260C 25mL purge	1	H193401AA	12/06/2019 14:38	Don V Viray	1
01163	GC/MS VOA Water Prep	SW-846 5030C	1	H193401AA	12/06/2019 14:37	Don V Viray	1

*=This limit was used in the evaluation of the final result

Sample Description: SW-1-120519 Grab Surface Water
General Electric Schenectady Main Plant

GE-O'Brien & Gere, Inc.
ELLE Sample #: WW 1216921
ELLE Group #: 2077922
Matrix: Surface Water

Project Name: GE Schenectady Main Plant

Submittal Date/Time: 12/06/2019 10:59
Collection Date/Time: 12/05/2019 10:45
SDG#: SMP18-10

CAT No.	Analysis Name	CAS Number	Result	Limit of Quantitation*	Method Detection Limit	Dilution Factor
GC/MS Volatiles		SW-846 8260C 25mL	ug/l	ug/l	ug/l	
	purge					
11996	Acetone	67-64-1	N.D.	5.0	0.9	1
11996	Benzene	71-43-2	N.D.	0.5	0.05	1
11996	2-Butanone	78-93-3	N.D.	5.0	0.6	1
11996	Chlorobenzene	108-90-7	N.D.	0.5	0.06	1
11996	Chloroethane	75-00-3	N.D.	0.5	0.07	1
11996	Cyclohexane	110-82-7	N.D.	0.5	0.05	1
11996	1,2-Dichlorobenzene	95-50-1	N.D.	0.5	0.06	1
11996	1,3-Dichlorobenzene	541-73-1	N.D.	0.5	0.06	1
11996	1,4-Dichlorobenzene	106-46-7	N.D.	0.5	0.07	1
11996	1,1-Dichloroethane	75-34-3	N.D.	0.5	0.07	1
11996	1,2-Dichloroethane	107-06-2	N.D.	0.5	0.05	1
11996	1,1-Dichloroethene	75-35-4	N.D.	0.5	0.06	1
11996	cis-1,2-Dichloroethene	156-59-2	N.D.	0.5	0.05	1
11996	trans-1,2-Dichloroethene	156-60-5	N.D.	0.5	0.06	1
11996	1,2-Dichloroethene (Total) ¹	540-59-0	N.D.	1.0	0.1	1
11996	Ethylbenzene	100-41-4	N.D.	0.5	0.06	1
11996	Isopropylbenzene	98-82-8	N.D.	0.5	0.05	1
11996	4-Methyl-2-Pentanone	108-10-1	N.D.	5.0	0.7	1
11996	Methylcyclohexane	108-87-2	N.D.	0.5	0.05	1
11996	Methylene Chloride	75-09-2	N.D.	0.5	0.07	1
11996	Tetrachloroethene	127-18-4	N.D.	0.5	0.06	1
11996	Toluene	108-88-3	N.D.	0.5	0.07	1
11996	1,1,1-Trichloroethane	71-55-6	N.D.	0.5	0.06	1
11996	Trichloroethene	79-01-6	N.D.	0.5	0.06	1
11996	Vinyl Chloride	75-01-4	N.D.	0.5	0.1	1
11996	Xylene (Total)	1330-20-7	N.D.	1.0	0.2	1

A Report Limit Verification (RLV) standard is analyzed to confirm sensitivity of the instrument for samples with non-detect analytes associated with a continuing calibration verification standard exhibiting low response (outside the 20%D criteria). The RLV standard shows adequate sensitivity at or below the reporting limit.

GC Miscellaneous		RSKSOP-175 modified	ug/l	ug/l	ug/l	
07105	Ethane	74-84-0	N.D.	5.0	1.0	1
07105	Ethene	74-85-1	N.D.	5.0	1.0	1
07105	Methane	74-82-8	17	5.0	3.0	1
Wet Chemistry		EPA 300.0	mg/l	mg/l	mg/l	
00224	Chloride	16887-00-6	174	80.0	40.0	200
00368	Nitrate Nitrogen	14797-55-8	2.0	0.50	0.25	5

*=This limit was used in the evaluation of the final result

Analysis Report

Sample Description: SW-1-120519 Grab Surface Water
General Electric Schenectady Main Plant

GE-O'Brien & Gere, Inc.
ELLE Sample #: WW 1216921
ELLE Group #: 2077922
Matrix: Surface Water

Project Name: GE Schenectady Main Plant

Submittal Date/Time: 12/06/2019 10:59
Collection Date/Time: 12/05/2019 10:45
SDG#: SMP18-10

CAT No.	Analysis Name	CAS Number	Result	Limit of Quantitation*	Method Detection Limit	Dilution Factor
Wet Chemistry		EPA 300.0	mg/l	mg/l	mg/l	
Sample was originally analyzed within the 48 hour holding time, however bracketing continuing calibration verification standards (CCV) were outside of the 90-110% acceptance window with a recoveries of 112% and 111%; also the client requirement of analyzing a low standard with the sample was outside of the same acceptance window with a recovery of 88%. Sample was reanalyzed past hold on 12/08/2019 with a result of 1.8 mg/l and had acceptable CCV's and low standard.						
00228	Sulfate	14808-79-8	40.0	5.0	1.5	5
		SM 5310 C-2011	mg/l	mg/l	mg/l	
00273	Total Organic Carbon	n.a.	2.4	1.0	0.50	1
		SM 2320 B-2011	mg/l as CaCO3	mg/l as CaCO3	mg/l as CaCO3	
12150	Total Alkalinity to pH 4.5	n.a.	175	8.0	2.6	1
12149	Bicarbonate Alkalinity	n.a.	175	8.0	2.6	1

Sample Comments

State of New York Certification No. 10670

¹ = This analyte was not on the laboratory's NYSDOH Scope of Accreditation at the time of analysis.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11996	VOCs 8260C	SW-846 8260C 25mL purge	1	H193442AA	12/11/2019 00:24	Miranda Campbell	1
01163	GC/MS VOA Water Prep	SW-846 5030C	1	H193442AA	12/11/2019 00:23	Miranda Campbell	1
07105	Methane, Ethane, Ethene	RSKSOP-175 modified	1	193430003A	12/09/2019 16:44	Johanna C Kennedy	1
00224	Chloride	EPA 300.0	1	19340720117A	12/08/2019 05:18	Samantha Faverio	200
00368	Nitrate Nitrogen	EPA 300.0	1	19340720117A	12/06/2019 18:50	Samantha Faverio	5
00228	Sulfate	EPA 300.0	1	19340720117A	12/08/2019 00:18	Samantha Faverio	5
00273	Total Organic Carbon	SM 5310 C-2011	1	19345304501B	12/11/2019 18:35	Bethany Sandone	1
12150	Total Alkalinity to pH 4.5	SM 2320 B-2011	1	19343010202A	12/09/2019 20:49	Jeremy L Bolf	1
12149	Bicarbonate Alkalinity	SM 2320 B-2011	1	19343010202A	12/09/2019 20:49	Jeremy L Bolf	1

*=This limit was used in the evaluation of the final result

Sample Description: SW-1-120519 Filtered Grab Surface Water
General Electric Schenectady Main Plant

GE-O'Brien & Gere, Inc.
ELLE Sample #: WW 1216922
ELLE Group #: 2077922
Matrix: Surface Water

Project Name: GE Schenectady Main Plant

Submittal Date/Time: 12/06/2019 10:59
Collection Date/Time: 12/05/2019 10:45
SDG#: SMP18-11

CAT No.	Analysis Name	CAS Number	Result	Limit of Quantitation*	Method Detection Limit	Dilution Factor
Metals Dissolved		SW-846 6010D Rev.4, July 2014	mg/l	mg/l	mg/l	
01754	Iron	7439-89-6	0.0428 J	0.200	0.0400	1

Sample Comments

State of New York Certification No. 10670
This sample was field filtered for dissolved metals.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01754	Iron	SW-846 6010D Rev.4, July 2014	1	193431404401	12/09/2019 11:04	Lisa J Cooke	1
14044	ICP-WW, 3005A (tot rec) - U345	SW-846 3005A	1	193431404401	12/09/2019 03:50	James L Mertz	1

*=This limit was used in the evaluation of the final result

Analysis Report

Sample Description: P-37R-120519 Grab Groundwater
General Electric Schenectady Main Plant**GE-O'Brien & Gere, Inc.**
ELLE Sample #: GW 1216923
ELLE Group #: 2077922
Matrix: Groundwater**Project Name:** GE Schenectady Main Plant**Submittal Date/Time:** 12/06/2019 10:59**Collection Date/Time:** 12/05/2019 14:27**SDG#:** SMP18-12BKG

CAT No.	Analysis Name	CAS Number	Result	Limit of Quantitation*	Method Detection Limit	Dilution Factor
GC/MS Volatiles		SW-846 8260C 25mL	ug/l	ug/l	ug/l	
	purge					
11996	Acetone	67-64-1	N.D.	5.0	0.9	1
11996	Benzene	71-43-2	0.6	0.5	0.05	1
11996	2-Butanone	78-93-3	N.D.	5.0	0.6	1
11996	Chlorobenzene	108-90-7	2.1	0.5	0.06	1
11996	Chloroethane	75-00-3	0.4 J	0.5	0.07	1
11996	Cyclohexane	110-82-7	6.5	0.5	0.05	1
11996	1,2-Dichlorobenzene	95-50-1	0.4 J	0.5	0.06	1
11996	1,3-Dichlorobenzene	541-73-1	0.2 J	0.5	0.06	1
11996	1,4-Dichlorobenzene	106-46-7	1.0	0.5	0.07	1
11996	1,1-Dichloroethane	75-34-3	0.1 J	0.5	0.07	1
11996	1,2-Dichloroethane	107-06-2	N.D.	0.5	0.05	1
11996	1,1-Dichloroethene	75-35-4	N.D.	0.5	0.06	1
11996	cis-1,2-Dichloroethene	156-59-2	0.2 J	0.5	0.05	1
11996	trans-1,2-Dichloroethene	156-60-5	N.D.	0.5	0.06	1
11996	1,2-Dichloroethene (Total) ¹	540-59-0	0.2 J	1.0	0.1	1
11996	Ethylbenzene	100-41-4	25	5.0	0.6	10
11996	Isopropylbenzene	98-82-8	8.2	0.5	0.05	1
11996	4-Methyl-2-Pentanone	108-10-1	N.D.	5.0	0.7	1
11996	Methylcyclohexane	108-87-2	5.3	0.5	0.05	1
11996	Methylene Chloride	75-09-2	0.2 J	0.5	0.07	1
11996	Tetrachloroethene	127-18-4	N.D.	0.5	0.06	1
11996	Toluene	108-88-3	0.2 J	0.5	0.07	1
11996	1,1,1-Trichloroethane	71-55-6	N.D.	0.5	0.06	1
11996	Trichloroethene	79-01-6	N.D.	0.5	0.06	1
11996	Vinyl Chloride	75-01-4	0.1 J	0.5	0.1	1
11996	Xylene (Total)	1330-20-7	23	1.0	0.2	1

A Report Limit Verification (RLV) standard is analyzed to confirm sensitivity of the instrument for samples with non-detect analytes associated with a continuing calibration verification standard exhibiting low response (outside the 20%D criteria). The RLV standard shows adequate sensitivity at or below the reporting limit.

GC Miscellaneous		RSKSOP-175 modified	ug/l	ug/l	ug/l	
07105	Ethane	74-84-0	1.0 J	5.0	1.0	1
07105	Ethene	74-85-1	N.D.	5.0	1.0	1
07105	Methane	74-82-8	19,000	1,000	600	200
Wet Chemistry		EPA 300.0	mg/l	mg/l	mg/l	
00224	Chloride	16887-00-6	87.6	20.0	10.0	50
00368	Nitrate Nitrogen	14797-55-8	N.D.	0.50	0.25	5

*=This limit was used in the evaluation of the final result

Sample Description: P-37R-120519 Grab Groundwater
General Electric Schenectady Main Plant

GE-O'Brien & Gere, Inc.
ELLE Sample #: GW 1216923
ELLE Group #: 2077922
Matrix: Groundwater

Project Name: GE Schenectady Main Plant

Submittal Date/Time: 12/06/2019 10:59
Collection Date/Time: 12/05/2019 14:27
SDG#: SMP18-12BKG

CAT No.	Analysis Name	CAS Number	Result	Limit of Quantitation*	Method Detection Limit	Dilution Factor
Wet Chemistry		EPA 300.0	mg/l	mg/l	mg/l	
Sample was analyzed within the 48 hour holding time; however the client requirement of analyzing a low standard with the sample was outside of the 90%-110% acceptance window with a recovery of 88%. Sample was repeated outside of the hold on 12/08/2019 with a result of ND and had an acceptable low standard.						
00228	Sulfate	14808-79-8	2.4 J	5.0	1.5	5
		SM 5310 C-2011	mg/l	mg/l	mg/l	
00273	Total Organic Carbon	n.a.	6.6	2.0	1.0	2
		SM 2320 B-2011	mg/l as CaCO3	mg/l as CaCO3	mg/l as CaCO3	
12150	Total Alkalinity to pH 4.5	n.a.	486	8.0	2.6	1
12149	Bicarbonate Alkalinity	n.a.	486	8.0	2.6	1

Sample Comments

State of New York Certification No. 10670

¹ = This analyte was not on the laboratory's NYSDOH Scope of Accreditation at the time of analysis.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11996	VOCs 8260C	SW-846 8260C 25mL purge	1	H193442AA	12/11/2019 00:46	Miranda Campbell	1
11996	VOCs 8260C	SW-846 8260C 25mL purge	1	H193442AA	12/11/2019 01:51	Miranda Campbell	10
01163	GC/MS VOA Water Prep	SW-846 5030C	1	H193442AA	12/11/2019 00:45	Miranda Campbell	1
01163	GC/MS VOA Water Prep	SW-846 5030C	2	H193442AA	12/11/2019 01:50	Miranda Campbell	10
07105	Methane, Ethane, Ethene	RSKSOP-175 modified	1	193430003A	12/09/2019 14:46	Johanna C Kennedy	1
07105	Methane, Ethane, Ethene	RSKSOP-175 modified	1	193430003A	12/10/2019 10:52	Johanna C Kennedy	200
00224	Chloride	EPA 300.0	1	19340720117B	12/08/2019 08:25	Samantha Faverio	50
00368	Nitrate Nitrogen	EPA 300.0	1	19340720117B	12/07/2019 01:42	Samantha Faverio	5
00228	Sulfate	EPA 300.0	1	19340720117B	12/08/2019 06:52	Samantha Faverio	5
00273	Total Organic Carbon	SM 5310 C-2011	1	19345304501B	12/12/2019 10:35	Bethany Sandone	2
12150	Total Alkalinity to pH 4.5	SM 2320 B-2011	1	19343010202A	12/09/2019 18:28	Jeremy L Bolf	1
12149	Bicarbonate Alkalinity	SM 2320 B-2011	1	19343010202A	12/09/2019 18:28	Jeremy L Bolf	1

*=This limit was used in the evaluation of the final result

Sample Description: P-37R-120519-MS Grab Groundwater
General Electric Schenectady Main Plant

GE-O'Brien & Gere, Inc.
ELLE Sample #: GW 1216924
ELLE Group #: 2077922
Matrix: Groundwater

Project Name: GE Schenectady Main Plant

Submission Date/Time: 12/06/2019 10:59
Collection Date/Time: 12/05/2019 14:27
SDG#: SMP18-12MS

CAT No.	Analysis Name	CAS Number	Result	Limit of Quantitation*	Method Detection Limit	Dilution Factor
GC/MS Volatiles		SW-846 8260C 25mL	ug/l	ug/l	ug/l	
		purge				
11996	Acetone	67-64-1	31	5.0	0.9	1
11996	Benzene	71-43-2	5.9	0.5	0.05	1
11996	2-Butanone	78-93-3	28	5.0	0.6	1
11996	Chlorobenzene	108-90-7	6.9	0.5	0.06	1
11996	Chloroethane	75-00-3	4.7	0.5	0.07	1
11996	Cyclohexane	110-82-7	11	0.5	0.05	1
11996	1,2-Dichlorobenzene	95-50-1	5.1	0.5	0.06	1
11996	1,3-Dichlorobenzene	541-73-1	4.9	0.5	0.06	1
11996	1,4-Dichlorobenzene	106-46-7	5.6	0.5	0.07	1
11996	1,1-Dichloroethane	75-34-3	5.4	0.5	0.07	1
11996	1,2-Dichloroethane	107-06-2	4.7	0.5	0.05	1
11996	1,1-Dichloroethene	75-35-4	5.7	0.5	0.06	1
11996	cis-1,2-Dichloroethene	156-59-2	5.6	0.5	0.05	1
11996	trans-1,2-Dichloroethene	156-60-5	5.5	0.5	0.06	1
11996	1,2-Dichloroethene (Total) ¹	540-59-0	11	1.0	0.1	1
11996	Ethylbenzene	100-41-4	29 E	0.5	0.06	1
11996	Isopropylbenzene	98-82-8	13	0.5	0.05	1
11996	4-Methyl-2-Pentanone	108-10-1	18	5.0	0.7	1
11996	Methylcyclohexane	108-87-2	10	0.5	0.05	1
11996	Methylene Chloride	75-09-2	5.1	0.5	0.07	1
11996	Tetrachloroethene	127-18-4	4.5	0.5	0.06	1
11996	Toluene	108-88-3	5.1	0.5	0.07	1
11996	1,1,1-Trichloroethane	71-55-6	4.9	0.5	0.06	1
11996	Trichloroethene	79-01-6	5.2	0.5	0.06	1
11996	Vinyl Chloride	75-01-4	4.6	0.5	0.1	1
11996	Xylene (Total)	1330-20-7	34	1.0	0.2	1
GC Miscellaneous		RSKSOP-175 modified	ug/l	ug/l	ug/l	
07105	Ethane	74-84-0	46	5.0	1.0	1
07105	Ethene	74-85-1	57	5.0	1.0	1
07105	Methane	74-82-8	12,000 E	5.0	3.0	1
Wet Chemistry		EPA 300.0	mg/l	mg/l	mg/l	
00224	Chloride	16887-00-6	192	20.0	10.0	50
00368	Nitrate Nitrogen	14797-55-8	3.1	0.50	0.25	5
Sample was analyzed within the 48 hour holding time; however the client requirement of analyzing a low standard with the sample was outside of the 90%-110% acceptance window with a recovery of 88%. Sample was repeated outside of the hold on 12/08/2019 with a result of 2.9 mg/l and had an acceptable low standard.						
00228	Sulfate	14808-79-8	30.7	5.0	1.5	5

*=This limit was used in the evaluation of the final result

Analysis Report

Sample Description: P-37R-120519-MS Grab Groundwater
General Electric Schenectady Main Plant

GE-O'Brien & Gere, Inc.
ELLE Sample #: GW 1216924
ELLE Group #: 2077922
Matrix: Groundwater

Project Name: GE Schenectady Main Plant

Submittal Date/Time: 12/06/2019 10:59
Collection Date/Time: 12/05/2019 14:27
SDG#: SMP18-12MS

CAT No.	Analysis Name	CAS Number	Result	Limit of Quantitation*	Method Detection Limit	Dilution Factor
Wet Chemistry						
00273	Total Organic Carbon	SM 5310 C-2011 n.a.	mg/l 26.7	mg/l 2.0	mg/l 1.0	2
12150	Total Alkalinity to pH 4.5	SM 2320 B-2011 n.a.	mg/l as CaCO3 657	mg/l as CaCO3 8.0	mg/l as CaCO3 2.6	1

Sample Comments

State of New York Certification No. 10670

¹ = This analyte was not on the laboratory's NYSDOH Scope of Accreditation at the time of analysis.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11996	VOCs 8260C	SW-846 8260C 25mL purge	1	H193442AA	12/11/2019 01:07	Miranda Campbell	1
01163	GC/MS VOA Water Prep	SW-846 5030C	1	H193442AA	12/11/2019 01:06	Miranda Campbell	1
07105	Methane, Ethane, Ethene	RSKSOP-175 modified	1	193430003A	12/09/2019 15:03	Johanna C Kennedy	1
00224	Chloride	EPA 300.0	1	19340720117B	12/08/2019 09:03	Samantha Faverio	50
00368	Nitrate Nitrogen	EPA 300.0	1	19340720117B	12/07/2019 02:21	Samantha Faverio	5
00228	Sulfate	EPA 300.0	1	19340720117B	12/08/2019 07:29	Samantha Faverio	5
00273	Total Organic Carbon	SM 5310 C-2011	1	19345304501B	12/12/2019 10:48	Bethany Sandone	2
12150	Total Alkalinity to pH 4.5	SM 2320 B-2011	1	19343010202A	12/09/2019 18:37	Jeremy L Bolf	1

*=This limit was used in the evaluation of the final result

Sample Description: P-37R-120519-MSD Grab Groundwater
General Electric Schenectady Main Plant

GE-O'Brien & Gere, Inc.
ELLE Sample #: GW 1216925
ELLE Group #: 2077922
Matrix: Groundwater

Project Name: GE Schenectady Main Plant

Submission Date/Time: 12/06/2019 10:59
Collection Date/Time: 12/05/2019 14:27
SDG#: SMP18-12MSD

CAT No.	Analysis Name	CAS Number	Result	Limit of Quantitation*	Method Detection Limit	Dilution Factor
GC/MS Volatiles		SW-846 8260C 25mL	ug/l	ug/l	ug/l	
	purge					
11996	Acetone	67-64-1	32	5.0	0.9	1
11996	Benzene	71-43-2	5.8	0.5	0.05	1
11996	2-Butanone	78-93-3	30	5.0	0.6	1
11996	Chlorobenzene	108-90-7	6.9	0.5	0.06	1
11996	Chloroethane	75-00-3	5.1	0.5	0.07	1
11996	Cyclohexane	110-82-7	10	0.5	0.05	1
11996	1,2-Dichlorobenzene	95-50-1	5.1	0.5	0.06	1
11996	1,3-Dichlorobenzene	541-73-1	4.9	0.5	0.06	1
11996	1,4-Dichlorobenzene	106-46-7	5.6	0.5	0.07	1
11996	1,1-Dichloroethane	75-34-3	5.4	0.5	0.07	1
11996	1,2-Dichloroethane	107-06-2	4.6	0.5	0.05	1
11996	1,1-Dichloroethene	75-35-4	5.8	0.5	0.06	1
11996	cis-1,2-Dichloroethene	156-59-2	5.7	0.5	0.05	1
11996	trans-1,2-Dichloroethene	156-60-5	5.4	0.5	0.06	1
11996	1,2-Dichloroethene (Total) ¹	540-59-0	11	1.0	0.1	1
11996	Ethylbenzene	100-41-4	25 E	0.5	0.06	1
11996	Isopropylbenzene	98-82-8	12	0.5	0.05	1
11996	4-Methyl-2-Pentanone	108-10-1	19	5.0	0.7	1
11996	Methylcyclohexane	108-87-2	11	0.5	0.05	1
11996	Methylene Chloride	75-09-2	5.0	0.5	0.07	1
11996	Tetrachloroethene	127-18-4	4.6	0.5	0.06	1
11996	Toluene	108-88-3	5.1	0.5	0.07	1
11996	1,1,1-Trichloroethane	71-55-6	4.9	0.5	0.06	1
11996	Trichloroethene	79-01-6	5.2	0.5	0.06	1
11996	Vinyl Chloride	75-01-4	4.7	0.5	0.1	1
11996	Xylene (Total)	1330-20-7	32	1.0	0.2	1
GC Miscellaneous		RSKSOP-175 modified	ug/l	ug/l	ug/l	
07105	Ethane	74-84-0	50	5.0	1.0	1
07105	Ethene	74-85-1	62	5.0	1.0	1
07105	Methane	74-82-8	12,000 E	5.0	3.0	1
Wet Chemistry		SM 2320 B-2011	mg/l as CaCO3	mg/l as CaCO3	mg/l as CaCO3	
12150	Total Alkalinity to pH 4.5	n.a.	657	8.0	2.6	1

Sample Comments

State of New York Certification No. 10670

¹ = This analyte was not on the laboratory's NYSDOH Scope of Accreditation at the time of analysis.

*=This limit was used in the evaluation of the final result

Analysis Report

Sample Description: P-37R-120519-MSD Grab Groundwater
General Electric Schenectady Main Plant

GE-O'Brien & Gere, Inc.
ELLE Sample #: GW 1216925
ELLE Group #: 2077922
Matrix: Groundwater

Project Name: GE Schenectady Main Plant

Submittal Date/Time: 12/06/2019 10:59
Collection Date/Time: 12/05/2019 14:27
SDG#: SMP18-12MSD

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11996	VOCs 8260C	SW-846 8260C 25mL purge	1	H193442AA	12/11/2019 01:29	Miranda Campbell	1
01163	GC/MS VOA Water Prep	SW-846 5030C	1	H193442AA	12/11/2019 01:28	Miranda Campbell	1
07105	Methane, Ethane, Ethene	RSKSOP-175 modified	1	193430003A	12/09/2019 15:20	Johanna C Kennedy	1
12150	Total Alkalinity to pH 4.5	SM 2320 B-2011	1	19343010202A	12/09/2019 18:56	Jeremy L Bolf	1

*=This limit was used in the evaluation of the final result

Analysis Report

Sample Description: P-37R-120519-DUP Grab Groundwater
General Electric Schenectady Main Plant

GE-O'Brien & Gere, Inc.
ELLE Sample #: GW 1216926
ELLE Group #: 2077922
Matrix: Groundwater

Project Name: GE Schenectady Main Plant

Submittal Date/Time: 12/06/2019 10:59
Collection Date/Time: 12/05/2019 14:27
SDG#: SMP18-12DUP

CAT No.	Analysis Name	CAS Number	Result	Limit of Quantitation*	Method Detection Limit	Dilution Factor
Wet Chemistry		EPA 300.0	mg/l	mg/l	mg/l	
00224	Chloride	16887-00-6	89.2	20.0	10.0	50
00368	Nitrate Nitrogen	14797-55-8	N.D.	0.50	0.25	5
Sample was analyzed within the 48 hour holding time; however the client requirement of analyzing a low standard with the sample was outside of the 90%-110% acceptance window with a reecover of 88%. Sample was repeated outside of the hold on 12/08/2019 with a result of ND and had an acceptable low standard.						
00228	Sulfate	14808-79-8	2.3 J	5.0	1.5	5
		SM 5310 C-2011	mg/l	mg/l	mg/l	
00273	Total Organic Carbon	n.a.	6.4	2.0	1.0	2
		SM 2320 B-2011	mg/l as CaCO3	mg/l as CaCO3	mg/l as CaCO3	
12150	Total Alkalinity to pH 4.5	n.a.	485	8.0	2.6	1

Sample Comments

State of New York Certification No. 10670

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
00224	Chloride	EPA 300.0	1	19340720117B	12/08/2019 08:44	Samantha Faverio	50
00368	Nitrate Nitrogen	EPA 300.0	1	19340720117B	12/07/2019 02:01	Samantha Faverio	5
00228	Sulfate	EPA 300.0	1	19340720117B	12/08/2019 07:10	Samantha Faverio	5
00273	Total Organic Carbon	SM 5310 C-2011	1	19345304501B	12/12/2019 11:02	Bethany Sandone	2
12150	Total Alkalinity to pH 4.5	SM 2320 B-2011	1	19343010202A	12/09/2019 19:03	Jeremy L Bolf	1

*=This limit was used in the evaluation of the final result

Sample Description: P-37R-120519 Filtered Grab Groundwater
General Electric Schenectady Main Plant

GE-O'Brien & Gere, Inc.
ELLE Sample #: GW 1216927
ELLE Group #: 2077922
Matrix: Groundwater

Project Name: GE Schenectady Main Plant

Submittal Date/Time: 12/06/2019 10:59
Collection Date/Time: 12/05/2019 14:27
SDG#: SMP18-13BKG

CAT No.	Analysis Name	CAS Number	Result	Limit of Quantitation*	Method Detection Limit	Dilution Factor
Metals Dissolved		SW-846 6010D Rev.4, July 2014	mg/l	mg/l	mg/l	
01754	Iron	7439-89-6	59.2	0.200	0.0400	1

Sample Comments

State of New York Certification No. 10670
This sample was field filtered for dissolved metals.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01754	Iron	SW-846 6010D Rev.4, July 2014	1	193431404401	12/09/2019 10:31	Lisa J Cooke	1
14044	ICP-WW, 3005A (tot rec) - U345	SW-846 3005A	1	193431404401	12/09/2019 03:50	James L Mertz	1

*=This limit was used in the evaluation of the final result

Sample Description: P-37R-120519-MS Filtered Grab Groundwater
General Electric Schenectady Main Plant

GE-O'Brien & Gere, Inc.
ELLE Sample #: GW 1216928
ELLE Group #: 2077922
Matrix: Groundwater

Project Name: GE Schenectady Main Plant

Submittal Date/Time: 12/06/2019 10:59
Collection Date/Time: 12/05/2019 14:27
SDG#: SMP18-13MS

CAT No.	Analysis Name	CAS Number	Result	Limit of Quantitation*	Method Detection Limit	Dilution Factor
Metals Dissolved		SW-846 6010D Rev.4, July 2014	mg/l	mg/l	mg/l	
01754	Iron	7439-89-6	59.0	0.200	0.0400	1

Sample Comments

State of New York Certification No. 10670
This sample was field filtered for dissolved metals.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01754	Iron	SW-846 6010D Rev.4, July 2014	1	193431404401	12/09/2019 10:41	Lisa J Cooke	1
14044	ICP-WW, 3005A (tot rec) - U345	SW-846 3005A	1	193431404401	12/09/2019 03:50	James L Mertz	1

*=This limit was used in the evaluation of the final result

Sample Description: P-37R-120519-MSD Filtered Grab Groundwater
General Electric Schenectady Main Plant

GE-O'Brien & Gere, Inc.
ELLE Sample #: GW 1216929
ELLE Group #: 2077922
Matrix: Groundwater

Project Name: GE Schenectady Main Plant

Submittal Date/Time: 12/06/2019 10:59
Collection Date/Time: 12/05/2019 14:27
SDG#: SMP18-13MSD

CAT No.	Analysis Name	CAS Number	Result	Limit of Quantitation*	Method Detection Limit	Dilution Factor
Metals Dissolved		SW-846 6010D Rev.4, July 2014	mg/l	mg/l	mg/l	
01754	Iron	7439-89-6	61.3	0.200	0.0400	1

Sample Comments

State of New York Certification No. 10670
This sample was field filtered for dissolved metals.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01754	Iron	SW-846 6010D Rev.4, July 2014	1	193431404401	12/09/2019 10:44	Lisa J Cooke	1
14044	ICP-WW, 3005A (tot rec) - U345	SW-846 3005A	1	193431404401	12/09/2019 03:50	James L Mertz	1

*=This limit was used in the evaluation of the final result

Sample Description: P-37R-120519-DUP Filtered Grab Groundwater
General Electric Schenectady Main Plant

GE-O'Brien & Gere, Inc.
ELLE Sample #: GW 1216930
ELLE Group #: 2077922
Matrix: Groundwater

Project Name: GE Schenectady Main Plant

Submittal Date/Time: 12/06/2019 10:59
Collection Date/Time: 12/05/2019 14:27
SDG#: SMP18-13DUP

CAT No.	Analysis Name	CAS Number	Result	Limit of Quantitation*	Method Detection Limit	Dilution Factor
Metals Dissolved		SW-846 6010D Rev.4, July 2014	mg/l	mg/l	mg/l	
01754	Iron	7439-89-6	59.6	0.200	0.0400	1

Sample Comments

State of New York Certification No. 10670
This sample was field filtered for dissolved metals.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01754	Iron	SW-846 6010D Rev.4, July 2014	1	193431404401	12/09/2019 10:38	Lisa J Cooke	1
14044	ICP-WW, 3005A (tot rec) - U345	SW-846 3005A	1	193431404401	12/09/2019 03:50	James L Mertz	1

*=This limit was used in the evaluation of the final result

Sample Description: PZ-06-120519 Grab Groundwater
General Electric Schenectady Main Plant

GE-O'Brien & Gere, Inc.
ELLE Sample #: GW 1216931
ELLE Group #: 2077922
Matrix: Groundwater

Project Name: GE Schenectady Main Plant

Submittal Date/Time: 12/06/2019 10:59
Collection Date/Time: 12/05/2019 14:50
SDG#: SMP18-14

CAT No.	Analysis Name	CAS Number	Result	Limit of Quantitation*	Method Detection Limit	Dilution Factor
GC/MS Volatiles		SW-846 8260C 25mL	ug/l	ug/l	ug/l	
	purge					
11996	Acetone	67-64-1	N.D.	100	18	20
11996	Benzene	71-43-2	N.D.	10	1.0	20
11996	2-Butanone	78-93-3	N.D.	100	12	20
11996	Chlorobenzene	108-90-7	N.D.	10	1.2	20
11996	Chloroethane	75-00-3	N.D.	10	1.4	20
11996	Cyclohexane	110-82-7	25	10	1.0	20
11996	1,2-Dichlorobenzene	95-50-1	2.6 J	10	1.2	20
11996	1,3-Dichlorobenzene	541-73-1	N.D.	10	1.2	20
11996	1,4-Dichlorobenzene	106-46-7	1.9 J	10	1.4	20
11996	1,1-Dichloroethane	75-34-3	N.D.	10	1.4	20
11996	1,2-Dichloroethane	107-06-2	N.D.	10	1.0	20
11996	1,1-Dichloroethene	75-35-4	N.D.	10	1.2	20
11996	cis-1,2-Dichloroethene	156-59-2	N.D.	10	1.0	20
11996	trans-1,2-Dichloroethene	156-60-5	N.D.	10	1.2	20
11996	1,2-Dichloroethene (Total) ¹	540-59-0	N.D.	20	2.2	20
11996	Ethylbenzene	100-41-4	860	50	6.0	100
11996	Isopropylbenzene	98-82-8	16	10	1.0	20
11996	4-Methyl-2-Pentanone	108-10-1	N.D.	100	14	20
11996	Methylcyclohexane	108-87-2	3.2 J	10	1.0	20
11996	Methylene Chloride	75-09-2	N.D.	10	1.4	20
11996	Tetrachloroethene	127-18-4	N.D.	10	1.2	20
11996	Toluene	108-88-3	27	10	1.4	20
11996	1,1,1-Trichloroethane	71-55-6	N.D.	10	1.2	20
11996	Trichloroethene	79-01-6	N.D.	10	1.2	20
11996	Vinyl Chloride	75-01-4	N.D.	10	2.0	20
11996	Xylene (Total)	1330-20-7	5,000	100	15	100

A Report Limit Verification (RLV) standard is analyzed to confirm sensitivity of the instrument for samples with non-detect analytes associated with a continuing calibration verification standard exhibiting low response (outside the 20%D criteria). The RLV standard shows adequate sensitivity at or below the reporting limit.

GC Miscellaneous		RSKSOP-175 modified	ug/l	ug/l	ug/l	
07105	Ethane	74-84-0	N.D.	5.0	1.0	1
07105	Ethene	74-85-1	N.D.	5.0	1.0	1
07105	Methane	74-82-8	5,300	100	60	20
Wet Chemistry		EPA 300.0	mg/l	mg/l	mg/l	
00224	Chloride	16887-00-6	80.6	20.0	10.0	50
00368	Nitrate Nitrogen	14797-55-8	N.D.	0.50	0.25	5

*=This limit was used in the evaluation of the final result

Analysis Report

Sample Description: PZ-06-120519 Grab Groundwater
General Electric Schenectady Main Plant

GE-O'Brien & Gere, Inc.
ELLE Sample #: GW 1216931
ELLE Group #: 2077922
Matrix: Groundwater

Project Name: GE Schenectady Main Plant

Submittal Date/Time: 12/06/2019 10:59
Collection Date/Time: 12/05/2019 14:50
SDG#: SMP18-14

CAT No.	Analysis Name	CAS Number	Result	Limit of Quantitation*	Method Detection Limit	Dilution Factor
Wet Chemistry		EPA 300.0	mg/l	mg/l	mg/l	
Sample was analyzed within the 48 hour holding time; however the client requirement of analyzing a low standard with the sample was outside of the 90%-110% acceptance window with a recovery of 88%. Sample was repeated outside of the hold on 12/08/2019 with a result of ND and an acceptable low standard.						
00228	Sulfate	14808-79-8	3.0 J	5.0	1.5	5
		SM 5310 C-2011	mg/l	mg/l	mg/l	
00273	Total Organic Carbon	n.a.	5.4	1.0	0.50	1
		SM 2320 B-2011	mg/l as CaCO3	mg/l as CaCO3	mg/l as CaCO3	
12150	Total Alkalinity to pH 4.5	n.a.	382	8.0	2.6	1
12149	Bicarbonate Alkalinity	n.a.	382	8.0	2.6	1

Sample Comments

State of New York Certification No. 10670

¹ = This analyte was not on the laboratory's NYSDOH Scope of Accreditation at the time of analysis.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11996	VOCs 8260C	SW-846 8260C 25mL purge	1	H193442AA	12/11/2019 02:56	Miranda Campbell	100
11996	VOCs 8260C	SW-846 8260C 25mL purge	1	H193452AA	12/11/2019 21:51	Miranda Campbell	20
01163	GC/MS VOA Water Prep	SW-846 5030C	1	H193442AA	12/11/2019 02:55	Miranda Campbell	100
01163	GC/MS VOA Water Prep	SW-846 5030C	2	H193452AA	12/11/2019 21:50	Miranda Campbell	20
07105	Methane, Ethane, Ethene	RSKSOP-175 modified	1	193430003A	12/09/2019 17:01	Johanna C Kennedy	1
07105	Methane, Ethane, Ethene	RSKSOP-175 modified	1	193430003A	12/10/2019 09:20	Johanna C Kennedy	20
00224	Chloride	EPA 300.0	1	19340720117B	12/08/2019 09:22	Samantha Faverio	50
00368	Nitrate Nitrogen	EPA 300.0	1	19340720117B	12/07/2019 03:00	Samantha Faverio	5
00228	Sulfate	EPA 300.0	1	19340720117B	12/08/2019 08:07	Samantha Faverio	5
00273	Total Organic Carbon	SM 5310 C-2011	1	19345304501B	12/11/2019 19:26	Bethany Sandone	1
12150	Total Alkalinity to pH 4.5	SM 2320 B-2011	1	19343010202A	12/09/2019 20:22	Jeremy L Bolf	1
12149	Bicarbonate Alkalinity	SM 2320 B-2011	1	19343010202A	12/09/2019 20:22	Jeremy L Bolf	1

*=This limit was used in the evaluation of the final result

Sample Description: PZ-06-120519 Filtered Grab Groundwater
General Electric Schenectady Main Plant

GE-O'Brien & Gere, Inc.
ELLE Sample #: GW 1216932
ELLE Group #: 2077922
Matrix: Groundwater

Project Name: GE Schenectady Main Plant

Submittal Date/Time: 12/06/2019 10:59
Collection Date/Time: 12/05/2019 14:50
SDG#: SMP18-15

CAT No.	Analysis Name	CAS Number	Result	Limit of Quantitation*	Method Detection Limit	Dilution Factor
Metals Dissolved		SW-846 6010D Rev.4, July 2014	mg/l	mg/l	mg/l	
01754	Iron	7439-89-6	19.3	0.200	0.0400	1

Sample Comments

State of New York Certification No. 10670
This sample was field filtered for dissolved metals.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01754	Iron	SW-846 6010D Rev.4, July 2014	1	193431404401	12/09/2019 10:54	Lisa J Cooke	1
14044	ICP-WW, 3005A (tot rec) - U345	SW-846 3005A	1	193431404401	12/09/2019 03:50	James L Mertz	1

*=This limit was used in the evaluation of the final result

Sample Description: X-02-120519 Grab Groundwater
General Electric Schenectady Main Plant

GE-O'Brien & Gere, Inc.
ELLE Sample #: GW 1216933
ELLE Group #: 2077922
Matrix: Groundwater

Project Name: GE Schenectady Main Plant

Submission Date/Time: 12/06/2019 10:59
Collection Date/Time: 12/05/2019
SDG#: SMP18-16FD

CAT No.	Analysis Name	CAS Number	Result	Limit of Quantitation*	Method Detection Limit	Dilution Factor
GC/MS Volatiles		SW-846 8260C 25mL	ug/l	ug/l	ug/l	
		purge				
11996	Acetone	67-64-1	N.D.	100	18	20
11996	Benzene	71-43-2	N.D.	10	1.0	20
11996	2-Butanone	78-93-3	N.D.	100	12	20
11996	Chlorobenzene	108-90-7	N.D.	10	1.2	20
11996	Chloroethane	75-00-3	N.D.	10	1.4	20
11996	Cyclohexane	110-82-7	23	10	1.0	20
11996	1,2-Dichlorobenzene	95-50-1	2.5 J	10	1.2	20
11996	1,3-Dichlorobenzene	541-73-1	N.D.	10	1.2	20
11996	1,4-Dichlorobenzene	106-46-7	1.8 J	10	1.4	20
11996	1,1-Dichloroethane	75-34-3	N.D.	10	1.4	20
11996	1,2-Dichloroethane	107-06-2	N.D.	10	1.0	20
11996	1,1-Dichloroethene	75-35-4	N.D.	10	1.2	20
11996	cis-1,2-Dichloroethene	156-59-2	N.D.	10	1.0	20
11996	trans-1,2-Dichloroethene	156-60-5	N.D.	10	1.2	20
11996	1,2-Dichloroethene (Total) ¹	540-59-0	N.D.	20	2.2	20
11996	Ethylbenzene	100-41-4	850	50	6.0	100
11996	Isopropylbenzene	98-82-8	15	10	1.0	20
11996	4-Methyl-2-Pentanone	108-10-1	N.D.	100	14	20
11996	Methylcyclohexane	108-87-2	3.2 J	10	1.0	20
11996	Methylene Chloride	75-09-2	N.D.	10	1.4	20
11996	Tetrachloroethene	127-18-4	N.D.	10	1.2	20
11996	Toluene	108-88-3	25	10	1.4	20
11996	1,1,1-Trichloroethane	71-55-6	N.D.	10	1.2	20
11996	Trichloroethene	79-01-6	N.D.	10	1.2	20
11996	Vinyl Chloride	75-01-4	N.D.	10	2.0	20
11996	Xylene (Total)	1330-20-7	5,000	100	15	100

A Report Limit Verification (RLV) standard is analyzed to confirm sensitivity of the instrument for samples with non-detect analytes associated with a continuing calibration verification standard exhibiting low response (outside the 20%D criteria). The RLV standard shows adequate sensitivity at or below the reporting limit.

GC Miscellaneous		RSKSOP-175 modified	ug/l	ug/l	ug/l	
07105	Ethane	74-84-0	N.D.	5.0	1.0	1
07105	Ethene	74-85-1	N.D.	5.0	1.0	1
07105	Methane	74-82-8	5,500	100	60	20
Wet Chemistry		EPA 300.0	mg/l	mg/l	mg/l	
00224	Chloride	16887-00-6	79.5	20.0	10.0	50
00368	Nitrate Nitrogen	14797-55-8	N.D.	0.50	0.25	5

*=This limit was used in the evaluation of the final result

Sample Description: X-02-120519 Grab Groundwater
General Electric Schenectady Main Plant

GE-O'Brien & Gere, Inc.
ELLE Sample #: GW 1216933
ELLE Group #: 2077922
Matrix: Groundwater

Project Name: GE Schenectady Main Plant

Submission Date/Time: 12/06/2019 10:59
Collection Date/Time: 12/05/2019
SDG#: SMP18-16FD

CAT No.	Analysis Name	CAS Number	Result	Limit of Quantitation*	Method Detection Limit	Dilution Factor
Wet Chemistry		EPA 300.0	mg/l	mg/l	mg/l	
Sample was originally analyzed within the 48 hour holding time, however bracketing continuing calibration verification standards (CCV) was outside of the 90-110% acceptance window with a recovery of 112%; also the client requirement of analyzing a low standard with the sample was outside for the same acceptance window with a recovery of 88%. Sample was reanalyzed past hold on 12/07/2019 with a result of 2.9 mg/l and had acceptable CCV's and low standard.						
00228	Sulfate	14808-79-8	3.1 J	5.0	1.5	5
		SM 5310 C-2011	mg/l	mg/l	mg/l	
00273	Total Organic Carbon	n.a.	5.3	1.0	0.50	1
		SM 2320 B-2011	mg/l as CaCO3	mg/l as CaCO3	mg/l as CaCO3	
12150	Total Alkalinity to pH 4.5	n.a.	372	8.0	2.6	1
12149	Bicarbonate Alkalinity	n.a.	372	8.0	2.6	1

Sample Comments

State of New York Certification No. 10670

¹ = This analyte was not on the laboratory's NYSDOH Scope of Accreditation at the time of analysis.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11996	VOCs 8260C	SW-846 8260C 25mL purge	1	H193442AA	12/11/2019 03:39	Miranda Campbell	100
11996	VOCs 8260C	SW-846 8260C 25mL purge	1	H193452AA	12/11/2019 22:13	Miranda Campbell	20
01163	GC/MS VOA Water Prep	SW-846 5030C	1	H193442AA	12/11/2019 03:38	Miranda Campbell	100
01163	GC/MS VOA Water Prep	SW-846 5030C	2	H193452AA	12/11/2019 22:12	Miranda Campbell	20
07105	Methane, Ethane, Ethene	RSKSOP-175 modified	1	193430003A	12/09/2019 17:18	Johanna C Kennedy	1
07105	Methane, Ethane, Ethene	RSKSOP-175 modified	1	193430003A	12/10/2019 09:36	Johanna C Kennedy	20
00224	Chloride	EPA 300.0	1	19340720117B	12/08/2019 09:40	Samantha Faverio	50
00368	Nitrate Nitrogen	EPA 300.0	1	19340720117A	12/06/2019 16:13	Samantha Faverio	5
00228	Sulfate	EPA 300.0	1	19340720117A	12/07/2019 21:48	Samantha Faverio	5
00273	Total Organic Carbon	SM 5310 C-2011	1	19345304501B	12/11/2019 19:39	Bethany Sandone	1
12150	Total Alkalinity to pH 4.5	SM 2320 B-2011	1	19343010202A	12/09/2019 20:29	Jeremy L Bolf	1
12149	Bicarbonate Alkalinity	SM 2320 B-2011	1	19343010202A	12/09/2019 20:29	Jeremy L Bolf	1

*=This limit was used in the evaluation of the final result

Sample Description: X-02-120519 Filtered Grab Groundwater
General Electric Schenectady Main Plant

GE-O'Brien & Gere, Inc.
ELLE Sample #: GW 1216934
ELLE Group #: 2077922
Matrix: Groundwater

Project Name: GE Schenectady Main Plant

Submittal Date/Time: 12/06/2019 10:59
Collection Date/Time: 12/05/2019
SDG#: SMP18-17FD

CAT No.	Analysis Name	CAS Number	Result	Limit of Quantitation*	Method Detection Limit	Dilution Factor
Metals Dissolved		SW-846 6010D Rev.4, July 2014	mg/l	mg/l	mg/l	
01754	Iron	7439-89-6	21.4	0.200	0.0400	1

Sample Comments

State of New York Certification No. 10670
This sample was field filtered for dissolved metals.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01754	Iron	SW-846 6010D Rev.4, July 2014	1	193431404401	12/09/2019 11:07	Lisa J Cooke	1
14044	ICP-WW, 3005A (tot rec) - U345	SW-846 3005A	1	193431404401	12/09/2019 03:50	James L Mertz	1

*=This limit was used in the evaluation of the final result

Analysis Report

Sample Description: TB-10-120519 Water
General Electric Schenectady Main Plant

GE-O'Brien & Gere, Inc.
ELLE Sample #: GW 1216935
ELLE Group #: 2077922
Matrix: Water

Project Name: GE Schenectady Main Plant

Submission Date/Time: 12/06/2019 10:59
Collection Date/Time: 12/05/2019
SDG#: SMP18-18TB

CAT No.	Analysis Name	CAS Number	Result	Limit of Quantitation*	Method Detection Limit	Dilution Factor
GC/MS Volatiles		SW-846 8260C 25mL	ug/l	ug/l	ug/l	
	purge					
11996	Acetone	67-64-1	N.D.	5.0	0.9	1
11996	Benzene	71-43-2	N.D.	0.5	0.05	1
11996	2-Butanone	78-93-3	N.D.	5.0	0.6	1
11996	Chlorobenzene	108-90-7	N.D.	0.5	0.06	1
11996	Chloroethane	75-00-3	N.D.	0.5	0.07	1
11996	Cyclohexane	110-82-7	N.D.	0.5	0.05	1
11996	1,2-Dichlorobenzene	95-50-1	N.D.	0.5	0.06	1
11996	1,3-Dichlorobenzene	541-73-1	N.D.	0.5	0.06	1
11996	1,4-Dichlorobenzene	106-46-7	N.D.	0.5	0.07	1
11996	1,1-Dichloroethane	75-34-3	N.D.	0.5	0.07	1
11996	1,2-Dichloroethane	107-06-2	N.D.	0.5	0.05	1
11996	1,1-Dichloroethene	75-35-4	N.D.	0.5	0.06	1
11996	cis-1,2-Dichloroethene	156-59-2	N.D.	0.5	0.05	1
11996	trans-1,2-Dichloroethene	156-60-5	N.D.	0.5	0.06	1
11996	1,2-Dichloroethene (Total) ¹	540-59-0	N.D.	1.0	0.1	1
11996	Ethylbenzene	100-41-4	N.D.	0.5	0.06	1
11996	Isopropylbenzene	98-82-8	N.D.	0.5	0.05	1
11996	4-Methyl-2-Pentanone	108-10-1	N.D.	5.0	0.7	1
11996	Methylcyclohexane	108-87-2	N.D.	0.5	0.05	1
11996	Methylene Chloride	75-09-2	N.D.	0.5	0.07	1
11996	Tetrachloroethene	127-18-4	N.D.	0.5	0.06	1
11996	Toluene	108-88-3	N.D.	0.5	0.07	1
11996	1,1,1-Trichloroethane	71-55-6	N.D.	0.5	0.06	1
11996	Trichloroethene	79-01-6	N.D.	0.5	0.06	1
11996	Vinyl Chloride	75-01-4	N.D.	0.5	0.1	1
11996	Xylene (Total)	1330-20-7	N.D.	1.0	0.2	1

A Report Limit Verification (RLV) standard is analyzed to confirm sensitivity of the instrument for samples with non-detect analytes associated with a continuing calibration verification standard exhibiting low response (outside the 20%D criteria). The RLV standard shows adequate sensitivity at or below the reporting limit.

Sample Comments

State of New York Certification No. 10670

¹ = This analyte was not on the laboratory's NYSDOH Scope of Accreditation at the time of analysis.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
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*=This limit was used in the evaluation of the final result

Sample Description: TB-10-120519 Water
General Electric Schenectady Main Plant

GE-O'Brien & Gere, Inc.
ELLE Sample #: GW 1216935
ELLE Group #: 2077922
Matrix: Water

Project Name: GE Schenectady Main Plant

Submittal Date/Time: 12/06/2019 10:59

Collection Date/Time: 12/05/2019

SDG#: SMP18-18TB

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11996	VOCs 8260C	SW-846 8260C 25mL purge	1	H193442AA	12/10/2019 22:14	Miranda Campbell	1
01163	GC/MS VOA Water Prep	SW-846 5030C	1	H193442AA	12/10/2019 22:13	Miranda Campbell	1

*=This limit was used in the evaluation of the final result

Analysis Report

Sample Description: GE-15-120519 Grab Groundwater
General Electric Schenectady Main Plant

GE-O'Brien & Gere, Inc.
ELLE Sample #: GW 1216957
ELLE Group #: 2077925
Matrix: Groundwater

Project Name: GE Schenectady Main Plant

Submittal Date/Time: 12/06/2019 10:59
Collection Date/Time: 12/05/2019 10:05
SDG#: SMP18-19

CAT No.	Analysis Name	CAS Number	Result	Limit of Quantitation*	Method Detection Limit	Dilution Factor
GC/MS Volatiles		SW-846 8260C 25mL	ug/l	ug/l	ug/l	
		purge				
11996	Acetone	67-64-1	16	5.0	0.9	1
11996	Benzene	71-43-2	0.3 J	0.5	0.05	1
11996	2-Butanone	78-93-3	N.D.	5.0	0.6	1
11996	Chlorobenzene	108-90-7	N.D.	0.5	0.06	1
11996	Chloroethane	75-00-3	0.6	0.5	0.07	1
11996	Cyclohexane	110-82-7	N.D.	0.5	0.05	1
11996	1,2-Dichlorobenzene	95-50-1	N.D.	0.5	0.06	1
11996	1,3-Dichlorobenzene	541-73-1	N.D.	0.5	0.06	1
11996	1,4-Dichlorobenzene	106-46-7	N.D.	0.5	0.07	1
11996	1,1-Dichloroethane	75-34-3	0.1 J	0.5	0.07	1
11996	1,2-Dichloroethane	107-06-2	N.D.	0.5	0.05	1
11996	1,1-Dichloroethene	75-35-4	N.D.	0.5	0.06	1
11996	cis-1,2-Dichloroethene	156-59-2	0.1 J	0.5	0.05	1
11996	trans-1,2-Dichloroethene	156-60-5	0.2 J	0.5	0.06	1
11996	1,2-Dichloroethene (Total) ¹	540-59-0	0.3 J	1.0	0.1	1
11996	Ethylbenzene	100-41-4	N.D.	0.5	0.06	1
11996	Isopropylbenzene	98-82-8	N.D.	0.5	0.05	1
11996	4-Methyl-2-Pentanone	108-10-1	N.D.	5.0	0.7	1
11996	Methylcyclohexane	108-87-2	N.D.	0.5	0.05	1
11996	Methylene Chloride	75-09-2	N.D.	0.5	0.07	1
11996	Tetrachloroethene	127-18-4	N.D.	0.5	0.06	1
11996	Toluene	108-88-3	N.D.	0.5	0.07	1
11996	1,1,1-Trichloroethane	71-55-6	N.D.	0.5	0.06	1
11996	Trichloroethene	79-01-6	0.07 J	0.5	0.06	1
11996	Vinyl Chloride	75-01-4	N.D.	0.5	0.1	1
11996	Xylene (Total)	1330-20-7	N.D.	1.0	0.2	1

A Report Limit Verification (RLV) standard is analyzed to confirm sensitivity of the instrument for samples with non-detect analytes associated with a continuing calibration verification standard exhibiting low response (outside the 20%D criteria). The RLV standard shows adequate sensitivity at or below the reporting limit.

Sample Comments

State of New York Certification No. 10670

¹ = This analyte was not on the laboratory's NYSDOH Scope of Accreditation at the time of analysis.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
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*=This limit was used in the evaluation of the final result

Analysis Report

Sample Description: GE-15-120519 Grab Groundwater
General Electric Schenectady Main Plant

GE-O'Brien & Gere, Inc.
ELLE Sample #: GW 1216957
ELLE Group #: 2077925
Matrix: Groundwater

Project Name: GE Schenectady Main Plant

Submittal Date/Time: 12/06/2019 10:59
Collection Date/Time: 12/05/2019 10:05
SDG#: SMP18-19

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11996	VOCs 8260C	SW-846 8260C 25mL purge	1	H193442AA	12/11/2019 06:33	Miranda Campbell	1
01163	GC/MS VOA Water Prep	SW-846 5030C	1	H193442AA	12/11/2019 06:32	Miranda Campbell	1

*=This limit was used in the evaluation of the final result

Analysis Report

Sample Description: PZ-07-120619 Grab Groundwater
General Electric Schenectady Main Plant

GE-O'Brien & Gere, Inc.
ELLE Sample #: GW 1218041
ELLE Group #: 2078184
Matrix: Groundwater

Project Name: GE Schenectady Main Plant

Submittal Date/Time: 12/07/2019 09:51
Collection Date/Time: 12/06/2019 10:15
SDG#: SMP18-20

CAT No.	Analysis Name	CAS Number	Result	Limit of Quantitation*	Method Detection Limit	Dilution Factor
GC/MS Volatiles		SW-846 8260C 25mL	ug/l	ug/l	ug/l	
		purge				
11996	Acetone	67-64-1	N.D.	100	18	20
11996	Benzene	71-43-2	230	10	1.0	20
11996	2-Butanone	78-93-3	N.D.	100	12	20
11996	Chlorobenzene	108-90-7	24	10	1.2	20
11996	Chloroethane	75-00-3	19	10	1.4	20
11996	Cyclohexane	110-82-7	2.7 J	10	1.0	20
11996	1,2-Dichlorobenzene	95-50-1	7.7 J	10	1.2	20
11996	1,3-Dichlorobenzene	541-73-1	N.D.	10	1.2	20
11996	1,4-Dichlorobenzene	106-46-7	3.1 J	10	1.4	20
11996	1,1-Dichloroethane	75-34-3	440	10	1.4	20
11996	1,2-Dichloroethane	107-06-2	N.D.	10	1.0	20
11996	1,1-Dichloroethene	75-35-4	19	10	1.2	20
11996	cis-1,2-Dichloroethene	156-59-2	660	100	10	200
11996	trans-1,2-Dichloroethene	156-60-5	N.D.	10	1.2	20
11996	1,2-Dichloroethene (Total) ¹	540-59-0	660	200	22	200
11996	Ethylbenzene	100-41-4	530	100	12	200
11996	Isopropylbenzene	98-82-8	29	10	1.0	20
11996	4-Methyl-2-Pentanone	108-10-1	N.D.	100	14	20
11996	Methylcyclohexane	108-87-2	11	10	1.0	20
11996	Methylene Chloride	75-09-2	2.6 J	10	1.4	20
11996	Tetrachloroethene	127-18-4	2.2 J	10	1.2	20
11996	Toluene	108-88-3	4,300	100	14	200
11996	1,1,1-Trichloroethane	71-55-6	290	10	1.2	20
11996	Trichloroethene	79-01-6	N.D.	10	1.2	20
11996	Vinyl Chloride	75-01-4	50	10	2.0	20
11996	Xylene (Total)	1330-20-7	3,000	200	30	200

A Report Limit Verification (RLV) standard is analyzed to confirm sensitivity of the instrument for samples with non-detect analytes associated with a continuing calibration verification standard exhibiting low response (outside the 20%D criteria). The RLV standard shows adequate sensitivity at or below the reporting limit.

GC Miscellaneous		RSKSOP-175 modified	ug/l	ug/l	ug/l	
07105	Ethane	74-84-0	15	5.0	1.0	1
07105	Ethene	74-85-1	31	5.0	1.0	1
07105	Methane	74-82-8	13,000	500	300	100

Wet Chemistry		EPA 300.0	mg/l	mg/l	mg/l	
00224	Chloride	16887-00-6	47.1	8.0	4.0	20
00368	Nitrate Nitrogen	14797-55-8	N.D.	0.50	0.25	5

*=This limit was used in the evaluation of the final result

Analysis Report

Sample Description: PZ-07-120619 Grab Groundwater
General Electric Schenectady Main Plant

GE-O'Brien & Gere, Inc.
ELLE Sample #: GW 1218041
ELLE Group #: 2078184
Matrix: Groundwater

Project Name: GE Schenectady Main Plant

Submittal Date/Time: 12/07/2019 09:51
Collection Date/Time: 12/06/2019 10:15
SDG#: SMP18-20

CAT No.	Analysis Name	CAS Number	Result	Limit of Quantitation*	Method Detection Limit	Dilution Factor
Wet Chemistry						
	EPA 300.0		mg/l	mg/l	mg/l	
Sample was originally analyzed within the 48 hour holding time. The analysis requires every ten injections are to be bracketed by a set of continuing calibration verification standard (CCV) and continuing calibration blank (CCB). Due to a lab error, the initial analysis had a CCV analyzed in place of the CCB, therefore the analysis did not have a qualifying CCB. The sample was reanalyzed past hold on 12/09/2019 with a result of ND and had acceptable bracketing CCV/CCB's.						
00228	Sulfate	14808-79-8	N.D.	5.0	1.5	5
	SM 5310 C-2011		mg/l	mg/l	mg/l	
00273	Total Organic Carbon	n.a.	17.2	5.0	2.5	5
	SM 2320 B-2011		mg/l as CaCO3	mg/l as CaCO3	mg/l as CaCO3	
12150	Total Alkalinity to pH 4.5	n.a.	526	8.0	2.6	1
12149	Bicarbonate Alkalinity	n.a.	526	8.0	2.6	1

Sample Comments

State of New York Certification No. 10670

¹ = This analyte was not on the laboratory's NYSDOH Scope of Accreditation at the time of analysis.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11996	VOCs 8260C	SW-846 8260C 25mL purge	1	H193442AA	12/11/2019 04:23	Miranda Campbell	20
11996	VOCs 8260C	SW-846 8260C 25mL purge	1	H193442AA	12/11/2019 04:44	Miranda Campbell	200
01163	GC/MS VOA Water Prep	SW-846 5030C	1	H193442AA	12/11/2019 04:22	Miranda Campbell	20
01163	GC/MS VOA Water Prep	SW-846 5030C	2	H193442AA	12/11/2019 04:43	Miranda Campbell	200
07105	Methane, Ethane, Ethene	RSKSOP-175 modified	1	193430007A	12/10/2019 14:59	Johanna C Kennedy	100
07105	Methane, Ethane, Ethene	RSKSOP-175 modified	1	193430007A	12/10/2019 19:03	Johanna C Kennedy	1
00224	Chloride	EPA 300.0	1	19341720112A	12/09/2019 19:19	Kevin Litwa	20
00368	Nitrate Nitrogen	EPA 300.0	2	19341720112A	12/07/2019 16:48	Samantha Faverio	5
00228	Sulfate	EPA 300.0	1	19341720112A	12/09/2019 19:01	Kevin Litwa	5
00273	Total Organic Carbon	SM 5310 C-2011	1	19346304502B	12/13/2019 10:54	Bethany Sandone	5
12150	Total Alkalinity to pH 4.5	SM 2320 B-2011	1	19343010202A	12/09/2019 20:15	Jeremy L Bolf	1
12149	Bicarbonate Alkalinity	SM 2320 B-2011	1	19343010202A	12/09/2019 20:15	Jeremy L Bolf	1

*=This limit was used in the evaluation of the final result

Sample Description: PZ-07-120619 Filtered Grab Groundwater
General Electric Schenectady Main Plant

GE-O'Brien & Gere, Inc.
ELLE Sample #: GW 1218042
ELLE Group #: 2078184
Matrix: Groundwater

Project Name: GE Schenectady Main Plant

Submittal Date/Time: 12/07/2019 09:51
Collection Date/Time: 12/06/2019 10:15
SDG#: SMP18-21

CAT No.	Analysis Name	CAS Number	Result	Limit of Quantitation*	Method Detection Limit	Dilution Factor
Metals Dissolved		SW-846 6010D Rev.4, July 2014	mg/l	mg/l	mg/l	
01754	Iron	7439-89-6	72.5	0.200	0.0400	1

Sample Comments

State of New York Certification No. 10670
This sample was field filtered for dissolved metals.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01754	Iron	SW-846 6010D Rev.4, July 2014	1	193431404402	12/11/2019 23:54	Cindy M Gehman	1
14044	ICP-WW, 3005A (tot rec) - U345	SW-846 3005A	1	193431404402	12/11/2019 03:50	James L Mertz	1

*=This limit was used in the evaluation of the final result

Sample Description: PZ-05-120619 Grab Groundwater
General Electric Schenectady Main Plant

GE-O'Brien & Gere, Inc.
ELLE Sample #: GW 1218043
ELLE Group #: 2078184
Matrix: Groundwater

Project Name: GE Schenectady Main Plant

Submittal Date/Time: 12/07/2019 09:51
Collection Date/Time: 12/06/2019 10:21
SDG#: SMP18-22

CAT No.	Analysis Name	CAS Number	Result	Limit of Quantitation*	Method Detection Limit	Dilution Factor
GC/MS Volatiles		SW-846 8260C 25mL	ug/l	ug/l	ug/l	
	purge					
11996	Acetone	67-64-1	N.D.	1,000	180	200
11996	Benzene	71-43-2	16 J	100	10	200
11996	2-Butanone	78-93-3	N.D.	1,000	120	200
11996	Chlorobenzene	108-90-7	N.D.	100	12	200
11996	Chloroethane	75-00-3	N.D.	100	14	200
11996	Cyclohexane	110-82-7	130	100	10	200
11996	1,2-Dichlorobenzene	95-50-1	N.D.	100	12	200
11996	1,3-Dichlorobenzene	541-73-1	N.D.	100	12	200
11996	1,4-Dichlorobenzene	106-46-7	N.D.	100	14	200
11996	1,1-Dichloroethane	75-34-3	N.D.	100	14	200
11996	1,2-Dichloroethane	107-06-2	N.D.	100	10	200
11996	1,1-Dichloroethene	75-35-4	N.D.	100	12	200
11996	cis-1,2-Dichloroethene	156-59-2	13 J	100	10	200
11996	trans-1,2-Dichloroethene	156-60-5	N.D.	100	12	200
11996	1,2-Dichloroethene (Total) ¹	540-59-0	N.D.	200	22	200
11996	Ethylbenzene	100-41-4	4,800	1,000	120	2000
11996	Isopropylbenzene	98-82-8	78 J	100	10	200
11996	4-Methyl-2-Pentanone	108-10-1	N.D.	1,000	140	200
11996	Methylcyclohexane	108-87-2	11 J	100	10	200
11996	Methylene Chloride	75-09-2	N.D.	100	14	200
11996	Tetrachloroethene	127-18-4	N.D.	100	12	200
11996	Toluene	108-88-3	36,000	1,000	140	2000
11996	1,1,1-Trichloroethane	71-55-6	N.D.	100	12	200
11996	Trichloroethene	79-01-6	N.D.	100	12	200
11996	Vinyl Chloride	75-01-4	N.D.	100	20	200
11996	Xylene (Total)	1330-20-7	29,000	2,000	300	2000

A Report Limit Verification (RLV) standard is analyzed to confirm sensitivity of the instrument for samples with non-detect analytes associated with a continuing calibration verification standard exhibiting low response (outside the 20%D criteria). The RLV standard shows adequate sensitivity at or below the reporting limit.

GC Miscellaneous		RSKSOP-175 modified	ug/l	ug/l	ug/l	
07105	Ethane	74-84-0	1.0 J	5.0	1.0	1
07105	Ethene	74-85-1	N.D.	5.0	1.0	1
07105	Methane	74-82-8	21,000	1,300	750	250
Wet Chemistry		EPA 300.0	mg/l	mg/l	mg/l	
00224	Chloride	16887-00-6	90.4	20.0	10.0	50
00368	Nitrate Nitrogen	14797-55-8	N.D.	0.50	0.25	5

*=This limit was used in the evaluation of the final result

Analysis Report

Sample Description: PZ-05-120619 Grab Groundwater
General Electric Schenectady Main Plant

GE-O'Brien & Gere, Inc.
ELLE Sample #: GW 1218043
ELLE Group #: 2078184
Matrix: Groundwater

Project Name: GE Schenectady Main Plant

Submittal Date/Time: 12/07/2019 09:51
Collection Date/Time: 12/06/2019 10:21
SDG#: SMP18-22

CAT No.	Analysis Name	CAS Number	Result	Limit of Quantitation*	Method Detection Limit	Dilution Factor
Wet Chemistry		EPA 300.0	mg/l	mg/l	mg/l	
Sample was originally analyzed within the 48 hour holding time. The analysis requires every ten injections are to be bracketed by a set of continuing calibration verification standard (CCV) and continuing calibration blank (CCB). Due to a lab error, the initial analysis had a CCV analyzed in place of the CCB, therefore the analysis did not have a qualifying CCB. The sample was reanalyzed past hold on 12/09/2019 with a result of ND and had acceptable bracketing CCV/CCB's.						
00228	Sulfate	14808-79-8	N.D.	5.0	1.5	5
		SM 5310 C-2011	mg/l	mg/l	mg/l	
00273	Total Organic Carbon	n.a.	25.8	10.0	5.0	10
		SM 2320 B-2011	mg/l as CaCO3	mg/l as CaCO3	mg/l as CaCO3	
12150	Total Alkalinity to pH 4.5	n.a.	559	8.0	2.6	1
12149	Bicarbonate Alkalinity	n.a.	559	8.0	2.6	1

Sample Comments

State of New York Certification No. 10670

¹ = This analyte was not on the laboratory's NYSDOH Scope of Accreditation at the time of analysis.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11996	VOCs 8260C	SW-846 8260C 25mL purge	1	H193442AA	12/11/2019 05:06	Miranda Campbell	200
11996	VOCs 8260C	SW-846 8260C 25mL purge	1	H193442AA	12/11/2019 05:28	Miranda Campbell	2000
01163	GC/MS VOA Water Prep	SW-846 5030C	1	H193442AA	12/11/2019 05:05	Miranda Campbell	200
01163	GC/MS VOA Water Prep	SW-846 5030C	2	H193442AA	12/11/2019 05:27	Miranda Campbell	2000
07105	Methane, Ethane, Ethene	RSKSOP-175 modified	1	193430007A	12/09/2019 12:42	Johanna C Kennedy	1
07105	Methane, Ethane, Ethene	RSKSOP-175 modified	1	193430007A	12/10/2019 15:18	Johanna C Kennedy	250
00224	Chloride	EPA 300.0	1	19341720112A	12/10/2019 13:50	Samantha Faverio	50
00368	Nitrate Nitrogen	EPA 300.0	2	19341720112A	12/07/2019 16:10	Samantha Faverio	5
00228	Sulfate	EPA 300.0	1	19341720112A	12/09/2019 18:23	Kevin Litwa	5
00273	Total Organic Carbon	SM 5310 C-2011	1	19346304502B	12/13/2019 11:34	Bethany Sandone	10
12150	Total Alkalinity to pH 4.5	SM 2320 B-2011	1	19343010202A	12/09/2019 19:58	Jeremy L Bolf	1
12149	Bicarbonate Alkalinity	SM 2320 B-2011	1	19343010202A	12/09/2019 19:58	Jeremy L Bolf	1

*=This limit was used in the evaluation of the final result

Sample Description: PZ-05-120619 Filtered Grab Groundwater
General Electric Schenectady Main Plant

GE-O'Brien & Gere, Inc.
ELLE Sample #: GW 1218044
ELLE Group #: 2078184
Matrix: Groundwater

Project Name: GE Schenectady Main Plant

Submittal Date/Time: 12/07/2019 09:51
Collection Date/Time: 12/06/2019 10:21
SDG#: SMP18-23

CAT No.	Analysis Name	CAS Number	Result	Limit of Quantitation*	Method Detection Limit	Dilution Factor
Metals Dissolved		SW-846 6010D Rev.4, July 2014	mg/l	mg/l	mg/l	
01754	Iron	7439-89-6	50.9	0.200	0.0400	1

Sample Comments

State of New York Certification No. 10670
This sample was field filtered for dissolved metals.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01754	Iron	SW-846 6010D Rev.4, July 2014	1	193431404402	12/12/2019 00:13	Cindy M Gehman	1
14044	ICP-WW, 3005A (tot rec) - U345	SW-846 3005A	1	193431404402	12/11/2019 03:50	James L Mertz	1

*=This limit was used in the evaluation of the final result

Analysis Report

Sample Description: PZ-04-120619 Grab Groundwater
General Electric Schenectady Main Plant

GE-O'Brien & Gere, Inc.
ELLE Sample #: GW 1218045
ELLE Group #: 2078184
Matrix: Groundwater

Project Name: GE Schenectady Main Plant

Submittal Date/Time: 12/07/2019 09:51
Collection Date/Time: 12/06/2019 12:10
SDG#: SMP18-24

CAT No.	Analysis Name	CAS Number	Result	Limit of Quantitation*	Method Detection Limit	Dilution Factor
GC/MS Volatiles		SW-846 8260C 25mL	ug/l	ug/l	ug/l	
	purge					
11996	Acetone	67-64-1	N.D.	2,500	450	500
11996	Benzene	71-43-2	2,000	250	25	500
11996	2-Butanone	78-93-3	N.D.	2,500	300	500
11996	Chlorobenzene	108-90-7	37 J	250	30	500
11996	Chloroethane	75-00-3	750	250	35	500
11996	Cyclohexane	110-82-7	N.D.	250	25	500
11996	1,2-Dichlorobenzene	95-50-1	200 J	250	30	500
11996	1,3-Dichlorobenzene	541-73-1	N.D.	250	30	500
11996	1,4-Dichlorobenzene	106-46-7	N.D.	250	35	500
11996	1,1-Dichloroethane	75-34-3	4,500	250	35	500
11996	1,2-Dichloroethane	107-06-2	530	250	25	500
11996	1,1-Dichloroethene	75-35-4	350	250	30	500
11996	cis-1,2-Dichloroethene	156-59-2	5,600	250	25	500
11996	trans-1,2-Dichloroethene	156-60-5	N.D.	250	30	500
11996	1,2-Dichloroethene (Total) ¹	540-59-0	5,600	500	55	500
11996	Ethylbenzene	100-41-4	3,700	250	30	500
11996	Isopropylbenzene	98-82-8	59 J	250	25	500
11996	4-Methyl-2-Pentanone	108-10-1	400 J	2,500	350	500
11996	Methylcyclohexane	108-87-2	29 J	250	25	500
11996	Methylene Chloride	75-09-2	620	250	35	500
11996	Tetrachloroethene	127-18-4	110 J	250	30	500
11996	Toluene	108-88-3	36,000	2,500	350	5000
11996	1,1,1-Trichloroethane	71-55-6	18,000	2,500	300	5000
11996	Trichloroethene	79-01-6	38 J	250	30	500
11996	Vinyl Chloride	75-01-4	N.D.	250	50	500
11996	Xylene (Total)	1330-20-7	22,000	500	75	500

A Report Limit Verification (RLV) standard is analyzed to confirm sensitivity of the instrument for samples with non-detect analytes associated with a continuing calibration verification standard exhibiting low response (outside the 20%D criteria). The RLV standard shows adequate sensitivity at or below the reporting limit.

GC Miscellaneous		RSKSOP-175 modified	ug/l	ug/l	ug/l	
07105	Ethane	74-84-0	14	5.0	1.0	1
07105	Ethene	74-85-1	3.1 J	5.0	1.0	1
07105	Methane	74-82-8	11,000	500	300	100
Wet Chemistry		EPA 300.0	mg/l	mg/l	mg/l	
00224	Chloride	16887-00-6	52.3	8.0	4.0	20
00368	Nitrate Nitrogen	14797-55-8	N.D.	0.50	0.25	5

*=This limit was used in the evaluation of the final result

Analysis Report

Sample Description: PZ-04-120619 Grab Groundwater
General Electric Schenectady Main Plant

GE-O'Brien & Gere, Inc.
ELLE Sample #: GW 1218045
ELLE Group #: 2078184
Matrix: Groundwater

Project Name: GE Schenectady Main Plant

Submittal Date/Time: 12/07/2019 09:51
Collection Date/Time: 12/06/2019 12:10
SDG#: SMP18-24

CAT No.	Analysis Name	CAS Number	Result	Limit of Quantitation*	Method Detection Limit	Dilution Factor
Wet Chemistry		EPA 300.0	mg/l	mg/l	mg/l	
Sample was originally analyzed within the 48 hour holding time. The analysis requires every ten injections are to be bracketed by a set of continuing calibration verification standard (CCV) and continuing calibration blank (CCB). Due to a lab error, the initial analysis had a CCV analyzed in place of the CCB, therefore the analysis did not have a qualifying CCB. The sample was reanalyzed past hold on 12/09/2019 with a result of ND and had acceptable bracketing CCV/CCB's.						
00228	Sulfate	14808-79-8	2.9 J	5.0	1.5	5
		SM 5310 C-2011	mg/l	mg/l	mg/l	
00273	Total Organic Carbon	n.a.	163	50.0	25.0	50
		SM 2320 B-2011	mg/l as CaCO3	mg/l as CaCO3	mg/l as CaCO3	
12150	Total Alkalinity to pH 4.5	n.a.	776	8.0	2.6	1
12149	Bicarbonate Alkalinity	n.a.	776	8.0	2.6	1

Sample Comments

State of New York Certification No. 10670

¹ = This analyte was not on the laboratory's NYSDOH Scope of Accreditation at the time of analysis.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11996	VOCs 8260C	SW-846 8260C 25mL purge	1	H193442AA	12/11/2019 05:49	Miranda Campbell	500
11996	VOCs 8260C	SW-846 8260C 25mL purge	1	H193442AA	12/11/2019 06:11	Miranda Campbell	5000
01163	GC/MS VOA Water Prep	SW-846 5030C	1	H193442AA	12/11/2019 05:48	Miranda Campbell	500
01163	GC/MS VOA Water Prep	SW-846 5030C	2	H193442AA	12/11/2019 06:10	Miranda Campbell	5000
07105	Methane, Ethane, Ethene	RSKSOP-175 modified	1	193430007A	12/09/2019 13:00	Johanna C Kennedy	1
07105	Methane, Ethane, Ethene	RSKSOP-175 modified	1	193430007A	12/10/2019 15:36	Johanna C Kennedy	100
00224	Chloride	EPA 300.0	1	19341720112A	12/09/2019 19:57	Kevin Litwa	20
00368	Nitrate Nitrogen	EPA 300.0	2	19341720112A	12/07/2019 17:25	Samantha Faverio	5
00228	Sulfate	EPA 300.0	1	19341720112A	12/09/2019 19:38	Kevin Litwa	5
00273	Total Organic Carbon	SM 5310 C-2011	1	19346304502B	12/13/2019 11:47	Bethany Sandone	50
12150	Total Alkalinity to pH 4.5	SM 2320 B-2011	1	19343010202A	12/09/2019 19:50	Jeremy L Bolf	1
12149	Bicarbonate Alkalinity	SM 2320 B-2011	1	19343010202A	12/09/2019 19:50	Jeremy L Bolf	1

*=This limit was used in the evaluation of the final result

Sample Description: PZ-04-120619 Filtered Grab Groundwater
General Electric Schenectady Main Plant

GE-O'Brien & Gere, Inc.
ELLE Sample #: GW 1218046
ELLE Group #: 2078184
Matrix: Groundwater

Project Name: GE Schenectady Main Plant

Submittal Date/Time: 12/07/2019 09:51
Collection Date/Time: 12/06/2019 12:10
SDG#: SMP18-25

CAT No.	Analysis Name	CAS Number	Result	Limit of Quantitation*	Method Detection Limit	Dilution Factor
Metals Dissolved		SW-846 6010D Rev.4, July 2014	mg/l	mg/l	mg/l	
01754	Iron	7439-89-6	62.0	0.200	0.0400	1

Sample Comments

State of New York Certification No. 10670
This sample was field filtered for dissolved metals.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01754	Iron	SW-846 6010D Rev.4, July 2014	1	193431404402	12/12/2019 00:10	Cindy M Gehman	1
14044	ICP-WW, 3005A (tot rec) - U345	SW-846 3005A	1	193431404402	12/11/2019 03:50	James L Mertz	1

*=This limit was used in the evaluation of the final result

Analysis Report

Sample Description: PZ-03-120619 Grab Groundwater
General Electric Schenectady Main Plant**GE-O'Brien & Gere, Inc.**
ELLE Sample #: GW 1218047
ELLE Group #: 2078184
Matrix: Groundwater**Project Name:** GE Schenectady Main Plant**Submittal Date/Time:** 12/07/2019 09:51**Collection Date/Time:** 12/06/2019 14:47**SDG#:** SMP18-26

CAT No.	Analysis Name	CAS Number	Result	Limit of Quantitation*	Method Detection Limit	Dilution Factor
GC/MS Volatiles		SW-846 8260C 25mL	ug/l	ug/l	ug/l	
	purge					
11996	Acetone	67-64-1	N.D.	5.0	0.9	1
11996	Benzene	71-43-2	N.D.	0.5	0.05	1
11996	2-Butanone	78-93-3	N.D.	5.0	0.6	1
11996	Chlorobenzene	108-90-7	N.D.	0.5	0.06	1
11996	Chloroethane	75-00-3	N.D.	0.5	0.07	1
11996	Cyclohexane	110-82-7	N.D.	0.5	0.05	1
11996	1,2-Dichlorobenzene	95-50-1	N.D.	0.5	0.06	1
11996	1,3-Dichlorobenzene	541-73-1	N.D.	0.5	0.06	1
11996	1,4-Dichlorobenzene	106-46-7	N.D.	0.5	0.07	1
11996	1,1-Dichloroethane	75-34-3	0.3 J	0.5	0.07	1
11996	1,2-Dichloroethane	107-06-2	N.D.	0.5	0.05	1
11996	1,1-Dichloroethene	75-35-4	0.07 J	0.5	0.06	1
11996	cis-1,2-Dichloroethene	156-59-2	N.D.	0.5	0.05	1
11996	trans-1,2-Dichloroethene	156-60-5	N.D.	0.5	0.06	1
11996	1,2-Dichloroethene (Total) ¹	540-59-0	N.D.	1.0	0.1	1
11996	Ethylbenzene	100-41-4	N.D.	0.5	0.06	1
11996	Isopropylbenzene	98-82-8	N.D.	0.5	0.05	1
11996	4-Methyl-2-Pentanone	108-10-1	N.D.	5.0	0.7	1
11996	Methylcyclohexane	108-87-2	N.D.	0.5	0.05	1
11996	Methylene Chloride	75-09-2	N.D.	0.5	0.07	1
11996	Tetrachloroethene	127-18-4	N.D.	0.5	0.06	1
11996	Toluene	108-88-3	N.D.	0.5	0.07	1
11996	1,1,1-Trichloroethane	71-55-6	N.D.	0.5	0.06	1
11996	Trichloroethene	79-01-6	N.D.	0.5	0.06	1
11996	Vinyl Chloride	75-01-4	N.D.	0.5	0.1	1
11996	Xylene (Total)	1330-20-7	N.D.	1.0	0.2	1

A Report Limit Verification (RLV) standard is analyzed to confirm sensitivity of the instrument for samples with non-detect analytes associated with a continuing calibration verification standard exhibiting low response (outside the 20%D criteria). The RLV standard shows adequate sensitivity at or below the reporting limit.

GC Miscellaneous		RSKSOP-175 modified	ug/l	ug/l	ug/l	
07105	Ethane	74-84-0	N.D.	5.0	1.0	1
07105	Ethene	74-85-1	N.D.	5.0	1.0	1
07105	Methane	74-82-8	1,700	100	60	20
Wet Chemistry		EPA 300.0	mg/l	mg/l	mg/l	
00224	Chloride	16887-00-6	71.6	40.0	20.0	100
00368	Nitrate Nitrogen	14797-55-8	N.D.	0.50	0.25	5

*=This limit was used in the evaluation of the final result

Analysis Report

Sample Description: PZ-03-120619 Grab Groundwater
General Electric Schenectady Main Plant

GE-O'Brien & Gere, Inc.
ELLE Sample #: GW 1218047
ELLE Group #: 2078184
Matrix: Groundwater

Project Name: GE Schenectady Main Plant

Submittal Date/Time: 12/07/2019 09:51
Collection Date/Time: 12/06/2019 14:47
SDG#: SMP18-26

CAT No.	Analysis Name	CAS Number	Result	Limit of Quantitation*	Method Detection Limit	Dilution Factor
Wet Chemistry						
	EPA 300.0		mg/l	mg/l	mg/l	
Sample was originally analyzed within the 48 hour holding time. The analysis requires every ten injections are to be bracketed by a set of continuing calibration verification standard (CCV) and continuing calibration blank (CCB). Due to a lab error, the initial analysis had a CCV analyzed in place of the CCB, therefore the analysis did not have a qualifying CCB. The sample was reanalyzed past hold on 12/09/2019 with a result of ND and had acceptable bracketing CCV/CCB's.						
00228	Sulfate	14808-79-8	N.D.	5.0	1.5	5
	SM 5310 C-2011		mg/l	mg/l	mg/l	
00273	Total Organic Carbon	n.a.	3.9	1.0	0.50	1
	SM 2320 B-2011		mg/l as CaCO3	mg/l as CaCO3	mg/l as CaCO3	
12150	Total Alkalinity to pH 4.5	n.a.	221	8.0	2.6	1
12149	Bicarbonate Alkalinity	n.a.	221	8.0	2.6	1

Sample Comments

State of New York Certification No. 10670

¹ = This analyte was not on the laboratory's NYSDOH Scope of Accreditation at the time of analysis.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11996	VOCs 8260C	SW-846 8260C 25mL purge	1	H193442AA	12/11/2019 02:12	Miranda Campbell	1
01163	GC/MS VOA Water Prep	SW-846 5030C	1	H193442AA	12/11/2019 02:11	Miranda Campbell	1
07105	Methane, Ethane, Ethene	RSKSOP-175 modified	1	193430007A	12/09/2019 13:18	Johanna C Kennedy	1
07105	Methane, Ethane, Ethene	RSKSOP-175 modified	1	193430007A	12/10/2019 12:29	Johanna C Kennedy	20
00224	Chloride	EPA 300.0	1	19341720112A	12/09/2019 18:04	Kevin Litwa	100
00368	Nitrate Nitrogen	EPA 300.0	2	19341720112A	12/07/2019 15:33	Samantha Faverio	5
00228	Sulfate	EPA 300.0	1	19341720112A	12/09/2019 17:46	Kevin Litwa	5
00273	Total Organic Carbon	SM 5310 C-2011	1	19346304502B	12/12/2019 21:32	Bethany Sandone	1
12150	Total Alkalinity to pH 4.5	SM 2320 B-2011	1	19343010202A	12/09/2019 20:42	Jeremy L Bolf	1
12149	Bicarbonate Alkalinity	SM 2320 B-2011	1	19343010202A	12/09/2019 20:42	Jeremy L Bolf	1

*=This limit was used in the evaluation of the final result

Sample Description: PZ-03-120619 Filtered Grab Groundwater
General Electric Schenectady Main Plant

GE-O'Brien & Gere, Inc.
ELLE Sample #: GW 1218048
ELLE Group #: 2078184
Matrix: Groundwater

Project Name: GE Schenectady Main Plant

Submittal Date/Time: 12/07/2019 09:51
Collection Date/Time: 12/06/2019 14:47
SDG#: SMP18-27

CAT No.	Analysis Name	CAS Number	Result	Limit of Quantitation*	Method Detection Limit	Dilution Factor
Metals Dissolved		SW-846 6010D Rev.4, July 2014	mg/l	mg/l	mg/l	
01754	Iron	7439-89-6	6.04	0.200	0.0400	1

Sample Comments

State of New York Certification No. 10670
This sample was field filtered for dissolved metals.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01754	Iron	SW-846 6010D Rev.4, July 2014	1	193431404402	12/12/2019 00:07	Cindy M Gehman	1
14044	ICP-WW, 3005A (tot rec) - U345	SW-846 3005A	1	193431404402	12/11/2019 03:50	James L Mertz	1

*=This limit was used in the evaluation of the final result

Sample Description: P-41R-120619 Grab Groundwater
General Electric Schenectady Main Plant

GE-O'Brien & Gere, Inc.
ELLE Sample #: GW 1218049
ELLE Group #: 2078184
Matrix: Groundwater

Project Name: GE Schenectady Main Plant

Submittal Date/Time: 12/07/2019 09:51
Collection Date/Time: 12/06/2019 14:55
SDG#: SMP18-28

CAT No.	Analysis Name	CAS Number	Result	Limit of Quantitation*	Method Detection Limit	Dilution Factor
GC/MS Volatiles		SW-846 8260C 25mL	ug/l	ug/l	ug/l	
	purge					
11996	Acetone	67-64-1	N.D.	5.0	0.9	1
11996	Benzene	71-43-2	N.D.	0.5	0.05	1
11996	2-Butanone	78-93-3	N.D.	5.0	0.6	1
11996	Chlorobenzene	108-90-7	N.D.	0.5	0.06	1
11996	Chloroethane	75-00-3	N.D.	0.5	0.07	1
11996	Cyclohexane	110-82-7	0.5	0.5	0.05	1
11996	1,2-Dichlorobenzene	95-50-1	N.D.	0.5	0.06	1
11996	1,3-Dichlorobenzene	541-73-1	N.D.	0.5	0.06	1
11996	1,4-Dichlorobenzene	106-46-7	N.D.	0.5	0.07	1
11996	1,1-Dichloroethane	75-34-3	0.1 J	0.5	0.07	1
11996	1,2-Dichloroethane	107-06-2	N.D.	0.5	0.05	1
11996	1,1-Dichloroethene	75-35-4	0.08 J	0.5	0.06	1
11996	cis-1,2-Dichloroethene	156-59-2	N.D.	0.5	0.05	1
11996	trans-1,2-Dichloroethene	156-60-5	N.D.	0.5	0.06	1
11996	1,2-Dichloroethene (Total) ¹	540-59-0	N.D.	1.0	0.1	1
11996	Ethylbenzene	100-41-4	N.D.	0.5	0.06	1
11996	Isopropylbenzene	98-82-8	N.D.	0.5	0.05	1
11996	4-Methyl-2-Pentanone	108-10-1	N.D.	5.0	0.7	1
11996	Methylcyclohexane	108-87-2	N.D.	0.5	0.05	1
11996	Methylene Chloride	75-09-2	N.D.	0.5	0.07	1
11996	Tetrachloroethene	127-18-4	N.D.	0.5	0.06	1
11996	Toluene	108-88-3	N.D.	0.5	0.07	1
11996	1,1,1-Trichloroethane	71-55-6	N.D.	0.5	0.06	1
11996	Trichloroethene	79-01-6	N.D.	0.5	0.06	1
11996	Vinyl Chloride	75-01-4	N.D.	0.5	0.1	1
11996	Xylene (Total)	1330-20-7	N.D.	1.0	0.2	1

A Report Limit Verification (RLV) standard is analyzed to confirm sensitivity of the instrument for samples with non-detect analytes associated with a continuing calibration verification standard exhibiting low response (outside the 20%D criteria). The RLV standard shows adequate sensitivity at or below the reporting limit.

GC Miscellaneous		RSKSOP-175 modified	ug/l	ug/l	ug/l	
07105	Ethane	74-84-0	N.D.	5.0	1.0	1
07105	Ethene	74-85-1	N.D.	5.0	1.0	1
07105	Methane	74-82-8	1,900	100	60	20
Wet Chemistry		EPA 300.0	mg/l	mg/l	mg/l	
00224	Chloride	16887-00-6	73.4	8.0	4.0	20
00368	Nitrate Nitrogen	14797-55-8	N.D.	0.50	0.25	5

*=This limit was used in the evaluation of the final result

Analysis Report

Sample Description: P-41R-120619 Grab Groundwater
General Electric Schenectady Main Plant

GE-O'Brien & Gere, Inc.
ELLE Sample #: GW 1218049
ELLE Group #: 2078184
Matrix: Groundwater

Project Name: GE Schenectady Main Plant

Submittal Date/Time: 12/07/2019 09:51
Collection Date/Time: 12/06/2019 14:55
SDG#: SMP18-28

CAT No.	Analysis Name	CAS Number	Result	Limit of Quantitation*	Method Detection Limit	Dilution Factor
Wet Chemistry						
	EPA 300.0		mg/l	mg/l	mg/l	
Sample was originally analyzed within the 48 hour holding time. The analysis requires every ten injections are to be bracketed by a set of continuing calibration verification standard (CCV) and continuing calibration blank (CCB). Due to a lab error, the initial analysis had a CCV analyzed in place of the CCB, therefore the analysis did not have a qualifying CCB. The sample was reanalyzed past hold on 12/09/2019 with a result of ND and had acceptable bracketing CCV/CCB's.						
00228	Sulfate	14808-79-8	N.D.	5.0	1.5	5
	SM 5310 C-2011		mg/l	mg/l	mg/l	
00273	Total Organic Carbon	n.a.	2.7	1.0	0.50	1
	SM 2320 B-2011		mg/l as CaCO3	mg/l as CaCO3	mg/l as CaCO3	
12150	Total Alkalinity to pH 4.5	n.a.	266	8.0	2.6	1
12149	Bicarbonate Alkalinity	n.a.	266	8.0	2.6	1

Sample Comments

State of New York Certification No. 10670

¹ = This analyte was not on the laboratory's NYSDOH Scope of Accreditation at the time of analysis.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11996	VOCs 8260C	SW-846 8260C 25mL purge	1	H193442AA	12/11/2019 02:34	Miranda Campbell	1
01163	GC/MS VOA Water Prep	SW-846 5030C	1	H193442AA	12/11/2019 02:33	Miranda Campbell	1
07105	Methane, Ethane, Ethene	RSKSOP-175 modified	1	193430007A	12/09/2019 13:37	Johanna C Kennedy	1
07105	Methane, Ethane, Ethene	RSKSOP-175 modified	1	193430007A	12/10/2019 12:48	Johanna C Kennedy	20
00224	Chloride	EPA 300.0	1	19341720112A	12/10/2019 13:35	Samantha Faverio	20
00368	Nitrate Nitrogen	EPA 300.0	2	19341720112A	12/07/2019 15:14	Samantha Faverio	5
00228	Sulfate	EPA 300.0	1	19341720112A	12/09/2019 17:27	Kevin Litwa	5
00273	Total Organic Carbon	SM 5310 C-2011	1	19346304502B	12/12/2019 21:44	Bethany Sandone	1
12150	Total Alkalinity to pH 4.5	SM 2320 B-2011	1	19343010202A	12/09/2019 20:36	Jeremy L Bolf	1
12149	Bicarbonate Alkalinity	SM 2320 B-2011	1	19343010202A	12/09/2019 20:36	Jeremy L Bolf	1

*=This limit was used in the evaluation of the final result

Sample Description: P-41R-120619 Filtered Grab Groundwater
General Electric Schenectady Main Plant

GE-O'Brien & Gere, Inc.
ELLE Sample #: GW 1218050
ELLE Group #: 2078184
Matrix: Groundwater

Project Name: GE Schenectady Main Plant

Submittal Date/Time: 12/07/2019 09:51
Collection Date/Time: 12/06/2019 14:55
SDG#: SMP18-29

CAT No.	Analysis Name	CAS Number	Result	Limit of Quantitation*	Method Detection Limit	Dilution Factor
Metals Dissolved		SW-846 6010D Rev.4, July 2014	mg/l	mg/l	mg/l	
01754	Iron	7439-89-6	6.03	0.200	0.0400	1

Sample Comments

State of New York Certification No. 10670
This sample was field filtered for dissolved metals.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01754	Iron	SW-846 6010D Rev.4, July 2014	1	193431404402	12/11/2019 23:57	Cindy M Gehman	1
14044	ICP-WW, 3005A (tot rec) - U345	SW-846 3005A	1	193431404402	12/11/2019 03:50	James L Mertz	1

*=This limit was used in the evaluation of the final result

Analysis Report

Sample Description: TB-11-120619 Water
General Electric Schenectady Main Plant

GE-O'Brien & Gere, Inc.
ELLE Sample #: GW 1218051
ELLE Group #: 2078184
Matrix: Water

Project Name: GE Schenectady Main Plant

Submission Date/Time: 12/07/2019 09:51
Collection Date/Time: 12/06/2019
SDG#: SMP18-30TB

CAT No.	Analysis Name	CAS Number	Result	Limit of Quantitation*	Method Detection Limit	Dilution Factor
GC/MS Volatiles		SW-846 8260C 25mL	ug/l	ug/l	ug/l	
	purge					
11996	Acetone	67-64-1	N.D.	5.0	0.9	1
11996	Benzene	71-43-2	N.D.	0.5	0.05	1
11996	2-Butanone	78-93-3	N.D.	5.0	0.6	1
11996	Chlorobenzene	108-90-7	N.D.	0.5	0.06	1
11996	Chloroethane	75-00-3	N.D.	0.5	0.07	1
11996	Cyclohexane	110-82-7	N.D.	0.5	0.05	1
11996	1,2-Dichlorobenzene	95-50-1	N.D.	0.5	0.06	1
11996	1,3-Dichlorobenzene	541-73-1	N.D.	0.5	0.06	1
11996	1,4-Dichlorobenzene	106-46-7	N.D.	0.5	0.07	1
11996	1,1-Dichloroethane	75-34-3	N.D.	0.5	0.07	1
11996	1,2-Dichloroethane	107-06-2	N.D.	0.5	0.05	1
11996	1,1-Dichloroethene	75-35-4	N.D.	0.5	0.06	1
11996	cis-1,2-Dichloroethene	156-59-2	N.D.	0.5	0.05	1
11996	trans-1,2-Dichloroethene	156-60-5	N.D.	0.5	0.06	1
11996	1,2-Dichloroethene (Total) ¹	540-59-0	N.D.	1.0	0.1	1
11996	Ethylbenzene	100-41-4	N.D.	0.5	0.06	1
11996	Isopropylbenzene	98-82-8	N.D.	0.5	0.05	1
11996	4-Methyl-2-Pentanone	108-10-1	N.D.	5.0	0.7	1
11996	Methylcyclohexane	108-87-2	N.D.	0.5	0.05	1
11996	Methylene Chloride	75-09-2	N.D.	0.5	0.07	1
11996	Tetrachloroethene	127-18-4	N.D.	0.5	0.06	1
11996	Toluene	108-88-3	N.D.	0.5	0.07	1
11996	1,1,1-Trichloroethane	71-55-6	N.D.	0.5	0.06	1
11996	Trichloroethene	79-01-6	N.D.	0.5	0.06	1
11996	Vinyl Chloride	75-01-4	N.D.	0.5	0.1	1
11996	Xylene (Total)	1330-20-7	N.D.	1.0	0.2	1

A Report Limit Verification (RLV) standard is analyzed to confirm sensitivity of the instrument for samples with non-detect analytes associated with a continuing calibration verification standard exhibiting low response (outside the 20%D criteria). The RLV standard shows adequate sensitivity at or below the reporting limit.

Sample Comments

State of New York Certification No. 10670

¹ = This analyte was not on the laboratory's NYSDOH Scope of Accreditation at the time of analysis.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
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*=This limit was used in the evaluation of the final result

Sample Description: TB-11-120619 Water
General Electric Schenectady Main Plant

GE-O'Brien & Gere, Inc.
ELLE Sample #: GW 1218051
ELLE Group #: 2078184
Matrix: Water

Project Name: GE Schenectady Main Plant

Submittal Date/Time: 12/07/2019 09:51
Collection Date/Time: 12/06/2019
SDG#: SMP18-30TB

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11996	VOCs 8260C	SW-846 8260C 25mL purge	1	H193442AA	12/10/2019 22:35	Miranda Campbell	1
01163	GC/MS VOA Water Prep	SW-846 5030C	1	H193442AA	12/10/2019 22:34	Miranda Campbell	1

*=This limit was used in the evaluation of the final result

Analysis Report

Sample Description: P-45R-120919 Grab Groundwater
General Electric Schenectady Main Plant**GE-O'Brien & Gere, Inc.**
ELLE Sample #: GW 1219230
ELLE Group #: 2078416
Matrix: Groundwater**Project Name:** GE Schenectady Main Plant**Submittal Date/Time:** 12/10/2019 10:32**Collection Date/Time:** 12/09/2019 12:05**SDG#:** SMP18-31

CAT No.	Analysis Name	CAS Number	Result	Limit of Quantitation*	Method Detection Limit	Dilution Factor
GC/MS Volatiles		SW-846 8260C 25mL	ug/l	ug/l	ug/l	
	purge					
11996	Acetone	67-64-1	N.D.	5.0	0.9	1
11996	Benzene	71-43-2	N.D.	0.5	0.05	1
11996	2-Butanone	78-93-3	N.D.	5.0	0.6	1
11996	Chlorobenzene	108-90-7	N.D.	0.5	0.06	1
11996	Chloroethane	75-00-3	0.08 J	0.5	0.07	1
11996	Cyclohexane	110-82-7	N.D.	0.5	0.05	1
11996	1,2-Dichlorobenzene	95-50-1	N.D.	0.5	0.06	1
11996	1,3-Dichlorobenzene	541-73-1	N.D.	0.5	0.06	1
11996	1,4-Dichlorobenzene	106-46-7	N.D.	0.5	0.07	1
11996	1,1-Dichloroethane	75-34-3	0.1 J	0.5	0.07	1
11996	1,2-Dichloroethane	107-06-2	N.D.	0.5	0.05	1
11996	1,1-Dichloroethene	75-35-4	N.D.	0.5	0.06	1
11996	cis-1,2-Dichloroethene	156-59-2	N.D.	0.5	0.05	1
11996	trans-1,2-Dichloroethene	156-60-5	N.D.	0.5	0.06	1
11996	1,2-Dichloroethene (Total) ¹	540-59-0	N.D.	1.0	0.1	1
11996	Ethylbenzene	100-41-4	N.D.	0.5	0.06	1
11996	Isopropylbenzene	98-82-8	N.D.	0.5	0.05	1
11996	4-Methyl-2-Pentanone	108-10-1	N.D.	5.0	0.7	1
11996	Methylcyclohexane	108-87-2	N.D.	0.5	0.05	1
11996	Methylene Chloride	75-09-2	N.D.	0.5	0.07	1
11996	Tetrachloroethene	127-18-4	N.D.	0.5	0.06	1
11996	Toluene	108-88-3	N.D.	0.5	0.07	1
11996	1,1,1-Trichloroethane	71-55-6	N.D.	0.5	0.06	1
11996	Trichloroethene	79-01-6	N.D.	0.5	0.06	1
11996	Vinyl Chloride	75-01-4	N.D.	0.5	0.1	1
11996	Xylene (Total)	1330-20-7	N.D.	1.0	0.2	1

A Report Limit Verification (RLV) standard is analyzed to confirm sensitivity of the instrument for samples with non-detect analytes associated with a continuing calibration verification standard exhibiting low response (outside the 20%D criteria). The RLV standard shows adequate sensitivity at or below the reporting limit.

The referenced method allows a maximum of 20% of the analytes in the calibration to exceed the 20% Drift continuing calibration verification criteria. The reported concentration in the associated sample(s) is considered to be estimated. Therefore the result for the following analyte(s) is estimated:
Chloroethane

GC Miscellaneous		RSKSOP-175 modified	ug/l	ug/l	ug/l	
07105	Ethane	74-84-0	N.D.	5.0	1.0	1
07105	Ethene	74-85-1	N.D.	5.0	1.0	1
07105	Methane	74-82-8	5,000	250	150	50

*=This limit was used in the evaluation of the final result

Sample Description: P-45R-120919 Grab Groundwater
General Electric Schenectady Main Plant

GE-O'Brien & Gere, Inc.
ELLE Sample #: GW 1219230
ELLE Group #: 2078416
Matrix: Groundwater

Project Name: GE Schenectady Main Plant

Submittal Date/Time: 12/10/2019 10:32
Collection Date/Time: 12/09/2019 12:05
SDG#: SMP18-31

CAT No.	Analysis Name	CAS Number	Result	Limit of Quantitation*	Method Detection Limit	Dilution Factor
Wet Chemistry		EPA 300.0	mg/l	mg/l	mg/l	
00224	Chloride	16887-00-6	44.9	20.0	10.0	50
00368	Nitrate Nitrogen	14797-55-8	N.D.	0.50	0.25	5
00228	Sulfate	14808-79-8	N.D.	5.0	1.5	5
		SM 5310 C-2011	mg/l	mg/l	mg/l	
00273	Total Organic Carbon	n.a.	3.4	1.0	0.50	1
		SM 2320 B-2011	mg/l as CaCO3	mg/l as CaCO3	mg/l as CaCO3	
12150	Total Alkalinity to pH 4.5	n.a.	276	8.0	2.6	1
12149	Bicarbonate Alkalinity	n.a.	276	8.0	2.6	1

Sample Comments

State of New York Certification No. 10670
Preservation requirements were not met. The pH preservation of all non-volatile containers was checked upon receipt at the laboratory. The container for the following analysis was not within the specification and was adjusted accordingly by the laboratory: Total Organic Carbon

¹ = This analyte was not on the laboratory's NYSDOH Scope of Accreditation at the time of analysis.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11996	VOCs 8260C	SW-846 8260C 25mL purge	1	I193471AA	12/13/2019 11:44	Jennifer K Howe	1
01163	GC/MS VOA Water Prep	SW-846 5030C	1	I193471AA	12/13/2019 11:43	Jennifer K Howe	1
07105	Methane, Ethane, Ethene	RSKSOP-175 modified	1	193450003A	12/11/2019 18:07	Esther Kathryn Lane	1
07105	Methane, Ethane, Ethene	RSKSOP-175 modified	1	193450003A	12/12/2019 12:56	Esther Kathryn Lane	50
00224	Chloride	EPA 300.0	1	19344720109A	12/11/2019 02:04	Samantha Faverio	50
00368	Nitrate Nitrogen	EPA 300.0	1	19344720109A	12/10/2019 22:19	Samantha Faverio	5
00228	Sulfate	EPA 300.0	1	19344720109A	12/10/2019 22:19	Samantha Faverio	5
00273	Total Organic Carbon	SM 5310 C-2011	1	19347304502A	12/13/2019 16:24	Bethany Sandone	1
12150	Total Alkalinity to pH 4.5	SM 2320 B-2011	1	19345003103A	12/11/2019 22:37	Jeremy L Bolf	1
12149	Bicarbonate Alkalinity	SM 2320 B-2011	1	19345003103A	12/11/2019 22:37	Jeremy L Bolf	1

*=This limit was used in the evaluation of the final result

Sample Description: P-45R-120919 Filtered Grab Groundwater
General Electric Schenectady Main Plant

GE-O'Brien & Gere, Inc.
ELLE Sample #: GW 1219231
ELLE Group #: 2078416
Matrix: Groundwater

Project Name: GE Schenectady Main Plant

Submittal Date/Time: 12/10/2019 10:32
Collection Date/Time: 12/09/2019 12:05
SDG#: SMP18-32

CAT No.	Analysis Name	CAS Number	Result	Limit of Quantitation*	Method Detection Limit	Dilution Factor
Metals Dissolved		SW-846 6010D Rev.4, July 2014	mg/l	mg/l	mg/l	
01754	Iron	7439-89-6	9.16	0.200	0.0400	1

Sample Comments

State of New York Certification No. 10670
This sample was field filtered for dissolved metals.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01754	Iron	SW-846 6010D Rev.4, July 2014	1	193441404402	12/12/2019 21:20	Cindy M Gehman	1
14044	ICP-WW, 3005A (tot rec) - U345	SW-846 3005A	1	193441404402	12/11/2019 14:30	JoElla L Rice	1

*=This limit was used in the evaluation of the final result

Sample Description: PZ-02-120919 Grab Groundwater
General Electric Schenectady Main Plant

GE-O'Brien & Gere, Inc.
ELLE Sample #: GW 1219232
ELLE Group #: 2078416
Matrix: Groundwater

Project Name: GE Schenectady Main Plant

Submittal Date/Time: 12/10/2019 10:32
Collection Date/Time: 12/09/2019 12:10
SDG#: SMP18-33

CAT No.	Analysis Name	CAS Number	Result	Limit of Quantitation*	Method Detection Limit	Dilution Factor
GC/MS Volatiles		SW-846 8260C 25mL	ug/l	ug/l	ug/l	
	purge					
11996	Acetone	67-64-1	N.D.	25	4.5	5
11996	Benzene	71-43-2	29	2.5	0.3	5
11996	2-Butanone	78-93-3	N.D.	25	3.0	5
11996	Chlorobenzene	108-90-7	210	25	3.0	50
11996	Chloroethane	75-00-3	N.D.	2.5	0.4	5
11996	Cyclohexane	110-82-7	1.2 J	2.5	0.3	5
11996	1,2-Dichlorobenzene	95-50-1	0.4 J	2.5	0.3	5
11996	1,3-Dichlorobenzene	541-73-1	1.4 J	2.5	0.3	5
11996	1,4-Dichlorobenzene	106-46-7	4.5	2.5	0.4	5
11996	1,1-Dichloroethane	75-34-3	N.D.	2.5	0.4	5
11996	1,2-Dichloroethane	107-06-2	N.D.	2.5	0.3	5
11996	1,1-Dichloroethene	75-35-4	N.D.	2.5	0.3	5
11996	cis-1,2-Dichloroethene	156-59-2	N.D.	2.5	0.3	5
11996	trans-1,2-Dichloroethene	156-60-5	N.D.	2.5	0.3	5
11996	1,2-Dichloroethene (Total) ¹	540-59-0	N.D.	5.0	0.6	5
11996	Ethylbenzene	100-41-4	8.2	2.5	0.3	5
11996	Isopropylbenzene	98-82-8	9.8	2.5	0.3	5
11996	4-Methyl-2-Pentanone	108-10-1	N.D.	25	3.5	5
11996	Methylcyclohexane	108-87-2	0.6 J	2.5	0.3	5
11996	Methylene Chloride	75-09-2	N.D.	2.5	0.4	5
11996	Tetrachloroethene	127-18-4	N.D.	2.5	0.3	5
11996	Toluene	108-88-3	0.7 J	2.5	0.4	5
11996	1,1,1-Trichloroethane	71-55-6	N.D.	2.5	0.3	5
11996	Trichloroethene	79-01-6	N.D.	2.5	0.3	5
11996	Vinyl Chloride	75-01-4	N.D.	2.5	0.5	5
11996	Xylene (Total)	1330-20-7	13	5.0	0.8	5

A Report Limit Verification (RLV) standard is analyzed to confirm sensitivity of the instrument for samples with non-detect analytes associated with a continuing calibration verification standard exhibiting low response (outside the 20%D criteria). The RLV standard shows adequate sensitivity at or below the reporting limit.

GC Miscellaneous		RSKSOP-175 modified	ug/l	ug/l	ug/l	
07105	Ethane	74-84-0	5.2	5.0	1.0	1
07105	Ethene	74-85-1	N.D.	5.0	1.0	1
07105	Methane	74-82-8	16,000	1,000	600	200
Wet Chemistry		EPA 300.0	mg/l	mg/l	mg/l	
00224	Chloride	16887-00-6	45.6	20.0	10.0	50
00368	Nitrate Nitrogen	14797-55-8	N.D.	0.50	0.25	5
00228	Sulfate	14808-79-8	5.3	5.0	1.5	5

*=This limit was used in the evaluation of the final result

Analysis Report

Sample Description: PZ-02-120919 Grab Groundwater
General Electric Schenectady Main Plant

GE-O'Brien & Gere, Inc.
ELLE Sample #: GW 1219232
ELLE Group #: 2078416
Matrix: Groundwater

Project Name: GE Schenectady Main Plant

Submittal Date/Time: 12/10/2019 10:32
Collection Date/Time: 12/09/2019 12:10
SDG#: SMP18-33

CAT No.	Analysis Name	CAS Number	Result	Limit of Quantitation*	Method Detection Limit	Dilution Factor
Wet Chemistry						
00273	Total Organic Carbon	SM 5310 C-2011 n.a.	mg/l 32.7	mg/l 5.0	mg/l 2.5	5
12150	Total Alkalinity to pH 4.5	SM 2320 B-2011 n.a.	mg/l as CaCO ₃ 858	mg/l as CaCO ₃ 8.0	mg/l as CaCO ₃ 2.6	1
12149	Bicarbonate Alkalinity	n.a.	858	8.0	2.6	1

Sample Comments

State of New York Certification No. 10670
Preservation requirements were not met. The pH preservation of all non-volatile containers was checked upon receipt at the laboratory. The container for the following analysis was not within the specification and was adjusted accordingly by the laboratory: Total Organic Carbon

¹ = This analyte was not on the laboratory's NYSDOH Scope of Accreditation at the time of analysis.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11996	VOCs 8260C	SW-846 8260C 25mL purge	1	I193471AA	12/13/2019 16:01	Jennifer K Howe	5
11996	VOCs 8260C	SW-846 8260C 25mL purge	1	I193471AA	12/13/2019 16:22	Jennifer K Howe	50
01163	GC/MS VOA Water Prep	SW-846 5030C	1	I193471AA	12/13/2019 16:00	Jennifer K Howe	5
01163	GC/MS VOA Water Prep	SW-846 5030C	2	I193471AA	12/13/2019 16:21	Jennifer K Howe	50
07105	Methane, Ethane, Ethene	RSKSOP-175 modified	1	193450003A	12/11/2019 18:25	Esther Kathryn Lane	1
07105	Methane, Ethane, Ethene	RSKSOP-175 modified	1	193450003A	12/12/2019 20:20	Esther Kathryn Lane	200
00224	Chloride	EPA 300.0	1	19344720109A	12/11/2019 02:42	Samantha Faverio	50
00368	Nitrate Nitrogen	EPA 300.0	1	19344720109A	12/10/2019 22:38	Samantha Faverio	5
00228	Sulfate	EPA 300.0	1	19344720109A	12/10/2019 22:38	Samantha Faverio	5
00273	Total Organic Carbon	SM 5310 C-2011	1	19347304502A	12/13/2019 16:37	Bethany Sandone	5
12150	Total Alkalinity to pH 4.5	SM 2320 B-2011	1	19345003103A	12/11/2019 22:29	Jeremy L Bolf	1
12149	Bicarbonate Alkalinity	SM 2320 B-2011	1	19345003103A	12/11/2019 22:29	Jeremy L Bolf	1

*=This limit was used in the evaluation of the final result

Sample Description: PZ-02-120919 Filtered Grab Groundwater
General Electric Schenectady Main Plant

GE-O'Brien & Gere, Inc.
ELLE Sample #: GW 1219233
ELLE Group #: 2078416
Matrix: Groundwater

Project Name: GE Schenectady Main Plant

Submittal Date/Time: 12/10/2019 10:32
Collection Date/Time: 12/09/2019 12:10
SDG#: SMP18-34

CAT No.	Analysis Name	CAS Number	Result	Limit of Quantitation*	Method Detection Limit	Dilution Factor
Metals Dissolved		SW-846 6010D Rev.4, July 2014	mg/l	mg/l	mg/l	
01754	Iron	7439-89-6	74.4	0.200	0.0400	1

Sample Comments

State of New York Certification No. 10670
This sample was field filtered for dissolved metals.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01754	Iron	SW-846 6010D Rev.4, July 2014	1	193441404402	12/12/2019 21:23	Cindy M Gehman	1
14044	ICP-WW, 3005A (tot rec) - U345	SW-846 3005A	1	193441404402	12/11/2019 14:30	JoElla L Rice	1

*=This limit was used in the evaluation of the final result

Analysis Report

Sample Description: PZ-01-120919 Grab Groundwater
General Electric Schenectady Main Plant**GE-O'Brien & Gere, Inc.**
ELLE Sample #: GW 1219234
ELLE Group #: 2078416
Matrix: Groundwater**Project Name:** GE Schenectady Main Plant**Submission Date/Time:** 12/10/2019 10:32**Collection Date/Time:** 12/09/2019 13:25**SDG#:** SMP18-35

CAT No.	Analysis Name	CAS Number	Result	Limit of Quantitation*	Method Detection Limit	Dilution Factor
GC/MS Volatiles		SW-846 8260C 25mL	ug/l	ug/l	ug/l	
	purge					
11996	Acetone	67-64-1	N.D.	5.0	0.9	1
11996	Benzene	71-43-2	N.D.	0.5	0.05	1
11996	2-Butanone	78-93-3	N.D.	5.0	0.6	1
11996	Chlorobenzene	108-90-7	N.D.	0.5	0.06	1
11996	Chloroethane	75-00-3	0.1 J	0.5	0.07	1
11996	Cyclohexane	110-82-7	0.8	0.5	0.05	1
11996	1,2-Dichlorobenzene	95-50-1	N.D.	0.5	0.06	1
11996	1,3-Dichlorobenzene	541-73-1	N.D.	0.5	0.06	1
11996	1,4-Dichlorobenzene	106-46-7	N.D.	0.5	0.07	1
11996	1,1-Dichloroethane	75-34-3	0.07 J	0.5	0.07	1
11996	1,2-Dichloroethane	107-06-2	N.D.	0.5	0.05	1
11996	1,1-Dichloroethene	75-35-4	N.D.	0.5	0.06	1
11996	cis-1,2-Dichloroethene	156-59-2	N.D.	0.5	0.05	1
11996	trans-1,2-Dichloroethene	156-60-5	N.D.	0.5	0.06	1
11996	1,2-Dichloroethene (Total) ¹	540-59-0	N.D.	1.0	0.1	1
11996	Ethylbenzene	100-41-4	N.D.	0.5	0.06	1
11996	Isopropylbenzene	98-82-8	N.D.	0.5	0.05	1
11996	4-Methyl-2-Pentanone	108-10-1	N.D.	5.0	0.7	1
11996	Methylcyclohexane	108-87-2	N.D.	0.5	0.05	1
11996	Methylene Chloride	75-09-2	N.D.	0.5	0.07	1
11996	Tetrachloroethene	127-18-4	N.D.	0.5	0.06	1
11996	Toluene	108-88-3	N.D.	0.5	0.07	1
11996	1,1,1-Trichloroethane	71-55-6	N.D.	0.5	0.06	1
11996	Trichloroethene	79-01-6	N.D.	0.5	0.06	1
11996	Vinyl Chloride	75-01-4	N.D.	0.5	0.1	1
11996	Xylene (Total)	1330-20-7	N.D.	1.0	0.2	1

A Report Limit Verification (RLV) standard is analyzed to confirm sensitivity of the instrument for samples with non-detect analytes associated with a continuing calibration verification standard exhibiting low response (outside the 20%D criteria). The RLV standard shows adequate sensitivity at or below the reporting limit.

The referenced method allows a maximum of 20% of the analytes in the calibration to exceed the 20% Drift continuing calibration verification criteria. The reported concentration in the associated sample(s) is considered to be estimated. Therefore the result for the following analyte(s) is estimated:
Chloroethane

GC Miscellaneous		RSKSOP-175 modified	ug/l	ug/l	ug/l	
07105	Ethane	74-84-0	N.D.	5.0	1.0	1
07105	Ethene	74-85-1	N.D.	5.0	1.0	1
07105	Methane	74-82-8	5,300	250	150	50

*=This limit was used in the evaluation of the final result

Sample Description: PZ-01-120919 Grab Groundwater
General Electric Schenectady Main Plant

GE-O'Brien & Gere, Inc.
ELLE Sample #: GW 1219234
ELLE Group #: 2078416
Matrix: Groundwater

Project Name: GE Schenectady Main Plant

Submittal Date/Time: 12/10/2019 10:32
Collection Date/Time: 12/09/2019 13:25
SDG#: SMP18-35

CAT No.	Analysis Name	CAS Number	Result	Limit of Quantitation*	Method Detection Limit	Dilution Factor
Wet Chemistry EPA 300.0						
00224	Chloride	16887-00-6	42.5	8.0	4.0	20
00368	Nitrate Nitrogen	14797-55-8	N.D.	0.50	0.25	5
00228	Sulfate	14808-79-8	N.D.	5.0	1.5	5
SM 5310 C-2011						
00273	Total Organic Carbon	n.a.	4.1	1.0	0.50	1
SM 2320 B-2011						
12150	Total Alkalinity to pH 4.5	n.a.	273	8.0	2.6	1
12149	Bicarbonate Alkalinity	n.a.	273	8.0	2.6	1

Sample Comments

State of New York Certification No. 10670

¹ = This analyte was not on the laboratory's NYSDOH Scope of Accreditation at the time of analysis.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11996	VOCs 8260C	SW-846 8260C 25mL purge	1	I193471AA	12/13/2019 12:06	Jennifer K Howe	1
01163	GC/MS VOA Water Prep	SW-846 5030C	1	I193471AA	12/13/2019 12:05	Jennifer K Howe	1
07105	Methane, Ethane, Ethene	RSKSOP-175 modified	1	193450003A	12/11/2019 18:43	Esther Kathryn Lane	1
07105	Methane, Ethane, Ethene	RSKSOP-175 modified	1	193450003A	12/12/2019 13:33	Esther Kathryn Lane	50
00224	Chloride	EPA 300.0	1	19344720109B	12/12/2019 13:03	Niyati Desai	20
00368	Nitrate Nitrogen	EPA 300.0	1	19344720109B	12/10/2019 22:57	Samantha Faverio	5
00228	Sulfate	EPA 300.0	1	19344720109B	12/10/2019 22:57	Samantha Faverio	5
00273	Total Organic Carbon	SM 5310 C-2011	1	19347304502A	12/13/2019 16:50	Bethany Sandone	1
12150	Total Alkalinity to pH 4.5	SM 2320 B-2011	1	19345003103A	12/11/2019 22:44	Jeremy L Bolf	1
12149	Bicarbonate Alkalinity	SM 2320 B-2011	1	19345003103A	12/11/2019 22:44	Jeremy L Bolf	1

*=This limit was used in the evaluation of the final result

Analysis Report

Sample Description: PZ-01-120919 Filtered Grab Groundwater
General Electric Schenectady Main Plant

GE-O'Brien & Gere, Inc.
ELLE Sample #: GW 1219235
ELLE Group #: 2078416
Matrix: Groundwater

Project Name: GE Schenectady Main Plant

Submittal Date/Time: 12/10/2019 10:32
Collection Date/Time: 12/09/2019 13:25
SDG#: SMP18-36

CAT No.	Analysis Name	CAS Number	Result	Limit of Quantitation*	Method Detection Limit	Dilution Factor
Metals Dissolved		SW-846 6010D Rev.4, July 2014	mg/l	mg/l	mg/l	
01754	Iron	7439-89-6	8.70	0.200	0.0400	1

Sample Comments

State of New York Certification No. 10670
This sample was field filtered for dissolved metals.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01754	Iron	SW-846 6010D Rev.4, July 2014	1	193451404401	12/12/2019 12:48	Christina Termini	1
14044	ICP-WW, 3005A (tot rec) - U345	SW-846 3005A	1	193451404401	12/12/2019 03:11	James L Mertz	1

*=This limit was used in the evaluation of the final result

Sample Description: TB-12-120919 Water
General Electric Schenectady Main Plant

GE-O'Brien & Gere, Inc.
ELLE Sample #: GW 1219236
ELLE Group #: 2078416
Matrix: Water

Project Name: GE Schenectady Main Plant

Submission Date/Time: 12/10/2019 10:32
Collection Date/Time: 12/09/2019
SDG#: SMP18-37TB

CAT No.	Analysis Name	CAS Number	Result	Limit of Quantitation*	Method Detection Limit	Dilution Factor
GC/MS Volatiles		SW-846 8260C 25mL	ug/l	ug/l	ug/l	
		purge				
11996	Acetone	67-64-1	N.D.	5.0	0.9	1
11996	Benzene	71-43-2	N.D.	0.5	0.05	1
11996	2-Butanone	78-93-3	N.D.	5.0	0.6	1
11996	Chlorobenzene	108-90-7	N.D.	0.5	0.06	1
11996	Chloroethane	75-00-3	N.D.	0.5	0.07	1
11996	Cyclohexane	110-82-7	N.D.	0.5	0.05	1
11996	1,2-Dichlorobenzene	95-50-1	N.D.	0.5	0.06	1
11996	1,3-Dichlorobenzene	541-73-1	N.D.	0.5	0.06	1
11996	1,4-Dichlorobenzene	106-46-7	N.D.	0.5	0.07	1
11996	1,1-Dichloroethane	75-34-3	N.D.	0.5	0.07	1
11996	1,2-Dichloroethane	107-06-2	N.D.	0.5	0.05	1
11996	1,1-Dichloroethene	75-35-4	N.D.	0.5	0.06	1
11996	cis-1,2-Dichloroethene	156-59-2	N.D.	0.5	0.05	1
11996	trans-1,2-Dichloroethene	156-60-5	N.D.	0.5	0.06	1
11996	1,2-Dichloroethene (Total) ¹	540-59-0	N.D.	1.0	0.1	1
11996	Ethylbenzene	100-41-4	N.D.	0.5	0.06	1
11996	Isopropylbenzene	98-82-8	N.D.	0.5	0.05	1
11996	4-Methyl-2-Pentanone	108-10-1	N.D.	5.0	0.7	1
11996	Methylcyclohexane	108-87-2	N.D.	0.5	0.05	1
11996	Methylene Chloride	75-09-2	N.D.	0.5	0.07	1
11996	Tetrachloroethene	127-18-4	N.D.	0.5	0.06	1
11996	Toluene	108-88-3	N.D.	0.5	0.07	1
11996	1,1,1-Trichloroethane	71-55-6	N.D.	0.5	0.06	1
11996	Trichloroethene	79-01-6	N.D.	0.5	0.06	1
11996	Vinyl Chloride	75-01-4	N.D.	0.5	0.1	1
11996	Xylene (Total)	1330-20-7	N.D.	1.0	0.2	1

Sample Comments

State of New York Certification No. 10670

¹ = This analyte was not on the laboratory's NYSDOH Scope of Accreditation at the time of analysis.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11996	VOCs 8260C	SW-846 8260C 25mL purge	1	I193471AA	12/13/2019 11:01	Jennifer K Howe	1
01163	GC/MS VOA Water Prep	SW-846 5030C	1	I193471AA	12/13/2019 11:00	Jennifer K Howe	1

*=This limit was used in the evaluation of the final result

Fluid Level Measurements

Fourth Quarter/Second Semi-Annual LNAPL Monitoring and Removal - December 2019

**GE Main Plant
Schenectady, New York**

IRM/Site Location	Date	Well Identification	Depth to Product (ft bmp)	Depth to Groundwater (ft bmp)	Product Thickness (ft)	Depth to Bottom (ft bmp)	Amount of LNAPL Removed (ounces)	Odor	Sheen	Comments
STARK OIL	-	R-1	NM	NM	NM	NM	0	NM	NM	Inaccessible/unable to locate due to significant snow/ice
	-	R-2	NM	NM	NM	NM	0	NM	NM	Inaccessible/unable to locate due to significant snow/ice
	-	R-3	NM	NM	NM	NM	0	NM	NM	Inaccessible/unable to locate due to significant snow/ice
	-	R-4	NM	NM	NM	NM	0	NM	NM	Inaccessible/unable to locate due to significant snow/ice
	-	R-5	NM	NM	NM	NM	0	NM	NM	Inaccessible/unable to locate due to significant snow/ice
	12/17/2019	R-7	NP	4.32	NP	14.16	0	No	No	
	12/17/2019	R-8	NP	5.40	NP	12.66	0	No	No	
	-	R-9	NM	NM	NM	NM	0	NM	NM	Inaccessible/unable to locate due to significant snow/ice
	-	R-10	NM	NM	NM	NM	0	NM	NM	Inaccessible/unable to locate due to significant snow/ice
	-	GE-122	NM	NM	NM	NM	0	NM	NM	Inaccessible/unable to locate due to significant snow/ice

Fourth Quarter/Second Semi-Annual LNAPL Monitoring and Removal - December 2019

**GE Main Plant
Schenectady, New York**

IRM/Site Location	Date	Well Identification	Depth to Product (ft bmp)	Depth to Groundwater (ft bmp)	Product Thickness (ft)	Depth to Bottom (ft bmp)	Amount of LNAPL Removed (ounces)	Odor	Sheen	Comments
49/53	12/18/2019	MW-1	NP	5.42	NP	10.17	0	Yes	Yes	
	-	MW-2	NM	NM	NM	NM	0	NM	NM	Inaccessible due to large amount of equipment/pallets stored on top
	12/18/2019	MW-2B	NP	7.20	NP	12.67	0	No	No	
	12/18/2019	MW-4	5.44	5.45	0.01	9.93	6	Yes	Yes	
	12/18/2019	MW-12	NP	3.76	NP	4.33	0	Yes	Yes	
	12/18/2019	MW-14A	NP	4.00	NP	11.86	0	No	No	
	12/18/2019	MW-15A	**	6.28	NP	12.50	0	Yes	Yes	
	12/18/2019	MW-15B	**	7.68	NP	NM	30	Yes	Yes	
	12/18/2019	MW-18	**	3.71	NP	6.20	0	Yes	Yes	
	-	MW-57-1	NM	NM	NM	NM	0	NM	NM	Inaccessible due to plowed pile of hard snow/ice
	-	MW-57-2	NM	NM	NM	NM	0	NM	NM	Inaccessible due to plowed pile of hard snow/ice
	-	MW-57-3	NM	NM	NM	NM	0	NM	NM	Inaccessible due to plowed pile of hard snow/ice
	12/17/2019	MW-57-6	NP	9.32	NP	21.20	0	No	No	
	12/17/2019	MW-57-7	NP	9.75	NP	21.00	0	No	No	
	12/17/2019	MW-57-8	NP	8.95	NP	21.34	0	No	No	
City Water Main	-	R-6	NM	NM	NM	NM	0	NM	NM	Inaccessible due to snow/ice

Fourth Quarter/Second Semi-Annual LNAPL Monitoring and Removal - December 2019

**GE Main Plant
Schenectady, New York**

IRM/Site Location	Date	Well Identification	Depth to Product (ft bmp)	Depth to Groundwater (ft bmp)	Product Thickness (ft)	Depth to Bottom (ft bmp)	Amount of LNAPL Removed (ounces)	Odor	Sheen	Comments
273 West	12/18/2019	DM-407F	NP	12.00	NP	13.44	0	No	No	
	12/18/2019	DM-407CF	NP	12.66	NP	41.90	0	No	No	
	-	DM-407FP	NM	NM	NM	NM	0	NM	NM	Inaccessible; submerged under a large puddle of water
	-	P-BK-5	NM	NM	NM	NM	0	NM	NM	Inaccessible; submerged under a large puddle of water
	12/18/2019	P-BK-7	**	9.78	NP	16.90	<1	Yes	Yes	
	12/18/2019	P-BK-15	**	7.15	NP	15.95	0	Yes	Yes	
	12/18/2019	P-BK-16	**	10.04	NP	19.10	0	Yes	Yes	
Bldg 113 North	12/17/2019	P-PK-5	NP	13.74	NP	20.24	0	No	No	
Former IMPS	12/18/2019	IMPS-1	NP	8.91	NP	16.32	0	Yes	Yes	
	12/18/2019	IMPS-9	NP	9.05	NP	17.16	0	Yes	Yes	
	-	IMPS-11	NM	NM	NM	NM	0	NM	NM	
	12/18/2019	IMPS-14	NP	8.21	NP	17.20	0	Yes	Yes	
	12/18/2019	IMPS-15	9.9	13.15	3.25	NM	228	Yes	Product	

Fourth Quarter/Second Semi-Annual LNAPL Monitoring and Removal - December 2019

GE Main Plant

Schenectady, New York

IRM/Site Location	Date	Well Identification	Depth to Product (ft bmp)	Depth to Groundwater (ft bmp)	Product Thickness (ft)	Depth to Bottom (ft bmp)	Amount of LNAPL Removed (ounces)	Odor	Sheen	Comments
East Landfill	12/17/2019	PZ-04	NP	7.34	NP	NM	0	Yes	Yes	
	12/17/2019	P-10R	NP	8.41	NP	15.00	0	No	No	
	12/17/2019	P-41R	NP	3.59	NP	17.50	0	No	No	

Notes:

NM - Not measured.

NP - No product detected or measured by interface probe.

** - Interface probe did not indicate presence of measurable product, but smeared product visible either on probe, passive skimmer or as globules in the groundwater.

Passive skimmer installed in this well.

Agronomic Cover Report

Intended for
General Electric Company

Document type
Report

Date
December 2019

AGRONOMIC COVER OPERATIONS, MONITORING AND MAINTENANCE **2019 ANNUAL REPORT**



AGRONOMIC COVER OPERATIONS, MONITORING AND MAINTENANCE 2019 ANNUAL REPORT

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Prepared by **Daniel M. Rockefeller**
Checked by **[Name]**
Approved by **[Name]**

Ramboll
18 Link Drive
Binghamton, NY 13904
USA

T 607-232-5300
F 607-723-3915
<https://ramboll.com>

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CONTENTS

1.	Introduction	4
2.	Agronomic Cover Installation History	5
2.1	Historic Agronomic Cover Areas	5
2.1.1	Pilot-scale Field Testing	5
2.1.2	Interim Agronomic Cover Program	6
2.1.3	Full-scale Agronomic Cover Program	6
2.2	FRD Agronomic Cover Installation	7
3.	Agronomic Cover Monitoring Activities	9
3.1	Aerial Photography Monitoring	9
3.2	Targeted Field Inspection	10
3.3	Qualitative Vegetation Inspection	10
3.4	Stream Bank Monitoring	11
4.	Agronomic Cover Monitoring Evaluation	12
4.1	Aerial Photography Monitoring – Targeted Field Inspection	12
4.2	Qualitative Vegetation Assessment	12
4.3	Stream Bank Integrity	13
5.	Maintenance and Adaptive Measures	14
5.1	Maintenance	14
5.1.1	Mechanical Raking	14
5.1.2	Seeding	14
5.2	Proposed Adaptive Measures	15
	References	16

LIST OF TABLES (IN TEXT)

Table 1. Pilot-Scale Field Testing Areas
Table 2. Interim Agronomic Cover Program Areas
Table 3. Full-Scale Cover Program Areas
Table 4. FRD Agronomic Cover Areas
Table 5. Seed Application
Table 6. Proposed Adaptive Measures

LIST OF TABLES (END OF REPORT)

Table 7. Transect Start Coordinates and Bearings
Table 8. Former East Landfill Vegetative Cover Summary
Table 9. Former West Landfill Vegetative Cover Summary

LIST OF FIGURES

Figure 1. Historic Agronomic Cover Photograph Monitoring Locations
Figure 2. Historic Agronomic Cover Areas and Photograph Monitoring Locations

LIST OF APPENDICES

Appendix 1. Photograph Log – Aerial Photography Monitoring
Appendix 2. Photograph Log – Historic Agronomic Cover
Appendix 3. Photograph Log – FRD Agronomic Cover
Appendix 4. Photograph Log – 2019 Corrective Actions
Appendix 5. Field Data Forms – Historic Agronomic Cover
Appendix 6. Field Data Forms – FRD Agronomic Cover
Appendix 7. Corrective Actions Seed Mix

LIST OF ACRONYMS

<u>Acronym</u>	<u>Definition</u>
FRD	Final Remedial Design
GE	General Electric Company
NYSDEC	New York State Department of Environmental Conservation
OM&M	Operations Monitoring and Maintenance
PCB	Polychlorinated biphenyl
UAV	Unmanned Aerial Vehicle

1. INTRODUCTION

This *Annual Report* presents the 2019 (Year 4) Agronomic Cover System Operations, Monitoring and Maintenance inspection summary for remediated landfill areas at the General Electric Company (GE) Main Plant facility in Schenectady, New York (Site). This report has been prepared in accordance with the Site's approved *Final Remedial Design* (FRD; CB&I 2014) and *Operations, Monitoring and Maintenance Plan* (OM&M Plan; CB&I 2015) for the remedy selected by the New York State Department of Environmental Conservation (NYSDEC) in its March 2005 Record of Decision for the Site.



1. Agronomic cover featuring native wildflowers at the west end of the Site

A brief history of Agronomic Cover System installation is provided in **Section 2**. Agronomic Cover System monitoring activities include aerial photography monitoring, targeted field inspections, a site-wide vegetative cover assessment, and a stream bank armoring inspection. These activities are discussed in **Sections 3 and 4**. Proposed maintenance needs and adaptive measures resulting from agronomic cover system monitoring observations are discussed in **Section 5**.

2. AGRONOMIC COVER INSTALLATION HISTORY

An agronomic cover is an integrated soil-plant system that features a thick soil profile and abundant vegetation that limits surface percolation of precipitation through the process of evapotranspiration; that is, evaporative losses from the soil surface, and transpiration by vegetation, thus reducing contact with subsurface materials.

The agronomic cover installed on the former East and West Landfills was designed to be a self-sustaining remedial system that provides an adequate growth medium for vegetation including grasses, forbs, shrubs, and trees, reduces leachate generation, and minimizes erosion, while enhancing wildlife habitat. A summary of the Agronomic Cover System installation activities is presented below. Additional details are described in the *Agronomic Cover Certification Report: 2007-2008* (Natresco & Associates, Ltd. 2009). Agronomic cover installed as part of the Pilot-scale field testing, Interim Agronomic Cover Program, and Full-scale Agronomic Cover Program phases are referred to as "Historic Agronomic Cover." Agronomic cover installed after approval of the FRD are referred to as "FRD Agronomic Cover."

2.1 Historic Agronomic Cover Areas

The Historic Agronomic Cover areas, detailed in the following subsections, were installed in 3 phases between 1999 and 2008 as part of the NYSDEC-selected Site-wide closure remedy.

2.1.1 Pilot-scale Field Testing

Pilot-scale field testing was performed from 1999 through 2001 to determine which vegetative species were most suitable for use in the specific soil conditions present at the former landfills. This research also provided insight into rooting habit, root depth proliferation, and the extent to which organic amendments would be necessary (Natresco & Associates, Ltd. 2009). Pilot-scale field testing was conducted in the areas listed in **Table 1**.

Table 1. Pilot-Scale Field Testing Areas

Area	Description	Year Installed
East Landfill		
EL-1	Hybrids, 10-inch cuttings in sandy soils	1999
EL-2	Hybrids and inter-plantings of locusts	1999
EL-3	Varying depth and intensity of plantings and OM additions	1999
EL-4	Deep planting – 12 to 15 feet	2000
EL-5	Mixed hybrids. Willow hybrid "SA-2" trials	2000
EL-6	Hybrids in an unvegetated area	2001
West Landfill		
WL-1	Organic amendments	1999
WL-2	Expansion of native tree stand	1999
WL-3	Mixed riparian buffer zone planting	2000-2001
WL-4		
WL-5		
WL-6		
WL-7		
WL-8		

2.1.2 Interim Agronomic Cover Program

The results of the pilot-scale testing (**Section 2.1.1**) were used to expand the Agronomic Cover System installation program to include a larger portion of the former landfills. The interim Program was conducted between 2002 and 2006 at the locations listed in **Table 2**. As part of this program, additional experimentation with planting densities and plant mixtures was conducted. An important component of this phase was the calculation of a leaf area index, or the measure of leaf surface area relative to the underlying ground surface area. Leaf area index provides an approximation of the transpiration capacity of vegetation (Bonan 2008).

Table 2. Interim Agronomic Cover Program Areas

Area	Description	Year Installed
East Landfill		
EL-7A	Reduce infiltration above "Seeps 1 – 4," density experiments	2002 - 2003
EL-7B		
EL-8		
EL-9	Target subsurface flows above "Seep 6"	2002
EL-10	Restoration – poor cover on "wood waste cells"	2003 – 2004
EL-11	Poor cover on "waste areas"	2005
EL-12		
EL-13		
EL-14A	Agronomic cover installation	2005
EL-14B		
EL-16		
EL-17	Agronomic cover installation	2006
West Landfill		
WL-9	Soil depth experiments	2002
WL-10		
WL-11A	Green winter buffer plantings	2003 - 2008
WL-11B		
WL-12	Phytotoxicity cover testing	2004
WL-13		
WL-14	Thin cover, conifer screening	2004
WL-14B		
WL-14C		
WL-15C	Agronomic cover installation	2004 - 2006
WL-15D		
WL-16	Agronomic cover installation	2005 - 2006
WL-17		

2.1.3 Full-scale Agronomic Cover Program

The full-scale Agronomic Cover System installation began in late 2006 and continued through 2008 (Natresco & Associates, Ltd. 2009). The full-scale program addressed areas with obvious

phytotoxic soil conditions, areas of thin soil cover, and areas where surface soil concentrations of polychlorinated biphenyls (PCBs) were greater than 1 milligram per kilogram (mg/kg), but less than 10 mg/kg, including the areas listed in **Table 3**.

Table 3. Full-Scale Cover Program Areas

Area	Description	Year Installed
East Landfill		
EL-15	Agronomic cover installation	2008
EL-18A/B	Agronomic cover installation	2003 & 2007
EL-19	Agronomic cover installation	2006
EL-25	Agronomic cover installation	2007
EL-26	Agronomic cover installation	2007
West Landfill		
WL-15C	Agronomic cover installation	2006 - 2008
WL-15D		
WL-18	Agronomic cover installation	2006 – 2008
WL-19	Agronomic cover installation	2006
WL-20	Agronomic cover installation	2008
WL-21	Agronomic cover installation	2007 – 2008
WL-22	Agronomic cover installation	2008

2.2 FRD Agronomic Cover Installation

Sixteen additional agronomic cover areas were installed in 2017 to supplement previously installed Historic Agronomic Cover, or other design components (e.g. Seep Collection and Treatment System), or where surface soil PCB concentrations were detected at levels greater than 1 mg/kg (Natresco & Associates, Ltd. 2009). FRD Agronomic Cover areas are listed in **Table 4**.

Table 4. FRD Agronomic Cover Areas

Area	Description	Year Installed
East Landfill		
EL-S8	Agronomic cover installation	2017
EL-10A	Agronomic cover installation	2017
EL-15A	Agronomic cover installation	2017
EL-18B	Agronomic cover installation	2007
EL-19A	Agronomic cover installation	2007
EL-20 (west)	Agronomic cover installation	2017
EL-20 (east)	Agronomic cover installation	2017
EL-21 (west)	Agronomic cover installation	2017
EL-21 (east)	Agronomic cover installation	2017
EL-22A	Agronomic cover installation	2017

Area	Description	Year Installed
EL-22B	Agronomic cover installation	2017
EL-22C	Agronomic cover installation	2017
EL-23	Agronomic cover installation	2017
West Landfill		
WL-20A	Agronomic cover installation	2017
WL-22A	Agronomic cover installation	2017
WL-23	Agronomic cover installation	2017

3. AGRONOMIC COVER MONITORING ACTIVITIES

Vegetative cover established as part of the agronomic cover system was evaluated using a combination of aerial photography and field-based qualitative assessment methods in 2019. This monitoring approach differs from that used during prior monitoring efforts as discussed in the *Agronomic Cover Operations, Monitoring and Maintenance 2018 Annual Report* (OBG, 2018). In addition to vegetation monitoring, four armored seeps located along the east bank of the Poentic Kill were visually inspected for signs of damage or maintenance needs.

3.1 Aerial Photography Monitoring

Aerial photography monitoring of the Site was performed by Ramboll on August 19, 2019 using an unmanned aerial vehicle (UAV). Flight operations included securing a Federal Aviation Administration (FAA) waiver for flight within restricted Class D airspace associated with the Schenectady County Airport, performing the flight, and processing the resulting images. The crew consisted of a pilot and a visual observer (spotter) who's role was to assist during flight operations by scanning for air traffic in the vicinity of the operation.

Nadir aerial photography (photography taken with the lens pointed perpendicular to the ground) was collected using a DJI Phantom 4 Pro multi-rotor UAV flown using a pre-programmed flight plan created in Pix4D, a readily accessible web application. The flight plan consisted of a flight altitude of 250 ft above ground level and parameters to avoid flying over Interstate 890, and the Norfolk Southern Railway located along the southern boundary of the Site. Imagery was collected in one continuous operation with multiple returns to the take-off/landing zone to change batteries. In addition to Nadir imagery, oblique aerial photographs were taken of the Site with particular focus on the FRD Agronomic Cover areas that received corrective actions in 2019 (**Section 5**). Combined flight operations were completed in approximately four hours. A photograph log of oblique imagery collected during the operation is presented in **Appendix 1**.



2. Unmanned aerial vehicle (UAV) used to collect aerial photography of the Site.

Aerial photographs were processed and mosaicked into one overall Site image with approximately 2-inch horizontal accuracy. The Site was then assessed by overlaying the resulting image with a grid containing 500 sq. ft cells. Each cell was methodically inspected to assess cover system effectiveness and to identify potential indications of exposed substrate or areas with limited vegetation establishment (*i.e.* areas not meeting the established 75% vegetative cover target). Additionally, ArcGIS image classification tools were used to identify areas that may have been missed through manual examination of the image. Locations identified using this process would be selected for a targeted field inspection (**Section 3.2**).

3.2 Targeted Field Inspection

Aerial photography was manually and digitally assessed to identify areas with limited vegetation establishment. Locations identified using this process would then be visited in the field to assess the conditions, identify a potential cause for limited vegetation coverage, and to recommend corrective actions as necessary. No locations were selected for a targeted field inspection in 2019 (**Section 4.1**).

3.3 Qualitative Vegetation Inspection

Historic Agronomic Cover

Qualitative vegetation inspections were performed for each of the Historic Agronomic Cover areas using previously established transect locations to evaluate the performance of the installed agronomic cover system. A 75% vegetative cover target was used to guide the evaluation. A total of 65 transects were monitored across the Former East Landfill (30 transects) and Former West Landfill (35 transects). The number of transects assessed within each monitoring area is listed in **Table 7**. As noted by TRC (2018), two Former East Landfill transects (EL-4-T1 and EL-14B-T1) were removed due to 2017 remedial actions associated with the approved FRD, including the installation of the FRD Agronomic Cover areas. Additionally, no transects were established within monitoring area EL-19 due to 2016 construction activities and subsequent use as a vehicular access right-of-way.

The following information was collected at each location:

- A representative photograph
- Herbaceous species cover (%)
- Woody species cover (%)
- Total relative vegetative cover (%)
- Dominant herbaceous species
- Dominant woody species
- Corrective action recommended (yes/no). If yes, a brief description of potential actions.
- Additional notes or location-specific observations

Field data forms for each location are presented in **Appendix 5**, and findings are discussed in **Section 4.2**. Transect starting points, which served as photograph monitoring locations, are presented in **Figure 1** and coordinates and bearings are presented in **Table 7**. A photograph log of Historic Agronomic Cover areas is presented in **Appendix 2**.

FRD Agronomic Cover

Qualitative vegetation inspections were also performed for the FRD Agronomic Cover areas, however transects had not been established, and thus were not used as the basis for the assessment. Instead, a walk-through was performed to visually assess vegetative cover within each of these areas. FRD Agronomic Cover areas were documented in the same manner as Historic Agronomic Cover (described above).

Field data forms for each location are presented in **Appendix 6**, and findings are discussed in **Section 4.2**. FRD Agronomic Cover areas and photograph locations are presented in **Figure 2**. A photograph log of FRD Agronomic Cover areas is presented in **Appendix 3**.

3.4 Stream Bank Monitoring

The 2019 monitoring included a visual inspection of stream bank armoring along the east bank of the Poentic Kill at Seeps 1, 5, 6 and 8. Seep 1 was armored with a rip-rap revetment, while Seeps 5 and 6 were armored with rip-rap and planted with live-stakes. Gabion baskets filled with rip-rap were installed at Seep 8 and supplemented with live willow stakes. An area just south of the gabion baskets was lined with an apron of riprap installed to stabilize a swale. Representative photographs of stream bank armoring are included in **Appendix 2**.

4. AGRONOMIC COVER MONITORING EVALUATION

This section presents the results of the 2019 agronomic cover inspection which was designed to evaluate the performance of vegetative cover established across the Site, and to assess the integrity of stream bank armoring along the Poentic Kill. A vegetative cover target of 75% was established to guide the evaluation of installed agronomic cover areas and to serve as the basis for potential adaptive measures.

Observations and data collected during field efforts are discussed below. Field data forms (**Appendices 5 and 6**) were used to record data collected during field inspections. Photographs collected during the field investigations are provided in **Appendices 1, 2, and 3**, and monitoring locations are presented on **Figures 1 and 2**.

4.1 Aerial Photography Monitoring – Targeted Field Inspection

Aerial photography was used to evaluate the performance of installed agronomic cover areas across the Site. Aerial photography served as a digital visual inspection designed to identify areas with limited vegetation establishment (*i.e.* areas not meeting the established 75% vegetative cover target). No such locations were identified within Historic Agronomic Cover areas, however, as expected, vegetative cover had not fully established within FRD Agronomic Cover areas that received corrective actions to establish vegetation in May of 2019. As these areas had not yet had a full growing season to allow for the establishment of sufficient vegetative cover, none were selected for targeted field inspections. However, all FRD Agronomic Cover areas were assessed as part of the annual cover system monitoring event.

4.2 Qualitative Vegetation Assessment

Findings of the 2019 agronomic cover inspection efforts indicated that overall vegetative establishment continues to be successful and that the agronomic cover system appears to be functioning as designed.

Historic Agronomic Cover

Vegetative cover was qualitatively assessed by surveying 65 transects located on the Historic Agronomic Cover areas. At each transect, herbaceous and woody vegetation cover was estimated, and dominant species were recorded. The vegetative communities observed consisted of native and invasive or non-native herbaceous and woody species. All transects exceeded the 75% vegetative cover target, and often achieved 100% relative vegetative cover through overlap of herbaceous and woody strata. Species assemblage and vegetative cover characteristics remain largely consistent with the findings of the 2018 monitoring event. Vegetative cover findings for the East and West Landfills are summarized in **Table 8** and **Table 9**, respectively.

Invasive species remain a ubiquitous presence throughout the Site, often acting as dominant species, and have surpassed by a wide margin the <10% invasive species cover target established in the OM&M Plan. As such, no attempt was made to quantify percent cover of invasive species. Despite their lack of desirability in most cases, invasive species at this site do contribute to the function of the agronomic cover system through soil stabilization and the uptake

and transpiration of surface water. However, invasive species do present shortcomings in terms of establishing valuable wildlife habitat and biodiversity.

FRD Agronomic Cover

FRD Agronomic Cover areas were qualitatively assessed by performing a walkthrough to determine if the 75% vegetative cover target was being met. Four cover areas (EL-22, EL-23, WL-20A, and WL-23) received corrective actions in May of 2019 to establish vegetation (see **Section 5**) and did not meet the cover target at the time of monitoring. These areas will be given another full growing season to allow vegetation to fully establish then be reevaluated for possible additional corrective actions. The vegetative community at these locations consisted of native upland species present in the seed mix (**Appendix 7**) and some invasive volunteers. All other FRD Agronomic Cover areas exceeded the 75% cover target with the exception of WL-22A which had only 50% vegetative coverage. It is recommended that this area be hand raked to remove excess mulch and expose underlying soil, then reseeded or allowed to revegetate naturally (**Section 5.2**). Vegetative cover findings for the East and West Landfills are summarized in **Table 8** and **Table 9**, respectively.

4.3 Stream Bank Integrity

Stream bank revetments at Seeps 1, 5, 6 and 8 were visually inspected for indications of sagging, sloughing, undermining, erosion, or other signs of damage. All stream bank revetments appeared in good condition with no evidence of damage. Vegetation has begun to volunteer among the rip-rap at Seep 1, and revetments at Seeps 5, 6 and 8 were intact and vegetation was fully established. Willows installed at Seep 8 are well established and continue to thrive.

Portions of the east bank associated with the seep collection system were fully vegetated and exceeded the 75% cover target.



3. Vegetation is beginning to establish at the Seep 1 revetment.

5. MAINTENANCE AND ADAPTIVE MEASURES

5.1 Maintenance

Based on the 2018 annual inspection, four agronomic cover areas (EL-22, EL-23, WL-20A, and WL-23), installed in 2017, had not developed adequate vegetative coverage to meet the established 75% cover requirement. The lack of vegetative establishment was likely the result of the application of course woody mulch rather than compost which is typically applied; the thickness to which the course woody mulch was applied; and the seed mix used (a wetland seed mix had been previously specified).

Corrective actions designed to create more favorable growing conditions for seeded species were completed between May 28 – May 30, 2019. Corrective actions consisted of mechanical raking to scarify the surface and remove excess mulch while mixing the mulch with the underlying soil/sand layer, followed by seeding of the raked areas. The proceeding sub-sections provide additional details.

5.1.1 Mechanical Raking

A 60-horsepower tractor equipped with an 8-ft landscape rake (or York rake) was used to scarify the surface, remove excess mulch, and mix the remaining mulch with the underlying soil/sand layer. In general, each agronomic cover area received two perpendicular passes with the rake to achieve the desired scarification and adequate mulch removal and mixing. Installed shrubs were avoided where possible. Areas of especially thick mulch received additional passes as necessary, and areas such as steep slopes, that could not be safely reached with the tractor were raked by hand. Photographs were taken of each cover area before and after scarification. A photograph log of completed corrective actions is presented in **Appendix 4**.

5.1.2 Seeding

After scarification, the seed mix was applied at a rate of 75lbs/acre (**Table 5**). The specified seed mix was ERNMX-181-1 Native Steep Slope Mix with Grain Oats purchased from Ernst Seeds (**Appendix 7**). Initially, the seed mix was applied using a broadcast seeder, however this method was found to be inefficient due to constant clogs in the hopper. Hand seeding became the preferred method and was performed on all four cover areas. To achieve uniformity across the entire plot, seed was cast in two directions. The seeded areas were not tracked due to concerns about excess soil compaction caused by the aggressive tire tread on the tractor.

Table 5. Seed Application

Site	Acres	Application Rate	Approximate Seed Applied (lbs)
EL-22	2.40	75lbs/acre	180
EL-23	0.42	75lbs/acre	35
WL-20A	0.32	75lbs/acre	25
WL-23	0.66	75lbs/acre	60

5.2 Proposed Adaptive Measures

The following **Table 6** presents observations recorded during the 2019 agronomic cover system monitoring effort and the associated adaptive measures proposed for 2020.

Table 6. Proposed Adaptive Measures

Observation	Adaptive Measure
Agronomic cover area WL-22A did not meet the required 75% vegetative cover target	Hand rake to remove excess mulch and expose underlying soil. Hand seed or allow to revegetate naturally.
FRD Agronomic Cover areas that received corrective actions in May of 2019 had not met the 75% vegetative cover requirement at the time of monitoring.	Allow another full growing season to allow vegetation to establish then reassess.

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TABLES

Table 7. Transect Start Coordinates and Bearings

Former East Landfill				Former West Landfill			
Transect	Latitude	Longitude	Bearing	Transect	Latitude	Longitude	Bearing
EL-1-T1	42.8038	-73.9758	264°	WL-1-T1	42.8096	-73.9757	138°
EL-2-T1	42.8037	-73.9752	246°	WL-2-T1	42.8059	-73.9786	308°
EL-3-T1	42.804	-73.9767	78°	WL-3-T1	42.8058	-73.9809	14°
EL-5-T1	42.8034	-73.9744	114°	WL-4-T1	42.8063	-73.9811	14°
EL-5-T2	42.8035	-73.9744	302°	WL-5-T1	42.807	-73.981	320°
EL-6-T1	42.8086	-73.9719	302°	WL-6-T1	42.8073	-73.9811	295°
EL-6-T2	42.8084	-73.9712	134°	WL-7-T1	42.8077	-73.9813	244°
EL-7A-T1	42.8041	-73.9764	36°	WL-8-T1	42.8058	-73.9805	286°
EL-7A-T2	42.8044	-73.9759	72°	WL-9-T1	42.8063	-73.979	302°
EL-7B-T1	42.8041	-73.9771	79°	WL-9-T2	42.8063	-73.9783	3°
EL-7B-T2	42.804	-73.9771	129°	WL-9-T3	42.806	-73.9784	280°
EL-8-T1	42.8039	-73.9764	174°	WL-10-T1	42.8055	-73.9775	354°
EL-9-T1	42.8068	-73.9751	139°	WL-10-T2	42.8059	-73.9776	22°
EL-10-T1	42.8037	-73.974	98°	WL-10-T3	42.8062	-73.9773	49°
EL-10-T2	42.804	-73.9742	302°	WL-11A-T1	42.81	-73.9762	292°
EL-11-T1	42.8078	-73.9739	302°	WL-11B-T1	42.8099	-73.9758	329°
EL-12-T1	42.8066	-73.974	12°	WL-12/13-T1	42.8077	-73.9786	78°
EL-13-T1	42.8081	-73.9732	287°	WL-12/13-T2	42.8071	-73.9786	98°
EL-13-T2	42.8078	-73.9731	92°	WL-12/13-T3	42.8074	-73.9782	84°
EL-14A-T1	42.8083	-73.9715	140°	WL-14-T1	42.8097	-73.9746	34°
EL-14B-T2	42.8076	-73.9718	34°	WL-14-T2	42.81	-73.9745	311°
EL-15-T1	42.8087	-73.9726	164°	WL-14B-T1	42.8098	-73.9748	44°
EL-16-T1	42.8053	-73.9767	94°	WL-14C-T1	42.8101	-73.975	68°
EL-17-T1	42.8048	-73.9733	47°	WL-15C-T1	42.8097	-73.9766	228°
EL-18A/B-T1	42.8045	-73.9733	276°	WL-15D-T1	42.8097	-73.9762	312°
EL-18A/B-T2	42.8046	-73.9744	294°	WL-16-T1	42.8062	-73.9794	136°
EL-25-T1	42.8063	-73.9741	288°	WL-17-T1	42.8059	-73.9795	344°
EL-26-T1	42.8046	-73.9725	216°	WL-17-T2	42.8058	-73.979	80°
EL-26-T2	42.8048	-73.9729	338°	WL-18-T1	42.8088	-73.975	236°
SEEP-8 T-1	42.809	-73.9713	154°	WL-18-T2	42.8074	-73.976	218°
				WL-18-T3	42.8055	-73.9772	232°
				WL-19A-T1	42.8082	-73.978	196°
				WL-20-T1	42.805	-73.9779	304°
				WL-21-T1	42.808	-73.9765	322°
				WL-22-T1	42.8064	-73.9795	36°
Total East Landfill Transects: 30				Total West Landfill Transects: 35			

All transects are 50 feet long.

Coordinates are provided in decimal degrees (WGS 1984)

Bearings are in reference to magnetic north. Bearings also represent direction of photograph.

Table 8. Former East Landfill Vegetative Cover Summary

Area	Transect	Herbaceous % Cover	Woody % Cover	Total Relative % Cover
Historic Agronomic Cover				
EL-1	T1	60	85	100
EL-2	T1	100	80	100
EL-3	T1	100	10	100
EL-5	T1	95	80	100
	T2	70	85	100
EL-6	T1	70	100	100
	T2	100	40	100
EL-7A	T1	90	60	100
	T2	90	20	90
EL-7B	T1	100	5	100
	T2	85	80	100
EL-8	T1	100	60	100
EL-9	T1	100	5	100
EL-10	T1	70	85	100
	T2	85	80	95
EL-11	T1	100	10	100
EL-12	T1	100	5	100
EL-13	T1	100	30	100
	T2	100	85	100
EL-14A	T1	90	85	100
EL-14B	T2	100	85	100
EL-15	T1	100	40	100
EL-16	T1	80	70	100
EL-17	T1	10	100	100
EL-18A/B	T1	95	80	100
	T2	95	80	100
EL-25	T1	100	10	100
EL-26	T1	100	60	100
	T2	100	0	100
Seep-8	T1	100	10	100
FRD Agronomic Cover				
EL-S8	--	100	20	100
EL-10A	--	85	85	95
EL-15A	--	100	0	100
EL-18B	--	100	50	100
EL-19A	--	100	30	100
EL-20 (WEST)	--	100	20	100
EL-20 (EAST)	--	100	20	100
EL-21 (WEST)	--	90	50	100
EL-21 (EAST)	--	100	40	100
EL-22	--	50	50	50
EL-22A	--	100	20	100
EL-22B	--	100	60	100
EL-23	--	65	10	65

Table 9. Former West Landfill Vegetative Cover Summary

Area	Transect	Herbaceous % Cover	Woody % Cover	Total Relative % Cover
Historic Agronomic Cover				
WL-1	T1	95	50	100
WL-2	T1	100	50	100
WL-3	T1	100	5	100
WL-4	T1	100	80	100
WL-5	T1	80	80	100
WL-6	T1	95	60	100
WL-7	T1	100	60	100
WL-8	T1	100	30	100
WL-9	T1	100	30	100
	T2	100	80	100
	T3	100	10	100
WL-10	T1	100	100	100
	T2	100	40	100
	T3	100	20	100
WL-11A	T1	100	30	100
WL-11B	T1	100	80	100
WL-12/13	T1	95	60	100
	T2	100	80	100
	T3	100	5	100
WL-14	T1	85	80	90
	T2	85	90	100
WL-14B	T1	90	75	100
WL-14C	T1	100	50	100
WL-15C	T1	100	85	100
WL-15D	T1	90	60	100
WL-16	T1	80	80	80
WL-17	T1	100	60	100
	T2	100	0	100
WL-18	T1	100	0	100
	T2	100	5	100
	T3	100	5	100
WL-19A	T1	85	50	100
WL-20	T1	100	60	100
WL-21	T1	100	30	100
WL-22	T1	100	10	100
FRD Agronomic Cover				
WL-20A	--	60	30	60
WL-22A	--	50	50	50
WL-23	--	50	30	50

FIGURE 1

**HISTORIC AGRONOMIC COVER PHOTOGRAPH MONITORING
LOCATIONS**



LEGEND

 PHOTOGRAPH LOCATION

Notes

- Background aerial photography collected by Ramboll on 8/19/2019
- Photo number corresponds to number in Historic Agronomic Cover Photograph Log



**AGRONOMIC COVER
OPERATIONS, MONITORING, AND
MAINTENANCE
2019 ANNUAL REPORT
HISTORIC AGRONOMIC COVER
PHOTOGRAPH MONITORING LOCATIONS**

General Electric Company, Main Plant
1 River Road
Schenectady, NY 12345

FIGURE 01



FIGURE 2

**FRD AGRONOMIC COVER AREAS AND PHOTOGRAPH MONITORING
LOCATIONS**



LEGEND

PHOTOGRAPH LOCATION

FRD AGRONOMIC COVER AREA

NO CORRECTIVE ACTIONS

CORRECTIVE ACTIONS OCCURRED IN 2019

Notes

- Background aerial photography collected by Ramboll on 8/19/2019
- Photo number corresponds to number in FRD Agronomic Cover Photograph Log



**AGRONOMIC COVER
OPERATIONS, MONITORING, AND
MAINTENANCE
2019 ANNUAL REPORT
FRD AGRONOMIC COVER AREAS AND
PHOTOGRAPH MONITORING LOCATIONS**

General Electric Company, Main Plant
1 River Road
Schenectady, NY 12345


FIGURE 02




APPENDIX 1

PHOTOGRAPH LOG – AERIAL PHOTOGRAPHY MONITORING


Photograph Log – Aerial Photography Monitoring


Client Name: General Electric		Site Location: General Electric Main Plant, Schenectady, New York	Project No. 612 71538
Photo No. 1	Date: 8/19/19		
Description DJI Phantom 4 Pro multi-rotor UAV at take-off/landing zone.			

Client Name: General Electric		Site Location: General Electric Main Plant, Schenectady, New York	Project No. 612 71538
Photo No. 2	Date: 8/19/19		
Description DJI Phantom 4 Pro multi-rotor UAV taking off.			

Client Name: General Electric		Site Location: General Electric Main Plant, Schenectady, New York	Project No. 612 71538
Photo No. 3	Date: 8/19/19		
Description Wetland and agronomic cover area WL-23 at western boundary of the Site. Corrective actions to establish vegetation at WL-23 occurred between May 28 and May 30, 2019.			
Client Name: General Electric		Site Location: General Electric Main Plant, Schenectady, New York	Project No. 612 71538
Photo No. 4	Date: 8/19/19		
Description Wetland and agronomic cover established on the Former West Landfill. General Electric's Main Plant is visible in the distance.			

Client Name: General Electric		Site Location: General Electric Main Plant, Schenectady, New York	Project No. 612 71538
Photo No. 5	Date: 8/19/19		
Description Agronomic cover area WL-20A. Corrective actions to establish vegetation at WL-20A occurred between May 28 and May 30, 2019.			
Client Name: General Electric		Site Location: General Electric Main Plant, Schenectady, New York	Project No. 612 71538
Photo No. 6	Date: 8/19/19		
Description Agronomic cover established on the Former East Landfill. The Poentic Kill is visible toward the left-center of the photograph. A portion of the Main Plant is visible in the distance.			

Client Name: General Electric		Site Location: General Electric Main Plant, Schenectady, New York	Project No. 612 71538
Photo No. 7	Date: 8/19/19		
Description Agronomic cover area EL-22. Corrective actions to establish vegetation at EL-22 occurred between May 28 and May 30, 2019.			


Client Name: General Electric		Site Location: General Electric Main Plant, Schenectady, New York	Project No. 612 71538
Photo No. 8	Date: 8/19/19		
Description Seep Collection System to the east of the Poentic Kill. Areas disturbed as part of collection system construction are fully vegetated.			


Client Name: General Electric		Site Location: General Electric Main Plant, Schenectady, New York	Project No. 612 71538
Photo No. 9	Date: 8/19/19		
Description Agronomic cover area EL-23. Corrective actions to establish vegetation at EL-23 occurred between May 28 and May 30, 2019.			
Client Name: General Electric		Site Location: General Electric Main Plant, Schenectady, New York	Project No. 612 71538
Photo No. 10	Date: 8/19/19		
Description Agronomic cover established on the Former East Landfill.			

APPENDIX 2

PHOTOGRAPH LOG – HISTORIC AGRONOMIC COVER


Photograph Log – Historic Agronomic Cover Plots

Client Name: General Electric		Site Location: General Electric Main Plant, Schenectady, New York	Project No. 612 71538
Photo No. 1	Date: 9/20/19		
Description EL-1-T1			

Client Name: General Electric		Site Location: General Electric Main Plant, Schenectady, New York	Project No. 612 71538
Photo No. 2	Date: 9/20/19		
Description EL-2-T1			

Client Name: General Electric		Site Location: General Electric Main Plant, Schenectady, New York	Project No. 612 71538
Photo No. 3	Date: 9/20/19		
Description EL-3-T1			

Client Name: General Electric		Site Location: General Electric Main Plant, Schenectady, New York	Project No. 612 71538
Photo No. 4	Date: 9/20/19		
Description EL-5-T1			

Client Name: General Electric		Site Location: General Electric Main Plant, Schenectady, New York	Project No. 612 71538
Photo No. 5	Date: 9/20/19		
Description EL-5-T2			

Client Name: General Electric		Site Location: General Electric Main Plant, Schenectady, New York	Project No. 612 71538
Photo No. 6	Date: 9/20/19		
Description EL-6-T1			

Client Name: General Electric		Site Location: General Electric Main Plant, Schenectady, New York	Project No. 612 71538
Photo No. 7	Date: 9/20/19		
Description EL-6-T2			

Client Name: General Electric		Site Location: General Electric Main Plant, Schenectady, New York	Project No. 612 71538
Photo No. 8	Date: 9/20/19		
Description EL-7A-T1			

Client Name: General Electric		Site Location: General Electric Main Plant, Schenectady, New York	Project No. 612 71538
Photo No. 9	Date: 9/20/19		
Description EL-7A-T2			

Client Name: General Electric		Site Location: General Electric Main Plant, Schenectady, New York	Project No. 612 71538
Photo No. 10	Date: 9/20/19		
Description EL-7B-T1			

Client Name: General Electric		Site Location: General Electric Main Plant, Schenectady, New York	Project No. 612 71538
Photo No. 11	Date: 9/20/19		
Description EL-7B-T2			

Client Name: General Electric		Site Location: General Electric Main Plant, Schenectady, New York	Project No. 612 71538
Photo No. 12	Date: 9/20/19		
Description EL-8-T1			

Client Name: General Electric		Site Location: General Electric Main Plant, Schenectady, New York	Project No. 612 71538
Photo No. 13	Date: 9/20/19		
Description EL-9-T1			

Client Name: General Electric		Site Location: General Electric Main Plant, Schenectady, New York	Project No. 612 71538
Photo No. 14	Date: 9/20/19		
Description EL-10-T1			

Client Name: General Electric		Site Location: General Electric Main Plant, Schenectady, New York	Project No. 612 71538
Photo No. 15	Date: 9/20/19		
Description EL-10-T2			
Client Name: General Electric		Site Location: General Electric Main Plant, Schenectady, New York	Project No. 612 71538
Photo No. 16	Date: 9/20/19		
Description EL-11-T1			

Client Name: General Electric		Site Location: General Electric Main Plant, Schenectady, New York	Project No. 612 71538
Photo No. 17	Date: 9/20/19		
Description EL-12-T1			

Client Name: General Electric		Site Location: General Electric Main Plant, Schenectady, New York	Project No. 612 71538
Photo No. 18	Date: 9/20/19		
Description EL-13-T1			

Client Name: General Electric		Site Location: General Electric Main Plant, Schenectady, New York	Project No. 612 71538
Photo No. 19	Date: 9/20/19		
Description EL-13-T2			

Client Name: General Electric		Site Location: General Electric Main Plant, Schenectady, New York	Project No. 612 71538
Photo No. 20	Date: 9/20/19		
Description EL-14A-T1			

Client Name: General Electric		Site Location: General Electric Main Plant, Schenectady, New York	Project No. 612 71538
Photo No. 21	Date: 9/20/19		
Description EL-14B-T2			

Client Name: General Electric		Site Location: General Electric Main Plant, Schenectady, New York	Project No. 612 71538
Photo No. 22	Date: 9/20/19		
Description EL-15-T1			

Client Name: General Electric		Site Location: General Electric Main Plant, Schenectady, New York	Project No. 612 71538
Photo No. 23	Date: 9/20/19		
Description EL-16-T1			


Client Name: General Electric		Site Location: General Electric Main Plant, Schenectady, New York	Project No. 612 71538
Photo No. 24	Date: 9/20/19		
Description EL-17-T1			


Client Name: General Electric		Site Location: General Electric Main Plant, Schenectady, New York	Project No. 612 71538
Photo No. 25	Date: 9/20/19		
Description EL-18A/B-T1			

Client Name: General Electric		Site Location: General Electric Main Plant, Schenectady, New York	Project No. 612 71538
Photo No. 26	Date: 9/20/19		
Description EL-18A/B-T2			

Client Name: General Electric		Site Location: General Electric Main Plant, Schenectady, New York	Project No. 612 71538
Photo No. 27	Date: 9/20/19		
Description EL-25-T1			

Client Name: General Electric		Site Location: General Electric Main Plant, Schenectady, New York	Project No. 612 71538
Photo No. 28	Date: 9/20/19		
Description EL-26-T1			

Client Name: General Electric		Site Location: General Electric Main Plant, Schenectady, New York	Project No. 612 71538
Photo No. 29	Date: 9/20/19		
Description EL-26-T2			


Client Name: General Electric		Site Location: General Electric Main Plant, Schenectady, New York	Project No. 612 71538
Photo No. 30	Date: 9/20/19		
Description Seep-8-T1			


Client Name: General Electric		Site Location: General Electric Main Plant, Schenectady, New York	Project No. 612 71538
Photo No. 31	Date: 9/20/19		
Description WL-1-T1			

Client Name: General Electric		Site Location: General Electric Main Plant, Schenectady, New York	Project No. 612 71538
Photo No. 32	Date: 9/20/19		
Description WL-2-T1			

Client Name: General Electric		Site Location: General Electric Main Plant, Schenectady, New York	Project No. 612 71538
Photo No. 33	Date: 9/20/19		
Description WL-3-T1			

Client Name: General Electric		Site Location: General Electric Main Plant, Schenectady, New York	Project No. 612 71538
Photo No. 34	Date: 9/20/19		
Description WL-4-T1			

Client Name: General Electric		Site Location: General Electric Main Plant, Schenectady, New York	Project No. 612 71538
Photo No. 35	Date: 9/20/19		
Description WL-5-T1			


Client Name: General Electric		Site Location: General Electric Main Plant, Schenectady, New York	Project No. 612 71538
Photo No. 36	Date: 9/20/19		
Description WL-6-T1			


Client Name: General Electric		Site Location: General Electric Main Plant, Schenectady, New York	Project No. 612 71538
Photo No. 37	Date: 9/20/19		
Description WL-7-T1			

Client Name: General Electric		Site Location: General Electric Main Plant, Schenectady, New York	Project No. 612 71538
Photo No. 38	Date: 9/20/19		
Description WL-8-T1			

Client Name: General Electric		Site Location: General Electric Main Plant, Schenectady, New York	Project No. 612 71538
Photo No. 39	Date: 9/20/19		
Description WL-9-T1			

Client Name: General Electric		Site Location: General Electric Main Plant, Schenectady, New York	Project No. 612 71538
Photo No. 40	Date: 9/20/19		
Description WL-9-T2			

Client Name: General Electric		Site Location: General Electric Main Plant, Schenectady, New York	Project No. 612 71538
Photo No. 41	Date: 9/20/19		
Description WL-9-T3			

Client Name: General Electric		Site Location: General Electric Main Plant, Schenectady, New York	Project No. 612 71538
Photo No. 42	Date: 9/20/19		
Description WL-10-T1			

Client Name: General Electric		Site Location: General Electric Main Plant, Schenectady, New York	Project No. 612 71538
Photo No. 43	Date: 9/20/19		
Description WL-10-T2			

Client Name: General Electric		Site Location: General Electric Main Plant, Schenectady, New York	Project No. 612 71538
Photo No. 44	Date: 9/20/19		
Description WL-10-T3			

Client Name: General Electric		Site Location: General Electric Main Plant, Schenectady, New York	Project No. 612 71538
Photo No. 45	Date: 9/20/19		
Description WL-11A-T1			

Client Name: General Electric		Site Location: General Electric Main Plant, Schenectady, New York	Project No. 612 71538
Photo No. 46	Date: 9/20/19		
Description WL-11B-T1			


Client Name: General Electric		Site Location: General Electric Main Plant, Schenectady, New York	Project No. 612 71538
Photo No. 47	Date: 9/20/19		
Description WL-12/13-T1			

Client Name: General Electric		Site Location: General Electric Main Plant, Schenectady, New York	Project No. 612 71538
Photo No. 48	Date: 9/20/19		
Description WL-12/13-T2			

Client Name: General Electric		Site Location: General Electric Main Plant, Schenectady, New York	Project No. 612 71538
Photo No. 49	Date: 9/20/19		
Description WL-12/13-T3			

Client Name: General Electric		Site Location: General Electric Main Plant, Schenectady, New York	Project No. 612 71538
Photo No. 50	Date: 9/20/19		
Description WL-14-T1			


Client Name: General Electric		Site Location: General Electric Main Plant, Schenectady, New York	Project No. 612 71538
Photo No. 51	Date: 9/20/19		
Description WL-14-T2			

Client Name: General Electric		Site Location: General Electric Main Plant, Schenectady, New York	Project No. 612 71538
Photo No. 52	Date: 9/20/19		
Description WL-14B-T1			

Client Name: General Electric		Site Location: General Electric Main Plant, Schenectady, New York	Project No. 612 71538
Photo No. 53	Date: 9/20/19		
Description WL-14C-T1			

Client Name: General Electric		Site Location: General Electric Main Plant, Schenectady, New York	Project No. 612 71538
Photo No. 54	Date: 9/20/19		
Description WL-15C-T1			

Client Name: General Electric		Site Location: General Electric Main Plant, Schenectady, New York	Project No. 612 71538
Photo No. 55	Date: 9/20/19		
Description WL-15D-T1			

Client Name: General Electric		Site Location: General Electric Main Plant, Schenectady, New York	Project No. 612 71538
Photo No. 56	Date: 9/20/19		
Description WL-16-T1			

Client Name: General Electric		Site Location: General Electric Main Plant, Schenectady, New York	Project No. 612 71538
Photo No. 57	Date: 9/20/19		
Description WL-17-T1			

Client Name: General Electric		Site Location: General Electric Main Plant, Schenectady, New York	Project No. 612 71538
Photo No. 58	Date: 9/20/19		
Description WL-17-T2			

Client Name: General Electric		Site Location: General Electric Main Plant, Schenectady, New York	Project No. 612 71538
Photo No. 59	Date: 9/20/19		
Description WL-18-T1			

Client Name: General Electric		Site Location: General Electric Main Plant, Schenectady, New York	Project No. 612 71538
Photo No. 60	Date: 9/20/19		
Description WL-18-T2			

Client Name: General Electric		Site Location: General Electric Main Plant, Schenectady, New York	Project No. 612 71538
Photo No. 61	Date: 9/20/19		
Description WL-18-T3			

Client Name: General Electric		Site Location: General Electric Main Plant, Schenectady, New York	Project No. 612 71538
Photo No. 62	Date: 9/20/19		
Description WL-19A-T1			

Client Name: General Electric		Site Location: General Electric Main Plant, Schenectady, New York	Project No. 612 71538
Photo No. 63	Date: 9/20/19		
Description WL-20-T1			


Client Name: General Electric		Site Location: General Electric Main Plant, Schenectady, New York	Project No. 612 71538
Photo No. 64	Date: 9/20/19		
Description WL-21-T1			


Client Name: General Electric		Site Location: General Electric Main Plant, Schenectady, New York	Project No. 612 71538
Photo No. 65	Date: 9/20/19		
Description WL-22-T1			

Client Name: General Electric		Site Location: General Electric Main Plant, Schenectady, New York	Project No. 612 71538
Photo No. 66	Date: 9/20/19		
Description Seep 1 vegetated rip-rap revetment (west).			

Client Name: General Electric		Site Location: General Electric Main Plant, Schenectady, New York	Project No. 612 71538
Photo No. 67	Date: 9/20/19		
Description Seep 1 vegetated rip-rap revetment (north).			

Client Name: General Electric		Site Location: General Electric Main Plant, Schenectady, New York	Project No. 612 71538
Photo No. 68	Date: 9/20/19		
Description Seep 5 vegetated rip-rap revetment.			

Client Name: General Electric		Site Location: General Electric Main Plant, Schenectady, New York	Project No. 612 71538
Photo No. 69	Date: 9/20/19		
Description Seep 6 vegetated rip-rap revetment.			

Client Name: General Electric		Site Location: General Electric Main Plant, Schenectady, New York	Project No. 612 71538
Photo No. 70	Date: 9/20/19		
Description Seep 8 vegetated rip-rap revetment.			


APPENDIX 3


PHOTOGRAPH LOG – FRD AGRONOMIC COVER

Photograph Log – FRD Agronomic Cover Plots

Client Name: General Electric		Site Location: General Electric Main Plant, Schenectady, New York	Project No. 612 71538
Photo No. 1	Date: 9/20/19		
Description EL-S8			

Client Name: General Electric		Site Location: General Electric Main Plant, Schenectady, New York	Project No. 612 71538
Photo No. 2	Date: 9/20/19		
Description EL-10A			

Client Name: General Electric		Site Location: General Electric Main Plant, Schenectady, New York	Project No. 612 71538
Photo No. 3	Date: 9/20/19		
Description EL-15A			



Client Name: General Electric		Site Location: General Electric Main Plant, Schenectady, New York	Project No. 612 71538
Photo No. 4	Date: 9/20/19		
Description EL-18B			

Client Name: General Electric		Site Location: General Electric Main Plant, Schenectady, New York	Project No. 612 71538
Photo No. 5	Date: 9/20/19		
Description EL-19A			

Client Name: General Electric		Site Location: General Electric Main Plant, Schenectady, New York	Project No. 612 71538
Photo No. 6	Date: 9/20/19		
Description EL-20 (west)			

Client Name: General Electric		Site Location: General Electric Main Plant, Schenectady, New York	Project No. 612 71538
Photo No. 7	Date: 9/20/19		
Description EL-20 (east)			


Client Name: General Electric		Site Location: General Electric Main Plant, Schenectady, New York	Project No. 612 71538
Photo No. 8	Date: 9/20/19		
Description EL-21 (west)			


Client Name: General Electric		Site Location: General Electric Main Plant, Schenectady, New York	Project No. 612 71538
Photo No. 9	Date: 9/20/19		
Description EL-21 (east)			
Client Name: General Electric		Site Location: General Electric Main Plant, Schenectady, New York	Project No. 612 71538
Photo No. 10	Date: 9/20/19		
Description EL-22 Corrective actions to establish vegetation occurred between May 28 and May 30, 2019.			

Client Name: General Electric		Site Location: General Electric Main Plant, Schenectady, New York	Project No. 612 71538
Photo No. 11	Date: 9/20/19		
Description EL-22A			

Client Name: General Electric		Site Location: General Electric Main Plant, Schenectady, New York	Project No. 612 71538
Photo No. 12	Date: 9/20/19		
Description EL-22B			

Client Name: General Electric		Site Location: General Electric Main Plant, Schenectady, New York	Project No. 612 71538
Photo No. 13	Date: 9/20/19		
Description EL-23 Corrective actions to establish vegetation occurred between May 28 and May 30, 2019.			
Client Name: General Electric		Site Location: General Electric Main Plant, Schenectady, New York	Project No. 612 71538
Photo No. 14	Date: 9/20/19		
Description WL-20A Corrective actions to establish vegetation occurred between May 28 and May 30, 2019.			

Client Name: General Electric		Site Location: General Electric Main Plant, Schenectady, New York	Project No. 612 71538
Photo No. 15	Date: 9/20/19		
Description WL-22A			

Client Name: General Electric		Site Location: General Electric Main Plant, Schenectady, New York	Project No. 612 71538
Photo No. 16	Date: 9/20/19		
Description WL-23 Corrective actions to establish vegetation occurred between May 28 and May 30, 2019.			

APPENDIX 4

PHOTOGRAPH LOG – 2019 CORRECTIVE ACTIONS

Photograph Log – 2019 Corrective Actions

Client Name: General Electric		Site Location: General Electric Main Plant, Schenectady, New York	Project No. 612 71538
Photo No. 1	Date: 5/28/19		
Description EL-22 prior to scarification. Poor vegetative establishment.			
Client Name: General Electric		Site Location: General Electric Main Plant, Schenectady, New York	Project No. 612 71538
Photo No. 2	Date: 5/28/19		
Description EL-22 after scarification.			

Client Name: General Electric		Site Location: General Electric Main Plant, Schenectady, New York	Project No. 612 71538
Photo No. 3	Date: 5/28/19		
Description EL-23 prior to scarification. Poor vegetative establishment.			


Client Name: General Electric		Site Location: General Electric Main Plant, Schenectady, New York	Project No. 612 71538
Photo No. 4	Date: 5/28/19		
Description EL-23 after scarification.			


Client Name: General Electric		Site Location: General Electric Main Plant, Schenectady, New York	Project No. 612 71538
Photo No. 5	Date: 5/28/19		
Description WL-20A prior to scarification. Poor vegetative establishment.			

Client Name: General Electric		Site Location: General Electric Main Plant, Schenectady, New York	Project No. 612 71538
Photo No. 6	Date: 5/28/19		
Description WL-20A after scarification.			

Client Name: General Electric		Site Location: General Electric Main Plant, Schenectady, New York	Project No. 612 71538
Photo No. 7	Date: 5/28/19		
Description WL-23 prior to scarification. Poor vegetative establishment.			

Client Name: General Electric		Site Location: General Electric Main Plant, Schenectady, New York	Project No. 612 71538
Photo No. 8	Date: 5/28/19		
Description WL-23 after scarification. Slope adjacent to wetland was raked by hand.			

Client Name: General Electric		Site Location: General Electric Main Plant, Schenectady, New York	Project No. 612 71538
Photo No. 9	Date: 5/28/19		
Description 60-horsepower tractor equipped with 8-ft landscape rake.			

Client Name: General Electric		Site Location: General Electric Main Plant, Schenectady, New York	Project No. 612 71538
Photo No. 10	Date: 5/28/19		
Description Tractor with rake in action.			

APPENDIX 5

FIELD DATA FORMS – HISTORIC AGRONOMIC COVER

AGRONOMIC COVER MONITORING DATA FORM

DATE: September 20, 2019
INSPECTOR: D. Rockefeller
PROJECT AREA: Historic Agronomic Cover Areas

EL-1-T1	
% VEGETATION COVER	Herbaceous <u>60</u> % Woody <u>85</u> % Total Relative <u>100</u> %
DOMINANT HERBACEOUS SPECIES	White snakeroot (<i>Ageratina altissima</i>)
	Virginia creeper (<i>Parthenocissus quinquefolia</i>)
	Mugwort (<i>Artemisia vulgaris</i>)
	Oriental bittersweet (<i>Celastrus orbiculatus</i>)
DOMINANT WOODY SPECIES	Black walnut (<i>Juglans nigra</i>)
	Green ash (<i>Fraxinus pensylvanica</i>)
	Morrow's honeysuckle (<i>Lonicera morrowii</i>)
CORRECTIVE ACTIONS	Recommended: ____ Yes <u>X</u> No
	Description:
ADDITIONAL NOTES	

EL-2-T1	
% VEGETATION COVER	Herbaceous <u>100</u> % Woody <u>80</u> % Total Relative <u>100</u> %
DOMINANT HERBACEOUS SPECIES	White snakeroot (<i>Ageratina altissima</i>)
	Oriental bittersweet (<i>Celastrus orbiculatus</i>)
	Clearweed (<i>Pilea pumila</i>)
	Garlic mustard (<i>Alliaria petiolata</i>)
DOMINANT WOODY SPECIES	Black walnut (<i>Juglans nigra</i>)
	Hybrid poplar (<i>Populus x</i>)
	Common buckthorn (<i>Rhamnus cathartica</i>)
CORRECTIVE ACTIONS	Recommended: ____ Yes <u>X</u> No
	Description:
ADDITIONAL NOTES	

AGRONOMIC COVER MONITORING DATA FORM

DATE: September 20, 2019
INSPECTOR: D. Rockefeller
PROJECT AREA: Historic Agronomic Cover Areas

EL-3-T1	
% VEGETATION COVER	Herbaceous <u>100</u> % Woody <u>10</u> % Total Relative <u>100</u> %
DOMINANT HERBACEOUS SPECIES	Mugwort (<i>Artemesia vulgaris</i>)
	White snakeroot (<i>Ageratina altissima</i>)
	Oriental bittersweet (<i>Celastrus orbiculatus</i>)
	Cleavers (<i>Galium aparine</i>)
DOMINANT WOODY SPECIES	Common buckthorn (<i>Rhamnus cathartica</i>)
	Hybrid poplar (<i>Populus x</i>)
CORRECTIVE ACTIONS	Recommended: ____ Yes <u>X</u> No
	Description:
ADDITIONAL NOTES	Poplars appear in poor health – crown is diminished.

EL-5-T1	
% VEGETATION COVER	Herbaceous <u>95</u> % Woody <u>80</u> % Total Relative <u>100</u> %
DOMINANT HERBACEOUS SPECIES	Clearweed (<i>Pilea pumila</i>)
	Mugwort (<i>Artemesia vulgaris</i>)
	White snakeroot (<i>Ageratina altissima</i>)
DOMINANT WOODY SPECIES	Hybrid willow (<i>Salix x</i>)
	Black locust (<i>Robinia pseudoacacia</i>)
	Hybrid poplar (<i>Populus x</i>)
CORRECTIVE ACTIONS	Recommended: ____ Yes <u>X</u> No
	Description:
ADDITIONAL NOTES	

AGRONOMIC COVER MONITORING DATA FORM

DATE: September 20, 2019
INSPECTOR: D. Rockefeller
PROJECT AREA: Historic Agronomic Cover Areas

EL-5-T2	
% VEGETATION COVER	Herbaceous <u>70</u> % Woody <u>85</u> % Total Relative <u>100</u> %
DOMINANT HERBACEOUS SPECIES	White snakeroot (<i>Ageratina altissima</i>)
	Mugwort (<i>Artemisia vulgaris</i>)
	Oriental bittersweet (<i>Celastrus orbiculatus</i>)
DOMINANT WOODY SPECIES	Hybrid willow (<i>Salix x</i>)
	Black locust (<i>Robinia pseudoacacia</i>)
	Hybrid poplar (<i>Populus x</i>)
CORRECTIVE ACTIONS	Recommended: <u> </u> Yes <u> X </u> No
	Description:
ADDITIONAL NOTES	

EL-6-T1	
% VEGETATION COVER	Herbaceous <u>70</u> % Woody <u>100</u> % Total Relative <u>100</u> %
DOMINANT HERBACEOUS SPECIES	White snakeroot (<i>Ageratina altissima</i>)
	Smooth goldenrod (<i>Solidago gigantea</i>)
	Oriental bittersweet (<i>Celastrus orbiculatus</i>)
DOMINANT WOODY SPECIES	Morrow's honeysuckle (<i>Lonicera morrowii</i>)
	Staghorn sumac (<i>Rhus typhina</i>)
CORRECTIVE ACTIONS	Recommended: <u> </u> Yes <u> X </u> No
	Description:
ADDITIONAL NOTES	

AGRONOMIC COVER MONITORING DATA FORM

DATE: September 20, 2019
INSPECTOR: D. Rockefeller
PROJECT AREA: Historic Agronomic Cover Areas

EL-6-T2	
% VEGETATION COVER	Herbaceous <u>100</u> % Woody <u>40</u> % Total Relative <u>100</u> %
DOMINANT HERBACEOUS SPECIES	Mugwort (<i>Artemisia vulgaris</i>)
	Red fescue (<i>Festuca rubra</i>)
	Canada goldenrod (<i>Solidago canadensis</i>)
DOMINANT WOODY SPECIES	Hybrid willow (<i>Salix x</i>)
	Hybrid poplar (<i>Populus x</i>)
CORRECTIVE ACTIONS	Recommended: <u> </u> Yes <u> X </u> No
	Description:
ADDITIONAL NOTES	

EL-7A-T1	
% VEGETATION COVER	Herbaceous <u>90</u> % Woody <u>60</u> % Total Relative <u>100</u> %
DOMINANT HERBACEOUS SPECIES	Mugwort (<i>Artemisia vulgaris</i>)
	Oriental bittersweet (<i>Celastrus orbiculatus</i>)
	Smooth goldenrod (<i>Solidago gigantea</i>)
	Virginia creeper (<i>Parthenocissus quinquefolia</i>)
DOMINANT WOODY SPECIES	Hybrid poplar (<i>Populus x</i>)
CORRECTIVE ACTIONS	Recommended: <u> </u> Yes <u> X </u> No
	Description:
ADDITIONAL NOTES	

AGRONOMIC COVER MONITORING DATA FORM

DATE: September 20, 2019
INSPECTOR: D. Rockefeller
PROJECT AREA: Historic Agronomic Cover Areas

EL-7A-T2	
% VEGETATION COVER	Herbaceous <u>90</u> % Woody <u>20</u> % Total Relative <u>90</u> %
DOMINANT HERBACEOUS SPECIES	Tall goldenrod (<i>Solidago altissima</i>)
	White snakeroot (<i>Ageratina altissima</i>)
	Common reed (<i>Phragmites australis</i>)
	Cleavers (<i>Galium aparine</i>)
DOMINANT WOODY SPECIES	Black locust (<i>Robinia pseudoacacia</i>)
	Hybrid poplar (<i>Populus x</i>)
CORRECTIVE ACTIONS	Recommended: ____ Yes <u>X</u> No
	Description:
ADDITIONAL NOTES	

EL-7B-T1	
% VEGETATION COVER	Herbaceous <u>100</u> % Woody <u>5</u> % Total Relative <u>100</u> %
DOMINANT HERBACEOUS SPECIES	Mugwort (<i>Artemisia vulgaris</i>)
	White snakeroot (<i>Ageratina altissima</i>)
	Tall fescue (<i>Festuca arundinacea</i>)
DOMINANT WOODY SPECIES	Hybrid poplar (<i>Populus x</i>)
	Riverbank grape (<i>Vitis riparia</i>)
CORRECTIVE ACTIONS	Recommended: ____ Yes <u>X</u> No
	Description:
ADDITIONAL NOTES	Multiple dead standing poplars present at this location.

AGRONOMIC COVER MONITORING DATA FORM

DATE: September 20, 2019
INSPECTOR: D. Rockefeller
PROJECT AREA: Historic Agronomic Cover Areas

EL-7B-T2	
% VEGETATION COVER	Herbaceous <u>75</u> % Woody <u>80</u> % Total Relative <u>100</u> %
DOMINANT HERBACEOUS SPECIES	White snakeroot (<i>Ageratina altissima</i>)
	Blackberry (<i>Rubus pensilvanicus</i>)
	Virginia creeper (<i>Parthenocissus quinquefolia</i>)
	Oriental bittersweet (<i>Celastrus orbiculatus</i>)
DOMINANT WOODY SPECIES	Hybrid poplar (<i>Populus x</i>)
	Hybrid willow (<i>Salix x</i>)
CORRECTIVE ACTIONS	Recommended: <u> </u> Yes <u> X </u> No
	Description:
ADDITIONAL NOTES	

EL-8-T1	
% VEGETATION COVER	Herbaceous <u>100</u> % Woody <u>60</u> % Total Relative <u>100</u> %
DOMINANT HERBACEOUS SPECIES	Red fescue (<i>Festuca rubra</i>)
	Mugwort (<i>Artemisia vulgaris</i>)
DOMINANT WOODY SPECIES	Hybrid poplar (<i>Populus x</i>)
	Hybrid willow (<i>Salix x</i>)
CORRECTIVE ACTIONS	Recommended: <u> </u> Yes <u> X </u> No
	Description:
ADDITIONAL NOTES	

AGRONOMIC COVER MONITORING DATA FORM

DATE: September 20, 2019
INSPECTOR: D. Rockefeller
PROJECT AREA: Historic Agronomic Cover Areas

EL-9-T1	
% VEGETATION COVER	Herbaceous <u>100</u> % Woody <u>5</u> % Total Relative <u>100</u> %
DOMINANT HERBACEOUS SPECIES	Indiangrass (<i>Sorghastrum nutans</i>)
	Big Bluestem (<i>Andropogon gerardi</i>)
DOMINANT WOODY SPECIES	Black locust (<i>Robinia pseudoacacia</i>)
CORRECTIVE ACTIONS	Recommended: <u> </u> Yes <u> X </u> No
	Description:
ADDITIONAL NOTES	Black locust only at transect start. This location is an excellent example of a native tallgrass prairie community.

EL-10-T1	
% VEGETATION COVER	Herbaceous <u>70</u> % Woody <u>85</u> % Total Relative <u>100</u> %
DOMINANT HERBACEOUS SPECIES	Mugwort (<i>Artemisia vulgaris</i>)
	Clearweed (<i>Pilea pumila</i>)
	White snakeroot (<i>Ageratina altissima</i>)
DOMINANT WOODY SPECIES	Black locust (<i>Robinia pseudoacacia</i>)
	Hybrid poplar (<i>Populus x</i>)
	White mulberry (<i>Morus alba</i>)
CORRECTIVE ACTIONS	Recommended: <u> </u> Yes <u> X </u> No
	Description:
ADDITIONAL NOTES	

AGRONOMIC COVER MONITORING DATA FORM

DATE: September 20, 2019
INSPECTOR: D. Rockefeller
PROJECT AREA: Historic Agronomic Cover Areas

EL-10-T2

% VEGETATION COVER	Herbaceous <u>85</u> % Woody <u>80</u> % Total Relative <u>95</u> %
DOMINANT HERBACEOUS SPECIES	White snakeroot (<i>Ageratina altissima</i>)
	Smooth goldenrod (<i>Solidago gigantea</i>)
	Virginia creeper (<i>Parthenocissus quinquefolia</i>)
	Oriental bittersweet (<i>Celastrus orbiculatus</i>)
DOMINANT WOODY SPECIES	Black locust (<i>Robinia pseudoacacia</i>)
	Hybrid poplar (<i>Populus x</i>)
	White mulberry (<i>Morus alba</i>)
CORRECTIVE ACTIONS	Recommended: <u> </u> Yes <u> X </u> No
	Description:
ADDITIONAL NOTES	

EL-11-T1

% VEGETATION COVER	Herbaceous <u>100</u> % Woody <u>10</u> % Total Relative <u>100</u> %
DOMINANT HERBACEOUS SPECIES	Red fescue (<i>Festuca rubra</i>)
	Crown vetch (<i>Securigera varia</i>)
DOMINANT WOODY SPECIES	Autumn olive (<i>Elaeagnus umbellata</i>)
	Black locust (<i>Robinia pseudoacacia</i>)
CORRECTIVE ACTIONS	Recommended: <u> </u> Yes <u> X </u> No
	Description:
ADDITIONAL NOTES	

AGRONOMIC COVER MONITORING DATA FORM

DATE: September 20, 2019
INSPECTOR: D. Rockefeller
PROJECT AREA: Historic Agronomic Cover Areas

EL-12-T1	
% VEGETATION COVER	Herbaceous <u>100</u> % Woody <u>5</u> % Total Relative <u>100</u> %
DOMINANT HERBACEOUS SPECIES	Switchgrass (<i>Panicum virgatum</i>)
	Big bluestem (<i>Andropogon gerardi</i>)
DOMINANT WOODY SPECIES	Hybrid willow (<i>Salix x</i>)
CORRECTIVE ACTIONS	Recommended: <u> </u> Yes <u> X </u> No
	Description:
ADDITIONAL NOTES	

EL-13-T1	
% VEGETATION COVER	Herbaceous <u>100</u> % Woody <u>30</u> % Total Relative <u>100</u> %
DOMINANT HERBACEOUS SPECIES	Mugwort (<i>Artemisia vulgaris</i>)
	Big bluestem (<i>Andropogon gerardi</i>)
	Red fescue (<i>Festuca rubra</i>)
DOMINANT WOODY SPECIES	Black locust (<i>Robinia pseudoacacia</i>)
CORRECTIVE ACTIONS	Recommended: <u> </u> Yes <u> X </u> No
	Description:
ADDITIONAL NOTES	

AGRONOMIC COVER MONITORING DATA FORM

DATE: September 20, 2019
INSPECTOR: D. Rockefeller
PROJECT AREA: Historic Agronomic Cover Areas

EL-13-T2	
% VEGETATION COVER	Herbaceous <u>100</u> % Woody <u>85</u> % Total Relative <u>100</u> %
DOMINANT HERBACEOUS SPECIES	Red fescue (<i>Festuca rubra</i>)
	Mugwort (<i>Artemisia vulgaris</i>)
DOMINANT WOODY SPECIES	Black locust (<i>Robinia pseudoacacia</i>)
CORRECTIVE ACTIONS	Recommended: <u> </u> Yes <u> X </u> No
	Description:
ADDITIONAL NOTES	

EL-14A-T1	
% VEGETATION COVER	Herbaceous <u>90</u> % Woody <u>85</u> % Total Relative <u>100</u> %
DOMINANT HERBACEOUS SPECIES	Canada goldenrod (<i>Solidago canadensis</i>)
	Red fescue (<i>Festuca rubra</i>)
DOMINANT WOODY SPECIES	Hybrid poplar (<i>Populus x</i>)
CORRECTIVE ACTIONS	Recommended: <u> </u> Yes <u> X </u> No
	Description:
ADDITIONAL NOTES	

AGRONOMIC COVER MONITORING DATA FORM

DATE: September 20, 2019
INSPECTOR: D. Rockefeller
PROJECT AREA: Historic Agronomic Cover Areas

EL-14B-T2	
% VEGETATION COVER	Herbaceous <u>100</u> % Woody <u>85</u> % Total Relative <u>100</u> %
DOMINANT HERBACEOUS SPECIES	Mugwort (<i>Artemisia vulgaris</i>)
DOMINANT WOODY SPECIES	Black locust (<i>Robinia pseudoacacia</i>)
	Morrow's honeysuckle (<i>Lonicera morrowii</i>)
CORRECTIVE ACTIONS	Recommended: ____ Yes <u>X</u> No
	Description:
ADDITIONAL NOTES	

EL-15-T1	
% VEGETATION COVER	Herbaceous <u>100</u> % Woody <u>40</u> % Total Relative <u>100</u> %
DOMINANT HERBACEOUS SPECIES	Wild senna (<i>Senna hebecarpa</i>)
	Mugwort (<i>Artemisia vulgaris</i>)
	Smooth goldenrod (<i>Solidago gigantea</i>)
DOMINANT WOODY SPECIES	Black locust (<i>Robinia pseudoacacia</i>)
CORRECTIVE ACTIONS	Recommended: ____ Yes <u>X</u> No
	Description:
ADDITIONAL NOTES	

AGRONOMIC COVER MONITORING DATA FORM

DATE: September 20, 2019
INSPECTOR: D. Rockefeller
PROJECT AREA: Historic Agronomic Cover Areas

EL-16-T1	
% VEGETATION COVER	Herbaceous <u>80</u> % Woody <u>70</u> % Total Relative <u>100</u> %
DOMINANT HERBACEOUS SPECIES	False sunflower (<i>Heliopsis helianthoides</i>)
	Mugwort (<i>Artemisia vulgaris</i>)
DOMINANT WOODY SPECIES	Hybrid poplar (<i>Populus x</i>)
	Black cherry (<i>Prunus serotina</i>)
	Green ash (<i>Fraxinus pennsylvanica</i>)
CORRECTIVE ACTIONS	Recommended: <u> </u> Yes <u> X </u> No
	Description:
ADDITIONAL NOTES	

EL-17-T1	
% VEGETATION COVER	Herbaceous <u>10</u> % Woody <u>100</u> % Total Relative <u>100</u> %
DOMINANT HERBACEOUS SPECIES	Oriental bittersweet (<i>Celastrus orbiculatus</i>)
	Common buckthorn seedling (<i>Rhamnus cathartica</i>)
DOMINANT WOODY SPECIES	Common buckthorn (<i>Rhamnus cathartica</i>)
	Black locust (<i>Robinia pseudoacacia</i>)
CORRECTIVE ACTIONS	Recommended: <u> </u> Yes <u> X </u> No
	Description:
ADDITIONAL NOTES	Transect location differs from that of 2018 due to GPS accuracy. The 2019 location is correct.

AGRONOMIC COVER MONITORING DATA FORM

DATE: September 20, 2019
INSPECTOR: D. Rockefeller
PROJECT AREA: Historic Agronomic Cover Areas

EL-18A/B-T1	
% VEGETATION COVER	Herbaceous <u>95</u> % Woody <u>80</u> % Total Relative <u>100</u> %
DOMINANT HERBACEOUS SPECIES	Common reed (<i>Phragmites australis</i>)
	Mugwort (<i>Artemisia vulgaris</i>)
	Common ironweed (<i>Veronia fasciculata</i>)
DOMINANT WOODY SPECIES	Hybrid poplar (<i>Populus x</i>)
CORRECTIVE ACTIONS	Recommended: ____ Yes <u>X</u> No
	Description:
ADDITIONAL NOTES	

EL-18A/B-T2	
% VEGETATION COVER	Herbaceous <u>95</u> % Woody <u>80</u> % Total Relative <u>100</u> %
DOMINANT HERBACEOUS SPECIES	Common reed (<i>Phragmites australis</i>)
	Oriental bittersweet (<i>Celastrus orbiculatus</i>)
DOMINANT WOODY SPECIES	Hybrid poplar (<i>Populus x</i>)
	Black locust (<i>Robinia pseudoacacia</i>)
CORRECTIVE ACTIONS	Recommended: ____ Yes <u>X</u> No
	Description:
ADDITIONAL NOTES	

AGRONOMIC COVER MONITORING DATA FORM

DATE: September 20, 2019
INSPECTOR: D. Rockefeller
PROJECT AREA: Historic Agronomic Cover Areas

EL-25-T1	
% VEGETATION COVER	Herbaceous <u>100</u> % Woody <u>10</u> % Total Relative <u>100</u> %
DOMINANT HERBACEOUS SPECIES	Canada thistle (<i>Cirsium arvense</i>)
	Common reed (<i>Phragmites australis</i>)
	Crown vetch (<i>Securigera varia</i>)
DOMINANT WOODY SPECIES	Common buckthorn (<i>Rhamnus cathartica</i>)
CORRECTIVE ACTIONS	Recommended: ____ Yes <u>X</u> No
	Description:
ADDITIONAL NOTES	

EL-26-T1	
% VEGETATION COVER	Herbaceous <u>100</u> % Woody <u>60</u> % Total Relative <u>100</u> %
DOMINANT HERBACEOUS SPECIES	Indiangrass (<i>Sorghastrum nutans</i>)
	Big bluestem (<i>Andropogon gerardi</i>)
	Calico aster (<i>Symphotrichum lateriflorum</i>)
	Crown vetch (<i>Securigera varia</i>)
DOMINANT WOODY SPECIES	Hybrid poplar (<i>Populus x</i>)
CORRECTIVE ACTIONS	Recommended: ____ Yes <u>X</u> No
	Description:
ADDITIONAL NOTES	

AGRONOMIC COVER MONITORING DATA FORM

DATE: September 20, 2019
INSPECTOR: D. Rockefeller
PROJECT AREA: Historic Agronomic Cover Areas

EL-26-T2	
% VEGETATION COVER	Herbaceous <u>100</u> % Woody <u>0</u> % Total Relative <u>100</u> %
DOMINANT HERBACEOUS SPECIES	Indiangrass (<i>Sorghastrum nutans</i>)
	Big bluestem (<i>Andropogon gerardi</i>)
DOMINANT WOODY SPECIES	N/A
CORRECTIVE ACTIONS	Recommended: <u> </u> Yes <u> X </u> No
	Description:
ADDITIONAL NOTES	

SEEP 8-T1	
% VEGETATION COVER	Herbaceous <u>100</u> % Woody <u>10</u> % Total Relative <u>100</u> %
DOMINANT HERBACEOUS SPECIES	Birdfoot trefoil (<i>Lotus corniculatus</i>)
	Red fescue (<i>Festuca rubra</i>)
	Mugwort (<i>Artemesia vulgaris</i>)
DOMINANT WOODY SPECIES	Hybrid poplar (<i>Populus x</i>)
CORRECTIVE ACTIONS	Recommended: <u> </u> Yes <u> X </u> No
	Description:
ADDITIONAL NOTES	

AGRONOMIC COVER MONITORING DATA FORM

DATE: September 20, 2019
INSPECTOR: D. Rockefeller
PROJECT AREA: Historic Agronomic Cover Areas

WL-1-T1	
% VEGETATION COVER	Herbaceous <u>95</u> % Woody <u>50</u> % Total Relative <u>100</u> %
DOMINANT HERBACEOUS SPECIES	White snakeroot (<i>Ageratina altissima</i>)
	Oriental bittersweet (<i>Celastrus orbiculatus</i>)
	Smooth goldenrod (<i>Solidago gigantea</i>)
DOMINANT WOODY SPECIES	Hybrid poplar (<i>Populus x</i>)
	Black locust (<i>Robinia pseudoacacia</i>)
	White mulberry (<i>Morus alba</i>)
CORRECTIVE ACTIONS	Recommended: <u> </u> Yes <u> X </u> No
	Description:
ADDITIONAL NOTES	Trees appear choked with bittersweet. Some have died and/or have fallen due to bittersweet stress including excess weight.

WL-2-T1	
% VEGETATION COVER	Herbaceous <u>100</u> % Woody <u>50</u> % Total Relative <u>100</u> %
DOMINANT HERBACEOUS SPECIES	Switchgrass (<i>Panicum virgatum</i>)
	Wild bergamot (<i>Monarda fistulosa</i>)
	Red fescue (<i>Festuca rubra</i>)
	Smooth goldenrod (<i>Solidago gigantea</i>)
DOMINANT WOODY SPECIES	White mulberry (<i>Morus alba</i>)
	Elm (<i>Ulmus</i> sp.)
	Common buckthorn (<i>Rhamnus cathartica</i>)
CORRECTIVE ACTIONS	Recommended: <u> </u> Yes <u> X </u> No
	Description:
ADDITIONAL NOTES	

AGRONOMIC COVER MONITORING DATA FORM

DATE: September 20, 2019
INSPECTOR: D. Rockefeller
PROJECT AREA: Historic Agronomic Cover Areas

WL-3-T1			
% VEGETATION COVER	Herbaceous <u>100</u> %	Woody <u>5</u> %	Total Relative <u>100</u> %
DOMINANT HERBACEOUS SPECIES	Smooth goldenrod (<i>Solidago gigantea</i>)		
	Canada goldenrod (<i>Solidago canadensis</i>)		
DOMINANT WOODY SPECIES	Black walnut (<i>Juglans nigra</i>)		
CORRECTIVE ACTIONS	Recommended: <u> </u> Yes <u> X </u> No		
	Description:		
ADDITIONAL NOTES			

WL-4-T1			
% VEGETATION COVER	Herbaceous <u>100</u> %	Woody <u>80</u> %	Total Relative <u>100</u> %
DOMINANT HERBACEOUS SPECIES	Oriental bittersweet (<i>Celastrus orbiculatus</i>)		
	Everlasting pea (<i>Lathyrus latifolius</i>)		
DOMINANT WOODY SPECIES	Hybrid poplar (<i>Populus x</i>)		
	Black locust (<i>Robinia pseudoacacia</i>)		
CORRECTIVE ACTIONS	Recommended: <u> </u> Yes <u> X </u> No		
	Description:		
ADDITIONAL NOTES			

AGRONOMIC COVER MONITORING DATA FORM

DATE: September 20, 2019
INSPECTOR: D. Rockefeller
PROJECT AREA: Historic Agronomic Cover Areas

WL-5-T1	
% VEGETATION COVER	Herbaceous <u>80</u> % Woody <u>80</u> % Total Relative <u>100</u> %
DOMINANT HERBACEOUS SPECIES	White snakeroot (<i>Ageratina altissima</i>)
	Virginia creeper (<i>Parthenocissus quinquefolia</i>)
DOMINANT WOODY SPECIES	White mulberry (<i>Morus alba</i>)
	Hybrid poplar (<i>Populus x</i>)
	Black locust (<i>Robinia pseudoacacia</i>)
CORRECTIVE ACTIONS	Recommended: <u> </u> Yes <u> X </u> No
	Description:
ADDITIONAL NOTES	

WL-6-T1	
% VEGETATION COVER	Herbaceous <u>95</u> % Woody <u>60</u> % Total Relative <u>80</u> %
DOMINANT HERBACEOUS SPECIES	Purple coneflower (<i>Echinacea purpurea</i>)
	Oriental bittersweet (<i>Celastrus orbiculatus</i>)
DOMINANT WOODY SPECIES	Hybrid poplar (<i>Populus x</i>)
	Black locust (<i>Robinia pseudoacacia</i>)
CORRECTIVE ACTIONS	Recommended: <u> </u> Yes <u> X </u> No
	Description:
ADDITIONAL NOTES	

AGRONOMIC COVER MONITORING DATA FORM

DATE: September 20, 2019
INSPECTOR: D. Rockefeller
PROJECT AREA: Historic Agronomic Cover Areas

WL-7-T1	
% VEGETATION COVER	Herbaceous <u>100</u> % Woody <u>60</u> % Total Relative <u>100</u> %
DOMINANT HERBACEOUS SPECIES	Oriental bittersweet (<i>Celastrus orbiculatus</i>)
DOMINANT WOODY SPECIES	Hybrid poplar (<i>Populus x</i>)
	Morrow's honeysuckle (<i>Lonicera morrowii</i>)
CORRECTIVE ACTIONS	Recommended: <u> </u> Yes <u> X </u> No
	Description:
ADDITIONAL NOTES	

WL-8-T1	
% VEGETATION COVER	Herbaceous <u>100</u> % Woody <u>30</u> % Total Relative <u>100</u> %
DOMINANT HERBACEOUS SPECIES	Red fescue (<i>Festuca rubra</i>)
	Oriental bittersweet (<i>Celastrus orbiculatus</i>)
DOMINANT WOODY SPECIES	Hybrid poplar (<i>Populus x</i>)
CORRECTIVE ACTIONS	Recommended: <u> </u> Yes <u> X </u> No
	Description:
ADDITIONAL NOTES	

AGRONOMIC COVER MONITORING DATA FORM

DATE: September 20, 2019
INSPECTOR: D. Rockefeller
PROJECT AREA: Historic Agronomic Cover Areas

WL-9-T1	
% VEGETATION COVER	Herbaceous <u>100</u> % Woody <u>30</u> % Total Relative <u>100</u> %
DOMINANT HERBACEOUS SPECIES	Mugwort (<i>Artemisia vulgaris</i>)
DOMINANT WOODY SPECIES	Hybrid poplar (<i>Populus x</i>)
	Black locust (<i>Robinia pseudoacacia</i>)
CORRECTIVE ACTIONS	Recommended: <u> </u> Yes <u> X </u> No
	Description:
ADDITIONAL NOTES	

WL-9-T2	
% VEGETATION COVER	Herbaceous <u>100</u> % Woody <u>80</u> % Total Relative <u>100</u> %
DOMINANT HERBACEOUS SPECIES	White snakeroot (<i>Ageratina altissima</i>)
	Smooth goldenrod (<i>Solidago gigantea</i>)
	Red fescue (<i>Festuca rubra</i>)
DOMINANT WOODY SPECIES	Black locust (<i>Robinia pseudoacacia</i>)
	Silky dogwood (<i>Cornus amomum</i>)
CORRECTIVE ACTIONS	Recommended: <u> </u> Yes <u> X </u> No
	Description:
ADDITIONAL NOTES	

AGRONOMIC COVER MONITORING DATA FORM

DATE: September 20, 2019
INSPECTOR: D. Rockefeller
PROJECT AREA: Historic Agronomic Cover Areas

WL-9-T3	
% VEGETATION COVER	Herbaceous <u>100</u> % Woody <u>10</u> % Total Relative <u>100</u> %
DOMINANT HERBACEOUS SPECIES	Smooth goldenrod (<i>Solidago gigantea</i>)
	White snakeroot (<i>Ageratina altissima</i>)
	Red fescue (<i>Festuca rubra</i>)
	Crown vetch (<i>Securigera varia</i>)
DOMINANT WOODY SPECIES	Black locust (<i>Robinia pseudoacacia</i>)
	Boxelder (<i>Acer negundo</i>)
CORRECTIVE ACTIONS	Recommended: <u> </u> Yes <u> X </u> No
	Description:
ADDITIONAL NOTES	

WL-10-T1	
% VEGETATION COVER	Herbaceous <u>100</u> % Woody <u>100</u> % Total Relative <u>100</u> %
DOMINANT HERBACEOUS SPECIES	Red fescue (<i>Festuca rubra</i>)
	Oriental bittersweet (<i>Celastrus orbiculatus</i>)
DOMINANT WOODY SPECIES	Black locust (<i>Robinia pseudoacacia</i>)
	Common buckthorn (<i>Rhamnus cathartica</i>)
	Hybrid poplar (<i>Populus x</i>)
CORRECTIVE ACTIONS	Recommended: <u> </u> Yes <u> X </u> No
	Description:
ADDITIONAL NOTES	

AGRONOMIC COVER MONITORING DATA FORM

DATE: September 20, 2019
INSPECTOR: D. Rockefeller
PROJECT AREA: Historic Agronomic Cover Areas

WL-10-T2	
% VEGETATION COVER	Herbaceous <u>100</u> % Woody <u>40</u> % Total Relative <u>100</u> %
DOMINANT HERBACEOUS SPECIES	Smooth goldenrod (<i>Solidago gigantea</i>)
	Red fescue (<i>Festuca rubra</i>)
	Switchgrass (<i>Panicum virgatum</i>)
DOMINANT WOODY SPECIES	Black locust (<i>Robinia pseudoacacia</i>)
	Morrow's honeysuckle (<i>Lonicera morrowii</i>)
CORRECTIVE ACTIONS	Recommended: ____ Yes <u>X</u> No
	Description:
ADDITIONAL NOTES	

WL-10-T3	
% VEGETATION COVER	Herbaceous <u>100</u> % Woody <u>20</u> % Total Relative <u>100</u> %
DOMINANT HERBACEOUS SPECIES	Smooth goldenrod (<i>Solidago gigantea</i>)
	Wild bergamot (<i>Monarda fistulosa</i>)
	Red fescue (<i>Festuca rubra</i>)
	Small white aster (<i>Symphyotrichum racemosum</i>)
DOMINANT WOODY SPECIES	Silky dogwood (<i>Cornus amomum</i>)
CORRECTIVE ACTIONS	Recommended: ____ Yes <u>X</u> No
	Description:
ADDITIONAL NOTES	

AGRONOMIC COVER MONITORING DATA FORM

DATE: September 20, 2019
INSPECTOR: D. Rockefeller
PROJECT AREA: Historic Agronomic Cover Areas

WL-11A-T1	
% VEGETATION COVER	Herbaceous <u>100</u> % Woody <u>30</u> % Total Relative <u>100</u> %
DOMINANT HERBACEOUS SPECIES	Mugwort (<i>Artemisia vulgaris</i>)
	Big bluestem (<i>Andropogon gerardi</i>)
	Common reed (<i>Phragmites australis</i>)
	Virginia wildrye (<i>Elymus virginicus</i>)
DOMINANT WOODY SPECIES	Hybrid willow (<i>Salix x</i>)
	Black locust (<i>Robinia pseudoacacia</i>)
CORRECTIVE ACTIONS	Recommended: <u> </u> Yes <u> X </u> No
	Description:
ADDITIONAL NOTES	

WL-11B-T1	
% VEGETATION COVER	Herbaceous <u>100</u> % Woody <u>80</u> % Total Relative <u>100</u> %
DOMINANT HERBACEOUS SPECIES	White snakeroot (<i>Ageratina altissima</i>)
	Oriental bittersweet (<i>Celastrus orbiculatus</i>)
DOMINANT WOODY SPECIES	Black locust (<i>Robinia pseudoacacia</i>)
CORRECTIVE ACTIONS	Recommended: <u> </u> Yes <u> X </u> No
	Description:
ADDITIONAL NOTES	

AGRONOMIC COVER MONITORING DATA FORM

DATE: September 20, 2019
INSPECTOR: D. Rockefeller
PROJECT AREA: Historic Agronomic Cover Areas

WL-12/13-T1	
% VEGETATION COVER	Herbaceous <u>95</u> % Woody <u>60</u> % Total Relative <u>95</u> %
DOMINANT HERBACEOUS SPECIES	Eastern gamagrass (<i>Tripsacum dactyloides</i>)
	Oriental bittersweet (<i>Celastrus orbiculatus</i>)
	Common milkweed (<i>Asclepias syriaca</i>)
DOMINANT WOODY SPECIES	Hybrid willow (<i>Salix x</i>)
CORRECTIVE ACTIONS	Recommended: ____ Yes <u>X</u> No
	Description:
ADDITIONAL NOTES	

WL-12/13-T2	
% VEGETATION COVER	Herbaceous <u>100</u> % Woody <u>80</u> % Total Relative <u>100</u> %
DOMINANT HERBACEOUS SPECIES	Switchgrass (<i>Panicum virgatum</i>)
	Eastern gamagrass (<i>Tripsacum dactyloides</i>)
	Mugwort (<i>Artemesia vulgaris</i>)
DOMINANT WOODY SPECIES	Hybrid poplar (<i>Populus x</i>)
CORRECTIVE ACTIONS	Recommended: ____ Yes <u>X</u> No
	Description:
ADDITIONAL NOTES	

AGRONOMIC COVER MONITORING DATA FORM

DATE: September 20, 2019
INSPECTOR: D. Rockefeller
PROJECT AREA: Historic Agronomic Cover Areas

WL-12/13-T3	
% VEGETATION COVER	Herbaceous <u>100</u> % Woody <u>5</u> % Total Relative <u>100</u> %
DOMINANT HERBACEOUS SPECIES	Mugwort (<i>Artemisia vulgaris</i>)
	Eastern gamagrass (<i>Tripsacum dactyloides</i>)
	Common reed (<i>Phragmites australis</i>)
DOMINANT WOODY SPECIES	Hybrid poplar (<i>Populus x</i>)
CORRECTIVE ACTIONS	Recommended: <u> </u> Yes <u> X </u> No
	Description:
ADDITIONAL NOTES	

WL-14-T1	
% VEGETATION COVER	Herbaceous <u>85</u> % Woody <u>80</u> % Total Relative <u>90</u> %
DOMINANT HERBACEOUS SPECIES	Mugwort (<i>Artemisia vulgaris</i>)
	Smooth goldenrod (<i>Solidago gigantea</i>)
	Common reed (<i>Phragmites australis</i>)
DOMINANT WOODY SPECIES	Black locust (<i>Robinia pseudoacacia</i>)
CORRECTIVE ACTIONS	Recommended: <u> </u> Yes <u> X </u> No
	Description:
ADDITIONAL NOTES	

AGRONOMIC COVER MONITORING DATA FORM

DATE: September 20, 2019
INSPECTOR: D. Rockefeller
PROJECT AREA: Historic Agronomic Cover Areas

WL-14-T2	
% VEGETATION COVER	Herbaceous <u>85</u> % Woody <u>90</u> % Total Relative <u>100</u> %
DOMINANT HERBACEOUS SPECIES	Smooth goldenrod (<i>Solidago gigantea</i>)
	Clearweed (<i>Pilea pumila</i>)
DOMINANT WOODY SPECIES	Black locust (<i>Robinia pseudoacacia</i>)
	Boxelder (<i>Acer negundo</i>)
CORRECTIVE ACTIONS	Recommended: <u> </u> Yes <u> X </u> No
	Description:
ADDITIONAL NOTES	

WL-14B-T1	
% VEGETATION COVER	Herbaceous <u>90</u> % Woody <u>75</u> % Total Relative <u>100</u> %
DOMINANT HERBACEOUS SPECIES	Clearweed (<i>Pilea pumila</i>)
	Oriental bittersweet (<i>Celastrus orbiculatus</i>)
	Common reed (<i>Phragmites australis</i>)
DOMINANT WOODY SPECIES	Black locust (<i>Robinia pseudoacacia</i>)
	Boxelder (<i>Acer negundo</i>)
CORRECTIVE ACTIONS	Recommended: <u> </u> Yes <u> X </u> No
	Description:
ADDITIONAL NOTES	

AGRONOMIC COVER MONITORING DATA FORM

DATE: September 20, 2019
INSPECTOR: D. Rockefeller
PROJECT AREA: Historic Agronomic Cover Areas

WL-14C-T1	
% VEGETATION COVER	Herbaceous <u>100</u> % Woody <u>50</u> % Total Relative <u>100</u> %
DOMINANT HERBACEOUS SPECIES	False sunflower (<i>Heliopsis helianthoides</i>)
	White snakeroot (<i>Ageratina altissima</i>)
	Smooth goldenrod (<i>Solidago gigantea</i>)
DOMINANT WOODY SPECIES	Black locust (<i>Robinia pseudoacacia</i>)
CORRECTIVE ACTIONS	Recommended: <u> </u> Yes <u> X </u> No
	Description:
ADDITIONAL NOTES	

WL-15C-T1	
% VEGETATION COVER	Herbaceous <u>100</u> % Woody <u>85</u> % Total Relative <u>100</u> %
DOMINANT HERBACEOUS SPECIES	Mugwort (<i>Artemisia vulgaris</i>)
DOMINANT WOODY SPECIES	Hybrid poplar (<i>Populus x</i>)
	Boxelder (<i>Acer negundo</i>)
	Black locust (<i>Robinia pseudoacacia</i>)
CORRECTIVE ACTIONS	Recommended: <u> </u> Yes <u> X </u> No
	Description:
ADDITIONAL NOTES	

AGRONOMIC COVER MONITORING DATA FORM

DATE: September 20, 2019
INSPECTOR: D. Rockefeller
PROJECT AREA: Historic Agronomic Cover Areas

WL-15D-T1	
% VEGETATION COVER	Herbaceous <u>90</u> % Woody <u>60</u> % Total Relative <u>100</u> %
DOMINANT HERBACEOUS SPECIES	Mugwort (<i>Artemesia vulgaris</i>)
	White snakeroot (<i>Ageratina altissima</i>)
	Common reed (<i>Phragmites australis</i>)
DOMINANT WOODY SPECIES	Hybrid poplar (<i>Populus x</i>)
	Black locust (<i>Robinia pseudoacacia</i>)
CORRECTIVE ACTIONS	Recommended: <u> </u> Yes <u> X </u> No
	Description:
ADDITIONAL NOTES	

WL-16-T1	
% VEGETATION COVER	Herbaceous <u>80</u> % Woody <u>80</u> % Total Relative <u>80</u> %
DOMINANT HERBACEOUS SPECIES	Smooth goldenrod (<i>Solidago gigantea</i>)
	Common reed (<i>Phragmites australis</i>)
DOMINANT WOODY SPECIES	Hybrid poplar (<i>Populus x</i>)
	Pin cherry (<i>Prunus pensylvanica</i>)
	Common buckthorn (<i>Rhamnus cathartica</i>)
CORRECTIVE ACTIONS	Recommended: <u> </u> Yes <u> X </u> No
	Description:
ADDITIONAL NOTES	

AGRONOMIC COVER MONITORING DATA FORM

DATE: September 20, 2019
INSPECTOR: D. Rockefeller
PROJECT AREA: Historic Agronomic Cover Areas

WL-17-T1	
% VEGETATION COVER	Herbaceous <u>100</u> % Woody <u>60</u> % Total Relative <u>100</u> %
DOMINANT HERBACEOUS SPECIES	False sunflower (<i>Heliopsis helianthoides</i>)
	Red fescue (<i>Festuca rubra</i>)
DOMINANT WOODY SPECIES	Hybrid poplar (<i>Populus x</i>)
	Black locust (<i>Robinia pseudoacacia</i>)
	Common buckthorn (<i>Rhamnus cathartica</i>)
CORRECTIVE ACTIONS	Recommended: ____ Yes <u>X</u> No
	Description:
ADDITIONAL NOTES	

WL-17-T2	
% VEGETATION COVER	Herbaceous <u>100</u> % Woody <u>0</u> % Total Relative <u>100</u> %
DOMINANT HERBACEOUS SPECIES	Smooth goldenrod (<i>Solidago gigantea</i>)
	Wild bergamot (<i>Monarda fistulosa</i>)
DOMINANT WOODY SPECIES	N/A
CORRECTIVE ACTIONS	Recommended: ____ Yes <u>X</u> No
	Description:
ADDITIONAL NOTES	

AGRONOMIC COVER MONITORING DATA FORM

DATE: September 20, 2019
INSPECTOR: D. Rockefeller
PROJECT AREA: Historic Agronomic Cover Areas

WL-18-T1	
% VEGETATION COVER	Herbaceous <u>100</u> % Woody <u>0</u> % Total Relative <u>100</u> %
DOMINANT HERBACEOUS SPECIES	Smooth goldenrod (<i>Solidago gigantea</i>)
	Mugwort (<i>Artemesia vulgaris</i>)
	Indian hemp (<i>Apocynum cannabinum</i>)
	Wild bergamot (<i>Monarda fistulosa</i>)
DOMINANT WOODY SPECIES	N/A
CORRECTIVE ACTIONS	Recommended: ____ Yes <u>X</u> No
	Description:
ADDITIONAL NOTES	

WL-18-T2	
% VEGETATION COVER	Herbaceous <u>100</u> % Woody <u>5</u> % Total Relative <u>100</u> %
DOMINANT HERBACEOUS SPECIES	Canada thistle (<i>Cirsium arvense</i>)
	Smooth goldenrod (<i>Solidago gigantea</i>)
	Mugwort (<i>Artemesia vulgaris</i>)
	Common milkweed (<i>Asclepias syriaca</i>)
DOMINANT WOODY SPECIES	Black locust (<i>Robinia pseudoacacia</i>)
CORRECTIVE ACTIONS	Recommended: ____ Yes <u>X</u> No
	Description:
ADDITIONAL NOTES	

AGRONOMIC COVER MONITORING DATA FORM

DATE: September 20, 2019
INSPECTOR: D. Rockefeller
PROJECT AREA: Historic Agronomic Cover Areas

WL-18-T3	
% VEGETATION COVER	Herbaceous <u>100</u> % Woody <u>5</u> % Total Relative <u>100</u> %
DOMINANT HERBACEOUS SPECIES	Grass-leaved goldenrod (<i>Euthamia graminifolia</i>)
	Mugwort (<i>Artemisia vulgaris</i>)
	Smooth goldenrod (<i>Solidago gigantea</i>)
	Touch-me-not (<i>Impatiens capensis</i>)
DOMINANT WOODY SPECIES	Boxelder (<i>Acer negundo</i>)
CORRECTIVE ACTIONS	Recommended: <u> </u> Yes <u>X</u> No
	Description:
ADDITIONAL NOTES	

WL-19A-T1	
% VEGETATION COVER	Herbaceous <u>85</u> % Woody <u>50</u> % Total Relative <u>100</u> %
DOMINANT HERBACEOUS SPECIES	White snakeroot (<i>Ageratina altissima</i>)
	Oriental bittersweet (<i>Celastrus orbiculatus</i>)
DOMINANT WOODY SPECIES	White mulberry (<i>Morus alba</i>)
	Black locust (<i>Robinia pseudoacacia</i>)
	Hybrid poplar (<i>Populus x</i>)
CORRECTIVE ACTIONS	Recommended: <u> </u> Yes <u>X</u> No
	Description:
ADDITIONAL NOTES	

AGRONOMIC COVER MONITORING DATA FORM

DATE: September 20, 2019
INSPECTOR: D. Rockefeller
PROJECT AREA: Historic Agronomic Cover Areas

WL-20-T1	
% VEGETATION COVER	Herbaceous <u>100</u> % Woody <u>60</u> % Total Relative <u>100</u> %
DOMINANT HERBACEOUS SPECIES	Smooth goldenrod (<i>Solidago gigantea</i>)
	Wild senna (<i>Senna hebecarpa</i>)
DOMINANT WOODY SPECIES	Black locust (<i>Robinia pseudoacacia</i>)
	Hybrid poplar (<i>Populus x</i>)
	Morrow's honeysuckle (<i>Lonicera morrowii</i>)
CORRECTIVE ACTIONS	Recommended: <u> </u> Yes <u> X </u> No
	Description:
ADDITIONAL NOTES	

WL-21-T1	
% VEGETATION COVER	Herbaceous <u>100</u> % Woody <u>30</u> % Total Relative <u>100</u> %
DOMINANT HERBACEOUS SPECIES	Smooth goldenrod (<i>Solidago gigantea</i>)
	Common reed (<i>Phragmites australis</i>)
	Field horsetail (<i>Equisetum arvense</i>)
DOMINANT WOODY SPECIES	Hybrid poplar (<i>Populus x</i>)
CORRECTIVE ACTIONS	Recommended: <u> </u> Yes <u> X </u> No
	Description:
ADDITIONAL NOTES	

AGRONOMIC COVER MONITORING DATA FORM

DATE: September 20, 2019
INSPECTOR: D. Rockefeller
PROJECT AREA: Historic Agronomic Cover Areas

WL-22-T1	
% VEGETATION COVER	Herbaceous <u>100</u> % Woody <u>10</u> % Total Relative <u>100</u> %
DOMINANT HERBACEOUS SPECIES	Common reed (<i>Phragmites australis</i>)
	Eastern gamagrass (<i>Tripsacum dactyloides</i>)
	Big bluestem (<i>Andropogon gerardi</i>)
DOMINANT WOODY SPECIES	Black locust (<i>Robinia pseudoacacia</i>)
CORRECTIVE ACTIONS	Recommended: <u> </u> Yes <u> X </u> No
	Description:
ADDITIONAL NOTES	

APPENDIX 6

FIELD DATA FORMS – FRD AGRONOMIC COVER

AGRONOMIC COVER MONITORING DATA FORM

DATE: September 20, 2019
INSPECTOR: D. Rockefeller
PROJECT AREA: FRD Agronomic Cover Areas

EL-S8	
% VEGETATION COVER	Herbaceous <u>100</u> % Woody <u>20</u> % Total Relative <u>100</u> %
DOMINANT HERBACEOUS SPECIES	Red fescue (<i>Festuca rubra</i>)
DOMINANT WOODY SPECIES	Hybrid poplar (<i>Populus x</i>)
CORRECTIVE ACTIONS	Recommended: <u> </u> Yes <u> X </u> No
	Description:
ADDITIONAL NOTES	This area is fully vegetated. Planted shrub species are alive but have suffered significant browsing pressure.

EL-10A	
% VEGETATION COVER	Herbaceous <u>85</u> % Woody <u>85</u> % Total Relative <u>95</u> %
DOMINANT HERBACEOUS SPECIES	White snakeroot (<i>Ageratina altissima</i>)
	Smooth goldenrod (<i>Solidago gigantea</i>)
	Virginia creeper (<i>Parthenocissus quinquefolia</i>)
DOMINANT WOODY SPECIES	Black locust (<i>Robinia pseudoacacia</i>)
	Hybrid poplar (<i>Populus x</i>)
CORRECTIVE ACTIONS	Recommended: <u> </u> Yes <u> X </u> No
	Description:
ADDITIONAL NOTES	This area is fully vegetated and difficult to distinguish from previously established agronomic cover.

AGRONOMIC COVER MONITORING DATA FORM

DATE: September 20, 2019
INSPECTOR: D. Rockefeller
PROJECT AREA: FRD Agronomic Cover Areas

EL-15A			
% VEGETATION COVER	Herbaceous <u>100</u> %	Woody <u>0</u> %	Total Relative <u>100</u> %
DOMINANT HERBACEOUS SPECIES	Mugwort (<i>Artemisia vulgaris</i>)		
	Virginia wildrye (<i>Elymus virginicus</i>)		
	Yellow foxtail (<i>Setaria pumila</i>)		
DOMINANT WOODY SPECIES	N/A		
CORRECTIVE ACTIONS	Recommended: <u> </u> Yes <u> X </u> No		
	Description:		
ADDITIONAL NOTES			

EL-18B			
% VEGETATION COVER	Herbaceous <u>100</u> %	Woody <u>50</u> %	Total Relative <u>100</u> %
DOMINANT HERBACEOUS SPECIES	Red fescue (<i>Festuca rubra</i>)		
	Calico aster (<i>Symphyotrichum lateriflorum</i>)		
	Virginia wildrye (<i>Elymus virginicus</i>)		
DOMINANT WOODY SPECIES	Boxelder (<i>Acer negundo</i>)		
	Hybrid poplar (<i>Populus x</i>)		
CORRECTIVE ACTIONS	Recommended: <u> </u> Yes <u> X </u> No		
	Description:		
ADDITIONAL NOTES	Roadside swale. Fully vegetated		

AGRONOMIC COVER MONITORING DATA FORM

DATE: September 20, 2019
INSPECTOR: D. Rockefeller
PROJECT AREA: FRD Agronomic Cover Areas

EL-19A	
% VEGETATION COVER	Herbaceous <u>100</u> % Woody <u>30</u> % Total Relative <u>100</u> %
DOMINANT HERBACEOUS SPECIES	Mugwort (<i>Artemisia vulgaris</i>)
DOMINANT WOODY SPECIES	Black locust (<i>Robinia pseudoacacia</i>)
CORRECTIVE ACTIONS	Recommended: <u> </u> Yes <u> X </u> No
	Description:
ADDITIONAL NOTES	

EL-20 (WEST)	
% VEGETATION COVER	Herbaceous <u>100</u> % Woody <u>20</u> % Total Relative <u>100</u> %
DOMINANT HERBACEOUS SPECIES	White snakeroot (<i>Ageratina altissima</i>)
	White vervain (<i>Verbena urticifolia</i>)
	Red fescue (<i>Festuca rubra</i>)
	Clearweed (<i>Pilea pumila</i>)
DOMINANT WOODY SPECIES	Hybrid poplar (<i>Populus x</i>)
CORRECTIVE ACTIONS	Recommended: <u> </u> Yes <u> X </u> No
	Description:
ADDITIONAL NOTES	Planted shrubs heavily browsed.

AGRONOMIC COVER MONITORING DATA FORM

DATE: September 20, 2019
INSPECTOR: D. Rockefeller
PROJECT AREA: FRD Agronomic Cover Areas

EL-20 (EAST)	
% VEGETATION COVER	Herbaceous <u>100</u> % Woody <u>20</u> % Total Relative <u>100</u> %
DOMINANT HERBACEOUS SPECIES	White snakeroot (<i>Ageratina altissima</i>)
	Red fescue (<i>Festuca rubra</i>)
	Cleavers (<i>Galium aparine</i>)
DOMINANT WOODY SPECIES	Hybrid poplar (<i>Populus x</i>)
CORRECTIVE ACTIONS	Recommended: ____ Yes <u>X</u> No
	Description:
ADDITIONAL NOTES	Planted shrubs heavily browsed.

EL-21 (WEST)	
% VEGETATION COVER	Herbaceous <u>90</u> % Woody <u>50</u> % Total Relative <u>100</u> %
DOMINANT HERBACEOUS SPECIES	Mugwort (<i>Artemisia vulgaris</i>)
	Oriental bittersweet (<i>Celastrus orbiculatus</i>)
	Smooth goldenrod (<i>Solidago gigantea</i>)
	White snakeroot (<i>Ageratina altissima</i>)
DOMINANT WOODY SPECIES	Hybrid willow (<i>Salix x</i>)
	Boxelder (<i>Acer negundo</i>)
CORRECTIVE ACTIONS	Recommended: ____ Yes <u>X</u> No
	Description:
ADDITIONAL NOTES	

AGRONOMIC COVER MONITORING DATA FORM

DATE: September 20, 2019
INSPECTOR: D. Rockefeller
PROJECT AREA: FRD Agronomic Cover Areas

EL-21 (EAST)	
% VEGETATION COVER	Herbaceous <u>100</u> % Woody <u>40</u> % Total Relative <u>100</u> %
DOMINANT HERBACEOUS SPECIES	Purple loosestrife (<i>Lythrum salicaria</i>)
	New York aster (<i>Symphotrichum novi-belgii</i>)
DOMINANT WOODY SPECIES	Black locust (<i>Robinia pseudoacacia</i>)
	Hybrid willow (<i>Salix x</i>)
CORRECTIVE ACTIONS	Recommended: <u> </u> Yes <u> X </u> No
	Description:
ADDITIONAL NOTES	

EL-22	
% VEGETATION COVER	Herbaceous <u>50</u> % Woody <u>50</u> % Total Relative <u>50</u> %
DOMINANT HERBACEOUS SPECIES	Mugwort (<i>Artemisia vulgaris</i>)
	Oats (<i>Avena sativa</i>)
	Deertongue (<i>Panicum clandestinum</i>)
	Black-eyed Susan (<i>Rudbeckia hirta</i>)
DOMINANT WOODY SPECIES	Hybrid poplar (<i>Populus x</i>)
CORRECTIVE ACTIONS	Recommended: <u> </u> Yes <u> X </u> No
	Description: Allow another growing season to determine corrective action effectiveness.
ADDITIONAL NOTES	Corrective actions to establish vegetation occurred between May 28 and May 30, 2019.

AGRONOMIC COVER MONITORING DATA FORM

DATE: September 20, 2019
INSPECTOR: D. Rockefeller
PROJECT AREA: FRD Agronomic Cover Areas

EL-22A	
% VEGETATION COVER	Herbaceous <u>100</u> % Woody <u>20</u> % Total Relative <u>100</u> %
DOMINANT HERBACEOUS SPECIES	Mugwort (<i>Artemesia vulgaris</i>)
	False sunflower (<i>Heliopsis helianthoides</i>)
	Red fescue (<i>Festuca rubra</i>)
DOMINANT WOODY SPECIES	Hybrid poplar (<i>Populus x</i>)
CORRECTIVE ACTIONS	Recommended: <u> </u> Yes <u> X </u> No
	Description:
ADDITIONAL NOTES	

EL-22B	
% VEGETATION COVER	Herbaceous <u>100</u> % Woody <u>60</u> % Total Relative <u>100</u> %
DOMINANT HERBACEOUS SPECIES	Red fescue (<i>Festuca rubra</i>)
	Mugwort (<i>Artemesia vulgaris</i>)
DOMINANT WOODY SPECIES	Hybrid poplar (<i>Populus x</i>)
	Hybrid willow (<i>Salix x</i>)
CORRECTIVE ACTIONS	Recommended: <u> </u> Yes <u> X </u> No
	Description:
ADDITIONAL NOTES	

AGRONOMIC COVER MONITORING DATA FORM

DATE: September 20, 2019
INSPECTOR: D. Rockefeller
PROJECT AREA: FRD Agronomic Cover Areas

EL-23

% VEGETATION COVER	Herbaceous <u>65</u> % Woody <u>10</u> % Total Relative <u>65</u> %
DOMINANT HERBACEOUS SPECIES	Oats (<i>Avena sativa</i>)
	Virginia wildrye (<i>Elymus virginicus</i>)
	Deertongue (<i>Panicum clandestinum</i>)
	Black-eyed Susan (<i>Rudbeckia hirta</i>)
DOMINANT WOODY SPECIES	Hybrid poplar (<i>Populus x</i>)
CORRECTIVE ACTIONS	Recommended: ____ Yes <u>X</u> No
	Description: Allow another growing season to determine corrective action effectiveness.
ADDITIONAL NOTES	Corrective actions to establish vegetation occurred between May 28 and May 30, 2019.

WL-20A

% VEGETATION COVER	Herbaceous <u>60</u> % Woody <u>30</u> % Total Relative <u>60</u> %
DOMINANT HERBACEOUS SPECIES	Mugwort (<i>Artemisia vulgaris</i>)
	Oats (<i>Avena sativa</i>)
	Deertongue (<i>Panicum clandestinum</i>)
	Black-eyed Susan (<i>Rudbeckia hirta</i>)
DOMINANT WOODY SPECIES	Hybrid poplar (<i>Populus x</i>)
	Hybrid willow (<i>Salix x</i>)
CORRECTIVE ACTIONS	Recommended: ____ Yes <u>X</u> No
	Description: Allow another growing season to determine corrective action effectiveness.
ADDITIONAL NOTES	Corrective actions to establish vegetation occurred between May 28 and May 30, 2019.

AGRONOMIC COVER MONITORING DATA FORM

DATE: September 20, 2019
INSPECTOR: D. Rockefeller
PROJECT AREA: FRD Agronomic Cover Areas

WL-22A

% VEGETATION COVER	Herbaceous <u>50</u> % Woody <u>50</u> % Total Relative <u>50</u> %
DOMINANT HERBACEOUS SPECIES	White snakeroot (<i>Ageratina altissima</i>)
	Smooth goldenrod (<i>Solidago gigantea</i>)
DOMINANT WOODY SPECIES	Hybrid willow (<i>Salix x</i>)
	Hybrid poplar (<i>Populus x</i>)
	Black locust (<i>Robinia pseudoacacia</i>)
CORRECTIVE ACTIONS	Recommended: <u> X </u> Yes <u> </u> No
	Description: Hand rake mulch during spring and allow to naturally vegetate.
ADDITIONAL NOTES	

WL-23

% VEGETATION COVER	Herbaceous <u>50</u> % Woody <u>30</u> % Total Relative <u>50</u> %
DOMINANT HERBACEOUS SPECIES	Mugwort (<i>Artemisia vulgaris</i>)
	Oats (<i>Avena sativa</i>)
	Deertongue (<i>Panicum clandestinum</i>)
	Black-eyed Susan (<i>Rudbeckia hirta</i>)
DOMINANT WOODY SPECIES	Autumn olive (<i>Elaeagnus umbellata</i>)
	Black locust (<i>Robinia pseudoacacia</i>)
CORRECTIVE ACTIONS	Recommended: <u> </u> Yes <u> X </u> No
	Description: Allow another growing season to determine corrective action effectiveness.
ADDITIONAL NOTES	Corrective actions to establish vegetation occurred between May 28 and May 30, 2019.

APPENDIX 7

CORRECTIVE ACTION SEED MIX



ERNST Seeds

8884 Merritt Pike, Meadville, PA 16335
(800) 873-3321 or (814) 336-2404

Native Steep Slope Mix w/Grain Oats

Item	Botanical Name	Purity	Germ	Hard	Dorm	Production Origin	Genetic Origin
Oats, Variety Not Stated	<i>Avena sativa</i> , Variety Not Stated	39.60%	90.0%			CN	
Indiangrass, PA Ecotype	<i>Sorghastrum nutans</i> , PA Ecotype	20.92%	8.0%		87.0%	PA	
Virginia Wildrye, PA Ecotype	<i>Elymus virginicus</i> , PA Ecotype	7.76%	96.0%		2.0%	PA	
Big Bluestem, 'Niagara'	<i>Andropogon gerardii</i> , 'Niagara'	7.07%	24.0%		71.0%	PA	
Canada Wildrye	<i>Elymus canadensis</i>	5.36%	91.0%			MN	
Autumn Bentgrass, Albany Pine Bush-NY Ecotype	<i>Agrostis perennans</i> , Albany Pin	3.78%	94.0%			OR	
Switchgrass, NJ Ecotype	<i>Panicum virgatum</i> , NJ Ecotype	2.87%	9.4%		81.0%	PA	
Deertongue, 'Tioga'	<i>Panicum clandestinum</i> , 'Tioga'	2.06%	3.0%		72.0%	PA	
Little Bluestem, 'Camper'	<i>Schizachyrium scoparium</i> , 'Camp	1.20%	76.0%		18.0%	NE	
Partridge Pea, PA Ecotype	<i>Chamaecrista fasciculata</i> , PA E	1.00%	50.0%	28.0%		PA	
Purple Coneflower	<i>Echinacea purpurea</i>	0.90%	93.0%		1.0%	OR	
Purpletop	<i>Tridens flavus</i>	0.88%	3.0%		93.0%	MO	
Blackeyed Susan, Coastal Plain NC Ecotype	<i>Rudbeckia hirta</i> , Coastal Plain	0.80%	72.0%		25.0%	NC	
Lanceleaf Coreopsis	<i>Coreopsis lanceolata</i>	0.79%	77.0%		13.0%	OR	
Oxeye Sunflower, PA Ecotype	<i>Helianthus helianthoides</i> , PA Ec	0.50%	49.0%		43.0%	PA	
Wild Bergamot, Fort Indiantown Gap-PA Ecotype	<i>Monarda fistulosa</i> , Fort Indian	0.20%	84.0%		14.0%	PA	
Common Milkweed	<i>Asclepias syriaca</i>	0.19%	93.0%		1.0%	CN	
White Avena, PA Ecotype	<i>Geum canadense</i> , PA Ecotype	0.10%	94.0%		3.0%	PA	
Tall White Beardtongue, PA Ecotype	<i>Penstemon digitalis</i> , PA Ecotyp	0.10%	3.0%		91.0%	PA	
Narrowleaf Mountainmint	<i>Pycnanthemum tenuifolium</i>	0.10%	35.0%		59.0%	PA	
Early Goldenrod, PA Ecotype	<i>Solidago juncea</i> , PA Ecotype	0.10%	80.0%		5.0%	PA	
Smooth Blue Aster, NY Ecotype	<i>Aster laevis</i> , NY Ecotype	0.09%	34.0%		44.0%	PA	
New England Aster, PA Ecotype	<i>Aster novae-angliae</i> , PA Ecotyp	0.08%	82%TZ			PA	
Marsh (Dense) Blazing Star (Spiked Gayfeather), PA Ecotype	<i>Liatris spicata</i> , PA Ecotype	0.08%	2.0%		87.0%	PA	

Other Crop: 0.84%
Inert Matter: 2.57%
Weed Seed: 0.06%

Net Weight: 50 LB
Lot Number: ERNMX-181-1
Date Tested: March 2019