EDMONTON WATERWORKS
MONTHLY REPORT

October 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 October, Rossdale Plant had 1 planned shutdown and 2 unplanned bypasses.

Date	Type	Bypass Description
Oct 8	Unplanned	2.8 hour bypass due to power outage
Oct 23/24	Planned	37.75 hour shutdown for capital and maintenance work
Oct 24	Unplanned	2.5 hour bypass to investigate sampling issues

In October, E.L. Smith Plant had 1 planned shutdown and 2 planned bypasses.

Date	Type	Bypass Description
Oct 9	Planned	15 hour shutdown for capital and maintenance work
Oct 21	Planned	0.6 hour bypass for maintenance work
Oct 30	Planned	0.9 hour bypass for maintenance work

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

Chemical Dosing Highlights

In October, 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 – October 2024

EPCOR Incident Number	Description	Date of Incident	AEPA Reference Number
ENV-20241001-454534-v1	About 47 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 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.	October 1, 2024	433671
ENV-20241008-056285-v1	About 83 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 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.	October 8, 2024	434010
ENV-20241016-003596-v1	About 63 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 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.	October 16, 2024	434270
ENV-20241017-520170-v1	About 40 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 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.	October 17, 2024	434275
ENV-20241022-930218-v1	About 42 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 catch basin. Dechlorination pucks were placed in the path of water and the water entry point	October 22, 2024	434431

	into the drainage infrastructure to dechlorinate the water. The leak was isolated until the repair was completed.		
ENV-20241031-776201-v1	On October 29, 2024 at 14:08 hrs, EPCOR's Analytical Operations Water Quality Sampler collected a random distribution sample from Gold Bar Park, located at 10955 - 50 Street NW. On October 31, 2024 at 12:40 hrs, the laboratory confirmed a test result, indicating the sample tested positive for total coliforms. An EPCOR field crew was dispatched to flush the localized distribution area and collect re-samples. Re-sample results confirmed all samples passed for all parameters tested.	October 29, 2024	434786

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
Operator I (temp)	WT II, WD II, WWT I, WWC II

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 II, WD I, WWT II, WWC I
Operator I	WT II, WD 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)

October 2024

Day	Rossdale			E.L. Smith	Plants Combined Total
	Plant 1	Plant 2	Plant Total	Plant Total	
1	57	98	155	261	415
2	55	95	150	261	410
3	53	93	145	261	406
4	52	92	143	272	415
5	56	113	169	300	469
6	50	113	163	286	449
7	51	117	168	291	459
8	42	113	155	300	455
9	51	120	171	126	297
10	51	118	169	300	470
11	59	110	169	300	470
12	51	104	155	291	447
13	50	91	141	267	407
14	50	91	141	261	401
15	55	95	149	286	435
16	58	104	162	300	462
17	56	109	165	301	465
18	50	101	151	301	451
19	50	105	154	287	441
20	51	103	153	281	434
21	21	128	149	288	437
22	--	134	134	308	442
23	--	--	--	321	321
24	--	121	121	320	441
25	--	162	162	320	482
26	--	170	170	321	491
27	--	170	170	321	491
28	--	169	169	301	469
29	--	162	162	291	453
30	--	158	158	274	431
31	--	169	169	281	449
Monthly Total	1,067	3,624	4,691	8,877	13,568
Monthly Min	0.0	0.0	0.0	126	
Monthly Max	59	170	171	321	
Monthly Avg	38	117	151	286	438

NOTES: ' -- ' indicates plant offline

1.2.2 Treated Water Production (ML)

October 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	76	185	142	204	282	230	372	74.8
2	4.9	206	137	198	287	230	367	72.5
3	5.8	205	133	200	297	227	360	69.7
4	27	187	129	233	281	237	367	65.9
5	96	208	156	204	294	262	418	68.9
6	89	207	149	206	292	243	392	76.6
7	84	206	155	205	301	255	410	75.2
8	49	209	133	251	299	259	393	81.8
9	55	209	153	0.0	295	85	238	75.8
10	60	207	158	205	299	266	424	60.5
11	69	205	152	204	299	260	412	68.1
12	69	202	145	248	300	254	399	74.2
13	32	185	124	196	287	230	354	78.5
14	72	204	127	199	300	225	352	78.3
15	81	205	137	199	296	242	378	74.6
16	79	194	143	205	292	243	386	74.3
17	27	203	153	199	296	242	395	77.6
18	78	203	136	206	300	241	377	79.6
19	61	204	135	199	300	235	370	79.9
20	52	203	135	199	300	228	362	79.8
21	55	202	132	0.0	291	233	365	77.9
22	22	186	113	242	293	257	370	75.5
23	--	--	--	242	286	264	262	70.3
24	0.0	106	50	236	291	260	310	51.0
25	27	205	142	234	295	264	406	45.2
26	92	210	156	201	286	264	420	53.7
27	75	206	151	206	293	266	417	63.5
28	69	204	150	235	296	250	400	70.5
29	58	204	145	200	276	242	387	73.7
30	49	204	139	0.0	296	215	353	75.8
31	75	207	149	201	281	227	376	73.0
Monthly Tota			4,155			7,437	11,592	
Monthly Min	0.0			0.0				
Monthly Max		210			301			
Monthly Avg			134			240	374	

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

October 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	1.8	1.9	1.8	8.3	8.4	8.4	3.3	4.1	3.6	1.8	2.2	2.1	8.4	8.4	8.4	3.5	4.4	3.8
2	1.6	1.8	1.7	8.4	8.4	8.4	3.5	4.3	3.8	1.8	2.1	1.9	8.3	8.4	8.3	3.3	4.8	4.2
3	1.5	1.7	1.6	8.4	8.4	8.4	3.4	4.3	3.7	1.7	2.0	1.9	8.4	8.4	8.4	3.3	4.1	3.7
4	1.5	2.5	2.1	8.3	8.4	8.4	3.3	3.9	3.6	1.7	3.4	2.9	8.3	8.4	8.3	3.2	4.2	3.7
5	1.7	2.1	1.9	8.4	8.4	8.4	3.9	4.3	3.9	2.0	2.9	2.5	8.3	8.4	8.3	3.6	5.5	4.4
6	1.7	1.8	1.7	8.3	8.4	8.4	3.3	4.3	3.7	1.9	5.5	2.2	8.3	8.4	8.3	3.0	5.5	3.7
7	1.6	1.8	1.8	8.2	8.4	8.3	3.3	3.7	3.3	2.0	2.3	2.1	8.4	8.5	8.4	3.5	4.1	3.8
8	1.6	1.9	1.6	8.3	8.4	8.3	2.5	3.7	3.0	1.9	6.1	2.8	8.3	8.5	8.4	3.4	3.9	3.6
9	1.8	1.9	1.9	8.3	8.3	8.3	3.2	4.6	3.4	2.2	6.1	2.5	8.3	8.4	8.4	3.4	4.4	3.6
10	1.7	1.8	1.8	8.3	8.4	8.4	3.9	4.6	4.2	2.0	2.5	2.3	8.3	8.3	8.3	3.3	4.4	3.7
11	1.6	1.8	1.7	8.3	8.4	8.4	3.2	3.9	3.5	2.0	2.6	2.3	8.3	8.4	8.3	3.5	4.2	3.8
12	1.6	1.7	1.6	8.3	8.4	8.4	3.3	3.8	3.6	2.0	3.7	2.9	8.4	8.4	8.4	3.4	4.6	4.2
13	1.7	1.9	1.8	8.3	8.4	8.4	3.3	4.1	3.3	2.3	2.6	2.5	8.3	8.4	8.4	3.0	3.9	3.6
14	1.6	1.9	1.8	8.3	8.4	8.3	3.3	4.1	3.8	2.1	2.5	2.3	8.4	8.4	8.4	3.0	4.3	3.7
15	1.5	2.2	1.7	8.3	8.4	8.3	3.2	3.5	3.4	1.9	2.4	2.1	8.3	8.4	8.3	3.7	4.3	3.9
16	2.1	2.2	2.2	8.2	8.3	8.2	3.2	3.2	3.2	2.2	2.6	2.4	8.3	8.4	8.4	3.0	3.9	3.3
17	2.1	3.7	3.1	8.2	8.4	8.2	3.2	3.4	3.3	2.6	6.4	4.9	8.3	8.4	8.3	2.7	3.9	3.2
18	2.2	3.6	3.0	8.3	8.4	8.3	3.2	4.8	3.7	2.6	3.8	3.2	8.3	8.4	8.3	2.7	5.0	4.3
19	2.0	2.3	2.2	8.4	8.4	8.4	3.3	4.8	4.1	2.3	2.7	2.6	8.3	8.4	8.3	3.2	4.1	3.5
20	1.9	2.1	2.0	8.3	8.4	8.3	3.1	3.7	3.2	2.1	2.4	2.3	8.3	8.3	8.3	3.0	3.5	3.2
21	1.7	1.9	1.8	8.0	8.4	8.2	3.1	3.7	3.4	2.0	2.4	2.2	8.3	8.3	8.3	3.1	3.6	3.3
22	1.7	2.1	1.9	8.3	8.3	8.3	2.8	3.1	2.9	2.0	2.6	2.4	8.3	8.3	8.3	2.7	3.6	3.1
23	--	--	--	--	--	--	--	--	--	2.1	3.4	2.7	8.3	8.3	8.3	3.0	3.7	3.3
24	2.1	2.8	2.3	8.3	8.3	8.3	2.8	3.9	3.1	2.8	4.3	3.4	8.3	8.4	8.3	3.0	4.2	3.8
25	1.7	2.3	2.0	8.3	8.3	8.3	3.4	4.1	4.0	2.6	3.0	2.9	8.3	8.4	8.4	3.6	4.6	4.2
26	1.7	2.0	1.8	8.3	8.3	8.3	2.7	3.4	3.2	2.5	3.0	2.8	8.3	8.4	8.3	2.5	4.3	3.2
27	1.9	2.0	2.0	8.3	8.3	8.3	2.7	3.6	3.0	2.3	2.8	2.6	8.3	8.4	8.3	2.5	3.9	3.1
28	1.8	2.0	1.9	8.3	8.3	8.3	2.8	3.6	3.3	1.9	2.3	2.2	8.3	8.3	8.3	2.8	3.7	3.6
29	1.6	1.8	1.7	8.3	8.3	8.3	3.0	3.6	3.3	1.8	1.9	1.9	8.2	8.3	8.2	2.8	3.6	3.2
30	1.7	2.4	1.9	8.3	8.3	8.3	2.4	3.0	2.8	1.9	3.5	2.7	8.2	8.3	8.2	2.7	3.2	3.1
31	2.4	4.0	3.3	8.2	8.3	8.3	2.4	3.2	2.6	3.0	5.3	4.3	8.2	8.3	8.2	3.1	4.1	3.5
Monthly Min/Max/Avg	1.5	4.0	2.0	8.0	8.4	8.3	2.4	4.8	3.4	1.7	6.4	2.6	8.2	8.5	8.3	2.5	5.5	3.6

NOTES: ' -- ' indicates plant offline

1.2.4 Treated Water Quality Entering the Distribution System

October 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	0.04	0.04	2.16	2.26	2.23	7.9	8.0	7.9	0.64	0.66	0.65	171	0.3	0.06	0.06	0.06	2.18	2.27	2.21	7.5	7.6	7.6	0.75	0.75	0.75	169	0.7
2	0.04	0.04	0.04	2.11	2.21	2.18	7.9	7.9	7.9	0.64	0.67	0.65	174	0.4	0.06	0.06	0.06	2.13	2.28	2.24	7.5	7.6	7.6	0.75	0.75	0.75	173	0.7
3	0.04	0.04	0.04	2.06	2.21	2.13	7.9	7.9	7.9	0.67	0.68	0.67	174	0.5	0.06	0.06	0.06	2.03	2.13	2.09	7.5	7.6	7.5	0.74	0.75	0.75	177	0.6
4	0.04	0.04	0.04	2.06	2.21	2.15	7.9	7.9	7.9	0.67	0.68	0.68	177	0.3	0.06	0.06	0.06	1.96	2.08	2.01	7.5	7.6	7.5	0.75	0.75	0.75	178	0.5
5	0.04	0.04	0.04	2.06	2.21	2.12	7.8	7.9	7.9	0.67	0.68	0.68	174	0.3	0.06	0.06	0.06	1.98	2.03	2.00	7.5	7.6	7.5	0.75	0.75	0.75	176	0.6
6	0.04	0.04	0.04	2.06	2.16	2.11	7.8	7.9	7.9	0.68	0.70	0.69	178	0.3	0.06	0.06	0.06	1.99	2.07	2.03	7.5	7.5	7.5	0.75	0.75	0.75	174	0.7
7	0.04	0.04	0.04	2.01	2.16	2.10	7.9	7.9	7.9	0.69	0.71	0.70	174	0.2	0.06	0.06	0.06	2.01	2.07	2.03	7.5	7.5	7.5	0.75	0.76	0.75	174	0.6
8	0.04	0.04	0.04	2.01	2.21	2.14	7.9	7.9	7.9	0.71	0.73	0.72	178	0.2	0.06	0.06	0.06	2.00	2.05	2.03	7.5	7.6	7.5	0.75	0.75	0.75	176	0.6
9	0.04	0.04	0.04	2.06	2.21	2.16	7.9	7.9	7.9	0.72	0.73	0.73	178	0.4	0.06	0.07	0.07	1.98	2.02	1.99	7.5	7.6	7.6	0.75	0.80	0.76	177	0.5
10	0.04	0.04	0.04	2.06	2.21	2.11	7.8	7.9	7.9	0.71	0.72	0.71	178	0.4	0.06	0.06	0.06	1.98	2.07	2.02	7.6	7.6	7.6	0.75	0.77	0.76	177	0.7
11	0.04	0.04	0.04	2.06	2.16	2.08	7.8	7.9	7.8	0.71	0.74	0.73	171	0.5	0.06	0.06	0.06	2.03	2.12	2.07	7.6	7.6	7.6	0.75	0.77	0.76	174	0.8
12	0.03	0.04	0.04	2.11	2.21	2.19	7.8	7.9	7.9	0.73	0.75	0.73	181	0.3	0.06	0.06	0.06	1.98	2.04	2.02	7.6	7.6	7.6	0.75	0.76	0.75	179	0.6
13	0.03	0.04	0.04	2.11	2.26	2.17	7.9	7.9	7.9	0.73	0.75	0.73	182	0.3	0.06	0.06	0.06	1.98	2.12	2.02	7.5	7.6	7.6	0.75	0.77	0.76	177	0.5
14	0.04	0.05	0.04	2.21	2.32	2.26	7.9	7.9	7.9	0.74	0.75	0.74	177	0.3	0.06	0.06	0.06	1.98	2.06	2.01	7.5	7.6	7.5	0.76	0.77	0.76	174	0.5
15	0.03	0.05	0.04	2.21	2.26	2.25	7.9	7.9	7.9	0.74	0.74	0.74	178	0.4	0.06	0.08	0.06	2.03	2.13	2.07	7.5	7.7	7.6	0.76	0.80	0.78	178	0.7
16	0.03	0.04	0.04	2.06	2.26	2.18	7.9	7.9	7.9	0.73	0.75	0.74	176	0.3	0.06	0.08	0.07	2.08	2.18	2.11	7.7	7.8	7.8	0.60	0.65	0.63	174	0.7
17	0.03	0.04	0.04	2.01	2.26	2.18	7.9	8.0	7.9	0.71	0.74	0.73	177	0.2	0.08	0.08	0.08	2.08	2.12	2.09	7.8	7.9	7.8	0.72	0.73	0.73	178	0.5
18	0.04	0.05	0.04	2.06	2.16	2.12	8.0	8.3	8.2	0.72	0.75	0.73	174	0.4	0.08	0.09	0.09	2.03	2.11	2.07	7.9	7.9	7.9	0.73	0.73	0.73	175	0.7
19	0.05	0.06	0.06	2.06	2.21	2.13	8.3	8.3	8.3	0.71	0.72	0.72	180	0.8	0.09	0.09	0.09	1.98	2.05	2.00	7.9	7.9	7.9	0.73	0.75	0.75	178	0.6
20	0.04	0.05	0.05	2.11	2.21	2.15	8.3	8.3	8.3	0.69	0.71	0.70	177	0.6	0.08	0.09	0.08	1.93	2.02	1.97	7.9	7.9	7.9	0.74	0.75	0.75	172	0.7
21	0.04	0.05	0.05	2.11	2.16	2.14	8.3	8.3	8.3	0.69	0.70	0.70	173	0.5	0.08	0.08	0.08	1.99	2.04	2.01	7.9	7.9	7.9	0.75	0.75	0.75	168	0.7
22	0.05	0.06	0.05	1.81	2.21	2.21	8.2	8.3	8.3	0.69	0.71	0.70	169	0.5	0.07	0.08	0.07	1.87	2.05	2.01	7.9	7.9	7.9	0.74	0.75	0.75	170	0.6
23	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.07	0.08	0.08	1.90	2.02	1.96	7.9	7.9	7.9	0.75	0.75	0.75	173	0.7
24	0.05	0.09	0.06	2.01	2.16	2.05	8.2	8.3	8.3	0.70	0.80	0.73	174	0.4	0.08	0.08	0.08	1.89	2.24	1.99	7.9	7.9	7.9	0.75	0.75	0.75	174	0.9
25	0.04	0.06	0.05	2.06	2.21	2.11	8.3	8.3	8.3	0.72	0.74	0.73	181	0.6	0.08	0.09	0.08	1.85	2.28	2.08	7.9	7.9	7.9	0.75	0.75	0.75	178	0.8
26	0.05	0.07	0.05	1.96	2.11	2.04	8.3	8.3	8.3	0.71	0.72	0.72	173	0.6	0.07	0.09	0.07	1.84	2.17	2.09	7.8	7.9	7.9	0.75	0.76	0.75	173	0.8
27	0.05	0.06	0.05	2.01	2.21	2.09	8.3	8.3	8.3	0.72	0.73	0.72	171	0.5	0.07	0.08	0.07	1.86	2.22	2.04	7.8	7.9	7.8	0.75	0.76	0.76	174	0.6
28	0.05	0.06	0.05	1.96	2.11	2.08	8.1	8.3	8.2	0.72	0.72	0.72	178	0.4	0.08	0.09	0.08	1.89	2.21	2.08	7.8	7.9	7.8	0.75	0.77	0.76	174	0.7
29	0.05	0.06	0.05	2.01	2.11	2.06	8.1	8.1	8.1	0.72	0.73	0.73	179	0.6	0.07	0.08	0.07	1.90	2.18	2.09	7.8	7.9	7.8	0.75	0.77	0.76	177	0.4
30	0.04	0.05	0.05	2.01	2.11	2.05	8.1	8.1	8.1	0.72	0.73	0.72	176	0.6	0.07	0.08	0.07	2.03	2.16	2.06	7.8	7.9	7.9	0.76	0.77	0.77	173	0.6
31	0.05	0.06	0.05	2.01	2.16	2.08	8.1	8.1	8.1	0.72	0.73	0.73	174	0.3	0.07	0.08	0.08	2.02	2.09	2.04	7.9	7.9	7.9	0.76	0.77	0.77	178	0.7
Monthly Min/Max/ Avg	0.03	0.09	0.04	1.81	2.32	2.13	7.8	8.3	8.0	0.64	0.80	0.71	176	0.4	0.06	0.09	0.07	1.84	2.28	2.05	7.5	7.9	7.7	0.60	0.80	0.75	175	0.6

NOTES: ' -- ' indicates plant offline

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

October 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	8	3	1	2	1	1	7	2	1	23	4	2	12	4	1	3	2	1	6	2	1	5	2	1	5	2
2	1	3	1	--	--	--	1	3	1	1	32	2	1	5	3	--	--	--	1	2	1	--	--	--	1	19	1
3	1	3	1	--	--	--	1	3	1	1	18	3	1	4	2	1	22	2	1	2	1	--	--	--	1	4	2
4	1	9	3	1	11	3	1	2	1	1	11	3	1	3	1	1	3	2	--	--	--	5	17	8	1	28	5
5	1	12	4	1	5	2	--	--	--	1	20	4	--	--	--	1	3	1	--	--	--	1	8	3	1	18	2
6	1	17	2	1	2	1	1	6	1	1	17	2	--	--	--	1	1	1	1	16	2	1	3	1	1	3	1
7	1	19	5	1	12	2	1	4	1	1	17	3	2	17	5	--	--	--	1	2	1	1	1	1	1	1	1
8	--	--	--	1	4	2	1	3	2	1	34	4	2	15	6	2	9	4	1	8	1	3	15	6	1	7	1
9	2	38	7	--	--	--	2	45	5	2	12	5	1	5	3	1	6	3	1	7	1	2	6	3	2	7	4
10	1	16	2	--	--	--	1	5	2	1	6	2	1	4	1	1	6	1	1	8	2	1	4	1	1	4	1
11	1	25	5	1	13	3	1	3	1	1	32	3	2	14	4	1	1	1	1	4	2	1	2	1	1	18	1
12	--	--	--	1	4	2	1	1	1	1	44	4	1	16	3	--	--	--	1	3	1	--	--	--	1	8	3
13	--	--	--	1	2	1	--	--	--	1	12	2	1	3	1	1	5	2	1	13	1	1	11	2	1	6	1
14	1	4	2	--	--	--	--	--	--	1	21	2	--	--	--	1	4	1	1	16	3	1	3	1	1	15	2
15	1	9	1	--	--	--	--	--	--	1	15	2	3	15	6	1	8	1	1	10	1	1	3	1	1	22	3
16	1	4	18	1	9	2	1	12	2	1	4	2	1	3	2	1	12	2	1	5	1	1	12	1	1	9	1
17	--	--	--	1	7	2	1	6	2	1	10	3	1	11	2	1	16	3	5	14	7	1	19	2	1	8	2
18	8	18	14	4	10	6	3	16	6	5	45	11	8	22	13	6	35	28	6	18	9	3	25	7	3	9	6
19	5	18	11	--	--	--	6	18	11	5	25	9	1	20	13	1	43	5	1	15	7	5	18	9	5	43	9
20	5	28	7	4	10	7	4	9	6	4	17	8	8	19	12	3	8	5	4	17	9	4	34	8	4	11	6
21	4	16	8	3	10	5	--	--	--	4	35	8	7	28	10	6	16	8	6	17	9	3	9	6	4	20	8
22	5	11	7	3	19	5	3	21	6	4	9	7	6	14	10	4	10	7	4	29	9	5	22	9	3	19	6
23	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
24	4	22	8	--	--	--	11	23	15	4	36	7	--	--	--	5	19	8	--	--	--	6	20	10	5	23	7
25	5	12	7	4	12	7	3	22	7	4	22	7	9	22	13	3	24	6	5	22	10	3	10	7	3	10	5
26	5	13	8	1	7	3	2	7	5	2	8	5	3	14	7	2	10	5	3	26	7	4	23	8	3	10	6
27	3	15	5	2	15	4	2	6	4	3	19	6	3	22	12	2	14	6	4	26	6	2	7	4	2	18	5
28	3	12	6	1	5	3	3	11	5	2	19	6	4	15	8	1	7	4	2	26	6	5	18	8	3	8	5
29	3	10	4	3	12	5	2	8	5	1	40	6	4	26	10	3	16	6	3	11	7	2	9	5	2	19	6
30	4	15	6	2	6	4	1	43	6	1	24	4	5	18	8	2	21	4	2	6	4	1	14	5	2	7	4
31	3	25	5	1	10	7	3	7	5	5	29	9	3	10	6	4	9	6	7	21	10	4	10	7	1	24	7
Monthly Min/Max/Avg	1	38	6	1	19	4	1	45	4	1	45	5	1	28	6	1	43	5	1	29	5	1	34	5	1	43	4

NOTE: ' -- ' indicates filter offline

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

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

NOTES: ' -- ' indicates filter offline

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

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

NOTES: ' -- ' indicates filter offline

1.2.8 Rossdale Filters 1 - 9 Turbidity (NTU)

October 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	0.04	0.02	0.01	0.03	0.02	0.01	0.03	0.01	0.03	0.05	0.04	0.01	0.04	0.01	0.02	0.03	0.02	0.01	0.02	0.01	0.01	0.02	0.02
2	0.02	0.03	0.02	--	--	--	0.01	0.01	0.01	0.01	0.03	0.01	0.02	0.04	0.03	--	--	--	0.02	0.02	0.02	--	--	--	0.01	0.05	0.02
3	0.02	0.05	0.02	--	--	--	0.01	0.01	0.01	0.01	0.04	0.01	0.02	0.07	0.02	0.01	0.04	0.01	0.02	0.04	0.02	--	--	--	0.02	0.02	0.02
4	0.02	0.06	0.02	0.02	0.04	0.03	0.01	0.02	0.01	0.01	0.03	0.01	0.02	0.04	0.02	0.01	0.02	0.01	--	--	--	0.02	0.06	0.03	0.01	0.02	0.01
5	0.02	0.04	0.02	0.02	0.03	0.02	--	--	--	0.01	0.03	0.01	--	--	--	0.01	0.01	0.01	--	--	--	0.02	0.02	0.02	0.01	0.05	0.02
6	0.01	0.04	0.02	0.02	0.04	0.02	0.01	0.03	0.02	0.01	0.04	0.01	--	--	--	0.01	0.04	0.01	0.02	0.05	0.03	0.01	0.02	0.01	0.02	0.02	0.02
7	0.02	0.02	0.02	0.02	0.05	0.03	0.01	0.01	0.01	0.01	0.03	0.01	0.03	0.05	0.04	--	--	--	0.02	0.02	0.02	0.01	0.02	0.01	0.01	0.02	0.02
8	--	--	--	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.02	0.01	0.02	0.03	0.02	0.01	0.03	0.01	0.02	0.03	0.02	0.02	0.04	0.02	0.01	0.03	0.02
9	0.02	0.04	0.02	--	--	--	0.01	0.03	0.02	0.01	0.05	0.01	0.02	0.04	0.02	0.01	0.01	0.01	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.06	0.02
10	0.01	0.03	0.02	--	--	--	0.01	0.01	0.01	0.01	0.03	0.01	0.02	0.03	0.02	0.01	0.01	0.01	0.03	0.04	0.03	0.01	0.02	0.02	0.02	0.02	0.02
11	0.01	0.04	0.01	0.03	0.04	0.03	0.01	0.01	0.01	0.01	0.03	0.01	0.02	0.05	0.03	0.01	0.03	0.01	0.02	0.03	0.02	0.01	0.01	0.01	0.01	0.05	0.02
12	--	--	--	0.02	0.03	0.03	0.01	0.02	0.01	0.01	0.05	0.01	0.02	0.05	0.02	--	--	--	0.02	0.02	0.02	--	--	--	0.01	0.02	0.02
13	--	--	--	0.02	0.03	0.02	--	--	--	0.01	0.04	0.01	0.02	0.02	0.02	0.01	0.03	0.01	0.02	0.05	0.02	0.02	0.03	0.02	0.01	0.02	0.02
14	0.02	0.02	0.02	--	--	--	--	--	--	0.01	0.04	0.01	--	--	--	0.01	0.01	0.01	0.02	0.03	0.03	0.01	0.02	0.02	0.01	0.05	0.02
15	0.02	0.03	0.02	--	--	--	--	--	--	0.01	0.05	0.01	0.04	0.05	0.05	0.00	0.01	0.01	0.02	0.02	0.02	0.01	0.02	0.01	0.01	0.02	0.02
16	0.02	0.03	0.02	0.03	0.05	0.03	0.01	0.04	0.02	0.01	0.04	0.01	0.02	0.04	0.03	0.01	0.03	0.01	0.02	0.02	0.02	0.01	0.03	0.02	0.02	0.04	0.02
17	--	--	--	0.02	0.03	0.03	0.01	0.01	0.01	0.01	0.03	0.02	0.02	0.04	0.02	0.01	0.02	0.01	0.04	0.04	0.04	0.02	0.02	0.02	0.01	0.04	0.02
18	0.05	0.08	0.06	0.03	0.05	0.03	0.01	0.08	0.02	0.02	0.06	0.03	0.04	0.06	0.05	0.02	0.03	0.02	0.04	0.05	0.04	0.02	0.03	0.02	0.02	0.03	0.03
19	0.03	0.07	0.04	--	--	--	0.02	0.06	0.04	0.02	0.08	0.04	0.03	0.06	0.04	0.03	0.06	0.04	0.03	0.05	0.04	0.03	0.09	0.04	0.03	0.08	0.04
20	0.03	0.08	0.04	0.03	0.08	0.04	0.02	0.02	0.02	0.02	0.08	0.03	0.03	0.09	0.05	0.02	0.05	0.02	0.03	0.08	0.05	0.03	0.05	0.04	0.02	0.04	0.03
21	0.03	0.05	0.03	0.03	0.04	0.03	--	--	--	0.02	0.08	0.03	0.03	0.08	0.04	0.02	0.06	0.04	0.03	0.09	0.04	0.02	0.03	0.03	0.02	0.09	0.04
22	0.02	0.03	0.02	0.03	0.08	0.04	0.02	0.07	0.03	0.02	0.05	0.03	0.03	0.05	0.04	0.02	0.07	0.02	0.03	0.08	0.04	0.03	0.08	0.04	0.02	0.08	0.03
23	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
24	0.03	0.04	0.03	--	--	--	0.05	0.07	0.06	0.02	0.04	0.02	--	--	--	0.02	0.03	0.03	--	--	--	0.04	0.06	0.04	0.04	0.05	0.04
25	0.03	0.03	0.03	0.04	0.08	0.05	0.02	0.05	0.04	0.02	0.08	0.03	0.05	0.09	0.06	0.02	0.09	0.03	0.03	0.08	0.05	0.03	0.06	0.03	0.02	0.09	0.03
26	0.03	0.08	0.04	0.02	0.05	0.03	0.02	0.07	0.03	0.01	0.05	0.02	0.03	0.06	0.04	0.01	0.05	0.02	0.03	0.07	0.03	0.03	0.09	0.04	0.02	0.05	0.03
27	0.02	0.04	0.03	0.03	0.07	0.04	0.02	0.03	0.02	0.02	0.07	0.03	0.03	0.08	0.06	0.01	0.06	0.03	0.03	0.06	0.04	0.02	0.03	0.02	0.02	0.07	0.03
28	0.03	0.08	0.04	0.03	0.05	0.03	0.01	0.06	0.03	0.01	0.07	0.03	0.03	0.05	0.04	0.01	0.04	0.02	0.03	0.07	0.04	0.03	0.07	0.04	0.02	0.04	0.03
29	0.02	0.04	0.03	0.03	0.07	0.04	0.02	0.05	0.03	0.02	0.08	0.03	0.03	0.08	0.05	0.02	0.07	0.03	0.03	0.05	0.04	0.02	0.03	0.03	0.02	0.08	0.04
30	0.03	0.08	0.04	0.03	0.03	0.03	0.01	0.06	0.03	0.01	0.06	0.02	0.03	0.05	0.04	0.01	0.06	0.02	0.03	0.05	0.03	0.02	0.06	0.03	0.02	0.03	0.02
31	0.02	0.08	0.03	0.03	0.07	0.05	0.02	0.03	0.02	0.02	0.06	0.03	0.03	0.05	0.03	0.02	0.03	0.02	0.04	0.07	0.04	0.03	0.04	0.03	0.02	0.08	0.03
Monthly Min/Max/Avg	0.01	0.08	0.03	0.02	0.08	0.03	0.01	0.08	0.02	0.01	0.08	0.02	0.02	0.09	0.03	0.00	0.09	0.02	0.02	0.09	0.03	0.01	0.09	0.03	0.01	0.09	0.02

NOTES: ' -- ' indicates filter offline

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

October 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	0.02	0.02	0.02	0.01	0.01	0.01	0.03	0.05	0.03	0.00	0.01	0.00	0.03	0.07	0.03	0.00	0.01	0.00	0.02	0.05	0.03	0.00	0.04	0.01
2	0.01	0.05	0.02	0.02	0.07	0.03	0.00	0.01	0.00	0.02	0.03	0.03	0.00	0.01	0.00	0.03	0.04	0.03	0.00	0.04	0.01	0.02	0.02	0.02	0.01	0.00	0.01
3	0.01	0.01	0.01	0.02	0.03	0.02	0.00	0.03	0.01	0.02	0.05	0.03	0.00	0.03	0.01	0.02	0.03	0.03	0.01	0.00	0.00	0.02	0.06	0.03	0.01	0.04	0.01
4	0.01	0.01	0.01	0.02	0.06	0.03	0.00	0.01	0.01	0.03	0.04	0.03	0.00	0.00	0.00	0.03	0.07	0.04	0.00	0.04	0.01	0.02	0.02	0.02	0.01	0.04	0.01
5	--	--	--	0.02	0.03	0.03	0.01	0.04	0.01	0.03	0.03	0.03	0.00	0.04	0.01	0.03	0.03	0.03	0.00	0.04	0.01	0.02	0.06	0.03	0.00	0.03	0.01
6	--	--	--	0.02	0.06	0.03	0.00	0.01	0.01	0.03	0.06	0.03	0.00	0.01	0.00	0.03	0.07	0.03	0.01	0.04	0.01	0.02	0.06	0.02	0.01	0.04	0.01
7	--	--	--	0.02	0.03	0.02	0.01	0.04	0.01	0.03	0.05	0.03	0.00	0.04	0.01	0.03	0.07	0.03	0.01	0.01	0.00	0.02	0.03	0.02	0.01	0.02	0.01
8	--	--	--	0.02	0.06	0.02	0.00	0.01	0.00	0.03	0.05	0.03	0.00	0.00	0.00	0.03	0.04	0.03	0.01	0.03	0.01	0.02	0.05	0.03	0.01	0.04	0.01
9	--	--	--	0.03	0.04	0.03	0.01	0.04	0.01	0.02	0.03	0.02	0.01	0.04	0.01	0.03	0.03	0.03	0.00	0.05	0.01	0.02	0.05	0.03	0.01	0.01	0.01
10	--	--	--	0.02	0.03	0.02	0.01	0.01	0.01	0.03	0.06	0.03	0.00	0.01	0.00	0.03	0.07	0.03	0.00	0.01	0.00	0.02	0.06	0.02	0.00	0.04	0.01
11	--	--	--	0.02	0.07	0.03	0.00	0.04	0.01	0.03	0.03	0.03	0.00	0.04	0.01	0.02	0.07	0.03	0.00	0.04	0.01	0.02	0.04	0.02	0.01	0.04	0.01
12	--	--	--	0.02	0.02	0.02	0.01	0.01	0.01	0.03	0.03	0.03	0.00	0.01	0.00	0.03	0.04	0.03	0.00	0.05	0.01	0.02	0.06	0.03	0.01	0.01	0.00
13	--	--	--	0.02	0.07	0.03	0.00	0.04	0.01	0.03	0.06	0.03	0.00	0.04	0.01	0.03	0.07	0.03	0.00	0.01	0.00	0.02	0.02	0.02	0.01	0.04	0.01
14	--	--	--	0.02	0.03	0.02	0.00	0.01	0.01	0.03	0.03	0.03	0.00	0.00	0.00	0.03	0.04	0.03	0.00	0.04	0.01	0.02	0.06	0.03	0.01	0.04	0.01
15	--	--	--	0.02	0.07	0.03	0.01	0.05	0.03	0.02	0.06	0.03	0.00	0.04	0.01	0.03	0.07	0.04	0.00	0.06	0.02	0.02	0.07	0.03	0.01	0.05	0.01
16	--	--	--	0.02	0.07	0.03	0.01	0.06	0.02	0.03	0.07	0.04	0.00	0.05	0.01	0.03	0.07	0.04	0.00	0.06	0.02	0.02	0.08	0.03	0.00	0.07	0.02
17	--	--	--	0.02	0.07	0.03	0.00	0.06	0.01	0.03	0.07	0.03	0.00	0.06	0.01	0.03	0.07	0.04	0.01	0.07	0.02	0.02	0.08	0.03	0.00	0.07	0.01
18	--	--	--	0.03	0.08	0.04	0.01	0.02	0.02	0.03	0.08	0.04	0.00	0.07	0.02	0.03	0.09	0.05	0.01	0.09	0.03	0.02	0.08	0.04	0.00	0.09	0.03
19	--	--	--	0.02	0.09	0.03	0.01	0.07	0.02	0.03	0.08	0.03	0.00	0.07	0.01	0.03	0.08	0.04	0.00	0.09	0.02	0.02	0.09	0.03	0.00	0.08	0.02
20	--	--	--	0.02	0.08	0.03	0.01	0.06	0.01	0.03	0.07	0.03	0.00	0.05	0.01	0.03	0.08	0.04	0.00	0.07	0.02	0.02	0.09	0.03	0.00	0.07	0.02
21	0.02	0.06	0.03	0.02	0.08	0.03	0.01	0.06	0.01	0.02	0.07	0.03	0.00	0.07	0.01	0.03	0.08	0.04	0.00	0.07	0.02	0.02	0.08	0.04	0.00	0.07	0.01
22	0.01	0.02	0.02	0.03	0.08	0.03	0.01	0.06	0.01	0.03	0.07	0.03	0.00	0.06	0.01	0.03	0.08	0.04	0.00	0.07	0.01	0.02	0.08	0.03	0.00	0.07	0.02
23	0.01	0.06	0.02	0.02	0.08	0.03	0.01	0.06	0.02	0.03	0.08	0.03	0.00	0.07	0.01	0.03	0.09	0.04	0.00	0.08	0.02	0.02	0.09	0.03	0.00	0.08	0.02
24	0.01	0.07	0.03	0.03	0.09	0.04	0.01	0.08	0.02	0.03	0.09	0.04	0.01	0.07	0.02	0.03	0.09	0.04	0.01	0.09	0.02	0.02	0.09	0.03	0.00	0.08	0.02
25	0.01	0.08	0.03	0.03	0.09	0.04	0.01	0.06	0.02	0.03	0.08	0.04	0.01	0.08	0.02	0.03	0.09	0.04	0.00	0.09	0.02	0.02	0.09	0.04	0.01	0.09	0.03
26	0.01	0.06	0.02	0.02	0.08	0.03	0.01	0.06	0.01	0.03	0.08	0.03	0.00	0.06	0.01	0.03	0.08	0.03	0.01	0.07	0.02	0.02	0.08	0.03	0.01	0.06	0.01
27	0.01	0.06	0.02	0.02	0.08	0.03	0.01	0.05	0.02	0.03	0.07	0.03	0.00	0.05	0.01	0.03	0.08	0.04	0.01	0.06	0.01	0.02	0.07	0.03	0.01	0.06	0.01
28	0.01	0.06	0.02	0.02	0.03	0.03	0.01	0.03	0.01	0.03	0.07	0.03	0.00	0.06	0.01	0.03	0.09	0.03	0.01	0.07	0.01	0.02	0.07	0.03	0.01	0.07	0.01
29	0.01	0.05	0.02	0.02	0.07	0.03	0.01	0.04	0.01	0.03	0.04	0.03	0.00	0.03	0.01	0.03	0.08	0.04	0.01	0.05	0.01	0.02	0.07	0.03	0.01	0.05	0.01
30	0.01	0.06	0.02	0.02	0.07	0.03	0.00	0.05	0.01	0.03	0.06	0.03	0.00	0.05	0.01	0.03	0.08	0.04	0.01	0.06	0.01	0.02	0.08	0.03	0.00	0.06	0.01
31	0.01	0.07	0.02	0.02	0.08	0.04	0.01	0.07	0.02	0.03	0.07	0.04	0.01	0.07	0.01	0.03	0.09	0.04	0.01	0.07	0.02	0.02	0.08	0.03	0.00	0.07	0.02
Monthly Min/Max/Avg	0.01	0.08	0.02	0.02	0.09	0.03	0.00	0.08	0.01	0.02	0.09	0.03	0.00	0.08	0.01	0.02	0.09	0.03	0.01	0.09	0.01	0.02	0.09	0.03	0.01	0.09	0.01

NOTES: ' -- ' indicates filter offline

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

October 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	0.03	0.02	0.00	0.06	0.01	0.01	0.05	0.01	0.03	0.05	0.04	0.03	0.04	0.03	0.04	0.07	0.05	0.03	0.04	0.04	0.04	0.04	0.04	0.03	0.03	0.03
2	0.02	0.05	0.03	0.01	0.00	0.01	0.01	0.04	0.02	0.03	0.03	0.03	0.03	0.07	0.04	0.04	0.04	0.04	0.03	0.07	0.04	0.04	0.07	0.04	0.03	0.06	0.03
3	0.02	0.02	0.02	0.00	0.04	0.02	0.00	0.01	0.00	0.03	0.06	0.04	0.03	0.04	0.03	0.04	0.07	0.04	0.03	0.05	0.04	0.03	0.04	0.03	0.02	0.03	0.03
4	0.02	0.05	0.03	0.01	0.01	0.00	0.00	0.04	0.02	0.03	0.03	0.03	0.03	0.07	0.04	0.04	0.04	0.04	0.03	0.07	0.04	0.04	0.07	0.04	0.02	0.06	0.03
5	0.02	0.06	0.03	0.01	0.05	0.01	0.01	0.05	0.01	0.03	0.07	0.04	0.03	0.04	0.04	0.04	0.08	0.05	0.04	0.04	0.04	0.04	0.08	0.04	0.03	0.03	0.03
6	0.02	0.03	0.02	0.01	0.04	0.01	0.00	0.02	0.01	0.03	0.07	0.03	0.03	0.07	0.04	0.04	0.04	0.04	0.03	0.07	0.04	0.03	0.05	0.04	0.03	0.06	0.03
7	0.02	0.05	0.03	0.01	0.00	0.01	0.00	0.04	0.01	0.03	0.03	0.03	0.03	0.07	0.04	0.04	0.07	0.04	0.03	0.04	0.04	0.03	0.07	0.04	0.03	0.06	0.03
8	0.02	0.04	0.02	0.01	0.04	0.00	0.00	0.04	0.01	0.03	0.06	0.03	0.03	0.04	0.03	0.04	0.07	0.04	0.03	0.07	0.04	0.03	0.07	0.04	0.03	0.03	0.03
9	0.02	0.04	0.03	0.01	0.01	0.01	0.01	0.05	0.02	0.03	0.03	0.03	0.04	0.06	0.05	0.04	0.04	0.04	0.03	0.04	0.04	0.04	0.04	0.04	0.03	0.06	0.03
10	0.02	0.06	0.03	0.01	0.04	0.01	0.01	0.04	0.01	0.03	0.06	0.04	0.03	0.04	0.03	0.04	0.07	0.04	0.04	0.07	0.04	0.04	0.07	0.04	0.03	0.03	0.03
11	0.02	0.05	0.03	0.01	0.04	0.01	0.00	0.01	0.01	0.03	0.07	0.04	0.03	0.07	0.04	0.04	0.04	0.04	0.03	0.04	0.04	0.03	0.04	0.04	0.03	0.06	0.03
12	0.02	0.06	0.03	0.01	0.05	0.01	0.01	0.05	0.01	0.03	0.04	0.03	0.03	0.06	0.04	0.04	0.08	0.05	0.04	0.07	0.04	0.03	0.07	0.04	0.03	0.03	0.03
13	0.02	0.03	0.03	0.01	0.01	0.00	0.00	0.04	0.02	0.03	0.07	0.04	0.03	0.04	0.03	0.04	0.04	0.04	0.03	0.07	0.04	0.03	0.04	0.04	0.03	0.06	0.03
14	0.02	0.06	0.03	0.01	0.05	0.01	0.00	0.04	0.01	0.03	0.03	0.03	0.03	0.07	0.04	0.04	0.07	0.04	0.04	0.05	0.04	0.04	0.07	0.04	0.03	0.03	0.03
15	0.02	0.03	0.03	0.01	0.05	0.01	0.01	0.06	0.02	0.03	0.07	0.04	0.03	0.04	0.03	0.04	0.08	0.05	0.04	0.07	0.04	0.04	0.07	0.04	0.03	0.06	0.03
16	0.02	0.08	0.04	0.01	0.08	0.02	0.01	0.08	0.02	0.03	0.07	0.04	0.03	0.08	0.04	0.04	0.08	0.05	0.04	0.08	0.04	0.04	0.08	0.05	0.03	0.07	0.04
17	0.02	0.08	0.04	0.01	0.08	0.01	0.01	0.08	0.02	0.03	0.08	0.04	0.03	0.08	0.04	0.04	0.08	0.05	0.03	0.08	0.04	0.03	0.08	0.05	0.03	0.07	0.04
18	0.03	0.08	0.05	0.01	0.09	0.03	0.01	0.09	0.04	0.04	0.09	0.05	0.04	0.08	0.05	0.04	0.08	0.05	0.04	0.09	0.05	0.04	0.09	0.05	0.03	0.08	0.04
19	0.03	0.09	0.04	0.01	0.09	0.02	0.01	0.08	0.02	0.03	0.08	0.04	0.03	0.09	0.04	0.04	0.09	0.05	0.04	0.09	0.05	0.04	0.09	0.05	0.03	0.08	0.04
20	0.02	0.08	0.03	0.01	0.08	0.02	0.01	0.07	0.02	0.03	0.08	0.04	0.03	0.09	0.04	0.04	0.09	0.05	0.04	0.09	0.05	0.03	0.09	0.05	0.03	0.08	0.03
21	0.02	0.08	0.04	0.01	0.08	0.01	0.01	0.07	0.02	0.03	0.08	0.04	0.03	0.09	0.04	0.04	0.09	0.05	0.04	0.09	0.04	0.04	0.09	0.05	0.03	0.08	0.04
22	0.03	0.09	0.04	0.01	0.08	0.01	0.01	0.07	0.02	0.03	0.08	0.04	0.03	0.08	0.04	0.04	0.08	0.05	0.04	0.08	0.04	0.04	0.09	0.04	0.03	0.08	0.04
23	0.03	0.09	0.04	0.01	0.09	0.02	0.01	0.08	0.02	0.03	0.08	0.04	0.03	0.09	0.04	0.04	0.09	0.05	0.04	0.09	0.05	0.04	0.09	0.05	0.03	0.08	0.04
24	0.03	0.09	0.04	0.01	0.09	0.02	0.01	0.08	0.03	0.03	0.09	0.04	0.03	0.09	0.04	0.04	0.09	0.05	0.04	0.09	0.05	0.04	0.09	0.05	0.03	0.08	0.04
25	0.02	0.09	0.04	0.00	0.09	0.02	0.01	0.08	0.03	0.03	0.08	0.04	0.03	0.09	0.04	0.04	0.09	0.05	0.04	0.09	0.05	0.04	0.09	0.05	0.03	0.08	0.04
26	0.02	0.08	0.04	0.01	0.06	0.01	0.00	0.06	0.02	0.03	0.07	0.04	0.03	0.08	0.04	0.04	0.08	0.04	0.03	0.08	0.04	0.03	0.08	0.04	0.03	0.07	0.03
27	0.02	0.07	0.03	0.01	0.06	0.01	0.00	0.06	0.02	0.03	0.08	0.03	0.03	0.08	0.04	0.04	0.09	0.04	0.03	0.08	0.04	0.03	0.09	0.04	0.03	0.07	0.03
28	0.02	0.07	0.03	0.01	0.08	0.01	0.00	0.07	0.02	0.03	0.08	0.04	0.03	0.08	0.04	0.04	0.08	0.04	0.03	0.08	0.04	0.03	0.09	0.04	0.03	0.07	0.03
29	0.02	0.07	0.03	0.01	0.06	0.01	0.00	0.05	0.01	0.03	0.07	0.03	0.03	0.08	0.03	0.04	0.08	0.04	0.03	0.08	0.05	0.03	0.08	0.04	0.03	0.07	0.03
30	0.02	0.07	0.03	0.01	0.08	0.01	0.01	0.06	0.02	0.03	0.07	0.04	0.03	0.08	0.03	0.04	0.08	0.05	0.03	0.08	0.04	0.03	0.08	0.04	0.03	0.08	0.03
31	0.02	0.09	0.04	0.00	0.08	0.02	0.01	0.07	0.03	0.03	0.08	0.04	0.03	0.09	0.04	0.04	0.09	0.05	0.04	0.09	0.05	0.04	0.09	0.05	0.03	0.08	0.04
Monthly Min/Max/Avg	0.02	0.09	0.03	0.01	0.09	0.01	0.00	0.09	0.02	0.03	0.09	0.04	0.03	0.09	0.04	0.04	0.09	0.04	0.03	0.09	0.04	0.03	0.09	0.04	0.02	0.08	0.03

NOTES: ' -- ' indicates filter offline

1.2.11 Combined Filter Effluent Water Quality

October 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	5	2	0.04	0.04	0.04	5	10	7	0.02	0.03	0.02
2	1	7	2	0.04	0.04	0.04	4	12	7	0.02	0.03	0.02
3	1	9	2	0.04	0.04	0.04	4	8	5	0.02	0.03	0.02
4	1	7	3	0.04	0.04	0.04	5	11	8	0.02	0.03	0.02
5	1	6	3	0.04	0.04	0.04	7	15	10	0.02	0.03	0.03
6	1	4	1	0.04	0.04	0.04	4	9	6	0.02	0.03	0.02
7	1	4	1	0.04	0.04	0.04	5	9	7	0.02	0.03	0.02
8	1	8	3	0.04	0.04	0.04	5	10	7	0.02	0.03	0.02
9	2	16	4	0.04	0.04	0.04	1	23	5	0.01	0.04	0.01
10	1	4	2	0.04	0.04	0.04	5	10	8	0.02	0.03	0.02
11	1	8	2	0.04	0.04	0.04	5	12	8	0.02	0.03	0.02
12	1	11	3	0.04	0.04	0.04	6	13	9	0.02	0.03	0.02
13	1	10	1	0.04	0.04	0.04	5	13	9	0.02	0.03	0.02
14	1	14	2	0.04	0.05	0.04	5	10	7	0.02	0.03	0.02
15	1	5	2	0.04	0.04	0.04	2	9	6	0.02	0.03	0.03
16	1	3	1	0.04	0.04	0.04	4	9	5	0.02	0.04	0.03
17	1	8	2	0.04	0.04	0.04	4	9	5	0.02	0.04	0.03
18	6	15	9	0.04	0.06	0.05	6	11	8	0.03	0.04	0.04
19	7	17	11	0.05	0.07	0.06	4	8	5	0.03	0.04	0.03
20	6	15	8	0.05	0.06	0.05	4	7	5	0.03	0.03	0.03
21	5	11	8	0.05	0.06	0.05	4	8	5	0.02	0.03	0.03
22	1	10	7	0.05	0.06	0.05	4	7	5	0.03	0.03	0.03
23	--	--	--	--	--	--	5	9	7	0.03	0.04	0.03
24	1	11	8	0.05	0.06	0.05	6	10	8	0.03	0.04	0.03
25	6	16	7	0.05	0.08	0.06	4	10	7	0.03	0.05	0.03
26	4	11	6	0.05	0.06	0.05	2	6	3	0.02	0.03	0.03
27	4	8	5	0.05	0.05	0.05	3	6	4	0.02	0.03	0.03
28	4	8	6	0.05	0.05	0.05	3	7	4	0.02	0.03	0.03
29	3	19	6	0.04	0.06	0.05	3	6	4	0.02	0.03	0.03
30	3	11	5	0.04	0.05	0.05	3	9	6	0.02	0.03	0.03
31	5	10	7	0.05	0.05	0.05	6	11	9	0.03	0.04	0.03
Monthly Min/Max/Avg	1	19	4	0.04	0.08	0.04	1	23	6	0.01	0.05	0.03

NOTES: ' -- ' indicates plant offline

1.2.12 Rossdale UV Disinfection - Filters 1 - 3

October 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	36.4	49.0	41.0	21.3	26.5	24.1	62.8	79.0	65.2	16.7	17.5	0.6	36.5	44.6	41.5	21.7	26.5	18.6	96.0	96.5	96.2
2	36.3	44.1	41.6	22.2	27.6	24.2	--	--	--	--	--	--	39.0	43.9	41.9	22.0	25.2	23.4	96.2	96.5	96.2
3	43.2	59.3	50.8	16.0	22.6	19.0	--	--	--	--	--	--	41.7	55.0	47.9	16.7	22.6	19.7	95.7	96.2	96.1
4	38.1	63.9	43.6	12.4	27.8	19.1	42.0	51.2	46.4	23.5	28.2	22.2	52.4	64.2	59.2	15.1	17.1	4.4	95.7	96.6	96.4
5	35.1	41.4	37.4	25.2	30.9	27.7	37.4	43.5	40.8	25.4	31.1	28.2	--	--	--	--	--	--	95.9	96.6	96.3
6	36.2	71.8	52.1	13.9	25.5	19.3	39.6	62.4	48.3	18.3	25.7	14.5	37.5	46.2	40.4	22.0	27.5	10.3	95.7	96.5	96.1
7	36.2	36.7	36.5	12.7	14.6	1.7	35.3	49.0	38.5	24.2	34.7	27.3	34.6	40.9	37.8	24.6	30.3	27.3	96.2	96.6	96.4
8	--	--	--	--	--	--	36.0	42.9	41.2	18.7	31.4	21.0	37.4	46.2	38.6	14.4	24.8	16.3	95.0	96.3	95.9
9	37.8	51.8	45.3	20.1	27.4	20.7	--	--	--	--	--	--	36.7	57.7	48.5	17.2	26.1	16.3	95.7	96.6	96.4
10	39.3	55.0	45.7	18.6	22.7	21.0	--	--	--	--	--	--	35.7	47.9	39.4	21.1	28.3	24.2	95.7	96.5	96.0
11	52.4	79.0	58.0	11.1	19.3	11.0	38.8	49.9	41.6	25.1	33.1	10.3	46.0	78.4	57.2	12.6	21.9	18.2	96.4	96.9	96.6
12	--	--	--	--	--	--	35.3	41.8	37.6	25.6	33.3	29.4	76.4	79.2	78.2	10.5	12.8	0.6	94.7	96.6	95.9
13	--	--	--	--	--	--	37.6	71.0	55.4	15.5	25.8	18.6	--	--	--	--	--	--	94.7	96.5	96.1
14	46.0	49.4	46.9	21.6	22.1	2.4	--	--	--	--	--	--	--	--	--	--	--	--	95.9	96.4	96.2
15	36.6	47.1	41.2	21.6	27.0	24.5	--	--	--	--	--	--	--	--	--	--	--	--	96.1	96.5	96.3
16	46.3	64.8	53.0	15.9	22.1	13.9	40.3	45.7	44.3	25.9	29.1	7.8	38.2	45.0	41.7	23.0	27.3	14.5	96.4	96.6	96.5
17	--	--	--	--	--	--	42.0	54.3	48.7	19.7	26.6	23.5	41.2	53.1	47.4	17.0	24.1	20.9	95.7	96.7	96.4
18	35.2	40.8	35.9	21.6	26.2	11.5	48.1	88.6	54.4	12.2	19.8	15.6	34.6	65.8	50.2	11.2	26.5	10.8	93.8	95.7	95.3
19	34.9	59.4	40.4	12.4	25.4	19.3	--	--	--	--	--	--	34.1	41.5	36.1	18.2	29.1	23.7	93.4	94.8	93.9
20	35.3	69.0	45.0	11.0	27.0	11.3	36.2	48.5	42.1	20.1	25.2	18.4	40.9	68.0	49.5	10.8	18.7	7.1	94.8	95.6	95.1
21	35.2	67.3	42.8	12.0	25.9	20.1	40.6	79.1	53.7	11.6	23.8	17.4	--	--	--	--	--	--	94.4	95.5	95.1
22	61.7	88.6	68.1	11.5	12.6	0.4	40.4	51.1	46.4	11.6	23.8	17.3	37.1	50.8	43.2	17.2	23.1	17.3	95.4	95.7	95.5
23	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
24	35.3	41.9	39.1	19.6	28.0	19.9	--	--	--	--	--	--	33.7	37.4	35.7	22.2	27.3	1.6	95.2	95.9	95.7
25	40.8	43.2	42.2	18.4	19.7	1.4	35.0	38.0	35.7	22.9	32.1	19.2	34.5	44.4	36.2	16.3	28.8	23.7	93.6	95.2	94.2
26	34.5	39.4	35.8	21.5	31.4	17.2	37.7	79.5	53.2	10.8	22.9	15.8	34.3	67.6	46.7	10.4	30.3	12.6	94.5	95.2	94.7
27	33.4	72.7	51.1	11.4	24.1	10.1	36.4	49.6	41.2	19.7	27.8	24.3	35.1	53.1	41.4	15.9	27.6	21.5	95.2	96.0	95.6
28	32.0	44.4	36.5	18.3	32.8	23.2	44.6	73.8	56.5	12.1	20.9	10.9	35.2	54.2	40.0	15.4	25.2	8.6	95.1	96.0	95.5
29	40.8	77.6	58.3	10.7	19.0	4.9	36.0	44.2	39.3	23.3	26.8	15.7	35.0	51.6	40.0	17.1	26.3	21.6	94.5	96.2	95.4
30	35.3	43.2	36.8	22.8	29.9	19.7	41.0	83.5	54.4	12.6	25.1	19.0	35.1	80.9	45.4	10.2	26.6	13.9	95.5	96.3	95.7
31	35.1	69.4	52.0	12.8	26.6	11.2	35.4	128.4	46.8	11.8	27.0	9.5	36.0	52.5	44.5	15.0	26.0	20.5	95.5	96.3	96.0
Monthly Total						398.8						386.3						397.5			
Monthly Min/Max/ Avg	32.0	88.6	45.3	10.7	32.8		35.0	128.4	46.9	10.8	34.7		33.7	80.9	45.1	10.2	30.3		95.3	96.2	95.8

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

October 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	38.8	52.9	46.5	22.7	29.5	24.4	39.9	44.7	43.6	23.7	24.5	2.3	44.5	79.6	49.0	11.1	22.1	8.5	96.0	96.5	96.2
2	43.6	54.9	50.6	20.2	25.5	22.3	35.3	45.0	39.6	23.6	30.2	26.4	--	--	--	--	--	--	96.2	96.5	96.2
3	40.9	68.9	54.7	15.9	27.9	19.1	42.4	53.7	47.3	18.6	23.8	21.2	33.7	36.1	35.7	27.5	31.5	28.4	95.7	96.2	96.1
4	42.0	54.6	49.3	22.4	25.5	23.8	50.6	71.1	63.3	10.5	18.8	15.1	35.4	47.2	41.4	21.9	27.7	24.8	95.7	96.6	96.4
5	42.3	52.7	47.5	21.6	27.1	24.5	--	--	--	--	--	--	44.0	52.5	47.8	18.5	23.2	20.8	95.9	96.6	96.3
6	45.2	84.6	53.9	13.6	26.7	19.4	--	--	--	--	--	--	47.0	50.8	48.6	17.4	18.7	1.1	95.7	96.5	96.1
7	39.7	50.0	43.7	24.0	30.8	27.4	35.4	42.8	37.7	24.1	32.9	5.0	--	--	--	--	--	--	96.2	96.6	96.4
8	37.2	42.9	39.5	15.3	26.1	17.4	37.8	41.3	38.7	19.1	32.9	25.9	36.8	43.4	38.6	20.6	25.5	16.0	95.0	96.3	95.9
9	40.8	56.7	50.3	20.0	28.0	21.7	47.1	61.6	55.7	16.4	21.9	18.6	35.2	41.4	38.7	23.6	29.9	26.3	95.7	96.6	96.4
10	41.3	55.4	47.0	21.6	25.9	23.3	52.1	64.7	57.1	15.5	17.4	10.8	35.8	54.1	42.4	18.9	25.3	22.6	95.7	96.5	96.0
11	39.7	89.0	59.1	14.0	31.1	19.6	35.4	43.7	39.0	24.0	31.7	23.6	51.0	56.0	52.7	10.9	19.8	4.4	96.4	96.9	96.6
12	35.4	42.2	38.1	26.3	32.3	29.5	39.8	44.2	41.7	21.1	26.5	24.2	--	--	--	--	--	--	94.7	96.6	95.9
13	37.7	71.2	52.5	16.9	27.6	20.5	41.8	75.8	57.6	13.7	21.2	15.2	34.2	41.0	37.3	23.6	33.6	24.7	94.7	96.5	96.1
14	40.9	51.1	45.4	23.2	27.2	25.2	--	--	--	--	--	--	35.4	53.1	40.6	19.0	28.2	24.5	95.9	96.4	96.2
15	37.2	57.3	48.0	17.5	29.6	22.1	41.9	44.7	43.8	23.5	24.1	0.9	45.7	63.9	52.1	15.5	21.5	17.9	96.1	96.5	96.3
16	42.6	61.7	49.5	18.6	26.5	23.7	40.3	49.7	45.0	22.2	27.0	24.4	35.5	45.3	42.3	24.7	30.0	9.7	96.4	96.6	96.5
17	45.9	64.5	55.2	17.2	21.1	16.9	42.5	53.0	47.2	20.0	24.7	19.1	41.1	48.1	44.9	21.7	25.9	24.2	95.7	96.7	96.4
18	43.2	52.3	48.4	13.6	20.0	17.9	35.2	47.7	38.0	18.3	23.7	17.3	41.6	46.8	42.8	19.0	21.9	4.3	93.8	95.7	95.3
19	35.1	51.5	38.2	13.5	27.2	20.9	35.1	72.7	42.9	11.3	20.7	16.1	35.2	36.1	35.7	25.7	30.5	14.2	93.4	94.8	93.9
20	37.4	58.0	46.3	15.2	26.2	18.7	35.1	47.8	39.1	18.0	27.1	21.5	35.4	72.0	44.4	11.6	26.0	19.3	94.8	95.6	95.1
21	38.5	50.3	43.4	10.9	25.2	20.0	35.6	59.3	47.6	13.1	24.3	8.3	34.8	41.4	38.4	20.9	29.4	13.4	94.4	95.5	95.1
22	38.8	62.7	48.4	16.0	25.2	17.9	37.2	51.5	43.0	17.5	23.7	16.1	35.6	54.8	45.2	16.7	25.2	14.0	95.4	95.7	95.5
23	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
24	36.1	44.2	40.3	21.1	28.1	20.9	--	--	--	--	--	--	35.3	38.2	36.3	22.3	28.5	22.3	95.2	95.9	95.7
25	35.0	58.0	41.7	14.1	30.8	21.2	35.0	36.0	35.6	22.6	26.6	7.8	34.6	52.1	40.7	13.4	34.2	17.6	93.6	95.2	94.2
26	35.0	87.3	49.2	10.2	25.5	19.2	35.2	74.1	45.1	10.9	24.6	19.1	35.4	58.7	39.6	14.7	31.0	24.7	94.5	95.2	94.7
27	39.4	55.1	43.1	17.5	25.6	21.7	35.4	74.6	40.5	10.9	28.9	3.2	34.8	63.4	37.8	13.6	30.8	16.4	95.2	96.0	95.6
28	35.1	75.8	46.2	12.5	33.5	21.8	35.2	58.2	41.9	13.4	28.3	21.9	35.4	72.1	47.3	11.2	26.7	18.2	95.1	96.0	95.5
29	35.1	49.5	39.9	17.7	28.2	22.8	35.1	61.1	50.8	12.4	26.8	1.5	35.4	42.9	37.7	21.6	29.7	23.2	94.5	96.2	95.4
30	41.4	100.1	53.2	12.5	24.4	18.1	34.9	55.1	40.3	17.4	28.4	20.6	38.8	87.7	49.8	12.3	26.9	13.7	95.5	96.3	95.7
31	37.4	50.1	43.0	19.9	28.4	24.1	54.2	90.2	64.8	10.2	17.4	6.1	35.4	45.5	39.5	18.5	32.8	24.9	95.5	96.3	96.0
Monthly Total						645.7						392.1						480.2			
Monthly Min/Max/ Avg	35.0	100.1	47.1	10.2	33.5		34.9	90.2	45.7	10.2	32.9		33.7	87.7	42.5	10.9	34.2		95.3	96.2	95.8

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

October 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	35.3	42.8	38.6	23.9	30.7	25.7	35.1	46.6	40.1	20.0	26.4	20.9	35.3	43.2	38.1	22.3	26.4	24.5	96.0	96.5	96.2
2	37.7	45.0	42.1	21.4	26.1	23.4	--	--	--	--	--	--	35.1	62.8	40.4	14.5	33.2	23.2	96.2	96.5	96.2
3	44.0	51.4	45.6	17.7	21.8	1.6	--	--	--	--	--	--	35.0	36.3	35.6	26.4	30.6	28.8	95.7	96.2	96.1
4	--	--	--	--	--	--	34.9	37.7	35.9	26.0	31.6	2.8	35.3	48.3	42.1	20.3	27.2	23.0	95.7	96.6	96.4
5	--	--	--	--	--	--	35.1	36.1	35.7	31.3	37.7	34.2	35.1	56.5	37.3	17.2	39.2	27.8	95.9	96.6	96.3
6	34.6	36.7	35.6	29.8	37.5	32.0	35.2	39.6	36.6	23.9	33.0	28.1	35.1	36.3	35.6	29.8	37.8	33.5	95.7	96.5	96.1
7	35.2	39.7	36.5	25.9	32.7	29.2	38.8	82.0	42.7	11.3	24.4	18.0	35.2	41.7	37.6	23.1	30.3	26.3	96.2	96.6	96.4
8	37.5	44.0	39.4	15.0	26.2	20.2	36.5	39.1	37.4	22.8	39.0	7.5	36.4	51.6	42.1	17.8	24.9	18.5	95.0	96.3	95.9
9	56.0	86.4	60.6	11.1	17.0	3.2	35.3	39.4	35.9	23.0	31.4	27.0	33.0	38.5	35.8	24.3	31.5	27.9	95.7	96.6	96.4
10	35.3	36.1	35.7	29.0	31.0	5.6	35.2	40.5	36.0	23.2	30.2	27.3	35.0	40.3	35.9	24.2	31.2	28.4	95.7	96.5	96.0
11	33.4	38.9	36.3	27.8	35.8	31.4	38.2	49.0	43.2	10.4	24.2	20.4	34.6	48.0	41.6	10.9	37.6	22.8	96.4	96.9	96.6
12	35.1	37.9	35.8	25.2	31.1	28.3	--	--	--	--	--	--	35.0	36.3	35.6	33.1	39.1	36.3	94.7	96.6	95.9
13	35.3	54.4	44.3	16.2	31.4	17.9	35.3	49.1	37.3	20.4	30.8	8.4	35.0	47.5	37.9	20.4	33.7	26.7	94.7	96.5	96.1
14	34.9	46.2	37.0	22.0	30.5	28.1	35.1	43.0	36.3	21.4	30.9	28.3	35.1	72.0	39.5	10.7	30.8	23.4	95.9	96.4	96.2
15	35.3	43.8	39.6	23.1	28.1	25.0	35.2	41.6	37.5	22.4	27.5	24.6	35.0	36.2	35.7	27.2	32.6	28.7	96.1	96.5	96.3
16	42.7	45.3	48.3	13.9	23.6	18.5	36.3	54.9	43.2	17.0	26.8	17.3	35.8	50.1	40.9	20.1	27.7	22.9	96.4	96.6	96.5
17	35.0	52.4	42.1	19.9	24.9	4.0	35.4	40.6	38.2	22.7	26.5	24.7	35.2	41.5	38.7	23.2	27.6	25.4	95.7	96.7	96.4
18	35.1	38.5	36.2	20.1	24.7	22.6	35.1	39.0	36.2	18.3	23.0	21.0	35.2	39.9	36.6	18.5	23.6	21.4	93.8	95.7	95.3
19	35.1	61.7	40.9	11.7	22.1	17.3	35.2	40.1	35.8	14.5	30.5	10.6	35.0	73.2	35.6	17.7	33.2	22.2	93.4	94.8	93.9
20	35.1	61.8	43.5	11.4	30.0	3.6	35.1	39.0	35.9	19.8	28.4	24.2	35.2	53.5	41.2	14.6	27.7	19.6	94.8	95.6	95.1
21	35.1	43.0	37.0	19.2	30.2	23.9	35.4	55.0	45.7	10.8	22.0	15.5	35.0	40.3	37.4	10.6	34.9	22.9	94.4	95.5	95.1
22	35.2	56.9	42.4	13.7	31.0	13.1	35.3	36.7	35.7	21.7	26.0	15.2	35.1	53.9	42.7	15.0	26.0	17.4	95.4	95.7	95.5
23	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
24	--	--	--	--	--	--	34.4	36.7	35.6	22.3	30.2	11.4	35.1	36.3	35.6	24.4	31.8	23.9	95.2	95.9	95.7
25	35.0	38.9	35.7	18.8	31.9	25.7	34.8	42.8	36.0	14.0	25.7	18.8	35.0	45.1	37.5	14.0	25.2	17.9	93.6	95.2	94.2
26	35.3	61.3	46.2	11.7	33.0	11.2	35.3	36.2	35.7	20.9	36.5	16.2	33.9	41.5	36.0	19.7	32.6	26.8	94.5	95.2	94.7
27	35.1	41.4	36.3	20.3	32.5	26.6	34.7	45.0	38.3	16.6	30.0	18.9	35.1	55.3	41.4	14.3	33.6	21.0	95.2	96.0	95.6
28	35.3	58.5	46.9	10.9	29.7	11.8	35.2	36.3	35.7	25.7	37.1	19.9	34.7	44.2	37.0	16.7	30.1	24.4	95.1	96.0	95.5
29	34.1	41.6	37.1	19.8	29.6	23.7	35.3	53.2	40.5	14.5	29.4	20.1	34.3	66.0	38.7	11.4	26.8	21.2	94.5	96.2	95.4
30	36.9	63.4	46.3	12.6	23.9	13.1	35.2	59.7	43.7	12.2	26.6	9.8	35.1	57.6	40.8	15.3	26.3	21.5	95.5	96.3	95.7
31	33.9	37.2	35.6	25.5	33.2	20.4	35.3	41.6	38.3	19.5	31.5	24.5	35.0	77.8	46.0	10.5	29.5	20.4	95.5	96.3	96.0
Monthly Total						507.4						515.5						728.7			
Monthly Min/Max/ Avg	33.4	86.4	40.8	10.9	37.5		34.4	82.0	38.1	10.4	39.0		33.0	77.8	38.6	10.5	39.2		95.3	96.2	95.8

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

October 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	62.1	73.6	66.3	70.0	84.4	78.8	55.2	62.6	58.6	67.0	81.6	76.2	56.9	65.8	60.4	69.9	82.5	78.9	--	--	--	--	--	--	95.6	96.1	95.9
2	48.6	70.2	59.9	70.1	86.7	80.4	45.5	77.4	53.7	68.7	84.4	77.5	53.6	73.1	59.2	71.0	85.5	80.0	--	--	--	--	--	--	95.6	95.9	95.8
3	52.6	56.7	53.8	68.5	85.2	78.2	48.7	56.0	51.2	66.0	83.1	75.5	58.9	64.3	60.6	68.0	83.4	78.3	--	--	--	--	--	--	95.6	96.1	96.0
4	49.3	57.4	53.0	70.4	90.9	82.4	46.6	56.1	50.6	68.6	88.2	79.6	56.0	63.9	60.0	72.1	90.2	82.3	--	--	--	--	--	--	95.9	96.2	96.0
5	45.1	95.6	55.3	80.6	96.7	90.8	44.2	84.0	61.6	78.7	95.6	88.1	46.4	56.7	50.0	80.8	97.2	91.3	--	--	--	--	--	--	95.3	96.0	95.6
6	57.1	68.7	64.4	75.9	97.3	85.9	50.5	74.4	55.2	72.2	94.5	83.0	52.3	61.9	57.1	75.4	94.6	86.0	--	--	--	--	--	--	95.4	96.9	96.2
7	58.2	70.0	62.8	76.7	95.4	87.8	48.8	59.7	52.9	74.1	93.9	85.2	51.9	61.9	55.7	77.0	95.2	88.1	--	--	--	--	--	--	95.6	96.1	96.0
8	59.4	63.9	61.5	80.0	99.5	91.3	49.5	55.6	52.4	74.7	95.8	88.3	52.0	61.0	54.7	79.4	96.9	91.1	--	--	--	--	--	--	95.6	96.2	96.0
9	60.7	74.3	67.0	33.0	98.2	35.6	51.9	83.4	56.5	33.1	95.5	33.1	53.5	78.7	58.3	45.3	96.5	35.5	--	--	--	--	--	--	95.9	96.2	96.2
10	58.8	63.8	60.9	80.0	97.8	90.9	51.1	56.2	53.2	76.4	94.8	88.2	50.8	56.6	53.1	80.2	96.2	91.3	--	--	--	--	--	--	95.6	96.2	95.9
11	44.1	94.8	56.5	77.9	97.4	90.6	51.7	58.9	54.5	74.4	95.6	87.8	51.5	58.6	54.6	78.3	96.5	90.9	--	--	--	--	--	--	95.6	96.3	96.0
12	55.2	68.6	60.2	70.5	99.2	87.8	49.0	59.5	53.2	70.0	96.3	85.1	49.1	59.4	53.7	71.5	97.5	87.9	--	--	--	--	--	--	95.3	96.1	95.7
13	58.6	74.6	66.4	69.4	88.8	81.2	52.1	64.3	58.2	66.3	86.6	78.3	52.2	64.8	58.4	68.6	87.9	81.0	--	--	--	--	--	--	95.6	96.2	95.9
14	64.5	71.5	67.5	69.4	84.5	78.4	57.5	62.8	60.1	66.1	81.6	75.7	58.0	64.0	60.6	69.2	82.0	77.5	--	--	--	--	--	--	95.6	96.0	95.9
15	50.4	67.4	59.8	69.0	95.1	85.1	44.9	78.4	59.5	66.5	94.1	82.4	44.5	63.1	52.7	68.9	94.1	85.1	--	--	--	--	--	--	95.1	96.0	95.7
16	49.3	61.1	54.3	76.0	99.4	87.5	45.9	86.0	63.4	74.2	96.9	84.5	44.2	51.7	48.2	76.8	97.3	87.4	--	--	--	--	--	--	95.1	95.7	95.4
17	52.1	60.5	56.1	75.5	97.0	87.7	46.0	87.1	60.5	72.8	95.7	85.1	46.0	53.3	49.6	76.8	96.5	87.9	--	--	--	--	--	--	95.3	95.8	95.6
18	47.4	76.7	62.8	72.5	96.8	86.7	45.5	76.5	63.2	70.9	95.0	83.9	46.7	81.6	67.1	74.9	95.9	86.7	--	--	--	--	--	--	93.7	95.8	94.5
19	53.2	84.7	63.5	72.1	94.3	84.4	46.0	88.2	75.5	69.9	92.6	81.4	49.3	95.4	67.6	72.9	94.0	84.3	--	--	--	--	--	--	94.0	95.9	95.0
20	55.2	64.6	60.4	72.9	90.8	83.0	45.7	55.7	51.4	70.1	88.0	79.9	48.8	58.3	54.3	72.7	89.8	82.7	--	--	--	--	--	--	95.5	96.2	95.9
21	54.1	60.3	58.4	55.5	91.3	75.0	57.5	67.6	55.1	51.5	87.3	70.7	59.9	70.4	58.1	53.0	90.5	74.2	47.2	47.3	57.2	56.1	68.5	32.2	95.5	96.2	95.9
22	49.6	66.4	57.7	62.5	97.9	78.6	49.5	63.1	56.8	57.4	93.8	73.1	63.0	67.4	63.9	63.6	76.7	45.2	47.0	47.4	47.2	61.5	87.6	73.2	95.4	96.3	95.9
23	56.5	132.8	61.0	65.6	79.4	73.3	50.8	127.7	55.9	60.6	73.1	67.4	59.5	137.6	68.0	64.6	76.6	71.3	47.1	47.6	47.3	64.1	72.0	68.1	95.3	95.8	95.5
24	50.2	92.5	60.6	63.8	103.5	73.5	49.8	87.6	71.7	58.6	98.1	67.8	61.0	76.5	68.4	62.2	94.2	71.2	46.2	119.9	47.4	59.5	72.2	64.2	94.8	95.7	95.4
25	46.9	62.6	52.8	60.1	79.1	72.6	49.2	85.4	73.4	56.2	74.2	67.0	55.8	84.3	68.4	60.0	76.4	70.6	47.0	47.4	47.2	62.0	72.0	67.7	94.2	95.3	94.5
26	60.5	68.5	65.3	66.5	81.3	73.9	53.3	61.5	57.8	60.9	74.7	68.0	67.1	89.4	74.4	65.4	78.8	72.0	47.1	47.4	47.3	64.9	72.2	68.8	95.3	96.9	96.2
27	57.0	67.3	62.3	65.0	81.0	73.6	50.2	59.8	55.0	60.6	73.7	67.8	60.3	72.1	66.1	64.6	78.3	71.8	47.1	47.4	47.3	64.8	71.8	68.4	95.5	96.1	95.8
28	57.2	65.7	62.0	51.9	78.4	68.8	50.1	58.8	54.8	48.1	72.2	63.4	61.2	73.9	66.8	50.7	75.4	66.6	47.1	47.7	47.3	53.3	70.7	64.2	95.3	95.7	95.6
29	58.0	75.8	68.1	56.5	74.8	66.9	51.4	66.2	60.5	52.4	68.8	61.5	64.1	80.7	73.1	56.2	71.9	64.9	47.1	47.5	47.3	56.5	67.8	62.4	95.2	96.2	95.8
30	45.6	88.0	63.7	43.8	92.6	74.3	48.2	125.0	72.8	41.4	88.3	70.3	59.9	85.0	69.5	40.9	84.9	70.3	47.0	47.3	47.2	56.7	63.1	23.8	95.8	96.3	96.1
31	47.0	58.7	51.8	73.6	92.7	84.3	47.5	90.2	73.0	68.7	89.5	80.8	53.7	64.8	58.8	68.1	85.5	78.4	--	--	--	--	--	--	95.0	96.1	95.6
Monthly Total						2,469.7						2,356.6						2,410.5						592.8			
Monthly Min/Max/ Avg	44.1	132.8	60.5	33.0	103.5		44.2	127.7	59.1	33.1	98.1		44.2	137.6	60.4	40.9	97.5		46.2	119.9	48.3	53.3	87.6		93.7	96.9	95.7

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

October 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	8.9	9.2	9.1	21	26	24	7.0	7.0	7.0	7.3	7.4	7.3	13	18	16	7.0	7.0	7.0
2	9.0	9.2	9.1	21	24	22	7.0	7.0	7.0	7.3	7.3	7.3	13	15	14	7.0	7.0	7.0
3	8.9	9.2	9.1	21	23	22	7.0	7.0	7.0	7.3	7.3	7.3	12	14	13	7.0	7.0	7.0
4	8.8	9.2	9.1	20	23	22	7.0	7.0	7.0	7.2	7.3	7.3	11	14	13	7.0	7.0	7.0
5	8.6	8.9	8.7	18	21	20	7.0	7.0	7.0	7.3	7.3	7.3	12	15	13	7.0	7.0	7.0
6	8.5	8.9	8.8	18	21	20	7.0	7.0	7.0	7.2	7.3	7.3	11	14	13	7.0	7.0	7.0
7	8.6	8.9	8.7	19	22	20	7.0	7.0	7.0	7.2	7.3	7.3	11	14	13	7.0	7.0	7.0
8	8.6	10.2	8.9	14	25	21	7.0	7.0	7.0	7.2	7.3	7.3	10	14	12	7.0	7.0	7.0
9	8.7	10.0	8.8	22	25	23	7.0	7.0	7.0	7.3	7.3	7.3	12	16	14	7.0	7.0	7.0
10	8.6	8.9	8.8	21	24	23	7.0	7.0	7.0	7.2	7.3	7.3	11	14	12	7.0	7.0	7.0
11	8.6	8.9	8.8	18	22	20	7.0	7.0	7.0	7.2	7.3	7.3	9.8	15	13	7.0	7.0	7.0
12	8.7	8.9	8.7	18	19	19	7.0	7.0	7.0	7.2	7.3	7.3	9.8	14	12	7.0	7.0	7.0
13	8.7	9.0	8.9	19	22	21	7.0	7.0	7.0	7.2	7.3	7.2	9.5	14	11	7.0	7.0	7.0
14	8.8	9.0	8.9	19	22	20	7.0	7.0	7.0	7.2	7.3	7.3	10	14	12	7.0	7.0	7.0
15	8.8	9.0	8.9	19	22	20	7.0	7.0	7.0	6.7	7.3	7.0	10	13	12	6.5	7.0	6.7
16	8.6	8.9	8.7	20	21	21	7.0	7.0	7.0	6.7	6.7	6.7	9.2	12	11	6.5	6.5	6.5
17	7.9	8.8	8.4	20	23	22	6.5	7.0	6.7	6.7	6.7	6.7	9.6	12	11	6.5	6.5	6.5
18	7.8	8.1	8.0	19	23	21	6.5	6.5	6.5	6.7	6.8	6.7	9.3	13	11	6.5	6.5	6.5
19	7.7	8.0	7.9	18	20	19	6.5	6.5	6.5	6.7	6.8	6.7	9.4	13	11	6.5	6.5	6.5
20	7.8	8.1	7.9	18	22	21	6.5	6.5	6.5	6.7	6.7	6.7	8.7	11	10	6.5	6.5	6.5
21	7.7	8.7	8.2	17	23	20	6.5	6.5	6.5	6.7	6.7	6.7	8.5	12	9.9	6.5	6.5	6.5
22	7.4	8.5	8.1	18	21	19	6.5	6.5	6.5	6.7	6.7	6.7	8.1	11	9.7	6.5	6.5	6.5
23	--	--	--	--	--	--	--	--	--	6.6	6.7	6.7	7.7	10	9.0	6.5	6.5	6.5
24	8.1	8.5	8.2	17	19	17	6.5	6.5	6.5	6.6	6.7	6.7	6.6	9.4	8.6	6.5	6.5	6.5
25	7.7	8.1	7.9	15	17	16	6.5	6.5	6.5	6.6	6.8	6.7	7.6	13	8.9	6.5	6.5	6.5
26	7.7	7.8	7.8	15	17	16	6.5	6.5	6.5	6.6	6.7	6.7	7.2	10	8.7	6.5	6.5	6.5
27	7.7	7.9	7.8	15	17	16	6.5	6.5	6.5	6.6	6.7	6.7	7.3	9.9	8.2	6.5	6.5	6.5
28	7.7	8.0	7.8	14	17	15	6.5	6.5	6.5	6.6	6.7	6.7	7.2	9.9	8.6	6.5	6.5	6.5
29	7.8	7.9	7.9	15	16	16	6.5	6.5	6.5	6.6	6.7	6.7	7.4	10	8.8	6.5	6.5	6.5
30	7.8	8.0	7.9	15	16	15	6.5	6.5	6.5	6.6	6.7	6.7	7.3	10	8.9	6.5	6.5	6.5
31	7.7	7.9	7.8	15	16	16	6.5	6.5	6.5	6.6	6.7	6.7	6.7	9.7	8.4	6.5	6.5	6.5
Monthly Min/Max/Avg	7.4	10.2	8.5	14	26	19	6.5	7.0	6.8	6.6	7.4	7.0	6.6	18	11	6.5	7.0	6.7

NOTES: ' -- ' indicates plant offline

1.2.17 Liquid Alum Chemical Consumption

October 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	23.7	23.7	21.1	2,798	4,771	7,569	11,315
2	22.9	22.9	21.1	2,594	4,487	7,082	11,315
3	21.9	21.8	21.1	2,372	4,174	6,546	11,329
4	21.5	21.5	21.0	2,287	4,060	6,347	11,799
5	23.9	23.8	21.1	2,742	5,544	8,286	13,037
6	22.0	22.0	21.1	2,265	5,134	7,399	12,424
7	21.0	21.0	21.1	2,215	5,057	7,272	12,652
8	21.0	21.0	21.0	1,817	4,883	6,700	13,030
9	21.2	21.2	21.2	2,213	5,251	7,463	5,516
10	24.6	24.7	21.0	2,591	6,021	8,612	12,998
11	22.5	22.5	21.0	2,753	5,102	7,856	13,029
12	22.0	22.0	21.1	2,311	4,744	7,056	12,652
13	22.0	22.0	21.1	2,272	4,115	6,386	11,585
14	22.0	22.0	21.1	2,272	4,113	6,385	11,323
15	22.0	22.0	13.3	2,474	4,302	6,776	7,821
16	22.0	22.0	7.40	2,626	4,699	7,324	4,578
17	13.4	13.3	8.21	1,540	2,985	4,525	5,085
18	6.00	6.00	8.48	619	1,244	1,862	5,263
19	6.00	6.00	8.06	616	1,295	1,911	4,764
20	5.99	6.00	8.05	629	1,270	1,899	4,662
21	6.03	6.00	7.36	258	1,585	1,844	4,369
22	--	6.56	7.09	--	1,811	1,811	4,496
23	--	--	7.09	--	--	--	4,688
24	--	7.59	7.48	--	1,889	1,889	4,935
25	--	7.84	8.05	--	2,617	2,617	5,311
26	--	7.00	8.04	--	2,453	2,453	5,321
27	--	7.00	8.05	--	2,456	2,456	5,322
28	--	7.00	8.03	--	2,434	2,434	4,977
29	--	7.00	7.84	--	2,341	2,341	4,705
30	--	7.00	7.09	--	2,277	2,277	4,001
31	--	7.00	7.05	--	2,431	2,431	4,083
Monthly Total				42,264	105,546	147,810	248,387
Monthly Avg	18.7	15.2	13.9	2,013	3,518	4,927	8,012

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

October 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	0.25	0.25	0.12	14	24	39	32
2	0.25	0.25	0.12	14	24	37	32
3	0.25	0.25	0.12	13	23	36	32
4	0.25	0.25	0.12	13	23	36	32
5	0.25	0.25	0.12	14	28	42	36
6	0.25	0.25	0.12	13	28	41	34
7	0.25	0.25	0.12	13	29	42	35
8	0.25	0.25	0.12	10	28	39	36
9	0.25	0.25	0.12	13	30	43	16
10	0.25	0.25	0.12	13	30	42	36
11	0.25	0.25	0.12	15	28	42	36
12	0.25	0.25	0.12	13	26	39	35
13	0.25	0.25	0.12	12	23	35	33
14	0.25	0.25	0.12	12	23	35	32
15	0.25	0.25	0.06	14	24	37	17
16	0.25	0.25	--	14	26	40	--
17	0.11	0.11	--	6	12	18	--
18	0.10	0.10	--	5	10	15	--
19	0.10	0.10	--	5	10	15	--
20	0.10	0.10	--	5	10	15	--
21	0.10	0.10	--	2	13	15	--
22	--	0.10	--	--	13	13	--
23	--	--	--	--	--	--	--
24	--	0.10	--	--	12	12	--
25	--	0.10	--	--	16	16	--
26	--	0.10	--	--	17	17	--
27	--	0.10	--	--	17	17	--
28	--	0.10	--	--	17	17	--
29	--	0.10	--	--	16	16	--
30	--	0.10	0.06	--	16	16	17
31	--	0.10	0.07	--	17	17	21
Monthly Total				233	613	846	511
Monthly Avg	0.21	0.18	0.11	11	20	28	30

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

October 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	--	--	--	--	--	--	--
14	--	--	--	--	--	--	--
15	--	--	--	--	--	--	--
16	--	--	--	--	--	--	--
17	--	--	--	--	--	--	--
18	--	--	--	--	--	--	--
19	--	--	--	--	--	--	--
20	--	--	--	--	--	--	--
21	--	--	--	--	--	--	--
22	--	--	--	--	--	--	--
23	--	--	--	--	--	--	--
24	--	--	--	--	--	--	--
25	--	--	--	--	--	--	--
26	--	--	--	--	--	--	--
27	--	--	--	--	--	--	--
28	--	--	--	--	--	--	--
29	--	--	--	--	--	--	--
30	--	--	--	--	--	--	--
31	--	--	--	--	--	--	--
Monthly Total				--	--	--	--
Monthly Avg	--	--	--	--	--	--	--

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

October 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	2.80	2.70	20,026	32,927	56,774	3.29	112,788
2	2.83	2.66	19,421	31,577	54,269	3.27	112,012
3	2.84	2.63	18,698	30,430	52,413	3.23	110,847
4	2.73	2.69	17,604	30,781	51,488	3.17	113,284
5	2.68	2.61	18,668	36,823	58,288	3.17	125,309
6	2.65	2.60	16,561	36,791	56,069	3.06	115,151
7	2.60	2.58	16,628	37,617	56,308	3.07	117,641
8	2.51	2.65	13,151	37,344	54,023	3.07	121,253
9	2.52	2.62	15,956	39,287	58,368	3.12	51,704
10	2.64	2.61	16,819	38,713	59,725	3.16	124,909
11	2.71	2.63	20,087	36,100	58,515	2.98	117,598
12	2.75	2.65	17,512	34,598	54,230	3.09	118,603
13	2.79	2.69	17,445	30,459	51,257	3.11	109,086
14	2.90	2.73	18,164	30,883	52,581	3.17	108,710
15	2.85	2.80	19,436	33,229	55,468	3.33	125,357
16	2.85	2.80	20,612	36,263	59,389	3.23	127,653
17	2.76	2.70	19,287	36,650	57,632	3.21	126,935
18	2.73	2.73	17,062	34,327	54,683	3.34	132,087
19	2.77	2.77	17,250	36,256	57,198	3.12	117,701
20	2.74	2.74	17,413	35,123	55,295	2.89	106,860
21	2.71	2.79	7,036	44,727	54,459	2.92	110,662
22	--	2.71	--	45,302	47,626	2.87	116,267
23	--	--	--	--	--	2.83	119,283
24	--	2.95	--	44,562	47,099	2.93	123,205
25	--	2.93	--	59,195	62,709	3.10	130,474
26	--	2.79	--	59,324	61,804	3.03	128,041
27	--	2.75	--	58,576	60,985	2.99	126,149
28	--	2.74	--	57,848	60,105	2.97	117,308
29	--	2.75	--	55,759	58,909	2.90	111,161
30	--	2.75	--	54,265	56,371	2.86	103,111
31	--	2.69	--	56,758	59,052	2.91	107,523
Monthly Total			364,835	1,232,496	1,683,092		3,588,670
Monthly Avg	2.73	2.71	17,373	41,083	56,103	3.08	115,764

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

October 2024

Day	Dosage (mg/L)		Consumption (kg)	
	Rossdale	E.L. Smith	Rossdale	E.L. Smith
1	0.28	0.20	42	52
2	0.29	0.20	41	52
3	0.29	0.18	40	47
4	0.29	0.16	39	44
5	0.29	0.16	47	48
6	0.29	0.16	46	46
7	0.29	0.16	47	47
8	0.29	0.16	41	48
9	0.29	0.16	47	20
10	0.29	0.16	47	48
11	0.29	0.15	47	44
12	0.29	0.14	43	41
13	0.29	0.14	38	37
14	0.29	0.14	38	36
15	0.29	0.31	42	90
16	0.29	0.46	44	139
17	0.34	0.56	54	167
18	0.40	0.55	57	165
19	0.41	0.55	59	158
20	0.40	0.55	57	154
21	0.39	0.55	55	158
22	0.39	0.55	50	169
23	0.00	0.55	0	176
24	0.39	0.57	39	183
25	0.39	0.60	59	192
26	0.39	0.60	63	193
27	0.39	0.60	63	192
28	0.39	0.57	62	171
29	0.38	0.51	59	148
30	0.36	0.50	54	137
31	0.37	0.50	60	140
Monthly Total			1,483	3,344
Monthly Avg	0.32	0.37	48	108

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

October 2024

Day	Dosage (mg/L)		Consumption (kg)	
	Rossdale	E.L. Smith	Rossdale	E.L. Smith
1	0.64	--	504	--
2	0.64	--	481	--
3	0.64	--	464	--
4	0.64	--	456	--
5	0.64	--	549	--
6	0.64	--	533	--
7	0.64	--	547	--
8	0.64	--	481	--
9	0.63	--	537	--
10	0.63	--	541	--
11	0.63	--	536	--
12	0.63	--	492	--
13	0.63	--	437	--
14	0.63	--	438	--
15	0.63	--	477	--
16	0.63	--	506	--
17	0.63	--	526	--
18	0.63	--	472	--
19	0.63	--	478	--
20	0.63	--	477	--
21	0.63	--	469	--
22	0.62	--	417	--
23	--	--	--	--
24	0.61	--	320	--
25	0.62	--	500	--
26	0.62	--	531	--
27	0.62	--	534	--
28	0.62	--	524	--
29	0.62	--	505	--
30	0.62	--	487	--
31	0.62	--	528	--
Monthly Total			14,748	--
Monthly Avg	0.63	--	492	--

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

October 2024

Day	Dosage (mg/L)	Consumption (kg)
	E.L. Smith	E.L. Smith
1	0.67	1,602
2	0.67	1,631
3	0.67	1,590
4	0.67	1,660
5	0.66	1,826
6	0.66	1,716
7	0.65	1,736
8	0.65	1,801
9	0.65	695
10	0.65	1,799
11	0.65	1,792
12	0.65	1,736
13	0.65	1,601
14	0.65	1,542
15	0.65	1,682
16	0.66	1,733
17	0.66	1,741
18	0.66	1,720
19	0.66	1,670
20	0.66	1,641
21	0.65	1,681
22	0.65	1,781
23	0.64	1,814
24	0.63	1,771
25	0.61	1,741
26	0.62	1,772
27	0.61	1,765
28	0.61	1,647
29	0.61	1,602
30	0.62	1,496
31	0.62	1,527
Monthly Total		51,510
Monthly Avg	0.65	1,662

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

October 2024

Day	Dosage (mg/L)		Consumption (kg)	
	Rossdale	E.L. Smith	Rossdale	E.L. Smith
1	--	--	--	--
2	--	--	--	--
3	--	--	--	--
4	--	--	--	--
5	--	--	--	--
6	--	--	--	--
7	--	--	--	--
8	--	--	--	--
9	--	--	--	--
10	--	--	--	--
11	--	--	--	--
12	--	--	--	--
13	--	--	--	--
14	--	--	--	--
15	--	--	--	--
16	--	--	--	--
17	--	--	--	--
18	--	--	--	--
19	--	--	--	--
20	--	--	--	--
21	--	--	--	--
22	--	--	--	--
23	--	--	--	--
24	--	--	--	--
25	--	--	--	--
26	--	--	--	--
27	--	--	--	--
28	--	--	--	--
29	--	--	--	--
30	--	--	--	--
31	--	--	--	--
Monthly Total			--	--
Monthly Avg	--	--	--	--

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
October 2024

Day	Dosage (mg/L)		Consumption (kg)	
	Rossdale	E.L. Smith	Rossdale	E.L. Smith
1	0.63	0.60	433	644
2	0.65	0.60	425	655
3	0.66	0.60	417	640
4	0.66	0.60	410	672
5	0.66	0.60	495	743
6	0.67	0.60	486	701
7	0.67	0.60	499	717
8	0.66	0.59	434	732
9	0.67	0.59	497	286
10	0.67	0.60	502	743
11	0.67	0.60	497	741
12	0.67	0.60	456	718
13	0.67	0.61	405	669
14	0.67	0.61	406	649
15	0.67	0.61	442	706
16	0.66	0.60	464	717
17	0.66	0.60	479	717
18	0.64	0.60	418	707
19	0.63	0.60	420	688
20	0.62	0.60	411	675
21	0.62	0.60	402	693
22	0.74	0.60	435	742
23	--	0.60	--	769
24	0.63	0.60	287	759
25	0.65	0.60	459	763
26	0.65	0.60	485	776
27	0.65	0.60	488	773
28	0.65	0.60	479	723
29	0.65	0.60	462	703
30	0.65	0.60	445	657
31	0.65	0.60	482	670
Monthly Total			13,418	21,547
Monthly Avg	0.66	0.60	447	695

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

October 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	31.7	12.8	1,035	1,107	13	33
2	33.3	11.2	1,070	973	12	33
3	32.4	11.1	1,038	1,053	12	36
4	29.8	18.1	1,036	1,796	13	38
5	27.3	17.1	907	1,824	13	41
6	28.5	14.7	1,038	1,770	14	46
7	31.0	13.8	1,063	1,417	13	39
8	30.3	16.6	1,682	1,659	21	44
9	33.1	22.6	1,529	1,969	18	42
10	24.4	14.3	713	1,723	11	37
11	34.3	21.4	1,557	2,409	17	43
12	18.7	21.3	516	2,261	11	40
13	30.2	21.2	1,293	2,184	16	39
14	21.9	18.4	775	1,847	14	38
15	27.7	18.4	906	2,041	13	45
16	26.9	17.0	1,295	2,371	18	59
17	31.2	14.4	901	2,294	11	62
18	27.4	13.0	1,033	2,156	14	63
19	25.8	13.4	1,294	1,939	19	55
20	31.8	12.9	1,553	1,911	19	56
21	29.7	14.6	1,293	2,262	17	59
22	42.5	18.6	2,382	2,678	21	55
23	90.1	16.2	1,393	2,602	6.0	61
24	21.3	15.1	3,991	2,535	71	64
25	28.7	13.4	1,463	2,201	19	60
26	28.7	13.4	1,058	2,130	14	60
27	33.1	11.8	1,661	1,837	19	59
28	27.4	11.4	1,297	1,722	18	55
29	29.2	11.9	1,295	1,643	17	53
30	31.2	13.2	1,555	2,153	19	62
31	35.6	18.9	1,815	2,824	19	57
Monthly Total			41,437	61,292	535	1,533
Monthly Avg	31.5	15.5	1,337	1,977	17	49

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

October 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)		248	24	151	51	58	533	60.14			474.47		
Solids (kg)	TSS	18,952	128	10,648			29,728						
	Aluminium	6,541	23	3,686			10,249						
# of Bypasses						3		Min	Max	Avg	Min	Max	Avg
pH								6.3	7.9	7.6	7.3	8.1	7.9
Total Chlorine (mg/L)								0.00	0.00	0.00	0.00	0.00	0.00
Sulfite (mg/L)								1.03	20.0	12.5	2.50	20.0	9.94

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

October 2024

		Clarifier Blowdown	Clarifier Washdown *	Backwash Water	Filter To Waste	Bypass	LLP Flush	HLP Cooling	Total	De-chlorinated Waste flow to		
Volume (ML)		690	0.0	448	218	46	1.0	30	1,432	1,533		
Solids (kg)	TSS	78,656	0	32,350					111,006			
	Aluminium	10,050	0	11,198					21,248			
# of Bypasses						3				Min	Max	Avg
pH										7.55	8.30	8.00
Total Chlorine (mg/L)										0.00	0.00	0.00
Sulphite (mg/L)										0.17	20.0	7.26

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

October 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
MARCH	4,282	163	189	7,099	269	260	11,382	405	378	1,523	2,511	4,034
APRIL	4,610	183	212	6,550	246	232	11,159	419	389	1,250	2,653	3,902
MAY	4,521	183	204	7,297	272	318	11,818	438	422	1,546	2,841	4,387
JUNE	5,000	209	205	7,320	268	270	12,320	471	456	1,469	2,990	4,459
JULY	6,424	264	258	8,286	312	314	14,710	574	567	1,650	3,749	5,399
AUGUST	5,439	240	235	7,659	282	301	13,098	511	494	1,529	3,233	4,762
SEPTEMBER	4,814	192	206	7,441	284	327	12,255	466	445	1,361	3,040	4,401
OCTOBER	4,154	158	204	7,437	267	305	11,591	424	385	1,405	2,752	4,157

2024 - HIGH 5-DAY DEMAND

	PLANTS PROD (ML/d)	RES. GAIN / LOSS (%)	RES. GAIN / LOSS (ML)	TOTAL DEMAND (ML)
17-Jul-2024	547	-0.8	-5.3	552
18-Jul-2024	555	-2.0	-12.4	567
19-Jul-2024	574	3.8	23.7	551
20-Jul-2024	512	0.4	2.3	510
21-Jul-2024	492	-5.7	-35.8	528
			AVERAGE:	**542**

Year to Date Data	2024	2023	% CHANGE
TOTAL PRODUCTION TO DATE (ML)	119,899	118,778	0.9
AVG. DAILY DEMAND TO DATE (ML)	393	391	0.5
PEAK DAILY DEMAND TO DATE (ML)	567	545	4.0
PEAK HOURLY DEMAND TO DATE (ML)	782	751	4.0
HIGH 5-DAY AVERAGE TO DATE (ML)	542	530	2.2

Peak daily demand of 567 ML/d occurred on July 18, 2024

Peak hourly demand of 782 ML/d occurred on July 18, 2024 at 21:00

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

October 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	--	--	--	1.74	1.89	1.80	1.56	1.64	1.60	1.98	2.07	2.00	1.04	1.40	1.23	1.21	1.77	1.51
2	1.51	1.95	1.54	1.74	1.92	1.84	1.39	1.60	1.57	1.97	2.06	2.01	1.03	1.20	1.19	1.44	1.75	1.62
3	1.34	1.53	1.42	1.84	1.98	1.90	1.47	1.62	1.56	1.96	2.06	2.01	1.13	1.17	1.15	1.38	1.51	1.46
4	1.40	1.91	1.42	1.78	2.64	1.93	1.51	1.73	1.52	1.98	2.14	2.02	1.08	1.14	1.11	1.30	1.44	1.37
5	1.47	1.93	1.50	1.86	1.99	1.91	1.45	1.58	1.53	1.96	2.07	2.00	1.02	1.10	1.08	1.21	1.38	1.32
6	1.41	1.95	1.53	1.89	2.01	1.94	1.35	1.60	1.55	1.93	2.02	1.98	1.02	1.05	1.02	1.14	1.33	1.26
7	1.48	1.99	1.54	1.90	1.97	1.94	1.55	1.57	1.56	1.91	2.05	1.99	--	--	--	1.13	1.30	1.24
8	1.53	1.93	1.56	1.83	1.99	1.95	1.49	1.62	1.58	1.99	2.05	2.01	1.90	1.97	1.94	1.10	1.51	1.32
9	1.37	1.53	1.46	1.81	1.98	1.92	1.43	1.58	1.55	1.91	2.03	1.97	1.80	2.00	1.93	1.37	1.52	1.46
10	1.40	1.94	1.42	1.88	2.03	1.92	1.44	1.60	1.55	1.96	2.03	2.00	1.82	2.08	2.01	1.34	1.46	1.42
11	1.50	1.89	1.51	1.85	2.04	1.94	1.47	1.61	1.56	1.97	2.05	2.00	1.76	2.08	2.03	1.28	1.44	1.39
12	1.56	2.01	1.59	1.92	2.04	1.97	1.45	1.59	1.56	1.96	2.01	1.98	1.88	2.11	2.06	1.26	1.40	1.34
13	1.54	1.88	1.56	1.81	2.00	1.95	1.46	1.62	1.58	1.87	2.00	1.95	1.97	2.10	2.06	1.18	1.35	1.29
14	1.51	1.92	1.53	1.80	2.00	1.91	1.47	1.74	1.56	1.91	1.99	1.94	1.92	2.08	2.04	1.08	1.30	1.23
15	1.48	1.98	1.50	1.83	1.97	1.92	1.51	1.57	1.56	1.95	2.01	1.97	1.88	2.15	2.05	1.11	1.54	1.31
16	1.56	1.97	1.59	1.88	2.00	1.95	1.47	1.62	1.58	1.94	2.03	2.00	1.92	2.06	2.03	1.39	1.54	1.48
17	1.51	2.00	1.55	1.90	2.02	1.97	1.58	1.60	1.59	2.01	2.08	2.04	1.94	2.12	2.04	1.37	1.51	1.46
18	1.49	1.95	1.53	1.98	2.06	2.02	1.51	1.75	1.59	2.02	2.12	2.05	1.93	2.06	2.03	1.40	1.52	1.47
19	1.45	1.88	1.48	1.93	2.12	2.01	1.56	1.80	1.60	1.97	2.10	2.04	1.94	2.06	2.02	1.33	1.48	1.44
20	--	--	--	1.93	2.03	1.98	1.55	1.62	1.58	2.00	2.07	2.03	1.88	2.10	1.99	1.29	1.46	1.39
21	1.57	1.95	1.60	1.85	2.00	1.97	1.55	1.63	1.60	1.96	2.06	2.01	1.86	2.08	1.99	1.27	1.40	1.36
22	--	--	--	1.94	1.99	1.97	1.57	1.66	1.63	1.99	2.04	2.01	1.85	2.03	1.99	1.23	1.48	1.37
23	1.38	1.48	1.42	1.85	1.99	1.93	1.48	1.63	1.59	1.94	2.06	2.01	1.87	2.00	1.98	1.34	1.51	1.44
24	1.37	1.41	1.38	1.86	1.97	1.90	1.51	1.57	1.54	1.96	2.01	1.98	1.91	2.01	1.98	1.37	1.57	1.48
25	--	--	--	1.90	1.99	1.94	1.53	1.61	1.57	1.98	2.01	2.00	1.83	2.01	1.97	1.48	1.59	1.53
26	--	--	--	1.96	2.06	2.00	1.52	1.68	1.63	2.00	2.06	2.03	1.90	2.05	2.02	1.46	1.58	1.53
27	1.57	1.91	1.64	1.93	2.07	2.01	1.54	1.69	1.67	2.01	2.07	2.03	2.02	2.04	2.03	1.43	1.55	1.48
28	--	--	--	1.92	2.07	2.02	1.68	1.72	1.70	2.01	2.07	2.03	1.96	2.11	2.03	1.35	1.54	1.47
29	1.58	1.94	1.63	1.90	2.09	2.01	1.56	1.79	1.71	1.99	2.06	2.02	1.96	2.05	2.03	1.32	1.62	1.52
30	1.59	1.93	1.63	1.97	2.05	2.00	1.68	1.73	1.70	1.99	2.08	2.02	1.98	2.05	2.03	1.48	1.61	1.56
31	1.56	1.61	1.59	1.97	2.08	2.00	1.57	1.72	1.68	1.98	2.06	2.01	1.96	2.07	2.02	1.49	1.62	1.56
Monthly Min/Max/Avg	1.34	2.01	1.52	1.74	2.64	1.95	1.35	1.80	1.59	1.87	2.14	2.00	1.02	2.15	1.84	1.08	1.77	1.42

NOTES: '--' Indication Analyzer Offline

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

October 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				1.52	1.78	1.66	1.33	2.04	1.41	1.45	1.48	1.47	1.52	2.16	1.56	1.44	1.60	1.54
2	1.64	1.64	1.64	1.52	1.78	1.65	1.33	1.95	1.43	1.34	1.97	1.50	1.58	2.20	1.61	1.46	1.98	1.76
3				1.57	1.74	1.64	1.32	1.91	1.39	1.40	1.46	1.43	1.45	2.18	1.55	1.78	1.95	1.88
4				1.53	1.70	1.61	1.35	1.99	1.37	1.36	1.46	1.43	1.56	2.05	1.57	1.76	1.92	1.84
5	--	--	--	1.50	1.75	1.63	1.39	1.91	1.42	1.46	1.99	1.49	1.59	2.05	1.63	1.73	1.87	1.81
6	--	--	--	1.50	1.77	1.63	1.44	1.97	1.48	1.49	1.89	1.52	1.62	2.08	1.64	1.73	1.84	1.79
7	--	--	--	1.43	1.77	1.63	1.44	1.98	1.47	1.35	1.98	1.51	1.58	2.06	1.64	1.73	1.83	1.78
8	--	--	--	1.55	1.77	1.65	1.43	1.98	1.48	1.44	1.48	1.47	1.62	2.08	1.73	1.69	1.81	1.75
9	1.47	1.61	1.60	1.40	1.76	1.63	1.35	1.99	1.39	1.41	1.45	1.43	1.39	2.04	1.55	1.64	1.79	1.72
10	--	--	--	1.57	1.75	1.66	1.39	1.85	1.41	1.34	1.43	1.39	--	--	--	1.63	1.73	1.68
11	--	--	--	1.52	1.79	1.67	1.40	2.00	1.46	1.36	1.78	1.43	1.42	2.12	1.58	1.65	1.76	1.70
12	--	--	--	1.51	1.76	1.66	1.47	1.95	1.50	1.35	1.46	1.44	1.61	2.05	1.67	1.66	1.76	1.71
13	--	--	--	1.50	1.76	1.66	1.32	1.95	1.46	1.44	1.87	1.47	1.55	2.04	1.63	1.64	1.76	1.69
14	--	--	--	1.56	1.75	1.67	1.44	1.94	1.46	1.43	1.47	1.46	1.49	2.00	1.56	1.62	1.73	1.67
15	--	--	--	1.53	1.77	1.69	1.43	1.92	1.45	1.38	1.45	1.42	1.45	2.07	1.54	1.63	1.72	1.67
16	1.55	1.55	1.55	1.56	1.76	1.67	1.47	2.03	1.49	1.37	1.42	1.39	1.56	2.18	1.61	1.63	1.79	1.69
17	--	--	--	1.60	1.77	1.68	1.41	2.06	1.49	1.30	1.44	1.40	1.58	2.14	1.60	1.62	1.79	1.69
18	--	--	--	1.59	2.20	1.66	1.49	1.86	1.50	1.38	1.53	1.44	1.53	2.18	1.66	1.59	1.73	1.66
19	--	--	--	1.60	1.82	1.72	1.51	2.04	1.54	1.41	1.45	1.44	1.49	2.07	1.70	1.55	1.68	1.62
20	--	--	--	1.61	1.79	1.71	1.42	1.99	1.54	1.40	1.45	1.44	1.69	2.03	1.71	1.53	1.63	1.58
21	1.69	1.71	1.69	1.63	1.84	1.74	1.54	1.95	1.56	1.42	1.45	1.43	1.60	2.00	1.72	1.51	1.61	1.56
22	1.67	1.67	1.67	1.65	1.83	1.73	1.52	1.96	1.55	1.35	1.47	1.44	1.69	2.04	1.73	1.49	1.60	1.54
23	1.59	1.66	1.63	1.60	1.79	1.69	1.50	1.98	1.53	1.38	1.44	1.40	1.64	2.01	1.67	1.50	1.62	1.54
24	1.50	1.59	1.54	1.50	1.73	1.67	1.53	1.96	1.57	1.34	1.40	1.36	1.61	2.01	1.63	1.48	1.58	1.53
25	1.57	1.59	1.58	1.57	1.79	1.71	1.56	1.92	1.74	1.19	1.39	1.36	1.61	1.63	1.62	1.45	1.57	1.51
26	1.56	1.57	1.57	1.71	1.87	1.79	1.59	2.02	1.63	1.35	1.81	1.49	1.49	2.08	1.68	1.47	1.57	1.52
27				1.66	1.88	1.80	1.66	2.00	1.68	1.57	1.83	1.59	1.71	2.05	1.74	1.48	1.60	1.54
28				1.80	1.89	1.84				1.64	2.08	1.67				1.48	1.59	1.54
29	--	--	--	1.73	1.90	1.83	1.64	1.97	1.66	1.63	1.69	1.68	1.68	2.06	1.70	1.47	1.58	1.53
30	1.81	1.81	1.81	1.68	1.90	1.83	1.50	1.98	1.64	1.67	2.02	1.70	1.66	2.06	1.68	1.48	1.59	1.53
31	--	--	--	1.70	1.87	1.81	1.58	1.92	1.60	1.67	1.97	1.70	1.61	2.03	1.64	1.48	1.59	1.52
Monthly Min/Max/Avg	1.47	1.81	1.63	1.40	2.20	1.70	1.32	2.06	1.51	1.19	2.08	1.48	1.39	2.20	1.64	1.44	1.98	1.65

NOTES: '--' Indication Analyzer Offline

1.2.31 Phosphoric Acid Chemical Consumption

October 2024

Day	Dosage (mg/L)		Consumption (kg)	
	Rossdale	E.L. Smith	Rossdale	E.L. Smith
1	0.90	0.90	636	911
2	0.90	0.90	652	897
3	0.90	0.88	654	309
4	0.90	0.90	694	858
5	0.90	0.90	570	944
6	0.90	0.89	611	845
7	0.90	0.90	532	903
8	0.90	0.89	597	885
9	0.90	0.90	559	838
10	0.90	0.89	552	979
11	0.95	0.88	11	937
12	0.90	0.90	464	954
13	0.90	0.89	492	844
14	0.90	0.90	509	952
15	0.90	0.88	517	902
16	0.90	0.78	578	746
17	0.76	0.90	457	801
18	0.90	0.90	535	736
19	0.90	0.90	675	684
20	0.90	0.90	669	729
21	0.90	0.90	583	756
22	0.90	0.90	626	762
23	0.90	0.90	625	819
24	0.90	0.86	635	826
25	0.90	0.90	677	783
26	0.90	0.90	621	785
27	0.90	0.90	525	830
28	0.90	0.90	543	818
29	0.90	0.90	506	854
30	0.90	0.72	521	713
31	0.90	0.90	516	876
Monthly Total			17,341	25,477
Monthly Avg	0.90	0.89	559	822

NOTES: ' -- ' indicates plant offline

- Phosphoric cid 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

October 2024

Date and Time Reported	Location of Mainbreak	Repaired (Time)	Size	Type**
10/1/2024 6:43	11352-57 AVENUE NW	10/1/2024 22:21	150	CI
10/2/2024 9:26	11149-87 AVENUE NW	10/3/2024 22:00	150	CI
10/2/2024 21:52	11034-160 STREET NW	10/3/2024 5:16	150	CI
10/3/2024 14:30	13509-38 STREET NW	10/4/2024 1:40	200	AC
10/8/2024 20:30	15624 - 83 AVENUE NW	10/9/2024 4:05	150	CI
10/9/2024 9:35	7230-89 AVENUE NW	10/10/2024 0:17	200	CI
10/9/2024 14:43	11003-144 STREET NW	10/10/2024 1:55	150	CI
10/13/2024 10:57	7230-89 AVENUE NW	10/13/2024 22:34	200	CI
10/13/2024 20:37	15205-112 AVENUE NW	10/15/2024 18:58	200	CI
10/16/2024 21:04	14912-56 AVENUE NW	10/17/2024 20:07	200	AC
10/17/2024 14:09	10302-140 STREET NW	10/22/2024 6:00	150	CI
10/20/2024 14:10	10519U-134 AVENUE NW	10/20/2024 23:14	150	CI
10/22/2024 15:56	10004-146 STREET NW	10/22/2024 23:20	150	CI
10/22/2024 23:33	10004-146 STREET NW	10/23/2024 4:15	150	CI
10/23/2024 9:03	49 ST N 122 AVE	10/23/2024 21:54	150	CI
10/23/2024 12:43	10943-165 STREET NW	10/23/2024 23:35	250	CI
10/23/2024 19:42	11041-23 AVENUE NW	10/25/2024 15:00	450	AC
10/30/2024 16:53	11347-69 STREET NW	10/31/2024 15:00	150	CI

Month	Total Breaks By Month
Jan-24	35
Feb-24	28
Mar-24	13
Apr-24	18
May-24	10
Jun-24	8
Jul-24	11
Aug-24	16
Sep-24	19
Oct-24	18
Nov-24	
Dec-24	
YTD 2024	**176**

**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 2024

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 2024 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

October 2024

Parameter	Unit	Monthly Count	Monthly Average	YTD Median	YTD Min	YTD Max	YTD Count
Alkalinity Total	mg CaCO3/L	62	117	118	8	141	605
Aluminum	mg/L	2	0.103	0.057	0.023	0.122	20
Arsenic	mg/L	2	<0.0002	<0.0002	<0.0002	<0.0002	20
Bromate Dissolved	mg/L	10	<0.005	<0.005	<0.005	<0.005	88
Bromodichloromethane	µg/L	61	0.9	1.1	<0.5	2.6	569
Cadmium	mg/L	2	<0.0002	<0.0002	<0.0002	<0.0002	20
Calcium Hardness	mg/L CaCO3	60	115	116	96	141	593
Chlorate Dissolved	mg/L	10	0.159	0.183	<0.100	0.332	88
Chloride Dissolved	mg/L	10	5.36	6.01	4.30	12.10	88
Chlorite Dissolved	mg/L	10	<0.01	<0.20	<0.20	<0.20	88
Chromium	mg/L	2	<0.0002	<0.0002	<0.0002	<0.0002	20
Colour	TCU	62	0.9	0.9	<0.5	1.9	605
Conductivity	µS/cm	10	377	397	342	453	88
Copper	mg/L	2	<0.0020	<0.0050	<0.0050	<0.0050	20
Cryptosporidium	oocysts/100L	0		<0.1	<0.1	<0.1	14
Fluoride	mg/L	62	0.70	0.68	0.61	0.79	605
Giardia	cysts/100L	0		<0.1	<0.1	<0.1	14
Iron	mg/L	2	<0.0050	<0.0050	<0.0050	<0.0050	20
Lead	mg/L	2	<0.0002	<0.0002	<0.0002	<0.0002	20
Manganese	mg/L	2	<0.0020	<0.0020	<0.0020	<0.0020	20
Mercury	mg/L	2	<0.0002	<0.0002	<0.0002	<0.0002	20
Nitrate (as N) Dissolved	mg/L	10	0.015	0.030	<0.010	0.170	88
Nitrite (as N) Dissolved	mg/L	10	<0.01	<0.01	<0.01	0.02	88
pH	N/A	62	7.9	7.9	7.5	8.3	606
Potassium	mg/L	2	0.70	0.80	0.70	1.10	20
Sodium	mg/L	2	7.42	10.80	6.80	18.90	20
Sulphate Dissolved	mg/L	10	65.0	72.0	59.3	95.1	88
Total Chlorine	N/A	62	2.15	2.17	1.87	2.40	605
Total Dissolved Solids	mg/L	2	209	229	195	252	20
Total Hardness	mg/L CaCO3	60	175	177	145	218	593
Total Organic Carbon	mg/L C	4	1.2	1.4	0.9	2.8	82
Trihalomethanes	mg/L	61	0.013	0.015	0.005	0.040	569
Turbidity	NTU	62	0.06	<0.04	<0.04	0.22	605
Uranium	mg/L	2	<0.0005	<0.0005	<0.0005	0.0006	20
Zinc	mg/L	2	<0.0050	<0.0050	<0.0050	<0.0050	20
Bacteriological Data							
Coliforms, total	PA/100mL	62	Absent	Absent	Absent	Absent	605
E. coli	PA/100mL	62	Absent	Absent	Absent	Absent	605

2.1.3 SUMMARY OF LABORATORY ANALYSIS - 2024

DISTRIBUTION OF TESTING

Drinking Water Testing

		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	**Total**
Water Treatment Plant	# Tests	10,442	9,566	10,736	10,143	9,855	10,053	10,306	10,156	6,169	10,169	97,595
	# Samples	261	248	326	269	264	260	268	273	257	268	2,694
Field Reservoirs	# Tests	1,936	1,721	1,695	1,883	1,734	2,006	2,225	1,917	1,779	2,035	18,931
	# Samples	63	52	52	65	49	53	66	54	52	65	571
Routine Distribution System	# Tests	2,740	2,879	2,734	2,845	2,901	2,692	2,424	2,401	2,142	3,187	26,945
	# Samples	146	153	146	153	144	124	99	106	103	165	1,339
System Depressurization/Repair	# Tests	1,050	720	555	675	660	630	628	480	723	735	6,856
	# Samples	70	48	37	45	44	42	42	32	48	49	457
Customer Complaints	# Tests	1,395	651	1,209	1,488	1,023	1,209	1,009	1,731	952	910	11,577
	# Samples	15	7	13	16	11	13	11	19	13	10	128
Total	# Tests	17,563	15,537	16,929	17,034	16,173	16,590	16,592	16,685	11,765	17,036	161,904
	# Samples	555	508	574	548	512	492	486	484	473	557	5,189

Additional Testing

		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	**Total**
New Watermain Testing	# Tests	80	30	0	10	135	160	495	275	305	330	1,820
	# Samples	17	6	0	2	27	32	99	55	61	66	365
Water Treatment Plant Waste Discharge	# Tests	168	43	173	117	300	327	284	595	68	73	2,148
	# Samples	56	33	36	45	55	51	50	52	34	35	447
Quality Control	# Tests	5,961	6,042	6,091	5,937	6,055	6,793	8,719	8,020	5,721	7,034	66,373
	# Samples	1,187	1,056	1,193	1,186	1,244	1,418	1,629	1,747	1,581	1,776	14,017
Distribution Water Enhanced Surveillance	# Tests	0	0	0	0	0	540	1,337	1,091	960	0	3,928
	# Samples	0	0	0	0	0	20	53	45	40	0	158
Externally Contracted Analyses	# Tests	405	672	316	307	949	798	832	595	7,210	817	12,901
	# Samples	134	120	157	136	140	122	139	130	240	174	1,492
Total	# Tests	6,614	6,787	6,580	6,371	7,439	8,618	11,667	10,576	14,264	8,254	87,170
	# Samples	1,394	1,215	1,386	1,369	1,466	1,643	1,970	2,029	1,956	2,051	16,479

		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	**Total**
Total	# Tests	24,177	22,324	23,509	23,405	23,612	25,208	28,259	27,261	26,029	25,290	249,074
	# Samples	1,825	1,611	1,848	1,793	1,842	2,022	2,327	2,399	2,198	2,452	20,317

2.1.4 QUALITY ASSURANCE – October 2024

Drinking water quality must meet the requirements in the Alberta Environment and Protected Areas *Approval-to-Operate* (638-04-01) 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 October 2024. Health Canada updates their on-line document regularly, but they recommend always consulting individual guideline technical documents and guidance documents on Health Canada's website "Water Quality—Reports and Publications" for the most current information. 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* (638-04-01) 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 AEPA *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.

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

Current month: **0** YTD Total: **3**

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

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

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

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

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

Sample Type	This Month	YTD
Depressurization Samples	0	1
Complaint Samples	0	0
Random Samples	0	2
Reservoirs	0	0
TOTAL (Distribution)	0	3

2.1.4.5 **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	1	3
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	2
Total Variances + Violations	1 + 0 = 1	5 + 0 = 0

Notes: 1) Variance statistics include any violations.

2) As of October 18, 2024, both ELS and ROS WTP were converted to Direct Filtration mode. Aluminium limit changes from 0.1 mg/L to 0.2 mg/L (operational guideline), when in Direct Filtration.

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

Variance Category[1]	This Month	YTD
Turbidity > 1 NTU	12	140
Chlorine < 1 mg/L or > 2.4 mg/L	7	21
Single Positive Coliform	1	10
THMs > 50 µg/L	0	0
Pipe Lube, Odour, UV positive	1	2
Aluminium[2] > 0.20 (or 0.1) mg/L	5	35
Iron > 0.300 mg/L	1	6
Other	0	3
Total Variances + Violations	27 + 0 = 27	217 + 3 = 220

Notes: 1) Variance statistics include any violations.
2) As of October 18, 2024, both ELS and ROS WTP were converted to Direct Filtration mode. Aluminium limit changes from 0.1 mg/L to 0.2 mg/L (operational guideline), when in Direct Filtration.

2.1.4.7 **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

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
March															
Rossdale Raw (MPN/100mL)	32			1,469	1	13,700			87	1	1,760	1	293	293	293
E.L. Smith Raw (MPN/100mL)	4			2,505	8	9,770			16	1	62	1	60.7	60.7	60.7
Raw River Water Entering the Treatment Plants	36			1,584	1	13,700			79	1	1,760	2	177	60.7	293
Rossdale Treated (PA/100mL)	31	0	0.0				0	0.0				31	0.70	0.12	1.00
E.L. Smith Treated (PA/100mL)	31	0	0.0				0	0.0				31	0.77	0.13	1.00
Water Entering the Plant Reservoir	62	0	0.0				0	0.0				62	0.74	0.12	1.00
Rossdale Reservoir (PA/100mL)	31	0	0.0				0	0.0				31	0.71	0.10	1.00
E.L. Smith Reservoir (PA/100mL)	31	0	0.0				0	0.0				31	0.67	0.11	1.00
Treated Water Entering the Distribution System	62	0	0.0				0	0.0				62	0.69	0.10	1.00
April															
Rossdale Raw (MPN/100mL)	31			208	1	1,120			9	1	58	1	92.2	92.2	92.2
E.L. Smith Raw (MPN/100mL)	4			353	91	980			2	1	5	1	126	126	126
Raw River Water Entering the Treatment Plants	35			225	1	1,120			8	1	58	2	109	92.2	126
Rossdale Treated (PA/100mL)	30	0	0.0				0	0.0				30	0.66	0.14	1.00
E.L. Smith Treated (PA/100mL)	30	0	0.0				0	0.0				30	0.57	0.10	1.00
Water Entering the Plant Reservoir	60	0	0.0				0	0.0				60	0.61	0.10	1.00
Rossdale Reservoir (PA/100mL)	30	0	0.0				0	0.0				30	0.58	0.11	1.00
E.L. Smith Reservoir (PA/100mL)	30	0	0.0				0	0.0				30	0.56	0.10	1.00
Treated Water Entering the Distribution System	60	0	0.0				0	0.0				60	0.57	0.10	1.00

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
May															
Rossdale Raw (MPN/100mL)	30			174	1	517			16	1	63	1	121	121	121
E.L. Smith Raw (MPN/100mL)	5			194	43	276			9	2	22	1	99.6	99.6	99.6
Raw River Water Entering the Treatment Plants	35			177	1	517			15	1	63	2	110	99.6	121
Rossdale Treated (PA/100mL)	29	0	0.0				0	0.0				29	0.49	0.10	1.02
E.L. Smith Treated (PA/100mL)	31	0	0.0				0	0.0				31	0.44	0.11	1.00
Water Entering the Plant Reservoir	60	0	0.0				0	0.0				60	0.46	0.10	1.02
Rossdale Reservoir (PA/100mL)	29	0	0.0				0	0.0				29	0.50	0.10	1.00
E.L. Smith Reservoir (PA/100mL)	31	0	0.0				0	0.0				31	0.42	0.11	1.00
Treated Water Entering the Distribution System	60	0	0.0				0	0.0				60	0.46	0.10	1.00
June															
Rossdale Raw (MPN/100mL)	31			158	1	1,410			8	1	45	1	77.0	77.0	77.0
E.L. Smith Raw (MPN/100mL)	4			131	48	249			7	2	15	1	66.5	66.5	66.5
Raw River Water Entering the Treatment Plants	35			155	1	1,410			8	1	45	2	71.8	66.5	77.0
Rossdale Treated (PA/100mL)	30	0	0.0				0	0.0				30	0.66	0.14	1.00
E.L. Smith Treated (PA/100mL)	30	0	0.0				0	0.0				30	0.61	0.10	1.00
Water Entering the Plant Reservoir	60	0	0.0				0	0.0				60	0.64	0.10	1.00
Rossdale Reservoir (PA/100mL)	30	0	0.0				0	0.0				30	0.73	0.12	1.00
E.L. Smith Reservoir (PA/100mL)	30	0	0.0				0	0.0				30	0.71	0.10	1.03
Treated Water Entering the Distribution System	60	0	0.0				0	0.0				60	0.72	0.10	1.03

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
July															
Rossdale Raw (MPN/100mL)	31			1,838	179	22,400			51	1	538	1	80.6	80.6	80.6
E.L. Smith Raw (MPN/100mL)	5			912	162	1,990			38	1	115	1	50.6	50.6	50.6
Raw River Water Entering the Treatment Plants	36			1,709	162	22,400			50	1	538	2	65.6	50.6	80.6
Rossdale Treated (PA/100mL)	31	0	0.0				0	0.0				31	0.89	0.12	1.00
E.L. Smith Treated (PA/100mL)	31	0	0.0				0	0.0				31	0.89	0.12	1.00
Water Entering the Plant Reservoir	62	0	0.0				0	0.0				62	0.89	0.12	1.00
Rossdale Reservoir (PA/100mL)	31	0	0.0				0	0.0				31	0.91	0.10	1.00
E.L. Smith Reservoir (PA/100mL)	31	0	0.0				0	0.0				31	0.86	0.11	1.00
Treated Water Entering the Distribution System	62	0	0.0				0	0.0				62	0.89	0.10	1.00
August															
Rossdale Raw (MPN/100mL)	32			1,548	1	11,600			156	1	1,450	1	56.3	56.3	56.3
E.L. Smith Raw (MPN/100mL)	9			504	218	1,300			25	11	77	1	59.6	59.6	59.6
Raw River Water Entering the Treatment Plants	41			1,319	1	11,600			128	1	1,450	2	57.9	56.3	59.6
Rossdale Treated (PA/100mL)	31	0	0.0				0	0.0				31	0.97	0.11	1.00
E.L. Smith Treated (PA/100mL)	31	0	0.0				0	0.0				31	0.94	0.12	1.00
Water Entering the Plant Reservoir	62	0	0.0				0	0.0				62	0.96	0.11	1.00
Rossdale Reservoir (PA/100mL)	31	0	0.0				0	0.0				31	0.97	0.13	1.00
E.L. Smith Reservoir (PA/100mL)	31	0	0.0				0	0.0				31	0.97	0.10	1.00
Treated Water Entering the Distribution System	62	0	0.0				0	0.0				62	0.97	0.10	1.00

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
September															
Rossdale Raw (MPN/100mL)	30			373	1	1,414			25	1	124	1	29.3	29.3	29.3
E.L. Smith Raw (MPN/100mL)	4			215	53	579			17	6	34	0			
Raw River Water Entering the Treatment Plants	34			354	1	1,414			24	1	124	1	29.3	29.3	29.3
Rossdale Treated (PA/100mL)	30	0	0.0				0	0.0				30	1.47	0.11	18.5
E.L. Smith Treated (PA/100mL)	30	0	0.0				0	0.0				30	0.71	0.10	1.00
Water Entering the Plant Reservoir	60	0	0.0				0	0.0				60	1.09	0.10	18.5
Rossdale Reservoir (PA/100mL)	29	0	0.0				0	0.0				29	0.94	0.12	1.00
E.L. Smith Reservoir (PA/100mL)	30	0	0.0				0	0.0				30	0.86	0.12	1.00
Treated Water Entering the Distribution System	59	0	0.0				0	0.0				59	0.90	0.12	1.00
October															
Rossdale Raw (MPN/100mL)	32			375	1	6,152			11	1	126	1	13.5	13.5	13.5
E.L. Smith Raw (MPN/100mL)	5			127	91	161			5	3	9	2	27.5	19.6	35.4
Raw River Water Entering the Treatment Plants	37			341	1	6,152			11	1	126	3	22.8	13.5	35.4
Rossdale Treated (PA/100mL)	31	0	0.0				0	0.0				31	0.77	0.11	1.00
E.L. Smith Treated (PA/100mL)	31	0	0.0				0	0.0				31	0.78	0.13	1.00
Water Entering the Plant Reservoir	62	0	0.0				0	0.0				62	0.78	0.11	1.00
Rossdale Reservoir (PA/100mL)	31	0	0.0				0	0.0				31	0.81	0.12	1.00
E.L. Smith Reservoir (PA/100mL)	31	0	0.0				0	0.0				31	0.73	0.10	1.00
Treated Water Entering the Distribution System	62	0	0.0				0	0.0				62	0.77	0.10	1.00

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

2.2.2 Bacteriological Data: Distribution System

2024

	Coliforms, total (PA/100 mL)			E. coli (PA/100 mL)		cATP (pg/mL)			
	Count	# +ve	% +ve	# +ve	% +ve	Count	Mean	Min	Max
January									
Complaint Water	15	0	0.0	0	0.0	15	0.36	0.14	1.50
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	224	1	0.4	0	0.0	133	0.33	0.11	1.50
February									
Complaint Water	7	0	0.0	0	0.0	7	0.17	0.12	0.32
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	212	0	0.0	0	0.0	113	0.20	0.10	1.09
March									
Complaint Water	13	0	0.0	0	0.0	13	0.18	0.11	0.42
FIELD DISTRIBUTION	146	0	0.0	0	0.0	54	0.28	0.11	0.96
FIELD DISTRIBUTION - PLPH	54	0	0.0	0	0.0				
FIELD RESERVOIR	52	0	0.0	0	0.0	52	0.23	0.10	0.80
FIELD RESERVOIR - PLPH (duplicate-not counted)	52	0	0.0	0	0.0				
Monthly	211	0	0.0	0	0.0	119	0.25	0.10	0.96
April									
Complaint Water	16	0	0.0	0	0.0	16	0.35	0.12	0.75
FIELD DISTRIBUTION	153	1	0.7	0	0.0	55	0.29	0.10	2.48
FIELD DISTRIBUTION - PLPH	54	0	0.0	0	0.0				
FIELD RESERVOIR	65	0	0.0	0	0.0	65	0.35	0.10	1.67
FIELD RESERVOIR - PLPH (duplicate-not counted)	64	0	0.0	0	0.0				
Monthly	234	1	0.4	0	0.0	136	0.33	0.10	2.48

2.2.2 Bacteriological Data: Distribution System

2024

	Coliforms, total (PA/100 mL)			E. coli (PA/100 mL)		cATP (pg/mL)			
	Count	# +ve	% +ve	# +ve	% +ve	Count	Mean	Min	Max
May									
Complaint Water	11	0	0.0	0	0.0	11	0.27	0.10	0.49
FIELD DISTRIBUTION	144	0	0.0	0	0.0	54	0.43	0.12	1.46
FIELD DISTRIBUTION - PLPH	54	0	0.0	0	0.0				
FIELD RESERVOIR	49	0	0.0	0	0.0	49	0.58	0.10	2.93
FIELD RESERVOIR - PLPH (duplicate-not counted)	49	0	0.0	0	0.0				
Monthly	204	0	0.0	0	0.0	114	0.47	0.10	2.93
June									
Complaint Water	13	0	0.0	0	0.0	13	0.39	0.11	0.91
Distribution Water Enhanced Surveillance	20	0	0.0	0	0.0	20	0.45	0.10	2.08
FIELD DISTRIBUTION	124	0	0.0	0	0.0	58	0.39	0.11	0.93
FIELD DISTRIBUTION - PLPH	54	0	0.0	0	0.0				
FIELD RESERVOIR	52	0	0.0	0	0.0	52	0.49	0.10	3.85
FIELD RESERVOIR - PLPH (duplicate-not counted)	51	0	0.0	0	0.0				
Monthly	209	0	0.0	0	0.0	143	0.43	0.10	3.85
July									
Complaint Water	11	0	0.0	0	0.0	11	0.64	0.24	1.66
Distribution Water Enhanced Surveillance	53	2	3.8	0	0.0	49	0.27	0.10	0.65
FIELD DISTRIBUTION	99	2	2.0	0	0.0	59	0.19	0.11	0.41
FIELD DISTRIBUTION - PLPH	58	0	0.0	0	0.0				
FIELD RESERVOIR	66	0	0.0	0	0.0	66	0.52	0.11	2.40
FIELD RESERVOIR - PLPH (duplicate-not counted)	65	0	0.0	0	0.0				
Monthly	229	4	1.7	0	0.0	185	0.34	0.10	2.40

2.2.2 Bacteriological Data: Distribution System

2024

	Coliforms, total (PA/100 mL)			E. coli (PA/100 mL)		cATP (pg/mL)			
	Count	# +ve	% +ve	# +ve	% +ve	Count	Mean	Min	Max
August									
Complaint Water	19	0	0.0	0	0.0	19	4.04	0.10	42.04
Distribution Water Enhanced Surveillance	45	2	4.4	0	0.0	45	0.38	0.10	1.60
FIELD DISTRIBUTION	105	0	0.0	0	0.0	63	0.28	0.11	1.69
FIELD DISTRIBUTION - PLPH	56	0	0.0	0	0.0				
FIELD RESERVOIR	53	0	0.0	0	0.0	53	0.59	0.10	4.37
FIELD RESERVOIR - PLPH (duplicate-not counted)	52	0	0.0	0	0.0				
Monthly	222	2	0.9	0	0.0	180	0.75	0.10	42.04
September									
Complaint Water	13	0	0.0	0	0.0	13	0.48	0.14	1.12
Distribution Water Enhanced Surveillance	40	0	0.0	0	0.0	40	0.43	0.10	2.85
FIELD DISTRIBUTION	104	0	0.0	0	0.0	61	0.31	0.10	1.08
FIELD DISTRIBUTION - PLPH	58	0	0.0	0	0.0				
FIELD RESERVOIR	52	0	0.0	0	0.0	52	0.56	0.10	2.76
FIELD RESERVOIR - PLPH (duplicate-not counted)	52	0	0.0	0	0.0				
Monthly	209	0	0.0	0	0.0	166	0.42	0.10	2.85
October									
Complaint Water	10	0	0.0	0	0.0	10	0.25	0.11	0.39
FIELD DISTRIBUTION	163	1	0.6	0	0.0	75	0.32	0.10	0.80
FIELD DISTRIBUTION - PLPH	73	0	0.0	0	0.0				
FIELD RESERVOIR	65	0	0.0	0	0.0	65	0.39	0.10	1.18
FIELD RESERVOIR - PLPH (duplicate-not counted)	65	0	0.0	0	0.0				
Monthly	238	1	0.4	0	0.0	150	0.33	0.10	1.18
Year to Date	2,762	9	0.3	0	0.0	1,439	0.41	0.10	42.04

2.2.2 Bacteriological Data: Distribution System

2024

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 AEPA 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

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
March	13	0	0.0	0	0.0	13	0.18	0.11	0.42
April	16	0	0.0	0	0.0	16	0.35	0.12	0.75
May	11	0	0.0	0	0.0	11	0.27	0.10	0.49
June	13	0	0.0	0	0.0	13	0.39	0.11	0.91
July	11	0	0.0	0	0.0	11	0.64	0.24	1.66
August	19	0	0.0	0	0.0	19	4.04	0.10	42.04
September	13	0	0.0	0	0.0	13	0.48	0.14	1.12
October	10	0	0.0	0	0.0	10	0.25	0.11	0.39
Year to Date	128	0	0.0	0	0.0	128	0.83	0.10	42.04
Samples from Depressurizations									
January	70	0	0.0	0	0.0				
February	48	0	0.0	0	0.0				
March	37	0	0.0	0	0.0				
April	45	0	0.0	0	0.0				
May	44	0	0.0	0	0.0				
June	42	0	0.0	0	0.0				
July	42	0	0.0	0	0.0				
August	32	0	0.0	0	0.0				
September	48	0	0.0	0	0.0				
October	49	0	0.0	0	0.0				
Year to Date	457	0	0.0	0	0.0				

2.2.3 Giardia and Cryptosporidium

2024

Treated Water entering the distribution system

	Cryptosporidium oocysts/100L		Giardia cysts/100L	
	E.L. Smith	Rossdale	E.L. Smith	Rossdale
23 - Jan		<0.1		<0.1
	<0.09		<0.09	
12 - Feb		<0.1		<0.1
	<0.09		<0.09	
21 - Mar		<0.1		<0.1
	<0.1		<0.1	
15 - Apr	<0.1		<0.1	
16 - Apr		<0.1		<0.1
13 - May	<0.1		<0.1	
14 - May		<0.1		<0.1
11 - Jun	<0.1		<0.1	
12 - Jun		<0.1		<0.1
11 - Jul		<0.1		<0.1
	<0.1		<0.1	
1 - Aug		<0.1		<0.1
	<0.1		<0.1	
9 - Sep		<0.1		<0.1
10 - Sep	<0.09		<0.09	
16 - Sep		<0.1		<0.1
17 - Sep	<0.1		<0.1	
23 - Sep		<0.09		<0.09
24 - Sep	<0.09		<0.09	
15 - Oct		<0.1		<0.1
	<0.09		<0.09	
22 - Oct	<0.1		<0.1	
23 - Oct		<0.1		<0.1
28 - Oct		<0.1		<0.1
	<0.1		<0.1	

Water entering plant reservoir

	Cryptosporidium oocysts/100L	Giardia cysts/100L
	Rossdale	Rossdale
29 - Oct	<0.1	<0.1

2.2.3 Giardia and Cryptosporidium

2024

Raw Water

	Cryptosporidium oocysts/100L		Giardia cysts/100L	
	E.L. Smith	**Rossdale**	**E.L. Smith**	**Rossdale**
23 - Jan		<6.93		<6.93
	<1.28		<1.28	
12 - Feb		<39.6		158.4
	<1		9	
21 - Mar		5.5		39.0
	<4.2		8.3	
15 - Apr	13.0		13.0	
16 - Apr		<23.0		23.0
13 - May	<13.0		26.0	
14 - May		<14.0		14.0
11 - Jun	<3.7		<3.7	
12 - Jun		<2.6		7.8
11 - Jul		<9.5		9.5
	19.0		19.0	
1 - Aug		2.4		23.0
	<2.5		5.0	
9 - Sep		<3.89		<3.89
10 - Sep	<6.62		6.6	
16 - Sep		9.0		86.0
17 - Sep	<6.5		6.5	
23 - Sep		<0.99		3
24 - Sep	<1		7	
2 - Oct		<0.99		7.9
7 - Oct		<0.99		197.6
15 - Oct		3.4		215.5
	<1.13		56.6	
22 - Oct	<1.07		7.5	
		<25.22		<25.22
28 - Oct		<1.15		17.3
	<1.44		43.2	

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

October 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	4	<0.2	<0.2	<0.2	4	1.5	
Physical																		
Colour (TCU)	0.9	0.5	1.3	31	0.9	<0.5	1.4	31	0.9	<0.5	1.9	301	0.9	<0.5	1.8	304	(15)	10
Conductivity (uS/cm)	377	371	383	5	378	371	384	5	393	342	439	44	402	351	453	44		<1
FPA-Intensity (N/A)	0.84	0.31	1.25	5	0.69	0.50	1.12	5	1.10	0.31	1.88	54	0.99	0.50	2.12	54		
pH (N/A)	8.0	7.9	8.2	31	7.9	7.6	8.1	31	7.9	7.7	8.3	302	7.8	7.5	8.2	304	(7.0 - 10.5)	7.3-8.3
Total Dissolved Solids (mg/L)	203	203	203	1	213	213	213	1	227	195	252	10	230	213	250	10	(500)	
Turbidity (NTU)	<0.05	<0.04	0.09	31	0.07	<0.04	0.22	31	<0.04	<0.04	0.09	301	0.05	<0.04	0.22	304		0.3
Primary Inorganics (mg/L)																		
Antimony	<0.0005	<0.0005	<0.0005	1	<0.0005	<0.0005	<0.0005	1	<0.0004	<0.0002	<0.0005	10	<0.0004	<0.0002	<0.0005	10	0.006	
Arsenic	0.0002	0.0002	0.0002	1	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	0.0002	10	<0.0002	<0.0002	0.0002	10	0.01	
Barium	0.059	0.059	0.059	1	0.058	0.058	0.058	1	0.062	0.050	0.073	10	0.061	0.049	0.072	10	2	
Boron	0.009	0.009	0.009	1	0.009	0.009	0.009	1	0.010	0.009	0.012	10	0.010	0.008	0.012	10	2	
Bromate, dissolved	<0.005	<0.005	<0.005	5	<0.005	<0.005	<0.005	5	<0.005	<0.003	<0.005	44	<0.005	<0.003	<0.005	44	0.01	
Cadmium	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	10	<0.0002	<0.0002	<0.0002	10	0.007	
Chlorate Dissolved	0.22	0.20	0.25	5	0.12	0.11	0.14	5	0.24	0.18	0.33	44	0.12	<0.05	0.23	44	1	
Chlorite Dissolved	<0.005	<0.005	<0.005	5	<0.005	<0.005	<0.005	5	<0.023	<0.005	<0.200	44	<0.023	<0.005	<0.200	44	1	
Chromium	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	10	<0.0002	<0.0002	<0.0002	10	0.05	
Copper	<0.002	<0.002	<0.002	1	<0.002	<0.002	<0.002	1	<0.003	<0.002	<0.005	10	<0.003	<0.002	<0.005	10	2 (1)	
Fluoride	0.70	0.62	0.73	31	0.71	0.68	0.76	31	0.68	0.61	0.76	301	0.69	0.62	0.79	304	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	10	<0.0002	<0.0002	<0.0002	10	0.005	
Manganese	<0.002	<0.002	<0.002	1	<0.002	<0.002	<0.002	1	<0.002	<0.002	<0.002	10	<0.002	<0.002	<0.002	10	0.12 (0.02)	
Mercury	<0.0026	<0.00020	<0.0050	2	<0.0026	<0.00020	<0.0050	2	<0.0012	<0.00005	<0.0050	14	<0.0012	<0.00005	<0.0050	14	0.001	
Nitrate (as N) Dissolved	<0.01	<0.01	0.02	5	0.02	<0.01	0.03	5	0.05	<0.01	0.17	44	0.05	<0.01	0.17	44	10	
Nitrite (as N) Dissolved	<0.010	<0.010	<0.010	5	<0.010	<0.010	<0.010	5	<0.010	<0.005	0.020	44	<0.010	<0.005	0.020	44	1	
Selenium	0.0003	0.0003	0.0003	1	0.0003	0.0003	0.0003	1	0.0003	0.0002	0.0004	10	0.0003	0.0002	0.0003	10	0.05	
Total Chlorine	2.16	2.00	2.32	31	2.15	2.04	2.30	31	2.19	1.91	2.40	301	2.14	1.87	2.35	304	>1.0	>1.0 and <2.4
Uranium	<0.0005	<0.0005	<0.0005	1	<0.0005	<0.0005	<0.0005	1	<0.0005	<0.0005	0.0006	10	<0.0005	<0.0005	0.0005	10	0.02	

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

October 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	<0.10	<0.10	<0.10	1	<0.25	<0.25	<0.25	1	<0.11	<0.05	<0.25	4	<0.15	<0.05	<0.25	4	100	
Atrazine	<0.05	<0.05	<0.05	1	<0.05	<0.05	<0.05	1	<0.05	<0.05	<0.05	4	<0.05	<0.05	<0.05	4	5	
Benzene	<0.5	<0.5	<0.5	30	<0.5	<0.5	<0.5	31	<0.5	<0.5	0.6	301	<0.5	<0.5	<0.5	304	5	
Benzo(a)pyrene	<0.005	<0.005	<0.005	1	<0.005	<0.005	<0.005	1	<0.005	<0.005	<0.005	4	<0.005	<0.005	<0.005	4	0.04	
Bromoxynil	<0.10	<0.10	<0.10	1	<0.25	<0.25	<0.25	1	<0.11	<0.05	<0.25	4	<0.15	<0.05	<0.25	4	5	
Carbon Tetrachloride	<0.5	<0.5	<0.5	30	<0.5	<0.5	<0.5	31	<0.5	<0.5	<1.0	284	<0.5	<0.5	<1.0	285	2	
Chlorobenzene	<0.5	<0.5	<0.5	30	<0.5	<0.5	<0.5	31	<0.5	<0.5	<0.5	301	<0.5	<0.5	<0.5	304	80 (30)	
Chlorpyrifos	<0.1	<0.1	<0.1	1	<0.1	<0.1	<0.1	1	<0.1	<0.1	<0.1	4	<0.1	<0.1	<0.1	4	90	
Cyanazine	<0.1	<0.1	<0.1	1	<0.1	<0.1	<0.1	1	<0.1	<0.1	<0.1	4	<0.1	<0.1	<0.1	4		
Diazinon	<0.025	<0.025	<0.025	1	<0.025	<0.025	<0.025	1	<0.025	<0.025	<0.025	4	<0.025	<0.025	<0.025	4		
Dicamba	<0.2	<0.2	<0.2	1	<0.5	<0.5	<0.5	1	<0.2	<0.1	<0.5	4	<0.3	<0.1	<0.5	4	110	
Dichlorobenzene (1,2)	<0.5	<0.5	<0.5	30	<0.5	<0.5	<0.5	31	<0.5	<0.5	<0.5	284	<0.5	<0.5	<0.5	285		
Dichlorobenzene (1,4)	<0.5	<0.5	<0.5	30	<0.5	<0.5	<0.5	31	<0.5	<0.5	<0.5	284	<0.5	<0.5	<0.5	285	5 (1)	
Dichloroethane (1,2)	<0.5	<0.5	<0.5	30	<0.5	<0.5	<0.5	31	<0.5	<0.5	<0.5	283	<0.5	<0.5	<0.5	284	5	
Dichloroethylene (1,1)	<0.5	<0.5	<0.5	30	<0.5	<0.5	<0.5	31	<0.5	<0.5	<3.0	284	<0.5	<0.5	<3.0	285	14	
Dichlorophenol (2,4)				0				0	<0.2	<0.2	<0.3	3	<0.2	<0.2	<0.3	3		
Diclofop-methyl	<0.1	<0.1	<0.1	1	<0.1	<0.1	<0.1	1	<0.1	<0.1	<0.1	4	<0.1	<0.1	<0.1	4		
Dimethoate	<0.05	<0.05	<0.05	1	<0.05	<0.05	<0.05	1	<0.05	<0.05	<0.05	4	<0.05	<0.05	<0.05	4	20	
Diuron	<0.05	<0.05	<0.05	1	<0.05	<0.05	<0.05	1	<0.05	<0.05	<0.05	4	<0.05	<0.05	<0.05	4		
Ethylbenzene	<0.5	<0.5	<0.5	30	<0.5	<0.5	<0.5	31	<0.5	<0.5	<0.5	301	<0.5	<0.5	<0.5	304	140 (1.6)	
Glyphosate	<0.2	<0.2	<0.2	1	<0.2	<0.2	<0.2	1	<0.3	<0.2	<0.5	4	<0.3	<0.2	<0.5	4	280	
Haloacetic Acids, (HAA5)	10.8	10.8	10.8	1	9.71	9.71	9.71	1	22.8	10.8	47.1	10	21.74	9.71	42.30	10	80	40
Malathion	<0.025	<0.025	<0.025	1	<0.025	<0.025	<0.025	1	<0.025	<0.025	<0.025	4	<0.025	<0.025	<0.025	4	190	
MCPA	<0.10	<0.10	<0.10	1	<0.25	<0.25	<0.25	1	<0.11	<0.05	<0.25	4	<0.15	<0.05	<0.25	4	100	
Methylene Chloride	<0.5	<0.5	<0.5	30	<0.5	<0.5	<0.5	31	<0.5	<0.5	<0.5	284	<0.5	<0.5	<0.5	285	50	
Metolachlor	<0.025	<0.025	<0.025	1	<0.025	<0.025	<0.025	1	<0.025	<0.025	<0.025	4	<0.025	<0.025	<0.025	4		
Metribuzin	<0.1	<0.1	<0.1	1	<0.1	<0.1	<0.1	1	<0.1	<0.1	<0.1	4	<0.1	<0.1	<0.1	4	80	
NDMA	<0.0014	<0.0014	<0.0014	1	<0.0011	<0.0011	<0.0011	1	<0.0026	<0.0009	<0.0060	10	<0.0022	<0.0009	<0.0060	10	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	4	<0.4	<0.4	<0.4	4	0.4	
Paraquat (as dichloride)	<1	<1	<1	1	<1	<1	<1	1	<1	<1	<1	3	<1	<1	<1	3		
Pentachlorophenol				0				0	<0.5	<0.5	<0.5	3	<0.5	<0.5	<0.5	3	60 (30)	
Perfluorooctane sulfonic acid (PFOS)	<0.002	<0.002	<0.002	1	<0.002	<0.002	<0.002	1	<0.007	<0.002	<0.020	4	<0.007	<0.002	<0.020	4	0.6	
Perfluorooctanoic acid (PFOA)	<0.002	<0.002	<0.002	1	<0.002	<0.002	<0.002	1	<0.007	<0.002	<0.020	4	<0.007	<0.002	<0.020	4	0.0002	
Phorate	<12.50	<12.50	<12.50	1	<0.25	<0.25	<0.25	1	<3.31	<0.25	<12.50	4	<0.25	<0.25	<0.25	4		
Picloram	<0.2	<0.2	<0.2	1	<0.5	<0.5	<0.5	1	<0.2	<0.1	<0.5	4	<0.3	<0.1	<0.5	4		
Simazine	<0.1	<0.1	<0.1	1	<0.1	<0.1	<0.1	1	<0.1	<0.1	<0.1	4	<0.1	<0.1	<0.1	4		
Terbufos	<25.0	<25.0	<25.0	1	<0.5	<0.5	<0.5	1	<6.6	<0.5	<25.0	4	<0.5	<0.5	<0.5	4		
Tetrachloroethylene	<0.5	<0.5	<0.5	30	<0.5	<0.5	<0.5	31	<0.5	<0.5	<0.5	301	<0.5	<0.5	<0.5	304	10	

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

October 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)																		
Toluene	<0.5	<0.5	<0.5	30	<0.5	<0.5	<0.5	31	<0.5	<0.5	1.6	301	<0.5	<0.5	3.3	304	60 (24)	
Total Xylenes	<1.0	<1.0	<1.0	30	<1.0	<1.0	<1.0	31	<1.0	<1.0	<2.5	284	<1.0	<1.0	<2.5	285	90	
Trichloroethylene	<0.5	<0.5	<0.5	30	<0.5	<0.5	<0.5	31	<0.5	<0.5	<0.5	301	<0.5	<0.5	<0.5	304	5	
Trifluralin	<0.1	<0.1	<0.1	1	<0.1	<0.1	<0.1	1	<0.1	<0.1	<0.1	4	<0.1	<0.1	<0.1	4		
Trihalomethanes	14.5	11.3	25.5	30	12.5	9.6	20.8	31	19.1	6.6	39.9	284	17.9	5.1	39.5	285	100	50
Vinyl Chloride	<1.0	<1.0	<1.0	30	<1.0	<1.0	<1.0	31	<1.0	<0.5	<1.0	300	<1.0	<0.5	<1.0	303	2	
Radionuclides (Bq/L)																		
Cesium-137				0				0	<0.2	<0.2	<0.2	1	<0.2	<0.2	<0.2	1	10	
Gross Alpha				0				0	<0.12	<0.12	<0.12	1	<0.15	<0.15	<0.15	1	(0.5)	
Gross Beta				0				0	<0.07	<0.07	<0.07	1	<0.07	<0.07	<0.07	1	(1.0)	
Iodine-131				0				0	<0.4	<0.4	<0.4	1	<0.4	<0.4	<0.4	1	6	
Lead-210				0				0	<0.02	<0.02	<0.02	1	<0.02	<0.02	<0.02	1	0.2	
Radium-226				0				0	<0.005	<0.005	<0.005	1	<0.005	<0.005	<0.005	1	0.5	
Strontium-90				0				0	<0.05	<0.05	<0.05	1	<0.05	<0.05	<0.05	1	5	
Tritium				0				0	<40	<40	<40	1	<40	<40	<40	1	7000	

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

October 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 Inorganics (mg/L)																		
Alkalinity Total (mg CaCO3/L)	117	113	125	31	116	110	121	31	117	99	141	301	118	8	140	304		
Aluminum	0.111	0.111	0.111	1	0.098	0.098	0.098	1	0.065	0.023	0.122	10	0.059	0.026	0.120	10	2.9	0.1/0.2
Ammonia as NH3	0.14	0.09	0.18	13	0.13	0.09	0.18	14	0.13	0.08	0.18	102	0.12	0.08	0.18	103		
Beryllium	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	10	<0.0002	<0.0002	<0.0002	10		
Bromide Dissolved	<0.03	<0.03	<0.03	5	<0.03	<0.03	<0.03	5	<0.02	<0.01	<0.05	44	<0.02	<0.01	<0.05	44		
Calcium	45.3	45.3	45.3	1	44.9	44.9	44.9	1	47.0	43.7	51.3	10	47.0	44.2	51.4	10		
Calcium Hardness Calculated	113	113	113	1	112	112	112	1	116	109	125	6	116	110	124	6		
Chloride Dissolved	4.6	4.3	5.0	5	5.78	5.45	6.16	5	6.0	4.3	11.4	44	6.88	4.85	12.10	44	(250)	
Cobalt	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	10	<0.0002	<0.0002	<0.0002	10		
Free Chlorine	<0.07	<0.07	<0.07	1	<0.07	<0.07	<0.07	1	<0.07	<0.07	<0.07	10	<0.07	<0.07	<0.07	10		
Hardness, Ca (mg CaCO3/L)	115	110	119	30	115	111	120	30	117	98	141	295	116	96	138	298		
Iron	<0.005	<0.005	<0.005	1	<0.005	<0.005	<0.005	1	<0.005	<0.005	0.005	10	<0.005	<0.005	<0.005	10	(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	10	<0.001	<0.001	<0.001	10		
Lithium	0.0037	0.0037	0.0037	1	0.004	0.004	0.004	1	0.0038	0.0031	0.0043	10	0.003	0.003	0.004	10		
Magnesium	13.9	13.9	13.9	1	13.7	13.7	13.7	1	13.7	12.6	15.0	10	13.8	12.6	15.1	10		
Molybdenum	0.0007	0.0007	0.0007	1	0.0006	0.0006	0.0006	1	0.0008	0.0007	0.0010	10	0.0008	0.0006	0.0009	10		
Nickel	<0.0005	<0.0005	<0.0005	1	<0.0005	<0.0005	<0.0005	1	<0.0005	<0.0005	0.0005	10	<0.0005	<0.0005	0.0005	10		
Phosphate,Ortho (as P)	<0.02	<0.02	<0.02	2	<0.02	<0.02	<0.02	2	<0.02	<0.02	<0.02	20	<0.02	<0.02	<0.02	18		
Phosphorus	<0.02	<0.02	<0.02	1	<0.02	<0.02	<0.02	1	<0.02	<0.02	<0.02	10	<0.02	<0.02	<0.02	10		
Potassium	0.7	0.7	0.7	1	0.7	0.7	0.7	1	0.8	0.7	1.1	10	0.8	0.7	1.0	10		
Silicon	1.44	1.44	1.44	1	1.44	1.44	1.44	1	1.96	1.44	2.27	10	1.94	1.44	2.27	10		
Silver	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.00022	<0.0002	1	0.0002	<0.0002	<0.0002	10	<0.0002	<0.0002	<0.0002	10		
Sodium	7.1	7.1	7.1	1	7.6	7.6	7.6	1	10.1	6.8	16.1	10	12.8	7.4	18.9	10	(200)	
Strontium	0.444	0.444	0.444	1	0.441	0.441	0.441	1	0.441	0.385	0.488	10	0.438	0.408	0.478	10	7.0	
Sulphate Dissolved	64.3	59.3	67.3	5	65.5	60.5	68.5	5	71.7	59.3	86.8	44	74.3	60.4	95.1	44	(500)	
Thallium	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	1	<0.0003	<0.0002	<0.0005	10	<0.0003	<0.0002	<0.0005	10		
Tin	<0.0005	<0.0005	<0.0005	1	<0.0005	<0.0005	<0.0005	1	<0.0005	<0.0005	<0.0005	10	<0.0005	<0.0005	<0.0005	10		
Titanium	<0.0005	<0.0005	<0.0005	1	<0.0005	<0.0005	<0.0005	1	<0.0005	<0.0005	<0.0005	10	<0.0005	<0.0005	<0.0005	10		
Total Hardness (mg/L CaCO3)	176	169	182	30	175	168	179	30	177	149	218	295	176	145	211	298		
Total Hardness Calculated	171	171	171	1	169	169	169	1	172	162	182	6	171	162	180	6		
Vanadium	<0.0005	<0.0005	<0.0005	1	<0.0005	<0.0005	<0.0005	1	<0.0005	<0.0005	<0.0005	10	<0.0005	<0.0005	<0.0005	10		
Zinc	<0.005	<0.005	<0.005	1	<0.005	<0.005	<0.005	1	<0.005	<0.005	<0.005	10	<0.005	<0.005	<0.005	10	(5.0)	
Zirconium	<0.001	<0.001	<0.001	1	<0.001	<0.001	<0.001	1	<0.001	<0.001	<0.001	10	<0.001	<0.001	<0.001	10		

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

October 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)																		
6:2 Fluorotelomer sulfonic acid(6:2 FTS)	<0.002	<0.002	<0.002	1	<0.002	<0.002	<0.002	1	<0.007	<0.002	<0.020	4	<0.007	<0.002	<0.020	4		
8:2 Fluorotelomer sulfonic acid(8:2 FTS)	<0.002	<0.002	<0.002	1	<0.002	<0.002	<0.002	1	<0.007	<0.002	<0.020	4	<0.007	<0.002	<0.020	4		
Aldicarb	<1.0	<1.0	<1.0	1	<0.1	<0.1	<0.1	1	<0.3	<0.1	<1.0	4	<0.1	<0.1	<0.1	4		
Aldrin	<0.008	<0.008	<0.008	1	<0.008	<0.008	<0.008	1	<0.008	<0.008	<0.008	4	<0.008	<0.008	<0.008	4		
Azinphos-methyl	<0.1	<0.1	<0.1	1	<0.1	<0.1	<0.1	1	<0.1	<0.1	<0.1	4	<0.1	<0.1	<0.1	4		
Bromochloroacetic acid	<1	<1	<1	1	<1	<1	<1	1	<1	<1	<1	10	<1	<1	<1	10		
Bromodichloromethane	0.9	0.5	1.4	30	0.8	0.5	1.2	31	1.2	<0.5	2.6	301	1.0	<0.5	2.4	304		16
Bromoform	<0.5	<0.5	<0.5	30	<0.5	<0.5	<0.5	31	<0.5	<0.5	<1.0	301	<0.5	<0.5	<1.0	304		
Bromomethane				0				0	<0.5	<0.5	<0.5	17	<0.5	<0.5	<0.5	19		
Carbaryl	<0.05	<0.05	<0.05	1	<0.05	<0.05	<0.05	1	<0.05	<0.05	<0.05	4	<0.05	<0.05	<0.05	4		
Carbofuran	<0.025	<0.025	<0.025	1	<0.025	<0.025	<0.025	1	<0.025	<0.025	<0.025	4	<0.025	<0.025	<0.025	4		
Chloroethane				0				0	<0.5	<0.5	<0.5	17	<0.5	<0.5	<0.5	19		
Chloroform	13.3	10.10	24.1	30	11.4	8.50	19.5	31	18.3	5.70	38.7	301	17.3	4.30	37.7	304		
Chloromethane				0				0	<5	<5	<5	17	<5	<5	<5	19		
Dibromoacetic acid	<1	<1	<1	1	<1	<1	<1	1	<1	<1	<1	10	<1	<1	<1	10		
Dibromochloromethane	<0.5	<0.5	<0.5	30	<0.5	<0.5	<0.5	31	<0.5	<0.5	<0.5	301	<0.5	<0.5	<0.5	304		
Dichloroacetic acid	4.7	4.7	4.7	1	4.69	4.69	4.69	1	11.0	4.7	21.1	10	10.91	4.69	19.80	10		
Dichlorobenzene (1,3)	<0.5	<0.5	<0.5	30	<0.5	<0.5	<0.5	31	<0.5	<0.5	<0.5	284	<0.5	<0.5	<0.5	285		
Dichloroethylene, cis (1,2)	<0.5	<0.5	<0.5	30	<0.5	<0.5	<0.5	31	<0.5	<0.5	<0.5	284	<0.5	<0.5	<0.5	285		
Dichloroethylene, trans (1,2)	<0.5	<0.5	<0.5	30	<0.5	<0.5	<0.5	31	<0.5	<0.5	<0.5	284	<0.5	<0.5	<0.5	285		
Dichloropropane (1,2)	<0.5	<0.5	<0.5	30	<0.5	<0.5	<0.5	31	<0.5	<0.5	<0.5	284	<0.5	<0.5	<0.5	285		
Dieldrin	<0.008	<0.008	<0.008	1	<0.008	<0.008	<0.008	1	<0.008	<0.008	<0.008	4	<0.008	<0.008	<0.008	4		
Methyl t-Butyl Ether (MTBE)	<0.5	<0.5	<0.5	30	<0.5	<0.5	<0.5	31	<0.5	<0.5	0.5	284	<0.5	<0.5	<0.5	285	(15)	
MIBK	<1	<1	<1	30	<1	<1	<1	31	<1	<1	<1	284	<1	<1	<1	285		
Monobromoacetic acid	<1	<1	<1	1	<1	<1	<1	1	<1	<1	<1	10	<1	<1	<1	10		
Monochloroacetic acid	<1.00	<1.00	<1.00	1	<1.00	<1.00	<1.00	1	<1.07	<1.00	1.58	10	<1.09	<1.00	1.68	10		
Parathion	<0.1	<0.1	<0.1	1	<0.1	<0.1	<0.1	1	<0.1	<0.1	<0.1	4	<0.1	<0.1	<0.1	4		
Perfluorobutane Sulfonate (PFBS)				0				0	<2	<2	<2	1	<2	<2	<2	1		
Perfluorobutane sulfonic acid (PFBS)	<0.002	<0.002	<0.002	1	<0.002	<0.002	<0.002	1	<0.007	<0.002	<0.020	4	<0.007	<0.002	<0.020	4		
Perfluorobutanoic acid (PFBA)	<0.02	<0.02	<0.02	1	<0.02	<0.02	<0.02	1	<0.69	<0.02	<2.00	6	<0.69	<0.02	<2.00	6		
Perfluorodecanoic Acid (PFDA)				0				0	<2	<2	<2	2	<2	<2	<2	2		
Perfluorododecanoic Acid (PFDoA)				0				0	<2	<2	<2	2	<2	<2	<2	2		
Perfluoroheptanoic acid (PFHpA)	<0.002	<0.002	<0.002	1	<0.002	<0.002	<0.002	1	<0.671	<0.002	<2.000	6	<0.671	<0.002	<2.000	6		
Perfluorohexane sulfonic acid (PFHxS)	<0.002	<0.002	<0.002	1	<0.002	<0.002	<0.002	1	<0.007	<0.002	<0.020	4	<0.007	<0.002	<0.020	4		
Perfluorohexanoic acid (PFHxA)	<0.002	<0.002	<0.002	1	<0.002	<0.002	<0.002	1	<0.671	<0.002	<2.000	6	<0.671	<0.002	<2.000	6		
Perfluorononanoic acid (PFNA)	<0.002	<0.002	<0.002	1	<0.002	<0.002	<0.002	1	<0.671	<0.002	<2.000	6	<0.671	<0.002	<2.000	6		
Perfluoropentanoic acid (PFPeA)	<0.002	<0.002	<0.002	1	<0.002	<0.002	<0.002	1	<0.671	<0.002	<2.000	6	<0.671	<0.002	<2.000	6		
Perfluoroundecanoic Acid (PFUnA)				0				0	<2	<2	<2	2	<2	<2	<2	2		

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

October 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)																		
Prometryn	<0.025	<0.025	<0.025	1	<0.025	<0.025	<0.025	1	<0.025	<0.025	<0.025	3	<0.025	<0.025	<0.025	3		
Styrene	<0.5	<0.5	<0.5	30	<0.5	<0.5	<0.5	31	<0.5	<0.5	<0.5	301	<0.5	<0.5	<0.5	304		
Tetrachloroethane (1,1,2,2)	<0.5	<0.5	<0.5	30	<0.5	<0.5	<0.5	31	<0.5	<0.5	<1.0	284	<0.5	<0.5	<1.0	285		
Total Organic Carbon	1.3	1.1	1.6	5	1.2	0.9	1.4	5	1.6	1.0	2.8	44	1.5	0.9	2.5	44		
Total Volatile Organics (NonTHM)	4.0	3.1	5.0	30	4	4	5	31	2.3	<1.0	6.1	284	2	<1	6	285		
Total Volatile Organics (Unknown)				0				0	1.3	<0.5	7.7	41	1.3	<0.5	3.6	43		
Triallate	<0.1	<0.1	<0.1	1	<0.1	<0.1	<0.1	1	<0.1	<0.1	<0.1	4	<0.1	<0.1	<0.1	4		
Trichloroacetic acid	6.06	6.06	6.06	1	5.02	5.02	5.02	1	11.44	6.06	24.40	10	10.54	5.02	20.80	10		
Trichlorobenzene (1,2,4)	<0.5	<0.5	<0.5	30	<0.5	<0.5	<0.5	31	<0.5	<0.5	<0.5	284	<0.5	<0.5	<0.5	285		
Trichloroethane (1,1,1)	<0.5	<0.5	<0.5	30	<0.5	<0.5	<0.5	31	<0.5	<0.5	<0.5	284	<0.5	<0.5	<0.5	285		
Xylene (1,2)	<0.5	<0.5	<0.5	30	<0.5	<0.5	<0.5	31	<0.5	<0.5	<0.5	284	<0.5	<0.5	<0.5	285		
Xylene (1,4)	<0.5	<0.5	<0.5	30	<0.5	<0.5	<0.5	31	<0.5	<0.5	0.6	284	<0.5	<0.5	0.9	285		

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 Protected Areas (AEPA) Operating Approval 638-04-01. 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 AEPA Operating Approval 638-04-01

*** 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

October 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)	<0.05	<0.04	0.11	31	0.07	<0.04	0.39	31	0.09	<0.04	12.90	302	0.05	<0.04	0.39	304		0.3
UV 254 %T ****	<95.9	<94.4	<96.8	30	<96.0	<94.0	<96.6	31	<94.4	<90.1	<96.9	300	<94.4	<90.7	<98.9	304		
Primary Inorganics (mg/L)																		
Bromate, dissolved	<0.005	<0.005	<0.005	5	<0.005	<0.005	<0.005	5	<0.005	<0.003	<0.005	44	<0.005	<0.003	<0.005	44	0.01	
Chlorate Dissolved	0.22	0.19	0.24	5	0.12	0.10	0.15	5	0.23	0.18	0.34	44	0.11	<0.05	0.20	44	1	
Chlorite Dissolved	<0.005	<0.005	<0.005	5	<0.005	<0.005	<0.005	5	<0.023	<0.005	<0.200	44	<0.023	<0.005	<0.200	44	1	
Nitrate (as N) Dissolved	<0.01	<0.01	0.02	5	0.02	<0.01	0.03	5	0.05	<0.01	0.17	44	0.05	<0.01	0.16	44	10	
Nitrite (as N) Dissolved	<0.010	<0.010	<0.010	5	<0.010	<0.010	<0.010	5	<0.010	<0.005	0.020	44	<0.010	<0.005	0.020	44	1	
Primary Organics (ug/L)																		
Benzene	<0.5	<0.5	<0.5	30	<0.5	<0.5	<0.5	31	<0.5	<0.5	<0.5	301	<0.5	<0.5	<0.5	304	5	
Carbon Tetrachloride	<0.5	<0.5	<0.5	30	<0.5	<0.5	<0.5	31	<0.5	<0.5	<1.0	284	<0.5	<0.5	<1.0	285	2	
Chlorobenzene	<0.5	<0.5	<0.5	30	<0.5	<0.5	<0.5	31	<0.5	<0.5	<0.5	301	<0.5	<0.5	<0.5	304	80 (30)	
Dichlorobenzene (1,2)	<0.5	<0.5	<0.5	30	<0.5	<0.5	<0.5	31	<0.5	<0.5	<0.5	284	<0.5	<0.5	<0.5	285		
Dichlorobenzene (1,4)	<0.5	<0.5	<0.5	30	<0.5	<0.5	<0.5	31	<0.5	<0.5	<0.5	284	<0.5	<0.5	<0.5	285	5 (1)	
Dichloroethane (1,2)	<0.5	<0.5	<0.5	30	<0.5	<0.5	<0.5	31	<0.5	<0.5	<0.5	283	<0.5	<0.5	<0.5	284	5	
Dichloroethylene (1,1)	<0.5	<0.5	<0.5	30	<0.5	<0.5	<0.5	31	<0.5	<0.5	<3.0	284	<0.5	<0.5	<3.0	285	14	
Ethylbenzene	<0.5	<0.5	<0.5	30	<0.5	<0.5	<0.5	31	<0.5	<0.5	<0.5	301	<0.5	<0.5	<0.5	304	140 (1.6)	
Methylene Chloride	<0.5	<0.5	<0.5	30	<0.5	<0.5	<0.5	31	<0.5	<0.5	<0.5	284	<0.5	<0.5	<0.5	285	50	
Tetrachloroethylene	<0.5	<0.5	<0.5	30	<0.5	<0.5	<0.5	31	<0.5	<0.5	<0.5	301	<0.5	<0.5	<0.5	304	10	
Toluene	<0.5	<0.5	<0.5	30	<0.5	<0.5	<0.5	31	<0.5	<0.5	4.1	301	<0.5	<0.5	1.8	304	60 (24)	
Total Xylenes	<1.0	<1.0	<1.0	30	<1.0	<1.0	<1.0	31	<1.0	<1.0	<2.5	284	<1.0	<1.0	<2.5	285	90	
Trichloroethylene	<0.5	<0.5	<0.5	30	<0.5	<0.5	0.5	31	<0.5	<0.5	<0.5	301	<0.5	<0.5	0.5	304	5	
Trihalomethanes	12.8	9.6	22.6	30	9.8	7.0	16.2	31	15.9	5.3	38.4	284	14.0	3.7	33.7	285	100	50
Vinyl Chloride	<1.0	<1.0	<1.0	30	<1.0	<1.0	<1.0	31	<1.0	<0.5	<1.0	300	<1.0	<0.5	<1.0	303	2	
Secondary Inorganics (mg/L)																		
Ammonia as NH3	0.14	0.12	0.18	13	0.13	0.08	0.16	14	0.12	0.08	0.18	102	0.12	0.06	0.17	103		
Bromide Dissolved	<0.03	<0.03	<0.03	5	<0.03	<0.03	<0.03	5	<0.02	<0.01	<0.05	44	<0.02	<0.01	<0.05	44		
Chloride Dissolved	4.6	4.3	5.0	5	5.70	5.24	6.09	5	6.3	4.3	19.9	44	6.85	4.63	12.90	44	(250)	
Sulphate Dissolved	64.4	59.0	67.7	5	65.0	59.8	68.8	5	72.2	59.0	95.8	44	74.2	59.8	95.3	44	(500)	

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

October 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	0.9	0.5	1.2	30	0.7	<0.5	1.1	31	1.0	<0.5	2.3	301	0.9	<0.5	2.1	304		16
Bromoform	<0.5	<0.5	<0.5	30	<0.5	<0.5	<0.5	31	<0.5	<0.5	<1.0	301	<0.5	<0.5	<1.0	304		
Bromomethane				0				0	<0.5	<0.5	<0.5	17	<0.5	<0.5	<0.5	19		
Chloroethane				0				0	<0.5	<0.5	<0.5	17	<0.5	<0.5	<0.5	19		
Chloroform	11.7	8.50	21.3	30	8.8	6.20	14.9	31	15.3	4.60	37.4	301	13.7	3.00	33.2	304		
Chloromethane				0				0	<5	<5	<5	17	<5	<5	<5	19		
Dibromochloromethane	<0.5	<0.5	<0.5	30	<0.5	<0.5	<0.5	31	<0.5	<0.5	0.5	301	<0.5	<0.5	<0.5	304		
Dichlorobenzene (1,3)	<0.5	<0.5	<0.5	30	<0.5	<0.5	<0.5	31	<0.5	<0.5	<0.5	284	<0.5	<0.5	<0.5	285		
Dichloroethylene, cis (1,2)	<0.5	<0.5	<0.5	30	<0.5	<0.5	<0.5	31	<0.5	<0.5	<0.5	284	<0.5	<0.5	<0.5	285		
Dichloroethylene, trans (1,2)	<0.5	<0.5	<0.5	30	<0.5	<0.5	<0.5	31	<0.5	<0.5	<0.5	284	<0.5	<0.5	<0.5	285		
Dichloropropane (1,2)	<0.5	<0.5	<0.5	30	<0.5	<0.5	<0.5	31	<0.5	<0.5	<0.5	284	<0.5	<0.5	<0.5	285		
Methyl t-Butyl Ether (MTBE)	<0.5	<0.5	<0.5	30	<0.5	<0.5	<0.5	31	<0.5	<0.5	<0.5	284	<0.5	<0.5	<0.5	285	(15)	
MIBK	<1	<1	<1	30	<1	<1	<1	31	<1	<1	<1	284	<1	<1	<1	285		
Styrene	<0.5	<0.5	<0.5	30	<0.5	<0.5	<0.5	31	<0.5	<0.5	<0.5	301	<0.5	<0.5	<0.5	304		
Tetrachloroethane (1,1,2,2)	<0.5	<0.5	<0.5	30	<0.5	<0.5	<0.5	31	<0.5	<0.5	<1.0	284	<0.5	<0.5	<1.0	285		
Total Volatile Organics (NonTHM)	4.1	2.9	5.0	30	4.1	3.1	5.0	31	2.2	<1.0	6.5	284	2.2	<1.0	6.7	285		
Total Volatile Organics (Unknown)				0				0	1.1	<0.5	2.4	38	1.1	<0.5	2.8	42		
Trichlorobenzene (1,2,4)	<0.5	<0.5	<0.5	30	<0.5	<0.5	<0.5	31	<0.5	<0.5	<0.5	284	<0.5	<0.5	<0.5	285		
Trichloroethane (1,1,1)	<0.5	<0.5	<0.5	30	<0.5	<0.5	<0.5	31	<0.5	<0.5	<0.5	284	<0.5	<0.5	<0.5	285		
Xylene (1,2)	<0.5	<0.5	<0.5	30	<0.5	<0.5	<0.5	31	<0.5	<0.5	<0.5	284	<0.5	<0.5	<0.5	285		
Xylene (1,4)	<0.5	<0.5	<0.5	30	<0.5	<0.5	<0.5	31	<0.5	<0.5	1.3	284	<0.5	<0.5	0.6	285		

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 Protected Areas (AEPA) Operating Approval 638-04-01. 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 638-04-01.

*** 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)

October 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	6	1.5	
Physical										
Colour (TCU)	0.7	0.7	0.7	1	0.8	0.6	1.1	4	(15)	10
pH (N/A)	7.7	7.6	8.0	31	7.8	7.6	8.0	312	(7.0 - 10.5)	7.3 - 8.3
Total Dissolved Solids (mg/L)	213	213	213	1	234	213	261	4	(500)	
Turbidity (NTU)	0.27	0.05	2.33	162	0.25	<0.04	5.03	1334		1.0
UV 254 %T	<94.7	<94.7	<94.7	1	<92.8	<90.1	<94.7	4		
Primary Inorganics (mg/L) **										
Antimony	<0.0005	<0.0005	<0.0005	1	<0.0004	<0.0002	<0.0005	5	0.006	
Arsenic	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	5	0.01	
Barium	0.057	0.057	0.057	1	0.062	0.057	0.074	5	2	
Boron	0.009	0.009	0.009	1	0.010	0.009	0.011	5	2	
Bromate Dissolved	<0.005	<0.005	<0.005	2	<0.005	<0.003	<0.005	21	0.01	
Cadmium	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	5	0.007	
Chlorate Dissolved	0.15	0.11	0.19	2	0.18	<0.08	0.30	21	1	
Chlorite Dissolved	<0.005	<0.005	<0.005	2	<0.033	<0.005	<0.200	21	1	
Chromium	<0.0002	<0.0002	<0.0002	1	0.0002	<0.0002	0.0003	5	0.05	
Copper	0.004	0.004	0.004	1	<0.003	<0.002	<0.005	5	2 (1)	
Fluoride	0.68	0.68	0.68	1	0.68	0.65	0.74	4	1.5	0.6 - 0.8
Lead	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	5	0.005	
Manganese	<0.002	<0.002	<0.002	1	<0.002	<0.002	<0.002	5	0.12 (0.02)	
Mercury	<0.00260	<0.00020	<0.00500	2	<0.00180	<0.00005	<0.00500	9	0.001	
Nitrate (as N) Dissolved	0.02	<0.01	0.06	31	0.04	<0.01	0.18	333	10	
Nitrite (as N) Dissolved	<0.010	<0.010	<0.010	31	<0.009	<0.005	0.040	333	1	
Selenium	0.0003	0.0003	0.0003	1	0.0003	<0.0002	0.0003	5	0.05	
Strontium	0.451	0.451	0.451	1	0.451	0.438	0.466	5	7.0	
Total Chlorine	1.79	0.09	2.24	162	1.87	0.09	2.44	1333	>0.5 and <3.0	>1.0 and <2.4
Uranium	<0.0005	<0.0005	<0.0005	1	<0.0005	<0.0005	<0.0005	5	0.02	

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

October 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	<0.25	<0.25	<0.25	1	<0.15	<0.05	<0.25	4	100	
Atrazine	<0.05	<0.05	<0.05	1	<0.05	<0.05	<0.05	4	5	
Atrazine+N-Dealkylated Metabolites				0	<0.1	<0.1	<0.1	1	0.005	
Azinphos-methyl	<0.1	<0.1	<0.1	1	<0.1	<0.1	<0.1	4	0.02	
Benzene	<0.5	<0.5	<0.5	6	<0.5	<0.5	<0.5	62	5	
Benzo(a)pyrene	<0.005	<0.005	<0.005	1	<0.005	<0.005	<0.005	4	0.04	
Bromoxynil	<0.25	<0.25	<0.25	1	<0.15	<0.05	<0.25	4	5	
Carbon Tetrachloride	<0.5	<0.5	<0.5	6	<0.5	<0.5	<0.5	62	2	
Chlorobenzene	<0.5	<0.5	<0.5	6	<0.5	<0.5	<0.5	62	80 (30)	
Chlorpyrifos	<0.1	<0.1	<0.1	1	<0.1	<0.1	<0.1	4	90	
Cyanazine	<0.1	<0.1	<0.1	1	<0.1	<0.1	<0.1	4		
Diazinon	<0.025	<0.025	<0.025	1	<0.025	<0.025	<0.025	4		
Dicamba	<0.5	<0.5	<0.5	1	<0.3	<0.1	<0.5	4	110	
Dichlorobenzene (1,2)	<0.5	<0.5	<0.5	6	<0.5	<0.5	<0.5	62		
Dichlorobenzene (1,4)	<0.5	<0.5	<0.5	6	<0.5	<0.5	<0.5	62	5 (1)	
Dichloroethane (1,2)	<0.5	<0.5	<0.5	6	<0.5	<0.5	<0.5	62	5	
Dichloroethylene (1,1)	<0.5	<0.5	<0.5	6	<0.5	<0.5	<0.5	55	14	
Dichlorophenol (2,4)				0	<0.2	<0.2	<0.3	3		
Diclofop-methyl	<0.1	<0.1	<0.1	1	<0.1	<0.1	<0.1	4		
Dimethoate	<0.05	<0.05	<0.05	1	<0.05	<0.05	<0.05	4	20	
Diquat	<1	<1	<1	1	<1	<1	<1	4	0.05	
Diuron	<0.05	<0.05	<0.05	1	<0.05	<0.05	<0.05	4		
Ethylbenzene	<0.5	<0.5	<0.5	6	<0.5	<0.5	<0.5	62	140 (1.6)	
Glyphosate	<0.2	<0.2	<0.2	1	<0.3	<0.2	<0.5	4	280	
Malathion	<0.025	<0.025	<0.025	1	<0.025	<0.025	<0.025	4	190	
MCPA	<0.25	<0.25	<0.25	1	<0.15	<0.05	<0.25	4	100	
Methylene Chloride	<0.5	<0.5	<0.5	6	<0.5	<0.5	<0.5	55	50	
Metolachlor	<0.025	<0.025	<0.025	1	<0.025	<0.025	<0.025	4		
Metribuzin	<0.1	<0.1	<0.1	1	<0.1	<0.1	<0.1	4	80	
NDMA (µg/L)	<0.00210	<0.00198	<0.00220	3	<0.00340	<0.00100	0.00690	30	0.040	10
Nitrilotriacetic acid	<0.4	<0.4	<0.4	1	<0.4	<0.4	<0.4	4	0.4	
Paraquat (as dichloride)	<1	<1	<1	1	<1	<1	<1	3	0.07	
Pentachlorophenol				0	<0.7	<0.5	<1.0	3	60 (30)	
Perfluorooctane sulfonic acid (PFOS)	<0.002	<0.002	<0.002	1	<0.007	<0.002	<0.020	4	0.0006	
Perfluorooctanoic acid (PFOA)	<0.002	<0.002	<0.002	1	<0.007	<0.002	<0.020	4	0.0002	
Phorate	<0.25	<0.25	<0.25	1	<0.25	<0.25	<0.25	4		
Picloram	<0.5	<0.5	<0.5	1	<0.3	<0.1	<0.5	4		
Simazine	<0.1	<0.1	<0.1	1	<0.1	<0.1	<0.1	4		
Terbufos	<0.5	<0.5	<0.5	1	<0.5	<0.5	<0.5	4		

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

October 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	62	10	
Tetrachlorophenol (2,3,4,6)				0	<0.5	<0.5	<0.5	3	100 (1)	
Toluene	<0.5	<0.5	<0.5	6	<0.5	<0.5	<0.5	62	60 (24)	
Total Xylenes	<1	<1	<1	6	<1	<1	<1	55	90	
Trichloroethylene	<0.5	<0.5	<0.5	6	<0.5	<0.5	<0.5	62	5	
Trichlorophenol (2,4,6)				0	<0.3	<0.2	<0.5	3	5 (2)	
Trifluralin	<0.1	<0.1	<0.1	1	<0.1	<0.1	<0.1	4		
Vinyl Chloride	<1	<1	<1	6	<1	<1	<1	55	2	

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

October 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	112	112	112	1	117	112	121	4		
Alkalinity, PHP (mg CaCO3/L)	<3	<3	<3	1	<3	<3	<3	4		
Aluminum	0.032	0.032	0.032	1	0.047	0.014	0.093	5	2.9	0.1/0.2
Ammonia as N	0.20	0.19	0.21	2	0.15	0.09	0.24	24		
Beryllium	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	5		
Bromide Dissolved	<0.03	<0.03	<0.03	2	<0.03	<0.01	<0.05	21		
Calcium	47.1	47.1	47.1	1	48.3	46.5	51.8	5		
Chloride Dissolved	5.48	4.88	6.07	2	6.56	4.87	8.73	21	(250)	
Cobalt	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	5		
Free Chlorine	<0.07	<0.07	<0.07	1	<0.07	<0.07	<0.07	4		
Iron	0.010	0.010	0.010	1	0.008	<0.005	0.013	5	(0.3)	0.3
Lanthanum	<0.001	<0.001	<0.001	1	<0.001	<0.001	<0.001	5		
Lithium	0.0037	0.0037	0.0037	1	0.0038	0.0034	0.0042	5		
Magnesium	13.9	13.9	13.9	1	14.1	13.4	15.3	5		
Molybdenum	0.0006	0.0006	0.0006	1	0.0008	0.0006	0.0010	5		
Nickel	0.0006	0.0006	0.0006	1	0.0006	<0.0005	0.0010	5		
Phosphorus	0.93	0.93	0.93	1	0.98	0.91	1.05	5		
Potassium	0.7	0.7	0.7	1	0.8	0.7	0.9	5		
Silicon	1.68	1.68	1.68	1	2.03	1.68	2.59	5		
Silver	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	5		
Sodium	6.9	6.9	6.9	1	10.3	6.9	13.5	5	(200)	
Sulphate Dissolved	67.5	67.2	67.7	2	71.1	59.0	82.4	21	(500)	
Thallium	<0.0002	<0.0002	<0.0002	1	<0.0003	<0.0002	<0.0005	5		
Tin	<0.0005	<0.0005	<0.0005	1	<0.0005	<0.0005	<0.0005	5		
Titanium	<0.0005	<0.0005	<0.0005	1	<0.0005	<0.0005	<0.0005	5		
Total Hardness (mg/L CaCO3)	174	174	174	1	178	171	183	4		
Total Kjeldahl Nitrogen	0.5	0.5	0.5	1	0.5	0.4	0.5	3		
Total Kjeldahl Nitrogen (TKN)				0	0.4	0.4	0.4	1		
Vanadium	<0.0005	<0.0005	<0.0005	1	<0.0005	<0.0005	<0.0005	5		
Zinc	<0.005	<0.005	<0.005	1	0.011	<0.005	0.037	5	(5.0)	
Zirconium	<0.001	<0.001	<0.001	1	<0.001	<0.001	<0.001	5		

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

October 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	<0.25	<0.25	<0.25	1	<0.15	<0.05	<0.25	4		
6:2 Fluorotelomer sulfonic acid(6:2 FTS)	<0.002	<0.002	<0.002	1	<0.007	<0.002	<0.020	4		
8:2 Fluorotelomer sulfonic acid(8:2 FTS)	<0.002	<0.002	<0.002	1	<0.007	<0.002	<0.020	4		
a-chlordane	<0.008	<0.008	<0.008	1	<0.008	<0.008	<0.008	4		
Alachlor	<0.05	<0.05	<0.05	1	<0.05	<0.05	<0.05	4		
Aldicarb	<0.1	<0.1	<0.1	1	<0.1	<0.1	<0.1	4		
Aldrin	<0.008	<0.008	<0.008	1	<0.008	<0.008	<0.008	4		
Ametryn	<0.025	<0.025	<0.025	1	<0.025	<0.025	<0.025	4		
Atrazine Desethyl	<0.025	<0.025	<0.025	1	<0.025	<0.025	<0.025	4		
Bendiocarb	<0.025	<0.025	<0.025	1	<0.025	<0.025	<0.025	4		
Bromochloroacetic acid	<1	<1	<1	6	<1	<1	<1	60		
Bromodichloromethane	0.9	0.7	1.1	6	1.1	<0.5	2.1	62		16
Bromoform	<0.5	<0.5	<0.5	6	<0.5	<0.5	<0.5	62		
Carbaryl	<0.05	<0.05	<0.05	1	<0.05	<0.05	<0.05	4		
Carbofuran	<0.025	<0.025	<0.025	1	<0.025	<0.025	<0.025	4		
Chloroform	15.0	10.5	21.4	6	21.1	7.6	39.1	62		
Dibromoacetic acid	<1	<1	<1	6	<1	<1	<1	60		
Dibromochloromethane	<0.5	<0.5	<0.5	6	<0.5	<0.5	<0.5	62		
Dibromoethane (1,2)				0	<0.5	<0.5	<0.5	7		
Dichloroacetic acid	6.05	4.89	9.19	6	10.96	4.89	23.50	60		
Dichlorobenzene (1,3)	<0.5	<0.5	<0.5	6	<0.5	<0.5	<0.5	55		
Dichloroethylene, cis (1,2)	<0.5	<0.5	<0.5	6	<0.5	<0.5	<0.5	55		
Dichloroethylene, trans (1,2)	<0.5	<0.5	<0.5	6	<0.5	<0.5	<0.5	55		
Dichloropropane (1,2)	<0.5	<0.5	<0.5	6	<0.5	<0.5	<0.5	55		
Dieldrin	<0.008	<0.008	<0.008	1	<0.008	<0.008	<0.008	4		
Dinoseb	<0.25	<0.25	<0.25	1	<0.15	<0.05	<0.25	4		
gamma-hexachlorocyclohexane	<0.008	<0.008	<0.008	1	<0.008	<0.008	<0.008	4		
g-chlordane	<0.008	<0.008	<0.008	1	<0.008	<0.008	<0.008	4		
Heptachlor	<0.008	<0.008	<0.008	1	<0.008	<0.008	<0.008	4		
Heptachlor Epoxide	<0.008	<0.008	<0.008	1	<0.008	<0.008	<0.008	4		
Methoxychlor	<0.008	<0.008	<0.008	1	<0.008	<0.008	<0.008	4		
Methyl Parathion	<0.1	<0.1	<0.1	1	<0.1	<0.1	<0.1	4		
Methyl t-Butyl Ether (MTBE)	<0.5	<0.5	<0.5	6	<0.5	<0.5	<0.5	55	(15)	
MIBK	<1	<1	<1	6	<1	<1	<1	55		
Monobromoacetic acid	<1	<1	<1	6	<1	<1	<1	60		
Monochloroacetic acid	<1	<1	<1	6	1	<1	2	60		
op-DDT	<0.004	<0.004	<0.004	1	<0.004	<0.004	<0.004	4		
Oxychlordane	<0.008	<0.008	<0.008	1	<0.008	<0.008	<0.008	4		
Parathion	<0.1	<0.1	<0.1	1	<0.1	<0.1	<0.1	4		

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

October 2024

	Monthly				YTD				Limits	
	Mean	Min	Max	Count	Mean	Min	Max	Count	*Approval or GCDWQ MAC, (AO or OG)	EPCOR
Secondary Organics (ug/L) * **										
Perfluorobutane sulfonic acid (PFBS)	<0.002	<0.002	<0.002	1	<0.007	<0.002	<0.020	4		
Perfluorobutanoic acid (PFBA)	<0.02	<0.02	<0.02	1	<0.04	<0.02	<0.10	4		
Perfluoroheptanoic acid (PFHpA)	<0.002	<0.002	<0.002	1	<0.007	<0.002	<0.020	4		
Perfluorohexane sulfonic acid (PFHxS)	<0.002	<0.002	<0.002	1	<0.007	<0.002	<0.020	4		
Perfluorohexanoic acid (PFHxA)	<0.002	<0.002	<0.002	1	<0.007	<0.002	<0.020	4		
Perfluorononanoic acid (PFNA)	<0.002	<0.002	<0.002	1	<0.007	<0.002	<0.020	4		
Perfluoropentanoic acid (PFPeA)	<0.002	<0.002	<0.002	1	<0.007	<0.002	<0.020	4		
pp-DDD	<0.004	<0.004	<0.004	1	<0.004	<0.004	<0.004	4		
pp-DDE	<0.004	<0.004	<0.004	1	<0.004	<0.004	<0.004	4		
pp-DDT	<0.004	<0.004	<0.004	1	<0.004	<0.004	<0.004	4		
Prometon	<0.025	<0.025	<0.025	1	<0.025	<0.025	<0.025	4		
Prometryn	<0.025	<0.025	<0.025	1	<0.025	<0.025	<0.025	3		
Propazine	<0.025	<0.025	<0.025	1	<0.025	<0.025	<0.025	4		
Styrene	<0.5	<0.5	<0.5	6	<0.5	<0.5	<0.5	62		
Temephos	<0.25	<0.25	<0.25	1	<0.25	<0.25	<0.25	4		
Terbutryn	<0.025	<0.025	<0.025	1	<0.025	<0.025	<0.025	4		
Tetrachloroethane (1,1,2,2)	<0.5	<0.5	<0.5	6	<0.5	<0.5	<0.5	55		
Total Organic Carbon	1.1	1.0	1.2	2	1.8	1.0	2.7	216		
Total Volatile Organics (NonTHM)	4	4	5	6	2	<1	5	55		
Total Volatile Organics (Unknown)				0	1.0	<0.5	1.9	11		
Triallate	<0.1	<0.1	<0.1	1	<0.1	<0.1	<0.1	4		
Trichloroacetic acid	6.26	5.45	8.11	6	10.58	5.40	24.30	60		
Trichlorobenzene (1,2,4)	<0.5	<0.5	<0.5	6	<0.5	<0.5	<0.5	69		
Trichloroethane (1,1,1)	<0.5	<0.5	<0.5	6	<0.5	<0.5	<0.5	55		
Trichloroethane (1,1,2)				0	<0.5	<0.5	<0.5	7		
Trichloropropane (1,2,3)				0	<0.5	<0.5	<0.5	7		
Xylene (1,2)	<0.5	<0.5	<0.5	6	<0.5	<0.5	<0.5	55		
Xylene (1,4)	<0.5	<0.5	<0.5	6	<0.5	<0.5	<0.5	55		

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 Protected Areas (AEPA) Operating Approval 638-04-01. 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 638-04-01.

*** 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

October 2024

	Monthly				YTD				Limits	
	Mean	Min	Max	Count	Mean	Min	Max	Count	*Approval or GCDWQ MAC, (AO or OG)	EPCOR
Physical										
Colour (TCU)	1.0	0.6	1.6	10	0.9	<0.5	1.9	128	(15)	10
pH (N/A)	7.8	7.7	8.0	10	7.8	7.6	8.1	128	(7.0 - 10.5)	7.3 - 8.3
Turbidity (NTU)	0.22	0.05	1.13	10	0.43	<0.04	2.89	128		1.0
Primary Inorganics (mg/L) **										
Antimony	<0.0005	<0.0005	<0.0005	10	<0.0005	<0.0002	<0.0005	128	0.006	
Arsenic	<0.0002	<0.0002	<0.0002	10	<0.0002	<0.0002	<0.0002	128	0.01	
Barium	0.059	0.056	0.063	10	0.062	<0.002	0.093	128	2	
Boron	0.010	0.009	0.017	10	0.011	0.007	0.036	128	2	
Cadmium	<0.0002	<0.0002	<0.0002	10	<0.0002	<0.0002	<0.0002	128	0.007	
Chromium	<0.0002	<0.0002	<0.0002	10	<0.0002	<0.0002	<0.0002	128	0.05	
Copper	0.003	<0.002	0.006	10	0.005	<0.002	0.192	128	2 (1)	
Lead	<0.0002	<0.0002	<0.0002	10	0.0002	<0.0002	0.0025	128	0.005	
Manganese	0.002	<0.002	0.005	10	0.002	<0.002	0.008	128	0.12 (0.02)	
Mercury	<0.00020	<0.00020	<0.00020	10	<0.00020	<0.00020	<0.00020	122	0.001	
Nitrate (as N) Dissolved				0	0.03	0.03	0.03	1	10	
Nitrite (as N) Dissolved				0	<0.01	<0.01	<0.01	1	1	
Selenium	0.0002	<0.0002	0.0003	10	0.0003	<0.0002	0.0004	128	0.05	
Strontium	0.450	0.441	0.456	10	0.444	<0.002	0.501	128	7.0	
Total Chlorine	1.92	1.52	2.12	10	1.81	0.75	2.27	128	>0.5 and <3.0	>1.0 and <2.4
Uranium	<0.0005	<0.0005	<0.0005	10	0.0005	<0.0005	0.0006	128	0.02	
Primary Organics (ug/L) **										
Benzene	<0.5	<0.5	<0.5	10	<0.5	<0.5	<0.5	128	5	
Carbon Tetrachloride	<0.5	<0.5	<0.5	10	<0.5	<0.5	<0.5	128	2	
Chlorobenzene	<0.5	<0.5	<0.5	10	<0.5	<0.5	<0.5	128	80 (30)	
Dichlorobenzene (1,2)	<0.5	<0.5	<0.5	10	<0.5	<0.5	<0.5	128		
Dichlorobenzene (1,4)	<0.5	<0.5	<0.5	10	<0.5	<0.5	<0.5	128	5 (1)	
Dichloroethane (1,2)	<0.5	<0.5	<0.5	10	<0.5	<0.5	<0.5	128	5	
Dichloroethylene (1,1)	<0.5	<0.5	<0.5	10	<0.5	<0.5	<0.5	121	14	
Ethylbenzene	<0.5	<0.5	<0.5	10	<0.5	<0.5	<0.5	128	140 (1.6)	
Methylene Chloride	<0.5	<0.5	<0.5	10	<0.5	<0.5	<0.5	121	50	
Tetrachloroethylene	<0.5	<0.5	<0.5	10	<0.5	<0.5	<0.5	128	10	
Toluene	<0.5	<0.5	<0.5	10	0.6	<0.5	3.4	128	60 (24)	
Total Xylenes	<1.0	<1.0	<1.0	10	1.0	<1.0	1.2	121	90	
Trichloroethylene	<0.5	<0.5	<0.5	10	<0.5	<0.5	<0.5	128	5	
Vinyl Chloride	<1	<1	<1	10	<1	<1	<1	121	2	

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

October 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	0.113	0.041	0.202	10	0.082	0.012	0.955	128	2.9	0.1/0.2
Beryllium	<0.0002	<0.0002	<0.0002	10	<0.0002	<0.0002	<0.0002	128		
Calcium	47.7	46.7	48.8	10	48.0	<0.1	54.3	128		
Cobalt	0.0002	<0.0002	0.0004	10	0.0002	<0.0002	0.0006	128		
Iron	0.051	<0.005	0.457	10	0.063	<0.005	0.497	128	(0.3)	0.3
Lanthanum	<0.001	<0.001	<0.001	10	<0.001	<0.001	<0.001	128		
Lithium	0.0039	0.0035	0.0060	10	0.0039	<0.0002	0.0076	128		
Magnesium	13.8	13.5	13.9	10	13.7	<0.1	16.4	128		
Molybdenum	0.0007	0.0006	0.0010	10	0.0008	0.0006	0.0011	128		
Nickel	<0.0005	<0.0005	<0.0005	10	0.0006	<0.0005	0.0028	128		
Phosphorus	1.00	0.93	1.08	10	0.98	0.33	1.62	128		
Potassium	0.7	0.7	0.7	10	0.9	0.3	2.8	128		
Silicon	1.71	1.64	1.95	10	2.07	1.63	2.69	128		
Silver	<0.0002	<0.0002	<0.0002	10	<0.0002	<0.0002	<0.0002	128		
Sodium	7.6	7.0	8.0	10	11.8	6.6	98.7	128	(200)	
Thallium	<0.0002	<0.0002	<0.0002	10	<0.0002	<0.0002	<0.0005	128		
Tin	<0.0005	<0.0005	<0.0005	10	<0.0005	<0.0005	<0.0005	128		
Titanium	<0.0005	<0.0005	<0.0005	10	<0.0005	<0.0005	<0.0005	128		
Total Hardness (mg/L CaCO3)	176	174	179	10	176	<2	201	128		
Vanadium	<0.0005	<0.0005	<0.0005	10	<0.0005	<0.0005	<0.0005	128		
Zinc	0.005	<0.005	0.008	10	0.005	<0.005	0.023	128	(5.0)	
Zirconium	<0.001	<0.001	<0.001	10	<0.001	<0.001	<0.001	128		

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

October 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	1.0	0.7	1.5	10	1.2	<0.5	2.1	128		16
Bromoform	<0.5	<0.5	<0.5	10	<0.5	<0.5	<0.5	128		
Chloroform	13.6	11.2	18.5	10	20.2	5.6	37.6	128		
Dibromochloromethane	<0.5	<0.5	<0.5	10	<0.5	<0.5	<0.5	128		
Dibromoethane (1,2)				0	<0.5	<0.5	<0.5	7		
Dichlorobenzene (1,3)	<0.5	<0.5	<0.5	10	<0.5	<0.5	<0.5	121		
Dichloroethylene, cis (1,2)	<0.5	<0.5	<0.5	10	<0.5	<0.5	<0.5	121		
Dichloroethylene, trans (1,2)	<0.5	<0.5	<0.5	10	<0.5	<0.5	<0.5	121		
Dichloropropane (1,2)	<0.5	<0.5	<0.5	10	<0.5	<0.5	<0.5	121		
Methyl t-Butyl Ether (MTBE)	<0.5	<0.5	<0.5	10	<0.5	<0.5	<0.5	121	(15)	
MIBK	<1	<1	<1	10	<1	<1	<1	121		
Styrene	<0.5	<0.5	<0.5	10	<0.5	<0.5	<0.5	128		
Tetrachloroethane (1,1,2,2)	<0.5	<0.5	<0.5	10	<0.5	<0.5	<0.5	121		
Total Volatile Organics (NonTHM)	3.9	3.2	4.3	10	2.5	<1.0	6.9	121		
Total Volatile Organics (Unknown)				0	3.2	<0.5	13.8	17		
Trichlorobenzene (1,2,4)	<0.5	<0.5	<0.5	10	<0.5	<0.5	<0.5	135		
Trichloroethane (1,1,1)	<0.5	<0.5	<0.5	10	<0.5	<0.5	<0.5	121		
Trichloroethane (1,1,2)				0	<0.5	<0.5	<0.5	7		
Trichloropropane (1,2,3)				0	<0.5	<0.5	<0.5	7		
Xylene (1,2)	<0.5	<0.5	<0.5	10	<0.5	<0.5	<0.5	121		
Xylene (1,4)	<0.5	<0.5	<0.5	10	0.5	<0.5	1.1	121		

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 Protected (AEPA) Operating Approval 638-04-01. 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 638-04-01.

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

2.2.7 Castledowns Reservoir

October 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	1.3	0.6	2.0	4	(15)	10
Conductivity (uS/cm)				0	409	391	423	4		
Odour				0	Inoff	Inoff	Inoff	4		
pH (N/A)	7.7	7.6	7.7	2	7.8	7.6	8.1	21	(7.0 - 10.5)	7.3 - 8.3
Turbidity (NTU)	0.12	0.10	0.15	5	0.13	0.06	0.46	40		1
Primary Inorganics (mg/L) **										
Antimony				0	<0.0004	<0.0002	<0.0005	4	0.006	
Arsenic				0	<0.0002	<0.0002	0.0002	4	0.01	
Barium				0	0.061	0.051	0.069	4	2	
Boron				0	0.010	0.009	0.011	4	2	
Bromate Dissolved				0	<0.005	<0.005	<0.005	5	0.01	
Cadmium				0	<0.0002	<0.0002	<0.0002	4	0.007	
Chlorate Dissolved				0	0.123	0.050	0.143	5	1	
Chlorite Dissolved				0	<0.005	<0.005	<0.005	5	1	
Chromium				0	<0.0002	<0.0002	<0.0002	4	0.05	
Copper				0	<0.003	<0.002	<0.005	4	2 (1)	
Fluoride				0	0.70	0.66	0.75	4	1.5	0.6 - 0.8
Lead				0	<0.0002	<0.0002	<0.0002	4	0.005	
Manganese				0	<0.002	<0.002	0.003	4	0.12 (0.02)	
Mercury				0	<0.0002	<0.0002	<0.0002	4	0.001	
Nitrate (as N) Dissolved	0.020	0.020	0.020	2	0.039	0.010	0.170	23	10	
Nitrite (as N) Dissolved	<0.010	<0.010	<0.010	2	<0.009	<0.005	0.010	23	1	
Selenium				0	0.0003	0.0002	0.0004	4	0.05	
Strontium				0	0.436	0.423	0.453	4	7.0	
Total Chlorine	1.89	1.84	1.94	5	1.79	1.27	2.06	40	>0.5 and <3.0	>1.0 and <2.4
Uranium				0	<0.0005	<0.0005	<0.0005	4	0.02	
Primary Organics (ug/L) **										
Benzene				0	<0.6	<0.5	1.0	4	5	
Carbon Tetrachloride				0	<0.6	<0.5	1.0	4	2	
Chlorobenzene				0	<0.63	<0.50	1.00	4	80 (30)	
Dichlorobenzene (1,2)				0	<0.63	<0.50	1.00	4		
Dichlorobenzene (1,4)				0	<0.6	<0.5	1.0	4	5 (1)	
Dichloroethane (1,2)				0	<0.6	<0.5	1.0	4	5	
Dichloroethylene (1,1)				0	<0.6	<0.5	1.0	4	14	
Ethylbenzene				0	<0.63	<0.50	1.00	4	140 (1.6)	
Methylene Chloride				0	<0.6	<0.5	1.0	4	50	
Tetrachloroethylene				0	<0.6	<0.5	1.0	4	10	
Toluene				0	<0.63	<0.50	1.00	4	60 (24)	
Total Xylenes				0	<1	<1	<1	4	90	
Trichloroethylene				0	<0.63	<0.50	1.00	4	5	
Vinyl Chloride				0	<1.3	<1.0	2.0	4	2	

2.2.7 Castledowns Reservoir

October 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	112	122	4		
Aluminum				0	0.050	0.022	0.090	4	2.9	0.1/0.2
Ammonia as NH3	0.18	0.17	0.18	2	0.18	0.14	0.28	20		
Beryllium				0	<0.0002	<0.0002	<0.0002	4		
Bromide Dissolved				0	<0.022	<0.010	<0.030	5		
Calcium				0	47.6	45.5	49.5	4		
Calcium Hardness				0	121	121	121	1		
Calcium Hardness Calculated				0	119	114	124	3		
Chloride Dissolved				0	7.4	6.2	8.0	5	(250)	
Cobalt				0	<0.0002	<0.0002	<0.0002	4		
Iron				0	0.023	<0.005	0.078	4	(0.3)	0.3
Lanthanum				0	<0.0010	<0.0010	<0.0010	4		
Lithium				0	0.0036	0.0030	0.0040	4		
Magnesium				0	13.7	13.3	14.0	4		
Molybdenum				0	0.0008	0.0007	0.0009	4		
Nickel				0	<0.0005	<0.0005	<0.0005	4		
Ortho_P	0.91	0.88	0.94	10	0.89	0.86	0.94	42		
Phosphorus				0	0.97	0.87	1.02	4		
Potassium				0	0.93	0.80	1.20	4		
Silicon				0	2.14	1.67	2.36	4		
Silver				0	<0.0002	<0.0002	<0.0002	4		
Sodium				0	13.6	9.9	17.1	4	(200)	
Sulphate Dissolved				0	74.8	69.6	80.2	5	(500)	
Thallium				0	<0.0003	<0.0002	<0.0005	4		
Tin				0	<0.0005	<0.0005	<0.0005	4		
Titanium				0	<0.0005	<0.0005	<0.0005	4		
Total Hardness (mg/L CaCO3)				0	184	184	184	1		
Total Hardness Calculated				0	175	168	181	3		
Vanadium				0	<0.0005	<0.0005	<0.0005	4		
Zinc				0	<0.005	<0.005	<0.005	4	(5.0)	
Zirconium				0	<0.0010	<0.0010	<0.0010	4		

2.2.7 Castledowns Reservoir

October 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	0.6	1.2	4		16
Bromoform				0	<0.6	<0.5	1.0	4		
Chloroform				0	22.9	6.9	35.6	4		
Dibromochloromethane				0	<0.63	<0.50	1.00	4		
Dichlorobenzene (1,3)				0	<0.63	<0.50	1.00	4		
Dichloroethylene, cis (1,2)				0	<0.63	<0.50	1.00	4		
Dichloroethylene, trans (1,2)				0	<0.63	<0.50	1.00	4		
Dichloropropane (1,2)				0	<0.6	<0.5	1.0	4		
Methyl t-Butyl Ether (MTBE)				0	<0.6	<0.5	1.0	4	(15)	
MIBK				0	<1.3	<1.0	2.0	4		
Styrene				0	<0.63	<0.50	1.00	4		
Tetrachloroethane (1,1,2,2)				0	<0.6	<0.5	1.0	4		
Total Organic Carbon				0	1.7	0.9	2.3	16		
Total Volatile Organics (NonTHM)				0	<1.2	<1.0	1.9	4		
Total Volatile Organics (Unknown)				0	0.7	0.7	0.7	1		
Trichlorobenzene (1,2,4)				0	<0.6	<0.5	1.0	4		
Trichloroethane (1,1,1)				0	<0.6	<0.5	1.0	4		
Xylene (1,2)				0	<0.6	<0.5	1.0	4		
Xylene (1,4)				0	<0.6	<0.5	1.0	4		

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 Protected Areas (AEPA) Operating Approval 638-04-01. 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 AEPA Operating Approval 638-04-01.

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

2.2.8 Clareview Reservoir

October 2024

Parameter	Monthly				YTD				Limits	
	Mean	Min	Max	Count	Mean	Min	Max	Count	*Approval or GCDWQ MAC, (AO or OG)	EPCOR
Physical										
Colour (TCU)	0.8	0.8	0.8	1	0.8	0.7	1.0	6	(15)	10
Conductivity (uS/cm)	382	382	382	1	394	368	421	6		
Odour	Inoff	Inoff	Inoff	1	Inoff	Inoff	Inoff	6		
pH (N/A)	7.8	7.8	7.8	2	7.8	7.7	8.1	24	(7.0 - 10.5)	7.3 - 8.3
Turbidity (NTU)	0.14	0.11	0.20	5	0.15	0.10	0.43	44		1
Primary Inorganics (mg/L) **										
Antimony	<0.0005	<0.0005	<0.0005	1	<0.0005	<0.0002	<0.0005	6	0.006	
Arsenic	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	0.0003	6	0.01	
Barium	0.058	0.058	0.058	1	0.062	0.056	0.068	6	2	
Boron	0.009	0.009	0.009	1	0.010	0.008	0.013	6	2	
Bromate Dissolved	<0.005	<0.005	<0.005	1	<0.005	<0.003	<0.005	7	0.01	
Cadmium	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	6	0.007	
Chlorate Dissolved	0.178	0.178	0.178	1	0.201	0.172	0.229	7	1	
Chlorite Dissolved	<0.005	<0.005	<0.005	1	<0.033	<0.005	<0.200	7	1	
Chromium	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	6	0.05	
Copper	<0.002	<0.002	<0.002	1	<0.003	<0.002	<0.005	6	2 (1)	
Fluoride	0.72	0.72	0.72	1	0.69	0.65	0.72	6	1.5	0.6 - 0.8
Lead	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	6	0.005	
Manganese	<0.002	<0.002	<0.002	1	<0.002	<0.002	<0.002	6	0.12 (0.02)	
Mercury	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	6	0.001	
Nitrate (as N) Dissolved	0.015	0.010	0.020	2	0.044	0.010	0.180	25	10	
Nitrite (as N) Dissolved	<0.010	<0.010	<0.010	2	<0.009	<0.005	0.010	25	1	
Selenium	0.0003	0.0003	0.0003	1	0.0003	0.0002	0.0003	6	0.05	
Strontium	0.444	0.444	0.444	1	0.447	0.405	0.481	6	7.0	
Total Chlorine	1.75	1.69	1.86	5	1.83	1.60	2.09	44	>0.5 and <3.0	>1.0 and <2.4
Uranium	<0.0005	<0.0005	<0.0005	1	<0.0005	<0.0005	0.0005	6	0.02	
Primary Organics (ug/L) **										
Benzene	<0.5	<0.5	<0.5	1	<0.5	<0.5	<0.5	6	5	
Carbon Tetrachloride	<0.5	<0.5	<0.5	1	<0.5	<0.5	<0.5	6	2	
Chlorobenzene	<0.50	<0.50	<0.50	1	<0.50	<0.50	<0.50	6	80 (30)	
Dichlorobenzene (1,2)	<0.50	<0.50	<0.50	1	<0.50	<0.50	<0.50	6		
Dichlorobenzene (1,4)	<0.5	<0.5	<0.5	1	<0.5	<0.5	<0.5	6	5 (1)	
Dichloroethane (1,2)	<0.5	<0.5	<0.5	1	<0.5	<0.5	<0.5	6	5	
Dichloroethylene (1,1)	<0.5	<0.5	<0.5	1	<0.5	<0.5	<0.5	6	14	
Ethylbenzene	<0.50	<0.50	<0.50	1	<0.50	<0.50	<0.50	6	140 (1.6)	
Methylene Chloride	<0.5	<0.5	<0.5	1	<0.5	<0.5	<0.5	6	50	
Tetrachloroethylene	<0.5	<0.5	<0.5	1	<0.5	<0.5	<0.5	6	10	
Toluene	<0.50	<0.50	<0.50	1	<0.50	<0.50	<0.50	6	60 (24)	
Total Xylenes	<1	<1	<1	1	<1	<1	<1	6	90	
Trichloroethylene	<0.50	<0.50	<0.50	1	<0.50	<0.50	<0.50	6	5	
Vinyl Chloride	<1.0	<1.0	<1.0	1	<1.0	<1.0	<1.0	6	2	

2.2.8 Clareview Reservoir

October 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	113	113	113	1	117	109	129	6		
Aluminum	0.078	0.078	0.078	1	0.067	0.023	0.173	6	2.9	0.1/0.2
Ammonia as NH3	0.20	0.19	0.21	2	0.20	0.15	0.22	22		
Beryllium	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	6		
Bromide Dissolved	<0.030	<0.030	<0.030	1	<0.027	<0.010	<0.050	7		
Calcium	46.6	46.6	46.6	1	47.2	43.7	51.3	6		
Calcium Hardness				0	124	118	130	2		
Calcium Hardness Calculated	116	116	116	1	115	109	117	4		
Chloride Dissolved	5.1	5.1	5.1	1	6.0	5.1	7.0	7	(250)	
Cobalt	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	6		
Iron	0.014	0.014	0.014	1	0.014	0.012	0.018	6	(0.3)	0.3
Lanthanum	<0.0010	<0.0010	<0.0010	1	<0.0010	<0.0010	<0.0010	6		
Lithium	0.0038	0.0038	0.0038	1	0.0038	0.0032	0.0043	6		
Magnesium	13.9	13.9	13.9	1	13.9	12.2	14.9	6		
Molybdenum	0.0007	0.0007	0.0007	1	0.0008	0.0006	0.0010	6		
Nickel	<0.0005	<0.0005	<0.0005	1	<0.0005	<0.0005	<0.0005	6		
Ortho_P	0.89	0.86	0.92	10	0.87	0.74	0.92	44		
Phosphorus	0.96	0.96	0.96	1	0.95	0.91	0.96	6		
Potassium	0.70	0.70	0.70	1	0.83	0.70	1.10	6		
Silicon	1.64	1.64	1.64	1	1.90	1.61	2.13	6		
Silver	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	6		
Sodium	7.1	7.1	7.1	1	10.6	7.1	16.2	6	(200)	
Sulphate Dissolved	66.8	66.8	66.8	1	70.3	59.6	76.4	7	(500)	
Thallium	<0.0002	<0.0002	<0.0002	1	<0.0003	<0.0002	<0.0005	6		
Tin	<0.0005	<0.0005	<0.0005	1	<0.0005	<0.0005	<0.0005	6		
Titanium	<0.0005	<0.0005	<0.0005	1	<0.0005	<0.0005	<0.0005	6		
Total Hardness (mg/L CaCO3)				0	188	177	198	2		
Total Hardness Calculated	174	174	174	1	171	160	177	4		
Vanadium	<0.0005	<0.0005	<0.0005	1	<0.0005	<0.0005	<0.0005	6		
Zinc	<0.005	<0.005	<0.005	1	<0.005	<0.005	<0.005	6	(5.0)	
Zirconium	<0.0010	<0.0010	<0.0010	1	<0.0010	<0.0010	<0.0010	6		

2.2.8 Clareview Reservoir

October 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	0.9	0.9	0.9	1	1.5	0.9	2.2	6		16
Bromoform	<0.5	<0.5	<0.5	1	<0.5	<0.5	<0.5	6		
Chloroform	17.3	17.3	17.3	1	22.4	13.9	34.8	6		
Dibromochloromethane	<0.50	<0.50	<0.50	1	<0.50	<0.50	<0.50	6		
Dichlorobenzene (1,3)	<0.50	<0.50	<0.50	1	<0.50	<0.50	<0.50	6		
Dichloroethylene, cis (1,2)	<0.50	<0.50	<0.50	1	<0.50	<0.50	<0.50	6		
Dichloroethylene, trans (1,2)	<0.50	<0.50	<0.50	1	<0.50	<0.50	<0.50	6		
Dichloropropane (1,2)	<0.5	<0.5	<0.5	1	<0.5	<0.5	<0.5	6		
Methyl t-Butyl Ether (MTBE)	<0.5	<0.5	<0.5	1	<0.5	<0.5	<0.5	6	(15)	
MIBK	<1.0	<1.0	<1.0	1	<1.0	<1.0	<1.0	6		
Styrene	<0.50	<0.50	<0.50	1	<0.50	<0.50	<0.50	6		
Tetrachloroethane (1,1,2,2)	<0.5	<0.5	<0.5	1	<0.5	<0.5	<0.5	6		
Total Organic Carbon	1.1	1.1	1.1	1	1.8	1.1	2.5	19		
Total Volatile Organics (NonTHM)	4.4	4.4	4.4	1	2.6	<1.0	4.4	6		
Total Volatile Organics (Unknown)				0	1.0	1.0	1.0	1		
Trichlorobenzene (1,2,4)	<0.5	<0.5	<0.5	1	<0.5	<0.5	<0.5	6		
Trichloroethane (1,1,1)	<0.5	<0.5	<0.5	1	<0.5	<0.5	<0.5	6		
Xylene (1,2)	<0.5	<0.5	<0.5	1	<0.5	<0.5	<0.5	6		
Xylene (1,4)	<0.5	<0.5	<0.5	1	<0.5	<0.5	<0.5	6		

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 Protected Areas (AEPA) Operating Approval 638-04-01. 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 to the AEPA Operating Approval 638-04-01.

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

2.2.9 Discovery Park Reservoir

October 2024

Parameter	Monthly				YTD				Limits	
	Mean	Min	Max	Count	Mean	Min	Max	Count	*Approval or GCDWQ MAC, (AO or OG)	EPCOR
Physical										
Colour (TCU)	0.7	0.7	0.7	1	0.7	<0.5	1.0	7	(15)	10
Conductivity (uS/cm)	378	378	378	1	395	367	420	7		
Odour	Inoff	Inoff	Inoff	1	Inoff	Inoff	Inoff	7		
pH (N/A)	7.9	7.9	7.9	2	7.9	7.8	8.1	25	(7.0 - 10.5)	7.3 - 8.3
Turbidity (NTU)	0.15	0.14	0.16	5	0.14	0.06	1.09	46		1
Primary Inorganics (mg/L) **										
Antimony	<0.0005	<0.0005	<0.0005	1	<0.0005	<0.0002	<0.0005	7	0.006	
Arsenic	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	0.0003	7	0.01	
Barium	0.061	0.061	0.061	1	0.062	0.054	0.069	7	2	
Boron	0.009	0.009	0.009	1	0.010	0.008	0.012	7	2	
Bromate Dissolved	<0.005	<0.005	<0.005	1	<0.005	<0.003	<0.005	7	0.01	
Cadmium	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	7	0.007	
Chlorate Dissolved	0.141	0.141	0.141	1	0.123	<0.090	0.163	7	1	
Chlorite Dissolved	<0.005	<0.005	<0.005	1	<0.033	<0.005	<0.200	7	1	
Chromium	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	7	0.05	
Copper	<0.002	<0.002	<0.002	1	<0.002	<0.002	<0.005	7	2 (1)	
Fluoride	0.69	0.69	0.69	1	0.69	0.65	0.77	7	1.5	0.6 - 0.8
Lead	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	7	0.005	
Manganese	<0.002	<0.002	<0.002	1	<0.002	<0.002	<0.002	7	0.12 (0.02)	
Mercury	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	7	0.001	
Nitrate (as N) Dissolved	0.040	0.040	0.040	2	0.047	0.020	0.190	26	10	
Nitrite (as N) Dissolved	<0.010	<0.010	<0.010	2	<0.009	<0.005	0.010	26	1	
Selenium	0.0003	0.0003	0.0003	1	0.0003	0.0002	0.0003	7	0.05	
Strontium	0.448	0.448	0.448	1	0.442	0.410	0.474	7	7.0	
Total Chlorine	1.31	1.06	1.68	5	1.37	1.03	1.68	46	>0.5 and <3.0	>1.0 and <2.4
Uranium	<0.0005	<0.0005	<0.0005	1	<0.0005	<0.0005	<0.0005	7	0.02	
Primary Organics (ug/L) **										
Benzene	<0.5	<0.5	<0.5	1	<0.5	<0.5	<0.5	7	5	
Carbon Tetrachloride	<0.5	<0.5	<0.5	1	<0.5	<0.5	<0.5	7	2	
Chlorobenzene	<0.50	<0.50	<0.50	1	<0.50	<0.50	<0.50	7	80 (30)	
Dichlorobenzene (1,2)	<0.50	<0.50	<0.50	1	<0.50	<0.50	<0.50	7		
Dichlorobenzene (1,4)	<0.5	<0.5	<0.5	1	<0.5	<0.5	<0.5	7	5 (1)	
Dichloroethane (1,2)	<0.5	<0.5	<0.5	1	<0.5	<0.5	<0.5	7	5	
Dichloroethylene (1,1)	<0.5	<0.5	<0.5	1	<0.5	<0.5	<0.5	7	14	
Ethylbenzene	<0.50	<0.50	<0.50	1	<0.50	<0.50	<0.50	7	140 (1.6)	
Methylene Chloride	<0.5	<0.5	<0.5	1	<0.5	<0.5	<0.5	7	50	
Tetrachloroethylene	<0.5	<0.5	<0.5	1	<0.5	<0.5	<0.5	7	10	
Toluene	<0.50	<0.50	<0.50	1	<0.50	<0.50	<0.50	7	60 (24)	
Total Xylenes	<1	<1	<1	1	<1	<1	<1	7	90	
Trichloroethylene	<0.50	<0.50	<0.50	1	<0.50	<0.50	<0.50	7	5	
Vinyl Chloride	<1.0	<1.0	<1.0	1	<1.0	<1.0	<1.0	7	2	

2.2.9 Discovery Park Reservoir

October 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	112	112	112	1	117	111	126	7		
Aluminum	0.133	0.133	0.133	1	0.080	0.021	0.200	7	2.9	0.1/0.2
Ammonia as NH3	0.26	0.25	0.26	2	0.22	<0.05	0.31	24		
Beryllium	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	7		
Bromide Dissolved	<0.030	<0.030	<0.030	1	<0.027	<0.010	<0.050	7		
Calcium	45.8	45.8	45.8	1	45.9	43.9	48.3	7		
Calcium Hardness				0	119	113	124	2		
Calcium Hardness Calculated	114	114	114	1	115	110	121	5		
Chloride Dissolved	6.4	6.4	6.4	1	7.0	6.0	8.4	7	(250)	
Cobalt	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	7		
Iron	0.008	0.008	0.008	1	<0.005	<0.005	0.008	7	(0.3)	0.3
Lanthanum	<0.0010	<0.0010	<0.0010	1	<0.0010	<0.0010	<0.0010	7		
Lithium	0.0037	0.0037	0.0037	1	0.0034	0.0030	0.0041	7		
Magnesium	13.8	13.8	13.8	1	13.6	12.7	14.4	7		
Molybdenum	0.0007	0.0007	0.0007	1	0.0008	0.0006	0.0009	7		
Nickel	<0.0005	<0.0005	<0.0005	1	<0.0005	<0.0005	0.0006	7		
Ortho_P	0.91	0.90	0.92	10	0.91	0.86	1.04	44		
Phosphorus	1.00	1.00	1.00	1	0.98	0.91	1.02	7		
Potassium	0.80	0.80	0.80	1	0.86	0.80	1.00	7		
Silicon	1.57	1.57	1.57	1	1.87	1.57	2.21	7		
Silver	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	7		
Sodium	7.9	7.9	7.9	1	12.5	7.4	19.4	7	(200)	
Sulphate Dissolved	67.1	67.1	67.1	1	72.3	58.6	81.0	7	(500)	
Thallium	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0005	7		
Tin	<0.0005	<0.0005	<0.0005	1	<0.0005	<0.0005	<0.0005	7		
Titanium	<0.0005	<0.0005	<0.0005	1	<0.0005	<0.0005	<0.0005	7		
Total Hardness (mg/L CaCO3)				0	178	174	182	2		
Total Hardness Calculated	171	171	171	1	170	162	180	5		
Vanadium	<0.0005	<0.0005	<0.0005	1	<0.0005	<0.0005	<0.0005	7		
Zinc	<0.005	<0.005	<0.005	1	<0.005	<0.005	<0.005	7	(5.0)	
Zirconium	<0.0010	<0.0010	<0.0010	1	<0.0010	<0.0010	<0.0010	7		

2.2.9 Discovery Park Reservoir

October 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	0.9	0.9	0.9	1	1.3	0.7	1.8	7		16
Bromoform	<0.5	<0.5	<0.5	1	<0.5	<0.5	<0.5	7		
Chloroform	18.0	18.0	18.0	1	22.7	11.7	37.8	7		
Dibromochloromethane	<0.50	<0.50	<0.50	1	<0.50	<0.50	<0.50	7		
Dichlorobenzene (1,3)	<0.50	<0.50	<0.50	1	<0.50	<0.50	<0.50	7		
Dichloroethylene, cis (1,2)	<0.50	<0.50	<0.50	1	<0.50	<0.50	<0.50	7		
Dichloroethylene, trans (1,2)	<0.50	<0.50	<0.50	1	<0.50	<0.50	<0.50	7		
Dichloropropane (1,2)	<0.5	<0.5	<0.5	1	<0.5	<0.5	<0.5	7		
Methyl t-Butyl Ether (MTBE)	<0.5	<0.5	<0.5	1	<0.5	<0.5	<0.5	7	(15)	
MIBK	<1.0	<1.0	<1.0	1	<1.0	<1.0	<1.0	7		
Styrene	<0.50	<0.50	<0.50	1	<0.50	<0.50	<0.50	7		
Tetrachloroethane (1,1,2,2)	<0.5	<0.5	<0.5	1	<0.5	<0.5	<0.5	7		
Total Organic Carbon	0.7	0.7	0.7	1	1.7	0.7	2.4	20		
Total Volatile Organics (NonTHM)	4.2	4.2	4.2	1	2.7	<1.0	4.2	7		
Total Volatile Organics (Unknown)				0	1.2	1.2	1.2	1		
Trichlorobenzene (1,2,4)	<0.5	<0.5	<0.5	1	<0.5	<0.5	<0.5	7		
Trichloroethane (1,1,1)	<0.5	<0.5	<0.5	1	<0.5	<0.5	<0.5	7		
Xylene (1,2)	<0.5	<0.5	<0.5	1	<0.5	<0.5	<0.5	7		
Xylene (1,4)	<0.5	<0.5	<0.5	1	<0.5	<0.5	<0.5	7		

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 Protected Areas (AEPA) Operating Approval 638-04-01. 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 AEPA Operating Approval 638-04-01.

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

2.2.10 Kaskitayo Reservoir

October 2024

Parameter	Monthly				YTD				Limits	
	Mean	Min	Max	Count	Mean	Min	Max	Count	*Approval or GCDWQ MAC, (AO or OG)	EPCOR
Physical										
Colour (TCU)	0.9	0.9	0.9	1	1.1	0.5	1.6	5	(15)	10
Conductivity (uS/cm)	376	376	376	1	399	370	426	5		
Odour	Inoff	Inoff	Inoff	1	Inoff	Inoff	Inoff	5		
pH (N/A)	7.7	7.6	7.8	3	7.7	7.6	7.9	25	(7.0 - 10.5)	7.3 - 8.3
Turbidity (NTU)	0.12	0.07	0.16	5	0.10	0.04	0.19	44		1
Primary Inorganics (mg/L) **										
Antimony	<0.0005	<0.0005	<0.0005	1	<0.0004	<0.0002	<0.0005	5	0.006	
Arsenic	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	0.0002	5	0.01	
Barium	0.057	0.057	0.057	1	0.061	0.056	0.069	5	2	
Boron	0.008	0.008	0.008	1	0.009	0.008	0.010	5	2	
Bromate Dissolved	<0.005	<0.005	<0.005	1	<0.005	<0.003	<0.005	5	0.01	
Cadmium	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	5	0.007	
Chlorate Dissolved	0.112	0.112	0.112	1	<0.104	<0.080	0.126	5	1	
Chlorite Dissolved	<0.005	<0.005	<0.005	1	<0.044	<0.005	<0.200	5	1	
Chromium	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	5	0.05	
Copper	<0.002	<0.002	<0.002	1	<0.003	<0.002	<0.005	5	2 (1)	
Fluoride	0.69	0.69	0.69	1	0.69	0.65	0.74	5	1.5	0.6 - 0.8
Lead	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	5	0.005	
Manganese	<0.002	<0.002	<0.002	1	<0.002	<0.002	<0.002	5	0.12 (0.02)	
Mercury	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	5	0.001	
Nitrate (as N) Dissolved	0.013	0.010	0.020	3	0.036	<0.010	0.170	26	10	
Nitrite (as N) Dissolved	<0.010	<0.010	<0.010	3	<0.009	<0.005	0.010	26	1	
Selenium	0.0003	0.0003	0.0003	1	0.0003	0.0002	0.0003	5	0.05	
Strontium	0.449	0.449	0.449	1	0.443	0.385	0.483	5	7.0	
Total Chlorine	1.81	1.18	1.99	5	1.95	1.18	2.23	44	>0.5 and <3.0	>1.0 and <2.4
Uranium	<0.0005	<0.0005	<0.0005	1	<0.0005	<0.0005	0.0005	5	0.02	
Primary Organics (ug/L) **										
Benzene	<0.5	<0.5	<0.5	1	<0.5	<0.5	<0.5	5	5	
Carbon Tetrachloride	<0.5	<0.5	<0.5	1	<0.5	<0.5	<0.5	5	2	
Chlorobenzene	<0.50	<0.50	<0.50	1	<0.50	<0.50	<0.50	5	80 (30)	
Dichlorobenzene (1,2)	<0.50	<0.50	<0.50	1	<0.50	<0.50	<0.50	5		
Dichlorobenzene (1,4)	<0.5	<0.5	<0.5	1	<0.5	<0.5	<0.5	5	5 (1)	
Dichloroethane (1,2)	<0.5	<0.5	<0.5	1	<0.5	<0.5	<0.5	5	5	
Dichloroethylene (1,1)	<0.5	<0.5	<0.5	1	<0.5	<0.5	<0.5	5	14	
Ethylbenzene	<0.50	<0.50	<0.50	1	<0.50	<0.50	<0.50	5	140 (1.6)	
Methylene Chloride	<0.5	<0.5	<0.5	1	<0.5	<0.5	<0.5	5	50	
Tetrachloroethylene	<0.5	<0.5	<0.5	1	<0.5	<0.5	<0.5	5	10	
Toluene	<0.50	<0.50	<0.50	1	<0.50	<0.50	<0.50	5	60 (24)	
Total Xylenes	<1	<1	<1	1	<1	<1	<1	5	90	
Trichloroethylene	<0.50	<0.50	<0.50	1	<0.50	<0.50	<0.50	5	5	
Vinyl Chloride	<1.0	<1.0	<1.0	1	<1.0	<1.0	<1.0	5	2	

2.2.10 Kaskitayo Reservoir

October 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	112	112	112	1	120	112	128	5		
Aluminum	0.086	0.086	0.086	1	0.053	0.022	0.097	5	2.9	0.1/0.2
Ammonia as NH3	0.16	0.14	0.18	3	0.17	0.11	0.20	24		
Beryllium	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	5		
Bromide Dissolved	<0.030	<0.030	<0.030	1	<0.026	<0.010	<0.050	5		
Calcium	46.3	46.3	46.3	1	47.1	43.3	51.2	5		
Calcium Hardness				0	124	118	129	2		
Calcium Hardness Calculated	116	116	116	1	114	108	118	3		
Chloride Dissolved	5.6	5.6	5.6	1	6.9	5.6	8.2	5	(250)	
Cobalt	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	5		
Iron	<0.005	<0.005	<0.005	1	<0.005	<0.005	<0.005	5	(0.3)	0.3
Lanthanum	<0.0010	<0.0010	<0.0010	1	<0.0010	<0.0010	<0.0010	5		
Lithium	0.0035	0.0035	0.0035	1	0.0033	0.0029	0.0036	5		
Magnesium	13.6	13.6	13.6	1	13.7	11.8	15.1	5		
Molybdenum	0.0006	0.0006	0.0006	1	0.0007	0.0006	0.0009	5		
Nickel	<0.0005	<0.0005	<0.0005	1	<0.0005	<0.0005	<0.0005	5		
Ortho_P	0.87	0.76	0.92	10	0.90	0.76	1.02	44		
Phosphorus	0.96	0.96	0.96	1	0.94	0.87	0.98	5		
Potassium	0.70	0.70	0.70	1	0.84	0.70	1.10	5		
Silicon	1.53	1.53	1.53	1	1.94	1.53	2.16	5		
Silver	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	5		
Sodium	7.3	7.3	7.3	1	12.8	7.3	22.0	5	(200)	
Sulphate Dissolved	68.4	68.4	68.4	1	72.7	60.7	79.6	5	(500)	
Thallium	<0.0002	<0.0002	<0.0002	1	<0.0003	<0.0002	<0.0005	5		
Tin	<0.0005	<0.0005	<0.0005	1	<0.0005	<0.0005	<0.0005	5		
Titanium	<0.0005	<0.0005	<0.0005	1	<0.0005	<0.0005	<0.0005	5		
Total Hardness (mg/L CaCO3)				0	184	178	190	2		
Total Hardness Calculated	172	172	172	1	168	157	175	3		
Vanadium	<0.0005	<0.0005	<0.0005	1	<0.0005	<0.0005	<0.0005	5		
Zinc	<0.005	<0.005	<0.005	1	<0.005	<0.005	<0.005	5	(5.0)	
Zirconium	<0.0010	<0.0010	<0.0010	1	<0.0010	<0.0010	<0.0010	5		

2.2.10 Kaskitayo Reservoir

October 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	1	1.2	0.7	1.8	5		16
Bromoform	<0.5	<0.5	<0.5	1	<0.5	<0.5	<0.5	5		
Chloroform	13.0	13.0	13.0	1	19.2	9.8	31.6	5		
Dibromochloromethane	<0.50	<0.50	<0.50	1	<0.50	<0.50	<0.50	5		
Dichlorobenzene (1,3)	<0.50	<0.50	<0.50	1	<0.50	<0.50	<0.50	5		
Dichloroethylene, cis (1,2)	<0.50	<0.50	<0.50	1	<0.50	<0.50	<0.50	5		
Dichloroethylene, trans (1,2)	<0.50	<0.50	<0.50	1	<0.50	<0.50	<0.50	5		
Dichloropropane (1,2)	<0.5	<0.5	<0.5	1	<0.5	<0.5	<0.5	5		
Methyl t-Butyl Ether (MTBE)	<0.5	<0.5	<0.5	1	<0.5	<0.5	<0.5	5	(15)	
MIBK	<1.0	<1.0	<1.0	1	<1.0	<1.0	<1.0	5		
Styrene	<0.50	<0.50	<0.50	1	<0.50	<0.50	<0.50	5		
Tetrachloroethane (1,1,2,2)	<0.5	<0.5	<0.5	1	<0.5	<0.5	<0.5	5		
Total Organic Carbon	1.2	1.2	1.2	1	1.8	1.2	2.6	19		
Total Volatile Organics (NonTHM)	4.3	4.3	4.3	1	2.6	<1.0	4.3	5		
Total Volatile Organics (Unknown)				0	1.1	1.1	1.1	1		
Trichlorobenzene (1,2,4)	<0.5	<0.5	<0.5	1	<0.5	<0.5	<0.5	5		
Trichloroethane (1,1,1)	<0.5	<0.5	<0.5	1	<0.5	<0.5	<0.5	5		
Xylene (1,2)	<0.5	<0.5	<0.5	1	<0.5	<0.5	<0.5	5		
Xylene (1,4)	<0.5	<0.5	<0.5	1	<0.5	<0.5	<0.5	5		

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 Protected Areas (AEPA) Operating Approval 638-04-01. 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 AEPA Operating Approval 638-04-01.

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

2.2.11 Londonderry Reservoir

October 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	0.7	1.2	4	(15)	10
Conductivity (uS/cm)				0	396	390	405	4		
Odour				0	Inoff	Inoff	Inoff	4		
pH (N/A)	7.8	7.8	7.8	2	7.8	7.7	8.1	23	(7.0 - 10.5)	7.3 - 8.3
Turbidity (NTU)	0.13	0.09	0.16	5	0.13	0.06	0.52	44		1
Primary Inorganics (mg/L) **										
Antimony				0	<0.0004	<0.0002	<0.0005	4	0.006	
Arsenic				0	<0.0002	<0.0002	0.0002	4	0.01	
Barium				0	0.061	0.052	0.068	4	2	
Boron				0	0.011	0.010	0.012	4	2	
Bromate Dissolved				0	<0.005	<0.005	<0.005	5	0.01	
Cadmium				0	<0.0002	<0.0002	<0.0002	4	0.007	
Chlorate Dissolved				0	0.220	0.188	0.238	5	1	
Chlorite Dissolved				0	<0.005	<0.005	<0.005	5	1	
Chromium				0	<0.0002	<0.0002	<0.0002	4	0.05	
Copper				0	<0.003	<0.002	<0.005	4	2 (1)	
Fluoride				0	0.69	0.66	0.73	4	1.5	0.6 - 0.8
Lead				0	<0.0002	<0.0002	<0.0002	4	0.005	
Manganese				0	<0.002	<0.002	<0.002	4	0.12 (0.02)	
Mercury				0	<0.0002	<0.0002	<0.0002	4	0.001	
Nitrate (as N) Dissolved	0.015	0.010	0.020	2	0.043	0.010	0.180	25	10	
Nitrite (as N) Dissolved	<0.010	<0.010	<0.010	2	<0.009	<0.005	0.010	25	1	
Selenium				0	0.0003	0.0002	0.0003	4	0.05	
Strontium				0	0.434	0.412	0.459	4	7.0	
Total Chlorine	1.88	1.82	2.00	5	1.90	1.63	2.25	44	>0.5 and <3.0	>1.0 and <2.4
Uranium				0	<0.0005	<0.0005	<0.0005	4	0.02	
Primary Organics (ug/L) **										
Benzene				0	<0.6	<0.5	1.0	4	5	
Carbon Tetrachloride				0	<0.6	<0.5	1.0	4	2	
Chlorobenzene				0	<0.63	<0.50	1.00	4	80 (30)	
Dichlorobenzene (1,2)				0	<0.63	<0.50	1.00	4		
Dichlorobenzene (1,4)				0	<0.6	<0.5	1.0	4	5 (1)	
Dichloroethane (1,2)				0	<0.6	<0.5	1.0	4	5	
Dichloroethylene (1,1)				0	<0.6	<0.5	1.0	4	14	
Ethylbenzene				0	<0.63	<0.50	1.00	4	140 (1.6)	
Methylene Chloride				0	<0.6	<0.5	1.0	4	50	
Tetrachloroethylene				0	<0.6	<0.5	1.0	4	10	
Toluene				0	<0.63	<0.50	1.00	4	60 (24)	
Total Xylenes				0	<1	<1	<1	4	90	
Trichloroethylene				0	<0.63	<0.50	1.00	4	5	
Vinyl Chloride				0	<1.3	<1.0	2.0	4	2	

2.2.11 Londonderry Reservoir

October 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	115	110	121	4		
Aluminum				0	0.048	0.018	0.082	4	2.9	0.1/0.2
Ammonia as NH3	0.18	0.17	0.18	2	0.19	0.14	0.22	22		
Beryllium				0	<0.0002	<0.0002	<0.0002	4		
Bromide Dissolved				0	<0.022	<0.010	<0.030	5		
Calcium				0	47.4	44.6	49.5	4		
Calcium Hardness				0	122	122	122	1		
Calcium Hardness Calculated				0	117	111	124	3		
Chloride Dissolved				0	6.4	5.7	7.2	5	(250)	
Cobalt				0	<0.0002	<0.0002	<0.0002	4		
Iron				0	<0.005	<0.005	<0.005	4	(0.3)	0.3
Lanthanum				0	<0.0010	<0.0010	<0.0010	4		
Lithium				0	0.0040	0.0033	0.0043	4		
Magnesium				0	13.8	13.3	14.3	4		
Molybdenum				0	0.0008	0.0007	0.0010	4		
Nickel				0	<0.0005	<0.0005	<0.0005	4		
Ortho_P	0.89	0.88	0.94	10	0.89	0.86	0.94	44		
Phosphorus				0	0.97	0.89	1.03	4		
Potassium				0	0.95	0.80	1.40	4		
Silicon				0	2.17	1.83	2.35	4		
Silver				0	<0.0002	<0.0002	<0.0002	4		
Sodium				0	11.2	9.8	13.0	4	(200)	
Sulphate Dissolved				0	73.6	72.9	74.6	5	(500)	
Thallium				0	<0.0003	<0.0002	<0.0005	4		
Tin				0	<0.0005	<0.0005	<0.0005	4		
Titanium				0	<0.0005	<0.0005	<0.0005	4		
Total Hardness (mg/L CaCO3)				0	184	184	184	1		
Total Hardness Calculated				0	173	166	182	3		
Vanadium				0	<0.0005	<0.0005	<0.0005	4		
Zinc				0	<0.005	<0.005	<0.005	4	(5.0)	
Zirconium				0	<0.0010	<0.0010	<0.0010	4		

2.2.11 Londonderry Reservoir

October 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	1.2	1.0	1.4	4		16
Bromoform				0	<0.6	<0.5	1.0	4		
Chloroform				0	22.9	8.5	34.3	4		
Dibromochloromethane				0	<0.63	<0.50	1.00	4		
Dichlorobenzene (1,3)				0	<0.63	<0.50	1.00	4		
Dichloroethylene, cis (1,2)				0	<0.63	<0.50	1.00	4		
Dichloroethylene, trans (1,2)				0	<0.63	<0.50	1.00	4		
Dichloropropane (1,2)				0	<0.6	<0.5	1.0	4		
Methyl t-Butyl Ether (MTBE)				0	<0.6	<0.5	1.0	4	(15)	
MIBK				0	<1.3	<1.0	2.0	4		
Styrene				0	<0.63	<0.50	1.00	4		
Tetrachloroethane (1,1,2,2)				0	<0.6	<0.5	1.0	4		
Total Organic Carbon				0	1.7	1.0	2.5	18		
Total Volatile Organics (NonTHM)				0	<1.4	<1.0	2.4	4		
Trichlorobenzene (1,2,4)				0	<0.6	<0.5	1.0	4		
Trichloroethane (1,1,1)				0	<0.6	<0.5	1.0	4		
Xylene (1,2)				0	<0.6	<0.5	1.0	4		
Xylene (1,4)				0	<0.6	<0.5	1.0	4		

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 Protected Areas (AEPA) Operating Approval 638-04-01. 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 AEPA Operating Approval 638-04-01.

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

2.2.12 Millwoods Reservoir

October 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	<0.5	1.2	5	(15)	10
Conductivity (uS/cm)				0	403	384	421	5		
Odour				0	Inoff	Inoff	Inoff	5		
pH (N/A)	7.7	7.7	7.7	2	7.7	7.7	8.0	23	(7.0 - 10.5)	7.3 - 8.3
Turbidity (NTU)	0.12	0.09	0.16	5	0.10	0.06	0.20	44		1
Primary Inorganics (mg/L) **										
Antimony				0	<0.0004	<0.0002	<0.0005	5	0.006	
Arsenic				0	<0.0002	<0.0002	0.0003	5	0.01	
Barium				0	0.062	0.051	0.071	5	2	
Boron				0	0.011	0.009	0.013	5	2	
Bromate Dissolved				0	<0.005	<0.005	<0.005	5	0.01	
Cadmium				0	<0.0002	<0.0002	<0.0002	5	0.007	
Chlorate Dissolved				0	0.138	0.090	0.171	5	1	
Chlorite Dissolved				0	<0.005	<0.005	<0.005	5	1	
Chromium				0	<0.0002	<0.0002	<0.0002	5	0.05	
Copper				0	<0.003	<0.002	<0.005	5	2 (1)	
Fluoride				0	0.68	0.65	0.72	5	1.5	0.6 - 0.8
Lead				0	<0.0002	<0.0002	<0.0002	5	0.005	
Manganese				0	<0.002	<0.002	<0.002	5	0.12 (0.02)	
Mercury				0	<0.0002	<0.0002	<0.0002	5	0.001	
Nitrate (as N) Dissolved	0.010	0.010	0.010	2	0.036	0.010	0.160	25	10	
Nitrite (as N) Dissolved	<0.010	<0.010	<0.010	2	<0.009	<0.005	0.010	25	1	
Selenium				0	0.0003	0.0002	0.0004	5	0.05	
Strontium				0	0.447	0.422	0.481	5	7.0	
Total Chlorine	2.05	2.01	2.11	5	1.99	1.79	2.21	44	>0.5 and <3.0	>1.0 and <2.4
Uranium				0	<0.0005	<0.0005	<0.0005	5	0.02	
Primary Organics (ug/L) **										
Benzene				0	<0.6	<0.5	1.0	6	5	
Carbon Tetrachloride				0	<0.6	<0.5	1.0	6	2	
Chlorobenzene				0	<0.58	<0.50	1.00	6	80 (30)	
Dichlorobenzene (1,2)				0	<0.58	<0.50	1.00	6		
Dichlorobenzene (1,4)				0	<0.6	<0.5	1.0	6	5 (1)	
Dichloroethane (1,2)				0	<0.6	<0.5	1.0	6	5	
Dichloroethylene (1,1)				0	<0.6	<0.5	1.0	6	14	
Ethylbenzene				0	<0.58	<0.50	1.00	6	140 (1.6)	
Methylene Chloride				0	<0.6	<0.5	1.0	6	50	
Tetrachloroethylene				0	<0.6	<0.5	1.0	6	10	
Toluene				0	<0.58	<0.50	1.00	6	60 (24)	
Total Xylenes				0	<1	<1	<1	6	90	
Trichloroethylene				0	<0.58	<0.50	1.00	6	5	
Vinyl Chloride				0	<1.2	<1.0	2.0	6	2	

2.2.12 Millwoods Reservoir

October 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	112	123	5		
Aluminum				0	0.071	0.022	0.168	5	2.9	0.1/0.2
Ammonia as NH3	0.16	0.15	0.17	2	0.17	0.11	0.19	23		
Beryllium				0	<0.0002	<0.0002	<0.0002	5		
Bromide Dissolved				0	<0.022	<0.010	<0.030	5		
Calcium				0	47.5	45.2	49.6	5		
Calcium Hardness				0	122	122	122	1		
Calcium Hardness Calculated				0	118	113	124	4		
Chloride Dissolved				0	6.7	5.6	7.4	5	(250)	
Cobalt				0	<0.0002	<0.0002	<0.0002	5		
Iron				0	<0.005	<0.005	<0.005	5	(0.3)	0.3
Lanthanum				0	<0.0010	<0.0010	<0.0010	5		
Lithium				0	0.0038	0.0031	0.0045	5		
Magnesium				0	14.0	13.3	14.5	5		
Molybdenum				0	0.0009	0.0007	0.0011	5		
Nickel				0	<0.0005	<0.0005	0.0005	5		
Ortho_P	0.89	0.86	0.90	10	0.89	0.82	1.00	44		
Phosphorus				0	0.97	0.90	1.01	5		
Potassium				0	0.88	0.80	1.10	5		
Silicon				0	2.07	1.56	2.43	5		
Silver				0	<0.0002	<0.0002	<0.0002	5		
Sodium				0	12.8	8.9	16.4	5	(200)	
Sulphate Dissolved				0	75.0	71.5	80.4	5	(500)	
Thallium				0	<0.0003	<0.0002	<0.0005	5		
Tin				0	<0.0005	<0.0005	<0.0005	5		
Titanium				0	<0.0005	<0.0005	<0.0005	5		
Total Hardness (mg/L CaCO3)				0	185	185	185	1		
Total Hardness Calculated				0	176	168	184	4		
Vanadium				0	<0.0005	<0.0005	<0.0005	5		
Zinc				0	<0.005	<0.005	<0.005	5	(5.0)	
Zirconium				0	<0.0010	<0.0010	<0.0010	5		

2.2.12 Millwoods Reservoir

October 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	1.2	0.7	2.2	6		16
Bromoform				0	<0.6	<0.5	1.0	6		
Chloroform				0	19.4	6.8	37.4	6		
Dibromochloromethane				0	<0.58	<0.50	1.00	6		
Dichlorobenzene (1,3)				0	<0.58	<0.50	1.00	6		
Dichloroethylene, cis (1,2)				0	<0.58	<0.50	1.00	6		
Dichloroethylene, trans (1,2)				0	<0.58	<0.50	1.00	6		
Dichloropropane (1,2)				0	<0.6	<0.5	1.0	6		
Methyl t-Butyl Ether (MTBE)				0	<0.6	<0.5	1.0	6	(15)	
MIBK				0	<1.2	<1.0	2.0	6		
Styrene				0	<0.58	<0.50	1.00	6		
Tetrachloroethane (1,1,2,2)				0	<0.6	<0.5	1.0	6		
Total Organic Carbon				0	1.8	0.9	2.6	18		
Total Volatile Organics (NonTHM)				0	1.6	<1.0	3.6	6		
Total Volatile Organics (Unknown)				0	1.3	1.3	1.3	1		
Trichlorobenzene (1,2,4)				0	<0.6	<0.5	1.0	6		
Trichloroethane (1,1,1)				0	<0.6	<0.5	1.0	6		
Xylene (1,2)				0	<0.6	<0.5	1.0	6		
Xylene (1,4)				0	<0.6	<0.5	1.0	6		

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 Protected Areas (AEPA) Operating Approval 638-04-01. 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 AEPA Operating Approval 638-04-01.

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

2.2.13 North Jasper Place Reservoir

October 2024

Parameter	Monthly				YTD				Limits	
	Mean	Min	Max	Count	Mean	Min	Max	Count	*Approval or GCDWQ MAC, (AO or OG)	EPCOR
Physical										
Colour (TCU)	0.8	0.8	0.8	1	0.8	0.6	1.0	6	(15)	10
Conductivity (uS/cm)	379	379	379	1	398	367	421	6		
Odour	Inoff	Inoff	Inoff	1	Inoff	Inoff	Inoff	6		
pH (N/A)	7.8	7.8	7.8	2	7.8	7.7	8.0	24	(7.0 - 10.5)	7.3 - 8.3
Turbidity (NTU)	0.15	0.13	0.19	5	0.12	0.05	0.37	44		1
Primary Inorganics (mg/L) **										
Antimony	<0.0005	<0.0005	<0.0005	1	<0.0005	<0.0002	<0.0005	6	0.006	
Arsenic	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	0.0003	6	0.01	
Barium	0.060	0.060	0.060	1	0.061	0.054	0.068	6	2	
Boron	0.009	0.009	0.009	1	0.010	0.008	0.014	6	2	
Bromate Dissolved	<0.005	<0.005	<0.005	1	<0.005	<0.003	<0.005	7	0.01	
Cadmium	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	6	0.007	
Chlorate Dissolved	0.114	0.114	0.114	1	0.116	<0.080	0.147	7	1	
Chlorite Dissolved	<0.005	<0.005	<0.005	1	<0.033	<0.005	<0.200	7	1	
Chromium	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	6	0.05	
Copper	<0.002	<0.002	<0.002	1	<0.003	<0.002	<0.005	6	2 (1)	
Fluoride	0.72	0.72	0.72	1	0.69	0.64	0.72	6	1.5	0.6 - 0.8
Lead	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	6	0.005	
Manganese	<0.002	<0.002	<0.002	1	<0.002	<0.002	<0.002	6	0.12 (0.02)	
Mercury	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	6	0.001	
Nitrate (as N) Dissolved	0.020	0.020	0.020	3	0.046	0.020	0.190	26	10	
Nitrite (as N) Dissolved	<0.010	<0.010	<0.010	3	<0.009	<0.005	0.010	26	1	
Selenium	0.0003	0.0003	0.0003	1	0.0003	0.0002	0.0003	6	0.05	
Strontium	0.450	0.450	0.450	1	0.445	0.416	0.481	6	7.0	
Total Chlorine	1.59	1.48	1.77	5	1.65	1.25	2.07	44	>0.5 and <3.0	>1.0 and <2.4
Uranium	<0.0005	<0.0005	<0.0005	1	<0.0005	<0.0005	<0.0005	6	0.02	
Primary Organics (ug/L) **										
Benzene	<0.5	<0.5	<0.5	1	<0.5	<0.5	<0.5	6	5	
Carbon Tetrachloride	<0.5	<0.5	<0.5	1	<0.5	<0.5	<0.5	6	2	
Chlorobenzene	<0.50	<0.50	<0.50	1	<0.50	<0.50	<0.50	6	80 (30)	
Dichlorobenzene (1,2)	<0.50	<0.50	<0.50	1	<0.50	<0.50	<0.50	6		
Dichlorobenzene (1,4)	<0.5	<0.5	<0.5	1	<0.5	<0.5	<0.5	6	5 (1)	
Dichloroethane (1,2)	<0.5	<0.5	<0.5	1	<0.5	<0.5	<0.5	6	5	
Dichloroethylene (1,1)	<0.5	<0.5	<0.5	1	<0.5	<0.5	<0.5	6	14	
Ethylbenzene	<0.50	<0.50	<0.50	1	<0.50	<0.50	<0.50	6	140 (1.6)	
Methylene Chloride	<0.5	<0.5	<0.5	1	<0.5	<0.5	<0.5	6	50	
Tetrachloroethylene	<0.5	<0.5	<0.5	1	<0.5	<0.5	<0.5	6	10	
Toluene	<0.50	<0.50	<0.50	1	<0.50	<0.50	<0.50	6	60 (24)	
Total Xylenes	<1	<1	<1	1	<1	<1	<1	6	90	
Trichloroethylene	<0.50	<0.50	<0.50	1	<0.50	<0.50	<0.50	6	5	
Vinyl Chloride	<1.0	<1.0	<1.0	1	<1.0	<1.0	<1.0	6	2	

2.2.13 North Jasper Place Reservoir

October 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	110	110	110	1	116	110	128	6		
Aluminum	0.102	0.102	0.102	1	0.062	0.024	0.102	6	2.9	0.1/0.2
Ammonia as NH3	0.22	0.22	0.22	2	0.21	0.16	0.25	22		
Beryllium	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	6		
Bromide Dissolved	<0.030	<0.030	<0.030	1	<0.027	<0.010	<0.050	7		
Calcium	45.7	45.7	45.7	1	46.5	43.9	51.0	6		
Calcium Hardness				0	122	116	128	2		
Calcium Hardness Calculated	114	114	114	1	114	110	117	4		
Chloride Dissolved	6.4	6.4	6.4	1	6.9	6.0	8.0	7	(250)	
Cobalt	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	6		
Iron	<0.005	<0.005	<0.005	1	<0.005	<0.005	<0.005	6	(0.3)	0.3
Lanthanum	<0.0010	<0.0010	<0.0010	1	<0.0010	<0.0010	<0.0010	6		
Lithium	0.0036	0.0036	0.0036	1	0.0034	0.0030	0.0041	6		
Magnesium	13.8	13.8	13.8	1	13.6	12.2	14.7	6		
Molybdenum	0.0007	0.0007	0.0007	1	0.0008	0.0005	0.0009	6		
Nickel	<0.0005	<0.0005	<0.0005	1	<0.0005	<0.0005	0.0005	6		
Ortho_P	0.89	0.74	0.94	10	0.89	0.74	0.96	44		
Phosphorus	0.99	0.99	0.99	1	0.98	0.92	1.00	6		
Potassium	0.70	0.70	0.70	1	0.82	0.70	1.00	6		
Silicon	1.64	1.64	1.64	1	1.90	1.64	2.09	6		
Silver	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	6		
Sodium	8.0	8.0	8.0	1	12.4	7.2	19.0	6	(200)	
Sulphate Dissolved	68.1	68.1	68.1	1	72.2	59.5	80.4	7	(500)	
Thallium	<0.0002	<0.0002	<0.0002	1	<0.0003	<0.0002	<0.0005	6		
Tin	<0.0005	<0.0005	<0.0005	1	<0.0005	<0.0005	<0.0005	6		
Titanium	<0.0005	<0.0005	<0.0005	1	<0.0005	<0.0005	<0.0005	6		
Total Hardness (mg/L CaCO3)				0	184	173	194	2		
Total Hardness Calculated	171	171	171	1	168	160	175	4		
Vanadium	<0.0005	<0.0005	<0.0005	1	<0.0005	<0.0005	<0.0005	6		
Zinc	<0.005	<0.005	<0.005	1	<0.005	<0.005	<0.005	6	(5.0)	
Zirconium	<0.0010	<0.0010	<0.0010	1	<0.0010	<0.0010	<0.0010	6		

2.2.13 North Jasper Place Reservoir

October 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	1	1.3	0.9	1.8	6		16
Bromoform	<0.5	<0.5	<0.5	1	<0.5	<0.5	<0.5	6		
Chloroform	18.3	18.3	18.3	1	22.0	12.7	36.0	6		
Dibromochloromethane	<0.50	<0.50	<0.50	1	<0.50	<0.50	<0.50	6		
Dichlorobenzene (1,3)	<0.50	<0.50	<0.50	1	<0.50	<0.50	<0.50	6		
Dichloroethylene, cis (1,2)	<0.50	<0.50	<0.50	1	<0.50	<0.50	<0.50	6		
Dichloroethylene, trans (1,2)	<0.50	<0.50	<0.50	1	<0.50	<0.50	<0.50	6		
Dichloropropane (1,2)	<0.5	<0.5	<0.5	1	<0.5	<0.5	<0.5	6		
Methyl t-Butyl Ether (MTBE)	<0.5	<0.5	<0.5	1	<0.5	<0.5	<0.5	6	(15)	
MIBK	<1.0	<1.0	<1.0	1	<1.0	<1.0	<1.0	6		
Styrene	<0.50	<0.50	<0.50	1	<0.50	<0.50	<0.50	6		
Tetrachloroethane (1,1,2,2)	<0.5	<0.5	<0.5	1	<0.5	<0.5	<0.5	6		
Total Organic Carbon	1.0	1.0	1.0	1	1.7	1.0	2.4	18		
Total Volatile Organics (NonTHM)	3.5	3.5	3.5	1	2.4	<1.0	3.5	6		
Total Volatile Organics (Unknown)				0	1.7	1.7	1.7	1		
Trichlorobenzene (1,2,4)	<0.5	<0.5	<0.5	1	<0.5	<0.5	<0.5	6		
Trichloroethane (1,1,1)	<0.5	<0.5	<0.5	1	<0.5	<0.5	<0.5	6		
Xylene (1,2)	<0.5	<0.5	<0.5	1	<0.5	<0.5	<0.5	6		
Xylene (1,4)	<0.5	<0.5	<0.5	1	<0.5	<0.5	<0.5	6		

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 Protected Areas (AEPA) Operating Approval 638-04-01. 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 AEPA Operating Approval 638-04-01.

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

2.2.14 Ormsby Reservoir

October 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	0.6	1.1	4	(15)	10
Conductivity (uS/cm)				0	411	395	424	4		
Odour				0	Inoff	Inoff	Inoff	4		
pH (N/A)	7.7	7.7	7.7	2	7.8	7.6	8.0	23	(7.0 - 10.5)	7.3 - 8.3
Turbidity (NTU)	0.14	0.10	0.22	5	0.11	0.05	0.28	44		1
Primary Inorganics (mg/L) **										
Antimony				0	<0.0004	<0.0002	<0.0005	4	0.006	
Arsenic				0	<0.0002	<0.0002	0.0002	4	0.01	
Barium				0	0.062	0.051	0.071	4	2	
Boron				0	0.011	0.010	0.011	4	2	
Bromate Dissolved				0	<0.005	<0.005	<0.005	4	0.01	
Cadmium				0	<0.0002	<0.0002	<0.0002	4	0.007	
Chlorate Dissolved				0	0.103	0.060	0.139	4	1	
Chlorite Dissolved				0	<0.005	<0.005	<0.005	4	1	
Chromium				0	<0.0002	<0.0002	<0.0002	4	0.05	
Copper				0	<0.003	<0.002	<0.005	4	2 (1)	
Fluoride				0	0.68	0.66	0.71	4	1.5	0.6 - 0.8
Lead				0	<0.0002	<0.0002	<0.0002	4	0.005	
Manganese				0	<0.002	<0.002	<0.002	4	0.12 (0.02)	
Mercury				0	<0.0002	<0.0002	<0.0002	4	0.001	
Nitrate (as N) Dissolved	0.015	0.010	0.020	2	0.036	0.010	0.170	25	10	
Nitrite (as N) Dissolved	<0.010	<0.010	<0.010	2	<0.009	<0.005	0.010	25	1	
Selenium				0	0.0003	0.0002	0.0003	4	0.05	
Strontium				0	0.437	0.424	0.458	4	7.0	
Total Chlorine	1.96	1.89	2.06	5	1.92	1.62	2.15	44	>0.5 and <3.0	>1.0 and <2.4
Uranium				0	<0.0005	<0.0005	<0.0005	4	0.02	
Primary Organics (ug/L) **										
Benzene				0	<0.6	<0.5	1.0	5	5	
Carbon Tetrachloride				0	<0.6	<0.5	1.0	5	2	
Chlorobenzene				0	<0.60	<0.50	1.00	5	80 (30)	
Dichlorobenzene (1,2)				0	<0.60	<0.50	1.00	5		
Dichlorobenzene (1,4)				0	<0.6	<0.5	1.0	5	5 (1)	
Dichloroethane (1,2)				0	<0.6	<0.5	1.0	5	5	
Dichloroethylene (1,1)				0	<0.6	<0.5	1.0	5	14	
Ethylbenzene				0	<0.60	<0.50	1.00	5	140 (1.6)	
Methylene Chloride				0	<0.6	<0.5	1.0	5	50	
Tetrachloroethylene				0	<0.6	<0.5	1.0	5	10	
Toluene				0	<0.60	<0.50	1.00	5	60 (24)	
Total Xylenes				0	<1	<1	<1	5	90	
Trichloroethylene				0	<0.60	<0.50	1.00	5	5	
Vinyl Chloride				0	<1.2	<1.0	2.0	5	2	

2.2.14 Ormsby Reservoir

October 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	112	123	4		
Aluminum				0	0.063	0.023	0.130	4	2.9	0.1/0.2
Ammonia as NH3	0.18	0.17	0.18	2	0.17	0.11	0.20	23		
Beryllium				0	<0.0002	<0.0002	<0.0002	4		
Bromide Dissolved				0	<0.020	<0.010	<0.030	4		
Calcium				0	47.0	43.9	49.6	4		
Calcium Hardness				0	122	122	122	1		
Calcium Hardness Calculated				0	117	110	124	3		
Chloride Dissolved				0	7.3	6.3	7.9	4	(250)	
Cobalt				0	<0.0002	<0.0002	<0.0002	4		
Iron				0	<0.005	<0.005	<0.005	4	(0.3)	0.3
Lanthanum				0	<0.0010	<0.0010	<0.0010	4		
Lithium				0	0.0035	0.0030	0.0040	4		
Magnesium				0	13.7	13.1	14.2	4		
Molybdenum				0	0.0008	0.0007	0.0011	4		
Nickel				0	<0.0005	<0.0005	<0.0005	4		
Ortho_P	0.88	0.68	0.94	10	0.89	0.68	0.98	44		
Phosphorus				0	0.98	0.88	1.04	4		
Potassium				0	0.93	0.80	1.30	4		
Silicon				0	2.17	1.68	2.39	4		
Silver				0	<0.0002	<0.0002	<0.0002	4		
Sodium				0	14.4	12.9	16.2	4	(200)	
Sulphate Dissolved				0	76.1	73.6	78.0	4	(500)	
Thallium				0	<0.0003	<0.0002	<0.0005	4		
Tin				0	<0.0005	<0.0005	<0.0005	4		
Titanium				0	<0.0005	<0.0005	<0.0005	4		
Total Hardness (mg/L CaCO3)				0	185	185	185	1		
Total Hardness Calculated				0	173	164	182	3		
Vanadium				0	<0.0005	<0.0005	<0.0005	4		
Zinc				0	<0.005	<0.005	<0.005	4	(5.0)	
Zirconium				0	<0.0010	<0.0010	<0.0010	4		

2.2.14 Ormsby Reservoir

October 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	0.8	1.1	5		16
Bromoform				0	<0.6	<0.5	1.0	5		
Chloroform				0	18.9	6.6	38.1	5		
Dibromochloromethane				0	<0.60	<0.50	1.00	5		
Dichlorobenzene (1,3)				0	<0.60	<0.50	1.00	5		
Dichloroethylene, cis (1,2)				0	<0.60	<0.50	1.00	5		
Dichloroethylene, trans (1,2)				0	<0.60	<0.50	1.00	5		
Dichloropropane (1,2)				0	<0.6	<0.5	1.0	5		
Methyl t-Butyl Ether (MTBE)				0	<0.6	<0.5	1.0	5	(15)	
MIBK				0	<1.2	<1.0	2.0	5		
Styrene				0	<0.60	<0.50	1.00	5		
Tetrachloroethane (1,1,2,2)				0	<0.6	<0.5	1.0	5		
Total Organic Carbon				0	1.8	0.9	2.5	18		
Total Volatile Organics (NonTHM)				0	<1.2	<1.0	1.9	5		
Total Volatile Organics (Unknown)				0	0.9	0.6	1.2	2		
Trichlorobenzene (1,2,4)				0	<0.6	<0.5	1.0	5		
Trichloroethane (1,1,1)				0	<0.6	<0.5	1.0	5		
Xylene (1,2)				0	<0.6	<0.5	1.0	5		
Xylene (1,4)				0	<0.6	<0.5	1.0	5		

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 Protected Areas (AEPA) Operating Approval 638-04-01. 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 AEPA Operating Approval 638-04-01.

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

2.2.15 Papaschase 1 Reservoir

October 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	0.7	1.0	4	(15)	10
Conductivity (uS/cm)				0	394	379	408	4		
Odour				0	Inoff	Inoff	Inoff	4		
pH (N/A)	7.9	7.9	7.9	2	7.8	7.6	8.0	23	(7.0 - 10.5)	7.3 - 8.3
Turbidity (NTU)	0.12	0.09	0.20	5	0.14	0.06	0.26	44		1
Primary Inorganics (mg/L) **										
Antimony				0	<0.0004	<0.0002	<0.0005	4	0.006	
Arsenic				0	<0.0002	<0.0002	0.0003	4	0.01	
Barium				0	0.061	0.050	0.071	4	2	
Boron				0	0.010	0.008	0.011	4	2	
Bromate Dissolved				0	<0.005	<0.005	<0.005	4	0.01	
Cadmium				0	<0.0002	<0.0002	<0.0002	4	0.007	
Chlorate Dissolved				0	0.233	0.190	0.261	4	1	
Chlorite Dissolved				0	<0.005	<0.005	<0.005	4	1	
Chromium				0	<0.0002	<0.0002	<0.0002	4	0.05	
Copper				0	<0.003	<0.002	<0.005	4	2 (1)	
Fluoride				0	0.69	0.64	0.75	4	1.5	0.6 - 0.8
Lead				0	<0.0002	<0.0002	<0.0002	4	0.005	
Manganese				0	<0.002	<0.002	<0.002	4	0.12 (0.02)	
Mercury				0	<0.0002	<0.0002	<0.0002	4	0.001	
Nitrate (as N) Dissolved	0.015	0.010	0.020	2	0.039	0.010	0.160	25	10	
Nitrite (as N) Dissolved	<0.010	<0.010	<0.010	2	<0.009	<0.005	0.010	25	1	
Selenium				0	0.0003	0.0002	0.0003	4	0.05	
Strontium				0	0.435	0.423	0.455	4	7.0	
Total Chlorine	1.74	1.52	2.09	5	1.85	1.35	2.15	44	>0.5 and <3.0	>1.0 and <2.4
Uranium				0	<0.0005	<0.0005	<0.0005	4	0.02	
Primary Organics (ug/L) **										
Benzene				0	<0.6	<0.5	1.0	5	5	
Carbon Tetrachloride				0	<0.6	<0.5	1.0	5	2	
Chlorobenzene				0	<0.60	<0.50	1.00	5	80 (30)	
Dichlorobenzene (1,2)				0	<0.60	<0.50	1.00	5		
Dichlorobenzene (1,4)				0	<0.6	<0.5	1.0	5	5 (1)	
Dichloroethane (1,2)				0	<0.6	<0.5	1.0	5	5	
Dichloroethylene (1,1)				0	<0.6	<0.5	1.0	5	14	
Ethylbenzene				0	<0.60	<0.50	1.00	5	140 (1.6)	
Methylene Chloride				0	<0.6	<0.5	1.0	5	50	
Tetrachloroethylene				0	<0.6	<0.5	1.0	5	10	
Toluene				0	<0.60	<0.50	1.00	5	60 (24)	
Total Xylenes				0	<1	<1	<1	5	90	
Trichloroethylene				0	<0.60	<0.50	1.00	5	5	
Vinyl Chloride				0	<1.2	<1.0	2.0	5	2	

2.2.15 Papaschase 1 Reservoir

October 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	115	110	120	4		
Aluminum				0	0.057	0.019	0.096	4	2.9	0.1/0.2
Ammonia as NH3	0.22	0.18	0.25	2	0.19	0.11	0.28	23		
Beryllium				0	<0.0002	<0.0002	<0.0002	4		
Bromide Dissolved				0	<0.020	<0.010	<0.030	4		
Calcium				0	47.7	45.1	50.1	4		
Calcium Hardness				0	123	123	123	1		
Calcium Hardness Calculated				0	117	113	123	3		
Chloride Dissolved				0	6.4	5.8	7.5	4	(250)	
Cobalt				0	<0.0002	<0.0002	<0.0002	4		
Iron				0	0.013	0.010	0.016	4	(0.3)	0.3
Lanthanum				0	<0.0010	<0.0010	<0.0010	4		
Lithium				0	0.0039	0.0033	0.0045	4		
Magnesium				0	13.9	13.1	14.5	4		
Molybdenum				0	0.0009	0.0007	0.0011	4		
Nickel				0	<0.0005	<0.0005	<0.0005	4		
Ortho_P	0.84	0.74	0.88	10	0.86	0.74	0.90	44		
Phosphorus				0	0.94	0.88	0.97	4		
Potassium				0	0.88	0.80	1.10	4		
Silicon				0	2.10	1.68	2.39	4		
Silver				0	<0.0002	<0.0002	<0.0002	4		
Sodium				0	10.3	9.2	11.4	4	(200)	
Sulphate Dissolved				0	72.0	69.2	75.2	4	(500)	
Thallium				0	<0.0003	<0.0002	<0.0005	4		
Tin				0	<0.0005	<0.0005	<0.0005	4		
Titanium				0	<0.0005	<0.0005	<0.0005	4		
Total Hardness (mg/L CaCO3)				0	185	185	185	1		
Total Hardness Calculated				0	174	167	182	3		
Vanadium				0	<0.0005	<0.0005	<0.0005	4		
Zinc				0	<0.005	<0.005	<0.005	4	(5.0)	
Zirconium				0	<0.0010	<0.0010	<0.0010	4		

2.2.15 Papaschase 1 Reservoir

October 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	0.7	1.6	5		16
Bromoform				0	<0.6	<0.5	1.0	5		
Chloroform				0	18.8	7.8	35.1	5		
Dibromochloromethane				0	<0.60	<0.50	1.00	5		
Dichlorobenzene (1,3)				0	<0.60	<0.50	1.00	5		
Dichloroethylene, cis (1,2)				0	<0.60	<0.50	1.00	5		
Dichloroethylene, trans (1,2)				0	<0.60	<0.50	1.00	5		
Dichloropropane (1,2)				0	<0.6	<0.5	1.0	5		
Methyl t-Butyl Ether (MTBE)				0	<0.6	<0.5	1.0	5	(15)	
MIBK				0	<1.2	<1.0	2.0	5		
Styrene				0	<0.60	<0.50	1.00	5		
Tetrachloroethane (1,1,2,2)				0	<0.6	<0.5	1.0	5		
Total Organic Carbon				0	1.7	0.9	2.5	18		
Total Volatile Organics (NonTHM)				0	<1.2	<1.0	1.8	5		
Total Volatile Organics (Unknown)				0	<0.5	<0.5	<0.5	1		
Trichlorobenzene (1,2,4)				0	<0.6	<0.5	1.0	5		
Trichloroethane (1,1,1)				0	<0.6	<0.5	1.0	5		
Xylene (1,2)				0	<0.6	<0.5	1.0	5		
Xylene (1,4)				0	<0.6	<0.5	1.0	5		

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 Protected Areas (AEPA) Operating Approval 638-04-01. 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 AEPA Operating Approval 638-04-01.

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

2.2.16 Papaschase 2 Reservoir

October 2024

Parameter	Monthly				YTD				Limits	
	Mean	Min	Max	Count	Mean	Min	Max	Count	*Approval or GCDWQ MAC, (AO or OG)	EPCOR
Physical										
Colour (TCU)	0.8	0.8	0.8	1	1.0	0.7	1.4	6	(15)	10
Conductivity (uS/cm)	368	368	368	1	392	368	430	6		
Odour	Inoff	Inoff	Inoff	1	Inoff	Inoff	Inoff	6		
pH (N/A)	7.9	7.9	7.9	2	7.8	7.6	7.9	24	(7.0 - 10.5)	7.3 - 8.3
Turbidity (NTU)	0.11	0.09	0.15	5	0.11	0.05	0.26	44		1
Primary Inorganics (mg/L) **										
Antimony	<0.0005	<0.0005	<0.0005	1	<0.0005	<0.0002	<0.0005	6	0.006	
Arsenic	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	0.0003	6	0.01	
Barium	0.058	0.058	0.058	1	0.062	0.055	0.067	6	2	
Boron	0.009	0.009	0.009	1	0.010	0.008	0.013	6	2	
Bromate Dissolved	<0.005	<0.005	<0.005	1	<0.005	<0.003	<0.005	6	0.01	
Cadmium	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	6	0.007	
Chlorate Dissolved	0.193	0.193	0.193	1	0.199	0.108	0.300	6	1	
Chlorite Dissolved	<0.005	<0.005	<0.005	1	<0.038	<0.005	<0.200	6	1	
Chromium	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	6	0.05	
Copper	<0.002	<0.002	<0.002	1	<0.003	<0.002	<0.005	6	2 (1)	
Fluoride	0.69	0.69	0.69	1	0.70	0.66	0.74	6	1.5	0.6 - 0.8
Lead	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	6	0.005	
Manganese	<0.002	<0.002	<0.002	1	<0.002	<0.002	<0.002	6	0.12 (0.02)	
Mercury	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	6	0.001	
Nitrate (as N) Dissolved	0.010	0.010	0.010	2	0.040	<0.010	0.170	25	10	
Nitrite (as N) Dissolved	<0.010	<0.010	<0.010	2	<0.009	<0.005	0.010	25	1	
Selenium	0.0003	0.0003	0.0003	1	0.0003	<0.0002	0.0003	6	0.05	
Strontium	0.443	0.443	0.443	1	0.448	0.400	0.477	6	7.0	
Total Chlorine	1.97	1.91	2.04	5	1.95	1.73	2.17	44	>0.5 and <3.0	>1.0 and <2.4
Uranium	<0.0005	<0.0005	<0.0005	1	<0.0005	<0.0005	0.0005	6	0.02	
Primary Organics (ug/L) **										
Benzene	<0.5	<0.5	<0.5	1	<0.5	<0.5	<0.5	6	5	
Carbon Tetrachloride	<0.5	<0.5	<0.5	1	<0.5	<0.5	<0.5	6	2	
Chlorobenzene	<0.50	<0.50	<0.50	1	<0.50	<0.50	<0.50	6	80 (30)	
Dichlorobenzene (1,2)	<0.50	<0.50	<0.50	1	<0.50	<0.50	<0.50	6		
Dichlorobenzene (1,4)	<0.5	<0.5	<0.5	1	<0.5	<0.5	<0.5	6	5 (1)	
Dichloroethane (1,2)	<0.5	<0.5	<0.5	1	<0.5	<0.5	<0.5	6	5	
Dichloroethylene (1,1)	<0.5	<0.5	<0.5	1	<0.5	<0.5	<0.5	6	14	
Ethylbenzene	<0.50	<0.50	<0.50	1	<0.50	<0.50	<0.50	6	140 (1.6)	
Methylene Chloride	<0.5	<0.5	<0.5	1	<0.5	<0.5	<0.5	6	50	
Tetrachloroethylene	<0.5	<0.5	<0.5	1	<0.5	<0.5	<0.5	6	10	
Toluene	<0.50	<0.50	<0.50	1	<0.50	<0.50	<0.50	6	60 (24)	
Total Xylenes	<1	<1	<1	1	<1	<1	<1	6	90	
Trichloroethylene	<0.50	<0.50	<0.50	1	<0.50	<0.50	<0.50	6	5	
Vinyl Chloride	<1.0	<1.0	<1.0	1	<1.0	<1.0	<1.0	6	2	

2.2.16 Papaschase 2 Reservoir

October 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	115	115	115	1	117	109	128	6		
Aluminum	0.079	0.079	0.079	1	0.073	0.023	0.157	6	2.9	0.1/0.2
Ammonia as NH3	0.24	0.20	0.27	2	0.18	0.13	0.27	23		
Beryllium	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	6		
Bromide Dissolved	<0.030	<0.030	<0.030	1	<0.027	<0.010	<0.050	6		
Calcium	45.3	45.3	45.3	1	47.3	43.0	52.2	6		
Calcium Hardness				0	123	116	130	2		
Calcium Hardness Calculated	113	113	113	1	115	107	124	4		
Chloride Dissolved	4.8	4.8	4.8	1	6.3	4.8	7.2	6	(250)	
Cobalt	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	6		
Iron	<0.005	<0.005	<0.005	1	<0.005	<0.005	<0.005	6	(0.3)	0.3
Lanthanum	<0.0010	<0.0010	<0.0010	1	<0.0010	<0.0010	<0.0010	6		
Lithium	0.0037	0.0037	0.0037	1	0.0038	0.0030	0.0044	6		
Magnesium	13.9	13.9	13.9	1	13.8	12.2	14.8	6		
Molybdenum	0.0007	0.0007	0.0007	1	0.0008	0.0006	0.0010	6		
Nickel	<0.0005	<0.0005	<0.0005	1	<0.0005	<0.0005	<0.0005	6		
Ortho_P	0.87	0.86	0.88	10	0.87	0.80	0.92	44		
Phosphorus	0.97	0.97	0.97	1	0.95	0.89	0.98	6		
Potassium	0.70	0.70	0.70	1	0.82	0.70	1.10	6		
Silicon	1.58	1.58	1.58	1	1.89	1.55	2.14	6		
Silver	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	6		
Sodium	6.9	6.9	6.9	1	10.4	6.9	17.1	6	(200)	
Sulphate Dissolved	67.0	67.0	67.0	1	69.9	59.9	79.4	6	(500)	
Thallium	<0.0002	<0.0002	<0.0002	1	<0.0003	<0.0002	<0.0005	6		
Tin	<0.0005	<0.0005	<0.0005	1	<0.0005	<0.0005	<0.0005	6		
Titanium	<0.0005	<0.0005	<0.0005	1	<0.0005	<0.0005	<0.0005	6		
Total Hardness (mg/L CaCO3)				0	186	177	194	2		
Total Hardness Calculated	170	170	170	1	171	158	181	4		
Vanadium	<0.0005	<0.0005	<0.0005	1	<0.0005	<0.0005	<0.0005	6		
Zinc	<0.005	<0.005	<0.005	1	<0.005	<0.005	<0.005	6	(5.0)	
Zirconium	<0.0010	<0.0010	<0.0010	1	<0.0010	<0.0010	<0.0010	6		

2.2.16 Papaschase 2 Reservoir

October 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	0.9	0.9	0.9	1	1.3	0.8	2.2	6		16
Bromoform	<0.5	<0.5	<0.5	1	<0.5	<0.5	<0.5	6		
Chloroform	14.1	14.1	14.1	1	18.6	9.9	26.9	6		
Dibromochloromethane	<0.50	<0.50	<0.50	1	<0.50	<0.50	<0.50	6		
Dichlorobenzene (1,3)	<0.50	<0.50	<0.50	1	<0.50	<0.50	<0.50	6		
Dichloroethylene, cis (1,2)	<0.50	<0.50	<0.50	1	<0.50	<0.50	<0.50	6		
Dichloroethylene, trans (1,2)	<0.50	<0.50	<0.50	1	<0.50	<0.50	<0.50	6		
Dichloropropane (1,2)	<0.5	<0.5	<0.5	1	<0.5	<0.5	<0.5	6		
Methyl t-Butyl Ether (MTBE)	<0.5	<0.5	<0.5	1	<0.5	<0.5	<0.5	6	(15)	
MIBK	<1.0	<1.0	<1.0	1	<1.0	<1.0	<1.0	6		
Styrene	<0.50	<0.50	<0.50	1	<0.50	<0.50	<0.50	6		
Tetrachloroethane (1,1,2,2)	<0.5	<0.5	<0.5	1	<0.5	<0.5	<0.5	6		
Total Organic Carbon	0.9	0.9	0.9	1	1.7	0.9	2.6	19		
Total Volatile Organics (NonTHM)	4.5	4.5	4.5	1	3.1	<1.0	5.9	6		
Total Volatile Organics (Unknown)				0	0.6	0.6	0.6	1		
Trichlorobenzene (1,2,4)	<0.5	<0.5	<0.5	1	<0.5	<0.5	<0.5	6		
Trichloroethane (1,1,1)	<0.5	<0.5	<0.5	1	<0.5	<0.5	<0.5	6		
Xylene (1,2)	<0.5	<0.5	<0.5	1	<0.5	<0.5	<0.5	6		
Xylene (1,4)	<0.5	<0.5	<0.5	1	<0.5	<0.5	<0.5	6		

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 Protected Areas (AEPA) Operating Approval 638-04-01. 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 AEPA Operating Approval 638-04-01.

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

2.2.17 Rosslyn 1 Reservoir

October 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	0.6	1.4	4	(15)	10
Conductivity (uS/cm)				0	402	397	408	4		
Odour				0	Inoff	Inoff	Inoff	4		
pH (N/A)	7.7	7.7	7.8	2	7.8	7.7	8.1	22	(7.0 - 10.5)	7.3 - 8.3
Turbidity (NTU)	0.13	0.08	0.16	5	0.15	0.08	0.53	42		1
Primary Inorganics (mg/L) **										
Antimony				0	<0.0004	<0.0002	<0.0005	4	0.006	
Arsenic				0	<0.0002	<0.0002	0.0002	4	0.01	
Barium				0	0.061	0.053	0.069	4	2	
Boron				0	0.012	0.010	0.014	4	2	
Bromate Dissolved				0	<0.005	<0.005	<0.005	5	0.01	
Cadmium				0	<0.0002	<0.0002	<0.0002	4	0.007	
Chlorate Dissolved				0	0.187	0.158	0.204	5	1	
Chlorite Dissolved				0	<0.005	<0.005	<0.005	5	1	
Chromium				0	<0.0002	<0.0002	<0.0002	4	0.05	
Copper				0	<0.003	<0.002	<0.005	4	2 (1)	
Fluoride				0	0.69	0.66	0.73	4	1.5	0.6 - 0.8
Lead				0	<0.0002	<0.0002	<0.0002	4	0.005	
Manganese				0	<0.002	<0.002	<0.002	4	0.12 (0.02)	
Mercury				0	<0.0002	<0.0002	<0.0002	4	0.001	
Nitrate (as N) Dissolved	0.020	0.020	0.020	2	0.039	0.020	0.190	23	10	
Nitrite (as N) Dissolved	<0.010	<0.010	<0.010	2	<0.009	<0.005	0.010	23	1	
Selenium				0	0.0003	0.0002	0.0003	4	0.05	
Strontium				0	0.437	0.426	0.459	4	7.0	
Total Chlorine	1.76	1.69	1.92	5	1.80	1.55	2.07	42	>0.5 and <3.0	>1.0 and <2.4
Uranium				0	<0.0005	<0.0005	<0.0005	4	0.02	
Primary Organics (ug/L) **										
Benzene				0	<0.6	<0.5	1.0	4	5	
Carbon Tetrachloride				0	<0.6	<0.5	1.0	4	2	
Chlorobenzene				0	<0.63	<0.50	1.00	4	80 (30)	
Dichlorobenzene (1,2)				0	<0.63	<0.50	1.00	4		
Dichlorobenzene (1,4)				0	<0.6	<0.5	1.0	4	5 (1)	
Dichloroethane (1,2)				0	<0.6	<0.5	1.0	4	5	
Dichloroethylene (1,1)				0	<0.6	<0.5	1.0	4	14	
Ethylbenzene				0	<0.63	<0.50	1.00	4	140 (1.6)	
Methylene Chloride				0	<0.6	<0.5	1.0	4	50	
Tetrachloroethylene				0	<0.6	<0.5	1.0	4	10	
Toluene				0	<0.63	<0.50	1.00	4	60 (24)	
Total Xylenes				0	<1	<1	<1	4	90	
Trichloroethylene				0	<0.63	<0.50	1.00	4	5	
Vinyl Chloride				0	<1.3	<1.0	2.0	4	2	

2.2.17 Rosslyn 1 Reservoir

October 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	112	122	4		
Aluminum				0	0.055	0.020	0.096	4	2.9	0.1/0.2
Ammonia as NH3	0.20	0.20	0.20	2	0.20	0.14	0.23	20		
Beryllium				0	<0.0002	<0.0002	<0.0002	4		
Bromide Dissolved				0	<0.022	<0.010	<0.030	5		
Calcium				0	47.8	45.2	49.8	4		
Calcium Hardness				0	122	122	122	1		
Calcium Hardness Calculated				0	118	113	123	3		
Chloride Dissolved				0	6.7	5.8	7.6	5	(250)	
Cobalt				0	<0.0002	<0.0002	<0.0002	4		
Iron				0	0.008	0.007	0.011	4	(0.3)	0.3
Lanthanum				0	<0.0010	<0.0010	<0.0010	4		
Lithium				0	0.0038	0.0032	0.0042	4		
Magnesium				0	13.9	13.3	14.6	4		
Molybdenum				0	0.0008	0.0007	0.0010	4		
Nickel				0	<0.0005	<0.0005	<0.0005	4		
Ortho_P	0.91	0.88	0.96	10	0.89	0.86	0.96	44		
Phosphorus				0	0.97	0.91	1.00	4		
Potassium				0	1.00	0.80	1.50	4		
Silicon				0	2.17	1.76	2.35	4		
Silver				0	<0.0002	<0.0002	<0.0002	4		
Sodium				0	12.3	10.7	14.4	4	(200)	
Sulphate Dissolved				0	74.5	73.4	76.5	5	(500)	
Thallium				0	<0.0003	<0.0002	<0.0005	4		
Tin				0	<0.0005	<0.0005	<0.0005	4		
Titanium				0	<0.0005	<0.0005	<0.0005	4		
Total Hardness (mg/L CaCO3)				0	183	183	183	1		
Total Hardness Calculated				0	174	168	181	3		
Vanadium				0	<0.0005	<0.0005	<0.0005	4		
Zinc				0	<0.005	<0.005	<0.005	4	(5.0)	
Zirconium				0	<0.0010	<0.0010	<0.0010	4		

2.2.17 Rosslyn 1 Reservoir

October 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	1.2	0.8	1.5	4		16
Bromoform				0	<0.6	<0.5	1.0	4		
Chloroform				0	22.6	8.9	34.2	4		
Dibromochloromethane				0	<0.63	<0.50	1.00	4		
Dichlorobenzene (1,3)				0	<0.63	<0.50	1.00	4		
Dichloroethylene, cis (1,2)				0	<0.63	<0.50	1.00	4		
Dichloroethylene, trans (1,2)				0	<0.63	<0.50	1.00	4		
Dichloropropane (1,2)				0	<0.6	<0.5	1.0	4		
Methyl t-Butyl Ether (MTBE)				0	<0.6	<0.5	1.0	4	(15)	
MIBK				0	<1.3	<1.0	2.0	4		
Styrene				0	<0.63	<0.50	1.00	4		
Tetrachloroethane (1,1,2,2)				0	<0.6	<0.5	1.0	4		
Total Organic Carbon				0	1.7	1.0	2.5	17		
Total Volatile Organics (NonTHM)				0	<1.3	<1.0	2.1	4		
Total Volatile Organics (Unknown)				0	1.0	1.0	1.0	1		
Trichlorobenzene (1,2,4)				0	<0.6	<0.5	1.0	4		
Trichloroethane (1,1,1)				0	<0.6	<0.5	1.0	4		
Xylene (1,2)				0	<0.6	<0.5	1.0	4		
Xylene (1,4)				0	<0.6	<0.5	1.0	4		

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 Protected Areas (AEPA) Operating Approval 638-04-01. 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 AEPA Operating Approval 638-04-01.

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

2.2.18 Rosslyn 2 Reservoir

October 2024

Parameter	Monthly				YTD				Limits	
	Mean	Min	Max	Count	Mean	Min	Max	Count	*Approval or GCDWQ MAC, (AO or OG)	EPCOR
Physical										
Colour (TCU)	0.8	0.8	0.8	1	0.8	0.6	0.9	6	(15)	10
Conductivity (uS/cm)	379	379	379	1	393	369	419	6		
Odour	Inoff	Inoff	Inoff	1	Inoff	Inoff	Inoff	6		
pH (N/A)	7.8	7.8	7.8	2	7.8	7.7	8.1	24	(7.0 - 10.5)	7.3 - 8.3
Turbidity (NTU)	0.09	0.08	0.12	5	0.11	0.07	0.18	44		1
Primary Inorganics (mg/L) **										
Antimony	<0.0005	<0.0005	<0.0005	1	<0.0005	<0.0002	<0.0005	6	0.006	
Arsenic	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	0.0003	6	0.01	
Barium	0.059	0.059	0.059	1	0.062	0.054	0.067	6	2	
Boron	0.009	0.009	0.009	1	0.010	0.008	0.012	6	2	
Bromate Dissolved	<0.005	<0.005	<0.005	1	<0.005	<0.003	<0.005	7	0.01	
Cadmium	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	6	0.007	
Chlorate Dissolved	0.161	0.161	0.161	1	0.186	0.147	0.206	7	1	
Chlorite Dissolved	<0.005	<0.005	<0.005	1	<0.033	<0.005	<0.200	7	1	
Chromium	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	6	0.05	
Copper	<0.002	<0.002	<0.002	1	<0.003	<0.002	<0.005	6	2 (1)	
Fluoride	0.72	0.72	0.72	1	0.69	0.67	0.72	6	1.5	0.6 - 0.8
Lead	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	6	0.005	
Manganese	<0.002	<0.002	<0.002	1	<0.002	<0.002	<0.002	6	0.12 (0.02)	
Mercury	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	6	0.001	
Nitrate (as N) Dissolved	0.020	0.020	0.020	2	0.040	0.020	0.170	24	10	
Nitrite (as N) Dissolved	<0.010	<0.010	<0.010	2	<0.009	<0.005	0.010	24	1	
Selenium	0.0003	0.0003	0.0003	1	0.0003	<0.0002	0.0003	6	0.05	
Strontium	0.446	0.446	0.446	1	0.451	0.419	0.482	6	7.0	
Total Chlorine	1.58	1.49	1.77	5	1.67	1.30	2.08	44	>0.5 and <3.0	>1.0 and <2.4
Uranium	<0.0005	<0.0005	<0.0005	1	<0.0005	<0.0005	0.0005	6	0.02	
Primary Organics (ug/L) **										
Benzene	<0.5	<0.5	<0.5	1	<0.5	<0.5	<0.5	7	5	
Carbon Tetrachloride	<0.5	<0.5	<0.5	1	<0.5	<0.5	<0.5	7	2	
Chlorobenzene	<0.50	<0.50	<0.50	1	<0.50	<0.50	<0.50	7	80 (30)	
Dichlorobenzene (1,2)	<0.50	<0.50	<0.50	1	<0.50	<0.50	<0.50	7		
Dichlorobenzene (1,4)	<0.5	<0.5	<0.5	1	<0.5	<0.5	<0.5	7	5 (1)	
Dichloroethane (1,2)	<0.5	<0.5	<0.5	1	<0.5	<0.5	<0.5	7	5	
Dichloroethylene (1,1)	<0.5	<0.5	<0.5	1	<0.5	<0.5	<0.5	7	14	
Ethylbenzene	<0.50	<0.50	<0.50	1	<0.50	<0.50	<0.50	7	140 (1.6)	
Methylene Chloride	<0.5	<0.5	<0.5	1	<0.5	<0.5	<0.5	7	50	
Tetrachloroethylene	<0.5	<0.5	<0.5	1	<0.5	<0.5	<0.5	7	10	
Toluene	<0.50	<0.50	<0.50	1	<0.50	<0.50	<0.50	7	60 (24)	
Total Xylenes	<1	<1	<1	1	<1	<1	<1	7	90	
Trichloroethylene	<0.50	<0.50	<0.50	1	<0.50	<0.50	<0.50	7	5	
Vinyl Chloride	<1.0	<1.0	<1.0	1	<1.0	<1.0	<1.0	7	2	

2.2.18 Rosslyn 2 Reservoir

October 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	112	112	112	1	118	111	127	6		
Aluminum	0.082	0.082	0.082	1	0.069	0.025	0.170	6	2.9	0.1/0.2
Ammonia as NH3	0.22	0.21	0.22	2	0.22	0.17	0.27	22		
Beryllium	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	6		
Bromide Dissolved	<0.030	<0.030	<0.030	1	<0.027	<0.010	<0.050	7		
Calcium	46.0	46.0	46.0	1	47.0	44.5	51.0	6		
Calcium Hardness				0	122	116	128	2		
Calcium Hardness Calculated	115	115	115	1	115	111	120	4		
Chloride Dissolved	5.6	5.6	5.6	1	6.3	5.6	7.4	7	(250)	
Cobalt	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	6		
Iron	<0.005	<0.005	<0.005	1	<0.005	<0.005	0.007	6	(0.3)	0.3
Lanthanum	<0.0010	<0.0010	<0.0010	1	<0.0010	<0.0010	<0.0010	6		
Lithium	0.0037	0.0037	0.0037	1	0.0036	0.0031	0.0042	6		
Magnesium	13.8	13.8	13.8	1	13.9	12.7	14.9	6		
Molybdenum	0.0007	0.0007	0.0007	1	0.0008	0.0006	0.0009	6		
Nickel	<0.0005	<0.0005	<0.0005	1	<0.0005	<0.0005	0.0005	6		
Ortho_P	0.89	0.86	0.92	10	0.88	0.84	0.92	44		
Phosphorus	0.98	0.98	0.98	1	0.96	0.90	0.99	6		
Potassium	0.70	0.70	0.70	1	0.82	0.70	1.00	6		
Silicon	1.62	1.62	1.62	1	1.88	1.62	2.14	6		
Silver	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	6		
Sodium	7.5	7.5	7.5	1	10.7	7.1	16.5	6	(200)	
Sulphate Dissolved	67.1	67.1	67.1	1	71.1	59.4	78.7	7	(500)	
Thallium	<0.0002	<0.0002	<0.0002	1	<0.0003	<0.0002	<0.0005	6		
Tin	<0.0005	<0.0005	<0.0005	1	<0.0005	<0.0005	<0.0005	6		
Titanium	<0.0005	<0.0005	<0.0005	1	<0.0005	<0.0005	<0.0005	6		
Total Hardness (mg/L CaCO3)				0	186	178	194	2		
Total Hardness Calculated	172	172	172	1	170	163	179	4		
Vanadium	<0.0005	<0.0005	<0.0005	1	<0.0005	<0.0005	<0.0005	6		
Zinc	<0.005	<0.005	<0.005	1	<0.005	<0.005	<0.005	6	(5.0)	
Zirconium	<0.0010	<0.0010	<0.0010	1	<0.0010	<0.0010	<0.0010	6		

2.2.18 Rosslyn 2 Reservoir

October 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	1	1.4	1.0	1.9	7		16
Bromoform	<0.5	<0.5	<0.5	1	<0.5	<0.5	<0.5	7		
Chloroform	18.9	18.9	18.9	1	22.8	14.6	35.3	7		
Dibromochloromethane	<0.50	<0.50	<0.50	1	<0.50	<0.50	<0.50	7		
Dichlorobenzene (1,3)	<0.50	<0.50	<0.50	1	<0.50	<0.50	<0.50	7		
Dichloroethylene, cis (1,2)	<0.50	<0.50	<0.50	1	<0.50	<0.50	<0.50	7		
Dichloroethylene, trans (1,2)	<0.50	<0.50	<0.50	1	<0.50	<0.50	<0.50	7		
Dichloropropane (1,2)	<0.5	<0.5	<0.5	1	<0.5	<0.5	<0.5	7		
Methyl t-Butyl Ether (MTBE)	<0.5	<0.5	<0.5	1	<0.5	<0.5	<0.5	7	(15)	
MIBK	<1.0	<1.0	<1.0	1	<1.0	<1.0	<1.0	7		
Styrene	<0.50	<0.50	<0.50	1	<0.50	<0.50	<0.50	7		
Tetrachloroethane (1,1,2,2)	<0.5	<0.5	<0.5	1	<0.5	<0.5	<0.5	7		
Total Organic Carbon	1.1	1.1	1.1	1	1.7	1.1	2.4	19		
Total Volatile Organics (NonTHM)	3.6	3.6	3.6	1	2.3	<1.0	3.8	7		
Total Volatile Organics (Unknown)				0	1.9	1.9	1.9	1		
Trichlorobenzene (1,2,4)	<0.5	<0.5	<0.5	1	<0.5	<0.5	<0.5	7		
Trichloroethane (1,1,1)	<0.5	<0.5	<0.5	1	<0.5	<0.5	<0.5	7		
Xylene (1,2)	<0.5	<0.5	<0.5	1	<0.5	<0.5	<0.5	7		
Xylene (1,4)	<0.5	<0.5	<0.5	1	<0.5	<0.5	<0.5	7		

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 Protected Areas (AEPA) Operating Approval 638-04-01. 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 AEPA Operating Approval 638-04-01.

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

2.2.19 Thorncliff Reservoir

October 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	0.8	<0.5	1.1	6	(15)	10
Conductivity (uS/cm)	384	384	384	1	397	368	420	6		
Odour	Inoff	Inoff	Inoff	1	Inoff	Inoff	Inoff	6		
pH (N/A)	7.8	7.8	7.8	2	7.8	7.6	8.0	24	(7.0 - 10.5)	7.3 - 8.3
Turbidity (NTU)	0.13	0.10	0.15	5	0.12	0.05	0.33	45		1
Primary Inorganics (mg/L) **										
Antimony	<0.0005	<0.0005	<0.0005	1	<0.0005	<0.0002	<0.0005	6	0.006	
Arsenic	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	0.0003	6	0.01	
Barium	0.059	0.059	0.059	1	0.062	0.055	0.067	6	2	
Boron	0.009	0.009	0.009	1	0.010	0.008	0.012	6	2	
Bromate Dissolved	<0.005	<0.005	<0.005	1	<0.005	<0.003	<0.005	6	0.01	
Cadmium	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	6	0.007	
Chlorate Dissolved	0.113	0.113	0.113	1	0.111	<0.080	0.143	6	1	
Chlorite Dissolved	<0.005	<0.005	<0.005	1	<0.038	<0.005	<0.200	6	1	
Chromium	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	6	0.05	
Copper	<0.002	<0.002	<0.002	1	<0.003	<0.002	<0.005	6	2 (1)	
Fluoride	0.73	0.73	0.73	1	0.69	0.64	0.77	6	1.5	0.6 - 0.8
Lead	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	6	0.005	
Manganese	<0.002	<0.002	<0.002	1	<0.002	<0.002	<0.002	6	0.12 (0.02)	
Mercury	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	6	0.001	
Nitrate (as N) Dissolved	0.020	0.020	0.020	2	0.041	<0.010	0.180	25	10	
Nitrite (as N) Dissolved	<0.010	<0.010	<0.010	2	<0.009	<0.005	0.010	25	1	
Selenium	0.0002	0.0002	0.0002	1	0.0003	0.0002	0.0003	6	0.05	
Strontium	0.449	0.449	0.449	1	0.446	0.413	0.476	6	7.0	
Total Chlorine	1.71	1.64	1.81	5	1.71	1.26	2.23	45	>0.5 and <3.0	>1.0 and <2.4
Uranium	<0.0005	<0.0005	<0.0005	1	<0.0005	<0.0005	0.0005	6	0.02	
Primary Organics (ug/L) **										
Benzene	<0.5	<0.5	<0.5	1	<0.6	<0.5	1.0	6	5	
Carbon Tetrachloride	<0.5	<0.5	<0.5	1	<0.6	<0.5	1.0	6	2	
Chlorobenzene	<0.50	<0.50	<0.50	1	<0.58	<0.50	1.00	6	80 (30)	
Dichlorobenzene (1,2)	<0.50	<0.50	<0.50	1	<0.58	<0.50	1.00	6		
Dichlorobenzene (1,4)	<0.5	<0.5	<0.5	1	<0.6	<0.5	1.0	6	5 (1)	
Dichloroethane (1,2)	<0.5	<0.5	<0.5	1	<0.6	<0.5	1.0	6	5	
Dichloroethylene (1,1)	<0.5	<0.5	<0.5	1	<0.6	<0.5	1.0	6	14	
Ethylbenzene	<0.50	<0.50	<0.50	1	<0.58	<0.50	1.00	6	140 (1.6)	
Methylene Chloride	<0.5	<0.5	<0.5	1	<0.6	<0.5	1.0	6	50	
Tetrachloroethylene	<0.5	<0.5	<0.5	1	<0.6	<0.5	1.0	6	10	
Toluene	<0.50	<0.50	<0.50	1	<0.58	<0.50	1.00	6	60 (24)	
Total Xylenes	<1	<1	<1	1	<1	<1	<1	6	90	
Trichloroethylene	<0.50	<0.50	<0.50	1	<0.58	<0.50	1.00	6	5	
Vinyl Chloride	<1.0	<1.0	<1.0	1	<1.2	<1.0	2.0	6	2	

2.2.19 Thorncliff Reservoir

October 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	111	111	111	1	116	110	129	6		
Aluminum	0.112	0.112	0.112	1	0.085	0.027	0.194	6	2.9	0.1/0.2
Ammonia as NH3	0.19	0.18	0.20	2	0.20	0.15	0.26	23		
Beryllium	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	6		
Bromide Dissolved	<0.030	<0.030	<0.030	1	<0.027	<0.010	<0.050	6		
Calcium	45.6	45.6	45.6	1	46.7	43.7	50.4	6		
Calcium Hardness				0	122	116	128	2		
Calcium Hardness Calculated	114	114	114	1	114	109	119	4		
Chloride Dissolved	6.4	6.4	6.4	1	6.8	6.0	8.1	6	(250)	
Cobalt	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	6		
Iron	<0.005	<0.005	<0.005	1	<0.005	<0.005	<0.005	6	(0.3)	0.3
Lanthanum	<0.0010	<0.0010	<0.0010	1	<0.0010	<0.0010	<0.0010	6		
Lithium	0.0036	0.0036	0.0036	1	0.0034	0.0030	0.0040	6		
Magnesium	13.9	13.9	13.9	1	13.8	12.4	14.7	6		
Molybdenum	0.0007	0.0007	0.0007	1	0.0008	0.0006	0.0009	6		
Nickel	<0.0005	<0.0005	<0.0005	1	<0.0005	<0.0005	0.0005	6		
Ortho_P	0.89	0.80	0.94	10	0.89	0.66	0.94	50		
Phosphorus	1.00	1.00	1.00	1	0.98	0.93	1.01	6		
Potassium	0.70	0.70	0.70	1	0.82	0.70	1.00	6		
Silicon	1.60	1.60	1.60	1	1.89	1.60	2.11	6		
Silver	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	6		
Sodium	8.1	8.1	8.1	1	12.2	7.3	18.3	6	(200)	
Sulphate Dissolved	68.1	68.1	68.1	1	71.9	59.6	79.7	6	(500)	
Thallium	<0.0002	<0.0002	<0.0002	1	<0.0003	<0.0002	<0.0005	6		
Tin	<0.0005	<0.0005	<0.0005	1	<0.0005	<0.0005	<0.0005	6		
Titanium	<0.0005	<0.0005	<0.0005	1	<0.0005	<0.0005	<0.0005	6		
Total Hardness (mg/L CaCO3)				0	182	174	189	2		
Total Hardness Calculated	171	171	171	1	170	160	178	4		
Vanadium	<0.0005	<0.0005	<0.0005	1	<0.0005	<0.0005	<0.0005	6		
Zinc	<0.005	<0.005	<0.005	1	<0.005	<0.005	<0.005	6	(5.0)	
Zirconium	<0.0010	<0.0010	<0.0010	1	<0.0010	<0.0010	<0.0010	6		

2.2.19 Thorncliff Reservoir

October 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	1.4	0.8	2.1	6		16
Bromoform	<0.5	<0.5	<0.5	1	<0.6	<0.5	1.0	6		
Chloroform	16.4	16.4	16.4	1	20.7	10.9	31.1	6		
Dibromochloromethane	<0.50	<0.50	<0.50	1	<0.58	<0.50	1.00	6		
Dichlorobenzene (1,3)	<0.50	<0.50	<0.50	1	<0.58	<0.50	1.00	6		
Dichloroethylene, cis (1,2)	<0.50	<0.50	<0.50	1	<0.58	<0.50	1.00	6		
Dichloroethylene, trans (1,2)	<0.50	<0.50	<0.50	1	<0.58	<0.50	1.00	6		
Dichloropropane (1,2)	<0.5	<0.5	<0.5	1	<0.6	<0.5	1.0	6		
Methyl t-Butyl Ether (MTBE)	<0.5	<0.5	<0.5	1	<0.6	<0.5	1.0	6	(15)	
MIBK	<1.0	<1.0	<1.0	1	<1.2	<1.0	2.0	6		
Styrene	<0.50	<0.50	<0.50	1	<0.58	<0.50	1.00	6		
Tetrachloroethane (1,1,2,2)	<0.5	<0.5	<0.5	1	<0.6	<0.5	1.0	6		
Total Organic Carbon	0.8	0.8	0.8	1	1.7	0.8	2.3	19		
Total Volatile Organics (NonTHM)	4.1	4.1	4.1	1	2.5	<1.0	4.1	6		
Total Volatile Organics (Unknown)				0	1.2	1.2	1.2	1		
Trichlorobenzene (1,2,4)	<0.5	<0.5	<0.5	1	<0.6	<0.5	1.0	6		
Trichloroethane (1,1,1)	<0.5	<0.5	<0.5	1	<0.6	<0.5	1.0	6		
Xylene (1,2)	<0.5	<0.5	<0.5	1	<0.6	<0.5	1.0	6		
Xylene (1,4)	<0.5	<0.5	<0.5	1	<0.6	<0.5	1.0	6		

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 Protected Areas (AEPA) Operating Approval 638-04-01. 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 AEPA Operating Approval 638-04-01.

*** 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

October 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				0	27.0	15.1	38.9	2	27.0	15.1	38.9	2		
02-SR				0	29.7	20.0	39.4	2	26.5	20.0	39.4	3		
04-SR				0	25.4	15.8	36.3	4	23.3	14.9	36.3	5		
07-RI				0	13.5	9.7	17.3	2	13.2	9.7	17.3	3		
07-SR				0	13.6	10.7	16.4	2	16.0	10.7	20.9	3		
15-SR				0				0	11.4	11.4	11.4	1		
19-SR				0	40.3	40.3	40.3	1	40.3	40.3	40.3	1		
20-DE	15.6	15.6	15.6	1	26.4	15.6	37.1	2	26.4	15.6	37.1	2		
21-DE				0	16.4	16.4	16.4	1	16.4	16.4	16.4	1		
21-SR	14.5	14.5	14.5	1	14.5	14.5	14.5	1	14.7	14.5	14.9	2		
24-SR				0	14.0	13.3	14.6	2	14.0	13.3	14.6	2		
26-DE				0				0	18.1	18.1	18.1	1		
30-SR	11.6	11.6	11.6	1	20.9	8.6	37.0	5	20.9	8.6	37.0	5		
31-DE				0	20.8	13.0	33.5	3	20.7	13.0	33.5	4		
31-RI				0	25.8	15.8	34.0	4	25.6	15.8	34.0	5		
32-SR				0	20.7	12.0	29.4	2	21.9	12.0	29.4	3		
37-SR				0	34.3	34.3	34.3	1	34.3	34.3	34.3	1		
40-SR	15.7	15.7	15.7	1	19.2	9.1	32.2	6	19.1	9.1	32.2	8		
41-SR				0	9.6	9.6	9.6	1	9.6	9.6	9.6	1		
7-RI				0	30.7	30.7	30.7	1	30.7	30.7	30.7	1		
EDMONTON S4	17.5	17.5	17.5	1	21.9	13.0	35.1	3	21.9	13.0	35.1	3		
		Total Count		5				45				57		

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

October 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
	17.3	17.3	17.3	1	21.4	13.9	32.7	13	21.4	13.9	32.7	13		
01-SR				0	21.8	16.8	26.7	2	21.8	16.8	26.7	2		
02-SR				0	30.5	19.8	41.1	2	28.8	19.8	41.1	3		
04-SR				0	26.3	19.1	36.2	4	24.9	19.1	36.2	5		
07-RI				0	16.6	14.2	19.0	2	16.2	14.2	19.0	3		
07-SR				0	15.0	12.9	17.0	2	18.1	12.9	24.5	3		
15-SR				0				0	14.2	14.2	14.2	1		
19-SR				0	49.3	49.3	49.3	1	49.3	49.3	49.3	1		
20-DE	10.6	10.6	10.6	1	20.0	10.6	29.3	2	20.0	10.6	29.3	2		
21-DE				0	16.3	16.3	16.3	1	16.3	16.3	16.3	1		
21-SR	11.2	11.2	11.2	1	11.2	11.2	11.2	1	16.2	11.2	21.1	2		
22-DE				0	25.9	25.9	25.9	1	25.9	25.9	25.9	1		
24-SR				0	17.3	14.0	20.5	2	17.3	14.0	20.5	2		
26-DE				0				0	21.7	21.7	21.7	1		
30-SR	10.3	10.3	10.3	1	20.4	10.3	33.1	5	20.4	10.3	33.1	5		
31-DE				0	17.6	14.7	20.5	2	19.7	14.7	24.0	3		
31-RI				0	23.7	14.0	34.8	4	23.9	14.0	34.8	5		
32-SR				0	27.9	18.4	37.4	2	28.5	18.4	37.4	3		
37-SR				0	27.3	27.3	27.3	1	27.3	27.3	27.3	1		
40-SR	11.8	11.8	11.8	1	18.5	11.8	29.5	6	19.6	11.8	29.5	8		
41-DE				0	26.9	26.9	26.9	1	26.9	26.9	26.9	1		
41-SR				0	12.6	12.6	12.6	1	12.6	12.6	12.6	1		
7-RI				0	24.8	24.8	24.8	1	24.8	24.8	24.8	1		
EDMONTON S4	12.6	12.6	12.6	1	26.0	12.6	49.6	3	26.0	12.6	49.6	3		
	Total Count			6				59				71		

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

October 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
				0	<0.003	<0.001	<0.006	6	<0.003	<0.001	<0.006	6		
04-SR				0	<0.006	<0.006	<0.006	1	<0.006	<0.006	<0.006	1		
07-RI				0	<0.001	<0.001	<0.001	1	<0.001	<0.001	<0.001	1		
07-SR				0	<0.002	<0.002	<0.002	1	<0.002	<0.002	<0.002	1		
20-DE				0	<0.003	<0.003	<0.003	1	<0.003	<0.003	<0.003	1		
20-OF				0				0	<0.002	<0.002	<0.002	1		
21-DE				0	<0.005	<0.005	<0.005	1	<0.005	<0.005	<0.005	1		
21-SR	<0.002	<0.002	<0.002	1	<0.002	<0.002	<0.002	1	<0.002	<0.001	<0.002	2		
22-DE				0	<0.004	<0.004	<0.004	1	<0.004	<0.004	<0.004	1		
24-SR				0	<0.002	<0.001	<0.002	2	<0.002	<0.001	<0.002	2		
26-DE				0				0	<0.002	<0.002	<0.002	1		
30-SR				0	<0.004	<0.003	<0.005	2	<0.004	<0.003	<0.005	2		
31-DE				0	<0.006	<0.006	<0.006	1	<0.004	<0.002	<0.006	2		
31-RI				0	<0.005	<0.003	0.007	3	<0.005	<0.003	0.007	3		
40-SR	<0.002	<0.002	<0.002	1	<0.004	<0.002	<0.006	4	<0.003	<0.002	<0.006	6		
41-DE				0	<0.006	<0.006	<0.006	1	<0.006	<0.006	<0.006	1		
7-RI				0	<0.005	<0.005	<0.005	1	<0.005	<0.005	<0.005	1		
EDMONTON S4	<0.002	<0.002	<0.002	1	<0.002	<0.001	<0.002	3	<0.002	<0.001	<0.002	3		
		Total Count		3				30				36		

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

October 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				0	23.8	7.8	36.2	4	23.0	7.8	36.2	5		
Clareview Reservoir	18.6	18.6	18.6	1	24.1	15.4	36.9	6	23.5	15.4	36.9	7		
Discovery Park Reservoir	19.3	19.3	19.3	1	24.2	13.1	39.7	7	23.8	13.1	39.7	8		
Kaskitayo Reservoir	14.4	14.4	14.4	1	20.6	10.8	33.4	5	20.6	10.8	33.4	6		
Londonderry Reservoir				0	24.1	9.8	35.8	4	24.0	9.8	35.8	5		
Millwoods Reservoir				0	20.7	7.8	38.3	6	20.9	7.8	38.3	7		
North Jasper Place Reservoir	19.7	19.7	19.7	1	23.6	14.0	37.9	6	23.6	14.0	37.9	7		
Ormsby Reservoir				0	20.0	7.7	39.0	5	20.4	7.7	39.0	6		
Papaschase Reservoir 1				0	19.8	8.8	35.4	5	20.7	8.8	35.4	6		
Papaschase Reservoir 2	15.3	15.3	15.3	1	20.3	11.0	28.8	6	20.3	11.0	28.8	7		
Rosslyn Reservoir 1				0	23.8	10.0	35.7	4	23.9	10.0	35.7	5		
Rosslyn Reservoir 2	20.1	20.1	20.1	1	24.4	16.1	37.5	7	23.9	16.1	37.5	8		
Thorncliff Reservoir	17.7	17.7	17.7	1	22.3	12.2	32.9	6	22.3	12.2	32.9	7		
		Total Count		7				71				84		

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

October 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
	22.9	22.9	22.9	1	20.3	12.5	40.7	9	20.3	12.5	40.7	9		
		Total Count		1				9				9		

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

October 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	4	<0.2	<0.2	<0.2	4
Physical																
Colour (TCU)	3.8	3.1	4.7	31	3.9	2.6	4.9	31	9.2	3.1	43.8	301	9.5	2.6	43.6	304
Conductivity (uS/cm)	354	348	358	5	352	346	360	5	360	311	415	44	354	311	416	44
FPA-Intensity (N/A)	0.56	0.31	0.75	5	0.54	0.31	0.88	5	0.76	0.25	2.38	54	0.80	0.31	2.25	54
pH (N/A)	8.3	8.3	8.3	1	8.4	8.4	8.4	1	8.3	8.1	8.4	10	8.3	8.1	8.4	10
Total Dissolved Solids (mg/L)	188	188	188	1	204	204	204	1	216	186	292	10	207	184	240	10
Total Suspended Solids	<2.5	<2.5	<2.5	1	<2.5	<2.5	<2.5	1	15.0	<2.5	53.7	10	28.1	<2.5	154.0	10
Turbidity (NTU)	3	1	29	31	2	1	8	31	9	1	367	301	12	1	257	304
Primary Inorganics (mg/L) **																
Antimony	<0.0005	<0.0005	<0.0005	1	<0.0005	<0.0005	<0.0005	1	<0.0004	<0.0002	0.0005	10	<0.0004	<0.0002	<0.0005	10
Arsenic	0.0002	0.0002	0.0002	1	<0.0002	<0.0002	<0.0002	1	0.0005	0.0002	0.0011	10	0.0006	<0.0002	0.0022	10
Barium	0.062	0.062	0.062	1	0.062	0.062	0.062	1	0.075	0.058	0.125	10	0.081	0.057	0.180	10
Boron	0.010	0.010	0.010	1	0.010	0.010	0.010	1	0.012	0.009	0.018	10	0.012	0.008	0.022	10
Cadmium^				0				0	<0.0002	<0.0002	<0.0002	3	<0.0002	<0.0002	<0.0002	3
Cadmium^^	<0.00002	<0.00002	<0.00002	1	<0.00002	<0.00002	<0.00002	1	<0.00002	<0.00002	0.00004	7	0.00003	<0.00002	0.00008	7
Chromium	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	1	0.0012	<0.0002	0.0053	10	0.0017	<0.0002	0.0099	10
Copper	0.003	0.003	0.003	1	<0.002	<0.002	<0.002	1	<0.004	<0.002	0.005	10	<0.003	<0.002	0.006	10
Fluoride	0.11	0.10	0.12	5	0.11	0.10	0.12	5	0.11	0.08	0.15	44	0.11	0.08	0.13	44
Lead	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	1	0.0004	<0.0002	0.0013	10	0.0006	<0.0002	0.0027	10
Manganese	<0.002	<0.002	<0.002	1	0.003	0.003	0.003	1	0.014	<0.002	0.050	10	0.019	0.003	0.080	10
Mercury	<0.0026	<0.0002	<0.0050	2	<0.0026	<0.0002	<0.0050	2	<0.0012	<0.0001	<0.0050	14	<0.0012	<0.0001	<0.0050	14
Nitrate (as N) Dissolved	0.02	<0.01	0.03	5	0.02	<0.01	0.03	5	0.05	<0.01	0.19	44	0.04	<0.01	0.18	44
Nitrite (as N) Dissolved	<0.010	<0.010	<0.010	5	<0.010	<0.010	<0.010	5	<0.010	<0.005	<0.010	44	<0.010	<0.005	<0.010	44
Selenium	0.0002	0.0002	0.0002	1	0.0002	0.0002	0.0002	1	0.0003	0.0002	0.0004	10	0.0003	<0.0002	0.0005	10
Total Chlorine	<0.03	<0.03	<0.03	1	<0.03	<0.03	<0.03	1	<0.03	<0.03	<0.03	10	<0.03	<0.03	<0.03	10
Uranium	<0.0005	<0.0005	<0.0005	1	<0.0005	<0.0005	<0.0005	1	<0.0006	<0.0005	0.0007	10	<0.0006	<0.0005	0.0008	10

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

October 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	<0.25	<0.25	<0.25	1	<0.25	<0.25	<0.25	1	<0.15	<0.05	<0.25	4	<0.15	<0.05	<0.25	4
Atrazine	<0.05	<0.05	<0.05	1	<0.05	<0.05	<0.05	1	<0.05	<0.05	<0.05	4	<0.05	<0.05	<0.05	4
Benzene	<0.5	<0.5	<0.5	30	<0.5	<0.5	<0.5	31	<0.5	<0.5	<0.5	301	<0.5	<0.5	<0.5	304
Benzo(a)pyrene	<0.005	<0.005	<0.005	1	<0.005	<0.005	<0.005	1	<0.005	<0.005	<0.005	4	<0.005	<0.005	<0.005	4
Bromoxynil	<0.25	<0.25	<0.25	1	<0.25	<0.25	<0.25	1	<0.15	<0.05	<0.25	4	<0.15	<0.05	<0.25	4
Carbon Tetrachloride	<0.5	<0.5	<0.5	30	<0.5	<0.5	<0.5	31	<0.5	<0.5	<1.0	284	<0.5	<0.5	<1.0	285
Chlorobenzene	<0.5	<0.5	<0.5	30	<0.5	<0.5	<0.5	31	<0.5	<0.5	<0.5	301	<0.5	<0.5	<0.5	304
Chlorpyrifos	<0.1	<0.1	<0.1	1	<0.1	<0.1	<0.1	1	<0.1	<0.1	<0.1	4	<0.1	<0.1	<0.1	4
Cyanazine	<0.1	<0.1	<0.1	1	<0.1	<0.1	<0.1	1	<0.1	<0.1	<0.1	4	<0.1	<0.1	<0.1	4
Diazinon	<0.025	<0.025	<0.025	1	<0.025	<0.025	<0.025	1	<0.025	<0.025	<0.025	4	<0.025	<0.025	<0.025	4
Dicamba	<0.5	<0.5	<0.5	1	<0.5	<0.5	<0.5	1	<0.3	<0.1	<0.5	4	<0.3	<0.1	<0.5	4
Dichlorobenzene (1,2)	<0.5	<0.5	<0.5	30	<0.5	<0.5	<0.5	31	<0.5	<0.5	<0.5	284	<0.5	<0.5	<0.5	285
Dichlorobenzene (1,4)	<0.5	<0.5	<0.5	30	<0.5	<0.5	<0.5	31	<0.5	<0.5	<0.5	284	<0.5	<0.5	<0.5	285
Dichloroethane (1,2)	<0.5	<0.5	<0.5	30	<0.5	<0.5	<0.5	31	<0.5	<0.5	<0.5	283	<0.5	<0.5	<0.5	284
Dichloroethylene (1,1)	<0.5	<0.5	<0.5	30	<0.5	<0.5	<0.5	31	<0.5	<0.5	<3.0	284	<0.5	<0.5	<3.0	285
Dichlorophenol (2,4)				0				0	<0.2	<0.2	<0.3	3	<0.2	<0.2	<0.3	3
Diclofop-methyl	<0.1	<0.1	<0.1	1	<0.1	<0.1	<0.1	1	<0.1	<0.1	<0.1	4	<0.1	<0.1	<0.1	4
Dimethoate	<0.05	<0.05	<0.05	1	<0.05	<0.05	<0.05	1	<0.05	<0.05	<0.05	4	<0.05	<0.05	<0.05	4
Diuron	<0.05	<0.05	<0.05	1	<0.05	<0.05	<0.05	1	<0.05	<0.05	<0.05	4	<0.05	<0.05	<0.05	4
Ethylbenzene	<0.5	<0.5	<0.5	30	<0.5	<0.5	<0.5	31	<0.5	<0.5	<0.5	301	<0.5	<0.5	<0.5	304
Glyphosate	<0.2	<0.2	<0.2	1	<0.2	<0.2	<0.2	1	<0.3	<0.2	<0.5	4	<0.3	<0.2	<0.5	4
Malathion	<0.025	<0.025	<0.025	1	<0.025	<0.025	<0.025	1	<0.025	<0.025	<0.025	4	<0.025	<0.025	<0.025	4
MCPA	<0.25	<0.25	<0.25	1	<0.25	<0.25	<0.25	1	<0.15	<0.05	<0.25	4	<0.15	<0.05	<0.25	4
Methylene Chloride	<0.5	<0.5	<0.5	30	<0.5	<0.5	<0.5	31	<0.5	<0.5	<0.5	284	<0.5	<0.5	<0.5	285
Metolachlor	<0.025	<0.025	<0.025	1	<0.025	<0.025	<0.025	1	<0.025	<0.025	<0.025	4	<0.025	<0.025	<0.025	4
Metribuzin	<0.1	<0.1	<0.1	1	<0.1	<0.1	<0.1	1	<0.1	<0.1	<0.1	4	<0.1	<0.1	<0.1	4
NDMA (µg/L)				0				0	<0.0009	<0.0009	<0.0009	1	<0.00099	<0.00099	<0.00099	1
Nitrilotriacetic acid	<0.40	<0.40	<0.40	1	<0.40	<0.40	<0.40	1	<0.40	<0.40	<0.40	4	<0.40	<0.40	<0.40	4
Pentachlorophenol				0				0	<0.5	<0.5	<0.5	3	<0.5	<0.5	<0.5	3
Perfluorooctane sulfonic acid (PFOS)	<0.002	<0.002	<0.002	1	<0.002	<0.002	<0.002	1	<0.007	<0.002	<0.020	4	<0.007	<0.002	<0.020	4
Perfluorooctanoic acid (PFOA)	<0.002	<0.002	<0.002	1	<0.002	<0.002	<0.002	1	<0.007	<0.002	<0.020	4	<0.007	<0.002	<0.020	4
Phorate	<0.25	<0.25	<0.25	1	<0.25	<0.25	<0.25	1	<0.25	<0.25	<0.25	4	<0.25	<0.25	<0.25	4
Picloram	<0.5	<0.5	<0.5	1	<0.5	<0.5	<0.5	1	<0.3	<0.1	<0.5	4	<0.3	<0.1	<0.5	4
Simazine	<0.1	<0.1	<0.1	1	<0.1	<0.1	<0.1	1	<0.1	<0.1	<0.1	4	<0.1	<0.1	<0.1	4
Terbufos	<0.5	<0.5	<0.5	1	<0.5	<0.5	<0.5	1	<0.5	<0.5	<0.5	4	<0.5	<0.5	<0.5	4
Tetrachloroethylene	<0.5	<0.5	<0.5	30	<0.5	<0.5	<0.5	31	<0.5	<0.5	<0.5	301	<0.5	<0.5	<0.5	304
Toluene	<0.5	<0.5	<0.5	30	<0.5	<0.5	<0.5	31	<0.5	<0.5	1.7	301	<0.5	<0.5	2.9	304
Total Xylenes	<1.0	<1.0	<1.0	30	<1.0	<1.0	<1.0	31	<1.0	<1.0	<2.5	284	<1.0	<1.0	<2.5	285
Trichloroethylene	<0.5	<0.5	<0.5	30	<0.5	<0.5	<0.5	31	<0.5	<0.5	<0.5	301	<0.5	<0.5	<0.5	304
Trifluralin	<0.1	<0.1	<0.1	1	<0.1	<0.1	<0.1	1	<0.1	<0.1	<0.1	4	<0.1	<0.1	<0.1	4

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

October 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	<1.0	<1.0	<1.0	30	<1	<1	<1	31	<1.0	<1.0	5.8	284	<1	<1	1	285
Vinyl Chloride	<1	<1	<1	30	<1	<1	<1	31	<1	<1	<1	283	<1	<1	<1	284
Radionuclides (Bq/L)																
Cesium-137				0				0	<0.2	<0.2	<0.2	1	<0.1	<0.1	<0.1	1
Gross Alpha				0				0	<0.14	<0.14	<0.14	1	<0.15	<0.15	<0.15	1
Gross Beta				0				0	0.07	0.07	0.07	1	<0.07	<0.07	<0.07	1
Iodine-131				0				0	<0.3	<0.3	<0.3	1	<0.2	<0.2	<0.2	1
Lead-210				0				0	<0.02	<0.02	<0.02	1	<0.02	<0.02	<0.02	1
Radium-226				0				0	<0.005	<0.005	<0.005	1	<0.005	<0.005	<0.005	1
Strontium-90				0				0	<0.05	<0.05	<0.05	1	<0.05	<0.05	<0.05	1
Tritium				0				0	<40	<40	<40	1	<40	<40	<40	1

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

October 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 Inorganics (mg/L) ***																
Alkalinity Total	124	123	125	5	123	120	125	5	128	117	149	44	128	112	152	44
Alkalinity, PHP (mg CaCO3/L)	<3	<3	<3	1	<3	<3	<3	1	<3	<3	<3	10	<3	<3	<3	10
Aluminum	0.118	0.118	0.118	1	0.098	0.098	0.098	1	0.871	0.108	4.200	10	1.237	0.078	7.370	10
Ammonia as NH3	<0.05	<0.05	<0.05	5	<0.05	<0.05	<0.05	6	<0.05	<0.05	0.09	55	<0.05	<0.05	0.14	57
Beryllium	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	10	<0.0002	<0.0002	0.0002	10
Calcium Hardness	116	114	118	4	114	112	115	4	116	102	138	38	116	99	140	38
Calcium Hardness Calculated	113	113	113	1	116	116	116	1	119	113	127	6	122	114	147	6
Cobalt	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	1	0.0003	<0.0002	0.0008	10	0.0004	<0.0002	0.0018	10
Free Chlorine	<0.07	<0.07	<0.07	1	<0.07	<0.07	<0.07	1	<0.07	<0.07	<0.07	10	<0.07	<0.07	<0.07	10
Iron	0.048	0.048	0.048	1	0.078	0.078	0.078	1	0.576	0.048	2.110	10	0.889	0.075	4.850	10
Lanthanum	<0.001	<0.001	<0.001	1	<0.001	<0.001	<0.001	1	<0.001	<0.001	0.001	10	<0.001	<0.001	0.003	10
Lithium	0.0039	0.0039	0.0039	1	0.0038	0.0038	0.0038	1	0.0045	0.0033	0.0076	10	0.0047	0.0033	0.0104	10
Magnesium	13.8	13.8	13.8	1	13.9	13.9	13.9	1	14.1	13.3	15.4	10	14.4	13.2	16.6	10
Molybdenum	0.0006	0.0006	0.0006	1	0.0006	0.0006	0.0006	1	0.0009	0.0006	0.0010	10	0.0009	0.0006	0.0011	10
Nickel	0.0006	0.0006	0.0006	1	0.0006	0.0006	0.0006	1	0.0013	<0.0005	0.0034	10	0.0016	<0.0005	0.0066	10
Ortho_P	<0.02	<0.02	<0.02	1	<0.02	<0.02	<0.02	1	<0.02	<0.02	<0.02	9	<0.02	<0.02	<0.02	9
Orthophosphate, total				0				0	0.03	<0.02	0.04	2	0.03	<0.02	0.04	2
Phosphorus	<0.02	<0.02	<0.02	1	<0.02	<0.02	<0.02	1	0.04	<0.02	0.09	10	0.04	<0.02	0.15	10
Potassium	0.7	0.7	0.7	1	0.7	0.7	0.7	1	1.1	0.7	2.2	10	1.2	0.7	3.2	10
Silicon	1.4	1.4	1.4	1	1.63	1.63	1.63	1	3.6	1.4	11.2	10	4.45	1.63	18.10	10
Silver^				0				0	<0.0002	<0.0002	<0.0002	3	<0.0002	<0.0002	<0.0002	3
Silver^^	<0.00002	<0.00002	<0.00002	1	<0.00002	<0.00002	<0.00002	1	<0.00002	<0.00002	<0.00002	7	<0.00002	<0.00002	0.00003	7
Sodium	3.4	3.4	3.4	1	3.4	3.4	3.4	1	4.7	3.4	7.0	10	4.2	3.4	5.1	10
Strontium	0.460	0.460	0.460	1	0.461	0.461	0.461	1	0.451	0.419	0.499	10	0.452	0.418	0.504	10
Thallium	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	1	<0.0003	<0.0002	<0.0005	10	<0.0003	<0.0002	<0.0005	10
Tin	<0.0005	<0.0005	<0.0005	1	<0.0005	<0.0005	<0.0005	1	<0.0005	<0.0005	<0.0005	10	<0.0005	<0.0005	<0.0005	10
Titanium	0.0013	0.0013	0.0013	1	0.0022	0.0022	0.0022	1	0.0230	0.0013	0.1140	10	0.0346	0.0017	0.2010	10
Total Hardness (mg/L CaCO3)	176	173	178	4	175	169	179	4	176	153	211	38	176	155	203	38
Total Hardness Calculated	170	170	170	1	173	173	173	1	176	170	187	6	181	169	216	6
Total Kjeldahl Nitrogen	0.2	0.2	0.2	1	0.2	0.2	0.2	1	0.2	0.1	0.4	9	0.2	<0.1	0.5	9
Total Kjeldahl Nitrogen (TKN)				0				0	0.3	<0.1	1.0	27	0.6	<0.1	9.4	28
Vanadium	<0.0005	<0.0005	<0.0005	1	<0.0005	<0.0005	<0.0005	1	0.0022	<0.0005	0.0106	10	0.0033	<0.0005	0.0198	10
Zinc	<0.005	<0.005	<0.005	1	<0.005	<0.005	<0.005	1	<0.006	<0.005	0.011	10	<0.007	<0.005	0.020	10
Zirconium	<0.001	<0.001	<0.001	1	<0.001	<0.001	<0.001	1	<0.001	<0.001	0.003	10	0.002	<0.001	0.005	10

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

October 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	4	<0.1	<0.1	<0.1	4
Aldrin	<0.008	<0.008	<0.008	1	<0.008	<0.008	<0.008	1	<0.008	<0.008	<0.008	4	<0.008	<0.008	<0.008	4
Azinphos-methyl	<0.1	<0.1	<0.1	1	<0.1	<0.1	<0.1	1	<0.1	<0.1	<0.1	4	<0.1	<0.1	<0.1	4
Bromodichloromethane	<0.5	<0.5	<0.5	30	<0.5	<0.5	<0.5	31	<0.5	<0.5	<0.5	301	<0.5	<0.5	<0.5	304
Bromoform	<0.5	<0.5	<0.5	30	<0.5	<0.5	<0.5	31	<0.5	<0.5	<1.0	301	<0.5	<0.5	<1.0	304
Bromomethane				0				0	<0.5	<0.5	<0.5	17	<0.5	<0.5	<0.5	19
Carbaryl	<0.05	<0.05	<0.05	1	<0.05	<0.05	<0.05	1	<0.05	<0.05	<0.05	4	<0.05	<0.05	<0.05	4
Carbofuran	<0.025	<0.025	<0.025	1	<0.025	<0.025	<0.025	1	<0.025	<0.025	<0.025	4	<0.025	<0.025	<0.025	4
Chloroethane				0				0	<0.5	<0.5	<0.5	17	<0.5	<0.5	<0.5	19
Chloroform	<0.5	<0.5	<0.5	30	<0.5	<0.5	<0.5	31	<0.5	<0.5	5.7	301	<0.5	<0.5	<0.5	304
Chloromethane				0				0	<5	<5	<5	17	<5	<5	<5	19
Dibromochloromethane	<0.5	<0.5	<0.5	30	<0.5	<0.5	<0.5	31	<0.5	<0.5	<0.5	301	<0.5	<0.5	<0.5	304
Dichlorobenzene (1,3)	<0.5	<0.5	<0.5	30	<0.5	<0.5	<0.5	31	<0.5	<0.5	<0.5	284	<0.5	<0.5	<0.5	285
Dichloroethylene, cis (1,2)	<0.5	<0.5	<0.5	30	<0.5	<0.5	<0.5	31	<0.5	<0.5	<0.5	284	<0.5	<0.5	<0.5	285
Dichloroethylene, trans (1,2)	<0.5	<0.5	<0.5	30	<0.5	<0.5	<0.5	31	<0.5	<0.5	<0.5	284	<0.5	<0.5	<0.5	285
Dichloropropane (1,2)	<0.5	<0.5	<0.5	30	<0.5	<0.5	<0.5	31	<0.5	<0.5	<0.5	284	<0.5	<0.5	<0.5	285
Dieldrin	<0.008	<0.008	<0.008	1	<0.008	<0.008	<0.008	1	<0.008	<0.008	<0.008	4	<0.008	<0.008	<0.008	4
Methyl t-Butyl Ether (MTBE)	<0.5	<0.5	<0.5	30	<0.5	<0.5	<0.5	31	<0.5	<0.5	<0.5	284	<0.5	<0.5	<0.5	285
MIBK	<1	<1	<1	30	<1	<1	<1	31	<1	<1	<1	284	<1	<1	<1	285
Parathion	<0.1	<0.1	<0.1	1	<0.1	<0.1	<0.1	1	<0.1	<0.1	<0.1	4	<0.1	<0.1	<0.1	4
Perfluorobutane Sulfonate (PFBS)				0				0	<2	<2	<2	1	<2	<2	<2	1
Perfluorobutane sulfonic acid (PFBS)	<0.002	<0.002	<0.002	1	<0.002	<0.002	<0.002	1	<0.007	<0.002	<0.020	4	<0.007	<0.002	<0.020	4
Perfluorobutanoic acid (PFBA)	<0.02	<0.02	<0.02	1	<0.02	<0.02	<0.02	1	<0.69	<0.02	<2.00	6	<0.69	<0.02	<2.00	6
Perfluorodecanoic Acid (PFDA)				0				0	<2	<2	<2	2	<2	<2	<2	2
Perfluorododecanoic Acid (PFDoA)				0				0	<2	<2	<2	2	<2	<2	<2	2
Perfluoroheptanoic acid (PFHpA)	<0.002	<0.002	<0.002	1	<0.002	<0.002	<0.002	1	<0.671	<0.002	<2.000	6	<0.671	<0.002	<2.000	6
Perfluorohexane sulfonic acid (PFHxS)	<0.002	<0.002	<0.002	1	<0.002	<0.002	<0.002	1	<0.007	<0.002	<0.020	4	<0.007	<0.002	<0.020	4
Perfluorohexanoic acid (PFHxA)	<0.002	<0.002	<0.002	1	<0.002	<0.002	<0.002	1	<0.671	<0.002	<2.000	6	<0.671	<0.002	<2.000	6
Perfluorononanoic acid (PFNA)	<0.002	<0.002	<0.002	1	<0.002	<0.002	<0.002	1	<0.671	<0.002	<2.000	6	<0.671	<0.002	<2.000	6
Perfluoropentanoic acid (PFPeA)	<0.002	<0.002	<0.002	1	<0.002	<0.002	<0.002	1	<0.671	<0.002	<2.000	6	<0.671	<0.002	<2.000	6
Perfluoroundecanoic Acid (PFUnA)				0				0	<2	<2	<2	2	<2	<2	<2	2
Prometryn	<0.025	<0.025	<0.025	1	<0.025	<0.025	<0.025	1	<0.025	<0.025	<0.025	3	<0.025	<0.025	<0.025	3
Styrene	<0.5	<0.5	<0.5	30	<0.5	<0.5	<0.5	31	<0.5	<0.5	<0.5	301	<0.5	<0.5	<0.5	304
Tetrachloroethane (1,1,2,2)	<0.5	<0.5	<0.5	30	<0.5	<0.5	<0.5	31	<0.5	<0.5	<1.0	284	<0.5	<0.5	<1.0	285
Total Organic Carbon	1.4	1.2	1.5	5	1.4	1.2	1.5	5	2.5	1.1	5.4	44	2.4	1.2	5.9	44
Total Volatile Organics (NonTHM)	4.2	3.2	4.9	30	4.1	3.0	4.9	31	2.2	<1.0	6.2	284	2.2	<1.0	6.1	285
Total Volatile Organics (Unknown)				0				0	<0.8	<0.5	2.1	23	<0.8	<0.5	2.1	31
Triallate	<0.1	<0.1	<0.1	1	<0.1	<0.1	<0.1	1	<0.1	<0.1	<0.1	4	<0.1	<0.1	<0.1	4
Trichloroacetic acid				0				0	<1	<1	<1	1	<1	<1	<1	1
Trichlorobenzene (1,2,4)	<0.5	<0.5	<0.5	30	<0.5	<0.5	<0.5	31	<0.5	<0.5	<0.5	284	<0.5	<0.5	<0.5	285

Secondary Organics (ug/L) ***																
Xylene (1,4)	<0.5	<0.5	<0.5	30	<0.5	<0.5	<0.5	31	<0.5	<0.5	0.6	284	<0.5	<0.5	0.9	285

Table Explanations:

^: Data from January 1 until March 31

^^: Data from April 1 onwards

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

(Lab Neutralization Tank in Water Excellence Lab Building)

Date	pH**
04-Oct-2024	7.85
10-Oct-2024	8.14
16-Oct-2024	7.82
24-Oct-2024	10.07
31-Oct-2024	9.7

**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	0.0005	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	0.03	mg/L
Bromodichloromethane	0.5	µg/L
Bromoform	0.5	µg/L
Cadmium	0.0002	mg/L
Calcium	0.1	mg/L
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	0.3	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	1.0	MPN/100 mL
Colour	0.5	TCU
Copper	0.002	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
E. coli	1.0	MPN/100 mL
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
Lithium	0.0002	mg/L
Magnesium	0.1	mg/L
Manganese	0.002	mg/L
Mercury	0.0002	mg/L
Methyl t-Butyl Ether (MTBE)	0.5	µg/L

2.2.23 REPORTABLE DETECTION LIMITS

Analyte	RDL	Unit
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
Run1	10	RLU
Run2	10	RLU
Run3	10	RLU
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	0.5	mg/L
Tetrachloroethane (1,1,2,2)	0.5	µg/L
Tetrachloroethylene	0.5	µg/L
Thallium	0.0002	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 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
UV Absorbance	0.001	UV Abs/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

2.2.23 REPORTABLE DETECTION LIMITS

Analyte	RDL	Unit
Contract Lab Analysis		
2,3,4,6-Tetrachlorophenol	NR	µg/L
2,4,5-T	0.250	µg/L
2,4,6-Trichlorophenol	NR	µg/L
2,4-D	0.250	µg/L
2,4-Dichlorophenol	NR	µg/L
6:2 Fluorotelomer sulfonic acid(6:2 FTS)	0.0020	µg/L
8:2 Fluorotelomer sulfonic acid(8:2 FTS)	0.0020	µg/L
a-chlordane	0.0080	µg/L
Alachlor	0.050	µg/L
Aldicarb	0.10	µg/L
Aldrin	0.0080	µg/L
Aldrin + Dieldrin	0.011	µg/L
Ametryn	0.0250	µg/L
Atrazine	0.050	µg/L
Atrazine + N-dealkylated metabolites	0.10	µg/L
Atrazine Desethyl	0.0250	µg/L
Azinphos-methyl	0.10	µg/L
Bendiocarb	0.0250	µg/L
Benzo(a)pyrene	0.0050	ug/L
Bromochloroacetic acid	1.00	ug/L
Bromoxynil	0.250	µg/L
Carbaryl	0.050	µg/L
Carbofuran	0.0250	µg/L
Chlordane, total	0.011	µg/L
Chlorpyrifos	0.10	µg/L
Cyanazine	0.10	µg/L
DDD, total	0.0060	µg/L
DDE, 2,4'-	0.0040	µg/L
DDE, total	0.0060	µg/L
DDT + metabolites, total	0.010	µg/L
DDT, total	0.0060	µg/L
Diazinon	0.0250	µg/L
Dibromoacetic acid	1.00	ug/L
Dicamba	0.50	µg/L
Dichloroacetic acid	1.00	ug/L
Diclofop-methyl	0.10	µg/L
Dieldrin	0.0080	µg/L
Dimethoate	0.050	µg/L
Dimethoate and Omethoate (as Dimethoate)	0.211	µg/L
Dinoseb	0.250	µg/L
Diquat	1.0	µg/L
Dissolved Organic Carbon	0.5	mg/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 + Heptachlor epoxide	0.011	µg/L
Heptachlor Epoxide	0.0080	µg/L
Malathion	0.0250	µg/L
MCPA	0.250	µg/L
Mercury	0.0050	µg/L

2.2.23 REPORTABLE DETECTION LIMITS

Analyte	RDL	Unit
Methoxychlor	0.0080	µg/L
Methyl Parathion	0.10	µg/L
Metolachlor	0.0250	µg/L
Metribuzin	0.10	µg/L
Microcystin	0.20	µg/L
Monobromoacetic acid	1.00	ug/L
Monochloroacetic acid	1.00	ug/L
NDMA	0.00216	µg/L
Nitrilotriacetic acid	0.40	mg/L
Omethoate	0.050	µg/L
Omethoate (as dimethoate)	0.161	µg/L
op-DDT	0.0040	µg/L
Oxychlordane	0.0080	µg/L
Paraquat (as dichloride)	1.0	µg/L
Parathion	0.10	µg/L
Pentachlorophenol	NR	µg/L
Perfluorobutane sulfonic acid (PFBS)	0.0020	µg/L
Perfluorobutanoic acid [PFBA]	0.020	µg/L
Perfluoroheptanoic acid [PFHpA]	0.0020	µg/L
Perfluorohexanesulfonic acid [PFHxS]	0.0020	µg/L
Perfluorohexanoic acid [PFHxA]	0.0020	µg/L
Perfluorononanoic acid [PFNA]	0.0020	µg/L
Perfluorooctanesulfonic acid [PFOS]	0.0020	µg/L
Perfluorooctanoic acid (PFOA)	0.0020	µg/L
Perfluoropentanoic acid (PFPeA)	0.0020	µg/L
Phorate	0.250	µg/L
Picloram	0.50	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
Prometryn	0.0250	µg/L
Propazine	0.0250	µg/L
Simazine	0.10	µg/L
Temephos	0.250	µg/L
Terbufos	0.50	µg/L
Terbutryn	0.0250	µg/L
Total Cyanide	0.0020	mg/L
Total Organic Carbon	0.5	mg/L
Total Sulphide (as S)	0.0015	mg/L
Triallate	0.10	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