EDMONTON WATERWORKS
MONTHLY REPORT

November 2024

PROVIDING MORE EPCOR

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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 November, Rossdale Plant had 1 planned shutdown and no unplanned bypasses.

Date	Type	Bypass Description
Nov 5-7	Planned	29.7 hour shutdown for capital project work

In November, E.L. Smith Plant had 1 planned shutdown and 1 planned bypass.

Date	Type	Bypass Description
Nov 20	Planned	23.5 hour shutdown for capital project work
Nov 27	Planned	0.65 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 November, there were zero instances of chlorinated waste released at the outfall structure at Rossdale Water Treatment Plant.
- During the month of November, there were zero instances of chlorinated waste released at the outfall structure at E.L. Smith Water Treatment Plant.

Chemical Dosing Highlights

In November, 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 – November 2024

EPCOR Incident Number	Description	Date of Incident	AEPA Reference Number
ENV-20241105-458956-v1	About 20 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.	November 5, 2024	434934
ENV-20241105-447900-v1	About 55 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.	November 5, 2024	434936
ENV-20241105-346973-v1	About 64 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.	November 5, 2024	434931
ENV-20241115-035310-v2	About 43 m^3 of potable chlorinated water at +/-1.5ppm was released to the surface due to a suspected leak within the water distribution system buried underground. The water drained to the nearby 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.	November 15, 2024	435281
ENV-20241119-202057-v1	About 54 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	November 19, 2024	435374

	into the drainage infrastructure to dechlorinate the water The leak was isolated until the repair was completed.		
ENV-20241128-893986-v1	About 26 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.	November 28, 2024	435628

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	
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)

November 2024

Day	Rossdale			E.L. Smith	Plants Combined Total
	Plant 1	Plant 2	Plant Total	Plant Total	
1	--	168	168	285	454
2	--	166	166	289	455
3	--	148	148	269	417
4	--	165	165	281	446
5	--	156	156	288	445
6	--	--	--	314	314
7	--	155	155	321	476
8	--	169	169	306	475
9	--	148	148	269	417
10	--	141	141	281	422
11	--	130	130	271	401
12	--	145	145	260	405
13	--	159	159	268	427
14	--	157	157	279	436
15	--	157	157	288	445
16	--	160	160	301	461
17	--	141	141	300	442
18	--	135	135	310	444
19	--	162	162	314	476
20	--	170	170	65	235
21	--	171	171	321	492
22	--	169	169	320	489
23	--	162	162	299	461
24	--	154	154	283	437
25	--	157	157	288	445
26	--	160	160	301	461
27	--	159	159	295	455
28	--	159	159	301	460
29	--	157	157	301	458
30	--	160	160	286	445
Monthly Total	--	4,540	4,540	8,556	13,096
Monthly Min	--	130	130	65	
Monthly Max	--	171	171	321	
Monthly Avg	--	157	157	285	437

NOTES: ' -- ' indicates plant offline

1.2.2 Treated Water Production (ML)

November 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	54	201	152	201	282	234	386	75.8
2	71	205	143	203	297	238	381	79.8
3	63	205	139	201	272	232	371	84.1
4	77	202	148	200	278	230	379	80.7
5	18	200	134	197	284	237	371	82.2
6	--	--	0.0	222	292	260	260	75.7
7	23	202	132	214	298	270	402	62.6
8	71	198	153	203	289	257	409	73.3
9	71	173	135	201	282	228	362	78.0
10	16	204	124	200	288	235	359	78.8
11	66	186	115	201	278	226	341	81.0
12	53	205	131	199	278	216	347	78.4
13	55	205	129	199	288	221	351	74.0
14	50	194	140	199	274	231	370	72.7
15	32	206	141	200	293	238	379	74.0
16	60	206	147	245	287	255	402	78.9
17	16	206	125	200	343	252	377	86.8
18	32	185	102	202	322	256	358	85.4
19	82	176	145	161	282	258	403	84.1
20	81	199	154	0.0	195	2.8	157	76.6
21	90	201	151	169	300	264	415	53.1
22	72	205	149	204	291	261	410	60.9
23	84	204	142	198	294	238	380	68.2
24	56	198	135	199	291	226	361	70.8
25	59	206	142	194	294	231	373	65.7
26	63	206	144	204	294	245	390	67.3
27	68	203	139	0.0	289	245	384	71.5
28	80	204	147	200	292	251	397	73.7
29	60	204	143	199	288	248	391	77.0
30	61	194	143	201	289	224	367	80.7
Monthly Tota			4,022			7,008	11,030	
Monthly Min	16			0.0				
Monthly Max		206			343			
Monthly Avg			134			234	368	

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

November 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	2.0	3.2	2.7	8.2	8.3	8.2	3.2	3.6	3.4		2.0	3.0	2.4	8.2	8.4	8.3	3.4	4.2	4.0	
2	1.8	2.0	1.9	8.2	8.3	8.2	2.3	3.6	3.2		1.9	2.1	2.0	8.2	8.4	8.3	2.4	3.4	2.9	
3	1.9	3.1	2.2	8.2	8.2	8.2	2.3	3.0	2.6		1.9	3.1	2.5	8.2	8.4	8.3	2.4	3.4	3.0	
4	2.7	3.1	2.9	8.2	8.2	8.2	2.3	3.3	2.5		3.0	3.3	3.1	8.2	8.4	8.3	2.7	3.5	3.1	
5	2.8	3.0	2.9	8.2	8.2	8.2	2.4	3.3	2.7		2.7	12	4.0	8.2	8.2	8.2	2.8	4.1	3.6	
6	3.0	3.0	3.0	8.2	8.2	8.2	2.4	2.4	2.4		2.7	12	4.7	8.2	8.3	8.2	3.0	3.4	3.3	
7	2.2	3.0	2.8	8.2	8.3	8.2	2.4	3.4	3.0		2.2	3.0	2.5	8.2	8.3	8.2	2.2	3.4	2.6	
8	2.2	2.7	2.4	8.1	8.2	8.2	2.7	2.9	2.7		2.1	3.3	2.8	8.2	8.3	8.3	2.1	3.0	2.7	
9	2.1	2.6	2.4	8.2	8.3	8.2	2.9	3.4	3.1		2.1	2.6	2.4	8.2	8.3	8.3	2.1	3.0	2.6	
10	1.9	2.1	2.0	8.2	8.3	8.2	2.7	3.8	3.0		2.0	2.5	2.2	8.2	8.3	8.3	2.5	4.0	3.3	
11	1.9	2.9	2.3	8.2	8.3	8.2	2.5	3.8	3.1		2.0	4.7	3.7	8.2	8.3	8.2	2.8	4.0	3.2	
12	2.3	2.9	2.7	8.3	8.3	8.3	2.7	3.5	3.0		2.2	3.8	2.9	8.2	8.3	8.3	2.8	4.6	3.9	
13	2.1	3.9	2.4	8.2	8.3	8.3	2.6	3.7	3.5		2.1	2.2	2.1	8.3	8.3	8.3	2.4	4.5	3.4	
14	2.4	3.9	3.0	8.2	8.3	8.2	2.6	2.7	2.7		2.1	6.9	3.8	8.2	8.3	8.2	2.4	2.9	2.5	
15	2.3	2.6	2.4	8.2	8.3	8.3	2.6	3.1	2.8		2.4	2.7	2.6	8.2	8.3	8.2	2.5	3.4	3.1	
16	2.3	2.6	2.5	8.2	8.2	8.2	2.6	3.7	3.3		2.4	3.2	2.7	8.2	8.3	8.2	2.6	3.4	2.9	
17	2.5	3.7	3.0	8.2	8.2	8.2	2.6	3.2	2.8		2.7	5.1	4.1	8.3	8.3	8.3	2.9	4.6	3.9	
18	3.2	3.7	3.4	8.2	8.2	8.2	2.9	3.4	3.0		3.5	4.7	3.9	8.2	8.3	8.2	2.9	4.7	3.6	
19	2.3	3.5	2.7	8.2	8.2	8.2	2.8	3.5	3.4		2.8	4.6	3.4	8.2	8.3	8.2	2.6	4.7	3.2	
20	2.5	2.9	2.7	8.2	8.2	8.2	2.8	3.4	3.1		4.6	4.6	4.6	8.2	8.2	8.2	2.9	2.9	2.9	
21	2.5	4.3	3.0	8.2	8.2	8.2	3.1	3.3	3.3		4.5	9.2	5.4	8.2	8.3	8.3	2.9	4.0	3.1	
22	4.2	5.6	5.1	8.2	8.2	8.2	2.7	3.1	3.1		5.5	12	8.7	8.2	8.3	8.3	2.7	4.7	3.6	
23	4.2	11	6.8	8.0	8.2	8.1	2.7	4.4	3.7		5.5	21	9.9	8.2	8.2	8.2	3.5	6.7	4.4	
24	5.9	16	9.0	8.2	8.2	8.2	4.0	4.6	4.3		6.6	30	12	8.2	8.2	8.2	3.5	4.2	3.8	
25	3.1	5.9	4.7	8.2	8.2	8.2	4.0	4.5	4.1		4.3	7.6	5.5	8.2	8.3	8.3	4.1	5.3	4.8	
26	2.4	3.1	2.7	8.2	8.2	8.2	4.3	4.9	4.5		2.7	4.3	3.5	8.2	8.3	8.2	4.7	5.0	4.8	
27	2.2	2.7	2.3	8.2	8.2	8.2	3.9	4.9	4.5		2.7	3.4	3.0	8.1	8.2	8.2	3.0	4.7	3.4	
28	2.3	3.0	2.5	8.1	8.2	8.1	2.5	3.9	3.1		3.2	4.1	3.9	8.1	8.2	8.1	2.8	3.7	3.1	
29	3.0	3.4	3.2	8.2	8.2	8.2	2.8	3.9	3.1		3.8	6.1	4.4	8.2	8.2	8.2	3.6	4.5	4.0	
30	3.4	100	18	8.1	8.2	8.2	3.2	3.9	3.5		5.1	130	55	8.1	8.2	8.1	3.0	6.2	4.5	
Monthly Min/Max/Avg	1.8	100	3.7	8.0	8.3	8.2	2.3	4.9	3.2		1.9	130	5.7	8.1	8.4	8.2	2.1	6.7	3.4	

NOTES: ' -- ' indicates plant offline

1.2.4 Treated Water Quality Entering the Distribution System

November 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	0.05	0.06	0.05	2.01	2.16	2.07	8.1	8.1	8.1	0.73	0.74	0.73	178	0.3	0.08	0.08	0.08	2.03	2.08	2.04	7.9	7.9	7.9	0.76	0.77	0.77	181	0.7
2	0.04	0.06	0.05	2.06	2.16	2.12	8.1	8.1	8.1	0.72	0.73	0.73	177	0.7	0.07	0.08	0.08	2.04	2.14	2.10	7.8	7.9	7.9	0.76	0.77	0.77	170	0.8
3	0.04	0.06	0.05	2.01	2.16	2.09	8.1	8.1	8.1	0.73	0.73	0.73	165	0.5	0.07	0.08	0.07	2.03	2.08	2.06	7.9	7.9	7.9	0.77	0.78	0.77	169	0.6
4	0.05	0.06	0.05	2.06	2.16	2.11	8.1	8.2	8.1	0.73	0.74	0.73	178	0.4	0.08	0.08	0.08	2.03	2.11	2.08	7.9	7.9	7.9	0.77	0.79	0.78	181	0.6
5	0.05	0.07	0.05	2.06	2.26	2.15	8.1	8.2	8.1	0.73	0.74	0.74	176	0.2	0.08	0.09	0.08	2.03	2.12	2.06	7.9	7.9	7.9	0.78	0.79	0.79	173	0.6
6	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.07	0.08	0.07	2.03	2.08	2.06	7.9	7.9	7.9	0.73	0.79	0.76	178	0.6
7	0.04	0.07	0.05	1.91	2.26	2.12	7.8	8.1	8.1	0.73	0.77	0.74	180	0.6	0.07	0.07	0.07	2.03	2.08	2.07	7.9	7.9	7.9	0.73	0.74	0.73	176	0.7
8	0.04	0.05	0.04	2.01	2.16	2.11	8.1	8.1	8.1	0.73	0.75	0.74	172	0.6	0.07	0.08	0.07	2.01	2.13	2.07	7.9	7.9	7.9	0.73	0.74	0.74	169	0.7
9	0.04	0.05	0.05	1.96	2.06	2.04	8.1	8.1	8.1	0.74	0.75	0.75	170	0.4	0.08	0.08	0.08	1.98	2.03	2.02	7.9	7.9	7.9	0.73	0.74	0.73	173	0.7
10	0.05	0.06	0.05	2.01	2.11	2.03	8.1	8.1	8.1	0.74	0.75	0.74	174	0.5	0.07	0.08	0.08	1.94	2.02	1.99	7.9	7.9	7.9	0.73	0.74	0.73	173	0.5
11	0.05	0.06	0.06	1.96	2.11	2.02	8.1	8.1	8.1	0.74	0.76	0.75	178	0.7	0.08	0.08	0.08	1.98	2.03	2.02	7.9	7.9	7.9	0.73	0.74	0.73	178	0.6
12	0.05	0.06	0.05	1.91	2.06	2.02	8.1	8.1	8.1	0.75	0.77	0.75	174	0.3	0.07	0.07	0.07	1.93	2.03	1.99	7.9	8.0	7.9	0.73	0.75	0.75	177	0.7
13	0.05	0.06	0.05	1.91	2.21	2.11	8.1	8.1	8.1	0.72	0.77	0.75	180	0.6	0.08	0.09	0.08	1.93	1.98	1.97	7.9	8.0	7.9	0.73	0.75	0.74	178	0.6
14	0.05	0.06	0.05	2.01	2.16	2.05	8.1	8.1	8.1	0.73	0.75	0.74	173	0.5	0.07	0.08	0.07	1.98	2.08	2.04	7.9	7.9	7.9	0.73	0.74	0.74	170	0.5
15	0.05	0.06	0.05	2.01	2.21	2.06	8.1	8.1	8.1	0.74	0.75	0.74	174	0.2	0.07	0.08	0.07	2.04	2.11	2.08	7.9	7.9	7.9	0.73	0.74	0.74	174	0.7
16	0.04	0.05	0.05	2.01	2.32	2.20	8.1	8.1	8.1	0.75	0.76	0.75	174	0.4	0.07	0.07	0.07	1.98	2.08	2.02	7.9	7.9	7.9	0.72	0.73	0.73	174	0.5
17	0.04	0.05	0.05	1.86	2.11	2.01	8.1	8.1	8.1	0.75	0.77	0.75	170	0.5	0.07	0.08	0.07	1.98	2.03	2.00	7.9	7.9	7.9	0.72	0.73	0.73	170	0.6
18	0.05	0.05	0.05	1.91	2.06	2.01	8.1	8.2	8.1	0.61	0.75	0.71	174	0.5	0.07	0.08	0.08	1.98	2.05	2.01	7.9	7.9	7.9	0.72	0.73	0.72	170	0.5
19	0.05	0.06	0.05	1.75	2.26	2.01	8.1	8.2	8.1	0.61	0.67	0.65	180	0.6	0.08	0.08	0.08	1.98	2.03	2.02	7.9	7.9	7.9	0.72	0.73	0.72	178	0.6
20	0.04	0.05	0.05	2.01	2.16	2.08	8.1	8.2	8.1	0.66	0.67	0.67	177	0.7	0.08	0.11	0.10	1.95	2.04	2.01	7.8	8.1	7.9	0.72	0.84	0.77	178	0.6
21	0.04	0.05	0.05	2.01	2.16	2.09	8.1	8.2	8.1	0.67	0.68	0.67	182	0.4	0.09	0.09	0.09	1.97	2.08	2.02	7.9	7.9	7.9	0.73	0.74	0.74	182	0.8
22	0.04	0.05	0.04	2.01	2.16	2.09	8.1	8.2	8.1	0.67	0.68	0.68	186	0.7	0.07	0.08	0.07	1.88	1.98	1.93	7.9	7.9	7.9	0.73	0.75	0.74	183	0.9
23	0.04	0.06	0.05	2.01	2.16	2.08	8.1	8.2	8.1	0.68	0.69	0.68	186	0.4	0.08	0.08	0.08	1.93	1.98	1.94	7.9	7.9	7.9	0.74	0.75	0.75	193	0.9
24	0.04	0.06	0.05	2.06	2.21	2.12	8.1	8.2	8.1	0.68	0.69	0.68	197	0.7	0.08	0.09	0.08	1.93	1.98	1.97	7.9	7.9	7.9	0.74	0.75	0.75	192	0.5
25	0.04	0.05	0.05	2.06	2.21	2.12	8.1	8.1	8.1	0.68	0.69	0.69	193	0.5	0.08	0.09	0.08	1.98	2.02	1.98	7.9	7.9	7.9	0.74	0.76	0.75	193	0.8
26	0.04	0.05	0.05	2.01	2.16	2.08	8.1	8.1	8.1	0.69	0.71	0.69	193	0.7	0.08	0.08	0.08	1.93	2.02	1.97	7.9	7.9	7.9	0.73	0.75	0.74	198	0.9
27	0.05	0.05	0.05	1.96	2.11	2.04	8.1	8.2	8.1	0.71	0.71	0.71	101	1.0	0.07	0.08	0.08	1.93	1.98	1.95	7.9	7.9	7.9	0.73	0.73	0.73	196	1.0
28	0.04	0.05	0.04	1.96	2.16	2.07	8.1	8.1	8.1	0.70	0.71	0.71	198	0.9	0.07	0.08	0.07	1.93	1.99	1.95	7.9	7.9	7.9	0.73	0.73	0.73	193	0.9
29	0.04	0.05	0.04	1.96	2.11	2.06	8.1	8.1	8.1	0.69	0.71	0.70	193	0.4	0.08	0.08	0.08	1.93	1.98	1.95	7.9	7.9	7.9	0.73	0.73	0.73	194	0.9
30	0.04	0.06	0.05	1.96	2.21	2.04	8.1	8.1	8.1	0.70	0.72	0.71	106	0.5	0.08	0.08	0.08	1.93	1.99	1.96	7.8	7.9	7.9	0.72	0.73	0.73	98	0.9
Monthly Min/Max/ Avg	0.04	0.07	0.05	1.75	2.32	2.08	7.8	8.2	8.1	0.61	0.77	0.72	174	0.5	0.07	0.11	0.08	1.88	2.14	2.01	7.8	8.1	7.9	0.72	0.84	0.74	177	0.7

NOTES: ' -- ' indicates plant offline

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

November 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	5	16	9	3	9	7	3	18	7	6	25	9	10	29	14	2	16	6	3	11	6	3	25	6	3	11	7
2	3	19	5	2	17	4	1	7	4	3	21	6	5	14	8	2	9	5	3	24	7	3	12	7	2	12	6
3	3	15	5	2	6	4	--	--	--	4	8	5	8	23	10	2	16	7	3	7	5	1	22	4	2	7	5
4	1	6	3	1	18	11	8	14	10	3	20	8	6	12	9	4	9	6	6	33	10	1	10	2	2	28	10
5	5	16	7	4	11	7	1	12	6	4	23	8	8	30	11	3	16	7	3	11	6	1	26	3	3	20	7
6	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
7	--	--	--	2	11	5	3	11	5	3	11	6	4	16	8	4	29	7	9	28	12	4	31	9	3	39	7
8	3	15	6	1	14	4	1	16	4	3	24	5	4	7	5	3	18	6	3	11	6	2	8	4	1	20	4
9	2	12	5	1	7	4	2	7	4	3	20	5	7	24	10	2	5	3	2	6	4	2	22	7	3	9	6
10	3	9	6	1	5	3	2	4	3	4	25	7	3	29	6	4	32	7	--	--	--	3	10	6	2	21	5
11	1	1	1	4	10	7	3	23	7	3	27	6	9	22	13	3	8	5	6	14	9	2	6	4	3	10	7
12	6	13	9	2	7	4	3	12	5	4	12	7	6	14	11	--	--	--	4	11	8	8	15	12	2	23	7
13	4	19	7	--	--	--	4	12	7	4	24	8	5	31	12	5	14	9	3	7	5	6	22	10	4	12	8
14	4	10	7	4	8	6	2	6	4	3	21	7	5	26	10	3	20	6	6	13	9	3	10	7	4	22	8
15	3	11	5	3	15	5	4	13	6	5	24	7	5	13	9	2	9	6	4	9	6	7	20	9	1	22	6
16	4	9	6	3	12	6	2	20	4	4	31	7	5	24	8	2	18	7	6	34	9	1	10	7	4	10	6
17	4	39	7	3	7	5	1	44	9	4	26	8	7	13	10	3	7	5	4	9	6	4	22	6	3	42	8
18	1	38	11	3	14	7	3	10	6	5	25	8	5	11	8	7	18	9	4	26	14	7	16	11	4	10	7
19	5	10	8	4	12	8	5	20	10	7	23	10	9	32	15	3	12	7	5	16	10	6	27	10	5	26	11
20	1	22	8	3	16	5	3	9	5	4	12	7	5	27	9	3	22	7	4	25	10	4	18	8	2	9	5
21	3	16	7	3	8	5	4	12	7	3	26	8	5	13	9	2	15	8	4	13	8	2	38	6	2	26	8
22	2	30	7	3	21	7	2	20	7	3	31	17	1	21	5	1	30	16	3	27	9	4	31	18	2	24	6
23	6	29	12	3	17	7	7	29	11	6	33	10	1	30	14	5	13	10	5	11	8	3	29	10	8	17	12
24	2	28	7	5	28	9	9	15	12	8	40	15	6	15	9	3	25	12	10	30	15	4	15	9	4	24	13
25	2	31	8	5	21	8	2	13	7	4	27	9	6	33	13	1	14	6	3	28	7	2	28	9	1	17	6
26	1	28	4	1	9	4	4	13	7	1	28	7	3	22	7	6	15	10	4	16	9	2	11	6	1	25	9
27	9	18	14	1	18	7	1	8	3	2	10	5	8	43	15	1	9	4	1	24	5	1	23	9	1	23	6
28	2	13	6	1	17	4	5	29	9	4	29	8	4	10	7	7	25	10	5	13	8	3	13	6	3	15	7
29	12	19	15	4	9	6	2	8	5	3	23	9	10	26	15	3	10	6	2	8	5	2	22	4	1	26	7
30	8	17	12	3	8	5	12	22	17	7	29	16	9	15	11	3	24	16	3	28	16	10	27	15	11	21	15
Monthly Min/Max/Avg	1	39	7	1	28	6	1	44	7	1	40	8	1	43	10	1	32	8	1	34	8	1	38	8	1	42	8

NOTE: ' -- ' indicates filter offline

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

November 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	3	17	9	3	16	8	3	22	7	1	16	8	3	20	7	3	16	8	5	26	11	5	28	10	3	29	9
2	2	16	5	2	11	5	2	22	5	2	13	4	2	15	4	1	17	5	3	28	6	1	28	6	1	25	4
3	2	15	7	3	21	6	2	18	6	2	14	5	2	16	6	2	15	7	5	26	9	5	28	9	4	28	8
4	2	15	7	1	14	5	1	23	5	2	12	5	2	19	6	2	13	6	4	27	8	3	28	8	3	25	6
5	2	15	7	1	30	4	2	21	5	2	7	5	3	24	5	3	14	6	4	31	8	3	32	8	2	28	7
6	2	16	7	1	14	5	2	16	5	2	13	5	1	16	6	2	14	6	3	31	8	3	33	7	2	33	6
7	1	11	4	1	9	3	1	11	3	1	9	3	1	21	3	1	21	4	2	24	4	1	26	5	1	29	4
8	1	13	5	1	15	5	2	8	4	1	14	4	1	43	5	1	16	4	2	30	6	2	29	5	2	30	5
9	2	8	5	2	14	5	2	12	5	2	10	4	3	35	6	1	10	5	3	24	7	3	12	7	4	25	7
10	3	12	7	2	15	6	3	11	6	3	14	5	2	22	6	3	14	7	3	23	9	5	32	7	3	25	8
11	3	18	7	3	13	6	2	20	6	3	11	6	3	13	6	3	14	6	5	23	8	5	41	8	4	24	8
12	2	19	7	5	13	8	3	22	6	2	17	8	3	21	7	3	18	9	5	25	11	1	30	13	4	30	11
13	2	13	6	2	16	7	2	13	6	2	10	6	3	15	7	2	15	7	5	26	9	4	20	10	3	31	7
14	2	16	7	3	31	7	2	19	6	3	14	6	2	14	6	2	15	5	4	26	7	5	28	8	2	28	6
15	2	17	7	2	14	6	3	16	6	4	14	6	3	12	6	3	16	7	4	30	8	3	29	8	2	26	7
16	2	15	5	2	9	5	2	16	6	3	12	6	2	18	5	3	13	6	3	25	7	2	31	6	2	26	6
17	3	32	7	3	17	7	2	29	7	2	15	7	3	17	7	2	16	7	4	29	7	3	33	7	3	28	8
18	5	18	9	1	19	9	2	25	6	2	19	7	3	22	8	3	17	9	5	29	11	4	24	10	3	43	9
19	1	18	7	2	15	7	1	17	7	2	17	7	2	24	8	2	22	8	4	26	9	4	33	9	2	27	7
20	2	13	4	4	6	5	7	20	10	5	36	8	--	--	--	8	13	10	3	5	5	3	8	5	7	11	9
21	3	24	9	3	16	8	3	21	8	2	17	8	3	17	8	3	19	9	5	28	11	4	31	9	3	31	8
22	1	23	8	1	23	8	1	21	7	1	17	7	1	21	7	1	18	8	2	24	8	1	27	8	3	30	8
23	2	25	8	1	43	9	2	22	8	2	15	8	1	16	9	2	25	8	4	28	11	3	23	9	2	33	8
24	1	42	9	1	16	8	1	28	7	1	16	8	1	16	8	1	26	11	2	24	8	1	32	8	2	30	10
25	1	24	9	2	19	9	1	22	7	1	17	8	2	42	9	1	20	9	3	29	9	2	36	10	2	28	8
26	3	21	11	2	19	8	3	24	9	3	21	9	4	22	9	4	18	10	4	27	11	4	27	10	3	28	11
27	2	28	7	1	22	6	2	25	6	1	17	5	3	16	6	3	15	7	2	26	6	1	34	5	1	27	6
28	2	18	9	3	11	6	2	20	8	3	20	6	2	22	6	2	18	8	3	23	8	3	29	7	2	33	7
29	3	21	12	2	19	11	4	23	9	3	15	10	4	21	10	4	33	9	4	22	11	3	21	11	4	31	11
30	1	19	6	1	17	5	1	19	5	1	23	6	1	14	6	1	18	6	1	26	7	1	26	7	2	31	7
Monthly Min/Max/Avg	1	42	7	1	43	7	1	29	6	1	36	6	1	43	7	1	33	7	1	31	8	1	41	8	1	43	8

NOTES: ' -- ' indicates filter offline

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

November 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	17	9	4	28	9	4	28	11	3	19	8	4	18	11	5	18	9	4	21	10	4	18	9	4	18	8
2	2	7	3	2	32	5	2	29	6	2	17	5	2	19	6	1	13	6	2	16	6	1	13	5	1	21	5
3	1	30	6	3	24	7	3	27	8	3	15	6	3	18	7	3	15	8	3	22	9	2	17	6	3	19	6
4	1	25	6	3	22	7	3	26	6	2	17	6	2	32	7	3	18	7	2	18	7	2	14	6	2	42	6
5	2	24	7	1	22	7	3	29	7	2	17	6	2	18	7	1	13	7	2	19	7	1	16	5	1	19	6
6	2	27	6	3	26	7	3	29	8	2	18	6	2	15	7	2	12	6	2	17	7	2	15	5	2	21	5
7	1	20	4	2	17	3	2	28	3	1	15	4	1	15	4	1	14	3	1	17	3	1	13	3	1	17	3
8	1	27	3	1	25	4	2	27	6	1	16	4	2	25	6	1	11	5	2	17	5	1	11	5	1	18	4
9	3	26	6	3	28	7	3	27	7	2	14	6	3	14	7	3	14	6	3	17	7	2	13	8	3	18	6
10	3	22	7	3	28	7	2	26	9	3	15	6	2	36	9	2	13	8	5	44	8	3	16	8	3	18	6
11	4	20	7	3	25	8	4	25	8	3	16	6	3	16	9	4	13	8	4	16	7	3	15	8	3	18	7
12	4	13	8	4	20	9	4	28	11	5	17	9	3	36	9	3	19	10	3	28	12	3	19	7	3	17	7
13	4	16	8	2	18	7	4	24	9	3	15	8	3	18	9	3	15	9	3	21	9	3	18	9	3	19	7
14	2	26	6	3	23	6	3	22	7	3	14	6	3	12	6	3	16	7	3	15	6	2	12	6	4	14	6
15	2	15	6	3	26	7	3	21	6	2	13	6	3	14	7	3	25	7	3	16	7	2	13	6	3	15	6
16	2	27	5	3	22	6	2	23	5	1	18	6	3	15	6	2	13	6	1	21	5	2	12	6	1	18	5
17	2	28	6	1	27	7	4	26	8	2	20	7	2	17	9	1	44	7	2	15	7	1	16	8	2	18	6
18	3	24	8	3	26	9	3	27	10	2	21	9	2	18	10	2	21	10	5	44	10	1	17	9	3	25	8
19	2	25	8	3	23	7	3	23	7	2	17	7	3	24	9	3	18	9	3	23	9	3	18	8	2	19	7
20	4	8	6	7	20	10	15	25	20	2	6	4	7	11	9	5	9	7	4	14	6	6	10	8	2	8	4
21	4	24	8	4	22	8	2	26	9	2	22	8	3	22	10	4	17	9	3	23	8	3	17	8	3	24	7
22	2	26	7	2	28	8	1	27	8	1	21	7	1	24	8	1	17	7	1	25	6	1	20	6	1	16	5
23	1	18	8	1	24	8	1	30	8	2	19	8	2	26	9	1	23	10	1	27	11	1	23	7	1	22	7
24	1	20	6	3	19	9	2	20	9	1	23	7	1	27	8	1	18	10	1	17	8	1	23	9	1	20	8
25	2	24	7	2	19	6	2	30	9	1	18	7	1	45	10	1	18	9	1	22	9	1	21	8	2	31	7
26	4	19	10	4	32	11	4	27	9	2	23	9	4	26	12	3	19	9	2	29	9	4	17	9	2	23	9
27	2	24	5	1	25	5	2	27	6	1	30	5	2	19	7	2	21	5	2	24	6	2	18	5	1	21	5
28	1	24	6	2	23	6	3	25	7	3	23	7	2	27	8	3	17	7	3	24	7	2	16	7	2	17	6
29	3	25	9	3	19	9	4	26	10	4	21	9	5	22	12	3	21	11	5	23	11	2	18	10	3	20	9
30	1	27	5	1	24	6	1	28	5	1	17	6	1	28	5	1	14	6	1	16	6	1	16	6	1	19	5
Monthly Min/Max/Avg	1	30	6	1	32	7	1	30	8	1	30	7	1	45	8	1	44	8	1	44	8	1	23	7	1	42	6

NOTES: ' -- ' indicates filter offline

1.2.8 Rossdale Filters 1 - 9 Turbidity (NTU)

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

NOTES: ' -- ' indicates filter offline

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

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

NOTES: ' -- ' indicates filter offline

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

November 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	0.03	0.09	0.05	0.00	0.09	0.02	0.01	0.08	0.03	0.03	0.09	0.04	0.03	0.08	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
2	0.02	0.05	0.03	0.01	0.07	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	0.08	0.04	0.03	0.07	0.03
3	0.02	0.07	0.04	0.01	0.08	0.01	0.01	0.07	0.02	0.03	0.04	0.04	0.03	0.08	0.04	0.04	0.09	0.05	0.03	0.08	0.05	0.04	0.09	0.04	0.03	0.08	0.03
5	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	0.09	0.05	0.03	0.08	0.04	0.03	0.09	0.04	0.03	0.08	0.03
6	0.03	0.08	0.04	0.00	0.08	0.02	0.01	0.07	0.02	0.03	0.08	0.04	0.03	0.08	0.04	0.04	0.09	0.05	0.03	0.09	0.04	0.03	0.09	0.04	0.03	0.08	0.03
7	0.02	0.07	0.03	0.01	0.08	0.01	0.00	0.06	0.01	0.03	0.07	0.03	0.03	0.08	0.04	0.04	0.08	0.04	0.03	0.08	0.04	0.03	0.08	0.04	0.02	0.06	0.03
8	0.02	0.08	0.03	0.01	0.07	0.01	0.00	0.06	0.02	0.03	0.08	0.03	0.03	0.08	0.04	0.04	0.08	0.04	0.03	0.08	0.04	0.03	0.08	0.04	0.02	0.07	0.03
9	0.02	0.08	0.04	0.01	0.08	0.02	0.01	0.07	0.02	0.03	0.08	0.04	0.03	0.08	0.04	0.04	0.08	0.04	0.03	0.09	0.04	0.03	0.09	0.05	0.03	0.08	0.03
10	0.03	0.09	0.04	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	0.05	0.04	0.08	0.04	0.03	0.09	0.05	0.03	0.08	0.04
11	0.03	0.09	0.04	0.01	0.08	0.01	0.01	0.07	0.02	0.03	0.05	0.04	0.03	0.08	0.04	0.04	0.08	0.05	0.04	0.09	0.04	0.03	0.09	0.05	0.03	0.08	0.03
12	0.03	0.05	0.04	0.01	0.08	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	0.04	0.03	0.04	0.03
13	0.03	0.09	0.04	0.01	0.08	0.01	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
14	0.02	0.09	0.04	0.01	0.08	0.01	0.00	0.07	0.02	0.03	0.08	0.04	0.03	0.05	0.04	0.04	0.09	0.04	0.03	0.09	0.04	0.03	0.07	0.04	0.03	0.08	0.03
15	0.03	0.08	0.04	0.01	0.08	0.01	0.01	0.07	0.02	0.03	0.08	0.04	0.03	0.08	0.04	0.04	0.09	0.05	0.04	0.08	0.04	0.03	0.09	0.04	0.03	0.08	0.03
16	0.02	0.09	0.03	0.01	0.06	0.01	0.00	0.07	0.01	0.03	0.08	0.04	0.03	0.08	0.04	0.04	0.05	0.04	0.03	0.09	0.04	0.03	0.08	0.04	0.03	0.08	0.03
17	0.02	0.08	0.03	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	0.04	0.03	0.06	0.04	0.03	0.09	0.04	0.03	0.08	0.03
18	0.02	0.09	0.04	0.01	0.09	0.01	0.00	0.08	0.02	0.03	0.08	0.04	0.03	0.08	0.04	0.04	0.09	0.05	0.04	0.09	0.05	0.03	0.09	0.04	0.03	0.08	0.04
19	0.02	0.09	0.04	0.01	0.08	0.01	0.01	0.08	0.02	0.03	0.08	0.04	0.03	0.09	0.04	0.04	0.08	0.05	0.03	0.08	0.04	0.04	0.09	0.05	0.03	0.08	0.03
20	0.03	0.04	0.03	0.01	0.04	0.03	0.06	0.07	0.07	0.03	0.03	0.03	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.05	0.04	0.03	0.03	0.03
21	0.03	0.08	0.04	0.01	0.07	0.01	0.01	0.07	0.02	0.03	0.08	0.04	0.03	0.08	0.04	0.04	0.08	0.04	0.04	0.08	0.04	0.03	0.08	0.04	0.03	0.07	0.03
22	0.02	0.07	0.04	0.01	0.08	0.01	0.00	0.07	0.02	0.03	0.08	0.03	0.03	0.08	0.04	0.04	0.08	0.04	0.03	0.09	0.04	0.03	0.09	0.04	0.02	0.07	0.03
23	0.02	0.09	0.04	0.01	0.09	0.02	0.00	0.09	0.02	0.03	0.08	0.04	0.03	0.09	0.04	0.04	0.09	0.05	0.03	0.09	0.05	0.03	0.09	0.04	0.02	0.08	0.03
24	0.02	0.09	0.03	0.01	0.09	0.01	0.01	0.08	0.02	0.03	0.09	0.04	0.03	0.09	0.04	0.04	0.09	0.05	0.03	0.09	0.04	0.03	0.09	0.05	0.02	0.08	0.03
25	0.02	0.10	0.04	0.01	0.09	0.01	0.01	0.08	0.03	0.03	0.08	0.04	0.03	0.09	0.04	0.04	0.09	0.05	0.03	0.09	0.04	0.03	0.09	0.05	0.03	0.08	0.04
26	0.03	0.09	0.05	0.00	0.08	0.02	0.01	0.08	0.02	0.03	0.08	0.04	0.03	0.08	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
27	0.02	0.08	0.03	0.01	0.07	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
28	0.02	0.07	0.03	0.01	0.07	0.01	0.00	0.07	0.02	0.03	0.08	0.04	0.03	0.08	0.04	0.04	0.08	0.05	0.04	0.08	0.04	0.03	0.07	0.04	0.03	0.08	0.03
29	0.02	0.10	0.04	0.01	0.09	0.02	0.01	0.09	0.02	0.03	0.08	0.04	0.03	0.09	0.05	0.04	0.09	0.05	0.04	0.09	0.05	0.04	0.09	0.05	0.03	0.08	0.04
30	0.02	0.10	0.03	0.01	0.08	0.02	0.00	0.08	0.02	0.03	0.08	0.04	0.03	0.09	0.04	0.04	0.09	0.05	0.03	0.09	0.04	0.03	0.09	0.04	0.02	0.08	0.03
Monthly Min/Max/Avg	0.02	0.10	0.04	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	0.05	0.03	0.09	0.04	0.03	0.09	0.04	0.02	0.08	0.03

NOTES: ' -- ' indicates filter offline

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

November 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	0.03	0.09	0.05	0.00	0.09	0.02	0.01	0.08	0.03	0.03	0.09	0.04	0.03	0.08	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
2	0.02	0.05	0.03	0.01	0.07	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	0.08	0.04	0.03	0.07	0.03
3	0.02	0.07	0.04	0.01	0.08	0.01	0.01	0.07	0.02	0.03	0.04	0.04	0.03	0.08	0.04	0.04	0.09	0.05	0.03	0.08	0.05	0.04	0.09	0.04	0.03	0.08	0.03
4	0.02	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	0.09	0.05	0.03	0.09	0.04	0.04	0.09	0.04	0.03	0.08	0.03
5	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	0.09	0.05	0.03	0.08	0.04	0.03	0.09	0.04	0.03	0.08	0.03
6	0.03	0.08	0.04	0.00	0.08	0.02	0.01	0.07	0.02	0.03	0.08	0.04	0.03	0.08	0.04	0.04	0.09	0.05	0.03	0.09	0.04	0.03	0.09	0.04	0.03	0.08	0.03
7	0.02	0.07	0.03	0.01	0.08	0.01	0.00	0.06	0.01	0.03	0.07	0.03	0.03	0.08	0.04	0.04	0.08	0.04	0.03	0.08	0.04	0.03	0.08	0.04	0.02	0.06	0.03
8	0.02	0.08	0.03	0.01	0.07	0.01	0.00	0.06	0.02	0.03	0.08	0.03	0.03	0.08	0.04	0.04	0.08	0.04	0.03	0.08	0.04	0.03	0.08	0.04	0.02	0.07	0.03
9	0.02	0.08	0.04	0.01	0.08	0.02	0.01	0.07	0.02	0.03	0.08	0.04	0.03	0.08	0.04	0.04	0.08	0.04	0.03	0.09	0.04	0.03	0.09	0.05	0.03	0.08	0.03
10	0.03	0.09	0.04	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	0.05	0.04	0.08	0.04	0.03	0.09	0.05	0.03	0.08	0.04
11	0.03	0.09	0.04	0.01	0.08	0.01	0.01	0.07	0.02	0.03	0.05	0.04	0.03	0.08	0.04	0.04	0.08	0.05	0.04	0.09	0.04	0.03	0.09	0.05	0.03	0.08	0.03
12	0.03	0.05	0.04	0.01	0.08	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	0.04	0.03	0.04	0.03
13	0.03	0.09	0.04	0.01	0.08	0.01	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
14	0.02	0.09	0.04	0.01	0.08	0.01	0.00	0.07	0.02	0.03	0.08	0.04	0.03	0.05	0.04	0.04	0.09	0.04	0.03	0.09	0.04	0.03	0.07	0.04	0.03	0.08	0.03
15	0.03	0.08	0.04	0.01	0.08	0.01	0.01	0.07	0.02	0.03	0.08	0.04	0.03	0.08	0.04	0.04	0.09	0.05	0.04	0.08	0.04	0.03	0.09	0.04	0.03	0.08	0.03
16	0.02	0.09	0.03	0.01	0.06	0.01	0.00	0.07	0.01	0.03	0.08	0.04	0.03	0.08	0.04	0.04	0.05	0.04	0.03	0.09	0.04	0.03	0.08	0.04	0.03	0.08	0.03
17	0.02	0.08	0.03	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	0.04	0.03	0.06	0.04	0.03	0.09	0.04	0.03	0.08	0.03
18	0.02	0.09	0.04	0.01	0.09	0.01	0.00	0.08	0.02	0.03	0.08	0.04	0.03	0.08	0.04	0.04	0.09	0.05	0.04	0.09	0.05	0.03	0.09	0.04	0.03	0.08	0.04
19	0.02	0.09	0.04	0.01	0.08	0.01	0.01	0.08	0.02	0.03	0.08	0.04	0.03	0.09	0.04	0.04	0.08	0.05	0.03	0.08	0.04	0.04	0.09	0.05	0.03	0.08	0.03
20	0.03	0.04	0.03	0.01	0.04	0.03	0.06	0.07	0.07	0.03	0.03	0.03	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.05	0.04	0.03	0.03	0.03
21	0.03	0.08	0.04	0.01	0.07	0.01	0.01	0.07	0.02	0.03	0.08	0.04	0.03	0.08	0.04	0.04	0.08	0.04	0.04	0.08	0.04	0.03	0.08	0.04	0.03	0.07	0.03
22	0.02	0.07	0.04	0.01	0.08	0.01	0.00	0.07	0.02	0.03	0.08	0.03	0.03	0.08	0.04	0.04	0.08	0.04	0.03	0.09	0.04	0.03	0.09	0.04	0.02	0.07	0.03
23	0.02	0.09	0.04	0.01	0.09	0.02	0.00	0.09	0.02	0.03	0.08	0.04	0.03	0.09	0.04	0.04	0.09	0.05	0.03	0.09	0.05	0.03	0.09	0.04	0.02	0.08	0.03
24	0.02	0.09	0.03	0.01	0.09	0.01	0.01	0.08	0.02	0.03	0.09	0.04	0.03	0.09	0.04	0.04	0.09	0.05	0.03	0.09	0.04	0.03	0.09	0.05	0.02	0.08	0.03
25	0.02	0.10	0.04	0.01	0.09	0.01	0.01	0.08	0.03	0.03	0.08	0.04	0.03	0.09	0.04	0.04	0.09	0.05	0.03	0.09	0.04	0.03	0.09	0.05	0.03	0.08	0.04
26	0.03	0.09	0.05	0.00	0.08	0.02	0.01	0.08	0.02	0.03	0.08	0.04	0.03	0.08	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
27	0.02	0.08	0.03	0.01	0.07	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
28	0.02	0.07	0.03	0.01	0.07	0.01	0.00	0.07	0.02	0.03	0.08	0.04	0.03	0.08	0.04	0.04	0.08	0.05	0.04	0.08	0.04	0.03	0.07	0.04	0.03	0.08	0.03
29	0.02	0.10	0.04	0.01	0.09	0.02	0.01	0.09	0.02	0.03	0.08	0.04	0.03	0.09	0.05	0.04	0.09	0.05	0.04	0.09	0.05	0.04	0.09	0.05	0.03	0.08	0.04
30	0.02	0.10	0.03	0.01	0.08	0.02	0.00	0.08	0.02	0.03	0.08	0.04	0.03	0.09	0.04	0.04	0.09	0.05	0.03	0.09	0.04	0.03	0.09	0.04	0.02	0.08	0.03
Monthly Min/Max/Avg	0.02	0.10	0.04	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	0.05	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

November 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	6	10	8	0.05	0.06	0.05	6	12	9	0.03	0.04	0.03
2	4	9	6	0.04	0.09	0.05	3	8	5	0.02	0.03	0.03
3	4	7	5	0.04	0.05	0.05	6	9	7	0.02	0.03	0.03
4	4	11	7	0.05	0.06	0.05	5	10	6	0.02	0.03	0.03
5	1	10	7	0.05	0.06	0.05	4	9	6	0.02	0.03	0.03
6	1	1	1	0.06	0.07	0.06	5	8	6	0.03	0.03	0.03
7	1	17	7	0.04	0.07	0.06	2	6	4	0.02	0.03	0.02
8	4	7	5	0.04	0.05	0.05	3	8	5	0.02	0.03	0.02
9	4	11	5	0.04	0.05	0.05	5	8	6	0.02	0.03	0.03
10	5	9	6	0.05	0.05	0.05	4	11	7	0.02	0.03	0.03
11	5	10	6	0.05	0.06	0.05	6	9	7	0.02	0.03	0.03
12	6	10	8	0.01	0.07	0.09	6	11	9	0.03	0.03	0.03
13	7	15	8	0.05	0.07	0.06	6	11	8	0.02	0.03	0.03
14	6	9	7	0.05	0.06	0.05	5	9	6	0.02	0.03	0.03
15	5	9	7	0.05	0.06	0.05	6	9	7	0.02	0.03	0.03
16	5	11	7	0.05	0.06	0.05	5	8	6	0.02	0.03	0.02
17	6	12	7	0.05	0.06	0.05	5	11	7	0.02	0.03	0.03
18	7	14	9	0.05	0.06	0.06	6	13	9	0.02	0.03	0.03
19	7	12	10	0.05	0.06	0.06	6	12	8	0.02	0.03	0.03
20	6	9	7	0.05	0.06	0.05	1	12	1	0.04	0.07	0.06
21	6	10	7	0.05	0.06	0.05	7	10	9	0.02	0.03	0.03
22	6	14	7	0.05	0.06	0.05	5	10	7	0.02	0.03	0.03
23	7	15	11	0.05	0.07	0.06	5	14	8	0.02	0.04	0.03
24	9	19	11	0.05	0.07	0.06	6	13	8	0.02	0.03	0.03
25	6	13	8	0.05	0.06	0.06	6	12	8	0.03	0.04	0.03
26	5	16	7	0.05	0.06	0.06	8	12	10	0.03	0.04	0.03
27	4	12	8	0.05	0.07	0.06	4	9	6	0.02	0.03	0.03
28	5	12	7	0.05	0.06	0.05	5	9	7	0.02	0.03	0.03
29	5	11	7	0.05	0.06	0.05	6	13	10	0.03	0.04	0.03
30	11	19	14	0.06	0.07	0.06	3	12	6	0.02	0.03	0.03
Monthly Min/Max/Avg	1	19	7	0.01	0.09	0.05	1	14	7	0.02	0.07	0.03

NOTES: ' -- ' indicates plant offline

1.2.12 Rossdale UV Disinfection - Filters 1 - 3

November 2024

Filter	1						2						3						Transmittance (%)		
Day	Dosage (mJ/cm²)			Flow (MLD)			Dosage (mJ/cm²)			Flow (MLD)			Dosage (mJ/cm²)			Flow (MLD)					
	Min	Max	Avg	Min	Max	Total	Min	Max	Avg	Min	Max	Total	Min	Max	Avg	Min	Max	Total	Min	Max	Avg
1	35.1	39.4	36.8	18.6	26.4	22.8	35.6	53.0	43.9	14.7	26.3	20.6	34.1	42.2	39.1	11.7	26.4	19.7	94.3	95.9	95.5
2	39.3	48.3	47.6	13.3	22.7	9.6	35.4	43.9	38.2	11.4	30.0	13.8	36.6	47.0	42.0	10.1	19.7	14.7	94.0	96.6	95.1
3	36.5	47.9	40.5	18.5	26.7	24.8	41.2	60.5	48.5	15.3	27.2	22.7	--	--	--	--	--	--	94.7	96.6	95.9
4	43.5	99.0	53.8	12.0	18.8	8.0	34.8	85.1	37.2	9.8	33.1	13.4	34.9	49.2	39.2	17.4	27.5	1.0	94.7	95.3	95.1
5	35.3	49.5	37.7	17.0	28.8	19.6	35.3	84.4	37.1	10.0	30.0	13.7	34.3	101.4	36.5	17.5	30.5	22.4	94.7	95.8	95.3
6	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
7	--	--	--	--	--	--	35.4	47.8	39.8	21.4	27.6	21.6	35.0	44.5	37.9	20.4	25.6	19.8	94.7	95.8	95.2
8	35.3	57.0	42.2	17.5	29.9	15.8	43.9	83.3	54.1	12.5	25.0	18.8	40.3	70.9	47.6	12.9	25.7	18.9	95.3	96.8	96.1
9	35.0	86.4	46.5	12.4	30.5	14.3	38.5	55.1	44.7	17.3	25.4	21.7	36.6	57.7	42.4	14.5	24.5	20.3	95.3	95.5	95.4
10	35.4	53.4	40.8	16.4	29.2	23.4	53.9	122.0	65.9	11.6	17.4	6.8	56.5	89.4	58.7	13.5	14.5	0.8	95.5	96.0	95.8
11	--	--	--	--	--	--	35.1	38.4	35.7	25.1	34.5	19.1	34.4	44.0	37.0	18.8	32.9	25.7	94.4	95.8	95.3
12	35.0	44.0	35.8	20.8	32.2	21.6	36.0	71.5	51.9	10.9	26.8	17.5	37.3	56.4	47.3	14.7	22.1	4.0	94.8	95.9	95.4
13	37.1	61.7	45.9	11.4	26.6	9.4	--	--	--	--	--	--	34.0	44.4	36.5	18.8	30.7	24.9	94.6	95.5	94.9
14	35.5	63.6	43.2	13.6	28.2	22.1	35.4	51.3	45.3	19.5	30.2	10.0	43.1	70.9	54.4	11.2	19.5	5.3	95.5	96.0	95.8
15	44.4	56.8	46.5	11.6	21.3	3.2	44.5	64.7	51.4	15.0	23.0	19.2	35.4	44.1	40.0	20.7	24.9	19.1	95.8	96.1	96.0
16	40.1	53.3	45.9	18.5	22.3	20.3	35.5	46.1	40.0	23.8	27.7	13.0	40.0	75.1	54.6	12.0	22.3	9.1	94.8	96.6	95.8
17	36.6	62.8	54.9	13.5	18.8	6.6	39.2	62.0	50.3	14.5	24.6	19.1	35.0	43.1	38.1	20.4	26.1	13.8	94.8	96.1	95.2
18	35.5	53.4	40.1	17.1	28.8	19.4	42.5	75.0	54.9	11.3	23.6	4.0	36.6	84.1	50.4	10.7	22.7	15.5	95.3	96.4	95.7
19	48.3	79.6	55.1	10.8	17.8	6.4	35.2	53.2	38.9	17.4	26.9	23.3	34.6	44.3	35.8	20.3	27.9	15.0	94.6	96.4	95.3
20	35.1	44.0	38.0	20.4	29.2	16.3	34.9	65.5	51.7	12.1	31.3	12.4	36.6	63.4	44.6	13.2	22.7	13.2	95.5	96.1	95.8
21	34.0	70.4	44.0	11.5	24.9	16.6	36.7	62.4	46.3	14.1	27.7	20.4	34.8	53.8	39.1	16.2	27.7	21.3	94.7	95.8	95.5
22	38.4	82.4	60.4	10.1	22.7	17.5	35.3	68.1	51.7	11.7	27.2	21.2	35.4	72.3	53.9	10.5	25.0	12.3	95.3	95.7	95.4
23	34.5	46.4	36.3	19.0	25.5	18.6	35.1	61.1	48.1	12.8	28.0	13.2	35.1	41.6	38.3	14.4	25.3	16.8	93.5	95.7	94.7
24	35.3	61.9	48.6	11.6	26.2	11.4	35.1	49.0	42.1	10.0	26.2	17.9	35.0	36.3	35.6	20.6	24.4	7.9	92.8	94.9	94.1
25	35.0	44.8	37.0	15.6	25.5	21.5	35.2	36.2	35.7	25.7	27.9	7.6	35.1	43.5	36.3	15.2	24.2	14.7	92.9	94.4	93.6
26	44.4	47.5	45.7	14.0	15.7	2.4	35.2	43.0	37.3	15.0	28.8	21.4	34.2	36.2	35.5	21.3	29.8	17.9	91.0	94.4	93.3
27	34.9	36.0	35.6	23.2	30.7	15.0	34.9	47.2	36.7	13.0	32.0	23.3	34.8	45.6	36.8	12.5	21.7	9.6	91.0	93.3	92.8
28	35.2	58.4	44.0	14.5	25.2	17.5	35.3	52.4	43.0	15.5	24.6	13.0	35.2	42.8	38.8	17.0	26.1	14.9	93.1	95.7	94.3
29	34.8	39.8	35.8	23.1	31.1	3.0	35.3	42.7	37.5	18.8	29.3	25.0	38.2	57.5	44.7	12.5	21.5	17.2	95.1	95.7	95.4
30	35.1	42.8	36.7	17.5	29.8	22.4	40.9	53.5	44.5	13.0	18.8	8.2	34.9	36.7	35.6	20.4	22.5	10.5	93.2	95.1	93.9
Monthly Total						409.5						461.6						406.2			
Monthly Min/Max/ Avg	34.0	99.0	43.5	10.1	32.2		34.8	122.0	44.7	9.8	34.5		34.0	101.4	42.0	10.1	32.9		94.3	95.7	95.1

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

November 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	35.3	45.7	42.3	10.3	24.9	20.0	35.2	39.2	35.8	20.6	26.1	14.1	35.4	42.0	39.7	11.7	27.2	15.8	94.3	95.9	95.5
2	38.9	41.7	40.0	12.1	27.1	17.1	36.0	43.6	41.5	13.8	20.7	11.1	35.3	47.2	44.0	15.5	26.8	21.5	94.0	96.6	95.1
3	38.1	56.7	46.8	17.1	28.2	23.7	35.1	40.1	36.1	24.2	28.0	10.2	33.6	84.3	39.7	12.1	30.5	8.8	94.7	96.6	95.9
4	34.6	107.8	44.1	11.3	29.6	21.2	35.4	68.8	45.6	10.6	24.5	17.4	35.4	51.6	39.6	15.4	29.3	22.5	94.7	95.3	95.1
5	35.1	71.1	41.3	13.6	30.4	20.4	34.0	100.3	35.8	10.0	28.9	12.7	35.2	60.7	40.0	12.5	33.7	14.1	94.7	95.8	95.3
6	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
7	36.4	51.5	41.9	19.9	25.5	20.5	35.2	51.8	40.5	17.5	25.5	20.5	35.4	51.4	36.0	18.2	27.8	18.5	94.7	95.8	95.2
8	44.2	129.9	51.5	16.1	24.6	19.9	50.6	60.5	53.8	14.5	17.6	3.0	34.6	51.5	40.0	20.7	33.2	23.7	95.3	96.8	96.1
9	43.6	90.3	53.7	10.3	23.2	18.0	35.4	39.3	36.8	22.8	28.8	13.6	45.1	73.8	53.7	11.5	20.7	9.6	95.3	95.5	95.4
10	35.2	50.5	42.1	20.4	29.2	23.3	37.0	91.6	55.3	11.0	24.2	15.6	35.3	44.0	35.9	21.4	33.5	17.9	95.5	96.0	95.8
11	38.6	55.8	52.8	11.9	24.9	15.9	35.3	36.8	35.9	23.7	26.9	2.1	35.4	59.5	40.7	14.8	27.8	13.3	94.4	95.8	95.3
12	35.2	58.1	42.6	14.3	28.6	23.1	33.7	52.2	39.7	14.0	29.0	22.6	--	--	--	--	--	--	94.8	95.9	95.4
13	35.1	48.0	38.6	21.9	26.3	22.2	34.8	68.6	40.7	11.8	27.9	17.2	34.6	41.2	36.2	22.5	30.0	19.8	94.6	95.5	94.9
14	38.0	73.5	47.6	12.9	27.1	20.3	38.1	77.4	50.2	11.0	23.2	13.4	35.5	77.2	46.9	11.3	33.1	18.9	95.5	96.0	95.8
15	36.8	59.3	46.5	16.4	28.2	21.1	38.4	60.9	46.2	14.2	24.9	20.2	37.6	65.6	46.8	13.8	26.9	21.2	95.8	96.1	96.0
16	39.3	74.9	54.7	13.5	25.9	18.4	35.6	69.6	57.2	10.8	26.7	3.4	35.3	118.7	39.7	13.0	29.4	22.8	94.8	96.6	95.8
17	38.3	74.7	45.3	12.1	25.2	19.9	35.3	49.0	42.2	16.9	25.9	20.9	43.2	74.2	55.3	11.0	21.0	11.5	94.8	96.1	95.2
18	45.1	90.0	52.7	10.1	21.6	17.3	49.0	100.4	60.5	10.8	16.9	6.2	35.5	42.3	39.6	23.7	28.9	13.3	95.3	96.4	95.7
19	35.3	101.0	41.8	17.7	29.0	20.4	35.1	38.5	35.8	22.9	28.5	9.6	35.5	106.1	44.6	11.6	25.0	18.8	94.6	96.4	95.3
20	37.1	68.9	48.5	14.1	26.5	21.1	35.0	69.5	45.7	12.4	26.0	18.5	35.0	49.4	38.8	19.2	31.8	24.7	95.5	96.1	95.8
21	39.7	57.5	50.5	16.8	22.3	17.4	36.2	65.9	46.1	12.3	25.7	18.8	34.5	45.2	40.4	12.7	28.4	17.0	94.7	95.8	95.5
22	40.0	77.8	58.9	11.6	24.7	16.9	35.1	64.4	49.7	12.3	25.6	18.7	35.5	69.5	52.5	12.0	28.7	14.3	95.3	95.7	95.4
23	34.9	59.2	47.1	10.5	25.8	16.5	34.9	70.1	52.5	11.1	25.3	14.5	35.1	43.8	36.8	15.5	27.1	22.8	93.5	95.7	94.7
24	33.5	54.5	43.9	14.0	27.2	21.3	35.4	58.0	44.1	11.9	20.0	9.4	35.3	57.2	46.3	10.6	26.6	12.0	92.8	94.9	94.1
25	35.1	45.8	38.0	16.9	27.7	20.4	35.1	40.9	36.0	17.0	26.8	17.7	35.4	54.0	39.7	13.0	23.6	19.0	92.9	94.4	93.6
26	33.9	59.2	43.1	10.6	28.7	17.8	32.5	49.8	44.7	12.4	17.2	5.6	35.2	36.0	35.6	23.0	33.2	14.8	91.0	94.4	93.3
27	34.0	53.0	39.7	11.3	27.0	17.5	32.8	41.4	35.9	13.9	26.7	21.3	35.3	51.4	38.8	12.4	26.9	17.1	91.0	93.3	92.8
28	34.5	52.6	41.4	17.1	25.4	21.2	40.0	49.2	44.6	13.9	15.9	4.4	35.1	36.2	35.7	26.1	30.0	12.6	93.1	95.7	94.3
29	35.1	46.1	44.8	11.4	30.3	21.3	35.0	41.7	36.7	17.2	27.9	22.1	35.5	55.2	42.3	13.6	26.6	21.4	95.1	95.7	95.4
30	35.1	91.9	38.5	13.6	30.2	20.4	35.5	49.4	44.0	11.7	17.4	3.4	35.4	91.7	37.3	12.7	25.0	18.3	93.2	95.1	93.9
Monthly Total						574.4						388.3						486.1			
Monthly Min/Max/ Avg	33.5	129.9	45.5	10.1	30.4		32.5	100.4	43.8	10.0	29.0		33.6	118.7	41.5	10.6	33.7		94.3	95.7	95.1

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

November 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	35.2	56.9	44.5	11.3	25.9	17.9	35.3	40.6	39.9	10.8	26.0	10.0	35.1	46.9	38.7	13.9	27.8	21.0	94.3	95.9	95.5
2	35.0	42.5	36.8	10.2	29.5	21.7	34.2	43.7	36.7	23.6	30.0	26.5	34.9	41.0	39.5	10.4	29.3	21.1	94.0	96.6	95.1
3	36.9	73.0	43.6	11.3	24.5	15.8	33.7	110.9	46.4	14.5	30.8	18.4	35.1	53.0	41.6	14.4	27.6	22.3	94.7	96.6	95.9
4	35.0	36.1	35.6	23.1	30.0	25.4	35.2	38.8	36.0	20.1	30.6	25.1	35.1	91.5	39.1	14.7	30.7	23.2	94.7	95.3	95.1
5	33.0	56.2	41.6	14.2	23.2	14.1	34.8	59.2	42.5	13.3	32.0	10.2	35.1	47.3	37.0	17.3	33.3	21.2	94.7	95.8	95.3
6	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
7	35.3	36.0	35.7	28.7	29.6	2.5	35.2	43.9	36.4	19.3	29.7	20.4	35.1	36.2	35.6	22.4	28.6	23.3	94.7	95.8	95.2
8	34.4	51.6	39.1	19.7	30.3	25.9	35.4	72.2	51.0	13.8	27.0	19.5	33.9	74.8	48.0	12.6	25.8	17.9	95.3	96.8	96.1
9	41.0	58.3	45.4	13.6	20.8	8.3	35.3	88.2	40.6	12.5	34.1	12.0	35.0	36.1	35.7	22.6	29.8	26.2	95.3	95.5	95.4
10	--	--	--	--	--	--	35.1	47.9	39.8	18.5	33.5	24.8	35.1	60.4	42.5	13.5	35.2	21.4	95.5	96.0	95.8
11	34.7	36.1	35.6	25.3	30.0	13.4	44.8	59.8	48.4	12.3	19.0	7.1	34.8	42.2	36.6	18.2	33.5	26.6	94.4	95.8	95.3
12	34.5	43.8	36.8	16.0	28.8	24.0	34.3	36.0	35.6	25.5	33.6	3.6	35.1	62.1	44.1	12.5	35.5	21.5	94.8	95.9	95.4
13	43.5	62.3	49.7	10.9	16.0	6.4	34.9	37.7	35.6	22.2	33.2	27.6	35.2	46.0	37.0	19.0	30.0	22.5	94.6	95.5	94.9
14	33.9	39.7	36.2	23.0	29.9	16.4	35.3	60.7	42.7	15.3	26.4	17.9	35.2	43.5	36.7	19.9	33.5	26.4	95.5	96.0	95.8
15	39.1	51.9	43.2	16.3	23.1	15.3	35.2	39.3	36.4	25.1	30.4	6.9	35.1	52.1	39.1	15.4	30.8	23.1	95.8	96.1	96.0
16	33.5	44.7	37.3	21.8	25.5	22.9	35.2	50.8	40.6	18.9	28.9	23.6	35.3	52.8	40.5	16.0	26.8	21.1	94.8	96.6	95.8
17	35.2	57.4	47.6	13.3	21.8	17.1	35.6	49.5	47.2	16.4	25.6	3.2	35.1	49.9	37.1	15.3	28.4	22.2	94.8	96.1	95.2
18	35.3	61.5	39.2	12.3	30.3	9.4	35.1	44.6	38.0	21.9	30.5	26.1	35.4	63.6	44.3	12.7	22.3	17.5	95.3	96.4	95.7
19	34.8	47.1	36.8	16.8	26.8	23.0	35.2	61.2	46.3	12.1	32.6	13.7	35.1	43.8	36.0	20.2	30.3	25.7	94.6	96.4	95.3
20	33.9	52.4	37.8	15.0	33.1	13.0	33.5	47.1	38.2	20.0	32.3	26.9	34.0	70.1	49.5	11.0	23.0	16.7	95.5	96.1	95.8
21	35.3	51.8	39.2	14.8	28.7	21.2	35.4	70.8	56.7	12.1	28.3	8.5	35.0	41.1	37.6	18.7	26.3	20.6	94.7	95.8	95.5
22	33.6	60.7	47.1	10.8	29.2	19.4	34.3	49.1	37.9	18.6	29.6	25.3	35.2	60.0	43.9	12.7	24.5	16.2	95.3	95.7	95.4
23	35.4	55.5	38.1	15.3	25.0	13.6	35.0	62.2	48.6	12.7	29.6	14.8	35.1	41.5	35.8	18.9	27.1	23.8	93.5	95.7	94.7
24	35.2	36.3	35.6	20.6	29.4	21.9	35.2	46.2	37.6	15.5	27.9	22.3	34.8	56.5	36.6	11.0	29.5	20.6	92.8	94.9	94.1
25	35.1	47.3	36.6	12.5	32.3	14.4	35.1	52.3	40.1	13.4	33.3	14.2	35.1	41.5	36.2	15.1	26.7	21.0	92.9	94.4	93.6
26	34.9	36.1	35.6	19.8	32.7	26.3	35.2	42.8	37.0	15.3	29.7	21.8	35.0	44.7	35.8	13.7	34.2	26.1	91.0	94.4	93.3
27	33.5	46.6	36.5	11.8	20.3	12.6	34.1	45.5	37.5	13.5	34.6	15.3	35.0	53.7	35.7	10.1	30.7	20.0	91.0	93.3	92.8
28	34.9	38.4	35.9	19.7	28.0	23.0	35.2	51.8	40.8	17.5	29.5	23.3	35.0	40.2	36.5	19.4	29.4	24.4	93.1	95.7	94.3
29	36.8	53.9	42.9	12.3	21.6	18.4	43.8	53.9	50.4	15.9	20.1	2.2	35.0	51.5	41.7	14.2	35.0	20.1	95.1	95.7	95.4
30	35.2	64.3	35.7	12.2	31.3	22.8	34.1	43.8	35.8	20.1	29.7	24.5	35.0	36.2	35.6	19.1	31.5	23.3	93.2	95.1	93.9
Monthly Total						486.0						495.6						637.1			
Monthly Min/Max/ Avg	33.0	73.0	39.5	10.2	33.1		33.5	110.9	41.4	10.8	34.6		33.9	91.5	39.1	10.1	35.5		94.3	95.7	95.1

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

November 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	47.6	84.9	75.2	75.2	99.0	85.7	62.4	78.6	69.6	70.8	97.0	82.2	46.0	56.4	51.3	69.8	91.5	79.5	--	--	--	--	--	--	94.2	95.2	94.7
2	51.3	86.5	61.7	75.9	99.7	87.3	45.5	83.7	58.6	70.7	95.8	83.8	56.1	69.4	64.4	69.1	92.1	81.3	--	--	--	--	--	--	95.1	96.5	96.0
3	47.0	61.0	53.9	64.2	91.2	84.9	46.2	84.1	57.3	62.5	89.8	81.5	54.5	69.5	62.1	60.4	85.1	79.0	--	--	--	--	--	--	95.4	96.5	95.8
4	45.7	56.6	50.1	76.6	92.1	84.6	70.9	89.0	78.2	72.2	91.7	81.2	53.1	65.1	57.8	70.0	85.4	78.7	--	--	--	--	--	--	95.1	95.9	95.5
5	45.7	81.0	62.1	76.7	96.0	86.5	65.8	87.8	76.1	72.8	93.7	83.0	49.7	64.9	56.5	71.0	89.1	80.5	--	--	--	--	--	--	93.8	95.9	95.2
6	73.9	87.0	79.6	81.9	103.7	95.0	66.4	79.2	71.9	78.5	101.1	91.3	49.7	58.4	53.4	76.0	95.9	88.5	--	--	--	--	--	--	94.9	95.4	95.3
7	48.5	84.8	59.0	89.3	105.3	97.8	69.4	85.6	79.5	84.7	101.7	94.1	51.4	63.9	58.8	83.6	96.9	91.2	--	--	--	--	--	--	94.1	96.1	95.0
8	48.2	57.6	52.3	82.1	106.9	93.8	75.8	90.1	81.4	80.0	103.5	90.3	55.5	67.0	60.3	77.3	98.2	87.5	--	--	--	--	--	--	95.9	96.2	96.1
9	46.9	61.5	53.2	66.1	96.9	82.9	46.7	89.3	68.9	64.8	93.1	79.6	54.9	68.7	62.0	63.2	88.6	77.1	--	--	--	--	--	--	95.2	95.9	95.6
10	45.6	82.0	59.8	75.4	93.2	85.4	46.0	90.8	77.3	72.4	90.5	82.0	52.3	67.6	59.5	70.8	86.7	79.4	--	--	--	--	--	--	94.8	96.0	95.6
11	50.1	88.4	60.6	60.4	91.8	82.1	48.4	101.3	81.6	59.6	88.3	78.7	52.7	69.5	62.0	57.3	85.1	76.3	--	--	--	--	--	--	94.8	96.0	95.5
12	44.2	80.8	65.3	66.5	90.3	78.5	46.4	80.7	68.2	65.4	86.8	75.1	50.1	65.1	56.1	63.5	84.0	72.8	--	--	--	--	--	--	94.4	96.0	95.0
13	47.3	85.1	59.5	69.4	90.6	80.3	69.3	89.4	78.5	66.9	87.1	76.8	53.6	67.5	59.8	64.4	84.4	74.7	--	--	--	--	--	--	94.4	95.8	95.2
14	48.6	58.0	53.4	73.4	91.8	83.8	46.4	90.1	80.9	70.2	88.6	80.4	57.8	68.1	62.6	68.5	84.7	78.1	--	--	--	--	--	--	95.6	96.0	95.8
15	46.2	56.8	50.3	74.4	98.7	87.0	71.8	83.6	78.1	71.8	95.2	83.5	55.2	66.1	59.6	70.5	90.5	81.0	--	--	--	--	--	--	95.5	95.9	95.7
16	46.1	55.0	50.3	82.9	98.9	91.5	72.9	86.0	78.0	79.4	95.9	88.0	54.9	64.5	59.7	77.7	91.2	85.2	--	--	--	--	--	--	95.7	96.3	96.0
17	45.4	82.7	58.6	79.7	99.8	91.5	69.1	81.6	74.9	76.1	96.7	87.9	52.8	63.7	57.6	73.9	91.9	85.2	--	--	--	--	--	--	95.5	96.2	95.9
18	48.9	88.5	66.0	80.7	104.3	93.1	55.8	82.0	70.4	77.4	101.3	89.4	46.6	86.5	61.1	76.2	96.4	86.9	--	--	--	--	--	--	94.6	96.0	95.5
19	56.4	92.8	75.9	62.9	108.2	95.5	45.9	90.2	69.2	59.7	104.8	91.8	50.7	100.2	64.7	57.0	101.3	89.0	--	--	--	--	--	--	94.5	95.9	95.2
20	49.7	62.5	80.0	49.1	74.0	6.2	48.6	76.4	67.9	49.3	70.9	5.9	48.2	108.8	78.5	58.6	90.2	7.2	--	--	--	--	--	--	95.9	95.9	95.9
21	47.4	83.3	74.6	72.8	96.3	87.9	46.6	78.9	71.9	67.7	92.2	84.3	47.6	118.8	106.4	89.6	114.8	106.7	--	--	--	--	--	--	95.1	95.9	95.3
22	47.1	83.0	58.6	77.3	97.1	88.0	68.2	85.8	78.7	74.7	95.8	85.2	45.5	115.9	69.8	93.3	120.6	106.3	--	--	--	--	--	--	94.9	96.0	95.7
23	59.5	80.2	69.7	65.9	94.8	80.8	56.5	75.2	66.2	64.0	90.7	77.3	59.2	83.1	71.0	80.6	112.2	97.1	--	--	--	--	--	--	93.4	95.2	94.3
24	64.3	84.9	73.4	53.6	89.9	76.1	62.4	81.2	69.9	51.8	84.6	73.7	65.9	91.3	74.3	66.1	107.2	93.0	--	--	--	--	--	--	93.8	95.2	94.4
25	53.5	75.8	64.2	66.7	91.2	77.7	50.6	69.6	60.6	66.5	87.6	76.1	55.1	73.2	64.4	82.6	110.4	94.9	--	--	--	--	--	--	93.4	94.8	93.9
26	55.1	71.8	63.4	70.2	88.4	81.7	50.9	67.3	59.6	66.1	87.7	79.6	55.8	72.3	64.1	83.9	107.2	99.5	--	--	--	--	--	--	93.1	94.6	93.7
27	52.2	138.5	65.5	49.0	94.7	83.6	48.2	141.4	75.4	49.1	92.6	81.1	50.1	144.5	64.7	60.6	108.7	94.6	--	--	--	--	--	--	94.6	95.7	95.2
28	49.7	58.4	53.4	77.4	96.2	87.8	72.8	84.0	78.6	73.8	93.5	84.9	49.8	56.1	52.6	81.4	100.8	90.9	--	--	--	--	--	--	95.4	95.8	95.7
29	46.0	83.8	68.3	74.4	97.0	87.8	55.2	76.1	62.4	71.6	94.8	84.4	47.9	85.7	69.0	75.1	95.6	87.4	--	--	--	--	--	--	93.7	95.8	94.5
30	49.2	81.4	63.8	59.7	95.2	82.6	64.3	85.9	73.0	57.2	93.2	79.6	50.9	87.3	67.2	59.6	95.0	82.4	--	--	--	--	--	--	94.1	95.3	94.9
Monthly Total						2,507.3						2,412.7						2,511.8						0.0			
Monthly Min/Max/ Avg	44.2	138.5	62.7	49.0	108.2		45.5	141.4	72.1	49.1	104.8		45.5	144.5	63.7	57.0	120.6		--	--	--	--	--		93.1	96.5	95.3

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

November 2024

Day	Rossdale									E.L. Smith								
	Log Removal									Log Removal								
	Giardia			Virus			*Cryptosporidium*			*Giardia*			Virus			*Cryptosporidium*		
	Min	Max	Avg	Min	Max	Avg	Min	Max	Avg	Min	Max	Avg	Min	Max	Avg	Min	Max	Avg
1	7.8	7.9	7.8	14	17	15	6.5	6.5	6.5	6.7	6.7	6.7	7.8	9.8	8.8	6.5	6.5	6.5
2	7.7	8.0	7.8	14	16	15	6.5	6.5	6.5	6.6	6.7	6.7	7.3	9.5	8.4	6.5	6.5	6.5
3	7.8	8.0	7.9	14	15	15	6.5	6.5	6.5	6.6	6.7	6.7	6.9	8.7	7.8	6.5	6.5	6.5
4	7.5	7.9	7.7	12	15	14	6.3	6.5	6.5	6.6	6.7	6.7	7.1	9.4	8.0	6.5	6.5	6.5
5	7.6	7.7	7.7	13	15	14	6.5	6.5	6.5	6.6	6.7	6.7	6.4	8.8	7.8	6.5	6.5	6.5
6	--	--	--	--	--	--	--	--	--	6.7	6.7	6.7	6.4	7.9	7.3	6.5	6.5	6.5
7	7.7	8.0	7.8	14	16	15	6.5	6.5	6.5	6.6	6.7	6.7	6.0	7.6	7.0	6.5	6.5	6.5
8	7.7	7.8	7.7	14	16	15	6.5	6.5	6.5	6.7	6.7	6.7	6.5	8.2	7.5	6.5	6.5	6.5
9	7.8	8.0	7.9	14	17	15	6.5	6.5	6.5	6.7	6.7	6.7	7.4	8.7	8.1	6.5	6.5	6.5
10	7.8	8.2	8.0	14	16	15	6.5	6.5	6.5	6.7	6.7	6.7	7.1	8.7	8.1	6.5	6.5	6.5
11	7.9	8.2	8.1	13	15	14	6.5	6.5	6.5	6.7	6.7	6.7	7.3	9.3	8.5	6.5	6.5	6.5
12	7.8	8.1	7.9	13	15	14	6.5	6.5	6.5	6.7	6.7	6.7	6.7	8.9	7.9	6.5	6.5	6.5
13	6.9	7.9	7.8	5.5	15	14	6.5	6.5	6.5	6.7	6.7	6.7	6.7	9.5	8.0	6.5	6.5	6.5
14	7.7	8.0	7.9	13	15	14	6.5	6.5	6.5	6.7	6.7	6.7	7.2	8.9	8.5	6.5	6.5	6.5
15	7.6	8.1	7.9	13	15	14	6.5	6.5	6.5	6.7	6.7	6.7	7.1	9.1	8.1	6.5	6.5	6.5
16	7.6	7.7	7.7	14	15	14	6.5	6.5	6.5	6.7	6.7	6.7	6.5	7.9	7.2	6.5	6.5	6.5
17	7.2	7.9	7.6	14	15	14	6.5	6.5	6.5	6.7	6.7	6.7	6.4	7.7	6.9	6.5	6.5	6.5
18	7.2	7.3	7.2	13	15	14	6.5	6.5	6.5	6.6	6.7	6.7	5.6	7.5	6.5	6.5	6.5	6.5
19	7.1	7.4	7.2	13	15	13	6.5	6.5	6.5	6.6	6.7	6.7	5.1	7.3	6.4	6.5	6.5	6.5
20	7.1	7.3	7.1	12	14	13	6.5	6.5	6.5	6.7	6.7	6.7	7.2	7.5	7.3	6.5	6.5	6.5
21	7.1	7.5	7.2	13	15	14	6.5	6.5	6.5	6.6	6.7	6.7	6.0	7.4	6.8	6.5	6.5	6.5
22	7.1	7.6	7.2	13	14	13	6.5	6.5	6.5	6.6	6.7	6.7	5.0	7.3	6.2	6.5	6.5	6.5
23	7.1	7.6	7.4	12	14	13	6.5	6.5	6.5	6.6	6.7	6.7	4.9	6.9	6.1	6.5	6.5	6.5
24	7.2	7.7	7.5	12	14	13	6.5	6.5	6.5	6.6	6.7	6.7	5.7	7.9	6.3	6.5	6.5	6.5
25	7.5	7.9	7.7	12	14	13	6.5	6.5	6.5	6.6	6.7	6.7	5.9	7.9	7.0	6.5	6.5	6.5
26	7.5	7.6	7.5	12	13	12	6.5	6.5	6.5	6.6	6.7	6.7	6.4	7.4	6.9	6.5	6.5	6.5
27	7.5	7.7	7.6	12	13	12	6.5	6.5	6.5	6.6	6.8	6.7	5.6	10	7.0	6.5	6.5	6.5
28	7.5	7.9	7.7	13	14	14	6.5	6.5	6.5	6.6	6.7	6.7	5.3	7.5	6.6	6.5	6.5	6.5
29	7.5	7.9	7.7	12	14	12	6.5	6.5	6.5	6.6	6.7	6.7	5.5	7.8	6.8	6.5	6.5	6.5
30	7.6	8.0	7.7	12	14	13	6.5	6.5	6.5	6.6	6.7	6.7	6.1	8.3	6.8	6.5	6.5	6.5
Monthly Min/Max/Avg	6.9	8.2	7.6	5.5	17	14	6.3	6.5	6.5	6.6	6.8	6.7	4.9	10	7.4	6.5	6.5	6.5

NOTES: ' -- ' indicates plant offline

1.2.17 Liquid Alum Chemical Consumption

November 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	--	7.00	7.11	--	2,431	2,431	4,184
2	--	7.00	7.16	--	2,403	2,403	4,265
3	--	7.00	7.06	--	2,221	2,221	4,077
4	--	5.88	7.07	--	1,997	1,997	4,090
5	--	7.02	7.08	--	2,261	2,261	4,207
6	--	--	7.04	--	--	--	4,561
7	--	6.97	6.83	--	2,233	2,233	4,518
8	--	7.00	6.08	--	2,443	2,443	3,838
9	--	7.00	6.09	--	2,134	2,134	3,380
10	--	7.00	6.04	--	2,040	2,040	3,494
11	--	7.00	6.06	--	1,875	1,875	3,393
12	--	7.00	6.06	--	2,089	2,089	3,253
13	--	7.00	6.04	--	2,295	2,295	3,332
14	--	6.99	6.05	--	2,261	2,261	3,483
15	--	6.59	6.04	--	2,131	2,131	3,584
16	--	6.00	6.05	--	1,981	1,981	3,753
17	--	6.01	6.05	--	1,748	1,748	3,748
18	--	5.99	6.04	--	1,667	1,667	3,854
19	--	6.00	6.09	--	2,006	2,006	3,935
20	--	6.00	6.62	--	2,102	2,102	890
21	--	6.00	5.98	--	2,113	2,113	3,954
22	--	6.00	6.46	--	2,088	2,088	4,269
23	--	6.33	6.85	--	2,115	2,115	4,226
24	--	7.01	6.72	--	2,218	2,218	3,923
25	--	6.85	6.95	--	2,213	2,213	4,131
26	--	6.00	6.76	--	1,985	1,985	4,186
27	--	6.00	6.59	--	1,967	1,967	4,015
28	--	6.00	6.13	--	1,967	1,967	3,805
29	--	6.00	6.60	--	1,941	1,941	4,093
30	--	6.00	8.46	--	1,975	1,975	4,987
Monthly Total				--	60,901	60,901	115,429
Monthly Avg	--	6.50	6.54	--	2,100	2,100	3,848

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

November 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	--	0.10	--	--	17	17	--
2	--	0.10	--	--	17	17	--
3	--	0.10	--	--	15	15	--
4	--	0.10	--	--	16	16	--
5	--	0.10	--	--	16	16	--
6	--	--	--	--	--	--	--
7	--	0.10	--	--	16	16	--
8	--	0.10	--	--	17	17	--
9	--	0.10	--	--	15	15	--
10	--	0.10	--	--	14	14	--
11	--	0.10	--	--	13	13	--
12	--	0.10	--	--	14	14	--
13	--	0.10	--	--	16	16	--
14	--	0.10	--	--	16	16	--
15	--	0.10	--	--	16	16	--
16	--	0.10	--	--	16	16	--
17	--	0.10	--	--	14	14	--
18	--	0.10	--	--	13	13	--
19	--	0.10	--	--	16	16	--
20	--	0.10	--	--	17	17	--
21	--	0.10	--	--	17	17	--
22	--	0.10	--	--	17	17	--
23	--	0.10	--	--	16	16	--
24	--	0.10	--	--	15	15	--
25	--	0.10	--	--	16	16	--
26	--	0.10	--	--	16	16	--
27	--	0.10	--	--	16	16	--
28	--	0.10	--	--	16	16	--
29	--	0.10	--	--	16	16	--
30	--	0.10	--	--	16	16	--
Monthly Total				--	455	455	--
Monthly Avg	--	0.10	--	--	16	16	--

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

November 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	--	--	--	--	--	--	--
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

November 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	--	2.69	--	56,543	60,272	2.98	111,812
2	--	2.61	--	54,303	57,695	2.81	106,738
3	--	2.61	--	50,196	53,202	2.80	103,130
4	--	2.65	--	54,663	57,122	2.82	104,155
5	--	2.71	--	52,851	55,542	2.88	109,274
6	--	--	--	--	--	3.16	130,479
7	--	2.91	--	56,541	59,110	3.23	136,533
8	--	2.77	--	58,539	62,230	3.02	121,680
9	--	2.81	--	51,918	54,603	3.09	109,511
10	--	2.80	--	49,451	51,125	3.10	114,409
11	--	2.72	--	44,171	45,889	3.07	109,760
12	--	2.66	--	48,136	50,947	3.09	105,973
13	--	2.68	--	53,338	56,849	3.01	105,937
14	--	2.64	--	51,725	54,934	2.92	107,478
15	--	2.74	--	53,765	57,367	2.89	109,558
16	--	2.72	--	54,456	57,468	2.81	111,375
17	--	2.66	--	46,984	49,682	2.75	108,637
18	--	2.65	--	44,707	47,643	2.75	112,144
19	--	2.63	--	53,243	56,257	2.87	118,579
20	--	2.65	--	56,348	58,399	2.95	25,306
21	--	2.65	--	56,572	58,655	2.96	125,035
22	--	2.68	--	56,554	59,734	2.73	115,280
23	--	2.80	--	56,778	60,524	2.90	114,189
24	--	2.88	--	55,248	58,382	3.00	111,898
25	--	2.89	--	56,623	60,070	3.04	115,246
26	--	2.90	--	58,173	60,101	3.01	118,850
27	--	2.85	--	56,687	58,996	2.89	112,336
28	--	2.63	--	52,217	55,399	2.87	113,637
29	--	2.67	--	52,470	56,483	3.13	123,821
30	--	2.85	--	56,920	60,514	3.30	123,963
Monthly Total			--	1,550,119	1,635,195		3,336,724
Monthly Avg	--	2.73	--	53,452	56,386	2.96	111,224

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

November 2024

Day	Dosage (mg/L)		Consumption (kg)	
	Rossdale	E.L. Smith	Rossdale	E.L. Smith
1	0.36	0.51	59	146
2	0.35	0.48	54	139
3	0.34	0.48	50	135
4	0.33	0.55	52	154
5	0.33	0.55	49	159
6	--	0.55	--	173
7	0.29	0.56	43	180
8	0.29	0.55	48	168
9	0.29	0.55	42	148
10	0.29	0.55	39	154
11	0.29	0.55	36	149
12	0.29	0.55	40	143
13	0.29	0.55	44	147
14	0.29	0.55	44	154
15	0.32	0.55	47	158
16	0.34	0.55	52	166
17	0.34	0.55	46	165
18	0.34	0.55	44	170
19	0.37	0.55	57	173
20	0.39	0.52	63	34
21	0.39	0.55	63	176
22	0.39	0.59	62	188
23	0.40	0.70	61	209
24	0.37	0.72	54	203
25	0.38	0.69	57	198
26	0.39	0.59	60	178
27	0.39	0.53	59	155
28	0.37	0.49	57	148
29	0.33	0.60	49	182
30	0.33	0.74	51	211
Monthly Total			1,480	4,864
Monthly Avg	0.34	0.57	51	162

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

November 2024

Day	Dosage (mg/L)		Consumption (kg)	
	Rossdale	E.L. Smith	Rossdale	E.L. Smith
1	0.62	--	528	--
2	0.62	--	512	--
3	0.62	--	479	--
4	0.61	--	508	--
5	0.61	--	477	--
6	--	--	--	--
7	0.60	--	467	--
8	0.61	--	524	--
9	0.61	--	462	--
10	0.61	--	430	--
11	0.61	--	398	--
12	0.61	--	443	--
13	0.61	--	482	--
14	0.61	--	484	--
15	0.61	--	479	--
16	0.61	--	497	--
17	0.61	--	432	--
18	0.61	--	413	--
19	0.61	--	500	--
20	0.61	--	523	--
21	0.61	--	520	--
22	0.61	--	520	--
23	0.61	--	496	--
24	0.61	--	465	--
25	0.61	--	484	--
26	0.61	--	491	--
27	0.60	--	479	--
28	0.60	--	488	--
29	0.60	--	472	--
30	0.59	--	477	--
Monthly Total			13,930	--
Monthly Avg	0.61	--	480	--

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

November 2024

Day	Dosage (mg/L)	Consumption (kg)
	E.L. Smith	E.L. Smith
1	0.61	1,549
2	0.61	1,581
3	0.61	1,537
4	0.61	1,533
5	0.61	1,565
6	0.61	1,708
7	0.60	1,743
8	0.60	1,674
9	0.60	1,476
10	0.60	1,519
11	0.60	1,460
12	0.60	1,394
13	0.60	1,428
14	0.60	1,491
15	0.60	1,549
16	0.60	1,630
17	0.60	1,629
18	0.60	1,659
19	0.60	1,679
20	0.46	91
21	0.58	1,659
22	0.58	1,665
23	0.58	1,520
24	0.58	1,441
25	0.58	1,464
26	0.57	1,515
27	0.56	1,489
28	0.56	1,515
29	0.56	1,490
30	0.57	1,408
Monthly Total		45,063
Monthly Avg	0.59	1,502

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

November 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	--	--	--	--
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
November 2024

Day	Dosage (mg/L)		Consumption (kg)	
	Rossdale	E.L. Smith	Rossdale	E.L. Smith
1	0.65	0.60	483	681
2	0.65	0.60	468	694
3	0.65	0.60	438	675
4	0.65	0.60	469	673
5	0.65	0.60	443	687
6	--	0.60	--	755
7	0.64	0.60	433	778
8	0.65	0.59	487	739
9	0.65	0.59	429	649
10	0.65	0.59	399	668
11	0.65	0.59	370	643
12	0.65	0.60	411	623
13	0.64	0.59	443	630
14	0.64	0.59	442	659
15	0.64	0.59	438	677
16	0.64	0.58	454	706
17	0.64	0.58	395	706
18	0.64	0.58	378	718
19	0.64	0.58	458	736
20	0.64	0.58	478	40
21	0.64	0.59	475	755
22	0.64	0.59	475	755
23	0.64	0.59	454	689
24	0.64	0.59	425	655
25	0.64	0.58	442	663
26	0.64	0.58	452	688
27	0.64	0.57	445	676
28	0.63	0.57	446	687
29	0.63	0.57	436	677
30	0.63	0.57	444	638
Monthly Total			12,810	20,021
Monthly Avg	0.64	0.59	442	667

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

November 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	28.4	16.6	1,168	2,388	16	55
2	32.6	15.8	1,944	2,276	23	55
3	30.9	14.5	1,166	1,973	14	52
4	36.4	13.2	1,559	1,881	16	54
5	33.7	11.9	1,946	1,702	22	54
6	21.2	11.1	910	1,706	16	59
7	28.3	11.0	1,686	1,608	23	55
8	30.4	15.8	1,300	2,162	16	53
9	35.6	20.6	1,180	2,476	13	45
10	29.1	18.6	1,288	2,418	17	49
11	30.2	15.9	1,167	2,084	15	49
12	30.1	17.3	1,037	2,188	13	48
13	24.1	14.2	1,556	1,855	25	50
14	32.2	13.9	1,430	1,910	17	52
15	30.4	10.8	1,297	1,751	16	53
16	29.5	11.4	1,037	1,476	13	49
17	43.5	13.0	1,821	1,686	16	53
18	37.1	14.5	1,793	2,168	18	57
19	31.2	16.8	1,167	2,618	14	59
20	30.7	21.0	1,301	3,435	16	62
21	28.2	15.7	1,430	2,552	19	62
22	32.6	15.4	1,721	2,567	20	63
23	31.4	14.4	1,658	2,491	20	66
24	31.4	13.6	1,547	2,185	19	61
25	29.8	13.2	1,446	2,065	19	61
26	29.4	12.4	1,951	1,920	25	59
27	34.6	13.1	2,473	1,991	27	58
28	44.9	14.2	1,432	2,226	12	55
29	36.7	17.5	1,300	2,597	14	56
30	26.4	18.6	1,164	2,753	17	65
Monthly Total			43,876	65,108	534	1,668
Monthly Avg	31.7	14.9	1,463	2,170	18	56

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

November 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)		65	0.0	209	55	10	339	58.20			475.54		
Solids (kg)	TSS	29,135	0	21,032			50,167						
	Aluminium	2,673	0	7,280			9,954						
# of Bypasses						1		Min	Max	Avg	Min	Max	Avg
pH								6.4	8.1	7.3	7.0	8.2	8.1
Total Chlorine (mg/L)								0.00	0.00	0.00	0.00	0.00	0.00
Sulfite (mg/L)								1.18	29.1	12.5	1.35	20.0	10.9

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

November 2024

		Clarifier Blowdown	Clarifier Washdown *	Backwash Water	Filter To Waste	Bypass	LLP Flush	HLP Cooling	Total	De-chlorinated Waste flow to		
Volume (ML)		702	0.0	490	265	52	3.0	29	1,541	1,668		
Solids (kg)	TSS	111,645	0	68,354					179,999			
	Aluminium	4,282	0	23,661					27,943			
# of Bypasses						2				Min	Max	Avg
pH										6.60	8.34	8.00
Total Chlorine (mg/L)										0.00	0.00	0.00
Sulphite (mg/L)										0.35	20.0	6.53

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

November 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
NOVEMBER	4,022	154	214	7,008	270	286	11,029	415	378	1,392	2,371	3,763

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)	130,928	129,664	1.0
AVG. DAILY DEMAND TO DATE (ML)	391	388	0.6
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

November 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	1.88	1.88	1.88	1.90	2.13	2.05	1.60	1.71	1.68	1.98	2.04	2.00	2.00	2.06	2.03	1.48	1.61	1.56
2	1.52	1.88	1.53	2.06	2.13	2.09	1.33	1.71	1.68	1.99	2.05	2.01	1.88	2.08	2.03	1.44	1.60	1.54
3	1.59	1.91	1.61	1.97	2.13	2.06	1.56	1.70	1.67	2.00	2.11	2.03	1.77	2.09	2.04	1.43	1.56	1.51
4	1.57	1.60	1.58	1.92	2.07	2.04	1.55	1.70	1.66	1.96	2.07	2.01	2.02	2.07	2.05	1.34	1.52	1.47
5	1.53	1.90	1.56	1.97	2.11	2.04	1.64	1.78	1.66	1.97	2.05	2.01	1.95	2.14	2.06	1.41	1.59	1.50
6	1.46	1.55	1.51	1.96	2.06	2.01	1.50	1.68	1.63	1.96	2.03	2.00	2.04	2.08	2.06	1.45	1.59	1.53
7	1.48	1.76	1.49	1.90	2.10	2.01	1.40	1.66	1.56	1.99	2.04	2.01	1.98	2.09	2.07	1.46	1.57	1.53
8	1.66	2.04	1.67	1.98	2.16	2.04	1.59	1.69	1.65	1.95	2.09	2.02	2.01	2.16	2.08	1.49	1.61	1.55
9	1.66	1.97	1.74	1.98	2.07	2.01	1.21	1.80	1.68	1.98	2.09	2.03	2.00	2.10	2.07	1.47	1.61	1.56
10	1.72	1.92	1.73	1.91	2.04	2.00	1.63	1.71	1.68	1.96	2.05	2.00	1.97	2.11	2.06	1.42	1.58	1.52
11	1.71	1.94	1.72	1.92	2.04	1.99	1.67	1.69	1.68	1.92	2.01	1.96	1.94	2.08	2.04	1.42	1.56	1.51
12	1.71	1.93	1.72	1.95	2.06	1.99	1.51	1.76	1.64	1.91	2.03	1.95	1.94	2.10	2.04	1.45	1.68	1.58
13	1.71	1.72	1.71	1.87	2.04	1.98	1.45	1.69	1.64	1.87	2.00	1.95	1.91	2.09	2.03	1.53	1.67	1.61
14	1.66	1.93	1.68	1.90	2.03	1.98	1.62	1.67	1.64	1.94	2.00	1.96	2.00	2.04	2.02	1.50	1.63	1.59
15	1.65	1.89	1.66	1.94	2.08	1.99	1.53	1.71	1.66	1.96	2.04	1.98	2.00	2.17	2.04	1.47	1.61	1.55
16	1.65	1.65	1.65	1.85	2.04	1.99	1.53	1.72	1.67	1.97	2.06	1.99	2.05	2.11	2.08	1.43	1.57	1.51
17	1.65	2.04	1.71	1.95	2.04	1.98	1.66	1.80	1.69	1.96	2.02	1.98	2.04	2.08	2.06	1.39	1.54	1.49
18	1.65	1.94	1.67	1.91	2.03	1.97	1.65	1.70	1.68	1.91	1.99	1.96	1.88	2.12	2.05	1.37	1.51	1.46
19	1.67	1.91	1.78	1.90	2.00	1.97	1.51	1.72	1.68	1.94	1.99	1.96	1.97	2.14	2.03	1.40	1.62	1.51
20	1.49	1.88	1.62	1.89	2.00	1.94	1.54	1.70	1.67	1.86	1.98	1.93	2.00	2.06	2.02	1.48	1.62	1.56
21	1.60	1.61	1.60	1.81	2.04	1.98	1.45	1.74	1.64	1.89	2.03	1.98	2.00	2.16	2.06	1.43	1.59	1.53
22	--	--	--	1.88	2.04	1.98	1.61	1.72	1.65	1.92	2.03	1.98	2.05	2.13	2.07	1.42	1.56	1.49
23	--	--	--	1.94	1.99	1.96	1.66	1.76	1.73	1.91	1.97	1.94	1.96	2.12	2.04	1.40	1.52	1.47
24	1.66	1.90	1.67	1.92	2.00	1.95	1.51	1.76	1.73	1.88	1.99	1.93	1.97	2.09	2.03	1.38	1.50	1.44
25	1.64	1.93	1.66	1.81	2.00	1.95	1.62	1.80	1.72	1.92	1.97	1.94	2.00	2.05	2.02	1.35	1.47	1.42
26	1.55	1.97	1.65	1.88	2.02	1.96	1.68	1.82	1.70	1.89	2.02	1.95	1.89	2.05	2.00	1.35	1.61	1.48
27	1.55	1.91	1.68	1.88	2.01	1.96	1.64	1.79	1.69	1.91	1.98	1.93	1.91	2.06	2.01	1.45	1.60	1.54
28	1.69	1.94	1.71	1.92	1.97	1.94	1.47	1.72	1.69	1.84	1.96	1.92	1.97	2.01	1.99	1.42	1.58	1.51
29	1.71	1.93	1.73	1.83	1.99	1.93	1.65	1.73	1.70	1.77	1.95	1.91	1.88	2.04	1.98	1.39	1.53	1.47
30	1.64	1.90	1.70	1.83	1.99	1.92	1.65	1.72	1.69	1.90	1.94	1.92	1.88	2.07	1.98	1.35	1.49	1.44
Monthly Min/Max/Avg	1.46	2.04	1.66	1.81	2.16	1.99	1.21	1.82	1.67	1.77	2.11	1.97	1.77	2.17	2.04	1.34	1.68	1.51

NOTES: '--' Indication Analyzer Offline

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

November 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				1.69	1.88	1.79	1.60	1.94	1.61	1.61	1.95	1.70	1.64	2.09	1.68	1.46	1.56	1.51
2				1.68	1.88	1.82	1.62	2.02	1.63	1.65	1.69	1.68	1.66	2.13	1.73	1.46	1.55	1.50
3				1.70	1.90	1.82	1.58	2.02	1.64	1.65	1.70	1.67	1.70	2.06	1.73	1.46	1.58	1.52
4				1.78	1.89	1.84	1.60	1.96	1.63	1.64	1.66	1.66	1.70	2.07	1.77	1.46	1.56	1.51
5	1.76	1.76	1.76	1.75	1.89	1.84	1.57	1.97	1.59	1.64	1.66	1.66	1.69	2.04	1.73	1.46	1.55	1.51
6	--	--	--	1.67	1.84	1.80	--	--	--	1.65	1.66	1.65	--	--	--	1.45	1.54	1.49
7	--	--	--	1.70	1.86	1.78	1.47	2.00	1.51	1.63	1.65	1.64	1.63	2.08	1.65	1.44	1.52	1.49
8	--	--	--	1.73	1.92	1.84	1.46	1.97	1.53	1.60	1.68	1.67	1.65	2.12	1.66	1.46	1.52	1.49
9	--	--	--	1.71	1.91	1.85	1.50	1.98	1.56	1.56	1.78	1.69	1.68	2.03	1.69	1.45	1.54	1.50
10	--	--	--	1.75	1.94	1.83	1.54	1.95	1.56	1.59	1.97	1.70	1.65	2.04	1.67	1.43	1.52	1.47
11	--	--	--	1.73	1.87	1.81	1.51	1.92	1.54	1.65	1.98	1.68	1.51	2.03	1.65	1.41	1.50	1.46
12	--	--	--	1.69	1.87	1.80	1.49	1.89	1.53	1.62	1.67	1.66	1.61	2.04	1.62	1.41	1.50	1.45
13	1.71	1.71	1.71	1.67	1.86	1.81	1.53	1.92	1.55	1.59	1.69	1.65	1.64	1.99	1.65	1.38	1.47	1.43
14	--	--	--	1.65	1.85	1.81	1.40	1.90	1.56	1.45	1.70	1.64	1.63	2.06	1.66	1.38	1.46	1.42
15	--	--	--	1.67	1.85	1.79	1.55	1.96	1.57	1.62	1.64	1.64	1.65	2.08	1.67	1.40	1.89	1.59
16	--	--	--	1.71	1.89	1.81	1.59	1.96	1.62	1.62	1.64	1.64	1.71	2.01	1.73	1.81	1.94	1.87
17				1.73	1.91	1.83	1.55	1.95	1.60	1.65	1.90	1.66	1.61	2.01	1.69	1.80	1.92	1.86
18	1.74	1.75	1.74	1.63	1.94	1.81	1.56	1.91	1.59	1.63	1.65	1.64	1.68	1.97	1.69	1.79	1.89	1.84
19				1.75	1.91	1.82	1.56	1.91	1.71	1.54	1.66	1.62				1.79	1.88	1.83
20	1.66	1.68	1.67	1.62	1.82	1.77	1.48	1.56	1.53	1.48	1.63	1.60	1.64	1.99	1.67	1.76	1.85	1.81
21				1.65	1.89	1.81	1.50	1.83	1.52	1.58	1.61	1.59				1.75	1.84	1.81
22				1.73	1.90	1.79	1.58	1.87	1.61	1.57	1.69	1.59				1.78	1.85	1.82
23				1.64	1.87	1.81	1.61	1.87	1.64	1.47	1.65	1.61	1.68	1.94	1.71	1.76	1.84	1.80
24				1.70	1.88	1.82	1.62	1.87	1.64	1.51	1.64	1.63	1.70	1.96	1.73	1.76	1.84	1.80
25	--	--	--	1.70	1.87	1.80	1.60	1.89	1.62	1.59	1.67	1.63	1.68	1.99	1.75	1.76	1.84	1.80
26	--	--	--	1.69	1.88	1.83	1.58	1.87	1.62	1.63	1.64	1.63	1.76	1.97	1.77	1.76	1.86	1.81
27	--	--	--	1.60	1.88	1.81	1.64	1.88	1.67	1.61	1.95	1.62	1.77	1.96	1.80	1.77	1.86	1.81
28	--	--	--	1.60	1.85	1.81	--	--	--	1.62	1.95	1.64	1.79	1.79	1.79	1.76	1.84	1.80
29	--	--	--	1.63	1.86	1.79	1.59	1.87	1.63	1.62	1.93	1.67	1.78	1.94	1.79	1.75	1.84	1.80
30	--	--	--	1.62	1.90	1.81	1.57	1.88	1.63	1.63	1.91	1.69	1.66	1.94	1.79	1.76	1.83	1.79
Monthly Min/Max/Avg	1.66	1.76	1.72	1.60	1.94	1.81	1.40	2.02	1.59	1.45	1.98	1.65	1.51	2.13	1.71	1.38	1.94	1.65

NOTES: '--' Indication Analyzer Offline

1.2.31 Phosphoric Acid Chemical Consumption

November 2024

Day	Dosage (mg/L)		Consumption (kg)	
	Rossdale	E.L. Smith	Rossdale	E.L. Smith
1	0.90	0.90	547	842
2	0.90	0.90	544	946
3	0.90	0.90	551	857
4	0.90	0.90	586	877
5	0.90	0.90	529	928
6	--	0.90	--	1,003
7	0.88	0.90	438	1,006
8	0.90	0.90	600	931
9	0.90	0.90	495	917
10	0.90	0.90	484	887
11	0.90	0.90	431	836
12	0.90	0.90	503	794
13	0.90	0.90	509	888
14	0.90	0.90	495	843
15	0.90	0.90	542	872
16	0.90	0.90	574	1,003
17	0.90	0.90	502	941
18	0.90	0.90	382	967
19	0.90	0.90	542	953
20	0.90	0.89	595	78
21	0.90	0.90	523	1,005
22	0.90	0.90	572	891
23	0.90	0.90	523	929
24	0.90	0.90	532	868
25	0.90	0.90	533	934
26	0.90	0.90	555	894
27	0.90	0.90	530	940
28	0.90	0.90	550	961
29	0.90	0.90	561	844
30	0.90	0.90	494	893
Monthly Total			15,223	26,528
Monthly Avg	0.90	0.90	525	884

NOTES: ' -- ' indicates plant offline

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

1.2.32 Summary of Mainbreaks

November 2024

Date and Time Reported	Location of Mainbreak	Repaired (Time)	Size	Type**
2024-11-01 0:28	10016-111 STREET NW	2024-11-01 17:00	200	CI
2024-11-03 3:20	10407-107 AVENUE NW	2024-11-03 22:40	150	CI
2024-11-04 17:30	11907-134 AVENUE NW	2024-11-05 0:49	250	CI
2024-11-04 17:39	6405-90 AVENUE NW	2024-11-04 23:55	200	CI
2024-11-04 19:02	13715-101A AVENUE NW	2024-11-05 5:00	200	CI
2024-11-06 1:14	9907-149 STREET NW	2024-11-06 22:00	150	CI
2024-11-06 3:55	11038-160 STREET NW	2024-11-06 23:08	150	CI
2024-11-06 4:15	9525-65 AVENUE NW	2024-11-06 20:46	150	CI
2024-11-06 22:12	9907-149 STREET NW	2024-11-07 5:00	150	CI
2024-11-07 5:01	9911-149 STREET NW	2024-11-07 5:55	150	CI
2024-11-07 16:44	9907-149 STREET NW	2024-11-07 16:53	150	CI
2024-11-07 23:29	9911-149 STREET NW	2024-11-08 4:15	150	CI
2024-11-12 19:40	13352-140 STREET NW	2024-11-12 23:28	200	AC
2024-11-16 3:05	9719-72 AVENUE NW	2024-11-16 19:30	150	CI
2024-11-17 6:30	7924-98 AVENUE NW	2024-11-18 0:00	200	CI
2024-11-18 13:15	13304-70 STREET NW	2024-11-18 22:20	200	CI
2024-11-19 13:20	8707-147 STREET NW	2024-11-20 4:37	200	CI
2024-11-20 1:16	12020-142 STREET NW	2024-11-20 20:35	150	CI
2024-11-20 13:50	13156 - 65 STREET NW	2024-11-21 23:20	150	CI
2024-11-20 20:34	12020-142 STREET NW	2024-11-20 23:05	150	CI
2024-11-20 23:05	12020-142 STREET NW	2024-11-21 20:05	150	CI
2024-11-20 18:24	7315U-72A STREET NW	2024-11-21 4:30	200	CI
2024-11-20 23:37	15215-83 AVENUE NW	2024-11-21 22:15	150	CI
2024-11-21 4:33	7315U-72A STREET NW	2024-11-21 20:00	150	CI
2024-11-22 16:11	9112-65 AVENUE NW	2024-11-23 3:00	150	CI
2024-11-22 18:35	11008-85 AVENUE NW	2024-11-23 5:53	150	CI
2024-11-23 9:44	9339-52 STREET NW		400	AC
2024-11-24 1:49	6230U-100 STREET NW	2024-11-24 22:35	200	CI
2024-11-25 13:40	160 STREET N 110 AVE	2024-11-26 0:08	150	CI
2024-11-25 23:46	11416-50 AVENUE NW	2024-11-26 18:29	200	CI
2024-11-26 18:58	10064-114 STREET NW	2024-11-27 3:25	150	CI
2024-11-27 17:22	6819U-DELWOOD ROAD NW	2024-11-28 2:44	200	CI
2024-11-27 18:06	3512-78 STREET NW	2024-11-28 5:30	150	CI
2024-11-28 16:58	9803-96A STREET NW		100	CI
2024-11-29 19:24	7408-84 AVENUE NW	2024-11-29 23:50	200	CI
2024-11-30 2:34	12040-97 STREET NW	2024-12-01 5:00	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	36
Dec-24	
YTD 2024	**212**

**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

November 2024

Parameter	Unit	Monthly Count	Monthly Average	YTD Median	YTD Min	YTD Max	YTD Count
Alkalinity Total	mg CaCO3/L	59	123	118	8	143	664
Aluminum	mg/L	2	0.123	0.061	0.023	0.125	22
Arsenic	mg/L	2	<0.0002	<0.0002	<0.0002	<0.0002	22
Bromate Dissolved	mg/L	8	<0.005	<0.005	<0.005	<0.005	96
Bromodichloromethane	µg/L	59	0.7	1.0	<0.5	2.6	628
Cadmium	mg/L	2	<0.0002	<0.0002	<0.0002	<0.0002	22
Calcium Hardness	mg/L CaCO3	57	119	116	96	141	650
Chlorate Dissolved	mg/L	8	0.143	0.183	<0.100	0.332	96
Chloride Dissolved	mg/L	8	5.29	5.99	3.89	12.10	96
Chlorite Dissolved	mg/L	8	<0.01	<0.20	<0.20	<0.20	96
Chromium	mg/L	2	<0.0002	<0.0002	<0.0002	<0.0002	22
Colour	TCU	59	1.0	0.9	<0.5	1.9	664
Conductivity	µS/cm	8	386	394	342	453	96
Copper	mg/L	2	<0.0020	<0.0050	<0.0050	<0.0050	22
Cryptosporidium	oocysts/100L	0		<0.1	<0.1	<0.1	14
Fluoride	mg/L	59	0.70	0.68	0.61	0.79	664
Giardia	cysts/100L	0		<0.1	<0.1	<0.1	14
Iron	mg/L	2	<0.0050	<0.0050	<0.0050	<0.0050	22
Lead	mg/L	2	<0.0002	<0.0002	<0.0002	<0.0002	22
Manganese	mg/L	2	<0.0020	<0.0020	<0.0020	<0.0020	22
Mercury	mg/L	2	<0.0002	<0.0002	<0.0002	<0.0002	22
Nitrate (as N) Dissolved	mg/L	8	0.048	0.040	<0.010	0.170	96
Nitrite (as N) Dissolved	mg/L	8	<0.01	<0.01	<0.01	0.02	96
pH	N/A	59	8.0	7.9	7.5	8.3	665
Potassium	mg/L	2	0.64	0.80	0.60	1.10	22
Sodium	mg/L	2	6.77	10.60	6.70	18.90	22
Sulphate Dissolved	mg/L	8	64.1	71.6	59.3	95.1	96
Total Chlorine	N/A	59	2.07	2.15	1.86	2.40	664
Total Dissolved Solids	mg/L	2	227	229	195	252	22
Total Hardness	mg/L CaCO3	57	181	177	145	218	650
Total Organic Carbon	mg/L C	0		1.4	0.9	2.8	82
Trihalomethanes	mg/L	59	0.011	0.014	0.005	0.040	628
Turbidity	NTU	59	0.07	<0.04	<0.04	0.22	664
Uranium	mg/L	2	<0.0005	<0.0005	<0.0005	0.0006	22
Zinc	mg/L	2	<0.0050	<0.0050	<0.0050	<0.0050	22
Bacteriological Data							
Coliforms, total	PA/100mL	59	Absent	Absent	Absent	Absent	664
E. coli	PA/100mL	59	Absent	Absent	Absent	Absent	664

2.1.3 SUMMARY OF LABORATORY ANALYSIS - 2024

DISTRIBUTION OF TESTING

Drinking Water Testing

		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov
Water Treatment Plant	# Tests	10,442	9,566	10,736	10,143	9,855	10,053	10,306	10,156	6,169	10,169	9,697
	# Samples	261	248	326	269	264	260	268	273	257	268	253
Field Reservoirs	# Tests	1,936	1,721	1,695	1,883	1,734	2,006	2,225	1,917	1,779	2,035	1,596
	# Samples	63	52	52	65	49	53	66	54	52	65	52
Routine Distribution System	# Tests	2,740	2,879	2,734	2,845	2,901	2,692	2,424	2,401	2,142	3,187	2,728
	# Samples	146	153	146	153	144	124	99	106	103	165	148
System Depressurization/Repair	# Tests	1,050	720	555	675	660	630	628	480	723	735	825
	# Samples	70	48	37	45	44	42	42	32	48	49	55
Customer Complaints	# Tests	1,395	651	1,209	1,488	1,023	1,209	1,009	1,731	952	910	724
	# Samples	15	7	13	16	11	13	11	19	13	10	8
Total	# Tests	17,563	15,537	16,929	17,034	16,173	16,590	16,592	16,685	11,765	17,036	15,570
	# Samples	555	508	574	548	512	492	486	484	473	557	516

Additional Testing

		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov
New Watermain Testing	# Tests	80	30	0	10	135	160	495	275	305	330	580
	# Samples	17	6	0	2	27	32	99	55	61	66	116
Water Treatment Plant Waste Discharge	# Tests	168	43	173	117	300	327	284	595	68	73	271
	# Samples	56	33	36	45	55	51	50	52	34	35	45
Quality Control	# Tests	5,961	6,042	6,091	5,937	6,055	6,793	8,719	8,020	5,721	7,034	6,061
	# Samples	1,187	1,056	1,193	1,186	1,244	1,418	1,629	1,747	1,581	1,776	1,611
Distribution Water Enhanced Surveillance	# Tests	0	0	0	0	0	540	1,337	1,091	960	0	0
	# Samples	0	0	0	0	0	20	53	45	40	0	0
ELS Online Monitoring	# Tests	0	0	0	0	0	0	0	0	0	0	4
	# Samples	0	0	0	0	0	0	0	0	0	0	2
Externally Contracted Analyses	# Tests	405	672	316	307	949	798	832	595	7,210	817	745
	# Samples	134	120	157	136	140	122	139	130	240	174	147
Rossdale Online Monitoring	# Tests	0	0	0	0	0	0	0	0	0	0	2
	# Samples	0	0	0	0	0	0	0	0	0	0	1

Total
107,292 2,947
20,527 623
29,673 1,487
7,681 512
12,301 136
177,474 5,705

Total
2,400 481
2,419 492
72,434 15,628
3,928 158
4 2
13,646 1,639
2 1

		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov
Total	# Tests	6,614	6,787	6,580	6,371	7,439	8,618	11,667	10,576	14,264	8,254	7,663
	# Samples	1,394	1,215	1,386	1,369	1,466	1,643	1,970	2,029	1,956	2,051	1,921

		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov
Total	# Tests	24,177	22,324	23,509	23,405	23,612	25,208	28,259	27,261	26,029	25,290	23,233
	# Samples	1,825	1,611	1,848	1,793	1,842	2,022	2,327	2,399	2,198	2,452	2,304

Total
94,833
18,400

Total
272,307
22,621

2.1.4 QUALITY ASSURANCE – November 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 Health Canada's 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	0	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	0 + 0 = 0	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	6	146
Chlorine < 1 mg/L or > 2.4 mg/L	1	22
Single Positive Coliform	0	10
THMs > 50 µg/L	0	0
Pipe Lube, Odour, UV positive	0	2
Aluminium[2] > 0.20 (or 0.1) mg/L	1	36
Iron > 0.300 mg/L	0	6
Other	0	3
Total Variances + Violations	8 + 0 = 8	225 + 3 = 228

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

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
November															
Rossdale Raw (MPN/100mL)	30			82	1	148			4	1	23	1	15.7	15.7	15.7
E.L. Smith Raw (MPN/100mL)	4			88	70	121			3	1	4	0			
Raw River Water Entering the Treatment Plants	34			83	1	148			4	1	23	1	15.7	15.7	15.7
Rossdale Treated (PA/100mL)	29	0	0.0				0	0.0				29	0.77	0.10	1.00
E.L. Smith Treated (PA/100mL)	30	0	0.0				0	0.0				30	0.51	0.10	1.00
Water Entering the Plant Reservoir	59	0	0.0				0	0.0				59	0.63	0.10	1.00
Rossdale Reservoir (PA/100mL)	29	0	0.0				0	0.0				29	0.94	0.13	1.00
E.L. Smith Reservoir (PA/100mL)	30	0	0.0				0	0.0				30	0.60	0.10	1.00
Treated Water Entering the Distribution System	59	0	0.0				0	0.0				59	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

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
November									
Complaint Water	8	0	0.0	0	0.0	7	0.29	0.11	0.62
FIELD DISTRIBUTION	149	0	0.0	0	0.0	60	0.39	0.10	7.86
FIELD DISTRIBUTION - PLPH	57	0	0.0	0	0.0				
FIELD RESERVOIR	52	0	0.0	0	0.0	52	0.15	0.10	0.31
FIELD RESERVOIR - PLPH (duplicate-not counted)	52	0	0.0	0	0.0				
Monthly	209	0	0.0	0	0.0	119	0.33	0.10	7.86
Year to Date	3,028	9	0.3	0	0.0	1,558	0.41	0.10	42.04

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
November	8	0	0.0	0	0.0	7	0.29	0.11	0.62
Year to Date	136	0	0.0	0	0.0	135	0.81	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				
November	55	0	0.0	0	0.0				
Year to Date	512	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	
5 - Nov		<0.1		<0.1
	<0.09		<0.09	

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	
5 - Nov		<1.06		6.4
	<1.33		2.7	

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

November 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				0	<0.2	<0.2	<0.2	4	<0.2	<0.2	<0.2	4	1.5	
Physical																		
Colour (TCU)	1.0	<0.5	1.4	29	1.0	<0.5	1.5	30	0.9	<0.5	1.9	330	1.0	<0.5	1.8	334	(15)	10
Conductivity (uS/cm)	386	370	420	4	387	369	422	4	393	342	439	48	400	351	453	48		<1
FPA-Intensity (N/A)	0.74	0.56	1.00	4	0.74	0.50	0.94	4	1.08	0.31	1.88	58	0.97	0.50	2.12	58		
pH (N/A)	8.1	8.0	8.2	29	8.0	7.8	8.1	30	8.0	7.7	8.3	331	7.9	7.5	8.2	334	(7.0 - 10.5)	7.3-8.3
Total Dissolved Solids (mg/L)	229	229	229	1	226	226	226	1	227	195	252	11	230	213	250	11	(500)	
Turbidity (NTU)	0.06	<0.04	0.08	29	0.07	0.05	0.10	30	<0.05	<0.04	0.09	330	0.06	<0.04	0.22	334		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	11	<0.0004	<0.0002	<0.0005	11	0.006	
Arsenic	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	0.0002	11	<0.0002	<0.0002	0.0002	11	0.01	
Barium	0.058	0.058	0.058	1	0.055	0.055	0.055	1	0.061	0.050	0.073	11	0.060	0.049	0.072	11	2	
Boron	0.008	0.008	0.008	1	0.007	0.007	0.007	1	0.010	0.008	0.012	11	0.009	0.007	0.012	11	2	
Bromate, dissolved	<0.005	<0.005	<0.005	4	<0.005	<0.005	<0.005	4	<0.005	<0.003	<0.005	48	<0.005	<0.003	<0.005	48	0.01	
Cadmium	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	11	<0.0002	<0.0002	<0.0002	11	0.007	
Chlorate Dissolved	0.26	0.21	0.32	4	0.08	0.07	0.08	4	0.24	0.18	0.33	48	0.11	<0.05	0.23	48	1	
Chlorite Dissolved	<0.005	<0.005	<0.005	4	<0.005	<0.005	<0.005	4	<0.021	<0.005	<0.200	48	<0.021	<0.005	<0.200	48	1	
Chromium	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	11	<0.0002	<0.0002	<0.0002	11	0.05	
Copper	<0.002	<0.002	<0.002	1	<0.002	<0.002	<0.002	1	<0.003	<0.002	<0.005	11	<0.003	<0.002	<0.005	11	2 (1)	
Fluoride	0.70	0.64	0.76	29	0.70	0.64	0.76	30	0.68	0.61	0.76	330	0.69	0.62	0.79	334	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	11	<0.0002	<0.0002	<0.0002	11	0.005	
Manganese	<0.002	<0.002	<0.002	1	<0.002	<0.002	<0.002	1	<0.002	<0.002	<0.002	11	<0.002	<0.002	<0.002	11	0.12 (0.02)	
Mercury	<0.0002	<0.00020	<0.0002	1	<0.0002	<0.00020	<0.0002	1	<0.0012	<0.00005	<0.0050	15	<0.0012	<0.00005	<0.0050	15	0.001	
Nitrate (as N) Dissolved	0.05	0.04	0.07	4	0.05	0.04	0.07	4	0.05	<0.01	0.17	48	0.05	<0.01	0.17	48	10	
Nitrite (as N) Dissolved	<0.010	<0.010	0.010	4	<0.010	<0.010	<0.010	4	<0.010	<0.005	0.020	48	<0.010	<0.005	0.020	48	1	
Selenium	0.0003	0.0003	0.0003	1	0.0003	0.0003	0.0003	1	0.0003	0.0002	0.0004	11	0.0003	0.0002	0.0003	11	0.05	
Total Chlorine	2.10	1.99	2.22	29	2.06	1.86	2.21	30	2.18	1.91	2.40	330	2.13	1.86	2.35	334	>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	11	<0.0005	<0.0005	0.0005	11	0.02	

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

November 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				0	<0.11	<0.05	<0.25	4	<0.15	<0.05	<0.25	4	100	
Atrazine				0				0	<0.05	<0.05	<0.05	4	<0.05	<0.05	<0.05	4	5	
Benzene	<0.5	<0.5	<0.5	29	<0.5	<0.5	<0.5	30	<0.5	<0.5	0.6	330	<0.5	<0.5	<0.5	334	5	
Benzo(a)pyrene				0				0	<0.005	<0.005	<0.005	4	<0.005	<0.005	<0.005	4	0.04	
Bromoxynil				0				0	<0.11	<0.05	<0.25	4	<0.15	<0.05	<0.25	4	5	
Carbon Tetrachloride	<0.5	<0.5	<0.5	29	<0.5	<0.5	<0.5	30	<0.5	<0.5	<1.0	313	<0.5	<0.5	<1.0	315	2	
Chlorobenzene	<0.5	<0.5	<0.5	29	<0.5	<0.5	<0.5	30	<0.5	<0.5	<0.5	330	<0.5	<0.5	<0.5	334	80 (30)	
Chlorpyrifos				0				0	<0.1	<0.1	<0.1	4	<0.1	<0.1	<0.1	4	90	
Cyanazine				0				0	<0.1	<0.1	<0.1	4	<0.1	<0.1	<0.1	4		
Diazinon				0				0	<0.025	<0.025	<0.025	4	<0.025	<0.025	<0.025	4		
Dicamba				0				0	<0.2	<0.1	<0.5	4	<0.3	<0.1	<0.5	4	110	
Dichlorobenzene (1,2)	<0.5	<0.5	<0.5	29	<0.5	<0.5	<0.5	30	<0.5	<0.5	<0.5	313	<0.5	<0.5	<0.5	315		
Dichlorobenzene (1,4)	<0.5	<0.5	<0.5	29	<0.5	<0.5	<0.5	30	<0.5	<0.5	<0.5	313	<0.5	<0.5	<0.5	315	5 (1)	
Dichloroethane (1,2)	<0.5	<0.5	<0.5	29	<0.5	<0.5	<0.5	30	<0.5	<0.5	<0.5	312	<0.5	<0.5	<0.5	314	5	
Dichloroethylene (1,1)	<0.5	<0.5	<0.5	29	<0.5	<0.5	<0.5	30	<0.5	<0.5	<3.0	313	<0.5	<0.5	<3.0	315	14	
Dichlorophenol (2,4)	<0.2	<0.2	<0.2	1	<0.2	<0.2	<0.2	1	<0.2	<0.2	<0.3	4	<0.2	<0.2	<0.3	4		
Diclofop-methyl				0				0	<0.1	<0.1	<0.1	4	<0.1	<0.1	<0.1	4		
Dimethoate	0.00	0.00	0.00	1	0.00	0.00	0.00	1	<0.04	<0.00	<0.05	5	<0.04	<0.00	<0.05	5	20	
Diuron				0				0	<0.05	<0.05	<0.05	4	<0.05	<0.05	<0.05	4		
Ethylbenzene	<0.5	<0.5	<0.5	29	<0.5	<0.5	<0.5	30	<0.5	<0.5	<0.5	330	<0.5	<0.5	<0.5	334	140 (1.6)	
Glyphosate				0				0	<0.3	<0.2	<0.5	4	<0.3	<0.2	<0.5	4	280	
Haloacetic Acids, (HAA5)	17.0	17.0	17.0	1	13.30	13.30	13.30	1	22.3	10.8	47.1	11	20.97	9.71	42.30	11	80	40
Malathion				0				0	<0.025	<0.025	<0.025	4	<0.025	<0.025	<0.025	4	190	
MCPA				0				0	<0.11	<0.05	<0.25	4	<0.15	<0.05	<0.25	4	100	
Methylene Chloride	<0.5	<0.5	<0.5	29	<0.5	<0.5	<0.5	30	<0.5	<0.5	<0.5	313	<0.5	<0.5	<0.5	315	50	
Metolachlor				0				0	<0.025	<0.025	<0.025	4	<0.025	<0.025	<0.025	4		
Metribuzin				0				0	<0.1	<0.1	<0.1	4	<0.1	<0.1	<0.1	4	80	
NDMA	<0.0011	<0.0011	<0.0011	1	<0.0009	<0.0009	<0.0009	1	<0.0025	<0.0009	<0.0060	11	<0.0021	<0.0009	<0.0060	11	0.040	10
NTA (mg/L)				0				0	<0.4	<0.4	<0.4	4	<0.4	<0.4	<0.4	4	0.4	
Paraquat (as dichloride)				0				0	<1	<1	<1	3	<1	<1	<1	3		
Pentachlorophenol	<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	60 (30)	
Perfluorooctane sulfonic acid (PFOS)				0				0	<0.007	<0.002	<0.020	4	<0.007	<0.002	<0.020	4	0.6	
Perfluorooctanoic acid (PFOA)				0				0	<0.007	<0.002	<0.020	4	<0.007	<0.002	<0.020	4	0.0002	
Phorate				0				0	<3.31	<0.25	<12.50	4	<0.25	<0.25	<0.25	4		
Picloram				0				0	<0.2	<0.1	<0.5	4	<0.3	<0.1	<0.5	4		
Simazine				0				0	<0.1	<0.1	<0.1	4	<0.1	<0.1	<0.1	4		
Terbufos				0				0	<6.6	<0.5	<25.0	4	<0.5	<0.5	<0.5	4		
Tetrachloroethylene	<0.5	<0.5	<0.5	29	<0.5	<0.5	<0.5	30	<0.5	<0.5	<0.5	330	<0.5	<0.5	<0.5	334	10	

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

November 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	29	<0.5	<0.5	<0.5	30	<0.5	<0.5	1.6	330	<0.5	<0.5	3.3	334	60 (24)	
Total Xylenes	<1.0	<1.0	<1.0	29	<1.0	<1.0	<1.0	30	<1.0	<1.0	<2.5	313	<1.0	<1.0	<2.5	315	90	
Trichloroethylene	<0.5	<0.5	<0.5	29	<0.5	<0.5	<0.5	30	<0.5	<0.5	<0.5	330	<0.5	<0.5	<0.5	334	5	
Trifluralin				0				0	<0.1	<0.1	<0.1	4	<0.1	<0.1	<0.1	4		
Trihalomethanes	12.0	8.6	16.4	29	11.0	8.1	15.1	30	18.5	6.6	39.9	313	17.2	5.1	39.5	315	100	50
Vinyl Chloride	<1.0	<1.0	<1.0	29	<1.0	<1.0	<1.0	30	<1.0	<0.5	<1.0	329	<1.0	<0.5	<1.0	333	2	
Radionuclides (Bq/L)																		
Cesium-137	<0.2	<0.2	<0.2	1	<0.2	<0.2	<0.2	1	<0.2	<0.2	<0.2	2	<0.2	<0.2	<0.2	2	10	
Gross Alpha	<0.10	<0.10	<0.10	1	<0.10	<0.10	<0.10	1	<0.11	<0.10	<0.12	2	<0.13	<0.10	<0.15	2	(0.5)	
Gross Beta	0.09	0.09	0.09	1	<0.05	<0.05	<0.05	1	<0.08	<0.07	0.09	2	<0.06	<0.05	<0.07	2	(1.0)	
Iodine-131	<0.4	<0.4	<0.4	1	<0.7	<0.7	<0.7	1	<0.4	<0.4	<0.4	2	<0.6	<0.4	<0.7	2	6	
Lead-210	<0.02	<0.02	<0.02	1	<0.02	<0.02	<0.02	1	<0.02	<0.02	<0.02	2	<0.02	<0.02	<0.02	2	0.2	
Radium-226	<0.005	<0.005	<0.005	1	<0.005	<0.005	<0.005	1	<0.005	<0.005	<0.005	2	<0.005	<0.005	<0.005	2	0.5	
Strontium-90	<0.05	<0.05	<0.05	1	<0.05	<0.05	<0.05	1	<0.05	<0.05	<0.05	2	<0.05	<0.05	<0.05	2	5	
Tritium	<40	<40	<40	1	<40	<40	<40	1	<40	<40	<40	2	<40	<40	<40	2	7000	

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

November 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)	124	116	143	29	122	114	136	30	118	99	143	330	118	8	140	334		
Aluminum	0.125	0.125	0.125	1	0.122	0.122	0.122	1	0.070	0.023	0.125	11	0.065	0.026	0.122	11	2.9	0.1/0.2
Ammonia as NH3	0.12	0.08	0.16	13	0.12	0.10	0.14	14	0.13	0.08	0.18	115	0.12	0.08	0.18	117		
Beryllium	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	11	<0.0002	<0.0002	<0.0002	11		
Bromide Dissolved	<0.03	<0.03	<0.03	4	<0.03	<0.03	<0.03	4	<0.03	<0.01	<0.05	48	<0.03	<0.01	<0.05	48		
Calcium	47.4	47.4	47.4	1	46.7	46.7	46.7	1	47.1	43.7	51.3	11	47.0	44.2	51.4	11		
Calcium Hardness Calculated	118	118	118	1	117	117	117	1	116	109	125	7	116	110	124	7		
Chloride Dissolved	4.55	3.89	5.24	4	5.71	4.61	6.27	4	5.90	3.89	11.40	48	6.79	4.61	12.10	48	(250)	
Cobalt	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	11	<0.0002	<0.0002	<0.0002	11		
Free Chlorine	<0.07	<0.07	<0.07	1	<0.07	<0.07	<0.07	1	<0.07	<0.07	<0.07	11	<0.07	<0.07	<0.07	11		
Hardness, Ca (mg CaCO3/L)	119	110	135	28	118	105	132	29	117	98	141	323	116	96	138	327		
Iron	<0.005	<0.005	<0.005	1	<0.005	<0.005	<0.005	1	<0.005	<0.005	0.005	11	<0.005	<0.005	<0.005	11	(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	11	<0.001	<0.001	<0.001	11		
Lithium	0.0033	0.0033	0.0033	1	0.003	0.003	0.003	1	0.0037	0.0031	0.0043	11	0.003	0.003	0.004	11		
Magnesium	13.9	13.9	13.9	1	13.6	13.6	13.6	1	13.8	12.6	15.0	11	13.8	12.6	15.1	11		
Molybdenum	0.0006	0.0006	0.0006	1	0.0006	0.0006	0.0006	1	0.0008	0.0006	0.0010	11	0.0008	0.0006	0.0009	11		
Nickel	<0.0005	<0.0005	<0.0005	1	<0.0005	<0.0005	<0.0005	1	<0.0005	<0.0005	0.0005	11	<0.0005	<0.0005	0.0005	11		
Phosphate,Ortho (as P)	<0.02	<0.02	<0.02	2	<0.02	<0.02	<0.02	2	<0.02	<0.02	<0.02	22	<0.02	<0.02	<0.02	20		
Phosphorus	<0.02	<0.02	<0.02	1	<0.02	<0.02	<0.02	1	<0.02	<0.02	<0.02	11	<0.02	<0.02	<0.02	11		
Potassium	0.7	0.7	0.7	1	0.6	0.6	0.6	1	0.8	0.7	1.1	11	0.8	0.6	1.0	11		
Silicon	1.69	1.69	1.69	1	1.65	1.65	1.65	1	1.93	1.44	2.27	11	1.92	1.44	2.27	11		
Silver	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	11	<0.0002	<0.0002	<0.0002	11		
Sodium	6.9	6.9	6.9	1	6.7	6.7	6.7	1	9.8	6.8	16.1	11	12.3	6.7	18.9	11	(200)	
Strontium	0.462	0.462	0.462	1	0.452	0.452	0.452	1	0.443	0.385	0.488	11	0.440	0.408	0.478	11	7.0	
Sulphate Dissolved	63.2	60.1	69.1	4	64.6	61.6	71.6	4	71.0	59.3	86.8	48	73.5	60.4	95.1	48	(500)	
Thallium	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	1	<0.0003	<0.0002	<0.0005	11	<0.0003	<0.0002	<0.0005	11		
Tin	<0.0005	<0.0005	<0.0005	1	<0.0005	<0.0005	<0.0005	1	<0.0005	<0.0005	<0.0005	11	<0.0005	<0.0005	<0.0005	11		
Titanium	<0.0005	<0.0005	<0.0005	1	<0.0005	<0.0005	<0.0005	1	<0.0005	<0.0005	<0.0005	11	<0.0005	<0.0005	<0.0005	11		
Total Hardness (mg/L CaCO3)	182	165	212	28	181	169	198	29	177	149	218	323	177	145	211	327		
Total Hardness Calculated	176	176	176	1	173	173	173	1	173	162	182	7	172	162	180	7		
Vanadium	<0.0005	<0.0005	<0.0005	1	<0.0005	<0.0005	<0.0005	1	<0.0005	<0.0005	<0.0005	11	<0.0005	<0.0005	<0.0005	11		
Zinc	<0.005	<0.005	<0.005	1	<0.005	<0.005	<0.005	1	<0.005	<0.005	<0.005	11	<0.005	<0.005	<0.005	11	(5.0)	
Zirconium	<0.001	<0.001	<0.001	1	<0.001	<0.001	<0.001	1	<0.001	<0.001	<0.001	11	<0.001	<0.001	<0.001	11		

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

November 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				0	<0.007	<0.002	<0.020	4	<0.007	<0.002	<0.020	4		
8:2 Fluorotelomer sulfonic acid(8:2 FTS)				0				0	<0.007	<0.002	<0.020	4	<0.007	<0.002	<0.020	4		
Aldicarb				0				0	<0.3	<0.1	<1.0	4	<0.1	<0.1	<0.1	4		
Aldrin				0				0	<0.008	<0.008	<0.008	4	<0.008	<0.008	<0.008	4		
Azinphos-methyl				0				0	<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	11	<1	<1	<1	11		
Bromodichloromethane	0.7	<0.5	1.0	29	0.6	<0.5	0.9	30	1.1	<0.5	2.6	330	1.0	<0.5	2.4	334		16
Bromoform	<0.5	<0.5	<0.5	29	<0.5	<0.5	<0.5	30	<0.5	<0.5	<1.0	330	<0.5	<0.5	<1.0	334		
Bromomethane				0				0	<0.5	<0.5	<0.5	17	<0.5	<0.5	<0.5	19		
Carbaryl				0				0	<0.05	<0.05	<0.05	4	<0.05	<0.05	<0.05	4		
Carbofuran				0				0	<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	11.3	8.10	15.7	29	10.2	7.50	14.0	30	17.7	5.70	38.7	330	16.7	4.30	37.7	334		
Chloromethane				0				0	<5	<5	<5	17	<5	<5	<5	19		
Dibromoacetic acid	<1	<1	<1	1	<1	<1	<1	1	<1	<1	<1	11	<1	<1	<1	11		
Dibromochloromethane	<0.5	<0.5	<0.5	29	<0.5	<0.5	<0.5	30	<0.5	<0.5	<0.5	330	<0.5	<0.5	<0.5	334		
Dichloroacetic acid	8.9	8.9	8.9	1	6.88	6.88	6.88	1	10.8	4.7	21.1	11	10.54	4.69	19.80	11		
Dichlorobenzene (1,3)	<0.5	<0.5	<0.5	29	<0.5	<0.5	<0.5	30	<0.5	<0.5	<0.5	313	<0.5	<0.5	<0.5	315		
Dichloroethylene, cis (1,2)	<0.5	<0.5	<0.5	29	<0.5	<0.5	0.6	30	<0.5	<0.5	<0.5	313	<0.5	<0.5	0.6	315		
Dichloroethylene, trans (1,2)	<0.5	<0.5	<0.5	29	<0.5	<0.5	<0.5	30	<0.5	<0.5	<0.5	313	<0.5	<0.5	<0.5	315		
Dichloropropane (1,2)	<0.5	<0.5	<0.5	29	<0.5	<0.5	<0.5	30	<0.5	<0.5	<0.5	313	<0.5	<0.5	<0.5	315		
Dieldrin				0				0	<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	29	<0.5	<0.5	<0.5	30	<0.5	<0.5	0.5	313	<0.5	<0.5	<0.5	315	(15)	
MIBK	<1	<1	<1	29	<1	<1	<1	30	<1	<1	<1	313	<1	<1	<1	315		
Monobromoacetic acid	<1	<1	<1	1	<1	<1	<1	1	<1	<1	<1	11	<1	<1	<1	11		
Monochloroacetic acid	<1.00	<1.00	<1.00	1	<1.00	<1.00	<1.00	1	<1.06	<1.00	1.58	11	<1.08	<1.00	1.68	11		
Parathion				0				0	<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				0	<0.007	<0.002	<0.020	4	<0.007	<0.002	<0.020	4		
Perfluorobutanoic acid (PFBA)				0				0	<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				0	<0.671	<0.002	<2.000	6	<0.671	<0.002	<2.000	6		
Perfluorohexane sulfonic acid (PFHxS)				0				0	<0.007	<0.002	<0.020	4	<0.007	<0.002	<0.020	4		
Perfluorohexanoic acid (PFHxA)				0				0	<0.671	<0.002	<2.000	6	<0.671	<0.002	<2.000	6		
Perfluorononanoic acid (PFNA)				0				0	<0.671	<0.002	<2.000	6	<0.671	<0.002	<2.000	6		
Perfluoropentanoic acid (PFPeA)				0				0	<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

November 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				0	<0.025	<0.025	<0.025	3	<0.025	<0.025	<0.025	3		
Styrene	<0.5	<0.5	<0.5	29	<0.5	<0.5	<0.5	30	<0.5	<0.5	<0.5	330	<0.5	<0.5	<0.5	334		
Tetrachloroethane (1,1,2,2)	<0.5	<0.5	<0.5	29	<0.5	<0.5	<0.5	30	<0.5	<0.5	<1.0	313	<0.5	<0.5	<1.0	315		
Total Organic Carbon	1.1	0.8	1.6	4	1.2	0.8	1.7	4	1.5	0.8	2.8	48	1.5	0.8	2.5	48		
Total Volatile Organics (NonTHM)	2.9	1.5	4.6	29	3	2	4	30	2.3	<1.0	6.1	313	2	<1	6	315		
Total Volatile Organics (Unknown)				0				0	1.3	<0.5	7.7	41	1.3	<0.5	3.6	43		
Triallate				0				0	<0.1	<0.1	<0.1	4	<0.1	<0.1	<0.1	4		
Trichloroacetic acid	8.10	8.10	8.10	1	6.42	6.42	6.42	1	11.13	6.06	24.40	11	10.17	5.02	20.80	11		
Trichlorobenzene (1,2,4)	<0.5	<0.5	<0.5	29	<0.5	<0.5	<0.5	30	<0.5	<0.5	<0.5	313	<0.5	<0.5	<0.5	315		
Trichloroethane (1,1,1)	<0.5	<0.5	<0.5	29	<0.5	<0.5	<0.5	30	<0.5	<0.5	<0.5	313	<0.5	<0.5	<0.5	315		
Xylene (1,2)	<0.5	<0.5	<0.5	29	<0.5	<0.5	<0.5	30	<0.5	<0.5	<0.5	313	<0.5	<0.5	<0.5	315		
Xylene (1,4)	<0.5	<0.5	<0.5	29	<0.5	<0.5	<0.5	30	<0.5	<0.5	0.6	313	<0.5	<0.5	0.9	315		

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

November 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)	0.12	<0.04	1.78	30	0.06	<0.04	0.08	30	0.09	<0.04	12.90	332	0.05	<0.04	0.39	334		0.3
UV 254 %T ****	<95.3	<93.1	<96.3	29	<95.5	<93.4	<96.5	30	<94.5	<90.1	<96.9	329	<94.5	<90.7	<98.9	334		
Primary Inorganics (mg/L)																		
Bromate, dissolved	<0.005	<0.005	<0.005	4	<0.005	<0.005	<0.005	4	<0.005	<0.003	<0.005	48	<0.005	<0.003	<0.005	48	0.01	
Chlorate Dissolved	0.26	0.21	0.32	4	0.08	0.07	0.09	4	0.23	0.18	0.34	48	0.11	<0.05	0.20	48	1	
Chlorite Dissolved	<0.005	<0.005	<0.005	4	<0.005	<0.005	<0.005	4	<0.021	<0.005	<0.200	48	<0.021	<0.005	<0.200	48	1	
Nitrate (as N) Dissolved	0.05	0.04	0.08	4	0.05	0.04	0.08	4	0.05	<0.01	0.17	48	0.05	<0.01	0.16	48	10	
Nitrite (as N) Dissolved	<0.010	<0.010	<0.010	4	<0.010	<0.010	<0.010	4	<0.010	<0.005	0.020	48	<0.010	<0.005	0.020	48	1	
Primary Organics (ug/L)																		
Benzene	<0.5	<0.5	<0.5	29	<0.5	<0.5	<0.5	30	<0.5	<0.5	<0.5	330	<0.5	<0.5	<0.5	334	5	
Carbon Tetrachloride	<0.5	<0.5	<0.5	29	<0.5	<0.5	<0.5	30	<0.5	<0.5	<1.0	313	<0.5	<0.5	<1.0	315	2	
Chlorobenzene	<0.5	<0.5	<0.5	29	<0.5	<0.5	<0.5	30	<0.5	<0.5	<0.5	330	<0.5	<0.5	<0.5	334	80 (30)	
Dichlorobenzene (1,2)	<0.5	<0.5	<0.5	29	<0.5	<0.5	<0.5	30	<0.5	<0.5	<0.5	313	<0.5	<0.5	<0.5	315		
Dichlorobenzene (1,4)	<0.5	<0.5	<0.5	29	<0.5	<0.5	<0.5	30	<0.5	<0.5	<0.5	313	<0.5	<0.5	<0.5	315	5 (1)	
Dichloroethane (1,2)	<0.5	<0.5	<0.5	29	<0.5	<0.5	<0.5	30	<0.5	<0.5	<0.5	312	<0.5	<0.5	<0.5	314	5	
Dichloroethylene (1,1)	<0.5	<0.5	<0.5	29	<0.5	<0.5	<0.5	30	<0.5	<0.5	<3.0	313	<0.5	<0.5	<3.0	315	14	
Ethylbenzene	<0.5	<0.5	<0.5	29	<0.5	<0.5	<0.5	30	<0.5	<0.5	<0.5	330	<0.5	<0.5	<0.5	334	140 (1.6)	
Methylene Chloride	<0.5	<0.5	<0.5	29	<0.5	<0.5	<0.5	30	<0.5	<0.5	<0.5	313	<0.5	<0.5	<0.5	315	50	
Tetrachloroethylene	<0.5	<0.5	<0.5	29	<0.5	<0.5	<0.5	30	<0.5	<0.5	<0.5	330	<0.5	<0.5	<0.5	334	10	
Toluene	<0.5	<0.5	<0.5	29	<0.5	<0.5	<0.5	30	<0.5	<0.5	4.1	330	<0.5	<0.5	1.8	334	60 (24)	
Total Xylenes	<1.0	<1.0	<1.0	29	<1.0	<1.0	<1.0	30	<1.0	<1.0	<2.5	313	<1.0	<1.0	<2.5	315	90	
Trichloroethylene	<0.5	<0.5	<0.5	29	<0.5	<0.5	<0.5	30	<0.5	<0.5	<0.5	330	<0.5	<0.5	0.5	334	5	
Trihalomethanes	11.0	9.4	16.9	29	9.1	7.0	12.9	30	15.4	5.3	38.4	313	13.5	3.7	33.7	315	100	50
Vinyl Chloride	<1.0	<1.0	<1.0	29	<1.0	<1.0	<1.0	30	<1.0	<0.5	<1.0	329	<1.0	<0.5	<1.0	333	2	
Secondary Inorganics (mg/L)																		
Ammonia as NH3	0.11	0.09	0.14	13	0.13	0.09	0.17	14	0.12	0.08	0.18	115	0.12	0.06	0.17	117		
Bromide Dissolved	<0.03	<0.03	<0.03	4	<0.03	<0.03	<0.03	4	<0.03	<0.01	<0.05	48	<0.03	<0.01	<0.05	48		
Chloride Dissolved	4.55	3.91	5.26	4	5.9	4.5	7.0	4	6.11	3.91	19.90	48	6.8	4.5	12.9	48	(250)	
Sulphate Dissolved	63.3	59.7	69.7	4	64.6	61.6	71.7	4	71.4	59.0	95.8	48	73.4	59.8	95.3	48	(500)	

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

November 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	0.6	<0.5	0.9	29	0.6	<0.5	0.8	30	1.0	<0.5	2.3	330	0.8	<0.5	2.1	334		16
Bromoform	<0.5	<0.5	<0.5	29	<0.5	<0.5	<0.5	30	<0.5	<0.5	<1.0	330	<0.5	<0.5	<1.0	334		
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	10.3	8.50	16.5	29	8.5	6.60	12.0	30	14.9	4.60	37.4	330	13.2	3.00	33.2	334		
Chloromethane				0				0	<5	<5	<5	17	<5	<5	<5	19		
Dibromochloromethane	<0.5	<0.5	<0.5	29	<0.5	<0.5	<0.5	30	<0.5	<0.5	0.5	330	<0.5	<0.5	<0.5	334		
Dichlorobenzene (1,3)	<0.5	<0.5	<0.5	29	<0.5	<0.5	<0.5	30	<0.5	<0.5	<0.5	313	<0.5	<0.5	<0.5	315		
Dichloroethylene, cis (1,2)	<0.5	<0.5	0.5	29	<0.5	<0.5	<0.5	30	<0.5	<0.5	0.5	313	<0.5	<0.5	<0.5	315		
Dichloroethylene, trans (1,2)	<0.5	<0.5	<0.5	29	<0.5	<0.5	<0.5	30	<0.5	<0.5	<0.5	313	<0.5	<0.5	<0.5	315		
Dichloropropane (1,2)	<0.5	<0.5	<0.5	29	<0.5	<0.5	<0.5	30	<0.5	<0.5	<0.5	313	<0.5	<0.5	<0.5	315		
Methyl t-Butyl Ether (MTBE)	<0.5	<0.5	<0.5	29	<0.5	<0.5	<0.5	30	<0.5	<0.5	<0.5	313	<0.5	<0.5	<0.5	315	(15)	
MIBK	<1	<1	<1	29	<1	<1	<1	30	<1	<1	<1	313	<1	<1	<1	315		
Styrene	<0.5	<0.5	<0.5	29	<0.5	<0.5	<0.5	30	<0.5	<0.5	<0.5	330	<0.5	<0.5	<0.5	334		
Tetrachloroethane (1,1,2,2)	<0.5	<0.5	<0.5	29	<0.5	<0.5	<0.5	30	<0.5	<0.5	<1.0	313	<0.5	<0.5	<1.0	315		
Total Volatile Organics (NonTHM)	2.9	1.6	4.6	29	2.8	1.3	4.6	30	2.3	<1.0	6.5	313	2.3	<1.0	6.7	315		
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	29	<0.5	<0.5	<0.5	30	<0.5	<0.5	<0.5	313	<0.5	<0.5	<0.5	315		
Trichloroethane (1,1,1)	<0.5	<0.5	<0.5	29	<0.5	<0.5	<0.5	30	<0.5	<0.5	<0.5	313	<0.5	<0.5	<0.5	315		
Xylene (1,2)	<0.5	<0.5	<0.5	29	<0.5	<0.5	<0.5	30	<0.5	<0.5	<0.5	313	<0.5	<0.5	<0.5	315		
Xylene (1,4)	<0.5	<0.5	<0.5	29	<0.5	<0.5	<0.5	30	<0.5	<0.5	1.3	313	<0.5	<0.5	0.6	315		

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 Area (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)

November 2024

	Monthly				YTD				Limits	
	Mean	Min	Max	Count	Mean	Min	Max	Count	*Approval or GCDWQ MAC, (AO or OG)	EPCOR
Microbiological										
Microcystin				0	<0.2	<0.2	<0.2	6	1.5	
Physical										
Colour (TCU)				0	0.8	0.6	1.1	4	(15)	10
pH (N/A)	7.9	7.9	7.9	2	7.8	7.6	8.0	314	(7.0 - 10.5)	7.3 - 8.3
Total Dissolved Solids (mg/L)				0	234	213	261	4	(500)	
Turbidity (NTU)	0.25	0.05	2.11	148	0.25	<0.04	5.03	1482		1.0
UV 254 %T				0	<92.8	<90.1	<94.7	4		
Primary Inorganics (mg/L) **										
Antimony				0	<0.0004	<0.0002	<0.0005	5	0.006	
Arsenic				0	<0.0002	<0.0002	<0.0002	5	0.01	
Barium				0	0.062	0.057	0.074	5	2	
Boron				0	0.010	0.009	0.011	5	2	
Bromate Dissolved				0	<0.005	<0.003	<0.005	21	0.01	
Cadmium				0	<0.0002	<0.0002	<0.0002	5	0.007	
Chlorate Dissolved				0	0.18	<0.08	0.30	21	1	
Chlorite Dissolved				0	<0.033	<0.005	<0.200	21	1	
Chromium				0	0.0002	<0.0002	0.0003	5	0.05	
Copper				0	<0.003	<0.002	<0.005	5	2 (1)	
Fluoride				0	0.68	0.65	0.74	4	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	<0.00180	<0.00005	<0.00500	9	0.001	
Nitrate (as N) Dissolved	0.04	0.04	0.04	2	0.04	<0.01	0.18	335	10	
Nitrite (as N) Dissolved	<0.010	<0.010	<0.010	2	<0.009	<0.005	0.040	335	1	
Selenium				0	0.0003	<0.0002	0.0003	5	0.05	
Strontium				0	0.451	0.438	0.466	5	7.0	
Total Chlorine	1.85	1.07	2.20	148	1.87	0.09	2.44	1481	>0.5 and <3.0	>1.0 and <2.4
Uranium				0	<0.0005	<0.0005	<0.0005	5	0.02	

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

November 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	<0.15	<0.05	<0.25	4	100	
Atrazine				0	<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	<0.1	<0.1	<0.1	4	0.02	
Benzene	<0.5	<0.5	<0.5	6	<0.5	<0.5	<0.5	68	5	
Benzo(a)pyrene				0	<0.005	<0.005	<0.005	4	0.04	
Bromoxynil				0	<0.15	<0.05	<0.25	4	5	
Carbon Tetrachloride	<0.5	<0.5	<0.5	6	<0.5	<0.5	<0.5	68	2	
Chlorobenzene	<0.5	<0.5	<0.5	6	<0.5	<0.5	<0.5	68	80 (30)	
Chlorpyrifos				0	<0.1	<0.1	<0.1	4	90	
Cyanazine				0	<0.1	<0.1	<0.1	4		
Diazinon				0	<0.025	<0.025	<0.025	4		
Dicamba				0	<0.3	<0.1	<0.5	4	110	
Dichlorobenzene (1,2)	<0.5	<0.5	<0.5	6	<0.5	<0.5	<0.5	68		
Dichlorobenzene (1,4)	<0.5	<0.5	<0.5	6	<0.5	<0.5	<0.5	68	5 (1)	
Dichloroethane (1,2)	<0.5	<0.5	<0.5	6	<0.5	<0.5	<0.5	68	5	
Dichloroethylene (1,1)	<0.5	<0.5	<0.5	6	<0.5	<0.5	<0.5	61	14	
Dichlorophenol (2,4)	<0.2	<0.2	<0.2	1	<0.2	<0.2	<0.3	4		
Diclofop-methyl				0	<0.1	<0.1	<0.1	4		
Dimethoate	<Inoff	<Inoff	<Inoff	1	<0.04	<0.05	<0.05	5	20	
Diquat				0	<1	<1	<1	4	0.05	
Diuron				0	<0.05	<0.05	<0.05	4		
Ethylbenzene	<0.5	<0.5	<0.5	6	<0.5	<0.5	<0.5	68	140 (1.6)	
Glyphosate				0	<0.3	<0.2	<0.5	4	280	
Malathion				0	<0.025	<0.025	<0.025	4	190	
MCPA				0	<0.15	<0.05	<0.25	4	100	
Methylene Chloride	<0.5	<0.5	<0.5	6	<0.5	<0.5	<0.5	61	50	
Metolachlor				0	<0.025	<0.025	<0.025	4		
Metribuzin				0	<0.1	<0.1	<0.1	4	80	
NDMA (µg/L)	<0.00160	<0.00115	<0.00220	3	<0.00320	<0.00100	0.00690	33	0.040	10
Nitrilotriacetic acid				0	<0.4	<0.4	<0.4	4	0.4	
Paraquat (as dichloride)				0	<1	<1	<1	3	0.07	
Pentachlorophenol	<0.5	<0.5	<0.5	1	<0.6	<0.5	<1.0	4	60 (30)	
Perfluorooctane sulfonic acid (PFOS)				0	<0.007	<0.002	<0.020	4	0.0006	
Perfluorooctanoic acid (PFOA)				0	<0.007	<0.002	<0.020	4	0.0002	
Phorate				0	<0.25	<0.25	<0.25	4		
Picloram				0	<0.3	<0.1	<0.5	4		
Simazine				0	<0.1	<0.1	<0.1	4		
Terbufos				0	<0.5	<0.5	<0.5	4		

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

November 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	68	10	
Tetrachlorophenol (2,3,4,6)	<0.5	<0.5	<0.5	1	<0.5	<0.5	<0.5	4	100 (1)	
Toluene	<0.5	<0.5	<0.5	6	<0.5	<0.5	<0.5	68	60 (24)	
Total Xylenes	<1	<1	<1	6	<1	<1	<1	61	90	
Trichloroethylene	<0.5	<0.5	<0.5	6	<0.5	<0.5	<0.5	68	5	
Trichlorophenol (2,4,6)	<0.2	<0.2	<0.2	1	<0.3	<0.2	<0.5	4	5 (2)	
Trifluralin				0	<0.1	<0.1	<0.1	4		
Vinyl Chloride	<1	<1	<1	6	<1	<1	<1	61	2	

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

November 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				0	117	112	121	4		
Alkalinity, PHP (mg CaCO3/L)				0	<3	<3	<3	4		
Aluminum				0	0.047	0.014	0.093	5	2.9	0.1/0.2
Ammonia as N	0.14	0.12	0.15	2	0.15	0.09	0.24	26		
Beryllium				0	<0.0002	<0.0002	<0.0002	5		
Bromide Dissolved				0	<0.03	<0.01	<0.05	21		
Calcium				0	48.3	46.5	51.8	5		
Chloride Dissolved				0	6.56	4.87	8.73	21	(250)	
Cobalt				0	<0.0002	<0.0002	<0.0002	5		
Free Chlorine				0	<0.07	<0.07	<0.07	4		
Iron				0	0.008	<0.005	0.013	5	(0.3)	0.3
Lanthanum				0	<0.001	<0.001	<0.001	5		
Lithium				0	0.0038	0.0034	0.0042	5		
Magnesium				0	14.1	13.4	15.3	5		
Molybdenum				0	0.0008	0.0006	0.0010	5		
Nickel				0	0.0006	<0.0005	0.0010	5		
Phosphorus				0	0.98	0.91	1.05	5		
Potassium				0	0.8	0.7	0.9	5		
Silicon				0	2.03	1.68	2.59	5		
Silver				0	<0.0002	<0.0002	<0.0002	5		
Sodium				0	10.3	6.9	13.5	5	(200)	
Sulphate Dissolved				0	71.1	59.0	82.4	21	(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	178	171	183	4		
Total Kjeldahl Nitrogen				0	0.5	0.4	0.5	3		
Total Kjeldahl Nitrogen (TKN)				0	0.4	0.4	0.4	1		
Vanadium				0	<0.0005	<0.0005	<0.0005	5		
Zinc				0	0.011	<0.005	0.037	5	(5.0)	
Zirconium				0	<0.001	<0.001	<0.001	5		

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

November 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	<0.15	<0.05	<0.25	4		
6:2 Fluorotelomer sulfonic acid(6:2 FTS)				0	<0.007	<0.002	<0.020	4		
8:2 Fluorotelomer sulfonic acid(8:2 FTS)				0	<0.007	<0.002	<0.020	4		
a-chlordane				0	<0.008	<0.008	<0.008	4		
Alachlor				0	<0.05	<0.05	<0.05	4		
Aldicarb				0	<0.1	<0.1	<0.1	4		
Aldrin				0	<0.008	<0.008	<0.008	4		
Ametryn				0	<0.025	<0.025	<0.025	4		
Atrazine Desethyl				0	<0.025	<0.025	<0.025	4		
Bendiocarb				0	<0.025	<0.025	<0.025	4		
Bromochloroacetic acid	<1	<1	<1	6	<1	<1	<1	66		
Bromodichloromethane	0.8	0.6	1.0	6	1.1	<0.5	2.1	68		16
Bromoform	<0.5	<0.5	<0.5	6	<0.5	<0.5	<0.5	68		
Carbaryl				0	<0.05	<0.05	<0.05	4		
Carbofuran				0	<0.025	<0.025	<0.025	4		
Chloroform	12.3	10.1	15.1	6	20.3	7.6	39.1	68		
Dibromoacetic acid	<1	<1	<1	6	<1	<1	<1	66		
Dibromochloromethane	<0.5	<0.5	<0.5	6	<0.5	<0.5	<0.5	68		
Dibromoethane (1,2)				0	<0.5	<0.5	<0.5	7		
Dichloroacetic acid	7.29	6.52	8.88	6	10.62	4.89	23.50	66		
Dichlorobenzene (1,3)	<0.5	<0.5	<0.5	6	<0.5	<0.5	<0.5	61		
Dichloroethylene, cis (1,2)	<0.5	<0.5	<0.5	6	<0.5	<0.5	<0.5	61		
Dichloroethylene, trans (1,2)	<0.5	<0.5	<0.5	6	<0.5	<0.5	<0.5	61		
Dichloropropane (1,2)	<0.5	<0.5	<0.5	6	<0.5	<0.5	<0.5	61		
Dieldrin				0	<0.008	<0.008	<0.008	4		
Dinoseb				0	<0.15	<0.05	<0.25	4		
gamma-hexachlorocyclohexane				0	<0.008	<0.008	<0.008	4		
g-chlordane				0	<0.008	<0.008	<0.008	4		
Heptachlor				0	<0.008	<0.008	<0.008	4		
Heptachlor Epoxide				0	<0.008	<0.008	<0.008	4		
Methoxychlor				0	<0.008	<0.008	<0.008	4		
Methyl Parathion				0	<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	61	(15)	
MIBK	<1	<1	<1	6	<1	<1	<1	61		
Monobromoacetic acid	<1	<1	<1	6	<1	<1	<1	66		
Monochloroacetic acid	<1	<1	<1	6	1	<1	2	66		
op-DDT				0	<0.004	<0.004	<0.004	4		
Oxychlordane				0	<0.008	<0.008	<0.008	4		
Parathion				0	<0.1	<0.1	<0.1	4		

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

November 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	<0.007	<0.002	<0.020	4		
Perfluorobutanoic acid (PFBA)				0	<0.04	<0.02	<0.10	4		
Perfluoroheptanoic acid (PFHpA)				0	<0.007	<0.002	<0.020	4		
Perfluorohexane sulfonic acid (PFHxS)				0	<0.007	<0.002	<0.020	4		
Perfluorohexanoic acid (PFHxA)				0	<0.007	<0.002	<0.020	4		
Perfluorononanoic acid (PFNA)				0	<0.007	<0.002	<0.020	4		
Perfluoropentanoic acid (PFPeA)				0	<0.007	<0.002	<0.020	4		
pp-DDD				0	<0.004	<0.004	<0.004	4		
pp-DDE				0	<0.004	<0.004	<0.004	4		
pp-DDT				0	<0.004	<0.004	<0.004	4		
Prometon				0	<0.025	<0.025	<0.025	4		
Prometryn				0	<0.025	<0.025	<0.025	3		
Propazine				0	<0.025	<0.025	<0.025	4		
Styrene	<0.5	<0.5	<0.5	6	<0.5	<0.5	<0.5	68		
Temephos				0	<0.25	<0.25	<0.25	4		
Terbutryn				0	<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	61		
Total Organic Carbon	1.3	1.0	1.5	2	1.8	1.0	2.7	218		
Total Volatile Organics (NonTHM)	4	4	5	6	2	<1	5	61		
Total Volatile Organics (Unknown)				0	1.0	<0.5	1.9	11		
Triallate				0	<0.1	<0.1	<0.1	4		
Trichloroacetic acid	6.62	6.01	7.76	6	10.22	5.40	24.30	66		
Trichlorobenzene (1,2,4)	<0.5	<0.5	<0.5	6	<0.5	<0.5	<0.5	75		
Trichloroethane (1,1,1)	<0.5	<0.5	<0.5	6	<0.5	<0.5	<0.5	61		
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	61		
Xylene (1,4)	<0.5	<0.5	<0.5	6	<0.5	<0.5	<0.5	61		

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.

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

November 2024

	Monthly				YTD				Limits	
	Mean	Min	Max	Count	Mean	Min	Max	Count	*Approval or GCDWQ MAC, (AO or OG)	EPCOR
Physical										
Colour (TCU)	0.9	<0.5	1.1	8	0.9	<0.5	1.9	136	(15)	10
pH (N/A)	7.9	7.8	8.1	8	7.8	7.6	8.1	136	(7.0 - 10.5)	7.3 - 8.3
Turbidity (NTU)	0.47	0.13	1.40	8	0.44	<0.04	2.89	136		1.0
Primary Inorganics (mg/L) **										
Antimony	<0.0005	<0.0005	<0.0005	8	<0.0005	<0.0002	<0.0005	136	0.006	
Arsenic	<0.0002	<0.0002	<0.0002	8	<0.0002	<0.0002	<0.0002	136	0.01	
Barium	0.057	0.054	0.073	8	0.062	<0.002	0.093	136	2	
Boron	0.008	0.007	0.009	8	0.011	0.007	0.036	136	2	
Cadmium	<0.0002	<0.0002	<0.0002	8	<0.0002	<0.0002	<0.0002	136	0.007	
Chromium	<0.0002	<0.0002	<0.0002	8	<0.0002	<0.0002	<0.0002	136	0.05	
Copper	0.002	<0.002	0.003	8	0.005	<0.002	0.192	136	2 (1)	
Lead	<0.0002	<0.0002	<0.0002	8	0.0002	<0.0002	0.0025	136	0.005	
Manganese	<0.002	<0.002	<0.002	8	0.002	<0.002	0.008	136	0.12 (0.02)	
Mercury	<0.00020	<0.00020	<0.00020	8	<0.00020	<0.00020	<0.00020	130	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	8	0.0003	<0.0002	0.0004	136	0.05	
Strontium	0.454	0.446	0.460	8	0.445	<0.002	0.501	136	7.0	
Total Chlorine	1.92	1.72	2.05	8	1.81	0.75	2.27	136	>0.5 and <3.0	>1.0 and <2.4
Uranium	<0.0005	<0.0005	<0.0005	8	0.0005	<0.0005	0.0006	136	0.02	
Primary Organics (ug/L) **										
Benzene	<0.5	<0.5	<0.5	8	<0.5	<0.5	<0.5	136	5	
Carbon Tetrachloride	<0.5	<0.5	<0.5	8	<0.5	<0.5	<0.5	136	2	
Chlorobenzene	<0.5	<0.5	<0.5	8	<0.5	<0.5	<0.5	136	80 (30)	
Dichlorobenzene (1,2)	<0.5	<0.5	<0.5	8	<0.5	<0.5	<0.5	136		
Dichlorobenzene (1,4)	<0.5	<0.5	<0.5	8	<0.5	<0.5	<0.5	136	5 (1)	
Dichloroethane (1,2)	<0.5	<0.5	<0.5	8	<0.5	<0.5	<0.5	136	5	
Dichloroethylene (1,1)	<0.5	<0.5	<0.5	8	<0.5	<0.5	<0.5	129	14	
Ethylbenzene	<0.5	<0.5	<0.5	8	<0.5	<0.5	<0.5	136	140 (1.6)	
Methylene Chloride	<0.5	<0.5	<0.5	8	<0.5	<0.5	<0.5	129	50	
Tetrachloroethylene	<0.5	<0.5	<0.5	8	<0.5	<0.5	<0.5	136	10	
Toluene	<0.5	<0.5	<0.5	8	0.6	<0.5	3.4	136	60 (24)	
Total Xylenes	<1.0	<1.0	<1.0	8	1.0	<1.0	1.2	129	90	
Trichloroethylene	<0.5	<0.5	<0.5	8	<0.5	<0.5	<0.5	136	5	
Vinyl Chloride	<1	<1	<1	8	<1	<1	<1	129	2	

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

November 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	0.191	0.066	0.790	8	0.088	0.012	0.955	136	2.9	0.1/0.2
Beryllium	<0.0002	<0.0002	<0.0002	8	<0.0002	<0.0002	<0.0002	136		
Calcium	48.3	46.4	51.7	8	48.0	<0.1	54.3	136		
Cobalt	<0.0002	<0.0002	<0.0002	8	0.0002	<0.0002	0.0006	136		
Iron	0.010	<0.005	0.029	8	0.060	<0.005	0.497	136	(0.3)	0.3
Lanthanum	<0.001	<0.001	<0.001	8	<0.001	<0.001	<0.001	136		
Lithium	0.0035	0.0032	0.0038	8	0.0039	<0.0002	0.0076	136		
Magnesium	13.8	13.5	14.3	8	13.7	<0.1	16.4	136		
Molybdenum	0.0006	0.0006	0.0008	8	0.0008	0.0006	0.0011	136		
Nickel	<0.0005	<0.0005	<0.0005	8	0.0006	<0.0005	0.0028	136		
Phosphorus	1.05	0.96	1.42	8	0.99	0.33	1.62	136		
Potassium	0.7	0.7	0.7	8	0.9	0.3	2.8	136		
Silicon	1.77	1.64	1.94	8	2.05	1.63	2.69	136		
Silver	<0.0002	<0.0002	<0.0002	8	<0.0002	<0.0002	<0.0002	136		
Sodium	7.1	6.8	8.0	8	11.5	6.6	98.7	136	(200)	
Thallium	<0.0002	<0.0002	<0.0002	8	<0.0002	<0.0002	<0.0005	136		
Tin	<0.0005	<0.0005	<0.0005	8	<0.0005	<0.0005	<0.0005	136		
Titanium	<0.0005	<0.0005	<0.0005	8	<0.0005	<0.0005	<0.0005	136		
Total Hardness (mg/L CaCO3)	177	172	188	8	176	<2	201	136		
Vanadium	<0.0005	<0.0005	<0.0005	8	<0.0005	<0.0005	<0.0005	136		
Zinc	<0.005	<0.005	<0.005	8	0.005	<0.005	0.023	136	(5.0)	
Zirconium	<0.001	<0.001	<0.001	8	<0.001	<0.001	<0.001	136		

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

November 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	0.8	0.6	1.4	8	1.2	<0.5	2.1	136		16
Bromoform	<0.5	<0.5	<0.5	8	<0.5	<0.5	<0.5	136		
Chloroform	13.8	10.7	15.9	8	19.8	5.6	37.6	136		
Dibromochloromethane	<0.5	<0.5	<0.5	8	<0.5	<0.5	<0.5	136		
Dibromoethane (1,2)				0	<0.5	<0.5	<0.5	7		
Dichlorobenzene (1,3)	<0.5	<0.5	<0.5	8	<0.5	<0.5	<0.5	129		
Dichloroethylene, cis (1,2)	<0.5	<0.5	<0.5	8	<0.5	<0.5	<0.5	129		
Dichloroethylene, trans (1,2)	<0.5	<0.5	<0.5	8	<0.5	<0.5	<0.5	129		
Dichloropropane (1,2)	<0.5	<0.5	<0.5	8	<0.5	<0.5	<0.5	129		
Methyl t-Butyl Ether (MTBE)	<0.5	<0.5	<0.5	8	<0.5	<0.5	<0.5	129	(15)	
MIBK	<1	<1	<1	8	<1	<1	<1	129		
Styrene	<0.5	<0.5	<0.5	8	<0.5	<0.5	<0.5	136		
Tetrachloroethane (1,1,2,2)	<0.5	<0.5	<0.5	8	<0.5	<0.5	<0.5	129		
Total Volatile Organics (NonTHM)	3.3	2.2	4.5	8	2.5	<1.0	6.9	129		
Total Volatile Organics (Unknown)				0	3.2	<0.5	13.8	17		
Trichlorobenzene (1,2,4)	<0.5	<0.5	<0.5	8	<0.5	<0.5	<0.5	143		
Trichloroethane (1,1,1)	<0.5	<0.5	<0.5	8	<0.5	<0.5	<0.5	129		
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	8	<0.5	<0.5	<0.5	129		
Xylene (1,4)	<0.5	<0.5	<0.5	8	0.5	<0.5	1.1	129		

TABLE EXPLANATIONS:

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** 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.

2.2.7 Castledowns Reservoir

November 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	1.2	0.6	2.0	5	(15)	10
Conductivity (uS/cm)	369	369	369	1	401	369	423	5		
Odour	Inoff	Inoff	Inoff	1	Inoff	Inoff	Inoff	5		
pH (N/A)	7.8	7.8	7.8	1	7.8	7.6	8.1	22	(7.0 - 10.5)	7.3 - 8.3
Turbidity (NTU)	0.14	0.11	0.17	4	0.13	0.06	0.46	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	0.054	0.054	0.054	1	0.060	0.051	0.069	5	2	
Boron	0.007	0.007	0.007	1	0.009	0.007	0.011	5	2	
Bromate Dissolved	<0.005	<0.005	<0.005	1	<0.005	<0.005	<0.005	6	0.01	
Cadmium	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	5	0.007	
Chlorate Dissolved	0.100	0.100	0.100	1	0.119	0.050	0.143	6	1	
Chlorite Dissolved	<0.005	<0.005	<0.005	1	<0.005	<0.005	<0.005	6	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	0.70	0.70	0.70	1	0.70	0.66	0.75	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	0.003	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	0.040	0.040	0.040	1	0.039	0.010	0.170	24	10	
Nitrite (as N) Dissolved	<0.010	<0.010	<0.010	1	<0.009	<0.005	0.010	24	1	
Selenium	0.0002	0.0002	0.0002	1	0.0003	0.0002	0.0004	5	0.05	
Strontium	0.448	0.448	0.448	1	0.438	0.423	0.453	5	7.0	
Total Chlorine	1.77	1.69	1.83	4	1.79	1.27	2.06	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	<0.6	<0.5	1.0	5	5	
Carbon Tetrachloride	<0.5	<0.5	<0.5	1	<0.6	<0.5	1.0	5	2	
Chlorobenzene	<0.50	<0.50	<0.50	1	<0.60	<0.50	1.00	5	80 (30)	
Dichlorobenzene (1,2)	<0.50	<0.50	<0.50	1	<0.60	<0.50	1.00	5		
Dichlorobenzene (1,4)	<0.5	<0.5	<0.5	1	<0.6	<0.5	1.0	5	5 (1)	
Dichloroethane (1,2)	<0.5	<0.5	<0.5	1	<0.6	<0.5	1.0	5	5	
Dichloroethylene (1,1)	<0.5	<0.5	<0.5	1	<0.6	<0.5	1.0	5	14	
Ethylbenzene	<0.50	<0.50	<0.50	1	<0.60	<0.50	1.00	5	140 (1.6)	
Methylene Chloride	<0.5	<0.5	<0.5	1	<0.6	<0.5	1.0	5	50	
Tetrachloroethylene	<0.5	<0.5	<0.5	1	<0.6	<0.5	1.0	5	10	
Toluene	<0.50	<0.50	<0.50	1	<0.60	<0.50	1.00	5	60 (24)	
Total Xylenes	<1	<1	<1	1	<1	<1	<1	5	90	
Trichloroethylene	<0.50	<0.50	<0.50	1	<0.60	<0.50	1.00	5	5	
Vinyl Chloride	<1.0	<1.0	<1.0	1	<1.2	<1.0	2.0	5	2	

2.2.7 Castledowns Reservoir

November 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	116	116	116	1	117	112	122	5		
Aluminum	0.100	0.100	0.100	1	0.060	0.022	0.100	5	2.9	0.1/0.2
Ammonia as NH3	0.16	0.16	0.16	1	0.18	0.14	0.28	21		
Beryllium	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	5		
Bromide Dissolved	<0.030	<0.030	<0.030	1	<0.023	<0.010	<0.030	6		
Calcium	46.3	46.3	46.3	1	47.3	45.5	49.5	5		
Calcium Hardness				0	121	121	121	1		
Calcium Hardness Calculated	116	116	116	1	118	114	124	4		
Chloride Dissolved	5.6	5.6	5.6	1	7.1	5.6	8.0	6	(250)	
Cobalt	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	5		
Iron	<0.005	<0.005	<0.005	1	0.020	<0.005	0.078	5	(0.3)	0.3
Lanthanum	<0.0010	<0.0010	<0.0010	1	<0.0010	<0.0010	<0.0010	5		
Lithium	0.0031	0.0031	0.0031	1	0.0035	0.0030	0.0040	5		
Magnesium	13.5	13.5	13.5	1	13.6	13.3	14.0	5		
Molybdenum	0.0006	0.0006	0.0006	1	0.0008	0.0006	0.0009	5		
Nickel	<0.0005	<0.0005	<0.0005	1	<0.0005	<0.0005	<0.0005	5		
Ortho_P	0.88	0.84	0.90	8	0.89	0.84	0.94	50		
Phosphorus	0.97	0.97	0.97	1	0.97	0.87	1.02	5		
Potassium	0.70	0.70	0.70	1	0.88	0.70	1.20	5		
Silicon	1.59	1.59	1.59	1	2.03	1.59	2.36	5		
Silver	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	5		
Sodium	7.3	7.3	7.3	1	12.3	7.3	17.1	5	(200)	
Sulphate Dissolved	61.5	61.5	61.5	1	72.6	61.5	80.2	6	(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	184	184	1		
Total Hardness Calculated	171	171	171	1	174	168	181	4		
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		

2.2.7 Castledowns Reservoir

November 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	0.6	0.6	0.6	1	0.9	0.6	1.2	5		16
Bromoform	<0.5	<0.5	<0.5	1	<0.6	<0.5	1.0	5		
Chloroform	15.3	15.3	15.3	1	21.3	6.9	35.6	5		
Dibromochloromethane	<0.50	<0.50	<0.50	1	<0.60	<0.50	1.00	5		
Dichlorobenzene (1,3)	<0.50	<0.50	<0.50	1	<0.60	<0.50	1.00	5		
Dichloroethylene, cis (1,2)	<0.50	<0.50	<0.50	1	<0.60	<0.50	1.00	5		
Dichloroethylene, trans (1,2)	<0.50	<0.50	<0.50	1	<0.60	<0.50	1.00	5		
Dichloropropane (1,2)	<0.5	<0.5	<0.5	1	<0.6	<0.5	1.0	5		
Methyl t-Butyl Ether (MTBE)	<0.5	<0.5	<0.5	1	<0.6	<0.5	1.0	5	(15)	
MIBK	<1.0	<1.0	<1.0	1	<1.2	<1.0	2.0	5		
Styrene	<0.50	<0.50	<0.50	1	<0.60	<0.50	1.00	5		
Tetrachloroethane (1,1,2,2)	<0.5	<0.5	<0.5	1	<0.6	<0.5	1.0	5		
Total Organic Carbon	1.0	1.0	1.0	1	1.7	0.9	2.3	17		
Total Volatile Organics (NonTHM)	1.7	1.7	1.7	1	1.3	<1.0	1.9	5		
Total Volatile Organics (Unknown)				0	0.7	0.7	0.7	1		
Trichlorobenzene (1,2,4)	<0.5	<0.5	<0.5	1	<0.6	<0.5	1.0	5		
Trichloroethane (1,1,1)	<0.5	<0.5	<0.5	1	<0.6	<0.5	1.0	5		
Xylene (1,2)	<0.5	<0.5	<0.5	1	<0.6	<0.5	1.0	5		
Xylene (1,4)	<0.5	<0.5	<0.5	1	<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.

2.2.8 Clareview Reservoir

November 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	0.8	0.7	1.0	6	(15)	10
Conductivity (uS/cm)				0	394	368	421	6		
Odour				0	Inoff	Inoff	Inoff	6		
pH (N/A)				0	7.8	7.7	8.1	24	(7.0 - 10.5)	7.3 - 8.3
Turbidity (NTU)	0.16	0.13	0.19	4	0.15	0.10	0.43	48		1
Primary Inorganics (mg/L) **										
Antimony				0	<0.0005	<0.0002	<0.0005	6	0.006	
Arsenic				0	<0.0002	<0.0002	0.0003	6	0.01	
Barium				0	0.062	0.056	0.068	6	2	
Boron				0	0.010	0.008	0.013	6	2	
Bromate Dissolved				0	<0.005	<0.003	<0.005	7	0.01	
Cadmium				0	<0.0002	<0.0002	<0.0002	6	0.007	
Chlorate Dissolved				0	0.201	0.172	0.229	7	1	
Chlorite Dissolved				0	<0.033	<0.005	<0.200	7	1	
Chromium				0	<0.0002	<0.0002	<0.0002	6	0.05	
Copper				0	<0.003	<0.002	<0.005	6	2 (1)	
Fluoride				0	0.69	0.65	0.72	6	1.5	0.6 - 0.8
Lead				0	<0.0002	<0.0002	<0.0002	6	0.005	
Manganese				0	<0.002	<0.002	<0.002	6	0.12 (0.02)	
Mercury				0	<0.0002	<0.0002	<0.0002	6	0.001	
Nitrate (as N) Dissolved				0	0.044	0.010	0.180	25	10	
Nitrite (as N) Dissolved				0	<0.009	<0.005	0.010	25	1	
Selenium				0	0.0003	0.0002	0.0003	6	0.05	
Strontium				0	0.447	0.405	0.481	6	7.0	
Total Chlorine	1.84	1.80	1.91	4	1.83	1.60	2.09	48	>0.5 and <3.0	>1.0 and <2.4
Uranium				0	<0.0005	<0.0005	0.0005	6	0.02	
Primary Organics (ug/L) **										
Benzene				0	<0.5	<0.5	<0.5	6	5	
Carbon Tetrachloride				0	<0.5	<0.5	<0.5	6	2	
Chlorobenzene				0	<0.50	<0.50	<0.50	6	80 (30)	
Dichlorobenzene (1,2)				0	<0.50	<0.50	<0.50	6		
Dichlorobenzene (1,4)				0	<0.5	<0.5	<0.5	6	5 (1)	
Dichloroethane (1,2)				0	<0.5	<0.5	<0.5	6	5	
Dichloroethylene (1,1)				0	<0.5	<0.5	<0.5	6	14	
Ethylbenzene				0	<0.50	<0.50	<0.50	6	140 (1.6)	
Methylene Chloride				0	<0.5	<0.5	<0.5	6	50	
Tetrachloroethylene				0	<0.5	<0.5	<0.5	6	10	
Toluene				0	<0.50	<0.50	<0.50	6	60 (24)	
Total Xylenes				0	<1	<1	<1	6	90	
Trichloroethylene				0	<0.50	<0.50	<0.50	6	5	
Vinyl Chloride				0	<1.0	<1.0	<1.0	6	2	

2.2.8 Clareview Reservoir

November 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	109	129	6		
Aluminum				0	0.067	0.023	0.173	6	2.9	0.1/0.2
Ammonia as NH3				0	0.20	0.15	0.22	22		
Beryllium				0	<0.0002	<0.0002	<0.0002	6		
Bromide Dissolved				0	<0.027	<0.010	<0.050	7		
Calcium				0	47.2	43.7	51.3	6		
Calcium Hardness				0	124	118	130	2		
Calcium Hardness Calculated				0	115	109	117	4		
Chloride Dissolved				0	6.0	5.1	7.0	7	(250)	
Cobalt				0	<0.0002	<0.0002	<0.0002	6		
Iron				0	0.014	0.012	0.018	6	(0.3)	0.3
Lanthanum				0	<0.0010	<0.0010	<0.0010	6		
Lithium				0	0.0038	0.0032	0.0043	6		
Magnesium				0	13.9	12.2	14.9	6		
Molybdenum				0	0.0008	0.0006	0.0010	6		
Nickel				0	<0.0005	<0.0005	<0.0005	6		
Ortho_P	0.89	0.88	0.90	8	0.88	0.74	0.92	52		
Phosphorus				0	0.95	0.91	0.96	6		
Potassium				0	0.83	0.70	1.10	6		
Silicon				0	1.90	1.61	2.13	6		
Silver				0	<0.0002	<0.0002	<0.0002	6		
Sodium				0	10.6	7.1	16.2	6	(200)	
Sulphate Dissolved				0	70.3	59.6	76.4	7	(500)	
Thallium				0	<0.0003	<0.0002	<0.0005	6		
Tin				0	<0.0005	<0.0005	<0.0005	6		
Titanium				0	<0.0005	<0.0005	<0.0005	6		
Total Hardness (mg/L CaCO3)				0	188	177	198	2		
Total Hardness Calculated				0	171	160	177	4		
Vanadium				0	<0.0005	<0.0005	<0.0005	6		
Zinc				0	<0.005	<0.005	<0.005	6	(5.0)	
Zirconium				0	<0.0010	<0.0010	<0.0010	6		

2.2.8 Clareview Reservoir

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

2.2.9 Discovery Park Reservoir

November 2024

Parameter	Monthly				YTD				Limits	
	Mean	Min	Max	Count	Mean	Min	Max	Count	*Approval or GCDWQ MAC, (AO or OG)	EPCOR
Physical										
Colour (TCU)				0	0.7	<0.5	1.0	7	(15)	10
Conductivity (uS/cm)				0	395	367	420	7		
Odour				0	Inoff	Inoff	Inoff	7		
pH (N/A)				0	7.9	7.8	8.1	25	(7.0 - 10.5)	7.3 - 8.3
Turbidity (NTU)	0.22	0.19	0.28	4	0.15	0.06	1.09	50		1
Primary Inorganics (mg/L) **										
Antimony				0	<0.0005	<0.0002	<0.0005	7	0.006	
Arsenic				0	<0.0002	<0.0002	0.0003	7	0.01	
Barium				0	0.062	0.054	0.069	7	2	
Boron				0	0.010	0.008	0.012	7	2	
Bromate Dissolved				0	<0.005	<0.003	<0.005	7	0.01	
Cadmium				0	<0.0002	<0.0002	<0.0002	7	0.007	
Chlorate Dissolved				0	0.123	<0.090	0.163	7	1	
Chlorite Dissolved				0	<0.033	<0.005	<0.200	7	1	
Chromium				0	<0.0002	<0.0002	<0.0002	7	0.05	
Copper				0	<0.002	<0.002	<0.005	7	2 (1)	
Fluoride				0	0.69	0.65	0.77	7	1.5	0.6 - 0.8
Lead				0	<0.0002	<0.0002	<0.0002	7	0.005	
Manganese				0	<0.002	<0.002	<0.002	7	0.12 (0.02)	
Mercury				0	<0.0002	<0.0002	<0.0002	7	0.001	
Nitrate (as N) Dissolved				0	0.047	0.020	0.190	26	10	
Nitrite (as N) Dissolved				0	<0.009	<0.005	0.010	26	1	
Selenium				0	0.0003	0.0002	0.0003	7	0.05	
Strontium				0	0.442	0.410	0.474	7	7.0	
Total Chlorine	1.73	1.66	1.87	4	1.39	1.03	1.87	50	>0.5 and <3.0	>1.0 and <2.4
Uranium				0	<0.0005	<0.0005	<0.0005	7	0.02	
Primary Organics (ug/L) **										
Benzene				0	<0.5	<0.5	<0.5	7	5	
Carbon Tetrachloride				0	<0.5	<0.5	<0.5	7	2	
Chlorobenzene				0	<0.50	<0.50	<0.50	7	80 (30)	
Dichlorobenzene (1,2)				0	<0.50	<0.50	<0.50	7		
Dichlorobenzene (1,4)				0	<0.5	<0.5	<0.5	7	5 (1)	
Dichloroethane (1,2)				0	<0.5	<0.5	<0.5	7	5	
Dichloroethylene (1,1)				0	<0.5	<0.5	<0.5	7	14	
Ethylbenzene				0	<0.50	<0.50	<0.50	7	140 (1.6)	
Methylene Chloride				0	<0.5	<0.5	<0.5	7	50	
Tetrachloroethylene				0	<0.5	<0.5	<0.5	7	10	
Toluene				0	<0.50	<0.50	<0.50	7	60 (24)	
Total Xylenes				0	<1	<1	<1	7	90	
Trichloroethylene				0	<0.50	<0.50	<0.50	7	5	
Vinyl Chloride				0	<1.0	<1.0	<1.0	7	2	

2.2.9 Discovery Park Reservoir

November 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	111	126	7		
Aluminum				0	0.080	0.021	0.200	7	2.9	0.1/0.2
Ammonia as NH3				0	0.22	<0.05	0.31	24		
Beryllium				0	<0.0002	<0.0002	<0.0002	7		
Bromide Dissolved				0	<0.027	<0.010	<0.050	7		
Calcium				0	45.9	43.9	48.3	7		
Calcium Hardness				0	119	113	124	2		
Calcium Hardness Calculated				0	115	110	121	5		
Chloride Dissolved				0	7.0	6.0	8.4	7	(250)	
Cobalt				0	<0.0002	<0.0002	<0.0002	7		
Iron				0	<0.005	<0.005	0.008	7	(0.3)	0.3
Lanthanum				0	<0.0010	<0.0010	<0.0010	7		
Lithium				0	0.0034	0.0030	0.0041	7		
Magnesium				0	13.6	12.7	14.4	7		
Molybdenum				0	0.0008	0.0006	0.0009	7		
Nickel				0	<0.0005	<0.0005	0.0006	7		
Ortho_P	0.93	0.88	0.94	8	0.91	0.86	1.04	52		
Phosphorus				0	0.98	0.91	1.02	7		
Potassium				0	0.86	0.80	1.00	7		
Silicon				0	1.87	1.57	2.21	7		
Silver				0	<0.0002	<0.0002	<0.0002	7		
Sodium				0	12.5	7.4	19.4	7	(200)	
Sulphate Dissolved				0	72.3	58.6	81.0	7	(500)	
Thallium				0	<0.0002	<0.0002	<0.0005	7		
Tin				0	<0.0005	<0.0005	<0.0005	7		
Titanium				0	<0.0005	<0.0005	<0.0005	7		
Total Hardness (mg/L CaCO3)				0	178	174	182	2		
Total Hardness Calculated				0	170	162	180	5		
Vanadium				0	<0.0005	<0.0005	<0.0005	7		
Zinc				0	<0.005	<0.005	<0.005	7	(5.0)	
Zirconium				0	<0.0010	<0.0010	<0.0010	7		

2.2.9 Discovery Park Reservoir

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

November 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	0.5	1.6	5	(15)	10
Conductivity (uS/cm)				0	399	370	426	5		
Odour				0	Inoff	Inoff	Inoff	5		
pH (N/A)				0	7.7	7.6	7.9	25	(7.0 - 10.5)	7.3 - 8.3
Turbidity (NTU)	0.25	0.13	0.39	4	0.11	0.04	0.39	48		1
Primary Inorganics (mg/L) **										
Antimony				0	<0.0004	<0.0002	<0.0005	5	0.006	
Arsenic				0	<0.0002	<0.0002	0.0002	5	0.01	
Barium				0	0.061	0.056	0.069	5	2	
Boron				0	0.009	0.008	0.010	5	2	
Bromate Dissolved				0	<0.005	<0.003	<0.005	5	0.01	
Cadmium				0	<0.0002	<0.0002	<0.0002	5	0.007	
Chlorate Dissolved				0	<0.104	<0.080	0.126	5	1	
Chlorite Dissolved				0	<0.044	<0.005	<0.200	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	0.69	0.65	0.74	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	0.036	<0.010	0.170	26	10	
Nitrite (as N) Dissolved				0	<0.009	<0.005	0.010	26	1	
Selenium				0	0.0003	0.0002	0.0003	5	0.05	
Strontium				0	0.443	0.385	0.483	5	7.0	
Total Chlorine	1.98	1.95	1.99	4	1.96	1.18	2.23	48	>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	<0.5	<0.5	<0.5	5	5	
Carbon Tetrachloride				0	<0.5	<0.5	<0.5	5	2	
Chlorobenzene				0	<0.50	<0.50	<0.50	5	80 (30)	
Dichlorobenzene (1,2)				0	<0.50	<0.50	<0.50	5		
Dichlorobenzene (1,4)				0	<0.5	<0.5	<0.5	5	5 (1)	
Dichloroethane (1,2)				0	<0.5	<0.5	<0.5	5	5	
Dichloroethylene (1,1)				0	<0.5	<0.5	<0.5	5	14	
Ethylbenzene				0	<0.50	<0.50	<0.50	5	140 (1.6)	
Methylene Chloride				0	<0.5	<0.5	<0.5	5	50	
Tetrachloroethylene				0	<0.5	<0.5	<0.5	5	10	
Toluene				0	<0.50	<0.50	<0.50	5	60 (24)	
Total Xylenes				0	<1	<1	<1	5	90	
Trichloroethylene				0	<0.50	<0.50	<0.50	5	5	
Vinyl Chloride				0	<1.0	<1.0	<1.0	5	2	

2.2.10 Kaskitayo Reservoir

November 2024

Parameter	Monthly				YTD				Limits	
	Mean	Min	Max	Count	Mean	Min	Max	Count	*Approval or GCDWQ MAC, (AO or OG)	EPCOR
Secondary Inorganics (mg/L) * **										
Alkalinity Total				0	120	112	128	5		
Aluminum				0	0.053	0.022	0.097	5	2.9	0.1/0.2
Ammonia as NH3				0	0.17	0.11	0.20	24		
Beryllium				0	<0.0002	<0.0002	<0.0002	5		
Bromide Dissolved				0	<0.026	<0.010	<0.050	5		
Calcium				0	47.1	43.3	51.2	5		
Calcium Hardness				0	124	118	129	2		
Calcium Hardness Calculated				0	114	108	118	3		
Chloride Dissolved				0	6.9	5.6	8.2	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	0.0033	0.0029	0.0036	5		
Magnesium				0	13.7	11.8	15.1	5		
Molybdenum				0	0.0007	0.0006	0.0009	5		
Nickel				0	<0.0005	<0.0005	<0.0005	5		
Ortho_P	0.93	0.90	0.96	8	0.91	0.76	1.02	52		
Phosphorus				0	0.94	0.87	0.98	5		
Potassium				0	0.84	0.70	1.10	5		
Silicon				0	1.94	1.53	2.16	5		
Silver				0	<0.0002	<0.0002	<0.0002	5		
Sodium				0	12.8	7.3	22.0	5	(200)	
Sulphate Dissolved				0	72.7	60.7	79.6	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	184	178	190	2		
Total Hardness Calculated				0	168	157	175	3		
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		

2.2.10 Kaskitayo Reservoir

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

November 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	1.0	0.7	1.2	5	(15)	10
Conductivity (uS/cm)	369	369	369	1	390	369	405	5		
Odour	Inoff	Inoff	Inoff	1	Inoff	Inoff	Inoff	5		
pH (N/A)	7.8	7.8	7.8	1	7.8	7.7	8.1	24	(7.0 - 10.5)	7.3 - 8.3
Turbidity (NTU)	0.15	0.12	0.20	4	0.13	0.06	0.52	48		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	0.054	0.054	0.054	1	0.059	0.052	0.068	5	2	
Boron	0.007	0.007	0.007	1	0.010	0.007	0.012	5	2	
Bromate Dissolved	<0.005	<0.005	<0.005	1	<0.005	<0.005	<0.005	6	0.01	
Cadmium	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	5	0.007	
Chlorate Dissolved	0.192	0.192	0.192	1	0.216	0.188	0.238	6	1	
Chlorite Dissolved	<0.005	<0.005	<0.005	1	<0.005	<0.005	<0.005	6	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	0.70	0.70	0.70	1	0.69	0.66	0.73	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	0.040	0.040	0.040	1	0.043	0.010	0.180	26	10	
Nitrite (as N) Dissolved	<0.010	<0.010	<0.010	1	<0.009	<0.005	0.010	26	1	
Selenium	0.0002	0.0002	0.0002	1	0.0002	0.0002	0.0003	5	0.05	
Strontium	0.449	0.449	0.449	1	0.437	0.412	0.459	5	7.0	
Total Chlorine	1.99	1.96	2.02	4	1.90	1.63	2.25	48	>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	<0.6	<0.5	1.0	5	5	
Carbon Tetrachloride	<0.5	<0.5	<0.5	1	<0.6	<0.5	1.0	5	2	
Chlorobenzene	<0.50	<0.50	<0.50	1	<0.60	<0.50	1.00	5	80 (30)	
Dichlorobenzene (1,2)	<0.50	<0.50	<0.50	1	<0.60	<0.50	1.00	5		
Dichlorobenzene (1,4)	<0.5	<0.5	<0.5	1	<0.6	<0.5	1.0	5	5 (1)	
Dichloroethane (1,2)	<0.5	<0.5	<0.5	1	<0.6	<0.5	1.0	5	5	
Dichloroethylene (1,1)	<0.5	<0.5	<0.5	1	<0.6	<0.5	1.0	5	14	
Ethylbenzene	<0.50	<0.50	<0.50	1	<0.60	<0.50	1.00	5	140 (1.6)	
Methylene Chloride	<0.5	<0.5	<0.5	1	<0.6	<0.5	1.0	5	50	
Tetrachloroethylene	<0.5	<0.5	<0.5	1	<0.6	<0.5	1.0	5	10	
Toluene	<0.50	<0.50	<0.50	1	<0.60	<0.50	1.00	5	60 (24)	
Total Xylenes	<1	<1	<1	1	<1	<1	<1	5	90	
Trichloroethylene	<0.50	<0.50	<0.50	1	<0.60	<0.50	1.00	5	5	
Vinyl Chloride	<1.0	<1.0	<1.0	1	<1.2	<1.0	2.0	5	2	

2.2.11 Londonderry Reservoir

November 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	117	117	117	1	115	110	121	5		
Aluminum	0.120	0.120	0.120	1	0.063	0.018	0.120	5	2.9	0.1/0.2
Ammonia as NH3	0.14	0.14	0.14	1	0.18	0.14	0.22	23		
Beryllium	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	5		
Bromide Dissolved	<0.030	<0.030	<0.030	1	<0.023	<0.010	<0.030	6		
Calcium	45.7	45.7	45.7	1	47.1	44.6	49.5	5		
Calcium Hardness				0	122	122	122	1		
Calcium Hardness Calculated	114	114	114	1	116	111	124	4		
Chloride Dissolved	4.9	4.9	4.9	1	6.1	4.9	7.2	6	(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	0.0031	0.0031	0.0031	1	0.0038	0.0031	0.0043	5		
Magnesium	13.6	13.6	13.6	1	13.8	13.3	14.3	5		
Molybdenum	0.0006	0.0006	0.0006	1	0.0008	0.0006	0.0010	5		
Nickel	<0.0005	<0.0005	<0.0005	1	<0.0005	<0.0005	<0.0005	5		
Ortho_P	0.89	0.88	0.90	8	0.89	0.86	0.94	52		
Phosphorus	0.97	0.97	0.97	1	0.97	0.89	1.03	5		
Potassium	0.60	0.60	0.60	1	0.88	0.60	1.40	5		
Silicon	1.56	1.56	1.56	1	2.05	1.56	2.35	5		
Silver	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	5		
Sodium	7.0	7.0	7.0	1	10.3	7.0	13.0	5	(200)	
Sulphate Dissolved	60.4	60.4	60.4	1	71.4	60.4	74.6	6	(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	184	184	1		
Total Hardness Calculated	170	170	170	1	172	166	182	4		
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		

2.2.11 Londonderry Reservoir

November 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	0.7	0.7	0.7	1	1.1	0.7	1.4	5		16
Bromoform	<0.5	<0.5	<0.5	1	<0.6	<0.5	1.0	5		
Chloroform	15.0	15.0	15.0	1	21.3	8.5	34.3	5		
Dibromochloromethane	<0.50	<0.50	<0.50	1	<0.60	<0.50	1.00	5		
Dichlorobenzene (1,3)	<0.50	<0.50	<0.50	1	<0.60	<0.50	1.00	5		
Dichloroethylene, cis (1,2)	<0.50	<0.50	<0.50	1	<0.60	<0.50	1.00	5		
Dichloroethylene, trans (1,2)	<0.50	<0.50	<0.50	1	<0.60	<0.50	1.00	5		
Dichloropropane (1,2)	<0.5	<0.5	<0.5	1	<0.6	<0.5	1.0	5		
Methyl t-Butyl Ether (MTBE)	<0.5	<0.5	<0.5	1	<0.6	<0.5	1.0	5	(15)	
MIBK	<1.0	<1.0	<1.0	1	<1.2	<1.0	2.0	5		
Styrene	<0.50	<0.50	<0.50	1	<0.60	<0.50	1.00	5		
Tetrachloroethane (1,1,2,2)	<0.5	<0.5	<0.5	1	<0.6	<0.5	1.0	5		
Total Organic Carbon	1.1	1.1	1.1	1	1.7	1.0	2.5	19		
Total Volatile Organics (NonTHM)	2.2	2.2	2.2	1	1.5	<1.0	2.4	5		
Trichlorobenzene (1,2,4)	<0.5	<0.5	<0.5	1	<0.6	<0.5	1.0	5		
Trichloroethane (1,1,1)	<0.5	<0.5	<0.5	1	<0.6	<0.5	1.0	5		
Xylene (1,2)	<0.5	<0.5	<0.5	1	<0.6	<0.5	1.0	5		
Xylene (1,4)	<0.5	<0.5	<0.5	1	<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.

2.2.12 Millwoods Reservoir

November 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	0.9	<0.5	1.2	6	(15)	10
Conductivity (uS/cm)	370	370	370	1	397	370	421	6		
Odour	Inoff	Inoff	Inoff	1	Inoff	Inoff	Inoff	6		
pH (N/A)	7.9	7.9	7.9	1	7.8	7.7	8.0	24	(7.0 - 10.5)	7.3 - 8.3
Turbidity (NTU)	0.17	0.12	0.23	4	0.11	0.06	0.23	48		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	0.055	0.055	0.055	1	0.061	0.051	0.071	6	2	
Boron	0.007	0.007	0.007	1	0.010	0.007	0.013	6	2	
Bromate Dissolved	<0.005	<0.005	<0.005	1	<0.005	<0.005	<0.005	6	0.01	
Cadmium	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	6	0.007	
Chlorate Dissolved	0.115	0.115	0.115	1	0.134	0.090	0.171	6	1	
Chlorite Dissolved	<0.005	<0.005	<0.005	1	<0.005	<0.005	<0.005	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	0.68	0.68	0.68	1	0.68	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	0.040	0.040	0.040	1	0.036	0.010	0.160	26	10	
Nitrite (as N) Dissolved	<0.010	<0.010	<0.010	1	<0.009	<0.005	0.010	26	1	
Selenium	0.0003	0.0003	0.0003	1	0.0003	0.0002	0.0004	6	0.05	
Strontium	0.452	0.452	0.452	1	0.448	0.422	0.481	6	7.0	
Total Chlorine	2.04	2.02	2.08	4	2.00	1.79	2.21	48	>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	7	5	
Carbon Tetrachloride	<0.5	<0.5	<0.5	1	<0.6	<0.5	1.0	7	2	
Chlorobenzene	<0.50	<0.50	<0.50	1	<0.57	<0.50	1.00	7	80 (30)	
Dichlorobenzene (1,2)	<0.50	<0.50	<0.50	1	<0.57	<0.50	1.00	7		
Dichlorobenzene (1,4)	<0.5	<0.5	<0.5	1	<0.6	<0.5	1.0	7	5 (1)	
Dichloroethane (1,2)	<0.5	<0.5	<0.5	1	<0.6	<0.5	1.0	7	5	
Dichloroethylene (1,1)	<0.5	<0.5	<0.5	1	<0.6	<0.5	1.0	7	14	
Ethylbenzene	<0.50	<0.50	<0.50	1	<0.57	<0.50	1.00	7	140 (1.6)	
Methylene Chloride	<0.5	<0.5	<0.5	1	<0.6	<0.5	1.0	7	50	
Tetrachloroethylene	<0.5	<0.5	<0.5	1	<0.6	<0.5	1.0	7	10	
Toluene	<0.50	<0.50	<0.50	1	<0.57	<0.50	1.00	7	60 (24)	
Total Xylenes	<1	<1	<1	1	<1	<1	<1	7	90	
Trichloroethylene	<0.50	<0.50	<0.50	1	<0.57	<0.50	1.00	7	5	
Vinyl Chloride	<1.0	<1.0	<1.0	1	<1.1	<1.0	2.0	7	2	

2.2.12 Millwoods Reservoir

November 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	116	112	123	6		
Aluminum	0.160	0.160	0.160	1	0.086	0.022	0.168	6	2.9	0.1/0.2
Ammonia as NH3	0.14	0.14	0.14	1	0.17	0.11	0.19	24		
Beryllium	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	6		
Bromide Dissolved	<0.030	<0.030	<0.030	1	<0.023	<0.010	<0.030	6		
Calcium	45.6	45.6	45.6	1	47.2	45.2	49.6	6		
Calcium Hardness				0	122	122	122	1		
Calcium Hardness Calculated	114	114	114	1	117	113	124	5		
Chloride Dissolved	5.5	5.5	5.5	1	6.5	5.5	7.4	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	0.0031	0.0031	0.0031	1	0.0037	0.0031	0.0045	6		
Magnesium	13.7	13.7	13.7	1	13.9	13.3	14.5	6		
Molybdenum	0.0006	0.0006	0.0006	1	0.0008	0.0006	0.0011	6		
Nickel	<0.0005	<0.0005	<0.0005	1	<0.0005	<0.0005	0.0005	6		
Ortho_P	0.91	0.90	0.92	8	0.89	0.82	1.00	52		
Phosphorus	0.99	0.99	0.99	1	0.97	0.90	1.01	6		
Potassium	0.70	0.70	0.70	1	0.85	0.70	1.10	6		
Silicon	1.55	1.55	1.55	1	1.98	1.55	2.43	6		
Silver	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	6		
Sodium	7.3	7.3	7.3	1	11.9	7.3	16.4	6	(200)	
Sulphate Dissolved	61.0	61.0	61.0	1	72.7	61.0	80.4	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	185	185	185	1		
Total Hardness Calculated	170	170	170	1	175	168	184	5		
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		

2.2.12 Millwoods Reservoir

November 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	0.6	0.6	0.6	1	1.1	0.6	2.2	7		16
Bromoform	<0.5	<0.5	<0.5	1	<0.6	<0.5	1.0	7		
Chloroform	14.3	14.3	14.3	1	18.6	6.8	37.4	7		
Dibromochloromethane	<0.50	<0.50	<0.50	1	<0.57	<0.50	1.00	7		
Dichlorobenzene (1,3)	<0.50	<0.50	<0.50	1	<0.57	<0.50	1.00	7		
Dichloroethylene, cis (1,2)	<0.50	<0.50	<0.50	1	<0.57	<0.50	1.00	7		
Dichloroethylene, trans (1,2)	<0.50	<0.50	<0.50	1	<0.57	<0.50	1.00	7		
Dichloropropane (1,2)	<0.5	<0.5	<0.5	1	<0.6	<0.5	1.0	7		
Methyl t-Butyl Ether (MTBE)	<0.5	<0.5	<0.5	1	<0.6	<0.5	1.0	7	(15)	
MIBK	<1.0	<1.0	<1.0	1	<1.1	<1.0	2.0	7		
Styrene	<0.50	<0.50	<0.50	1	<0.57	<0.50	1.00	7		
Tetrachloroethane (1,1,2,2)	<0.5	<0.5	<0.5	1	<0.6	<0.5	1.0	7		
Total Organic Carbon	1.0	1.0	1.0	1	1.7	0.9	2.6	19		
Total Volatile Organics (NonTHM)	2.1	2.1	2.1	1	1.7	<1.0	3.6	7		
Total Volatile Organics (Unknown)				0	1.3	1.3	1.3	1		
Trichlorobenzene (1,2,4)	<0.5	<0.5	<0.5	1	<0.6	<0.5	1.0	7		
Trichloroethane (1,1,1)	<0.5	<0.5	<0.5	1	<0.6	<0.5	1.0	7		
Xylene (1,2)	<0.5	<0.5	<0.5	1	<0.6	<0.5	1.0	7		
Xylene (1,4)	<0.5	<0.5	<0.5	1	<0.6	<0.5	1.0	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.

2.2.13 North Jasper Place Reservoir

November 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	0.8	0.6	1.0	6	(15)	10
Conductivity (uS/cm)				0	398	367	421	6		
Odour				0	Inoff	Inoff	Inoff	6		
pH (N/A)				0	7.8	7.7	8.0	24	(7.0 - 10.5)	7.3 - 8.3
Turbidity (NTU)	0.14	0.10	0.19	4	0.12	0.05	0.37	48		1
Primary Inorganics (mg/L) **										
Antimony				0	<0.0005	<0.0002	<0.0005	6	0.006	
Arsenic				0	<0.0002	<0.0002	0.0003	6	0.01	
Barium				0	0.061	0.054	0.068	6	2	
Boron				0	0.010	0.008	0.014	6	2	
Bromate Dissolved				0	<0.005	<0.003	<0.005	7	0.01	
Cadmium				0	<0.0002	<0.0002	<0.0002	6	0.007	
Chlorate Dissolved				0	0.116	<0.080	0.147	7	1	
Chlorite Dissolved				0	<0.033	<0.005	<0.200	7	1	
Chromium				0	<0.0002	<0.0002	<0.0002	6	0.05	
Copper				0	<0.003	<0.002	<0.005	6	2 (1)	
Fluoride				0	0.69	0.64	0.72	6	1.5	0.6 - 0.8
Lead				0	<0.0002	<0.0002	<0.0002	6	0.005	
Manganese				0	<0.002	<0.002	<0.002	6	0.12 (0.02)	
Mercury				0	<0.0002	<0.0002	<0.0002	6	0.001	
Nitrate (as N) Dissolved				0	0.046	0.020	0.190	26	10	
Nitrite (as N) Dissolved				0	<0.009	<0.005	0.010	26	1	
Selenium				0	0.0003	0.0002	0.0003	6	0.05	
Strontium				0	0.445	0.416	0.481	6	7.0	
Total Chlorine	1.71	1.63	1.79	4	1.65	1.25	2.07	48	>0.5 and <3.0	>1.0 and <2.4
Uranium				0	<0.0005	<0.0005	<0.0005	6	0.02	
Primary Organics (ug/L) **										
Benzene				0	<0.5	<0.5	<0.5	6	5	
Carbon Tetrachloride				0	<0.5	<0.5	<0.5	6	2	
Chlorobenzene				0	<0.50	<0.50	<0.50	6	80 (30)	
Dichlorobenzene (1,2)				0	<0.50	<0.50	<0.50	6		
Dichlorobenzene (1,4)				0	<0.5	<0.5	<0.5	6	5 (1)	
Dichloroethane (1,2)				0	<0.5	<0.5	<0.5	6	5	
Dichloroethylene (1,1)				0	<0.5	<0.5	<0.5	6	14	
Ethylbenzene				0	<0.50	<0.50	<0.50	6	140 (1.6)	
Methylene Chloride				0	<0.5	<0.5	<0.5	6	50	
Tetrachloroethylene				0	<0.5	<0.5	<0.5	6	10	
Toluene				0	<0.50	<0.50	<0.50	6	60 (24)	
Total Xylenes				0	<1	<1	<1	6	90	
Trichloroethylene				0	<0.50	<0.50	<0.50	6	5	
Vinyl Chloride				0	<1.0	<1.0	<1.0	6	2	

2.2.13 North Jasper Place Reservoir

November 2024

Parameter	Monthly				YTD				Limits	
	Mean	Min	Max	Count	Mean	Min	Max	Count	*Approval or GCDWQ MAC, (AO or OG)	EPCOR
Secondary Inorganics (mg/L) * **										
Alkalinity Total				0	116	110	128	6		
Aluminum				0	0.062	0.024	0.102	6	2.9	0.1/0.2
Ammonia as NH3				0	0.21	0.16	0.25	22		
Beryllium				0	<0.0002	<0.0002	<0.0002	6		
Bromide Dissolved				0	<0.027	<0.010	<0.050	7		
Calcium				0	46.5	43.9	51.0	6		
Calcium Hardness				0	122	116	128	2		
Calcium Hardness Calculated				0	114	110	117	4		
Chloride Dissolved				0	6.9	6.0	8.0	7	(250)	
Cobalt				0	<0.0002	<0.0002	<0.0002	6		
Iron				0	<0.005	<0.005	<0.005	6	(0.3)	0.3
Lanthanum				0	<0.0010	<0.0010	<0.0010	6		
Lithium				0	0.0034	0.0030	0.0041	6		
Magnesium				0	13.6	12.2	14.7	6		
Molybdenum				0	0.0008	0.0005	0.0009	6		
Nickel				0	<0.0005	<0.0005	0.0005	6		
Ortho_P	0.95	0.88	1.08	8	0.90	0.74	1.08	52		
Phosphorus				0	0.98	0.92	1.00	6		
Potassium				0	0.82	0.70	1.00	6		
Silicon				0	1.90	1.64	2.09	6		
Silver				0	<0.0002	<0.0002	<0.0002	6		
Sodium				0	12.4	7.2	19.0	6	(200)	
Sulphate Dissolved				0	72.2	59.5	80.4	7	(500)	
Thallium				0	<0.0003	<0.0002	<0.0005	6		
Tin				0	<0.0005	<0.0005	<0.0005	6		
Titanium				0	<0.0005	<0.0005	<0.0005	6		
Total Hardness (mg/L CaCO3)				0	184	173	194	2		
Total Hardness Calculated				0	168	160	175	4		
Vanadium				0	<0.0005	<0.0005	<0.0005	6		
Zinc				0	<0.005	<0.005	<0.005	6	(5.0)	
Zirconium				0	<0.0010	<0.0010	<0.0010	6		

2.2.13 North Jasper Place Reservoir

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

November 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	0.9	0.6	1.1	5	(15)	10
Conductivity (uS/cm)	371	371	371	1	403	371	424	5		
Odour	Inoff	Inoff	Inoff	1	Inoff	Inoff	Inoff	5		
pH (N/A)	7.9	7.9	7.9	1	7.8	7.6	8.0	24	(7.0 - 10.5)	7.3 - 8.3
Turbidity (NTU)	0.13	0.12	0.15	4	0.11	0.05	0.28	48		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	0.055	0.055	0.055	1	0.060	0.051	0.071	5	2	
Boron	0.007	0.007	0.007	1	0.010	0.007	0.011	5	2	
Bromate Dissolved	<0.005	<0.005	<0.005	1	<0.005	<0.005	<0.005	5	0.01	
Cadmium	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	5	0.007	
Chlorate Dissolved	0.100	0.100	0.100	1	0.102	0.060	0.139	5	1	
Chlorite Dissolved	<0.005	<0.005	<0.005	1	<0.005	<0.005	<0.005	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	0.68	0.66	0.71	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	0.040	0.040	0.040	1	0.037	0.010	0.170	26	10	
Nitrite (as N) Dissolved	<0.010	<0.010	<0.010	1	<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	0.439	0.424	0.458	5	7.0	
Total Chlorine	2.02	1.97	2.07	4	1.92	1.62	2.15	48	>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	<0.6	<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	

2.2.14 Ormsby Reservoir

November 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	116	116	116	1	117	112	123	5		
Aluminum	0.138	0.138	0.138	1	0.078	0.023	0.138	5	2.9	0.1/0.2
Ammonia as NH3	0.12	0.12	0.12	1	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	<0.022	<0.010	<0.030	5		
Calcium	45.9	45.9	45.9	1	46.8	43.9	49.6	5		
Calcium Hardness				0	122	122	122	1		
Calcium Hardness Calculated	115	115	115	1	117	110	124	4		
Chloride Dissolved	5.7	5.7	5.7	1	7.0	5.7	7.9	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	0.0031	0.0031	0.0031	1	0.0034	0.0030	0.0040	5		
Magnesium	13.6	13.6	13.6	1	13.7	13.1	14.2	5		
Molybdenum	0.0006	0.0006	0.0006	1	0.0008	0.0006	0.0011	5		
Nickel	<0.0005	<0.0005	<0.0005	1	<0.0005	<0.0005	<0.0005	5		
Ortho_P	0.91	0.86	0.94	8	0.89	0.68	0.98	52		
Phosphorus	1.00	1.00	1.00	1	0.98	0.88	1.04	5		
Potassium	0.60	0.60	0.60	1	0.86	0.60	1.30	5		
Silicon	1.53	1.53	1.53	1	2.04	1.53	2.39	5		
Silver	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	5		
Sodium	7.3	7.3	7.3	1	13.0	7.3	16.2	5	(200)	
Sulphate Dissolved	61.1	61.1	61.1	1	73.1	61.1	78.0	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	185	185	185	1		
Total Hardness Calculated	171	171	171	1	173	164	182	4		
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		

2.2.14 Ormsby Reservoir

November 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	0.5	0.5	0.5	1	0.9	0.5	1.1	6		16
Bromoform	<0.5	<0.5	<0.5	1	<0.6	<0.5	1.0	6		
Chloroform	13.2	13.2	13.2	1	17.9	6.6	38.1	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	1.0	1.0	1.0	1	1.7	0.9	2.5	19		
Total Volatile Organics (NonTHM)	2.3	2.3	2.3	1	1.4	<1.0	2.3	6		
Total Volatile Organics (Unknown)				0	0.9	0.6	1.2	2		
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.

2.2.15 Papaschase 1 Reservoir

November 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	0.9	0.7	1.0	5	(15)	10
Conductivity (uS/cm)	367	367	367	1	388	367	408	5		
Odour	Inoff	Inoff	Inoff	1	Inoff	Inoff	Inoff	5		
pH (N/A)	8.0	8.0	8.0	1	7.8	7.6	8.0	24	(7.0 - 10.5)	7.3 - 8.3
Turbidity (NTU)	0.13	0.12	0.14	4	0.14	0.06	0.26	48		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	0.0003	5	0.01	
Barium	0.054	0.054	0.054	1	0.059	0.050	0.071	5	2	
Boron	0.007	0.007	0.007	1	0.009	0.007	0.011	5	2	
Bromate Dissolved	<0.005	<0.005	<0.005	1	<0.005	<0.005	<0.005	5	0.01	
Cadmium	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	5	0.007	
Chlorate Dissolved	0.231	0.231	0.231	1	0.232	0.190	0.261	5	1	
Chlorite Dissolved	<0.005	<0.005	<0.005	1	<0.005	<0.005	<0.005	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	0.67	0.67	0.67	1	0.69	0.64	0.75	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	0.050	0.050	0.050	1	0.040	0.010	0.160	26	10	
Nitrite (as N) Dissolved	<0.010	<0.010	<0.010	1	<0.009	<0.005	0.010	26	1	
Selenium	0.0002	0.0002	0.0002	1	0.0002	0.0002	0.0003	5	0.05	
Strontium	0.444	0.444	0.444	1	0.437	0.423	0.455	5	7.0	
Total Chlorine	1.87	1.80	2.03	4	1.86	1.35	2.15	48	>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	<0.6	<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	

2.2.15 Papaschase 1 Reservoir

November 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	116	116	116	1	115	110	120	5		
Aluminum	0.104	0.104	0.104	1	0.066	0.019	0.104	5	2.9	0.1/0.2
Ammonia as NH3	0.16	0.16	0.16	1	0.19	0.11	0.28	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	<0.022	<0.010	<0.030	5		
Calcium	45.7	45.7	45.7	1	47.3	45.1	50.1	5		
Calcium Hardness				0	123	123	123	1		
Calcium Hardness Calculated	114	114	114	1	117	113	123	4		
Chloride Dissolved	4.9	4.9	4.9	1	6.1	4.9	7.5	5	(250)	
Cobalt	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	5		
Iron	0.007	0.007	0.007	1	0.012	0.007	0.016	5	(0.3)	0.3
Lanthanum	<0.0010	<0.0010	<0.0010	1	<0.0010	<0.0010	<0.0010	5		
Lithium	0.0032	0.0032	0.0032	1	0.0037	0.0032	0.0045	5		
Magnesium	13.5	13.5	13.5	1	13.8	13.1	14.5	5		
Molybdenum	0.0006	0.0006	0.0006	1	0.0008	0.0006	0.0011	5		
Nickel	<0.0005	<0.0005	<0.0005	1	<0.0005	<0.0005	<0.0005	5		
Ortho_P	0.87	0.86	0.88	8	0.86	0.74	0.90	52		
Phosphorus	0.93	0.93	0.93	1	0.94	0.88	0.97	5		
Potassium	0.70	0.70	0.70	1	0.84	0.70	1.10	5		
Silicon	1.58	1.58	1.58	1	2.00	1.58	2.39	5		
Silver	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	5		
Sodium	6.8	6.8	6.8	1	9.6	6.8	11.4	5	(200)	
Sulphate Dissolved	60.5	60.5	60.5	1	69.7	60.5	75.2	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	185	185	185	1		
Total Hardness Calculated	170	170	170	1	173	167	182	4		
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		

2.2.15 Papaschase 1 Reservoir

November 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	0.6	0.6	0.6	1	0.9	0.6	1.6	6		16
Bromoform	<0.5	<0.5	<0.5	1	<0.6	<0.5	1.0	6		
Chloroform	16.7	16.7	16.7	1	18.5	7.8	35.1	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	1.0	1.0	1.0	1	1.7	0.9	2.5	19		
Total Volatile Organics (NonTHM)	1.8	1.8	1.8	1	1.3	<1.0	1.8	6		
Total Volatile Organics (Unknown)				0	<0.5	<0.5	<0.5	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.

2.2.16 Papaschase 2 Reservoir

November 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	0.7	1.4	6	(15)	10
Conductivity (uS/cm)				0	392	368	430	6		
Odour				0	Inoff	Inoff	Inoff	6		
pH (N/A)				0	7.8	7.6	7.9	24	(7.0 - 10.5)	7.3 - 8.3
Turbidity (NTU)	0.14	0.10	0.18	4	0.11	0.05	0.26	48		1
Primary Inorganics (mg/L) **										
Antimony				0	<0.0005	<0.0002	<0.0005	6	0.006	
Arsenic				0	<0.0002	<0.0002	0.0003	6	0.01	
Barium				0	0.062	0.055	0.067	6	2	
Boron				0	0.010	0.008	0.013	6	2	
Bromate Dissolved				0	<0.005	<0.003	<0.005	6	0.01	
Cadmium				0	<0.0002	<0.0002	<0.0002	6	0.007	
Chlorate Dissolved				0	0.199	0.108	0.300	6	1	
Chlorite Dissolved				0	<0.038	<0.005	<0.200	6	1	
Chromium				0	<0.0002	<0.0002	<0.0002	6	0.05	
Copper				0	<0.003	<0.002	<0.005	6	2 (1)	
Fluoride				0	0.70	0.66	0.74	6	1.5	0.6 - 0.8
Lead				0	<0.0002	<0.0002	<0.0002	6	0.005	
Manganese				0	<0.002	<0.002	<0.002	6	0.12 (0.02)	
Mercury				0	<0.0002	<0.0002	<0.0002	6	0.001	
Nitrate (as N) Dissolved				0	0.040	<0.010	0.170	25	10	
Nitrite (as N) Dissolved				0	<0.009	<0.005	0.010	25	1	
Selenium				0	0.0003	<0.0002	0.0003	6	0.05	
Strontium				0	0.448	0.400	0.477	6	7.0	
Total Chlorine	2.03	2.01	2.04	4	1.96	1.73	2.17	48	>0.5 and <3.0	>1.0 and <2.4
Uranium				0	<0.0005	<0.0005	0.0005	6	0.02	
Primary Organics (ug/L) **										
Benzene				0	<0.5	<0.5	<0.5	6	5	
Carbon Tetrachloride				0	<0.5	<0.5	<0.5	6	2	
Chlorobenzene				0	<0.50	<0.50	<0.50	6	80 (30)	
Dichlorobenzene (1,2)				0	<0.50	<0.50	<0.50	6		
Dichlorobenzene (1,4)				0	<0.5	<0.5	<0.5	6	5 (1)	
Dichloroethane (1,2)				0	<0.5	<0.5	<0.5	6	5	
Dichloroethylene (1,1)				0	<0.5	<0.5	<0.5	6	14	
Ethylbenzene				0	<0.50	<0.50	<0.50	6	140 (1.6)	
Methylene Chloride				0	<0.5	<0.5	<0.5	6	50	
Tetrachloroethylene				0	<0.5	<0.5	<0.5	6	10	
Toluene				0	<0.50	<0.50	<0.50	6	60 (24)	
Total Xylenes				0	<1	<1	<1	6	90	
Trichloroethylene				0	<0.50	<0.50	<0.50	6	5	
Vinyl Chloride				0	<1.0	<1.0	<1.0	6	2	

2.2.16 Papaschase 2 Reservoir

November 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	109	128	6		
Aluminum				0	0.073	0.023	0.157	6	2.9	0.1/0.2
Ammonia as NH3				0	0.18	0.13	0.27	23		
Beryllium				0	<0.0002	<0.0002	<0.0002	6		
Bromide Dissolved				0	<0.027	<0.010	<0.050	6		
Calcium				0	47.3	43.0	52.2	6		
Calcium Hardness				0	123	116	130	2		
Calcium Hardness Calculated				0	115	107	124	4		
Chloride Dissolved				0	6.3	4.8	7.2	6	(250)	
Cobalt				0	<0.0002	<0.0002	<0.0002	6		
Iron				0	<0.005	<0.005	<0.005	6	(0.3)	0.3
Lanthanum				0	<0.0010	<0.0010	<0.0010	6		
Lithium				0	0.0038	0.0030	0.0044	6		
Magnesium				0	13.8	12.2	14.8	6		
Molybdenum				0	0.0008	0.0006	0.0010	6		
Nickel				0	<0.0005	<0.0005	<0.0005	6		
Ortho_P	0.88	0.86	0.90	8	0.87	0.80	0.92	52		
Phosphorus				0	0.95	0.89	0.98	6		
Potassium				0	0.82	0.70	1.10	6		
Silicon				0	1.89	1.55	2.14	6		
Silver				0	<0.0002	<0.0002	<0.0002	6		
Sodium				0	10.4	6.9	17.1	6	(200)	
Sulphate Dissolved				0	69.9	59.9	79.4	6	(500)	
Thallium				0	<0.0003	<0.0002	<0.0005	6		
Tin				0	<0.0005	<0.0005	<0.0005	6		
Titanium				0	<0.0005	<0.0005	<0.0005	6		
Total Hardness (mg/L CaCO3)				0	186	177	194	2		
Total Hardness Calculated				0	171	158	181	4		
Vanadium				0	<0.0005	<0.0005	<0.0005	6		
Zinc				0	<0.005	<0.005	<0.005	6	(5.0)	
Zirconium				0	<0.0010	<0.0010	<0.0010	6		

2.2.16 Papaschase 2 Reservoir

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

November 2024

Parameter	Monthly				YTD				Limits	
	Mean	Min	Max	Count	Mean	Min	Max	Count	*Approval or GCDWQ MAC, (AO or OG)	EPCOR
Physical										
Colour (TCU)	1.1	1.1	1.1	1	1.0	0.6	1.4	5	(15)	10
Conductivity (uS/cm)	368	368	368	1	395	368	408	5		
Odour	Inoff	Inoff	Inoff	1	Inoff	Inoff	Inoff	5		
pH (N/A)	7.9	7.9	7.9	1	7.8	7.7	8.1	23	(7.0 - 10.5)	7.3 - 8.3
Turbidity (NTU)	0.14	0.12	0.15	4	0.15	0.08	0.53	46		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	0.054	0.054	0.054	1	0.060	0.053	0.069	5	2	
Boron	0.007	0.007	0.007	1	0.011	0.007	0.014	5	2	
Bromate Dissolved	<0.005	<0.005	<0.005	1	<0.005	<0.005	<0.005	6	0.01	
Cadmium	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	5	0.007	
Chlorate Dissolved	0.152	0.152	0.152	1	0.181	0.152	0.204	6	1	
Chlorite Dissolved	<0.005	<0.005	<0.005	1	<0.005	<0.005	<0.005	6	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	0.70	0.70	0.70	1	0.69	0.66	0.73	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	0.040	0.040	0.040	1	0.039	0.020	0.190	24	10	
Nitrite (as N) Dissolved	<0.010	<0.010	<0.010	1	<0.009	<0.005	0.010	24	1	
Selenium	0.0003	0.0003	0.0003	1	0.0003	0.0002	0.0003	5	0.05	
Strontium	0.445	0.445	0.445	1	0.438	0.426	0.459	5	7.0	
Total Chlorine	1.89	1.86	1.92	4	1.81	1.55	2.07	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	5	0.02	
Primary Organics (ug/L) **										
Benzene	<0.5	<0.5	<0.5	1	<0.6	<0.5	1.0	5	5	
Carbon Tetrachloride	<0.5	<0.5	<0.5	1	<0.6	<0.5	1.0	5	2	
Chlorobenzene	<0.50	<0.50	<0.50	1	<0.60	<0.50	1.00	5	80 (30)	
Dichlorobenzene (1,2)	<0.50	<0.50	<0.50	1	<0.60	<0.50	1.00	5		
Dichlorobenzene (1,4)	<0.5	<0.5	<0.5	1	<0.6	<0.5	1.0	5	5 (1)	
Dichloroethane (1,2)	<0.5	<0.5	<0.5	1	<0.6	<0.5	1.0	5	5	
Dichloroethylene (1,1)	<0.5	<0.5	<0.5	1	<0.6	<0.5	1.0	5	14	
Ethylbenzene	<0.50	<0.50	<0.50	1	<0.60	<0.50	1.00	5	140 (1.6)	
Methylene Chloride	<0.5	<0.5	<0.5	1	<0.6	<0.5	1.0	5	50	
Tetrachloroethylene	<0.5	<0.5	<0.5	1	<0.6	<0.5	1.0	5	10	
Toluene	<0.50	<0.50	<0.50	1	<0.60	<0.50	1.00	5	60 (24)	
Total Xylenes	<1	<1	<1	1	<1	<1	<1	5	90	
Trichloroethylene	<0.50	<0.50	<0.50	1	<0.60	<0.50	1.00	5	5	
Vinyl Chloride	<1.0	<1.0	<1.0	1	<1.2	<1.0	2.0	5	2	

2.2.17 Rosslyn 1 Reservoir

November 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	116	116	116	1	116	112	122	5		
Aluminum	0.122	0.122	0.122	1	0.069	0.020	0.122	5	2.9	0.1/0.2
Ammonia as NH3	0.15	0.15	0.15	1	0.19	0.14	0.23	21		
Beryllium	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	5		
Bromide Dissolved	<0.030	<0.030	<0.030	1	<0.023	<0.010	<0.030	6		
Calcium	45.7	45.7	45.7	1	47.4	45.2	49.8	5		
Calcium Hardness				0	122	122	122	1		
Calcium Hardness Calculated	114	114	114	1	117	113	123	4		
Chloride Dissolved	5.2	5.2	5.2	1	6.5	5.2	7.6	6	(250)	
Cobalt	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	5		
Iron	<0.005	<0.005	<0.005	1	0.008	<0.005	0.011	5	(0.3)	0.3
Lanthanum	<0.0010	<0.0010	<0.0010	1	<0.0010	<0.0010	<0.0010	5		
Lithium	0.0031	0.0031	0.0031	1	0.0036	0.0031	0.0042	5		
Magnesium	13.5	13.5	13.5	1	13.8	13.3	14.6	5		
Molybdenum	0.0006	0.0006	0.0006	1	0.0008	0.0006	0.0010	5		
Nickel	<0.0005	<0.0005	<0.0005	1	<0.0005	<0.0005	<0.0005	5		
Ortho_P	0.89	0.86	0.90	8	0.89	0.86	0.96	52		
Phosphorus	0.96	0.96	0.96	1	0.97	0.91	1.00	5		
Potassium	0.60	0.60	0.60	1	0.92	0.60	1.50	5		
Silicon	1.55	1.55	1.55	1	2.05	1.55	2.35	5		
Silver	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	5		
Sodium	7.1	7.1	7.1	1	11.3	7.1	14.4	5	(200)	
Sulphate Dissolved	60.8	60.8	60.8	1	72.2	60.8	76.5	6	(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	183	183	183	1		
Total Hardness Calculated	170	170	170	1	173	168	181	4		
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		

2.2.17 Rosslyn 1 Reservoir

November 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	0.8	0.8	0.8	1	1.1	0.8	1.5	5		16
Bromoform	<0.5	<0.5	<0.5	1	<0.6	<0.5	1.0	5		
Chloroform	14.9	14.9	14.9	1	21.0	8.9	34.2	5		
Dibromochloromethane	<0.50	<0.50	<0.50	1	<0.60	<0.50	1.00	5		
Dichlorobenzene (1,3)	<0.50	<0.50	<0.50	1	<0.60	<0.50	1.00	5		
Dichloroethylene, cis (1,2)	<0.50	<0.50	<0.50	1	<0.60	<0.50	1.00	5		
Dichloroethylene, trans (1,2)	<0.50	<0.50	<0.50	1	<0.60	<0.50	1.00	5		
Dichloropropane (1,2)	<0.5	<0.5	<0.5	1	<0.6	<0.5	1.0	5		
Methyl t-Butyl Ether (MTBE)	<0.5	<0.5	<0.5	1	<0.6	<0.5	1.0	5	(15)	
MIBK	<1.0	<1.0	<1.0	1	<1.2	<1.0	2.0	5		
Styrene	<0.50	<0.50	<0.50	1	<0.60	<0.50	1.00	5		
Tetrachloroethane (1,1,2,2)	<0.5	<0.5	<0.5	1	<0.6	<0.5	1.0	5		
Total Organic Carbon	1.0	1.0	1.0	1	1.7	1.0	2.5	18		
Total Volatile Organics (NonTHM)	2.0	2.0	2.0	1	1.4	<1.0	2.1	5		
Total Volatile Organics (Unknown)				0	1.0	1.0	1.0	1		
Trichlorobenzene (1,2,4)	<0.5	<0.5	<0.5	1	<0.6	<0.5	1.0	5		
Trichloroethane (1,1,1)	<0.5	<0.5	<0.5	1	<0.6	<0.5	1.0	5		
Xylene (1,2)	<0.5	<0.5	<0.5	1	<0.6	<0.5	1.0	5		
Xylene (1,4)	<0.5	<0.5	<0.5	1	<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.

2.2.18 Rosslyn 2 Reservoir

November 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	0.8	0.6	0.9	6	(15)	10
Conductivity (uS/cm)				0	393	369	419	6		
Odour				0	Inoff	Inoff	Inoff	6		
pH (N/A)				0	7.8	7.7	8.1	24	(7.0 - 10.5)	7.3 - 8.3
Turbidity (NTU)	0.13	0.11	0.18	4	0.11	0.07	0.18	48		1
Primary Inorganics (mg/L) **										
Antimony				0	<0.0005	<0.0002	<0.0005	6	0.006	
Arsenic				0	<0.0002	<0.0002	0.0003	6	0.01	
Barium				0	0.062	0.054	0.067	6	2	
Boron				0	0.010	0.008	0.012	6	2	
Bromate Dissolved				0	<0.005	<0.003	<0.005	7	0.01	
Cadmium				0	<0.0002	<0.0002	<0.0002	6	0.007	
Chlorate Dissolved				0	0.186	0.147	0.206	7	1	
Chlorite Dissolved				0	<0.033	<0.005	<0.200	7	1	
Chromium				0	<0.0002	<0.0002	<0.0002	6	0.05	
Copper				0	<0.003	<0.002	<0.005	6	2 (1)	
Fluoride				0	0.69	0.67	0.72	6	1.5	0.6 - 0.8
Lead				0	<0.0002	<0.0002	<0.0002	6	0.005	
Manganese				0	<0.002	<0.002	<0.002	6	0.12 (0.02)	
Mercury				0	<0.0002	<0.0002	<0.0002	6	0.001	
Nitrate (as N) Dissolved				0	0.040	0.020	0.170	24	10	
Nitrite (as N) Dissolved				0	<0.009	<0.005	0.010	24	1	
Selenium				0	0.0003	<0.0002	0.0003	6	0.05	
Strontium				0	0.451	0.419	0.482	6	7.0	
Total Chlorine	1.76	1.69	1.79	4	1.68	1.30	2.08	48	>0.5 and <3.0	>1.0 and <2.4
Uranium				0	<0.0005	<0.0005	0.0005	6	0.02	
Primary Organics (ug/L) **										
Benzene				0	<0.5	<0.5	<0.5	7	5	
Carbon Tetrachloride				0	<0.5	<0.5	<0.5	7	2	
Chlorobenzene				0	<0.50	<0.50	<0.50	7	80 (30)	
Dichlorobenzene (1,2)				0	<0.50	<0.50	<0.50	7		
Dichlorobenzene (1,4)				0	<0.5	<0.5	<0.5	7	5 (1)	
Dichloroethane (1,2)				0	<0.5	<0.5	<0.5	7	5	
Dichloroethylene (1,1)				0	<0.5	<0.5	<0.5	7	14	
Ethylbenzene				0	<0.50	<0.50	<0.50	7	140 (1.6)	
Methylene Chloride				0	<0.5	<0.5	<0.5	7	50	
Tetrachloroethylene				0	<0.5	<0.5	<0.5	7	10	
Toluene				0	<0.50	<0.50	<0.50	7	60 (24)	
Total Xylenes				0	<1	<1	<1	7	90	
Trichloroethylene				0	<0.50	<0.50	<0.50	7	5	
Vinyl Chloride				0	<1.0	<1.0	<1.0	7	2	

2.2.18 Rosslyn 2 Reservoir

November 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	111	127	6		
Aluminum				0	0.069	0.025	0.170	6	2.9	0.1/0.2
Ammonia as NH3				0	0.22	0.17	0.27	22		
Beryllium				0	<0.0002	<0.0002	<0.0002	6		
Bromide Dissolved				0	<0.027	<0.010	<0.050	7		
Calcium				0	47.0	44.5	51.0	6		
Calcium Hardness				0	122	116	128	2		
Calcium Hardness Calculated				0	115	111	120	4		
Chloride Dissolved				0	6.3	5.6	7.4	7	(250)	
Cobalt				0	<0.0002	<0.0002	<0.0002	6		
Iron				0	<0.005	<0.005	0.007	6	(0.3)	0.3
Lanthanum				0	<0.0010	<0.0010	<0.0010	6		
Lithium				0	0.0036	0.0031	0.0042	6		
Magnesium				0	13.9	12.7	14.9	6		
Molybdenum				0	0.0008	0.0006	0.0009	6		
Nickel				0	<0.0005	<0.0005	0.0005	6		
Ortho_P	0.89	0.88	0.90	8	0.88	0.84	0.92	52		
Phosphorus				0	0.96	0.90	0.99	6		
Potassium				0	0.82	0.70	1.00	6		
Silicon				0	1.88	1.62	2.14	6		
Silver				0	<0.0002	<0.0002	<0.0002	6		
Sodium				0	10.7	7.1	16.5	6	(200)	
Sulphate Dissolved				0	71.1	59.4	78.7	7	(500)	
Thallium				0	<0.0003	<0.0002	<0.0005	6		
Tin				0	<0.0005	<0.0005	<0.0005	6		
Titanium				0	<0.0005	<0.0005	<0.0005	6		
Total Hardness (mg/L CaCO3)				0	186	178	194	2		
Total Hardness Calculated				0	170	163	179	4		
Vanadium				0	<0.0005	<0.0005	<0.0005	6		
Zinc				0	<0.005	<0.005	<0.005	6	(5.0)	
Zirconium				0	<0.0010	<0.0010	<0.0010	6		

2.2.18 Rosslyn 2 Reservoir

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

November 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	0.8	<0.5	1.1	6	(15)	10
Conductivity (uS/cm)				0	397	368	420	6		
Odour				0	Inoff	Inoff	Inoff	6		
pH (N/A)				0	7.8	7.6	8.0	24	(7.0 - 10.5)	7.3 - 8.3
Turbidity (NTU)	0.17	0.14	0.21	4	0.12	0.05	0.33	49		1
Primary Inorganics (mg/L) **										
Antimony				0	<0.0005	<0.0002	<0.0005	6	0.006	
Arsenic				0	<0.0002	<0.0002	0.0003	6	0.01	
Barium				0	0.062	0.055	0.067	6	2	
Boron				0	0.010	0.008	0.012	6	2	
Bromate Dissolved				0	<0.005	<0.003	<0.005	6	0.01	
Cadmium				0	<0.0002	<0.0002	<0.0002	6	0.007	
Chlorate Dissolved				0	0.111	<0.080	0.143	6	1	
Chlorite Dissolved				0	<0.038	<0.005	<0.200	6	1	
Chromium				0	<0.0002	<0.0002	<0.0002	6	0.05	
Copper				0	<0.003	<0.002	<0.005	6	2 (1)	
Fluoride				0	0.69	0.64	0.77	6	1.5	0.6 - 0.8
Lead				0	<0.0002	<0.0002	<0.0002	6	0.005	
Manganese				0	<0.002	<0.002	<0.002	6	0.12 (0.02)	
Mercury				0	<0.0002	<0.0002	<0.0002	6	0.001	
Nitrate (as N) Dissolved				0	0.041	<0.010	0.180	25	10	
Nitrite (as N) Dissolved				0	<0.009	<0.005	0.010	25	1	
Selenium				0	0.0003	0.0002	0.0003	6	0.05	
Strontium				0	0.446	0.413	0.476	6	7.0	
Total Chlorine	1.79	1.69	1.91	4	1.72	1.26	2.23	49	>0.5 and <3.0	>1.0 and <2.4
Uranium				0	<0.0005	<0.0005	0.0005	6	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	

2.2.19 Thorncliff Reservoir

November 2024

Parameter	Monthly				YTD				Limits	
	Mean	Min	Max	Count	Mean	Min	Max	Count	*Approval or GCDWQ MAC, (AO or OG)	EPCOR
Secondary Inorganics (mg/L) * **										
Alkalinity Total				0	116	110	129	6		
Aluminum				0	0.085	0.027	0.194	6	2.9	0.1/0.2
Ammonia as NH3				0	0.20	0.15	0.26	23		
Beryllium				0	<0.0002	<0.0002	<0.0002	6		
Bromide Dissolved				0	<0.027	<0.010	<0.050	6		
Calcium				0	46.7	43.7	50.4	6		
Calcium Hardness				0	122	116	128	2		
Calcium Hardness Calculated				0	114	109	119	4		
Chloride Dissolved				0	6.8	6.0	8.1	6	(250)	
Cobalt				0	<0.0002	<0.0002	<0.0002	6		
Iron				0	<0.005	<0.005	<0.005	6	(0.3)	0.3
Lanthanum				0	<0.0010	<0.0010	<0.0010	6		
Lithium				0	0.0034	0.0030	0.0040	6		
Magnesium				0	13.8	12.4	14.7	6		
Molybdenum				0	0.0008	0.0006	0.0009	6		
Nickel				0	<0.0005	<0.0005	0.0005	6		
Ortho_P	0.92	0.90	0.96	8	0.89	0.66	0.96	58		
Phosphorus				0	0.98	0.93	1.01	6		
Potassium				0	0.82	0.70	1.00	6		
Silicon				0	1.89	1.60	2.11	6		
Silver				0	<0.0002	<0.0002	<0.0002	6		
Sodium				0	12.2	7.3	18.3	6	(200)	
Sulphate Dissolved				0	71.9	59.6	79.7	6	(500)	
Thallium				0	<0.0003	<0.0002	<0.0005	6		
Tin				0	<0.0005	<0.0005	<0.0005	6		
Titanium				0	<0.0005	<0.0005	<0.0005	6		
Total Hardness (mg/L CaCO3)				0	182	174	189	2		
Total Hardness Calculated				0	170	160	178	4		
Vanadium				0	<0.0005	<0.0005	<0.0005	6		
Zinc				0	<0.005	<0.005	<0.005	6	(5.0)	
Zirconium				0	<0.0010	<0.0010	<0.0010	6		

2.2.19 Thorncliff Reservoir

November 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	1.4	0.8	2.1	6		16
Bromoform				0	<0.6	<0.5	1.0	6		
Chloroform				0	20.7	10.9	31.1	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	1.7	0.8	2.3	19		
Total Volatile Organics (NonTHM)				0	2.5	<1.0	4.1	6		
Total Volatile Organics (Unknown)				0	1.2	1.2	1.2	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.

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

November 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	29.7	20.0	39.4	2		
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	13.5	9.7	17.3	2		
07-SR				0	13.6	10.7	16.4	2	16.0	10.7	20.9	3		
11-RI	11.6	11.6	11.6	1	11.6	11.6	11.6	1	11.6	11.6	11.6	1		
19-SR	13.5	13.5	13.5	1	26.9	13.5	40.3	2	26.9	13.5	40.3	2		
20-DE				0	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				0	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	11.3	11.3	11.3	1	19.3	8.6	37.0	6	19.3	8.6	37.0	6		
31-DE				0	20.8	13.0	33.5	3	20.8	13.0	33.5	3		
31-RI				0	25.8	15.8	34.0	4	25.6	15.8	34.0	5		
32-SR	11.2	11.2	11.2	1	17.5	11.2	29.4	3	17.5	11.2	29.4	3		
36-DE	15.5	15.5	15.5	1	15.5	15.5	15.5	1	15.5	15.5	15.5	1		
37-SR	16.2	16.2	16.2	1	25.3	16.2	34.3	2	25.3	16.2	34.3	2		
40-SR				0	19.2	9.1	32.2	6	18.6	9.1	32.2	7		
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				0	21.9	13.0	35.1	3	21.9	13.0	35.1	3		
		Total Count		6				51				57		

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

November 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
				0	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	30.5	19.8	41.1	2		
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	16.6	14.2	19.0	2		
07-SR				0	15.0	12.9	17.0	2	18.1	12.9	24.5	3		
11-RI	13.7	13.7	13.7	1	13.7	13.7	13.7	1	13.7	13.7	13.7	1		
19-SR	12.6	12.6	12.6	1	31.0	12.6	49.3	2	31.0	12.6	49.3	2		
20-DE				0	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				0	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	12.8	12.8	12.8	1	19.2	10.3	33.1	6	19.2	10.3	33.1	6		
31-DE				0	17.6	14.7	20.5	2	17.6	14.7	20.5	2		
31-RI				0	23.7	14.0	34.8	4	23.9	14.0	34.8	5		
32-SR	13.0	13.0	13.0	1	22.9	13.0	37.4	3	22.9	13.0	37.4	3		
36-DE	14.8	14.8	14.8	1	14.8	14.8	14.8	1	14.8	14.8	14.8	1		
37-SR	16.6	16.6	16.6	1	22.0	16.6	27.3	2	22.0	16.6	27.3	2		
40-SR				0	18.5	11.8	29.5	6	18.7	11.8	29.5	7		
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				0	26.0	12.6	49.6	3	26.0	12.6	49.6	3		
		Total Count		6				65				71		

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

November 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		
11-RI	<0.001	<0.001	<0.001	1	<0.001	<0.001	<0.001	1	<0.001	<0.001	<0.001	1		
20-DE				0	<0.003	<0.003	<0.003	1	<0.003	<0.003	<0.003	1		
21-DE				0	<0.005	<0.005	<0.005	1	<0.005	<0.005	<0.005	1		
21-SR				0	<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	<0.001	<0.001	<0.001	1	<0.003	<0.001	<0.005	3	<0.003	<0.001	<0.005	3		
31-DE				0	<0.006	<0.006	<0.006	1	<0.006	<0.006	<0.006	1		
31-RI				0	<0.005	<0.003	0.007	3	<0.005	<0.003	0.007	3		
37-SR	<0.002	<0.002	<0.002	1	<0.002	<0.002	<0.002	1	<0.002	<0.002	<0.002	1		
40-SR				0	<0.004	<0.002	<0.006	4	<0.003	<0.002	<0.006	5		
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	<0.002	<0.001	<0.002	3	<0.002	<0.001	<0.002	3		
		Total Count		3				33				36		

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

November 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	15.9	15.9	15.9	1	22.2	7.8	36.2	5	21.8	7.8	36.2	6		
Clareview Reservoir				0	24.1	15.4	36.9	6	24.1	15.4	36.9	6		
Discovery Park Reservoir				0	24.2	13.1	39.7	7	24.2	13.1	39.7	7		
Kaskitayo Reservoir				0	20.6	10.8	33.4	5	20.6	10.8	33.4	5		
Londonderry Reservoir	15.7	15.7	15.7	1	22.4	9.8	35.8	5	22.6	9.8	35.8	6		
Millwoods Reservoir	14.9	14.9	14.9	1	19.8	7.8	38.3	7	20.1	7.8	38.3	8		
North Jasper Place Reservoir				0	23.6	14.0	37.9	6	23.6	14.0	37.9	6		
Ormsby Reservoir	13.7	13.7	13.7	1	19.0	7.7	39.0	6	19.4	7.7	39.0	7		
Papaschase Reservoir 1	17.2	17.2	17.2	1	19.4	8.8	35.4	6	20.2	8.8	35.4	7		
Papaschase Reservoir 2				0	20.3	11.0	28.8	6	20.3	11.0	28.8	6		
Rosslyn Reservoir 1	15.7	15.7	15.7	1	22.1	10.0	35.7	5	22.6	10.0	35.7	6		
Rosslyn Reservoir 2				0	24.4	16.1	37.5	7	24.4	16.1	37.5	7		
Thorncliff Reservoir				0	22.3	12.2	32.9	6	22.3	12.2	32.9	6		
		Total Count		6				77				83		

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

November 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
				0	20.3	12.5	40.7	9	20.3	12.5	40.7	9		
		Total Count		0				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

November 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				0	<0.2	<0.2	<0.2	4	<0.2	<0.2	<0.2	4
Physical																
Colour (TCU)	3.8	2.7	5.2	29	3.8	2.6	5.7	30	8.8	2.7	43.8	330	8.9	2.6	43.6	334
Conductivity (uS/cm)	369	348	406	4	366	351	400	4	361	311	415	48	355	311	416	48
FPA-Intensity (N/A)	0.56	0.38	0.69	4	0.53	0.44	0.62	4	0.75	0.25	2.38	58	0.79	0.31	2.25	58
pH (N/A)	8.3	8.3	8.3	1	8.3	8.3	8.3	1	8.3	8.1	8.4	11	8.3	8.1	8.4	11
Total Dissolved Solids (mg/L)	215	215	215	1	218	218	218	1	216	186	292	11	208	184	240	11
Total Suspended Solids	<1.0	<1.0	<1.0	1	1.8	1.8	1.8	1	13.7	<1.0	53.7	11	25.7	<1.8	154.0	11
Turbidity (NTU)	2	1	5	29	6	1	72	30	9	1	367	330	12	1	257	334
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	11	<0.0004	<0.0002	<0.0005	11
Arsenic	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	1	0.0004	<0.0002	0.0011	11	0.0005	<0.0002	0.0022	11
Barium	0.058	0.058	0.058	1	0.059	0.059	0.059	1	0.074	0.058	0.125	11	0.079	0.057	0.180	11
Boron	0.008	0.008	0.008	1	0.008	0.008	0.008	1	0.011	0.008	0.018	11	0.012	0.008	0.022	11
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	<0.00002	8	<0.00002	<0.00002	<0.00002	8
Chromium	0.0002	0.0002	0.0002	1	0.0002	0.0002	0.0002	1	0.0011	<0.0002	0.0053	11	0.0016	<0.0002	0.0099	11
Copper	0.003	0.003	0.003	1	<0.002	<0.002	<0.002	1	<0.003	<0.002	0.005	11	<0.003	<0.002	0.006	11
Fluoride	0.11	0.10	0.11	4	0.11	0.10	0.13	4	0.11	0.08	0.15	48	0.11	0.08	0.13	48
Lead	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	1	0.0004	<0.0002	0.0013	11	0.0005	<0.0002	0.0027	11
Manganese	0.002	0.002	0.002	1	0.004	0.004	0.004	1	0.012	<0.002	0.050	11	0.018	0.003	0.080	11
Mercury	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	1	<0.0012	<0.0001	<0.0050	15	<0.0012	<0.0001	<0.0050	15
Nitrate (as N) Dissolved	0.05	0.04	0.08	4	0.05	0.03	0.08	4	0.05	<0.01	0.19	48	0.04	<0.01	0.18	48
Nitrite (as N) Dissolved	<0.010	<0.010	<0.010	4	<0.010	<0.010	<0.010	4	<0.010	<0.005	<0.010	48	<0.010	<0.005	<0.010	48
Selenium	0.0002	0.0002	0.0002	1	0.0003	0.0003	0.0003	1	0.0003	0.0002	0.0004	11	0.0003	<0.0002	0.0005	11
Total Chlorine	<0.03	<0.03	<0.03	1	<0.03	<0.03	<0.03	1	<0.03	<0.03	<0.03	11	<0.03	<0.03	<0.03	11
Uranium	<0.0005	<0.0005	<0.0005	1	<0.0005	<0.0005	<0.0005	1	<0.0006	<0.0005	0.0007	11	<0.0006	<0.0005	0.0008	11

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

November 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				0	<0.15	<0.05	<0.25	4	<0.15	<0.05	<0.25	4
Atrazine				0				0	<0.05	<0.05	<0.05	4	<0.05	<0.05	<0.05	4
Benzene	<0.5	<0.5	<0.5	29	<0.5	<0.5	<0.5	30	<0.5	<0.5	<0.5	330	<0.5	<0.5	<0.5	334
Benzo(a)pyrene				0				0	<0.005	<0.005	<0.005	4	<0.005	<0.005	<0.005	4
Bromoxynil				0				0	<0.15	<0.05	<0.25	4	<0.15	<0.05	<0.25	4
Carbon Tetrachloride	<0.5	<0.5	<0.5	29	<0.5	<0.5	<0.5	30	<0.5	<0.5	<1.0	313	<0.5	<0.5	<1.0	315
Chlorobenzene	<0.5	<0.5	<0.5	29	<0.5	<0.5	<0.5	30	<0.5	<0.5	<0.5	330	<0.5	<0.5	<0.5	334
Chlorpyrifos				0				0	<0.1	<0.1	<0.1	4	<0.1	<0.1	<0.1	4
Cyanazine				0				0	<0.1	<0.1	<0.1	4	<0.1	<0.1	<0.1	4
Diazinon				0				0	<0.025	<0.025	<0.025	4	<0.025	<0.025	<0.025	4
Dicamba				0				0	<0.3	<0.1	<0.5	4	<0.3	<0.1	<0.5	4
Dichlorobenzene (1,2)	<0.5	<0.5	<0.5	29	<0.5	<0.5	<0.5	30	<0.5	<0.5	<0.5	313	<0.5	<0.5	<0.5	315
Dichlorobenzene (1,4)	<0.5	<0.5	<0.5	29	<0.5	<0.5	<0.5	30	<0.5	<0.5	<0.5	313	<0.5	<0.5	<0.5	315
Dichloroethane (1,2)	<0.5	<0.5	<0.5	29	<0.5	<0.5	<0.5	30	<0.5	<0.5	<0.5	312	<0.5	<0.5	<0.5	314
Dichloroethylene (1,1)	<0.5	<0.5	<0.5	29	<0.5	<0.5	<0.5	30	<0.5	<0.5	<3.0	313	<0.5	<0.5	<3.0	315
Dichlorophenol (2,4)	<0.2	<0.2	<0.2	1	<0.2	<0.2	<0.2	1	<0.2	<0.2	<0.3	4	<0.2	<0.2	<0.3	4
Diclofop-methyl				0				0	<0.1	<0.1	<0.1	4	<0.1	<0.1	<0.1	4
Dimethoate	0.00	0.00	0.00	1	0.00	0.00	0.00	1	<0.04	<0.00	<0.05	5	<0.04	<0.00	<0.05	5
Diuron				0				0	<0.05	<0.05	<0.05	4	<0.05	<0.05	<0.05	4
Ethylbenzene	<0.5	<0.5	<0.5	29	<0.5	<0.5	<0.5	30	<0.5	<0.5	<0.5	330	<0.5	<0.5	<0.5	334
Glyphosate				0				0	<0.3	<0.2	<0.5	4	<0.3	<0.2	<0.5	4
Malathion				0				0	<0.025	<0.025	<0.025	4	<0.025	<0.025	<0.025	4
MCPA				0				0	<0.15	<0.05	<0.25	4	<0.15	<0.05	<0.25	4
Methylene Chloride	<0.5	<0.5	<0.5	29	<0.5	<0.5	<0.5	30	<0.5	<0.5	<0.5	313	<0.5	<0.5	<0.5	315
Metolachlor				0				0	<0.025	<0.025	<0.025	4	<0.025	<0.025	<0.025	4
Metribuzin				0				0	<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				0	<0.40000	<0.400000	<0.40	4	<0.40	<0.40	<0.40	4
Paraquat (as dichloride)				0				0	<1	<1	<1	3	<1	<1	<1	3
Pentachlorophenol	<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
Perfluorooctane sulfonic acid (PFOS)				0				0	<0.007	<0.002	<0.020	4	<0.007	<0.002	<0.020	4
Perfluorooctanoic acid (PFOA)				0				0	<0.007	<0.002	<0.020	4	<0.007	<0.002	<0.020	4
Phorate				0				0	<0.25	<0.25	<0.25	4	<0.25	<0.25	<0.25	4
Picloram				0				0	<0.3	<0.1	<0.5	4	<0.3	<0.1	<0.5	4
Simazine				0				0	<0.1	<0.1	<0.1	4	<0.1	<0.1	<0.1	4
Terbufos				0				0	<0.5	<0.5	<0.5	4	<0.5	<0.5	<0.5	4
Tetrachloroethylene	<0.5	<0.5	<0.5	29	<0.5	<0.5	<0.5	30	<0.5	<0.5	<0.5	330	<0.5	<0.5	<0.5	334
Toluene	<0.5	<0.5	<0.5	29	<0.5	<0.5	<0.5	30	<0.5	<0.5	1.7	330	<0.5	<0.5	2.9	334
Total Xylenes	<1.0	<1.0	<1.0	29	<1.0	<1.0	<1.0	30	<1.0	<1.0	<2.5	313	<1.0	<1.0	<2.5	315
Trichloroethylene	<0.5	<0.5	<0.5	29	<0.5	<0.5	<0.5	30	<0.5	<0.5	<0.5	330	<0.5	<0.5	<0.5	334

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

November 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) **																
Trifluralin				0				0	<0.1	<0.1	<0.1	4	<0.1	<0.1	<0.1	4
Trihalomethanes	<1.0	<1.0	<1.0	29	<1	<1	1	30	<1.0	<1.0	5.8	313	<1	<1	1	315
Vinyl Chloride	<1	<1	<1	29	<1	<1	<1	30	<1	<1	<1	312	<1	<1	<1	314
Radionuclides (Bq/L)																
Cesium-137	<0.2	<0.2	<0.2	1	<0.2	<0.2	<0.2	1	<0.2	<0.2	<0.2	2	<0.2	<0.1	<0.2	2
Gross Alpha	<0.10	<0.10	<0.10	1	<0.10	<0.10	<0.10	1	<0.12	<0.10	<0.14	2	<0.13	<0.10	<0.15	2
Gross Beta	<0.05	<0.05	<0.05	1	0.07	0.07	0.07	1	<0.06	<0.05	0.07	2	<0.07	<0.07	0.07	2
Iodine-131	<0.6	<0.6	<0.6	1	<0.6	<0.6	<0.6	1	<0.5	<0.3	<0.6	2	<0.4	<0.2	<0.6	2
Lead-210	<0.02	<0.02	<0.02	1	<0.02	<0.02	<0.02	1	<0.02	<0.02	<0.02	2	<0.02	<0.02	<0.02	2
Radium-226	0.008	0.008	0.008	1	<0.005	<0.005	<0.005	1	0.007	<0.005	0.008	2	<0.005	<0.005	<0.005	2
Strontium-90	<0.05	<0.05	<0.05	1	<0.05	<0.05	<0.05	1	<0.05	<0.05	<0.05	2	<0.05	<0.05	<0.05	2
Tritium	<40	<40	<40	1	<40	<40	<40	1	<40	<40	<40	2	<40	<40	<40	2

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

November 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	127	121	138	4	127	123	135	4	128	117	149	48	128	112	152	48
Alkalinity, PHP (mg CaCO3/L)	<3	<3	<3	1	<3	<3	<3	1	<3	<3	<3	11	<3	<3	<3	11
Aluminum	0.104	0.104	0.104	1	0.131	0.131	0.131	1	0.801	0.104	4.200	11	1.137	0.078	7.370	11
Ammonia as NH3	<0.05	<0.05	<0.05	9	<0.05	<0.05	<0.05	11	<0.05	<0.05	0.09	64	<0.05	<0.05	0.14	68
Beryllium	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	11	<0.0002	<0.0002	0.0002	11
Calcium Hardness	117	96	133	3	123	116	134	3	116	96	138	41	116	99	140	41
Calcium Hardness Calculated	115	115	115	1	116	116	116	1	118	113	127	7	121	114	147	7
Cobalt	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	1	0.0003	<0.0002	0.0008	11	0.0004	<0.0002	0.0018	11
Free Chlorine	<0.07	<0.07	<0.07	1	<0.07	<0.07	<0.07	1	<0.07	<0.07	<0.07	11	<0.07	<0.07	<0.07	11
Iron	0.086	0.086	0.086	1	0.117	0.117	0.117	1	0.532	0.048	2.110	11	0.819	0.075	4.850	11
Lanthanum	<0.001	<0.001	<0.001	1	<0.001	<0.001	<0.001	1	<0.001	<0.001	0.001	11	<0.001	<0.001	0.003	11
Lithium	0.0033	0.0033	0.0033	1	0.0034	0.0034	0.0034	1	0.0044	0.0033	0.0076	11	0.0046	0.0033	0.0104	11
Magnesium	13.7	13.7	13.7	1	13.9	13.9	13.9	1	14.0	13.3	15.4	11	14.3	13.2	16.6	11
Molybdenum	0.0005	0.0005	0.0005	1	0.0006	0.0006	0.0006	1	0.0008	0.0005	0.0010	11	0.0008	0.0006	0.0011	11
Nickel	<0.0005	<0.0005	<0.0005	1	0.0005	0.0005	0.0005	1	0.0012	<0.0005	0.0034	11	0.0015	<0.0005	0.0066	11
Ortho_P	<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
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	11	0.04	<0.02	0.15	11
Potassium	0.7	0.7	0.7	1	0.7	0.7	0.7	1	1.0	0.7	2.2	11	1.1	0.7	3.2	11
Silicon	1.6	1.6	1.6	1	1.71	1.71	1.71	1	3.4	1.4	11.2	11	4.20	1.63	18.10	11
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	8	<0.00002	<0.00002	<0.00002	8
Sodium	3.5	3.5	3.5	1	3.4	3.4	3.4	1	4.6	3.4	7.0	11	4.1	3.4	5.1	11
Strontium	0.450	0.450	0.450	1	0.450	0.450	0.450	1	0.451	0.419	0.499	11	0.452	0.418	0.504	11
Thallium	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	1	<0.0003	<0.0002	<0.0005	11	<0.0003	<0.0002	<0.0005	11
Tin	<0.0005	<0.0005	<0.0005	1	<0.0005	<0.0005	<0.0005	1	<0.0005	<0.0005	<0.0005	11	<0.0005	<0.0005	<0.0005	11
Titanium	0.0016	0.0016	0.0016	1	0.0041	0.0041	0.0041	1	0.0210	0.0013	0.1140	11	0.0318	0.0017	0.2010	11
Total Hardness (mg/L CaCO3)	187	178	198	3	185	178	196	3	177	153	211	41	177	155	203	41
Total Hardness Calculated	172	172	172	1	173	173	173	1	175	170	187	7	180	169	216	7
Total Kjeldahl Nitrogen	<0.1	<0.1	<0.1	1	<0.1	<0.1	<0.1	1	0.2	<0.1	0.4	10	0.2	<0.1	0.5	10
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	0.0021	<0.0005	0.0106	11	0.0030	<0.0005	0.0198	11
Zinc	<0.005	<0.005	<0.005	1	<0.005	<0.005	<0.005	1	<0.006	<0.005	0.011	11	<0.007	<0.005	0.020	11
Zirconium	<0.001	<0.001	<0.001	1	0.002	0.002	0.002	1	<0.001	<0.001	0.003	11	0.002	<0.001	0.005	11

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

November 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				0	<0.1	<0.1	<0.1	4	<0.1	<0.1	<0.1	4
Aldrin				0				0	<0.008	<0.008	<0.008	4	<0.008	<0.008	<0.008	4
Azinphos-methyl				0				0	<0.1	<0.1	<0.1	4	<0.1	<0.1	<0.1	4
Bromodichloromethane	<0.5	<0.5	<0.5	29	<0.5	<0.5	<0.5	30	<0.5	<0.5	<0.5	330	<0.5	<0.5	<0.5	334
Bromoform	<0.5	<0.5	<0.5	29	<0.5	<0.5	<0.5	30	<0.5	<0.5	<1.0	330	<0.5	<0.5	<1.0	334
Bromomethane				0				0	<0.5	<0.5	<0.5	17	<0.5	<0.5	<0.5	19
Carbaryl				0				0	<0.05	<0.05	<0.05	4	<0.05	<0.05	<0.05	4
Carbofuran				0				0	<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	29	<0.5	<0.5	<0.5	30	<0.5	<0.5	5.7	330	<0.5	<0.5	<0.5	334
Chloromethane				0				0	<5	<5	<5	17	<5	<5	<5	19
Dibromochloromethane	<0.5	<0.5	<0.5	29	<0.5	<0.5	<0.5	30	<0.5	<0.5	<0.5	330	<0.5	<0.5	<0.5	334
Dichlorobenzene (1,3)	<0.5	<0.5	<0.5	29	<0.5	<0.5	<0.5	30	<0.5	<0.5	<0.5	313	<0.5	<0.5	<0.5	315
Dichloroethylene, cis (1,2)	<0.5	<0.5	<0.5	29	<0.5	<0.5	0.6	30	<0.5	<0.5	<0.5	313	<0.5	<0.5	0.6	315
Dichloroethylene, trans (1,2)	<0.5	<0.5	<0.5	29	<0.5	<0.5	<0.5	30	<0.5	<0.5	<0.5	313	<0.5	<0.5	<0.5	315
Dichloropropane (1,2)	<0.5	<0.5	<0.5	29	<0.5	<0.5	<0.5	30	<0.5	<0.5	<0.5	313	<0.5	<0.5	<0.5	315
Dieldrin				0				0	<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	29	<0.5	<0.5	<0.5	30	<0.5	<0.5	<0.5	313	<0.5	<0.5	<0.5	315
MIBK	<1	<1	<1	29	<1	<1	<1	30	<1	<1	<1	313	<1	<1	<1	315
Parathion				0				0	<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				0	<0.007	<0.002	<0.020	4	<0.007	<0.002	<0.020	4
Perfluorobutanoic acid (PFBA)				0				0	<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				0	<0.671	<0.002	<2.000	6	<0.671	<0.002	<2.000	6
Perfluorohexane sulfonic acid (PFHxS)				0				0	<0.007	<0.002	<0.020	4	<0.007	<0.002	<0.020	4
Perfluorohexanoic acid (PFHxA)				0				0	<0.671	<0.002	<2.000	6	<0.671	<0.002	<2.000	6
Perfluorononanoic acid (PFNA)				0				0	<0.671	<0.002	<2.000	6	<0.671	<0.002	<2.000	6
Perfluoropentanoic acid (PFPeA)				0				0	<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				0	<0.025	<0.025	<0.025	3	<0.025	<0.025	<0.025	3
Styrene	<0.5	<0.5	<0.5	29	<0.5	<0.5	<0.5	30	<0.5	<0.5	<0.5	330	<0.5	<0.5	<0.5	334
Tetrachloroethane (1,1,2,2)	<0.5	<0.5	<0.5	29	<0.5	<0.5	<0.5	30	<0.5	<0.5	<1.0	313	<0.5	<0.5	<1.0	315
Total Organic Carbon	1.4	0.8	2.0	4	1.4	1.1	1.8	4	2.4	0.8	5.4	48	2.4	1.1	5.9	48
Total Volatile Organics (NonTHM)	2.7	1.4	4.5	29	2.9	1.7	4.8	30	2.2	<1.0	6.2	313	2.3	<1.0	6.1	315
Total Volatile Organics (Unknown)				0				0	<0.8	<0.5	2.1	23	<0.8	<0.5	2.1	31
Triallate				0				0	<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	29	<0.5	<0.5	<0.5	30	<0.5	<0.5	<0.5	313	<0.5	<0.5	<0.5	315

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

November 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) ***																
Trichloroethane (1,1,1)	<0.5	<0.5	<0.5	29	<0.5	<0.5	<0.5	30	<0.5	<0.5	<0.5	313	<0.5	<0.5	<0.5	315
Xylene (1,2)	<0.5	<0.5	<0.5	29	<0.5	<0.5	<0.5	30	<0.5	<0.5	<0.5	313	<0.5	<0.5	<0.5	315
Xylene (1,4)	<0.5	<0.5	<0.5	29	<0.5	<0.5	<0.5	30	<0.5	<0.5	0.6	313	<0.5	<0.5	0.9	315

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**
08-Nov-2024	7.42
14-Nov-2024	7.28
21-Nov-2024	7.86
28-Nov-2024	7.78

**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
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
Calcium Dissolved	0.1	mg/L
Calcium Hardness	2	mg/L CaCO3
Calcium Hardness Calculated	2	mg/L CaCO3
Carbon Tetrachloride	0.5	µg/L
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	PA/100mL
Colour	0.5	TCU
Conductivity	1	µS/cm
Copper	0.002	mg/L
Copper Dissolved	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	PA/100mL
Ethylbenzene	0.5	µg/L
Fluoride	0.05	mg/L
Free Chlorine	0.07	mg/L
Iron	0.005	mg/L
Lanthanum	0.001	mg/L
Lead	0.0002	mg/L
Lithium	0.0002	mg/L
Magnesium	0.1	mg/L

2.2.23 REPORTABLE DETECTION LIMITS

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

2.2.23 REPORTABLE DETECTION LIMITS

Analyte	RDL	Unit
Contract Lab Analysis		
2,3,4,6-Tetrachlorophenol	0.50	µg/L
2,4,5-T	NR	µg/L
2,4,6-Trichlorophenol	0.20	µg/L
2,4-D	NR	µg/L
2,4-Dichlorophenol	0.20	µg/L
a-chlordane	NR	µg/L
Alachlor	NR	µg/L
Aldicarb	NR	µg/L
Aldrin	NR	µg/L
Aldrin + Dieldrin	NR	µg/L
Ametryn	NR	µg/L
Atrazine	NR	µg/L
Atrazine + N-dealkylated metabolites	NR	µg/L
Atrazine Desethyl	NR	µg/L
Azinphos-methyl	NR	µg/L
Bendiocarb	NR	µg/L
Bromochloroacetic acid	1.00	ug/L
Bromoxynil	NR	µg/L
Carbaryl	NR	µg/L
Carbofuran	NR	µg/L
Cesium-137	0.2	Bq/L
Chlordane, total	NR	µg/L
Chlorpyrifos	NR	µg/L
Cryptosporidium	1.1	oocysts/100L
Cyanazine	NR	µg/L
DDD, total	NR	µg/L
DDE, 2,4'-	NR	µg/L
DDE, total	NR	µg/L
DDT + metabolites, total	NR	µg/L
DDT, total	NR	µg/L
Diazinon	NR	µg/L
Dibromoacetic acid	1.00	ug/L
Dicamba	NR	µg/L
Dichloroacetic acid	1.00	ug/L
Diclofop-methyl	NR	µg/L
Dieldrin	NR	µg/L
Dimethoate	0	µg/L
Dimethoate and Omethoate (as Dimethoate)	0	µg/L
Dinoseb	NR	µg/L
Diquat	NR	µg/L
Diuron	NR	µg/L
gamma-hexachlorocyclohexane	NR	µg/L
g-chlordane	NR	µg/L
Giardia	1.1	cysts/100L
Glyphosate	NR	µg/L
Gross Alpha	0.1	Bq/L
Gross Beta	0.09	Bq/L
Haloacetic Acids, total (HAA5)	5.00	ug/L
Heptachlor	NR	µg/L
Heptachlor + Heptachlor epoxide	NR	µg/L
Heptachlor Epoxide	NR	µg/L
Iodine-131	0.4	Bq/L
Lead-210	0.02	Bq/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