EDMONTON WATERWORKS
MONTHLY REPORT

February 2024

PROVIDING MORE EPCOR

TABLE OF CONTENTS

2.0 WATER QUALITY

2.1 HIGHLIGHTS

2.2 SUMMARY OF ANALYSES PERFORMED

1.1.1 Operations – Rossdale and E.L. Smith Plants

Plant Bypasses

The number of bypasses shown on Table 1.2.26 “Rossdale Waste Stream Data” and Table 1.2.27 “E.L. Smith Waste Stream Data” include both planned and unplanned bypasses. A planned bypass is any bypass that is planned a minimum of one day ahead of the actual bypass. All other bypasses are considered unplanned.

In February, Rossdale Plant had one planned shutdown and no unplanned shutdowns or bypasses.

Date	Type	Bypass Description
Feb 28	Planned	26.5 hour shutdown for capital work and maintenance.

In February, E.L. Smith Plant had three planned shutdowns and no unplanned shutdowns or bypasses.

Date	Type	Bypass Description
Feb 1	Planned	8.26 hours shutdown for maintenance work
Feb 14	Planned	7.25 hours shutdown for capital work and maintenance
Feb 21	Planned	9.75 hours shutdown for capital work and maintenance

Clarifier Blowdown Volume

- The clarifier blowdown volume shown on Table 1.2.26 and Table 1.2.27 include estimated plant leakage.

Dechlorination Highlights

- During the month of February, there were zero instances of chlorinated waste released at the outfall structure at Rossdale Water Treatment Plant.
- During the month of February, there were zero instances of chlorinated waste released at the outfall structure at E.L. Smith Water Treatment Plant.

Chemical Dosing Highlights

In February, Rossdale and E.L. Smith Water Treatment Plants did not exceed the Maximum Use in the Standard 60, published by the National Sanitation Foundation and the American National Sanitation Standards Institute (NSF/ANSI) for Alum or Caustic Soda.

Chemicals Used for the Month

CHEMICAL NAME	MANUFACTURER
Aluminum Sulfate 48.5%	Chemtrade
Aqua Ammonia 19%	Univar
Caustic Soda 50%	Chemtrade
Hydrofluorosilicic Acid 25%	Nutrien
Magnafloc LT27AG / Praestol DW27AG	Solenis
Magnafloc LT-7995	Solenis
Phosphoric Acid 75%	Innophos
Sodium Hypochlorite 12%	Univar
Liquid Ammonium Sulphate 41%	Umicore Canada Inc
Salt	Windsor
Sodium Bisulphite 38%	Chemtrade

ENV-1.1.2 EDMONTON INCIDENT REPORT SUMMARY – February 2024

EPCOR Incident Number	Description	Date of Incident	AEPA Reference Number
ENV-20240208-107793-v1	About 3 m^3 of potable chlorinated water at +/-1.5ppm was released to the surface due to a suspected leak within the water distribution system buried underground. The water drained to the nearby storm catch basin. Dechlorination pucks were placed in the path of water and the water entry point into the drainage infrastructure to dechlorinate the water The leak was isolated until the repair was completed.	February 7, 2024	424777
ENV-20240210-504731-v1	About 43 m^3 of potable chlorinated water at +/-1.5ppm was released to the surface due to a suspected leak within the water distribution system buried underground. The water drained to the nearby storm catch basin. Dechlorination pucks were placed in the path of water and the water entry point into the drainage infrastructure to dechlorinate the water The leak was isolated until the repair was completed.	February 10, 2024	424858
ENV-20240213-279512-v1	About 1 m^3 of potable chlorinated water at +/-1.5ppm was released to the surface due to a suspected leak within the water distribution system buried underground. The water drained to the nearby storm catch basin. Dechlorination pucks were placed in the path of water and the water entry point into the drainage infrastructure to dechlorinate the water The leak will remain isolated until the repair is completed.	February 12, 2024	424942
ENV-20240219-557475-v1	About 36 m^3 of potable chlorinated water at +/-1.5ppm was released to the surface due to a suspected leak within the water distribution system buried underground. The water drained to the nearby sanitary sewer system. Dechlorination pucks were placed in the path of water and the water entry point into the drainage infrastructure to dechlorinate the water The leak was isolated until the repair was completed.	February 19, 2024	425088

ENV-20240229-981755-v1	About 61 m^3 of potable chlorinated water at +/-1.5ppm was released to the surface due to a suspected leak within the water distribution system buried underground. The water drained to the nearby storm catch basin. Dechlorination pucks were placed in the path of water and the water entry point into the drainage infrastructure to dechlorinate the water The leak was isolated until the repair was completed.	February 29, 2024	425454

1.1.3 Alberta Environment Operator Certifications

Operator Contact Number: EPCOR Water Services Dispatch (24 hr) (780) 412-4500

ROSSDALE WATER TREATMENT PLANT (LEVEL IV)	
Director, Edmonton Water Treatment Plants	
Senior Manager, Operations	**WT II**
Manager, Operations	**WT III, WWT III**
Title	Alberta Environment Certification Level
Operations Engineer	WT I
Manager, Transmission Operations	WT III
Operations Foreman	WT IV
HEI Foreman	WT IV
Operations Foreman	WT IV
Operations Foreman	WT IV
Operations Foreman	WT IV
Operations Foreman	WT IV
Transmission Foreman	WT III
Training Operator Foreman	WT III
Lead Hand, Operator	WT II
Operator I	WT III
Operator I	WT II
Lead Hand, Operator	WT II
Operator I	WT III
Operator I	WT III
Operations Trainer	WT III
Day Foreman	WT IV
Lead Hand, Operator	WT II
Lead Hand, Operator	WT III
Operator I	WT II
Operator I	WT II
Operator I	WT III
Lead Hand, Operator	WT II
Operator I	WT III, WD II
Operator I	WT III, WWT III
Operator I	WT I
Operator I	WT II, WD II, WWT II, WWC II
Operator I (temp)	WT I, WC I

1.1.3 Alberta Environment Operator Certifications

Operator Contact Number: EPCOR Water Services Dispatch (24 hr) (780) 412-4500

E.L. SMITH TREATMENT PLANT (LEVEL IV)	
Director, Edmonton Water Treatment Plants	
Senior Manager, Operations	**WT II**
Manager, Operations	**WT III, WWT III**
Title	Alberta Environment Certification Level
Operations Engineer	
Operations Engineer	WWC I
Day Foreman	WT IV
HEI Foreman	WT IV
Training Operator Foreman	WT IV
Operations Foreman	WT IV
Operations Foreman	WT IV
Operations Foreman	WT III
Operations Foreman	WT IV
Operations Foreman	WT IV
Lead Hand, Operator	WT III
Lead Hand, Operator	WT II
Lead Hand, Operator	WT III
Lead Hand, Operator	WT III
Lead Hand, Operator	WT II, WD II, WWT I, WWC I
Operator I	WT III, WWT II,
Operator I	WT II
Operator I	WT III, WWT III
Operator I	WT II
Operator I	WT III
Operator I	WT II, WD I
Operator I	WT II, WD I, WWT II, WWC I
Operator I	WT III, WD I, WWT II, WWC I

1.1.3 Alberta Environment Operator Certifications

Operator Contact Number: EPCOR Water Services Dispatch (24 hr) (780) 412-4500

DISTRIBUTION SYSTEM (LEVEL IV FACILITY)

WATER DISTRIBUTION (WD) - NETWORK MAINTENANCE

Senior Manager, Maintenance and Construction

Manager, Distribution Maintenance

Manager, Dist. Maint Schedule

Title	Alberta Environment Certification Level
Water Network Operator	WD IV WWC I
Water Network Operator	WD IV
Foreman III	WD III
Foreman III	WD III
Foreman III	WD III
Foreman III	WD III
Foreman I	WD III WWC I
Foreman I	WD II
Foreman I	WD III
Foreman I	WD II
Foreman I	WD II
Foreman I	WD II
Foreman I	WD II
Foreman I	WD II
Foreman I	WD II
Foreman I	WD III
Foreman I	WD II
Foreman I	WD II
Foreman I	WD II
Equipment Operator III	WD II
Equipment Operator III	WD I
Equipment Operator III	WD II
Equipment Operator III	WD I
Equipment Operator III	WD II
Equipment Operator III	WD I
Equipment Operator III	WD I
Equipment Operator III	WD II
Equipment Operator III	WD II
Equipment Operator III	WD II
Equipment Operator III	WD II
Equipment Operator III	WD II
Equipment Operator III	WD I
Equipment Operator III	WD II
Equipment Operator III	WD II
Labourer II	WD I
Labourer II	WD I
Labourer II	WD I
Labourer II	WD I
Labourer III	WD II
Labourer III	WD III
Labourer II	WD I

Labourer III	WD I
Labourer II	WD I
Labourer II	WD I

1.1.3 Alberta Environment Operator Certifications

Operator Contact Number: EPCOR Water Services Dispatch (24 hr) (780) 412-4500

DISTRIBUTION SYSTEM (LEVEL IV FACILITY)
WATER DISTRIBUTION (WD) - NETWORK MAINTENANCE
Senior Manager, Maintenance and Construction
Manager, Maintenance and Construction
Manager, Dist. Maint Scheduling

Title	Alberta Environment Certification Level
Truck Driver III	WD I
Labourer II	WD I
Labourer II	WD I
Labourer II	WD I
Labourer II	WD II
Labourer II	WD II
Labourer II	WD II
Truck Driver III	WD II
Truck Driver III	WD I
Truck Driver III	WD I
Foreman III	WD III
Welder	WD II
Maintenance Repairman I	WD II
Maintenance Repairman I	WD I
Maintenance Repairman I	WD I
Labourer III	WD I
Labourer II	WD I
Foreman I	WD I
Water Sys Tech Support Specialist	WD II
Water Sys Tech Support Specialist	WD IV

1.1.3 Alberta Environment Operator Certifications

Operator Contact Number: EPCOR Water Services Dispatch (24 hr) (780) 412-4500

DISTRIBUTION SYSTEM (LEVEL IV FACILITY)

WATER DISTRIBUTION (WD) - FIELD OPERATIONS

Senior Manager, Distribution Operations	
Manager, Field Operations	
Manager, Metering and Preventative Maintenance	**WD I**
Manager, Water Trouble	**WD III**
Title	Alberta Environment Certification Level
Foreman III	WD IV
Foreman III	WD IV
Foreman I	WD II
Foreman I	WD II
Labourer III	WD II
Labourer III	WD II
Labourer III	WD I
Foreman I	WD I
Labourer III	WD III
Labourer II	WD I
Labourer II	WD II
Labourer II	WD I
Labourer III	WD I
Labourer III	WD I
Labourer II	WD II
Labourer II	WD I
Labourer III	WD I
Labourer II	WD II
Water Systems Serviceman	WD II
Water Systems Serviceman	WD II
Water Systems Serviceman	WD II
Water Systems Serviceman	WD II
Water Systems Serviceman	WD II
Water Systems Serviceman	WD III
Water Systems Serviceman	WD II
Water Systems Serviceman	WD III
Water Systems Serviceman	WD II
Water Systems Serviceman	WD II
Water Systems Serviceman	WD II
Water Systems Serviceman	WD II
Water Systems Serviceman	WD II

1.1.3 Alberta Environment Operator Certifications

Operator Contact Number: EPCOR Water Services Dispatch (24 hr) (780) 412-4500

DISTRIBUTION SYSTEM (LEVEL IV FACILITY)

WATER DISTRIBUTION (WD) - CUSTOMER SERVICE

Senior Manager, Customer Service

Manager, Dispatch

Manager, Inspections and Customer Service

Title	Alberta Environment Certification Level
Team Lead, Dispatch	
Dispatcher Coordinator	WD I
Inspector – Water Metering	WD II
Inspector – Water Metering	WD I
Foreman III	WD III
Manager, Cross Connections	WD II
Inspector – Cross Connections	WD I

1.1.3 Alberta Environment Operator Certifications

Operator Contact Number: EPCOR Water Services Dispatch (24 hr) (780) 412-4500

DISTRIBUTION SYSTEM (LEVEL IV FACILITY)

WATER METERING (WD)

Manager, Metering Operations	**WD I**
Title	Alberta Environment Certification Level
Foreman III	WD II
Meter Mechanic II	WD II
Meter Installer II	WD III
Meter Installer I	WD I
Meter Installer I	WD II
Meter Installer I	WD II
Meter Installer I	WD I
Meter Installer I	WD III
Meter Installer II	WD I

1.2.1 Raw Water Intake (ML)

February 2024

Day	Rossdale			E.L. Smith	Plants Combined Total
	Plant 1	Plant 2	Plant Total	Plant Total	
1	76	109	184	228	412
2	79	100	179	331	510
3	80	98	178	309	487
4	74	94	168	288	456
5	72	92	165	274	439
6	63	107	170	261	431
7	0.0	141	141	255	396
8	--	143	143	241	384
9	--	140	140	241	381
10	--	140	140	269	409
11	--	140	140	281	421
12	--	149	149	292	442
13	--	144	144	301	445
14	--	142	142	206	349
15	--	141	141	281	422
16	--	141	141	281	421
17	--	140	140	281	421
18	--	140	140	267	407
19	--	133	133	260	393
20	--	130	130	279	409
21	--	144	144	183	327
22	--	150	150	293	443
23	--	150	150	287	437
24	--	141	141	281	422
25	--	140	140	266	406
26	--	143	143	281	424
27	--	137	137	296	433
28	--	25	25	311	336
29	--	138	138	297	435
Monthly Total	443	3,734	4,177	7,920	12,096
Monthly Min	0.0	25	25	183	
Monthly Max	80	150	184	331	
Monthly Avg	15	129	144	273	417

NOTES: ' -- ' indicates plant offline

1.2.2 Treated Water Production (ML)

February 2024

Day	Rossdale (Plant 1 & Plant 2)			E.L. Smith			Plants Combined	Reservoir Levels (%)
	Flow Meters			Flow Meters			Flow Meters (Both Plants)	
	Min	Max	Total	Min	Max	Total		
1	84	209	164	0.0	297	176	341	40.6
2	61	205	154	258	299	278	433	53.1
3	67	207	153	206	296	259	412	64.8
4	79	206	154	202	279	241	395	72.0
5	78	204	149	203	266	232	381	74.5
6	77	205	148	199	268	228	376	77.2
7	58	202	128	200	262	225	353	77.9
8	66	207	132	198	266	210	342	76.0
9	58	206	129	204	216	206	336	73.5
10	75	203	131	197	291	236	367	69.5
11	71	197	129	196	292	247	376	71.7
12	52	205	133	201	296	253	386	72.5
13	59	211	130	206	298	268	397	78.0
14	51	205	131	0.0	298	165	296	80.0
15	91	182	129	204	301	252	381	71.3
16	51	203	129	205	292	249	378	73.0
17	72	209	127	208	299	248	375	75.7
18	60	207	130	202	293	239	369	78.2
19	71	205	118	198	284	229	347	79.8
20	50	202	121	205	294	240	361	75.8
21	54	200	131	0.0	297	144	275	75.6
22	47	208	138	207	298	255	393	62.3
23	57	205	137	205	300	249	385	68.4
24	52	204	128	202	291	249	377	72.6
25	72	204	128	201	293	231	359	74.9
26	66	208	132	202	298	245	377	73.9
27	57	200	124	207	297	257	381	77.6
28	0.0	189	--	239	306	264	261	75.8
29	13	183	116	206	295	252	368	63.2
Monthly Tota			3,751			6,828	10,579	
Monthly Min	0.0			0.0				
Monthly Max		211			306			
Monthly Avg			129			235	365	

NOTES: ' -- ' indicates plant offline

- Estimated flows are based on UV effluent flow meters to address inaccuracy of highlift flow meters.
- Reservoir levels (%) recorded daily at 7 AM

1.2.3 Raw Water Quality - North Saskatchewan River

February 2024

Day	Rossdale									E.L. Smith								
	Turbidity (NTU)			pH			Colour (TCU)			Turbidity (NTU)			pH			Colour (TCU)		
	Min	Max	Avg	Min	Max	Avg	Min	Max	Avg	Min	Max	Avg	Min	Max	Avg	Min	Max	Avg
1	1.7	2.0	1.9	8.0	8.1	8.1	7.6	8.3	8.0	2.0	2.9	2.5	8.0	8.1	8.1	8.7	9.0	8.9
2	1.9	2.0	1.9	8.0	8.1	8.0	8.0	8.8	8.5	2.0	2.9	2.3	8.0	8.1	8.0	8.3	9.0	8.8
3	1.8	1.9	1.8	8.1	8.1	8.1	7.4	8.8	7.8	1.7	2.2	1.9	8.0	8.1	8.1	8.3	9.0	8.9
4	1.8	2.0	1.8	8.0	8.1	8.0	7.4	8.2	7.8	1.6	2.0	1.8	8.0	8.1	8.0	8.4	8.8	8.5
5	1.9	2.9	2.5	8.0	8.1	8.1	7.5	8.0	7.7	2.0	4.6	3.4	8.0	8.1	8.0	8.2	8.8	8.4
6	2.1	2.9	2.5	8.0	8.0	8.0	8.0	9.3	8.5	1.8	2.8	2.1	8.0	8.0	8.0	8.6	10.2	9.5
7	2.1	3.7	2.6	8.0	8.1	8.0	8.7	9.3	9.2	1.8	3.3	2.7	8.0	8.1	8.0	9.0	10.1	9.6
8	2.3	3.7	2.8	8.0	8.0	8.0	8.7	9.0	8.7	2.5	2.8	2.7	7.9	8.1	8.1	9.0	9.9	9.6
9	2.3	2.9	2.7	8.0	8.1	8.0	9.0	9.5	9.2	2.5	3.2	2.7	7.9	8.1	8.0	9.5	9.9	9.7
10	1.7	2.3	2.1	8.0	8.1	8.0	9.5	9.8	9.5	1.8	2.7	2.2	8.0	8.1	8.0	9.9	10.3	10.2
11	1.6	1.8	1.8	8.1	8.1	8.1	9.5	9.8	9.8	1.6	2.0	1.8	8.0	8.0	8.0	9.9	10.7	10.1
12	1.6	1.8	1.6	8.0	8.1	8.0	9.1	9.5	9.3	1.5	1.8	1.6	8.0	8.1	8.0	9.2	9.9	9.5
13	1.8	2.7	2.3	8.0	8.1	8.0	7.7	9.1	8.2	1.6	2.0	1.8	8.0	8.1	8.0	8.0	9.3	8.5
14	1.6	2.4	2.2	8.0	8.1	8.0	6.9	7.7	7.2	1.4	1.7	1.5	8.1	8.1	8.1	7.5	8.0	7.9
15	1.6	1.9	1.7	8.0	8.0	8.0	6.8	7.3	7.1	1.5	2.0	1.8	8.0	8.1	8.0	6.5	7.5	7.0
16	1.7	2.4	2.0	8.0	8.0	8.0	5.8	6.8	6.2	1.5	2.1	1.9	8.0	8.1	8.1	6.5	6.8	6.6
17	1.6	1.9	1.7	8.0	8.1	8.1	5.8	6.3	6.1	1.6	2.0	1.7	8.0	8.1	8.0	6.7	6.9	6.7
18	1.5	1.9	1.7	8.0	8.1	8.1	6.0	6.7	6.4	1.6	1.8	1.7	8.0	8.1	8.1	6.5	7.1	6.8
19	1.4	1.8	1.5	8.0	8.1	8.0	6.7	7.2	7.0	1.3	1.6	1.4	8.0	8.0	8.0	7.1	7.5	7.3
20	1.3	1.8	1.6	8.0	8.1	8.0	7.2	7.3	7.2	1.1	1.5	1.3	8.0	8.0	8.0	7.5	8.2	7.7
21	1.3	1.8	1.6	8.0	8.1	8.0	6.9	7.2	7.0	1.4	1.7	1.5	8.0	8.0	8.0	7.1	7.5	7.4
22	1.3	1.4	1.3	8.0	8.1	8.1	6.4	6.9	6.6	1.2	1.6	1.4	8.0	8.1	8.0	6.5	7.2	6.9
23	1.3	1.8	1.6	8.1	8.1	8.1	6.3	6.4	6.3	1.3	1.6	1.4	8.0	8.1	8.0	6.3	7.7	6.9
24	1.7	2.0	1.9	8.1	8.1	8.1	5.8	6.3	6.1	1.3	2.4	1.8	7.9	8.1	8.0	5.8	6.6	6.3
25	1.5	1.7	1.6	8.1	8.1	8.1	5.8	6.0	5.9	1.2	1.7	1.5	8.0	8.0	8.0	6.2	6.4	6.4
26	1.5	1.5	1.5	8.0	8.1	8.0	5.5	6.2	6.0	1.2	1.8	1.5	8.0	8.0	8.0	6.1	7.0	6.4
27	1.5	3.2	2.5	8.0	8.0	8.0	5.5	6.6	5.6	1.8	2.9	2.5	8.0	8.0	8.0	6.1	7.3	6.8
28	2.3	2.3	2.3	8.0	8.0	8.0	6.6	6.6	6.6	1.4	2.2	1.7	8.0	8.1	8.0	7.3	8.3	7.7
29	1.3	4.8	4.0	8.0	8.1	8.0	6.6	7.5	7.0	1.8	4.8	3.6	8.1	8.1	8.1	7.5	8.4	7.7
Monthly Min/Max/Avg	1.3	4.8	2.0	8.0	8.1	8.0	5.5	9.8	7.5	1.1	4.8	2.0	7.9	8.1	8.0	5.8	10.7	8.0

NOTES: ' -- ' indicates plant offline

1.2.4 Treated Water Quality Entering the Distribution System

February 2024

Day	Rossdale														E.L. Smith												
	Turbidity (NTU)			Chloramine Residual (mg/L)			pH			Fluoride Residual (mg/L)			Total Hardness (mg/L as $CaCO_3$)	Colour (TCU)	Turbidity (NTU)			Chloramine Residual (mg/L)			pH			Fluoride Residual (mg/L)			Total Hardness (mg/L as $CaCO_3$)	Colour (TCU)
	Min	Max	Avg	Min	Max	Avg	Min	Max	Avg	Min	Max	Avg	Total	Avg	Min	Max	Avg	Min	Max	Avg	Min	Max	Avg	Min	Max	Avg	Total	Avg
1	0.04	0.06	0.05	1.91	2.18	2.14	7.7	7.7	7.7	0.71	0.72	0.72	189	0.6	0.05	0.06	0.04	1.91	2.08	1.94	7.5	7.8	7.7	0.73	0.74	0.74	185	1.0
2	0.04	0.06	0.05	2.06	2.12	2.12	7.7	7.7	7.7	0.71	0.72	0.72	186	0.6	0.05	0.05	0.05	1.94	2.03	1.98	7.8	7.8	7.8	0.72	0.74	0.73	186	0.8
3	0.04	0.06	0.05	2.01	2.13	2.10	7.7	7.7	7.7	0.72	0.73	0.72	185	0.6	0.05	0.06	0.05	1.98	2.03	2.01	7.7	7.8	7.8	0.73	0.74	0.74	186	0.8
4	0.04	0.06	0.05	2.01	2.16	2.09	7.7	7.7	7.7	0.72	0.74	0.73	186	0.4	0.06	0.06	0.06	2.01	2.03	2.03	7.7	7.8	7.7	0.74	0.74	0.74	181	1.0
5	0.04	0.06	0.05	2.06	2.16	2.11	7.7	7.7	7.7	0.74	0.76	0.75	184	0.6	0.05	0.06	0.06	2.00	2.03	2.03	7.7	7.7	7.7	0.73	0.74	0.74	181	0.9
6	0.04	0.05	0.04	2.08	2.18	2.13	7.7	7.7	7.7	0.75	0.75	0.75	181	0.3	0.06	0.06	0.06	2.02	2.06	2.03	7.7	7.7	7.7	0.72	0.74	0.74	178	1.4
7	0.04	0.09	0.05	2.01	2.18	2.10	7.7	7.7	7.7	0.75	0.76	0.75	185	0.6	0.06	0.06	0.06	2.03	2.08	2.05	7.7	7.8	7.7	0.71	0.73	0.73	178	1.0
8	0.05	0.07	0.05	2.01	2.20	2.12	7.7	7.7	7.7	0.76	0.76	0.76	185	0.6	0.06	0.06	0.06	2.03	2.04	2.03	7.7	7.8	7.7	0.71	0.72	0.71	182	0.8
9	0.04	0.07	0.05	2.01	2.16	2.08	7.6	7.7	7.7	0.75	0.76	0.75	186	0.6	0.06	0.06	0.06	2.03	2.07	2.03	7.7	7.7	7.7	0.70	0.71	0.71	177	1.0
10	0.04	0.05	0.04	2.01	2.18	2.13	7.6	7.6	7.6	0.74	0.75	0.75	184	0.7	0.06	0.06	0.06	2.03	2.08	2.04	7.7	7.7	7.7	0.70	0.71	0.71	185	1.1
11	0.04	0.05	0.04	2.03	2.16	2.10	7.6	7.6	7.6	0.74	0.75	0.75	184	0.8	0.06	0.06	0.06	2.03	2.08	2.04	7.7	7.7	7.7	0.71	0.71	0.71	185	1.0
12	0.04	0.05	0.05	2.01	2.16	2.08	7.6	7.6	7.6	0.71	0.75	0.73	185	0.7	0.06	0.07	0.06	2.03	2.08	2.05	7.7	7.7	7.7	0.70	0.72	0.71	184	1.2
13	0.04	0.06	0.04	2.11	2.13	2.11	7.6	7.7	7.6	0.72	0.72	0.72	186	0.4	0.05	0.06	0.06	2.03	2.14	2.07	7.7	7.8	7.8	0.71	0.72	0.72	185	1.1
14	0.04	0.05	0.04	2.01	2.16	2.08	7.7	7.8	7.8	0.72	0.73	0.72	185	0.7	0.06	0.06	0.06	2.02	2.12	2.07	7.5	7.9	7.7	0.64	0.72	0.68	184	1.1
15	0.04	0.05	0.05	1.96	2.11	2.03	7.7	7.8	7.8	0.67	0.73	0.71	183	0.7	0.05	0.06	0.05	2.04	2.13	2.10	7.7	7.7	7.7	0.71	0.75	0.72	182	0.8
16	0.04	0.05	0.04	1.96	2.06	2.02	7.8	7.8	7.8	0.70	0.70	0.70	178	0.5	0.05	0.05	0.05	2.03	2.08	2.07	7.7	7.7	7.7	0.75	0.78	0.77	175	0.7
17	0.04	0.05	0.04	1.96	2.11	2.05	7.8	7.8	7.8	0.70	0.70	0.70	179	0.3	0.05	0.05	0.05	2.02	2.08	2.05	7.7	7.7	7.7	0.78	0.79	0.78	178	0.7
18	0.04	0.06	0.04	2.01	2.11	2.05	7.8	7.8	7.8	0.70	0.70	0.70	180	0.5	0.05	0.06	0.05	1.99	2.03	2.03	7.7	7.7	7.7	0.68	0.75	0.71	180	0.7
19	0.04	0.05	0.04	2.01	2.11	2.06	7.8	7.8	7.8	0.70	0.70	0.70	177	0.5	0.05	0.06	0.05	2.03	2.05	2.03	7.7	7.8	7.8	0.69	0.79	0.73	181	0.9
20	0.04	0.05	0.04	2.01	2.11	2.05	7.7	7.8	7.7	0.70	0.71	0.71	185	0.6	0.06	0.06	0.06	2.03	2.04	2.03	7.7	7.8	7.8	0.71	0.77	0.74	185	0.9
21	0.04	0.05	0.04	1.96	2.16	2.05	7.7	7.8	7.8	0.68	0.71	0.70	186	0.5	0.06	0.07	0.06	2.02	2.08	2.05	7.5	7.9	7.7	0.70	0.77	0.72	187	1.3
22	0.04	0.05	0.04	1.96	2.06	2.03	7.7	7.8	7.8	0.66	0.69	0.68	183	0.6	0.05	0.06	0.06	2.03	2.08	2.07	7.7	7.7	7.7	0.69	0.80	0.73	189	1.2
23	0.04	0.07	0.05	2.01	2.16	2.06	7.8	7.8	7.8	0.66	0.69	0.68	187	0.4	0.06	0.06	0.06	2.03	2.08	2.06	7.7	7.7	7.7	0.69	0.80	0.74	184	1.0
24	0.04	0.06	0.04	1.96	2.16	2.11	7.8	7.8	7.8	0.69	0.72	0.71	190	0.6	0.06	0.06	0.06	2.05	2.08	2.08	7.7	7.7	7.7	0.70	0.75	0.73	188	0.6
25	0.04	0.06	0.04	1.96	2.16	2.06	7.8	7.8	7.8	0.71	0.72	0.71	187	0.4	0.06	0.06	0.06	2.03	2.08	2.08	7.7	7.7	7.7	0.70	0.79	0.74	184	0.9
26	0.04	0.05	0.04	2.01	2.11	2.07	7.8	7.8	7.8	0.70	0.71	0.71	186	0.5	0.06	0.06	0.06	2.03	2.10	2.08	7.7	7.8	7.8	0.70	0.79	0.74	179	0.8
27	0.04	0.05	0.04	2.06	2.13	2.11	7.8	7.8	7.8	0.70	0.72	0.71	181	0.5	0.06	0.06	0.06	2.03	2.08	2.07	7.7	7.8	7.7	0.71	0.80	0.74	179	0.8
28	0.04	0.05	0.04	2.08	2.20	2.10	7.7	7.8	7.8	0.71	0.78	0.72		0.5	0.06	0.06	0.06	2.03	2.08	2.07	7.7	7.7	7.7	0.72	0.80	0.77	181	1.0
29	0.04	0.05	0.04	2.06	2.13	2.09	7.8	7.9	7.8	0.68	0.72	0.71	182	0.4	0.06	0.06	0.06	1.99	2.11	2.06	7.7	7.8	7.7	0.78	0.81	0.79	186	1.1
Monthly Min/Max/ Avg	0.04	0.09	0.04	1.91	2.20	2.08	7.6	7.9	7.7	0.66	0.78	0.72	184	0.5	0.05	0.07	0.06	1.91	2.14	2.04	7.5	7.9	7.7	0.64	0.81	0.73	183	1.0

NOTES: ' -- ' indicates plant offline

1.2.4 – 1 ROSSDALE: Treated Water Quality Entering the Distribution System

Date	Temperature (°C)			pH			Hourly Flow (ML per day)		
	Min	Max	Avg.	Min	Max	Avg.	Min	Max	Avg.
1-Feb	0.5	0.5	0.5	7.7	7.7	7.7	107	130	119
2-Feb	0.5	0.5	0.5	7.7	7.7	7.7	109	127	117
3-Feb	0.5	0.5	0.5	7.7	7.7	7.7	107	127	117
4-Feb	0.5	0.5	0.5	7.7	7.7	7.7	99	116	109
5-Feb	0.5	0.6	0.5	7.7	7.7	7.7	101	120	112
6-Feb	0.5	0.6	0.5	7.7	7.7	7.7	99	122	112
7-Feb	0.5	0.6	0.5	7.7	7.7	7.7	109	130	119
8-Feb	0.5	0.5	0.5	7.7	7.7	7.7	106	128	117
9-Feb	0.5	0.5	0.5	7.6	7.7	7.7	107	126	117
10-Feb	0.5	0.5	0.5	7.6	7.6	7.6	118	138	128
11-Feb	0.5	0.5	0.5	7.6	7.6	7.6	102	120	111
12-Feb	0.5	0.5	0.5	7.6	7.6	7.6	110	134	126
13-Feb	0.5	0.6	0.5	7.6	7.7	7.6	107	133	123
14-Feb	0.5	0.5	0.5	7.7	7.8	7.8	108	130	119
15-Feb	0.5	0.5	0.5	7.7	7.8	7.8	111	125	120
16-Feb	0.5	0.5	0.5	7.8	7.8	7.8	129	144	138
17-Feb	0.5	0.5	0.5	7.8	7.8	7.8	84	98	92
18-Feb	0.5	0.5	0.5	7.8	7.8	7.8	97	111	104
19-Feb	0.5	0.5	0.5	7.8	7.8	7.8	111	127	120
20-Feb	0.6	0.6	0.6	7.7	7.8	7.7	86	107	98
21-Feb	0.6	0.6	0.6	7.7	7.8	7.8	101	121	113
22-Feb	0.5	0.5	0.5	7.7	7.8	7.8	111	133	123
23-Feb	0.5	0.5	0.5	7.8	7.8	7.8	99	118	108
24-Feb	0.5	0.5	0.5	7.8	7.8	7.8	101	115	110
25-Feb	0.5	0.5	0.5	7.7	7.8	7.8	96	113	106
26-Feb	0.5	0.5	0.5	7.8	7.8	7.8	103	122	114
27-Feb	0.5	0.5	0.5	7.8	7.8	7.8	122	141	133
28-Feb	0.5	0.5	0.5	7.7	7.8	7.8	108	130	120
29-Feb	0.5	0.5	0.5	7.8	7.9	7.8	13	183	116
Monthly Min/Max/Avg.	0.5	0.6	0.5	7.6	7.9	7.7	13	183	116

1.2.4 – 2 E. L. Smith: Treated Water Quality Entering the Distribution System

Date	Temperature (°C)			pH			Hourly Flow (ML per day)		
	Min	Max	Avg.	Min	Max	Avg.	Min	Max	Avg.
1-Feb	0.6	0.6	0.6	7.5	7.8	7.7	236	251	241
2-Feb	0.6	0.6	0.6	7.8	7.8	7.8	238	250	244
3-Feb	0.6	0.6	0.6	7.7	7.8	7.8	240	252	245
4-Feb	0.6	0.6	0.6	7.7	7.8	7.7	233	245	239
5-Feb	0.6	0.6	0.6	7.7	7.7	7.7	243	256	251
6-Feb	0.6	0.6	0.6	7.7	7.7	7.7	222	233	229
7-Feb	0.6	0.6	0.6	7.7	7.8	7.7	220	237	227
8-Feb	0.6	0.6	0.6	7.7	7.8	7.7	234	268	253
9-Feb	0.7	0.7	0.7	7.7	7.7	7.7	224	237	230
10-Feb	0.7	0.7	0.7	7.7	7.7	7.7	223	231	227
11-Feb	0.7	0.7	0.7	7.7	7.7	7.7	261	275	268
12-Feb	0.7	0.7	0.7	7.7	7.7	7.7	222	233	228
13-Feb	0.7	0.7	0.7	7.7	7.8	7.8	244	261	254
14-Feb	0.7	0.7	0.7	7.5	7.9	7.7	224	234	228
15-Feb	0.7	0.7	0.7	7.7	7.7	7.7	220	231	225
16-Feb	0.7	0.7	0.7	7.7	7.7	7.7	250	262	255
17-Feb	0.7	0.7	0.7	7.7	7.7	7.7	251	262	256
18-Feb	0.7	0.7	0.7	7.7	7.7	7.7	222	232	227
19-Feb	0.7	0.7	0.7	7.7	7.8	7.8	238	252	244
20-Feb	0.7	0.7	0.7	7.7	7.8	7.8	228	237	231
21-Feb	0.6	0.6	0.6	7.5	7.9	7.7	233	246	240
22-Feb	0.6	0.6	0.6	7.7	7.7	7.7	243	260	251
23-Feb	0.6	0.6	0.6	7.7	7.7	7.7	249	262	253
24-Feb	0.6	0.6	0.6	7.7	7.7	7.7	237	249	243
25-Feb	0.6	0.6	0.6	7.7	7.7	7.7	255	270	262
26-Feb	0.6	0.6	0.6	7.7	7.7	7.7	224	236	229
27-Feb	0.6	0.6	0.6	7.7	7.8	7.8	257	269	263
28-Feb	0.6	0.6	0.6	7.7	7.8	7.7	232	243	238
29-Feb	0.6	0.6	0.6	7.7	7.8	7.7	206	295	252
Monthly Min/Max/Avg.	0.6	0.7	0.6	7.5	7.9	7.7	206	295	243

1.2.5 Rossdale Filters 1 - 9 Particle Counts (no./mL >2um)

February 2024

Filter	1			2			3			4			5			6			7			8			9		
Day	Min	Max	Avg	Min	Max	Avg	Min	Max	Avg	Min	Max	Avg	Min	Max	Avg	Min	Max	Avg	Min	Max	Avg	Min	Max	Avg	Min	Max	Avg
1	1	34	8	1	19	2	1	9	1	1	20	4	1	4	1	1	14	1	1	24	3	1	44	2	1	25	3
2	1	34	3	1	26	4	1	44	3	1	42	19	1	24	2	1	21	5	1	1	1	1	1	1	1	17	1
3	1	16	2	1	33	3	1	22	2	3	21	6	1	3	1	1	3	1	1	26	3	1	22	2	1	36	4
4	1	14	1	1	3	1	1	18	7	2	41	5	1	19	2	1	6	2	1	2	1	1	10	1	1	14	1
5	1	42	1	1	13	1	1	5	1	1	17	5	1	3	1	1	3	1	1	21	1	1	22	4	1	18	1
6	1	4	1	1	26	7	1	2	1	1	13	3	1	1	1	1	1	1	1	13	1	1	22	3	1	17	3
7	1	26	6	1	2	1	1	11	5	3	39	10	--	--	--	1	9	1	1	27	3	1	4	1	1	45	1
8	3	9	6	1	15	3	1	7	2	1	5	2	--	--	--	1	13	3	1	2	1	1	25	4	1	1	1
9	2	26	6	8	16	11	1	18	1	1	3	1	1	13	4	1	2	1	1	1	1	1	22	2	1	18	2
10	1	9	2	1	14	1	1	6	1	--	--	--	1	3	1	1	1	1	2	21	4	1	4	1	1	2	1
11	1	18	6	1	19	3	--	--	--	1	21	2	1	19	2	1	9	2	1	2	2	1	38	9	1	18	8
12	1	18	2	12	40	25	1	10	2	1	18	2	1	21	4	1	14	1	1	46	8	1	23	3	1	3	1
13	1	7	1	1	28	1	1	6	1	12	12	12	1	6	2	1	11	2	1	15	2	1	2	1	1	3	1
14	--	--	--	1	15	3	1	9	1	1	8	2	1	1	1	1	3	1	1	4	1	1	37	5	1	12	2
15	1	27	2	11	33	21	1	12	1	1	3	1	1	12	2	1	8	2	2	34	13	7	16	11	1	8	4
16	1	3	1	1	7	1	1	1	1	1	19	4	1	2	1	1	13	1	1	15	2	1	8	2	1	22	11
17	1	2	1	1	4	2	1	14	1	1	16	2	1	2	1	1	16	8	1	5	1	1	32	16	1	30	15
18	1	22	4	1	7	4	1	5	3	1	7	2	1	14	2	1	1	1	1	9	1	1	1	1	1	5	1
19	1	3	1	1	13	2	1	1	1	1	7	2	1	2	1	1	1	1	--	--	--	1	20	2	1	3	1
20	1	24	1	1	12	1	--	--	--	--	--	--	1	1	1	1	12	2	1	16	2	1	2	1	1	2	1
21	1	5	1	1	26	1	1	11	1	1	13	2	1	16	2	1	2	1	1	36	1	1	3	1	1	13	2
22	1	18	2	6	11	8	1	6	1	1	23	3	1	3	1	1	16	1	1	16	2	1	20	5	1	28	3
23	1	38	9	1	6	1	2	12	6	1	21	2	1	12	2	1	10	2	1	3	1	1	18	2	--	--	--
24	7	20	12	1	10	2	1	4	1	1	20	3	1	15	3	1	1	2	1	36	5	1	8	2	1	12	1
25	1	7	1	1	18	11	1	20	1	1	21	2	1	2	1	1	2	15	--	--	--	1	16	3	1	2	1
26	1	5	1	1	8	1	1	1	1	1	3	1	1	20	10	2	10	4	1	19	2	1	2	1	1	17	9
27	1	17	3	1	1	1	1	21	1	1	45	15	1	19	4	1	4	1	1	7	4	1	35	1	1	32	2
28	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
29	1	12	3	2	26	6	1	5	2	1	12	2	--	--	--	--	--	--	1	16	3	1	36	4	1	8	2
Monthly Min/Max/Avg	1	42	3	1	40	5	1	44	2	1	45	5	1	24	2	1	21	2	1	46	3	1	44	3	1	45	3

NOTE: ' -- ' indicates filter offline

1.2.6 E.L. Smith Filters 1 - 9 Particle Counts (no./mL >2um)

February 2024

Filter	1			2			3			4			5			6			7			8			9		
Day	Min	Max	Avg	Min	Max	Avg	Min	Max	Avg	Min	Max	Avg	Min	Max	Avg	Min	Max	Avg	Min	Max	Avg	Min	Max	Avg	Min	Max	Avg
1	1	20	2	1	32	2	1	16	1	1	39	1	--	--	--	1	24	2	1	28	3	1	30	2	1	32	4
2	1	13	1	1	13	1	1	11	1	1	9	1	--	--	--	1	19	1	1	25	3	1	26	2	1	29	2
3	1	13	2	1	18	2	1	10	2	1	14	2	--	--	--	1	21	1	1	27	4	1	28	3	1	32	3
4	1	19	3	1	16	3	1	13	3	1	14	3	--	--	--	1	27	3	2	27	5	2	9	3	--	--	--
5	1	14	5	1	5	2	1	21	4	1	5	2	--	--	--	1	28	5	3	28	5	1	28	6	7	37	10
6	1	26	4	1	15	5	1	20	4	3	14	6	--	--	--	1	10	4	3	15	7	3	29	7	2	10	5
7	1	6	2	1	18	2	1	8	4	1	5	2	--	--	--	4	26	7	2	30	8	2	6	4	5	28	7
8	1	2	1	2	13	5	1	27	5	3	20	6	--	--	--	1	7	3	2	9	6	5	31	8	2	8	4
9	2	24	6	1	19	4	1	16	3	1	5	3	--	--	--	4	28	9	7	32	11	4	8	5	4	28	8
10	1	26	4	1	8	4	4	25	6	3	20	6	--	--	--	1	7	3	2	11	5	4	32	7	2	29	5
11	1	8	4	1	25	4	1	22	3	1	5	2	--	--	--	1	28	5	2	32	8	1	6	3	3	9	6
12	1	24	3	1	5	2	1	22	4	1	22	5	--	--	--	1	30	5	2	7	5	3	28	6	1	27	4
13	1	6	2	1	25	4	1	25	4	1	26	2	--	--	--	4	32	10	3	30	6	2	30	4	2	9	4
14	1	27	4	1	6	1	1	25	4	1	24	3	--	--	--	2	8	5	3	27	6	2	10	5	2	30	6
15	1	28	3	1	18	3	1	4	2	1	28	3	--	--	--	3	29	5	2	6	3	1	4	3	1	5	3
16	1	9	2	1	2	1	1	31	3	1	3	1	--	--	--	6	40	19	3	30	6	2	32	4	1	30	4
17	1	28	1	1	35	3	1	3	1	1	25	3	--	--	--	4	27	8	1	5	3	1	3	2	1	4	2
18	1	8	3	1	4	1	1	28	4	1	20	2	--	--	--	6	44	22	1	29	3	1	28	4	1	26	2
19	1	10	1	2	26	6	1	5	1	1	24	2	--	--	--	8	34	12	3	7	4	2	6	3	2	12	4
20	1	27	5	1	4	2	1	27	3	1	30	3	--	--	--	3	44	24	2	4	3	1	29	3	1	30	3
21	1	29	4	1	33	4	1	3	2	1	17	3	--	--	--	3	45	17	3	27	6	2	5	3	2	5	3
22	1	27	2	1	2	1	1	29	3	1	8	2	--	--	--	2	45	26	2	26	3	1	33	4	2	23	4
23	1	31	5	1	42	3	1	28	5	1	1	1	--	--	--	2	45	15	1	11	4	1	4	2	1	5	2
24	1	4	1	1	28	2	1	26	3	1	26	4	--	--	--	1	45	6	1	24	4	1	29	4	1	27	4
25	1	32	5	1	4	1	1	7	2	1	2	1	--	--	--	2	45	7	1	6	3	1	29	3	2	5	3
26	1	3	1	1	29	3	1	27	2	1	24	2	--	--	--	1	34	9	2	28	4	2	7	3	2	28	4
27	1	31	5	1	4	1	1	26	4	1	2	1	--	--	--	2	38	5	2	32	6	1	33	5	1	32	5
28	1	32	4	1	33	3	1	33	5	1	26	3	--	--	--	2	45	8	1	31	4	1	30	4	1	6	2
29	1	45	9	1	32	8	1	33	6	1	27	6	--	--	--	2	45	15	2	15	5	1	6	2	1	26	4
Monthly Min/Max/Avg	1	45	3	1	42	3	1	33	3	1	39	3	--	--	--	1	45	9	1	32	5	1	33	4	1	37	4

NOTES: ' -- ' indicates filter offline

1.2.7 E.L. Smith Filters 10 - 18 Particle Counts (no./mL >2um)

February 2024

Filter	10			11			12			13			14			15			16			17			18		
Day	Min	Max	Avg	Min	Max	Avg	Min	Max	Avg	Min	Max	Avg	Min	Max	Avg	Min	Max	Avg	Min	Max	Avg	Min	Max	Avg	Min	Max	Avg
1	1	27	2	1	30	2	1	25	3	1	19	2	14	34	21	8	33	22	1	18	2	1	10	2	1	17	2
2	1	14	1	1	29	2	1	26	1	1	12	1	13	28	17	2	31	19	1	15	2	1	18	1	1	12	1
3	1	23	3	1	30	2	1	25	3	1	13	2	13	31	19	16	33	21	1	19	3	1	11	2	1	12	3
4	1	18	3	1	28	3	2	28	3	1	17	3	14	31	20	3	35	25	1	16	4	1	15	3	1	11	3
5	1	29	5	4	29	6	3	26	4	1	21	5	16	23	19	13	29	21	2	23	5	2	6	3	1	17	6
6	2	9	4	2	29	4	3	26	6	2	25	5	19	36	26	18	41	25	2	17	6	2	21	7	2	20	5
7	2	27	6	2	42	5	3	24	6	3	14	5	16	25	20	15	26	19	1	24	6	2	7	4	4	17	7
8	3	10	5	3	27	6	3	26	7	2	11	4	22	39	28	21	38	27	4	16	7	2	19	8	2	16	5
9	2	26	6	2	7	5	2	8	5	4	26	8	18	38	23	18	33	26	3	24	6	3	9	6	3	21	9
10	2	10	5	2	26	6	3	27	6	2	7	4	19	39	26	20	40	26	3	15	7	2	21	5	3	10	5
11	2	29	5	1	17	3	2	25	4	3	20	6	17	35	23	16	28	21	2	10	3	2	7	4	3	22	6
12	2	6	4	1	27	4	1	10	4	2	10	3	19	29	24	4	25	12	3	22	6	1	21	5	2	8	4
13	2	27	4	1	26	3	2	30	4	2	23	5	16	37	21	2	7	4	1	11	3	1	6	3	1	22	4
14	2	30	4	2	7	3	2	26	4	2	23	4	19	27	23	2	27	5	2	24	5	2	24	5	3	13	4
15	2	5	2	1	28	4	1	8	3	1	12	3	4	18	6	2	6	3	1	12	3	1	4	2	2	34	4
16	1	3	1	1	4	2	1	26	3	1	24	3	1	10	3	1	3	2	1	27	3	1	24	4	1	11	2
17	1	24	4	1	30	1	1	4	2	2	11	3	1	22	3	2	23	4	1	9	3	1	4	2	1	24	3
18	1	4	3	2	21	3	2	28	4	1	9	2	2	7	4	1	5	3	1	13	2	1	24	4	2	11	3
19	1	28	3	1	19	2	1	4	2	1	26	4	1	5	3	1	25	4	3	28	5	1	6	3	1	9	2
20	1	6	4	1	30	4	2	28	4	2	24	4	3	23	6	1	8	3	1	10	3	1	26	3	2	27	4
21	2	10	5	1	12	2	1	3	2	1	9	3	2	5	3	1	24	5	2	29	5	1	6	3	2	24	5
22	1	4	2	1	31	3	1	26	3	1	24	3	2	19	5	1	21	3	1	10	2	1	27	3	1	8	3
23	1	23	3	1	27	2	1	25	3	1	3	2	1	22	3	1	25	4	1	33	4	1	4	2	1	23	4
24	1	4	2	1	3	2	1	6	2	2	25	4	2	8	4	1	5	2	1	26	3	1	25	4	1	8	2
25	1	31	4	1	26	3	1	23	4	1	4	2	1	20	4	2	24	4	2	11	4	1	5	2	2	23	5
26	1	29	4	1	3	1	1	23	3	2	23	4	2	7	4	1	15	2	1	23	4	1	26	3	1	4	2
27	1	6	4	1	27	4	1	26	4	1	35	4	1	21	6	2	27	5	1	37	4	1	27	3	1	24	5
28	1	29	4	1	26	3	1	26	3	1	12	3	1	26	4	1	28	4	1	28	4	1	15	3	1	32	4
29	1	30	4	1	30	4	1	28	4	1	25	5	1	7	2	1	28	4	1	35	6	1	26	4	1	8	1
Monthly Min/Max/Avg	1	31	4	1	42	3	1	30	4	1	35	4	1	39	13	1	41	11	1	37	4	1	27	4	1	34	4

NOTES: ' -- ' indicates filter offline

1.2.8 Rossdale Filters 1 - 9 Turbidity (NTU)

February 2024

Filter	1			2			3			4			5			6			7			8			9		
Day	Min	Max	Avg	Min	Max	Avg	Min	Max	Avg	Min	Max	Avg	Min	Max	Avg	Min	Max	Avg	Min	Max	Avg	Min	Max	Avg	Min	Max	Avg
1	0.02	0.05	0.03	0.02	0.05	0.03	0.01	0.02	0.01	0.01	0.07	0.02	0.02	0.03	0.02	0.01	0.02	0.01	0.03	0.06	0.03	0.02	0.05	0.02	0.02	0.06	0.02
2	0.02	0.06	0.03	0.02	0.05	0.03	0.01	0.05	0.02	0.01	0.06	0.02	0.02	0.05	0.03	0.01	0.06	0.02	0.02	0.04	0.03	0.02	0.02	0.02	0.02	0.02	0.02
3	0.02	0.03	0.02	0.02	0.05	0.03	0.01	0.05	0.02	0.01	0.04	0.02	0.02	0.04	0.02	0.01	0.02	0.01	0.02	0.06	0.03	0.02	0.05	0.02	0.02	0.05	0.02
4	0.02	0.05	0.03	0.02	0.04	0.03	0.01	0.04	0.01	0.01	0.08	0.01	0.03	0.05	0.03	0.01	0.04	0.01	0.03	0.03	0.03	0.02	0.02	0.02	0.02	0.02	0.02
5	0.02	0.03	0.02	0.02	0.02	0.02	0.01	0.03	0.02	0.01	0.05	0.02	0.03	0.03	0.03	0.01	0.02	0.01	0.02	0.03	0.03	0.02	0.05	0.03	0.02	0.02	0.02
6	0.02	0.02	0.02	0.02	0.05	0.03	0.01	0.01	0.01	0.01	0.02	0.01	0.02	0.04	0.03	0.01	0.01	0.01	0.02	0.04	0.03	0.02	0.03	0.02	0.02	0.05	0.03
7	0.02	0.06	0.03	0.02	0.03	0.03	0.01	0.02	0.01	0.01	0.04	0.02	--	--	--	0.01	0.04	0.01	0.02	0.08	0.04	0.02	0.02	0.02	0.02	0.02	0.02
8	0.02	0.03	0.02	0.02	0.04	0.02	0.02	0.04	0.02	0.01	0.02	0.01	--	--	--	0.01	0.04	0.02	0.03	0.03	0.03	0.02	0.07	0.03	0.02	0.02	0.02
9	0.02	0.07	0.03	0.03	0.04	0.03	0.01	0.02	0.01	0.01	0.01	0.01	0.03	0.05	0.03	0.01	0.01	0.01	0.03	0.04	0.03	0.02	0.03	0.02	0.02	0.04	0.02
10	0.02	0.03	0.02	0.02	0.05	0.03	0.01	0.02	0.01	--	--	--	0.03	0.03	0.03	0.01	0.01	0.01	0.03	0.06	0.04	0.02	0.02	0.02	0.02	0.02	0.02
11	0.02	0.06	0.02	0.02	0.02	0.02	--	--	--	0.01	0.03	0.02	0.02	0.03	0.03	0.01	0.05	0.02	0.03	0.03	0.03	0.02	0.04	0.02	0.02	0.04	0.02
12	0.02	0.08	0.03	0.02	0.05	0.03	0.01	0.03	0.02	0.01	0.04	0.01	0.03	0.06	0.04	0.01	0.02	0.01	0.03	0.05	0.03	0.02	0.04	0.03	0.02	0.03	0.02
13	0.02	0.03	0.02	0.02	0.04	0.03	0.01	0.01	0.01	0.04	0.04	0.04	0.02	0.07	0.03	0.01	0.04	0.02	0.03	0.05	0.03	0.02	0.03	0.02	0.02	0.02	0.02
14	--	--	--	0.02	0.02	0.02	0.01	0.03	0.02	0.02	0.03	0.02	0.02	0.02	0.02	0.01	0.03	0.01	0.03	0.03	0.03	0.02	0.03	0.02	0.02	0.04	0.03
15	0.02	0.04	0.02	0.02	0.03	0.02	0.01	0.01	0.01	0.01	0.03	0.01	0.03	0.05	0.03	0.01	0.02	0.01	0.03	0.03	0.03	0.04	0.04	0.04	0.02	0.02	0.02
16	0.02	0.02	0.02	0.02	0.03	0.03	0.01	0.02	0.02	0.01	0.03	0.01	0.03	0.03	0.03	0.01	0.04	0.02	0.02	0.04	0.03	0.02	0.04	0.02	0.02	0.02	0.02
17	0.02	0.02	0.02	0.02	0.03	0.02	0.01	0.03	0.02	0.01	0.03	0.02	0.02	0.04	0.03	0.01	0.04	0.03	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
18	0.03	0.05	0.03	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.02	0.01	0.02	0.04	0.03	0.01	0.03	0.02	0.02	0.03	0.02	0.02	0.02	0.02	0.02	0.04	0.02
19	0.02	0.03	0.02	0.02	0.05	0.03	0.01	0.02	0.01	0.01	0.02	0.01	0.02	0.04	0.02	0.01	0.04	0.01	--	--	--	0.02	0.04	0.02	0.02	0.02	0.02
20	0.02	0.02	0.02	0.02	0.03	0.02	--	--	--	--	--	--	0.02	0.04	0.02	0.01	0.04	0.02	0.03	0.05	0.03	0.02	0.02	0.02	0.02	0.02	0.02
21	0.02	0.03	0.02	0.02	0.04	0.02	0.01	0.03	0.02	0.01	0.03	0.02	0.02	0.05	0.03	0.01	0.03	0.01	0.03	0.03	0.03	0.02	0.02	0.02	0.02	0.04	0.03
22	0.02	0.05	0.02	0.04	0.04	0.04	0.01	0.01	0.01	0.01	0.03	0.01	0.02	0.03	0.02	0.01	0.04	0.01	0.03	0.05	0.03	0.02	0.04	0.03	0.02	0.02	0.02
23	0.02	0.04	0.02	0.02	0.04	0.03	0.01	0.04	0.01	0.01	0.05	0.02	0.02	0.04	0.02	0.01	0.03	0.02	0.03	0.04	0.03	0.02	0.02	0.02	--	--	--
24	0.04	0.04	0.04	0.02	0.07	0.02	0.01	0.03	0.02	0.01	0.03	0.01	0.02	0.04	0.03	0.01	0.03	0.01	0.03	0.04	0.03	0.02	0.02	0.02	0.02	0.04	0.03
25	0.02	0.04	0.02	0.02	0.05	0.02	0.01	0.01	0.01	0.01	0.04	0.02	0.02	0.05	0.03	0.01	0.03	0.01	--	--	--	0.02	0.04	0.03	0.02	0.02	0.02
26	0.02	0.02	0.02	0.02	0.04	0.03	0.01	0.02	0.01	0.01	0.01	0.01	0.02	0.03	0.03	0.02	0.04	0.03	0.02	0.06	0.03	0.02	0.02	0.02	0.02	0.02	0.02
27	0.02	0.04	0.02	0.02	0.03	0.02	0.01	0.03	0.02	0.01	0.03	0.01	0.03	0.04	0.03	0.01	0.03	0.02	0.02	0.04	0.02	0.02	0.02	0.02	0.02	0.03	0.03
28	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
29	0.02	0.04	0.03	0.03	0.04	0.03	0.01	0.02	0.02	0.01	0.03	0.02	--	--	--	--	--	--	0.03	0.06	0.03	0.02	0.07	0.02	0.02	0.03	0.02
Monthly Min/Max/Avg	0.02	0.08	0.02	0.02	0.07	0.03	0.01	0.05	0.01	0.01	0.08	0.02	0.02	0.07	0.03	0.01	0.06	0.02	0.02	0.08	0.03	0.02	0.07	0.02	0.02	0.06	0.02

NOTES: ' -- ' indicates filter offline

1.2.9 E.L. Smith Filters 1 - 9 Turbidity (NTU)

February 2024

Filter	1			2			3			4			5			6			7			8			9		
Day	Min	Max	Avg	Min	Max	Avg	Min	Max	Avg	Min	Max	Avg	Min	Max	Avg	Min	Max	Avg	Min	Max	Avg	Min	Max	Avg	Min	Max	Avg
1	0.01	0.04	0.02	0.03	0.06	0.03	0.01	0.04	0.01	0.02	0.05	0.03	--	--	--	0.03	0.06	0.03	0.00	0.05	0.01	0.01	0.07	0.03	0.00	0.04	0.01
2	0.01	0.04	0.01	0.02	0.05	0.03	0.01	0.03	0.01	0.02	0.04	0.02	--	--	--	0.03	0.06	0.03	0.01	0.05	0.01	0.02	0.06	0.02	0.01	0.03	0.00
3	0.01	0.04	0.02	0.03	0.07	0.03	0.01	0.04	0.01	0.02	0.06	0.03	--	--	--	0.02	0.06	0.03	0.00	0.05	0.01	0.01	0.07	0.03	0.01	0.03	0.01
4	0.01	0.05	0.02	0.03	0.07	0.03	0.01	0.04	0.01	0.03	0.06	0.03	--	--	--	0.03	0.08	0.03	0.00	0.06	0.01	0.02	0.06	0.03	--	--	--
5	0.01	0.04	0.02	0.03	0.05	0.03	0.01	0.04	0.01	0.03	0.03	0.03	--	--	--	0.03	0.06	0.03	0.00	0.05	0.01	0.01	0.07	0.03	0.01	0.04	0.02
6	0.01	0.05	0.02	0.03	0.06	0.03	0.01	0.04	0.01	0.02	0.05	0.03	--	--	--	0.03	0.04	0.03	0.00	0.02	0.01	0.00	0.07	0.03	0.00	0.01	0.00
7	0.01	0.02	0.02	0.03	0.06	0.03	0.01	0.02	0.01	0.02	0.04	0.02	--	--	--	0.03	0.06	0.04	0.00	0.05	0.01	0.02	0.02	0.02	0.01	0.04	0.01
8	0.01	0.01	0.01	0.03	0.05	0.03	0.01	0.05	0.02	0.03	0.05	0.03	--	--	--	0.03	0.03	0.03	0.00	0.01	0.00	0.00	0.07	0.03	0.00	0.01	0.00
9	0.02	0.05	0.02	0.03	0.07	0.04	0.01	0.01	0.01	0.03	0.05	0.03	--	--	--	0.03	0.06	0.04	0.01	0.06	0.02	0.01	0.03	0.02	0.01	0.05	0.01
10	0.01	0.05	0.02	0.03	0.04	0.03	0.01	0.04	0.02	0.03	0.06	0.03	--	--	--	0.03	0.03	0.03	0.00	0.05	0.00	0.02	0.07	0.03	0.00	0.05	0.01
11	0.02	0.02	0.02	0.03	0.07	0.03	0.01	0.04	0.01	0.03	0.03	0.03	--	--	--	0.03	0.06	0.04	0.00	0.05	0.01	0.02	0.03	0.02	0.00	0.02	0.01
12	0.01	0.04	0.02	0.03	0.03	0.03	0.01	0.04	0.01	0.03	0.06	0.03	--	--	--	0.03	0.06	0.03	0.00	0.01	0.00	0.01	0.07	0.03	0.00	0.04	0.01
13	0.01	0.02	0.02	0.03	0.07	0.04	0.01	0.04	0.01	0.03	0.05	0.03	--	--	--	0.03	0.05	0.04	0.00	0.05	0.01	0.00	0.06	0.02	0.00	0.02	0.01
14	0.01	0.04	0.02	0.03	0.05	0.03	0.01	0.03	0.01	0.03	0.04	0.03	--	--	--	0.03	0.05	0.03	0.00	0.05	0.01	0.01	0.05	0.03	0.00	0.08	0.02
15	0.01	0.03	0.02	0.03	0.06	0.03	0.01	0.03	0.01	0.03	0.09	0.03	--	--	--	0.03	0.05	0.03	0.00	0.01	0.00	0.01	0.02	0.02	0.01	0.01	0.00
16	0.01	0.02	0.02	0.03	0.03	0.03	0.01	0.03	0.01	0.03	0.04	0.03	--	--	--	0.03	0.05	0.03	0.00	0.04	0.01	0.01	0.06	0.03	0.01	0.03	0.01
17	0.01	0.03	0.02	0.03	0.05	0.03	0.01	0.01	0.01	0.03	0.05	0.03	--	--	--	0.03	0.05	0.03	0.00	0.00	0.00	0.01	0.06	0.02	0.01	0.01	0.00
18	0.01	0.02	0.02	0.03	0.03	0.03	0.01	0.03	0.01	0.00	0.09	0.03	--	--	--	0.03	0.05	0.03	0.01	0.04	0.01	0.02	0.05	0.03	0.01	0.04	0.00
19	0.01	0.02	0.01	0.03	0.06	0.04	0.01	0.01	0.01	0.03	0.05	0.03	--	--	--	0.03	0.05	0.04	0.00	0.01	0.01	0.02	0.03	0.02	0.00	0.03	0.01
20	0.02	0.04	0.02	0.03	0.03	0.03	0.01	0.03	0.01	0.03	0.09	0.03	--	--	--	0.03	0.09	0.04	0.01	0.01	0.01	0.02	0.06	0.03	0.01	0.04	0.01
21	0.01	0.04	0.02	0.03	0.06	0.04	0.01	0.01	0.01	0.03	0.04	0.03	--	--	--	0.03	0.05	0.04	0.01	0.05	0.01	0.02	0.03	0.02	0.00	0.01	0.01
22	0.01	0.03	0.02	0.03	0.03	0.03	0.01	0.03	0.01	0.02	0.03	0.03	--	--	--	0.04	0.05	0.04	0.00	0.04	0.01	0.01	0.06	0.03	0.00	0.04	0.01
23	0.02	0.04	0.02	0.03	0.05	0.03	0.01	0.01	0.01	0.03	0.03	0.03	--	--	--	0.03	0.07	0.04	0.00	0.03	0.01	0.01	0.02	0.02	0.00	0.01	0.00
24	0.01	0.02	0.01	0.03	0.06	0.03	0.01	0.03	0.01	0.03	0.05	0.03	--	--	--	0.03	0.04	0.03	0.00	0.04	0.01	0.01	0.06	0.03	0.01	0.04	0.01
25	0.01	0.03	0.02	0.03	0.05	0.03	0.01	0.01	0.01	0.02	0.04	0.02	--	--	--	0.03	0.05	0.03	0.00	0.01	0.00	0.02	0.06	0.02	0.01	0.01	0.00
26	0.01	0.03	0.01	0.03	0.06	0.03	0.01	0.03	0.01	0.02	0.04	0.03	--	--	--	0.03	0.05	0.03	0.00	0.04	0.01	0.02	0.04	0.02	0.00	0.04	0.01
27	0.01	0.04	0.02	0.03	0.05	0.03	0.01	0.04	0.01	0.03	0.03	0.03	--	--	--	0.03	0.04	0.03	0.00	0.05	0.01	0.02	0.06	0.03	0.00	0.04	0.01
28	0.01	0.04	0.02	0.03	0.07	0.04	0.01	0.03	0.01	0.03	0.05	0.03	--	--	--	0.03	0.06	0.04	0.00	0.05	0.01	0.01	0.06	0.03	0.00	0.01	0.00
29	0.02	0.04	0.02	0.03	0.06	0.03	0.01	0.02	0.01	0.03	0.05	0.03	--	--	--	0.04	0.06	0.04	0.00	0.03	0.01	0.02	0.03	0.02	0.00	0.04	0.01
Monthly Min/Max/Avg	0.01	0.05	0.02	0.02	0.07	0.03	0.01	0.05	0.01	0.00	0.09	0.03	--	--	--	0.02	0.09	0.03	0.01	0.06	0.01	0.01	0.07	0.03	0.01	0.08	0.01

NOTES: ' -- ' indicates filter offline

1.2.10 E.L. Smith Filters 10 - 18 Turbidity (NTU)

February 2024

Filter	10			11			12			13			14			15			16			17			18		
Day	**Min**	**Max**	**Avg**	**Min**	**Max**	**Avg**	**Min**	**Max**	**Avg**	**Min**	**Max**	**Avg**	**Min**	**Max**	**Avg**	**Min**	**Max**	**Avg**	**Min**	**Max**	**Avg**	**Min**	**Max**	**Avg**	**Min**	**Max**	**Avg**
1	0.02	0.06	0.03	0.01	0.06	0.01	0.01	0.06	0.02	0.03	0.07	0.03	0.04	0.09	0.05	0.03	0.07	0.04	0.03	0.08	0.04	0.03	0.08	0.04	0.04	0.08	0.04
2	0.02	0.06	0.03	0.01	0.05	0.01	0.01	0.05	0.01	0.03	0.06	0.03	0.04	0.08	0.04	0.03	0.08	0.04	0.03	0.08	0.04	0.03	0.08	0.04	0.04	0.08	0.04
3	0.02	0.06	0.03	0.01	0.05	0.01	0.01	0.05	0.02	0.03	0.06	0.03	0.04	0.09	0.05	0.03	0.08	0.04	0.03	0.08	0.04	0.03	0.08	0.04	0.04	0.08	0.04
4	0.03	0.07	0.03	0.00	0.06	0.01	0.01	0.06	0.01	0.03	0.07	0.03	0.04	0.09	0.05	0.04	0.07	0.04	0.03	0.08	0.04	0.03	0.08	0.04	0.04	0.08	0.04
5	0.02	0.06	0.03	0.01	0.08	0.02	0.01	0.05	0.01	0.03	0.07	0.03	0.04	0.07	0.05	0.04	0.04	0.04	0.04	0.08	0.04	0.04	0.05	0.04	0.04	0.08	0.05
6	0.03	0.03	0.03	0.00	0.06	0.01	0.01	0.05	0.01	0.03	0.07	0.03	0.05	0.08	0.05	0.04	0.06	0.04	0.04	0.04	0.04	0.04	0.08	0.04	0.04	0.04	0.04
7	0.02	0.06	0.03	0.00	0.04	0.01	0.01	0.06	0.02	0.03	0.03	0.03	0.04	0.05	0.04	0.04	0.04	0.04	0.04	0.08	0.04	0.04	0.04	0.04	0.04	0.08	0.05
8	0.03	0.04	0.03	0.00	0.06	0.01	0.01	0.06	0.02	0.03	0.03	0.03	0.05	0.08	0.05	0.04	0.07	0.04	0.04	0.05	0.04	0.04	0.08	0.05	0.04	0.04	0.04
9	0.03	0.07	0.04	0.00	0.01	0.01	0.01	0.01	0.01	0.03	0.07	0.04	0.05	0.08	0.05	0.04	0.04	0.04	0.04	0.08	0.04	0.04	0.04	0.04	0.04	0.08	0.05
10	0.03	0.04	0.03	0.00	0.06	0.02	0.01	0.06	0.02	0.03	0.03	0.03	0.05	0.08	0.05	0.04	0.07	0.05	0.04	0.05	0.04	0.04	0.08	0.04	0.04	0.04	0.04
11	0.03	0.07	0.04	0.00	0.01	0.01	0.01	0.05	0.01	0.03	0.07	0.03	0.04	0.08	0.05	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.08	0.04
12	0.03	0.03	0.03	0.00	0.06	0.01	0.01	0.01	0.01	0.03	0.03	0.03	0.05	0.06	0.05	0.04	0.08	0.04	0.04	0.08	0.04	0.04	0.08	0.04	0.04	0.04	0.04
13	0.03	0.07	0.03	0.00	0.05	0.01	0.01	0.05	0.02	0.03	0.06	0.03	0.04	0.07	0.05	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.08	0.04
14	0.03	0.06	0.03	0.00	0.03	0.01	0.01	0.04	0.01	0.03	0.06	0.04	0.04	0.05	0.05	0.04	0.07	0.05	0.04	0.07	0.04	0.04	0.08	0.04	0.04	0.04	0.04
15	0.02	0.03	0.03	0.00	0.04	0.01	0.01	0.03	0.01	0.03	0.03	0.03	0.05	0.09	0.06	0.04	0.04	0.04	0.04	0.04	0.04	0.03	0.04	0.04	0.04	0.08	0.04
16	0.02	0.03	0.02	0.01	0.01	0.00	0.01	0.04	0.01	0.03	0.06	0.03	0.05	0.05	0.05	0.03	0.04	0.04	0.03	0.07	0.04	0.04	0.07	0.04	0.04	0.04	0.04
17	0.02	0.06	0.03	0.01	0.05	0.00	0.01	0.02	0.01	0.03	0.04	0.03	0.05	0.09	0.05	0.04	0.07	0.04	0.04	0.04	0.04	0.03	0.04	0.03	0.04	0.07	0.04
18	0.03	0.04	0.03	0.00	0.03	0.01	0.01	0.04	0.02	0.03	0.03	0.03	0.05	0.05	0.05	0.04	0.04	0.04	0.04	0.04	0.04	0.03	0.07	0.04	0.04	0.04	0.04
19	0.03	0.06	0.03	0.00	0.00	0.00	0.01	0.01	0.01	0.03	0.06	0.03	0.05	0.05	0.05	0.04	0.07	0.04	0.04	0.07	0.04	0.04	0.04	0.04	0.04	0.04	0.04
20	0.03	0.04	0.03	0.01	0.05	0.01	0.01	0.05	0.02	0.03	0.06	0.03	0.05	0.09	0.06	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.08	0.04	0.04	0.08	0.05
21	0.03	0.05	0.04	0.00	0.01	0.00	0.01	0.01	0.01	0.03	0.03	0.03	0.05	0.05	0.05	0.04	0.08	0.05	0.04	0.07	0.04	0.04	0.05	0.04	0.04	0.07	0.05
22	0.03	0.03	0.03	0.00	0.05	0.01	0.01	0.05	0.01	0.03	0.06	0.03	0.05	0.09	0.06	0.04	0.04	0.04	0.04	0.04	0.04	0.03	0.07	0.04	0.04	0.05	0.04
23	0.03	0.06	0.03	0.01	0.05	0.01	0.01	0.05	0.01	0.03	0.03	0.03	0.05	0.09	0.05	0.04	0.08	0.04	0.04	0.07	0.04	0.03	0.04	0.04	0.04	0.08	0.05
24	0.03	0.03	0.03	0.00	0.05	0.01	0.01	0.01	0.01	0.03	0.06	0.03	0.05	0.07	0.05	0.04	0.04	0.04	0.04	0.07	0.04	0.03	0.08	0.04	0.04	0.04	0.04
25	0.02	0.06	0.04	0.00	0.05	0.01	0.01	0.04	0.01	0.03	0.03	0.03	0.05	0.09	0.05	0.04	0.08	0.04	0.04	0.05	0.04	0.03	0.04	0.04	0.04	0.08	0.05
26	0.03	0.06	0.04	0.01	0.00	0.00	0.01	0.04	0.01	0.03	0.06	0.03	0.05	0.06	0.05	0.04	0.04	0.04	0.03	0.07	0.04	0.03	0.08	0.04	0.04	0.04	0.04
27	0.03	0.03	0.03	0.00	0.05	0.01	0.01	0.05	0.01	0.03	0.06	0.03	0.05	0.09	0.06	0.04	0.08	0.04	0.04	0.04	0.04	0.03	0.08	0.04	0.04	0.08	0.05
28	0.03	0.07	0.03	0.00	0.05	0.01	0.01	0.05	0.01	0.03	0.04	0.03	0.05	0.09	0.05	0.04	0.08	0.04	0.04	0.07	0.04	0.03	0.07	0.04	0.04	0.08	0.05
29	0.02	0.07	0.03	0.00	0.05	0.01	0.01	0.05	0.01	0.03	0.06	0.04	0.05	0.05	0.05	0.04	0.08	0.04	0.04	0.07	0.04	0.03	0.08	0.04	0.04	0.04	0.04
Monthly Min/Max/Avg	0.02	0.07	0.03	0.01	0.08	0.01	0.01	0.06	0.01	0.03	0.07	0.03	0.04	0.09	0.05	0.03	0.08	0.04	0.03	0.08	0.04	0.03	0.08	0.04	0.04	0.08	0.04

NOTES: ' -- ' indicates filter offline

1.2.11 Combined Filter Effluent Water Quality

February 2024

Day	Rossdale						E.L. Smith					
	Particle Counts (no./mL,>2um)			Turbidity (NTU)			Particle Counts (no./mL,>2um)			Turbidity (NTU)		
	Min	Max	Avg	Min	Max	Avg	Min	Max	Avg	Min	Max	Avg
1	1	7	2	0.04	0.10	0.04	1	26	3	0.01	0.04	0.02
2	1	10	3	0.04	0.08	0.04	2	5	3	0.02	0.03	0.02
3	1	6	3	0.04	0.06	0.05	3	7	5	0.02	0.03	0.03
4	1	7	2	0.04	0.08	0.04	3	8	6	0.03	0.03	0.03
5	1	6	1	0.04	0.07	0.05	5	10	6	0.03	0.03	0.03
6	1	6	2	0.04	0.06	0.05	6	10	8	0.02	0.03	0.03
7	1	18	3	0.04	0.06	0.04	5	10	7	0.02	0.03	0.03
8	2	5	3	0.04	0.08	0.04	5	11	8	0.02	0.03	0.03
9	1	5	2	0.04	0.07	0.05	5	10	7	0.02	0.03	0.03
10	1	1	1	0.04	0.07	0.04	6	10	8	0.03	0.03	0.03
11	1	9	3	0.04	0.04	0.04	5	9	6	0.03	0.03	0.03
12	1	8	3	0.04	0.10	0.05	4	8	6	0.03	0.03	0.03
13	1	3	1	0.04	0.09	0.04	3	8	5	0.02	0.03	0.03
14	1	7	2	0.04	0.08	0.05	1	12	4	0.03	0.04	0.04
15	1	8	6	0.04	0.08	0.05	2	5	3	0.02	0.03	0.02
16	1	4	1	0.04	0.06	0.05	2	6	3	0.02	0.03	0.03
17	1	8	1	0.04	0.07	0.04	2	5	3	0.02	0.03	0.02
18	1	4	1	0.04	0.06	0.05	3	7	4	0.02	0.03	0.03
19	1	3	1	0.04	0.06	0.05	2	6	3	0.02	0.03	0.02
20	1	3	1	0.04	0.05	0.05	3	9	4	0.03	0.03	0.03
21	1	5	1	0.04	0.07	0.05	1	10	3	0.01	0.04	0.02
22	1	9	2	0.04	0.07	0.04	2	7	3	0.03	0.03	0.03
23	1	7	3	0.04	0.09	0.04	2	7	4	0.02	0.03	0.03
24	1	7	2	0.04	0.10	0.04	2	6	3	0.02	0.03	0.03
25	1	5	1	0.04	0.10	0.05	2	7	3	0.02	0.03	0.03
26	1	4	1	0.04	0.06	0.05	2	6	3	0.02	0.03	0.03
27	1	11	3	0.04	0.06	0.05	2	7	4	0.03	0.03	0.03
28	1	1	1	0.06	0.05	0.08	3	7	4	0.03	0.03	0.03
29	1	19	3	0.04	0.05	0.06	3	9	5	0.03	0.03	0.03
Monthly Min/Max/Avg	1	19	2	0.04	0.10	0.05	1	26	5	0.01	0.04	0.03

NOTES: ' -- ' indicates plant offline

1.2.12 Rossdale UV Disinfection - Filters 1 - 3

February 2024

Filter	1						2						3						Transmittance (%)		
Day	Dosage (mJ/cm²)			Flow (MLD)			Dosage (mJ/cm²)			Flow (MLD)			Dosage (mJ/cm²)			Flow (MLD)					
	Min	Max	Avg	Min	Max	Total	Min	Max	Avg	Min	Max	Total	Min	Max	Avg	Min	Max	Total	Min	Max	Avg
1	35.2	51.9	41.1	13.0	23.2	10.9	35.3	83.7	36.1	16.9	24.2	19.9	35.2	37.6	36.0	18.3	21.6	19.8	93.8	94.2	94.0
2	34.0	41.1	35.8	19.2	23.5	20.4	35.2	41.4	36.4	17.9	24.5	18.8	35.1	48.1	35.9	15.3	25.0	19.1	93.8	94.5	94.1
3	35.1	38.9	36.3	20.1	23.0	20.8	35.2	52.9	35.9	13.5	24.0	19.2	35.0	40.1	36.1	11.8	23.5	19.1	94.2	94.6	94.4
4	35.0	41.7	37.1	18.9	26.8	18.2	35.4	40.0	38.2	18.9	23.3	20.1	35.4	46.7	40.7	14.6	21.4	13.7	94.2	94.7	94.4
5	38.1	42.6	40.3	17.9	20.4	19.0	38.8	42.8	40.5	17.7	19.8	18.7	34.8	36.1	35.7	20.7	24.7	22.5	94.1	94.7	94.4
6	41.2	53.0	42.2	12.6	18.3	8.6	34.3	39.9	38.1	11.9	31.3	19.9	35.0	36.1	35.7	18.4	22.8	21.2	93.4	94.4	94.1
7	35.0	39.0	35.6	19.4	27.9	16.3	34.9	36.2	35.6	20.6	28.0	24.0	35.3	37.5	36.2	16.9	18.8	6.1	93.4	93.8	93.5
8	35.0	35.7	35.6	22.4	25.3	12.6	35.4	42.5	39.0	16.4	20.8	18.2	34.5	38.8	35.6	17.9	25.9	17.6	93.4	94.1	93.7
9	35.2	36.1	35.6	23.1	23.9	7.7	40.4	74.5	42.1	15.4	17.0	1.6	35.1	36.1	35.7	19.1	24.3	20.9	93.4	94.0	93.8
10	35.1	36.1	35.6	21.8	25.5	23.2	34.9	37.2	35.6	20.3	28.5	23.9	35.4	39.5	38.6	11.6	19.5	12.1	93.8	94.0	93.9
11	35.0	41.4	36.1	18.0	22.3	18.8	35.2	37.0	35.7	19.7	24.5	22.7	--	--	--	--	--	--	93.8	94.2	93.9
12	35.0	36.3	35.6	23.1	28.0	18.4	36.0	60.9	37.2	18.9	20.1	4.1	34.6	39.2	35.6	17.6	27.1	22.5	93.8	94.3	94.0
13	35.1	43.0	36.0	17.4	23.6	18.7	35.1	37.9	35.7	19.9	28.1	22.6	35.2	51.5	35.8	14.7	22.7	12.4	94.3	94.4	94.4
14	--	--	--	--	--	--	35.4	41.2	37.0	18.8	25.2	22.1	35.1	36.2	35.7	21.8	30.2	20.9	94.4	94.8	94.6
15	35.2	43.2	36.3	19.1	25.8	19.0	39.8	43.7	41.2	17.9	19.5	4.2	35.4	43.1	37.8	18.0	22.8	20.3	94.2	95.1	94.6
16	35.6	45.3	40.4	19.6	24.6	22.0	35.3	43.2	36.0	20.5	29.1	7.0	42.7	47.5	45.1	16.6	18.2	7.5	95.1	95.5	95.3
17	44.9	50.5	47.7	17.3	19.8	6.2	35.2	40.4	38.3	21.7	27.6	23.5	37.5	39.4	38.6	21.1	22.2	13.7	95.2	95.5	95.4
18	36.9	45.4	38.2	20.0	24.2	3.1	40.2	53.4	43.9	15.2	21.7	19.4	38.6	49.1	42.1	15.6	21.1	19.1	95.1	95.4	95.3
19	35.2	38.6	36.3	22.7	27.5	24.1	35.3	52.7	38.9	15.4	28.2	14.9	39.0	48.4	43.6	15.8	19.7	7.2	94.7	95.4	95.0
20	35.4	43.8	40.5	18.0	23.6	20.0	35.4	43.6	38.6	18.0	27.3	21.9	--	--	--	--	--	--	94.5	94.8	94.7
21	43.4	48.1	46.3	16.1	18.3	6.7	38.8	46.7	43.1	16.3	20.0	14.8	35.1	36.9	35.7	21.9	26.8	22.3	94.7	94.8	94.8
22	33.8	36.7	35.6	23.5	30.2	24.6	35.4	35.7	35.6	24.1	24.4	0.2	35.2	41.8	37.4	18.2	22.9	20.7	94.8	95.1	95.0
23	35.6	46.4	40.2	18.1	24.2	20.6	35.3	36.3	35.7	22.9	26.4	24.2	36.1	51.6	41.3	15.4	22.5	1.9	95.0	95.3	95.2
24	37.1	38.9	37.5	23.5	24.2	18.2	35.7	45.5	40.3	18.2	23.7	20.6	35.2	38.0	36.1	20.6	24.4	22.2	95.0	95.2	95.1
25	37.0	42.1	39.4	21.1	24.4	22.6	45.1	50.1	47.5	16.7	18.3	5.4	37.7	46.6	42.5	17.3	21.4	19.0	95.1	95.5	95.3
26	37.7	51.2	43.3	17.5	23.8	21.0	34.7	39.3	35.8	23.9	28.1	10.6	44.5	48.1	46.3	16.8	18.1	2.2	95.4	95.7	95.6
27	37.7	54.5	46.1	16.7	24.8	8.7	36.9	40.9	38.7	21.6	24.6	20.7	33.0	54.5	35.8	17.5	26.4	14.5	95.4	95.8	95.7
28	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	95.8	95.8	95.8
29	35.2	40.5	36.6	20.4	27.3	12.2	35.3	38.1	36.9	21.3	24.3	4.1	35.3	88.5	35.8	21.7	24.4	11.9	94.4	95.8	94.9
Monthly Total						442.7						447.2						410.4			
Monthly Min/Max/ Avg	33.8	54.5	38.8	12.6	30.2		34.3	83.7	38.3	11.9	31.3		33.0	88.5	38.1	11.6	30.2		93.4	95.8	94.6

NOTES: - Each filter has a UV reactor

- Transmittance (%) is a grab sample of the filter effluent prior to the UV reactor of a random online filter

' -- ' indicates filter and UV reactor offline

1.2.13 Rossdale UV Disinfection - Filters 4 - 6

February 2024

Filter	4						5						6						Transmittance (%)		
Day	Dosage (mJ/cm²)			Flow (MLD)			Dosage (mJ/cm²)			Flow (MLD)			Dosage (mJ/cm²)			Flow (MLD)					
	Min	Max	Avg	Min	Max	Total	Min	Max	Avg	Min	Max	Total	Min	Max	Avg	Min	Max	Total	Min	Max	Avg
1	38.6	88.0	43.6	13.6	21.9	17.5	34.1	39.9	36.9	18.6	23.1	20.7	33.9	36.4	35.6	18.6	22.8	20.6	93.8	94.2	94.0
2	38.9	46.5	42.0	18.9	22.1	14.3	34.8	44.0	38.2	16.6	24.1	17.0	34.9	38.5	36.2	17.5	25.0	12.8	93.8	94.5	94.1
3	40.2	49.4	42.8	17.1	21.9	17.7	33.6	45.7	38.9	16.6	23.4	20.2	35.1	35.9	35.6	21.6	25.6	10.6	94.2	94.6	94.4
4	37.3	50.6	45.0	16.6	23.4	18.4	35.3	45.0	39.4	16.1	22.8	12.7	35.1	42.0	36.7	15.9	21.7	14.9	94.2	94.7	94.4
5	40.1	50.2	43.2	17.3	21.7	17.0	37.9	46.1	41.7	16.1	20.3	18.2	35.0	36.3	35.6	19.1	24.6	21.6	94.1	94.7	94.4
6	35.1	44.3	38.3	19.2	25.1	22.2	43.7	49.6	45.6	13.4	16.2	14.1	35.2	40.0	36.9	15.3	19.1	17.5	93.4	94.4	94.1
7	35.1	47.4	37.1	15.8	30.4	15.9	--	--	--	--	--	--	39.0	47.8	42.5	12.2	15.5	7.5	93.4	93.8	93.5
8	35.1	41.5	36.9	19.8	27.7	23.7	--	--	--	--	--	--	35.1	36.0	35.6	21.1	30.4	24.9	93.4	94.1	93.7
9	39.1	64.3	44.1	11.6	20.1	12.5	35.3	37.2	35.7	21.7	23.0	13.2	35.1	36.5	35.6	18.6	24.7	20.4	93.4	94.0	93.8
10	--	--	--	--	--	--	35.3	37.9	36.2	18.9	22.6	20.6	35.2	52.7	36.1	11.9	18.8	2.5	93.8	94.0	93.9
11	35.1	38.8	35.8	22.2	26.3	19.8	37.2	47.7	40.4	14.6	19.0	17.5	34.7	36.4	35.6	21.7	29.8	13.6	93.8	94.2	93.9
12	35.9	43.2	39.2	19.2	23.4	19.0	35.0	47.9	37.7	14.6	23.4	2.6	34.0	36.0	35.6	20.7	27.4	23.9	93.8	94.3	94.0
13	--	--	--	--	--	0.0	35.3	38.6	35.8	20.8	25.4	22.7	35.2	37.4	35.6	19.2	29.8	8.1	94.3	94.4	94.4
14	36.4	43.2	39.9	21.1	25.2	13.6	36.1	39.4	36.9	19.5	21.2	3.8	35.1	36.0	35.6	22.3	30.7	25.9	94.4	94.8	94.6
15	37.3	48.2	42.1	19.8	24.4	22.0	35.3	36.6	35.7	23.6	27.6	14.6	35.3	47.1	39.2	17.1	22.3	19.6	94.2	95.1	94.6
16	47.5	57.2	52.0	17.2	19.9	12.1	36.6	48.4	42.1	18.4	23.8	21.0	44.9	56.2	46.7	13.5	17.1	0.9	95.1	95.5	95.3
17	53.6	59.3	55.4	17.3	18.1	8.5	47.3	55.2	51.3	11.5	18.5	8.5	35.2	37.5	35.6	24.8	31.1	23.0	95.2	95.5	95.4
18	46.6	58.0	49.4	16.7	20.9	19.7	37.2	40.2	38.4	21.5	23.8	10.2	35.4	46.5	38.3	16.8	24.9	21.5	95.1	95.4	95.3
19	49.4	57.9	53.4	16.1	18.5	10.0	35.4	42.4	39.4	20.1	24.6	21.5	43.2	47.5	45.1	15.9	17.2	4.7	94.7	95.4	95.0
20	--	--	--	--	--	--	39.7	49.4	45.6	15.8	20.3	17.2	35.1	36.0	35.6	23.9	26.4	14.7	94.5	94.8	94.7
21	37.5	43.4	40.8	21.0	24.8	14.9	35.4	58.4	40.3	12.7	26.6	7.8	34.8	40.2	37.4	19.0	24.1	20.9	94.7	94.8	94.8
22	37.3	53.2	41.6	16.9	25.4	22.6	35.4	40.5	36.7	20.8	26.1	23.6	38.3	44.3	40.4	17.8	20.2	11.3	94.8	95.1	95.0
23	37.1	53.2	40.5	16.9	25.5	21.3	40.3	50.5	42.7	15.8	20.8	11.4	35.3	38.8	36.0	20.5	30.1	11.6	95.0	95.3	95.2
24	42.0	49.6	45.8	19.1	22.8	20.3	38.0	39.4	38.4	22.6	23.4	22.8	35.1	39.3	36.5	21.1	27.5	24.1	95.0	95.2	95.1
25	40.7	47.8	45.3	20.9	24.8	16.1	38.4	43.3	40.4	20.5	23.3	22.0	38.4	47.5	42.8	17.1	21.5	13.2	95.1	95.5	95.3
26	41.6	56.0	47.5	18.2	24.2	21.5	43.0	58.3	50.6	15.3	20.6	17.0	35.3	35.9	35.6	26.0	30.2	2.3	95.4	95.7	95.6
27	54.0	60.2	57.1	16.3	18.7	12.1	38.6	49.4	44.0	21.0	24.3	5.3	35.2	41.6	38.4	21.6	29.6	26.2	95.4	95.8	95.7
28	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	95.8	95.8	95.8
29	36.6	50.0	40.4	17.9	25.8	22.4	--	--	--	--	--	--	--	--	--	--	--	--	94.4	95.8	94.9
Monthly Total						435.1						386.3						418.8			
Monthly Min/Max/ Avg	35.1	88.0	44.0	11.6	30.4		33.6	58.4	40.4	11.5	27.6		33.9	56.2	37.6	11.9	31.1		93.4	95.8	94.6

NOTES: - Each filter has a UV reactor

- Transmittance (%) is a grab sample of the filter effluent prior to the UV reactor of a random online filter

' -- ' indicates filter and UV reactor offline

1.2.14 Rossdale UV Disinfection - Filters 7 - 9

February 2024

Filter	7						8						9						Transmittance (%)		
Day	Dosage (mJ/cm²)			Flow (MLD)			Dosage (mJ/cm²)			Flow (MLD)			Dosage (mJ/cm²)			Flow (MLD)					
	Min	Max	Avg	Min	Max	Total	Min	Max	Avg	Min	Max	Total	Min	Max	Avg	Min	Max	Total	Min	Max	Avg
1	35.1	43.0	36.5	22.8	24.6	20.0	34.4	39.9	35.6	17.2	27.9	23.9	35.1	37.7	35.6	19.0	26.1	21.9	93.8	94.2	94.0
2	35.0	38.6	36.0	18.6	22.5	20.6	35.1	39.4	36.1	18.2	25.1	21.2	35.1	36.9	35.7	19.4	24.4	21.5	93.8	94.5	94.1
3	35.2	44.4	38.7	16.3	24.2	17.6	34.8	48.2	36.2	14.1	25.9	21.2	35.0	40.6	37.1	17.4	28.0	18.4	94.2	94.6	94.4
4	35.2	40.9	36.7	18.2	26.4	21.4	35.2	42.4	38.2	17.0	25.3	20.4	35.1	39.4	36.4	18.7	27.6	22.4	94.2	94.7	94.4
5	39.0	46.0	42.4	15.5	19.0	17.1	35.3	38.3	38.0	12.1	25.6	9.3	38.4	38.4	41.2	11.7	19.0	12.3	94.1	94.7	94.4
6	44.5	45.7	45.7	11.1	15.8	3.4	35.1	36.1	35.6	23.5	28.0	25.8	34.9	36.1	35.6	20.9	31.4	23.1	93.4	94.4	94.1
7	35.1	37.1	35.6	20.5	29.2	21.6	35.1	36.1	35.6	18.5	24.8	21.3	35.1	36.2	35.6	20.9	28.0	24.1	93.4	93.8	93.5
8	35.0	36.1	35.6	20.6	26.7	23.4	35.2	45.9	35.7	14.0	28.4	13.7	35.3	38.9	35.7	17.0	21.5	4.8	93.4	94.1	93.7
9	35.2	62.3	36.7	17.6	21.1	8.2	35.1	36.1	35.6	22.2	27.2	23.8	35.0	36.2	35.6	21.6	30.4	27.1	93.4	94.0	93.8
10	35.2	35.5	35.7	20.5	28.8	9.1	35.2	36.1	35.7	19.1	22.6	20.9	35.1	36.1	35.6	20.9	27.1	23.6	93.8	94.0	93.9
11	35.1	36.1	35.6	22.8	28.5	26.1	35.4	41.4	36.0	16.2	19.6	8.7	35.1	36.1	35.6	19.9	30.9	7.5	93.8	94.2	93.9
12	35.1	51.3	35.6	13.0	23.6	13.4	35.1	36.7	35.6	20.9	26.0	9.8	35.0	36.1	35.6	24.9	30.6	27.9	93.8	94.3	94.0
13	35.0	36.1	35.6	24.3	28.9	17.5	35.1	36.1	35.6	23.6	28.3	25.3	35.2	40.7	35.6	17.3	25.5	9.2	94.3	94.4	94.4
14	35.2	36.7	35.6	21.5	28.4	24.9	35.2	41.5	36.1	13.4	25.0	16.1	35.0	36.1	35.6	25.3	29.9	8.8	94.4	94.8	94.6
15	35.3	45.7	37.5	16.7	21.9	7.6	34.1	38.8	38.1	20.8	21.3	0.2	35.0	36.4	35.6	23.8	29.5	26.7	94.2	95.1	94.6
16	35.2	36.1	35.6	25.4	30.1	14.9	34.9	38.8	35.7	20.9	30.2	27.9	35.2	43.1	38.2	19.1	24.2	21.5	95.1	95.5	95.3
17	42.2	43.9	43.0	22.2	27.6	24.4	35.1	40.8	38.0	20.4	25.8	22.6	42.2	43.9	43.4	18.7	19.4	2.3	95.2	95.5	95.4
18	37.9	43.5	40.2	18.9	22.3	12.9	40.5	43.4	41.9	12.0	20.6	1.6	35.0	37.8	35.7	21.2	29.6	27.0	95.1	95.4	95.3
19	--	--	--	--	--	--	35.2	36.2	35.7	24.2	29.7	20.3	34.1	37.4	35.8	21.4	25.9	22.8	94.7	95.4	95.0
20	35.1	36.6	35.7	21.4	29.5	23.8	35.2	36.0	35.7	21.5	28.5	23.9	35.4	51.4	36.0	13.6	22.1	1.9	94.5	94.8	94.7
21	33.3	40.2	37.5	19.0	22.8	20.5	35.4	40.8	38.1	18.3	21.7	14.0	35.0	36.1	35.6	25.9	28.3	16.4	94.7	94.8	94.8
22	35.3	38.6	36.8	20.3	29.9	4.4	35.0	40.7	35.7	20.3	30.1	11.8	34.9	35.9	35.7	24.3	29.2	24.0	94.8	95.1	95.0
23	34.7	36.3	35.6	24.4	29.1	26.8	35.2	36.1	35.7	23.5	28.7	26.0	--	--	--	--	--	--	95.0	95.3	95.2
24	35.2	40.2	36.8	20.2	24.6	16.1	35.4	39.4	36.8	20.1	23.7	10.5	35.0	36.3	35.7	24.7	28.3	14.0	95.0	95.2	95.1
25	--	--	--	--	--	--	35.3	40.7	35.8	20.9	26.2	9.4	35.1	36.8	35.7	23.3	28.6	25.8	95.1	95.5	95.3
26	35.1	36.3	35.7	24.3	28.9	24.5	35.2	37.9	36.1	23.2	27.5	25.0	35.4	45.6	39.1	18.0	23.7	13.7	95.4	95.7	95.6
27	35.9	42.0	38.9	13.3	25.0	20.9	37.6	42.2	39.9	20.3	23.6	16.2	35.2	43.0	39.1	19.4	26.7	8.1	95.4	95.8	95.7
28	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	95.8	95.8	95.8
29	35.0	36.1	35.6	24.2	28.8	24.9	34.9	36.1	35.6	24.2	29.8	26.3	34.3	36.2	35.6	23.6	28.8	25.8	94.4	95.8	94.9
Monthly Total						465.8						497.2						482.7			
Monthly Min/Max/ Avg	33.3	62.3	37.3	11.1	30.1		34.1	48.2	36.6	12.0	30.2		34.1	51.4	36.6	11.7	31.4		93.4	95.8	94.6

NOTES: - Each filter has a UV reactor

- Transmittance (%) is a grab sample of the filter effluent prior to the UV reactor of a random online filter

' -- ' indicates filter and UV reactor offline

1.2.15 E.L. Smith UV Disinfection - UV Reactors 1 - 4

February 2024

Filter	1						2						3						4						Transmittance (%)		
Day	Dosage (mJ/cm²)			Flow (MLD)			Dosage (mJ/cm²)			Flow (MLD)			Dosage (mJ/cm²)			Flow (MLD)			Dosage (mJ/cm²)			Flow (MLD)					
	Min	Max	Avg	Min	Max	Total	Min	Max	Avg	Min	Max	Total	Min	Max	Avg	Min	Max	Total	Min	Max	Avg	Min	Max	Total	Min	Max	Avg
1	50.2	178.9	54.5	58.4	108.1	65.1	49.8	176.3	55.6	53.2	104.3	62.8	50.9	165.9	55.0	56.7	106.1	65.1	--	--	--	--	--	--	94.6	95.3	94.9
2	50.4	55.9	52.6	87.8	108.2	99.9	51.4	56.8	53.7	84.3	106.8	96.4	53.1	57.0	54.5	88.9	107.8	100.0	--	--	--	--	--	--	95.1	95.4	95.3
3	47.0	54.7	51.6	82.4	105.3	92.8	49.4	55.9	52.6	78.7	101.8	89.5	50.1	56.1	53.4	83.0	104.5	92.9	--	--	--	--	--	--	95.1	95.4	95.2
4	48.4	56.9	52.9	69.7	98.9	86.5	48.6	57.4	53.9	67.8	94.8	83.1	49.6	58.1	54.5	69.7	96.6	86.3	--	--	--	--	--	--	94.7	95.1	94.8
5	47.3	60.0	52.9	71.8	88.7	82.4	49.5	59.2	54.0	70.4	86.8	79.3	49.0	60.7	54.4	73.6	88.0	82.5	--	--	--	--	--	--	94.4	95.0	94.7
6	45.4	54.5	49.7	64.7	88.6	80.0	46.6	55.5	50.6	62.8	86.8	76.9	47.7	56.8	51.7	64.6	87.1	79.1	--	--	--	--	--	--	94.1	94.8	94.3
7	49.2	53.7	51.3	67.7	85.7	78.4	50.1	55.7	52.1	63.2	82.9	75.1	51.8	56.0	53.1	65.8	84.9	78.1	--	--	--	--	--	--	94.1	94.5	94.2
8	48.9	56.3	50.9	64.5	79.0	73.6	48.9	57.0	51.8	62.2	76.6	70.6	50.4	57.6	52.4	65.2	77.4	73.2	--	--	--	--	--	--	93.8	94.1	93.9
9	47.5	54.8	50.8	64.1	81.4	72.8	47.2	55.4	51.6	61.4	77.2	69.7	48.3	57.3	52.4	63.5	79.6	72.4	--	--	--	--	--	--	93.7	94.1	93.9
10	48.6	83.1	70.2	63.9	91.6	81.6	50.3	82.7	69.7	60.4	88.1	78.4	45.6	86.6	66.8	63.7	89.6	81.4	--	--	--	--	--	--	93.8	94.2	94.0
11	78.7	85.5	81.3	76.6	92.1	85.8	77.3	82.8	79.3	71.8	88.3	82.4	77.5	83.7	80.0	76.4	90.9	85.5	--	--	--	--	--	--	93.6	93.8	93.7
12	75.1	87.8	81.0	78.3	97.8	88.4	74.2	84.9	79.1	75.5	93.2	85.1	74.9	85.8	79.5	77.5	95.1	88.3	--	--	--	--	--	--	93.8	94.0	93.9
13	78.1	87.4	82.0	81.6	98.5	91.3	77.3	85.5	80.8	78.8	95.0	87.8	76.4	85.6	80.5	82.3	98.6	91.3	--	--	--	--	--	--	93.7	94.3	94.0
14	52.0	60.0	51.2	45.0	97.8	61.0	52.0	55.0	47.6	48.0	96.0	58.6	52.0	70.0	48.1	48.0	96.7	60.9	--	--	--	--	--	--	94.3	94.9	94.7
15	54.3	62.4	59.2	76.8	91.0	86.1	53.7	63.6	58.0	74.3	89.4	83.1	54.7	64.1	59.1	77.5	89.8	86.4	--	--	--	--	--	--	94.6	95.7	94.9
16	57.1	63.2	61.2	75.5	92.2	85.8	56.6	63.7	61.3	72.8	89.0	82.4	60.1	67.2	63.3	76.4	90.6	85.5	--	--	--	--	--	--	95.4	95.7	95.5
17	56.6	60.6	58.7	74.2	90.5	85.2	56.5	62.3	59.0	72.4	87.9	82.1	60.0	65.6	62.3	76.2	89.6	85.2	--	--	--	--	--	--	95.3	95.5	95.4
18	55.0	59.9	57.6	72.5	90.7	82.5	55.4	63.5	58.5	69.8	88.9	79.1	58.9	63.8	61.2	72.5	89.9	82.2	--	--	--	--	--	--	95.0	95.3	95.2
19	54.4	60.8	56.4	68.3	84.8	79.0	54.4	60.0	56.8	66.6	81.5	75.8	57.1	63.5	59.7	69.7	83.3	78.7	--	--	--	--	--	--	94.4	95.1	94.8
20	46.3	62.0	52.3	63.7	99.6	84.2	46.9	59.4	52.4	59.5	96.7	81.0	49.2	61.5	55.3	62.5	97.7	84.2	--	--	--	--	--	--	94.4	94.8	94.5
21	52.3	60.7	54.4	69.0	90.3	84.6	52.4	61.3	54.3	66.2	93.9	81.5	55.4	66.0	57.9	68.8	89.3	84.7	--	--	--	--	--	--	94.5	94.7	94.6
22	49.0	56.6	52.9	74.7	98.4	87.6	48.6	56.4	52.7	72.0	94.8	84.4	52.4	60.5	56.4	75.7	96.6	87.6	--	--	--	--	--	--	94.5	95.0	94.8
23	49.5	57.5	53.0	74.2	99.0	86.9	48.9	57.1	53.1	72.4	95.5	83.6	53.1	60.9	56.5	76.5	98.5	86.8	--	--	--	--	--	--	94.1	94.9	94.6
24	51.7	56.8	54.4	77.0	92.4	86.4	52.4	56.8	54.7	73.1	89.1	83.1	56.5	60.9	58.1	76.6	90.8	86.0	--	--	--	--	--	--	94.7	95.3	94.9
25	54.7	61.8	58.3	70.5	88.8	80.1	55.9	62.6	58.9	68.1	86.7	77.0	58.3	65.8	61.8	71.0	88.7	80.0	--	--	--	--	--	--	94.8	95.3	95.0
26	55.6	61.1	57.2	76.4	91.8	85.6	56.0	62.3	58.2	72.0	88.6	82.2	58.5	64.3	60.8	76.6	91.0	85.3	--	--	--	--	--	--	95.0	95.2	95.1
27	46.3	58.6	51.9	76.9	101.1	89.6	45.7	59.1	52.4	74.3	96.9	86.2	49.2	62.1	55.1	77.2	98.9	89.5	--	--	--	--	--	--	94.8	95.1	94.9
28	45.7	86.2	77.8	84.0	100.6	93.1	47.0	85.2	75.4	81.0	96.9	90.0	46.9	51.7	48.6	85.7	99.4	93.2	--	--	--	--	--	--	94.3	94.8	94.4
29	45.4	85.2	62.3	75.3	100.2	88.7	45.5	90.3	65.9	73.2	97.5	85.4	46.6	55.3	50.5	75.4	98.8	88.6	--	--	--	--	--	--	94.0	94.5	94.3
Monthly Total						2,424.9						2,332.6						2,420.6						0.0			
Monthly Min/Max/ Avg	45.4	178.9	58.6	45.0	108.2		45.5	176.3	58.8	48.0	106.8		45.6	165.9	58.7	48.0	107.8		--	--	--	--	--		93.6	95.7	94.6

NOTES: ' -- ' indicates UV reactor offline

- Transmittance (%) is a grab sample of the combined filter effluent prior to the UV reactor

1.2.16 Log Removal

February 2024

Day	Rossdale									E.L. Smith								
	Log Removal									Log Removal								
	Giardia			Virus			*Cryptosporidium*			*Giardia*			Virus			*Cryptosporidium*		
	Min	Max	Avg	Min	Max	Avg	Min	Max	Avg	Min	Max	Avg	Min	Max	Avg	Min	Max	Avg
1	7.8	8.1	8.0	14	15	15	7.0	7.0	7.0	7.2	7.3	7.2	7.2	9.1	8.0	7.0	7.0	7.0
2	8.0	8.1	8.0	14	15	15	7.0	7.0	7.0	7.1	7.2	7.1	6.4	7.3	6.8	7.0	7.0	7.0
3	8.0	8.1	8.0	14	15	15	7.0	7.0	7.0	7.1	7.2	7.2	6.5	7.5	7.0	7.0	7.0	7.0
4	8.0	8.2	8.1	14	16	15	7.0	7.0	7.0	7.1	7.2	7.2	6.4	7.8	7.2	7.0	7.0	7.0
5	8.1	8.2	8.1	15	16	16	7.0	7.0	7.0	7.1	7.2	7.2	6.5	7.8	7.2	7.0	7.0	7.0
6	7.9	8.3	8.1	12	16	14	7.0	7.0	7.0	7.1	7.2	7.2	6.9	8.3	7.7	7.0	7.0	7.0
7	8.1	8.4	8.3	13	14	14	7.0	7.0	7.0	7.2	7.2	7.2	7.0	8.7	7.8	7.0	7.0	7.0
8	8.3	8.4	8.4	13	15	14	7.0	7.0	7.0	7.2	7.2	7.2	7.6	8.9	8.1	7.0	7.0	7.0
9	8.3	8.4	8.4	14	15	14	7.0	7.0	7.0	7.2	7.2	7.2	6.9	8.2	7.6	7.0	7.0	7.0
10	8.3	8.5	8.4	14	15	14	7.0	7.0	7.0	7.2	7.2	7.2	7.8	9.0	8.2	7.0	7.0	7.0
11	8.3	8.4	8.4	14	15	14	7.0	7.0	7.0	7.2	7.2	7.2	7.2	8.7	8.0	7.0	7.0	7.0
12	8.3	8.4	8.3	14	15	14	7.0	7.0	7.0	7.2	7.2	7.2	7.3	8.4	7.9	7.0	7.0	7.0
13	8.2	8.5	8.4	14	15	14	7.0	7.0	7.0	7.2	7.2	7.2	7.4	8.9	8.2	7.0	7.0	7.0
14	8.3	8.4	8.4	13	15	14	7.0	7.0	7.0	7.2	7.2	7.2	7.7	8.9	8.4	7.0	7.0	7.0
15	8.3	8.5	8.4	14	15	14	7.0	7.0	7.0	7.2	7.2	7.2	7.1	8.7	7.8	7.0	7.0	7.0
16	8.3	8.4	8.4	13	15	14	7.0	7.0	7.0	7.2	7.2	7.2	7.5	8.4	7.9	7.0	7.0	7.0
17	8.4	8.5	8.4	13	15	14	7.0	7.0	7.0	7.2	7.2	7.2	7.0	8.4	7.8	7.0	7.0	7.0
18	8.3	8.4	8.4	14	15	14	7.0	7.0	7.0	7.2	7.2	7.2	7.4	8.9	8.2	7.0	7.0	7.0
19	8.3	8.5	8.5	13	15	14	7.0	7.0	7.0	7.2	7.2	7.2	7.1	8.3	7.8	7.0	7.0	7.0
20	8.4	8.6	8.5	14	16	15	7.0	7.0	7.0	7.1	7.2	7.2	6.8	8.2	7.7	7.0	7.0	7.0
21	8.2	8.6	8.4	14	16	14	7.0	7.0	7.0	7.1	7.2	7.2	6.8	9.0	7.8	7.0	7.0	7.0
22	8.1	8.3	8.2	13	14	13	7.0	7.0	7.0	7.1	7.2	7.2	6.8	8.2	7.6	7.0	7.0	7.0
23	8.2	8.3	8.3	13	14	14	7.0	7.0	7.0	7.1	7.2	7.2	7.0	9.0	7.8	7.0	7.0	7.0
24	8.3	8.5	8.4	14	15	15	7.0	7.0	7.0	7.2	7.2	7.2	7.5	8.4	8.0	7.0	7.0	7.0
25	8.3	8.5	8.4	14	15	15	7.0	7.0	7.0	7.2	7.2	7.2	7.6	9.0	8.1	7.0	7.0	7.0
26	8.2	8.4	8.4	13	15	14	7.0	7.0	7.0	7.2	7.2	7.2	7.7	8.6	8.1	7.0	7.0	7.0
27	8.2	9.2	8.3	14	15	14	7.0	7.0	7.0	7.2	7.2	7.2	7.7	8.7	8.1	7.0	7.0	7.0
28	--	--	--	--	--	--	--	--	--	7.2	7.2	7.2	7.4	8.3	7.9	7.0	7.0	7.0
29	8.0	8.5	8.3	13	15	14	7.0	7.0	7.0	7.2	7.2	7.2	7.1	8.5	7.9	7.0	7.0	7.0
Monthly Min/Max/Avg	7.8	9.2	8.3	12	16	14	7.0	7.0	7.0	7.1	7.3	7.2	6.4	9.1	7.8	7.0	7.0	7.0

NOTES: ' -- ' indicates plant offline

1.2.17 Liquid Alum Chemical Consumption

February 2024

Day	Dosage (mg/L)			Consumption (kg)			
	Rossdale		E.L. Smith	Rossdale			E.L. Smith
	Plant 1	Plant 2		Plant 1	Plant 2	Plant Total	
1	25.0	25.0	43.9	3,892	5,614	9,506	20,593
2	25.0	25.0	43.1	4,049	5,178	9,227	29,423
3	25.4	25.4	34.4	4,160	5,138	9,298	21,903
4	25.0	25.0	32.1	3,801	4,837	8,637	19,041
5	25.0	25.0	31.0	3,731	4,765	8,496	17,496
6	25.3	25.0	34.2	3,288	5,526	8,814	18,384
7	--	25.3	32.2	--	7,362	7,362	16,945
8	--	26.2	29.4	--	7,714	7,714	14,590
9	--	29.3	30.4	--	8,454	8,454	15,067
10	--	30.0	32.1	--	8,658	8,658	17,803
11	--	30.0	32.1	--	8,661	8,661	18,544
12	--	30.0	30.8	--	9,218	9,218	18,572
13	--	25.8	28.1	--	7,666	7,666	17,392
14	--	25.0	28.5	--	7,328	7,328	12,128
15	--	25.0	29.3	--	7,256	7,256	16,949
16	--	25.0	28.1	--	7,262	7,262	16,225
17	--	25.0	26.9	--	7,217	7,217	15,568
18	--	25.0	26.1	--	7,216	7,216	14,347
19	--	25.0	26.1	--	6,849	6,849	13,991
20	--	25.0	26.7	--	6,701	6,701	15,315
21	--	25.0	28.2	--	7,437	7,437	10,612
22	--	25.0	26.2	--	7,732	7,732	15,829
23	--	25.0	24.0	--	7,719	7,719	14,219
24	--	24.0	23.1	--	6,978	6,978	13,350
25	--	24.0	23.1	--	6,927	6,927	12,653
26	--	24.3	23.5	--	7,153	7,153	13,625
27	--	24.8	21.2	--	7,017	7,017	12,912
28	--	27.4	23.2	--	1,418	1,418	14,859
29	--	27.4	23.9	--	7,802	7,802	14,639
Monthly Total				22,922	198,802	221,724	472,974
Monthly Avg	25.1	25.8	29.0	3,820	6,855	7,646	16,309

NOTES : ' -- ' indicates system offline

- Liquid alum consumption (kg) at 48.5% by weight (solution delivered to sites at a concentration of 48.5%)
- NSF limit for liquid alum is **194 mg/L**

1.2.18 Primary Polymer Chemical Consumption

February 2024

Day	Dosage (mg/L)			Consumption (kg)			
	Rossdale		E.L. Smith	Rossdale			E.L. Smith
	Plant 1	Plant 2		Plant 1	Plant 2	Plant Total	
1	0.35	0.35	0.25	26	38	65	57
2	0.35	0.35	0.25	27	35	63	83
3	0.36	0.35	0.25	29	35	63	77
4	0.40	0.40	0.24	29	38	67	69
5	0.40	0.40	0.20	29	37	66	56
6	0.40	0.40	0.20	25	43	68	52
7	--	0.40	0.19	--	57	57	48
8	--	0.40	0.18	--	57	57	42
9	--	0.40	0.17	--	56	56	41
10	--	0.40	0.17	--	56	56	47
11	--	0.40	0.17	--	56	56	49
12	--	0.40	0.17	--	60	60	48
13	--	0.39	0.15	--	57	57	44
14	--	0.40	0.14	--	57	57	29
15	--	0.40	0.14	--	56	56	38
16	--	0.40	0.13	--	56	56	37
17	--	0.40	0.14	--	56	56	38
18	--	0.40	0.13	--	56	56	36
19	--	0.40	0.13	--	53	53	35
20	--	0.40	0.14	--	52	52	39
21	--	0.40	0.15	--	58	58	28
22	--	0.40	0.14	--	60	60	41
23	--	0.40	0.14	--	60	60	41
24	--	0.40	0.14	--	56	56	39
25	--	0.40	0.14	--	56	56	37
26	--	0.40	0.15	--	57	57	42
27	--	0.40	0.15	--	55	55	43
28	--	0.39	0.15	--	10	10	46
29	--	0.40	0.15	--	55	55	44
Monthly Total				166	1,477	1,643	1,326
Monthly Avg	0.38	0.39	0.17	28	51	57	46

NOTES: ' -- ' indicates system offline or primary polymer not being used
- Primary polymer consumption (kg) at 100% by weight mixed at the sites to required solution
- NSF limit for Praestol DW 27AG is **1.00 mg/L**

1.2.19 Carbon Chemical Consumption

February 2024

Day	Dosage (mg/L)			Consumption (kg)			
	Rossdale		E.L. Smith	Rossdale			E.L. Smith
	Plant 1	Plant 2		Plant 1	Plant 2	Plant Total	
1	--	--	--	--	--	--	--
2	--	--	--	--	--	--	--
3	--	--	--	--	--	--	--
4	--	--	--	--	--	--	--
5	--	--	--	--	--	--	--
6	--	--	--	--	--	--	--
7	--	--	--	--	--	--	--
8	--	--	--	--	--	--	--
9	--	--	--	--	--	--	--
10	--	--	--	--	--	--	--
11	--	--	--	--	--	--	--
12	--	--	--	--	--	--	--
13	--	--	0.01	--	--	--	4
14	--	--	--	--	--	--	--
15	--	--	0.82	--	--	--	231
16	--	--	--	--	--	--	--
17	--	--	--	--	--	--	--
18	--	--	--	--	--	--	--
19	--	--	--	--	--	--	--
20	--	--	--	--	--	--	--
21	--	--	--	--	--	--	--
22	--	--	--	--	--	--	--
23	--	--	--	--	--	--	--
24	--	--	--	--	--	--	--
25	--	--	--	--	--	--	--
26	--	--	--	--	--	--	--
27	--	--	--	--	--	--	--
28	--	--	--	--	--	--	--
29	--	--	--	--	--	--	--
Monthly Total				--	--	--	235
Monthly Avg	--	--	0.42	--	--	--	117

NOTES: ' -- ' indicates carbon not being used
- Carbon consumption (kg) at 100% by weight (mixed at the sites)
- NSF limit for Carbon is **250 mg/L**

1.2.20 Sodium Hypochlorite Chemical Consumption

February 2024

Day	Rossdale					E.L. Smith	
	Dosage (mg/L)		Consumption (kg)			Dosage (mg/L)	Consumption (kg)
	Plant 1	Plant 2	Plant 1	Plant 2	Plant Total		
1	2.83	3.06	26,736	41,617	71,777	3.04	91,095
2	3.00	2.90	29,464	36,376	68,845	3.08	134,068
3	3.02	2.86	29,993	35,056	69,562	3.15	128,057
4	3.05	2.97	28,111	34,845	67,427	3.17	120,161
5	3.05	2.98	27,606	34,479	65,447	3.26	117,433
6	3.03	2.77	23,898	37,003	64,626	3.29	113,007
7	--	3.18	--	56,139	60,833	3.30	110,794
8	--	3.20	--	57,166	59,784	3.31	104,893
9	--	3.16	--	55,261	58,293	3.33	105,459
10	--	3.07	--	53,709	56,493	3.37	119,588
11	--	3.03	--	53,063	55,813	3.30	122,000
12	--	2.99	--	55,640	58,827	3.31	127,281
13	--	2.96	--	53,255	56,104	3.22	127,472
14	--	2.95	--	52,491	55,041	3.19	86,449
15	--	2.90	--	51,034	53,552	3.16	116,828
16	--	2.90	--	51,070	53,598	3.11	114,932
17	--	2.89	--	50,589	53,078	3.04	112,143
18	--	2.89	--	50,574	53,853	3.10	108,899
19	--	2.90	--	48,119	51,363	3.12	106,880
20	--	2.93	--	47,650	50,735	3.11	114,022
21	--	2.93	--	52,944	56,227	3.14	75,587
22	--	2.93	--	54,964	58,276	3.17	122,078
23	--	3.04	--	56,976	60,182	3.16	119,419
24	--	3.10	--	54,622	57,310	3.15	116,394
25	--	3.20	--	55,999	58,629	3.18	111,264
26	--	3.20	--	57,171	59,755	3.14	116,173
27	--	3.17	--	54,294	56,773	3.10	120,797
28	--	0.97	--	3,023	3,053	3.21	131,186
29	--	3.27	--	56,542	58,931	3.19	124,565
Monthly Total			165,807	1,401,673	1,654,187		3,318,927
Monthly Avg	3.00	2.94	27,635	48,334	57,041	3.19	114,446

NOTES: ' -- ' indicates system offline

- Sodium hypochlorite consumption (kg) at 0.8% by weight (sodium hypochlorite generated onsite at a concentration of 0.8%)
- Plant Total Consumption is the combined addition of Plant 1, Plant 2 and Post Filter Trim.
- NSF limit for Sodium Hypochlorite generated onsite is **10 mg/L**

1.2.21 Filter Polymer Chemical Consumption

February 2024

Day	Dosage (mg/L)		Consumption (kg)	
	Rossdale	E.L. Smith	Rossdale	E.L. Smith
1	0.19	0.20	34	44
2	0.19	0.20	32	65
3	0.19	0.14	32	42
4	0.18	0.13	30	37
5	0.15	0.11	23	31
6	0.18	0.10	28	26
7	0.22	0.10	30	25
8	0.20	0.10	28	24
9	0.19	0.10	26	24
10	0.19	0.10	26	27
11	0.19	0.10	26	28
12	0.19	0.10	27	29
13	0.19	0.10	26	30
14	0.19	0.10	26	20
15	0.17	0.10	23	28
16	0.15	0.10	20	28
17	0.15	0.10	19	28
18	0.15	0.10	20	27
19	0.15	0.10	18	26
20	0.15	0.10	18	28
21	0.15	0.10	20	18
22	0.15	0.10	21	29
23	0.15	0.10	21	28
24	0.15	0.10	20	28
25	0.15	0.10	19	27
26	0.15	0.10	20	28
27	0.15	0.10	19	30
28	--	0.10	--	31
29	0.15	0.10	19	30
Monthly Total			670	867
Monthly Avg	0.17	0.11	24	30

NOTES: ' -- ' indicates system offline

- Filter polymer consumption (kg) at 100% by weight mixed at the sites to required solution
- NSF limit for Magnafloc LT 7981 is **20 mg/L**
- NSF limit for Magnafloc LT 7995 is **25 mg/L**

1.2.22 Aqua Ammonia Chemical Consumption

February 2024

Day	Dosage (mg/L)		Consumption (kg)	
	Rossdale	E.L. Smith	Rossdale	E.L. Smith
1	0.65	--	599	--
2	0.65	--	567	--
3	0.65	--	564	--
4	0.65	--	555	--
5	0.65	--	532	--
6	0.65	--	533	--
7	0.65	--	468	--
8	0.65	--	475	--
9	0.65	--	463	--
10	0.65	--	465	--
11	0.65	--	461	--
12	0.65	--	485	--
13	0.65	--	467	--
14	0.64	--	460	--
15	0.64	--	452	--
16	0.64	--	454	--
17	0.64	--	447	--
18	0.64	--	453	--
19	0.64	--	422	--
20	0.64	--	416	--
21	0.64	--	466	--
22	0.64	--	483	--
23	0.64	--	484	--
24	0.64	--	454	--
25	0.64	--	450	--
26	0.64	--	464	--
27	0.64	--	447	--
28	--	--	--	--
29	0.64	--	428	--
Monthly Total			13,414	--
Monthly Avg	0.64	--	479	--

NOTES: ' -- ' indicates system offline

- Aqua ammonia consumption (kg) at 100% by weight (solution delivered to sites at a concentration of 19.0%)
- NSF limit for Aqua Ammonia is **2.85 mg/L**

1.2.22-1 LAS Ammonia Chemical Consumption

February 2024

Day	Dosage (mg/L)	Consumption (kg)
	E.L. Smith	E.L. Smith
1	0.65	1,280
2	0.65	1,975
3	0.65	1,834
4	0.65	1,704
5	0.65	1,625
6	0.65	1,571
7	0.65	1,540
8	0.65	1,446
9	0.65	1,431
10	0.65	1,604
11	0.65	1,687
12	0.65	1,740
13	0.65	1,799
14	0.65	1,194
15	0.65	1,697
16	0.65	1,686
17	0.65	1,679
18	0.65	1,620
19	0.65	1,552
20	0.65	1,656
21	0.65	1,049
22	0.65	1,726
23	0.65	1,712
24	0.65	1,699
25	0.65	1,578
26	0.65	1,683
27	0.65	1,765
28	0.64	1,804
29	0.63	1,693
Monthly Total		47,032
Monthly Avg	0.65	1,622

NOTES: ' -- ' indicates system offline
- LAS ammonia consumption (kg) at 100% by weight (solution delivered to sites at a concentration of **41.0%**)
- NSF limit for LAS Ammonia is **16.4 mg/L**

1.2.23 Caustic Soda Chemical Consumption

February 2024

Day	Dosage (mg/L)		Consumption (kg)	
	Rossdale	E.L. Smith	Rossdale	E.L. Smith
1	2.85	11.6	875	4,481
2	2.77	12.0	803	7,140
3	2.52	9.60	742	5,285
4	2.22	8.14	649	4,164
5	2.20	7.68	623	3,751
6	2.17	8.01	623	3,777
7	2.20	8.39	548	3,888
8	2.22	6.84	555	2,972
9	2.24	6.78	541	2,914
10	2.44	7.27	592	3,511
11	2.63	7.49	619	3,798
12	2.62	7.39	666	3,867
13	3.21	6.74	807	3,644
14	3.39	6.00	816	2,167
15	3.46	6.02	806	3,074
16	3.39	5.96	809	3,023
17	3.25	5.62	797	2,839
18	3.28	5.71	807	2,783
19	2.97	6.08	682	2,840
20	2.79	5.72	617	2,854
21	3.01	5.27	725	1,668
22	3.37	4.54	855	2,356
23	3.35	4.06	863	2,088
24	3.39	3.85	808	1,967
25	3.37	4.28	801	2,031
26	3.39	5.10	827	2,581
27	3.62	4.70	868	2,496
28	--	5.20	--	2,873
29	4.11	5.61	919	2,948
Monthly Total			20,644	93,781
Monthly Avg	2.94	6.61	737	3,234

NOTES: ' -- ' indicates system offline
- Caustic soda consumption (kg) at 100% by weight (solution delivered to sites at a concentration of 50.0%)
- NSF limit for Caustic Soda is **50 mg/L**

1.2.24 Fluoride Chemical Consumption
February 2024

Day	Dosage (mg/L)		Consumption (kg)	
	Rossdale	E.L. Smith	Rossdale	E.L. Smith
1	0.56	0.64	450	564
2	0.56	0.64	426	870
3	0.56	0.64	423	808
4	0.56	0.64	417	752
5	0.56	0.64	400	718
6	0.56	0.64	400	694
7	0.56	0.64	352	681
8	0.56	0.64	357	640
9	0.56	0.64	348	632
10	0.56	0.64	349	710
11	0.56	0.64	346	746
12	0.56	0.64	364	770
13	0.56	0.64	351	795
14	0.56	0.64	349	525
15	0.56	0.64	345	749
16	0.56	0.63	346	734
17	0.56	0.63	341	731
18	0.56	0.63	345	706
19	0.56	0.63	322	676
20	0.56	0.63	317	722
21	0.56	0.63	355	455
22	0.56	0.63	370	751
23	0.58	0.63	383	745
24	0.58	0.63	358	739
25	0.58	0.63	355	687
26	0.58	0.63	367	732
27	0.58	0.63	353	767
28	--	0.61	--	777
29	0.58	0.59	338	709
Monthly Total			10,227	20,582
Monthly Avg	0.56	0.63	365	710

NOTES: ' -- ' indicates system offline
- Fluoride consumption (kg) at 100% by weight (solution delivered to sites at a concentration of 21.8%)
- NSF limit for Fluoride is **1.308 mg/L**

1.2.25 Sodium Bisulfite (SBS) Chemical Consumption

February 2024

Day	Dosage (mg/L)		Consumption (kg)		De-chlorinated Waste Stream to Outfall (ML)	
	Rossdale	E.L. Smith	Rossdale	E.L. Smith	Rossdale	E.L. Smith
1	20.3	35.4	1,043	5,124	20	55
2	16.4	10.1	1,046	1,462	24	54
3	16.4	13.5	1,044	1,880	24	53
4	24.4	15.2	835	1,961	13	49
5	12.9	15.2	524	1,738	15	43
6	12.7	15.4	729	1,428	22	35
7	25.0	15.7	833	1,273	13	30
8	29.6	40.1	835	3,369	11	32
9	23.0	25.5	624	2,303	10	35
10	23.6	19.3	522	1,736	8.5	35
11	22.5	16.7	625	1,482	11	35
12	18.0	13.1	728	1,415	16	41
13	22.2	15.1	834	1,647	14	41
14	14.7	14.6	417	1,646	11	43
15	14.2	10.6	416	863	11	31
16	19.9	24.5	624	2,185	12	34
17	18.1	10.5	626	970	13	35
18	16.1	81.9	416	6,616	9.9	31
19	19.5	10.7	730	959	14	34
20	13.4	18.5	312	1,943	9.0	40
21	21.0	14.4	732	1,479	13	39
22	19.6	10.4	628	1,171	12	43
23	15.4	11.8	521	1,246	13	41
24	18.8	11.5	626	1,029	13	34
25	20.6	10.3	623	1,018	12	37
26	18.6	11.9	520	1,202	11	38
27	27.1	46.1	936	4,987	13	41
28	18.3	10.5	1,360	1,349	28	49
29	16.1	36.1	938	4,482	22	47
Monthly Total			20,647	59,966	421	1,157
Monthly Avg	19.2	20.2	712	2,068	15	40

NOTES: ' -- ' indicates plant offline

- Sodium bisulfite consumption (kg) at 38% by weight (solution delivered to sites at a concentration of 38.0%)

1.2.26 Rossdale Waste Stream Data

February 2024

		Clarifier Blowdown	Clarifier Washdown *	Backwash Water	Filter To Waste	Bypass	Total	De-Chlorin'd Waste Stream 3			De-Chlorin'd Waste Stream 7		
Volume (ML)		193	20	140	34	7.6	395	56.26			364.33		
Solids (kg)	TSS	13,619	160	6,402			20,182						
	Aluminium	9,702	36	2,216			11,955						
# of Bypasses						1		Min	Max	Avg	Min	Max	Avg
pH								5.5	7.8	7.5	6.9	7.8	7.7
Total Chlorine (mg/L)								0.00	0.00	0.00	0.00	0.00	0.00
Sulfite (mg/L)								1.06	20.0	9.55	1.30	20.0	6.45

NOTES: * Estimate value for the waste stream volume and calculated value for the waste stream solids
- Clarifier washdown volume(s) estimated for clarifier cleaning
- LLP flush, HLP cooling are not applicable to the Rossdale WTP

1.2.27 E.L. Smith Waste Stream Data

February 2024

		Clarifier Blowdown	Clarifier Washdown *	Backwash Water	Filter To Waste	Bypass	LLP Flush	HLP Cooling	Total	De-chlorinated Waste flow to		
Volume (ML)		566	0.0	292	154	46	0.6	26	1,085	1,157		
Solids (kg)	TSS	106,010	0	15,371					121,381			
	Aluminium	20,644	0	5,321					25,965			
# of Bypasses						3				Min	Max	Avg
pH										6.65	7.61	7.02
Total Chlorine (mg/L)										0.00	0.00	0.00
Sulphite (mg/L)										0.13	20.0	5.99

NOTES: * Estimate value for the waste stream volume and calculated value for the waste stream solids
- Clarifier washdown volume(s) estimated for clarifer cleaning
- Estimated chlorinated waste stream to outfall for dechlorination

1.2.28 Demand/Production Statistics

February 2024

Month	ROSSDALE ZONE			E.L.SMITH ZONE			SYSTEM TOTAL			RESERVOIR PUMPAGE		
	Monthly Prod'n (ML)	Max Daily Prod'n (ML)	Peak Daily Demand (ML)	Monthly Prod'n (ML)	Max Daily Prod'n (ML)	Peak Daily Demand (ML)	Monthly Prod'n (ML)	Max Daily Prod'n (ML)	Peak Daily Demand (ML)	Rossdale Zone (ML)	E.L.Smith Zone (ML)	Total (ML)
JANUARY	4,226	179	222	6,762	253	249	10,989	395	379	1,451	2,466	3,917
FEBRUARY	3,750	165	183	6,828	278	301	10,578	433	371	1,507	2,211	3,718

2024 - HIGH 5-DAY DEMAND

	PLANTS PROD (ML/d)	RES. GAIN / LOSS (%)	RES. GAIN / LOSS (ML)	TOTAL DEMAND (ML)
21-Jan-2024	373	-1.0	-6.3	379
22-Jan-2024	380	1.9	11.7	368
23-Jan-2024	381	2.7	16.9	364
24-Jan-2024	395	4.5	28.2	367
25-Jan-2024	388	3.1	19.6	369
			AVERAGE:	369

Year to Date Data	2024	2023	% CHANGE
TOTAL PRODUCTION TO DATE (ML)	21,567	21,047	2.5
AVG. DAILY DEMAND TO DATE (ML)	360	357	0.8
PEAK DAILY DEMAND TO DATE (ML)	379	367	3.3
PEAK HOURLY DEMAND TO DATE (ML)	494	536	(7.9)
HIGH 5-DAY AVERAGE TO DATE (ML)	369	362	2.0

Peak daily demand of 379 ML/d occurred on January 21, 2024

Peak hourly demand of 494 ML/d occurred on January 27, 2024 at 11:00-12:00

1.2.29 Reservoir Chlorine Residual (mg/L) - Part 1

February 2024

Reservoir	Papaschase 1			Ormsby			Clareview Discharge			Millwoods Discharge			Kaskitayo			Discovery Park		
Day	Min	Max	Avg	Min	Max	Avg	Min	Max	Avg	Min	Max	Avg	Min	Max	Avg	Min	Max	Avg
1	1.62	1.62	1.62	1.89	1.94	1.91	1.67	1.76	1.71	1.91	1.97	1.95	1.72	1.88	1.82	1.31	1.42	1.38
2	1.67	1.92	1.69	1.90	2.01	1.95	1.68	1.80	1.75	1.93	2.09	1.94	1.66	1.88	1.83	1.29	1.38	1.35
3	1.68	1.92	1.71	1.91	2.00	1.94	1.69	1.83	1.75	1.92	1.96	1.94	1.79	1.86	1.83	1.30	1.39	1.36
4	1.62	1.91	1.73	1.91	2.03	1.93	1.63	1.81	1.77	1.92	1.97	1.94	1.71	1.90	1.84	1.27	1.37	1.33
5	1.62	1.92	1.73	1.89	1.98	1.92	1.74	1.79	1.76	1.91	1.98	1.95	1.72	1.89	1.85	1.26	1.35	1.31
6	1.70	1.92	1.73	1.87	1.98	1.92	1.70	1.81	1.77	1.92	2.00	1.94	1.83	1.87	1.85	1.28	1.36	1.33
7	1.69	1.90	1.70	1.89	2.01	1.92	1.68	1.81	1.76	1.91	1.99	1.93	1.77	1.92	1.85	1.24	1.34	1.31
8	1.69	1.94	1.70	1.90	1.99	1.92	1.68	1.80	1.75	1.89	2.00	1.93	1.75	1.90	1.85	1.22	1.39	1.31
9	1.67	1.89	1.69	1.83	2.02	1.92	1.56	1.81	1.74	1.91	2.01	1.94	1.80	2.07	1.85	1.34	1.41	1.39
10	1.69	1.89	1.70	1.80	1.97	1.92	1.68	1.73	1.71	1.93	2.00	1.95	1.83	1.87	1.85	1.35	1.44	1.41
11	1.70	1.91	1.71	1.92	1.96	1.93	1.64	1.77	1.72	1.93	2.00	1.95	1.79	1.88	1.85	1.32	1.42	1.38
12	1.67	1.88	1.69	1.81	1.97	1.93	1.65	1.79	1.73	1.93	2.00	1.95	1.83	1.90	1.85	1.30	1.39	1.36
13	1.57	1.92	1.69	1.81	1.99	1.94	1.67	1.77	1.73	1.93	2.01	1.95	1.82	1.88	1.86	1.28	1.48	1.40
14	1.65	1.91	1.67	1.85	2.01	1.95	1.66	1.76	1.72	1.91	2.02	1.96	1.85	1.88	1.87	1.38	1.49	1.46
15	1.64	1.88	1.66	1.89	2.06	1.97	1.58	1.77	1.72	1.97	2.05	1.99	1.83	1.91	1.84	1.40	1.50	1.46
16	1.62	1.88	1.64	1.86	2.02	1.96	1.66	1.84	1.70	1.95	2.02	1.98	1.87	1.90	1.89	1.39	1.50	1.45
17	1.61	1.87	1.65	1.83	2.07	1.97	1.63	1.75	1.71	1.95	2.01	1.98	1.88	1.89	1.88	1.39	1.48	1.44
18	1.56	1.89	1.65	1.92	2.01	1.94	1.63	1.80	1.70	1.94	2.00	1.97	1.83	1.94	1.87	1.38	1.46	1.42
19	1.65	1.86	1.66	1.80	2.00	1.93	1.59	1.75	1.69	1.94	2.00	1.96	1.79	1.91	1.87	1.36	1.45	1.41
20	1.60	1.73	1.66	1.89	2.02	1.93	1.67	1.76	1.69	1.93	2.00	1.96	1.80	1.92	1.86	1.36	1.52	1.44
21	1.54	1.86	1.65	1.81	1.99	1.93	1.63	1.75	1.68	1.93	1.99	1.95	1.81	1.86	1.85	1.42	1.52	1.49
22	1.66	1.84	1.68	1.86	2.05	1.96	1.60	1.68	1.65	1.93	2.00	1.96	1.74	1.94	1.87	1.43	1.52	1.49
23	1.55	1.84	1.67	1.90	2.05	1.95	1.55	1.71	1.66	1.93	2.00	1.97	1.82	1.91	1.87	1.42	1.52	1.48
24	1.63	1.87	1.68	1.87	2.05	1.96	1.62	1.71	1.68	1.96	2.01	1.98	1.76	1.90	1.86	1.41	1.50	1.46
25	1.65	1.81	1.68	1.90	2.07	1.95	1.65	1.72	1.68	1.96	2.02	1.99	1.76	1.89	1.86	1.41	1.49	1.45
26	1.65	1.84	1.66	1.91	2.04	1.96	1.65	1.70	1.69	1.95	2.04	1.95	1.77	1.94	1.88	1.38	1.48	1.44
27	1.65	1.86	1.75	1.94	2.03	1.96	1.63	1.70	1.69	1.96	2.02	1.98	1.83	1.91	1.87	1.25	1.56	1.47
28	1.51	1.81	1.61	1.87	2.00	1.95	1.56	1.75	1.68	1.93	2.02	1.97	1.76	1.92	1.87	1.46	1.57	1.53
29	1.59	1.61	1.60	1.90	2.03	1.93	1.58	1.67	1.64	1.96	2.01	1.98	1.74	1.92	1.87	1.45	1.54	1.51
Monthly Min/Max/Avg	1.51	1.94	1.68	1.80	2.07	1.94	1.55	1.84	1.71	1.89	2.09	1.96	1.66	2.07	1.86	1.22	1.57	1.41

NOTES: '--' Indication Analyzer Offline

1.2.30 Reservoir Chlorine Residual (mg/L) - Part 2

February 2024

Reservoir	Rosslyn 1			Londonderry			N. Jasper Place			Rosslyn 2			Thorncliffe			Blackmud Creek		
Day	Min	Max	Avg	Min	Max	Avg	Min	Max	Avg	Min	Max	Avg	Min	Max	Avg	Min	Max	Avg
1				1.66	1.99	1.83	1.63	1.67	1.65	1.72	1.79	1.78	1.62	1.80	1.73	1.64	1.74	1.69
2				1.71	1.96	1.87				1.70	1.85	1.81				1.62	1.74	1.68
3				1.75	1.93	1.86	1.61	1.86	1.65	1.80	2.15	1.83	1.70	1.96	1.79	1.60	1.71	1.65
4				1.70	1.91	1.86	1.64	1.87	1.66	1.84	2.17	1.86	1.79	1.98	1.81	1.60	1.71	1.65
5	1.82	1.82	1.82	1.73	1.93	1.86	1.64	1.87	1.66	1.80	1.89	1.86	1.77	1.96	1.79	1.59	1.70	1.64
6	--	--	--	1.66	2.00	1.85	1.63	1.87	1.65	1.85	1.88	1.86	1.78	1.96	1.82	1.60	1.69	1.64
7	1.83	1.83	1.83	1.68	1.98	1.85	--	--	--	1.82	1.89	1.86	1.74	1.96	1.77	1.59	1.71	1.65
8	--	--	--	1.73	1.98	1.84	1.59	1.90	1.62	1.81	1.87	1.85	1.72	1.98	1.73	1.59	1.71	1.65
9	1.79	1.79	1.79	1.72	1.95	1.84	1.57	1.90	1.60	1.81	1.85	1.84	1.72	1.99	1.74	1.59	1.69	1.65
10	--	--	--	1.71	1.93	1.84	1.59	1.90	1.60	1.76	1.86	1.83	1.73	1.97	1.74	1.61	1.71	1.65
11	--	--	--	1.68	1.97	1.84	1.60	1.90	1.61	1.70	1.92	1.85	1.72	1.97	1.73	1.57	1.69	1.65
12	1.81	1.82	1.82	1.71	1.98	1.84	1.58	1.90	1.61	1.82	1.87	1.85	1.73	1.98	1.75	1.59	1.70	1.64
13	1.79	1.80	1.80	1.68	1.91	1.84	1.59	1.93	1.62	1.84	2.16	1.86	1.73	2.01	1.76	1.59	1.70	1.64
14	--	--	--	1.68	1.96	1.84	1.58	1.91	1.61	1.78	1.87	1.84	1.70	2.03	1.74	1.59	1.70	1.64
15	--	--	--	1.71	1.94	1.82	1.58	1.93	1.61	1.77	1.84	1.82	1.72	2.04	1.73	1.60	1.70	1.65
16	--	--	--	1.75	1.96	1.83	1.58	1.93	1.61	1.81	2.04	1.83	1.70	1.99	1.71	1.62	1.71	1.67
17	--	--	--	1.73	1.92	1.83	1.49	1.92	1.58	1.85	2.14	1.87	1.57	2.00	1.69	1.62	1.70	1.66
18	--	--	--	1.74	1.92	1.84	1.59	1.91	1.62	1.83	2.12	1.87	--	--	--	1.60	1.71	1.65
19	--	--	--	1.67	1.91	1.81	1.45	1.91	1.61	1.87	2.11	1.88	1.64	1.99	1.68	1.59	1.69	1.64
20	1.70	1.74	1.73	1.74	1.87	1.82	1.54	1.91	1.64	1.86	1.87	1.87	1.70	1.98	1.72	1.59	1.68	1.64
21	1.71	1.71	1.71	1.73	1.86	1.80	1.61	1.92	1.63	1.77	1.84	1.83	1.66	1.99	1.70	1.58	1.68	1.63
22	--	--	--	1.63	1.91	1.79	1.63	1.90	1.66	1.80	1.82	1.81	1.66	2.00	1.69	1.59	1.70	1.64
23	1.71	1.77	1.73	1.69	1.87	1.78	1.61	1.95	1.65	1.80	1.82	1.81	1.69	2.01	1.70	1.60	1.71	1.65
24	1.72	1.76	1.74	1.63	1.87	1.78	1.61	1.94	1.69	1.80	2.12	1.82	1.72	2.02	1.75	1.62	1.71	1.66
25	--	--	--	1.69	1.88	1.79	1.65	1.95	1.69	1.80	2.04	1.83	1.73	2.01	1.75	1.61	1.71	1.66
26	1.73	1.75	1.74	1.67	1.83	1.77	1.65	1.93	1.70	1.73	2.09	1.84	1.72	2.02	1.76	1.60	1.71	1.66
27	--	--	--	1.69	1.86	1.78	1.69	1.94	1.71	1.83	2.09	1.85	1.69	2.01	1.74	1.28	1.70	1.65
28	--	--	--	1.61	1.82	1.73	1.64	1.94	1.71	1.84	1.86	1.85	1.62	2.00	1.75	1.59	1.69	1.64
29				1.66	1.83	1.75	1.65	1.94	1.67	1.75	1.90	1.84	1.61	2.00	1.73	1.58	1.67	1.62
Monthly Min/Max/Avg	1.70	1.83	1.77	1.61	2.00	1.82	1.45	1.95	1.64	1.70	2.17	1.84	1.57	2.04	1.74	1.28	1.74	1.65

NOTES: '--' Indication Analyzer Offline

1.2.31 Phosphoric Acid Consumption

February 2024

Day	Dosage (mg/L)		Consumption (kg)	
	Rossdale	E.L. Smith	Rossdale	E.L. Smith
1	0.90	0.89	647	693
2	0.90	0.90	562	1,074
3	0.90	0.90	510	960
4	0.90	0.90	598	911
5	0.90	0.90	526	851
6	0.90	0.90	561	895
7	0.90	0.90	513	830
8	0.90	0.90	504	829
9	0.90	0.90	505	798
10	0.90	0.90	481	887
11	0.90	0.90	513	930
12	0.90	0.90	502	962
13	0.90	0.90	506	1,001
14	0.90	0.89	521	645
15	0.90	0.90	447	956
16	0.90	0.90	454	924
17	0.90	0.90	477	936
18	0.90	0.90	502	922
19	0.90	0.90	464	829
20	0.90	0.90	455	958
21	0.90	0.89	552	521
22	0.90	0.90	543	972
23	0.90	0.90	457	933
24	0.90	0.90	481	936
25	0.90	0.90	507	892
26	0.90	0.90	513	928
27	0.90	0.90	502	945
28	0.94	0.90	24	1,038
29	0.90	0.90	344	935
Monthly Total			14,174	25,892
Monthly Avg	0.90	0.90	489	893

NOTES: ' -- ' indicates plant offline
- Phosphoric acid consumption (kg) at 100% by weight (solution delivered to sites at a concentration of 75%)
- NSF limit for Phosphoric acid (75%) is 13 mg/l

1.2.32 Summary of Mainbreaks

February 2024

Date and Time Reported	Location of Mainbreak	Repaired (Time)	Size	Type**
02/04/2024 11:21:33	13915-135A AVENUE NW	02/04/2024 18:20:28	150	CI
02/04/2024 18:30:31	13915-135A AVENUE NW	02/05/2024 11:00:21	150	CI
02/06/2024 18:32:27	8710-112 AVENUE NW	02/07/2024 10:24:19	150	CI
02/10/2024 06:06:46	6512-91 STREET NW	02/10/2024 16:00:14	150	CI
02/11/2024 08:00:32	12921U-114 STREET NW	02/11/2024 16:10:00	100	CI
02/12/2024 07:25:43	10745-164 STREET NW	02/12/2024 16:55:00	150	CI
02/12/2024 16:22:29	7609-91 AVENUE NW	02/15/2024 17:44:23	300	PVC
02/13/2024 05:44:53	10927-134A AVENUE NW	02/13/2024 15:30:53	150	CI
02/13/2024 12:36:00	13408-108 STREET NW	02/13/2024 20:40:42	300	CI
02/13/2024 15:35:36	10923-134A AVENUE NW	02/13/2024 15:50:17	150	CI
02/13/2024 15:55:40	10923-134A AVENUE NW	02/13/2024 17:00:00	150	CI
02/14/2024 10:35:01	8503-64 STREET NW	02/14/2024 22:37:00	150	CI
02/15/2024 10:08:30	6423-98A STREET NW	02/15/2024 22:05:00	150	CI
02/16/2024 10:51:18	10927-134A AVENUE NW	02/16/2024 14:33:58	150	CI
02/19/2024 14:08:00	11937-38 STREET NW	02/19/2024 22:42:00	150	CI
02/19/2024 21:27:20	8503-64 STREET NW	02/20/2024 19:02:00	150	CI
02/21/2024 08:00:47	12439-75 STREET NW	02/21/2024 19:15:00	200	CI
02/21/2024 12:15:00	8503-64 STREET NW	02/21/2024 18:20:00	150	CI
02/21/2024 09:05:48	W 57 ST 97 AVE	02/21/2024 22:15:56	200	CI
02/21/2024 18:28:28	8503-64 STREET NW	02/21/2024 19:50:00	150	CI
02/21/2024 21:45:00	8503-64 STREET NW	02/22/2024 15:11:00	150	PVC
02/21/2024 22:35:29	5712-AUST O' RO NW	02/21/2024 23:30:21	200	CI
02/22/2024 10:28:54	11031-130 STREET NW	02/22/2024 15:15:39	150	CI
02/22/2024 15:30:00	8503-64 STREET NW	02/22/2024 15:55:13	150	CI
02/27/2024 10:21:22	9803-165 STREET NW	02/28/2024 11:08:36	200	CI
02/27/2024 19:50:09	11535-137 STREET NW	02/28/2024 20:03:00	200	CI
02/28/2024 20:04:00	11535-137 STREET NW	02/28/2024 21:15:00	200	CI
02/29/2024 06:39:54	10007-148 STREET NW	02/29/2024 21:20:22	150	CI

Month	Total Breaks By Month
Jan-24	36
Feb-24	28
Feb-24	
Feb-24	
Feb-24	
Feb-24	
Feb-24	
Feb-24	
Feb-24	
Feb-24	
Feb-24	
Feb-24	
YTD 2024	**64**

**Pipe Type Explanation	
CI	Cast Iron Pipe
COP	Copper Pipe
CCP	Concrete Cylinder Pipe
PVC	Poly Vinyl Chloride Pipe
AC	Asbestos Cement Pipe
HPLCP	Hyperscon Cylinder Prestressed Lined Concrete Cylinder Pipe
FRP	Fibre Glass Pipe
STL	Steel Pipe
HDP	High Density Polyethylene

Water Quality 2023

2.1.1 Water Quality Objectives for EPCOR

Parameter	Approval Requirement	EPCOR Internal Limit	EPCOR Target
Turbidity (NTU)			
Individual Filters	<0.3	<0.1 (2)	<0.08
Distribution System	N/A	< 1 (1)	< 1
Distribution System (Maintenance)	N/A	< 3 (1)	< 1
Colour (TCU)	<15 (3)	<10 (1)	<3
pH (25°C)	6.5 - 8.5	7.3 - 8.3 (1)	7.4 - 8.0
Taste and Odour	Inoffensive (3)	Inoffensive (1)	Inoffensive
E.coli (PA/100 mL)	absent	absent (1)	absent
Total Coliforms (PA/100 mL)	absent	absent (1)	absent
Total Chlorine Residual (mg/L)			
Water Treatment Plant Effluent	>1.0	1.3 - 2.4 (2)	1.9 - 2.2
Reservoirs	>0.5	1.0 - 2.4 (1)	1.2 - 2.2
Distribution	>0.5 (4)	1.0 - 2.4 (1)	1.0 - 2.2
Fluoride: (mg/L)			
Reservoir Effluent	0.5 - 0.9	0.6 - 0.8 (1)	0.6 - 0.8
Trihalomethanes (mg/L)			
Reservoir Effluent	<0.100	<0.050 (1)	<0.040
Distribution System	<0.100	<0.050 (1)	<0.040
UV254 % Transmittance			
E.L. Smith		>89% (2)	>90%
Rossdale		>87% (2)	>88%
HAA (mg/L)			
Reservoir Effluent	< 0.080	< 0.040 (1)	<0.035
Distribution System	< 0.080	< 0.040 (1)	<0.035
NDMA (mg/L):			
Reservoir Effluent	< 0.000040	< 0.000010 (1)	<0.000005
Distribution System	< 0.000040	< 0.000010 (1)	
Microoganism Log Removal at Water			
Giardia	≥5.5	≥6.0 (2)	>6.5
Cryptosporidium	≥5.5	≥5.3 (2)	>6.0
Virus	≥4.0	≥4.5 (2)	>5.0

(1) Limit based on City of Edmonton Performance Based Rate (PBR) agreement
(2) Limit based on EPCOR Action Level
(3) Aesthetic Objective
(4) in 75% of samples collected in a day
All values are expressed in units of mg/L unless otherwise stated.
Based on March 2022 Summary of Epcor Edmonton Water Quality Standards.

2.1.2 SUMMARY OF MAJOR CHEMICALS, MICROBIOLOGICAL, AND PHYSICAL PARAMETERS OF EDMONTON DRINKING WATER PRODUCED AT WATER TREATMENT PLANTS

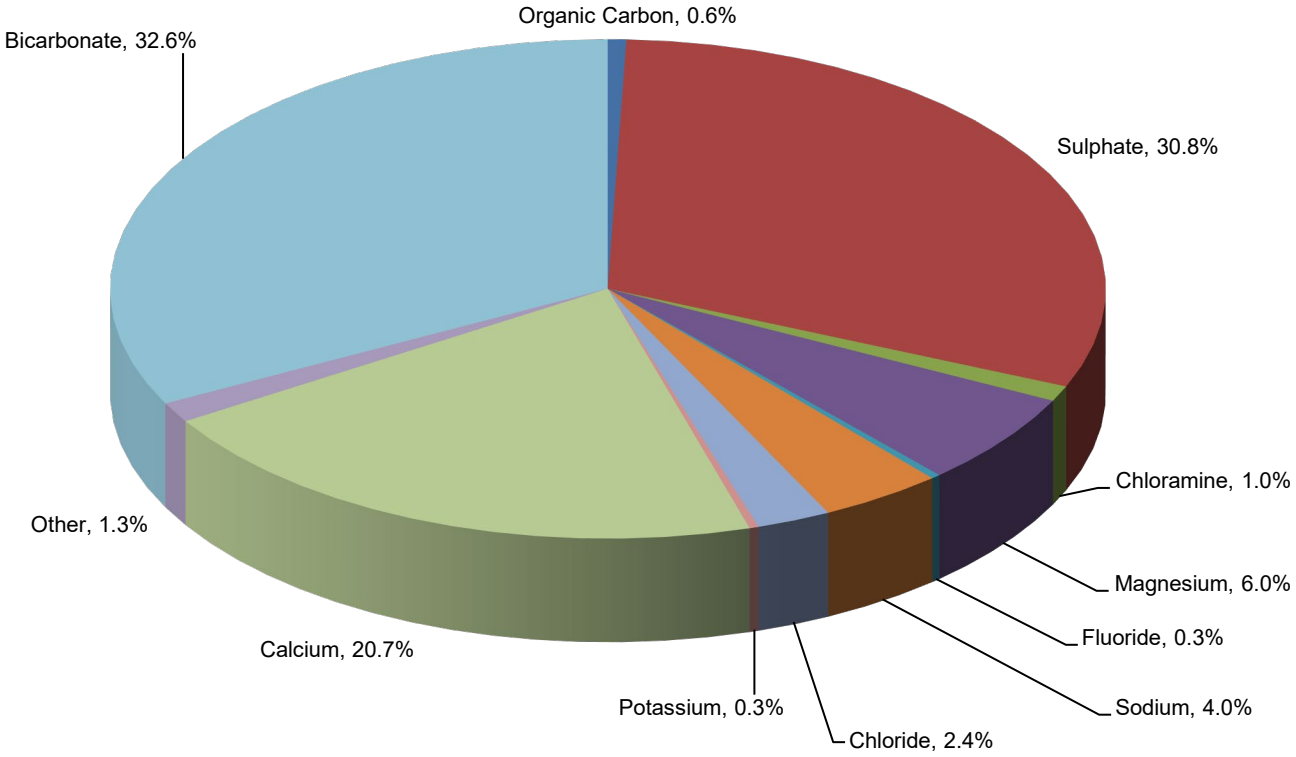
February 2024

Parameter	Unit	Monthly Count	Monthly Average	YTD Median	YTD Min	YTD Max	YTD Count
Alkalinity Total	mg CaCO3/L	57	121	125	8	141	118
Aluminum	mg/L	2	0.026	0.058	0.026	0.089	4
Arsenic	mg/L	2	<0.0002	<0.0002	<0.0002	<0.0002	4
Bromate Dissolved	mg/L	8	<0.005	<0.005	<0.005	<0.005	18
Bromodichloromethane	µg/L	57	0.9	1.0	<0.5	1.8	120
Cadmium	mg/L	2	<0.0002	<0.0002	<0.0002	<0.0002	4
Calcium Hardness	mg/L CaCO3	57	118	122	98	141	118
Chlorate Dissolved	mg/L	8	0.128	0.144	0.070	0.256	18
Chloride Dissolved	mg/L	8	6.06	5.83	4.78	7.38	18
Chlorite Dissolved	mg/L	8	<0.01	<0.01	<0.01	<0.01	18
Chromium	mg/L	2	<0.0002	<0.0002	<0.0002	<0.0002	4
Colour	TCU	57	0.9	1.0	<0.5	1.9	118
Conductivity	µS/cm	8	399	402	376	453	18
Copper	mg/L	2	<0.0050	<0.0050	<0.0050	<0.0050	4
Fluoride	mg/L	57	0.72	0.71	0.62	0.79	118
Iron	mg/L	2	<0.0050	<0.0050	<0.0050	<0.0050	4
Lead	mg/L	2	<0.0002	<0.0002	<0.0002	<0.0002	4
Manganese	mg/L	2	<0.0020	<0.0020	<0.0020	<0.0020	4
Mercury	mg/L	2	<0.0002	<0.0002	<0.0002	<0.0002	4
Nitrate (as N) Dissolved	mg/L	8	0.087	0.090	0.080	0.090	18
Nitrite (as N) Dissolved	mg/L	8	0.01	0.01	0.01	0.02	18
pH	N/A	58	7.9	7.9	7.6	8.1	119
Potassium	mg/L	2	0.70	0.70	0.70	0.80	4
Sodium	mg/L	2	10.91	8.25	6.80	11.90	4
Sulphate Dissolved	mg/L	8	72.3	73.6	59.5	95.1	18
Total Chlorine	N/A	57	2.11	2.16	1.99	2.34	118
Total Dissolved Solids	mg/L	2	234	226	220	238	4
Total Hardness	mg/L CaCO3	57	183	185	166	218	118
Total Organic Carbon	mg/L C	8	1.3	1.4	1.1	1.7	18
Trihalomethanes	µg/L	57	9.3	11.5	6.7	20.1	120
Turbidity	NTU	57	0.04	<0.04	<0.04	0.09	118
Uranium	mg/L	2	<0.0005	<0.0005	<0.0005	0.0006	4
Zinc	mg/L	2	<0.0050	<0.0050	<0.0050	<0.0050	4
Bacteriological Data							
Coliforms, total	PA/100mL	57	Absent	Absent	Absent	Absent	118
E. coli	PA/100mL	57	Absent	Absent	Absent	Absent	118

2.1.3 THE COMPOSITION OF EDMONTON WATER
TREATED WATER ENTERING THE DISTRIBUTION SYSTEM MONTHLY DATA

Edmonton Water for the Month of February 2024 is 99.98% pure

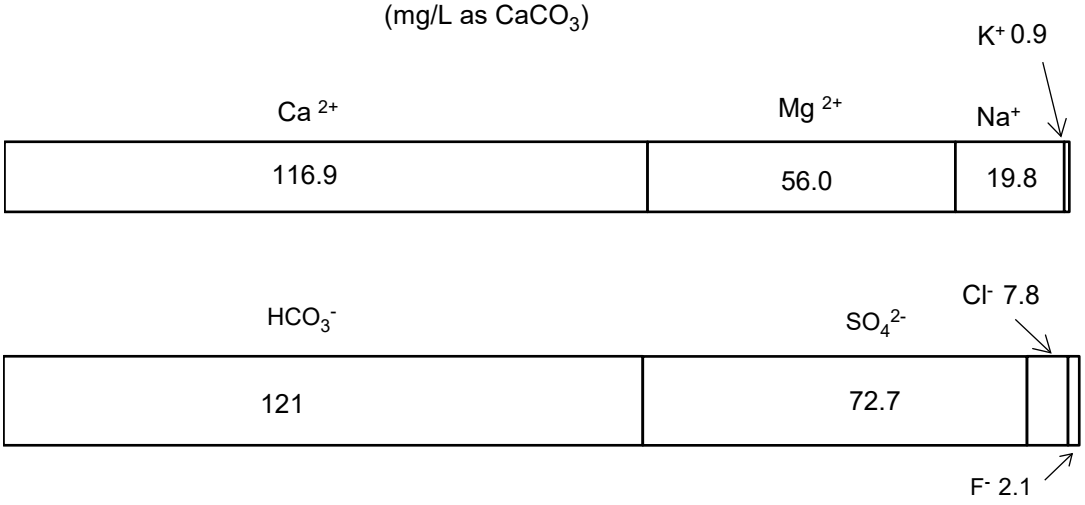
Other Chemicals that make up the remaining 0.02% (in % by weight)



*Other - Includes Trace Metals and Trace Organics

Bar Diagram of the Major Ions in Treated Water

(mg/L as $CaCO_3$)



2.1.4 SUMMARY OF LABORATORY ANALYSIS - 2024

DISTRIBUTION OF TESTING

Drinking Water Testing

		Jan	Feb	**Total**
Water Treatment Plant	# Tests	3,653	953	4,606
	# Samples	260	60	320
Field Reservoirs	# Tests	687	0	687
	# Samples	22	0	22
Routine Distribution System	# Tests	2,212	2,355	4,567
	# Samples	146	153	299
System Depressurization/Repair	# Tests	1,050	720	1,770
	# Samples	70	48	118
Customer Complaints	# Tests	810	378	1,188
	# Samples	15	7	22
Total	# Tests	8,412	4,406	12,818
	# Samples	513	268	781

Additional Testing

		Jan	Feb	**Total**
New Watermain Testing	# Tests	80	30	110
	# Samples	17	6	23
Water Treatment Plant Waste Discharge	# Tests	135	39	174
	# Samples	55	31	86
Quality Control	# Tests	1,584	1,401	2,985
	# Samples	956	821	1,777
Externally Contracted Analyses	# Tests	154	108	262
	# Samples	77	54	131
Regulatory Plant Water	# Tests	0	2,265	2,265
	# Samples	0	188	188
Total	# Tests	1,953	3,843	5,796
	# Samples	1,105	1,100	2,205

		Jan	Feb	**Total**
Total	# Tests	10,365	8,249	18,614
	# Samples	1,541	1,314	2,855

2.1.5 QUALITY ASSURANCE – February 2024

Drinking water quality must meet the requirements in the Alberta Environment and Protected Areas *Approval-to-Operate* (638-04-00) and the limits set out in the latest version of the Health Canada *Guidelines for Canadian Drinking Water Quality (GCDWQ)*. The latest internet edition of the *GCDWQ* was issued in September 2022 and supersedes all previous electronic and printed versions, including the Sixth Edition published 1996. Guideline limits are listed as Maximum Acceptable Concentrations (MACs), Aesthetic Objectives (AO) or Operational Guidelines (OG). The latest edition of the Health Canada Guidelines includes parameter types, commons sources, health considerations and application of the guideline.

In addition, for treated water in the distribution system, total chlorine residual values under 0.5 mg/L are not necessarily violations of the approval, but do require immediate follow-up action and re-sampling. A violation of the current *Approval-to-Operate* (638-04-00) requirements occurs if the chlorine residual in more than 25% of samples collected in a day is < 0.5 mg/L. Alberta Environment and Protected Areas is to be notified of any single positive total coliform sample and follow-up sampling is done according to the *Communication and Action Protocol for Failed Bacteriological Results in Drinking Water*. Any sample that is positive for *E. coli* is also considered a violation and requires follow-up action and re-sampling. A repeat total coliform positive from the same location is also considered a violation

Critical water quality parameters (e.g. turbidity, residual chlorine, fluoride, pH, & particle counts) in the treated water are monitored continuously using on-line instruments at the water treatment plants. In addition, water quality samples are collected daily at the two Water Treatment Plants, and 180 to 300 samples per month are collected throughout the distribution system (routine and random sampling sites, reservoirs, following system depressurizations and in response to customer complaints).

The EPCOR Water Laboratory is nationally accredited by CALA (Canadian Association for Laboratory Accreditation) to ISO/IEC 17025 for specific water quality analyses, and it also provides quality assurance support for Water Plant Operations labs and on-line analytical monitoring.

"*Violations*" occur when the concentrations of a measured parameter exceeds the AEP *Approval-to-Operate* limits, including the MACs for the GCDWQ parameters listed Schedule 4.

"Variances" occur when the concentration of a measured parameter exceeds EPCOR's own internal water quality objectives. See section 2.1.1 of this report for EPCOR's internal water quality objectives.

2.1.5.1 **Total Water Quality Violations of AEP Approval-to-Operate:**

Current month: **0** YTD Total: **0**

2.1.5.2 **Water Quality Violations for Water Plants (Treated Water)**

Current month**: 0** YTD Total**: 0**

2.1.5.3 **Water Quality Violations (Environmental): Plants Waste Streams**

Current month**: 0** YTD Total**: 0**

2.1.5.4 **Violations for Water Quality in the Field Reservoirs and Distribution System**

Sample Type	This Month	YTD
Depressurization Samples	0	0
Complaint Samples	0	0
Random Samples	0	0
Reservoirs	0	0
TOTAL (Distribution)	0	0

2.1.5.5 **Variances from EPCOR Water Services Water Quality Objectives at the Water Treatment Plants**

Variance Category[1]	This Month	YTD
Aluminium[2] > 0.20 or 0.10 mg/L	0	0
Turbidity > 1 NTU	0	0
Chlorine < 1 mg/L or > 2.4 mg/L	0	0
Cryptosporidium ≥ 1/1000 L	0	0
Giardia ≥ 1/1000 L	0	0
Other	0	0
Total Variances + Violations	0 + 0 = 0	0 + 0 = 0

Notes: 1) Variance statistics include any violations.

2) As of January 15, 2024 both ELS and ROS WTP converted back to Conventional Filtration mode. Aluminium limit changes from 0.1 mg/L to 0.2 mg/L (operational guideline), when in Direct Filtration.

2.1.5.6 **Variances from EPCOR Water Services Water Quality Objectives in the Field Reservoirs and Distribution System**

Variance Category[1]	This Month	YTD
Turbidity > 1 NTU	11	18
Chlorine < 1 mg/L or > 2.4 mg/L	0	2
Single Positive Coliform	0	1
THMs > 50 µg/L	0	0
Pipe Lube, Odour, UV positive	0	0
Aluminium[2] > 0.20 (or 0.1) mg/L	1	2
Iron > 0.300 mg/L	0	0
Other	0	0
Total Variances + Violations	12 + 0 = 12	23 + 0 = 23

Notes: 1) Variance statistics include any violations.
2) As of January 15, 2024 both ELS and ROS WTP converted back to Conventional Filtration mode. Aluminium limit changes from 0.1 mg/L to 0.2 mg/L (operational guideline), when in Direct Filtration.

2.1.5.7 **Variances from EPCOR Water Services Water Quality Objectives (Lab Waste Streams)**

No variances to report for lab waste streams.

2.2.1 Bacteriological Data: Water Treatment Plants

2024

	Coliforms, total						E. coli					cATP (pg/mL)			
	Count	# +ve	% +ve	Mean	Min	Max	# +ve	% +ve	Mean	Min	Max	Count	Mean	Min	Max
January															
Rossdale Raw (MPN/100mL)	32			133	1	517			13	1	40	1	44.7	44.7	44.7
E.L. Smith Raw (MPN/100mL)	5			41	28	53			2	1	3	1	14.2	14.2	14.2
Raw River Water Entering the Treatment Plants	37			121	1	517			11	1	40	2	29.4	14.2	44.7
Rossdale Treated (PA/100mL)	31	0	0.0				0	0.0				31	0.44	0.10	1.00
E.L. Smith Treated (PA/100mL)	30	0	0.0				0	0.0				30	0.50	0.12	1.00
Water Entering the Plant Reservoir	61	0	0.0				0	0.0				61	0.47	0.10	1.00
Rossdale Reservoir (PA/100mL)	31	0	0.0				0	0.0				31	0.45	0.10	1.00
E.L. Smith Reservoir (PA/100mL)	30	0	0.0				0	0.0				30	0.52	0.10	1.00
Treated Water Entering the Distribution System	61	0	0.0				0	0.0				61	0.49	0.10	1.00
February															
Rossdale Raw (MPN/100mL)	29			144	1	816			12	1	44	1	17.0	17.0	17.0
E.L. Smith Raw (MPN/100mL)	4			18	12	28			1	1	2	1	11.8	11.8	11.8
Raw River Water Entering the Treatment Plants	33			129	1	816			10	1	44	2	14.4	11.8	17.0
Rossdale Treated (PA/100mL)	28	0	0.0				0	0.0				28	0.73	0.11	1.00
E.L. Smith Treated (PA/100mL)	29	0	0.0				0	0.0				29	0.64	0.11	1.48
Water Entering the Plant Reservoir	57	0	0.0				0	0.0				57	0.69	0.11	1.48
Rossdale Reservoir (PA/100mL)	28	0	0.0				0	0.0				28	0.74	0.11	1.00
E.L. Smith Reservoir (PA/100mL)	29	0	0.0				0	0.0				29	0.68	0.11	1.00
Treated Water Entering the Distribution System	57	0	0.0				0	0.0				57	0.71	0.11	1.00

PA = present or absent, MPN = most probable number, cATP = cellular adenosine triphosphate

2.2.2 Bacteriological Data: Distribution System

February 2024

	Coliforms, total (PA/100 mL)			E. coli (PA/100 mL)		cATP (pg/mL)			
	Count	# +ve	% +ve	# +ve	% +ve	Count	Mean	Min	Max
January									
FIELD DISTRIBUTION	146	0	0.0	0	0.0	55	0.28	0.11	0.86
FIELD DISTRIBUTION - PLPH	55	1	1.8	0	0.0				
FIELD RESERVOIR	63	0	0.0	0	0.0	63	0.36	0.11	1.26
FIELD RESERVOIR - PLPH (duplicate-not counted)	63	0	0.0	0	0.0				
Monthly	209	1	0.5	0	0.0	118	0.33	0.11	1.26
February									
FIELD DISTRIBUTION	153	0	0.0	0	0.0	54	0.21	0.10	1.09
FIELD DISTRIBUTION - PLPH	54	0	0.0	0	0.0				
FIELD RESERVOIR	52	0	0.0	0	0.0	52	0.20	0.10	0.51
FIELD RESERVOIR - PLPH (duplicate-not counted)	52	0	0.0	0	0.0				
Monthly	205	0	0.0	0	0.0	106	0.21	0.10	1.09
Year to Date	523	1	0.2	0	0.0	224	0.28	0.10	1.26

Guidelines for Canadian Drinking Water Quality recommend 195 bacteriological samples for a city the size of Edmonton. Total Coliform and E.coli testing is required in the AEP Approval. At least 95 of the 195 samples must be tested at ProvLab each month according to our Operations Program.

Testing conducted by Laboratory for Provincial Laboratory for Public Health (ProvLAB) are labelled with PLPH.

2.2.2 Bacteriological Data: Distribution System

February 2024

	Coliforms, total (PA/100 mL)			E. coli (PA/100 mL)		cATP (pg/mL)			
	Count	# +ve	% +ve	# +ve	% +ve	Count	Mean	Min	Max
Samples from Complaints									
January	15	0	0.0	0	0.0	15	0.36	0.14	1.50
February	7	0	0.0	0	0.0	7	0.17	0.12	0.32
Year to Date	22	0	0.0	0	0.0	22	0.31	0.12	1.50
Samples from Depressurizations									
January	70	0	0.0	0	0.0				
February	48	0	0.0	0	0.0				
Year to Date	118	0	0.0	0	0.0				

2.2.3 Giardia and Cryptosporidium

February 2024

Treated Water entering the distribution system

	Cryptosporidium		Giardia	
	oocysts/100L		cysts/100L	
	E.L. Smith	Rossdale	E.L. Smith	Rossdale
23 - Jan		<0.1		<0.1
	<0.09		<0.09	

Raw Water

	Cryptosporidium		Giardia	
	oocysts/100L		cysts/100L	
	E.L. Smith	Rossdale	E.L. Smith	Rossdale
23 - Jan		<6.93		<6.93
	<1.28		<1.28	

2.2.4 Treated Water Entering the Distribution System: Physical, Inorganic, and Organic

February 2024

	Current Month								YTD								Limits	
	ROSSDALE				E.L. SMITH				ROSSDALE				E.L. SMITH				*Approval or GCDWQ MAC, (AO or OG)	EPCOR
	Mean	Min	Max	Count	Mean	Min	Max	Count	Mean	Min	Max	Count	Mean	Min	Max	Count		
Microbiologicals																		
Microcystin	<0.2	<0.2	<0.2	1	<0.2	<0.2	<0.2	1	<0.2	<0.2	<0.2	1	<0.2	<0.2	<0.2	1	1.5	
Physical																		
Colour (TCU)	0.9	0.5	1.1	28	0.9	<0.5	1.7	29	1.0	0.5	1.9	59	1.0	<0.5	1.8	59	(15)	10
Conductivity (uS/cm)	396	392	401	4	400	384	409	4	399	376	436	9	406	376	453	9		<1
FPA-Intensity (N/A)	1.12	0.88	1.25	5	0.81	0.62	1.00	5	1.08	0.88	1.25	9	0.81	0.62	1.12	9		
pH (N/A)	7.9	7.8	8.1	29	7.8	7.7	8.1	29	7.9	7.7	8.1	60	7.9	7.6	8.1	59	(7.0 - 10.5)	7.3-8.3
Total Dissolved Solids (mg/L)	228	228	228	1	238	238	238	1	226	223	228	2	229	220	238	2	(500)	
Turbidity (NTU)	<0.04	<0.04	0.07	28	<0.05	<0.04	0.08	29	<0.04	<0.04	0.07	59	0.05	<0.04	0.09	59		0.3
Primary Inorganics (mg/L)																		
Antimony	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	2	<0.0002	<0.0002	<0.0002	2	0.006	
Arsenic	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	2	<0.0002	<0.0002	<0.0002	2	0.01	
Barium	0.056	0.056	0.056	1	0.055	0.055	0.055	1	0.056	0.055	0.056	2	0.055	0.055	0.055	2	2	
Boron	0.009	0.009	0.009	1	0.009	0.009	0.009	1	0.010	0.009	0.010	2	0.010	0.009	0.010	2	2	
Bromate Dissolved	<0.005	<0.005	<0.005	4	<0.005	<0.005	<0.005	4	<0.005	<0.005	<0.005	9	<0.005	<0.005	<0.005	9	0.01	
Cadmium	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	2	<0.0002	<0.0002	<0.0002	2	0.007	
Chlorate Dissolved	0.21	0.21	0.23	4	0.08	0.07	0.09	4	0.21	0.18	0.26	9	0.09	0.07	0.11	9	1	
Chlorite Dissolved	<0.005	<0.005	<0.005	4	<0.005	<0.005	<0.005	4	<0.005	<0.005	<0.005	9	<0.005	<0.005	<0.005	9	1	
Chromium	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	2	<0.0002	<0.0002	<0.0002	2	0.05	
Copper	<0.005	<0.005	<0.005	1	<0.005	<0.005	<0.005	1	<0.005	<0.005	<0.005	2	<0.005	<0.005	<0.005	2	2 (1)	
Fluoride	0.70	0.66	0.74	28	0.73	0.64	0.79	29	0.70	0.65	0.75	59	0.73	0.62	0.79	59	1.5	0.6–0.8
Lead	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	2	<0.0002	<0.0002	<0.0002	2	0.005	
Manganese	<0.002	<0.002	<0.002	1	<0.002	<0.002	<0.002	1	<0.002	<0.002	<0.002	2	<0.002	<0.002	<0.002	2	0.12 (0.02)	
Mercury	<0.0001	<0.00005	<0.0002	2	<0.0001	<0.00005	<0.0002	2	<0.0002	<0.00005	<0.0002	3	<0.0002	<0.00005	<0.0002	3	0.001	
Nitrate (as N) Dissolved	0.09	0.08	0.09	4	0.09	0.08	0.09	4	0.08	0.08	0.09	9	0.09	0.08	0.09	9	10	
Nitrite (as N) Dissolved	0.02	0.01	0.02	4	0.01	0.01	0.02	4	0.01	0.01	0.02	9	0.01	0.01	0.02	9	1	
Selenium	0.0003	0.0003	0.0003	1	0.0002	0.0002	0.0002	1	0.0003	0.0003	0.0003	2	0.0003	0.0002	0.0003	2	0.05	
Total Chlorine	2.13	1.99	2.26	28	2.10	2.00	2.22	29	2.19	1.99	2.34	59	2.12	1.99	2.32	59	>1.0	>1.0 and <2.4
Uranium	<0.0005	<0.0005	<0.0005	1	<0.0005	<0.0005	<0.0005	1	<0.0006	<0.0005	0.0006	2	<0.0005	<0.0005	0.0005	2	0.02	

2.2.4 Treated Water Entering the Distribution System: Physical, Inorganic, and Organic

February 2024

	Current Month								YTD								Limits	
	ROSSDALE				E.L. SMITH				ROSSDALE				E.L. SMITH				*Approval or GCDWQ MAC, (AO or OG)	EPCOR
	Mean	Min	Max	Count	Mean	Min	Max	Count	Mean	Min	Max	Count	Mean	Min	Max	Count		
Primary Organics (ug/L)																		
2,4-D	<0.05	<0.05	<0.05	1	<0.05	<0.05	<0.05	1	<0.05	<0.05	<0.05	1	<0.05	<0.05	<0.05	1	100	
Atrazine	<0.05	<0.05	<0.05	1	<0.05	<0.05	<0.05	1	<0.05	<0.05	<0.05	1	<0.05	<0.05	<0.05	1	5	
Benzene	<0.5	<0.5	<0.5	28	<0.5	<0.5	<0.5	29	<0.5	<0.5	<0.5	60	<0.5	<0.5	<0.5	60	5	
Benzo(a)pyrene	<0.005	<0.005	<0.005	1	<0.005	<0.005	<0.005	1	<0.005	<0.005	<0.005	1	<0.005	<0.005	<0.005	1	0.04	
Bromoxynil	<0.05	<0.05	<0.05	1	<0.05	<0.05	<0.05	1	<0.05	<0.05	<0.05	1	<0.05	<0.05	<0.05	1	5	
Carbon Tetrachloride	<0.5	<0.5	<0.5	28	<0.5	<0.5	<0.5	29	<0.5	<0.5	<1.0	60	<0.5	<0.5	<1.0	60	2	
Chlorobenzene	<0.5	<0.5	<0.5	28	<0.5	<0.5	<0.5	29	<0.5	<0.5	<0.5	60	<0.5	<0.5	<0.5	60	80 (30)	
Chlorpyrifos	<0.1	<0.1	<0.1	1	<0.1	<0.1	<0.1	1	<0.1	<0.1	<0.1	1	<0.1	<0.1	<0.1	1	90	
Cyanazine	<0.1	<0.1	<0.1	1	<0.1	<0.1	<0.1	1	<0.1	<0.1	<0.1	1	<0.1	<0.1	<0.1	1		
Diazinon	<0.025	<0.025	<0.025	1	<0.025	<0.025	<0.025	1	<0.025	<0.025	<0.025	1	<0.025	<0.025	<0.025	1		
Dicamba	<0.1	<0.1	<0.1	1	<0.1	<0.1	<0.1	1	<0.1	<0.1	<0.1	1	<0.1	<0.1	<0.1	1	110	
Dichlorobenzene (1,2)	<0.5	<0.5	<0.5	28	<0.5	<0.5	<0.5	29	<0.5	<0.5	<0.5	60	<0.5	<0.5	<0.5	60		
Dichlorobenzene (1,4)	<0.5	<0.5	<0.5	28	<0.5	<0.5	<0.5	29	<0.5	<0.5	<0.5	60	<0.5	<0.5	<0.5	60	5 (1)	
Dichloroethane (1,2)	<0.5	<0.5	<0.5	28	<0.5	<0.5	<0.5	29	<0.5	<0.5	<0.5	59	<0.5	<0.5	<0.5	59	5	
Dichloroethylene (1,1)	<0.5	<0.5	<0.5	28	<0.5	<0.5	<0.5	29	<0.5	<0.5	<3.0	60	<0.5	<0.5	<3.0	60	14	
Dichlorophenol (2,4)	<0.3	<0.3	<0.3	1	<0.3	<0.3	<0.3	1	<0.3	<0.3	<0.3	1	<0.3	<0.3	<0.3	1		
Diclofop-methyl	<0.1	<0.1	<0.1	1	<0.1	<0.1	<0.1	1	<0.1	<0.1	<0.1	1	<0.1	<0.1	<0.1	1		
Dimethoate	<0.05	<0.05	<0.05	1	<0.05	<0.05	<0.05	1	<0.05	<0.05	<0.05	1	<0.05	<0.05	<0.05	1	20	
Diuron	<0.05	<0.05	<0.05	1	<0.05	<0.05	<0.05	1	<0.05	<0.05	<0.05	1	<0.05	<0.05	<0.05	1		
Ethylbenzene	<0.5	<0.5	<0.5	28	<0.5	<0.5	<0.5	29	<0.5	<0.5	<0.5	60	<0.5	<0.5	<0.5	60	140 (1.6)	
Glyphosate	<0.2	<0.2	<0.2	1	<0.2	<0.2	<0.2	1	<0.2	<0.2	<0.2	1	<0.2	<0.2	<0.2	1	280	
Haloacetic Acids, (HAA5)	16.5	16.5	16.5	1	13.7	13.7	13.7	1	18.5	16.5	20.5	2	15.7	13.7	17.7	2	80	40
Malathion	<0.025	<0.025	<0.025	1	<0.025	<0.025	<0.025	1	<0.025	<0.025	<0.025	1	<0.025	<0.025	<0.025	1	190	
MCPA	<0.05	<0.05	<0.05	1	<0.05	<0.05	<0.05	1	<0.05	<0.05	<0.05	1	<0.05	<0.05	<0.05	1	100	
Methylene Chloride	<0.5	<0.5	<0.5	28	<0.5	<0.5	<0.5	29	<0.5	<0.5	<0.5	60	<0.5	<0.5	<0.5	60	50	
Metolachlor	<0.025	<0.025	<0.025	1	<0.025	<0.025	<0.025	1	<0.025	<0.025	<0.025	1	<0.025	<0.025	<0.025	1		
Metribuzin	<0.1	<0.1	<0.1	1	<0.1	<0.1	<0.1	1	<0.1	<0.1	<0.1	1	<0.1	<0.1	<0.1	1	80	
NDMA	<0.00120	<0.00117	<0.00120	1	<0.00130	<0.00126	<0.00130	1	<0.00360	<0.00117	<0.00600	2	<0.00360	<0.00126	<0.00600	2	0.040	10
NTA (mg/L)	<0.4	<0.4	<0.4	1	<0.4	<0.4	<0.4	1	<0.4	<0.4	<0.4	1	<0.4	<0.4	<0.4	1	0.4	
Pentachlorophenol	<0.5	<0.5	<0.5	1	<0.5	<0.5	<0.5	1	<0.5	<0.5	<0.5	1	<0.5	<0.5	<0.5	1	60 (30)	
Perfluorooctane sulfonic acid (PFOS)	<0.02	<0.02	<0.02	1	<0.02	<0.02	<0.02	1	<0.02	<0.02	<0.02	1	<0.02	<0.02	<0.02	1	0.6	
Perfluorooctanoic acid (PFOA)	<0.02	<0.02	<0.02	1	<0.02	<0.02	<0.02	1	<0.02	<0.02	<0.02	1	<0.02	<0.02	<0.02	1	0.0002	
Phorate	<0.25	<0.25	<0.25	1	<0.25	<0.25	<0.25	1	<0.25	<0.25	<0.25	1	<0.25	<0.25	<0.25	1		
Picloram	<0.1	<0.1	<0.1	1	<0.1	<0.1	<0.1	1	<0.1	<0.1	<0.1	1	<0.1	<0.1	<0.1	1		
Simazine	<0.1	<0.1	<0.1	1	<0.1	<0.1	<0.1	1	<0.1	<0.1	<0.1	1	<0.1	<0.1	<0.1	1		
Terbufos	<0.5	<0.5	<0.5	1	<0.5	<0.5	<0.5	1	<0.5	<0.5	<0.5	1	<0.5	<0.5	<0.5	1		
Tetrachloroethylene	<0.5	<0.5	<0.5	28	<0.5	<0.5	<0.5	29	<0.5	<0.5	<0.5	60	<0.5	<0.5	<0.5	60	10	
Toluene	<0.5	<0.5	<0.5	28	<0.5	<0.5	<0.5	29	<0.5	<0.5	<0.5	60	<0.5	<0.5	<0.5	60	60 (24)	

2.2.4 Treated Water Entering the Distribution System: Physical, Inorganic, and Organic

February 2024

	Current Month								YTD								Limits	
	ROSSDALE				E.L. SMITH				ROSSDALE				E.L. SMITH				*Approval or GCDWQ MAC, (AO or OG)	EPCOR
	Mean	Min	Max	Count	Mean	Min	Max	Count	Mean	Min	Max	Count	Mean	Min	Max	Count		
Primary Organics (ug/L)																		
Total Xylenes	<1.0	<1.0	<1.0	28	<1.0	<1.0	<1.0	29	<1.0	<1.0	<2.5	60	<1.0	<1.0	<2.5	60	90	
Trichloroethylene	<0.5	<0.5	<0.5	28	<0.5	<0.5	<0.5	29	<0.5	<0.5	<0.5	60	<0.5	<0.5	<0.5	60	5	
Trifluralin	<0.1	<0.1	<0.1	1	<0.1	<0.1	<0.1	1	<0.1	<0.1	<0.1	1	<0.1	<0.1	<0.1	1		
Trihalomethanes	11.1	9.3	13.5	28	8.3	6.7	10.5	29	13.1	9.3	20.1	60	10.3	6.7	16.9	60	100	50
Vinyl Chloride	<1	<1	<1	28	<1	<1	<1	29	<1	<1	<1	59	<1	<1	<1	59	2	
Secondary Inorganics (mg/L)																		
Alkalinity Total (mg CaCO3/L)	123	120	129	28	120	8	128	29	126	118	141	59	123	8	140	59		
Aluminum	0.026	0.026	0.026	1	0.026	0.026	0.026	1	0.058	0.026	0.089	2	0.058	0.026	0.089	2	2.9	0.1/0.2
Ammonia as NH3	0.15	0.12	0.16	4	0.13	0.11	0.15	4	0.14	0.10	0.16	9	0.13	0.10	0.15	9		
Beryllium	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	2	<0.0002	<0.0002	<0.0002	2		
Bromide Dissolved	0.02	<0.01	0.04	4	0.02	<0.01	0.03	4	<0.01	<0.01	0.04	9	<0.01	<0.01	0.03	9		
Calcium	46.8	46.8	46.8	1	46.3	46.3	46.3	1	47.3	46.8	47.8	2	48.0	46.3	49.7	2		
Chloride Dissolved	6.1	5.5	7.4	4	6.0	5.6	7.0	4	5.7	4.8	7.4	9	6.3	5.6	7.0	9	(250)	
Cobalt	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	2	<0.0002	<0.0002	<0.0002	2		
Free Chlorine	<0.07	<0.07	<0.07	1	<0.07	<0.07	<0.07	1	<0.07	<0.07	<0.07	2	<0.07	<0.07	<0.07	2		
Hardness, Ca (mg CaCO3/L)	121	107	126	28	117	98	128	29	123	106	141	59	120	98	138	59		
Iron	<0.005	<0.005	<0.005	1	<0.005	<0.005	<0.005	1	<0.005	<0.005	<0.005	2	<0.005	<0.005	<0.005	2	(0.3)	0.3
Lanthanum	<0.001	<0.001	<0.001	1	<0.001	<0.001	<0.001	1	<0.001	<0.001	<0.001	2	<0.001	<0.001	<0.001	2		
Lithium	0.0031	0.0031	0.0031	1	0.0030	0.0030	0.0030	1	0.0032	0.0031	0.0032	2	0.0032	0.0030	0.0033	2		
Magnesium	13.6	13.6	13.6	1	13.6	13.6	13.6	1	14.0	13.6	14.4	2	14.4	13.6	15.1	2		
Molybdenum	0.001	0.001	0.001	1	0.0009	0.0009	0.0009	1	0.001	0.001	0.001	2	0.0009	0.0009	0.0009	2		
Nickel	<0.0005	<0.0005	<0.0005	1	<0.0005	<0.0005	<0.0005	1	<0.0005	<0.0005	<0.0005	2	<0.0005	<0.0005	<0.0005	2		
Phosphate,Ortho (as P)	<0.02	<0.02	<0.02	3	<0.02	<0.02	<0.02	2	<0.02	<0.02	<0.02	4	<0.02	<0.02	<0.02	3		
Phosphorus	<0.02	<0.02	<0.02	1	<0.02	<0.02	<0.02	1	<0.02	<0.02	<0.02	2	<0.02	<0.02	<0.02	2		
Potassium	0.7	0.7	0.7	1	0.7	0.7	0.7	1	0.7	0.7	0.7	2	0.8	0.7	0.8	2		
Silicon	2.27	2.27	2.27	1	2.23	2.23	2.23	1	2.16	2.05	2.27	2	2.19	2.14	2.23	2		
Silver	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	2	<0.0002	<0.0002	<0.0002	2		
Sodium	9.1	9.1	9.1	1	11.9	11.9	11.9	1	8.0	6.8	9.1	2	9.7	7.4	11.9	2	(200)	
Strontium	0.429	0.429	0.429	1	0.423	0.423	0.423	1	0.438	0.429	0.446	2	0.439	0.423	0.454	2	7.0	
Sulphate Dissolved	71.1	69.8	73.5	4	73.0	70.2	74.6	4	71.7	59.5	86.8	9	74.7	60.4	95.1	9	(500)	
Thallium	<0.0005	<0.0005	<0.0005	1	<0.0005	<0.0005	<0.0005	1	<0.0005	<0.0005	<0.0005	2	<0.0005	<0.0005	<0.0005	2		
Tin	<0.0005	<0.0005	<0.0005	1	<0.0005	<0.0005	<0.0005	1	<0.0005	<0.0005	<0.0005	2	<0.0005	<0.0005	<0.0005	2		
Titanium	<0.0005	<0.0005	<0.0005	1	<0.0005	<0.0005	<0.0005	1	<0.0005	<0.0005	<0.0005	2	<0.0005	<0.0005	<0.0005	2		
Total Hardness (mg/L CaCO3)	184	177	190	28	183	175	189	29	187	172	218	59	185	166	211	59		
Vanadium	<0.0005	<0.0005	<0.0005	1	<0.0005	<0.0005	<0.0005	1	<0.0005	<0.0005	<0.0005	2	<0.0005	<0.0005	<0.0005	2		
Zinc	<0.005	<0.005	<0.005	1	<0.005	<0.005	<0.005	1	<0.005	<0.005	<0.005	2	<0.005	<0.005	<0.005	2	(5.0)	
Zirconium	<0.001	<0.001	<0.001	1	<0.001	<0.001	<0.001	1	<0.001	<0.001	<0.001	2	<0.001	<0.001	<0.001	2		

2.2.4 Treated Water Entering the Distribution System: Physical, Inorganic, and Organic

February 2024

	Current Month								YTD								Limits	
	ROSSDALE				E.L. SMITH				ROSSDALE				E.L. SMITH				*Approval or GCDWQ MAC, (AO or OG)	EPCOR
	Mean	Min	Max	Count	Mean	Min	Max	Count	Mean	Min	Max	Count	Mean	Min	Max	Count		
Secondary Organics (ug/L)																		
Aldicarb	<0.1	<0.1	<0.1	1	<0.1	<0.1	<0.1	1	<0.1	<0.1	<0.1	1	<0.1	<0.1	<0.1	1		
Aldrin	<0.008	<0.008	<0.008	1	<0.008	<0.008	<0.008	1	<0.008	<0.008	<0.008	1	<0.008	<0.008	<0.008	1		
Azinphos-methyl	<0.1	<0.1	<0.1	1	<0.1	<0.1	<0.1	1	<0.1	<0.1	<0.1	1	<0.1	<0.1	<0.1	1		
Bromochloroacetic acid	<1	<1	<1	1	<1	<1	<1	1	<1	<1	<1	2	<1	<1	<1	2		
Bromodichloromethane	1.1	0.7	1.7	28	0.9	<0.5	1.2	29	1.1	<0.5	1.8	60	0.9	<0.5	1.2	60		16
Bromoform	<0.5	<0.5	<0.5	28	<0.5	<0.5	<0.5	29	<0.5	<0.5	<1.0	60	<0.5	<0.5	<1.0	60		
Carbaryl	<0.05	<0.05	<0.05	1	<0.05	<0.05	<0.05	1	<0.05	<0.05	<0.05	1	<0.05	<0.05	<0.05	1		
Carbofuran	<0.025	<0.025	<0.025	1	<0.025	<0.025	<0.025	1	<0.025	<0.025	<0.025	1	<0.025	<0.025	<0.025	1		
Chloroform	9.8	8.10	12.3	28	7.3	5.70	9.7	29	11.8	8.10	20.1	60	9.2	5.70	16.4	60		
Dibromoacetic acid	<1	<1	<1	1	<1	<1	<1	1	<1	<1	<1	2	<1	<1	<1	2		
Dibromochloromethane	<0.5	<0.5	<0.5	28	<0.5	<0.5	<0.5	29	<0.5	<0.5	<0.5	60	<0.5	<0.5	<0.5	60		
Dichloroacetic acid	8.58	8.58	8.58	1	7.17	7.17	7.17	1	9.39	8.58	10.20	2	8.15	7.17	9.12	2		
Dichlorobenzene (1,3)	<0.5	<0.5	<0.5	28	<0.5	<0.5	<0.5	29	<0.5	<0.5	<0.5	60	<0.5	<0.5	<0.5	60		
Dichloroethylene, cis (1,2)	<0.5	<0.5	<0.5	28	<0.5	<0.5	<0.5	29	<0.5	<0.5	<0.5	60	<0.5	<0.5	<0.5	60		
Dichloroethylene, trans (1,2)	<0.5	<0.5	<0.5	28	<0.5	<0.5	<0.5	29	<0.5	<0.5	<0.5	60	<0.5	<0.5	<0.5	60		
Dichloropropane (1,2)	<0.5	<0.5	<0.5	28	<0.5	<0.5	<0.5	29	<0.5	<0.5	<0.5	60	<0.5	<0.5	<0.5	60		
Dieldrin	<0.008	<0.008	<0.008	1	<0.008	<0.008	<0.008	1	<0.008	<0.008	<0.008	1	<0.008	<0.008	<0.008	1		
Methyl t-Butyl Ether (MTBE)	<0.5	<0.5	<0.5	28	<0.5	<0.5	<0.5	29	<0.5	<0.5	<0.5	60	<0.5	<0.5	<0.5	60	(15)	
MIBK	<1	<1	<1	28	<1	<1	<1	29	<1	<1	<1	60	<1	<1	<1	60		
Monobromoacetic acid	<1	<1	<1	1	<1	<1	<1	1	<1	<1	<1	2	<1	<1	<1	2		
Monochloroacetic acid	<1	<1	<1	1	<1	<1	<1	1	<1	<1	<1	2	<1	<1	<1	2		
Parathion	<0.1	<0.1	<0.1	1	<0.1	<0.1	<0.1	1	<0.1	<0.1	<0.1	1	<0.1	<0.1	<0.1	1		
Perfluorobutanoic acid (PFBA)	<0.1	<0.1	<0.1	1	<0.1	<0.1	<0.1	1	<0.1	<0.1	<0.1	1	<0.1	<0.1	<0.1	1		
Perfluoroheptanoic acid (PFHpA)	<0.02	<0.02	<0.02	1	<0.02	<0.02	<0.02	1	<0.02	<0.02	<0.02	1	<0.02	<0.02	<0.02	1		
Perfluorohexane sulfonic acid (PFHxS)	<0.02	<0.02	<0.02	1	<0.02	<0.02	<0.02	1	<0.02	<0.02	<0.02	1	<0.02	<0.02	<0.02	1		
Perfluorohexanoic acid (PFHxA)	<0.02	<0.02	<0.02	1	<0.02	<0.02	<0.02	1	<0.02	<0.02	<0.02	1	<0.02	<0.02	<0.02	1		
Perfluorononanoic acid (PFNA)	<0.02	<0.02	<0.02	1	<0.02	<0.02	<0.02	1	<0.02	<0.02	<0.02	1	<0.02	<0.02	<0.02	1		
Perfluoropentanoic acid (PFPeA)	<0.02	<0.02	<0.02	1	<0.02	<0.02	<0.02	1	<0.02	<0.02	<0.02	1	<0.02	<0.02	<0.02	1		
Styrene	<0.5	<0.5	<0.5	28	<0.5	<0.5	<0.5	29	<0.5	<0.5	<0.5	60	<0.5	<0.5	<0.5	60		
Tetrachloroethane (1,1,2,2)	<0.5	<0.5	<0.5	28	<0.5	<0.5	0.5	29	<0.5	<0.5	<1.0	60	<0.5	<0.5	<1.0	60		
Total Organic Carbon	1.4	1.2	1.7	4	1.2	1.1	1.3	4	1.4	1.2	1.7	9	1.3	1.1	1.7	9		
Total Volatile Organics (NonTHM)	<1.1	<1.0	1.5	28	<1.1	<1.0	1.3	29	1.3	<1.0	2.3	60	<1.3	<1.0	2.3	60		
Total Volatile Organics (Unknown)	1.3	<0.5	7.7	23	1.3	0.6	2.2	25	1.3	<0.5	7.7	25	1.3	<0.6	2.2	28		
Triallate	<0.1	<0.1	<0.1	1	<0.1	<0.1	<0.1	1	<0.1	<0.1	<0.1	1	<0.1	<0.1	<0.1	1		
Trichloroacetic acid	7.95	7.95	7.95	1	6.52	6.52	6.52	1	9.13	7.95	10.30	2	7.57	6.52	8.61	2		
Trichlorobenzene (1,2,4)	<0.5	<0.5	<0.5	28	<0.5	<0.5	<0.5	29	<0.5	<0.5	<0.5	60	<0.5	<0.5	<0.5	60		
Trichloroethane (1,1,1)	<0.5	<0.5	<0.5	28	<0.5	<0.5	<0.5	29	<0.5	<0.5	<0.5	60	<0.5	<0.5	<0.5	60		
Xylene (1,2)	<0.5	<0.5	<0.5	28	<0.5	<0.5	<0.5	29	<0.5	<0.5	<0.5	60	<0.5	<0.5	<0.5	60		

Secondary Organics (ug/L)																		
Xylene (1,4)	<0.5	<0.5	<0.5	28	<0.5	<0.5	<0.5	29	<0.5	<0.5	<0.5	60	<0.5	<0.5	<0.5	60		

TABLE EXPLANATIONS:

* Numbers with no brackets are Health Canada Guidelines for Canadian Drinking Water Quality (GCDWQ) Maximum Acceptable Concentrations (MAC) and/or a limit set out in the Alberta Environment and Parks (AEP) Operating Approval 638-04-00. Limits in brackets indicate Aesthetic Objectives or Operational Guidelines (OG) and are not Approval limits. The EPCOR limits are internal limits set by EPCOR in the Operations Program.

** Primary parameters are those that have health-based limits (MACs) according the AEP Operating Approval 638-04-00

*** Secondary parameters do not have health-based limits but may have aesthetic or operational objectives

2.2.5 ROSSDALE AND E.L. SMITH TREATED WATER ENTERING PLANT RESERVOIR

February 2024

	Current Month								YTD								Limits	
	ROSSDALE				E.L. SMITH				ROSSDALE				E.L. SMITH				*Approval or GCDWQ MAC, (AO or OG)	EPCOR
	Mean	Min	Max	Count	Mean	Min	Max	Count	Mean	Min	Max	Count	Mean	Min	Max	Count		
Physical																		
Turbidity (NTU)	<0.04	<0.04	0.05	28	<0.05	<0.04	0.09	29	<0.04	<0.04	0.07	59	0.05	<0.04	0.09	59		0.3
UV 254 %T ****	<94.7	<93.3	<95.7	28	<94.9	<93.8	<95.8	29	<94.0	<91.0	<95.7	59	<94.4	<91.1	<95.8	59		
Primary Inorganics (mg/L)																		
Bromate Dissolved	<0.005	<0.005	<0.005	4	<0.005	<0.005	<0.005	4	<0.005	<0.005	<0.005	9	<0.005	<0.005	<0.005	9	0.01	
Chlorate Dissolved	0.20	0.20	0.21	4	0.08	0.07	0.09	4	0.21	0.18	0.25	9	0.09	0.07	0.12	9	1	
Chlorite Dissolved	<0.005	<0.005	<0.005	4	<0.005	<0.005	<0.005	4	<0.005	<0.005	<0.005	9	<0.005	<0.005	<0.005	9	1	
Nitrate (as N) Dissolved	0.08	0.08	0.09	4	0.09	0.08	0.09	4	0.08	0.08	0.09	9	0.09	0.08	0.10	9	10	
Nitrite (as N) Dissolved	0.01	0.01	0.02	4	0.01	0.01	0.02	4	0.01	0.01	0.02	9	0.01	0.01	0.02	9	1	
Primary Organics (ug/L)																		
Benzene	<0.5	<0.5	<0.5	28	<0.5	<0.5	<0.5	29	<0.5	<0.5	<0.5	60	<0.5	<0.5	<0.5	60	5	
Carbon Tetrachloride	<0.5	<0.5	<0.5	28	<0.5	<0.5	<0.5	29	<0.5	<0.5	<1.0	60	<0.5	<0.5	<1.0	60	2	
Chlorobenzene	<0.5	<0.5	<0.5	28	<0.5	<0.5	<0.5	29	<0.5	<0.5	<0.5	60	<0.5	<0.5	<0.5	60	80 (30)	
Dichlorobenzene (1,2)	<0.5	<0.5	<0.5	28	<0.5	<0.5	<0.5	29	<0.5	<0.5	<0.5	60	<0.5	<0.5	<0.5	60		
Dichlorobenzene (1,4)	<0.5	<0.5	<0.5	28	<0.5	<0.5	<0.5	29	<0.5	<0.5	<0.5	60	<0.5	<0.5	<0.5	60	5 (1)	
Dichloroethane (1,2)	<0.5	<0.5	<0.5	28	<0.5	<0.5	<0.5	29	<0.5	<0.5	<0.5	59	<0.5	<0.5	<0.5	59	5	
Dichloroethylene (1,1)	<0.5	<0.5	<0.5	28	<0.5	<0.5	<0.5	29	<0.5	<0.5	<3.0	60	<0.5	<0.5	<3.0	60	14	
Ethylbenzene	<0.5	<0.5	<0.5	28	<0.5	<0.5	<0.5	29	<0.5	<0.5	<0.5	60	<0.5	<0.5	<0.5	60	140 (1.6)	
Methylene Chloride	<0.5	<0.5	<0.5	28	<0.5	<0.5	<0.5	29	<0.5	<0.5	<0.5	60	<0.5	<0.5	<0.5	60	50	
Tetrachloroethylene	<0.5	<0.5	<0.5	28	<0.5	<0.5	<0.5	29	<0.5	<0.5	<0.5	60	<0.5	<0.5	<0.5	60	10	
Toluene	<0.5	<0.5	<0.5	28	<0.5	<0.5	<0.5	29	<0.5	<0.5	<0.5	60	<0.5	<0.5	<0.5	60	60 (24)	
Total Xylenes	<1.0	<1.0	<1.0	28	<1.0	<1.0	<1.0	29	<1.0	<1.0	<2.5	60	<1.0	<1.0	<2.5	60	90	
Trichloroethylene	<0.5	<0.5	<0.5	28	<0.5	<0.5	<0.5	29	<0.5	<0.5	<0.5	60	<0.5	<0.5	<0.5	60	5	
Trihalomethanes	8.5	7.1	12.4	28	6.4	5.0	8.1	29	10.4	7.1	17.9	60	8.4	5.0	15.2	60	100	50
Vinyl Chloride	<1	<1	<1	28	<1	<1	<1	29	<1	<1	<1	59	<1	<1	<1	59	2	
Secondary Inorganics (mg/L)																		
Ammonia as NH3	0.15	0.13	0.16	4	0.15	0.13	0.16	4	0.14	0.10	0.16	9	0.14	0.10	0.16	9		
Bromide Dissolved	0.02	<0.01	0.03	4	0.02	<0.01	0.03	4	<0.01	<0.01	0.03	9	<0.01	<0.01	0.03	9		
Chloride Dissolved	5.6	5.4	6.2	4	6.0	5.5	7.2	4	5.9	4.7	10.4	9	6.3	5.5	7.2	9	(250)	
Sulphate Dissolved	71.2	70.2	72.9	4	73.2	69.9	74.8	4	71.7	59.2	87.4	9	74.6	59.8	95.3	9	(500)	

2.2.5 ROSSDALE AND E.L. SMITH TREATED WATER ENTERING PLANT RESERVOIR

February 2024

	Current Month								YTD								Limits	
	ROSSDALE				E.L. SMITH				ROSSDALE				E.L. SMITH				*Approval or GCDWQ MAC, (AO or OG)	EPCOR
	Mean	Min	Max	Count	Mean	Min	Max	Count	Mean	Min	Max	Count	Mean	Min	Max	Count		
Secondary Organics (ug/L)																		
Bromodichloromethane	0.8	<0.5	1.3	28	0.7	<0.5	0.9	29	0.9	<0.5	1.3	60	0.7	<0.5	1.0	60		16
Bromoform	<0.5	<0.5	<0.5	28	<0.5	<0.5	<0.5	29	<0.5	<0.5	<1.0	60	<0.5	<0.5	<1.0	60		
Chloroform	7.4	6.20	11.3	28	5.5	4.20	7.3	29	9.4	6.20	17.9	60	7.4	4.20	14.6	60		
Dibromochloromethane	<0.5	<0.5	<0.5	28	<0.5	<0.5	<0.5	29	<0.5	<0.5	<0.5	60	<0.5	<0.5	<0.5	60		
Dichlorobenzene (1,3)	<0.5	<0.5	<0.5	28	<0.5	<0.5	<0.5	29	<0.5	<0.5	<0.5	60	<0.5	<0.5	<0.5	60		
Dichloroethylene, cis (1,2)	<0.5	<0.5	<0.5	28	<0.5	<0.5	<0.5	29	<0.5	<0.5	<0.5	60	<0.5	<0.5	<0.5	60		
Dichloroethylene, trans (1,2)	<0.5	<0.5	<0.5	28	<0.5	<0.5	<0.5	29	<0.5	<0.5	<0.5	60	<0.5	<0.5	<0.5	60		
Dichloropropane (1,2)	<0.5	<0.5	<0.5	28	<0.5	<0.5	<0.5	29	<0.5	<0.5	<0.5	60	<0.5	<0.5	<0.5	60		
Methyl t-Butyl Ether (MTBE)	<0.5	<0.5	<0.5	28	<0.5	<0.5	<0.5	29	<0.5	<0.5	<0.5	60	<0.5	<0.5	<0.5	60	(15)	
MIBK	<1	<1	<1	28	<1	<1	<1	29	<1	<1	<1	60	<1	<1	<1	60		
Styrene	<0.5	<0.5	<0.5	28	<0.5	<0.5	<0.5	29	<0.5	<0.5	<0.5	60	<0.5	<0.5	<0.5	60		
Tetrachloroethane (1,1,2,2)	<0.5	<0.5	<0.5	28	<0.5	<0.5	<0.5	29	<0.5	<0.5	<1.0	60	<0.5	<0.5	<1.0	60		
Total Volatile Organics (NonTHM)	<1.1	<1.0	1.3	28	<1.1	<1.0	1.5	29	<1.3	<1.0	2.3	60	1.3	<1.0	2.3	60		
Total Volatile Organics (Unknown)	1.0	<0.5	1.8	22	1.1	<0.5	2.1	24	<1.0	<0.5	1.8	24	1.1	<0.5	2.1	27		
Trichlorobenzene (1,2,4)	<0.5	<0.5	<0.5	28	<0.5	<0.5	<0.5	29	<0.5	<0.5	<0.5	60	<0.5	<0.5	<0.5	60		
Trichloroethane (1,1,1)	<0.5	<0.5	<0.5	28	<0.5	<0.5	<0.5	29	<0.5	<0.5	<0.5	60	<0.5	<0.5	<0.5	60		
Xylene (1,2)	<0.5	<0.5	<0.5	28	<0.5	<0.5	<0.5	29	<0.5	<0.5	<0.5	60	<0.5	<0.5	<0.5	60		
Xylene (1,4)	<0.5	<0.5	<0.5	28	<0.5	<0.5	<0.5	29	<0.5	<0.5	<0.5	60	<0.5	<0.5	<0.5	60		

TABLE EXPLANATIONS:

* Numbers with no brackets are Health Canada Guidelines for Canadian Drinking Water Quality (GCDWQ) Maximum Acceptable Concentrations (MAC) and/or a limit set out in the Alberta Environment and Parks (AEP) Operating Approval 638-04-00. Limits in brackets indicate Aesthetic Objectives or Operational Guidelines (OG) and are not Approval Limits The EPCOR limits are internal limits set by EPCOR in the Operations Program.

** Primary parameters are those that have health-based limits (MACs) according the AEP Operating Approval 638-04-00

*** Secondary parameters do not have health-based limits but may have aesthetic or operational objectives

**** UV 254 %T for Rossdale based on a sample collected daily from one of the nine filters selected randomly. For E.L. Smith it is based on a daily sample of Combined Filter Effluent

2.2.6.a Routine Distribution System (does not include Field Reservoirs)

February 2024

	Monthly				YTD				Limits	
	Mean	Min	Max	Count	Mean	Min	Max	Count	*Approval or GCDWQ MAC, (AO or OG)	EPCOR
Microbiological										
Microcystin	<0.2	<0.2	<0.2	1	<0.2	<0.2	<0.2	1	1.5	
Physical										
Colour (TCU)	0.7	0.7	0.7	1	0.7	0.7	0.7	1	(15)	10
pH (N/A)	7.8	7.8	7.8	1	7.8	7.8	7.9	3	(7.0 - 10.5)	7.3 - 8.3
Total Dissolved Solids (mg/L)	233	233	233	1	233	233	233	1	(500)	
Turbidity (NTU)	0.25	<0.04	2.32	153	0.23	<0.04	2.32	299		1.0
UV 254 %T	<92.7	<92.7	<92.7	1	<92.7	<92.7	<92.7	1		
Primary Inorganics (mg/L) **										
Antimony	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	1	0.006	
Arsenic	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	1	0.01	
Barium	0.057	0.057	0.057	1	0.057	0.057	0.057	1	2	
Boron	0.009	0.009	0.009	1	0.009	0.009	0.009	1	2	
Bromate Dissolved	<0.005	<0.005	<0.005	1	<0.005	<0.005	<0.005	3	0.01	
Cadmium	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	1	0.007	
Chlorate Dissolved	0.15	0.15	0.15	1	0.16	0.14	0.20	3	1	
Chlorite Dissolved	<0.005	<0.005	<0.005	1	<0.005	<0.005	<0.005	3	1	
Chromium	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	1	0.05	
Copper	<0.005	<0.005	<0.005	1	<0.005	<0.005	<0.005	1	2 (1)	
Fluoride	0.74	0.74	0.74	1	0.74	0.74	0.74	1	1.5	0.6 - 0.8
Lead	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	1	0.005	
Manganese	<0.002	<0.002	<0.002	1	<0.002	<0.002	<0.002	1	0.12 (0.02)	
Mercury	<0.00010	<0.00005	<0.00020	2	<0.00010	<0.00005	<0.00020	2	0.001	
Nitrate (as N) Dissolved	0.09	0.09	0.09	1	0.08	0.08	0.09	3	10	
Nitrite (as N) Dissolved	<0.01	<0.01	<0.01	1	<0.01	<0.01	<0.01	3	1	
Selenium	0.0003	0.0003	0.0003	1	0.0003	0.0003	0.0003	1	0.05	
Strontium	0.445	0.445	0.445	1	0.445	0.445	0.445	1	7.0	
Total Chlorine	1.97	1.15	2.27	153	2.00	1.15	2.27	299	>0.5 and <3.0	>1.0 and <2.4
Uranium	<0.0005	<0.0005	<0.0005	1	<0.0005	<0.0005	<0.0005	1	0.02	

2.2.6.a Routine Distribution System (does not include Field Reservoirs)

February 2024

	Monthly				YTD				Limits	
	Mean	Min	Max	Count	Mean	Min	Max	Count	*Approval or GCDWQ MAC, (AO or OG)	EPCOR
Primary Organics (ug/L) **										
2,4-D	<0.05	<0.05	<0.05	1	<0.05	<0.05	<0.05	1	100	
Atrazine	<0.05	<0.05	<0.05	1	<0.05	<0.05	<0.05	1	5	
Atrazine+N-Dealkylated Metabolites	<0.1	<0.1	<0.1	1	<0.1	<0.1	<0.1	1	0.005	
Azinphos-methyl	<0.1	<0.1	<0.1	1	<0.1	<0.1	<0.1	1	0.02	
Benzene	<0.5	<0.5	<0.5	6	<0.5	<0.5	<0.5	12	5	
Benzo(a)pyrene	<0.005	<0.005	<0.005	1	<0.005	<0.005	<0.005	1	0.04	
Bromoxynil	<0.05	<0.05	<0.05	1	<0.05	<0.05	<0.05	1	5	
Carbon Tetrachloride	<0.5	<0.5	<0.5	6	<0.5	<0.5	<0.5	12	2	
Chlorobenzene	<0.5	<0.5	<0.5	6	<0.5	<0.5	<0.5	12	80 (30)	
Chlorpyrifos	<0.1	<0.1	<0.1	1	<0.1	<0.1	<0.1	1	90	
Cyanazine	<0.1	<0.1	<0.1	1	<0.1	<0.1	<0.1	1		
Diazinon	<0.025	<0.025	<0.025	1	<0.025	<0.025	<0.025	1		
Dicamba	<0.1	<0.1	<0.1	1	<0.1	<0.1	<0.1	1	110	
Dichlorobenzene (1,2)	<0.5	<0.5	<0.5	6	<0.5	<0.5	<0.5	12		
Dichlorobenzene (1,4)	<0.5	<0.5	<0.5	6	<0.5	<0.5	<0.5	12	5 (1)	
Dichloroethane (1,2)	<0.5	<0.5	<0.5	6	<0.5	<0.5	<0.5	12	5	
Dichloroethylene (1,1)	<0.5	<0.5	<0.5	6	<0.5	<0.5	<0.5	12	14	
Dichlorophenol (2,4)	<0.3	<0.3	<0.3	1	<0.3	<0.3	<0.3	1		
Diclofop-methyl	<0.1	<0.1	<0.1	1	<0.1	<0.1	<0.1	1		
Dimethoate	<0.05	<0.05	<0.05	1	<0.05	<0.05	<0.05	1	20	
Diquat	<1	<1	<1	1	<1	<1	<1	1	0.05	
Diuron	<0.05	<0.05	<0.05	1	<0.05	<0.05	<0.05	1		
Ethylbenzene	<0.5	<0.5	<0.5	6	<0.5	<0.5	<0.5	12	140 (1.6)	
Glyphosate	<0.2	<0.2	<0.2	1	<0.2	<0.2	<0.2	1	280	
Malathion	<0.025	<0.025	<0.025	1	<0.025	<0.025	<0.025	1	190	
MCPA	<0.05	<0.05	<0.05	1	<0.05	<0.05	<0.05	1	100	
Methylene Chloride	<0.5	<0.5	<0.5	6	<0.5	<0.5	<0.5	12	50	
Metolachlor	<0.025	<0.025	<0.025	1	<0.025	<0.025	<0.025	1		
Metribuzin	<0.1	<0.1	<0.1	1	<0.1	<0.1	<0.1	1	80	
NDMA (µg/L)	0.00320	<0.00126	0.00690	3	<0.00460	<0.00126	0.00690	6	0.040	10
Nitrilotriacetic acid	<0.4	<0.4	<0.4	1	<0.4	<0.4	<0.4	1	0.4	
Paraquat	<1	<1	<1	1	<1	<1	<1	1	0.07	
Pentachlorophenol	<0.5	<0.5	<0.5	1	<0.5	<0.5	<0.5	1	60 (30)	
Perfluorooctane sulfonic acid (PFOS)	<0.02	<0.02	<0.02	1	<0.02	<0.02	<0.02	1	0.0006	
Perfluorooctanoic acid (PFOA)	<0.02	<0.02	<0.02	1	<0.02	<0.02	<0.02	1	0.0002	
Phorate	<0.25	<0.25	<0.25	1	<0.25	<0.25	<0.25	1		
Picloram	<0.1	<0.1	<0.1	1	<0.1	<0.1	<0.1	1		
Simazine	<0.1	<0.1	<0.1	1	<0.1	<0.1	<0.1	1		
Terbufos	<0.5	<0.5	<0.5	1	<0.5	<0.5	<0.5	1		

2.2.6.a Routine Distribution System (does not include Field Reservoirs)

February 2024

	Monthly				YTD				Limits	
	Mean	Min	Max	Count	Mean	Min	Max	Count	*Approval or GCDWQ MAC, (AO or OG)	EPCOR
Primary Organics (ug/L) **										
Tetrachloroethylene	<0.5	<0.5	<0.5	6	<0.5	<0.5	<0.5	12	10	
Tetrachlorophenol (2,3,4,6)	<0.5	<0.5	<0.5	1	<0.5	<0.5	<0.5	1	100 (1)	
Toluene	<0.5	<0.5	<0.5	6	<0.5	<0.5	<0.5	12	60 (24)	
Total Xylenes	<1	<1	<1	6	<1	<1	<1	12	90	
Trichloroethylene	<0.5	<0.5	<0.5	6	<0.5	<0.5	<0.5	12	5	
Trichlorophenol (2,4,6)	<0.5	<0.5	<0.5	1	<0.5	<0.5	<0.5	1	5 (2)	
Trifluralin	<0.1	<0.1	<0.1	1	<0.1	<0.1	<0.1	1		
Vinyl Chloride	<1	<1	<1	6	<1	<1	<1	12	2	

2.2.6.a Routine Distribution System (does not include Field Reservoirs)

February 2024

	Monthly				YTD				Limits	
	Mean	Min	Max	Count	Mean	Min	Max	Count	*Approval or GCDWQ MAC, (AO or OG)	EPCOR
Secondary Inorganics (mg/L) * **										
Alkalinity Total	121	121	121	1	121	121	121	1		
Alkalinity, PHP (mg CaCO3/L)	<3	<3	<3	1	<3	<3	<3	1		
Aluminum	0.018	0.018	0.018	1	0.018	0.018	0.018	1	2.9	0.1/0.2
Ammonia as N	0.19	0.16	0.24	3	0.15	0.10	0.24	5		
Beryllium	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	1		
Bromide Dissolved	<0.01	<0.01	<0.01	1	<0.01	<0.01	<0.01	3		
Calcium	47.4	47.4	47.4	1	47.4	47.4	47.4	1		
Chloride Dissolved	6.1	6.1	6.1	1	5.5	4.9	6.1	3	(250)	
Cobalt	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	1		
Free Chlorine	<0.07	<0.07	<0.07	1	<0.07	<0.07	<0.07	1		
Iron	0.013	0.013	0.013	1	0.013	0.013	0.013	1	(0.3)	0.3
Lanthanum	<0.001	<0.001	<0.001	1	<0.001	<0.001	<0.001	1		
Lithium	0.0034	0.0034	0.0034	1	0.0034	0.0034	0.0034	1		
Magnesium	15.3	15.3	15.3	1	15.3	15.3	15.3	1		
Molybdenum	0.001	0.001	0.001	1	0.001	0.001	0.001	1		
Nickel	<0.0005	<0.0005	<0.0005	1	<0.0005	<0.0005	<0.0005	1		
Phosphorus	0.91	0.91	0.91	1	0.91	0.91	0.91	1		
Potassium	0.8	0.8	0.8	1	0.8	0.8	0.8	1		
Silicon	2.4	2.4	2.4	1	2.4	2.4	2.4	1		
Silver	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	1		
Sodium	11.2	11.2	11.2	1	11.2	11.2	11.2	1	(200)	
Sulphate Dissolved	74.5	74.5	74.5	1	64.5	59.0	74.5	3	(500)	
Thallium	<0.0005	<0.0005	<0.0005	1	<0.0005	<0.0005	<0.0005	1		
Tin	<0.0005	<0.0005	<0.0005	1	<0.0005	<0.0005	<0.0005	1		
Titanium	<0.0005	<0.0005	<0.0005	1	<0.0005	<0.0005	<0.0005	1		
Total Hardness (mg/L CaCO3)	183	183	183	1	183	183	183	1		
Total Kjeldahl Nitrogen	0.4	0.4	0.4	1	0.4	0.4	0.4	1		
Vanadium	<0.0005	<0.0005	<0.0005	1	<0.0005	<0.0005	<0.0005	1		
Zinc	<0.005	<0.005	<0.005	1	<0.005	<0.005	<0.005	1	(5.0)	
Zirconium	<0.001	<0.001	<0.001	1	<0.001	<0.001	<0.001	1		

2.2.6.a Routine Distribution System (does not include Field Reservoirs)

February 2024

	Monthly				YTD				Limits	
	Mean	Min	Max	Count	Mean	Min	Max	Count	*Approval or GCDWQ MAC, (AO or OG)	EPCOR
Secondary Organics (ug/L) * **										
2,4,5-T	<0.05	<0.05	<0.05	1	<0.05	<0.05	<0.05	1		
6:2 Fluorotelomer sulfonic acid(6:2 FTS)	<0.02	<0.02	<0.02	1	<0.02	<0.02	<0.02	1		
8:2 Fluorotelomer sulfonic acid(8:2 FTS)	<0.02	<0.02	<0.02	1	<0.02	<0.02	<0.02	1		
a-chlordane	<0.008	<0.008	<0.008	1	<0.008	<0.008	<0.008	1		
Alachlor	<0.05	<0.05	<0.05	1	<0.05	<0.05	<0.05	1		
Aldicarb	<0.1	<0.1	<0.1	1	<0.1	<0.1	<0.1	1		
Aldrin	<0.008	<0.008	<0.008	1	<0.008	<0.008	<0.008	1		
Ametryn	<0.025	<0.025	<0.025	1	<0.025	<0.025	<0.025	1		
Atrazine Desethyl	<0.025	<0.025	<0.025	1	<0.025	<0.025	<0.025	1		
Bendiocarb	<0.025	<0.025	<0.025	1	<0.025	<0.025	<0.025	1		
Bromochloroacetic acid	<1	<1	<1	6	<1	<1	<1	12		
Bromodichloromethane	1.2	1.0	1.5	6	1.1	0.9	1.5	12		16
Bromoform	<0.5	<0.5	<0.5	6	<0.5	<0.5	<0.5	12		
Carbaryl	<0.05	<0.05	<0.05	1	<0.05	<0.05	<0.05	1		
Carbofuran	<0.025	<0.025	<0.025	1	<0.025	<0.025	<0.025	1		
Chloroform	13.4	11.6	20.0	6	14.1	10.7	20.0	12		
Dibromoacetic acid	<1	<1	<1	6	<1	<1	<1	12		
Dibromochloromethane	<0.5	<0.5	<0.5	6	<0.5	<0.5	<0.5	12		
Dichloroacetic acid	8.07	7.05	10.20	6	8.99	7.05	10.80	12		
Dichlorobenzene (1,3)	<0.5	<0.5	<0.5	6	<0.5	<0.5	<0.5	12		
Dichloroethylene, cis (1,2)	<0.5	<0.5	<0.5	6	<0.5	<0.5	<0.5	12		
Dichloroethylene, trans (1,2)	<0.5	<0.5	<0.5	6	<0.5	<0.5	<0.5	12		
Dichloropropane (1,2)	<0.5	<0.5	<0.5	6	<0.5	<0.5	<0.5	12		
Dieldrin	<0.008	<0.008	<0.008	1	<0.008	<0.008	<0.008	1		
Dinoseb	<0.05	<0.05	<0.05	1	<0.05	<0.05	<0.05	1		
gamma-hexachlorocyclohexane	<0.008	<0.008	<0.008	1	<0.008	<0.008	<0.008	1		
g-chlordane	<0.008	<0.008	<0.008	1	<0.008	<0.008	<0.008	1		
Heptachlor	<0.008	<0.008	<0.008	1	<0.008	<0.008	<0.008	1		
Heptachlor Epoxide	<0.008	<0.008	<0.008	1	<0.008	<0.008	<0.008	1		
Methoxychlor	<0.008	<0.008	<0.008	1	<0.008	<0.008	<0.008	1		
Methyl Parathion	<0.1	<0.1	<0.1	1	<0.1	<0.1	<0.1	1		
Methyl t-Butyl Ether (MTBE)	<0.5	<0.5	<0.5	6	<0.5	<0.5	<0.5	12	(15)	
MIBK	<1	<1	<1	6	<1	<1	<1	12		
Monobromoacetic acid	<1	<1	<1	6	<1	<1	<1	12		
Monochloroacetic acid	<1	<1	<1	6	<1	<1	<1	12		
op-DDT	<0.004	<0.004	<0.004	1	<0.004	<0.004	<0.004	1		
Oxychlordane	<0.008	<0.008	<0.008	1	<0.008	<0.008	<0.008	1		
Parathion	<0.1	<0.1	<0.1	1	<0.1	<0.1	<0.1	1		
Perfluorobutane sulfonic acid (PFBS)	<0.02	<0.02	<0.02	1	<0.02	<0.02	<0.02	1		

2.2.6.a Routine Distribution System (does not include Field Reservoirs)

February 2024

	Monthly				YTD				Limits	
	Mean	Min	Max	Count	Mean	Min	Max	Count	*Approval or GCDWQ MAC, (AO or OG)	EPCOR
Secondary Organics (ug/L) * **										
Perfluorobutanoic acid (PFBA)	<0.1	<0.1	<0.1	1	<0.1	<0.1	<0.1	1		
Perfluoroheptanoic acid (PFHpA)	<0.02	<0.02	<0.02	1	<0.02	<0.02	<0.02	1		
Perfluorohexane sulfonic acid (PFHxS)	<0.02	<0.02	<0.02	1	<0.02	<0.02	<0.02	1		
Perfluorohexanoic acid (PFHxA)	<0.02	<0.02	<0.02	1	<0.02	<0.02	<0.02	1		
Perfluorononanoic acid (PFNA)	<0.02	<0.02	<0.02	1	<0.02	<0.02	<0.02	1		
Perfluoropentanoic acid (PFPeA)	<0.02	<0.02	<0.02	1	<0.02	<0.02	<0.02	1		
pp-DDD	<0.004	<0.004	<0.004	1	<0.004	<0.004	<0.004	1		
pp-DDE	<0.004	<0.004	<0.004	1	<0.004	<0.004	<0.004	1		
pp-DDT	<0.004	<0.004	<0.004	1	<0.004	<0.004	<0.004	1		
Prometon	<0.025	<0.025	<0.025	1	<0.025	<0.025	<0.025	1		
Prometryne	<0.025	<0.025	<0.025	1	<0.025	<0.025	<0.025	1		
Propazine	<0.025	<0.025	<0.025	1	<0.025	<0.025	<0.025	1		
Styrene	<0.5	<0.5	<0.5	6	<0.5	<0.5	<0.5	12		
Temephos	<0.25	<0.25	<0.25	1	<0.25	<0.25	<0.25	1		
Terbutryn	<0.025	<0.025	<0.025	1	<0.025	<0.025	<0.025	1		
Tetrachloroethane (1,1,2,2)	<0.5	<0.5	<0.5	6	<0.5	<0.5	<0.5	12		
Total Organic Carbon	1.3	1.3	1.3	1	1.3	1.3	1.3	1		
Total Volatile Organics (NonTHM)	<1.0	<1.0	<1.0	6	1.4	<1.0	2.2	12		
Total Volatile Organics (Unknown)	1.1	0.7	1.6	3	1.1	0.7	1.6	3		
Triallate	<0.1	<0.1	<0.1	1	<0.1	<0.1	<0.1	1		
Trichloroacetic acid	7.62	6.73	9.04	6	8.49	6.73	9.74	12		
Trichlorobenzene (1,2,4)	<0.5	<0.5	<0.5	6	<0.5	<0.5	<0.5	12		
Trichloroethane (1,1,1)	<0.5	<0.5	<0.5	6	<0.5	<0.5	<0.5	12		
Xylene (1,2)	<0.5	<0.5	<0.5	6	<0.5	<0.5	<0.5	12		
Xylene (1,4)	<0.5	<0.5	<0.5	6	<0.5	<0.5	<0.5	12		

TABLE EXPLANATIONS:

* Numbers with no brackets are Health Canada Guidelines for Canadian Drinking Water Quality (GCDWQ) Maximum Acceptable Concentrations (MAC) and/or a limit set out in the Alberta Environment and Parks (AEP) Operating Approval 638-04-00. Limits in brackets indicate Aesthetic Objectives or Operational Guidelines (OG) and are not Approval Limits The EPCOR limits are internal limits set by EPCOR in the Operations Program.

** Primary parameters are those that have health-based limits (MACs) according the AEP Operating Approval 638-04-00

*** Secondary parameters do not have health-based limits but may have aesthetic or operational objectives

2.2.6.b Additional Distribution System Samples Collected from Water Quality Complaint Investigations

February 2024

	Monthly				YTD				Limits	
	Mean	Min	Max	Count	Mean	Min	Max	Count	*Approval or GCDWQ MAC, (AO or OG)	EPCOR
Physical										
Colour (TCU)	0.8	<0.5	1.1	7	0.9	<0.5	1.8	22	(15)	10
pH (N/A)	7.8	7.7	7.9	7	7.8	7.6	8.1	22	(7.0 - 10.5)	7.3 - 8.3
Turbidity (NTU)	0.55	0.06	2.34	7	0.37	0.05	2.34	22		1.0
Primary Inorganics (mg/L) **										
Antimony	<0.0003	<0.0002	<0.0005	7	<0.0002	<0.0002	<0.0005	22	0.006	
Arsenic	<0.0002	<0.0002	<0.0002	7	<0.0002	<0.0002	<0.0002	22	0.01	
Barium	0.060	0.055	0.081	7	0.058	0.052	0.081	22	2	
Boron	0.010	0.008	0.012	7	0.010	0.007	0.013	22	2	
Cadmium	<0.00010	<0.00002	<0.00020	7	<0.00020	<0.00002	<0.00020	22	0.007	
Chromium	<0.0002	<0.0002	<0.0002	7	<0.0002	<0.0002	<0.0002	22	0.05	
Copper	0.011	<0.002	0.048	7	0.007	<0.002	0.048	22	2 (1)	
Lead	0.0002	<0.0002	0.0005	7	0.0002	<0.0002	0.0005	22	0.005	
Manganese	0.003	<0.002	0.006	7	0.002	<0.002	0.006	22	0.12 (0.02)	
Mercury	<0.00020	<0.00020	<0.00020	3	<0.00020	<0.00020	<0.00020	18	0.001	
Selenium	0.0003	0.0003	0.0003	7	0.0003	<0.0002	0.0003	22	0.05	
Strontium	0.453	0.425	0.473	7	0.451	0.425	0.473	22	7.0	
Total Chlorine	1.91	1.66	2.09	7	1.97	1.66	2.27	22	>0.5 and <3.0	>1.0 and <2.4
Uranium	<0.0005	<0.0005	<0.0005	7	0.0005	<0.0005	0.0006	22	0.02	
Primary Organics (ug/L) **										
Benzene	<0.5	<0.5	<0.5	7	<0.5	<0.5	<0.5	22	5	
Carbon Tetrachloride	<0.5	<0.5	<0.5	7	<0.5	<0.5	<0.5	22	2	
Chlorobenzene	<0.5	<0.5	<0.5	7	<0.5	<0.5	<0.5	22	80 (30)	
Dichlorobenzene (1,2)	<0.5	<0.5	<0.5	7	<0.5	<0.5	<0.5	22		
Dichlorobenzene (1,4)	<0.5	<0.5	<0.5	7	<0.5	<0.5	<0.5	22	5 (1)	
Dichloroethane (1,2)	<0.5	<0.5	<0.5	7	<0.5	<0.5	<0.5	22	5	
Dichloroethylene (1,1)	<0.5	<0.5	<0.5	7	<0.5	<0.5	<0.5	22	14	
Ethylbenzene	<0.5	<0.5	<0.5	7	<0.5	<0.5	<0.5	22	140 (1.6)	
Methylene Chloride	<0.5	<0.5	<0.5	7	<0.5	<0.5	<0.5	22	50	
Tetrachloroethylene	<0.5	<0.5	<0.5	7	<0.5	<0.5	<0.5	22	10	
Toluene	<0.5	<0.5	<0.5	7	<0.5	<0.5	<0.5	22	60 (24)	
Total Xylenes	<1	<1	<1	7	<1	<1	<1	22	90	
Trichloroethylene	<0.5	<0.5	<0.5	7	<0.5	<0.5	<0.5	22	5	
Vinyl Chloride	<1	<1	<1	7	<1	<1	<1	22	2	

2.2.6.b Additional Distribution System Samples Collected from Water Quality Complaint Investigations

February 2024

	Monthly				YTD				Limits	
	Mean	Min	Max	Count	Mean	Min	Max	Count	*Approval or GCDWQ MAC, (AO or OG)	EPCOR
Secondary Inorganics (mg/L) * **										
Aluminum	0.126	0.015	0.759	7	0.081	0.015	0.759	22	2.9	0.1/0.2
Beryllium	<0.0002	<0.0002	<0.0002	7	<0.0002	<0.0002	<0.0002	22		
Calcium	49.3	46.8	50.7	7	49.4	46.4	54.1	22		
Cobalt	<0.0002	<0.0002	<0.0002	7	<0.0002	<0.0002	<0.0002	22		
Iron	0.068	<0.005	0.273	7	0.047	<0.005	0.273	22	(0.3)	0.3
Lanthanum	<0.001	<0.001	<0.001	7	<0.001	<0.001	<0.001	22		
Lithium	0.0036	0.0034	0.0040	7	0.0035	0.0029	0.0041	22		
Magnesium	14.4	13.8	15.1	7	14.9	13.7	16.4	22		
Molybdenum	0.0010	0.0008	0.0011	7	0.0009	0.0006	0.0011	22		
Nickel	<0.0005	<0.0005	<0.0005	7	0.0005	<0.0005	0.0008	22		
Phosphorus	1.02	0.86	1.43	7	0.95	0.86	1.43	22		
Potassium	0.8	0.8	0.8	7	0.8	0.7	1.0	22		
Silicon	2.21	1.93	2.50	7	2.25	1.93	2.69	22		
Silver	<0.00010	<0.00002	<0.00020	7	<0.00020	<0.00002	<0.00020	22		
Sodium	10.4	9.1	11.5	7	9.6	6.6	16.1	22	(200)	
Thallium	<0.0004	<0.0002	<0.0005	7	<0.0005	<0.0002	<0.0005	22		
Tin	<0.0005	<0.0005	<0.0005	7	<0.0005	<0.0005	<0.0005	22		
Titanium	<0.0005	<0.0005	<0.0005	7	<0.0005	<0.0005	<0.0005	22		
Total Hardness (mg/L CaCO3)	184	179	186	7	184	173	201	22		
Vanadium	<0.0005	<0.0005	<0.0005	7	<0.0005	<0.0005	<0.0005	22		
Zinc	0.008	<0.005	0.023	7	0.006	<0.005	0.023	22	(5.0)	
Zirconium	<0.001	<0.001	<0.001	7	<0.001	<0.001	<0.001	22		

2.2.6.b Additional Distribution System Samples Collected from Water Quality Complaint Investigations

February 2024

	Monthly				YTD				Limits	
	Mean	Min	Max	Count	Mean	Min	Max	Count	*Approval or GCDWQ MAC, (AO or OG)	EPCOR
Secondary Organics (ug/L) * **										
Bromodichloromethane	1.3	0.9	1.6	7	1.2	0.7	1.6	22		16
Bromoform	<0.5	<0.5	<0.5	7	<0.5	<0.5	<0.5	22		
Chloroform	11.7	9.6	13.1	7	14.5	9.6	20.1	22		
Dibromochloromethane	<0.5	<0.5	<0.5	7	<0.5	<0.5	<0.5	22		
Dichlorobenzene (1,3)	<0.5	<0.5	<0.5	7	<0.5	<0.5	<0.5	22		
Dichloroethylene, cis (1,2)	<0.5	<0.5	<0.5	7	<0.5	<0.5	<0.5	22		
Dichloroethylene, trans (1,2)	<0.5	<0.5	<0.5	7	<0.5	<0.5	<0.5	22		
Dichloropropane (1,2)	<0.5	<0.5	<0.5	7	<0.5	<0.5	<0.5	22		
Methyl t-Butyl Ether (MTBE)	<0.5	<0.5	<0.5	7	<0.5	<0.5	<0.5	22	(15)	
MIBK	<1	<1	<1	7	<1	<1	<1	22		
Styrene	<0.5	<0.5	<0.5	7	<0.5	<0.5	<0.5	22		
Tetrachloroethane (1,1,2,2)	<0.5	<0.5	<0.5	7	<0.5	<0.5	<0.5	22		
Total Volatile Organics (NonTHM)	1.0	<1.0	1.3	7	1.4	<1.0	2.6	22		
Total Volatile Organics (Unknown)	0.6	<0.5	0.8	5	1.8	<0.5	7.7	6		
Trichlorobenzene (1,2,4)	<0.5	<0.5	<0.5	7	<0.5	<0.5	<0.5	22		
Trichloroethane (1,1,1)	<0.5	<0.5	<0.5	7	<0.5	<0.5	<0.5	22		
Xylene (1,2)	<0.5	<0.5	<0.5	7	<0.5	<0.5	<0.5	22		
Xylene (1,4)	<0.5	<0.5	<0.5	7	<0.5	<0.5	<0.5	22		

TABLE EXPLANATIONS:

* Numbers with no brackets are Health Canada Guidelines for Canadian Drinking Water Quality (GCDWQ) Maximum Acceptable Concentrations (MAC) and/or a limit set out in the Alberta Environment and Parks (AEP) Operating Approval 638-04-00. Limits in brackets indicate Aesthetic Objectives or Operational Guidelines (OG) and are not Approval Limits The EPCOR limits are internal limits set by EPCOR in the Operations Program.

** Primary parameters are those that have health-based limits (MACs) according the AEP Operating Approval 638-04-00

*** Secondary parameters do not have health-based limits but may have aesthetic or operational objectives

2.2.7 Castledowns Reservoir

February 2024

Parameter	Monthly				YTD				Limits	
	Mean	Min	Max	Count	Mean	Min	Max	Count	*Approval or GCDWQ MAC, (AO or OG)	EPCOR
Physical										
Colour (TCU)	1.2	1.2	1.2	1	1.2	1.2	1.2	1	(15)	10
Conductivity (uS/cm)	391	391	391	1	391	391	391	1		
Odour	Inoff	Inoff	Inoff	1	Inoff	Inoff	Inoff	1		
pH (N/A)	7.8	7.8	7.8	1	7.8	7.8	7.8	1	(7.0 - 10.5)	7.3 - 8.3
Turbidity (NTU)	0.23	0.08	0.46	4	0.20	0.08	0.46	7		1
Primary Inorganics (mg/L) **										
Antimony	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	1	0.006	
Arsenic	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	1	0.01	
Barium	0.056	0.056	0.056	1	0.056	0.056	0.056	1	2	
Boron	0.009	0.009	0.009	1	0.009	0.009	0.009	1	2	
Bromate Dissolved	<0.005	<0.005	<0.005	1	<0.005	<0.005	<0.005	1	0.01	
Cadmium	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	1	0.007	
Chlorate Dissolved	0.143	0.143	0.143	1	0.143	0.143	0.143	1	1	
Chlorite Dissolved	<0.005	<0.005	<0.005	1	<0.005	<0.005	<0.005	1	1	
Chromium	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	1	0.05	
Copper	<0.005	<0.005	<0.005	1	<0.005	<0.005	<0.005	1	2 (1)	
Fluoride	0.75	0.75	0.75	1	0.75	0.75	0.75	1	1.5	0.6 - 0.8
Lead	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	1	0.005	
Manganese	0.003	0.003	0.003	1	0.003	0.003	0.003	1	0.12 (0.02)	
Mercury	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	1	0.001	
Nitrate (as N) Dissolved	0.090	0.090	0.090	1	0.090	0.090	0.090	1	10	
Nitrite (as N) Dissolved	<0.010	<0.010	<0.010	1	<0.010	<0.010	<0.010	1	1	
Selenium	0.0003	0.0003	0.0003	1	0.0003	0.0003	0.0003	1	0.05	
Strontium	0.437	0.437	0.437	1	0.437	0.437	0.437	1	7.0	
Total Chlorine	1.58	1.27	1.92	4	1.66	1.27	2.04	7	>0.5 and <3.0	>1.0 and <2.4
Uranium	<0.0005	<0.0005	<0.0005	1	<0.0005	<0.0005	<0.0005	1	0.02	
Primary Organics (ug/L) **										
Benzene	<0.5	<0.5	<0.5	1	<0.5	<0.5	<0.5	1	5	
Carbon Tetrachloride	<0.5	<0.5	<0.5	1	<0.5	<0.5	<0.5	1	2	
Chlorobenzene	<0.50	<0.50	<0.50	1	<0.50	<0.50	<0.50	1	80 (30)	
Dichlorobenzene (1,2)	<0.50	<0.50	<0.50	1	<0.50	<0.50	<0.50	1		
Dichlorobenzene (1,4)	<0.5	<0.5	<0.5	1	<0.5	<0.5	<0.5	1	5 (1)	
Dichloroethane (1,2)	<0.5	<0.5	<0.5	1	<0.5	<0.5	<0.5	1	5	
Dichloroethylene (1,1)	<0.5	<0.5	<0.5	1	<0.5	<0.5	<0.5	1	14	
Ethylbenzene	<0.50	<0.50	<0.50	1	<0.50	<0.50	<0.50	1	140 (1.6)	
Methylene Chloride	<0.5	<0.5	<0.5	1	<0.5	<0.5	<0.5	1	50	
Tetrachloroethylene	<0.5	<0.5	<0.5	1	<0.5	<0.5	<0.5	1	10	
Toluene	<0.50	<0.50	<0.50	1	<0.50	<0.50	<0.50	1	60 (24)	
Total Xylenes	<1	<1	<1	1	<1	<1	<1	1	90	
Trichloroethylene	<0.50	<0.50	<0.50	1	<0.50	<0.50	<0.50	1	5	
Vinyl Chloride	<1.0	<1.0	<1.0	1	<1.0	<1.0	<1.0	1	2	

2.2.7 Castledowns Reservoir

February 2024

Parameter	Monthly				YTD				Limits	
	Mean	Min	Max	Count	Mean	Min	Max	Count	*Approval or GCDWQ MAC, (AO or OG)	EPCOR
Secondary Inorganics (mg/L) * **										
Alkalinity Total	122	122	122	1	122	122	122	1		
Aluminum	0.031	0.031	0.031	1	0.031	0.031	0.031	1	2.9	0.1/0.2
Beryllium	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	1		
Bromide Dissolved	<0.010	<0.010	<0.010	1	<0.010	<0.010	<0.010	1		
Calcium	47.7	47.7	47.7	1	47.7	47.7	47.7	1		
Calcium Hardness	121	121	121	1	121	121	121	1		
Chloride Dissolved	6.2	6.2	6.2	1	6.2	6.2	6.2	1	(250)	
Cobalt	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	1		
Iron	0.078	0.078	0.078	1	0.078	0.078	0.078	1	(0.3)	0.3
Lanthanum	<0.0010	<0.0010	<0.0010	1	<0.0010	<0.0010	<0.0010	1		
Lithium	0.0030	0.0030	0.0030	1	0.0030	0.0030	0.0030	1		
Magnesium	13.7	13.7	13.7	1	13.7	13.7	13.7	1		
Molybdenum	0.0009	0.0009	0.0009	1	0.0009	0.0009	0.0009	1		
Nickel	<0.0005	<0.0005	<0.0005	1	<0.0005	<0.0005	<0.0005	1		
Ortho_P	0.86	0.86	0.86	2	0.88	0.86	0.92	3		
Phosphorus	0.87	0.87	0.87	1	0.87	0.87	0.87	1		
Potassium	0.80	0.80	0.80	1	0.80	0.80	0.80	1		
Silicon	2.21	2.21	2.21	1	2.21	2.21	2.21	1		
Silver	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	1		
Sodium	9.9	9.9	9.9	1	9.9	9.9	9.9	1	(200)	
Sulphate Dissolved	70	70	70	1	70	70	70	1	(500)	
Thallium	<0.0005	<0.0005	<0.0005	1	<0.0005	<0.0005	<0.0005	1		
Tin	<0.0005	<0.0005	<0.0005	1	<0.0005	<0.0005	<0.0005	1		
Titanium	<0.0005	<0.0005	<0.0005	1	<0.0005	<0.0005	<0.0005	1		
Total Hardness (mg/L CaCO3)	184	184	184	1	184	184	184	1		
Vanadium	<0.0005	<0.0005	<0.0005	1	<0.0005	<0.0005	<0.0005	1		
Zinc	<0.005	<0.005	<0.005	1	<0.005	<0.005	<0.005	1	(5.0)	
Zirconium	<0.0010	<0.0010	<0.0010	1	<0.0010	<0.0010	<0.0010	1		

2.2.7 Castledowns Reservoir

February 2024

Parameter	Monthly				YTD				Limits	
	Mean	Min	Max	Count	Mean	Min	Max	Count	*Approval or GCDWQ MAC, (AO or OG)	EPCOR
Secondary Organics (ug/L) * **										
Bromodichloromethane	1.2	1.2	1.2	1	1.2	1.2	1.2	1		16
Bromoform	<0.5	<0.5	<0.5	1	<0.5	<0.5	<0.5	1		
Chloroform	18.4	18.4	18.4	1	18.4	18.4	18.4	1		
Dibromochloromethane	<0.50	<0.50	<0.50	1	<0.50	<0.50	<0.50	1		
Dichlorobenzene (1,3)	<0.50	<0.50	<0.50	1	<0.50	<0.50	<0.50	1		
Dichloroethylene, cis (1,2)	<0.50	<0.50	<0.50	1	<0.50	<0.50	<0.50	1		
Dichloroethylene, trans (1,2)	<0.50	<0.50	<0.50	1	<0.50	<0.50	<0.50	1		
Dichloropropane (1,2)	<0.5	<0.5	<0.5	1	<0.5	<0.5	<0.5	1		
Methyl t-Butyl Ether (MTBE)	<0.5	<0.5	<0.5	1	<0.5	<0.5	<0.5	1	(15)	
MIBK	<1.0	<1.0	<1.0	1	<1.0	<1.0	<1.0	1		
Styrene	<0.50	<0.50	<0.50	1	<0.50	<0.50	<0.50	1		
Tetrachloroethane (1,1,2,2)	<0.5	<0.5	<0.5	1	<0.5	<0.5	<0.5	1		
Total Organic Carbon	1.3	1.3	1.3	1	1.3	1.3	1.3	1		
Total Volatile Organics (NonTHM)	<1.0	<1.0	<1.0	1	<1.0	<1.0	<1.0	1		
Total Volatile Organics (Unknown)	0.7	0.7	0.7	1	0.7	0.7	0.7	1		
Trichlorobenzene (1,2,4)	<0.5	<0.5	<0.5	1	<0.5	<0.5	<0.5	1		
Trichloroethane (1,1,1)	<0.5	<0.5	<0.5	1	<0.5	<0.5	<0.5	1		
Xylene (1,2)	<0.5	<0.5	<0.5	1	<0.5	<0.5	<0.5	1		
Xylene (1,4)	<0.5	<0.5	<0.5	1	<0.5	<0.5	<0.5	1		

TABLE EXPLANATIONS:

* Numbers with no brackets are Health Canada Guidelines for Canadian Drinking Water Quality (GCDWQ) Maximum Acceptable Concentrations (MAC) and/or a limit set out in the Alberta Environment and Parks (AEP) Operating Approval 638-04-00. Limits in brackets indicate Aesthetic Objectives or Operational Guidelines (OG) and are not Approval Limits The EPCOR limits are internal limits set by EPCOR in the Operations Program.

** Primary parameters are those that have health-based limits (MACs) according the AEP Operating Approval 638-04-00

*** Secondary parameters do not have health-based limits but may have aesthetic or operational objectives

2.2.8 Clareview Reservoir

February 2024

Parameter	Monthly				YTD				Limits	
	Mean	Min	Max	Count	Mean	Min	Max	Count	*Approval or GCDWQ MAC, (AO or OG)	EPCOR
Physical										
Colour (TCU)				0	0.7	0.7	0.7	1	(15)	10
Conductivity (uS/cm)				0	368	368	368	1		
Odour				0	Inoff	Inoff	Inoff	1		
pH (N/A)				0	7.9	7.9	7.9	1	(7.0 - 10.5)	7.3 - 8.3
Turbidity (NTU)	0.11	0.10	0.12	4	0.13	0.10	0.23	9		1
Primary Inorganics (mg/L) **										
Antimony				0	<0.0002	<0.0002	<0.0002	1	0.006	
Arsenic				0	0.0002	0.0002	0.0002	1	0.01	
Barium				0	0.056	0.056	0.056	1	2	
Boron				0	0.008	0.008	0.008	1	2	
Bromate Dissolved				0	<0.005	<0.005	<0.005	1	0.01	
Cadmium				0	<0.0002	<0.0002	<0.0002	1	0.007	
Chlorate Dissolved				0	0.191	0.191	0.191	1	1	
Chlorite Dissolved				0	<0.005	<0.005	<0.005	1	1	
Chromium				0	<0.0002	<0.0002	<0.0002	1	0.05	
Copper				0	<0.005	<0.005	<0.005	1	2 (1)	
Fluoride				0	0.71	0.71	0.71	1	1.5	0.6 - 0.8
Lead				0	<0.0002	<0.0002	<0.0002	1	0.005	
Manganese				0	<0.002	<0.002	<0.002	1	0.12 (0.02)	
Mercury				0	<0.0002	<0.0002	<0.0002	1	0.001	
Nitrate (as N) Dissolved				0	0.090	0.090	0.090	1	10	
Nitrite (as N) Dissolved				0	0.010	0.010	0.010	1	1	
Selenium				0	0.0002	0.0002	0.0002	1	0.05	
Strontium				0	0.451	0.451	0.451	1	7.0	
Total Chlorine	1.98	1.94	2.02	4	2.01	1.94	2.09	9	>0.5 and <3.0	>1.0 and <2.4
Uranium				0	0.0005	0.0005	0.0005	1	0.02	
Primary Organics (ug/L) **										
Benzene				0	<0.5	<0.5	<0.5	1	5	
Carbon Tetrachloride				0	<0.5	<0.5	<0.5	1	2	
Chlorobenzene				0	<0.50	<0.50	<0.50	1	80 (30)	
Dichlorobenzene (1,2)				0	<0.50	<0.50	<0.50	1		
Dichlorobenzene (1,4)				0	<0.5	<0.5	<0.5	1	5 (1)	
Dichloroethane (1,2)				0	<0.5	<0.5	<0.5	1	5	
Dichloroethylene (1,1)				0	<0.5	<0.5	<0.5	1	14	
Ethylbenzene				0	<0.50	<0.50	<0.50	1	140 (1.6)	
Methylene Chloride				0	<0.5	<0.5	<0.5	1	50	
Tetrachloroethylene				0	<0.5	<0.5	<0.5	1	10	
Toluene				0	<0.50	<0.50	<0.50	1	60 (24)	
Total Xylenes				0	<1	<1	<1	1	90	
Trichloroethylene				0	<0.50	<0.50	<0.50	1	5	
Vinyl Chloride				0	<1.0	<1.0	<1.0	1	2	

2.2.8 Clareview Reservoir

February 2024

Parameter	Monthly				YTD				Limits	
	Mean	Min	Max	Count	Mean	Min	Max	Count	*Approval or GCDWQ MAC, (AO or OG)	EPCOR
Secondary Inorganics (mg/L) * **										
Alkalinity Total				0	119	119	119	1		
Aluminum				0	0.078	0.078	0.078	1	2.9	0.1/0.2
Beryllium				0	<0.0002	<0.0002	<0.0002	1		
Bromide Dissolved				0	<0.010	<0.010	<0.010	1		
Calcium				0	48.2	48.2	48.2	1		
Calcium Hardness				0	118	118	118	1		
Chloride Dissolved				0	5.5	5.5	5.5	1	(250)	
Cobalt				0	<0.0002	<0.0002	<0.0002	1		
Iron				0	0.012	0.012	0.012	1	(0.3)	0.3
Lanthanum				0	<0.0010	<0.0010	<0.0010	1		
Lithium				0	0.0032	0.0032	0.0032	1		
Magnesium				0	14.4	14.4	14.4	1		
Molybdenum				0	0.0006	0.0006	0.0006	1		
Nickel				0	<0.0005	<0.0005	<0.0005	1		
Ortho_P	0.87	0.86	0.88	2	0.89	0.86	0.92	4		
Phosphorus				0	0.91	0.91	0.91	1		
Potassium				0	0.70	0.70	0.70	1		
Silicon				0	1.93	1.93	1.93	1		
Silver				0	<0.0002	<0.0002	<0.0002	1		
Sodium				0	7.2	7.2	7.2	1	(200)	
Sulphate Dissolved				0	60	60	60	1	(500)	
Thallium				0	<0.0005	<0.0005	<0.0005	1		
Tin				0	<0.0005	<0.0005	<0.0005	1		
Titanium				0	<0.0005	<0.0005	<0.0005	1		
Total Hardness (mg/L CaCO3)				0	177	177	177	1		
Vanadium				0	<0.0005	<0.0005	<0.0005	1		
Zinc				0	<0.005	<0.005	<0.005	1	(5.0)	
Zirconium				0	<0.0010	<0.0010	<0.0010	1		

2.2.8 Clareview Reservoir

February 2024

Parameter	Monthly				YTD				Limits	
	Mean	Min	Max	Count	Mean	Min	Max	Count	*Approval or GCDWQ MAC, (AO or OG)	EPCOR
Secondary Organics (ug/L) * **										
Bromodichloromethane				0	0.9	0.9	0.9	1		16
Bromoform				0	<0.5	<0.5	<0.5	1		
Chloroform				0	19.1	19.1	19.1	1		
Dibromochloromethane				0	<0.50	<0.50	<0.50	1		
Dichlorobenzene (1,3)				0	<0.50	<0.50	<0.50	1		
Dichloroethylene, cis (1,2)				0	<0.50	<0.50	<0.50	1		
Dichloroethylene, trans (1,2)				0	<0.50	<0.50	<0.50	1		
Dichloropropane (1,2)				0	<0.5	<0.5	<0.5	1		
Methyl t-Butyl Ether (MTBE)				0	<0.5	<0.5	<0.5	1	(15)	
MIBK				0	<1.0	<1.0	<1.0	1		
Styrene				0	<0.50	<0.50	<0.50	1		
Tetrachloroethane (1,1,2,2)				0	<0.5	<0.5	<0.5	1		
Total Organic Carbon				0	1.3	1.3	1.3	1		
Total Volatile Organics (NonTHM)				0	1.8	1.8	1.8	1		
Trichlorobenzene (1,2,4)				0	<0.5	<0.5	<0.5	1		
Trichloroethane (1,1,1)				0	<0.5	<0.5	<0.5	1		
Xylene (1,2)				0	<0.5	<0.5	<0.5	1		
Xylene (1,4)				0	<0.5	<0.5	<0.5	1		

TABLE EXPLANATIONS:

* Numbers with no brackets are Health Canada Guidelines for Canadian Drinking Water Quality (GCDWQ) Maximum Acceptable Concentrations (MAC) and/or a limit set out in the Alberta Environment and Parks (AEP) Operating Approval 638-04-00. Limits in brackets indicate Aesthetic Objectives or Operational Guidelines (OG) and are not Approval Limits The EPCOR limits are internal limits set by EPCOR in the Operations Program.

** Primary parameters are those that have health-based limits (MACs) according the AEP Operating Approval 638-04-00

*** Secondary parameters do not have health-based limits but may have aesthetic or operational objectives

2.2.9 Discovery Park Reservoir

February 2024

Parameter	Monthly				YTD				Limits	
	Mean	Min	Max	Count	Mean	Min	Max	Count	*Approval or GCDWQ MAC, (AO or OG)	EPCOR
Physical										
Colour (TCU)				0	1.0	1.0	1.0	1	(15)	10
Conductivity (uS/cm)				0	367	367	367	1		
Odour				0	Inoff	Inoff	Inoff	1		
pH (N/A)				0	8.0	8.0	8.0	1	(7.0 - 10.5)	7.3 - 8.3
Turbidity (NTU)	0.08	0.07	0.09	4	0.10	0.07	0.15	9		1
Primary Inorganics (mg/L) **										
Antimony				0	<0.0002	<0.0002	<0.0002	1	0.006	
Arsenic				0	0.0003	0.0003	0.0003	1	0.01	
Barium				0	0.054	0.054	0.054	1	2	
Boron				0	0.008	0.008	0.008	1	2	
Bromate Dissolved				0	<0.005	<0.005	<0.005	1	0.01	
Cadmium				0	<0.0002	<0.0002	<0.0002	1	0.007	
Chlorate Dissolved				0	0.108	0.108	0.108	1	1	
Chlorite Dissolved				0	<0.005	<0.005	<0.005	1	1	
Chromium				0	<0.0002	<0.0002	<0.0002	1	0.05	
Copper				0	<0.005	<0.005	<0.005	1	2 (1)	
Fluoride				0	0.68	0.68	0.68	1	1.5	0.6 - 0.8
Lead				0	<0.0002	<0.0002	<0.0002	1	0.005	
Manganese				0	<0.002	<0.002	<0.002	1	0.12 (0.02)	
Mercury				0	<0.0002	<0.0002	<0.0002	1	0.001	
Nitrate (as N) Dissolved				0	0.090	0.090	0.090	1	10	
Nitrite (as N) Dissolved				0	<0.010	<0.010	<0.010	1	1	
Selenium				0	0.0003	0.0003	0.0003	1	0.05	
Strontium				0	0.443	0.443	0.443	1	7.0	
Total Chlorine	1.54	1.40	1.68	4	1.52	1.40	1.68	9	>0.5 and <3.0	>1.0 and <2.4
Uranium				0	<0.0005	<0.0005	<0.0005	1	0.02	
Primary Organics (ug/L) **										
Benzene				0	<0.5	<0.5	<0.5	1	5	
Carbon Tetrachloride				0	<0.5	<0.5	<0.5	1	2	
Chlorobenzene				0	<0.50	<0.50	<0.50	1	80 (30)	
Dichlorobenzene (1,2)				0	<0.50	<0.50	<0.50	1		
Dichlorobenzene (1,4)				0	<0.5	<0.5	<0.5	1	5 (1)	
Dichloroethane (1,2)				0	<0.5	<0.5	<0.5	1	5	
Dichloroethylene (1,1)				0	<0.5	<0.5	<0.5	1	14	
Ethylbenzene				0	<0.50	<0.50	<0.50	1	140 (1.6)	
Methylene Chloride				0	<0.5	<0.5	<0.5	1	50	
Tetrachloroethylene				0	<0.5	<0.5	<0.5	1	10	
Toluene				0	<0.50	<0.50	<0.50	1	60 (24)	
Total Xylenes				0	<1	<1	<1	1	90	
Trichloroethylene				0	<0.50	<0.50	<0.50	1	5	
Vinyl Chloride				0	<1.0	<1.0	<1.0	1	2	

2.2.9 Discovery Park Reservoir

February 2024

Parameter	Monthly				YTD				Limits	
	Mean	Min	Max	Count	Mean	Min	Max	Count	*Approval or GCDWQ MAC, (AO or OG)	EPCOR
Secondary Inorganics (mg/L) * **										
Alkalinity Total				0	116	116	116	1		
Aluminum				0	0.093	0.093	0.093	1	2.9	0.1/0.2
Beryllium				0	<0.0002	<0.0002	<0.0002	1		
Bromide Dissolved				0	<0.010	<0.010	<0.010	1		
Calcium				0	45.6	45.6	45.6	1		
Calcium Hardness				0	113	113	113	1		
Chloride Dissolved				0	6.1	6.1	6.1	1	(250)	
Cobalt				0	<0.0002	<0.0002	<0.0002	1		
Iron				0	<0.005	<0.005	<0.005	1	(0.3)	0.3
Lanthanum				0	<0.0010	<0.0010	<0.0010	1		
Lithium				0	0.0030	0.0030	0.0030	1		
Magnesium				0	13.8	13.8	13.8	1		
Molybdenum				0	0.0006	0.0006	0.0006	1		
Nickel				0	<0.0005	<0.0005	<0.0005	1		
Ortho_P	0.90	0.88	0.92	2	0.91	0.88	0.92	4		
Phosphorus				0	0.91	0.91	0.91	1		
Potassium				0	0.80	0.80	0.80	1		
Silicon				0	1.90	1.90	1.90	1		
Silver				0	<0.0002	<0.0002	<0.0002	1		
Sodium				0	7.4	7.4	7.4	1	(200)	
Sulphate Dissolved				0	59	59	59	1	(500)	
Thallium				0	<0.0005	<0.0005	<0.0005	1		
Tin				0	<0.0005	<0.0005	<0.0005	1		
Titanium				0	<0.0005	<0.0005	<0.0005	1		
Total Hardness (mg/L CaCO3)				0	174	174	174	1		
Vanadium				0	<0.0005	<0.0005	<0.0005	1		
Zinc				0	<0.005	<0.005	<0.005	1	(5.0)	
Zirconium				0	<0.0010	<0.0010	<0.0010	1		

2.2.9 Discovery Park Reservoir

February 2024

Parameter	Monthly				YTD				Limits	
	Mean	Min	Max	Count	Mean	Min	Max	Count	*Approval or GCDWQ MAC, (AO or OG)	EPCOR
Secondary Organics (ug/L) * **										
Bromodichloromethane				0	0.7	0.7	0.7	1		16
Bromoform				0	<0.5	<0.5	<0.5	1		
Chloroform				0	17.1	17.1	17.1	1		
Dibromochloromethane				0	<0.50	<0.50	<0.50	1		
Dichlorobenzene (1,3)				0	<0.50	<0.50	<0.50	1		
Dichloroethylene, cis (1,2)				0	<0.50	<0.50	<0.50	1		
Dichloroethylene, trans (1,2)				0	<0.50	<0.50	<0.50	1		
Dichloropropane (1,2)				0	<0.5	<0.5	<0.5	1		
Methyl t-Butyl Ether (MTBE)				0	<0.5	<0.5	<0.5	1	(15)	
MIBK				0	<1.0	<1.0	<1.0	1		
Styrene				0	<0.50	<0.50	<0.50	1		
Tetrachloroethane (1,1,2,2)				0	<0.5	<0.5	<0.5	1		
Total Organic Carbon				0	1.2	1.2	1.2	1		
Total Volatile Organics (NonTHM)				0	1.9	1.9	1.9	1		
Trichlorobenzene (1,2,4)				0	<0.5	<0.5	<0.5	1		
Trichloroethane (1,1,1)				0	<0.5	<0.5	<0.5	1		
Xylene (1,2)				0	<0.5	<0.5	<0.5	1		
Xylene (1,4)				0	<0.5	<0.5	<0.5	1		

TABLE EXPLANATIONS:

* Numbers with no brackets are Health Canada Guidelines for Canadian Drinking Water Quality (GCDWQ) Maximum Acceptable Concentrations (MAC) and/or a limit set out in the Alberta Environment and Parks (AEP) Operating Approval 638-04-00. Limits in brackets indicate Aesthetic Objectives or Operational Guidelines (OG) and are not Approval Limits The EPCOR limits are internal limits set by EPCOR in the Operations Program.

** Primary parameters are those that have health-based limits (MACs) according the AEP Operating Approval 638-04-00

*** Secondary parameters do not have health-based limits but may have aesthetic or operational objectives

Footnote: The Discovery Park reservoir was officially included as part of EWSI's Approval to Operate, Approval 638-04-00, starting on January 19, 2021. From January 1 - 18, 2021 the Discovery Park Waterworks System operated under the Environmental Protection and Enhancement Act (EPEA) Registration no. 462525-00-00. This Registration was issued for Discovery Park Waterworks System to follow the Code of Practice for a Waterworks System Consisting Solely of a Water Distribution System.

2.2.10 Kaskitayo Reservoir

February 2024

Parameter	Monthly				YTD				Limits	
	Mean	Min	Max	Count	Mean	Min	Max	Count	*Approval or GCDWQ MAC, (AO or OG)	EPCOR
Physical										
Colour (TCU)				0	1.6	1.6	1.6	1	(15)	10
Conductivity (uS/cm)				0	370	370	370	1		
Odour				0	Inoff	Inoff	Inoff	1		
pH (N/A)				0	7.9	7.9	7.9	1	(7.0 - 10.5)	7.3 - 8.3
Turbidity (NTU)	0.07	0.06	0.07	4	0.09	0.06	0.14	9		1
Primary Inorganics (mg/L) **										
Antimony				0	<0.0002	<0.0002	<0.0002	1	0.006	
Arsenic				0	0.0002	0.0002	0.0002	1	0.01	
Barium				0	0.056	0.056	0.056	1	2	
Boron				0	0.008	0.008	0.008	1	2	
Bromate Dissolved				0	<0.005	<0.005	<0.005	1	0.01	
Cadmium				0	<0.0002	<0.0002	<0.0002	1	0.007	
Chlorate Dissolved				0	0.100	0.100	0.100	1	1	
Chlorite Dissolved				0	<0.005	<0.005	<0.005	1	1	
Chromium				0	<0.0002	<0.0002	<0.0002	1	0.05	
Copper				0	<0.005	<0.005	<0.005	1	2 (1)	
Fluoride				0	0.72	0.72	0.72	1	1.5	0.6 - 0.8
Lead				0	<0.0002	<0.0002	<0.0002	1	0.005	
Manganese				0	<0.002	<0.002	<0.002	1	0.12 (0.02)	
Mercury				0	<0.0002	<0.0002	<0.0002	1	0.001	
Nitrate (as N) Dissolved				0	0.080	0.080	0.080	1	10	
Nitrite (as N) Dissolved				0	0.010	0.010	0.010	1	1	
Selenium				0	0.0002	0.0002	0.0002	1	0.05	
Strontium				0	0.458	0.458	0.458	1	7.0	
Total Chlorine	2.10	2.08	2.13	4	2.11	2.08	2.23	9	>0.5 and <3.0	>1.0 and <2.4
Uranium				0	0.0005	0.0005	0.0005	1	0.02	
Primary Organics (ug/L) **										
Benzene				0	<0.5	<0.5	<0.5	1	5	
Carbon Tetrachloride				0	<0.5	<0.5	<0.5	1	2	
Chlorobenzene				0	<0.50	<0.50	<0.50	1	80 (30)	
Dichlorobenzene (1,2)				0	<0.50	<0.50	<0.50	1		
Dichlorobenzene (1,4)				0	<0.5	<0.5	<0.5	1	5 (1)	
Dichloroethane (1,2)				0	<0.5	<0.5	<0.5	1	5	
Dichloroethylene (1,1)				0	<0.5	<0.5	<0.5	1	14	
Ethylbenzene				0	<0.50	<0.50	<0.50	1	140 (1.6)	
Methylene Chloride				0	<0.5	<0.5	<0.5	1	50	
Tetrachloroethylene				0	<0.5	<0.5	<0.5	1	10	
Toluene				0	<0.50	<0.50	<0.50	1	60 (24)	
Total Xylenes				0	<1	<1	<1	1	90	
Trichloroethylene				0	<0.50	<0.50	<0.50	1	5	
Vinyl Chloride				0	<1.0	<1.0	<1.0	1	2	

2.2.10 Kaskitayo Reservoir

February 2024

Parameter	Monthly				YTD				Limits	
	Mean	Min	Max	Count	Mean	Min	Max	Count	*Approval or GCDWQ MAC, (AO or OG)	EPCOR
Secondary Inorganics (mg/L) * **										
Alkalinity Total				0	118	118	118	1		
Aluminum				0	0.097	0.097	0.097	1	2.9	0.1/0.2
Beryllium				0	<0.0002	<0.0002	<0.0002	1		
Bromide Dissolved				0	<0.010	<0.010	<0.010	1		
Calcium				0	47.7	47.7	47.7	1		
Calcium Hardness				0	118	118	118	1		
Chloride Dissolved				0	6.5	6.5	6.5	1	(250)	
Cobalt				0	<0.0002	<0.0002	<0.0002	1		
Iron				0	<0.005	<0.005	<0.005	1	(0.3)	0.3
Lanthanum				0	<0.0010	<0.0010	<0.0010	1		
Lithium				0	0.0029	0.0029	0.0029	1		
Magnesium				0	14.1	14.1	14.1	1		
Molybdenum				0	0.0006	0.0006	0.0006	1		
Nickel				0	<0.0005	<0.0005	<0.0005	1		
Ortho_P	0.91	0.90	0.92	2	0.92	0.90	0.94	4		
Phosphorus				0	0.92	0.92	0.92	1		
Potassium				0	0.70	0.70	0.70	1		
Silicon				0	1.93	1.93	1.93	1		
Silver				0	<0.0002	<0.0002	<0.0002	1		
Sodium				0	7.4	7.4	7.4	1	(200)	
Sulphate Dissolved				0	61	61	61	1	(500)	
Thallium				0	<0.0005	<0.0005	<0.0005	1		
Tin				0	<0.0005	<0.0005	<0.0005	1		
Titanium				0	<0.0005	<0.0005	<0.0005	1		
Total Hardness (mg/L CaCO3)				0	178	178	178	1		
Vanadium				0	<0.0005	<0.0005	<0.0005	1		
Zinc				0	<0.005	<0.005	<0.005	1	(5.0)	
Zirconium				0	<0.0010	<0.0010	<0.0010	1		

2.2.10 Kaskitayo Reservoir

February 2024

Parameter	Monthly				YTD				Limits	
	Mean	Min	Max	Count	Mean	Min	Max	Count	*Approval or GCDWQ MAC, (AO or OG)	EPCOR
Secondary Organics (ug/L) * **										
Bromodichloromethane				0	0.7	0.7	0.7	1		16
Bromoform				0	<0.5	<0.5	<0.5	1		
Chloroform				0	13.4	13.4	13.4	1		
Dibromochloromethane				0	<0.50	<0.50	<0.50	1		
Dichlorobenzene (1,3)				0	<0.50	<0.50	<0.50	1		
Dichloroethylene, cis (1,2)				0	<0.50	<0.50	<0.50	1		
Dichloroethylene, trans (1,2)				0	<0.50	<0.50	<0.50	1		
Dichloropropane (1,2)				0	<0.5	<0.5	<0.5	1		
Methyl t-Butyl Ether (MTBE)				0	<0.5	<0.5	<0.5	1	(15)	
MIBK				0	<1.0	<1.0	<1.0	1		
Styrene				0	<0.50	<0.50	<0.50	1		
Tetrachloroethane (1,1,2,2)				0	<0.5	<0.5	<0.5	1		
Total Organic Carbon				0	1.2	1.2	1.2	1		
Total Volatile Organics (NonTHM)				0	2.0	2.0	2.0	1		
Trichlorobenzene (1,2,4)				0	<0.5	<0.5	<0.5	1		
Trichloroethane (1,1,1)				0	<0.5	<0.5	<0.5	1		
Xylene (1,2)				0	<0.5	<0.5	<0.5	1		
Xylene (1,4)				0	<0.5	<0.5	<0.5	1		

TABLE EXPLANATIONS:

* Numbers with no brackets are Health Canada Guidelines for Canadian Drinking Water Quality (GCDWQ) Maximum Acceptable Concentrations (MAC) and/or a limit set out in the Alberta Environment and Parks (AEP) Operating Approval 638-04-00. Limits in brackets indicate Aesthetic Objectives or Operational Guidelines (OG) and are not Approval Limits The EPCOR limits are internal limits set by EPCOR in the Operations Program.

** Primary parameters are those that have health-based limits (MACs) according the AEP Operating Approval 638-04-00

*** Secondary parameters do not have health-based limits but may have aesthetic or operational objectives

2.2.11 Londonderry Reservoir

February 2024

Parameter	Monthly				YTD				Limits	
	Mean	Min	Max	Count	Mean	Min	Max	Count	*Approval or GCDWQ MAC, (AO or OG)	EPCOR
Physical										
Colour (TCU)	1.2	1.2	1.2	1	1.2	1.2	1.2	1	(15)	10
Conductivity (uS/cm)	390	390	390	1	390	390	390	1		
Odour	Inoff	Inoff	Inoff	1	Inoff	Inoff	Inoff	1		
pH (N/A)	7.7	7.7	7.7	1	7.7	7.7	7.7	1	(7.0 - 10.5)	7.3 - 8.3
Turbidity (NTU)	0.12	0.07	0.22	4	0.11	0.07	0.22	9		1
Primary Inorganics (mg/L) **										
Antimony	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	1	0.006	
Arsenic	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	1	0.01	
Barium	0.056	0.056	0.056	1	0.056	0.056	0.056	1	2	
Boron	0.010	0.010	0.010	1	0.010	0.010	0.010	1	2	
Bromate Dissolved	<0.005	<0.005	<0.005	1	<0.005	<0.005	<0.005	1	0.01	
Cadmium	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	1	0.007	
Chlorate Dissolved	0.188	0.188	0.188	1	0.188	0.188	0.188	1	1	
Chlorite Dissolved	<0.005	<0.005	<0.005	1	<0.005	<0.005	<0.005	1	1	
Chromium	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	1	0.05	
Copper	<0.005	<0.005	<0.005	1	<0.005	<0.005	<0.005	1	2 (1)	
Fluoride	0.73	0.73	0.73	1	0.73	0.73	0.73	1	1.5	0.6 - 0.8
Lead	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	1	0.005	
Manganese	<0.002	<0.002	<0.002	1	<0.002	<0.002	<0.002	1	0.12 (0.02)	
Mercury	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	1	0.001	
Nitrate (as N) Dissolved	0.080	0.080	0.080	1	0.080	0.080	0.080	1	10	
Nitrite (as N) Dissolved	0.010	0.010	0.010	1	0.010	0.010	0.010	1	1	
Selenium	0.0003	0.0003	0.0003	1	0.0003	0.0003	0.0003	1	0.05	
Strontium	0.412	0.412	0.412	1	0.412	0.412	0.412	1	7.0	
Total Chlorine	2.08	2.00	2.12	4	2.12	2.00	2.25	9	>0.5 and <3.0	>1.0 and <2.4
Uranium	<0.0005	<0.0005	<0.0005	1	<0.0005	<0.0005	<0.0005	1	0.02	
Primary Organics (ug/L) **										
Benzene	<0.5	<0.5	<0.5	1	<0.5	<0.5	<0.5	1	5	
Carbon Tetrachloride	<0.5	<0.5	<0.5	1	<0.5	<0.5	<0.5	1	2	
Chlorobenzene	<0.50	<0.50	<0.50	1	<0.50	<0.50	<0.50	1	80 (30)	
Dichlorobenzene (1,2)	<0.50	<0.50	<0.50	1	<0.50	<0.50	<0.50	1		
Dichlorobenzene (1,4)	<0.5	<0.5	<0.5	1	<0.5	<0.5	<0.5	1	5 (1)	
Dichloroethane (1,2)	<0.5	<0.5	<0.5	1	<0.5	<0.5	<0.5	1	5	
Dichloroethylene (1,1)	<0.5	<0.5	<0.5	1	<0.5	<0.5	<0.5	1	14	
Ethylbenzene	<0.50	<0.50	<0.50	1	<0.50	<0.50	<0.50	1	140 (1.6)	
Methylene Chloride	<0.5	<0.5	<0.5	1	<0.5	<0.5	<0.5	1	50	
Tetrachloroethylene	<0.5	<0.5	<0.5	1	<0.5	<0.5	<0.5	1	10	
Toluene	<0.50	<0.50	<0.50	1	<0.50	<0.50	<0.50	1	60 (24)	
Total Xylenes	<1	<1	<1	1	<1	<1	<1	1	90	
Trichloroethylene	<0.50	<0.50	<0.50	1	<0.50	<0.50	<0.50	1	5	
Vinyl Chloride	<1.0	<1.0	<1.0	1	<1.0	<1.0	<1.0	1	2	

2.2.11 Londonderry Reservoir

February 2024

Parameter	Monthly				YTD				Limits	
	Mean	Min	Max	Count	Mean	Min	Max	Count	*Approval or GCDWQ MAC, (AO or OG)	EPCOR
Secondary Inorganics (mg/L) * **										
Alkalinity Total	121	121	121	1	121	121	121	1		
Aluminum	0.023	0.023	0.023	1	0.023	0.023	0.023	1	2.9	0.1/0.2
Beryllium	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	1		
Bromide Dissolved	<0.010	<0.010	<0.010	1	<0.010	<0.010	<0.010	1		
Calcium	49.2	49.2	49.2	1	49.2	49.2	49.2	1		
Calcium Hardness	122	122	122	1	122	122	122	1		
Chloride Dissolved	5.7	5.7	5.7	1	5.7	5.7	5.7	1	(250)	
Cobalt	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	1		
Iron	<0.005	<0.005	<0.005	1	<0.005	<0.005	<0.005	1	(0.3)	0.3
Lanthanum	<0.0010	<0.0010	<0.0010	1	<0.0010	<0.0010	<0.0010	1		
Lithium	0.0033	0.0033	0.0033	1	0.0033	0.0033	0.0033	1		
Magnesium	14.3	14.3	14.3	1	14.3	14.3	14.3	1		
Molybdenum	0.0010	0.0010	0.0010	1	0.0010	0.0010	0.0010	1		
Nickel	<0.0005	<0.0005	<0.0005	1	<0.0005	<0.0005	<0.0005	1		
Ortho_P	0.91	0.90	0.92	2	0.91	0.90	0.92	4		
Phosphorus	0.89	0.89	0.89	1	0.89	0.89	0.89	1		
Potassium	0.80	0.80	0.80	1	0.80	0.80	0.80	1		
Silicon	2.35	2.35	2.35	1	2.35	2.35	2.35	1		
Silver	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	1		
Sodium	9.8	9.8	9.8	1	9.8	9.8	9.8	1	(200)	
Sulphate Dissolved	73	73	73	1	73	73	73	1	(500)	
Thallium	<0.0005	<0.0005	<0.0005	1	<0.0005	<0.0005	<0.0005	1		
Tin	<0.0005	<0.0005	<0.0005	1	<0.0005	<0.0005	<0.0005	1		
Titanium	<0.0005	<0.0005	<0.0005	1	<0.0005	<0.0005	<0.0005	1		
Total Hardness (mg/L CaCO3)	184	184	184	1	184	184	184	1		
Vanadium	<0.0005	<0.0005	<0.0005	1	<0.0005	<0.0005	<0.0005	1		
Zinc	<0.005	<0.005	<0.005	1	<0.005	<0.005	<0.005	1	(5.0)	
Zirconium	<0.0010	<0.0010	<0.0010	1	<0.0010	<0.0010	<0.0010	1		

2.2.11 Londonderry Reservoir

February 2024

Parameter	Monthly				YTD				Limits	
	Mean	Min	Max	Count	Mean	Min	Max	Count	*Approval or GCDWQ MAC, (AO or OG)	EPCOR
Secondary Organics (ug/L) * **										
Bromodichloromethane	1.4	1.4	1.4	1	1.4	1.4	1.4	1		16
Bromoform	<0.5	<0.5	<0.5	1	<0.5	<0.5	<0.5	1		
Chloroform	14.5	14.5	14.5	1	14.5	14.5	14.5	1		
Dibromochloromethane	<0.50	<0.50	<0.50	1	<0.50	<0.50	<0.50	1		
Dichlorobenzene (1,3)	<0.50	<0.50	<0.50	1	<0.50	<0.50	<0.50	1		
Dichloroethylene, cis (1,2)	<0.50	<0.50	<0.50	1	<0.50	<0.50	<0.50	1		
Dichloroethylene, trans (1,2)	<0.50	<0.50	<0.50	1	<0.50	<0.50	<0.50	1		
Dichloropropane (1,2)	<0.5	<0.5	<0.5	1	<0.5	<0.5	<0.5	1		
Methyl t-Butyl Ether (MTBE)	<0.5	<0.5	<0.5	1	<0.5	<0.5	<0.5	1	(15)	
MIBK	<1.0	<1.0	<1.0	1	<1.0	<1.0	<1.0	1		
Styrene	<0.50	<0.50	<0.50	1	<0.50	<0.50	<0.50	1		
Tetrachloroethane (1,1,2,2)	<0.5	<0.5	<0.5	1	<0.5	<0.5	<0.5	1		
Total Organic Carbon	1.4	1.4	1.4	1	1.4	1.4	1.4	1		
Total Volatile Organics (NonTHM)	<1.0	<1.0	<1.0	1	<1.0	<1.0	<1.0	1		
Trichlorobenzene (1,2,4)	<0.5	<0.5	<0.5	1	<0.5	<0.5	<0.5	1		
Trichloroethane (1,1,1)	<0.5	<0.5	<0.5	1	<0.5	<0.5	<0.5	1		
Xylene (1,2)	<0.5	<0.5	<0.5	1	<0.5	<0.5	<0.5	1		
Xylene (1,4)	<0.5	<0.5	<0.5	1	<0.5	<0.5	<0.5	1		

TABLE EXPLANATIONS:

* Numbers with no brackets are Health Canada Guidelines for Canadian Drinking Water Quality (GCDWQ) Maximum Acceptable Concentrations (MAC) and/or a limit set out in the Alberta Environment and Parks (AEP) Operating Approval 638-04-00. Limits in brackets indicate Aesthetic Objectives or Operational Guidelines (OG) and are not Approval Limits The EPCOR limits are internal limits set by EPCOR in the Operations Program.

** Primary parameters are those that have health-based limits (MACs) according the AEP Operating Approval 638-04-00

*** Secondary parameters do not have health-based limits but may have aesthetic or operational objectives

2.2.12 Millwoods Reservoir

February 2024

Parameter	Monthly				YTD				Limits	
	Mean	Min	Max	Count	Mean	Min	Max	Count	*Approval or GCDWQ MAC, (AO or OG)	EPCOR
Physical										
Colour (TCU)	1.2	1.2	1.2	1	1.2	1.2	1.2	1	(15)	10
Conductivity (uS/cm)	402	402	402	1	402	402	402	1		
Odour	Inoff	Inoff	Inoff	1	Inoff	Inoff	Inoff	1		
pH (N/A)	7.7	7.7	7.7	1	7.7	7.7	7.7	1	(7.0 - 10.5)	7.3 - 8.3
Turbidity (NTU)	0.07	0.06	0.08	4	0.09	0.06	0.13	9		1
Primary Inorganics (mg/L) **										
Antimony	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	1	0.006	
Arsenic	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	1	0.01	
Barium	0.056	0.056	0.056	1	0.056	0.056	0.056	1	2	
Boron	0.010	0.010	0.010	1	0.010	0.010	0.010	1	2	
Bromate Dissolved	<0.005	<0.005	<0.005	1	<0.005	<0.005	<0.005	1	0.01	
Cadmium	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	1	0.007	
Chlorate Dissolved	0.090	0.090	0.090	1	0.090	0.090	0.090	1	1	
Chlorite Dissolved	<0.005	<0.005	<0.005	1	<0.005	<0.005	<0.005	1	1	
Chromium	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	1	0.05	
Copper	<0.005	<0.005	<0.005	1	<0.005	<0.005	<0.005	1	2 (1)	
Fluoride	0.68	0.68	0.68	1	0.68	0.68	0.68	1	1.5	0.6 - 0.8
Lead	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	1	0.005	
Manganese	<0.002	<0.002	<0.002	1	<0.002	<0.002	<0.002	1	0.12 (0.02)	
Mercury	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	1	0.001	
Nitrate (as N) Dissolved	0.080	0.080	0.080	1	0.080	0.080	0.080	1	10	
Nitrite (as N) Dissolved	0.010	0.010	0.010	1	0.010	0.010	0.010	1	1	
Selenium	0.0003	0.0003	0.0003	1	0.0003	0.0003	0.0003	1	0.05	
Strontium	0.422	0.422	0.422	1	0.422	0.422	0.422	1	7.0	
Total Chlorine	2.11	2.07	2.14	4	2.11	2.07	2.21	9	>0.5 and <3.0	>1.0 and <2.4
Uranium	<0.0005	<0.0005	<0.0005	1	<0.0005	<0.0005	<0.0005	1	0.02	
Primary Organics (ug/L) **										
Benzene	<0.5	<0.5	<0.5	2	<0.5	<0.5	<0.5	2	5	
Carbon Tetrachloride	<0.5	<0.5	<0.5	2	<0.5	<0.5	<0.5	2	2	
Chlorobenzene	<0.50	<0.50	<0.50	2	<0.50	<0.50	<0.50	2	80 (30)	
Dichlorobenzene (1,2)	<0.50	<0.50	<0.50	2	<0.50	<0.50	<0.50	2		
Dichlorobenzene (1,4)	<0.5	<0.5	<0.5	2	<0.5	<0.5	<0.5	2	5 (1)	
Dichloroethane (1,2)	<0.5	<0.5	<0.5	2	<0.5	<0.5	<0.5	2	5	
Dichloroethylene (1,1)	<0.5	<0.5	<0.5	2	<0.5	<0.5	<0.5	2	14	
Ethylbenzene	<0.50	<0.50	<0.50	2	<0.50	<0.50	<0.50	2	140 (1.6)	
Methylene Chloride	<0.5	<0.5	<0.5	2	<0.5	<0.5	<0.5	2	50	
Tetrachloroethylene	<0.5	<0.5	<0.5	2	<0.5	<0.5	<0.5	2	10	
Toluene	<0.50	<0.50	<0.50	2	<0.50	<0.50	<0.50	2	60 (24)	
Total Xylenes	<1	<1	<1	2	<1	<1	<1	2	90	
Trichloroethylene	<0.50	<0.50	<0.50	2	<0.50	<0.50	<0.50	2	5	
Vinyl Chloride	<1.0	<1.0	<1.0	2	<1.0	<1.0	<1.0	2	2	

2.2.12 Millwoods Reservoir

February 2024

Parameter	Monthly				YTD				Limits	
	Mean	Min	Max	Count	Mean	Min	Max	Count	*Approval or GCDWQ MAC, (AO or OG)	EPCOR
Secondary Inorganics (mg/L) * **										
Alkalinity Total	123	123	123	1	123	123	123	1		
Aluminum	0.022	0.022	0.022	1	0.022	0.022	0.022	1	2.9	0.1/0.2
Beryllium	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	1		
Bromide Dissolved	<0.010	<0.010	<0.010	1	<0.010	<0.010	<0.010	1		
Calcium	48.4	48.4	48.4	1	48.4	48.4	48.4	1		
Calcium Hardness	122	122	122	1	122	122	122	1		
Chloride Dissolved	6.1	6.1	6.1	1	6.1	6.1	6.1	1	(250)	
Cobalt	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	1		
Iron	<0.005	<0.005	<0.005	1	<0.005	<0.005	<0.005	1	(0.3)	0.3
Lanthanum	<0.0010	<0.0010	<0.0010	1	<0.0010	<0.0010	<0.0010	1		
Lithium	0.0031	0.0031	0.0031	1	0.0031	0.0031	0.0031	1		
Magnesium	14.1	14.1	14.1	1	14.1	14.1	14.1	1		
Molybdenum	0.0011	0.0011	0.0011	1	0.0011	0.0011	0.0011	1		
Nickel	<0.0005	<0.0005	<0.0005	1	<0.0005	<0.0005	<0.0005	1		
Ortho_P	0.89	0.88	0.90	2	0.90	0.88	0.92	4		
Phosphorus	0.90	0.90	0.90	1	0.90	0.90	0.90	1		
Potassium	0.80	0.80	0.80	1	0.80	0.80	0.80	1		
Silicon	2.29	2.29	2.29	1	2.29	2.29	2.29	1		
Silver	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	1		
Sodium	12.7	12.7	12.7	1	12.7	12.7	12.7	1	(200)	
Sulphate Dissolved	75	75	75	1	75	75	75	1	(500)	
Thallium	<0.0005	<0.0005	<0.0005	1	<0.0005	<0.0005	<0.0005	1		
Tin	<0.0005	<0.0005	<0.0005	1	<0.0005	<0.0005	<0.0005	1		
Titanium	<0.0005	<0.0005	<0.0005	1	<0.0005	<0.0005	<0.0005	1		
Total Hardness (mg/L CaCO3)	185	185	185	1	185	185	185	1		
Vanadium	<0.0005	<0.0005	<0.0005	1	<0.0005	<0.0005	<0.0005	1		
Zinc	<0.005	<0.005	<0.005	1	<0.005	<0.005	<0.005	1	(5.0)	
Zirconium	<0.0010	<0.0010	<0.0010	1	<0.0010	<0.0010	<0.0010	1		

2.2.12 Millwoods Reservoir

February 2024

Parameter	Monthly				YTD				Limits	
	Mean	Min	Max	Count	Mean	Min	Max	Count	*Approval or GCDWQ MAC, (AO or OG)	EPCOR
Secondary Organics (ug/L) * **										
Bromodichloromethane	1.0	1.0	1.0	2	1.0	1.0	1.0	2		16
Bromoform	<0.5	<0.5	<0.5	2	<0.5	<0.5	<0.5	2		
Chloroform	9.1	8.3	9.9	2	9.1	8.3	9.9	2		
Dibromochloromethane	<0.50	<0.50	<0.50	2	<0.50	<0.50	<0.50	2		
Dichlorobenzene (1,3)	<0.50	<0.50	<0.50	2	<0.50	<0.50	<0.50	2		
Dichloroethylene, cis (1,2)	<0.50	<0.50	<0.50	2	<0.50	<0.50	<0.50	2		
Dichloroethylene, trans (1,2)	<0.50	<0.50	<0.50	2	<0.50	<0.50	<0.50	2		
Dichloropropane (1,2)	<0.5	<0.5	<0.5	2	<0.5	<0.5	<0.5	2		
Methyl t-Butyl Ether (MTBE)	<0.5	<0.5	<0.5	2	<0.5	<0.5	<0.5	2	(15)	
MIBK	<1.0	<1.0	<1.0	2	<1.0	<1.0	<1.0	2		
Styrene	<0.50	<0.50	<0.50	2	<0.50	<0.50	<0.50	2		
Tetrachloroethane (1,1,2,2)	<0.5	<0.5	<0.5	2	<0.5	<0.5	<0.5	2		
Total Organic Carbon	1.3	1.3	1.3	1	1.3	1.3	1.3	1		
Total Volatile Organics (NonTHM)	<1.1	<1.0	1.1	2	<1.1	<1.0	1.1	2		
Total Volatile Organics (Unknown)	1.3	1.3	1.3	1	1.3	1.3	1.3	1		
Trichlorobenzene (1,2,4)	<0.5	<0.5	<0.5	2	<0.5	<0.5	<0.5	2		
Trichloroethane (1,1,1)	<0.5	<0.5	<0.5	2	<0.5	<0.5	<0.5	2		
Xylene (1,2)	<0.5	<0.5	<0.5	2	<0.5	<0.5	<0.5	2		
Xylene (1,4)	<0.5	<0.5	<0.5	2	<0.5	<0.5	<0.5	2		

TABLE EXPLANATIONS:

* Numbers with no brackets are Health Canada Guidelines for Canadian Drinking Water Quality (GCDWQ) Maximum Acceptable Concentrations (MAC) and/or a limit set out in the Alberta Environment and Parks (AEP) Operating Approval 638-04-00. Limits in brackets indicate Aesthetic Objectives or Operational Guidelines (OG) and are not Approval Limits The EPCOR limits are internal limits set by EPCOR in the Operations Program.

** Primary parameters are those that have health-based limits (MACs) according the AEP Operating Approval 638-04-00

*** Secondary parameters do not have health-based limits but may have aesthetic or operational objectives

2.2.13 North Jasper Place Reservoir

February 2024

Parameter	Monthly				YTD				Limits	
	Mean	Min	Max	Count	Mean	Min	Max	Count	*Approval or GCDWQ MAC, (AO or OG)	EPCOR
Physical										
Colour (TCU)				0	1.0	1.0	1.0	1	(15)	10
Conductivity (uS/cm)				0	367	367	367	1		
Odour				0	Inoff	Inoff	Inoff	1		
pH (N/A)				0	7.8	7.8	7.8	1	(7.0 - 10.5)	7.3 - 8.3
Turbidity (NTU)	0.08	0.07	0.09	4	0.10	0.07	0.13	9		1
Primary Inorganics (mg/L) **										
Antimony				0	<0.0002	<0.0002	<0.0002	1	0.006	
Arsenic				0	0.0003	0.0003	0.0003	1	0.01	
Barium				0	0.054	0.054	0.054	1	2	
Boron				0	0.008	0.008	0.008	1	2	
Bromate Dissolved				0	<0.005	<0.005	<0.005	1	0.01	
Cadmium				0	<0.0002	<0.0002	<0.0002	1	0.007	
Chlorate Dissolved				0	0.110	0.110	0.110	1	1	
Chlorite Dissolved				0	<0.005	<0.005	<0.005	1	1	
Chromium				0	<0.0002	<0.0002	<0.0002	1	0.05	
Copper				0	<0.005	<0.005	<0.005	1	2 (1)	
Fluoride				0	0.71	0.71	0.71	1	1.5	0.6 - 0.8
Lead				0	<0.0002	<0.0002	<0.0002	1	0.005	
Manganese				0	<0.002	<0.002	<0.002	1	0.12 (0.02)	
Mercury				0	<0.0002	<0.0002	<0.0002	1	0.001	
Nitrate (as N) Dissolved				0	0.090	0.090	0.090	1	10	
Nitrite (as N) Dissolved				0	<0.010	<0.010	<0.010	1	1	
Selenium				0	0.0002	0.0002	0.0002	1	0.05	
Strontium				0	0.443	0.443	0.443	1	7.0	
Total Chlorine	1.90	1.84	2.01	4	1.90	1.78	2.05	9	>0.5 and <3.0	>1.0 and <2.4
Uranium				0	<0.0005	<0.0005	<0.0005	1	0.02	
Primary Organics (ug/L) **										
Benzene				0	<0.5	<0.5	<0.5	1	5	
Carbon Tetrachloride				0	<0.5	<0.5	<0.5	1	2	
Chlorobenzene				0	<0.50	<0.50	<0.50	1	80 (30)	
Dichlorobenzene (1,2)				0	<0.50	<0.50	<0.50	1		
Dichlorobenzene (1,4)				0	<0.5	<0.5	<0.5	1	5 (1)	
Dichloroethane (1,2)				0	<0.5	<0.5	<0.5	1	5	
Dichloroethylene (1,1)				0	<0.5	<0.5	<0.5	1	14	
Ethylbenzene				0	<0.50	<0.50	<0.50	1	140 (1.6)	
Methylene Chloride				0	<0.5	<0.5	<0.5	1	50	
Tetrachloroethylene				0	<0.5	<0.5	<0.5	1	10	
Toluene				0	<0.50	<0.50	<0.50	1	60 (24)	
Total Xylenes				0	<1	<1	<1	1	90	
Trichloroethylene				0	<0.50	<0.50	<0.50	1	5	
Vinyl Chloride				0	<1.0	<1.0	<1.0	1	2	

2.2.13 North Jasper Place Reservoir

February 2024

Parameter	Monthly				YTD				Limits	
	Mean	Min	Max	Count	Mean	Min	Max	Count	*Approval or GCDWQ MAC, (AO or OG)	EPCOR
Secondary Inorganics (mg/L) * **										
Alkalinity Total				0	117	117	117	1		
Aluminum				0	0.102	0.102	0.102	1	2.9	0.1/0.2
Beryllium				0	<0.0002	<0.0002	<0.0002	1		
Bromide Dissolved				0	<0.010	<0.010	<0.010	1		
Calcium				0	46.4	46.4	46.4	1		
Calcium Hardness				0	116	116	116	1		
Chloride Dissolved				0	6.1	6.1	6.1	1	(250)	
Cobalt				0	<0.0002	<0.0002	<0.0002	1		
Iron				0	<0.005	<0.005	<0.005	1	(0.3)	0.3
Lanthanum				0	<0.0010	<0.0010	<0.0010	1		
Lithium				0	0.0030	0.0030	0.0030	1		
Magnesium				0	14.0	14.0	14.0	1		
Molybdenum				0	0.0005	0.0005	0.0005	1		
Nickel				0	<0.0005	<0.0005	<0.0005	1		
Ortho_P	0.92	0.88	0.96	2	0.92	0.88	0.96	4		
Phosphorus				0	0.92	0.92	0.92	1		
Potassium				0	0.70	0.70	0.70	1		
Silicon				0	1.91	1.91	1.91	1		
Silver				0	<0.0002	<0.0002	<0.0002	1		
Sodium				0	7.2	7.2	7.2	1	(200)	
Sulphate Dissolved				0	60	60	60	1	(500)	
Thallium				0	<0.0005	<0.0005	<0.0005	1		
Tin				0	<0.0005	<0.0005	<0.0005	1		
Titanium				0	<0.0005	<0.0005	<0.0005	1		
Total Hardness (mg/L CaCO3)				0	173	173	173	1		
Vanadium				0	<0.0005	<0.0005	<0.0005	1		
Zinc				0	<0.005	<0.005	<0.005	1	(5.0)	
Zirconium				0	<0.0010	<0.0010	<0.0010	1		

2.2.13 North Jasper Place Reservoir

February 2024

Parameter	Monthly				YTD				Limits	
	Mean	Min	Max	Count	Mean	Min	Max	Count	*Approval or GCDWQ MAC, (AO or OG)	EPCOR
Secondary Organics (ug/L) * **										
Bromodichloromethane				0	0.9	0.9	0.9	1		16
Bromoform				0	<0.5	<0.5	<0.5	1		
Chloroform				0	18.2	18.2	18.2	1		
Dibromochloromethane				0	<0.50	<0.50	<0.50	1		
Dichlorobenzene (1,3)				0	<0.50	<0.50	<0.50	1		
Dichloroethylene, cis (1,2)				0	<0.50	<0.50	<0.50	1		
Dichloroethylene, trans (1,2)				0	<0.50	<0.50	<0.50	1		
Dichloropropane (1,2)				0	<0.5	<0.5	<0.5	1		
Methyl t-Butyl Ether (MTBE)				0	<0.5	<0.5	<0.5	1	(15)	
MIBK				0	<1.0	<1.0	<1.0	1		
Styrene				0	<0.50	<0.50	<0.50	1		
Tetrachloroethane (1,1,2,2)				0	<0.5	<0.5	<0.5	1		
Total Organic Carbon				0	1.2	1.2	1.2	1		
Total Volatile Organics (NonTHM)				0	2.1	2.1	2.1	1		
Trichlorobenzene (1,2,4)				0	<0.5	<0.5	<0.5	1		
Trichloroethane (1,1,1)				0	<0.5	<0.5	<0.5	1		
Xylene (1,2)				0	<0.5	<0.5	<0.5	1		
Xylene (1,4)				0	<0.5	<0.5	<0.5	1		

TABLE EXPLANATIONS:

* Numbers with no brackets are Health Canada Guidelines for Canadian Drinking Water Quality (GCDWQ) Maximum Acceptable Concentrations (MAC) and/or a limit set out in the Alberta Environment and Parks (AEP) Operating Approval 638-04-00. Limits in brackets indicate Aesthetic Objectives or Operational Guidelines (OG) and are not Approval Limits The EPCOR limits are internal limits set by EPCOR in the Operations Program.

** Primary parameters are those that have health-based limits (MACs) according the AEP Operating Approval 638-04-00

*** Secondary parameters do not have health-based limits but may have aesthetic or operational objectives

2.2.14 Ormsby Reservoir

February 2024

Parameter	Monthly				YTD				Limits	
	Mean	Min	Max	Count	Mean	Min	Max	Count	*Approval or GCDWQ MAC, (AO or OG)	EPCOR
Physical										
Colour (TCU)	1.1	1.1	1.1	1	1.1	1.1	1.1	1	(15)	10
Conductivity (uS/cm)	408	408	408	1	408	408	408	1		
Odour	Inoff	Inoff	Inoff	1	Inoff	Inoff	Inoff	1		
pH (N/A)	7.8	7.8	7.8	1	7.8	7.8	7.8	1	(7.0 - 10.5)	7.3 - 8.3
Turbidity (NTU)	0.08	0.07	0.09	4	0.10	0.07	0.12	9		1
Primary Inorganics (mg/L) **										
Antimony	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	1	0.006	
Arsenic	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	1	0.01	
Barium	0.057	0.057	0.057	1	0.057	0.057	0.057	1	2	
Boron	0.010	0.010	0.010	1	0.010	0.010	0.010	1	2	
Bromate Dissolved	<0.005	<0.005	<0.005	1	<0.005	<0.005	<0.005	1	0.01	
Cadmium	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	1	0.007	
Chlorate Dissolved	0.080	0.080	0.080	1	0.080	0.080	0.080	1	1	
Chlorite Dissolved	<0.005	<0.005	<0.005	1	<0.005	<0.005	<0.005	1	1	
Chromium	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	1	0.05	
Copper	<0.005	<0.005	<0.005	1	<0.005	<0.005	<0.005	1	2 (1)	
Fluoride	0.68	0.68	0.68	1	0.68	0.68	0.68	1	1.5	0.6 - 0.8
Lead	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	1	0.005	
Manganese	<0.002	<0.002	<0.002	1	<0.002	<0.002	<0.002	1	0.12 (0.02)	
Mercury	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	1	0.001	
Nitrate (as N) Dissolved	0.080	0.080	0.080	1	0.080	0.080	0.080	1	10	
Nitrite (as N) Dissolved	0.010	0.010	0.010	1	0.010	0.010	0.010	1	1	
Selenium	0.0003	0.0003	0.0003	1	0.0003	0.0003	0.0003	1	0.05	
Strontium	0.424	0.424	0.424	1	0.424	0.424	0.424	1	7.0	
Total Chlorine	2.08	2.04	2.12	4	2.08	2.00	2.15	9	>0.5 and <3.0	>1.0 and <2.4
Uranium	<0.0005	<0.0005	<0.0005	1	<0.0005	<0.0005	<0.0005	1	0.02	
Primary Organics (ug/L) **										
Benzene	<0.5	<0.5	<0.5	2	<0.5	<0.5	<0.5	2	5	
Carbon Tetrachloride	<0.5	<0.5	<0.5	2	<0.5	<0.5	<0.5	2	2	
Chlorobenzene	<0.50	<0.50	<0.50	2	<0.50	<0.50	<0.50	2	80 (30)	
Dichlorobenzene (1,2)	<0.50	<0.50	<0.50	2	<0.50	<0.50	<0.50	2		
Dichlorobenzene (1,4)	<0.5	<0.5	<0.5	2	<0.5	<0.5	<0.5	2	5 (1)	
Dichloroethane (1,2)	<0.5	<0.5	<0.5	2	<0.5	<0.5	<0.5	2	5	
Dichloroethylene (1,1)	<0.5	<0.5	<0.5	2	<0.5	<0.5	<0.5	2	14	
Ethylbenzene	<0.50	<0.50	<0.50	2	<0.50	<0.50	<0.50	2	140 (1.6)	
Methylene Chloride	<0.5	<0.5	<0.5	2	<0.5	<0.5	<0.5	2	50	
Tetrachloroethylene	<0.5	<0.5	<0.5	2	<0.5	<0.5	<0.5	2	10	
Toluene	<0.50	<0.50	<0.50	2	<0.50	<0.50	<0.50	2	60 (24)	
Total Xylenes	<1	<1	<1	2	<1	<1	<1	2	90	
Trichloroethylene	<0.50	<0.50	<0.50	2	<0.50	<0.50	<0.50	2	5	
Vinyl Chloride	<1.0	<1.0	<1.0	2	<1.0	<1.0	<1.0	2	2	

2.2.14 Ormsby Reservoir

February 2024

Parameter	Monthly				YTD				Limits	
	Mean	Min	Max	Count	Mean	Min	Max	Count	*Approval or GCDWQ MAC, (AO or OG)	EPCOR
Secondary Inorganics (mg/L) * **										
Alkalinity Total	123	123	123	1	123	123	123	1		
Aluminum	0.023	0.023	0.023	1	0.023	0.023	0.023	1	2.9	0.1/0.2
Beryllium	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	1		
Bromide Dissolved	<0.010	<0.010	<0.010	1	<0.010	<0.010	<0.010	1		
Calcium	47.3	47.3	47.3	1	47.3	47.3	47.3	1		
Calcium Hardness	122	122	122	1	122	122	122	1		
Chloride Dissolved	6.3	6.3	6.3	1	6.3	6.3	6.3	1	(250)	
Cobalt	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	1		
Iron	<0.005	<0.005	<0.005	1	<0.005	<0.005	<0.005	1	(0.3)	0.3
Lanthanum	<0.0010	<0.0010	<0.0010	1	<0.0010	<0.0010	<0.0010	1		
Lithium	0.0030	0.0030	0.0030	1	0.0030	0.0030	0.0030	1		
Magnesium	13.8	13.8	13.8	1	13.8	13.8	13.8	1		
Molybdenum	0.0011	0.0011	0.0011	1	0.0011	0.0011	0.0011	1		
Nickel	<0.0005	<0.0005	<0.0005	1	<0.0005	<0.0005	<0.0005	1		
Ortho_P	0.91	0.84	0.98	2	0.93	0.84	0.98	4		
Phosphorus	0.88	0.88	0.88	1	0.88	0.88	0.88	1		
Potassium	0.80	0.80	0.80	1	0.80	0.80	0.80	1		
Silicon	2.33	2.33	2.33	1	2.33	2.33	2.33	1		
Silver	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	1		
Sodium	12.9	12.9	12.9	1	12.9	12.9	12.9	1	(200)	
Sulphate Dissolved	75	75	75	1	75	75	75	1	(500)	
Thallium	<0.0005	<0.0005	<0.0005	1	<0.0005	<0.0005	<0.0005	1		
Tin	<0.0005	<0.0005	<0.0005	1	<0.0005	<0.0005	<0.0005	1		
Titanium	<0.0005	<0.0005	<0.0005	1	<0.0005	<0.0005	<0.0005	1		
Total Hardness (mg/L CaCO3)	185	185	185	1	185	185	185	1		
Vanadium	<0.0005	<0.0005	<0.0005	1	<0.0005	<0.0005	<0.0005	1		
Zinc	<0.005	<0.005	<0.005	1	<0.005	<0.005	<0.005	1	(5.0)	
Zirconium	<0.0010	<0.0010	<0.0010	1	<0.0010	<0.0010	<0.0010	1		

2.2.14 Ormsby Reservoir

February 2024

Parameter	Monthly				YTD				Limits	
	Mean	Min	Max	Count	Mean	Min	Max	Count	*Approval or GCDWQ MAC, (AO or OG)	EPCOR
Secondary Organics (ug/L) * **										
Bromodichloromethane	1.1	1.0	1.1	2	1.1	1.0	1.1	2		16
Bromoform	<0.5	<0.5	<0.5	2	<0.5	<0.5	<0.5	2		
Chloroform	9.2	8.3	10.1	2	9.2	8.3	10.1	2		
Dibromochloromethane	<0.50	<0.50	<0.50	2	<0.50	<0.50	<0.50	2		
Dichlorobenzene (1,3)	<0.50	<0.50	<0.50	2	<0.50	<0.50	<0.50	2		
Dichloroethylene, cis (1,2)	<0.50	<0.50	<0.50	2	<0.50	<0.50	<0.50	2		
Dichloroethylene, trans (1,2)	<0.50	<0.50	<0.50	2	<0.50	<0.50	<0.50	2		
Dichloropropane (1,2)	<0.5	<0.5	<0.5	2	<0.5	<0.5	<0.5	2		
Methyl t-Butyl Ether (MTBE)	<0.5	<0.5	<0.5	2	<0.5	<0.5	<0.5	2	(15)	
MIBK	<1.0	<1.0	<1.0	2	<1.0	<1.0	<1.0	2		
Styrene	<0.50	<0.50	<0.50	2	<0.50	<0.50	<0.50	2		
Tetrachloroethane (1,1,2,2)	<0.5	<0.5	<0.5	2	<0.5	<0.5	<0.5	2		
Total Organic Carbon	1.3	1.3	1.3	1	1.3	1.3	1.3	1		
Total Volatile Organics (NonTHM)	<1.1	<1.0	1.2	2	<1.1	<1.0	1.2	2		
Total Volatile Organics (Unknown)	0.9	0.6	1.2	2	0.9	0.6	1.2	2		
Trichlorobenzene (1,2,4)	<0.5	<0.5	<0.5	2	<0.5	<0.5	<0.5	2		
Trichloroethane (1,1,1)	<0.5	<0.5	<0.5	2	<0.5	<0.5	<0.5	2		
Xylene (1,2)	<0.5	<0.5	<0.5	2	<0.5	<0.5	<0.5	2		
Xylene (1,4)	<0.5	<0.5	<0.5	2	<0.5	<0.5	<0.5	2		

TABLE EXPLANATIONS:

* Numbers with no brackets are Health Canada Guidelines for Canadian Drinking Water Quality (GCDWQ) Maximum Acceptable Concentrations (MAC) and/or a limit set out in the Alberta Environment and Parks (AEP) Operating Approval 638-04-00. Limits in brackets indicate Aesthetic Objectives or Operational Guidelines (OG) and are not Approval Limits The EPCOR limits are internal limits set by EPCOR in the Operations Program.

** Primary parameters are those that have health-based limits (MACs) according the AEP Operating Approval 638-04-00

*** Secondary parameters do not have health-based limits but may have aesthetic or operational objectives

2.2.15 Papaschase 1 Reservoir

February 2024

Parameter	Monthly				YTD				Limits	
	Mean	Min	Max	Count	Mean	Min	Max	Count	*Approval or GCDWQ MAC, (AO or OG)	EPCOR
Physical										
Colour (TCU)	1.0	1.0	1.0	1	1.0	1.0	1.0	1	(15)	10
Conductivity (uS/cm)	407	407	407	1	407	407	407	1		
Odour	Inoff	Inoff	Inoff	1	Inoff	Inoff	Inoff	1		
pH (N/A)	7.7	7.7	7.7	1	7.7	7.7	7.7	1	(7.0 - 10.5)	7.3 - 8.3
Turbidity (NTU)	0.12	0.11	0.13	4	0.13	0.11	0.18	9		1
Primary Inorganics (mg/L) **										
Antimony	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	1	0.006	
Arsenic	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	1	0.01	
Barium	0.058	0.058	0.058	1	0.058	0.058	0.058	1	2	
Boron	0.010	0.010	0.010	1	0.010	0.010	0.010	1	2	
Bromate Dissolved	<0.005	<0.005	<0.005	1	<0.005	<0.005	<0.005	1	0.01	
Cadmium	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	1	0.007	
Chlorate Dissolved	0.190	0.190	0.190	1	0.190	0.190	0.190	1	1	
Chlorite Dissolved	<0.005	<0.005	<0.005	1	<0.005	<0.005	<0.005	1	1	
Chromium	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	1	0.05	
Copper	<0.005	<0.005	<0.005	1	<0.005	<0.005	<0.005	1	2 (1)	
Fluoride	0.69	0.69	0.69	1	0.69	0.69	0.69	1	1.5	0.6 - 0.8
Lead	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	1	0.005	
Manganese	<0.002	<0.002	<0.002	1	<0.002	<0.002	<0.002	1	0.12 (0.02)	
Mercury	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	1	0.001	
Nitrate (as N) Dissolved	0.090	0.090	0.090	1	0.090	0.090	0.090	1	10	
Nitrite (as N) Dissolved	0.010	0.010	0.010	1	0.010	0.010	0.010	1	1	
Selenium	0.0003	0.0003	0.0003	1	0.0003	0.0003	0.0003	1	0.05	
Strontium	0.423	0.423	0.423	1	0.423	0.423	0.423	1	7.0	
Total Chlorine	1.98	1.88	2.15	4	1.97	1.88	2.15	9	>0.5 and <3.0	>1.0 and <2.4
Uranium	<0.0005	<0.0005	<0.0005	1	<0.0005	<0.0005	<0.0005	1	0.02	
Primary Organics (ug/L) **										
Benzene	<0.5	<0.5	<0.5	2	<0.5	<0.5	<0.5	2	5	
Carbon Tetrachloride	<0.5	<0.5	<0.5	2	<0.5	<0.5	<0.5	2	2	
Chlorobenzene	<0.50	<0.50	<0.50	2	<0.50	<0.50	<0.50	2	80 (30)	
Dichlorobenzene (1,2)	<0.50	<0.50	<0.50	2	<0.50	<0.50	<0.50	2		
Dichlorobenzene (1,4)	<0.5	<0.5	<0.5	2	<0.5	<0.5	<0.5	2	5 (1)	
Dichloroethane (1,2)	<0.5	<0.5	<0.5	2	<0.5	<0.5	<0.5	2	5	
Dichloroethylene (1,1)	<0.5	<0.5	<0.5	2	<0.5	<0.5	<0.5	2	14	
Ethylbenzene	<0.50	<0.50	<0.50	2	<0.50	<0.50	<0.50	2	140 (1.6)	
Methylene Chloride	<0.5	<0.5	<0.5	2	<0.5	<0.5	<0.5	2	50	
Tetrachloroethylene	<0.5	<0.5	<0.5	2	<0.5	<0.5	<0.5	2	10	
Toluene	<0.50	<0.50	<0.50	2	<0.50	<0.50	<0.50	2	60 (24)	
Total Xylenes	<1	<1	<1	2	<1	<1	<1	2	90	
Trichloroethylene	<0.50	<0.50	<0.50	2	<0.50	<0.50	<0.50	2	5	
Vinyl Chloride	<1.0	<1.0	<1.0	2	<1.0	<1.0	<1.0	2	2	

2.2.15 Papaschase 1 Reservoir

February 2024

Parameter	Monthly				YTD				Limits	
	Mean	Min	Max	Count	Mean	Min	Max	Count	*Approval or GCDWQ MAC, (AO or OG)	EPCOR
Secondary Inorganics (mg/L) * **										
Alkalinity Total	120	120	120	1	120	120	120	1		
Aluminum	0.021	0.021	0.021	1	0.021	0.021	0.021	1	2.9	0.1/0.2
Beryllium	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	1		
Bromide Dissolved	<0.010	<0.010	<0.010	1	<0.010	<0.010	<0.010	1		
Calcium	50.1	50.1	50.1	1	50.1	50.1	50.1	1		
Calcium Hardness	123	123	123	1	123	123	123	1		
Chloride Dissolved	7.5	7.5	7.5	1	7.5	7.5	7.5	1	(250)	
Cobalt	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	1		
Iron	0.015	0.015	0.015	1	0.015	0.015	0.015	1	(0.3)	0.3
Lanthanum	<0.0010	<0.0010	<0.0010	1	<0.0010	<0.0010	<0.0010	1		
Lithium	0.0034	0.0034	0.0034	1	0.0034	0.0034	0.0034	1		
Magnesium	14.5	14.5	14.5	1	14.5	14.5	14.5	1		
Molybdenum	0.0011	0.0011	0.0011	1	0.0011	0.0011	0.0011	1		
Nickel	<0.0005	<0.0005	<0.0005	1	<0.0005	<0.0005	<0.0005	1		
Ortho_P	0.87	0.86	0.88	2	0.88	0.86	0.88	4		
Phosphorus	0.88	0.88	0.88	1	0.88	0.88	0.88	1		
Potassium	0.80	0.80	0.80	1	0.80	0.80	0.80	1		
Silicon	2.39	2.39	2.39	1	2.39	2.39	2.39	1		
Silver	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	1		
Sodium	11.4	11.4	11.4	1	11.4	11.4	11.4	1	(200)	
Sulphate Dissolved	74	74	74	1	74	74	74	1	(500)	
Thallium	<0.0005	<0.0005	<0.0005	1	<0.0005	<0.0005	<0.0005	1		
Tin	<0.0005	<0.0005	<0.0005	1	<0.0005	<0.0005	<0.0005	1		
Titanium	<0.0005	<0.0005	<0.0005	1	<0.0005	<0.0005	<0.0005	1		
Total Hardness (mg/L CaCO3)	185	185	185	1	185	185	185	1		
Vanadium	<0.0005	<0.0005	<0.0005	1	<0.0005	<0.0005	<0.0005	1		
Zinc	<0.005	<0.005	<0.005	1	<0.005	<0.005	<0.005	1	(5.0)	
Zirconium	<0.0010	<0.0010	<0.0010	1	<0.0010	<0.0010	<0.0010	1		

2.2.15 Papaschase 1 Reservoir

February 2024

Parameter	Monthly				YTD				Limits	
	Mean	Min	Max	Count	Mean	Min	Max	Count	*Approval or GCDWQ MAC, (AO or OG)	EPCOR
Secondary Organics (ug/L) * **										
Bromodichloromethane	1.2	0.7	1.6	2	1.2	0.7	1.6	2		16
Bromoform	<0.5	<0.5	<0.5	2	<0.5	<0.5	<0.5	2		
Chloroform	11.6	10.9	12.2	2	11.6	10.9	12.2	2		
Dibromochloromethane	<0.50	<0.50	<0.50	2	<0.50	<0.50	<0.50	2		
Dichlorobenzene (1,3)	<0.50	<0.50	<0.50	2	<0.50	<0.50	<0.50	2		
Dichloroethylene, cis (1,2)	<0.50	<0.50	<0.50	2	<0.50	<0.50	<0.50	2		
Dichloroethylene, trans (1,2)	<0.50	<0.50	<0.50	2	<0.50	<0.50	<0.50	2		
Dichloropropane (1,2)	<0.5	<0.5	<0.5	2	<0.5	<0.5	<0.5	2		
Methyl t-Butyl Ether (MTBE)	<0.5	<0.5	<0.5	2	<0.5	<0.5	<0.5	2	(15)	
MIBK	<1.0	<1.0	<1.0	2	<1.0	<1.0	<1.0	2		
Styrene	<0.50	<0.50	<0.50	2	<0.50	<0.50	<0.50	2		
Tetrachloroethane (1,1,2,2)	<0.5	<0.5	<0.5	2	<0.5	<0.5	<0.5	2		
Total Organic Carbon	1.4	1.4	1.4	1	1.4	1.4	1.4	1		
Total Volatile Organics (NonTHM)	<1.2	<1.0	1.3	2	<1.2	<1.0	1.3	2		
Total Volatile Organics (Unknown)	<0.5	<0.5	<0.5	1	<0.5	<0.5	<0.5	1		
Trichlorobenzene (1,2,4)	<0.5	<0.5	<0.5	2	<0.5	<0.5	<0.5	2		
Trichloroethane (1,1,1)	<0.5	<0.5	<0.5	2	<0.5	<0.5	<0.5	2		
Xylene (1,2)	<0.5	<0.5	<0.5	2	<0.5	<0.5	<0.5	2		
Xylene (1,4)	<0.5	<0.5	<0.5	2	<0.5	<0.5	<0.5	2		

TABLE EXPLANATIONS:

* Numbers with no brackets are Health Canada Guidelines for Canadian Drinking Water Quality (GCDWQ) Maximum Acceptable Concentrations (MAC) and/or a limit set out in the Alberta Environment and Parks (AEP) Operating Approval 638-04-00. Limits in brackets indicate Aesthetic Objectives or Operational Guidelines (OG) and are not Approval Limits The EPCOR limits are internal limits set by EPCOR in the Operations Program.

** Primary parameters are those that have health-based limits (MACs) according the AEP Operating Approval 638-04-00

*** Secondary parameters do not have health-based limits but may have aesthetic or operational objectives

2.2.16 Papaschase 2 Reservoir

February 2024

Parameter	Monthly				YTD				Limits	
	Mean	Min	Max	Count	Mean	Min	Max	Count	*Approval or GCDWQ MAC, (AO or OG)	EPCOR
Physical										
Colour (TCU)				0	1.4	1.4	1.4	1	(15)	10
Conductivity (uS/cm)				0	375	375	375	1		
Odour				0	Inoff	Inoff	Inoff	1		
pH (N/A)				0	7.9	7.9	7.9	1	(7.0 - 10.5)	7.3 - 8.3
Turbidity (NTU)	0.08	0.08	0.09	4	0.09	0.08	0.11	9		1
Primary Inorganics (mg/L) **										
Antimony				0	<0.0002	<0.0002	<0.0002	1	0.006	
Arsenic				0	0.0002	0.0002	0.0002	1	0.01	
Barium				0	0.055	0.055	0.055	1	2	
Boron				0	0.008	0.008	0.008	1	2	
Bromate Dissolved				0	<0.005	<0.005	<0.005	1	0.01	
Cadmium				0	<0.0002	<0.0002	<0.0002	1	0.007	
Chlorate Dissolved				0	0.161	0.161	0.161	1	1	
Chlorite Dissolved				0	<0.005	<0.005	<0.005	1	1	
Chromium				0	<0.0002	<0.0002	<0.0002	1	0.05	
Copper				0	<0.005	<0.005	<0.005	1	2 (1)	
Fluoride				0	0.71	0.71	0.71	1	1.5	0.6 - 0.8
Lead				0	<0.0002	<0.0002	<0.0002	1	0.005	
Manganese				0	<0.002	<0.002	<0.002	1	0.12 (0.02)	
Mercury				0	<0.0002	<0.0002	<0.0002	1	0.001	
Nitrate (as N) Dissolved				0	0.090	0.090	0.090	1	10	
Nitrite (as N) Dissolved				0	<0.010	<0.010	<0.010	1	1	
Selenium				0	0.0003	0.0003	0.0003	1	0.05	
Strontium				0	0.445	0.445	0.445	1	7.0	
Total Chlorine	2.06	2.03	2.11	4	2.08	2.03	2.17	9	>0.5 and <3.0	>1.0 and <2.4
Uranium				0	0.0005	0.0005	0.0005	1	0.02	
Primary Organics (ug/L) **										
Benzene				0	<0.5	<0.5	<0.5	1	5	
Carbon Tetrachloride				0	<0.5	<0.5	<0.5	1	2	
Chlorobenzene				0	<0.50	<0.50	<0.50	1	80 (30)	
Dichlorobenzene (1,2)				0	<0.50	<0.50	<0.50	1		
Dichlorobenzene (1,4)				0	<0.5	<0.5	<0.5	1	5 (1)	
Dichloroethane (1,2)				0	<0.5	<0.5	<0.5	1	5	
Dichloroethylene (1,1)				0	<0.5	<0.5	<0.5	1	14	
Ethylbenzene				0	<0.50	<0.50	<0.50	1	140 (1.6)	
Methylene Chloride				0	<0.5	<0.5	<0.5	1	50	
Tetrachloroethylene				0	<0.5	<0.5	<0.5	1	10	
Toluene				0	<0.50	<0.50	<0.50	1	60 (24)	
Total Xylenes				0	<1	<1	<1	1	90	
Trichloroethylene				0	<0.50	<0.50	<0.50	1	5	
Vinyl Chloride				0	<1.0	<1.0	<1.0	1	2	

2.2.16 Papaschase 2 Reservoir

February 2024

Parameter	Monthly				YTD				Limits	
	Mean	Min	Max	Count	Mean	Min	Max	Count	*Approval or GCDWQ MAC, (AO or OG)	EPCOR
Secondary Inorganics (mg/L) * **										
Alkalinity Total				0	120	120	120	1		
Aluminum				0	0.084	0.084	0.084	1	2.9	0.1/0.2
Beryllium				0	<0.0002	<0.0002	<0.0002	1		
Bromide Dissolved				0	<0.010	<0.010	<0.010	1		
Calcium				0	47.3	47.3	47.3	1		
Calcium Hardness				0	116	116	116	1		
Chloride Dissolved				0	5.8	5.8	5.8	1	(250)	
Cobalt				0	<0.0002	<0.0002	<0.0002	1		
Iron				0	<0.005	<0.005	<0.005	1	(0.3)	0.3
Lanthanum				0	<0.0010	<0.0010	<0.0010	1		
Lithium				0	0.0030	0.0030	0.0030	1		
Magnesium				0	14.1	14.1	14.1	1		
Molybdenum				0	0.0006	0.0006	0.0006	1		
Nickel				0	<0.0005	<0.0005	<0.0005	1		
Ortho_P	0.90	0.88	0.92	2	0.90	0.88	0.92	4		
Phosphorus				0	0.89	0.89	0.89	1		
Potassium				0	0.70	0.70	0.70	1		
Silicon				0	1.93	1.93	1.93	1		
Silver				0	<0.0002	<0.0002	<0.0002	1		
Sodium				0	7.0	7.0	7.0	1	(200)	
Sulphate Dissolved				0	60	60	60	1	(500)	
Thallium				0	<0.0005	<0.0005	<0.0005	1		
Tin				0	<0.0005	<0.0005	<0.0005	1		
Titanium				0	<0.0005	<0.0005	<0.0005	1		
Total Hardness (mg/L CaCO3)				0	177	177	177	1		
Vanadium				0	<0.0005	<0.0005	<0.0005	1		
Zinc				0	<0.005	<0.005	<0.005	1	(5.0)	
Zirconium				0	<0.0010	<0.0010	<0.0010	1		

2.2.16 Papaschase 2 Reservoir

February 2024

Parameter	Monthly				YTD				Limits	
	Mean	Min	Max	Count	Mean	Min	Max	Count	*Approval or GCDWQ MAC, (AO or OG)	EPCOR
Secondary Organics (ug/L) * **										
Bromodichloromethane				0	0.9	0.9	0.9	1		16
Bromoform				0	<0.5	<0.5	<0.5	1		
Chloroform				0	15.6	15.6	15.6	1		
Dibromochloromethane				0	<0.50	<0.50	<0.50	1		
Dichlorobenzene (1,3)				0	<0.50	<0.50	<0.50	1		
Dichloroethylene, cis (1,2)				0	<0.50	<0.50	<0.50	1		
Dichloroethylene, trans (1,2)				0	<0.50	<0.50	<0.50	1		
Dichloropropane (1,2)				0	<0.5	<0.5	<0.5	1		
Methyl t-Butyl Ether (MTBE)				0	<0.5	<0.5	<0.5	1	(15)	
MIBK				0	<1.0	<1.0	<1.0	1		
Styrene				0	<0.50	<0.50	<0.50	1		
Tetrachloroethane (1,1,2,2)				0	<0.5	<0.5	<0.5	1		
Total Organic Carbon				0	1.2	1.2	1.2	1		
Total Volatile Organics (NonTHM)				0	1.8	1.8	1.8	1		
Trichlorobenzene (1,2,4)				0	<0.5	<0.5	<0.5	1		
Trichloroethane (1,1,1)				0	<0.5	<0.5	<0.5	1		
Xylene (1,2)				0	<0.5	<0.5	<0.5	1		
Xylene (1,4)				0	<0.5	<0.5	<0.5	1		

TABLE EXPLANATIONS:

* Numbers with no brackets are Health Canada Guidelines for Canadian Drinking Water Quality (GCDWQ) Maximum Acceptable Concentrations (MAC) and/or a limit set out in the Alberta Environment and Parks (AEP) Operating Approval 638-04-00. Limits in brackets indicate Aesthetic Objectives or Operational Guidelines (OG) and are not Approval Limits The EPCOR limits are internal limits set by EPCOR in the Operations Program.

** Primary parameters are those that have health-based limits (MACs) according the AEP Operating Approval 638-04-00

*** Secondary parameters do not have health-based limits but may have aesthetic or operational objectives

2.2.17 Rosslyn 1 Reservoir

February 2024

Parameter	Monthly				YTD				Limits	
	Mean	Min	Max	Count	Mean	Min	Max	Count	*Approval or GCDWQ MAC, (AO or OG)	EPCOR
Physical										
Colour (TCU)	1.4	1.4	1.4	1	1.4	1.4	1.4	1	(15)	10
Conductivity (uS/cm)	400	400	400	1	400	400	400	1		
Odour	Inoff	Inoff	Inoff	1	Inoff	Inoff	Inoff	1		
pH (N/A)	7.7	7.7	7.7	1	7.7	7.7	7.7	1	(7.0 - 10.5)	7.3 - 8.3
Turbidity (NTU)	0.12	0.09	0.16	4	0.11	0.09	0.16	9		1
Primary Inorganics (mg/L) **										
Antimony	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	1	0.006	
Arsenic	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	1	0.01	
Barium	0.056	0.056	0.056	1	0.056	0.056	0.056	1	2	
Boron	0.010	0.010	0.010	1	0.010	0.010	0.010	1	2	
Bromate Dissolved	<0.005	<0.005	<0.005	1	<0.005	<0.005	<0.005	1	0.01	
Cadmium	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	1	0.007	
Chlorate Dissolved	0.158	0.158	0.158	1	0.158	0.158	0.158	1	1	
Chlorite Dissolved	<0.005	<0.005	<0.005	1	<0.005	<0.005	<0.005	1	1	
Chromium	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	1	0.05	
Copper	<0.005	<0.005	<0.005	1	<0.005	<0.005	<0.005	1	2 (1)	
Fluoride	0.73	0.73	0.73	1	0.73	0.73	0.73	1	1.5	0.6 - 0.8
Lead	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	1	0.005	
Manganese	<0.002	<0.002	<0.002	1	<0.002	<0.002	<0.002	1	0.12 (0.02)	
Mercury	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	1	0.001	
Nitrate (as N) Dissolved	0.080	0.080	0.080	1	0.080	0.080	0.080	1	10	
Nitrite (as N) Dissolved	0.010	0.010	0.010	1	0.010	0.010	0.010	1	1	
Selenium	0.0003	0.0003	0.0003	1	0.0003	0.0003	0.0003	1	0.05	
Strontium	0.426	0.426	0.426	1	0.426	0.426	0.426	1	7.0	
Total Chlorine	2.00	1.95	2.07	4	1.92	1.77	2.07	9	>0.5 and <3.0	>1.0 and <2.4
Uranium	<0.0005	<0.0005	<0.0005	1	<0.0005	<0.0005	<0.0005	1	0.02	
Primary Organics (ug/L) **										
Benzene	<0.5	<0.5	<0.5	1	<0.5	<0.5	<0.5	1	5	
Carbon Tetrachloride	<0.5	<0.5	<0.5	1	<0.5	<0.5	<0.5	1	2	
Chlorobenzene	<0.50	<0.50	<0.50	1	<0.50	<0.50	<0.50	1	80 (30)	
Dichlorobenzene (1,2)	<0.50	<0.50	<0.50	1	<0.50	<0.50	<0.50	1		
Dichlorobenzene (1,4)	<0.5	<0.5	<0.5	1	<0.5	<0.5	<0.5	1	5 (1)	
Dichloroethane (1,2)	<0.5	<0.5	<0.5	1	<0.5	<0.5	<0.5	1	5	
Dichloroethylene (1,1)	<0.5	<0.5	<0.5	1	<0.5	<0.5	<0.5	1	14	
Ethylbenzene	<0.50	<0.50	<0.50	1	<0.50	<0.50	<0.50	1	140 (1.6)	
Methylene Chloride	<0.5	<0.5	<0.5	1	<0.5	<0.5	<0.5	1	50	
Tetrachloroethylene	<0.5	<0.5	<0.5	1	<0.5	<0.5	<0.5	1	10	
Toluene	<0.50	<0.50	<0.50	1	<0.50	<0.50	<0.50	1	60 (24)	
Total Xylenes	<1	<1	<1	1	<1	<1	<1	1	90	
Trichloroethylene	<0.50	<0.50	<0.50	1	<0.50	<0.50	<0.50	1	5	
Vinyl Chloride	<1.0	<1.0	<1.0	1	<1.0	<1.0	<1.0	1	2	

2.2.17 Rosslyn 1 Reservoir

February 2024

Parameter	Monthly				YTD				Limits	
	Mean	Min	Max	Count	Mean	Min	Max	Count	*Approval or GCDWQ MAC, (AO or OG)	EPCOR
Secondary Inorganics (mg/L) * **										
Alkalinity Total	122	122	122	1	122	122	122	1		
Aluminum	0.032	0.032	0.032	1	0.032	0.032	0.032	1	2.9	0.1/0.2
Beryllium	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	1		
Bromide Dissolved	<0.010	<0.010	<0.010	1	<0.010	<0.010	<0.010	1		
Calcium	49.8	49.8	49.8	1	49.8	49.8	49.8	1		
Calcium Hardness	122	122	122	1	122	122	122	1		
Chloride Dissolved	5.8	5.8	5.8	1	5.8	5.8	5.8	1	(250)	
Cobalt	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	1		
Iron	0.007	0.007	0.007	1	0.007	0.007	0.007	1	(0.3)	0.3
Lanthanum	<0.0010	<0.0010	<0.0010	1	<0.0010	<0.0010	<0.0010	1		
Lithium	0.0032	0.0032	0.0032	1	0.0032	0.0032	0.0032	1		
Magnesium	14.6	14.6	14.6	1	14.6	14.6	14.6	1		
Molybdenum	0.0010	0.0010	0.0010	1	0.0010	0.0010	0.0010	1		
Nickel	<0.0005	<0.0005	<0.0005	1	<0.0005	<0.0005	<0.0005	1		
Ortho_P	0.89	0.88	0.90	2	0.90	0.88	0.90	4		
Phosphorus	0.91	0.91	0.91	1	0.91	0.91	0.91	1		
Potassium	0.80	0.80	0.80	1	0.80	0.80	0.80	1		
Silicon	2.35	2.35	2.35	1	2.35	2.35	2.35	1		
Silver	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	1		
Sodium	10.7	10.7	10.7	1	10.7	10.7	10.7	1	(200)	
Sulphate Dissolved	73	73	73	1	73	73	73	1	(500)	
Thallium	<0.0005	<0.0005	<0.0005	1	<0.0005	<0.0005	<0.0005	1		
Tin	<0.0005	<0.0005	<0.0005	1	<0.0005	<0.0005	<0.0005	1		
Titanium	<0.0005	<0.0005	<0.0005	1	<0.0005	<0.0005	<0.0005	1		
Total Hardness (mg/L CaCO3)	183	183	183	1	183	183	183	1		
Vanadium	<0.0005	<0.0005	<0.0005	1	<0.0005	<0.0005	<0.0005	1		
Zinc	<0.005	<0.005	<0.005	1	<0.005	<0.005	<0.005	1	(5.0)	
Zirconium	<0.0010	<0.0010	<0.0010	1	<0.0010	<0.0010	<0.0010	1		

2.2.17 Rosslyn 1 Reservoir

February 2024

Parameter	Monthly				YTD				Limits	
	Mean	Min	Max	Count	Mean	Min	Max	Count	*Approval or GCDWQ MAC, (AO or OG)	EPCOR
Secondary Organics (ug/L) * **										
Bromodichloromethane	1.5	1.5	1.5	1	1.5	1.5	1.5	1		16
Bromoform	<0.5	<0.5	<0.5	1	<0.5	<0.5	<0.5	1		
Chloroform	13.7	13.7	13.7	1	13.7	13.7	13.7	1		
Dibromochloromethane	<0.50	<0.50	<0.50	1	<0.50	<0.50	<0.50	1		
Dichlorobenzene (1,3)	<0.50	<0.50	<0.50	1	<0.50	<0.50	<0.50	1		
Dichloroethylene, cis (1,2)	<0.50	<0.50	<0.50	1	<0.50	<0.50	<0.50	1		
Dichloroethylene, trans (1,2)	<0.50	<0.50	<0.50	1	<0.50	<0.50	<0.50	1		
Dichloropropane (1,2)	<0.5	<0.5	<0.5	1	<0.5	<0.5	<0.5	1		
Methyl t-Butyl Ether (MTBE)	<0.5	<0.5	<0.5	1	<0.5	<0.5	<0.5	1	(15)	
MIBK	<1.0	<1.0	<1.0	1	<1.0	<1.0	<1.0	1		
Styrene	<0.50	<0.50	<0.50	1	<0.50	<0.50	<0.50	1		
Tetrachloroethane (1,1,2,2)	<0.5	<0.5	<0.5	1	<0.5	<0.5	<0.5	1		
Total Organic Carbon	1.3	1.3	1.3	1	1.3	1.3	1.3	1		
Total Volatile Organics (NonTHM)	<1.0	<1.0	<1.0	1	<1.0	<1.0	<1.0	1		
Total Volatile Organics (Unknown)	1.0	1.0	1.0	1	1.0	1.0	1.0	1		
Trichlorobenzene (1,2,4)	<0.5	<0.5	<0.5	1	<0.5	<0.5	<0.5	1		
Trichloroethane (1,1,1)	<0.5	<0.5	<0.5	1	<0.5	<0.5	<0.5	1		
Xylene (1,2)	<0.5	<0.5	<0.5	1	<0.5	<0.5	<0.5	1		
Xylene (1,4)	<0.5	<0.5	<0.5	1	<0.5	<0.5	<0.5	1		

TABLE EXPLANATIONS:

* Numbers with no brackets are Health Canada Guidelines for Canadian Drinking Water Quality (GCDWQ) Maximum Acceptable Concentrations (MAC) and/or a limit set out in the Alberta Environment and Parks (AEP) Operating Approval 638-04-00. Limits in brackets indicate Aesthetic Objectives or Operational Guidelines (OG) and are not Approval Limits The EPCOR limits are internal limits set by EPCOR in the Operations Program.

** Primary parameters are those that have health-based limits (MACs) according the AEP Operating Approval 638-04-00

*** Secondary parameters do not have health-based limits but may have aesthetic or operational objectives

2.2.18 Rosslyn 2 Reservoir

February 2024

Parameter	Monthly				YTD				Limits	
	Mean	Min	Max	Count	Mean	Min	Max	Count	*Approval or GCDWQ MAC, (AO or OG)	EPCOR
Physical										
Colour (TCU)				0	0.9	0.9	0.9	1	(15)	10
Conductivity (uS/cm)				0	369	369	369	1		
Odour				0	Inoff	Inoff	Inoff	1		
pH (N/A)				0	7.9	7.9	7.9	1	(7.0 - 10.5)	7.3 - 8.3
Turbidity (NTU)	0.11	0.08	0.14	4	0.11	0.08	0.14	9		1
Primary Inorganics (mg/L) **										
Antimony				0	<0.0002	<0.0002	<0.0002	1	0.006	
Arsenic				0	<0.0002	<0.0002	<0.0002	1	0.01	
Barium				0	0.054	0.054	0.054	1	2	
Boron				0	0.008	0.008	0.008	1	2	
Bromate Dissolved				0	<0.005	<0.005	<0.005	1	0.01	
Cadmium				0	<0.0002	<0.0002	<0.0002	1	0.007	
Chlorate Dissolved				0	0.184	0.184	0.184	1	1	
Chlorite Dissolved				0	<0.005	<0.005	<0.005	1	1	
Chromium				0	<0.0002	<0.0002	<0.0002	1	0.05	
Copper				0	<0.005	<0.005	<0.005	1	2 (1)	
Fluoride				0	0.71	0.71	0.71	1	1.5	0.6 - 0.8
Lead				0	<0.0002	<0.0002	<0.0002	1	0.005	
Manganese				0	<0.002	<0.002	<0.002	1	0.12 (0.02)	
Mercury				0	<0.0002	<0.0002	<0.0002	1	0.001	
Nitrate (as N) Dissolved				0	0.090	0.090	0.090	1	10	
Nitrite (as N) Dissolved				0	<0.010	<0.010	<0.010	1	1	
Selenium				0	<0.0002	<0.0002	<0.0002	1	0.05	
Strontium				0	0.443	0.443	0.443	1	7.0	
Total Chlorine	1.92	1.90	1.93	4	1.96	1.90	2.08	9	>0.5 and <3.0	>1.0 and <2.4
Uranium				0	0.0005	0.0005	0.0005	1	0.02	
Primary Organics (ug/L) **										
Benzene				0	<0.5	<0.5	<0.5	1	5	
Carbon Tetrachloride				0	<0.5	<0.5	<0.5	1	2	
Chlorobenzene				0	<0.50	<0.50	<0.50	1	80 (30)	
Dichlorobenzene (1,2)				0	<0.50	<0.50	<0.50	1		
Dichlorobenzene (1,4)				0	<0.5	<0.5	<0.5	1	5 (1)	
Dichloroethane (1,2)				0	<0.5	<0.5	<0.5	1	5	
Dichloroethylene (1,1)				0	<0.5	<0.5	<0.5	1	14	
Ethylbenzene				0	<0.50	<0.50	<0.50	1	140 (1.6)	
Methylene Chloride				0	<0.5	<0.5	<0.5	1	50	
Tetrachloroethylene				0	<0.5	<0.5	<0.5	1	10	
Toluene				0	<0.50	<0.50	<0.50	1	60 (24)	
Total Xylenes				0	<1	<1	<1	1	90	
Trichloroethylene				0	<0.50	<0.50	<0.50	1	5	
Vinyl Chloride				0	<1.0	<1.0	<1.0	1	2	

2.2.18 Rosslyn 2 Reservoir

February 2024

Parameter	Monthly				YTD				Limits	
	Mean	Min	Max	Count	Mean	Min	Max	Count	*Approval or GCDWQ MAC, (AO or OG)	EPCOR
Secondary Inorganics (mg/L) * **										
Alkalinity Total				0	122	122	122	1		
Aluminum				0	0.081	0.081	0.081	1	2.9	0.1/0.2
Beryllium				0	<0.0002	<0.0002	<0.0002	1		
Bromide Dissolved				0	<0.010	<0.010	<0.010	1		
Calcium				0	47.2	47.2	47.2	1		
Calcium Hardness				0	116	116	116	1		
Chloride Dissolved				0	5.6	5.6	5.6	1	(250)	
Cobalt				0	<0.0002	<0.0002	<0.0002	1		
Iron				0	<0.005	<0.005	<0.005	1	(0.3)	0.3
Lanthanum				0	<0.0010	<0.0010	<0.0010	1		
Lithium				0	0.0031	0.0031	0.0031	1		
Magnesium				0	14.3	14.3	14.3	1		
Molybdenum				0	0.0006	0.0006	0.0006	1		
Nickel				0	<0.0005	<0.0005	<0.0005	1		
Ortho_P	0.89	0.88	0.90	2	0.90	0.88	0.92	4		
Phosphorus				0	0.90	0.90	0.90	1		
Potassium				0	0.70	0.70	0.70	1		
Silicon				0	1.95	1.95	1.95	1		
Silver				0	<0.0002	<0.0002	<0.0002	1		
Sodium				0	7.1	7.1	7.1	1	(200)	
Sulphate Dissolved				0	59	59	59	1	(500)	
Thallium				0	<0.0005	<0.0005	<0.0005	1		
Tin				0	<0.0005	<0.0005	<0.0005	1		
Titanium				0	<0.0005	<0.0005	<0.0005	1		
Total Hardness (mg/L CaCO3)				0	178	178	178	1		
Vanadium				0	<0.0005	<0.0005	<0.0005	1		
Zinc				0	<0.005	<0.005	<0.005	1	(5.0)	
Zirconium				0	<0.0010	<0.0010	<0.0010	1		

2.2.18 Rosslyn 2 Reservoir

February 2024

Parameter	Monthly				YTD				Limits	
	Mean	Min	Max	Count	Mean	Min	Max	Count	*Approval or GCDWQ MAC, (AO or OG)	EPCOR
Secondary Organics (ug/L) * **										
Bromodichloromethane				0	1.0	1.0	1.0	1		16
Bromoform				0	<0.5	<0.5	<0.5	1		
Chloroform				0	18.9	18.9	18.9	1		
Dibromochloromethane				0	<0.50	<0.50	<0.50	1		
Dichlorobenzene (1,3)				0	<0.50	<0.50	<0.50	1		
Dichloroethylene, cis (1,2)				0	<0.50	<0.50	<0.50	1		
Dichloroethylene, trans (1,2)				0	<0.50	<0.50	<0.50	1		
Dichloropropane (1,2)				0	<0.5	<0.5	<0.5	1		
Methyl t-Butyl Ether (MTBE)				0	<0.5	<0.5	<0.5	1	(15)	
MIBK				0	<1.0	<1.0	<1.0	1		
Styrene				0	<0.50	<0.50	<0.50	1		
Tetrachloroethane (1,1,2,2)				0	<0.5	<0.5	<0.5	1		
Total Organic Carbon				0	1.3	1.3	1.3	1		
Total Volatile Organics (NonTHM)				0	1.8	1.8	1.8	1		
Trichlorobenzene (1,2,4)				0	<0.5	<0.5	<0.5	1		
Trichloroethane (1,1,1)				0	<0.5	<0.5	<0.5	1		
Xylene (1,2)				0	<0.5	<0.5	<0.5	1		
Xylene (1,4)				0	<0.5	<0.5	<0.5	1		

TABLE EXPLANATIONS:

* Numbers with no brackets are Health Canada Guidelines for Canadian Drinking Water Quality (GCDWQ) Maximum Acceptable Concentrations (MAC) and/or a limit set out in the Alberta Environment and Parks (AEP) Operating Approval 638-04-00. Limits in brackets indicate Aesthetic Objectives or Operational Guidelines (OG) and are not Approval Limits The EPCOR limits are internal limits set by EPCOR in the Operations Program.

** Primary parameters are those that have health-based limits (MACs) according the AEP Operating Approval 638-04-00

*** Secondary parameters do not have health-based limits but may have aesthetic or operational objectives

2.2.19 Thorncliff Reservoir

February 2024

Parameter	Monthly				YTD				Limits	
	Mean	Min	Max	Count	Mean	Min	Max	Count	*Approval or GCDWQ MAC, (AO or OG)	EPCOR
Physical										
Colour (TCU)				0	1.1	1.1	1.1	1	(15)	10
Conductivity (uS/cm)				0	368	368	368	1		
Odour				0	Inoff	Inoff	Inoff	1		
pH (N/A)				0	7.9	7.9	7.9	1	(7.0 - 10.5)	7.3 - 8.3
Turbidity (NTU)	0.08	0.07	0.08	4	0.09	0.07	0.12	9		1
Primary Inorganics (mg/L) **										
Antimony				0	<0.0002	<0.0002	<0.0002	1	0.006	
Arsenic				0	0.0003	0.0003	0.0003	1	0.01	
Barium				0	0.055	0.055	0.055	1	2	
Boron				0	0.008	0.008	0.008	1	2	
Bromate Dissolved				0	<0.005	<0.005	<0.005	1	0.01	
Cadmium				0	<0.0002	<0.0002	<0.0002	1	0.007	
Chlorate Dissolved				0	0.109	0.109	0.109	1	1	
Chlorite Dissolved				0	<0.005	<0.005	<0.005	1	1	
Chromium				0	<0.0002	<0.0002	<0.0002	1	0.05	
Copper				0	<0.005	<0.005	<0.005	1	2 (1)	
Fluoride				0	0.71	0.71	0.71	1	1.5	0.6 - 0.8
Lead				0	<0.0002	<0.0002	<0.0002	1	0.005	
Manganese				0	<0.002	<0.002	<0.002	1	0.12 (0.02)	
Mercury				0	<0.0002	<0.0002	<0.0002	1	0.001	
Nitrate (as N) Dissolved				0	0.080	0.080	0.080	1	10	
Nitrite (as N) Dissolved				0	<0.010	<0.010	<0.010	1	1	
Selenium				0	0.0002	0.0002	0.0002	1	0.05	
Strontium				0	0.447	0.447	0.447	1	7.0	
Total Chlorine	2.01	1.90	2.23	4	1.97	1.86	2.23	9	>0.5 and <3.0	>1.0 and <2.4
Uranium				0	0.0005	0.0005	0.0005	1	0.02	
Primary Organics (ug/L) **										
Benzene				0	<0.5	<0.5	<0.5	1	5	
Carbon Tetrachloride				0	<0.5	<0.5	<0.5	1	2	
Chlorobenzene				0	<0.50	<0.50	<0.50	1	80 (30)	
Dichlorobenzene (1,2)				0	<0.50	<0.50	<0.50	1		
Dichlorobenzene (1,4)				0	<0.5	<0.5	<0.5	1	5 (1)	
Dichloroethane (1,2)				0	<0.5	<0.5	<0.5	1	5	
Dichloroethylene (1,1)				0	<0.5	<0.5	<0.5	1	14	
Ethylbenzene				0	<0.50	<0.50	<0.50	1	140 (1.6)	
Methylene Chloride				0	<0.5	<0.5	<0.5	1	50	
Tetrachloroethylene				0	<0.5	<0.5	<0.5	1	10	
Toluene				0	<0.50	<0.50	<0.50	1	60 (24)	
Total Xylenes				0	<1	<1	<1	1	90	
Trichloroethylene				0	<0.50	<0.50	<0.50	1	5	
Vinyl Chloride				0	<1.0	<1.0	<1.0	1	2	

2.2.19 Thorncliff Reservoir

February 2024

Parameter	Monthly				YTD				Limits	
	Mean	Min	Max	Count	Mean	Min	Max	Count	*Approval or GCDWQ MAC, (AO or OG)	EPCOR
Secondary Inorganics (mg/L) * **										
Alkalinity Total				0	118	118	118	1		
Aluminum				0	0.101	0.101	0.101	1	2.9	0.1/0.2
Beryllium				0	<0.0002	<0.0002	<0.0002	1		
Bromide Dissolved				0	<0.010	<0.010	<0.010	1		
Calcium				0	46.9	46.9	46.9	1		
Calcium Hardness				0	116	116	116	1		
Chloride Dissolved				0	6.1	6.1	6.1	1	(250)	
Cobalt				0	<0.0002	<0.0002	<0.0002	1		
Iron				0	<0.005	<0.005	<0.005	1	(0.3)	0.3
Lanthanum				0	<0.0010	<0.0010	<0.0010	1		
Lithium				0	0.0030	0.0030	0.0030	1		
Magnesium				0	14.2	14.2	14.2	1		
Molybdenum				0	0.0006	0.0006	0.0006	1		
Nickel				0	<0.0005	<0.0005	<0.0005	1		
Ortho_P	0.90	0.88	0.92	2	0.90	0.88	0.92	4		
Phosphorus				0	0.93	0.93	0.93	1		
Potassium				0	0.70	0.70	0.70	1		
Silicon				0	1.95	1.95	1.95	1		
Silver				0	<0.0002	<0.0002	<0.0002	1		
Sodium				0	7.3	7.3	7.3	1	(200)	
Sulphate Dissolved				0	60	60	60	1	(500)	
Thallium				0	<0.0005	<0.0005	<0.0005	1		
Tin				0	<0.0005	<0.0005	<0.0005	1		
Titanium				0	<0.0005	<0.0005	<0.0005	1		
Total Hardness (mg/L CaCO3)				0	174	174	174	1		
Vanadium				0	<0.0005	<0.0005	<0.0005	1		
Zinc				0	<0.005	<0.005	<0.005	1	(5.0)	
Zirconium				0	<0.0010	<0.0010	<0.0010	1		

2.2.19 Thorncliff Reservoir

February 2024

Parameter	Monthly				YTD				Limits	
	Mean	Min	Max	Count	Mean	Min	Max	Count	*Approval or GCDWQ MAC, (AO or OG)	EPCOR
Secondary Organics (ug/L) * **										
Bromodichloromethane				0	0.8	0.8	0.8	1		16
Bromoform				0	<0.5	<0.5	<0.5	1		
Chloroform				0	18.2	18.2	18.2	1		
Dibromochloromethane				0	<0.50	<0.50	<0.50	1		
Dichlorobenzene (1,3)				0	<0.50	<0.50	<0.50	1		
Dichloroethylene, cis (1,2)				0	<0.50	<0.50	<0.50	1		
Dichloroethylene, trans (1,2)				0	<0.50	<0.50	<0.50	1		
Dichloropropane (1,2)				0	<0.5	<0.5	<0.5	1		
Methyl t-Butyl Ether (MTBE)				0	<0.5	<0.5	<0.5	1	(15)	
MIBK				0	<1.0	<1.0	<1.0	1		
Styrene				0	<0.50	<0.50	<0.50	1		
Tetrachloroethane (1,1,2,2)				0	<0.5	<0.5	<0.5	1		
Total Organic Carbon				0	1.2	1.2	1.2	1		
Total Volatile Organics (NonTHM)				0	1.8	1.8	1.8	1		
Trichlorobenzene (1,2,4)				0	<0.5	<0.5	<0.5	1		
Trichloroethane (1,1,1)				0	<0.5	<0.5	<0.5	1		
Xylene (1,2)				0	<0.5	<0.5	<0.5	1		
Xylene (1,4)				0	<0.5	<0.5	<0.5	1		

TABLE EXPLANATIONS:

* Numbers with no brackets are Health Canada Guidelines for Canadian Drinking Water Quality (GCDWQ) Maximum Acceptable Concentrations (MAC) and/or a limit set out in the Alberta Environment and Parks (AEP) Operating Approval 638-04-00. Limits in brackets indicate Aesthetic Objectives or Operational Guidelines (OG) and are not Approval Limits The EPCOR limits are internal limits set by EPCOR in the Operations Program.

** Primary parameters are those that have health-based limits (MACs) according the AEP Operating Approval 638-04-00

*** Secondary parameters do not have health-based limits but may have aesthetic or operational objectives

2.2.20 Routine Distribution System, Field Reservoirs, Fire stations and Staff Residences
Disinfection Byproducts, THM, HAA, NDMA

February 2024

Parameter or Location	Monthly				YTD				12 months running				Limits	
	Mean	Min	Max	Count	Mean	Min	Max	Count	Mean	Min	Max	Count	GCDWQ or Approval or MAC* or (AO or OG) 12 month running	EPCOR single result
Trihalomethanes (ug/L)													100	50
01-SR	15.1	15.1	15.1	1	15.1	15.1	15.1	1	19.9	15.1	24.6	2		
02-SR				0	20.0	20.0	20.0	1	18.4	5.3	28.3	4		
03-SR				0				0	23.0	19.0	27.0	2		
04-SR				0	15.8	15.8	15.8	1	18.9	14.9	25.9	3		
05-OF				0				0	15.2	15.2	15.2	1		
05-RI				0				0	24.9	21.2	28.5	2		
07-RI				0	17.3	17.3	17.3	1	15.0	12.7	17.3	2		
07-SR				0				0	22.4	15.7	30.5	3		
10-SR				0				0	14.5	9.1	19.8	2		
11-SR				0				0	25.8	25.8	25.8	1		
14-RI				0				0	27.4	21.6	33.1	2		
14-SR				0				0	12.8	12.8	12.8	1		
15-SR				0				0	21.0	11.4	28.9	4		
19-SR				0				0	26.8	26.8	26.8	1		
21-DE				0				0	6.5	6.5	6.5	2		
21-SR				0				0	16.5	13.9	20.7	3		
24-SR	13.3	13.3	13.3	1	13.3	13.3	13.3	1	13.3	13.3	13.3	1		
26-DE				0				0	19.7	15.8	25.3	3		
27-SR				0				0	17.5	17.5	17.5	1		
28-SR				0				0	13.9	5.6	22.3	4		
31-DE	13.0	13.0	13.0	1	14.5	13.0	15.9	2	19.1	13.0	26.8	5		
31-OF				0				0	13.8	13.8	13.8	1		
31-RI	21.6	21.6	21.6	1	21.6	21.6	21.6	1	19.8	6.1	26.8	4		
31-SR				0				0	13.9	13.9	13.9	1		
32-SR				0	12.0	12.0	12.0	1	22.7	12.0	30.8	6		
36-DE				0				0	27.4	24.2	30.6	2		
40-SR	12.7	12.7	12.7	1	14.6	12.7	16.4	2	19.8	12.7	30.2	8		
41-DE				0				0	22.1	22.1	22.1	1		
EDMONTON S4	13.0	13.0	13.0	1	13.0	13.0	13.0	1	13.0	13.0	13.0	1		
		Total Count		6				12				73		

2.2.20 Routine Distribution System, Field Reservoirs, Fire stations and Staff Residences
Disinfection Byproducts, THM, HAA, NDMA

February 2024

Parameter or Location	Monthly				YTD				12 months running				Limits	
	Mean	Min	Max	Count	Mean	Min	Max	Count	Mean	Min	Max	Count	GCDWQ or Approval or MAC* or (AO or OG) 12 month running	EPCOR single result
HAA (ug/L)													80	40
01-SR	16.8	16.8	16.8	1	16.8	16.8	16.8	1	21.0	16.8	25.2	2		
02-SR				0	19.8	19.8	19.8	1	19.9	8.6	25.6	4		
03-SR				0				0	23.3	19.6	27.0	2		
04-SR				0	19.1	19.1	19.1	1	20.8	19.1	23.9	3		
05-OF				0				0	18.6	18.6	18.6	1		
05-RI				0				0	24.4	22.4	26.4	2		
07-RI				0	19.0	19.0	19.0	1	17.2	15.3	19.0	2		
07-SR				0				0	25.4	16.7	34.9	3		
10-SR				0				0	15.9	10.3	21.5	2		
11-SR				0				0	25.2	25.2	25.2	1		
14-RI				0				0	26.7	22.5	30.9	2		
14-SR				0				0	17.2	17.2	17.2	1		
15-SR				0				0	23.4	14.2	34.6	4		
19-SR				0				0	26.1	26.1	26.1	1		
21-DE				0				0	7.7	7.7	7.7	1		
21-SR				0				0	18.9	16.8	21.1	3		
24-SR	14.0	14.0	14.0	1	14.0	14.0	14.0	1	14.0	14.0	14.0	1		
26-DE				0				0	20.8	17.7	22.9	3		
27-SR				0				0	18.0	18.0	18.0	1		
28-SR				0				0	15.6	7.3	24.8	4		
31-DE	14.7	14.7	14.7	1	17.6	14.7	20.5	2	19.5	13.4	25.0	5		
31-OF				0				0	17.3	17.3	17.3	1		
31-RI	19.2	19.2	19.2	1	19.2	19.2	19.2	1	18.8	7.4	24.9	4		
31-SR				0				0	17.2	17.2	17.2	1		
32-SR				0	18.4	18.4	18.4	1	24.3	18.4	31.0	6		
36-DE				0				0	26.8	23.8	29.7	2		
40-SR	13.8	13.8	13.8	1	16.3	13.8	18.7	2	20.5	13.8	26.4	7		
41-DE				0				0	23.8	23.8	23.8	1		
EDMONTON S4	15.7	15.7	15.7	1	15.7	15.7	15.7	1	15.7	15.7	15.7	1		
	Total Count			6				12				71		

2.2.20 Routine Distribution System, Field Reservoirs, Fire stations and Staff Residences
Disinfection Byproducts, THM, HAA, NDMA

February 2024

Parameter or Location	Monthly				YTD				12 months running				Limits	
	Mean	Min	Max	Count	Mean	Min	Max	Count	Mean	Min	Max	Count	GCDWQ or Approval or MAC* or (AO or OG) 12 month running	EPCOR single result
NDMA (ug/L)													0.040	0.01
02-SR				0				0	0.001	<0.001	0.002	2		
03-SR				0				0	0.003	0.002	0.004	2		
04-SR				0	<0.006	<0.006	<0.006	1	<0.006	<0.006	<0.006	1		
05-RI				0				0	0.004	0.004	0.004	1		
07-SR				0				0	0.005	0.005	0.005	1		
10-SR				0				0	0.001	0.001	0.001	1		
15-SR				0				0	0.001	<0.001	0.002	2		
20-OF				0				0	<0.002	<0.002	<0.002	1		
21-SR				0				0	<0.002	<0.001	0.002	2		
24-SR	<0.001	<0.001	<0.001	1	<0.001	<0.001	<0.001	1	<0.001	<0.001	<0.001	1		
26-DE				0				0	<0.002	<0.001	<0.002	3		
31-DE				0	<0.006	<0.006	<0.006	1	<0.006	<0.002	0.011	3		
31-OF				0				0	<0.001	<0.001	<0.001	1		
31-RI	0.007	0.007	0.007	1	0.007	0.007	0.007	1	0.006	<0.001	0.010	3		
31-SR				0				0	<0.001	<0.001	<0.001	1		
32-SR				0				0	0.002	0.002	0.002	1		
36-DE				0				0	0.002	<0.001	0.002	2		
40-SR				0	<0.006	<0.006	<0.006	1	<0.003	<0.001	<0.006	6		
41-DE				0				0	0.002	0.002	0.002	1		
EDMONTON S4	<0.001	<0.001	<0.001	1	<0.001	<0.001	<0.001	1	<0.001	<0.001	<0.001	1		
		Total Count		3				6				36		

2.2.20 Routine Distribution System, Field Reservoirs, Fire stations and Staff Residences
Disinfection Byproducts, THM, HAA, NDMA

February 2024

Parameter or Location	Monthly				YTD				12 months running				Limits	
	Mean	Min	Max	Count	Mean	Min	Max	Count	Mean	Min	Max	Count	GCDWQ or Approval or MAC* or (AO or OG) 12 month running	EPCOR single result
Trihalomethanes (ug/L)													100	50
Castledowns Reservoir	19.8	19.8	19.8	1	19.8	19.8	19.8	1	21.4	16.2	28.8	5		
Clareview Reservoir				0	20.1	20.1	20.1	1	21.5	13.3	33.5	7		
Discovery Park Reservoir				0	18.1	18.1	18.1	1	17.6	6.8	29.8	7		
Kaskitayo Reservoir				0	14.4	14.4	14.4	1	20.2	11.2	29.9	7		
Londonderry Reservoir	16.0	16.0	16.0	1	16.0	16.0	16.0	1	19.6	6.1	29.2	6		
Millwoods Reservoir	10.3	9.5	11.1	2	10.3	9.5	11.1	2	16.6	5.0	28.8	7		
North Jasper Place Reservoir				0	19.4	19.4	19.4	1	19.4	8.7	35.7	7		
Ormsby Reservoir	10.5	9.6	11.4	2	10.5	9.6	11.4	2	17.0	5.2	30.1	7		
Papaschase Reservoir 1	12.9	11.9	13.9	2	12.9	11.9	13.9	2	19.8	8.9	32.9	8		
Papaschase Reservoir 2				0	16.8	16.8	16.8	1	20.7	10.9	33.1	6		
Rosslyn Reservoir 1	15.5	15.5	15.5	1	15.5	15.5	15.5	1	21.8	7.9	30.0	7		
Rosslyn Reservoir 2				0	20.1	20.1	20.1	1	22.8	9.4	32.6	7		
Thorncliff Reservoir				0	19.1	19.1	19.1	1	20.2	8.2	31.6	6		
		Total Count		9				16				87		

Location Code: City is divided into 28 zones by population. Location is coded by zone and site type.

DE - Dead End
FS - Firestation
KT - Key Tap
OF - Other Facilities (stores / Restaurant)
PF - Plant First Customer (Guardhouse)
PR - Private Residence (Non-Staff)
RI - Regional Influent

2.2.21 Raw River Water: Physical, Inorganic, Organic and Pesticide Parameters

February 2024

	Current Month								YTD							
	ROSSDALE				E.L. SMITH				ROSSDALE				E.L. SMITH			
	Mean	Min	Max	Count	Mean	Min	Max	Count	Mean	Min	Max	Count	Mean	Min	Max	Count
Microbiologicals																
Microcystin	<0.2	<0.2	<0.2	1	<0.2	<0.2	<0.2	1	<0.2	<0.2	<0.2	1	<0.2	<0.2	<0.2	1
Physical																
Colour (TCU)	7.9	6.1	9.8	28	8.1	6.1	10.7	29	8.4	5.2	14.0	59	8.7	5.3	14.6	59
Conductivity (uS/cm)	372	368	378	4	367	358	376	4	376	352	415	9	369	343	416	9
FPA-Intensity (N/A)	0.51	0.38	0.56	5	0.65	0.44	0.81	5	0.58	0.38	0.94	9	0.69	0.44	0.88	9
pH (N/A)	8.1	8.1	8.1	1	8.1	8.1	8.1	1	8.1	8.1	8.2	2	8.2	8.1	8.2	2
Total Dissolved Solids (mg/L)	218	218	218	1	221	221	221	1	215	212	218	2	217	213	221	2
Total Suspended Solids	<2.5	<2.5	<2.5	1	<2.5	<2.5	<2.5	1	<2.5	<2.5	<2.5	2	<2.5	<2.5	<2.5	2
Turbidity (NTU)	1.9	1.0	15.1	28	1.7	1.0	3.7	29	2.0	1.0	15.1	59	2.0	1.0	4.0	59
Primary Inorganics (mg/L) **																
Antimony	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	2	<0.0002	<0.0002	<0.0002	2
Arsenic	0.0002	0.0002	0.0002	1	0.0003	0.0003	0.0003	1	0.0002	0.0002	0.0002	2	0.0003	0.0002	0.0003	2
Barium	0.065	0.065	0.065	1	0.065	0.065	0.065	1	0.062	0.059	0.065	2	0.062	0.059	0.065	2
Boron	0.01	0.01	0.01	1	0.01	0.01	0.01	1	0.01	0.01	0.01	2	0.01	0.01	0.01	2
Cadmium	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	2	<0.0002	<0.0002	<0.0002	2
Chromium	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	2	<0.0002	<0.0002	<0.0002	2
Copper	<0.005	<0.005	<0.005	1	<0.005	<0.005	<0.005	1	<0.005	<0.005	<0.005	2	<0.005	<0.005	<0.005	2
Fluoride	0.11	0.10	0.12	4	0.11	0.10	0.12	4	0.11	0.10	0.13	9	0.11	0.10	0.12	9
Lead	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	2	<0.0002	<0.0002	<0.0002	2
Manganese	0.002	0.002	0.002	1	0.004	0.004	0.004	1	0.002	0.002	0.002	2	0.005	0.004	0.005	2
Mercury	<0.0001	<0.0001	<0.0002	2	<0.0001	<0.0001	<0.0002	2	<0.0002	<0.0001	<0.0002	3	<0.0002	<0.0001	<0.0002	3
Nitrate (as N) Dissolved	0.09	0.09	0.10	4	0.08	0.08	0.08	4	0.09	0.08	0.14	9	0.08	0.08	0.08	9
Nitrite (as N) Dissolved	<0.01	<0.01	<0.01	4	<0.01	<0.01	<0.01	4	<0.01	<0.01	<0.01	9	<0.01	<0.01	<0.01	9
Selenium	0.0003	0.0003	0.0003	1	0.0003	0.0003	0.0003	1	0.0003	0.0002	0.0003	2	0.0003	<0.0002	0.0003	2
Total Chlorine	<0.03	<0.03	<0.03	1	<0.03	<0.03	<0.03	1	<0.03	<0.03	<0.03	2	<0.03	<0.03	<0.03	2
Uranium	0.0005	0.0005	0.0005	1	<0.0005	<0.0005	<0.0005	1	0.0006	0.0005	0.0006	2	<0.0006	<0.0005	0.0006	2

2.2.21 Raw River Water: Physical, Inorganic, Organic and Pesticide Parameters

February 2024

	Current Month								YTD							
	ROSSDALE				E.L. SMITH				ROSSDALE				E.L. SMITH			
	Mean	Min	Max	Count	Mean	Min	Max	Count	Mean	Min	Max	Count	Mean	Min	Max	Count
Primary Organics (ug/L) **																
2,4-D	<0.05	<0.05	<0.05	1	<0.05	<0.05	<0.05	1	<0.05	<0.05	<0.05	1	<0.05	<0.05	<0.05	1
Atrazine	<0.05	<0.05	<0.05	1	<0.05	<0.05	<0.05	1	<0.05	<0.05	<0.05	1	<0.05	<0.05	<0.05	1
Benzene	<0.5	<0.5	<0.5	28	<0.5	<0.5	<0.5	29	<0.5	<0.5	<0.5	60	<0.5	<0.5	<0.5	60
Benzo(a)pyrene	<0.005	<0.005	<0.005	1	<0.005	<0.005	<0.005	1	<0.005	<0.005	<0.005	1	<0.005	<0.005	<0.005	1
Bromoxynil	<0.05	<0.05	<0.05	1	<0.05	<0.05	<0.05	1	<0.05	<0.05	<0.05	1	<0.05	<0.05	<0.05	1
Carbon Tetrachloride	<0.5	<0.5	<0.5	28	<0.5	<0.5	<0.5	29	<0.5	<0.5	<1.0	60	<0.5	<0.5	<1.0	60
Chlorobenzene	<0.5	<0.5	<0.5	28	<0.5	<0.5	<0.5	29	<0.5	<0.5	<0.5	60	<0.5	<0.5	<0.5	60
Chlorpyrifos	<0.1	<0.1	<0.1	1	<0.1	<0.1	<0.1	1	<0.1	<0.1	<0.1	1	<0.1	<0.1	<0.1	1
Cyanazine	<0.1	<0.1	<0.1	1	<0.1	<0.1	<0.1	1	<0.1	<0.1	<0.1	1	<0.1	<0.1	<0.1	1
Diazinon	<0.025	<0.025	<0.025	1	<0.025	<0.025	<0.025	1	<0.025	<0.025	<0.025	1	<0.025	<0.025	<0.025	1
Dicamba	<0.1	<0.1	<0.1	1	<0.1	<0.1	<0.1	1	<0.1	<0.1	<0.1	1	<0.1	<0.1	<0.1	1
Dichlorobenzene (1,2)	<0.5	<0.5	<0.5	28	<0.5	<0.5	<0.5	29	<0.5	<0.5	<0.5	60	<0.5	<0.5	<0.5	60
Dichlorobenzene (1,4)	<0.5	<0.5	<0.5	28	<0.5	<0.5	<0.5	29	<0.5	<0.5	<0.5	60	<0.5	<0.5	<0.5	60
Dichloroethane (1,2)	<0.5	<0.5	<0.5	28	<0.5	<0.5	<0.5	29	<0.5	<0.5	<0.5	59	<0.5	<0.5	<0.5	59
Dichloroethylene (1,1)	<0.5	<0.5	<0.5	28	<0.5	<0.5	<0.5	29	<0.5	<0.5	<3.0	60	<0.5	<0.5	<3.0	60
Dichlorophenol (2,4)	<0.3	<0.3	<0.3	1	<0.3	<0.3	<0.3	1	<0.3	<0.3	<0.3	1	<0.3	<0.3	<0.3	1
Diclofop-methyl	<0.1	<0.1	<0.1	1	<0.1	<0.1	<0.1	1	<0.1	<0.1	<0.1	1	<0.1	<0.1	<0.1	1
Dimethoate	<0.05	<0.05	<0.05	1	<0.05	<0.05	<0.05	1	<0.05	<0.05	<0.05	1	<0.05	<0.05	<0.05	1
Diuron	<0.05	<0.05	<0.05	1	<0.05	<0.05	<0.05	1	<0.05	<0.05	<0.05	1	<0.05	<0.05	<0.05	1
Ethylbenzene	<0.5	<0.5	<0.5	28	<0.5	<0.5	<0.5	29	<0.5	<0.5	<0.5	60	<0.5	<0.5	<0.5	60
Glyphosate	<0.2	<0.2	<0.2	1	<0.2	<0.2	<0.2	1	<0.2	<0.2	<0.2	1	<0.2	<0.2	<0.2	1
Malathion	<0.025	<0.025	<0.025	1	<0.025	<0.025	<0.025	1	<0.025	<0.025	<0.025	1	<0.025	<0.025	<0.025	1
MCPA	<0.05	<0.05	<0.05	1	<0.05	<0.05	<0.05	1	<0.05	<0.05	<0.05	1	<0.05	<0.05	<0.05	1
Methylene Chloride	<0.5	<0.5	<0.5	28	<0.5	<0.5	<0.5	29	<0.5	<0.5	<0.5	60	<0.5	<0.5	<0.5	60
Metolachlor	<0.025	<0.025	<0.025	1	<0.025	<0.025	<0.025	1	<0.025	<0.025	<0.025	1	<0.025	<0.025	<0.025	1
Metribuzin	<0.1	<0.1	<0.1	1	<0.1	<0.1	<0.1	1	<0.1	<0.1	<0.1	1	<0.1	<0.1	<0.1	1
NDMA (µg/L)	<0.0009	<0.0009	<0.0009	1	<0.00100	<0.00099	<0.00100	1	<0.0009	<0.0009	<0.0009	1	<0.00100	<0.00099	<0.00100	1
Nitrilotriacetic acid	<0.40	<0.40	<0.40	1	<0.40	<0.40	<0.40	1	<0.40	<0.40	<0.40	1	<0.40	<0.40	<0.40	1
Pentachlorophenol	<0.5	<0.5	<0.5	1	<0.5	<0.5	<0.5	1	<0.5	<0.5	<0.5	1	<0.5	<0.5	<0.5	1
Perfluorooctane sulfonic acid (PFOS)	<0.02	<0.02	<0.02	1	<0.02	<0.02	<0.02	1	<0.02	<0.02	<0.02	1	<0.02	<0.02	<0.02	1
Perfluorooctanoic acid (PFOA)	<0.02	<0.02	<0.02	1	<0.02	<0.02	<0.02	1	<0.02	<0.02	<0.02	1	<0.02	<0.02	<0.02	1
Phorate	<0.25	<0.25	<0.25	1	<0.25	<0.25	<0.25	1	<0.25	<0.25	<0.25	1	<0.25	<0.25	<0.25	1
Picloram	<0.1	<0.1	<0.1	1	<0.1	<0.1	<0.1	1	<0.1	<0.1	<0.1	1	<0.1	<0.1	<0.1	1
Simazine	<0.1	<0.1	<0.1	1	<0.1	<0.1	<0.1	1	<0.1	<0.1	<0.1	1	<0.1	<0.1	<0.1	1
Terbufos	<0.5	<0.5	<0.5	1	<0.5	<0.5	<0.5	1	<0.5	<0.5	<0.5	1	<0.5	<0.5	<0.5	1
Tetrachloroethylene	<0.5	<0.5	<0.5	28	<0.5	<0.5	<0.5	29	<0.5	<0.5	<0.5	60	<0.5	<0.5	<0.5	60
Toluene	<0.5	<0.5	<0.5	28	<0.5	<0.5	<0.5	29	<0.5	<0.5	<0.5	60	<0.5	<0.5	<0.5	60
Total Xylenes	<1.0	<1.0	<1.0	28	<1.0	<1.0	<1.0	29	<1.0	<1.0	<2.5	60	<1.0	<1.0	<2.5	60
Trichloroethylene	<0.5	<0.5	<0.5	28	<0.5	<0.5	<0.5	29	<0.5	<0.5	<0.5	60	<0.5	<0.5	<0.5	60
Trifluralin	<0.1	<0.1	<0.1	1	<0.1	<0.1	<0.1	1	<0.1	<0.1	<0.1	1	<0.1	<0.1	<0.1	1

2.2.21 Raw River Water: Physical, Inorganic, Organic and Pesticide Parameters

February 2024

	Current Month								YTD							
	ROSSDALE				E.L. SMITH				ROSSDALE				E.L. SMITH			
	Mean	Min	Max	Count	Mean	Min	Max	Count	Mean	Min	Max	Count	Mean	Min	Max	Count
Primary Organics (ug/L) **																
Trihalomethanes	<1	<1	<1	28	<1	<1	<1	29	<1	<1	<1	60	<1	<1	<1	60
Vinyl Chloride	<1	<1	<1	28	<1	<1	<1	29	<1	<1	<1	59	<1	<1	<1	59
Secondary Inorganics (mg/L) ***																
Alkalinity Total	131	128	133	4	131	127	133	4	132	123	149	9	132	123	151	9
Alkalinity, PHP (mg CaCO3/L)	<3	<3	<3	1	<3	<3	<3	1	<3	<3	<3	2	<3	<3	<3	2
Aluminum	0.140	0.140	0.140	1	0.132	0.132	0.132	1	0.124	0.108	0.140	2	0.121	0.109	0.132	2
Ammonia as NH3	<0.05	<0.05	<0.05	4	<0.05	<0.05	<0.05	4	<0.05	<0.05	<0.05	9	<0.05	<0.05	<0.05	9
Beryllium	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	2	<0.0002	<0.0002	<0.0002	2
Calcium Hardness	123	120	126	4	121	120	123	4	123	110	138	9	122	110	140	9
Cobalt	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	2	<0.0002	<0.0002	<0.0002	2
Free Chlorine	<0.07	<0.07	<0.07	1	<0.07	<0.07	<0.07	1	<0.07	<0.07	<0.07	2	<0.07	<0.07	<0.07	2
Iron	0.078	0.078	0.078	1	0.108	0.108	0.108	1	0.076	0.073	0.078	2	0.108	0.108	0.108	2
Lanthanum	<0.001	<0.001	<0.001	1	<0.001	<0.001	<0.001	1	<0.001	<0.001	<0.001	2	<0.001	<0.001	<0.001	2
Lithium	0.0033	0.0033	0.0033	1	0.0033	0.0033	0.0033	1	0.0033	0.0033	0.0033	2	0.0033	0.0033	0.0033	2
Magnesium	14.4	14.4	14.4	1	14.8	14.8	14.8	1	14.5	14.4	14.6	2	14.6	14.4	14.8	2
Molybdenum	0.001	0.001	0.001	1	0.001	0.001	0.001	1	0.001	0.001	0.001	2	0.001	0.001	0.001	2
Nickel	0.0007	0.0007	0.0007	1	0.0006	0.0006	0.0006	1	0.0007	0.0006	0.0007	2	0.0006	0.0005	0.0006	2
Ortho_P	<0.02	<0.02	<0.02	2	<0.02	<0.02	<0.02	2	<0.02	<0.02	<0.02	3	<0.02	<0.02	<0.02	3
Phosphorus	<0.02	<0.02	<0.02	1	<0.02	<0.02	<0.02	1	<0.02	<0.02	<0.02	2	<0.02	<0.02	<0.02	2
Potassium	0.8	0.8	0.8	1	0.8	0.8	0.8	1	0.8	0.7	0.8	2	0.8	0.7	0.8	2
Silicon	2.38	2.38	2.38	1	2.45	2.45	2.45	1	2.24	2.09	2.38	2	2.24	2.03	2.45	2
Silver	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	2	<0.0002	<0.0002	<0.0002	2
Sodium	4.3	4.3	4.3	1	4.1	4.1	4.1	1	4.1	3.8	4.3	2	4.0	3.8	4.1	2
Strontium	0.429	0.429	0.429	1	0.425	0.425	0.425	1	0.449	0.429	0.469	2	0.444	0.425	0.462	2
Thallium	<0.0005	<0.0005	<0.0005	1	<0.0005	<0.0005	<0.0005	1	<0.0005	<0.0005	<0.0005	2	<0.0005	<0.0005	<0.0005	2
Tin	<0.0005	<0.0005	<0.0005	1	<0.0005	<0.0005	<0.0005	1	<0.0005	<0.0005	<0.0005	2	<0.0005	<0.0005	<0.0005	2
Titanium	0.0028	0.0028	0.0028	1	0.0033	0.0033	0.0033	1	0.0022	0.0015	0.0028	2	0.0027	0.0020	0.0033	2
Total Hardness (mg/L CaCO3)	182	178	185	4	185	181	187	4	185	173	211	9	186	172	203	9
Total Kjeldahl Nitrogen	0.1	0.1	0.1	1	0.1	0.1	0.1	1	0.1	0.1	0.1	2	<0.1	<0.1	0.1	2
Vanadium	0.0006	0.0006	0.0006	1	<0.0005	<0.0005	<0.0005	1	<0.0006	<0.0005	0.0006	2	<0.0005	<0.0005	<0.0005	2
Zinc	<0.005	<0.005	<0.005	1	<0.005	<0.005	<0.005	1	<0.005	<0.005	<0.005	2	<0.005	<0.005	<0.005	2
Zirconium	<0.001	<0.001	<0.001	1	<0.001	<0.001	<0.001	1	<0.001	<0.001	<0.001	2	<0.001	<0.001	<0.001	2

2.2.21 Raw River Water: Physical, Inorganic, Organic and Pesticide Parameters

February 2024

	Current Month								YTD							
	ROSSDALE				E.L. SMITH				ROSSDALE				E.L. SMITH			
	Mean	Min	Max	Count	Mean	Min	Max	Count	Mean	Min	Max	Count	Mean	Min	Max	Count
Secondary Organics (ug/L) ***																
Aldicarb	<0.1	<0.1	<0.1	1	<0.1	<0.1	<0.1	1	<0.1	<0.1	<0.1	1	<0.1	<0.1	<0.1	1
Aldrin	<0.008	<0.008	<0.008	1	<0.008	<0.008	<0.008	1	<0.008	<0.008	<0.008	1	<0.008	<0.008	<0.008	1
Azinphos-methyl	<0.1	<0.1	<0.1	1	<0.1	<0.1	<0.1	1	<0.1	<0.1	<0.1	1	<0.1	<0.1	<0.1	1
Bromodichloromethane	<0.5	<0.5	<0.5	28	<0.5	<0.5	<0.5	29	<0.5	<0.5	<0.5	60	<0.5	<0.5	<0.5	60
Bromoform	<0.5	<0.5	<0.5	28	<0.5	<0.5	<0.5	29	<0.5	<0.5	<1.0	60	<0.5	<0.5	<1.0	60
Carbaryl	<0.05	<0.05	<0.05	1	<0.05	<0.05	<0.05	1	<0.05	<0.05	<0.05	1	<0.05	<0.05	<0.05	1
Carbofuran	<0.025	<0.025	<0.025	1	<0.025	<0.025	<0.025	1	<0.025	<0.025	<0.025	1	<0.025	<0.025	<0.025	1
Chloroform	<0.5	<0.5	<0.5	28	<0.5	<0.5	<0.5	29	<0.5	<0.5	<0.5	60	<0.5	<0.5	<0.5	60
Dibromochloromethane	<0.5	<0.5	<0.5	28	<0.5	<0.5	<0.5	29	<0.5	<0.5	<0.5	60	<0.5	<0.5	<0.5	60
Dichlorobenzene (1,3)	<0.5	<0.5	<0.5	28	<0.5	<0.5	<0.5	29	<0.5	<0.5	<0.5	60	<0.5	<0.5	<0.5	60
Dichloroethylene, cis (1,2)	<0.5	<0.5	<0.5	28	<0.5	<0.5	<0.5	29	<0.5	<0.5	<0.5	60	<0.5	<0.5	<0.5	60
Dichloroethylene, trans (1,2)	<0.5	<0.5	<0.5	28	<0.5	<0.5	<0.5	29	<0.5	<0.5	<0.5	60	<0.5	<0.5	<0.5	60
Dichloropropane (1,2)	<0.5	<0.5	<0.5	28	<0.5	<0.5	<0.5	29	<0.5	<0.5	<0.5	60	<0.5	<0.5	<0.5	60
Dieldrin	<0.008	<0.008	<0.008	1	<0.008	<0.008	<0.008	1	<0.008	<0.008	<0.008	1	<0.008	<0.008	<0.008	1
Methyl t-Butyl Ether (MTBE)	<0.5	<0.5	<0.5	28	<0.5	<0.5	<0.5	29	<0.5	<0.5	<0.5	60	<0.5	<0.5	<0.5	60
MIBK	<1	<1	<1	28	<1	<1	<1	29	<1	<1	<1	60	<1	<1	<1	60
Parathion	<0.1	<0.1	<0.1	1	<0.1	<0.1	<0.1	1	<0.1	<0.1	<0.1	1	<0.1	<0.1	<0.1	1
Perfluorobutanoic acid (PFBA)	<0.1	<0.1	<0.1	1	<0.1	<0.1	<0.1	1	<0.1	<0.1	<0.1	1	<0.1	<0.1	<0.1	1
Perfluoroheptanoic acid (PFHpA)	<0.02	<0.02	<0.02	1	<0.02	<0.02	<0.02	1	<0.02	<0.02	<0.02	1	<0.02	<0.02	<0.02	1
Perfluorohexane sulfonic acid (PFHxS)	<0.02	<0.02	<0.02	1	<0.02	<0.02	<0.02	1	<0.02	<0.02	<0.02	1	<0.02	<0.02	<0.02	1
Perfluorohexanoic acid (PFHxA)	<0.02	<0.02	<0.02	1	<0.02	<0.02	<0.02	1	<0.02	<0.02	<0.02	1	<0.02	<0.02	<0.02	1
Perfluorononanoic acid (PFNA)	<0.02	<0.02	<0.02	1	<0.02	<0.02	<0.02	1	<0.02	<0.02	<0.02	1	<0.02	<0.02	<0.02	1
Perfluoropentanoic acid (PFPeA)	<0.02	<0.02	<0.02	1	<0.02	<0.02	<0.02	1	<0.02	<0.02	<0.02	1	<0.02	<0.02	<0.02	1
Styrene	<0.5	<0.5	<0.5	28	<0.5	<0.5	<0.5	29	<0.5	<0.5	<0.5	60	<0.5	<0.5	<0.5	60
Tetrachloroethane (1,1,2,2)	<0.5	<0.5	<0.5	28	<0.5	<0.5	<0.5	29	<0.5	<0.5	<1.0	60	<0.5	<0.5	<1.0	60
Total Organic Carbon	1.9	1.1	2.2	4	2.0	1.6	2.5	4	2.1	1.1	3.1	9	2.1	1.2	3.2	9
Total Volatile Organics (NonTHM)	<1.1	<1.0	1.4	28	<1.1	<1.0	1.4	29	<1.3	<1.0	2.2	60	<1.3	<1.0	2.2	60
Total Volatile Organics (Unknown)	0.7	<0.5	0.9	12	0.7	<0.5	1.1	16	<0.7	<0.5	<1.0	13	<0.7	<0.5	1.1	17
Triallate	<0.1	<0.1	<0.1	1	<0.1	<0.1	<0.1	1	<0.1	<0.1	<0.1	1	<0.1	<0.1	<0.1	1
Trichloroacetic acid	<1	<1	<1	1	<1	<1	<1	1	<1	<1	<1	1	<1	<1	<1	1
Trichlorobenzene (1,2,4)	<0.5	<0.5	<0.5	28	<0.5	<0.5	<0.5	29	<0.5	<0.5	<0.5	60	<0.5	<0.5	<0.5	60
Trichloroethane (1,1,1)	<0.5	<0.5	<0.5	28	<0.5	<0.5	<0.5	29	<0.5	<0.5	<0.5	60	<0.5	<0.5	<0.5	60
Xylene (1,2)	<0.5	<0.5	<0.5	28	<0.5	<0.5	<0.5	29	<0.5	<0.5	<0.5	60	<0.5	<0.5	<0.5	60
Xylene (1,4)	<0.5	<0.5	<0.5	28	<0.5	<0.5	<0.5	29	<0.5	<0.5	<0.5	60	<0.5	<0.5	<0.5	60

2.2.22 EFFLUENT WASTESTREAM TO SANITARY SEWER (PLANTS) - REGULATED (EPCOR Drainage Bylaw)

(Lab Neutralization Tank in Water Excellence Lab Building)

Date	pH**
07-Feb-2024	7.97
15-Feb-2024	9.76
22-Feb-2024	7.31
29-Feb-2024	9.55

**Drainage By-Law 18093 Acceptable Range is 6.0 to 11.5

2.2.23 REPORTABLE DETECTION LIMITS

Analyte	RDL	Unit
Alkalinity phenolphthalein	3	mg CaCO3/L
Alkalinity Total	6	mg CaCO3/L
Aluminum	0.005	mg/L
Ammonia as N	0.05	mg/L
Ammonia as NH3	0.05	mg/L
Antimony	0.0002	mg/L
Arsenic	0.0002	mg/L
Barium	0.002	mg/L
Benzene	0.5	µg/L
Beryllium	0.0002	mg/L
Bicarbonate	3	mg CaCO3/L
Boron	0.005	mg/L
Bromate Dissolved	0.005	mg/L
Bromide Dissolved	0.01	mg/L
Bromodichloromethane	0.5	µg/L
Bromoform	0.5	µg/L
Cadmium	0.0002	mg/L
Calcium	0.1	mg/L
Calcium Dissolved	0.1	mg/L
Calcium Hardness	2	mg/L CaCO3
Carbon Tetrachloride	0.5	µg/L
Carbonate	3	mg/L CaCO3
Cellular ATP	0.1	pg/mL
Chlorate Dissolved	0.01	mg/L
Chloride Dissolved	0.1	mg/L
Chlorite Dissolved	0.005	mg/L
Chlorobenzene	0.5	µg/L
Chloroform	0.5	µg/L
Chromium	0.0002	mg/L
Cobalt	0.0002	mg/L
Coliforms, total	1	PA/100mL
Colour	0.5	TCU
Conductivity	1	µS/cm
Copper	0.005	mg/L
Copper Dissolved	0.005	mg/L
Dibromochloromethane	0.5	µg/L
Dichlorobenzene (1,2)	0.5	µg/L
Dichlorobenzene (1,3)	0.5	µg/L
Dichlorobenzene (1,4)	0.5	µg/L
Dichloroethane (1,2)	0.5	µg/L
Dichloroethylene (1,1)	0.5	µg/L
Dichloroethylene, cis (1,2)	0.5	µg/L
Dichloroethylene, trans (1,2)	0.5	µg/L
Dichloropropane (1,2)	0.5	µg/L
Dissolved Organic Carbon	0.6	mg/L
E. coli	1	PA/100mL
Ethylbenzene	0.5	µg/L
Fluoride	0.05	mg/L
Free Chlorine	0.07	mg/L
Iron	0.005	mg/L
Lanthanum	0.001	mg/L
Lead	0.0002	mg/L

2.2.23 REPORTABLE DETECTION LIMITS

Analyte	RDL	Unit
Lithium	0.0002	mg/L
Magnesium	0.1	mg/L
Manganese	0.002	mg/L
Manganese Dissolved	0.002	mg/L
Mercury	0.0002	mg/L
Methyl t-Butyl Ether (MTBE)	0.5	µg/L
Methylene Chloride	0.5	µg/L
MIBK	1.0	µg/L
Molybdenum	0.0002	mg/L
Nickel	0.0005	mg/L
Nitrate (as N) Dissolved	0.01	mg/L
Nitrite (as N) Dissolved	0.01	mg/L
Ortho_P	0.02	mg/L as P
Phosphorus	0.02	mg/L
Potassium	0.1	mg/L
Selenium	0.0002	mg/L
Silicon	0.05	mg/L
Silver	0.0002	mg/L
Sodium	0.1	mg/L
Strontium	0.002	mg/L
Styrene	0.5	µg/L
Sulphate Dissolved	0.2	mg/L
Tetrachloroethane (1,1,2,2)	0.5	µg/L
Tetrachloroethylene	0.5	µg/L
Thallium	0.0005	mg/L
Tin	0.0005	mg/L
Titanium	0.0005	mg/L
Toluene	0.5	µg/L
Total Dissolved Solids	25	mg/L
Total Hardness	2	mg/L CaCO3
Total Kjeldahl Nitrogen	0.1	mg/L N
Total Organic Carbon	0.6	mg/L
Total Suspended Solids	2.5	mg/L
Total Volatile Organics (NonTHM)	1.0	µg/L
Total Volatile Organics (Unknown)	0.5	µg/L
Total Xylenes	1.0	µg/L
Trichlorobenzene (1,2,4)	0.5	µg/L
Trichloroethane (1,1,1)	0.5	µg/L
Trichloroethylene	0.5	µg/L
Trihalomethanes	1.0	µg/L
Turbidity	0.04	NTU
Uranium	0.0005	mg/L
UV 254 % Transmittance	99.8	%T/cm
Vanadium	0.0005	mg/L
Vinyl Chloride	1.0	µg/L
Xylene (1,2)	0.5	µg/L
Xylene (1,4)	0.5	µg/L
Zinc	0.005	mg/L
Zirconium	0.001	mg/L
Zirconium Dissolved	0.001	mg/L

2.2.23 REPORTABLE DETECTION LIMITS

Analyte	RDL	Unit
Contract Lab Analysis		
2,3,4,6-Tetrachlorophenol	0.50	µg/L
2,4,5-T	0.050	µg/L
2,4,6-Trichlorophenol	0.50	µg/L
2,4-D	0.050	µg/L
2,4-Dichlorophenol	0.30	µg/L
6:2 Fluorotelomer sulfonic acid(6:2 FTS)	0.020	µg/L
8:2 Fluorotelomer sulfonic acid(8:2 FTS)	0.020	µg/L
a-chlordane	0.0080	µg/L
Alachlor	0.050	µg/L
Aldicarb	0.100	µg/L
Aldrin	0.0080	µg/L
Ametryn	0.0250	µg/L
Atrazine	0.050	µg/L
Atrazine Desethyl	0.0250	µg/L
Atrazine+N-Dealkylated Metabolites	0.10	µg/L
Azinphos-methyl	0.100	µg/L
Bendiocarb	0.0250	µg/L
Benzo(a)pyrene	0.0050	ug/L
Bromochloroacetic acid	1.00	ug/L
Bromoxynil	0.050	µg/L
Carbaryl	0.050	µg/L
Carbofuran	0.0250	µg/L
Chlorpyrifos	0.10	µg/L
Cyanazine	0.100	µg/L
Diazinon	0.0250	µg/L
Dibromoacetic acid	1.00	ug/L
Dicamba	0.10	µg/L
Dichloroacetic acid	1.00	ug/L
Diclofop-methyl	0.100	µg/L
Dieldrin	0.0080	µg/L
Dimethoate	0.050	µg/L
Dinoseb	0.050	µg/L
Diquat	1.0	µg/L
Diuron	0.050	µg/L
gamma-hexachlorocyclohexane	0.0080	µg/L
g-chlordane	0.0080	µg/L
Glyphosate	0.20	µg/L
Haloacetic Acids, total (HAA5)	5.00	ug/L
Heptachlor	0.0080	µg/L
Heptachlor Epoxide	0.0080	µg/L
Malathion	0.0250	µg/L
MCPA	0.050	µg/L
Mercury	0.0000500	mg/L
Methoxychlor	0.0080	µg/L
Methyl Parathion	0.10	µg/L
Metolachlor	0.0250	µg/L
Metribuzin	0.100	µg/L
Microcystin	0.20	µg/L
Monobromoacetic acid	1.00	ug/L
Monochloroacetic acid	1.00	ug/L
NDMA	0.00144	µg/L
Nitrilotriacetic acid	0.40	mg/L
op-DDT	0.0040	µg/L

2.2.23 REPORTABLE DETECTION LIMITS

Analyte	RDL	Unit
Oxychlordane	0.0080	µg/L
Paraquat	1.0	µg/L
Parathion	0.10	µg/L
Pentachlorophenol	0.50	µg/L
Perfluorobutane sulfonic acid (PFBS)	0.020	µg/L
Perfluorobutanoic acid [PFBA]	0.10	µg/L
Perfluoroheptanoic acid [PFHpA]	0.020	µg/L
Perfluorohexanesulfonic acid [PFHxS]	0.020	µg/L
Perfluorohexanoic acid [PFHxA]	0.020	µg/L
Perfluorononanoic acid [PFNA]	0.020	µg/L
Perfluorooctanesulfonic acid [PFOS]	0.020	µg/L
Perfluorooctanoic acid (PFOA)	0.020	µg/L
Perfluoropentanoic acid (PFPeA)	0.020	µg/L
Phorate	0.250	µg/L
Picloram	0.10	µg/L
pp-DDD	0.0040	µg/L
pp-DDE	0.0040	µg/L
pp-DDT	0.0040	µg/L
Prometon	0.0250	µg/L
Prometryne	0.0250	µg/L
Propazine	0.0250	µg/L
Simazine	0.100	µg/L
Temephos	0.250	µg/L
Terbufos	0.50	µg/L
Terbutryn	0.0250	µg/L
Total Cyanide	0.0020	mg/L
Total Sulphide (as S)	0.0015	mg/L
Triallate	0.100	µg/L
Trichloroacetic acid	1.00	ug/L
Trifluralin	0.10	µg/L

2.2.24 EXPLANATION OF NOTATIONS USED

Concentrations are reported as mg/L unless otherwise indicated.
Alkalinity and Hardness (Ca and Total) are reported as mg $CaCO_3$/L

%T	=	% Transmission
- ve	=	Absent
+ ve	=	Present
µg/L	=	Micrograms per litre (1 µg/L = 0.001 mg/L)
µS/cm	=	Microsiemens per centimeter (unit of conductivity)
2/Y	=	Twice per Year
AO	=	Aesthetic Objective
Bq/L	=	Becquerel(s) per litre (unit of radionuclide concentration)
CCPP	=	Calcium Carbonate Precipitation Potential
CFU	=	Colony Forming Units
Comm	=	Commercial Laboratories
D	=	Daily
EWSI	=	EPCOR Water Services Inc.
FPA	=	Flavour Profile Analysis
GCDWQ	=	Guidelines for Canadian Drinking Water Quality
GM	=	Geometric Mean
HPC	=	Heterotrophic Plate Count
inoff	=	Inoffensive (no objectionable odour)
M	=	Monthly
MAC	=	Maximum Acceptable Concentration
MDL	=	Method Detection Limit
N/A	=	Not Available
ND	=	Not Detected
NTU	=	Nephelometric Turbidity Units
PA	=	Presence/Absence Testing
PBR	=	Performance Based Rates
PHP	=	phenolphthalein
PLPH	=	Provincial Laboratory of Public Health
ppb	=	Parts Per Billion
ppm	=	Parts Per Million
Q	=	Quarterly
QA	=	Quality Assurance
QC	=	Quality Control
RDL	=	Reportable Detection Limit
TCU	=	True Colour Units
TDS	=	Total Dissolved Solids
TOC	=	Total Organic Carbon
WL	=	Water Laboratory
WTP	=	Water Treatment Plant