

2020 Annual Groundwater Sampling Report

Location:

**729 Cross Road
Oaks Corners, New York**

Prepared For:

Elderlee, Inc.
729 Cross Road
Oaks Corners, New York 14518

December 2020

Prepared By:



NEU-VELLE^{LLC}

Eastman Business Park, 1667 Lake Avenue, Building 59, 1st Floor
Rochester, New York 14615

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1.0 Introduction

NEU-VELLE, LLC (“NEU-VELLE”) was retained by Elderlee, Inc. to provide professional environmental services at 729 Cross Road, Oaks Corners, New York, hereinafter referred to as the “Site” for the 2020 annual groundwater sampling event. (Figure 1)

A portion of this Site (Elderlee, Inc.) in Oaks Corners, New York is a listed New York State Department of Environmental Conservation (NYSDEC) Inactive Hazardous Waste Disposal Site (NYSDEC ID3 835014). This Site has been utilized to manufacture road signs, galvanized highway bridge rail, and guide rails since approximately 1968. Hazardous waste was disposed of in two (2) distinct areas of the Site.

Area A is a location of two (2) former settling lagoons that are located north of the galvanizing plant and used for neutralizing waste sulfuric acid until approximately 1984. Elevated levels of zinc and lead were detected in soil samples collect from the former lagoon area. A Remedial Investigation/Feasibility Study (RI/FS) was conducted at the Site in the fall of 1995. The RI/FS was finalized in 1998 and a Record of Decision (ROD) was signed in March 1998. The ROD specified asphalt capping of the former lagoon area combined with continued semi-annual ground water monitoring of selected wells located within, and downgradient, from Area A. The sampling frequency was subsequently reduced to annual sampling.

Area B was the former paint waste disposal area immediately southeast of the sign plant at the Site. Waste paint thinner and cleaning solvents were reportedly disposed of on the ground surface. Elevated levels of xylene, ethylbenzene, toluene and acetone have been detected in soil and groundwater samples collected from this area. The March 1998 ROD specified the operation and enhanced bioremediation program (i.e., oxygen injection) in this area combined with continued groundwater monitoring of selected wells located within the downgradient from Area B. After ground water analytical results indicated a significant decrease in contaminant levels with Area B monitoring wells utilizing a passive (wind-powered) soil vapor extraction system was installed to treat unsaturated soils in the area in the summer of 2001. Based on analytical results, periodic sampling of Area B ground water monitoring wells was terminated in 2006.

1.1 Objective

The objective of this project is to monitor Area A groundwater monitoring wells, collect cap photos and provide an annual progress report for Area A at the Site. The Scope of Work in Section 2.0 of this Report was conducted at the Site.

2.0 Scope of Work

2.1 Annual Sampling of Area A Groundwater Monitoring Wells

The NYSDEC requires the annual sample of Area A monitoring wells (MW-4A, MW-5A, MW-

8, MW-9R, MW-10R, and MW-11). To meet the objective, NEU-VELLE completed the following:

1. A NEU-VELLE Environmental Scientist measured water levels from all on-site Area A monitoring wells prior to sample collection using an electronic water level meter calibrated to ± 0.01 foot. Measurements were taken from the top of the inner PVC casing of each well which have previously been surveyed for elevation. Water level measurements were recorded on the groundwater sampling logs generated for each well sampled. The groundwater sampling logs are contained in Appendix C.
2. Prior to groundwater sampling, the monitoring wells were purged by the NEU-VELLE Environmental Scientist. Specifically, a peristaltic pump and dedicated Teflon tubing were used to purge the selected wells using low flow methodologies. Field parameter measurements for pH, Specific Conductance, Temperature and Turbidity were collected at five-minute intervals, then recorded on the individual Groundwater Sampling Log Sheets for each well sampled. Purging was considered complete with the field parameters of pH and Specific Conductance stabilized to within 10% for three (3) successive readings, and when the turbidity readings were at or below 10 Nephelometric Turbidity Units (NTUs). However, since the turbidity criteria of 10 NTUs could not be achieved, sampling was completed after turbidity measurements stabilized.
3. Groundwater samples were collected from each well once the purging criteria described above had been reached. The samples were collected using the peristaltic pump operating at the same low flow rate utilized during purging of the well. The groundwater samples were placed in laboratory supplied bottles, placed in a cooler on ice, and transported to Paradigm Laboratories under chain-of-custody procedures for the following analysis:
 - Target Analyte List (TAL) Metals by USEPA Methods 6010 and 7471
 - Chloride and Sulfate Ions by USEPA Method 300.0

2.2 Deviation from Reporting Requirements

This is the seventh annual reporting period for well MW-9R and MW-10R monitoring well locations, which replaced former well locations MW-9 and MW-10.

2.3 Annual Progress Report

Following sampling, NEU-VELLE prepared this Annual Progress Report for the Site. The Report details the field methodologies implemented at the Site, and summarizes and discusses the results of the work, including a comparison of the current analytical result to historical site data as well as the appropriate NYSDEC Groundwater Standards and Guidance Values.

This Annual Progress Report will be submitted electronically as follows:

- Jonathan Tamargo – NYSDEC Region 8
- Karis Manning – NYSDEC Region 8
- Adam Morgan – NYSDEC Region 8
- Director, Bureau of Environmental Exposure Investigation – NYSDOH
- Robert Lamb – Elderlee, Inc

3.0 Field Measurements

On May 13, 2020, NEU-VELLE Environmental Scientist measured the water levels within the referenced groundwater monitoring wells in Area A with an electronic water level meter. Static water level readings were utilized to evaluate the groundwater flow pattern with historical data.

Well I.D.	Static Water Level (feet)	Depth of Well (feet)
MW-4A	3.51	12.0
MW-5A	2.60	11.3
MW-8	6.35	13.9
MW-9R	10.20	20.0
MW-10R	6.84	15.0
MW-11	1.13	12.3

The Site groundwater flow direction was calculated from the above static water level measurements collected on May 13, 2020 is depicted in Figure 3 – Appendix A. Water-level elevation data indicate groundwater to be flowing in a southeast direction on site.

4.0 Analytical Results

The laboratory results were compared to the NYCRR Part 703 Groundwater Standards from the NYSDEC Technical and Operational Guidance Series (1.1.1) Memorandum, and to historical analytical data collected for each well. Table 2 presents the analytical data from the Area A monitoring wells from the sampling event. Tables 3 through 8 present the current and historic analytical data for each well in Area A. Appendix E contains the laboratory report.

The following summarizes the infringements of groundwater quality standards identified during the 2020 annual sampling event:

- Two (2) wells (MW-9R and MW-11) contained concentrations of Chloride Ion that exceeded the NYCRR Part 703 Groundwater Standard.
- Five (5) wells (MW-4A, MW-5A, MW-8, MW-10R and MW-11) contained concentrations of Sulfate Ion that exceeded the NYCRR Part 703 Groundwater Standard.

- Five (5) wells (MW-4A, MW-5A, MW-8, MW-10R and MW-11) contained concentrations of iron that exceeded the NYCRR Part 703 Groundwater Standard.
- Five (5) wells (MW-4A, MW-5A, MW-9R, MW-10R and MW-11) contained concentrations of magnesium that exceeded the NYCRR Part 703 Groundwater Standard.
- Five (5) wells (MW-4A, MW-5A, MW-8, MW-10R and MW-11) contained concentrations of manganese that exceeded the NYCRR Part 703 Groundwater Standard.
- Six (6) wells (MW-4A, MW-5A, MW-8, MW-9R, MW-10R and MW-11) contained concentrations of sodium that exceeded the NYCRR Part 703 Groundwater Standard.
- One (1) well (MW-4A) contained concentrations of zinc that exceeded the NYCRR Part 703 Groundwater Standard.

The concentration of analytes detected in groundwater samples collected on May 13, 2020 were generally within the ranges of values previously recorded for Area A monitoring wells. Appendix B – Table 2 depicts the results from the May 13, 2020 annual sampling event.

5.0 Summary of Findings

Summary of Findings

In general, the concentrations of analytes of concern have remained relatively unchanged over the past year. Many of the analytes that exceed the Part 703 Value in the previous sampling event were reported at concentrations still exceeding the Part 703 Value in the May 13, 2020 sampling event.

Concentrations of analytes of concern were below the standard deviation (SD) above their associated historical average concentration except for the following well/analyte that exceeded the historical average by one SD:

- MW-4A: Magnesium, Manganese, Sodium, Zinc and Sulfate
- MW-5A: Magnesium, Manganese, Sodium and Sulfate
- MW-8: Iron, Manganese and Sulfate
- MW-9R: Magnesium, Sodium and Chloride
- MW-10R: Magnesium, Manganese, Sodium and Chloride
- MW-11: Iron, Magnesium, Manganese, Sodium and Sulfate

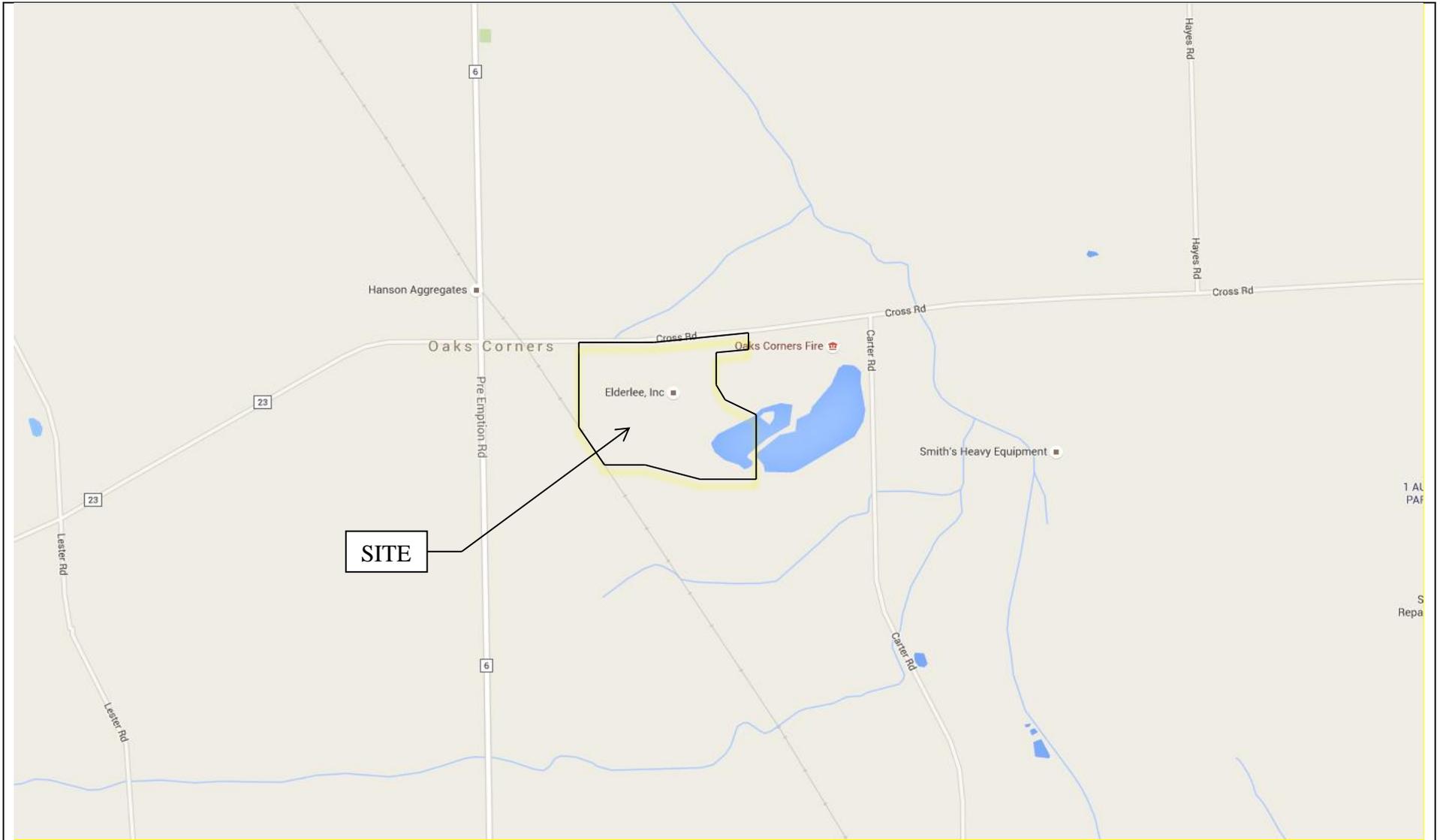
Appendix B depicts the historical data in Table 3 through 8.

Conclusions

- Overall, the concentrations of analytes of interest are either decreasing in certain compounds or have remained relatively stable. Additionally, the analytical parameters have included testing for TAL metals, chloride, and sulfates. Generally, only a select few metals have been detected above the Part 703 Values on a consistent basis. These metals include:
 - Iron
 - Magnesium
 - Manganese
 - Sodium
 - Zinc
 - Chloride
 - Sulfate
- As requested by the NYSDEC, a change of use and corrective action work plan was developed and submitted to the NYSDEC to address the BMP's for Area A. Area A consists of the two (2) former settling lagoons that are asphalt capped that are located north of the galvanizing plant. Based on the agreement between the NYSDEC and Elderlee, the following was implemented back in 2018.
 - A lining for a section storm water piping to the west of Area A was completed to restrict infiltration into the piping.
 - Installation for drainage swale to the east of the manufacturing facility to control no industrial storm water from entering the site.
 - The former dewatering pump station was abandoned, removed and closed.

APPENDIX A

FIGURES



1667 Lake Avenue, Building 59, Suite 101, Rochester, New York 14615

Site Location Map Elderlee, Inc. - 729 Cross Road, Oaks Corners, NY	
Drawn Date: June 2020	
Drawn By: J. Moore	
Scale: NTS	Drawing No. 1



NO.	DATE	APPR.	REVISION	NO.	DATE	APPR.	REVISION

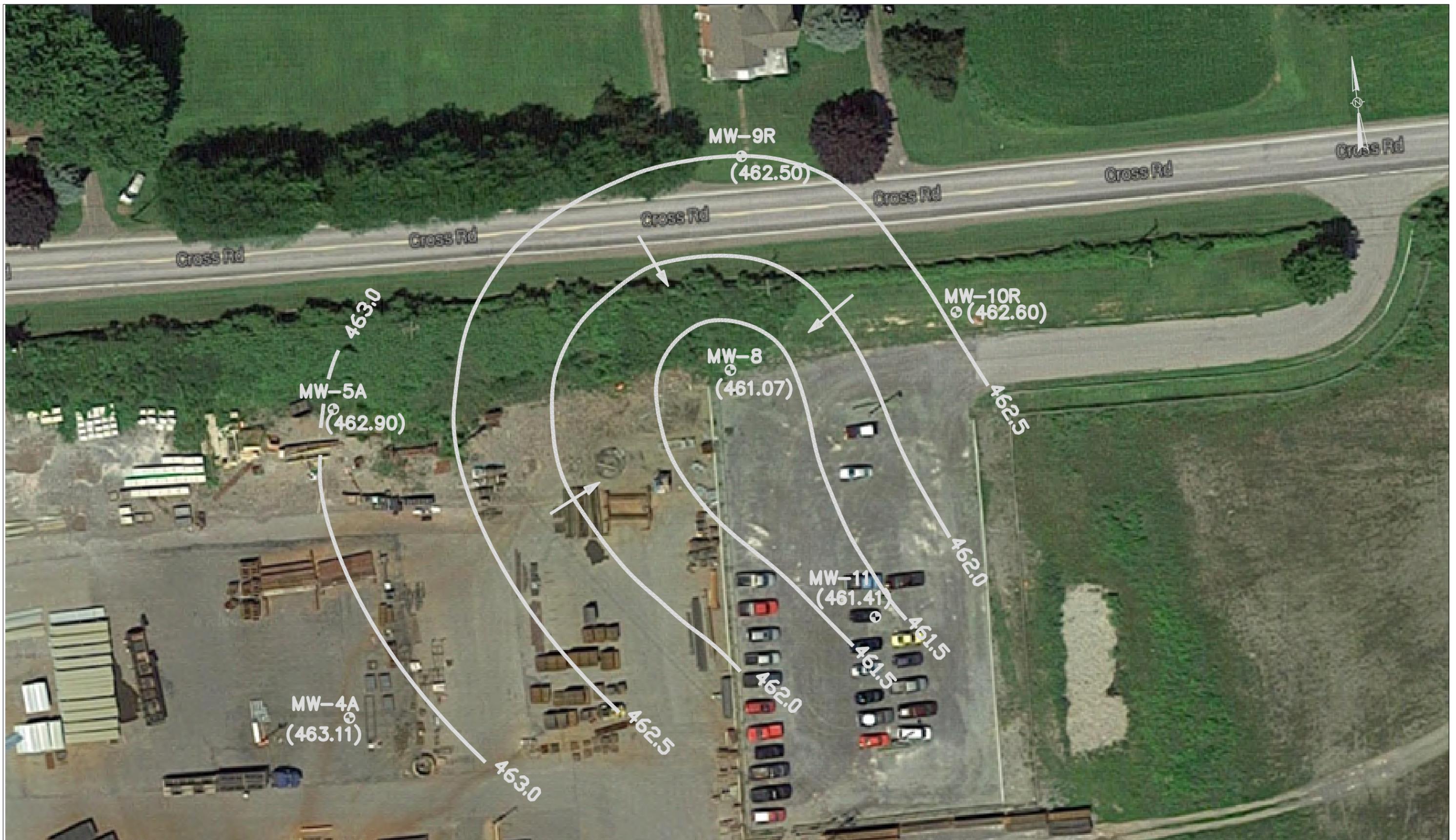
ELDERLEE, INC. - AREA A
 729 CROSS ROAD, OAKS CORNERS, NY

NEU-VELLE
 1667 LAKE AVENUE
 ROCHESTER, NEW YORK 14615

CHECKED	JAM	DATE	5/2020
DESIGN ENGINEER	JAM	DATE	5/2020
PROJECT ENGINEER	JAM	DATE	5/2020
PROJECT MANAGER	JAM	DATE	5/2020
APPROVED	JAM	DATE	5/2020
APPROVED	JAM	DATE	5/2020

MONITORING WELL LOCATION MAP			
MAY 13 2020			
DRAWN	JAM	DATE	MAY 2020
SCALE	NOT TO SCALE	JOB NO.	
REVISION DATE:		FILE NAME:	

DRAWING NO.	2
REV. NO.	
SHEET	1
OF	1



NO.	DATE	APPR.	REVISION	NO.	DATE	APPR.	REVISION

ELDERLEE, INC. - AREA A
 729 CROSS ROAD, OAKS CORNERS, NY

NEU-VELLE
 1667 LAKE AVENUE
 ROCHESTER, NEW YORK 14615

CHECKED	JAM	DATE	5/2020
DESIGN ENGINEER	JAM	DATE	5/2020
PROJECT ENGINEER	JAM	DATE	5/2020
PROJECT MANAGER	JAM	DATE	5/2020
APPROVED	JAM	DATE	5/2020
APPROVED	JAM	DATE	5/2020

GROUNDWATER CONTOUR MAP
 MAY 13 2020

DRAWN: JAM DATE: MAY 2020 REVISION DATE: FILE NAME: JOB NO. SCALE: NDT TO SCALE

DRAWING NO.	3
REV. NO.	
SHEET	1
OF	1

APPENDIX B
ANALYTICAL SUMMARY TABLES

Table 1
Annual Groundwater Sampling
729 Cross Road, Oaks Corners, New York

Summary of Monitoring Well Depths
May 13, 2020

Well I.D.	Static Water Level (feet)	Depth of Well (feet)
MW-4A	3.51	12.04
MW-5A	2.60	11.3
MW-8	6.35	13.9
MW-9R	10.20	20.0
MW-10R	6.84	15.0
MW-11	1.13	12.3

Table 2
Elderlee, Inc. Oaks Corners Facility - Area A
Table of Analytical Results - May 13, 2020

Field Parameters	Units	Method	MW-4A	MW-5A	MW-8	MW-9R	MW-10R	MW-11	6NYCRR Part 703 MCL/Std.
Gradient Location	NA	NA	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	NS
Static Water Level	feet	NA	3.51	2.60	6.35	10.20	6.84	1.13	NS
Specific Conductance	umhos/cm	NA	2,461	2,546	1,906	2,042	1,539	2,605	NS
Temperature	Degrees C	NA	12.5	9.0	10.1	9.7	10.4	10.1	NS
pH	S.U.	NA	6.86	7.00	6.90	7.10	7.06	7.05	6.5 - 8.5
Turbidity	NTU	NA	2.9	0.5	0.71	0.60	1.1	9.7	NS
Metals									
Aluminum	ug/l	200.7	ND	ND	ND	ND	ND	145	NS
Antimony	ug/l	200.7	ND	ND	ND	ND	ND	ND	3
Arsenic	ug/l	200.7	ND	ND	ND	ND	ND	14.1	25
Barium	ug/l	200.7	ND	ND	ND	ND	ND	ND	1,000
Beryllium	ug/l	200.7	ND	ND	ND	ND	ND	ND	3
Cadmium	ug/l	200.7	ND	ND	ND	ND	ND	ND	5
Calcium	ug/l	200.7	496,000	494,000	399,000	165,000	219,000	339,000	NS
Chromium	ug/l	200.7	ND	ND	ND	ND	ND	ND	50
Cobalt	ug/l	200.7	ND	ND	ND	ND	ND	ND	5
Copper	ug/l	200.7	ND	ND	ND	ND	ND	ND	200
Iron	ug/l	200.7	2,380	868	3,380	120	963	5,740	300
Lead	ug/l	200.7	ND	ND	ND	ND	ND	ND	25
Magnesium	ug/l	200.7	57,500	35,800	24,500	35,100	40,300	57,700	35,000
Manganese	ug/l	200.7	503	409	537	49	1,810	1,140	300
Mercury	ug/l	245.1	ND	ND	ND	ND	ND	ND	0.7
Nickel	ug/l	200.7	ND	ND	ND	ND	ND	ND	100
Potassium	ug/l	200.7	3,890	ND	ND	3,110	ND	4,210	NS
Selenium	ug/l	200.7	ND	ND	ND	ND	ND	ND	10
Silver	ug/l	200.7	ND	ND	ND	ND	ND	ND	50
Sodium	ug/l	200.7	141,000	57,700	36,100	195,000	61,900	175,000	20,000
Thallium	ug/l	200.7	ND	ND	ND	ND	ND	ND	0.5
Vanadium	ug/l	200.7	ND	ND	ND	ND	ND	ND	NS
Zinc	ug/l	200.7	13,600	312	1,460	177	824	ND	2,000
Wet Chemistry									
Chloride	mg/l	300.0	240	88	55	430	120	290	250
Sulfate	mg/l	300.0	1,400	1,200	840	83	430	770	250

Bold Type - Exceeds NYCRR Part 703 Groundwater Standard from NYSDEC Technical and Operational Guidance Series (1.1.1) - Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations.

NA - Not Applicable

ND<5.0 denotes that the constituent was not detected above the reported laboratory method detection limit.

NS - No Groundwater Standard

B - This flag indicates the compound was also detected in the associated Method Blank. The B flag has an alternative meaning for Inorganics analyses reported using CLP ILM-type metals forms, indicating a "trace" concentration below the reporting limit and equal to or above the detection limit.

--- - Not Sampled

Table 3
Elderlee, Inc. Oaks Corners Facility - MW-4A

Field Parameters	UNITS	METHOD	6NYCRR Part 703 MCL/dtd.	05/13/20	05/10/19	05/02/18	05/01/17	05/11/16	06/11/15	06/20/14	07/01/13	04/11/12	07/22/11	05/15/09	05/27/08	06/14/07	06/13/06	06/01/05	12/06/04	06/02/04	12/16/03	07/10/03	02/19/03	06/06/02	12/06/01	06/22/01	12/14/00	06/01/00	###	Arithmetic Mean	Standard Deviation
Static Water Level	feet	NA	NS	3.60	3.31	3.16	3.07	3.36	2.95	3.75	3.55	5.48	4.42	3.7	3.81	3.85	3.75	3.79	3.93	3.31	3.66	4.01	4.67	3.43	4.66	3.98	3.77	3.25	NA	3.77	0.57
Specific Conductance	umhos/cm	NA	NS	2,461	1,890	3,100	3,930	2,520	3,140	3,340	2,550	1,910	3,730	2,833	2,810	3,190	3,320	2,920	3,350	3,160	3,590	3,630	3,539	2,610	3,020	2,520	3,380	3,060	NA	3020.12	524.40
Temperature	Degrees C	NA	NS	12.5	12.9	11.7	14	15.2	16.5	21.16	20.21	11.4	23.81	15.4	14.80	18.00	16.90	21.20	9.10	15.10	10.20	18.80	8.10	15.90	15.90	20.30	7.80	17.10	NA	15.36	4.25
pH	S.U.	NA	6.5-8.5	6.86	6.65	6.75	5.07	7.17	6.82	6.74	6.75	6.57	8.2	7.77	7.62	6.85	7.07	7.12	6.85	6.68	6.75	6.21	6.97	6.68	6.69	6.74	6.52	6.81	NA	6.84	0.56
Turbidity	NTU	NA	NS	2.9	2.21	2.6	12	21	22.8	12.5	15.2	3.0	33.5	9.8	44.00	30.00	8.00	5.00	100.00	18.00	3.00	6.00	8.04	2.89	7.63	NA	12.00	11.50	NA	16.98	21.11

Metals																															
Aluminum	ug/l	200.7	NS	ND	ND	ND	532.0	1,080.0	470.0	ND	ND	70.9 B	ND	190	269	ND	102	ND	241	ND	ND	ND	ND	13	209	149	71 B	ND	B	265.39	295.71
Antimony	ug/l	200.7	3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20.5 B	ND		20.50	#DIV/0!
Arsenic	ug/l	200.7	25	ND	ND	ND	ND	ND	11.4	ND	3.4 B	ND	ND		6.57	4.25															
Barium	ug/l	200.7	1,000	ND	ND	ND	ND	ND	ND	30.1 B	ND	15.7 B	43 J	ND	ND	37.4	ND	18.1	ND	22.9	14.1 B	44.5 B	B	27.74	11.36						
Beryllium	ug/l	200.7	3	ND	ND	ND	ND	ND	ND	24.2 B	ND	0.9	ND	ND		12.55	16.48														
Cadmium	ug/l	200.7	5	ND	ND	ND	ND	ND	ND	4.0 B	ND	3.9 B	3.2 J	ND	ND	ND	ND	ND	ND	6.1	7.3	ND	5.2	3.4	ND	4.0 B	4.3 B	7.0		4.84	1.48
Calcium	ug/l	200.7	NS	496,000	320,000	572,000	592,000	425,000	607,000	523,000	475,000	347,000	560,000	425,000	497,000	557,000	596,000	495,000	584,000	443,000	551,000	498,000	553,000	536,000	503,000	347,000	575,000	572,000		522551.72	83447.37
Chromium	ug/l	200.7	50	ND	ND	ND	21.2	47.7	16.4	3.2 B	2.7 B	10.5 B	1.1 J	11	11.3	ND	ND	ND	17.5	11.9	11.7	12.8	ND	3.4	43.8	14.2	2.6 B	ND		14.29	13.19
Cobalt	ug/l	200.7	5	ND	ND	ND	ND	ND	ND	1.5 B	2.0 B	1.5 B	1.5 J	ND	2.7 B	3 B	ND	B	1.93	0.67											
Copper	ug/l	200.7	200	ND	ND	ND	ND	ND	ND	3.8 B	ND	4.6 B	ND	0.88 B	ND	ND		3.09	1.96												
Iron	ug/l	200.7	300	2,380	1,420	6,460	2,860	6,070	1,980	6,790	5,660	2,350	8,300	2,480	4,190	8,770	12,300	7,160	14,800	7,250	9,690	5,950	15,300	13,100	13,300	5,200	14,700	12,900		9008.97	5361.32
Lead	ug/l	200.7	25	ND	ND	ND	84.3	178.0	46.7	13.6	4.7 B	18.3	ND	ND	22.4	9.1	11.4	ND	29.6	11.0	5.9	7.3	ND	2.5	17.5	11.4	ND	ND		29.61	44.52
Magnesium	ug/l	200.7	35,000	57,500	38,900	65,700	69,500	46,800	39,100	80,100	69,900	55,900	81,000	75,000	71,000	79,600	74,300	81,200	76,900	89,800	103,000	103,000	83,200	72,300	57,400	54,200	78,100	82,600		70341.38	20266.78
Manganese	ug/l	200.7	300	503	408	472	122	276	296	561	548	551	560	698	635	670	578	652	537	596	705	739	619	647	331	646	697	719		563.00	151.44
Mercury	ug/l	200.7	0.7	ND	ND	ND	ND	ND	ND	0.043 B	ND	ND	ND		0.17	#DIV/0!															
Nickel	ug/l	200.7	100	ND	ND	ND	ND	ND	ND	7.2 B	8.1 B	7.6 B	6.6 J	ND	8	ND	8 B	10.5 B	ND	B	8.34	1.23									
Potassium	ug/l	200.7	NS	3,890	2,960	4,190	5,890	3,660	5,390	6,930	4,960	4,660	7,300	7,700	6,850	7,880	7,690	7,970	7,010	7,690	7,370	8,670	5,190	6,160	5,830	5,620	5,300	6,360		6289.31	1470.75
Selenium	ug/l	200.7	10	ND	ND	ND	ND	ND	1.6	ND	21.7 B	ND	2.8 B	ND	ND		8.51	9.62													
Silver	ug/l	200.7	50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3 B	ND	ND	ND		1.91	#DIV/0!
Sodium	ug/l	200.7	20,000	141,000	88,400	168,000	265,000	164,000	161,000	203,000	199,000	177,000	230,000	198,000	161,000	175,000	181,000	162,000	228,000	194,000	231,000	189,000	154,000	111,000	97,700	78,900	115,000	114,000		16506.90	55453.05
Thallium	ug/l	200.7	0.5*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		12.00	#DIV/0!
Vanadium	ug/l	200.7	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		#DIV/0!	#DIV/0!
Zinc	ug/l	200.7	2,000	13,600	7,400	10,500	16,600	18,000	12,900	13,500	11,400	12,300	12,000	13,100	12,000	13,200	8,100	11,000	9,150	14,400	15,100	13,400	11,600	10,300	5,910 E	14,500 E	11,900	13,800		11964.48	2706.31

Wet Chemistry																																	
Chloride	mg/l	300.0	250	240	160	310	510	260	250	340 B	310	310	360	357	316	297	316	312	470	449	520										338.17	94.83	
Sulfate	mg/l	300.0	250	1,400	880	1,600	1,600	970	1,300	1,400 B	1,200	970	1,400	1,250	1060	1510	1600	1210	1550	1420	1590											1328.53	244.64

Bold Type - Exceeds NYCRR Part 703 Groundwater Standard from NYSDEC Technical and Operational Guidance Series (1.1.1) - Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations.
 NA - Not Applicable
 ND < 5.0 denotes that the constituent was not detected above the reported laboratory method detection limit.
 NS - No Groundwater Standard

Table 4
Elderlee, Inc. Oaks Corners Facility - MW-5A

Field Parameters	UNITS	METHOD	6NYCRR Part 703 MCLstd.	05/13/20	05/10/19	05/02/18	05/01/17	05/11/16	06/11/15	06/20/14	07/01/13	04/11/12	07/22/11	05/15/09	05/27/08	06/14/07	06/13/06	06/01/05	12/06/04	06/02/04	12/16/03	07/10/03	02/19/03	06/06/02	12/06/01	06/22/01	12/14/00	06/01/00	12/16/99	12/11/97	12/12/96	09/12/95	Arithmetic Mean	Standard Deviation
Static Water Level	feet	NA	NS	2.67	2.60	2.02	2.20	2.72	1.88	3.00	2.23	2.70	3.57	3.80	3.28	3.45	3.14	3.32	2.92	2.71	2.94	3.58	4.01	3.02	4.10	3.60	2.44	2.32	4.00	NA	NA	NA	3.02	0.64
Specific Conductance	umhos/cm	NA	NS	2,546	2,170	2,381	2,690	2,520	2,820	2,550	2,680	2,764	3,200	2,780	2,940	2,790	2,800	2,740	2,730	2,890	3,380	3,610	2,775	2,270	2,720	2,750	2,870	2,470	2,570	NA	NA	NA	2746.38	308.39
Temperature	Degrees C	NA	NS	9.0	9.2	9.5	9.1	10.9	14.20	16.35	16.5	9.3	21.2	12.8	11.2	15.0	15.6	15.8	7.7	12.9	7.2	16.1	6.2	13.9	13.4	16.8	6.6	15.5	8.8	NA	NA	NA	12.34	3.88
pH	S.U.	NA	6.5-8.5	6.99	6.86	7.07	5.47	7.10	6.89	6.65	6.95	6.92	7.87	7.81	7.61	7.02	7.24	7.48	7.06	7.05	6.99	6.44	7.06	6.99	6.94	7.08	7.03	6.92	7.38	NA	NA	NA	7.03	0.45
Turbidity	NTU	NA	NS	0.48	1.1	0.7	1.2	1.6	4.1	13.2	5	0.7	80	8	7	16	4	5	16	5	4	3	6	6	7	NA	1	5	2	NA	NA	NA	8.41	15.90

Metals

Aluminum	ug/l	200.7	NS	ND	ND<100	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	31.3	44.9	ND	ND	ND	ND	ND	ND	109.0	61.73	41.50									
Antimony	ug/l	200.7	3	ND	ND<60	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA									
Arsenic	ug/l	200.7	25	ND	ND	ND	ND	ND	16	ND	ND	4.6 B	19 J	ND<100	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20.8	7.1	ND	ND	20.8	13.8	ND	14.09	6.20	6.20	
Barium	ug/l	200.7	1,000	ND	ND	ND	ND	ND	ND	12.2 B	13.9 B	13.3 B	14 J	ND<20	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	12.1	ND	14.6	16.4	ND	ND	ND	ND	ND	15.6	14.01	1.51
Beryllium	ug/l	200.7	3	ND	ND<5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	1.20	NA										
Cadmium	ug/l	200.7	5	ND	ND<5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	ND	1.20	NA										
Calcium	ug/l	200.7	NS	494,000	451,000	435,000	596,000	641,000	655,000	584,000	576,000	586,000	600,000	606,000	625,000	629,000	624,000	641,000	641,000	572,000	545,000	610,000	603,000	567,000	605,000	603,000	589,000	566,000	525,000	547,000	631,000	712,000	588,241.38	58,584.28		
Chromium	ug/l	200.7	50	ND	0.68 J	ND<100	ND	ND	ND	ND	ND	ND	ND	ND	ND	2	ND	1	ND	ND	ND	ND	ND	ND	1.26	0.61	0.61									
Cobalt	ug/l	200.7	5	ND	ND	ND	ND	ND	ND	1.7 B	1.8 B	1.9 B	1.9 J	ND<50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4	ND	ND	ND	ND	ND	ND	2.28	NA		
Copper	ug/l	200.7	200	ND	ND<20	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1	3	ND	ND	ND	ND	ND	1.92	1.39											
Iron	ug/l	200.7	300	868	1,740	1,600	2,330	2,490	3,200	4,010	3,940	2,440	5,300	4,800	5,610	4,380	6,380	5,140	7,080	5,430	6,280	8,260	5,960	4,590	6,020	7,480	8,540	7,090	6,040	6,860	4,160	1,900	4,824.76	2,098.65		
Lead	ug/l	200.7	25	ND	ND<50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5	ND	ND	5.00	NA										
Magnesium	ug/l	200.7	35,000	35,800	29,900	21,500	27,800	39,800	39,900	42,500	33,600	37,600	40,000	47,700	36,800	45,000	42,500	44,300	32,300	40,900	32,200	39,700	43,300	39,000	38,900	46,200	27,600	29,300	31,900	38,700	67,400	71,200	39,911.11	10,360.87		
Manganese	ug/l	200.7	300	409	440	296	502	600	834	725	613	788	710	684	672	567	651	557	608	637	651	1,110	556	553	572	582	884	766	636	726	804	805	653.03	157.74		
Mercury	ug/l	200.7	0.7	ND	0.037 B	ND	ND	ND<0.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.03	NA								
Nickel	ug/l	200.7	100	ND	ND	ND	ND	ND	ND	2.8 B	6.4 B	2.5 B	2.7 J	ND<40	ND	ND	ND	ND	ND	ND	ND	ND	ND	3	ND	ND	5	ND	ND	ND	7	4.11	1.94			
Potassium	ug/l	200.7	NS	ND	ND	ND	ND	ND	ND	1,890	1,880	1,850	2,300	ND<2,000	ND	ND	ND	ND	ND	ND	ND	2,020	2,130	ND	1,580	ND	1,580	1,430	ND	ND	ND	2,580	3,420	2,060.00	561.00	
Selenium	ug/l	200.7	10	ND	ND	ND	ND	ND	14.6	15 B	17.5 B	ND	ND	ND<10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4	ND	ND	10	ND	15	ND	12.70	4.87		
Silver	ug/l	200.7	50	ND	ND<10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4	ND	ND	ND	ND	1	2.60	2.26												
Sodium	ug/l	200.7	20,000	57,700	53,400	52,200	58,100	67,400	68,500	68,200	66,500	61,800	71,000	78,900	72,400	72,200	84,500	69,700	82,200	109,000	242,000	248,000	55,300	46,700	44,600	39,600	33,900	37,400	38,900	48,600	85,700	80,700	75,693.10	49,912.97		
Thallium	ug/l	200.7	0.5*	ND	ND<10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA											
Vanadium	ug/l	200.7	NS	ND	ND<50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA										
Zinc	ug/l	200.7	2,000	312	314	273	363	364	306	366	290	332	300	246	238	208	221	186	215	210	206	223	207	157	165	119	247	173	160	232	211	302	246.41	67.37		

Wet Chemistry

Chloride	mg/l	300.0	250	88	86	95	93	110	110	110 B	100	95	100	174	141	134	195	149	177	244	450
Sulfate	mg/l	300	250	1,200	1,100	960	1,400	1,400	1,300	1,300 B	1,100	1,300	1,200	1,340	1,140	1,300	1,320	1,190	1,310	1,270	1,110

147.28	87.25
1,235.56	118.23

Bold Type - Exceeds NYCRR Part 703 Groundwater Standard from NYSDEC Technical and Operational Guidance Series (1.1.1) - Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations.

NA - Not Applicable

ND<5.0 Denotes that the constituent was not detected above the reported laboratory method detection limit.

NS - No Groundwater Standard

**Table 5
Elderlee, Inc. Oaks Corners Facility - MW-8**

Field Parameters	UNITS	METHOD	NYCRR Part 703 MCLStd.	05/13/20	05/10/19	05/02/18	05/01/17	05/11/16	06/11/15	06/20/14	07/01/13	04/11/12	07/22/11	05/15/09	05/27/08	06/14/07	06/13/06	06/02/05	12/06/04	06/02/04	12/16/03	07/10/03	02/19/03	06/06/02	12/06/01	06/22/01	12/14/00	06/01/00	12/16/99	12/11/97	12/12/96	09/12/95	Arithmetic Mean	Standard Deviation
Static Water Level	feet	NA	NS	6.35	6.36	5.75	5.91	6.36	5.79	5.20	4.44	7.80	5.63	5.5	5.78	5.66	5.30	5.55	5.09	4.99	5.09	NR	6.21	5.24	6.33	5.91	4.55	4.52	NA	NA	NA	NA	5.54	0.59
Specific Conductance	umhos/cm	NA	NS	1,906	1,610	2,910	2,700	1,520	1,320	2,040	3,230	3,315	2,400	2,055	3,010	2,780	2,830	3,210	2,400	2,570	2,570	4,060	3,660	2,570	3,560	4,100	1,478	2,510	NA	NA	NA	NA	2652.56	769.86
Temperature	Degrees C	NA	NS	10.1	10.3	11.7	12.0	12.7	14.50	20.72	17.4	11.3	16.2	13.4	9.7	16.4	15.1	14.5	8.2	13.3	7.7	14.4	6.3	14.5	13.6	21.0	6.4	13.1	NA	NA	NA	NA	12.98	3.82
pH	S.U.	NA	6.5-8.5	6.90	6.84	6.85	6.98	7.26	6.98	6.90	6.83	8.16	7.74	7.68	7.11	7.33	7.51	7.27	7.10	6.89	6.58	6.98	6.85	6.87	6.92	7.10	6.89	NA	NA	NA	NA	7.10	0.35	
Turbidity	NTU	NA	NS	0.71	2.14	0.10	3.10	2.74	4.50	9.66	0.35	1.8	123	8.7	1	25	2	8	21	8	0	6	1	3	10	NA	10	7	NA	NA	NA	NA	11.12	25.20

Metals

Aluminum	ug/l	200.7	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND<100	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	113	142	86.2	ND	ND	ND	ND	92.7	108.48	25.10
Antimony	ug/l	200.7	3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND<60	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Arsenic	ug/l	200.7	25	ND	ND	ND	ND	ND	ND	ND	ND	6.2 B	11 J	ND<10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5	ND	ND	ND	19.5	ND	ND	10.43	6.58	
Barium	ug/l	200.7	1,000	ND	ND	ND	ND	ND	ND	32.5 B	80.4 B	68.3 B	59 J	ND<20	23.2	34.7	31.2	28.3	41.8	37	20.7	22	39.1	30.6	20.3	25.1	33	27.1	25.3	30.1	50	56.4	37.10	16.18
Beryllium	ug/l	200.7	3	ND	ND	ND	ND	ND	ND	ND	ND	B	ND	ND<5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.1	ND	ND	ND	ND	ND	ND	2.10	NA
Cadmium	ug/l	200.7	5	ND	ND	ND	ND	ND	ND	ND	ND	B	ND	ND<5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.67	ND	ND	1	ND	ND	ND	1.6	1.09	0.47
Calcium	ug/l	200.7	NS	399,000	312,000	284,000	305,000	204,000	215,000	485,000	468,000	475,000	470,000	506,000	580,000	559,000	530,000	617,000	430,000	360,000	510,000	643,000	559,000	483,000	489,000	6340,000	562,000	477,000	511,000	359,000	296,000	418,000	449,851.85	117,751.60
Chromium	ug/l	200.7	50	ND	ND	ND	ND	ND	ND	ND	1.3 B	B	ND	ND<10	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.9	ND	ND	ND	ND	ND	ND	ND	ND	1.60	NA
Cobalt	ug/l	200.7	5	ND	ND	ND	ND	ND	ND	1.2 B	1.3 B	2.7 B	2.2 J	ND<50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.2	ND	ND	ND	ND	ND	1.1	1.95	0.88
Copper	ug/l	200.7	200	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND<20	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Iron	ug/l	200.7	300	3,380	2,650	1,780	1,720	1,090	962	5,850	5,570	6,330	5,600	8,150	5,460	4,960	6,620	6,110	6,090	5,350	6,230	10,100	12,500	9,660	9,200	11,400	7,100	8,500	9,400	5,660	4,530	516	5,947.17	3,129.36
Lead	ug/l	200.7	25	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND<50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Magnesium	ug/l	200.7	35,000	24,500	23,000	36,400	30,800	22,300	24,300	29,800	35,100	27,800	31,000	32,300	38,500	44,100	45,400	36,300	37,600	20,200	26,000	44,900	66,200	44,300	63,600	60,400	11,600	48,700	53,000	53,100	33,800	36,800	37,303.45	13,392.76
Manganese	ug/l	200.7	300	537	637	321	352	285	353	452	417	496	950	892	1070	1030	651	566	521	376	624	768	846	709	753	917	1000	1030	738	437	538	1140	669.17	254.75
Mercury	ug/l	200.7	0.7	ND	ND	ND	ND	ND	ND	ND	0.054	ND	ND	ND<0.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.02	ND	ND	ND	ND	ND	ND	ND	ND	0.04	NA
Nickel	ug/l	200.7	100	ND	ND	ND	ND	ND	ND	5.1 B	6.4 B	7.1 B	5.5 J	ND<40	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.9	ND	6.4	6.5	ND	ND	ND	8.3	6.28	1.12	
Potassium	ug/l	200.7	NS	ND	ND	ND	ND	ND	ND	1,280	2,040	2,440	3,700	2100	3330	2340	3730	3110	4030	ND	3590	6220	6300	5630	4560	6090	1930	4670	6010	6620	4960	3120	3,990.91	1,640.29
Selenium	ug/l	200.7	10	ND	ND	ND	ND	ND	ND	ND	17.6 B	ND	ND	ND<10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.5	ND	ND	12.8	ND	7.74	2.5	9.23	6.00	
Silver	ug/l	200.7	50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND<10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4.2	ND	ND	ND	ND	ND	0.71	2.46	2.47
Sodium	ug/l	200.7	20,000	36,100	25,500	295,000	252,000	115,000	39,400	69,400	304,000	240,000	61,000	62,500	115,000	97,800	148,000	200,000	112,000	111,000	130,000	237,000	174,000	123,000	246,000	224,000	131,000	50,400	191,000	243,000	152,000	121,000	148,486.21	80,627.89
Thallium	ug/l	200.7	0.5*	ND	ND	ND	ND	ND	ND	ND	7.1 B	ND	ND	ND<10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	7.10	NA
Vanadium	ug/l	200.7	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND<50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA
Zinc	ug/l	200.7	2,000	1,460	1,190	1,550	1,870	1,930	2,710	1,260	1,920	2,490	2,000	762	576	673	436	185	437	640	188	233	381	288	465	529	686	1,790	485	548	752	6,490	1,204.28	1,251.17

Wet Chemistry

Chloride	mg/l	300	250	55	26	550	450	160	85	150 B	440	430	91	263	190	193	255	284	186	141	80.4
Sulfate	mg/l	300	250	840	700	470	530	330	320	900 B	810	970	860	1,020	1,100	1,200	1,230	1,230	1,060	1,000	834

223.86	153.00
855.78	287.82

Bold Type - Exceeds NYCRR Part 703 Groundwater Standard from NYSDEC Technical and Operational Guidance Series (1.1.1) - Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations.

NA - Not Applicable

ND<5.0 denotes that the constituent was not detected above the reported laboratory method detection limit.

NS - No Groundwater Standard

Table 6
Elderlee, Inc. Oaks Corners Facility - MW-9R

Field Parameters	UNITS	METHOD	6NYCRR Part703 MCL/std.	05/13/20	05/10/19	05/02/18	05/01/17	05/11/16	06/11/15	06/20/14	07/01/13	Arithmetic Mean	Standard Deviation
Static Water Level	feet	NA	NS	10.20	10.23	9.60	9.73	10.22	9.65	10.60	9.80	10.00	0.36
Specific Conductance	umhos/cm	NA	NS	2,042	2,620	913	1,620	1,430	2,030	1540	1410.00	1700.63	518.33
Temperature	Degrees C	NA	NS	9.7	10.5	10.5	10.6	11.1	13.20	15.72	13.14	11.81	2.03
pH	S.U.	NA	6.5--8.5	7.10	6.88	7.04	6.33	7.27	7.10	6.62	7.13	6.93	0.31
Turbidity	NTU	NA	NS	0.60	2.69	1.60	1.22	1.39	2.30	4.54	1.54	1.99	1.21

Metals

Aluminum	ug/l	200.7	NS	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA
Antimony	ug/l	200.7	3	ND	ND	ND	ND	ND	ND	9.7 B	ND	NA	NA
Arsenic	ug/l	200.7	25	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA
Barium	ug/l	200.7	1,000	ND	ND	ND	ND	ND	ND	40.8 B	41.6 B	41.20	0.57
Beryllium	ug/l	200.7	3	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA
Cadmium	ug/l	200.7	5	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA
Calcium	ug/l	200.7	NS	165,000	162,000	122,000	191,000	146,000	149,000	159,000	168,000	157750.00	19,912.31
Chromium	ug/l	200.7	50	ND	ND	ND	ND	ND	ND	ND	1.10 B	NA	NA
Cobalt	ug/l	200.7	5	ND	ND	ND	ND	ND	ND	ND	0.95 B	NA	NA
Copper	ug/l	200.7	200	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA
Iron	ug/l	200.7	300	120	120	ND	168	220	222	158 B	424	204.57	105.28
Lead	ug/l	200.7	25	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA
Magnesium	ug/l	200.7	35,000	35,100	39,000	33,400	48,000	37,200	36,100	40,700	4,500	34250.00	12,827.76
Manganese	ug/l	200.7	300	49	88	167	110	125	76	101	302	127.26	78.72
Mercury	ug/l	200.7	0.7	ND	ND	ND	ND	ND	ND	ND	0.043 B	NA	NA
Nickel	ug/l	200.7	100	ND	ND	ND	ND	ND	ND	1.0 B	3.9 B	2.45	2.05
Potassium	ug/l	200.7	NS	3,110	4,530	3,170	4,130	3,610	3,270	3,260	2,810	3540.00	599.19
Selenium	ug/l	200.7	10	ND	ND	ND	ND	ND	ND	ND	15.1 B	NA	NA
Silver	ug/l	200.7	50	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA
Sodium	ug/l	200.7	20,000	195,000	303,000	32,500	76,800	134,000	215,000	174,000	63,700	149250.00	90,315.86
Thallium	ug/l	200.7	0.5*	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA
Vanadium	ug/l	200.7	NS	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA
Zinc	ug/l	200.7	2,000	177	144	276	398	357	149	246	419	270.75	110.79

Wet Chemistry

Chloride	mg/l	300.0	250	430	630	54	250	180	380	250 B	83 B	282.13	191.48
Sulfate	mg/l	300	250	83	88	130	160	210	61	170 B	250	144.00	65.97

Bold Type - Exceeds NYCRR Part 703 Groundwater Standard from NYSDEC Technical and Operational Guidance Series (1.1.1) - Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations.

NA - Not Applicable

ND<5.0 denotes that the constituent was not detected above the reported laboratory method detection limit.

NS - No Groundwater Standard

**Table 7
Elderlee, Inc. Oaks Corners Facility - MW-10 and MW-10R**

Field Parameters	UNITS	METHOD	6NYCRR Part703 MCLAd.	05/13/20	05/10/19	05/02/18	05/01/17	05/11/16	06/11/15	06/20/14	07/01/13	07/22/11	05/15/09	05/27/08	06/14/07	06/13/06	06/01/05	12/06/04	06/02/04	12/16/03	07/10/03	02/19/03	06/06/02	12/06/01	06/22/01	12/14/00	06/01/00	12/16/99	12/11/97	12/12/96	Arithmetic Mean	Standard Deviation
Static Water Level	feet	NA	NS	6.84	6.87	6.26	6.39	6.90	6.26	7.30	6.50	5.49	4.3	4.39	4.60	4.19	4.42	3.95	3.85	3.97	4.70	Could Not Locate	4.26	5.20	4.86	3.40	2.32	NA	NA	NA	5.10	1.33
Specific Conductance	umhos/cm	NA	NS	1,539	1,390	1,165	1,170	1,620	2,100	1,920	1,210	2,790	1,087	2,690	3,020	2,950	2,560	2,870	2,710	3,070	3,320		2.600	3.390	3.110	1,838	2,450	NA	NA	NA	2285.61	767.85
Temperature	Degrees C	NA	NS	10.4	10.7	10.7	11.3	12.5	14.5	15.1	17.5	19.8	14.6	10.5	16.7	13.9	16.2	9.6	12.6	9.9	14.6		13.5	13.9	17.8	5.8	12.9	NA	NA	NA	13.26	3.20
pH	S.U.	NA	6.5-8.5	7.06	6.91	7.01	6.84	7.22	7.05	6.61	7.09	8.01	7.74	7.61	7.09	7.30	7.45	7.19	7.07	6.91	6.57		6.91	6.87	6.97	6.86	6.94	NA	NA	NA	7.10	0.34
Turbidity	NTU	NA	NS	1.14	2.8	2.8	2.5	1.5	1.3	32.1	38	101	7.96	13	66	8	10	1	38	0	7		3	6	NA	8	7	NA	NA	NA	16.25	25.14

Metals

Aluminum	ug/l	200.7	NS	ND	199	ND	ND<100	ND	NA	10.7	ND	29.8	70.7	ND	ND	132	108	91.70	69.62													
Antimony	ug/l	200.7	3	ND	ND<60	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA														
Arsenic	ug/l	200.7	25	ND	4.6 B	13 J	ND<10	ND	NA	ND	10.9	11.6	ND	ND	ND	22	ND	14.43	5.26													
Barium	ug/l	200.7	1,000	ND	ND	ND	ND	ND	ND	91.40 B	101 B	17 J	64	ND	23.6	ND	ND	ND	33.8	25.2	36.4	NA	28.3	22.5	30.7	128	25.2	20.9	40.8	31.3	41.27	30.70
Beryllium	ug/l	200.7	3	ND	ND<5	ND	NA	ND	ND	1.6	ND	ND	ND	ND	ND	1.60	NA															
Cadmium	ug/l	200.7	5	ND	ND<5	ND	NA	ND	ND	ND	1	ND	ND	ND	ND	1.00	NA															
Calcium	ug/l	200.7	NS	219,000	109,000	102,000	128,000	137,000	131,000	154,000	127,000	520,000	338,000	521,000	465,000	574,000	492,000	598,000	406,000	514,000	581,000	NA	399,000	565,000	446,000	170,000	426,000	345,000	351,000	289,000	350269.23	173668.09
Chromium	ug/l	200.7	50	ND	ND	83.4	ND	ND	12.20	ND	ND	ND	ND<10	ND	11.6	NA	1.9	ND	27.28	37.71												
Cobalt	ug/l	200.7	5	ND	ND	ND	ND	ND	ND	0.76 B	1.2 B	1.9 J	ND<50	ND	NA	3.2	ND	3.9	ND	ND	ND	ND	ND	2.19	1.33							
Copper	ug/l	200.7	200	ND	ND<20	ND	NA	ND	NA	NA																						
Iron	ug/l	200.7	300	963	446	515	410	445	736	1940	2770	7,200	1,980	7,290	6,530	9,820	7,310	9,160	12,300	10,800	13,000	NA	8,190	9,590	9,160	8,020	7,830	6,070	6,780	5,310	5944.81	3983.54
Lead	ug/l	200.7	25	ND	ND<50	ND	NA	2.2	ND	2.20	NA																					
Magnesium	ug/l	200.7	35,000	40,300	25,000	25,300	27,200	26,700	23,600	29,300	25,800	27,000	19,500	34,800	29,200	45,800	48,100	36,500	42,000	46,200	47,500	NA	42,300	36,100	38,700	19,700	39,700	39,300	44,500	37,100	34507.69	8920.40
Manganese	ug/l	200.7	300	1,810	1,150	990	1,380	1,060	1,010	848	894.00	860	904	702	689	763	580	595	778	686	1,170	NA	906	871	622	880	496	610	592	536	860.85	290.93
Mercury	ug/l	200.7	0.7	ND	0.04 B	ND	ND<0.3	ND	NA	ND	0.04	ND																				
Nickel	ug/l	200.7	100	ND	ND	ND	ND	ND	ND	2.10 B	4.70 B	7.2 J	ND<40	ND	NA	6.9	ND	8.2	ND	ND	ND	ND	ND	5.82	2.44							
Potassium	ug/l	200.7	NS	ND	ND	ND	ND	ND	ND	1,070	1,020	3,300	2,200	ND	2,340	3,320	2,540	3,950	4,090	5,360	3,960	NA	3,500	4,580	4,460	1,190	3,220	3,640	4,500	4,260	3289.47	1259.72
Selenium	ug/l	200.7	10	ND	17.9 B	ND	ND<10	ND	NA	ND	ND	4	ND	ND	8.9	ND	10.9	7.93	3.55													
Silver	ug/l	200.7	50	ND	ND<10	ND	NA	ND	ND	3.3	ND	ND	ND	ND	ND	3.30	NA															
Sodium	ug/l	200.7	20,000	61,900	143,000	105,000	84,000	187,000	283,000	237,000	117,000	81,000	92,600	81,000	206,000	124,000	81,600	130,000	171,000	205,000	184,000	NA	183,000	194,000	135,000	176,000	81,100	116,000	172,000	154,000	145584.62	55878.17
Thallium	ug/l	200.7	0.5*	ND	6.20	ND	ND<10	ND	NA	ND	6.20	NA																				
Vanadium	ug/l	200.7	NS	ND	ND<50	ND	NA	ND	NA	NA																						
Zinc	ug/l	200.7	2,000	824	658	430	566	528	605	727	416	1,000	1,700	738	632	861	743	857	760	925	974	NA	667	1,010	799	185	622	486	448	430	727.00	286.31

Wet Chemistry

Chloride	mg/l	300.0	250	120	220	160	130	310	410	390 B	130	230	213	140	359	256	202	230	329	415
Sulfate	mg/l	300	250	430	110	62	83	99	120	110 B	88	870	702	1,000	928	1,340	1,030	1,270	1,010	1,170

239.31	101.69
613.06	489.37

Table 8
Elderlee, Inc. Oaks Corners Facility - MW-11

Field Parameters	UNITS	METHOD	SNYCRER Part703 MCL/std.	05/13/20	05/10/19	05/02/18	05/01/17	05/11/16	08/06/15	06/20/14	07/01/13	04/11/12	07/22/11	05/15/09	05/27/08	06/14/07	06/13/06	06/01/05	12/06/04	06/01/04	12/16/03	07/10/03	02/19/03	06/06/02	12/06/01	06/22/01	12/14/00	06/01/00	12/16/99	12/11/97	12/12/96	Arithmetic Mean	Standard Deviation
Static Water Level	feet	NA	NS	1.13	1.04	0.73	1.06	1.57	1.72	2.50	1.02	1.40	2.02	1.8	2.09	1.85	1.55	1.73	1.34	0.94	1.15	1.91	2.31	1.11	2.43	Damaged Well Not Sampled	Damaged Well Not Sampled	0.72	2.35	NA	NA	1.57	0.56
Specific Conductance	umhos/cm	NA	NS	2,605	2,670	2,811	2,450	2,420	1,940	2,680	2,520	3,025	2,990	3,076	3,790	3,520	3,880	41,000	3,870	4,660	4,300	5,190	4,195	3,190	4,200			3,990	1930.00	NA	NA	4870.92	7743.42
Temperature	Degrees C	NA	NS	10.1	10.4	11.3	10.9	11.9	18.4	20.19	18.2	8.8	20.8	13.5	10.8	16.1	15.1	14.1	7.7	14.7	8.0	16.6	5.6	14.1	12.9			12.6	5.50	NA	NA	12.84	4.24
pH	S.U.	NA	6.5-8.5	7.05	6.73	6.96	7.02	7.10	7.65	6.75	6.99	7.01	8.46	7.75	7.64	7.03	7.32	7.37	7.16	7.04	6.91	6.57	7.12	6.96	6.97			7.01	7.48	NA	NA	7.17	0.40
Turbidity	NTU	NA	NS	9.7	12.4	9.8	26.9	11.0	22.0	12.0	19.9	0.94	69	8.5	14	16	52	10	94	35	4	8	9.72	9	8	9	5.80	NA	NA	20.68	22.28		

Metals																																		
Aluminum	ug/l	200.7	NS	145	115	205	278	ND	1050	ND	199 B	ND	81 J	ND<100	192	ND	ND	ND	ND	ND	169	209	118	146	335	NA	NA	133	NA	132	NA	233.80	235.12	
Antimony	ug/l	200.7	3	ND	ND<60	ND	ND	NA	NA	NA	NA	NA	NA	ND	NA																			
Arsenic	ug/l	200.7	25.0	14.1	18.7	13.6	16.3	22.3	26.7	5.1 B	13.4 B	9.6 B	22	10	11	ND	ND	13	ND	ND	NA	NA	NA	NA	19	NA	24.43	38.84						
Barium	ug/l	200.7	1,000	ND	ND	ND	ND	ND	131	73.2 B	76.3 B	67.0 B	51 J	71	71.4	82.3	102	97.5	121	129	113	151	89.6	71.7	95.4	NA	NA	123	45.3	11.3	110	90.80	33.56	
Beryllium	ug/l	200.7	3	ND	B	ND	ND<5	ND	ND	NA	NA	NA	NA	NA	NA	ND	NA																	
Cadmium	ug/l	200.7	5	ND	B	ND	ND<5	ND	ND	NA	NA	NA	NA	NA	NA	ND	NA																	
Calcium	ug/l	200.7	NS	339,000	364,000	415,000	385,000	450,000	422,000	487,000	375,000	430,000	370,000	316,000	361,000	353,000	340,000	380,000	429,000	356,000	389,000	443,000	353,000	322,000	383,000	NA	NA	500,000	210,000	265,000	286,000	373961.54	65192.93	
Chromium	ug/l	200.7	50	ND	1.6 B	ND	0.98 J	ND<10	ND	3	ND	NA	NA	NA	NA	NA	NA	1.93	1.15															
Cobalt	ug/l	200.7	5	ND	ND	ND	ND	ND	ND	1.4 B	1.8 B	1.4 B	1.2 J	ND<50	ND	ND	NA	NA	NA	NA	NA	1.45	0.25											
Copper	ug/l	200.7	200	ND	ND<20	ND	ND	NA	NA	NA	NA	NA	NA	ND	NA																			
Iron	ug/l	200.7	300	5,740	6,190	7,530	7,550	9,510	12,600	9,180	8,780	8,760	9,600	8,930	6,770	4,580	8,810	8,760	10,700	8,010	7,870	9,890	9,180	6,600	6,700	NA	NA	10,100	2,450	3,840	6,070	7873.08	2231.05	
Lead	ug/l	200.7	25	ND	ND<50	ND	ND	NA	NA	NA	NA	NA	7.20	NA																				
Magnesium	ug/l	200.7	35,000	57,700	60,300	53,800	48,800	57,100	51,400	68,300	53,100	72,100	74,000	75,000	77,900	80,100	81,200	99,800	91,400	85,200	88,900	104,000	92,800	83,900	99,200	NA	NA	93,700	59,500	60,200	64,900	74396.15	16781.95	
Manganese	ug/l	200.7	300	1,140	1,110	1,100	1,110	1,210	1,810	1,680	1,570	1,600	1,300	1,260	1,290	1,500	1,530	1,890	1,920	2,060	1,630	1,630	1,850	2,100	NA	NA	NA	NA	2,110	1,600	2,560	2,080	1611.15	385.00
Mercury	ug/l	200.7	0.7	ND	0.041 B	ND	ND	ND<0.3	ND	ND	0.02	ND	ND	NA	NA	NA	NA	NA	0.03	0.02														
Nickel	ug/l	200.7	100	ND	ND	ND	ND	ND	ND	2.6 B	6.5 B	2.7 B	2.9 J	ND<40	ND	3	ND	NA	NA	NA	NA	NA	NA	3.56	1.65									
Potassium	ug/l	200.7	NS	4,210	3,860	3,480	4,010	3,990	6,530	5,200	5,310	5,190	6,700	6,100	6,300	6,670	7,440	7,770	8,870	8,050	8,200	9,730	7,120	6,130	7,020	NA	NA	8,920	3,680	3,750	4,470	6103.85	1843.57	
Selenium	ug/l	200.7	10	ND	ND	ND	ND	ND	18	13 B	21.3 B	ND	ND	ND<10	ND	3	ND	ND	NA	NA	NA	NA	6.9	NA	13.7	12.65	6.79							
Silver	ug/l	200.7	50	ND	ND<10	ND	NA	NA	NA	NA	NA	NA	ND	NA																				
Sodium	ug/l	200.7	20,000	175,000	158,000	182,000	134,000	126,000	130,000	157,000	168,000	215,000	190,000	285,000	334,000	337,000	430,000	413,000	408,000	542,000	484,000	544,000	403,000	374,000	381,000	NA	NA	269,000	237,000	297,000	320,000	295884.62	129186.17	
Thallium	ug/l	200.7	0.5*	ND	ND<10	ND	NA	NA	NA	NA	NA	NA	ND	NA																				
Vanadium	ug/l	200.7	NS	ND	ND<50	ND	NA	NA	NA	NA	NA	NA	ND	NA																				
Zinc	ug/l	200.7	2,000	ND	ND	70.1	94.5	ND	229	46.8 B	82.2	48.0 B	100	46	37.3	88.8	73	53.4	104	103	102	185	164	234	546	NA	NA	422	418	560	351	186.82	165.09	

Wet Chemistry																											
Chloride	mg/l	300.0	250	290	290	320	230	200	270	230 B	250	350	280	579	534	560	725	710	729	1180	1100						
Sulfate	mg/l	300.0	250	770	870	1,000	780	1,000	980	1,000 B	480	1,100	800	759	739	916	749	805	909	708	746						

490.39	299.18
839.50	147.06

APPENDIX C
GROUNDWATER SAMPLING LOGS

APPENDIX D
LABORATORY ANALYTICAL
DATA



PARADIGM
ENVIRONMENTAL SERVICES, INC.

Analytical Report For

Neu-Velle

For Lab Project ID

202044

Referencing

Elderlee - Annual 2020 GW Sampling

Prepared

Wednesday, May 20, 2020

Any noncompliant QC parameters or other notes impacting data interpretation are flagged or documented on the final report or are noted below.

A handwritten signature in blue ink, appearing to read "R. R. [unclear]", is written over a horizontal line. The signature is stylized and somewhat illegible.

Certifies that this report has been approved by the Technical Director or Designee

179 Lake Avenue • Rochester, NY 14608 • (585) 647-2530 • Fax (585) 647-3311 • ELAP ID# 10958

This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with the sample condition requirements upon receipt.

Page 1 of 18

Report Prepared Wednesday, May 20, 2020



Client: Neu-Velle

Project Reference: Elderlee - Annual 2020 GW Sampling

Sample Identifier: MW-9R

Lab Sample ID: 202044-01

Date Sampled: 5/13/2020

Matrix: Groundwater

Date Received: 5/13/2020

Chloride

<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>Qualifier</u>	<u>Date Analyzed</u>
Chloride	430	mg/L		5/19/2020
Method Reference(s):		EPA 300.0 Rev 2.1		
Subcontractor ELAP ID:		10709		

Mercury

<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>Qualifier</u>	<u>Date Analyzed</u>
Mercury	< 0.000200	mg/L		5/15/2020 09:05
Method Reference(s):		EPA 7470A		
Preparation Date:		5/14/2020		
Data File:		Hg200515A		

TAL Metals (ICP)

<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>Qualifier</u>	<u>Date Analyzed</u>
Aluminum	< 0.100	mg/L		5/15/2020 13:51
Antimony	< 0.0600	mg/L		5/15/2020 13:51
Arsenic	< 0.0100	mg/L		5/15/2020 13:51
Barium	< 0.100	mg/L		5/15/2020 13:51
Beryllium	< 0.00500	mg/L		5/15/2020 13:51
Cadmium	< 0.00500	mg/L		5/15/2020 13:51
Calcium	165	mg/L		5/15/2020 13:51
Chromium	< 0.0100	mg/L		5/15/2020 13:51
Cobalt	< 0.0500	mg/L		5/15/2020 13:51
Copper	< 0.0400	mg/L		5/15/2020 13:51
Iron	< 0.100	mg/L		5/18/2020 16:02
Lead	< 0.0100	mg/L		5/15/2020 13:51
Magnesium	35.1	mg/L		5/15/2020 13:51
Manganese	0.0492	mg/L		5/15/2020 13:51
Nickel	< 0.0400	mg/L		5/15/2020 13:51
Potassium	3.11	mg/L		5/15/2020 13:51

This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with the sample condition requirements upon receipt.



Client: Neu-Velle

Project Reference: Elderlee - Annual 2020 GW Sampling

Sample Identifier: MW-9R

Lab Sample ID: 202044-01

Date Sampled: 5/13/2020

Matrix: Groundwater

Date Received: 5/13/2020

Selenium	< 0.0200	mg/L	5/15/2020 13:51
Silver	< 0.0100	mg/L	5/15/2020 13:51
Sodium	195	mg/L	5/15/2020 13:51
Thallium	< 0.0250	mg/L	5/15/2020 13:51
Vanadium	< 0.0250	mg/L	5/15/2020 13:51
Zinc	0.177	mg/L	5/15/2020 13:51

Method Reference(s): EPA 6010C
EPA 3005A
Preparation Date: 5/14/2020
Data File: 200515C

Sulfate

Analyte	Result	Units	Qualifier	Date Analyzed
Sulfate	83	mg/L		5/19/2020

Method Reference(s): EPA 300.0 Rev 2.1
Subcontractor ELAP ID: 10709



Client: Neu-Velle

Project Reference: Elderlee - Annual 2020 GW Sampling

Sample Identifier: MW-10R

Lab Sample ID: 202044-02

Date Sampled: 5/13/2020

Matrix: Groundwater

Date Received: 5/13/2020

Chloride

<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>Qualifier</u>	<u>Date Analyzed</u>
Chloride	120	mg/L		5/19/2020
Method Reference(s):		EPA 300.0 Rev 2.1		
Subcontractor ELAP ID:		10709		

Mercury

<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>Qualifier</u>	<u>Date Analyzed</u>
Mercury	< 0.000200	mg/L		5/15/2020 09:07
Method Reference(s):		EPA 7470A		
Preparation Date:		5/14/2020		
Data File:		Hg200515A		

TAL Metals (ICP)

<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>Qualifier</u>	<u>Date Analyzed</u>
Aluminum	< 0.100	mg/L		5/15/2020 13:56
Antimony	< 0.0600	mg/L		5/15/2020 13:56
Arsenic	< 0.0100	mg/L		5/15/2020 13:56
Barium	< 0.100	mg/L		5/15/2020 13:56
Beryllium	< 0.00500	mg/L		5/15/2020 13:56
Cadmium	< 0.00500	mg/L		5/15/2020 13:56
Calcium	219	mg/L		5/15/2020 13:56
Chromium	< 0.0100	mg/L		5/15/2020 13:56
Cobalt	< 0.0500	mg/L		5/15/2020 13:56
Copper	< 0.0400	mg/L		5/15/2020 13:56
Iron	0.963	mg/L		5/15/2020 13:56
Lead	< 0.0100	mg/L		5/15/2020 13:56
Magnesium	40.3	mg/L		5/15/2020 13:56
Manganese	1.81	mg/L		5/15/2020 13:56
Nickel	< 0.0400	mg/L		5/15/2020 13:56
Potassium	< 2.50	mg/L		5/15/2020 13:56



Client: Neu-Velle

Project Reference: Elderlee - Annual 2020 GW Sampling

Sample Identifier: MW-10R

Lab Sample ID: 202044-02

Date Sampled: 5/13/2020

Matrix: Groundwater

Date Received: 5/13/2020

Selenium	< 0.0200	mg/L	5/15/2020 13:56
Silver	< 0.0100	mg/L	5/15/2020 13:56
Sodium	61.9	mg/L	5/15/2020 13:56
Thallium	< 0.0250	mg/L	5/15/2020 13:56
Vanadium	< 0.0250	mg/L	5/15/2020 13:56
Zinc	0.824	mg/L	5/15/2020 13:56

Method Reference(s): EPA 6010C
EPA 3005A
Preparation Date: 5/14/2020
Data File: 200515C

Sulfate

Analyte	Result	Units	Qualifier	Date Analyzed
Sulfate	430	mg/L		5/19/2020

Method Reference(s): EPA 300.0 Rev 2.1
Subcontractor ELAP ID: 10709



Client: Neu-Velle

Project Reference: Elderlee - Annual 2020 GW Sampling

Sample Identifier: MW-8

Lab Sample ID: 202044-03

Date Sampled: 5/13/2020

Matrix: Groundwater

Date Received: 5/13/2020

Chloride

<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>Qualifier</u>	<u>Date Analyzed</u>
Chloride	55	mg/L		5/19/2020
Method Reference(s):		EPA 300.0 Rev 2.1		
Subcontractor ELAP ID:		10709		

Mercury

<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>Qualifier</u>	<u>Date Analyzed</u>
Mercury	< 0.000200	mg/L		5/15/2020 09:09
Method Reference(s):		EPA 7470A		
Preparation Date:		5/14/2020		
Data File:		Hg200515A		

TAL Metals (ICP)

<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>Qualifier</u>	<u>Date Analyzed</u>
Aluminum	< 0.100	mg/L		5/15/2020 14:00
Antimony	< 0.0600	mg/L		5/15/2020 14:00
Arsenic	< 0.0100	mg/L		5/15/2020 14:00
Barium	< 0.100	mg/L		5/15/2020 14:00
Beryllium	< 0.00500	mg/L		5/15/2020 14:00
Cadmium	< 0.00500	mg/L		5/15/2020 14:00
Calcium	399	mg/L		5/15/2020 14:00
Chromium	< 0.0100	mg/L		5/15/2020 14:00
Cobalt	< 0.0500	mg/L		5/15/2020 14:00
Copper	< 0.0400	mg/L		5/15/2020 14:00
Iron	3.38	mg/L		5/15/2020 14:00
Lead	< 0.0100	mg/L		5/15/2020 14:00
Magnesium	24.5	mg/L		5/15/2020 14:00
Manganese	0.537	mg/L		5/15/2020 14:00
Nickel	< 0.0400	mg/L		5/15/2020 14:00
Potassium	< 2.50	mg/L		5/15/2020 14:00

This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with the sample condition requirements upon receipt.



Client: Neu-Velle

Project Reference: Elderlee - Annual 2020 GW Sampling

Sample Identifier: MW-8

Lab Sample ID: 202044-03

Date Sampled: 5/13/2020

Matrix: Groundwater

Date Received: 5/13/2020

Selenium	< 0.0200	mg/L	5/15/2020 14:00
Silver	< 0.0100	mg/L	5/15/2020 14:00
Sodium	36.1	mg/L	5/15/2020 14:00
Thallium	< 0.0250	mg/L	5/15/2020 14:00
Vanadium	< 0.0250	mg/L	5/15/2020 14:00
Zinc	1.46	mg/L	5/15/2020 14:00

Method Reference(s): EPA 6010C
EPA 3005A
Preparation Date: 5/14/2020
Data File: 200515C

Sulfate

Analyte	Result	Units	Qualifier	Date Analyzed
Sulfate	840	mg/L		5/19/2020

Method Reference(s): EPA 300.0 Rev 2.1
Subcontractor ELAP ID: 10709



Client: Neu-Velle

Project Reference: Elderlee - Annual 2020 GW Sampling

Sample Identifier: MW-11

Lab Sample ID: 202044-04

Date Sampled: 5/13/2020

Matrix: Groundwater

Date Received: 5/13/2020

Chloride

<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>Qualifier</u>	<u>Date Analyzed</u>
Chloride	290	mg/L		5/19/2020
Method Reference(s):		EPA 300.0 Rev 2.1		
Subcontractor ELAP ID:		10709		

Mercury

<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>Qualifier</u>	<u>Date Analyzed</u>
Mercury	< 0.000200	mg/L		5/15/2020 09:11
Method Reference(s):		EPA 7470A		
Preparation Date:		5/14/2020		
Data File:		Hg200515A		

TAL Metals (ICP)

<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>Qualifier</u>	<u>Date Analyzed</u>
Aluminum	0.145	mg/L		5/15/2020 14:05
Antimony	< 0.0600	mg/L		5/15/2020 14:05
Arsenic	0.0141	mg/L		5/15/2020 14:05
Barium	< 0.100	mg/L		5/15/2020 14:05
Beryllium	< 0.00500	mg/L		5/15/2020 14:05
Cadmium	< 0.00500	mg/L		5/15/2020 14:05
Calcium	339	mg/L		5/15/2020 14:05
Chromium	< 0.0100	mg/L		5/15/2020 14:05
Cobalt	< 0.0500	mg/L		5/15/2020 14:05
Copper	< 0.0400	mg/L		5/15/2020 14:05
Iron	5.74	mg/L		5/15/2020 14:05
Lead	< 0.0100	mg/L		5/15/2020 14:05
Magnesium	55.7	mg/L		5/15/2020 14:05
Manganese	1.14	mg/L		5/15/2020 14:05
Nickel	< 0.0400	mg/L		5/15/2020 14:05
Potassium	4.21	mg/L		5/15/2020 14:05

This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with the sample condition requirements upon receipt.



Client: Neu-Velle

Project Reference: Elderlee - Annual 2020 GW Sampling

Sample Identifier: MW-11

Lab Sample ID: 202044-04

Date Sampled: 5/13/2020

Matrix: Groundwater

Date Received: 5/13/2020

Selenium	< 0.0200	mg/L	5/15/2020 14:05
Silver	< 0.0100	mg/L	5/15/2020 14:05
Sodium	175	mg/L	5/15/2020 14:05
Thallium	< 0.0250	mg/L	5/15/2020 14:05
Vanadium	< 0.0250	mg/L	5/15/2020 14:05
Zinc	< 0.0600	mg/L	5/15/2020 14:05

Method Reference(s): EPA 6010C
EPA 3005A
Preparation Date: 5/14/2020
Data File: 200515C

Sulfate

Analyte	Result	Units	Qualifier	Date Analyzed
Sulfate	770	mg/L		5/19/2020

Method Reference(s): EPA 300.0 Rev 2.1
Subcontractor ELAP ID: 10709



Client: Neu-Velle

Project Reference: Elderlee - Annual 2020 GW Sampling

Sample Identifier: MW-5A

Lab Sample ID: 202044-05

Date Sampled: 5/13/2020

Matrix: Groundwater

Date Received: 5/13/2020

Chloride

<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>Qualifier</u>	<u>Date Analyzed</u>
Chloride	88	mg/L		5/19/2020
Method Reference(s):		EPA 300.0 Rev 2.1		
Subcontractor ELAP ID:		10709		

Mercury

<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>Qualifier</u>	<u>Date Analyzed</u>
Mercury	< 0.000200	mg/L		5/15/2020 09:17
Method Reference(s):		EPA 7470A		
Preparation Date:		5/14/2020		
Data File:		Hg200515A		

TAL Metals (ICP)

<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>Qualifier</u>	<u>Date Analyzed</u>
Aluminum	< 0.100	mg/L		5/15/2020 14:09
Antimony	< 0.0600	mg/L		5/15/2020 14:09
Arsenic	< 0.0100	mg/L		5/15/2020 14:09
Barium	< 0.100	mg/L		5/15/2020 14:09
Beryllium	< 0.00500	mg/L		5/15/2020 14:09
Cadmium	< 0.00500	mg/L		5/15/2020 14:09
Calcium	494	mg/L		5/15/2020 14:09
Chromium	< 0.0100	mg/L		5/15/2020 14:09
Cobalt	< 0.0500	mg/L		5/15/2020 14:09
Copper	< 0.0400	mg/L		5/15/2020 14:09
Iron	0.868	mg/L		5/15/2020 14:09
Lead	< 0.0100	mg/L		5/15/2020 14:09
Magnesium	35.8	mg/L		5/15/2020 14:09
Manganese	0.409	mg/L		5/15/2020 14:09
Nickel	< 0.0400	mg/L		5/15/2020 14:09
Potassium	< 2.50	mg/L		5/15/2020 14:09



Client: Neu-Velle

Project Reference: Elderlee - Annual 2020 GW Sampling

Sample Identifier: MW-5A

Lab Sample ID: 202044-05

Date Sampled: 5/13/2020

Matrix: Groundwater

Date Received: 5/13/2020

Selenium	< 0.0200	mg/L	5/15/2020 14:09
Silver	< 0.0100	mg/L	5/15/2020 14:09
Sodium	57.7	mg/L	5/15/2020 14:09
Thallium	< 0.0250	mg/L	5/15/2020 14:09
Vanadium	< 0.0250	mg/L	5/15/2020 14:09
Zinc	0.312	mg/L	5/15/2020 14:09

Method Reference(s): EPA 6010C
EPA 3005A
Preparation Date: 5/14/2020
Data File: 200515C

Sulfate

Analyte	Result	Units	Qualifier	Date Analyzed
Sulfate	1200	mg/L		5/19/2020

Method Reference(s): EPA 300.0 Rev 2.1
Subcontractor ELAP ID: 10709



Client: Neu-Velle

Project Reference: Elderlee - Annual 2020 GW Sampling

Sample Identifier: MW-4A

Lab Sample ID: 202044-06

Date Sampled: 5/13/2020

Matrix: Groundwater

Date Received: 5/13/2020

Chloride

<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>Qualifier</u>	<u>Date Analyzed</u>
Chloride	240	mg/L		5/19/2020
Method Reference(s):		EPA 300.0 Rev 2.1		
Subcontractor ELAP ID:		10709		

Mercury

<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>Qualifier</u>	<u>Date Analyzed</u>
Mercury	< 0.000200	mg/L		5/15/2020 09:19
Method Reference(s):		EPA 7470A		
Preparation Date:		5/14/2020		
Data File:		Hg200515A		

TAL Metals (ICP)

<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>Qualifier</u>	<u>Date Analyzed</u>
Aluminum	< 0.100	mg/L		5/15/2020 14:14
Antimony	< 0.0600	mg/L		5/15/2020 14:14
Arsenic	< 0.0100	mg/L		5/15/2020 14:14
Barium	< 0.100	mg/L		5/15/2020 14:14
Beryllium	< 0.00500	mg/L		5/15/2020 14:14
Cadmium	< 0.00500	mg/L		5/15/2020 14:14
Calcium	496	mg/L		5/15/2020 14:14
Chromium	< 0.0100	mg/L		5/15/2020 14:14
Cobalt	< 0.0500	mg/L		5/15/2020 14:14
Copper	< 0.0400	mg/L		5/15/2020 14:14
Iron	2.38	mg/L		5/15/2020 14:14
Lead	< 0.0100	mg/L		5/15/2020 14:14
Magnesium	57.5	mg/L		5/15/2020 14:14
Manganese	0.503	mg/L		5/15/2020 14:14
Nickel	< 0.0400	mg/L		5/15/2020 14:14
Potassium	3.89	mg/L		5/15/2020 14:14



Client: Neu-Velle

Project Reference: Elderlee - Annual 2020 GW Sampling

Sample Identifier: MW-4A

Lab Sample ID: 202044-06

Date Sampled: 5/13/2020

Matrix: Groundwater

Date Received: 5/13/2020

Selenium	< 0.0200	mg/L	5/15/2020 14:14
Silver	< 0.0100	mg/L	5/15/2020 14:14
Sodium	141	mg/L	5/15/2020 14:14
Thallium	< 0.0250	mg/L	5/15/2020 14:14
Vanadium	< 0.0250	mg/L	5/15/2020 14:14
Zinc	13.6	mg/L	5/18/2020 16:06

Method Reference(s): EPA 6010C
EPA 3005A
Preparation Date: 5/14/2020
Data File: 200515C

Sulfate

Analyte	Result	Units	Qualifier	Date Analyzed
Sulfate	1400	mg/L		5/19/2020

Method Reference(s): EPA 300.0 Rev 2.1
Subcontractor ELAP ID: 10709



Analytical Report Appendix

The reported results relate only to the samples as they have been received by the laboratory.

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All soil/sludge samples have been reported on a dry weight basis, unless qualified "reported as received". Other solids are reported as received.

Low level Volatiles blank reports for soil/solid matrix are based on a nominal 5 gram weight. Sample results and reporting limits are based on actual weight, which may be more or less than 5 grams.

The Chain of Custody provides additional information, including compliance with sample condition requirements upon receipt. Sample condition requirements are defined under the 2003 NELAC Standard, sections 5.5.8.3.1 and 5.5.8.3.2.

NYSDOH ELAP does not certify for all parameters. Paradigm Environmental Services or the indicated subcontracted laboratory does hold certification for all analytes where certification is offered by ELAP unless otherwise specified. Aliquots separated for certain tests, such as TCLP, are indicated on the Chain of Custody and final reports with an "A" suffix.

Data qualifiers are used, when necessary, to provide additional information about the data. This information may be communicated as a flag or as text at the bottom of the report. Please refer to the following list of analyte-specific, frequently used data flags and their meaning:

"<" = Analyzed for but not detected at or above the quantitation limit.

"E" = Result has been estimated, calibration limit exceeded.

"Z" = See case narrative.

"D" = Sample, Laboratory Control Sample, or Matrix Spike Duplicate results above Relative Percent Difference limit.

"M" = Matrix spike recoveries outside QC limits. Matrix bias indicated.

"B" = Method blank contained trace levels of analyte. Refer to included method blank report.

"J" = Result estimated between the quantitation limit and half the quantitation limit.

"L" = Laboratory Control Sample recovery outside accepted QC limits.

"P" = Concentration differs by more than 40% between the primary and secondary analytical columns.

"NC" = Not calculable. Applicable to RPD if sample or duplicate result is non-detect or estimated (see primary report for data flags). Applicable to MS if sample is greater or equal to ten times the spike added. Applicable to sample surrogates or MS if sample dilution is 10x or higher.

"" = Indicates any recoveries outside associated acceptance windows. Surrogate outliers in samples are presumed matrix effects. LCS demonstrates method compliance unless otherwise noted.*

"(1)" = Indicates data from primary column used for QC calculation.

"A" = denotes a parameter for which ELAP does not offer approval as part of their laboratory certification program.

"F" = denotes a parameter for which Paradigm does not carry certification, the results for which should therefore only be used where ELAP certification is not required, such as personal exposure assessment.

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GENERAL TERMS AND CONDITIONS

LABORATORY SERVICES

These Terms and Conditions embody the whole agreement of the parties in the absence of a signed and executed contract between the Laboratory (LAB) and Client. They shall supersede all previous communications, representations, or agreements, either verbal or written, between the parties. The LAB specifically rejects all additional, inconsistent, or conflicting terms, whether printed or otherwise set forth in any purchase order or other communication from the Client to the LAB. The invalidity or unenforceability in whole or in part of any provision, term or condition hereof shall not affect in any way the validity or enforceability of the remainder of the Terms and Conditions. No waiver by LAB of any provision, term, or condition hereof or of any breach by or obligation of the Client hereunder shall constitute a waiver of such provision, term, or condition on any other occasion or a waiver of any other breach by or obligation of the Client. This agreement shall be administered and interpreted under the laws of the state which services are procured.

Warranty.

Recognizing that the nature of many samples is unknown and that some may contain potentially hazardous components, LAB warrants only that it will perform testing services, obtain findings, and prepare reports in accordance with generally accepted analytical laboratory principles and practices at the time of performance of services. LAB makes no other warranty, express or implied.

Scope and Compensation.

LAB agrees to perform the services described in the chain of custody to which these terms and conditions are attached. Unless the parties agree in writing to the contrary, the duties of LAB shall not be construed to exceed the services specifically described. LAB will use LAB default method for all tests unless specified otherwise on the Work Order.

Payment terms are net 30 days from the date of invoice. All overdue payments are subject to an interest charge of one and one-half percent (1-1/2%) per month or a portion thereof. Client shall also be responsible for costs of collection, including payment of reasonable attorney fees if such expense is incurred. The prices, unless stated, do not include any sale, use or other taxes. Such taxes will be added to invoice prices when required.

Prices.

Compensation for services performed will be based on the current Lab Analytical Fee Schedule or on quotations agreed to in writing by the parties. Turnaround time based charges are determined from the time of resolution of all work order questions. Testimony, court appearances or data compilation for legal action will be charged separately. Evaluation and reporting of initial screening runs may incur additional fees.

Limitations of Liability.

In the event of any error, omission, or other professional negligence, the sole and exclusive responsibility of LAB shall be to re-perform the deficient work at its own expense and LAB shall have no other liability whatsoever. All claims shall be deemed waived unless made in writing and received by LAB within ninety (90) days following completion of services.

LAB shall have no liability, obligation, or responsibility of any kind for losses, costs, expenses, or other damages (including but not limited to any special, direct, incidental or consequential damages) with respect to LAB's services or results.

All results provided by LAB are strictly for the use of its clients and LAB is in no way responsible for the use of such results by clients or third parties. All reports should be considered in their entirety, and LAB is not responsible for the separation, detachment, or other use of any portion of these reports. Client may not assign the lab report without the written consent of the LAB.

Client covenants and agrees, at its/his/her sole expense, to indemnify, protect, defend, and save harmless the LAB from and against any and all damages, losses, liabilities, obligations, penalties, claims, litigation, demands, defenses, judgments, suits, actions, proceedings, costs, disbursements and/or expenses (including, without limitation attorneys' and experts' fees and disbursements) of any kind whatsoever which may at any time be imposed upon, incurred by or asserted or awarded against client relating to, resulting from or arising out of (a) the breach of this agreement by this client, (b) the negligence of the client in handling, delivering or disclosing any hazardous substance, (c) the violation of the Client of any applicable law, (d) non-compliance by the Client with any environmental permit or (e) a material misrepresentation in disclosing the materials to be tested.

Hazard Disclosure.

Client represents and warrants that any sample delivered to LAB will be preceded or accompanied by complete written disclosure of the presence of any hazardous substances known or suspected by Client. Client further warrants that any sample containing any hazardous substance that is to be delivered to LAB will be packaged, labeled, transported, and delivered properly and in accordance with applicable laws.

Sample Handling.

Prior to LAB's acceptance of any sample (or after any revocation of acceptance), the entire risk of loss or of damage to such sample remains with Client. Samples are accepted when receipt is acknowledged on chain of custody documentation. In no event will LAB have any responsibility for the action or inaction of any carrier shipping or delivering any sample to or from LAB premises.

Client authorizes LAB to proceed with the analysis of samples as received by the laboratory, recognizing that any samples not in compliance with all current DOH-ELAP-NELAP requirements for containers, preservation or holding time will be noted as such on the final report.

Disposal of hazardous waste samples is the responsibility of the Client. If the Client does not wish such samples returned, LAB may add storage and disposal fees to the final invoice. Maximum storage time for samples is 30 days after completion of analysis unless modified by applicable state or federal laws. Client will be required to give the LAB written instructions concerning disposal of these samples.

LAB reserves the absolute right, exercisable at any time, to refuse to receive delivery of, refuse to accept, or revoke acceptance of any sample, which, in the sole judgment of LAB (a) is of unsuitable volume, (b) may be or become unsuitable for or may pose a risk in handling, transport, or processing for any health, safety, environmental or other reason whether or not due to the presence in the sample of any hazardous substance, and whether or not such presence has been disclosed to LAB by Client or (c) if the condition or sample date make the sample unsuitable for analysis.

Legal Responsibility.

LAB is solely responsible for performance of this contract, and no affiliated company, director, officer, employee, or agent shall have any legal responsibility hereunder, whether in contract or tort including negligence.

Assignment.

LAB may assign its performance obligations under this contract to other parties, as it deems necessary. LAB shall disclose to Client any assignee (subcontractor) by ELAP ID # on the submitted final report.

Force Majeure.

LAB shall have no responsibility or liability to the Client for any failure or delay in performance by LAB, which results in whole or in part from any cause or circumstance beyond the reasonable control of LAB. Such causes and circumstances shall include, but not limited to, acts of God, acts or orders of any government authority, strikes or other labor disputes, natural disasters, accidents, wars, civil disturbances, difficulties or delays in transportation, mail or delivery services, inability to obtain sufficient services or supplies from LAB's usual suppliers, or any other cause beyond LAB's reasonable control.

Law.

This contract shall be continued under the laws of the State of New York without regard to its conflicts of laws provision.

This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with the sample condition requirements upon receipt.

Report Prepared Wednesday, May 20, 2020



CHAIN OF CUSTODY

REPORT TO:

INVOICE TO:

CLIENT: NEW-VALE LLC	CLIENT: Same	LAB PROJECT ID: 202044
ADDRESS: 1667 LAKE AVE	ADDRESS:	Quotation #: 202044
CITY: ROCHESTER	CITY: NY	Email: Jmore@new-valle.com
STATE: NY	STATE: NY	
ZIP: 14615	ZIP:	
PHONE: 585 373-4771	PHONE:	
ATTN: JAMES MADDE	ATTN:	
PROJECT REFERENCE: EDDISE - ANNUAL 2020 GW SAMPLING	MATRIX CODICES: AQ - Aqueous Liquid	
	NQ - Non-Aqueous Liquid	
	WA - Water	
	WG - Groundwater	
	DW - Drinking Water	
	WW - Wastewater	
	SO - Soil	
	SL - Sludge	
	SD - Solid	
	PT - Paint	
	WP - Wipe	
	CK - Caulk	
	OL - Oil	
	AR - Air	

DATE COLLECTED	TIME COLLECTED	COMPOSITE	GRADES	SAMPLE IDENTIFIER	MATERIALS	CONTAMINANTS	REQUESTED ANALYSIS	REMARKS	PARADIGM LAB SAMPLE NUMBER
5/13/2020	0930	X		MW-9R	W6	2	TOTAL METALS		01
5/13/2020	1020	X		MW-1BR	W6	2	SULFATE/CHLORIDE		02
5/13/2020	1120	X		MW-8	W6	2			03
5/13/2020	1205	X		MW-11	W6	2			04
5/13/2020	1300	X		MW-5A	W6	2			05
5/13/2020	1355	X		MW-4A	W6	2			06

17°C i cell started in field
MW 5/13/2020 1602

Turnaround Time	Report Supplements
Standard 5 day <input checked="" type="checkbox"/>	None Required <input checked="" type="checkbox"/>
10 day <input type="checkbox"/>	Batch QC <input type="checkbox"/>
Rush 3 day <input type="checkbox"/>	Category A <input type="checkbox"/>
Rush 2 day <input type="checkbox"/>	Category B <input type="checkbox"/>
Rush 1 day <input type="checkbox"/>	Other <input type="checkbox"/>
Other <input type="checkbox"/>	Other EDD <input type="checkbox"/>

Availability contingent upon lab approval; additional fees may apply.

Sampled By: **JAMES A MADDE** Date/Time: **5/13/2020**

Retrieved By: **AM** Date/Time: **5/13/2020 1555**

Received By: **Stacy** Date/Time: **5/13/2020 1555**

Received @ Lab By: **Stacy** Date/Time: **5/13/2020 1603**

Total Cost:

P.L.F.

By signing this form, client agrees to Paradigm Terms and Conditions (reverse). See additional page for sample conditions.

2082



Chain of Custody Supplement

Client: Neu-velle Completed by: Molyneux
 Lab Project ID: 202044 Date: 5/13/2020

Sample Condition Requirements

Per NELAC/ELAP 210/241/242/243/244

Condition	NELAC compliance with the sample condition requirements upon receipt		
	Yes	No	N/A
Container Type	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments	_____		
Transferred to method-compliant container	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Headspace (<1 mL)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Comments	_____		
Preservation	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments	met sulfate chloride		
Chlorine Absent (<0.10 ppm per test strip)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Comments	_____		
Holding Time	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments	_____		
Temperature	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Comments	17°C iced started in field		
Compliant Sample Quantity/Type	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments	_____		



179 Lake Avenue, Rochester, NY 14608 Office (585) 647-2530 Fax (585) 647-3311

CHAIN OF CUSTODY

ADIRONDACK: ELAP ID

REPORT TO: INVOICE TO:

COMPANY: Paradigm Environmental	COMPANY: Same	LAB PROJECT #:	CLIENT PROJ:
ADDRESS:	ADDRESS:	TURNAROUND TIME (WORKING DAYS)	
CITY:	CITY:		
STATE:	STATE:		
ZIP:	ZIP:		
PHONE:	PHONE:		
FAX:	FAX:		
ATTN: Reporting	ATTN: Accounts Payable	1	2
COMMENTS: Please email results to reporting@paradigmenv.com		3	5
		STD	
		Date Due: 5/14/2002	

REQUESTED ANALYSIS

DATE	TIME	C O M P O S I T I O N	G R A B	SAMPLE LOCATION/FIELD ID	M A T T R I X	C O N T A I N E R	REMARKS	PARADIGM LAB SAMPLE NUMBER
05/15/2002	0930			302044-01	fw	1	sulfate chloride	
05/15/2002	1020			02		1		
05/15/2002	1220			03		1		
05/15/2002	1205			04		1		
05/15/2002	1300			05		1		
05/15/2002	1355			06		1		

****LAB USE ONLY BELOW THIS LINE****

Sample Condition: Per NELAC/ELAP 210/241/242/243/244

Receipt Parameter: NELAC Compliance

Container Type: Y N

Preservation: Y N

Holding Time: Y N

Temperature: 3°C Y N

Comments: *Made by*

Comments: *Made by*

Client

Sampled By: *Andy Baird* Date/Time: *5/14/2002 0830*

Relinquished By: *Andy Baird* Date/Time: *5/14/2002 0830*

Received By: *None* Date/Time: *5/14/2002 3:00pm*

Received @ Lab By: *None* Date/Time: *5/14/2002 3:00pm*

Total Cost:

P.L.F.

APPENDIX E

PHOTO LOGS

Representative Photos

Elderlee, Inc. Site No. – 835014

Date: October 3, 2020

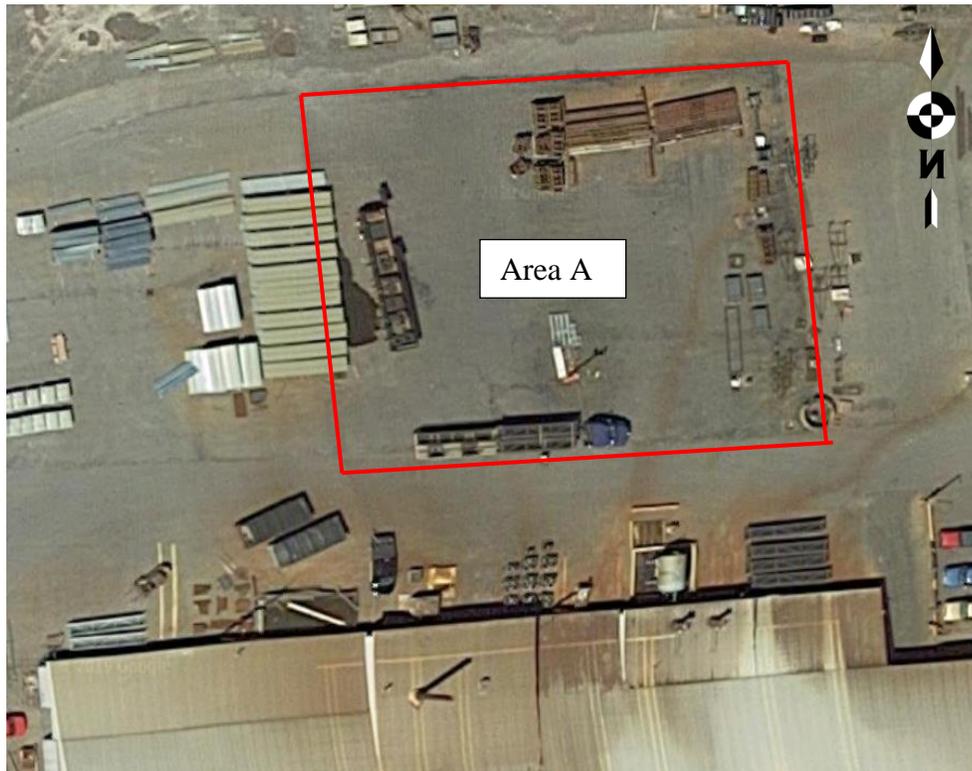


Photo No 1. – Ariel View



Photo No. 2 – Asphalt seal along south edge of Area A – viewing west.

Representative Photos

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Photo No. 3 – Asphalt seal along west edge of Area A – viewing north.



Photo No. 4 – Asphalt seal along north edge of Area A – viewing east.

Representative Photos

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Photo No. 5 – Asphalt seal along east edge of Area A – viewing south.



Photo No. 6 – Asphalt seal area view of Area A – viewing northwest.