

**Otter Lake Solid Waste Management
Facility
Site Development and Operations Report**
Annual Report - 2022
Approval 2022-3051773-00

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Otter Lake Solid Waste Management Facility
2022 Annual Report

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1.0 Introduction

This document has been prepared by MIRROR Nova Scotia to summarize 2022 operational activities at the Otter Lake Solid Waste Management Facility. The purpose of this report is to satisfy the requirements of Nova Scotia Environment and Climate Change (NSECC) Approval (Approval No. 2022-3051773-00) and the Operations Plans contained therein.

The Otter Lake Solid Waste Management Facility has been in operation since acceptance testing began during the summer of 1998. Subsequently, operations began on January 1st, 1999 with all processed wastes being disposed of in the Residual Disposal Facility (RDF) Cells #1 through #7.

2.0 Operations Overview

As per the Approval, **Section 18 b)** outlines the information requested in the Annual Report. Relevant Approval sections and conditions, and provided information are presented below.

- Section 18 b) i) Monitoring analysis of:**
- (a) Air emissions**
 - (b) Surface water**
 - (c) Sediment**
 - (d) Groundwater**
 - (e) Leachate**

Quarterly monitoring of Surface water and Groundwater at the site was conducted in 2022 by Dillon Consulting and annual monitoring of sediment was also completed by Dillon during the Q3 event of 2022. Surface water, groundwater and sediment analysis is provided in the 2022 Dillon Annual Surface and Groundwater report provided under separate cover.

Further monitoring of surface water was conducted by MIRROR NS during discharges from the sedimentation ponds and during rain events. Appendix A contains the surface water discharge summary which includes the results for TSS and pH. Analytical results for the full analyses for the North and South Sedimentation Pond discharges can be found in Appendix B. There were no exceedances to TSS or pH in 2022.

The leak detection layers were pumped as needed throughout the year (weekly or monthly). Leak detection analytical data is supplied in Appendix C.

Leachate removed from site in 2022 is summarized in Table 1.

Table 1 Leachate Volumes (Litres) by Month

Leachate	2022
January	7,978,230
February	10,433,070
March	10,105,758
April	7,241,778
May	4,705,110
June	5,032,422
July	3,886,830
August	2,413,926
September	3,477,690
October	3,682,260
November	4,541,454
December	8,305,542
	71,804,070

Section 18 b) ii) *Inventory of dangerous/ waste dangerous goods which have been stored at the Facility over the past operating year and specifying what remains as of December 31 of that operating year,*

As of December 31st, 2022, there was a small amount of waste Dangerous Goods stored on site as all material removed from the waste stream are removed from site regularly. Monthly inventories are available.

Section 18 b) iii) *Analysis of solid waste handled, recorded by month and in tonnes as applicable:*

- a) ***Quantity, type, source and carrier of waste received***
- b) ***Quantity and type of banned materials removed from the FEP, RDF, Tipping Face and Waste Transfer Station***
- c) ***Quantity of material handled at each portion of the Facility (FEP, WSF, Waste Transfer Station and RDF)***
- d) ***contaminated soils/solids disposed of in the RDF, including compliance testing, quantity, the generator, and the location of the source material.***

The following tables summarize and characterize the waste received and the recyclables removed (Table 2), and the material handled at each portion of the Facility (Tables 2 and 3).

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Table 2 - Monthly Site Tonnage Summary for Otter Lake Solid Waste Management Facility (metric tons (mt))

OTTER LAKE	Facility Receipts										Facility Process & Disposal									
	RESIDENTIAL	SPECIAL Compost/Haz	SPECIAL Handling	RECEIVED TO FEP	FEP TO RDF	TRAILER TO RDF	IN WSF	OUT WSF	DIRECT TO RDF	SPEC HAN Direct to RDF	RES DIRECT To RDF	RDF TOTAL	METAL	POP BOTTLES	PAPER C/B					
January 2022	3,746.08	0.00	8.93	3,755.01	540.07	2,284.22	930.72	711.37	52.12			3,587.78	0.00	0.00	0.00					
February 2022	3,245.19	0.00	23.04	3,268.23	419.36	1,908.44	940.43	707.94	63.94			3,099.68	0.00	0.17	0.00					
March 2022	4,087.63	0.00	16.92	4,104.55	699.72	2,254.06	1,150.77	914.96	57.45			3,926.19	0.00	0.06	0.00					
April 2022	4,030.69	0.00	4.95	4,035.64	752.64	2,228.09	1,054.91	863.89	95.72			3,940.34	267.49	0.00	0.00					
May 2022	4,487.33	0.35	11.20	4,498.88	872.97	2,269.24	1,356.67	732.64	98.68			3,973.53	0.00	0.12	0.00					
June 2022	4,487.95	0.00	15.64	4,503.59	805.45	2,432.71	1,265.43	1,230.79	71.69			4,540.64	0.00	0.00	0.00					
July 2022	4,163.26	0.00	17.50	4,180.76	851.24	2,165.73	1,163.79	776.53	51.49			3,844.99	0.00	0.06	0.00					
August 2022	4,160.76	0.00	15.50	4,176.26	762.10	2,433.53	980.63	936.74	98.49			4,230.86	373.02	0.05	0.00					
September 2022	3,957.92	0.00	9.90	3,967.82	787.93	2,229.15	950.74	870.36	88.62			3,976.06	50.54	0.04	0.00					
October 2022	4,402.45	0.00	7.37	4,409.82	846.19	2,338.64	1,224.99	811.38	78.21			4,074.42	0.00	0.00	0.00					
November 2022	4,160.23	0.00	16.44	4,176.67	785.72	2,165.81	1,225.14	793.67	98.72			3,843.92	0.00	0.00	0.00					
December 2022	3,808.32	0.00	4.81	2,159.34	639.71	1,236.02	608.79	542.00	71.75	4.81	1,648.98	4,143.27	0.00	0.00	0.00					
TOTAL	48,737.81	0.35	152.20	47,236.57	8,763.10	25,945.64	12,853.01	9,892.27	926.88	4.81	1,648.98	47,181.68	691.05	0.50	0.00					

Note: For the period from December 19, 2022 until the end of December, a total of 1,648.98 mt of Residential Waste was not processed into the FEP/WSF but disposed of directly in the RDF.

RDF Received (mt) = 47,181.68

Less Metal Shipped (mt) = - 691.05

Material Landfilled (mt) = 46,490.63

Table 3 Transfer Station Monthly Tonnage Summary (mt)

RECEIVED:					
2022	COMM	SPECIAL Compost/Haz	SPECIAL Handling Fee	DIRECT TO RDF	TOTAL RECEIVED
JAN	5,211.01	12.46	8.93	52.12	5,284.52
FEB	5,291.39	13.09	23.04	63.94	5,391.46
MARCH	6,416.23	18.58	16.92	57.45	6,509.18
APRIL	5,987.82	3.30	4.95	95.72	6,091.79
MAY	6,260.13	6.21	11.20	98.68	6,376.22
JUNE	6,397.97	17.85	15.64	71.69	6,503.15
JULY	6,156.95	13.45	17.50	51.49	6,239.39
AUG	6,434.86	10.51	15.50	98.49	6,559.36
SEPT	6,383.93	11.35	9.90	88.62	6,493.80
OCT	6,443.64	15.67	7.37	78.21	6,544.89
NOV	5,993.21	4.45	16.44	98.72	6,112.82
DEC	6,156.37	6.66	4.81	71.75	6,239.59
TOTALS	73,133.51	133.58	152.20	926.88	74,346.17

Quantities of the contaminated solids that were disposed of directly to the RDF are summarized in Table 2 (Direct to RDF column).

The generator and location of source can be found in Appendix D with compliance testing included.

Section 18 b) iv) summary table and discussion of Performance Audits, including discussion of progress towards Compliance Plan(s) and or Enhanced Diversion Plan(s);

Quarterly Performance Audits are completed by Strum Environmental, with three Performance audits being completed in 2022. A summary report for the Performance Audits and the Compliance Plan is provided under separate cover.

Section 18 b) v) Quantity, type and location of any stockpiled materials, including daily, intermediate and final cover, feedstocks, etc., including summary of construction and demolition debris mix used as daily cover on the RDF, including compliance testing, quantity received and quantity used.

There are no stockpiles of alternate cover or rock materials kept on site other than 1-2 days worth of material kept near the working face.

We keep approximately 100-200 tonnes of clay east of Cell 7 for emergency use.

Table 4 summarizes use of alternate cover, rock, clay and soil cover received during 2022.

Table 4 Summary of Alternate Cover used for RDF

2022	Alternate Cover	Rock	Soil Cover	Clay	Totals
January	345.45	118.64			464.09
February	306.99	58.61			365.60
March	705.06	288.10		2982	3,975.16
April	375.32	-			375.32
May	486.22	112.06			598.28
June	430.46	584.37			1,014.83
July	534.31	332.22			866.53
August	568.84	178.94			747.78
September	364.24	204.85			569.09
October	330.13	153.01			483.14
November	322.34	59.32			381.66
December	483.00	1,294.79			1,777.79
Totals	5,252.36	3,384.91	-	2,982.00	11,619.27

All Construction & Demolition Debris used on site was weighed on our scale in volumes reported on Table 4. All materials were supplied by Halifax C&D Ltd. Compliance testing is reported in Appendix E. There is only about 1-2 days worth of debris mix kept on hand at any time throughout the year.

Clay was placed as intermediate cover on areas of the landfill that will not be utilized in the near future.

Section 18 b) vi) Details of any spills or releases at the Facility;

There were no reportable spills at the facility in 2022.

Section 18 b) vii) Any complaints and measures taken to resolve the complaints;

Odour complaints received in 2022 can be found in Appendix F.

Section 18 b) viii) *Updates to Operations & Maintenance Manual, Environmental Management Plan, and Contingency Plan documents, which shall include the dates of reviews, modifications and reasons for any modifications;*

The Operations & Maintenance Manual, Environmental Management Plan and Contingency Plan were all modified in 2022 as part of the site's Operating Approval Renewal Application to reflect the altered site operations expected with the closure of FEP and WSF. This plan was accepted for both the activities and no modifications have been made since this recent submission to NSECC.

Section 18 b) ix) *Any violations of the conditions of this Approval and actions taken by the Approval Holders to correct those violations;*

No violations to the conditions of the Approval took place in 2022.

Section 18 b) x) *Recommendations assembled by the Site Professional(s), the Engineer(s), the Hydrogeologist(s), and any other consultant(s) or author(s) contributing to the Annual Report*

Recommendations can be reviewed in the 2022 Dillon Annual Surface and Groundwater report.

Section 18 b) xi) *Comments from the Approval Holder(s) reporting whether each recommendation from Condition ix., above, was accepted, what action has been taken, or justification of why the recommendation has not been accepted.*

Recommendations provided in the 2022 Annual Surface and Groundwater Report are actively being considered for implementation during 2023.

In addition to the annual reporting requirements of Section 12 (presented above), the Approval also specifies operating records to be maintained.

Section 15 k) *The used oil holding tank at the maintenance building shall be inspected regularly, as per Industry standards. The liquid from the holding tank shall be disposed of through the services of a licensed used oil collector. The Department shall be advised in writing of the collector*

and final treatment for this liquid as part of the annual report.

Waste oil was collected by GFL. A summary of the volume collected is included in Appendix G.

3.0 Future Work in 2023

In early 2023, landfill operations will continue in the upper sections of Cell 7A.

- Fill Plan - For 2023, we anticipate continuing to fill Cell #7A throughout 2023.
- Major Construction - We anticipate the construction of Cell 7B in 2023 – pending approval from NSECC.

4.0 Statement of Compliance

On a continuing basis, MIRROR NS and HRM have made all reasonable efforts to maintain compliance with our Approval and operating plans while communicating any issues relating to the approval to construct and operate with NSECC.

5.0 Summary

This report has summarized the operational and developmental aspects of the Otter Lake Solid Waste Management Facility during 2022. This was the twenty fourth year of operation of the facility. Incidents that did occur were managed and measures were put in place to minimize further occurrences.

Appendix A - Surface Water Discharge Summary

SURFACE WATER ANALYSIS 2022

2022	Sample Code	Sample Location	TSS	pH
January	SSP-030122-01	Discharge from the South Sed Pond	34	6.93
January	SW4-060122-09	Discharge from behind the Pumphouse	10	7.28
January	FD-060122-10	Discharge from Front Ditch	35	6.60
January	SW4-130122-04	Discharge from behind the Pumphouse	< 5	7.38
January	FD-130122-05	Discharge from Front Ditch	< 5	6.58
January	SW4-200122-04	Discharge from behind the Pumphouse	< 5	7.28
January	FD-200122-05	Discharge from Front Ditch	< 5	6.60
January	SSP-270122-03	Discharge from the South Sed Pond	< 5	7.28
January Average			13.0	6.99

2022	Sample Code	Sample Location	TSS	pH
February	SSP-080222-01	Discharge from the South Sed Pond	< 5	6.65
February	SW4-10222-05	Discharge from behind the Pumphouse	< 5	6.86
February	FD-102222-06	Discharge from Front Ditch	< 5	6.55
February	SSP-170222-05	Discharge from the South Sed Pond	8	6.56
February	NSP-220222-01	Discharge from the North Sed Pond	< 5	6.70
February	FD-250222-08	Discharge from Front Ditch	< 5	6.73
February	NSP-280222-01	Discharge from the North Sed Pond	< 5	6.75
February Average			5.4	6.69

2022	Sample Code	Sample Location	TSS	pH
March	FD-030322-06	Discharge from Front Ditch	< 5	6.30
March	SSP-070322-01	Discharge from the South Sed Pond	17	7.03
March	NSP-090322-06	Discharge from the North Sed Pond	< 5	6.82
March	SSP-160322-10	Discharge from the South Sed Pond	34	6.68
March	SW4-170322-08	Discharge from behind the Pumphouse	< 5	7.37
March	FD-170322-09	Discharge from Front Ditch	< 5	6.97
March	SSP-220322-01	Discharge from the South Sed Pond	6	7.44
March	FD-240322-04	Discharge from Front Ditch	< 5	6.96
March	SW4-240322-05	Discharge from behind the Pumphouse	< 5	7.56
March	NSP-290322-01	Discharge from the North Sed Pond	< 5	7.08
March	SSP-300322-01	Discharge from the South Sed Pond	15	7.24
March	FD-310322-03	Discharge from Front Ditch	< 5	6.79
March	SW4-310322-04	Discharge from behind the Pumphouse	< 5	7.65
March Average			9.0	7.07

2022	Sample Code	Sample Location	TSS	pH
April	SSP-050422-01	Discharge from the South Sed Pond	< 5	7.68
April	SW4-080422-04	Discharge from behind the Pumphouse	< 5	7.81
April	FD-080422-05	Discharge from Front Ditch	< 5	6.74
April	SSP-130422-02	Discharge from the South Sed Pond	25	7.45
April	SW4-220422-09	Discharge from behind the Pumphouse	< 5	6.82
April	FD-220422-10	Discharge from Front Ditch	< 5	7.63
April	SSP-220422-11	Discharge from the South Sed Pond	7	7.66
April	SW4-280422-03	Discharge from behind the Pumphouse	< 5	7.61
April	FD-280422-04	Discharge from Front Ditch	< 5	6.62
April Average			7.4	7.34

2022	Sample Code	Sample Location	TSS	pH
May	SSP-040522-01	Discharge from the South Sed Pond	5	7.43
May	SW4-050522-04	Discharge from behind the Pumphouse	< 5	7.53
May	NSP-110522-07	Discharge from the North Sed Pond	< 5	7.01
May Average			5.0	7.32

SURFACE WATER ANALYSIS 2022

2022	Sample Code	Sample Location	TSS	pH
June	SSP-130622-13	Discharge from the South Sed Pond	< 5	7.94
June	NSP-130622-14	Discharge from the North Sed Pond	< 5	7.20
June	SSP-210622-01	Discharge from the South Sed Pond	< 5	7.67
June	NSP-220622-05	Discharge from the North Sed Pond	< 5	7.34
June Average			5.0	7.54
2022	Sample Code	Sample Location	TSS	pH
July	SSP-200722-01	Discharge from the South Sed Pond	< 5	6.83
July	NSP-280722-04	Discharge from the North Sed Pond	< 5	7.09
July Average			5.0	6.96
2022	Sample Code	Sample Location	TSS	pH
August	SSP-160822-01	Discharge from the South Sed Pond	< 5	7.50
August	NSP-160822-02	Discharge from the North Sed Pond	< 5	7.09
August Average			5.0	7.30
2022	Sample Code	Sample Location	TSS	pH
September	SSP-260922-01	Discharge from the South Sed Pond	< 5	7.05
September	NSP-300922-01	Discharge from the North Sed Pond	< 5	6.94
September Average			5.0	7.00
2022	Sample Code	Sample Location	TSS	pH
October	SSP-201022-04	Discharge from the South Sed Pond	< 5	7.31
October	NSP-271022-01	Discharge from the North Sed Pond	< 5	7.63
September Average			5.0	7.47
2022	Sample Code	Sample Location	TSS	pH
November	NSP-041122-02	Discharge from the North Sed Pond	< 5	7.03
November	SSP-031122-02	Discharge from the South Sed Pond	< 5	6.68
November	FD-031122-04	Discharge from Front Ditch	8	6.62
November	SSP-291122-01	Discharge from the South Sed Pond	21	7.00
November Average			9.8	6.83
2022	Sample Code	Sample Location	TSS	pH
December	SSP-061222-01	Discharge from the South Sed Pond	6	7.22
December	NSP-061222-02	Discharge from the North Sed Pond	< 5	7.13
December	SSP-101222-01	Discharge from the South Sed Pond	8	6.67
December	NSP-151222-01	Discharge from the North Sed Pond	< 5	7.06
December	SSP-211222-05	Discharge from the South Sed Pond	< 5	7.45
December	NSP-301222-01	Discharge from the North Sed Pond	< 5	7.31
December	FD-151222-02	Discharge from Front Ditch	< 5	6.99
December	SSP211222-05	Discharge from the South Sed Pond	< 5	7.45
December	SW4-211222-03	Discharge from behind the Pumphouse	< 5	7.59
December	FD-211222-04	Discharge from Front Ditch	< 5	6.71
December Average			5.4	7.16

Appendix B - NSP/SSP Full Analysis Summary

Standard Water Analysis - Total Metals

Sample Description Date Sampled Parameter	Unit	G / S	RDL	3-Jun	27-Jun	8-Feb	17-Feb	22-Feb	28-Feb	7-Mar	9-Mar	16-Mar	29-Mar	30-Mar	22-Mar	5-Apr	13-Apr	22-Apr	26-Apr	26-Apr	4-May	11-May	13-Jun	13-Jun		
				SSP - 030122-01	SSP - 270122-03	SSP - 080222-01	SSP - 170222-05	SSP - 220222-01	NSP - 280222 - 01	SSP - 070322-01	NSP - 090322-06	SSP - 160322-10	NSP - 290322-01	SSP - 300322-01	SSP - 220322-01	SSP - 050422-01	SSP - 130422 - 02	SSP - 220422-11	SSP - 260422 - 01	SSP - 260422 - 01	SSP - 260422 - 01	SSP - 260422 - 01	SSP - 040522-01	SSP - 110522-07	NSP - 130622-13	NSP - 130622-14
				01032022	31272022	02092022	02172022	02222022	02282022	03072022	03092022	03162022	03202022	03232022	03232022	03232022	04192022	04192022	04192022	04192022	04192022	04192022	04192022	04192022	04192022	04192022
				3407385	3459019	3497497	3529677	3546266	3567265	3591671	3597175	3628413	3686967	3693184	3658029	3720214	3720214	3720214	3720214	3720214	3720214	3720214	3720214	3720214	3720214	3720214
Reactive Silica as SiO2	mg/L	6.53	7.28	6.65	6.75	7.03	6.82	6.68	6.68	7.06	7.24	7.44	7.68	7.45	7.68	7.45	7.68	7.45	7.68	7.45	7.68	7.45	7.68	7.45	7.68	7.45
Fluoride	mg/L	3.7	3.7	<0.5	2.8	0.7	2	2.2	0.5	1.8	2.6	2.3	2.5	3.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4
Chloride	mg/L	36	22	1	13	5	6	10	8	31	4	15	18	12	16	16	16	16	16	16	16	16	16	16	16	16
Sulphate	mg/L	11	9	2	7	2	7	2	2	5	3	8	3	9	8	11	11	11	11	11	11	11	11	11	11	11
Alkalinity	mg/L	23	32	6	17	14	22	21	23	15	28	41	29	42	51	51	51	51	51	51	51	51	51	51	51	51
True Color	NTU	<5.00	14	<5.00	7.03	16.4	26.2	8.4	28.2	<5.00	32	<5.00	5.22	<5.00	5.22	<5.00	5.22	<5.00	5.22	<5.00	5.22	<5.00	5.22	<5.00	5.22	<5.00
Turbidity	NTU	20.8	9.8	6.7	7.9	9.4	6.1	6.1	6.1	36.1	8.7	21.8	10.3	6.3	23.4	9.5	2.3	2.4	12.9	1.4	2.4	12.9	1.4	2.4	12.9	1.4
Electrical Conductivity	umho/cm	186	169	18	100	46	68	78	81	157	79	162	141	178	191	193	193	193	193	193	193	193	193	193	193	193
Nitrate + Nitrite as N	mg/L	0.15	0.19	<0.05	0.14	<0.05	0.14	<0.05	0.12	<0.05	0.11	<0.05	0.09	0.13	0.07	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
Nitrate as N	mg/L	2.935																								
Nitrite as N	mg/L	0.06	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	
Ammonia as N	mg/L	<0.03	0.06	0.59	0.17	<0.03	0.12	0.04	0.04	0.04	0.03	<0.03	<0.03	<0.03	0.71	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Total Organic Carbon	mg/L	2.3	7	4.9	2.5	4.4	9.4	4.4	9.4	1.3	3.7	6.4	3.3	1.5	2.6	3.8	4.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3
Ortho-Phosphate as P	mg/L	<0.01	<0.01	<0.01	0.03	0.07	0.01	0.06	0.01	0.06	0.01	0.01	0.02	0.09	0.02	0.09	0.02	0.09	0.02	0.09	0.02	0.09	0.02	0.09	0.02	0.09
Total Sodium	mg/L	10.9	8.5	1.1	4.4	2.4	3.6	6.5	4	9	2.6	7.4	6.9	7.1	8.4	7.8	7.9	8.4	7.8	7.9	8.4	7.8	7.9	8.4	7.8	7.9
Total Potassium	mg/L	0.1	2.7	2.6	1.4	1.3	1.2	2.7	2.6	3	2.1	2.1	2.6	2.2	2.2	2.7	2.4	2.3	2.4	2.3	2.4	2.3	2.4	2.3	2.4	2.3
Total Calcium	mg/L	17.3	13.8	1.4	9.4	4.7	9.1	15.6	8.8	12.8	8.8	15.4	14.4	18.2	22.3	22.3	22.3	22.3	22.3	22.3	22.3	22.3	22.3	22.3	22.3	22.3
Total Magnesium	mg/L	0.1	2.3	2.1	0.2	1	0.7	1.2	2.2	1.1	1.9	1.1	2.7	1.9	2.3	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2
Bicarb. Alkalinity (as CaCO3)	mg/L	33	32	6	17	14	22	21	23	15	28	41	29	42	51	51	51	51	51	51	51	51	51	51	51	51
Carb. Alkalinity (as CaCO3)	mg/L	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	
Hydroxide	mg/L	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Calcified TDS	mg/L	96	79	12	48	25	37	58	42	76	39	79	71	75	96	96	96	96	96	96	96	96	96	96	96	96
Hardness	mg/L	52.7	43.1	4.3	27.6	14.6	27.7	48	26.5	39.8	26.5	49.6	43.8	54.9	68.9	68.9	68.9	68.9	68.9	68.9	68.9	68.9	68.9	68.9	68.9	68.9
Langlier Index (@20C)	NA	-2.06	-1.65	-3.92	-2.79	-3.01	-2.49	-2.02	-2.42	-2.61	-2.09	-1.54	-1.01	-1.08	-0.83	-1.77	-1.72	-1.72	-1.72	-1.72	-1.72	-1.72	-1.72	-1.72	-1.72	-1.72
Langlier Index (@4C)	NA	-2.38	-1.97	-4.24	-3.11	-3.33	-2.81	-2.34	-2.74	-2.93	-2.41	-1.86	-1.33	-1.4	-1.15	-2.09	-2.04	-2.04	-2.04	-2.04	-2.04	-2.04	-2.04	-2.04	-2.04	-2.04
Saturation pH (@20C)	NA	8.99	8.93	10.6	9.35	9.71	9.24	9.05	9.24	9.05	9.24	9.15	8.78	8.95	8.69	8.53	8.49	8.86	8.81	8.86	8.81	8.86	8.81	8.86	8.81	8.86
Saturation pH (@4C)	NA	9.31	9.25	10.9	9.67	10	9.56	9.37	9.56	9.37	9.56	9.61	9.47	9.1	9.27	9.01	8.85	8.81	9.13	9.13	9.13	9.13	9.13	9.13	9.13	9.13
Anion Sum	mg/L	1.72	1.46	0.19	0.86	0.46	0.81	0.81	0.81	0.75	1.35	0.74	1.44	1.26	1.33	1.7	1.69	1.69	1.69	1.69	1.69	1.69	1.69	1.69	1.69	1.69
Cation Sum	mg/L	1.73	1.39	0.26	0.88	0.48	0.84	0.84	0.84	0.82	1.38	0.75	1.52	1.35	1.52	1.96	1.86	1.86	1.86	1.86	1.86	1.86	1.86	1.86	1.86	1.86
% Difference / Ion Balance	%	0.4	2.7	15.4	0.8	1.8	15.9	30.3	4.7	1.1	0.8	2.8	3.3	6.6	7.1	6.6	7.1	6.6	7.1	6.6	7.1	6.6	7.1	6.6	7.1	
Total Aluminum	ug/L	1060	570	358	538	366	366	366	366	366	366	366	366	366	366	366	366	366	366	366	366	366	366	366	366	366
Total Antimony	ug/L	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Total Arsenic	ug/L	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Total Barium	ug/L	24	23	<5	24	10	14	32	16	30	18	34	30	28	34	26	26	26	26	26	26	26	26	26	26	26
Total Beryllium	ug/L	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Total Boron	ug/L	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Total Boron	ug/L	14	16	<5	9	<5	9	<5	9	<5	10	<5	10	<5	10	7	9	11	12	14	15	17	6	17	6	17
Total Cadmium	ug/L	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	
Total Chromium	ug/L	1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Total Cobalt	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
Total Copper	ug/L	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
Total Iron	ug/L	300	108	361	161	428	303	301	810	810	254	87	333	796	302	271	751	432	502	534	562	562	562	562	562	
Total Lead	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
Total Manganese	ug/L	269																								

Standard Water Analysis + Total Metals

Sample Description Parameter	Unit	G / S	RDL	22-Jun SSP - 210622-01 NSP - 210622-01	23-Jun SSP - 200722-01 NSP - 200722-01	20-Jul SSP - 200722-01 NSP - 200722-01	28-Jul SSP - 200722-01 NSP - 200722-01	15-Aug SSP - 160822-01 NSP - 160822-01	16-Aug SSP - 160822-01 NSP - 160822-01	26-Sep SSP - 200922-01 NSP - 200922-01	30-Sep SSP - 201022-01 NSP - 201022-01	27-Oct SSP - 04271022-01 NSP - 04271022-01	4-Nov SSP - 041122-01 NSP - 041122-01	3-Nov SSP - 031122-01 NSP - 031122-01	29-Nov SSP - 061222-01 NSP - 061222-01	6-Dec SSP - 061222-01 NSP - 061222-01	10-Dec SSP - 101222-01 NSP - 101222-01	15-Dec SSP - 151222-01 NSP - 151222-01	21-Dec SSP - 211222-01 NSP - 211222-01	
CCME FWALG																				
6.5-9.0																				
Reactive Silica as SiO2	mg/L	0.5		7.67	7.34	6.83	7.09	7.5	7.09	7.05	6.94	7.31	7.63	7.03	6.68	7	7.22	7.13	6.67	7.06
Chloride	mg/L	1		1.5	1.1	1.5	<0.5	<0.5	0.8	1	3.5	11.2	5	7	5	32	21	6	32	7
Fluoride	mg/L	0.12		0.13	0.15	<0.12	0.13	<0.12	0.13	<0.12	0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	0.17
Sulphate	mg/L	2		3	11	2	8	<2	6	4	12	5	8	6	12	11	6	11	6	11
Alkalinity	mg/L	5		50	36	31	34	56	44	57	79	67	55	73	58	65	58	60	40	55
True Color	TCU	5.00		6.07	30.4	<5.00	22.2	<5.00	27.4	5.5	37.7	10.1	77.7	14.4	30.7	<5.00	<5.00	<5.00	<5.00	36.3
Turbidity	NTU	0.5		7.2	2.7	2.7	1.1	1.1	1.1	2.5	2.6	1.9	2	2.5	0.8	9.6	7.7	2.7	5.7	5.4
Electrical Conductivity	umho/cm	1		184	89	1984	83	158	103	184	113	192	132	177	141	221	199	137	204	139
Nitrate + Nitrite as N	mg/L	0.05		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.06	0.09	<0.05	0.11	0.06
Nitrate as N	mg/L	0.05		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.06	0.09	<0.05	0.11	0.06
Nitrite as N	mg/L	0.05		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.19
Ammonia as N	mg/L	0.03		<0.03	<0.03	<0.03	0.03	0.03	0.03	0.03	0.03	0.06	0.06	0.03	0.06	<0.05	<0.05	<0.05	<0.05	<0.05
Total Organic Carbon	mg/L	0.5		4.6	8.4	4.6	8.2	6.2	9.4	5	8.9	5.8	7.6	6.3	7.8	3.6	3.4	7	2.1	7.4
Ortho-Phosphate as P	mg/L	0.01		<0.01	<0.01	0.01	0.01	0.02	0.02	<0.01	<0.01	<0.01	<0.01	<0.01	0.11	<0.01	<0.01	<0.01	0.01	<0.01
Total Sodium	mg/L	0.1		8.5	2.8	7.6	3	7.6	2.9	8.4	3.3	7.8	3.3	6.1	3.5	9.9	9.3	4.2	12	4.6
Total Potassium	mg/L	0.1		2.1	1.9	2.5	1.6	3.6	1.8	4.3	2.4	5.1	3.2	4.4	3.7	3.9	4.4	4.3	3.4	4.4
Total Calcium	mg/L	0.1		20.6	11.4	17.9	9.8	16.5	13.2	17.8	16.3	22.3	16.9	22.3	22.7	23	23.6	19.6	26.9	24.5
Total Magnesium	mg/L	0.1		3.1	1.6	2.9	1.8	3.5	2	3.5	2.1	3.6	2.2	3.4	2.3	3.3	3.9	2.5	3.1	2.6
Bicarb. Alkalinity (as CaCO3)	mg/L	5		50	36	31	34	56	44	57	79	67	55	73	58	65	58	60	40	55
Carb. Alkalinity (as CaCO3)	mg/L	10		<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Hydroxide	mg/L	5		<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Calculated TDS	mg/L	1		96	46	75	41	81	49	87	75	104	69	96	78	129	111	79	115	85
Hardness	mg/L	1		64.2	35.1	56.6	31.9	55.6	41.2	58.9	49.3	70.5	51.3	69.7	66.2	71	75	59.2	79.9	56.4
Langlier Index (@20C)	NA			-0.9	-1.6	-2	-1.94	-1.11	-1.7	-1.52	-1.53	-1.1	-0.97	-1.34	-1.78	-1.42	-1.24	-1.38	-1.89	-1.39
Langlier Index (@4C)	NA			-1.22	-1.92	-2.32	-2.26	-1.43	-2.02	-1.84	-1.85	-1.42	-1.29	-1.66	-2.1	-1.74	-1.56	-1.7	-2.21	-1.71
Saturation pH (@20C)	NA			8.57	8.94	8.83	9.03	8.61	8.79	8.57	8.47	8.41	8.6	8.37	8.46	8.42	8.46	8.51	8.56	8.45
Saturation pH (@4C)	NA			8.89	9.26	9.15	9.35	8.93	9.11	8.89	8.79	8.73	8.92	8.69	8.78	8.74	8.78	8.83	8.88	8.77
Anion Sum	meq/L	1.8		1.76	0.88	1.57	0.82	1.58	1.02	1.7	1.21	1.93	1.27	1.81	1.58	2.52	2.24	1.51	2.38	1.79
Cation Sum	meq/L	1.76		1.2	0.9	1.16	2.7	2.2	4.3	2.8	1.8	0	3	0.5	5.1	1.3	6	0.6	10.2	9.9
% Difference / Ion Balance	%			324	46	353	35	374	27	338	96	378	56	218	36	4950	1120	94	1400	292
Total Aluminum	ug/L	5		<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Total Antimony	ug/L	2		<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Total Arsenic	ug/L	5		<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Total Barium	ug/L	2		24	10	18	10	19	13	22	21	25	20	27	21	38	44	21	41	31
Total Beryllium	ug/L	2		<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Total Boron	ug/L	5		19	8	17	7	24	10	19	10	21	10	18	10	14	37	26	10	8
Total Cadmium	ug/L	0.09		<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09
Total Chromium	ug/L	1		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Total Cobalt	ug/L	1		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Total Copper	ug/L	1		2	1	2	1	1	1	1	1	2	1	2	2	2	1	2	1	3
Total Iron	ug/L	50		208	138	88	146	<50	514	163	155	112	107	184	79	337	382	102	243	255
Total Lead	ug/L	0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Total Manganese	ug/L	2		162	46	38	47	14	59	29	114	37	17	107	5	120	127	3	243	6
Total Molybdenum	ug/L	2		<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Total Nickel	ug/L	2		<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Total Phosphorus	mg/L	0.02		0.03	0.06	0.03	0.05	0.03	0.09	0.03	0.07	0.03	0.06	0.04	0.06	0.04	0.06	0.07	0.06	0.09
Total Selenium	ug/L	1		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Total Silver	ug/L	0.25		60	27	52	26	59	31	57	38	66	38	66	43	69	64	33	63	44
Total Strontium	ug/L	5		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total Thallium	ug/L	0.1		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total Tin	ug/L	2		<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Total Titanium	ug/L	2		4	<2	<2	<2	<2	<2	4	2	<2	<2	2	<2	5	10	<2	6	7
Total Uranium	ug/L	0.2		0.8	0.6	0.5	0.3	1.1	0.3	0.5	0.6	1.2	0.4	2	0.5	1.2	0.5	0.6	0.2	1.2
Total Vanadium	ug/L	2		<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Total Zinc	ug/L	5		<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Total Suspended Solids	mg/L	5		<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5

Comments: 3407305 RDL - Reported Detection Limit; G / S - Guideline / Standard % Difference / Ion Balance, Hardness, Langlier Index, Nitrate + Nitrite, Hydroxide and Saturation pH are calculated parameters. The calculated parameters are non-accredited. The component parameters of the calculations are accredited.

Analysis performed at AGAT Halifax (unless marked by *) Insufficient Sample : IS Sample Not Received : SNR

Appendix C - Leak Detection Analysis Results

2022 Standard Water Analysis + Metals (Total)
Leak Detection 2022

CELL #1	Parameter	Unit	G / S	RDL	6-Jan	25-Feb	17-Mar	22-Apr	12-May	19-May	2-Jun	7-Jul	14-Jul	4-Aug	1-Sep	15-Sep	6-Oct	10-Nov	28-Nov	8-Dec
					LD1- 060122- 02	LD1- 250222- 01	LD1- 170322- 02	LD1- 210422- 03	LD1- 120522- 02	LD1- 190522- 02	LD1- 020622- 01	LD1- 070722- 02	LD1- 140722- 02	LD1- 040822- 01	LD1- 010922- 01	LD1- 150922- 02	LD1- 061022- 02	LD1- 10112220- 01	LD1- 281122- 01	LD1- 081222- 01
	pH				7.79	7.63	7.84	7.63	7.53	7.54	8.2	8.12	7.78	8.07	7.91	7.9	7.85	7.72	7.64	7.74
	Reactive Silica as SiO2	mg/L	0.5		9.1	7.9	10.6	8	21.5	12.1	10.2	9.5	<0.5	7.5	7	7.3	8.2	9.9	9.2	10.2
	Chloride	mg/L	1		13	14	15	8	7	8	10	12	15	13	11	9	12	13	15	16
	Fluoride	mg/L	0.12		0.12	<0.12	<0.12	<0.12	<0.12	<0.12	0.16	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12
	Sulphate	mg/L	2		36	24	26	36	30	31	35	24	30	38	35	35	38	35	36	37
	Alkalinity	mg/L	5		303	263	270	340	347	349	340	263	371	365	368	376	310	338	354	347
	True Color	TCU	5		<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	8.92	<5.00	10.2	<5.00	<5.00	14.6	5.8	5.14
	Turbidity	NTU	0.1		<0.5	<0.5	0.9	0.8	<0.5	1.1	2.2	1.4	0.8	0.9	1.9	1.5	<0.5	<0.5	<0.5	3.9
	Electrical Conductivity	umho/cm	1		653	564	661	788	749	746	732	551	729	740	737	787	668	704	756	717
	Nitrate + Nitrite as N	mg/L	0.05		0.84	0.29	2.11	0.61	0.79	0.67	0.67	0.93	1.38	0.63	0.65	0.63	1.45	1.02	1.2	1.59
	Nitrate as N	mg/L	0.05		0.84	0.29	2.11	0.61	0.79	0.67	0.67	0.93	1.38	0.63	0.65	0.63	1.45	1.02	1.2	1.59
	Nitrite as N	mg/L	0.05		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
	Ammonia as N	mg/L	0.03		see Note 1	see Note 1	see Note 1	see Note 1	see Note 1	see Note 1	see Note 1	see Note 1	see Note 1	see Note 1	see Note 1	see Note 1	see Note 1	see Note 1	see Note 1	see Note 1
	Total Organic Carbon	mg/L	0.5		16.9	8.5	6	6	5.5	5.2	4.4	7.3	4.5	4.4	4.4	4.2	5.3	5.1	4.9	4.8
	Ortho-Phosphate as P	mg/L	0.01		0.02	0.01	0.01	<0.01	0.07	<0.01	<0.01	0.03	<0.01	<0.01	<0.01	0.09	0.02	0.01	0.01	<0.01
	Total Sodium	mg/L	0.1		39.9	28	31	29	35	32	40	26	28	36	40	42	34	36.1	39.6	42.8
	Total Potassium	mg/L	0.1		5.5	5	6	5.4	5	5.6	5.4	5.2	5.4	5.8	5.6	5.5	5.6	6.2	6	6.3
	Total Calcium	mg/L	0.1		102	86.2	83	113	99.2	99.2	103	118	120	127	110	113	99.6	104	116	95.1
	Total Magnesium	mg/L	0.1		10.9	8.1	9.2	11.2	10.8	10.3	10.8	11.2	11.2	13.3	10.7	11.2	9.8	11	11.6	11.5
	Bicarb. Alkalinity (as CaCO3)	mg/L	5		303	263	270	340	347	349	340	263	371	365	368	376	310	338	354	347
	Carb. Alkalinity (as CaCO3)	mg/L	10		<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
	Hydroxide	mg/L	5		<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
	Calculated TDS	mg/L	1		393	324	342	410	398	400	411	358	438	441	436	444	391	413	442	424
	Hardness	mg/L	2		300	249	245	328	292	291	302	341	346	372	319	328	289	305	337	285
	Langelier Index (@20C)	NA	2		0.63	0.35	0.55	0.57	0.42	0.43	1.1	0.97	0.78	1.08	0.87	0.88	0.69	0.62	0.6	0.61
	Langelier Index (@4C)	NA	2		0.31	0.03	0.23	0.25	0.1	0.11	0.78	0.65	0.46	0.76	0.55	0.56	0.37	0.3	0.28	0.29
	Saturation pH (@ 20C)	NA	5		7.16	7.28	7.29	7.06	7.11	7.11	7.15	7.15	7	6.99	7.04	7.02	7.16	7.1	7.04	7.13
	Saturation pH (@ 4C)	NA	2		7.48	7.6	7.61	7.38	7.43	7.43	7.42	7.47	7.32	7.31	7.36	7.34	7.48	7.42	7.36	7.45
	Anion Sum	me/L	5		7.24	6.18	6.51	7.85	7.8	7.91	7.86	6.16	8.57	8.18	8.45	8.55	7.43	7.93	8.34	8.27
	Cation sum	me/L	5		7.87	6.32	6.42	7.97	7.5	7.37	7.92	8.09	8.28	9.16	8.27	8.55	7.41	7.84	8.64	7.72
	% Difference/ Ion Balance (NS)	%	5		4.2	1.2	0.7	0.8	2	3.5	0.4	13.5	1.7	5.7	1.1	0	0.2	0.6	1.8	3.4
	Total Aluminum	ug/L	5		5-100	7	61	10	16	31	66	46	15	46	60	47	13	39	119	8
	Total Antimony	ug/L	2		<2	<2	<2	<2	<2	<6	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
	Total Arsenic	ug/L	2		4	3	3	3	3	3	4	3	3	3	3	3	3	3	3	3
	Total Barium	ug/L	5		70	106	91	95	97	102	109	88	100	106	96	103	88	106	105	110
	Total Beryllium	ug/L	2		<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
	Total Bismuth	ug/L	2		<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
	Total Boron	ug/L	5		37	39	45	21	24	25	71	26	35	21	20	19	34	46	44	43
	Total Cadmium	ug/L	0.017		<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09
	Total Chromium	ug/L	1		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
	Total Cobalt	ug/L	1		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
	Total Copper	ug/L	1		see Note 3	see Note 3	see Note 3	see Note 3	see Note 3	see Note 3	see Note 3	see Note 3	see Note 3	see Note 3	see Note 3	see Note 3	see Note 3	see Note 3	see Note 3	see Note 3
	Total Iron	ug/L	50		300	69	<50	98	57	<50	71	104	<50	81	86	72	55	68	77	108
	Total Lead	ug/L	0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	Total Manganese	ug/L	2		<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
	Total Molybdenum	ug/L	2		<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
	Total Nickel	ug/L	2		Note 5	Note 5	Note 5	Note 5	Note 5	Note 5	Note 5	Note 5	Note 5	Note 5	Note 5	Note 5	Note 5	Note 5	Note 5	Note 5
	Total Phosphorous	mg/L	0.02		0.05	<0.02	0.03	0.03	0.02	0.03	0.03	<0.01	0.02	0.03	0.03	0.03	0.03	0.03	0.03	0.04
	Total Selenium	ug/L	1		1	1	1	1	<1	<1	2	<1	1	1	<1	2	<1	1	2	2
	Total Silver	ug/L	0.1		<0.1	0.2	<0.1	<0.1	<0.1	<0.1	<0.1	292	<0.1	<0.1	<2	<0.1	<0.1	<0.1	<0.1	<0.1
	Total Strontium	ug/L	5		248	180	215	272	236	263	269	<0.2	265	312	265	280	246	261	274	344
	Total Thallium	ug/L	0.1		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
	Total Tin	ug/L	2		<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
	Total Titanium	ug/L	2		<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
	Total Uranium	ug/L	0.1		<2	<2	<2	<2	<2	<2	<2	2.8	<2	<2	<2	<2	<2	<2	<2	<2
	Total Vanadium	ug/L	2		3	2.6	2.9	3.9	3.6	4	5.6	<2	3.4	3.8	4.4	4.5	<2	2.9	3.2	3.1
	Total Zinc	ug/L	5		<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
	Total Suspended Solids	mg/L	5		<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
					see Note 25															

RDL - Reported Detection (see Note 6)

Comments:

2022 Standard Water Analysis + Metals (Total)
Leak Detection 2022

CELL #3	CCME FWALG	6-Jan LD3- 060122- 03	25-Feb LD3- 250222- 03	17-Mar LD3- 170322- 03	22-Apr LD3- 210422- 04	12-May LD3- 120522- 03	19-May LD3- 190522- 03	2-Jun LD3- 020622- 02	7-Jul LD3- 070722- 03	14-Jul LD3- 140722- 03	4-Aug LD3- 040822- 02	1-Sep LD3- 010922- 02	15-Sep LD3- 150922- 03	6-Oct LD3- 061022- 03	10-Nov LD3- 10112220- 02	28-Nov LD3- 281122-3 02	8-Dec LD3- 081222- 02
Parameter	Unit	G / S	RDL	01/06/2022	12/25/2022	13/17/2022	14/22/2022	15/12/2022	15/19/2022	16/02/2022	17/07/2022	17/14/2022	18/04/2022	19/15/2022	10/06/2022	11/28/2022	12/08/2022
pH				7.39	7.24	7.45	7.31	7.26	7.33	8.05	8.46	7.23	7.33	7.17	7.37	7.24	7.34
Reactive Silica as SiO2	mg/L	0.5		8.6	7.2	9.2	7.5	12.9	11	10.8	9.6	12.5	9.3	8.2	7.6	8.5	8.6
Chloride	mg/L	1		15	11	10	13	10	11	12	16	15	14	13	20	25	20
Fluoride	mg/L	0.12		<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12
Sulphate	mg/L	2		46	43	39	50	49	45	47	42	36	32	39	41	42	44
Alkalinity	mg/L	5		314	307	286	341	365	355	373	369	362	358	360	364	302	316
True Color	TCU	5		<5.00	<5.00	10.2	6	<5.00	8.46	9.67	7.57	10.8	10.5	8.53	13.8	9.47	11.4
Turbidity	NTU	0.1		1.4	1.4	1.3	0.5	<0.5	1.3	6.2	<0.5	1.7	1.3	2.3	0.5	0.8	2.6
Electrical Conductivity	umho/cm	1		728	648	682	848	861	801	821	746	752	760	803	744	682	745
Nitrate + Nitrite as N	mg/L	0.05		0.21	<0.05	0.06	1.21	<0.05	0.57	0.96	0.44	0.51	0.5	0.41	0.33	0.42	1.27
Nitrate as N	mg/L	0.05		0.21	<0.05	0.06	1.21	<0.05	0.57	0.96	0.44	0.51	0.5	0.41	0.33	0.42	1.27
Nitrite as N	mg/L	0.05		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Ammonia as N	mg/L	0.03		<0.03	<0.03	0.09	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Total Organic Carbon	mg/L	0.5		25	15.4	0.8	8.9	12.8	10.4	11.3	12.3	7.4	7.7	8.1	8	8.1	7.4
Ortho-Phosphate as P	mg/L	0.01		0.02	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.01	<0.01	<0.01	0.09	0.02	0.01	0.01
Total Sodium	mg/L	0.1		82.2	65	68	74	94	78	86	81	66	76	69	75	69	73
Total Potassium	mg/L	0.1		5.6	6	6.1	6.2	6	5.9	6	6.2	6.2	6.5	6.4	6.7	6.9	6.3
Total Calcium	mg/L	0.1		78.8	68.4	68.9	92.4	75.1	69	76	84.3	84.9	94.9	86.6	91.6	88.1	66.9
Total Magnesium	mg/L	0.1		8.9	8	7.8	11	9.5	9.4	8.7	9.3	9.3	10.6	9.4	9.8	9.9	9.2
Bicarb. Alkalinity (as CaCO3)	mg/L	5		314	307	286	341	365	355	373	344	362	358	360	364	302	316
Carb. Alkalinity (as CaCO3)	mg/L	10		<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Hydroxide	mg/L	5		<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Calculated TDS	mg/L	1		426	386	372	457	483	434	463	462	437	451	444	447	410	443
Hardness	mg/L	5	5-100	233	204	204	276	227	211	226	249	250	281	286	289	233	248
Langelier Index (@20C)	NA	2		0.13	-0.08	0.1	0.16	0.04	0.07	0.85	1.3	0.07	0.21	0	0.03	0.09	0.01
Langelier Index (@4C)	NA	2		-0.19	-0.4	-0.22	-0.16	-0.28	-0.25	0.53	0.98	-0.25	-0.11	-0.32	-0.19	-0.29	-0.31
Saturation pH (@20C)	NA	5		7.26	7.32	7.35	7.15	7.22	7.26	7.2	7.16	7.16	7.12	7.16	7.17	7.14	7.28
Saturation pH (@4C)	NA	2		7.58	7.64	7.67	7.47	7.54	7.58	7.52	7.48	7.48	7.44	7.48	7.46	7.55	7.65
Anion Sum	me/L	5		788	735	682	831	816	839	882	874	845	826	846	852	756	792
Cation sum	me/L	5		839	706	721	89	878	777	846	866	805	91	829	842	856	783
% Difference / Ion Balance (NS)	%	5		4.5	2	2.8	3.4	1	3.8	2.1	0.5	2.4	4.8	1	0.6	1.2	22.3
Total Aluminum	ug/L	1		19	8	29	11	19	13	46	11	13	13	10	41	12	93
Total Antimony	ug/L	2		<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Total Arsenic	ug/L	2		<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Total Barium	ug/L	5		51	71	63	65	70	59	74	67	74	87	79	77	76	80
Total Beryllium	ug/L	2		<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Total Bismuth	ug/L	2		<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Total Boron	ug/L	5		101	59	56	62	88	75	87	69	68	81	71	72	75	99
Total Cadmium	ug/L	0.017		<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09
Total Chromium	ug/L	1		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Total Cobalt	ug/L	1		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Total Copper	ug/L	1		5	4	4	4	5	4	5	4	5	6	5	5	5	8
Total Iron	ug/L	50		127	<50	173	68	120	171	1090	57	235	261	165	424	126	191
Total Lead	ug/L	0.5		<0.5	<0.5	0.6	<0.5	<0.5	<0.5	0.6	<0.5	1.5	<0.5	<0.5	<0.5	<0.5	<0.5
Total Manganese	ug/L	2		26	19	32	11	8	10	176	20	21	40	40	98	37	11
Total Molybdenum	ug/L	2		<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Total Nickel	ug/L	2		4	3	4	4	4	3	4	4	5	4	4	5	4	7
Total Phosphorous	mg/L	0.02		0.05	<0.02	0.03	0.03	0.03	0.03	0.03	<0.03	0.02	0.03	0.03	0.03	0.03	0.04
Total Selenium	ug/L	1		2	1	2	2	2	2	2	2	2	2	2	2	2	2
Total Silver	ug/L	0.1		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total Strontium	ug/L	5		275	252	285	336	285	295	329	<0.2	321	391	340	347	366	356
Total Thallium	ug/L	0.1		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total Tin	ug/L	2		<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Total Titanium	ug/L	2		<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Total Uranium	ug/L	0.1		8.6	15.9	14.7	17.4	34	30	37	<2	28	33	31	34	26	19.3
Total Vanadium	ug/L	2		<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Total Zinc	ug/L	5		7	<5	<5	<5	<5	8	29	<5	10	20	8	20	12	10
Total Suspended Solids	mg/L	5		<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5

Comments: (see Note 6)
RDL - Reported Detection Limit.

2022 Standard Water Analysis + Metals (Total)
Leak Detection 2022

CELL #4	Parameter	Unit	G / S	RDL	6-Jan LD4- 060122- 04	25-Feb LD4- 250222- 04	17-Mar LD4- 170322- 04	9-Jun LD4- 090622- 02	7-Jul LD4- 070722- 04	14-Jul LD4- 140722- 04	1-Sep LD4- 010922- 03	15-Sep LD4- 150922- 04	6-Oct LD4- 061022- 04	10-Nov LD4- 10112220- 03	28-Nov LD4- 281122-4 03	8-Dec LD4- 081222- 03
	CCME				01/06/2022	32/25/2022	33/17/2022	36/09/2022	37/07/2022	37/14/2022	39/01/2022	39/15/2022	10/06/2022	11/10/2022	11/28/2022	12/08/2022
	FWALG				3408556	3553511	3628448	3954180	4062089	4091309	4264086	4306448	4382445	4507656	4564415	4599447
	6.5-9.0				8.17	8.05	8.1	8.21	8.51	8.14	8.1	8	8.1	8.12	8.01	8.06
	Reactive Silica as SiO2	mg/L		0.5	11.9	9.6	18.4	13.7	11.6	5.865	10.6	0.7	10.4	11.7	10.7	10.2
	Chloride	mg/L		1	20	21	21	23	23	22	21	21	14	21	19	20
	Fluoride	mg/L		0.12	0.18	0.17	0.16	0.15	0.14	0.14	0.2	0.18	0.19	0.19	0.18	0.18
	Sulphate	mg/L		2	324	307	363	300	322	328	275	318	263	373	316	412
	Alkalinity	mg/L		5	464	487	497	503	434	504	518	516	488	510	509	501
	True Color	TCU		5	8.56	7.9	9.65	<5.00	6.91	7.76	8.79	9.71	5.78	12.6	8.94	9.92
	Turbidity	NTU		0.1	5.1	5.2	1.9	13.9	2.2	7.5	1.7	9.7	1.5	6.4	4.1	1.2
	Electrical Conductivity	umhol/cm		1	1490	1430	1640	1825	1450	1551	1490	1690	1341	1590	1500	1500
	Nitrate + Nitrite as N	mg/L		0.05	0.76	0.11	0.27	2.32	1.97	2.05	1.45	0.64	1.51	1.08	1.66	1.25
	Nitrate as N	mg/L		0.05	0.76	0.11	0.27	2.32	1.97	2.05	1.45	0.64	1.51	1.03	1.66	1.25
	Nitrite as N	mg/L		0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.05	<0.05	<0.05
	Ammonia as N	mg/L		0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	0.03	0.05	<0.03	<0.03	<0.03	<0.03
	Total Organic Carbon	mg/L		0.5	28.6	31.2	6.3	19.7	23.2	19.1	18	23.3	15.2	18.8	17.8	19.3
	Ortho-Phosphate as P	mg/L		0.01	0.07	0.08	<0.01	<0.01	0.07	0.02	0.07	0.09	0.07	0.02	0.04	<0.01
	Total Sodium	mg/L		0.1	272	208	302	311	301	278	274	304	222	315	285	420
	Total Potassium	mg/L		0.1	3.4	5.6	5	5.3	5.2	5	5.3	5.6	5	5.8	5.4	5.9
	Total Calcium	mg/L		0.1	57.6	55.5	56.6	74.4	60.7	59.1	67.1	57.7	69.7	60.2	61.2	47.9
	Total Magnesium	mg/L		0.1	15.2	17.7	16.1	18.9	14.5	14.3	14.8	14.7	15.9	16.2	17.5	16.4
	Bicarb. Alkalinity (as CaCO3)	mg/L		5	464	487	497	503	406	504	518	516	488	510	509	501
	Carb. Alkalinity (as CaCO3)	mg/L		10	<10	<10	<10	<10	28	<10	<10	<10	<10	<10	<10	<10
	Hydroxide	mg/L		5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
	Calculated TDS	mg/L		1	974	908	1060	1040	996	1020	975	1030	889	1100	1020	1230
	Hardness	mg/L			206	211	208	264	211	206	228	205	240	217	225	187
	Langelier Index (@20C)	NA			0.91	0.8	0.86	1.09	1.24	0.93	0.95	0.79	0.95	0.92	0.82	0.74
	Langelier Index (@4C)	NA			0.59	0.48	0.54	0.77	0.92	0.61	0.63	0.47	0.63	0.6	0.5	0.42
	Saturation pH (@20C)	NA			7.26	7.25	7.24	7.12	7.27	7.21	7.15	7.21	7.15	7.2	7.19	7.32
	Saturation pH (@4C)	NA			7.58	7.57	7.56	7.44	7.59	7.53	7.47	7.53	7.47	7.52	7.51	7.64
	Anion Sum	me/L			16.6	16.7	18.1	17	16.2	17.7	16.8	17.6	15.7	18.6	17.4	19.2
	Cation sum	me/L			16.1	13.4	17.4	19	17.4	16.4	16.6	17.5	14.6	18.2	17.2	22.2
	% Difference/ Ion Balance (NS)	%			1.8	11	1.9	5.5	3.8	3.8	0.4	0.2	3.8	1.1	0.7	7.1
	Total Aluminum	ug/L		5	53	43	69	666	34	62	29	136	114	159	1120	114
	Total Antimony	ug/L		2	<2	2	2	<2	<2	<2	<2	2	<2	<2	<2	<2
	Total Arsenic	ug/L		2	32	32	22	23	27	28	29	12	31	24	28	18
	Total Barium	ug/L		5	37	50	43	54	41	43	44	42	38	45	44	44
	Total Beryllium	ug/L		2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
	Total Bismuth	ug/L		2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
	Total Boron	ug/L		5	202	162	175	175	176	168	154	192	124	207	171	198
	Total Cadmium	ug/L		0.017	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09
	Total Chromium	ug/L		1	<1	1	<1	2	<1	<1	1	<1	<1	<1	1	1
	Total Cobalt	ug/L		1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
	Total Copper	ug/L		1	3	4	3	6	4	4	4	4	4	4	6	4
	Total Iron	ug/L		50	214	123	95	778	160	516	189	921	164	577	295	551
	Total Lead	ug/L		0.5	<0.5	0.7	1.9	2.2	2.2	3.2	2.4	2.3	2	2.4	2.8	2.1
	Total Manganese	ug/L		2	3	2	<2	20	3	3	<2	7	<2	8	5	9
	Total Molybdenum	ug/L		2	10	8	11	13	14	14	13	15	10	14	12	12
	Total Nickel	ug/L		2	3	30	2	3	5	2	3	2	3	2	4	4
	Total Phosphorous	mg/L		0.02	0.13	0.06	0.04	0.1	2.2	0.1	0.1	0.06	0.11	0.09	0.09	0.08
	Total Selenium	ug/L		1	13	14	17	15	<1	15	3	16	3	15	18	4
	Total Silver	ug/L		0.1	<0.1	<0.1	<0.1	<0.1	502	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
	Total Strontium	ug/L		5	422	422	456	541	<2	425	461	484	450	511	517	384
	Total Thallium	ug/L		0.1	<0.1	<0.1	<0.1	<0.1	<3	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
	Total Tin	ug/L		2	<2	<2	<2	<2	6	<2	<2	<2	<2	<2	<2	<2
	Total Titanium	ug/L		2	3	<2	<2	22	86.8	<2	<2	<2	<2	<2	<2	<2
	Total Uranium	ug/L		0.1	68.2	76	77	90	<2	95	97	107	78	91.2	89	41.6
	Total Vanadium	ug/L		2	<2	<2	<2	3	28	<2	<2	<2	<2	<2	<2	<2
	Total Zinc	ug/L		5	6	13	39	39	35	35	14	36	17	28	34	29
	Total Suspended Solids	mg/L		5	13	<5	<5	10	<5	5	<5	<5	<5	<5	5	<5

Comments: (see Note 5)
RDL - Reported Detection Limit.

2022 Standard Water Analysis + Metals (Total)
Leak Detection 2022

CELL #5	Parameter	Unit	G / S	RDL	6-Jan	25-Feb	17-Mar	22-Apr	12-May	19-May	2-Jun	7-Jul	14-Jul	4-Aug	1-Sep	15-Sep	6-Oct	10-Nov	28-Nov	8-Dec
					LD5- 060122- 06	LD5- 250222- 05	LD5- 170322- 05	LD5- 210422- 06	LD5- 120522- 04	LD5- 190522- 04	LD5- 020622- 03	LD5- 070722- 05	LD5- 140722- 05	LD5- 040822- 03	LD5- 010922- 04	LD5- 150922- 05	LD5- 061022- 05	LD5- 10112220	LD5- 04 281122-5	LD5- 081222- 04
	Reactive Silica as SiO2	mg/L	0.5		8.24	8.04	8.17	8.07	7.92	7.95	8.3	8.48	8.08	8.1	8.06	8.1	8.14	8.11	8.16	8.17
	Chloride	mg/L	1		25.3	20.9	<0.5	24.4	11.8	35.6	40.3	<0.5	5.186	25.2	2.488	13.2	21.6	26.3	21.2	15.5
	Fluoride	mg/L	0.12		37	26	22	33	30	30	33	36	34	30	22	19	18	24	21	24
	Sulphate	mg/L	2		0.21	0.14	0.15	0.16	0.14	0.14	0.21	<0.12	<0.12	0.22	0.17	0.16	0.19	0.19	0.2	0.23
	Alkalinity	mg/L	5		326	385	423	351	390	393	420	336	379	397	320	337	273	344	289	317
	True Color	TCU	5		8.16	6.17	7.69	6	9.19	5.86	7.94	7.52	9.08	6.31	<5.00	<5.00	<5.00	6.76	5.73	5.75
	Turbidity	NTU	0.1		5.7	9.6	<0.5	2	7.6	2.6	10.3	3	4.1	19.4	2.2	10.2	1.2	2.7	8.9	<0.5
	Electrical Conductivity	umho/cm	1		928	835	987	1010	1030	975	1020	868	943	968	758	817	658	796	681	726
	Nitrate + Nitrite as N	mg/L	0.05		4.04	0.08	0.24	7.44	6.64	7.76	13.9	7.9	9.41	6.1	2.84	2.21	2.55	3.69	3.15	4.17
	Nitrate as N	mg/L	0.05		4.04	0.08	0.24	7.44	6.64	7.5	13.9	7.9	9.41	6.1	2.84	2.21	2.55	3.69	3.15	4.17
	Nitrite as N	mg/L	0.05		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
	Ammonia as N	mg/L	0.03		<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
	Total Organic Carbon	mg/L	0.5		21.8	18.6	<0.5	10.7	11	10.6	11.2	10.4	7.8	8.4	6.4	6.9	5.6	6.2	6.1	6.1
	Ortho-Phosphate as P	mg/L	0.01		0.04	0.03	0.02	<0.01	<0.01	<0.01	<0.01	0.02	0.02	<0.01	0.02	0.1	0.03	<0.01	0.03	0.03
	Total Sodium	mg/L	0.1		130	120	128	130	127	122	123	127	128	132	102	103	81	109	101	108
	Total Potassium	mg/L	0.1		3.5	4.1	4.2	4.2	4.4	4.1	4.9	4.3	4.8	4.8	3.9	4.3	3.7	4.2	3.4	3.9
	Total Calcium	mg/L	0.1		40.7	49	47.5	38.6	50.6	48.8	62.7	45.5	48	68.7	40.3	48.1	37.8	50.8	36.5	40.4
	Total Magnesium	mg/L	0.1		26.1	24.9	24	26.4	28.3	26.4	27.7	28.2	29.2	28.2	19.7	20.5	18.2	23.3	20.4	21.1
	Bicarb. Alkalinity (as CaCO3)	mg/L	5		326	385	423	351	390	393	415	313	379	397	320	320	273	344	289	317
	Carb. Alkalinity (as CaCO3)	mg/L	10		<10	<10	<10	<10	<10	<10	<10	23	<10	<10	<10	<10	<10	<10	<10	<10
	Hydroxide	mg/L	5		<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
	Calculated TDS	mg/L	1		516	507	529	537	555	558	631	541	574	594	448	458	382	491	424	463
	Hardness	mg/L	1		209	225	217	205	243	231	271	228	240	288	182	205	169	223	175	188
	Langelier Index (@20C)	NA			0.7	0.66	0.81	0.54	0.55	0.57	1.05	0.68	0.87	0.52	0.52	0.66	0.51	0.7	0.53	0.62
	Langelier Index (@4C)	NA			0.38	0.34	0.49	0.22	0.23	0.25	0.73	0.68	0.36	0.55	0.2	0.34	0.19	0.38	0.21	0.3
	Saturation pH (@ 20C)	NA			7.54	7.38	7.36	7.53	7.37	7.38	7.25	7.48	7.4	7.23	7.54	7.44	7.63	7.41	7.63	7.55
	Saturation pH (@ 4C)	NA			7.86	7.7	7.68	7.85	7.69	7.7	7.57	7.48	7.72	7.55	7.86	7.76	7.95	7.73	7.95	7.87
	Anion Sum	me/L			9.21	9.5	10.1	9.75	10.2	10.4	11.6	9.63	10.5	10.5	8.37	8.47	7.15	9.01	7.72	8.5
	Cation sum	me/L			9.93	9.84	10.1	9.86	10.5	10	11.3	10.2	10.5	11.8	8.18	8.73	7.01	9.32	8.02	8.57
	% Difference/ Ion Balance (NS)	%			3.8	1.8	0.3	0.5	1.8	2	1.1	2.8	1.1	5.7	1.2	1.5	1	1.7	1.9	0.4
	Total Aluminum	ug/L	5		127	180	828	30	321	38	2820	88	123	1450	63	368	46	143	313	163
	Total Antimony	ug/L	2		<2	<2	<2	<2	<2	<6	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
	Total Arsenic	ug/L	5		4	4	4	4	3	3	4	3	4	3	4	3	4	4	4	4
	Total Barium	ug/L	5		26	49	44	34	58	51	77	54	59	81	42	54	37	49	33	43
	Total Beryllium	ug/L	2		<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
	Total Bismuth	ug/L	2		<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
	Total Boron	ug/L	5		161	117	124	128	134	127	132	122	128	127	91	95	76	100	77	97
	Total Cadmium	ug/L	0.017		<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09
	Total Chromium	ug/L	1		1	2	2	<1	1	<1	4	<1	<1	2	<1	1	<1	<1	1	1
	Total Cobalt	ug/L	1		<1	<1	<1	<1	<1	<1	2	<1	<1	<1	<1	<1	<1	<1	<1	<1
	Total Copper	ug/L	1		3	2	3	3	3	3	7	3	3	8	2	3	2	2	2	2
	Total Iron	ug/L	50		124	142	596	58	349	<50	3330	70	156	705	99	319	87	158	355	205
	Total Lead	ug/L	0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	2.7	<0.5	<0.5	0.8	<0.5	0.6	<0.5	<0.5	<0.5	<0.5
	Total Manganese	ug/L	2		3	14	22	2	17	5	131	8	7	41	6	17	11	7	10	5
	Total Molybdenum	ug/L	2		4	2	2	2	2	2	3	2	2	2	3	4	5	4	5	5
	Total Nickel	ug/L	2		3	3	3	3	4	3	7	<2	4	4	2	2	2	3	3	4
	Total Phosphorus	ug/L	0.02		0.06	<0.02	0.05	0.03	0.03	0.03	0.07	<1.0	0.03	0.04	0.04	0.04	0.04	0.04	0.03	0.06
	Total Selenium	ug/L	1		3	3	5	4	4	3	4	<0.1	3	3	1	3	1	3	3	4
	Total Silver	ug/L	0.1		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	343	<0.1	<0.1	<0.1	<0.1	<2	<0.1	<0.1	<0.1
	Total Strontium	ug/L	5		255	263	300	273	316	320	356	<0.2	317	355	234	264	217	271	214	293
	Total Thallium	ug/L	0.1		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<3	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
	Total Tin	ug/L	2		<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
	Total Titanium	ug/L	2		6	6	21	<2	12	<2	57	15.4	4	23	3	11	<2	<2	<2	<2
	Total Uranium	ug/L	0.1		14.8	16.7	13.9	17	15	15.3	14.4	<2	18	16	12.4	12.7	11.2	14	13.1	13
	Total Vanadium	ug/L	2		<2	<2	<2	<2	<2	<2	5	<2	<2	<2	<2	<2	<2	<2	<2	<2
	Total Zinc	ug/L	5		8	13	<5	9	7	27	7	40	<5	6	<5	15	6	7	6	7
	Total Suspended Solids	mg/L	5		<5	8	5	<5	8	<5	98	<5	<5	23	6	8	<5	<5	<5	<5
	Total Organic Carbon	mg/L	0.5		(see Note 25)	(see Note 25)	(see Note 25)	(see Note 25)	(see Note 25)	(see Note 25)	(see Note 25)	(see Note 25)	(see Note 25)	(see Note 25)	(see Note 25)	(see Note 25)	(see Note 25)	(see Note 25)	(see Note 25)	(see Note 25)

Total Organic Carbon
RDL - Reported Detection Limit: G / S - Guideline / Standard
Comments:

2022 Standard Water Analysis + Metals (Total)
Leak Detection 2022

CELL #6 (Start date 22 Oct 2012)

Parameter	Unit	G / S	RDL	01/06/2022	11/13/2022	11/20/2022	11/27/2022	12/04/2022	12/11/2022	12/18/2022	12/25/2022	01/01/2023	01/08/2023	01/15/2023	01/22/2023	01/29/2023	02/05/2023	02/12/2023	02/19/2023	02/26/2023	03/05/2023	03/12/2023	03/19/2023	03/26/2023	04/02/2023	04/09/2023	04/16/2023	04/23/2023	04/30/2023	05/07/2023	05/14/2023	05/21/2023	05/28/2023	06/04/2023	06/11/2023	06/18/2023	06/25/2023	07/02/2023	07/09/2023	07/16/2023	07/23/2023	07/30/2023	08/06/2023	08/13/2023	08/20/2023	08/27/2023	09/03/2023	09/10/2023	09/17/2023	09/24/2023	10/01/2023	10/08/2023	10/15/2023	10/22/2023	10/29/2023	11/05/2023	11/12/2023	11/19/2023	11/26/2023	12/03/2023	12/10/2023	12/17/2023	12/24/2023	12/31/2023	01/07/2024	01/14/2024	01/21/2024	01/28/2024	02/04/2024	02/11/2024	02/18/2024	02/25/2024	03/04/2024	03/11/2024	03/18/2024	03/25/2024	04/01/2024	04/08/2024	04/15/2024	04/22/2024	04/29/2024	05/06/2024	05/13/2024	05/20/2024	05/27/2024	06/03/2024	06/10/2024	06/17/2024	06/24/2024	07/01/2024	07/08/2024	07/15/2024	07/22/2024	07/29/2024	08/05/2024	08/12/2024	08/19/2024	08/26/2024	09/02/2024	09/09/2024	09/16/2024	09/23/2024	09/30/2024	10/07/2024	10/14/2024	10/21/2024	10/28/2024	11/04/2024	11/11/2024	11/18/2024	11/25/2024	12/02/2024	12/09/2024	12/16/2024	12/23/2024	12/30/2024	01/06/2025	01/13/2025	01/20/2025	01/27/2025	02/03/2025	02/10/2025	02/17/2025	02/24/2025	03/03/2025	03/10/2025	03/17/2025	03/24/2025	03/31/2025	04/07/2025	04/14/2025	04/21/2025	04/28/2025	05/05/2025	05/12/2025	05/19/2025	05/26/2025	06/02/2025	06/09/2025	06/16/2025	06/23/2025	06/30/2025	07/07/2025	07/14/2025	07/21/2025	07/28/2025	08/04/2025	08/11/2025	08/18/2025	08/25/2025	09/01/2025	09/08/2025	09/15/2025	09/22/2025	09/29/2025	10/06/2025	10/13/2025	10/20/2025	10/27/2025	11/03/2025	11/10/2025	11/17/2025	11/24/2025	12/01/2025	12/08/2025	12/15/2025	12/22/2025	12/29/2025	01/05/2026	01/12/2026	01/19/2026	01/26/2026	02/02/2026	02/09/2026	02/16/2026	02/23/2026	03/01/2026	03/08/2026	03/15/2026	03/22/2026	03/29/2026	04/05/2026	04/12/2026	04/19/2026	04/26/2026	05/03/2026	05/10/2026	05/17/2026	05/24/2026	05/31/2026	06/07/2026	06/14/2026	06/21/2026	06/28/2026	07/05/2026	07/12/2026	07/19/2026	07/26/2026	08/02/2026	08/09/2026	08/16/2026	08/23/2026	08/30/2026	09/06/2026	09/13/2026	09/20/2026	09/27/2026	10/04/2026	10/11/2026	10/18/2026	10/25/2026	11/01/2026	11/08/2026	11/15/2026	11/22/2026	11/29/2026	12/06/2026	12/13/2026	12/20/2026	12/27/2026	01/03/2027	01/10/2027	01/17/2027	01/24/2027	01/31/2027	02/07/2027	02/14/2027	02/21/2027	02/28/2027	03/06/2027	03/13/2027	03/20/2027	03/27/2027	04/03/2027	04/10/2027	04/17/2027	04/24/2027	05/01/2027	05/08/2027	05/15/2027	05/22/2027	05/29/2027	06/05/2027	06/12/2027	06/19/2027	06/26/2027	07/03/2027	07/10/2027	07/17/2027	07/24/2027	07/31/2027	08/07/2027	08/14/2027	08/21/2027	08/28/2027	09/04/2027	09/11/2027	09/18/2027	09/25/2027	10/02/2027	10/09/2027	10/16/2027	10/23/2027	10/30/2027	11/06/2027	11/13/2027	11/20/2027	11/27/2027	12/04/2027	12/11/2027	12/18/2027	12/25/2027	01/01/2028	01/08/2028	01/15/2028	01/22/2028	01/29/2028	02/05/2028	02/12/2028	02/19/2028	02/26/2028	03/05/2028	03/12/2028	03/19/2028	03/26/2028	04/02/2028	04/09/2028	04/16/2028	04/23/2028	04/30/2028	05/07/2028	05/14/2028	05/21/2028	05/28/2028	06/04/2028	06/11/2028	06/18/2028	06/25/2028	07/02/2028	07/09/2028	07/16/2028	07/23/2028	07/30/2028	08/06/2028	08/13/2028	08/20/2028	08/27/2028	09/03/2028	09/10/2028	09/17/2028	09/24/2028	10/01/2028	10/08/2028	10/15/2028	10/22/2028	10/29/2028	11/05/2028	11/12/2028	11/19/2028	11/26/2028	12/03/2028	12/10/2028	12/17/2028	12/24/2028	12/31/2028	01/07/2029	01/14/2029	01/21/2029	01/28/2029	02/04/2029	02/11/2029	02/18/2029	02/25/2029	03/04/2029	03/11/2029	03/18/2029	03/25/2029	04/01/2029	04/08/2029	04/15/2029	04/22/2029	04/29/2029	05/06/2029	05/13/2029	05/20/2029	05/27/2029	06/03/2029	06/10/2029	06/17/2029	06/24/2029	07/01/2029	07/08/2029	07/15/2029	07/22/2029	07/29/2029	08/05/2029	08/12/2029	08/19/2029	08/26/2029	09/02/2029	09/09/2029	09/16/2029	09/23/2029	09/30/2029	10/07/2029	10/14/2029	10/21/2029	10/28/2029	11/04/2029	11/11/2029	11/18/2029	11/25/2029	12/02/2029	12/09/2029	12/16/2029	12/23/2029	12/30/2029	01/06/2030	01/13/2030	01/20/2030	01/27/2030	02/03/2030	02/10/2030	02/17/2030	02/24/2030	03/02/2030	03/09/2030	03/16/2030	03/23/2030	03/30/2030	04/06/2030	04/13/2030	04/20/2030	04/27/2030	05/04/2030	05/11/2030	05/18/2030	05/25/2030	06/01/2030	06/08/2030	06/15/2030	06/22/2030	06/29/2030	07/06/2030	07/13/2030	07/20/2030	07/27/2030	08/03/2030	08/10/2030	08/17/2030	08/24/2030	08/31/2030	09/07/2030	09/14/2030	09/21/2030	09/28/2030	10/05/2030	10/12/2030	10/19/2030	10/26/2030	11/02/2030	11/09/2030	11/16/2030	11/23/2030	11/30/2030	12/07/2030	12/14/2030	12/21/2030	12/28/2030	01/04/2031	01/11/2031	01/18/2031	01/25/2031	02/01/2031	02/08/2031	02/15/2031	02/22/2031	03/01/2031	03/08/2031	03/15/2031	03/22/2031	03/29/2031	04/05/2031	04/12/2031	04/19/2031	04/26/2031	05/03/2031	05/10/2031	05/17/2031	05/24/2031	05/31/2031	06/07/2031	06/14/2031	06/21/2031	06/28/2031	07/05/2031	07/12/2031	07/19/2031	07/26/2031	08/02/2031	08/09/2031	08/16/2031	08/23/2031	08/30/2031	09/06/2031	09/13/2031	09/20/2031	09/27/2031	10/04/2031	10/11/2031	10/18/2031	10/25/2031	11/01/2031	11/08/2031	11/15/2031	11/22/2031	11/29/2031	12/06/2031	12/13/2031	12/20/2031	12/27/2031	01/03/2032	01/10/2032	01/17/2032	01/24/2032	01/31/2032	02/07/2032	02/14/2032	02/21/2032	02/28/2032	03/06/2032	03/13/2032	03/20/2032	03/27/2032	04/03/2032	04/10/2032	04/17/2032	04/24/2032	05/01/2032	05/08/2032	05/15/2032	05/22/2032	05/29/2032	06/05/2032	06/12/2032	06/19/2032	06/26/2032	07/03/2032	07/10/2032	07/17/2032	07/24/2032	07/31/2032	08/07/2032	08/14/2032	08/21/2032	08/28/2032	09/04/2032	09/11/2032	09/18/2032	09/25/2032	10/02/2032	10/09/2032	10/16/2032	10/23/2032	10/30/2032	11/06/2032	11/13/2032	11/20/2032	11/27/2032	12/04/2032	12/11/2032	12/18/2032	12/25/2032	01/01/2033	01/08/2033	01/15/2033	01/22/2033	01/29/2033	02/05/2033	02/12/2033	02/19/2033	02/26/2033	03/05/2033	03/12/2033	03/19/2033	03/26/2033	04/02/2033	04/09/2033	04/16/2033	04/23/2033	04/30/2033	05/07/2033	05/14/2033	05/21/2033	05/28/2033	06/04/2033	06/11/2033	06/18/2033	06/25/2033	07/02/2033	07/09/2033	07/16/2033	07/23/2033	07/30/2033	08/06/2033	08/13/2033	08/20/2033	08/27/2033	09/03/2033	09/10/2033	09/17/2033	09/24/2033	10/01/2033	10/08/2033	10/15/2033	10/22/2033	10/29/2033	11/05/2033	11/12/2033	11/19/2033	11/26/2033	12/03/2033	12/10/2033	12/17/2033	12/24/2033	12/31/2033	01/07/2034	01/14/2034	01/21/2034	01/28/2034	02/04/2034	02/11/2034	02/18/2034	02/25/2034	03/04/2034	03/11/2034	03/18/2034	03/25/2034	04/01/2034	04/08/2034	04/15/2034	04/22/2034	04/29/2034	05/06/2034	05/13/2034	05/20/2034	05/27/2034	06/03/2034	06/10/2034	06/17/2034	06/24/2034	07/01/2034	07/08/2034	07/15/2034	07/22/2034	07/29/2034	08/05/2034	08/12/2034	08/19/2034	08/26/2034	09/02/2034	09/09/2034	09/16/2034	09/23/2034	09/30/2034	10/07/2034	10/14/2034	10/21/2034	10/28/2034	11/04/2034	11/11/2034	11/18/2034	11/25/2034	12/02/2034	12/09/2034	12/16/2034	12/23/2034	12/30/2034	01/06/2035	01/13/2035	01/20/2035	01/27/2035	02/03/2035	02/10/2035	02/17/2035	02/24/2035	03/02/2035	03/09/2035	03/16/2035	03/23/2035	03/30/2035	04/06/2035	04/13/2035	04/20/2035	04/27/2035	05/04/2035	05/11/2035	05/18/2035	05/25/2035	06/01/2035	06/08/2035	06/15/2035	06/22/2035	06/29/2035	07/06/2035	07/13/2035	07/20/2035	07/27/2035	08/03/2035	08/10/2035	08/17/2035	08/24/2035	08/31/2035	09/07/2035	09/14/2035	09/21/2035	09/28/2035	10/05/2035	10/12/2035	10/19/2035	10/26/2035	11/02/2035	11/09/2035	11/16/2035	11/23/2035	11/30/2035	12/07/2035	12/14/2035	12/21/2035	12/28/2035	01/04/2036	01/11/2036	01/18/2036	01/25/2036	02/01/2036	02/08/2036	02/15/2036	02/22/2036	03/01/2036	03/08/2036	03/15/2036	03/22/2036	03/29/2036	04/05/2036	04/12/2036	04/19/2036	04/26/2036	05/03/2036	05/10/2036	05/17/2036	05/24/2036	05/31/2036	06/07/2036	06/14/2036	06/21/2036	06/28/2036	07/05/2036	07/12/2036	07/19/2036	07/26/2036	08/02/2036	08/09/2036	08/16/2036	08/23/2036	08/30/2036	09/06/2036	09/13/2036	09/20/2036	09/27/2036	10/04/2036	10/11/2036	10/18/2036	10/25/2036	11/01/2036	11/08/2036	11/15/2036	11/22/2036	11/29/2036	12/06/2036	12/13/2036	12/20/2036	12/27/2036	01/03/2037	01/10/2037	01/17/2037	01/24/2037	01/31/2037	02/07/2037	02/14/2037	02/21/2037	02/28/2037	03/06/2037	03/13/2037	03/20/2037	03/27/2037	04/03/2037	04/10/2037	04/17/2037	04/24/2037	05/01/2037	05/08/2037	05/15/2037	05/22/2037	05/29/2037	06/05/2037	06/12/2037</
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2022 Standard Water Analysis + Metals (Total)
Leak Detection 2022

CELL #6 (Start date 22 Oct 2012)

Parameter	Unit	G / S	RDL	13-Oct LD6 - 131022 -	20-Oct LD6 - 201022 -	27-Oct LD6 - 271022 -	3-Nov LD6 - 031122 -	10-Nov LD6 - 10112220 -	28-Nov LD6 - 281122 -	1-Dec LD6 - 011222 -	8-Dec LD6 - 081222 -	15-Dec LD6 - 151222 -	21-Dec LD6 - 211222 -
Reactive Silica as SiO2	mg/L		0.5	8.07	8.01	21.2	21	24.1	22.9	21.4	7.96	8.04	7.94
Chloride	mg/L		1	9	11	10	9	10	9	10	10	10	10
Fluoride	mg/L		0.12	0.14	<0.12	0.13	0.14	0.12	0.14	0.13	0.13	0.14	0.17
Sulphate	mg/L		2	59	61	60	56	57	57	59	55	51	43
Alkalinity	mg/L		5	615	633	630	624	607	653	626	627	644	652
True Color	TCU		5	10.3	<5.00	<5.00	<5.00	<5.00	<5.00	9.04	<5.00	<5.00	<5.00
Turbidity	NTU		0.1	<0.5	0.8	0.6	2.3	1.1	0.6	0.9	<0.5	1.5	0.8
Electrical Conductivity	umho/cm		1	1340	1270	1200	1070	1150	1170	1200	1130	1240	1230
Nitrate + Nitrite as N	mg/L		0.05	<0.05	0.08	<0.05	0.12	<0.05	<0.05	<0.05	0.78	<0.05	0.11
Nitrate as N	mg/L		0.05	<0.05	0.08	<0.05	0.12	<0.05	<0.05	<0.05	0.78	<0.05	0.11
Nitrite as N	mg/L		0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Ammonia as N	mg/L		0.03	0.04	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	0.07	0.07
Total Organic Carbon	mg/L		0.5	11.9	6.9	3.3	3.2	3.5	3.5	3.4	3.4	3.6	3.9
Ortho-Phosphate as P	mg/L		0.01	0.02	<0.01	<0.01	<0.01	<0.01	0.03	0.02	0.02	0.03	0.01
Total Sodium	mg/L		0.1	146	159	123	143	157	157	92	270	161	164
Total Potassium	mg/L		0.1	4.2	5.2	4.3	4.5	4.9	4.9	4.1	5.1	4.9	4.6
Total Calcium	mg/L		0.1	97.6	108	88.6	97.2	98.2	109	83.6	92.3	99.9	101
Total Magnesium	mg/L		0.1	24.1	25.4	20.9	23.1	25.3	25.8	15.4	13.1	25.8	24.8
Bicarb. Alkalinity (as CaCO3)	mg/L		5	615	633	630	624	607	653	626	627	644	652
Carb. Alkalinity (as CaCO3)	mg/L		10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Hydroxide	mg/L		5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Calculated TDS	mg/L		1	709	750	685	708	717	755	640	825	739	738
Hardness	mg/L			343	374	307	338	349	378	272	284	356	354
Langelier Index (@20C)	NA			1.18	1.17	1.05	0.88	1.06	0.88	0.91	1.04	1.17	1.08
Langelier Index (@4C)	NA			0.86	0.85	0.73	0.56	0.74	0.56	0.59	0.72	0.85	0.76
Saturation pH (@20C)	NA			6.89	6.84	6.92	6.89	6.9	6.82	6.95	6.92	6.87	6.86
Saturation pH (@4C)	NA			7.21	7.16	7.24	7.22	7.14	7.27	7.24	7.19	7.18	7.18
Anion Sum	me/L			13.8	14.2	14.1	13.9	13.6	14.5	14	14	14.2	14.2
Cation Sum	me/L			13.3	14.5	11.6	13.1	13.9	14.5	9.55	17.6	14.2	14.3
% Difference/ Ion Balance (NS)	%			1.7	1	9.8	3	1.2	0.1	19	11.2	0.1	0.5
Total Aluminum	ug/L		5	<5	7	14	12	19	13	12	12	17	10
Total Antimony	ug/L		2	<2	<2	<2	<2	<2	<2	2	<2	<2	<2
Total Arsenic	ug/L		2	3	3	3	3	3	3	3	3	3	4
Total Barium	ug/L		5	181	114	124	112	124	121	89	120	115	97
Total Beryllium	ug/L		2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Total Bismuth	ug/L		2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Total Boron	ug/L		5	109	135	138	110	126	118	62	128	140	146
Total Cadmium	ug/L		0.017	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09
Total Chromium	ug/L		1	4	<1	<1	<1	<1	<1	<1	<1	<1	<1
Total Cobalt	ug/L		1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Total Copper	ug/L		1	1	1	1	1	1	1	1	1	1	2
Total Iron	ug/L		50	72	64	81	68	<50	74	76	111	94	71
Total Lead	ug/L		0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Total Manganese	ug/L		2	<2	2	3	3	<2	3	<2	3	24	20
Total Molybdenum	ug/L		2	3	4	4	4	4	3	4	4	5	6
Total Nickel	ug/L		2	4	5	6	5	3	5	7	7	3	6
Total Phosphorous	mg/L		0.02	<0.02	0.04	0.03	0.03	0.04	0.04	0.06	0.05	0.04	0.04
Total Selenium	ug/L		1	2	2	2	1	2	3	1	4	4	4
Total Silver	ug/L		0.1	<0.1	<0.1	<2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total Strontium	ug/L		5	647	638	574	591	687	687	400	471	659	603
Total Thallium	ug/L		0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total Tin	ug/L		2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Total Titanium	ug/L		2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Total Uranium	ug/L		0.1	29	25	24	28	23.4	24.6	32	16.2	32	38
Total Vanadium	ug/L		2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Total Zinc	ug/L		5	6	5	6	5	10	8	7	5	5	5
Total Suspended Solids	mg/L		5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5

RDL - Reported Detection Limit;

Comments:

2022 Standard Water Analysis + Metals (Total)
Leak Detection 2022

CELL #7 (Start date 25 May 2017)

Parameter	Unit	G / S	RDL	6-Jan	13-Jan	20-Jan	27-Jan	11-Feb	25-Feb	3-Mar	9-Mar	17-Mar	24-Mar	31-Mar	8-Apr	22-Apr	28-Apr	5-May	12-May	
				LD7-08	LD7-03	LD7-03	LD7-02	LD7-04	LD7-07	LD7-02	LD7-03	LD7-07	LD7-03	LD7-02	LD7-03	LD7-08	LD7-02	LD7-02	LD7-03	LD7-06
Reactive Silica as SiO2	mg/L	0.5		8.09	7.92	7.97	8.05	7.81	7.89	7.86	7.89	8.05	8.2	8.05	7.96	7.97	7.72	7.81	7.93	
Chloride	mg/L	1		17.8	16	18.4	19.1	16.7	13.4	16.6	16.2	8.5	4.9	17.2	17.2	15.7	23.1	6	3	235
Fluoride	mg/L	0.12		0.17	0.13	0.18	0.15	0.14	0.19	0.19	0.18	0.14	0.14	0.21	0.19	0.17	0.17	0.13	0.2	
Sulphate	mg/L	2		71	75	88	92	89	80	94	59	60	76	75	90	77	81	81	76	76
Alkalinity	mg/L	5		317	279	330	324	293	268	321	269	271	294	282	347	323	348	327	347	347
True Color	NTU	5		7.1	<0.5	<5.00	<5.00	<5.00	<5.00	6.11	<5.00	<5.00	<5.00	<5.00	3110	<5	<5.00	9	22.6	<5.00
Turbidity	NTU	0.1		8	9	9	10	10	11	9	9	7	8	9	8	7	6	6	5	5
Electrical Conductivity	umho/cm	1		764	673	731	797	767	653	793	678	686	716	689	830	841	805	761	844	844
Nitrate + Nitrite as N	mg/L	0.05		0.48	1.06	0.23	0.35	1.06	0.21	0.69	0.85	0.38	0.82	1.31	0.83	0.98	0.73	0.73	0.42	0.42
Nitrite as N	mg/L	0.05		0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Ammonia as N	mg/L	0.03		<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Total Organic Carbon	mg/L	0.5		15.9	12.4	27.9	1.1	<0.5	9.1	11.4	4.6	<0.5	<2.5	3.9	4.8	4.6	4.6	5	4.8	4.8
Ortho-Phosphate as P	mg/L	0.01		<0.01	0.05	0.03	0.02	0.04	0.03	<0.01	0.03	0.03	<0.01	0.02	0.03	0.02	0.02	<0.01	0.02	0.02
Total Sodium	mg/L	0.1		85.6	65.7	85.9	95.1	72	59	91	159	59	73	55	85	85	91	84	92	92
Total Potassium	mg/L	0.1		3.5	3.5	3.4	3.2	3.2	3.8	3.6	4.8	3.5	3.1	3.7	3.7	3.7	4	3.9	3.6	3.6
Total Calcium	mg/L	0.1		74.7	72.3	71.4	63.6	62.8	71.6	79	110	65.8	70.8	62.1	73	73.4	66.8	69.1	65.6	65.6
Total Magnesium	mg/L	0.1		13.1	12.8	11.5	12.7	9.2	12.1	13.6	22.9	12	12.5	10.7	12.7	13.4	13.5	12.6	12.7	12.7
Bicarb. Alkalinity (as CaCO3)	mg/L	5		317	279	330	324	293	268	321	269	271	294	282	347	323	348	327	347	347
Carb. Alkalinity (as CaCO3)	mg/L	10		<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Hydroxide	mg/L	5		<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Calculated TDS	mg/L	1		448	410	468	473	427	399	486	530	372	424	391	484	460	474	451	465	465
Hardness	mg/L	1		240	233	226	211	195	229	253	369	214	228	199	235	238	222	224	216	216
Langeller Index (@20C)	NA			0.81	0.58	0.69	0.71	0.42	0.53	0.61	0.7	0.66	0.87	0.62	0.71	0.69	0.43	0.51	0.63	0.63
Langeller Index (@ 4C)	NA			0.49	0.26	0.37	0.39	0.1	0.21	0.29	0.38	0.34	0.55	0.3	0.39	0.37	0.11	0.19	0.31	0.31
Saturation pH (@ 20C)	NA			7.28	7.34	7.28	7.34	7.39	7.36	7.25	7.19	7.39	7.33	7.4	7.25	7.28	7.29	7.3	7.3	7.3
Saturation pH (@ 4C)	NA			7.6	7.66	7.6	7.66	7.71	7.68	7.57	7.51	7.71	7.65	7.72	7.57	7.6	7.61	7.62	7.62	7.62
Anion Sum	me/L			8.08	7.47	8.7	8.7	8.07	7.35	8.68	6.92	6.89	7.75	7.55	9.1	8.33	8.87	8.34	8.69	8.69
Cation sum	me/L			8.62	7.61	8.34	8.44	7.11	7.24	9.12	14.4	6.93	7.82	6.47	8.48	8.68	8.51	8.24	8.41	8.41
% Difference/ Ion Balance (NS)	%			3.3	0.9	2.2	1.5	6.3	0.8	2.5	35.2	0.3	0.5	7.7	3.5	2.1	2.1	0.6	1.6	1.6
Total Aluminum	ug/L	5		8	8	7	10	8	8	10	124	7	14	11	9	8	15	13	15	15
Total Antimony	ug/L	2		<2	2	2	2	<2	2	2	<2	<2	3	3	3	2	<2	<2	<2	<2
Total Arsenic	ug/L	2		4	3	3	4	4	4	4	3	3	2	4	4	4	3	4	4	4
Total Barium	ug/L	5		61	63	65	66	81	84	84	119	67	68	91	79	71	79	78	73	73
Total Beryllium	ug/L	2		<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Total Bismuth	ug/L	2		<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Total Boron	ug/L	5		73	61	65	63	59	50	58	126	46	49	62	55	58	63	56	57	57
Total Cadmium	ug/L	0.017		<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09
Total Chromium	ug/L	1		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Total Cobalt	ug/L	1		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Total Copper	ug/L	1		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Total Iron	ug/L	50		58	<50	<50	<50	<50	53	64	232	55	73	<50	50	<50	<50	68	<50	0.05
Total Lead	ug/L	0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Total Manganese	ug/L	2		<2	<2	<2	<2	<2	<2	<2	32	<2	<2	<2	<2	<2	<2	<2	<2	<2
Total Molybdenum	ug/L	2		4	3	5	6	4	2	5	5	3	4	4	4	5	5	5	6	6
Total Nickel	ug/L	2		3	3	2	3	3	3	3	4	4	4	<2	4	3	3	3	3	3
Total Phosphorous	mg/L	0.02		0.06	0.04	0.05	0.04	0.05	<0.02	0.04	0.05	0.05	0.04	0.06	0.05	0.05	0.05	0.06	0.05	0.05
Total Selenium	ug/L	1		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Total Silver	ug/L	0.1		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total Strontium	ug/L	5		358	353	330	343	322	328	327	607	331	299	303	365	369	373	368	347	347
Total Thallium	ug/L	0.1		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total Tin	ug/L	2		<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Total Titanium	ug/L	2		<2	<2	<2	<2	<2	<2	<2	5	<2	<2	<2	<2	<2	<2	<2	<2	<2
Total Uranium	ug/L	0.1		24.9	19.6	23.9	26.2	22	19	29	27	17.9	25	45	34	30	28	29	32	32
Total Vanadium	ug/L	2		<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Total Zinc	ug/L	5		<5	<5	5	7	6	6	6	<5	<5	6	<5	6	5	6	6	<5	<5
Total Suspended Solids	mg/L	5		<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5

Comments: RDL - Reported Detection Limit; (see Note 25) (see Note 6)

2022 Standard Water Analysis + Metals (Total)
Leak Detection 2022

CELL #7 (Start date 25 May 2017)

Parameter	Unit	G / S	RDL	19-May	26-May	2-Jun	9-Jun	23-Jun	30-Jun	7-Jul	14-Jul	28-Jul	4-Aug	11-Aug	18-Aug	25-Aug	1-Sep	8-Sep	15-Sep
				LD7 -	LD7 -	LD7 -	LD7 -	LD7 -	LD6 -	LD7 -	LD7 -	LD7 -	LD7 -	LD7 -	LD7 -	LD7 -	LD7 -	LD6 -	LD7 -
				190522 -	260522 -	020622 -	090622 -	230622 -	300622 -	070722 -	140722 -	280722 -	040822 -	110822 -	180822 -	250822 -	010922 -	080922 -	150922 -
				06	06	05	04	04	02	07	07	03	05	03	03	02	06	03	07
				3878493	3896186	3926643	3954203	4013986	4039116	4062092	4091313	4142985	4165092	4189135	4214573	4239108	4264089	4282383	4306451
Reactive Silica as SiO2	mg/L	0.5		7.61	8.32	8.37	8.13	8.03	8.07	8.41	7.73	7.97	8.06	7.96	7.89	8.01	7.78	7.5	7.8
Chloride	mg/L	1		19.2	13.5	28.5	23.2	20.4	20.5	0.6	2.7	21.8	20.9	22.4	20.3	21.3	20.4	19.7	20.5
Fluoride	mg/L	0.12		0.18	0.21	0.13	0.19	0.18	0.16	<0.12	<0.12	0.15	0.15	0.15	0.14	0.16	0.15	0.14	0.13
Sulphate	mg/L	2		82	80	76	76	62	70	67	62	62	62	61	62	64	66	59	56
Alkalinity	mg/L	5		356	331	313	319	299	328	288	316	310	303	300	301	308	312	320	322
True Color	TCU	5		<5.00	<5.00	<5.00	<5.00	7.95	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
NTU	NTU	0.1		<0.5	<0.5	0.5	0.6	0.6	0.9	2.1	1.1	0.68	0.74	0.6	<0.5	<0.5	<0.5	1.1	<0.5
Electrical Conductivity	umho/cm	1		815	743	744	869	658	799	644	679	668	674	682	665	712	695	686	714
Nitrate + Nitrite as N	mg/L	0.05		0.28	0.25	0.47	0.34	0.51	0.33	0.21	0.24	0.06	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Nitrate as N	mg/L	0.05		0.28	0.25	0.47	0.34	0.51	0.33	0.21	0.24	0.06	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Nitrite as N	mg/L	0.05		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Ammonia as N	mg/L	0.03		<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	1.17	<0.03	<0.03	<0.03	<0.03	0.07
Total Organic Carbon	mg/L	0.5		4.6	4.4	4.2	4.6	3.8	4.4	4.4	2	1.7	1.7	2	1.6	1.6	1.6	1.7	1.6
Ortho-Phosphate as P	mg/L	0.01		<0.01	0.17	0.01	<0.01	<0.01	0.03	0.03	0.027	0.05	0.03	0.04	0.03	0.02	0.02	0.02	0.11
Total Sodium	mg/L	0.1		98	87	85	93	71.2	71	76	78	88	80	79	81	84	78	73	81
Total Potassium	mg/L	0.1		3.9	3.6	3.8	3.7	4.4	4	3.5	3.4	3.6	3.4	3.8	3.8	3.6	3.5	3.5	3.5
Total Calcium	mg/L	0.1		67.8	66.2	67.7	72.4	74.7	67	62.2	64.9	65.8	60.9	61.3	59.1	61.5	59.4	56.9	63.6
Total Magnesium	mg/L	0.1		13.2	12.5	12.3	14	11.3	12	10.6	11	12.3	10.8	11.1	10.6	10.9	9.5	9.5	10.7
Bicarb. Alkalinity (as CaCO3)	mg/L	5		356	325	301	319	299	328	274	316	310	303	300	308	312	320	320	322
Carb. Alkalinity (as CaCO3)	mg/L	10		<10	<10	12	<10	<10	<10	14	<10	<10	<10	<10	<10	<10	<10	<10	<10
Hydroxide	mg/L	5		<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Calculated TDS	mg/L	1		485	453	440	456	409	426	397	414	420	401	400	399	411	406	396	410
Hardness	mg/L			224	217	220	238	233	217	199	207	215	197	199	198	187	187	187	203
Langlier Index (@20C)	NA			0.54	1.01	1.04	0.84	0.73	0.76	1.02	0.76	0.63	0.68	0.58	0.49	0.64	0.4	0.11	0.46
Langlier Index (@ 4C)	NA			0.22	0.69	0.72	0.52	0.41	0.44	0.7	0.65	0.31	0.36	0.26	0.17	0.32	0.08	-0.21	0.14
Saturation pH (@ 20C)	NA			7.27	7.31	7.33	7.29	7.3	7.31	7.39	7.34	7.34	7.38	7.38	7.4	7.37	7.38	7.39	7.34
Saturation pH (@ 4C)	NA			7.59	7.63	7.65	7.61	7.62	7.63	7.71	7.66	7.66	7.7	7.7	7.72	7.69	7.71	7.71	7.66
Anion Sum	me/L			8.99	8.42	8.02	8.1	7.42	8.15	7.28	7.73	7.55	7.41	7.33	7.37	7.55	7.67	7.68	7.66
Cation Sum	me/L			8.83	8.21	8.19	8.91	7.87	7.52	7.37	7.63	8.22	7.5	7.59	7.44	7.72	7.23	6.89	7.67
% Difference/ Ion Balance (NS)	%			0.9	1.2	1.1	4.8	2.9	4	0.6	0.7	4.2	0.6	1.8	0.5	1.1	2.9	5.5	0.1
Total Aluminum	ug/L	5		9	13	9	6	<3	10	5	11	9	8	19	11	8	7	6	6
Total Antimony	ug/L	2		<6	<2	<2	4	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Total Arsenic	ug/L	2		4	5	4	4	2	3	3	3	3	3	3	3	3	3	3	3
Total Barium	ug/L	5		81	67	78	72	61	67	66	77	77	75	76	74	76	72	76	79
Total Beryllium	ug/L	5		<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Total Bismuth	ug/L	2		<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Total Boron	ug/L	5		58	55	57	55	62	50	48	49	50	50	50	55	49	45	46	45
Total Cadmium	ug/L	0.017		<0.09	<0.09	<0.09	<0.09	<0.16	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09
Total Chromium	ug/L	1		<1	<1	<1	<1	<4	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Total Cobalt	ug/L	1		<1	<1	<1	<1	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Total Copper	ug/L	1		2	2	2	2	3	2	2	2	2	2	2	2	2	2	2	2
Total Iron	ug/L	50		<50	62	60	<50	<180	<50	<50	<50	<50	60	<50	<50	55	<50	<50	<50
Total Lead	ug/L	0.5		<0.5	<0.5	<0.5	<0.5	<2.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Total Manganese	ug/L	2		<2	<2	<2	<2	<8	<3	<3	<2	<2	<2	<2	<2	<2	<2	<2	<2
Total Molybdenum	ug/L	2		6	6	5	5	5	4	4	4	4	4	4	4	4	3	3	3
Total Nickel	ug/L	2		3	4	3	3	<9	<2	<2	3	3	2	2	2	2	2	2	2
Total Phosphorous	mg/L	0.02		0.05	0.06	0.04	0.06	<0.02	<1.0	<1.0	0.03	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.04
Total Selenium	ug/L	1		1	2	1	2	<2	<0.1	<0.1	1	1	<1	<1	<1	1	<1	<1	1
Total Silver	ug/L	0.1		<0.1	<0.1	<0.1	<0.1	<0.5	3.89	3.65	<2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total Strontium	ug/L	5		385	341	402	374	357	<0.2	<0.2	308	296	326	275	285	278	284	297	324
Total Thallium	ug/L	0.1		<0.1	<0.1	<0.1	<0.1	<0.3	<3	<3	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total Tin	ug/L	2		<2	<2	<2	3	<2	<3	<3	<2	<2	<2	<2	<2	<2	<2	<2	<2
Total Titanium	ug/L	2		<2	<2	<2	<2	<3	23.9	19.4	<2	<2	<2	<2	<2	<2	<2	<2	<2
Total Uranium	ug/L	0.1		31	33	26	29	17.6	<2	<2	23	26	23	21	23	24	22	23	23
Total Vanadium	ug/L	2		<2	<2	<2	<2	<2	10	10	<2	<2	<2	<2	<2	<2	<2	<2	<2
Total Zinc	ug/L	5		7	5	6	7	8	<50	7	8	7	7	7	8	7	8	9	10
Total Suspended Solids	mg/L	5		<5	<5	<5	64	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5

RDL - Reported Detection Limit;

Comments:

(see Note 5)

(see Note 6)

2022 Standard Water Analysis + Metals (Total)
Leak Detection 2022

CELL #7 (Start date 25 May 2017)

Parameter	Unit	G / S	RDL	22-Sep LD7- 220922- 061022- 02	6-Oct LD7- 432448 07	13-Oct LD7- 440752 03	20-Oct LD7- 4433667 03	27-Oct LD7- 4461076 02	3-Nov LD7- 4483024 03	10-Nov LD7- 4507659 06	28-Nov LD7- 4564418 07	1-Dec LD7- 4578124 03	8-Dec LD7- 4599450 06	15-Dec LD7- 4622691 05	21-Dec LD7- 4639361 2
pH				7.81	7.97	8.12	8.06	7.96	7.75	7.93	7.93	7.93	7.98	8.09	8.09
Reactive Silica as SiO2	mg/L	0.5		21.7	16.8	18.5	17.8	20.5	19.5	22.5	17.8	17.4	20.3	32.86	4.5
Chloride	mg/L	1		0.15	0.13	0.14	0.13	0.16	0.14	0.14	0.15	0.15	0.16	0.17	0.17
Fluoride	mg/L	0.12		315	256	270	280	336	312	325	291	337	305	305	353
Sulphate	mg/L	5		6.89	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
Alkalinity	mg/L	5		733	644	767	727	799	659	729	634	780	661	708	803
True Color	TCU	5		0.32	0.54	0.52	0.57	0.34	0.46	0.19	0.56	0.78	1.01	1.1	0.76
Turbidity	umho/cm	1		0.22	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Electrical Conductivity	mg/L	0.05		<0.03	0.04	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Nitrate + Nitrite as N	mg/L	0.05		1.8	3.3	3.1	2.9	2.6	2.5	2	2.6	2.4	2.5	2.6	2.7
Nitrite as N	mg/L	0.05		0.03	0.02	0.03	<0.01	0.02	<0.01	<0.01	0.03	0.03	0.02	0.03	0.01
Ammonia as N	mg/L	0.03		80	55	58	64	65	74	87.4	63.1	164	188	70	79
Ortho-Phosphate as P	mg/L	0.1		3.3	3.5	3.1	3.6	3.4	3.6	3.3	3.5	3.7	3.7	3.9	3.8
Total Sodium	mg/L	0.1		61.5	65.8	65.4	70.9	59.2	69.1	66	66.6	108	63	81.7	86.8
Total Potassium	mg/L	0.1		11.1	11.1	11.5	12.4	10.8	12.3	12.4	12.1	26.5	13.3	14	13.9
Total Calcium	mg/L	0.1		315	256	270	280	336	312	325	291	337	305	305	353
Total Magnesium	mg/L	5		<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Total Bicarbonate (as CaCO3)	mg/L	10		405	375	390	418	438	431	441	390	599	531	425	481
Total Alkalinity (as CaCO3)	mg/L	5		199	209	212	228	192	223	216	216	379	212	262	274
Hydroxide	mg/L	5		0.45	0.55	0.72	0.71	0.61	0.43	0.61	0.57	0.83	0.6	0.84	0.75
Calculated TDS	mg/L	1		0.13	0.23	0.4	0.39	0.29	0.11	0.29	0.25	0.51	0.28	0.52	0.43
Hardness	mg/L	1		7.36	7.42	7.4	7.35	7.35	7.32	7.36	7.1	7.38	7.25	7.17	7.17
Langelier Index (@20C)	NA			7.68	7.74	7.72	7.67	7.67	7.64	7.64	7.68	7.42	7.7	7.57	7.49
Langelier Index (@ 4C)	NA			7.57	7	7.34	7.73	8.81	8.07	8.14	7.34	8.71	7.81	7.65	8.92
Saluration pH (@ 20C)	NA			7.55	6.67	6.84	7.44	6.76	7.78	8.22	7.16	14.8	12.5	8.38	9.01
Saluration pH (@ 4C)	NA			0.1	2.4	3.5	1.9	13.1	1.9	10	1.3	26	23.1	4.5	0.5
Anion Sum	me/L			6	9	9	7	6	7	10	8	14	8	7	5
Cation sum	me/L			<2	3	<2	<2	2	2	<2	<2	<2	<2	<2	4
% Difference/Ion Balance (NS)	%			3	3	3	3	3	3	3	3	3	3	3	3
Total Aluminum	ug/L	5		79	72	103	72	88	81	85	72	122	82	84	92
Total Antimony	ug/L	2		<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Total Arsenic	ug/L	2		<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Total Barium	ug/L	5		<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Total Beryllium	ug/L	2		<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Total Bismuth	ug/L	2		<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Total Boron	ug/L	5		45	68	61	64	65	58	61	55	136	58	57	56
Total Cadmium	ug/L	0.017		<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09	<0.09
Total Chromium	ug/L	1		<1	<1	2	1	<1	<1	<1	<1	<1	<1	<1	<1
Total Copper	ug/L	1		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Total Lead	ug/L	50		<50	66	56	79	57	57	<50	51	83	78	66	<50
Total Manganese	ug/L	0.5		<0.5	<0.5	<0.5	<0.5	<0.5	0.7	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Total Molybdenum	ug/L	2		<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Total Nickel	ug/L	2		<2	4	4	5	5	3	3	3	4	3	3	3
Total Phosphorus	mg/L	0.02		0.04	0.05	<0.02	0.04	0.04	0.05	0.05	0.05	0.05	0.07	0.06	0.05
Total Selenium	ug/L	1		<1	<1	1	1	1	1	1	1	2	2	1	2
Total Silver	ug/L	0.1		<2	311	319	329	317	356	347	322	679	323	386	396
Total Strontium	ug/L	5		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total Thallium	ug/L	0.1		<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Total Tin	ug/L	2		<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Total Titanium	ug/L	2		15.2	15.2	17	17.2	24	25	23.8	19.8	26.9	15.4	28	31
Total Uranium	ug/L	0.1		<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Total Vanadium	ug/L	2		<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Total Zinc	ug/L	5		<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Total Suspended Solids	mg/L	5		<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5

Comments: RDL - Reported Detection Limit: (see Note 6)

Appendix D - Contaminated Solids Summary

Appendix E- Alternate Cover Analysis Summary

ALTERNATE COVER ANALYSIS

Analyte	Units	EQL	6-Jan 2022	20-Jan 2022
			AC1	AC1
Aluminum	ug/l	100	<100	569
Antimony	ug/l	20	<20	<20
Arsenic	ug/l	20	<20	35
Barium	ug/l	50	175	151
Beryllium	ug/l	50	<50	<50
Boron	ug/l	50	1,190	1760
Cadmium	ug/l	3	9	3
Chromium	ug/l	20	<20	32
Cobalt	ug/l	10	208	10
Copper	ug/l	20	125	227
Iron	ug/l	200	2,950	1260
Lead	ug/l	5	13	306
Lithium	ug/l	20	25	<20
Manganese	ug/l	20	2,140	1350
Molybdenum	ug/l	20	85	<20
Nickel	ug/l	20	340	51
Selenium	ug/l	20	<20	<20
Silver	ug/l	5	<5	<5
Strontium	ug/l	50	3,050	1730
Thallium	ug/l	1	<1	<1
Tin	ug/l	20	<20	<20
Uranium	ug/l	1	2	<1
Vanadium	ug/l	20	<20	<20
Zinc	ug/l	20	4,730	1640
Final pH	NA	NA	NA	NA
Initial pH	NA	NA	NA	NA
Dry Weight Used	g	0	50	50
0.5N Acetic acid volume	ml/l	-		
Moisture	%	0	NA	NA
Dissolved Sulphate	ug/g	20	8,200	9320

ALTERNATE COVER ANALYSIS

<i>Analyte</i>	Units	EQL	11-Feb 2022	25-Feb 2022
			AC1	AC1
Aluminum	ug/l	100	778	1180
Antimony	ug/l	20	<20	<20
Arsenic	ug/l	20	<20	<20
Barium	ug/l	50	186	299
Beryllium	ug/l	50	<50	<50
Boron	ug/l	50	3710	1350
Cadmium	ug/l	3	6	8
Chromium	ug/l	20	38	26
Cobalt	ug/l	10	222	14
Copper	ug/l	20	1530	65
Iron	ug/l	200	24400	1200
Lead	ug/l	5	2600	2470
Lithium	ug/l	20	<20	<20
Manganese	ug/l	20	1960	1320
Molybdenum	ug/l	20	48	<20
Nickel	ug/l	20	504	62
Selenium	ug/l	20	<20	<20
Silver	ug/l	5	<5	<5
Strontium	ug/l	50	1970	1810
Thallium	ug/l	1	<1	<1
Tin	ug/l	20	<20	<20
Uranium	ug/l	1	3	<1
Vanadium	ug/l	20	<20	<20
Zinc	ug/l	20	17800	11200
Final pH	NA	NA	NA	NA
Initial pH	NA	NA	NA	NA
Dry Weight Used	g	0	50	50
0.5N Acetic acid volume	ml/l	-		
Moisture	%	0	NA	NA
Dissolved Sulphate	ug/g	20	8840	16300

ALTERNATE COVER ANALYSIS

<i>Analyte</i>	Units	RDL	9-Mar 2022	24-Mar 2022
			AC1	AC1
Aluminum	mg/L		1010	1090
Antimony	mg/L		<20	<20
Arsenic	mg/L	0.010	<20	<20
Barium	mg/L	0.010	304	433
Beryllium	mg/L		<50	<50
Boron	mg/L	0.050	580	890
Cadmium	mg/L	0.010	<3	<3
Chromium	mg/L	0.050	30	31
Cobalt	mg/L		<10	14
Copper	mg/L		78	411
Iron	mg/L		1780	1130
Lead	mg/L	0.010	147	194
Lithium	mg/L		<20	<20
Manganese	mg/L		1600	2000
Molybdenum	mg/L		<20	<20
Nickel	mg/L		50	46
Selenium	mg/L	0.010	<20	<20
Silver	mg/L	0.010	<5	<5
Strontium	mg/L		1450	1780
Thallium	mg/L		<1	<1
Tin	mg/L		<20	<20
Uranium	mg/L	0.050	<1	<1
Vanadium	mg/L		<20	<20
Zinc	mg/L		1230	1800
Final pH	NA		NA	NA
Initial pH	NA		NA	NA
Dry Weight Used	g		50	50
0.5N Acetic acid volume	ml/l			
Moisture	%		NA	NA
Dissolved Sulphate	ug/g		1600	3470

ALTERNATE COVER ANALYSIS

<i>Analyte</i>	Units	EQL	8-Apr 2022	22-Apr 2022
			AC1	AC1
Aluminum	ug/l	100	1460	445
Antimony	ug/l	20	22	<20
Arsenic	ug/l	20	<20	<20
Barium	ug/l	50	178	324
Beryllium	ug/l	50	<50	<50
Boron	ug/l	50	790	776
Cadmium	ug/l	3	3	3
Chromium	ug/l	20	30	28
Cobalt	ug/l	10	25	16
Copper	ug/l	20	170	225
Iron	ug/l	200	76700	13500
Lead	ug/l	5	285	866
Lithium	ug/l	20	<20	<20
Manganese	ug/l	20	2010	1350
Molybdenum	ug/l	20	<20	<20
Nickel	ug/l	20	206	71
Selenium	ug/l	20	<20	<20
Silver	ug/l	5	<5	<5
Strontium	ug/l	50	1850	1830
Thallium	ug/l	1	<1	<1
Tin	ug/l	20	<20	<20
Uranium	ug/l	1	<1	<1
Vanadium	ug/l	20	<20	<20
Zinc	ug/l	20	2800	2460
Final pH	NA	NA	NA	NA
Initial pH	NA	NA	NA	NA
Dry Weight Used	g	0	50	50
0.5N Acetic acid volume	ml/l	-		
Moisture	%	0	NA	NA
Dissolved Sulphate	ug/g	20	16600	16800

ALTERNATE COVER ANALYSIS

<i>Analyte</i>	Units	EQL	5-May 2022	19-May 2022
			AC1	AC1
Aluminum	ug/l	100	1,080	786
Antimony	ug/l	20	<20	<20
Arsenic	ug/l	20	21	252
Barium	ug/l	50	178	279
Beryllium	ug/l	50	<50	<50
Boron	ug/l	50	748	667
Cadmium	ug/l	3	6	3
Chromium	ug/l	20	36	106
Cobalt	ug/l	10	13	12
Copper	ug/l	20	405	500
Iron	ug/l	200	1,380	905
Lead	ug/l	5	209	199
Lithium	ug/l	20	<20	<20
Manganese	ug/l	20	1,840	1,770
Molybdenum	ug/l	20	<20	<20
Nickel	ug/l	20	75	67
Selenium	ug/l	20	<20	<20
Silver	ug/l	5	<5	<5
Strontium	ug/l	50	1,820	1,710
Thallium	ug/l	1	<1	<1
Tin	ug/l	20	<20	<20
Uranium	ug/l	1	<1	<1
Vanadium	ug/l	20	<20	<20
Zinc	ug/l	20	2,690	2,090
Final pH	NA	NA	NA	NA
Initial pH	NA	NA	NA	NA
Dry Weight Used	g	0	50	50
0.5N Acetic acid volume	ml/l	-		
Moisture	%	0	NA	NA
Dissolved Sulphate	ug/g	20	17,600	17,200

ALTERNATE COVER ANALYSIS

<i>Analyte</i>	Units	EQL	9-Jun 2022	23-Jun 2022
			AC1	AC1
Aluminum	ug/l	100	540	0.790
Antimony	ug/l	20	<20	<.010
Arsenic	ug/l	20	<20	<.010
Barium	ug/l	50	349	0.160
Beryllium	ug/l	50	<50	<.010
Boron	ug/l	50	485	1.370
Cadmium	ug/l	3	4	<0.010
Chromium	ug/l	20	49	<.050
Cobalt	ug/l	10	<10	0.017
Copper	ug/l	20	885	0.142
Iron	ug/l	200	15,500	1.29
Lead	ug/l	5	451	0.179
Lithium	ug/l	20	<20	
Manganese	ug/l	20	3,500	1.44
Mercury				<.01
Molybdenum	ug/l	20	<20	0.008
Nickel	ug/l	20	69	0.016
Selenium	ug/l	20	<20	<.010
Silver	ug/l	5	<5	<.010
Strontium	ug/l	50	1,330	2.74
Thallium	ug/l	1	<1	<0.010
Tin	ug/l	20	<20	
Titanium				0.065
Uranium	ug/l	1	<1	<.050
Vanadium	ug/l	20	<20	<0.020
Zinc	ug/l	20	39,400	2.92
Final pH	NA	NA	NA	NA
Initial pH	NA	NA	NA	NA
Dry Weight Used	g	0	50	
0.5N Acetic acid volume	ml/l	-		
Moisture	%	0	NA	NA
Dissolved Sulphate	ug/g	20	16,600	3450

ALTERNATE COVER ANALYSIS

<i>Analyte</i>	Units	EQL	7-Jul 2022	28-Jul 2022
			AC1	AC1
Aluminum	ug/l	100	1060	1120
Antimony	ug/l	20	<20	<20
Arsenic	ug/l	20	35	20
Barium	ug/l	50	170	246
Beryllium	ug/l	50	<50	<50
Boron	ug/l	50	656	2480
Cadmium	ug/l	3	4	4
Chromium	ug/l	20	57	37
Cobalt	ug/l	10	25	12
Copper	ug/l	20	304	268
Iron	ug/l	200	1190	1130
Lead	ug/l	5	796	594
Lithium	ug/l	20	<20	24
Manganese	ug/l	20	1430	1780
Molybdenum	ug/l	20	<20	<20
Nickel	ug/l	20	69	50
Selenium	ug/l	20	<20	<20
Silver	ug/l	5	<5	<5
Strontium	ug/l	50	1720	1880
Thallium	ug/l	1	<1	<1
Tin	ug/l	20	<20	<20
Uranium	ug/l	1	<1	<1
Vanadium	ug/l	20	<20	<20
Zinc	ug/l	20	3780	3840
Final pH	NA	NA	NA	NA
Initial pH	NA	NA	NA	NA
Dry Weight Used	g	0	50	50
0.5N Acetic acid volume	ml/l	-		
Moisture	%	0	NA	NA
Dissolved Sulphate	ug/g	20	16400	16700

ALTERNATE COVER ANALYSIS

<i>Analyte</i>	Units	EQL	11-Aug 2022	25-Aug 2022
			AC1	AC1
Aluminum	ug/l	100	1010	823
Antimony	ug/l	20	26	<20
Arsenic	ug/l	20	<20	<20
Barium	ug/l	50	394	421
Beryllium	ug/l	50	<50	<50
Boron	ug/l	50	1210	1050
Cadmium	ug/l	3	3	5
Chromium	ug/l	20	35	25
Cobalt	ug/l	10	27	12
Copper	ug/l	20	90	100
Iron	ug/l	200	1040	1300
Lead	ug/l	5	361	292
Lithium	ug/l	20	<20	<20
Manganese	ug/l	20	1790	1950
Molybdenum	ug/l	20	<20	<20
Nickel	ug/l	20	61	88
Selenium	ug/l	20	<20	<20
Silver	ug/l	5	<5	<5
Strontium	ug/l	50	1580	1800
Thallium	ug/l	1	<1	<1
Tin	ug/l	20	<20	<20
Uranium	ug/l	1	<1	<1
Vanadium	ug/l	20	<20	<20
Zinc	ug/l	20	2400	1950
Final pH	NA	NA	NA	NA
Initial pH	NA	NA	NA	NA
Dry Weight Used	g	0	50	50
0.5N Acetic acid volume	ml/l	-		
Moisture	%	0	NA	NA
Dissolved Sulphate	ug/g	20	16900	17900

ALTERNATE COVER ANALYSIS

Analyte	Units	EQL	8-Sep 2022	22-Sep 2022
			AC1	AC1
Aluminum	ug/l	100	1090	1690
Antimony	ug/l	20	<20	34
Arsenic	ug/l	20	45	41
Barium	ug/l	50	369	225
Beryllium	ug/l	50	<50	<50
Boron	ug/l	50	6840	892
Cadmium	ug/l	3	4	5
Chromium	ug/l	20	29	35
Cobalt	ug/l	10	11	11
Copper	ug/l	20	218	389
Iron	ug/l	200	1620	1730
Lead	ug/l	5	2410	1650
Lithium	ug/l	20	<20	<20
Manganese	ug/l	20	1560	2110
Molybdenum	ug/l	20	<20	<20
Nickel	ug/l	20	61	72
Selenium	ug/l	20	<20	<20
Silver	ug/l	5	<5	<5
Strontium	ug/l	50	1460	1820
Thallium	ug/l	1	<1	<1
Tin	ug/l	20	<20	<20
Uranium	ug/l	1	<1	<1
Vanadium	ug/l	20	<10	<20
Zinc	ug/l	20	4660	4680
Final pH	NA	NA	NA	NA
Initial pH	NA	NA	NA	NA
Dry Weight Used	g	0	50	50
0.5N Acetic acid volume	ml/l	-		
Moisture	%	0	NA	NA
Dissolved Sulphate	ug/g	20	16900	16400

ALTERNATE COVER ANALYSIS

<i>Analyte</i>	Units	EQL	6-Oct 2022	20-Oct 2022
			AC1	AC1
Aluminum	ug/l	100	4090	1090
Antimony	ug/l	20	<20	<20
Arsenic	ug/l	20	150	<20
Barium	ug/l	50	408	162
Beryllium	ug/l	50	<50	<50
Boron	ug/l	50	1560	1310
Cadmium	ug/l	3	7	31
Chromium	ug/l	20	79	29
Cobalt	ug/l	10	14	16
Copper	ug/l	20	549	59
Iron	ug/l	200	2910	5750
Lead	ug/l	5	548	202
Lithium	ug/l	20	<20	<20
Manganese	ug/l	20	2470	1660
Molybdenum	ug/l	20	<20	<20
Nickel	ug/l	20	79	65
Selenium	ug/l	20	<20	<20
Silver	ug/l	5	<5	<5
Strontium	ug/l	50	1760	2040
Thallium	ug/l	1	<1	<1
Tin	ug/l	20	<20	<20
Uranium	ug/l	1	<1	<1
Vanadium	ug/l	20	<20	<20
Zinc	ug/l	20	4060	3370
Final pH	NA	NA	NA	NA
Initial pH	NA	NA	NA	NA
Dry Weight Used	g	0	50	50
0.5N Acetic acid volume	ml/l	-		
Moisture	%	0	NA	NA
Dissolved Sulphate	ug/g	20	15500	17200

ALTERNATE COVER ANALYSIS

<i>Analyte</i>	Units	EQL	3-Nov 2022
			AC1
Aluminum	ug/l	100	478
Antimony	ug/l	20	<20
Arsenic	ug/l	20	<20
Barium	ug/l	50	77
Beryllium	ug/l	50	<50
Boron	ug/l	50	1150
Cadmium	ug/l	3	<3
Chromium	ug/l	20	<20
Cobalt	ug/l	10	55
Copper	ug/l	20	71
Iron	ug/l	200	801
Lead	ug/l	5	116
Lithium	ug/l	20	<20
Manganese	ug/l	20	2340
Molybdenum	ug/l	20	<20
Nickel	ug/l	20	48
Selenium	ug/l	20	<20
Silver	ug/l	5	<5
Strontium	ug/l	50	1720
Thallium	ug/l	1	<1
Tin	ug/l	20	<20
Uranium	ug/l	1	<1
Vanadium	ug/l	20	<20
Zinc	ug/l	20	3160
Final pH	NA	NA	NA
Initial pH	NA	NA	NA
Dry Weight Used	g	0	50
0.5N Acetic acid volume	ml/l	-	
Moisture	%	0	NA
Dissolved Sulphate	ug/g	20	17000

ALTERNATE COVER ANALYSIS

<i>Analyte</i>	Units	EQL	1-Dec 2022	15-Dec 2022
			AC1	AC1
Aluminum	ug/l	100	553	579
Antimony	ug/l	20	<20	<20
Arsenic	ug/l	20	38	<20
Barium	ug/l	50	140	106
Beryllium	ug/l	50	<50	<50
Boron	ug/l	50	399	400
Cadmium	ug/l	3	3	<3
Chromium	ug/l	20	39	39
Cobalt	ug/l	10	15	<10
Copper	ug/l	20	100	20
Iron	ug/l	200	1070	1480
Lead	ug/l	5	569	132
Lithium	ug/l	20	<20	<20
Manganese	ug/l	20	1170	482
Molybdenum	ug/l	20	<20	<20
Nickel	ug/l	20	128	61
Selenium	ug/l	20	<20	<20
Silver	ug/l	5	<5	<5
Strontium	ug/l	50	1870	1930
Thallium	ug/l	1	<1	<1
Tin	ug/l	20	<20	<20
Uranium	ug/l	1	<1	<1
Vanadium	ug/l	20	<20	<20
Zinc	ug/l	20	3590	1170
Final pH	NA	NA	NA	NA
Initial pH	NA	NA	NA	NA
Dry Weight Used	g	0	50	50
0.5N Acetic acid volume	ml/l	-		
Moisture	%	0	NA	NA
Dissolved Sulphate	ug/g	20	17000	16800

Otter Lake Solid Waste Management Facility
2022 Annual Report

Appendix F- Odor Complaint Log

Format	Received	In regards to	Follow Up
Phone Call	January 27, 2022	January 27, 2022	Phone
Social Media	March 3, 2022	March 3, 2022	Email by S. Copp
Social Media	March 4, 2022	March 4, 2022	Email by S. Copp
Social Media	March 6, 2022	March 6, 2022	Email by S. Copp
Social Media	March 6, 2022	March 6, 2022	Email by S. Copp
Phone Call/311	March 14, 2022	March 14, 2022	Email by S. Copp
Phone Call/311	March 14, 2022	March 14, 2022	Phone Call - Tim Jordon
Phone Call/311	March 14, 2022	March 14, 2022	Phone Call - Tim Jordon
Phone Call/311	March 14, 2022	March 14, 2022	Phone Call - Tim Jordon
Phone Call/311	March 14, 2022	March 14, 2022	Phone Call - Tim Jordon
Phone Call/311	March 14, 2022	March 14, 2022	Phone Call - Tim Jordon
Phone Call/311	March 14, 2022	March 14, 2022	Phone Call - Tim Jordon
Phone Call/311	March 15, 2022	March 15, 2022	Phone Call - Tim Jordon
Phone Call/311	March 15, 2022	March 15, 2022	Phone Call - Tim Jordon
Phone Call	March 19, 2022	March 19, 2022	Phone Call - Tim Jordon
Phone Call	March 27, 2022	March 27, 2022	Phone Call - Tim Jordon
Phone Call	March 31, 2022	March 31, 2022	Phone Call - Tim Jordon
Phone Call/311	April 6, 2022	April 6, 2022	Phone Call - Tim Jordon
Email - Iona Stoddard	April 6, 2022	April 6, 2022	Email - Iona Stoddard
Phone Call	June 11, 2022	June 11, 2022	Phone Call - Tim Jordon
Phone Call	July 26, 2022	July 26, 2022	Phone Call - Tim Jordon
Phone Call	July 29, 2022	July 29, 2022	Phone Call - Tim Jordon

NOTE:

Individual complainant information has been recorded as per the approval and is available from MIRROR NS and HRM upon request.

Appendix G – Waste Oil Summary

Steve Copp

From: Troy Rafuse
Sent: Thursday, March 16, 2023 3:37 PM
To: Steve Copp
Subject: FW: GFL Environmental Oil Collections 2022

From: Crystal Kennedy <ckennedy@gflenv.com>
Sent: Thursday, March 16, 2023 3:32 PM
To: Troy Rafuse <trafuse@regroupns.ca>
Subject: GFL Environmental Oil Collections 2022

You don't often get email from ckennedy@gflenv.com. [Learn why this is important](#)

**** EXTERNAL EMAIL / COURRIEL EXTERNE **** Exercise caution when opening attachments or clicking on links / Faites preuve de prudence si vous ouvrez une pièce jointe ou cliquez sur un lien******

Hi Troy

It was great speaking with you this morning, here are the 2022 oil collections that you requested.

January 24th - 800 L BOL # 85757843
June 14th - 400L Work Order # W1387412
July 28th - 300L Work Order # W1461825
October 21st - 1075 L - Work Order # W1610367

A Total of - 2575 L collected in 2022.

Thanks

Crystal Kennedy | Operations Supervisor, Oil Services
GFL Environmental Services Inc.
17 Jones Court, Sussex, NB E4E 2S2
T (506) 432-9500 | D (506) 432-5855 | F (506) 432-9595 | C (506) 433-0616 | ckennedy@gflenv.com | www.gflenv.com

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