EDMONTON WATERWORKS
MONTHLY REPORT

July 2024

PROVIDING MORE EPCOR

TABLE OF CONTENTS

2.0 WATER QUALITY

2.1 HIGHLIGHTS

2.2 SUMMARY OF ANALYSES PERFORMED

1.1.1 Operations – Rossdale and E.L. Smith Plants

Plant Bypasses

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

In July, Rossdale Plant had one planned Bypass and no unplanned bypasses.

Date	Type	Bypass Description
July 25	Planned	1.25 hours bypass to perform flow test

In July, E.L. Smith Plant had one planned shutdown and two unplanned bypasses.

Date	Type	Bypass Description
July 7	Unplanned	0.4 hours bypass due to power outage
July 8	Unplanned	0.2 hours bypass for maintenance troubleshooting
July 11	Planned	3.4 hours shutdown 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 July, there were zero instances of chlorinated waste released at the outfall structure at Rossdale Water Treatment Plant.
- During the month of July, there were zero instances of chlorinated waste released at the outfall structure at E.L. Smith Water Treatment Plant.

Chemical Dosing Highlights

In July, 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 – July 2024

EPCOR Incident Number	Description	Date of Incident	AEPA Reference Number
ENV-20240706-796174-v1	On July 4, 2024 EPCOR Operations collected a sample from a residence bathtub. On July 6, 2024, the laboratory results indicated that the sample failed for total coliforms. AEPA was notified of these lab results on July 6, 2024. Following the failed sample, an EPCOR emergency response member was dispatched to site to collect four (4) resamples: 1. One (1) at the original source location; 2. One (1) from a secondary source at the original sample location; 3. One (1) from less than five (5) service locations upstream from the original sample location, and; 4. One (1) from less than five (5) services downstream from the original sample location. On July 8, 2024 at 13:27 hrs, the lab reported that all four (4) resamples passed.	July 4, 2024	429948
ENV-20240712-475530-v1	About 74 m^3 of potable chlorinated water at +/-1.5ppm was released to the surface due to a suspected leak within the water distribution system buried underground. The water drained to the nearby storm catch basin. Dechlorination pucks were placed in the path of water and the water entry point into the drainage infrastructure to dechlorinate the water The leak was isolated until the repair was completed.	July 12, 2024	430272
ENV-20240726-782763-v1	Estimated* 50m^3 of potable chlorinated water at 0.25 ppm was released to Blackmud Creek through Outfall 290. A main break occurred on the on ramp from Ellerslie Road east bound onto Highway 2 south bound (Calgary Trail). The potable chlorinated water from the break is suspected to have travelled through the stormwater system until it arrived at Outfall 290. Upon arriving to the site, the EPCOR Emergency Response Team verified the	July 21, 2024	431002

	location of the water infrastructure to control the leak. Dechlorination pucks were placed in the overland path of water, the water entry point into the drainage infrastructure and outfall 290 into the Blackmud Creek The leak was isolated by the operations of the water infrastructure on July 30, 2024 at 12:10 hrs. The water could not be isolated sooner due to system impacts and inoperable valves.The water main will remain out of service until repairs can be completed.		
ENV-20240801-126220-v1	On July 31st, EPCOR Operations collected a sample from Hydrant 4976 as part of QA check and to be analytically tested. The laboratory results indicated that the sample failed for total coliforms and E. coli. AEP was notified of these lab results on August 1, 2024. Following the failed sample, an EPCOR emergency response member was dispatched to site to collect four (4) resamples on August 1, 2024 that included one hydrant upstream and another downstream of Hydrant 4976. After Samples were collected the hydrant control valve on H4976 was closed as a precautionary measure. On August 3, 2024 at 11:20 hrs, the lab reported that 2 out of the 4 resamples passed. H4976 Right Port had a 2nd positive TC+ and a E. Coli positive. H4976 Left port had a 2nd TC+. Following the 2nd failed sample a super chlorination of the hydrant (H16943) occurred on August 3 and four (4) resamples were collected by EPCOR after 3 hours of the hydrant being super chlorinated. After samples were collected the hydrant control valve was closed as a precautionary measure. On August 5, 2024 at 11:50 hrs, the lab reported all resamples had passed.	July 31, 2024	431255 & 431354

1.1.3 Alberta Environment Operator Certifications

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

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

1.1.3 Alberta Environment Operator Certifications

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

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

1.1.3 Alberta Environment Operator Certifications

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

DISTRIBUTION SYSTEM (LEVEL IV FACILITY)

WATER DISTRIBUTION (WD) - NETWORK MAINTENANCE

Senior Manager, Maintenance and Construction

Manager, Distribution Maintenance

Manager, Dist. Maint Schedule

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

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

1.1.3 Alberta Environment Operator Certifications

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

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

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

1.1.3 Alberta Environment Operator Certifications

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

DISTRIBUTION SYSTEM (LEVEL IV FACILITY)

WATER DISTRIBUTION (WD) - FIELD OPERATIONS

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

1.1.3 Alberta Environment Operator Certifications

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

DISTRIBUTION SYSTEM (LEVEL IV FACILITY)

WATER DISTRIBUTION (WD) - CUSTOMER SERVICE

Senior Manager, Customer Service

Manager, Dispatch

Manager, Inspections and Customer Service

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

1.1.3 Alberta Environment Operator Certifications

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

DISTRIBUTION SYSTEM (LEVEL IV FACILITY)

WATER METERING (WD)

D. Cooper	**Manager, Metering Operations**	**WD I**
Employee Name	Title	Alberta Environment Certification Level
T. Seargeant	Foreman III	WD II
C. Robert	Meter Mechanic II	WD II
A. Hyshka	Meter Installer II	WD III
J. Lister	Meter Installer I	WD I
C. Neufeld	Meter Installer I	WD II
A. Lechelt	Meter Installer I	WD II
S. Williams	Meter Installer I	WD I
B. Mace	Meter Installer I	WD III
K. Santos	Meter Installer II	WD I

1.2.1 Raw Water Intake (ML)

July 2024

Day	Rossdale			E.L. Smith	Plants Combined Total
	Plant 1	Plant 2	Plant Total	Plant Total	
1	70	97	167	267	434
2	68	104	172	269	441
3	70	110	180	297	477
4	70	110	180	301	481
5	76	115	191	316	508
6	86	143	228	334	562
7	76	116	192	312	504
8	88	140	228	346	574
9	98	168	266	329	595
10	90	168	258	354	612
11	90	170	260	335	595
12	86	166	251	310	562
13	75	152	228	300	528
14	64	126	189	283	472
15	81	132	213	313	527
16	88	146	235	333	567
17	90	162	252	352	604
18	90	170	259	360	619
19	93	180	273	360	634
20	93	182	275	293	568
21	84	168	253	288	540
22	88	168	257	341	598
23	90	170	260	360	620
24	82	156	238	325	563
25	66	134	200	280	481
26	61	111	172	281	453
27	60	110	170	262	432
28	62	110	172	248	420
29	79	119	198	313	511
30	84	125	209	308	517
31	87	135	222	301	523
Monthly Total	2,486	4,362	6,848	9,674	16,521
Monthly Min	60	97	167	248	
Monthly Max	98	182	275	360	
Monthly Avg	80	141	221	312	533

NOTES: ' -- ' indicates plant offline

1.2.2 Treated Water Production (ML)

July 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	55	206	155	194	292	226	382	79.1
2	101	205	159	205	294	226	386	74.6
3	87	209	167	203	292	257	424	69.9
4	87	209	169	205	294	262	431	75.3
5	97	208	177	202	298	272	450	74.1
6	130	211	192	257	331	290	481	76.8
7	115	223	179	97	348	260	439	79.6
8	161	307	212	233	356	296	508	73.5
9	179	312	255	257	344	286	541	81.9
10	186	310	248	245	362	302	550	79.6
11	189	308	245	0.0	338	288	533	80.2
12	160	301	223	0.0	318	256	479	73.9
13	122	303	216	195	319	252	469	75.7
14	103	272	179	202	295	244	423	77.6
15	129	270	200	202	297	273	472	75.0
16	191	312	227	247	361	283	510	72.9
17	171	309	242	252	349	305	547	71.3
18	163	307	245	269	342	310	555	72.0
19	185	307	263	277	340	312	574	68.6
20	187	306	264	203	319	248	512	74.1
21	187	300	243	202	294	249	492	73.8
22	172	303	243	257	296	294	537	66.2
23	181	304	249	262	343	309	558	66.2
24	150	302	227	231	340	279	506	73.6
25	102	265	175	198	294	238	413	74.2
26	70	207	160	198	294	242	402	74.7
27	82	206	160	199	286	223	383	77.0
28	83	208	162	196	294	212	374	76.3
29	103	207	181	200	293	272	453	68.5
30	171	207	197	239	299	267	464	71.9
31	179	303	210	199	300	253	463	70.4
Monthly Tota			6,425			8,286	14,711	
Monthly Min	55			0.0				
Monthly Max		312			362			
Monthly Avg			207			267	475	

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

July 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	14	240	130	8.2	8.3	8.3	6.5	14.7	10.4	40	280	180	8.3	8.4	8.3	7.3	15.8	12.6
2	110	180	150	8.2	8.3	8.2	13.7	15.0	14.6	110	180	130	8.3	8.3	8.3	13.7	15.8	14.5
3	75	120	95	8.2	8.3	8.3	12.5	14.9	13.8	70	110	85	8.3	8.3	8.3	12.0	15.0	13.5
4	60	75	65	8.3	8.4	8.3	10.9	12.8	12.2	55	70	60	8.1	8.3	8.2	6.2	12.7	11.1
5	35	75	65	8.3	8.4	8.3	10.4	11.8	10.8	55	90	70	8.1	8.4	8.3	10.2	10.9	10.5
6	55	75	60	8.1	8.4	8.2	10.0	10.5	10.2	65	90	65	8.4	8.4	8.4	10.3	11.6	11.1
7	40	55	45	8.3	8.4	8.3	10.5	11.3	10.9	45	85	50	8.3	8.4	8.4	11.0	12.2	11.7
8	23	40	36	8.3	8.4	8.3	10.6	11.3	11.1	40	85	45	8.3	8.4	8.4	10.3	11.9	11.1
9	21	31	28	8.0	8.4	8.2	9.0	11.0	9.8	23	40	28	8.4	8.5	8.4	9.1	10.6	9.9
10	13	45	32	8.4	8.4	8.4	9.0	10.2	9.3	23	40	36	8.4	8.5	8.4	9.0	9.3	9.1
11	18	45	27	8.4	8.4	8.4	8.7	10.4	9.8	24	30	27	8.4	8.4	8.4	7.8	9.2	8.5
12	11	29	19	8.4	8.5	8.4	7.6	9.1	8.7	20	28	24	8.4	8.5	8.4	7.1	8.8	7.7
13	11	19	15	8.5	8.5	8.5	7.6	8.2	7.9	16	20	18	8.4	8.5	8.5	7.1	7.7	7.3
14	8.2	15	11	8.4	8.5	8.5	6.8	7.6	7.5	10	16	12	8.4	8.5	8.5	6.6	7.4	7.1
15	7.0	10	8.8	8.4	8.5	8.5	4.2	6.8	5.8	10	14	12	8.5	8.5	8.5	5.5	6.7	6.2
16	5.8	10	8.3	8.5	8.5	8.5	5.5	7.0	6.1	9.7	12	11	8.5	8.5	8.5	5.3	6.2	5.9
17	5.8	13	8.7	8.4	8.5	8.5	5.3	7.0	6.1	11	14	13	8.5	8.5	8.5	5.0	6.5	5.6
18	8.4	15	11	8.5	8.5	8.5	5.3	6.4	5.9	9.5	13	12	8.4	8.5	8.5	5.7	7.0	6.2
19	8.0	10	9.4	8.5	8.5	8.5	5.9	6.2	6.1	7.7	11	9.6	8.4	8.5	8.5	6.0	6.6	6.3
20	8.0	10	9.2	8.4	8.5	8.4	6.1	7.1	6.4	7.7	9.0	8.6	8.5	8.5	8.5	5.8	6.6	6.2
21	6.5	10	9.2	8.5	8.5	8.5	5.6	6.2	6.1	6.4	8.7	8.0	8.5	8.5	8.5	5.8	6.9	6.4
22	6.5	10	8.6	8.5	8.5	8.5	5.6	6.0	5.8	6.4	12	9.1	8.4	8.5	8.5	5.4	6.7	6.2
23	10	12	11	8.5	8.5	8.5	5.8	6.1	6.0	6.1	11	9.9	8.5	8.5	8.5	5.4	10.9	6.0
24	5.3	11	8.4	8.5	8.5	8.5	5.8	7.3	6.2	5.1	8.0	7.0	8.5	8.5	8.5	5.5	6.4	6.1
25	5.3	6.8	6.1	8.5	8.5	8.5	5.7	7.3	6.3	5.0	6.0	5.4	8.5	8.5	8.5	5.4	6.1	5.8
26	5.1	5.8	5.7	8.5	8.5	8.5	5.7	7.5	6.7	4.8	50	7.2	8.4	8.5	8.4	5.4	6.3	5.9
27	5.1	8.1	6.9	8.4	8.5	8.4	5.5	6.1	5.7	7.9	10	8.8	8.4	8.4	8.4	5.2	6.1	5.6
28	6.8	8.1	7.3	8.4	8.5	8.5	5.1	5.5	5.3	6.1	8.8	7.8	8.4	8.4	8.4	5.4	6.2	5.8
29	5.9	10	8.1	8.5	8.5	8.5	4.7	5.5	5.1	5.3	6.3	6.0	8.4	8.5	8.4	5.4	6.3	5.9
30	5.0	7.6	7.0	8.5	8.5	8.5	4.9	5.5	5.2	4.2	5.3	4.8	8.5	8.5	8.5	5.5	6.7	5.8
31	3.9	5.0	4.3	8.5	8.5	8.5	4.4	5.3	4.7	3.6	4.3	4.0	8.4	8.5	8.5	4.6	5.6	4.9
Monthly Min/Max/Avg	3.9	240	29	8.0	8.5	8.4	4.2	15.0	7.9	3.6	280	32	8.1	8.5	8.4	4.6	15.8	8.0

NOTES: ' -- ' indicates plant offline

1.2.4 Treated Water Quality Entering the Distribution System

July 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	0.03	0.06	0.04	2.16	2.26	2.22	7.7	7.8	7.8	0.66	0.67	0.66	186	0.4	0.05	0.06	0.06	1.98	2.09	2.02	7.7	7.9	7.8	0.74	0.77	0.76	186	1.0
2	0.04	0.06	0.05	2.11	2.26	2.18	7.7	7.7	7.7	0.64	0.66	0.65	182	0.7	0.05	0.06	0.05	2.03	2.08	2.04	7.9	7.9	7.9	0.74	0.78	0.76	180	1.2
3	0.04	0.07	0.05	2.11	2.21	2.16	7.6	7.7	7.7	0.64	0.65	0.65	185	0.7	0.06	0.06	0.06	2.03	2.16	2.09	7.9	7.9	7.9	0.65	0.68	0.67	183	1.2
4	0.03	0.06	0.04	2.16	2.21	2.19	7.7	7.7	7.7	0.64	0.65	0.65	179	0.5	0.06	0.06	0.06	2.08	2.14	2.11	7.9	7.9	7.9	0.79	0.80	0.79	181	1.2
5	0.03	0.06	0.04	2.16	2.26	2.20	7.7	7.8	7.8	0.65	0.67	0.66	186	0.4	0.06	0.06	0.06	2.05	2.17	2.12	7.9	8.0	8.0	0.70	0.80	0.77	181	1.0
6	0.03	0.06	0.04	2.11	2.26	2.20	7.7	7.8	7.8	0.66	0.69	0.68	185	0.6	0.06	0.06	0.06	2.08	2.17	2.12	7.9	7.9	7.9	0.67	0.71	0.69	185	1.3
7	0.03	0.06	0.04	2.11	2.26	2.20	7.7	7.7	7.7	0.66	0.67	0.66	185	0.6	0.06	0.06	0.06	2.03	2.12	2.09	7.9	7.9	7.9	0.67	0.70	0.69	181	1.2
8	0.03	0.06	0.04	2.11	2.26	2.19	7.6	7.7	7.7	0.66	0.68	0.67	177	0.8	0.06	0.07	0.06	2.02	2.09	2.06	7.5	7.9	7.8	0.67	0.67	0.67	185	1.2
9	0.02	0.05	0.04	2.16	2.26	2.22	7.6	7.7	7.7	0.67	0.68	0.68	183	0.8	0.06	0.06	0.06	1.98	2.11	2.03	7.7	7.8	7.7	0.64	0.69	0.68	184	1.1
10	0.02	0.05	0.03	2.11	2.22	2.18	7.7	7.8	7.7	0.68	0.70	0.69	185	0.7	0.06	0.06	0.06	2.08	2.18	2.13	7.7	7.7	7.7	0.68	0.70	0.69	182	1.1
11	0.02	0.05	0.03	2.11	2.26	2.20	7.7	7.8	7.7	0.68	0.70	0.69	182	0.7	0.06	0.06	0.06	2.08	2.18	2.10	7.6	7.7	7.7	0.70	0.71	0.71	182	1.0
12	0.02	0.04	0.03	2.16	2.26	2.21	7.7	7.8	7.7	0.68	0.69	0.68	181	0.6	0.06	0.10	0.06	2.03	2.15	2.09	7.7	7.7	7.7	0.70	0.71	0.71	178	0.9
13	0.02	0.04	0.03	2.11	2.22	2.18	7.7	7.8	7.7	0.67	0.68	0.68	185	0.7	0.06	0.06	0.06	2.07	2.12	2.09	7.7	7.7	7.7	0.70	0.72	0.71	182	1.0
14	0.02	0.05	0.03	2.11	2.26	2.22	7.7	7.8	7.8	0.67	0.67	0.67	186	0.7	0.06	0.06	0.06	2.06	2.12	2.09	7.7	7.7	7.7	0.71	0.71	0.71	185	0.9
15	0.02	0.04	0.03	2.16	2.28	2.28	7.8	7.8	7.8	0.67	0.68	0.68	184	0.6	0.06	0.06	0.06	2.08	2.13	2.12	7.7	7.8	7.7	0.71	0.73	0.72	188	0.9
16	0.03	0.04	0.03	2.26	2.36	2.31	7.8	7.8	7.8	0.67	0.68	0.68	186	0.5	0.06	0.06	0.06	2.09	2.14	2.12	7.6	7.8	7.7	0.71	0.73	0.72	186	0.9
17	0.03	0.06	0.04	2.22	2.36	2.30	7.8	7.8	7.8	0.67	0.68	0.68	186	0.5	0.06	0.06	0.06	2.09	2.19	2.14	7.7	7.7	7.7	0.72	0.74	0.73	184	0.8
18	0.04	0.07	0.05	2.11	2.32	2.26	7.8	7.8	7.8	0.68	0.69	0.69	185	0.4	0.06	0.06	0.06	2.08	2.13	2.11	7.7	7.7	7.7	0.73	0.74	0.73	181	0.8
19	0.03	0.06	0.04	2.16	2.26	2.21	7.8	7.8	7.8	0.68	0.70	0.69	182	0.4	0.06	0.06	0.06	2.09	2.13	2.12	7.7	7.7	7.7	0.73	0.74	0.74	181	1.0
20	0.03	0.06	0.04	2.16	2.26	2.22	7.8	7.8	7.8	0.66	0.68	0.67	186	0.6	0.06	0.06	0.06	2.03	2.12	2.08	7.7	7.7	7.7	0.71	0.73	0.72	184	0.9
21	0.03	0.05	0.03	2.16	2.26	2.23	7.8	7.8	7.8	0.66	0.67	0.67	185	0.5	0.06	0.06	0.06	2.03	2.11	2.07	7.7	7.7	7.7	0.71	0.73	0.72	180	0.8
22	0.03	0.06	0.04	2.16	2.26	2.21	7.8	7.8	7.8	0.67	0.68	0.67	185	0.5	0.06	0.06	0.06	2.08	2.17	2.11	7.7	7.7	7.7	0.72	0.74	0.73	181	1.0
23	0.03	0.06	0.04	2.06	2.26	2.22	7.8	7.8	7.8	0.66	0.67	0.67	182	0.5	0.06	0.07	0.06	2.08	2.16	2.11	7.7	7.7	7.7	0.73	0.75	0.74	182	1.2
24	0.03	0.06	0.04	2.22	2.32	2.27	7.8	7.8	7.8	0.65	0.67	0.66	178	0.6	0.06	0.06	0.06	2.05	2.13	2.09	7.7	7.7	7.7	0.73	0.74	0.73	178	1.0
25	0.03	0.05	0.04	2.18	2.33	2.26	7.8	7.9	7.9	0.65	0.67	0.66	182	0.5	0.06	0.06	0.06	2.03	2.18	2.10	7.7	7.7	7.7	0.72	0.73	0.73	181	1.0
26	0.03	0.05	0.04	2.16	2.36	2.24	7.9	7.9	7.9	0.64	0.66	0.65	185	0.5	0.06	0.06	0.06	2.12	2.21	2.16	7.6	7.7	7.7	0.71	0.73	0.72	181	0.8
27	0.03	0.04	0.03	2.21	2.36	2.32	7.9	7.9	7.9	0.63	0.64	0.63	175	0.6	0.06	0.06	0.06	2.19	2.31	2.25	7.6	7.6	7.6	0.71	0.72	0.71	175	0.7
28	0.03	0.05	0.04	2.21	2.36	2.30	7.9	7.9	7.9	0.63	0.64	0.63	174	0.4	0.06	0.06	0.06	2.17	2.24	2.21	7.6	7.7	7.6	0.71	0.72	0.72	178	0.9
29	0.03	0.06	0.04	2.16	2.23	2.23	7.9	7.9	7.9	0.64	0.67	0.66	178	0.3	0.06	0.06	0.06	2.09	2.22	2.17	7.6	7.7	7.7	0.72	0.75	0.74	181	0.9
30	0.03	0.05	0.04	2.16	2.36	2.29	7.9	7.9	7.9	0.66	0.68	0.67	185	0.5	0.06	0.06	0.06	2.09	2.13	2.11	7.7	7.7	7.7	0.75	0.75	0.75	185	1.0
31	0.03	0.04	0.04	2.21	2.32	2.26	7.9	7.9	7.9	0.66	0.67	0.66	185	0.4	0.06	0.06	0.06	2.03	2.17	2.10	7.7	7.7	7.7	0.75	0.76	0.75	181	0.7
Monthly Min/Max/ Avg	0.02	0.07	0.04	2.06	2.36	2.23	7.6	7.9	7.8	0.63	0.70	0.67	183	0.6	0.05	0.10	0.06	1.98	2.31	2.11	7.5	8.0	7.7	0.64	0.80	0.72	182	1.0

NOTES: ' -- ' indicates plant offline

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

July 2024

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

NOTE: ' -- ' indicates filter offline

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

July 2024

Filter	1			2			3			4			5			6			7			8			9		
Day	Min	Max	Avg	Min	Max	Avg	Min	Max	Avg	Min	Max	Avg	Min	Max	Avg	Min	Max	Avg	Min	Max	Avg	Min	Max	Avg	Min	Max	Avg
1	1	18	5	1	32	4	1	9	3	1	18	4	--	--	--	1	21	3	--	--	--	1	13	6	2	5	3
2	1	4	2	1	28	1	1	19	2	1	4	1	--	--	--	1	4	2	--	--	--	2	24	9	1	10	5
3	1	17	5	1	14	3	1	12	1	1	14	3	--	--	--	1	26	2	--	--	--	1	6	2	1	28	4
4	1	5	2	1	21	1	1	6	3	1	3	1	--	--	--	1	5	2	--	--	--	1	27	6	2	20	5
5	1	22	2	1	26	4	1	16	2	1	18	4	--	--	--	1	24	3	--	--	--	1	22	3	1	6	3
6	1	7	3	1	35	2	1	9	3	1	3	2	3	45	17	1	4	2	--	--	--	2	5	3	1	23	5
7	1	19	1	2	14	5	1	4	1	2	15	5	2	17	6	1	24	5	--	--	--	2	28	7	1	29	6
8	1	17	6	1	36	3	2	10	5	1	17	2	2	17	5	1	6	2	--	--	--	2	25	6	1	20	6
9	1	3	1	1	23	4	1	6	1	2	16	4	1	18	6	1	20	6	--	--	--	2	22	4	1	44	4
10	2	18	8	1	19	4	1	21	5	1	15	4	1	15	4	1	20	4	--	--	--	2	17	7	2	25	8
11	1	17	5	1	9	3	1	10	3	1	6	3	1	10	4	1	7	3	--	--	--	3	18	5	1	19	3
12	1	10	3	1	9	4	1	10	3	1	9	4	--	--	--	5	16	7	--	--	--	1	15	4	2	14	5
13	1	15	3	1	12	1	1	10	2	1	3	1	3	15	6	1	7	3	--	--	--	1	17	6	2	19	7
14	1	11	5	1	14	5	1	11	4	1	14	5	1	5	2	1	19	5	--	--	--	1	6	3	1	18	4
15	1	17	6	1	17	2	1	12	5	1	14	5	3	14	7	1	9	3	--	--	--	4	20	9	2	14	6
16	1	7	2	1	18	6	1	7	2	1	6	2	1	19	3	1	27	5	--	--	--	1	16	6	1	21	6
17	1	22	8	1	44	1	1	14	5	1	15	4	1	20	6	1	5	2	--	--	--	2	18	6	1	18	6
18	1	17	4	1	13	5	1	10	3	1	4	1	1	26	4	1	13	4	--	--	--	1	13	6	1	23	5
19	1	12	5	1	14	2	1	9	3	2	15	5	1	9	2	1	26	5	--	--	--	1	29	8	1	15	5
20	1	17	2	1	10	4	1	14	5	1	3	1	2	18	6	1	4	2	--	--	--	2	27	11	2	24	7
21	3	18	8	1	25	4	1	12	4	3	17	7	1	7	2	3	23	9	--	--	--	3	20	9	2	22	12
22	1	27	6	1	21	6	1	15	7	1	17	3	2	19	8	1	29	5	--	--	--	3	26	13	1	24	5
23	1	13	6	1	19	7	1	6	2	2	12	6	1	20	7	1	12	5	--	--	--	3	24	10	2	24	8
24	1	31	10	2	18	8	2	18	7	1	19	7	3	19	9	1	27	9	--	--	--	2	15	7	2	27	11
25	1	17	6	1	23	3	2	19	8	1	15	4	1	9	4	2	30	9	--	--	--	5	31	14	2	7	4
26	2	15	7	1	18	9	1	8	3	2	17	7	4	22	9	1	26	4	--	--	--	3	27	11	2	23	9
27	1	20	7	1	21	3	3	14	7	1	14	4	1	17	3	2	15	6	--	--	--	4	11	5	1	22	10
28	2	10	6	7	18	12	1	9	2	3	10	6	3	15	8	1	29	5	--	--	--	8	23	15	4	11	6
29	1	24	13	2	15	5	5	17	10	2	17	9	2	22	10	3	17	8	--	--	--	3	38	10	8	27	17
30	1	11	4	2	19	11	1	8	3	1	10	3	1	12	4	1	26	9	--	--	--	3	26	10	3	26	7
31	8	22	15	1	37	3	4	23	10	1	33	11	1	29	15	1	34	7	--	--	--	2	35	20	4	22	10
Monthly Min/Max/Avg	1	31	5	1	44	4	1	23	4	1	33	4	1	45	6	1	34	5	--	--	--	1	38	8	1	44	6

NOTES: ' -- ' indicates filter offline

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

July 2024

Filter	10			11			12			13			14			15			16			17			18		
Day	Min	Max	Avg	Min	Max	Avg	Min	Max	Avg	Min	Max	Avg	Min	Max	Avg	Min	Max	Avg	Min	Max	Avg	Min	Max	Avg	Min	Max	Avg
1	1	18	5	1	23	7	2	11	5	1	10	4	1	23	6	1	20	6	1	21	7	1	6	3	1	8	3
2	1	8	3	1	3	2	2	15	7	4	45	10	1	17	4	1	4	2	1	12	2	1	12	5	3	26	7
3	1	29	4	1	17	5	1	4	2	1	6	3	1	7	3	2	15	5	1	17	4	1	3	1	1	4	2
4	1	5	2	1	19	1	2	21	5	1	27	5	1	18	5	1	4	1	1	12	2	1	11	4	2	25	4
5	2	24	6	1	19	4	1	22	4	1	6	3	1	4	2	1	12	4	1	7	3	1	15	4	1	16	3
6	1	29	5	1	21	4	1	24	2	1	38	5	1	36	4	1	14	5	1	37	4	1	14	3	1	5	3
7	1	9	3	1	24	5	1	16	5	1	27	6	1	18	6	1	6	2	1	15	3	1	10	4	1	16	6
8	1	20	7	1	21	5	1	24	5	1	23	4	1	20	6	2	14	6	1	45	4	1	15	5	1	20	5
9	1	22	4	2	14	3	2	20	6	2	12	6	1	23	5	1	19	5	1	24	7	1	18	5	1	8	3
10	2	14	6	2	18	6	2	20	6	1	31	6	1	15	5	1	9	4	1	20	5	1	10	4	1	28	5
11	3	9	5	1	15	5	1	16	5	1	24	5	1	35	7	1	9	5	2	14	4	1	11	5	1	8	3
12	1	36	5	1	5	2	3	12	7	1	10	4	1	18	3	2	36	4	1	15	4	7	16	10	3	12	7
13	1	3	2	2	16	6	1	6	3	1	19	7	1	23	6	1	23	4	1	32	5	1	9	4	1	41	3
14	4	44	7	1	16	4	2	16	6	1	6	3	1	20	5	1	7	3	1	7	3	1	16	6	4	43	7
15	1	18	6	1	10	4	3	17	9	2	22	7	2	10	5	1	18	8	2	22	6	1	7	3	1	6	3
16	1	11	4	1	18	7	2	18	5	1	20	6	1	24	8	1	19	5	1	20	5	1	19	6	2	38	7
17	2	16	6	1	18	6	2	19	6	1	31	6	1	24	7	1	25	5	1	19	5	1	19	7	1	18	6
18	1	19	6	1	19	6	2	39	5	1	10	4	1	27	7	1	24	6	1	10	4	1	17	6	1	37	5
19	1	18	6	1	21	7	2	20	6	1	23	7	1	27	4	1	19	6	1	19	7	1	21	6	2	26	5
20	1	7	3	3	22	11	2	20	8	1	25	8	3	32	8	1	8	3	1	23	10	1	11	4	1	19	8
21	7	21	13	1	12	5	3	28	11	1	9	4	3	29	15	5	20	10	2	14	6	6	24	11	1	29	6
22	2	22	9	2	25	10	1	24	8	3	34	10	1	14	5	2	21	8	4	36	10	1	21	7	2	37	8
23	1	32	8	2	22	8	3	25	10	1	23	8	4	26	10	2	20	8	1	22	8	2	26	6	1	22	8
24	2	20	8	1	28	10	3	25	11	1	11	5	2	29	10	1	14	6	1	12	5	2	25	9	2	31	6
25	2	29	13	5	23	11	6	14	9	5	42	14	3	16	9	2	29	12	4	33	13	2	24	10	3	36	11
26	2	11	5	3	25	9	2	25	10	3	27	7	4	26	12	2	9	5	2	25	9	1	13	6	3	27	10
27	3	18	9	2	12	5	2	25	9	3	13	7	3	28	9	3	19	8	2	11	5	1	39	12	2	28	5
28	2	27	6	15	35	24	2	34	14	15	36	24	5	37	10	2	7	4	8	22	14	3	9	5	7	24	12
29	5	23	12	4	19	9	3	33	13	5	20	11	5	37	23	6	26	13	2	10	5	6	26	14	3	19	5
30	2	31	11	4	26	11	3	35	10	3	28	13	1	17	7	2	29	9	4	27	12	2	36	8	4	33	11
31	1	12	5	2	37	16	3	35	9	3	38	8	8	33	19	3	14	8	1	41	8	2	18	9	2	42	10
Monthly Min/Max/Avg	1	44	6	1	37	7	1	39	7	1	45	7	1	37	8	1	36	6	1	45	6	1	39	6	1	43	6

NOTES: ' -- ' indicates filter offline

1.2.8 Rossdale Filters 1 - 9 Turbidity (NTU)

July 2024

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

NOTES: ' -- ' indicates filter offline

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

July 2024

Filter	1			2			3			4			5			6			7			8			9		
Day	Min	Max	Avg	Min	Max	Avg	Min	Max	Avg	Min	Max	Avg	Min	Max	Avg	Min	Max	Avg	Min	Max	Avg	Min	Max	Avg	Min	Max	Avg
1	0.01	0.04	0.01	0.02	0.03	0.03	0.00	0.03	0.01	0.02	0.05	0.03	--	--	--	0.03	0.06	0.03	--	--	--	0.02	0.04	0.02	0.01	0.00	0.00
2	0.01	0.01	0.01	0.03	0.04	0.03	0.01	0.04	0.01	0.02	0.07	0.03	--	--	--	0.03	0.06	0.03	--	--	--	0.02	0.07	0.03	0.00	0.04	0.01
3	0.01	0.04	0.02	0.03	0.06	0.03	0.01	0.04	0.01	0.02	0.05	0.03	--	--	--	0.03	0.06	0.03	--	--	--	0.02	0.03	0.02	0.00	0.04	0.01
4	0.01	0.04	0.02	0.03	0.04	0.03	0.01	0.02	0.01	0.02	0.04	0.03	--	--	--	0.03	0.04	0.03	--	--	--	0.02	0.06	0.03	0.00	0.04	0.01
5	0.01	0.05	0.02	0.03	0.07	0.03	0.01	0.04	0.01	0.02	0.07	0.03	--	--	--	0.02	0.07	0.03	--	--	--	0.02	0.06	0.03	0.00	0.03	0.01
6	0.02	0.02	0.02	0.03	0.03	0.03	0.01	0.02	0.01	0.03	0.03	0.03	0.02	0.05	0.02	0.03	0.07	0.03	--	--	--	0.02	0.05	0.02	0.00	0.04	0.01
7	0.01	0.06	0.02	0.03	0.07	0.04	0.01	0.02	0.01	0.03	0.07	0.03	0.01	0.05	0.02	0.03	0.07	0.04	--	--	--	0.02	0.08	0.03	0.00	0.04	0.01
8	0.02	0.04	0.02	0.03	0.07	0.03	0.01	0.04	0.01	0.03	0.06	0.03	0.01	0.04	0.01	0.03	0.04	0.03	--	--	--	0.02	0.06	0.03	0.00	0.06	0.01
9	0.01	0.06	0.01	0.03	0.05	0.03	0.01	0.05	0.01	0.03	0.04	0.03	0.01	0.08	0.01	0.03	0.07	0.03	--	--	--	0.02	0.07	0.03	0.00	0.05	0.01
10	0.02	0.05	0.02	0.03	0.07	0.03	0.01	0.05	0.01	0.02	0.05	0.03	0.01	0.04	0.01	0.03	0.07	0.03	--	--	--	0.02	0.07	0.03	0.00	0.06	0.02
11	0.01	0.04	0.02	0.03	0.06	0.03	0.01	0.04	0.01	0.03	0.03	0.03	0.01	0.03	0.01	0.03	0.05	0.03	--	--	--	0.02	0.06	0.03	0.00	0.04	0.01
12	0.01	0.03	0.02	0.03	0.06	0.03	0.01	0.02	0.01	0.03	0.05	0.03	--	--	--	0.03	0.06	0.04	--	--	--	0.02	0.04	0.03	0.00	0.08	0.01
13	0.01	0.06	0.02	0.03	0.03	0.03	0.01	0.03	0.01	0.03	0.04	0.03	0.01	0.03	0.01	0.03	0.05	0.03	--	--	--	0.02	0.05	0.03	0.00	0.03	0.01
14	0.01	0.02	0.02	0.03	0.06	0.03	0.01	0.03	0.01	0.02	0.06	0.03	0.01	0.02	0.01	0.03	0.06	0.03	--	--	--	0.02	0.03	0.02	0.01	0.04	0.01
15	0.01	0.08	0.02	0.03	0.04	0.03	0.01	0.03	0.01	0.02	0.05	0.03	0.01	0.05	0.01	0.03	0.03	0.03	--	--	--	0.02	0.05	0.03	0.01	0.02	0.01
16	0.01	0.02	0.01	0.03	0.06	0.03	0.00	0.01	0.01	0.02	0.06	0.03	0.01	0.03	0.01	0.03	0.06	0.03	--	--	--	0.02	0.05	0.03	0.01	0.04	0.01
17	0.01	0.05	0.02	0.02	0.04	0.03	0.01	0.04	0.01	0.02	0.07	0.03	0.01	0.02	0.01	0.02	0.03	0.03	--	--	--	0.02	0.05	0.03	0.00	0.03	0.01
18	0.01	0.05	0.02	0.03	0.05	0.03	0.00	0.03	0.01	0.02	0.03	0.02	0.00	0.07	0.01	0.03	0.06	0.03	--	--	--	0.02	0.04	0.03	0.01	0.04	0.01
19	0.01	0.03	0.02	0.03	0.05	0.03	0.01	0.02	0.01	0.02	0.05	0.03	0.00	0.01	0.01	0.03	0.07	0.03	--	--	--	0.02	0.06	0.03	0.00	0.02	0.01
20	0.01	0.04	0.01	0.03	0.04	0.03	0.01	0.03	0.01	0.02	0.03	0.02	0.01	0.03	0.01	0.03	0.03	0.03	--	--	--	0.02	0.05	0.03	0.00	0.05	0.01
21	0.01	0.04	0.02	0.03	0.06	0.03	0.01	0.01	0.01	0.01	0.08	0.03	0.00	0.01	0.01	0.03	0.07	0.04	--	--	--	0.02	0.04	0.03	0.00	0.04	0.02
22	0.01	0.05	0.02	0.03	0.06	0.03	0.01	0.04	0.02	0.02	0.06	0.03	0.01	0.03	0.01	0.03	0.08	0.03	--	--	--	0.02	0.05	0.04	0.00	0.05	0.01
23	0.01	0.04	0.02	0.03	0.06	0.03	0.01	0.01	0.01	0.03	0.04	0.03	0.01	0.04	0.01	0.03	0.05	0.03	--	--	--	0.02	0.05	0.03	0.00	0.04	0.01
24	0.01	0.05	0.02	0.03	0.07	0.03	0.01	0.04	0.01	0.03	0.06	0.03	0.01	0.04	0.01	0.03	0.07	0.04	--	--	--	0.02	0.03	0.02	0.00	0.05	0.01
25	0.01	0.04	0.02	0.02	0.03	0.03	0.01	0.04	0.01	0.03	0.05	0.03	0.00	0.02	0.01	0.03	0.07	0.04	--	--	--	0.02	0.05	0.03	0.00	0.01	0.00
26	0.01	0.03	0.02	0.02	0.07	0.04	0.01	0.01	0.01	0.02	0.05	0.03	0.01	0.03	0.01	0.03	0.07	0.03	--	--	--	0.02	0.05	0.03	0.00	0.04	0.01
27	0.01	0.04	0.02	0.02	0.05	0.03	0.01	0.03	0.01	0.03	0.05	0.03	0.00	0.04	0.01	0.03	0.05	0.03	--	--	--	0.02	0.03	0.02	0.00	0.04	0.01
28	0.01	0.02	0.01	0.03	0.06	0.04	0.01	0.07	0.01	0.02	0.03	0.03	0.01	0.02	0.01	0.03	0.07	0.03	--	--	--	0.03	0.06	0.03	0.00	0.01	0.01
29	0.01	0.05	0.02	0.03	0.03	0.03	0.01	0.04	0.02	0.02	0.06	0.03	0.01	0.04	0.01	0.03	0.04	0.03	--	--	--	0.02	0.05	0.03	0.01	0.04	0.02
30	0.01	0.02	0.01	0.03	0.06	0.03	0.01	0.01	0.01	0.03	0.03	0.03	0.00	0.01	0.01	0.03	0.07	0.04	--	--	--	0.02	0.04	0.03	0.00	0.04	0.01
31	0.02	0.04	0.02	0.02	0.03	0.03	0.01	0.03	0.01	0.02	0.06	0.03	0.00	0.03	0.01	0.03	0.07	0.03	--	--	--	0.02	0.05	0.03	0.00	0.02	0.01
Monthly Min/Max/Avg	0.01	0.08	0.02	0.02	0.07	0.03	0.00	0.07	0.01	0.01	0.08	0.03	0.00	0.08	0.01	0.02	0.08	0.03	--	--	--	0.02	0.08	0.03	0.01	0.08	0.01

NOTES: ' -- ' indicates filter offline

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

July 2024

Filter	10			11			12			13			14			15			16			17			18		
Day	Min	Max	Avg	Min	Max	Avg	Min	Max	Avg	Min	Max	Avg	Min	Max	Avg	Min	Max	Avg	Min	Max	Avg	Min	Max	Avg	Min	Max	Avg
1	0.02	0.06	0.03	0.01	0.05	0.01	0.01	0.02	0.01	0.03	0.03	0.03	0.03	0.05	0.04	0.04	0.07	0.04	0.04	0.07	0.04	0.03	0.04	0.04	0.02	0.03	0.03
2	0.02	0.03	0.03	0.01	0.00	0.01	0.01	0.04	0.02	0.03	0.07	0.04	0.03	0.07	0.04	0.04	0.04	0.04	0.03	0.07	0.04	0.04	0.07	0.04	0.03	0.05	0.03
3	0.02	0.06	0.03	0.00	0.04	0.01	0.01	0.02	0.01	0.03	0.03	0.03	0.03	0.04	0.04	0.02	0.07	0.05	0.04	0.06	0.04	0.04	0.04	0.04	0.03	0.03	0.03
4	0.02	0.04	0.03	0.01	0.05	0.00	0.01	0.05	0.02	0.03	0.07	0.04	0.03	0.07	0.04	0.04	0.04	0.04	0.04	0.08	0.04	0.04	0.08	0.05	0.03	0.06	0.03
5	0.03	0.06	0.04	0.00	0.05	0.01	0.01	0.05	0.02	0.03	0.04	0.03	0.03	0.04	0.04	0.04	0.07	0.05	0.04	0.05	0.04	0.04	0.08	0.05	0.03	0.07	0.03
6	0.02	0.06	0.03	0.00	0.04	0.01	0.01	0.06	0.01	0.03	0.07	0.04	0.04	0.07	0.04	0.04	0.07	0.05	0.04	0.07	0.05	0.04	0.08	0.04	0.03	0.03	0.03
7	0.02	0.05	0.03	0.01	0.05	0.01	0.01	0.05	0.02	0.03	0.07	0.04	0.03	0.08	0.04	0.04	0.05	0.04	0.04	0.08	0.04	0.04	0.06	0.04	0.03	0.07	0.03
8	0.02	0.07	0.04	0.00	0.06	0.01	0.01	0.05	0.02	0.03	0.07	0.04	0.03	0.07	0.04	0.04	0.08	0.05	0.04	0.05	0.04	0.04	0.08	0.05	0.03	0.06	0.03
9	0.02	0.07	0.03	0.00	0.03	0.01	0.01	0.05	0.02	0.03	0.05	0.04	0.03	0.08	0.04	0.04	0.08	0.05	0.04	0.08	0.05	0.04	0.08	0.04	0.02	0.03	0.03
10	0.03	0.07	0.03	0.00	0.06	0.01	0.01	0.07	0.02	0.03	0.07	0.04	0.03	0.05	0.04	0.04	0.05	0.04	0.04	0.08	0.04	0.04	0.05	0.04	0.02	0.06	0.03
11	0.03	0.06	0.03	0.01	0.04	0.01	0.01	0.05	0.02	0.03	0.07	0.04	0.03	0.08	0.05	0.04	0.08	0.05	0.04	0.08	0.04	0.04	0.08	0.05	0.03	0.03	0.03
12	0.02	0.08	0.03	0.00	0.02	0.00	0.01	0.04	0.02	0.03	0.05	0.03	0.03	0.05	0.04	0.04	0.07	0.05	0.04	0.08	0.04	0.05	0.07	0.06	0.03	0.08	0.03
13	0.02	0.03	0.02	0.01	0.07	0.01	0.01	0.03	0.01	0.03	0.07	0.04	0.03	0.08	0.04	0.04	0.07	0.04	0.03	0.08	0.04	0.04	0.05	0.04	0.03	0.03	0.03
14	0.03	0.05	0.04	0.00	0.04	0.01	0.01	0.05	0.02	0.03	0.04	0.03	0.03	0.07	0.04	0.04	0.05	0.04	0.03	0.04	0.04	0.04	0.07	0.05	0.03	0.06	0.04
15	0.02	0.05	0.03	0.01	0.05	0.01	0.01	0.04	0.02	0.03	0.07	0.04	0.03	0.04	0.04	0.04	0.08	0.05	0.04	0.08	0.04	0.04	0.05	0.04	0.02	0.04	0.03
16	0.02	0.08	0.03	0.01	0.05	0.01	0.01	0.04	0.02	0.03	0.07	0.04	0.03	0.07	0.04	0.04	0.08	0.04	0.03	0.07	0.04	0.04	0.08	0.04	0.02	0.06	0.03
17	0.02	0.05	0.03	0.01	0.07	0.01	0.01	0.04	0.01	0.03	0.07	0.04	0.03	0.07	0.04	0.04	0.07	0.04	0.03	0.07	0.04	0.04	0.08	0.05	0.02	0.06	0.03
18	0.02	0.07	0.03	0.01	0.05	0.01	0.01	0.06	0.02	0.03	0.04	0.03	0.03	0.07	0.04	0.04	0.08	0.05	0.03	0.05	0.04	0.04	0.08	0.04	0.02	0.06	0.03
19	0.02	0.07	0.03	0.00	0.08	0.01	0.01	0.05	0.02	0.03	0.07	0.04	0.03	0.07	0.04	0.04	0.08	0.05	0.03	0.08	0.05	0.04	0.08	0.04	0.02	0.03	0.03
20	0.02	0.06	0.03	0.00	0.04	0.02	0.01	0.04	0.02	0.03	0.07	0.04	0.03	0.07	0.04	0.04	0.04	0.04	0.04	0.08	0.05	0.04	0.05	0.04	0.02	0.08	0.03
21	0.03	0.07	0.04	0.00	0.03	0.01	0.01	0.05	0.03	0.03	0.04	0.03	0.03	0.08	0.05	0.04	0.08	0.05	0.04	0.05	0.04	0.04	0.08	0.05	0.03	0.07	0.03
22	0.03	0.07	0.04	0.00	0.06	0.02	0.01	0.06	0.02	0.03	0.08	0.04	0.03	0.04	0.04	0.04	0.08	0.05	0.04	0.08	0.05	0.04	0.08	0.05	0.03	0.03	0.03
23	0.02	0.06	0.03	0.00	0.06	0.01	0.01	0.05	0.02	0.03	0.07	0.04	0.04	0.08	0.05	0.04	0.08	0.05	0.04	0.08	0.05	0.04	0.08	0.04	0.03	0.06	0.03
24	0.03	0.04	0.03	0.00	0.04	0.01	0.01	0.06	0.02	0.03	0.04	0.03	0.03	0.08	0.04	0.04	0.05	0.04	0.03	0.05	0.04	0.04	0.07	0.05	0.03	0.06	0.03
25	0.03	0.08	0.04	0.00	0.04	0.01	0.01	0.02	0.02	0.04	0.07	0.04	0.03	0.04	0.04	0.04	0.08	0.05	0.04	0.08	0.05	0.04	0.08	0.05	0.03	0.05	0.03
26	0.03	0.04	0.03	0.00	0.05	0.01	0.01	0.05	0.02	0.03	0.07	0.04	0.04	0.08	0.05	0.04	0.05	0.04	0.04	0.08	0.05	0.04	0.05	0.04	0.03	0.06	0.04
27	0.03	0.06	0.03	0.00	0.04	0.01	0.01	0.04	0.02	0.03	0.04	0.04	0.03	0.08	0.04	0.04	0.07	0.05	0.04	0.05	0.04	0.04	0.08	0.05	0.03	0.03	0.03
28	0.02	0.06	0.03	0.02	0.06	0.03	0.01	0.05	0.02	0.04	0.07	0.05	0.03	0.05	0.04	0.04	0.04	0.04	0.04	0.08	0.05	0.04	0.04	0.04	0.03	0.06	0.03
29	0.03	0.05	0.03	0.00	0.03	0.01	0.01	0.05	0.02	0.03	0.04	0.04	0.03	0.07	0.05	0.04	0.08	0.05	0.04	0.04	0.04	0.04	0.08	0.05	0.03	0.03	0.03
30	0.02	0.06	0.03	0.01	0.04	0.01	0.01	0.04	0.02	0.03	0.07	0.04	0.03	0.04	0.04	0.04	0.08	0.05	0.04	0.07	0.05	0.04	0.08	0.04	0.03	0.06	0.03
31	0.02	0.03	0.03	0.01	0.08	0.02	0.01	0.06	0.01	0.03	0.07	0.03	0.04	0.08	0.05	0.04	0.05	0.04	0.03	0.07	0.04	0.04	0.05	0.04	0.02	0.05	0.03
Monthly Min/Max/Avg	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	0.02	0.08	0.04	0.03	0.08	0.04	0.03	0.08	0.04	0.02	0.08	0.03

NOTES: ' -- ' indicates filter offline

1.2.11 Combined Filter Effluent Water Quality

July 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	3	6	4	0.05	0.06	0.06	3	8	5	0.02	0.03	0.02
2	1	16	2	0.05	0.08	0.06	2	7	3	0.02	0.03	0.02
3	1	7	1	0.05	0.06	0.05	2	6	3	0.02	0.03	0.03
4	1	4	2	0.05	0.07	0.06	2	5	3	0.02	0.03	0.03
5	2	14	3	0.05	0.08	0.06	2	6	3	0.02	0.03	0.03
6	2	4	3	0.05	0.07	0.06	2	7	4	0.03	0.03	0.03
7	2	4	3	0.05	0.07	0.05	3	7	4	0.03	0.03	0.03
8	1	9	3	0.05	0.07	0.06	3	7	5	0.03	0.03	0.03
9	1	8	2	0.05	0.07	0.06	3	9	4	0.02	0.03	0.03
10	2	11	2	0.05	0.06	0.06	4	7	5	0.03	0.03	0.03
11	1	4	2	0.03	0.06	0.06	1	7	4	0.01	0.05	0.03
12	1	3	1	0.05	0.07	0.06	1	13	4	0.01	0.04	0.03
13	1	9	2	0.05	0.08	0.06	3	6	4	0.02	0.03	0.03
14	2	4	3	0.03	0.07	0.06	3	7	4	0.02	0.03	0.03
15	2	6	3	0.05	0.06	0.06	4	9	5	0.02	0.03	0.03
16	2	5	3	0.05	0.07	0.06	4	7	5	0.02	0.03	0.03
17	2	4	2	0.05	0.06	0.06	4	9	5	0.02	0.03	0.03
18	2	6	3	0.06	0.07	0.06	4	8	5	0.02	0.03	0.03
19	2	10	3	0.05	0.07	0.06	4	8	5	0.02	0.03	0.03
20	2	4	3	0.05	0.08	0.06	4	9	6	0.02	0.03	0.03
21	1	4	2	0.05	0.07	0.06	5	11	8	0.02	0.03	0.03
22	2	12	5	0.06	0.07	0.06	6	10	7	0.03	0.03	0.03
23	2	7	3	0.06	0.10	0.06	6	10	7	0.03	0.03	0.03
24	2	6	3	0.06	0.09	0.06	6	11	8	0.02	0.03	0.03
25	3	11	4	0.05	0.08	0.06	7	12	9	0.02	0.04	0.03
26	3	11	4	0.05	0.07	0.06	6	12	8	0.02	0.03	0.03
27	3	6	4	0.01	0.06	0.06	5	9	7	0.02	0.03	0.03
28	3	7	4	0.05	0.06	0.05	7	13	9	0.02	0.03	0.03
29	3	18	5	0.05	0.07	0.06	8	13	11	0.03	0.03	0.03
30	6	10	7	0.06	0.06	0.06	7	12	9	0.02	0.03	0.03
31	4	8	5	0.06	0.10	0.06	7	16	10	0.02	0.03	0.03
Monthly Min/Max/Avg	1	18	3	0.01	0.10	0.06	1	16	6	0.01	0.05	0.03

NOTES: ' -- ' indicates plant offline

1.2.12 Rossdale UV Disinfection - Filters 1 - 3

July 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	34.9	36.0	35.6	29.0	31.7	29.9	34.9	36.5	35.6	29.1	34.0	30.4	--	--	--	--	--	--	93.5	94.6	94.2
2	34.9	36.0	35.5	25.9	29.7	27.3	34.6	36.1	35.5	25.7	33.9	30.0	34.5	36.7	35.5	27.3	32.7	29.3	93.0	93.8	93.2
3	35.1	36.7	35.6	23.9	26.6	0.8	34.8	36.3	35.5	26.4	28.3	27.4	34.7	36.5	35.5	27.5	29.5	28.5	92.5	93.2	92.9
4	34.4	36.0	35.5	24.7	29.5	13.0	35.0	35.8	36.2	26.2	27.1	0.9	34.6	35.9	35.5	12.0	28.2	15.6	92.9	93.4	93.1
5	34.9	36.2	35.5	27.2	31.1	28.5	34.9	36.2	35.5	29.5	33.8	13.2	34.4	36.8	35.5	26.6	31.5	9.6	92.7	92.9	92.8
6	34.8	36.5	35.5	25.0	33.0	21.7	34.8	36.1	35.5	26.0	35.6	31.7	34.1	36.6	35.5	27.9	34.0	30.1	92.5	92.8	92.7
7	--	--	--	--	--	--	34.7	36.3	35.5	30.0	35.8	32.6	34.2	36.6	35.5	28.1	34.6	30.4	91.8	92.7	92.3
8	34.7	36.0	35.5	32.0	33.7	15.0	34.8	36.2	35.5	28.6	35.7	13.7	34.6	47.7	35.5	15.7	33.6	19.4	92.0	93.0	92.4
9	34.5	36.0	35.5	29.1	32.7	31.4	34.8	36.2	35.5	31.7	34.4	32.9	34.2	36.7	35.5	29.4	32.9	31.3	92.6	93.5	93.1
10	34.7	35.9	35.6	28.7	37.6	25.1	34.8	36.2	35.5	29.7	33.0	31.3	34.2	36.6	35.5	28.9	33.9	31.5	92.6	93.8	93.6
11	34.6	36.5	35.5	29.5	35.9	33.5	34.6	51.6	35.5	15.2	34.8	22.2	34.1	51.0	35.5	15.2	30.6	25.5	92.9	94.2	93.5
12	34.8	36.1	35.5	26.6	29.8	28.5	34.7	36.3	35.5	29.8	32.5	31.3	34.7	36.2	35.5	22.9	28.7	14.0	93.9	94.2	94.0
13	34.7	36.0	35.6	35.8	28.0	25.4	34.8	36.5	35.5	25.0	31.3	29.6	34.2	41.2	35.6	15.9	27.9	26.2	93.3	94.4	93.9
14	34.6	35.9	35.5	28.8	32.3	3.6	35.1	42.2	36.8	20.2	27.9	22.5	34.5	37.8	35.6	19.4	28.5	24.3	93.5	94.1	93.9
15	34.7	36.4	35.6	27.0	32.7	30.4	34.8	36.2	35.5	33.5	35.1	19.4	34.7	36.2	35.4	12.6	28.2	12.7	93.5	94.4	94.1
16	34.7	36.0	35.5	25.5	32.1	28.3	34.8	36.3	35.7	29.1	34.6	30.6	34.2	36.4	35.5	23.2	28.6	16.1	94.1	94.8	94.4
17	34.7	36.2	35.6	25.6	29.1	27.6	34.9	37.3	35.7	27.8	32.0	30.2	34.0	36.8	35.5	26.3	34.7	31.5	94.5	95.1	94.8
18	34.6	36.4	35.5	24.9	37.5	23.8	34.8	36.6	35.6	25.7	38.0	25.8	34.1	36.7	35.5	27.1	33.2	30.6	94.8	95.3	94.9
19	34.7	36.2	35.6	31.0	34.7	33.4	34.7	36.3	35.5	33.0	37.2	35.3	33.6	36.8	35.5	24.9	33.2	26.2	93.7	94.8	94.4
20	34.7	36.2	35.5	27.5	31.7	29.7	34.2	36.4	35.6	29.3	34.4	32.3	34.4	36.2	35.6	11.7	35.0	32.4	93.7	94.8	94.4
21	34.8	36.7	35.6	24.0	30.9	15.7	35.1	36.6	35.6	28.3	32.5	30.7	34.6	36.2	35.5	31.2	34.0	32.7	94.0	94.8	94.5
22	34.8	36.3	35.5	24.7	33.8	31.9	34.8	37.2	35.5	24.5	35.5	21.0	33.9	42.4	35.5	20.6	31.7	26.4	93.7	94.7	94.4
23	34.8	36.1	35.6	29.8	35.5	32.3	34.7	36.2	35.5	31.5	35.1	33.2	34.8	36.3	35.5	31.0	33.5	15.2	93.7	95.0	94.6
24	34.9	35.6	35.6	28.1	30.4	13.4	35.0	36.4	35.7	27.4	32.3	30.3	34.4	36.4	35.5	27.9	32.8	30.8	94.4	94.8	94.6
25	34.2	35.7	35.6	26.2	34.0	25.1	35.0	41.0	39.5	22.8	28.4	17.0	34.2	35.6	35.6	26.0	29.4	18.3	94.2	95.1	94.9
26	34.7	36.1	35.6	22.4	28.5	25.6	35.0	39.1	36.1	22.7	29.8	26.3	34.7	36.2	35.6	22.6	23.6	4.7	93.6	94.5	94.2
27	34.9	36.3	36.7	21.0	26.8	1.1	35.3	37.8	36.1	25.2	28.7	26.9	34.6	37.1	35.6	20.9	28.7	25.3	94.4	94.9	94.6
28	34.9	35.8	35.7	28.6	29.8	10.4	36.7	40.6	38.4	24.9	26.5	11.4	34.6	36.8	35.6	24.7	30.0	26.2	94.8	95.1	94.9
29	--	--	--	--	--	--	35.0	36.2	35.6	30.0	34.9	20.2	34.1	42.8	35.6	14.2	28.8	23.7	94.6	95.0	94.9
30	--	--	--	--	--	--	35.2	38.7	36.2	25.1	31.9	29.4	34.6	36.6	35.6	22.9	31.6	26.9	94.5	94.9	94.7
31	34.2	36.3	35.6	24.2	33.4	29.5	35.1	38.3	35.8	24.4	35.1	12.6	33.6	36.7	35.6	24.1	30.9	28.0	94.7	95.4	94.9
Monthly Total						642.1						782.1						723.6			
Monthly Min/Max/ Avg	34.2	36.7	35.6	21.0	37.6		34.2	51.6	35.9	15.2	38.0		33.6	51.0	35.5	11.7	35.0		91.8	95.4	94.0

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

July 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	34.6	37.5	35.8	24.1	26.8	24.8	35.4	36.2	35.7	21.3	22.6	1.3	34.9	36.3	35.5	29.7	32.1	30.6	93.5	94.6	94.2
2	35.0	36.0	35.7	23.3	24.6	1.1	35.2	37.2	35.6	25.5	29.0	7.3	35.0	37.1	35.5	20.6	30.2	21.2	93.0	93.8	93.2
3	35.0	36.8	35.7	26.5	28.0	26.3	34.4	36.3	35.6	26.7	28.7	27.7	35.1	35.8	35.5	26.7	27.2	0.1	92.5	93.2	92.9
4	34.8	36.7	35.7	25.6	27.1	26.5	34.9	36.1	35.6	25.4	27.0	26.2	34.8	36.1	35.5	26.2	31.7	30.8	92.9	93.4	93.1
5	34.9	36.8	35.7	22.3	27.7	25.5	35.1	37.7	35.6	18.9	26.2	14.9	34.9	36.1	35.5	24.7	32.7	29.7	92.7	92.9	92.8
6	35.1	36.9	36.0	22.2	27.7	4.8	35.0	36.0	35.6	24.5	33.7	13.5	34.9	36.2	35.5	24.3	32.5	20.2	92.5	92.8	92.7
7	35.1	36.0	35.4	27.7	28.2	0.2	34.9	36.2	35.6	27.8	34.4	31.2	34.8	36.1	35.5	27.3	35.1	18.6	91.8	92.7	92.3
8	34.8	36.1	35.5	28.1	32.6	31.7	34.8	36.2	35.6	25.8	29.3	27.5	35.0	36.1	35.5	29.6	35.3	33.5	92.0	93.0	92.4
9	34.7	36.1	35.5	30.3	33.9	31.5	34.9	36.1	35.6	24.5	31.8	18.6	34.9	36.1	35.5	28.1	34.3	32.5	92.6	93.5	93.1
10	34.8	36.5	35.6	28.3	31.0	25.4	34.9	36.3	35.6	30.5	32.5	31.5	34.8	36.4	35.5	25.9	32.5	20.6	92.6	93.8	93.6
11	34.8	36.7	35.6	27.8	36.5	20.2	34.8	36.2	35.6	26.7	30.8	29.9	34.7	36.1	35.5	27.6	36.4	30.8	92.9	94.2	93.5
12	34.9	37.0	35.7	28.1	30.7	29.6	35.0	43.9	35.6	17.7	26.9	21.7	34.7	36.1	35.5	23.7	32.8	28.5	93.9	94.2	94.0
13	35.0	36.9	35.7	23.4	29.7	28.0	35.0	36.1	35.6	23.9	30.9	14.9	34.9	47.7	35.5	24.0	31.2	22.3	93.3	94.4	93.9
14	34.9	37.8	35.7	21.6	25.2	12.6	34.9	36.3	35.6	24.9	28.4	26.3	35.0	36.3	35.5	23.2	28.4	13.4	93.5	94.1	93.9
15	34.8	36.8	35.6	23.1	32.5	25.2	35.1	36.2	35.6	24.8	27.6	10.7	34.8	36.1	35.6	26.3	31.5	30.1	93.5	94.4	94.1
16	34.9	36.8	35.7	27.9	32.2	30.0	35.0	36.1	35.6	27.6	31.4	27.4	35.1	36.0	35.6	27.3	32.6	30.7	94.1	94.8	94.4
17	34.8	36.7	35.7	26.6	30.6	28.7	34.1	36.3	35.6	27.9	30.7	29.5	35.2	37.6	35.6	19.6	31.2	20.5	94.5	95.1	94.8
18	34.6	36.7	35.6	27.0	36.7	27.2	34.5	36.9	35.6	25.6	29.5	27.4	34.9	36.0	35.6	27.1	33.0	27.5	94.8	95.3	94.9
19	34.7	36.1	35.5	31.6	35.0	33.8	34.8	55.1	35.6	12.6	30.9	24.5	34.9	36.2	35.6	25.9	31.1	28.5	93.7	94.8	94.4
20	34.8	36.8	35.7	27.8	32.3	30.5	34.2	36.5	35.6	28.6	32.0	30.0	35.0	44.8	35.6	15.4	33.5	25.3	93.7	94.8	94.4
21	34.9	44.9	35.7	17.6	31.1	19.6	34.6	36.2	35.6	28.0	30.9	29.6	35.1	36.0	35.6	29.4	35.4	11.0	94.0	94.8	94.5
22	34.0	37.1	35.6	23.1	36.1	31.3	35.0	36.3	35.6	24.5	32.5	17.3	34.9	36.0	35.6	27.1	36.8	32.1	93.7	94.7	94.4
23	34.8	36.6	35.6	30.9	36.1	33.0	34.9	36.3	35.6	29.4	32.5	30.6	35.0	36.3	35.6	28.4	36.9	32.6	93.7	95.0	94.6
24	34.8	35.7	35.7	25.7	31.7	26.7	34.2	36.2	35.6	26.1	31.9	29.3	33.8	55.8	35.6	13.6	34.3	15.4	94.4	94.8	94.6
25	35.0	35.9	35.8	25.0	33.5	20.8	34.4	35.5	35.7	25.9	28.0	16.8	35.1	46.1	35.6	15.9	36.1	30.7	94.2	95.1	94.9
26	34.7	36.8	35.7	24.5	27.2	25.4	35.0	36.9	35.6	23.3	28.4	25.7	35.2	54.9	35.6	25.6	30.5	16.8	93.6	94.5	94.2
27	35.0	39.9	35.7	21.3	26.1	13.7	35.0	36.7	35.6	24.0	26.7	25.1	--	--	--	--	--	--	94.4	94.9	94.6
28	35.0	36.9	35.7	28.5	33.1	6.0	35.1	36.6	35.7	21.8	24.5	22.9	35.2	35.9	35.6	29.6	34.8	29.9	94.8	95.1	94.9
29	35.0	36.9	35.7	28.7	34.9	31.5	35.2	44.0	35.6	16.8	28.4	5.4	35.2	36.7	35.6	29.0	35.0	31.9	94.6	95.0	94.9
30	35.0	44.7	35.8	11.1	32.2	21.5	35.0	36.2	35.6	26.3	29.4	28.0	34.9	36.8	35.6	22.1	33.4	25.1	94.5	94.9	94.7
31	35.0	43.4	35.7	21.8	31.5	15.0	34.8	47.6	35.6	17.3	28.9	25.9	34.9	36.0	35.6	26.6	33.5	30.5	94.7	95.4	94.9
Monthly Total						707.9						698.9						751.5			
Monthly Min/Max/ Avg	34.0	44.9	35.7	11.1	36.7		34.1	55.1	35.6	12.6	34.4		33.8	55.8	35.6	13.6	36.9		91.8	95.4	94.0

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

July 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	35.0	36.2	35.6	26.2	29.5	10.5	--	--	--	--	--	--	34.9	36.3	35.6	30.1	36.0	33.4	93.5	94.6	94.2
2	--	--	--	--	--	--	34.9	36.0	35.6	29.5	33.2	18.2	35.0	37.1	35.6	27.9	35.7	31.5	93.0	93.8	93.2
3	35.1	36.0	35.6	30.4	31.9	16.3	34.9	36.1	35.6	29.2	32.5	31.3	34.9	37.6	35.6	25.5	29.4	14.5	92.5	93.2	92.9
4	35.1	36.0	35.6	29.0	30.9	30.0	34.7	36.2	35.6	29.3	31.1	30.3	--	--	--	--	--	--	92.9	93.4	93.1
5	35.0	36.1	35.6	25.1	32.2	29.2	35.0	36.0	35.5	23.9	30.5	6.5	34.9	36.1	35.6	21.8	35.7	25.8	92.7	92.9	92.8
6	35.1	36.0	35.6	26.2	38.3	28.3	35.0	36.1	35.6	26.3	37.8	27.1	34.9	37.3	35.6	24.4	35.5	24.4	92.5	92.8	92.7
7	35.1	36.0	35.6	32.0	40.7	34.5	35.0	36.2	35.6	31.1	39.7	33.8	--	--	--	--	--	--	91.8	92.7	92.3
8	35.1	36.1	35.6	30.8	34.2	32.4	34.7	36.0	35.6	30.3	35.4	32.7	35.0	36.1	35.6	31.1	36.9	12.6	92.0	93.0	92.4
9	35.1	36.9	35.6	28.8	33.2	19.9	35.1	37.9	35.6	19.5	37.1	30.5	35.0	36.2	35.6	29.3	38.1	34.9	92.6	93.5	93.1
10	34.7	36.1	35.6	30.0	35.6	21.6	34.9	36.1	35.6	27.8	35.9	33.8	34.8	36.1	35.6	27.1	35.0	32.9	92.6	93.8	93.6
11	34.9	36.3	35.6	30.9	36.9	34.6	35.1	36.1	35.6	28.9	35.9	33.0	35.0	36.3	35.6	28.5	34.5	23.2	92.9	94.2	93.5
12	35.1	36.1	35.6	26.5	32.6	30.5	35.0	52.2	35.6	27.1	33.2	18.1	34.8	36.1	35.6	22.2	32.6	28.8	93.9	94.2	94.0
13	35.1	36.4	35.6	26.0	31.2	18.8	34.8	36.1	35.6	24.3	32.2	29.7	34.9	36.2	35.6	23.6	31.5	29.4	93.3	94.4	93.9
14	34.1	36.1	35.6	23.3	29.6	25.8	34.9	36.1	35.6	24.1	31.0	27.6	34.9	36.3	35.6	23.1	30.3	27.9	93.5	94.1	93.9
15	35.0	36.1	35.6	27.8	30.7	29.2	35.1	36.1	35.6	26.4	33.1	30.1	35.0	36.3	35.6	26.0	32.8	20.1	93.5	94.4	94.1
16	35.0	36.1	35.6	26.7	32.6	30.1	35.2	36.0	35.6	24.8	32.2	4.8	35.0	36.1	35.6	28.6	35.7	32.7	94.1	94.8	94.4
17	35.0	36.0	35.7	28.2	38.7	18.4	35.1	36.2	35.6	25.7	39.1	28.8	34.7	36.3	35.6	25.5	35.7	33.4	94.5	95.1	94.8
18	35.1	36.1	35.6	30.9	38.7	34.7	34.8	36.1	35.6	28.9	38.6	33.0	34.9	37.3	35.6	21.9	34.4	24.0	94.8	95.3	94.9
19	35.1	36.8	35.6	29.1	35.6	32.3	34.4	36.2	35.6	26.9	34.2	30.5	34.9	36.3	35.6	25.9	32.6	24.5	93.7	94.8	94.4
20	35.1	37.2	35.6	25.4	39.1	26.3	35.1	39.9	35.6	17.9	40.3	31.8	34.9	36.2	35.6	28.6	37.8	33.0	93.7	94.8	94.4
21	35.0	36.1	35.6	33.3	41.6	38.2	35.0	35.5	35.6	17.3	38.8	36.2	34.9	36.2	35.6	29.8	37.1	34.6	94.0	94.8	94.5
22	35.1	36.8	35.6	30.6	35.3	32.7	35.0	36.4	35.6	29.4	33.5	31.7	34.5	36.0	35.6	28.0	37.0	25.4	93.7	94.7	94.4
23	35.1	37.4	35.6	22.5	35.9	25.3	35.0	36.1	35.6	29.2	32.5	19.9	34.8	36.2	35.6	29.8	36.9	33.4	93.7	95.0	94.6
24	35.1	36.0	35.6	31.4	35.9	34.0	35.0	37.5	35.6	28.5	36.9	20.8	34.9	36.2	35.6	29.4	34.9	32.9	94.4	94.8	94.6
25	34.1	36.7	35.6	20.4	32.9	16.8	35.1	54.0	35.6	12.9	35.9	22.7	34.8	35.4	35.6	27.5	32.3	25.1	94.2	95.1	94.9
26	35.1	36.0	35.6	25.8	31.9	13.1	--	--	--	--	--	--	34.8	36.3	35.6	25.4	31.5	28.9	93.6	94.5	94.2
27	34.9	36.3	35.6	27.0	31.4	28.9	35.0	36.0	35.6	25.9	32.0	14.5	34.9	36.2	35.6	23.1	30.8	28.9	94.4	94.9	94.6
28	35.0	36.0	35.6	26.6	31.9	28.4	35.0	36.7	35.6	27.6	34.6	30.4	35.3	36.2	36.7	22.6	23.7	1.0	94.8	95.1	94.9
29	34.5	36.5	35.6	27.9	36.1	21.7	35.0	39.3	35.7	15.4	34.4	29.3	34.2	36.3	35.6	27.9	36.7	27.9	94.6	95.0	94.9
30	33.8	36.6	35.6	25.0	32.3	29.3	35.2	36.1	35.6	22.3	32.9	27.2	34.9	43.5	35.6	16.5	31.4	16.0	94.5	94.9	94.7
31	33.5	36.0	35.6	27.0	33.5	25.7	34.7	36.1	35.6	28.2	34.7	31.1	34.9	36.3	35.6	26.0	29.1	17.8	94.7	95.4	94.9
Monthly Total						797.4						775.6						758.6			
Monthly Min/Max/ Avg	33.5	37.4	35.6	20.4	41.6		34.4	54.0	35.6	12.9	40.3		34.2	43.5	35.6	16.5	38.1		91.8	95.4	94.0

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

July 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	72.7	87.6	79.8	63.3	87.5	78.4	72.7	88.8	79.6	61.0	86.8	76.8	46.3	90.1	75.1	65.7	89.2	80.7	--	--	--	--	--	--	93.1	94.1	93.8
2	56.0	77.6	66.0	63.1	95.1	78.1	54.3	75.6	65.3	61.7	94.1	76.1	54.1	75.0	63.6	66.1	97.2	80.0	--	--	--	--	--	--	92.0	93.2	92.6
3	49.9	60.7	54.1	75.9	96.3	88.8	45.4	60.8	52.2	73.8	94.7	86.8	48.7	58.8	52.9	77.8	99.0	91.3	--	--	--	--	--	--	91.6	92.2	91.8
4	51.3	60.4	54.8	77.9	98.6	90.0	47.5	56.7	50.8	75.2	95.0	87.7	50.6	59.0	53.3	79.9	98.3	92.3	--	--	--	--	--	--	91.7	92.2	92.0
5	45.6	80.5	56.5	78.0	115.2	94.1	45.3	78.6	55.1	75.8	114.8	92.1	47.6	57.7	52.9	78.8	115.1	96.5	--	--	--	--	--	--	92.0	92.5	92.3
6	49.5	80.3	57.0	83.3	114.8	99.7	49.0	75.3	53.5	79.6	115.0	97.5	51.9	59.9	54.4	86.2	117.9	102.6	--	--	--	--	--	--	91.5	92.5	92.0
7	47.7	53.8	51.0	67.7	106.3	93.1	47.1	53.3	50.2	65.2	104.8	90.8	48.9	55.8	52.8	69.3	107.8	95.4	--	--	--	--	--	--	91.4	91.9	91.6
8	44.4	52.5	48.7	71.5	119.1	103.9	45.8	68.4	47.7	69.9	115.6	101.6	46.8	53.1	50.4	74.1	120.7	106.7	--	--	--	--	--	--	91.7	92.0	91.8
9	46.7	83.4	64.8	76.0	121.1	99.0	51.0	76.9	62.9	73.0	119.2	96.8	46.2	76.1	62.1	77.4	122.8	101.3	--	--	--	--	--	--	92.0	92.4	92.2
10	47.5	87.4	54.7	86.4	123.4	105.2	46.6	56.9	52.7	85.8	122.8	103.4	49.2	86.8	56.4	91.0	125.8	108.3	--	--	--	--	--	--	92.1	93.2	92.4
11	47.6	197.5	55.5	68.5	121.6	101.5	47.7	195.0	55.1	67.7	120.2	99.7	49.3	205.3	57.2	69.3	124.9	104.4	--	--	--	--	--	--	92.3	93.1	92.6
12	45.4	74.0	63.9	76.3	108.2	90.4	48.9	171.9	58.5	75.0	106.2	88.1	45.3	162.7	61.2	78.1	108.6	92.8	--	--	--	--	--	--	92.7	94.1	93.4
13	62.4	76.2	68.5	74.9	102.6	88.4	56.8	69.0	61.7	71.7	101.2	86.5	60.6	73.6	65.3	77.8	104.2	90.9	--	--	--	--	--	--	93.0	93.8	93.3
14	62.9	75.9	69.6	70.8	94.5	84.9	56.3	69.4	63.3	68.2	94.3	82.8	59.5	73.3	66.8	72.3	96.7	86.9	--	--	--	--	--	--	92.8	93.5	93.0
15	65.8	76.7	70.8	79.2	104.7	93.7	60.6	68.1	64.4	76.7	101.8	91.3	63.9	73.3	67.4	82.4	104.8	96.0	--	--	--	--	--	--	93.5	94.0	93.7
16	61.8	80.4	69.4	83.1	109.8	99.4	57.1	69.3	64.3	80.1	107.3	97.5	60.0	72.3	66.8	85.6	114.3	102.6	--	--	--	--	--	--	93.8	94.4	94.0
17	60.7	73.8	66.5	90.0	117.8	106.3	58.1	66.6	63.1	88.7	114.7	104.1	60.5	69.3	65.1	94.2	118.6	109.3	--	--	--	--	--	--	94.0	94.5	94.3
18	57.0	67.0	62.9	94.6	116.7	107.4	52.5	64.3	59.8	92.0	115.1	105.3	55.9	64.8	61.5	96.5	118.4	110.6	--	--	--	--	--	--	93.5	94.5	93.9
19	56.1	67.3	61.5	95.2	116.5	107.7	52.9	63.9	58.0	93.3	115.4	105.6	55.1	66.2	60.1	99.0	119.1	110.9	--	--	--	--	--	--	93.2	94.4	93.8
20	59.6	81.9	71.6	71.1	116.0	88.3	58.7	78.2	68.9	69.3	111.5	86.5	60.8	81.7	71.4	72.2	116.4	90.7	--	--	--	--	--	--	93.5	94.4	93.8
21	64.1	79.0	69.9	70.4	102.2	86.1	58.8	76.0	66.5	70.3	99.7	84.4	63.0	77.6	68.6	74.2	103.2	88.3	--	--	--	--	--	--	93.2	93.9	93.5
22	60.6	69.5	64.2	82.6	116.3	101.6	56.9	65.8	61.0	82.7	113.1	99.6	58.8	68.0	62.7	86.2	116.3	104.5	--	--	--	--	--	--	93.3	94.1	93.6
23	58.0	68.6	62.8	86.5	116.4	107.2	54.2	64.6	59.4	84.7	113.6	105.0	56.5	66.2	60.9	89.8	118.5	110.3	--	--	--	--	--	--	93.8	94.2	94.0
24	57.5	80.4	67.6	74.2	113.7	97.4	54.7	78.5	64.2	72.6	110.2	95.3	56.8	79.1	66.0	76.9	114.8	100.0	--	--	--	--	--	--	93.7	94.3	93.9
25	70.7	82.5	76.7	71.2	91.8	83.9	68.6	79.3	73.7	69.2	90.2	81.9	69.3	81.7	75.3	73.5	93.4	85.8	--	--	--	--	--	--	93.7	94.8	94.1
26	72.8	83.7	77.9	73.6	91.7	84.0	71.1	78.9	74.8	70.3	89.6	82.0	73.4	81.5	77.0	75.2	92.3	86.0	--	--	--	--	--	--	94.0	94.8	94.3
27	48.6	86.0	63.1	63.5	91.0	78.4	49.4	91.4	66.7	61.3	88.6	76.2	45.0	79.8	51.7	65.1	92.7	80.3	--	--	--	--	--	--	94.3	95.0	94.7
28	47.3	84.7	57.7	63.0	91.3	73.3	46.4	78.8	57.4	60.6	89.6	71.8	46.0	84.3	57.0	63.7	92.4	75.1	--	--	--	--	--	--	94.2	94.6	94.4
29	68.1	83.3	72.8	76.2	105.2	93.6	64.0	76.7	68.4	74.4	102.4	91.4	66.7	79.6	70.9	78.9	104.6	96.0	--	--	--	--	--	--	93.5	94.4	94.0
30	51.3	83.6	74.5	71.9	103.0	92.4	66.8	84.4	72.0	68.8	102.1	90.4	69.3	86.7	74.1	73.9	105.7	95.0	--	--	--	--	--	--	93.7	94.4	94.1
31	78.1	89.0	83.1	75.7	95.2	88.1	71.1	84.8	78.1	74.4	94.3	86.4	74.1	86.6	80.4	78.4	96.9	90.7	--	--	--	--	--	--	94.2	95.0	94.7
Monthly Total						2,884.5						2,821.8						2,961.9						0.0			
Monthly Min/Max/ Avg	44.4	197.5	65.1	63.0	123.4		45.3	195.0	62.2	60.6	122.8		45.0	205.3	63.3	63.7	125.8		--	--	--	--	--		91.4	95.0	93.3

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

July 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	10.8	11.5	11.2	30	35	33	7.0	7.0	7.0	7.4	7.6	7.5	17	24	21	7.0	7.0	7.0
2	10.7	11.5	11.1	30	34	32	7.0	7.0	7.0	7.4	7.6	7.5	19	24	21	7.0	7.0	7.0
3	10.7	11.3	11.1	33	35	34	7.0	7.0	7.0	7.4	7.5	7.5	19	23	21	7.0	7.0	7.0
4	10.5	11.1	10.8	31	35	33	7.0	7.0	7.0	7.4	7.5	7.5	18	23	20	7.0	7.0	7.0
5	10.2	10.7	10.5	29	33	32	7.0	7.0	7.0	7.4	7.5	7.4	17	22	19	7.0	7.0	7.0
6	9.6	11.1	10.1	28	35	31	7.0	7.0	7.0	7.5	7.6	7.5	19	25	22	7.0	7.0	7.0
7	10.6	11.0	10.8	29	34	32	7.0	7.0	7.0	7.4	7.5	7.5	19	23	21	7.0	7.0	7.0
8	10.2	11.2	10.7	33	37	35	7.0	7.0	7.0	7.5	7.7	7.6	22	29	24	7.0	7.0	7.0
9	10.6	11.0	10.8	37	40	39	7.0	7.0	7.0	7.5	7.7	7.6	22	29	26	7.0	7.0	7.0
10	10.6	11.1	11.0	36	45	42	7.0	7.0	7.0	7.6	7.8	7.7	24	32	29	7.0	7.0	7.0
11	10.7	11.5	11.2	37	47	43	7.0	7.0	7.0	7.7	8.0	7.8	28	38	33	7.0	7.0	7.0
12	11.0	11.5	11.2	41	50	46	7.0	7.0	7.0	7.6	8.0	7.8	22	36	30	7.0	7.0	7.0
13	10.7	11.4	11.1	41	47	44	6.9	7.0	7.0	7.7	7.8	7.7	27	33	30	7.0	7.0	7.0
14	11.2	11.7	11.5	41	49	47	7.0	7.0	7.0	7.5	7.7	7.6	23	29	27	7.0	7.0	7.0
15	10.6	11.5	11.1	36	46	40	7.0	7.0	7.0	7.6	7.8	7.7	26	31	28	7.0	7.0	7.0
16	10.7	11.0	10.8	36	44	41	7.0	7.0	7.0	7.6	7.8	7.7	22	30	26	7.0	7.0	7.0
17	10.5	11.3	10.9	40	46	42	7.0	7.0	7.0	7.7	7.8	7.7	25	30	27	7.0	7.0	7.0
18	10.8	11.3	11.0	40	48	43	7.0	7.0	7.0	7.6	7.9	7.8	24	35	31	7.0	7.0	7.0
19	10.7	11.1	10.9	41	44	43	7.0	7.0	7.0	7.7	7.9	7.8	29	36	32	7.0	7.0	7.0
20	11.1	11.6	11.3	43	47	44	7.0	7.0	7.0	7.8	8.0	7.9	30	40	34	7.0	7.0	7.0
21	11.6	12.3	11.9	41	46	44	7.0	7.0	7.0	7.7	8.0	7.9	29	39	34	7.0	7.0	7.0
22	10.8	12.2	11.6	42	46	44	7.0	7.0	7.0	7.8	8.0	7.9	30	38	34	7.0	7.0	7.0
23	10.7	11.2	11.0	42	47	45	7.0	7.0	7.0	7.8	8.0	7.9	29	39	33	7.0	7.0	7.0
24	11.0	11.7	11.3	45	49	47	7.0	7.0	7.0	7.7	8.0	7.8	27	38	33	7.0	7.0	7.0
25	8.0	12.3	11.7	10	51	47	7.0	7.0	7.0	7.7	7.9	7.8	28	35	31	7.0	7.0	7.0
26	11.1	12.3	11.8	37	46	42	7.0	7.0	7.0	7.6	7.8	7.6	24	30	26	7.0	7.0	7.0
27	10.3	11.3	10.7	32	40	35	7.0	7.0	7.0	7.5	7.6	7.5	20	26	22	7.0	7.0	7.0
28	10.3	10.7	10.5	29	35	33	7.0	7.0	7.0	7.4	7.6	7.5	18	23	21	7.0	7.0	7.0
29	10.2	10.9	10.6	30	34	32	7.0	7.0	7.0	7.5	7.7	7.6	19	29	24	7.0	7.0	7.0
30	10.4	10.9	10.7	34	41	38	7.0	7.0	7.0	7.5	7.7	7.6	20	29	23	7.0	7.0	7.0
31	10.1	11.0	10.7	35	42	38	7.0	7.0	7.0	7.6	7.7	7.7	24	29	26	7.0	7.0	7.0
Monthly Min/Max/Avg	8.0	12.3	11.0	10	51	39	6.9	7.0	7.0	7.4	8.0	7.7	17	40	27	7.0	7.0	7.0

NOTES: ' -- ' indicates plant offline

1.2.17 Liquid Alum Chemical Consumption

July 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	48.8	49.8	72.5	7,044	9,931	16,975	39,948
2	67.1	67.1	66.8	9,410	14,385	23,795	37,013
3	64.1	64.1	54.6	9,256	14,547	23,803	33,449
4	49.3	49.3	47.5	7,117	11,186	18,304	29,459
5	37.1	37.2	43.2	5,849	8,791	14,640	28,195
6	37.9	37.1	45.9	6,703	10,920	17,623	31,624
7	40.0	40.0	49.7	6,260	9,558	15,818	32,055
8	44.6	44.8	48.4	8,116	12,889	21,005	34,582
9	46.6	46.2	43.1	9,408	15,981	25,389	29,219
10	34.3	34.2	40.3	6,371	11,847	18,218	29,373
11	35.0	35.0	38.1	6,495	12,263	18,758	26,300
12	33.1	33.1	36.8	5,838	11,287	17,125	23,561
13	29.7	29.7	29.9	4,612	9,333	13,945	18,536
14	28.4	28.4	27.8	3,743	7,361	11,104	16,192
15	26.5	26.5	26.0	4,436	7,231	11,667	16,786
16	26.1	26.1	25.8	4,748	7,880	12,628	17,667
17	26.2	26.2	26.2	4,863	8,733	13,597	19,029
18	25.6	25.5	26.9	4,716	8,927	13,643	19,944
19	26.0	26.0	27.1	4,997	9,659	14,656	20,122
20	26.7	26.7	26.7	5,098	10,015	15,114	16,158
21	25.9	25.9	25.7	4,510	8,978	13,488	15,235
22	25.0	25.0	25.0	4,549	8,672	13,221	17,596
23	25.0	25.0	25.3	4,639	8,762	13,401	18,810
24	25.0	25.0	24.7	4,217	8,060	12,277	16,568
25	25.0	25.0	24.6	3,415	6,913	10,328	14,220
26	25.0	25.0	24.2	3,144	5,720	8,864	14,020
27	25.0	25.0	23.8	3,092	5,666	8,759	12,850
28	24.8	24.8	23.7	3,176	5,615	8,791	12,114
29	23.8	23.8	23.5	3,865	5,827	9,693	15,141
30	24.0	24.0	25.2	4,136	6,205	10,341	16,004
31	23.9	23.8	23.1	4,303	6,637	10,941	14,327
Monthly Total				168,129	289,780	457,909	686,095
Monthly Avg	33.1	33.1	34.6	5,424	9,348	14,771	22,132

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

July 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	0.28	0.28	0.18	19	27	46	48
2	0.30	0.30	0.18	20	31	52	48
3	0.30	0.30	0.18	21	33	54	52
4	0.30	0.30	0.18	21	33	54	53
5	0.27	0.28	0.17	21	31	52	55
6	0.25	0.25	0.19	21	36	57	64
7	0.25	0.25	0.19	19	29	48	60
8	0.25	0.25	0.19	22	35	57	67
9	0.27	0.27	0.19	26	46	72	64
10	0.29	0.29	0.19	26	48	74	68
11	0.25	0.25	0.18	23	43	65	60
12	0.25	0.25	0.15	22	42	64	47
13	0.30	0.30	0.15	23	46	68	44
14	0.28	0.28	0.15	18	35	53	42
15	0.21	0.21	0.16	17	28	46	49
16	0.20	0.20	0.15	18	29	47	49
17	0.20	0.20	0.15	18	32	50	54
18	0.20	0.20	0.14	18	34	52	51
19	0.20	0.20	0.14	19	36	55	51
20	0.20	0.20	0.14	19	36	55	42
21	0.20	0.20	0.14	17	34	51	40
22	0.20	0.20	0.14	18	34	51	48
23	0.20	0.20	0.14	18	34	52	50
24	0.20	0.20	0.14	16	31	48	45
25	0.20	0.20	0.14	13	27	40	39
26	0.20	0.20	0.14	12	22	34	39
27	0.21	0.21	0.14	13	23	36	37
28	0.25	0.25	0.14	16	28	43	35
29	0.25	0.25	0.14	20	30	49	44
30	0.25	0.25	0.14	21	31	52	43
31	0.25	0.25	0.14	22	34	56	42
Monthly Total				595	1,038	1,633	1,533
Monthly Avg	0.24	0.24	0.16	19	33	53	49

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

July 2024

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

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

1.2.20 Sodium Hypochlorite Chemical Consumption

July 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	3.11	3.00	27,219	36,241	69,021	3.84	135,051
2	3.14	3.12	26,713	40,526	72,019	3.92	138,678
3	3.19	3.19	27,928	43,835	76,111	4.03	157,632
4	3.15	3.06	27,526	42,051	75,354	4.09	161,664
5	3.13	3.04	29,924	43,598	81,214	4.11	171,308
6	3.13	2.68	33,503	47,793	87,833	4.11	180,371
7	3.27	3.02	31,054	43,787	81,991	4.21	172,961
8	3.34	3.13	36,784	54,582	99,827	4.15	189,051
9	3.22	3.11	39,432	65,140	114,301	4.23	183,023
10	3.22	3.22	36,165	67,544	114,345	4.17	194,203
11	3.27	3.29	36,746	69,881	114,742	4.21	185,040
12	2.67	3.16	28,565	65,340	100,629	4.14	169,146
13	2.92	2.98	27,440	56,768	91,568	4.15	163,766
14	2.96	2.96	23,614	46,415	76,107	4.15	154,572
15	2.92	2.91	29,630	48,001	84,307	4.07	167,723
16	2.87	2.87	31,677	52,570	90,627	4.05	177,339
17	2.89	2.89	32,476	58,449	98,300	4.08	189,221
18	2.93	2.86	32,749	60,674	100,508	4.20	199,019
19	3.05	2.93	35,497	66,020	109,875	4.23	200,387
20	3.20	3.05	37,068	69,361	118,209	4.32	166,630
21	3.08	3.00	32,511	63,011	106,081	4.37	165,293
22	3.01	3.01	33,201	63,287	106,620	4.33	194,478
23	3.05	3.05	34,269	64,811	107,341	4.30	203,682
24	3.04	3.06	31,030	59,694	98,025	4.21	179,822
25	2.98	2.98	24,652	49,956	79,654	4.09	150,858
26	3.01	2.95	22,975	40,883	66,979	3.93	144,963
27	2.82	2.82	21,149	38,788	63,355	3.77	129,991
28	2.71	2.83	21,049	38,911	62,976	3.86	125,818
29	2.77	2.78	27,303	41,270	73,818	4.09	168,492
30	2.80	2.80	29,252	43,873	79,242	4.17	169,280
31	2.80	2.77	30,568	46,695	82,527	3.97	157,002
Monthly Total			939,671	1,629,756	2,783,506		5,246,464
Monthly Avg	3.02	2.98	30,312	52,573	89,791	4.11	169,241

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

July 2024

Day	Dosage (mg/L)		Consumption (kg)	
	Rossdale	E.L. Smith	Rossdale	E.L. Smith
1	0.24	0.16	39	43
2	0.24	0.14	40	39
3	0.24	0.12	42	36
4	0.24	0.12	42	36
5	0.24	0.12	44	38
6	0.24	0.12	49	40
7	0.24	0.12	44	37
8	0.24	0.12	53	42
9	0.24	0.12	63	40
10	0.24	0.13	61	47
11	0.24	0.13	61	42
12	0.24	0.12	56	38
13	0.20	0.12	46	36
14	0.19	0.12	36	34
15	0.19	0.12	40	38
16	0.19	0.12	45	40
17	0.19	0.12	48	42
18	0.19	0.12	49	43
19	0.19	0.12	52	43
20	0.19	0.12	52	35
21	0.19	0.12	48	34
22	0.19	0.12	48	41
23	0.19	0.12	49	43
24	0.19	0.12	45	39
25	0.19	0.12	37	34
26	0.19	0.12	32	34
27	0.19	0.12	32	31
28	0.19	0.12	32	31
29	0.19	0.14	36	42
30	0.19	0.13	39	39
31	0.19	0.14	42	42
Monthly Total			1,402	1,199
Monthly Avg	0.21	0.12	45	39

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

July 2024

Day	Dosage (mg/L)		Consumption (kg)	
	Rossdale	E.L. Smith	Rossdale	E.L. Smith
1	0.67	--	567	--
2	0.67	--	585	--
3	0.67	--	609	--
4	0.67	--	612	--
5	0.67	--	645	--
6	0.67	--	712	--
7	0.67	--	639	--
8	0.67	--	771	--
9	0.67	--	929	--
10	0.67	--	894	--
11	0.67	--	892	--
12	0.67	--	814	--
13	0.67	--	791	--
14	0.67	--	649	--
15	0.67	--	734	--
16	0.67	--	815	--
17	0.67	--	877	--
18	0.67	--	896	--
19	0.67	--	949	--
20	0.67	--	957	--
21	0.67	--	875	--
22	0.67	--	878	--
23	0.67	--	899	--
24	0.67	--	824	--
25	0.67	--	681	--
26	0.67	--	587	--
27	0.67	--	579	--
28	0.67	--	587	--
29	0.67	--	676	--
30	0.67	--	717	--
31	0.67	--	762	--
Monthly Total			23,403	--
Monthly Avg	0.67	--	755	--

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

July 2024

Day	Dosage (mg/L)	Consumption (kg)
	E.L. Smith	E.L. Smith
1	0.65	1,570
2	0.66	1,570
3	0.66	1,785
4	0.65	1,796
5	0.65	1,882
6	0.65	1,995
7	0.65	1,857
8	0.65	2,078
9	0.66	1,995
10	0.66	2,137
11	0.66	2,067
12	0.65	1,803
13	0.65	1,769
14	0.65	1,694
15	0.65	1,870
16	0.65	1,993
17	0.65	2,128
18	0.66	2,159
19	0.67	2,223
20	0.67	1,808
21	0.66	1,753
22	0.67	2,096
23	0.67	2,210
24	0.67	2,006
25	0.67	1,726
26	0.67	1,728
27	0.67	1,612
28	0.67	1,509
29	0.67	1,924
30	0.67	1,906
31	0.67	1,820
Monthly Total		58,468
Monthly Avg	0.66	1,886

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

July 2024

Day	Dosage (mg/L)		Consumption (kg)	
	Rossdale	E.L. Smith	Rossdale	E.L. Smith
1	0.39	9.57	116	4,515
2	4.41	12.6	1,302	5,887
3	5.66	9.55	1,784	5,098
4	5.36	7.80	1,717	4,212
5	2.24	6.87	756	3,886
6	1.21	6.61	455	3,738
7	1.07	6.74	362	3,768
8	1.51	8.60	612	5,372
9	3.90	8.89	1,916	5,285
10	2.60	6.75	1,225	4,280
11	1.18	6.33	556	3,868
12	1.09	5.63	462	3,055
13	--	4.49	--	2,387
14	--	3.66	--	1,865
15	--	3.02	--	1,695
16	--	2.03	--	1,215
17	--	2.02	--	1,292
18	--	2.46	--	1,589
19	--	2.46	--	1,593
20	--	2.50	--	1,328
21	--	1.97	--	1,020
22	--	1.81	--	1,103
23	--	1.66	--	1,072
24	--	1.72	--	1,009
25	--	1.08	--	542
26	--	1.15	--	577
27	--	1.31	--	614
28	--	1.04	--	458
29	--	0.77	--	431
30	--	1.44	--	797
31	--	1.53	--	810
Monthly Total			11,264	74,358
Monthly Avg	2.55	4.32	939	2,399

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
July 2024

Day	Dosage (mg/L)		Consumption (kg)	
	Rossdale	E.L. Smith	Rossdale	E.L. Smith
1	0.61	0.66	450	710
2	0.62	0.68	469	727
3	0.62	0.67	492	826
4	0.62	0.66	493	818
5	0.62	0.67	520	867
6	0.61	0.67	568	918
7	0.61	0.65	507	831
8	0.61	0.65	612	928
9	0.61	0.65	738	885
10	0.61	0.65	710	942
11	0.61	0.65	708	911
12	0.61	0.64	646	797
13	0.61	0.65	627	792
14	0.61	0.65	515	759
15	0.61	0.65	581	836
16	0.61	0.65	646	890
17	0.61	0.65	696	951
18	0.61	0.65	711	962
19	0.61	0.65	753	964
20	0.61	0.65	759	791
21	0.61	0.65	695	771
22	0.61	0.65	699	909
23	0.61	0.65	715	960
24	0.61	0.65	654	871
25	0.61	0.66	541	756
26	0.61	0.66	466	762
27	0.61	0.66	460	712
28	0.61	0.66	466	668
29	0.61	0.66	536	849
30	0.61	0.66	569	839
31	0.61	0.66	605	802
Monthly Total			18,606	26,003
Monthly Avg	0.61	0.65	600	839

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

July 2024

Day	Dosage (mg/L)		Consumption (kg)		De-chlorinated Waste Stream to Outfall (ML)	
	Rossdale	E.L. Smith	Rossdale	E.L. Smith	Rossdale	E.L. Smith
1	20.3	17.5	597	1,968	11	43
2	25.2	13.7	807	1,590	12	44
3	25.7	19.1	838	2,113	13	42
4	21.2	14.7	593	1,574	11	41
5	22.8	16.2	811	1,872	14	46
6	14.2	20.7	1,359	2,493	36	46
7	10.5	21.7	355	3,034	13	53
8	28.9	23.2	1,196	3,162	16	52
9	31.8	28.8	836	3,426	10	45
10	35.0	21.6	848	3,088	9.3	54
11	25.9	24.2	965	3,122	14	49
12	15.6	21.5	1,127	3,340	28	55
13	30.5	16.4	872	2,514	11	49
14	28.3	23.9	757	2,511	10	40
15	24.8	22.3	851	2,509	13	43
16	30.5	18.9	573	2,466	7.3	50
17	24.6	22.4	617	2,974	9.7	50
18	35.0	23.4	1,301	3,247	14	53
19	31.6	23.6	877	3,179	11	51
20	30.4	15.1	871	1,870	11	47
21	30.7	21.1	713	2,258	8.9	41
22	34.3	17.0	1,222	2,202	14	49
23	31.8	20.2	899	2,899	11	55
24	37.3	20.0	1,024	2,569	11	49
25	42.4	17.9	2,789	2,094	25	44
26	29.4	17.4	870	1,856	11	41
27	27.8	16.4	704	1,746	9.7	40
28	26.2	15.8	698	1,526	10	37
29	31.1	15.3	1,331	1,672	16	43
30	28.7	15.3	863	1,664	12	44
31	41.9	21.6	1,351	2,816	12	49
Monthly Total			29,517	75,354	415	1,444
Monthly Avg	28.2	19.6	952	2,431	13	47

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

July 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)		247	0.0	127	40	7.9	422	60.14			354.87		
Solids (kg)	TSS	465,844	0	5,060			470,904						
	Aluminium	20,043	0	1,752			21,794						
# of Bypasses						1		Min	Max	Avg	Min	Max	Avg
pH								6.5	7.9	7.6	6.8	7.8	7.6
Total Chlorine (mg/L)								0.00	0.00	0.00	0.00	0.00	0.00
Sulfite (mg/L)								1.23	20.0	7.71	1.40	20.0	5.43

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

July 2024

		Clarifier Blowdown	Clarifier Washdown *	Backwash Water	Filter To Waste	Bypass	LLP Flush	HLP Cooling	Total	De-chlorinated Waste flow to		
Volume (ML)		739	0.0	397	152	49	0.6	37	1,375	1,444		
Solids (kg)	TSS	563,537	0	23,593					587,130			
	Aluminium	28,901	0	8,167					37,068			
# of Bypasses						3				Min	Max	Avg
pH										6.62	7.67	7.42
Total Chlorine (mg/L)										0.00	0.00	0.00
Sulphite (mg/L)										0.21	20.0	5.25

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

July 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

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)	82,955	83,218	(0.3)
AVG. DAILY DEMAND TO DATE (ML)	389	392	(0.8)
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

July 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	1.22	1.92	1.39	1.59	1.69	1.63	1.55	1.62	1.58	1.81	2.06	1.84	1.90	1.97	1.93	1.15	1.19	1.18
2	--	--	--	1.53	1.68	1.60	1.52	1.56	1.55	1.83	1.94	1.87	1.80	1.96	1.92	1.12	1.20	1.17
3	1.13	1.31	1.25	1.64	1.74	1.70	1.50	1.55	1.52	1.81	1.94	1.87	1.73	1.98	1.89	1.15	1.18	1.17
4	1.07	1.76	1.33	1.66	1.79	1.73	1.42	1.56	1.54	1.81	2.07	1.85	1.92	2.00	1.95	1.12	1.16	1.15
5	--	--	--	1.71	1.83	1.77	1.53	1.70	1.55	1.82	2.08	1.89	1.89	2.06	1.98	1.09	1.19	1.16
6	--	--	--	1.72	1.91	1.85	1.54	1.64	1.59	1.87	2.12	1.91	1.99	2.11	2.05	1.13	1.19	1.18
7	1.27	1.57	1.30	1.72	1.87	1.80	1.59	1.65	1.61	1.85	1.99	1.90	1.94	2.10	2.00	1.14	1.18	1.16
8	1.21	1.73	1.25	1.72	1.89	1.83	1.55	1.61	1.59	1.85	2.09	1.88	1.89	2.08	2.02	1.13	1.16	1.15
9	--	--	--	1.79	1.90	1.87	1.38	1.64	1.60	1.86	1.96	1.89	1.98	2.09	2.02	1.13	1.34	1.23
10	1.22	1.59	1.24	1.76	1.88	1.84	1.56	1.61	1.59	1.85	1.96	1.89	1.93	2.11	2.02	1.28	1.33	1.32
11	1.18	1.46	1.24	1.77	1.90	1.86	1.56	1.59	1.58	1.89	1.98	1.93	1.84	2.12	2.07	1.26	1.30	1.29
12	1.15	1.59	1.17	1.77	1.85	1.81	1.53	1.59	1.56	1.86	1.97	1.89	1.97	2.04	2.00	1.22	1.28	1.27
13	--	--	--	1.73	1.89	1.82	1.55	1.62	1.58	1.83	1.95	1.88	1.87	2.09	1.97	1.21	1.25	1.24
14	1.10	1.84	1.13	1.74	1.90	1.82	1.53	1.60	1.57	1.83	1.91	1.86	1.82	1.99	1.94	1.17	1.23	1.21
15	1.04	1.22	1.11	1.76	1.85	1.82	1.52	1.58	1.55	1.84	1.91	1.88	1.87	2.04	1.95	1.15	1.20	1.18
16	1.08	1.88	1.11	1.76	1.88	1.83	1.30	1.56	1.52	1.86	1.96	1.89	1.86	2.04	1.98	1.12	1.26	1.21
17	1.09	1.09	1.09	1.76	1.93	1.87	1.52	1.61	1.57	1.88	1.96	1.91	1.75	2.08	2.02	1.22	1.25	1.24
18	0.98	1.25	1.05	1.82	1.92	1.87	1.56	1.63	1.60	1.86	1.99	1.91	1.98	2.07	2.02	1.20	1.23	1.22
19	1.07	1.76	1.12	1.76	1.92	1.88	1.60	1.63	1.61	1.88	1.96	1.91	1.99	2.14	2.04	1.18	1.22	1.21
20	1.02	1.76	1.05	1.78	1.93	1.87	1.62	1.65	1.63	1.87	1.99	1.93	1.92	2.08	2.02	1.16	1.21	1.19
21	1.00	1.06	1.03	1.72	1.85	1.80	1.62	1.68	1.66	1.86	1.96	1.89	1.85	2.02	1.99	1.14	1.19	1.17
22	1.11	1.90	1.17	1.73	1.88	1.83	1.48	1.67	1.62	1.89	1.96	1.91	1.95	2.07	2.03	1.12	1.15	1.14
23	1.24	1.87	1.29	1.86	1.96	1.92	1.57	1.61	1.59	1.90	1.99	1.93	1.81	2.09	2.04	1.12	1.15	1.14
24	1.16	1.36	1.28	1.78	1.93	1.87	1.54	1.63	1.60	1.85	1.99	1.92	1.96	2.09	2.03	1.10	1.20	1.15
25	1.24	1.41	1.30	1.75	1.88	1.82	1.54	1.67	1.64	1.85	1.94	1.89	1.85	2.03	1.96	1.13	1.17	1.16
26	1.28	1.63	1.34	1.71	1.82	1.77	1.47	1.80	1.59	1.83	1.99	1.87	1.85	1.97	1.92	1.10	1.15	1.13
27	--	--	--	1.75	1.82	1.79	1.47	1.60	1.56	1.82	1.92	1.86	1.73	1.94	1.88	1.08	1.12	1.11
28	1.41	1.83	1.42	1.72	1.81	1.75	1.44	1.56	1.53	1.85	1.96	1.89	1.75	1.93	1.86	1.05	1.09	1.07
29	1.31	1.82	1.36	1.69	1.81	1.74	1.39	1.57	1.53	1.85	1.96	1.89	1.72	2.08	1.97	1.02	1.06	1.05
30	1.40	1.89	1.44	1.72	1.89	1.84	1.46	1.63	1.57	1.85	1.98	1.90	1.96	2.05	2.01	1.04	1.12	1.07
31	1.35	1.94	1.39	1.75	1.88	1.82	1.52	1.67	1.63	1.87	1.97	1.90	1.96	2.08	2.01	1.08	1.12	1.10
Monthly Min/Max/Avg	0.98	1.94	1.23	1.53	1.96	1.81	1.30	1.80	1.58	1.81	2.12	1.89	1.72	2.14	1.98	1.02	1.34	1.17

NOTES: '--' Indication Analyzer Offline

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

July 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				1.37	1.63	1.51	1.35	1.86	1.37	1.43	1.63	1.60	1.43	2.01	1.47	1.40	1.49	1.44
2				1.43	1.74	1.57	1.33	1.66	1.35	1.46	1.59	1.56	1.39	2.01	1.43	1.37	1.47	1.43
3				1.37	1.63	1.52	1.24	1.50	1.29	1.42	1.54	1.53	1.35	2.05	1.42	1.38	1.46	1.42
4				1.37	1.66	1.52	1.27	1.91	1.33	1.41	1.52	1.51	1.36	2.08	1.42	1.37	1.47	1.42
5	--	--	--	1.41	1.72	1.52	1.33	1.91	1.35	1.36	1.59	1.48	1.28	2.11	1.37	1.39	1.46	1.43
6	--	--	--	1.44	1.69	1.57	1.26	1.95	1.33	1.39	2.31	1.53	1.43	2.12	1.45	1.41	1.50	1.45
7	--	--	--	1.43	1.71	1.56	1.30	1.93	1.33	1.40	1.57	1.54	1.34	2.09	1.36	1.40	1.49	1.46
8	--	--	--	1.47	1.76	1.61	1.38	1.89	1.40	1.42	1.53	1.52	--	--	--	1.41	1.51	1.47
9	--	--	--	1.51	1.75	1.60	1.36	1.99	1.38	1.52	2.27	1.55	1.37	2.06	1.41	1.43	1.50	1.47
10	--	--	--	1.42	1.73	1.55	1.40	1.96	1.43	1.56	2.28	1.58	1.36	2.07	1.38	1.43	1.50	1.46
11	--	--	--	1.19	1.73	1.59	1.31	2.00	1.40	1.54	2.23	1.56	1.31	2.09	1.34	1.44	1.55	1.49
12	--	--	--	1.36	1.74	1.56	1.28	1.88	1.30	1.42	1.55	1.52	1.28	2.05	1.31	1.44	1.52	1.47
13	--	--	--	1.44	1.71	1.58	1.29	1.93	1.34	1.34	1.48	1.47	1.35	2.01	1.37	1.41	1.47	1.44
14	--	--	--	1.38	1.70	1.56	1.30	1.92	1.33	1.37	1.47	1.44	1.33	2.01	1.35	1.38	1.46	1.41
15	--	--	--	1.42	1.72	1.53	1.31	1.93	1.33	1.29	1.45	1.43	1.26	2.03	1.32	1.37	1.46	1.41
16	--	--	--	1.28	1.65	1.50	1.31	1.84	1.34	1.42	1.44	1.43	1.27	2.07	1.43	1.39	1.49	1.44
17				1.21	1.70	1.54	1.37	1.97	1.40	1.44	1.48	1.46	1.26	2.08	1.29	1.40	1.54	1.47
18				1.38	1.70	1.53	1.37	1.96	1.41	1.50	2.33	1.53	1.25	2.08	1.30	1.45	1.53	1.49
19				1.26	1.71	1.56	1.32	1.96	1.34	1.54	2.24	1.56	1.19	2.10	1.31	1.44	1.56	1.49
20				1.45	1.73	1.61	1.31	1.94	1.33	1.58	2.30	1.60	1.18	2.07	1.19	1.46	1.53	1.49
21	--	--	--	1.23	1.73	1.58	1.27	1.85	1.29	1.59	2.33	1.60	1.14	2.03	1.16	1.43	1.52	1.48
22	1.59	1.59	1.59	1.24	1.70	1.58	1.21	1.92	1.23	1.54	1.59	1.56	1.13	1.15	1.14	1.45	1.55	1.49
23	--	--	--	1.16	1.70	1.56	1.21	1.98	1.27	1.49	1.54	1.51	1.29	2.09	1.34	1.45	1.53	1.49
24	--	--	--	1.30	1.72	1.57	1.34	1.97	1.38	1.36	1.50	1.48	1.44	2.08	1.49	1.46	1.52	1.49
25	--	--	--	1.35	1.70	1.55	1.28	1.91	1.30	1.48	2.15	1.49	1.35	2.03	1.39	1.42	1.49	1.45
26	--	--	--	1.36	1.70	1.53	1.29	1.95	1.32	1.43	1.54	1.51	1.33	2.05	1.35	1.40	1.46	1.43
27	--	--	--	1.44	1.65	1.54	1.21	1.95	1.34	1.52	1.90	1.53	1.37	2.12	1.41	1.40	1.46	1.43
28	--	--	--	1.36	1.65	1.52	1.29	1.93	1.31	1.33	1.56	1.50	1.31	2.05	1.35	1.37	1.48	1.42
29	--	--	--	1.43	1.68	1.56	1.25	1.94	1.31	1.32	1.49	1.47	1.25	2.04	1.30	1.38	1.50	1.44
30	--	--	--	1.40	1.70	1.53	1.31	1.98	1.33	1.28	1.46	1.45	1.35	2.10	1.40	1.42	1.50	1.46
31	--	--	--	1.19	1.74	1.57	1.25	1.95	1.32	1.35	1.46	1.46	1.31	2.08	1.35	1.43	1.54	1.46
Monthly Min/Max/Avg	1.59	1.59	1.59	1.16	1.76	1.55	1.21	2.00	1.34	1.28	2.33	1.51	1.13	2.12	1.35	1.37	1.56	1.45

NOTES: '--' Indication Analyzer Offline

1.2.31 Phosphoric Acid Chemical Consumption

July 2024

Day	Dosage (mg/L)		Consumption (kg)	
	Rossdale	E.L. Smith	Rossdale	E.L. Smith
1	0.90	0.90	616	858
2	0.90	0.90	599	908
3	0.90	0.90	609	945
4	0.90	0.90	642	983
5	0.90	0.90	678	1,002
6	0.90	0.90	737	1,101
7	0.90	0.90	670	991
8	0.90	0.90	818	1,124
9	0.90	0.90	962	1,133
10	0.90	0.90	965	1,086
11	0.90	0.90	924	1,096
12	0.90	0.90	835	949
13	0.90	0.90	835	980
14	0.90	0.90	673	938
15	0.90	0.90	759	999
16	0.90	0.90	899	1,102
17	0.90	0.90	900	1,157
18	0.90	0.90	913	1,152
19	0.90	0.90	981	1,172
20	0.90	0.90	959	980
21	0.90	0.90	974	960
22	0.90	0.90	924	1,073
23	0.90	0.90	940	1,145
24	0.90	0.90	870	1,054
25	0.90	0.90	701	902
26	0.90	0.90	578	926
27	0.90	0.90	637	875
28	0.90	0.90	578	837
29	0.90	0.90	686	957
30	0.90	0.90	738	1,035
31	0.90	0.90	825	956
Monthly Total			24,428	31,374
Monthly Avg	0.90	0.90	788	1,012

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

July 2024

Date and Time Reported	Location of Mainbreak	Repaired (Time)	Size	Type**
07/07/2024 06:41:13	8215-82 AVENUE NW	07/08/2024 01:00:35	150	CI
07/12/2024 06:12:17	10207U-116 STREET NW	07/12/2024 23:30:55	150	CI
07/21/2024 14:09:09	7204-79 STREET NW	07/22/2024 01:10:29	150	CI
07/21/2024 18:29:37	1115-103A STREET SW		508	Steel
07/21/2024 20:38:41	11252-109 AVENUE NW	07/22/2024 04:58:35	200	CI
07/22/2024 05:00:00	11252-109 AVENUE NW	07/22/2024 17:18:15	150	CI
07/20/2024 23:46:06	10523C - 123 STREET NW		914	Steel
07/27/2024 02:22:21	11635-78 AVENUE NW	07/27/2024 03:00:00	150	CI
07/27/2024 03:15:37	11635-78 AVENUE NW	07/27/2024 22:14:40	150	CI
07/30/2024 01:58:05	16019-101 STREET NW	07/30/2024 22:49:50	150	PVC
07/30/2024 15:00:00	10539-123 STREET NW		914	Steel

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	
Sep-24	
Oct-24	
Nov-24	
Dec-24	
YTD 2024	**123**

**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

July 2024

Parameter	Unit	Monthly Count	Monthly Average	YTD Median	YTD Min	YTD Max	YTD Count
Alkalinity Total	mg CaCO3/L	62	120	120	8	141	422
Aluminum	mg/L	2	0.071	0.035	0.023	0.090	14
Arsenic	mg/L	2	<0.0002	<0.0002	<0.0002	<0.0002	14
Bromate Dissolved	mg/L	10	<0.005	<0.005	<0.005	<0.005	62
Bromodichloromethane	µg/L	62	1.2	1.0	<0.5	2.2	424
Cadmium	mg/L	2	<0.0002	<0.0002	<0.0002	<0.0002	14
Calcium Hardness	mg/L CaCO3	60	120	118	96	141	416
Chlorate Dissolved	mg/L	10	0.191	0.183	<0.100	0.332	62
Chloride Dissolved	mg/L	10	6.55	6.43	4.78	12.10	62
Chlorite Dissolved	mg/L	10	<0.01	<0.20	<0.20	<0.20	62
Chromium	mg/L	2	<0.0002	<0.0002	<0.0002	<0.0002	14
Colour	TCU	62	0.8	0.9	<0.5	1.9	422
Conductivity	µS/cm	10	411	405	342	453	62
Copper	mg/L	2	<0.0020	<0.0050	<0.0050	<0.0050	14
Cryptosporidium	oocysts/100L	2	<0.1	<0.1	<0.1	<0.1	10
Fluoride	mg/L	62	0.67	0.68	0.62	0.79	422
Giardia	cysts/100L	2	<0.1	<0.1	<0.1	<0.1	10
Iron	mg/L	2	<0.0050	<0.0050	<0.0050	<0.0050	14
Lead	mg/L	2	<0.0002	<0.0002	<0.0002	<0.0002	14
Manganese	mg/L	2	<0.0020	<0.0020	<0.0020	<0.0020	14
Mercury	mg/L	2	<0.0002	<0.0002	<0.0002	<0.0002	14
Nitrate (as N) Dissolved	mg/L	10	0.027	0.080	<0.010	0.170	62
Nitrite (as N) Dissolved	mg/L	10	<0.01	<0.01	<0.01	0.02	62
pH	N/A	62	7.9	7.9	7.6	8.3	423
Potassium	mg/L	2	0.86	0.85	0.70	1.10	14
Sodium	mg/L	2	14.30	11.15	6.80	18.90	14
Sulphate Dissolved	mg/L	10	75.3	73.6	59.5	95.1	62
Total Chlorine	N/A	62	2.19	2.15	1.87	2.38	422
Total Dissolved Solids	mg/L	2	207	229	195	252	14
Total Hardness	mg/L CaCO3	60	182	179	145	218	416
Total Organic Carbon	mg/L C	10	1.6	1.4	0.9	2.8	62
Trihalomethanes	µg/L	62	31.8	13.3	5.1	39.9	424
Turbidity	NTU	62	0.05	<0.04	<0.04	0.09	422
Uranium	mg/L	2	<0.0005	<0.0005	<0.0005	0.0006	14
Zinc	mg/L	2	<0.0050	<0.0050	<0.0050	<0.0050	14
Bacteriological Data							
Coliforms, total	PA/100mL	62	Absent	Absent	Absent	Absent	422
E. coli	PA/100mL	62	Absent	Absent	Absent	Absent	422

2.1.3 SUMMARY OF LABORATORY ANALYSIS - 2024

DISTRIBUTION OF TESTING

Drinking Water Testing

		Jan	Feb	Mar	Apr	May	Jun	Jul	**Total**
Water Treatment Plant	# Tests	10,442	9,566	10,736	10,143	9,855	10,053	10,306	71,101
	# Samples	261	248	326	269	264	260	268	1,896
Field Reservoirs	# Tests	1,936	1,721	1,695	1,883	1,734	2,006	2,225	13,200
	# Samples	63	52	52	65	49	53	66	400
Routine Distribution System	# Tests	2,740	2,879	2,734	2,845	2,901	2,692	2,424	19,215
	# Samples	146	153	146	153	144	124	99	965
System Depressurization/Repair	# Tests	1,050	720	555	675	660	630	628	4,918
	# Samples	70	48	37	45	44	42	42	328
Customer Complaints	# Tests	1,395	651	1,209	1,488	1,023	1,209	1,009	7,984
	# Samples	15	7	13	16	11	13	11	86
Total	# Tests	17,563	15,537	16,929	17,034	16,173	16,590	16,592	116,418
	# Samples	555	508	574	548	512	492	486	3,675

Additional Testing

		Jan	Feb	Mar	Apr	May	Jun	Jul	**Total**
New Watermain Testing	# Tests	80	30	0	10	135	160	495	910
	# Samples	17	6	0	2	27	32	99	183
Water Treatment Plant Waste Discharge	# Tests	168	43	173	117	300	327	284	1,412
	# Samples	56	33	36	45	55	51	50	326
Quality Control	# Tests	5,961	6,042	6,091	5,937	6,055	6,793	8,719	45,598
	# Samples	1,187	1,056	1,193	1,186	1,244	1,418	1,629	8,913
Distribution Water Enhanced Surveillance	# Tests	0	0	0	0	0	540	1,337	1,877
	# Samples	0	0	0	0	0	20	53	73
Externally Contracted Analyses	# Tests	405	672	316	307	949	798	832	4,279
	# Samples	134	120	157	136	140	122	139	948
Total	# Tests	6,614	6,787	6,580	6,371	7,439	8,618	11,667	54,076
	# Samples	1,394	1,215	1,386	1,369	1,466	1,643	1,970	10,443

		Jan	Feb	Mar	Apr	May	Jun	Jul	**Total**
Total	# Tests	24,177	22,324	23,509	23,405	23,612	25,208	28,259	170,494
	# Samples	1,825	1,611	1,848	1,793	1,842	2,022	2,327	13,268

2.1.4 QUALITY ASSURANCE – July 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 September 2022 and supersedes all previous electronic and printed versions, including the Sixth Edition published 1996. Guideline limits are listed as Maximum Acceptable Concentrations (MACs), Aesthetic Objectives (AO) or Operational Guidelines (OG). The latest edition of the Health Canada Guidelines includes parameter types, commons sources, health considerations and application of the guideline.

In addition, for treated water in the distribution system, total chlorine residual values under 0.5 mg/L are not necessarily violations of the approval, but do require immediate follow-up action and re-sampling. A violation of the current *Approval-to-Operate* (638-04-01) 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 AEP *Approval-to-Operate* limits, including the MACs for the GCDWQ parameters listed Schedule 4.

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

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

Current month: **0** YTD Total: **2**

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	0
Complaint Samples	0	0
Random Samples	0	2
Reservoirs	0	0
TOTAL (Distribution)	0	2

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	0
Turbidity > 1 NTU	0	0
Chlorine < 1 mg/L or > 2.4 mg/L	0	0
Cryptosporidium ≥ 1/1000 L	0	0
Giardia ≥ 1/1000 L	0	0
Other	2	2
Total Variances + Violations	2 + 0 = 2	2 + 0 = 2

Notes: 1) Variance statistics include any violations.

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

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

Variance Category[1]	This Month	YTD
Turbidity > 1 NTU	27	84
Chlorine < 1 mg/L or > 2.4 mg/L	4	10
Single Positive Coliform	5	7
THMs > 50 µg/L	0	0
Pipe Lube, Odour, UV positive	0	1
Aluminium[2] > 0.20 (or 0.1) mg/L	10	16
Iron > 0.300 mg/L	0	4
Other	3	3
Total Variances + Violations	49 + 0 = 49	125 + 2 = 127

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

2.1.4.7 **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

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
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	189	0	0.0	0	0.0	123	0.43	0.10	3.85
July									
Complaint Water	11	0	0.0	0	0.0	11	0.64	0.24	1.66
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	176	2	1.1	0	0.0	136	0.37	0.11	2.40
Year to Date	1,833	4	0.2	0	0.0	874	0.35	0.10	3.85

2.2.2 Bacteriological Data: Distribution System

2024

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

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

2.2.2 Bacteriological Data: Distribution System

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
Year to Date	86	0	0.0	0	0.0	86	0.33	0.10	1.66
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				
Year to Date	328	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	

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	

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

July 2024

	Current Month								YTD								Limits	
	ROSSDALE				E.L. SMITH				ROSSDALE				E.L. SMITH				*Approval or GCDWQ MAC, (AO or OG)	EPCOR
	Mean	Min	Max	Count	Mean	Min	Max	Count	Mean	Min	Max	Count	Mean	Min	Max	Count		
Microbiologicals																		
Microcystin	<0.2	<0.2	<0.2	1	<0.2	<0.2	<0.2	1	<0.2	<0.2	<0.2	3	<0.2	<0.2	<0.2	3	1.5	
Physical																		
Colour (TCU)	0.7	<0.5	1.0	31	0.9	0.5	1.6	31	0.9	<0.5	1.9	210	0.9	<0.5	1.8	212	(15)	10
Conductivity (uS/cm)	404	393	414	5	416	401	441	5	397	342	439	31	408	351	453	31		<1
FPA-Intensity (N/A)	1.00	0.88	1.25	4	0.94	0.69	1.38	4	1.15	0.75	1.88	40	1.04	0.62	2.12	40		
pH (N/A)	7.9	7.8	8.1	31	7.8	7.6	8.0	31	7.9	7.7	8.3	211	7.8	7.6	8.2	212	(7.0 - 10.5)	7.3-8.3
Total Dissolved Solids (mg/L)	195	195	195	1	217	217	217	1	226	195	252	7	233	217	250	7	(500)	
Turbidity (NTU)	<0.04	<0.04	0.05	31	0.05	<0.04	0.07	31	<0.04	<0.04	0.07	210	0.05	<0.04	0.09	212		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	7	<0.0004	<0.0002	<0.0005	7	0.006	
Arsenic	0.0002	0.0002	0.0002	1	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	0.0002	7	<0.0002	<0.0002	<0.0002	7	0.01	
Barium	0.073	0.073	0.073	1	0.072	0.072	0.072	1	0.061	0.050	0.073	7	0.060	0.049	0.072	7	2	
Boron	0.011	0.011	0.011	1	0.011	0.011	0.011	1	0.010	0.009	0.011	7	0.009	0.008	0.011	7	2	
Bromate, dissolved	<0.005	<0.005	<0.005	5	<0.005	<0.005	<0.005	5	<0.005	<0.003	<0.005	31	<0.005	<0.003	<0.005	31	0.01	
Cadmium	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	7	<0.0002	<0.0002	<0.0002	7	0.007	
Chlorate Dissolved	0.24	0.22	0.27	5	0.15	0.12	0.17	5	0.24	0.18	0.33	31	0.11	<0.05	0.23	31	1	
Chlorite Dissolved	<0.005	<0.005	<0.005	5	<0.005	<0.005	<0.005	5	<0.030	<0.005	<0.200	31	<0.030	<0.005	<0.200	31	1	
Chromium	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	7	<0.0002	<0.0002	<0.0002	7	0.05	
Copper	<0.002	<0.002	<0.002	1	<0.002	<0.002	<0.002	1	<0.003	<0.002	<0.005	7	<0.003	<0.002	<0.005	7	2 (1)	
Fluoride	0.67	0.65	0.70	31	0.67	0.63	0.72	31	0.69	0.63	0.76	210	0.69	0.62	0.79	212	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	7	<0.0002	<0.0002	<0.0002	7	0.005	
Manganese	<0.002	<0.002	<0.002	1	<0.002	<0.002	<0.002	1	<0.002	<0.002	<0.002	7	<0.002	<0.002	<0.002	7	0.12 (0.02)	
Mercury	<0.0026	<0.00020	<0.0050	2	<0.0026	<0.00020	<0.0050	2	<0.0011	<0.00005	<0.0050	10	<0.0011	<0.00005	<0.0050	10	0.001	
Nitrate (as N) Dissolved	0.03	<0.01	0.06	5	0.03	0.01	0.07	5	0.06	<0.01	0.17	31	0.06	<0.01	0.17	31	10	
Nitrite (as N) Dissolved	<0.010	<0.010	0.010	5	<0.010	<0.010	0.010	5	<0.010	<0.005	0.020	31	<0.010	<0.005	0.020	31	1	
Selenium	0.0004	0.0004	0.0004	1	0.0003	0.0003	0.0003	1	0.0003	0.0002	0.0004	7	0.0003	0.0002	0.0003	7	0.05	
Total Chlorine	2.23	2.15	2.31	31	2.16	2.07	2.25	31	2.17	1.91	2.38	210	2.12	1.87	2.32	212	>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	7	<0.0005	<0.0005	0.0005	7	0.02	

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

July 2024

	Current Month								YTD								Limits	
	ROSSDALE				E.L. SMITH				ROSSDALE				E.L. SMITH				*Approval or GCDWQ MAC, (AO or OG)	EPCOR
	Mean	Min	Max	Count	Mean	Min	Max	Count	Mean	Min	Max	Count	Mean	Min	Max	Count		
Primary Organics (ug/L)																		
2,4-D	<0.05	<0.05	<0.05	1	<0.05	<0.05	<0.05	1	<0.12	<0.05	<0.25	3	<0.12	<0.05	<0.25	3	100	
Atrazine	<0.05	<0.05	<0.05	1	<0.05	<0.05	<0.05	1	<0.05	<0.05	<0.05	3	<0.05	<0.05	<0.05	3	5	
Benzene	<0.5	<0.5	<0.5	31	<0.5	<0.5	<0.5	31	<0.5	<0.5	0.6	211	<0.5	<0.5	<0.5	213	5	
Benzo(a)pyrene	<0.005	<0.005	<0.005	1	<0.005	<0.005	<0.005	1	<0.005	<0.005	<0.005	3	<0.005	<0.005	<0.005	3	0.04	
Bromoxynil	<0.05	<0.05	<0.05	1	<0.05	<0.05	<0.05	1	<0.12	<0.05	<0.25	3	<0.12	<0.05	<0.25	3	5	
Carbon Tetrachloride	<0.5	<0.5	<0.5	31	<0.5	<0.5	<0.5	31	<0.5	<0.5	<1.0	211	<0.5	<0.5	<1.0	213	2	
Chlorobenzene	<0.5	<0.5	<0.5	31	<0.5	<0.5	<0.5	31	<0.5	<0.5	<0.5	211	<0.5	<0.5	<0.5	213	80 (30)	
Chlorpyrifos	<0.1	<0.1	<0.1	1	<0.1	<0.1	<0.1	1	<0.1	<0.1	<0.1	3	<0.1	<0.1	<0.1	3	90	
Cyanazine	<0.1	<0.1	<0.1	1	<0.1	<0.1	<0.1	1	<0.1	<0.1	<0.1	3	<0.1	<0.1	<0.1	3		
Diazinon	<0.025	<0.025	<0.025	1	<0.025	<0.025	<0.025	1	<0.025	<0.025	<0.025	3	<0.025	<0.025	<0.025	3		
Dicamba	<0.1	<0.1	<0.1	1	<0.1	<0.1	<0.1	1	<0.2	<0.1	<0.5	3	<0.2	<0.1	<0.5	3	110	
Dichlorobenzene (1,2)	<0.5	<0.5	<0.5	31	<0.5	<0.5	<0.5	31	<0.5	<0.5	<0.5	211	<0.5	<0.5	<0.5	213		
Dichlorobenzene (1,4)	<0.5	<0.5	<0.5	31	<0.5	<0.5	<0.5	31	<0.5	<0.5	<0.5	211	<0.5	<0.5	<0.5	213	5 (1)	
Dichloroethane (1,2)	<0.5	<0.5	<0.5	31	<0.5	<0.5	<0.5	31	<0.5	<0.5	<0.5	210	<0.5	<0.5	<0.5	212	5	
Dichloroethylene (1,1)	<0.5	<0.5	<0.5	31	<0.5	<0.5	<0.5	31	<0.5	<0.5	<3.0	211	<0.5	<0.5	<3.0	213	14	
Dichlorophenol (2,4)	<0.2	<0.2	<0.2	1	<0.2	<0.2	<0.2	1	<0.2	<0.2	<0.3	3	<0.2	<0.2	<0.3	3		
Diclofop-methyl	<0.1	<0.1	<0.1	1	<0.1	<0.1	<0.1	1	<0.1	<0.1	<0.1	3	<0.1	<0.1	<0.1	3		
Dimethoate	<0.05	<0.05	<0.05	1	<0.05	<0.05	<0.05	1	<0.05	<0.05	<0.05	3	<0.05	<0.05	<0.05	3	20	
Diuron	<0.05	<0.05	<0.05	1	<0.05	<0.05	<0.05	1	<0.05	<0.05	<0.05	3	<0.05	<0.05	<0.05	3		
Ethylbenzene	<0.5	<0.5	<0.5	31	<0.5	<0.5	<0.5	31	<0.5	<0.5	<0.5	211	<0.5	<0.5	<0.5	213	140 (1.6)	
Glyphosate	<0.2	<0.2	<0.2	1	<0.2	<0.2	<0.2	1	<0.3	<0.2	<0.5	3	<0.3	<0.2	<0.5	3	280	
Haloacetic Acids, (HAA5)	47.1	47.1	47.1	1	42.3	42.3	42.3	1	24.0	16.3	47.1	7	21.6	13.7	42.3	7	80	40
Malathion	<0.025	<0.025	<0.025	1	<0.025	<0.025	<0.025	1	<0.025	<0.025	<0.025	3	<0.025	<0.025	<0.025	3	190	
MCPA	<0.05	<0.05	<0.05	1	<0.05	<0.05	<0.05	1	<0.12	<0.05	<0.25	3	<0.12	<0.05	<0.25	3	100	
Methylene Chloride	<0.5	<0.5	<0.5	31	<0.5	<0.5	<0.5	31	<0.5	<0.5	<0.5	211	<0.5	<0.5	<0.5	213	50	
Metolachlor	<0.025	<0.025	<0.025	1	<0.025	<0.025	<0.025	1	<0.025	<0.025	<0.025	3	<0.025	<0.025	<0.025	3		
Metribuzin	<0.1	<0.1	<0.1	1	<0.1	<0.1	<0.1	1	<0.1	<0.1	<0.1	3	<0.1	<0.1	<0.1	3	80	
NDMA	<0.0030	<0.0030	<0.0030	1	<0.0016	<0.0016	<0.0016	1	<0.0025	<0.0009	<0.0060	7	<0.0021	<0.0009	<0.0060	7	0.040	10
NTA (mg/L)				0				0	<0.4	<0.4	<0.4	2	<0.4	<0.4	<0.4	2	0.4	
Pentachlorophenol	<0.5	<0.5	<0.5	1	<0.5	<0.5	<0.5	1	<0.5	<0.5	<0.5	3	<0.5	<0.5	<0.5	3	60 (30)	
Perfluorooctane sulfonic acid (PFOS)	<0.002	<0.002	<0.002	1	<0.002	<0.002	<0.002	1	<0.008	<0.002	<0.020	3	<0.008	<0.002	<0.020	3	0.6	
Perfluorooctanoic acid (PFOA)	<0.002	<0.002	<0.002	1	<0.002	<0.002	<0.002	1	<0.008	<0.002	<0.020	3	<0.008	<0.002	<0.020	3	0.0002	
Phorate	<0.25	<0.25	<0.25	1	<0.25	<0.25	<0.25	1	<0.25	<0.25	<0.25	3	<0.25	<0.25	<0.25	3		
Picloram	<0.1	<0.1	<0.1	1	<0.1	<0.1	<0.1	1	<0.2	<0.1	<0.5	3	<0.2	<0.1	<0.5	3		
Simazine	<0.1	<0.1	<0.1	1	<0.1	<0.1	<0.1	1	<0.1	<0.1	<0.1	3	<0.1	<0.1	<0.1	3		
Terbufos	<0.5	<0.5	<0.5	1	<0.5	<0.5	<0.5	1	<0.5	<0.5	<0.5	3	<0.5	<0.5	<0.5	3		
Tetrachloroethylene	<0.5	<0.5	<0.5	31	<0.5	<0.5	<0.5	31	<0.5	<0.5	<0.5	211	<0.5	<0.5	<0.5	213	10	
Toluene	<0.5	<0.5	<0.5	31	<0.5	<0.5	<0.5	31	<0.5	<0.5	1.6	211	<0.5	<0.5	3.3	213	60 (24)	

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

July 2024

	Current Month								YTD								Limits	
	ROSSDALE				E.L. SMITH				ROSSDALE				E.L. SMITH				*Approval or GCDWQ MAC, (AO or OG)	EPCOR
	Mean	Min	Max	Count	Mean	Min	Max	Count	Mean	Min	Max	Count	Mean	Min	Max	Count		
Primary Organics (ug/L)																		
Total Xylenes	<1.0	<1.0	<1.0	31	<1.0	<1.0	<1.0	31	<1.0	<1.0	<2.5	211	<1.0	<1.0	<2.5	213	90	
Trichloroethylene	<0.5	<0.5	<0.5	31	<0.5	<0.5	<0.5	31	<0.5	<0.5	<0.5	211	<0.5	<0.5	<0.5	213	5	
Trifluralin	<0.1	<0.1	<0.1	1	<0.1	<0.1	<0.1	1	<0.1	<0.1	<0.1	3	<0.1	<0.1	<0.1	3		
Trihalomethanes	30.6	23.1	39.9	31	32.7	23.8	39.5	31	18.5	6.6	39.9	211	17.0	5.1	39.5	213	100	50
Vinyl Chloride	<1	<1	<1	31	<1	<1	<1	31	<1	<1	<1	210	<1	<1	<1	212	2	
Radionuclides (Bq/L)																		
Cesium-137				0				0	<0.2	<0.2	<0.2	1	<0.2	<0.2	<0.2	1	10	
Gross Alpha				0				0	<0.12	<0.12	<0.12	1	<0.15	<0.15	<0.15	1	(0.5)	
Gross Beta				0				0	<0.07	<0.07	<0.07	1	<0.07	<0.07	<0.07	1	(1.0)	
Iodine-131				0				0	<0.4	<0.4	<0.4	1	<0.4	<0.4	<0.4	1	6	
Lead-210				0				0	<0.02	<0.02	<0.02	1	<0.02	<0.02	<0.02	1	0.2	
Radium-226				0				0	<0.005	<0.005	<0.005	1	<0.005	<0.005	<0.005	1	0.5	
Strontium-90				0				0	<0.05	<0.05	<0.05	1	<0.05	<0.05	<0.05	1	5	
Tritium				0				0	<40	<40	<40	1	<40	<40	<40	1	7000	

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

July 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)	119	113	122	31	121	114	128	31	118	99	141	210	119	8	140	212		
Aluminum	0.090	0.090	0.090	1	0.057	0.057	0.057	1	0.050	0.023	0.090	7	0.042	0.026	0.089	7	2.9	0.1/0.2
Ammonia as NH3	0.13	0.10	0.17	14	0.12	0.09	0.17	14	0.13	0.08	0.17	61	0.11	0.08	0.17	61		
Beryllium	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	7	<0.0002	<0.0002	<0.0002	7		
Bromide Dissolved	<0.03	<0.03	<0.03	5	<0.03	<0.03	<0.03	5	<0.02	<0.01	<0.05	31	<0.02	<0.01	<0.05	31		
Calcium	50.0	50.0	50.0	1	49.7	49.7	49.7	1	47.2	43.7	51.3	7	47.4	44.2	51.4	7		
Calcium Hardness Calculated	125	125	125	1	124	124	124	1	116	109	125	3	116	110	124	3		
Chloride Dissolved	5.65	5.41	5.93	5	7.25	6.44	8.74	5	6.36	4.78	11.40	31	7.17	5.61	12.10	31	(250)	
Cobalt	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	7	<0.0002	<0.0002	<0.0002	7		
Free Chlorine	<0.07	<0.07	<0.07	1	<0.07	<0.07	<0.07	1	<0.07	<0.07	<0.07	7	<0.07	<0.07	<0.07	7		
Hardness, Ca (mg CaCO3/L)	120	114	127	30	119	113	124	30	117	98	141	207	116	96	138	209		
Iron	<0.005	<0.005	<0.005	1	<0.005	<0.005	<0.005	1	<0.005	<0.005	<0.005	7	<0.005	<0.005	<0.005	7	(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	7	<0.001	<0.001	<0.001	7		
Lithium	0.0040	0.0040	0.0040	1	0.004	0.004	0.004	1	0.0037	0.0031	0.0042	7	0.003	0.003	0.004	7		
Magnesium	14.0	14.0	14.0	1	13.6	13.6	13.6	1	13.7	12.6	15.0	7	13.7	12.6	15.1	7		
Molybdenum	0.0008	0.0008	0.0008	1	0.0008	0.0008	0.0008	1	0.0009	0.0007	0.0010	7	0.0008	0.0007	0.0009	7		
Nickel	<0.0005	<0.0005	<0.0005	1	0.0005	0.0005	0.0005	1	<0.0005	<0.0005	0.0005	7	<0.0005	<0.0005	0.0005	7		
Phosphate,Ortho (as P)				0				0	<0.02	<0.02	<0.02	14	<0.02	<0.02	<0.02	12		
Phosphorus	<0.02	<0.02	<0.02	1	<0.02	<0.02	<0.02	1	<0.02	<0.02	<0.02	7	<0.02	<0.02	<0.02	7		
Potassium	0.8	0.8	0.8	1	0.9	0.9	0.9	1	0.9	0.7	1.1	7	0.9	0.7	1.0	7		
Silicon	2.13	2.13	2.13	1	2.27	2.27	2.27	1	2.02	1.58	2.27	7	2.01	1.64	2.27	7		
Silver	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	7	<0.0002	<0.0002	<0.0002	7		
Sodium	9.4	9.4	9.4	1	18.1	18.1	18.1	1	10.6	6.8	16.1	7	14.0	7.4	18.9	7	(200)	
Strontium	0.448	0.448	0.448	1	0.426	0.426	0.426	1	0.442	0.385	0.488	7	0.439	0.408	0.478	7	7.0	
Sulphate Dissolved	73.7	69.6	79.0	5	76.5	72.0	87.0	5	72.8	59.5	86.8	31	76.1	60.4	95.1	31	(500)	
Thallium	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	1	<0.0003	<0.0002	<0.0005	7	<0.0003	<0.0002	<0.0005	7		
Tin	<0.0005	<0.0005	<0.0005	1	<0.0005	<0.0005	<0.0005	1	<0.0005	<0.0005	<0.0005	7	<0.0005	<0.0005	<0.0005	7		
Titanium	<0.0005	<0.0005	<0.0005	1	<0.0005	<0.0005	<0.0005	1	<0.0005	<0.0005	<0.0005	7	<0.0005	<0.0005	<0.0005	7		
Total Hardness (mg/L CaCO3)	183	174	186	30	182	175	188	30	178	149	218	207	177	145	211	209		
Total Hardness Calculated	182	182	182	1	180	180	180	1	170	162	182	3	170	162	180	3		
Vanadium	<0.0005	<0.0005	<0.0005	1	<0.0005	<0.0005	<0.0005	1	<0.0005	<0.0005	<0.0005	7	<0.0005	<0.0005	<0.0005	7		
Zinc	<0.005	<0.005	<0.005	1	<0.005	<0.005	<0.005	1	<0.005	<0.005	<0.005	7	<0.005	<0.005	<0.005	7	(5.0)	
Zirconium	<0.001	<0.001	<0.001	1	<0.001	<0.001	<0.001	1	<0.001	<0.001	<0.001	7	<0.001	<0.001	<0.001	7		

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

July 2024

	Current Month								YTD								Limits	
	ROSSDALE				E.L. SMITH				ROSSDALE				E.L. SMITH				*Approval or GCDWQ MAC, (AO or OG)	EPCOR
	Mean	Min	Max	Count	Mean	Min	Max	Count	Mean	Min	Max	Count	Mean	Min	Max	Count		
Secondary Organics (ug/L)																		
Aldicarb	<0.1	<0.1	<0.1	1	<0.1	<0.1	<0.1	1	<0.1	<0.1	<0.1	3	<0.1	<0.1	<0.1	3		
Aldrin	<0.008	<0.008	<0.008	1	<0.008	<0.008	<0.008	1	<0.008	<0.008	<0.008	3	<0.008	<0.008	<0.008	3		
Azinphos-methyl	<0.1	<0.1	<0.1	1	<0.1	<0.1	<0.1	1	<0.1	<0.1	<0.1	3	<0.1	<0.1	<0.1	3		
Bromochloroacetic acid	<1	<1	<1	1	<1	<1	<1	1	<1	<1	<1	7	<1	<1	<1	7		
Bromodichloromethane	1.3	<0.5	1.7	31	1.2	<0.5	1.8	31	1.2	<0.5	2.2	211	1.0	<0.5	2.0	213		16
Bromoform	<0.5	<0.5	<0.5	31	<0.5	<0.5	<0.5	31	<0.5	<0.5	<1.0	211	<0.5	<0.5	<1.0	213		
Carbaryl	<0.05	<0.05	<0.05	1	<0.05	<0.05	<0.05	1	<0.05	<0.05	<0.05	3	<0.05	<0.05	<0.05	3		
Carbofuran	<0.025	<0.025	<0.025	1	<0.025	<0.025	<0.025	1	<0.025	<0.025	<0.025	3	<0.025	<0.025	<0.025	3		
Chloroform	29.1	21.60	38.7	31	31.3	22.70	37.7	31	17.0	5.70	38.7	211	15.8	4.30	37.7	213		
Dibromoacetic acid	<1	<1	<1	1	<1	<1	<1	1	<1	<1	<1	7	<1	<1	<1	7		
Dibromochloromethane	<0.5	<0.5	<0.5	31	<0.5	<0.5	<0.5	31	<0.5	<0.5	<0.5	211	<0.5	<0.5	<0.5	213		
Dichloroacetic acid	21.10	21.10	21.10	1	19.8	19.8	19.8	1	11.77	7.98	21.10	7	10.9	7.0	19.8	7		
Dichlorobenzene (1,3)	<0.5	<0.5	<0.5	31	<0.5	<0.5	<0.5	31	<0.5	<0.5	<0.5	211	<0.5	<0.5	<0.5	213		
Dichloroethylene, cis (1,2)	<0.5	<0.5	<0.5	31	<0.5	<0.5	<0.5	31	<0.5	<0.5	<0.5	211	<0.5	<0.5	<0.5	213		
Dichloroethylene, trans (1,2)	<0.5	<0.5	<0.5	31	<0.5	<0.5	<0.5	31	<0.5	<0.5	<0.5	211	<0.5	<0.5	<0.5	213		
Dichloropropane (1,2)	<0.5	<0.5	<0.5	31	<0.5	<0.5	<0.5	31	<0.5	<0.5	<0.5	211	<0.5	<0.5	<0.5	213		
Dieldrin	<0.008	<0.008	<0.008	1	<0.008	<0.008	<0.008	1	<0.008	<0.008	<0.008	3	<0.008	<0.008	<0.008	3		
Methyl t-Butyl Ether (MTBE)	<0.5	<0.5	<0.5	31	<0.5	<0.5	<0.5	31	<0.5	<0.5	0.5	211	<0.5	<0.5	<0.5	213	(15)	
MIBK	<1	<1	<1	31	<1	<1	<1	31	<1	<1	<1	211	<1	<1	<1	213		
Monobromoacetic acid	<1	<1	<1	1	<1	<1	<1	1	<1	<1	<1	7	<1	<1	<1	7		
Monochloroacetic acid	1.58	1.58	1.58	1	1.68	1.68	1.68	1	<1.10	<1.00	1.58	7	<1.13	<1.00	1.68	7		
Parathion	<0.1	<0.1	<0.1	1	<0.1	<0.1	<0.1	1	<0.1	<0.1	<0.1	3	<0.1	<0.1	<0.1	3		
Perfluorobutane Sulfonate (PFBS)				0				0	<2	<2	<2	1	<2	<2	<2	1		
Perfluorobutanoic acid (PFBA)	<1.01	<0.02	<2.00	2	<1.01	<0.02	<2.00	2	<0.83	<0.02	<2.00	5	<0.83	<0.02	<2.00	5		
Perfluorodecanoic Acid (PFDA)	<2	<2	<2	1	<2	<2	<2	1	<2	<2	<2	2	<2	<2	<2	2		
Perfluorododecanoic Acid (PFDoA)	<2	<2	<2	1	<2	<2	<2	1	<2	<2	<2	2	<2	<2	<2	2		
Perfluoroheptanoic acid (PFHpA)	<1.001	<0.002	<2.000	2	<1.001	<0.002	<2.000	2	<0.805	<0.002	<2.000	5	<0.805	<0.002	<2.000	5		
Perfluorohexane sulfonic acid (PFHxS)	<0.002	<0.002	<0.002	1	<0.002	<0.002	<0.002	1	<0.008	<0.002	<0.020	3	<0.008	<0.002	<0.020	3		
Perfluorohexanoic acid (PFHxA)	<1.001	<0.002	<2.000	2	<1.001	<0.002	<2.000	2	<0.805	<0.002	<2.000	5	<0.805	<0.002	<2.000	5		
Perfluorononanoic acid (PFNA)	<1.001	<0.002	<2.000	2	<1.001	<0.002	<2.000	2	<0.805	<0.002	<2.000	5	<0.805	<0.002	<2.000	5		
Perfluoropentanoic Acid (PFPeA)	<1.001	<0.002	<2.000	2	<1.001	<0.002	<2.000	2	<0.805	<0.002	<2.000	5	<0.805	<0.002	<2.000	5		
Perfluoroundecanoic Acid (PFUnA)	<2	<2	<2	1	<2	<2	<2	1	<2	<2	<2	2	<2	<2	<2	2		
Styrene	<0.5	<0.5	<0.5	31	<0.5	<0.5	<0.5	31	<0.5	<0.5	<0.5	211	<0.5	<0.5	<0.5	213		
Tetrachloroethane (1,1,2,2)	<0.5	<0.5	<0.5	31	<0.5	<0.5	<0.5	31	<0.5	<0.5	<1.0	211	<0.5	<0.5	<1.0	213		
Total Organic Carbon	1.6	1.4	1.8	5	1.7	1.4	2.0	5	1.6	1.0	2.8	31	1.5	0.9	2.5	31		
Total Volatile Organics (NonTHM)	3.6	<1.0	6.0	31	3	<1	5	31	1.9	<1.0	6.1	211	2	<1	6	213		
Total Volatile Organics (Unknown)	2.4	1.5	3.2	4	1.7	1.3	1.9	3	1.3	<0.5	7.7	41	1.3	<0.5	3.6	43		
Triallate	<0.1	<0.1	<0.1	1	<0.1	<0.1	<0.1	1	<0.1	<0.1	<0.1	3	<0.1	<0.1	<0.1	3		

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

July 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)																		
Trichloroacetic acid	24.40	24.40	24.40	1	20.80	20.80	20.80	1	11.72	7.95	24.40	7	10.30	6.22	20.80	7		
Trichlorobenzene (1,2,4)	<0.5	<0.5	<0.5	31	<0.5	<0.5	<0.5	31	<0.5	<0.5	<0.5	211	<0.5	<0.5	<0.5	213		
Trichloroethane (1,1,1)	<0.5	<0.5	<0.5	31	<0.5	<0.5	<0.5	31	<0.5	<0.5	<0.5	211	<0.5	<0.5	<0.5	213		
Xylene (1,2)	<0.5	<0.5	<0.5	31	<0.5	<0.5	<0.5	31	<0.5	<0.5	<0.5	211	<0.5	<0.5	<0.5	213		
Xylene (1,4)	<0.5	<0.5	<0.5	31	<0.5	<0.5	<0.5	31	<0.5	<0.5	0.6	211	<0.5	<0.5	0.9	213		

TABLE EXPLANATIONS:

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

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

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

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

July 2024

	Current Month								YTD								Limits	
	ROSSDALE				E.L. SMITH				ROSSDALE				E.L. SMITH				*Approval or GCDWQ MAC, (AO or OG)	EPCOR
	Mean	Min	Max	Count	Mean	Min	Max	Count	Mean	Min	Max	Count	Mean	Min	Max	Count		
Physical																		
Turbidity (NTU)	<0.05	<0.04	0.06	31	0.05	<0.04	0.08	31	<0.04	<0.04	0.13	210	0.05	<0.04	0.09	212		0.3
UV 254 %T ****	<94.2	<92.3	<95.3	31	<93.6	<92.2	<95.3	31	<94.1	<90.1	<96.9	210	<94.2	<90.9	<98.9	212		
Primary Inorganics (mg/L)																		
Bromate, dissolved	<0.005	<0.005	<0.005	5	<0.005	<0.005	<0.005	5	<0.005	<0.003	<0.005	31	<0.005	<0.003	<0.005	31	0.01	
Chlorate Dissolved	0.24	0.22	0.26	5	0.15	0.12	0.17	5	0.23	0.18	0.34	31	<0.11	<0.05	0.20	31	1	
Chlorite Dissolved	<0.005	<0.005	<0.005	5	<0.005	<0.005	<0.005	5	<0.030	<0.005	<0.200	31	<0.030	<0.005	<0.200	31	1	
Nitrate (as N) Dissolved	0.03	<0.01	0.06	5	0.03	0.01	0.07	5	0.06	<0.01	0.17	31	0.06	<0.01	0.16	31	10	
Nitrite (as N) Dissolved	<0.010	<0.010	0.010	5	<0.010	<0.010	0.010	5	<0.010	<0.005	0.020	31	<0.010	<0.005	0.020	31	1	
Primary Organics (ug/L)																		
Benzene	<0.5	<0.5	<0.5	31	<0.5	<0.5	<0.5	31	<0.5	<0.5	<0.5	211	<0.5	<0.5	<0.5	213	5	
Carbon Tetrachloride	<0.5	<0.5	<0.5	31	<0.5	<0.5	<0.5	31	<0.5	<0.5	<1.0	211	<0.5	<0.5	<1.0	213	2	
Chlorobenzene	<0.5	<0.5	<0.5	31	<0.5	<0.5	<0.5	31	<0.5	<0.5	<0.5	211	<0.5	<0.5	<0.5	213	80 (30)	
Dichlorobenzene (1,2)	<0.5	<0.5	<0.5	31	<0.5	<0.5	<0.5	31	<0.5	<0.5	<0.5	211	<0.5	<0.5	<0.5	213		
Dichlorobenzene (1,4)	<0.5	<0.5	<0.5	31	<0.5	<0.5	<0.5	31	<0.5	<0.5	<0.5	211	<0.5	<0.5	<0.5	213	5 (1)	
Dichloroethane (1,2)	<0.5	<0.5	<0.5	31	<0.5	<0.5	<0.5	31	<0.5	<0.5	<0.5	210	<0.5	<0.5	<0.5	212	5	
Dichloroethylene (1,1)	<0.5	<0.5	<0.5	31	<0.5	<0.5	<0.5	31	<0.5	<0.5	<3.0	211	<0.5	<0.5	<3.0	213	14	
Ethylbenzene	<0.5	<0.5	<0.5	31	<0.5	<0.5	<0.5	31	<0.5	<0.5	<0.5	211	<0.5	<0.5	<0.5	213	140 (1.6)	
Methylene Chloride	<0.5	<0.5	<0.5	31	<0.5	<0.5	<0.5	31	<0.5	<0.5	<0.5	211	<0.5	<0.5	<0.5	213	50	
Tetrachloroethylene	<0.5	<0.5	<0.5	31	<0.5	<0.5	<0.5	31	<0.5	<0.5	<0.5	211	<0.5	<0.5	<0.5	213	10	
Toluene	<0.5	<0.5	<0.5	31	<0.5	<0.5	<0.5	31	<0.5	<0.5	4.1	211	<0.5	<0.5	1.8	213	60 (24)	
Total Xylenes	<1.0	<1.0	<1.0	31	<1.0	<1.0	<1.0	31	<1.0	<1.0	<2.5	211	<1.0	<1.0	<2.5	213	90	
Trichloroethylene	<0.5	<0.5	<0.5	31	<0.5	<0.5	<0.5	31	<0.5	<0.5	<0.5	211	<0.5	<0.5	<0.5	213	5	
Trihalomethanes	25.7	19.5	38.4	31	25.9	16.9	33.7	31	14.9	5.3	38.4	211	13.3	3.7	33.7	213	100	50
Vinyl Chloride	<1	<1	<1	31	<1	<1	<1	31	<1	<1	<1	210	<1	<1	<1	212	2	
Secondary Inorganics (mg/L)																		
Ammonia as NH3	0.12	0.09	0.16	14	0.12	0.07	0.17	14	0.12	0.08	0.16	61	0.11	0.06	0.17	61		
Bromide Dissolved	<0.03	<0.03	<0.03	5	<0.03	<0.03	<0.03	5	<0.02	<0.01	<0.05	31	<0.02	<0.01	<0.05	31		
Chloride Dissolved	5.54	5.36	5.72	5	7.3	6.4	9.0	5	6.67	4.65	19.90	31	7.2	5.5	12.9	31	(250)	
Sulphate Dissolved	74.8	70.4	82.9	5	76.1	71.4	84.9	5	73.5	59.2	95.8	31	76.1	59.8	95.3	31	(500)	

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

July 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	1.1	0.5	1.4	31	1.0	0.5	1.4	31	1.0	<0.5	2.0	211	0.8	<0.5	1.7	213		16
Bromoform	<0.5	<0.5	<0.5	31	<0.5	<0.5	<0.5	31	<0.5	<0.5	<1.0	211	<0.5	<0.5	<1.0	213		
Chloroform	24.4	18.00	37.4	31	24.7	16.10	33.2	31	13.7	4.60	37.4	211	12.2	3.00	33.2	213		
Dibromochloromethane	<0.5	<0.5	<0.5	31	<0.5	<0.5	<0.5	31	<0.5	<0.5	<0.5	211	<0.5	<0.5	<0.5	213		
Dichlorobenzene (1,3)	<0.5	<0.5	<0.5	31	<0.5	<0.5	<0.5	31	<0.5	<0.5	<0.5	211	<0.5	<0.5	<0.5	213		
Dichloroethylene, cis (1,2)	<0.5	<0.5	<0.5	31	<0.5	<0.5	<0.5	31	<0.5	<0.5	<0.5	211	<0.5	<0.5	<0.5	213		
Dichloroethylene, trans (1,2)	<0.5	<0.5	<0.5	31	<0.5	<0.5	<0.5	31	<0.5	<0.5	<0.5	211	<0.5	<0.5	<0.5	213		
Dichloropropane (1,2)	<0.5	<0.5	<0.5	31	<0.5	<0.5	<0.5	31	<0.5	<0.5	<0.5	211	<0.5	<0.5	<0.5	213		
Methyl t-Butyl Ether (MTBE)	<0.5	<0.5	<0.5	31	<0.5	<0.5	<0.5	31	<0.5	<0.5	<0.5	211	<0.5	<0.5	<0.5	213	(15)	
MIBK	<1	<1	<1	31	<1	<1	<1	31	<1	<1	<1	211	<1	<1	<1	213		
Styrene	<0.5	<0.5	<0.5	31	<0.5	<0.5	<0.5	31	<0.5	<0.5	<0.5	211	<0.5	<0.5	<0.5	213		
Tetrachloroethane (1,1,2,2)	<0.5	<0.5	<0.5	31	<0.5	<0.5	<0.5	31	<0.5	<0.5	<1.0	211	<0.5	<0.5	<1.0	213		
Total Volatile Organics (NonTHM)	3.3	<1.0	4.9	31	3.3	<1.0	5.0	31	1.9	<1.0	6.5	211	1.8	<1.0	6.7	213		
Total Volatile Organics (Unknown)	1.9	0.8	2.4	3	2.1	1.6	2.8	3	1.1	<0.5	2.4	38	1.1	<0.5	2.8	42		
Trichlorobenzene (1,2,4)	<0.5	<0.5	<0.5	31	<0.5	<0.5	<0.5	31	<0.5	<0.5	<0.5	211	<0.5	<0.5	<0.5	213		
Trichloroethane (1,1,1)	<0.5	<0.5	<0.5	31	<0.5	<0.5	<0.5	31	<0.5	<0.5	<0.5	211	<0.5	<0.5	<0.5	213		
Xylene (1,2)	<0.5	<0.5	<0.5	31	<0.5	<0.5	<0.5	31	<0.5	<0.5	<0.5	211	<0.5	<0.5	<0.5	213		
Xylene (1,4)	<0.5	<0.5	<0.5	31	<0.5	<0.5	<0.5	31	<0.5	<0.5	1.3	211	<0.5	<0.5	0.6	213		

TABLE EXPLANATIONS:

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

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

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

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

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

July 2024

	Monthly				YTD				Limits	
	Mean	Min	Max	Count	Mean	Min	Max	Count	*Approval or GCDWQ MAC, (AO or OG)	EPCOR
Microbiological										
Microcystin	<0.2	<0.2	<0.2	1	<0.2	<0.2	<0.2	3	1.5	
Physical										
Colour (TCU)	1.1	1.1	1.1	1	0.8	0.6	1.1	3	(15)	10
pH (N/A)	7.8	7.6	8.0	62	7.8	7.6	8.0	162	(7.0 - 10.5)	7.3 - 8.3
Total Dissolved Solids (mg/L)	261	261	261	1	240	227	261	3	(500)	
Turbidity (NTU)	0.37	0.05	2.92	99	0.25	<0.04	5.03	965		1.0
UV 254 %T	<90.1	<90.1	<90.1	1	<92.2	<90.1	<93.7	3		
Primary Inorganics (mg/L) **										
Antimony	<0.0005	<0.0005	<0.0005	1	<0.0004	<0.0002	<0.0005	3	0.006	
Arsenic	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	3	0.01	
Barium	0.074	0.074	0.074	1	0.064	0.057	0.074	3	2	
Boron	0.011	0.011	0.011	1	0.010	0.009	0.011	3	2	
Bromate Dissolved	<0.005	<0.005	<0.005	5	<0.005	<0.003	<0.005	17	0.01	
Cadmium	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	3	0.007	
Chlorate Dissolved	0.19	0.14	0.23	5	0.18	<0.08	0.30	17	1	
Chlorite Dissolved	<0.005	<0.005	<0.005	5	<0.039	<0.005	<0.200	17	1	
Chromium	<0.0002	<0.0002	<0.0002	1	0.0002	<0.0002	0.0003	3	0.05	
Copper	0.004	0.004	0.004	1	<0.004	<0.002	<0.005	3	2 (1)	
Fluoride	0.66	0.66	0.66	1	0.68	0.65	0.74	3	1.5	0.6 - 0.8
Lead	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	3	0.005	
Manganese	<0.002	<0.002	<0.002	1	<0.002	<0.002	<0.002	3	0.12 (0.02)	
Mercury	<0.00260	<0.00020	<0.00500	2	<0.00180	<0.00005	<0.00500	6	0.001	
Nitrate (as N) Dissolved	0.04	<0.01	0.08	61	0.05	<0.01	0.18	181	10	
Nitrite (as N) Dissolved	0.010	<0.010	0.020	61	<0.008	<0.005	0.020	181	1	
Selenium	0.0003	0.0003	0.0003	1	0.0003	<0.0002	0.0003	3	0.05	
Strontium	0.438	0.438	0.438	1	0.450	0.438	0.466	3	7.0	
Total Chlorine	1.75	0.99	2.15	99	1.91	0.86	2.44	963	>0.5 and <3.0	>1.0 and <2.4
Uranium	<0.0005	<0.0005	<0.0005	1	<0.0005	<0.0005	<0.0005	3	0.02	

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

July 2024

	Monthly				YTD				Limits	
	Mean	Min	Max	Count	Mean	Min	Max	Count	*Approval or GCDWQ MAC, (AO or OG)	EPCOR
Primary Organics (ug/L) **										
2,4-D	<0.05	<0.05	<0.05	1	<0.12	<0.05	<0.25	3	100	
Atrazine	<0.05	<0.05	<0.05	1	<0.05	<0.05	<0.05	3	5	
Atrazine+N-Dealkylated Metabolites				0	<0.1	<0.1	<0.1	1	0.005	
Azinphos-methyl	<0.1	<0.1	<0.1	1	<0.1	<0.1	<0.1	3	0.02	
Benzene	<0.5	<0.5	<0.5	6	<0.5	<0.5	<0.5	42	5	
Benzo(a)pyrene	<0.005	<0.005	<0.005	1	<0.005	<0.005	<0.005	3	0.04	
Bromoxynil	<0.05	<0.05	<0.05	1	<0.12	<0.05	<0.25	3	5	
Carbon Tetrachloride	<0.5	<0.5	<0.5	6	<0.5	<0.5	<0.5	42	2	
Chlorobenzene	<0.5	<0.5	<0.5	6	<0.5	<0.5	<0.5	42	80 (30)	
Chlorpyrifos	<0.1	<0.1	<0.1	1	<0.1	<0.1	<0.1	3	90	
Cyanazine	<0.1	<0.1	<0.1	1	<0.1	<0.1	<0.1	3		
Diazinon	<0.025	<0.025	<0.025	1	<0.025	<0.025	<0.025	3		
Dicamba	<0.1	<0.1	<0.1	1	<0.2	<0.1	<0.5	3	110	
Dichlorobenzene (1,2)	<0.5	<0.5	<0.5	6	<0.5	<0.5	<0.5	42		
Dichlorobenzene (1,4)	<0.5	<0.5	<0.5	6	<0.5	<0.5	<0.5	42	5 (1)	
Dichloroethane (1,2)	<0.5	<0.5	<0.5	6	<0.5	<0.5	<0.5	42	5	
Dichloroethylene (1,1)	<0.5	<0.5	<0.5	6	<0.5	<0.5	<0.5	42	14	
Dichlorophenol (2,4)	<0.2	<0.2	<0.2	1	<0.2	<0.2	<0.3	3		
Diclofop-methyl	<0.1	<0.1	<0.1	1	<0.1	<0.1	<0.1	3		
Dimethoate	<0.05	<0.05	<0.05	1	<0.05	<0.05	<0.05	3	20	
Diquat	<1	<1	<1	1	<1	<1	<1	3	0.05	
Diuron	<0.05	<0.05	<0.05	1	<0.05	<0.05	<0.05	3		
Ethylbenzene	<0.5	<0.5	<0.5	6	<0.5	<0.5	<0.5	42	140 (1.6)	
Glyphosate	<0.2	<0.2	<0.2	1	<0.3	<0.2	<0.5	3	280	
Malathion	<0.025	<0.025	<0.025	1	<0.025	<0.025	<0.025	3	190	
MCPA	<0.05	<0.05	<0.05	1	<0.12	<0.05	<0.25	3	100	
Methylene Chloride	<0.5	<0.5	<0.5	6	<0.5	<0.5	<0.5	42	50	
Metolachlor	<0.025	<0.025	<0.025	1	<0.025	<0.025	<0.025	3		
Metribuzin	<0.1	<0.1	<0.1	1	<0.1	<0.1	<0.1	3	80	
NDMA (µg/L)	<0.00270	<0.00150	<0.00360	3	<0.00300	<0.00100	0.00690	21	0.040	10
Nitrilotriacetic acid				0	<0.4	<0.4	<0.4	2	0.4	
Paraquat				0	<1	<1	<1	1	0.07	
Pentachlorophenol	<0.5	<0.5	<0.5	1	<0.7	<0.5	<1.0	3	60 (30)	
Perfluorooctane sulfonic acid (PFOS)	<0.002	<0.002	<0.002	1	<0.008	<0.002	<0.020	3	0.0006	
Perfluorooctanoic acid (PFOA)	<0.002	<0.002	<0.002	1	<0.008	<0.002	<0.020	3	0.0002	
Phorate	<0.25	<0.25	<0.25	1	<0.25	<0.25	<0.25	3		
Picloram	<0.1	<0.1	<0.1	1	<0.2	<0.1	<0.5	3		
Simazine	<0.1	<0.1	<0.1	1	<0.1	<0.1	<0.1	3		
Terbufos	<0.5	<0.5	<0.5	1	<0.5	<0.5	<0.5	3		

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

July 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	42	10	
Tetrachlorophenol (2,3,4,6)	<0.5	<0.5	<0.5	1	<0.5	<0.5	<0.5	3	100 (1)	
Toluene	<0.5	<0.5	<0.5	6	<0.5	<0.5	<0.5	42	60 (24)	
Total Xylenes	<1	<1	<1	6	<1	<1	<1	42	90	
Trichloroethylene	<0.5	<0.5	<0.5	6	<0.5	<0.5	<0.5	42	5	
Trichlorophenol (2,4,6)	<0.2	<0.2	<0.2	1	<0.3	<0.2	<0.5	3	5 (2)	
Trifluralin	<0.1	<0.1	<0.1	1	<0.1	<0.1	<0.1	3		
Vinyl Chloride	<1	<1	<1	6	<1	<1	<1	42	2	

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

July 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	120	120	120	1	119	116	121	3		
Alkalinity, PHP (mg CaCO3/L)	<3	<3	<3	1	<3	<3	<3	3		
Aluminum	0.093	0.093	0.093	1	0.042	0.014	0.093	3	2.9	0.1/0.2
Ammonia as N	0.14	0.09	0.18	3	0.14	0.09	0.24	17		
Beryllium	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	3		
Bromide Dissolved	<0.03	<0.03	<0.03	5	<0.03	<0.01	<0.05	17		
Calcium	51.8	51.8	51.8	1	48.6	46.5	51.8	3		
Chloride Dissolved	6.89	6.19	7.47	5	6.62	4.87	8.73	17	(250)	
Cobalt	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	3		
Free Chlorine	<0.07	<0.07	<0.07	1	<0.07	<0.07	<0.07	3		
Iron	<0.005	<0.005	<0.005	1	0.008	<0.005	0.013	3	(0.3)	0.3
Lanthanum	<0.001	<0.001	<0.001	1	<0.001	<0.001	<0.001	3		
Lithium	0.0042	0.0042	0.0042	1	0.0037	0.0034	0.0042	3		
Magnesium	14.1	14.1	14.1	1	14.3	13.4	15.3	3		
Molybdenum	0.0007	0.0007	0.0007	1	0.0009	0.0007	0.0010	3		
Nickel	<0.0005	<0.0005	<0.0005	1	0.0007	<0.0005	0.0010	3		
Phosphorus	1.03	1.03	1.03	1	1.00	0.91	1.05	3		
Potassium	0.8	0.8	0.8	1	0.8	0.8	0.9	3		
Silicon	2.59	2.59	2.59	1	2.26	1.78	2.59	3		
Silver	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	3		
Sodium	13.5	13.5	13.5	1	12.6	11.2	13.5	3	(200)	
Sulphate Dissolved	75.1	73.0	78.2	5	71.4	59.0	82.4	17	(500)	
Thallium	<0.0002	<0.0002	<0.0002	1	<0.0003	<0.0002	<0.0005	3		
Tin	<0.0005	<0.0005	<0.0005	1	<0.0005	<0.0005	<0.0005	3		
Titanium	<0.0005	<0.0005	<0.0005	1	<0.0005	<0.0005	<0.0005	3		
Total Hardness (mg/L CaCO3)	182	182	182	1	179	171	183	3		
Total Kjeldahl Nitrogen	0.5	0.5	0.5	1	0.5	0.4	0.5	2		
Total Kjeldahl Nitrogen (TKN)				0	0.4	0.4	0.4	1		
Vanadium	<0.0005	<0.0005	<0.0005	1	<0.0005	<0.0005	<0.0005	3		
Zinc	<0.005	<0.005	<0.005	1	<0.005	<0.005	<0.005	3	(5.0)	
Zirconium	<0.001	<0.001	<0.001	1	<0.001	<0.001	<0.001	3		

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

July 2024

	Monthly				YTD				Limits	
	Mean	Min	Max	Count	Mean	Min	Max	Count	*Approval or GCDWQ MAC, (AO or OG)	EPCOR
Secondary Organics (ug/L) * **										
2,4,5-T	<0.05	<0.05	<0.05	1	<0.12	<0.05	<0.25	3		
6:2 Fluorotelomer sulfonic acid(6:2 FTS)	<0.002	<0.002	<0.002	1	<0.008	<0.002	<0.020	3		
8:2 Fluorotelomer sulfonic acid(8:2 FTS)	<0.002	<0.002	<0.002	1	<0.008	<0.002	<0.020	3		
a-chlordane	<0.008	<0.008	<0.008	1	<0.008	<0.008	<0.008	3		
Alachlor	<0.05	<0.05	<0.05	1	<0.05	<0.05	<0.05	3		
Aldicarb	<0.1	<0.1	<0.1	1	<0.1	<0.1	<0.1	3		
Aldrin	<0.008	<0.008	<0.008	1	<0.008	<0.008	<0.008	3		
Ametryn	<0.025	<0.025	<0.025	1	<0.025	<0.025	<0.025	3		
Atrazine Desethyl	<0.025	<0.025	<0.025	1	<0.025	<0.025	<0.025	3		
Bendiocarb	<0.025	<0.025	<0.025	1	<0.025	<0.025	<0.025	3		
Bromochloroacetic acid	<1	<1	<1	6	<1	<1	<1	42		
Bromodichloromethane	0.9	<0.5	1.5	6	1.1	<0.5	1.9	42		16
Bromoform	<0.5	<0.5	<0.5	6	<0.5	<0.5	<0.5	42		
Carbaryl	<0.05	<0.05	<0.05	1	<0.05	<0.05	<0.05	3		
Carbofuran	<0.025	<0.025	<0.025	1	<0.025	<0.025	<0.025	3		
Chloroform	36.9	34.5	39.1	6	19.3	7.6	39.1	42		
Dibromoacetic acid	<1	<1	<1	6	<1	<1	<1	42		
Dibromochloromethane	<0.5	<0.5	<0.5	6	<0.5	<0.5	<0.5	42		
Dichloroacetic acid	18.65	14.60	23.50	6	10.78	5.90	23.50	42		
Dichlorobenzene (1,3)	<0.5	<0.5	<0.5	6	<0.5	<0.5	<0.5	42		
Dichloroethylene, cis (1,2)	<0.5	<0.5	<0.5	6	<0.5	<0.5	<0.5	42		
Dichloroethylene, trans (1,2)	<0.5	<0.5	<0.5	6	<0.5	<0.5	<0.5	42		
Dichloropropane (1,2)	<0.5	<0.5	<0.5	6	<0.5	<0.5	<0.5	42		
Dieldrin	<0.008	<0.008	<0.008	1	<0.008	<0.008	<0.008	3		
Dinoseb	<0.05	<0.05	<0.05	1	<0.12	<0.05	<0.25	3		
gamma-hexachlorocyclohexane	<0.008	<0.008	<0.008	1	<0.008	<0.008	<0.008	3		
g-chlordane	<0.008	<0.008	<0.008	1	<0.008	<0.008	<0.008	3		
Heptachlor	<0.008	<0.008	<0.008	1	<0.008	<0.008	<0.008	3		
Heptachlor Epoxide	<0.008	<0.008	<0.008	1	<0.008	<0.008	<0.008	3		
Methoxychlor	<0.008	<0.008	<0.008	1	<0.008	<0.008	<0.008	3		
Methyl Parathion	<0.1	<0.1	<0.1	1	<0.1	<0.1	<0.1	3		
Methyl t-Butyl Ether (MTBE)	<0.5	<0.5	<0.5	6	<0.5	<0.5	<0.5	42	(15)	
MIBK	<1	<1	<1	6	<1	<1	<1	42		
Monobromoacetic acid	<1	<1	<1	6	<1	<1	<1	42		
Monochloroacetic acid	2	1	2	6	1	<1	2	42		
op-DDT	<0.004	<0.004	<0.004	1	<0.004	<0.004	<0.004	3		
Oxychlordane	<0.008	<0.008	<0.008	1	<0.008	<0.008	<0.008	3		
Parathion	<0.1	<0.1	<0.1	1	<0.1	<0.1	<0.1	3		
Perfluorobutane sulfonic acid (PFBS)	<0.002	<0.002	<0.002	1	<0.008	<0.002	<0.020	3		

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

July 2024

	Monthly				YTD				Limits	
	Mean	Min	Max	Count	Mean	Min	Max	Count	*Approval or GCDWQ MAC, (AO or OG)	EPCOR
Secondary Organics (ug/L) * **										
Perfluorobutanoic acid (PFBA)	<0.02	<0.02	<0.02	1	<0.05	<0.02	<0.10	3		
Perfluoroheptanoic acid (PFHpA)	<0.002	<0.002	<0.002	1	<0.008	<0.002	<0.020	3		
Perfluorohexane sulfonic acid (PFHxS)	<0.002	<0.002	<0.002	1	<0.008	<0.002	<0.020	3		
Perfluorohexanoic acid (PFHxA)	<0.002	<0.002	<0.002	1	<0.008	<0.002	<0.020	3		
Perfluorononanoic acid (PFNA)	<0.002	<0.002	<0.002	1	<0.008	<0.002	<0.020	3		
Perfluoropentanoic acid (PFPeA)	<0.002	<0.002	<0.002	1	<0.008	<0.002	<0.020	3		
pp-DDD	<0.004	<0.004	<0.004	1	<0.004	<0.004	<0.004	3		
pp-DDE	<0.004	<0.004	<0.004	1	<0.004	<0.004	<0.004	3		
pp-DDT	<0.004	<0.004	<0.004	1	<0.004	<0.004	<0.004	3		
Prometon	<0.025	<0.025	<0.025	1	<0.025	<0.025	<0.025	3		
Prometryne				0	<0.025	<0.025	<0.025	1		
Propazine	<0.025	<0.025	<0.025	1	<0.025	<0.025	<0.025	3		
Styrene	<0.5	<0.5	<0.5	6	<0.5	<0.5	<0.5	42		
Temephos	<0.25	<0.25	<0.25	1	<0.25	<0.25	<0.25	3		
Terbutryn	<0.025	<0.025	<0.025	1	<0.025	<0.025	<0.025	3		
Tetrachloroethane (1,1,2,2)	<0.5	<0.5	<0.5	6	<0.5	<0.5	<0.5	42		
Total Organic Carbon	1.6	1.2	2.0	61	1.9	1.2	2.7	153		
Total Volatile Organics (NonTHM)	3	<1	5	6	2	<1	5	42		
Total Volatile Organics (Unknown)	1.5	1.1	1.9	2	1.0	<0.5	1.9	11		
Triallate	<0.1	<0.1	<0.1	1	<0.1	<0.1	<0.1	3		
Trichloroacetic acid	19.85	15.70	24.30	6	10.03	5.40	24.30	42		
Trichlorobenzene (1,2,4)	<0.5	<0.5	<0.5	6	<0.5	<0.5	<0.5	42		
Trichloroethane (1,1,1)	<0.5	<0.5	<0.5	6	<0.5	<0.5	<0.5	42		
Xylene (1,2)	<0.5	<0.5	<0.5	6	<0.5	<0.5	<0.5	42		
Xylene (1,4)	<0.5	<0.5	<0.5	6	<0.5	<0.5	<0.5	42		

TABLE EXPLANATIONS:

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

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

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

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

July 2024

	Monthly				YTD				Limits	
	Mean	Min	Max	Count	Mean	Min	Max	Count	*Approval or GCDWQ MAC, (AO or OG)	EPCOR
Physical										
Colour (TCU)	0.7	<0.5	1.1	11	0.8	<0.5	1.9	86	(15)	10
pH (N/A)	7.9	7.8	8.1	11	7.8	7.6	8.1	86	(7.0 - 10.5)	7.3 - 8.3
Turbidity (NTU)	0.72	0.13	2.09	11	0.49	<0.04	2.89	86		1.0
Primary Inorganics (mg/L) **										
Antimony	<0.0005	<0.0005	<0.0005	11	<0.0004	<0.0002	<0.0005	86	0.006	
Arsenic	<0.0002	<0.0002	<0.0002	11	<0.0002	<0.0002	<0.0002	86	0.01	
Barium	0.072	0.062	0.084	11	0.061	0.048	0.093	86	2	
Boron	0.011	0.011	0.012	11	0.011	0.007	0.036	86	2	
Cadmium	<0.0002	<0.0002	<0.0002	11	<0.0002	<0.0002	<0.0002	86	0.007	
Chromium	<0.0002	<0.0002	<0.0002	11	<0.0002	<0.0002	<0.0002	86	0.05	
Copper	0.003	<0.002	0.010	11	<0.004	<0.002	0.048	86	2 (1)	
Lead	<0.0002	<0.0002	<0.0002	11	0.0002	<0.0002	0.0010	86	0.005	
Manganese	0.003	<0.002	0.008	11	0.003	<0.002	0.008	86	0.12 (0.02)	
Mercury	<0.00020	<0.00020	<0.00020	11	<0.00020	<0.00020	<0.00020	80	0.001	
Selenium	0.0003	0.0003	0.0004	11	0.0003	<0.0002	0.0004	86	0.05	
Strontium	0.459	0.429	0.501	11	0.448	0.388	0.501	86	7.0	
Total Chlorine	1.65	0.75	2.07	11	1.83	0.75	2.27	86	>0.5 and <3.0	>1.0 and <2.4
Uranium	<0.0005	<0.0005	<0.0005	11	0.0005	<0.0005	0.0006	86	0.02	
Primary Organics (ug/L) **										
Benzene	<0.5	<0.5	<0.5	11	<0.5	<0.5	<0.5	86	5	
Carbon Tetrachloride	<0.5	<0.5	<0.5	11	<0.5	<0.5	<0.5	86	2	
Chlorobenzene	<0.5	<0.5	<0.5	11	<0.5	<0.5	<0.5	86	80 (30)	
Dichlorobenzene (1,2)	<0.5	<0.5	<0.5	11	<0.5	<0.5	<0.5	86		
Dichlorobenzene (1,4)	<0.5	<0.5	<0.5	11	<0.5	<0.5	<0.5	86	5 (1)	
Dichloroethane (1,2)	<0.5	<0.5	<0.5	11	<0.5	<0.5	<0.5	86	5	
Dichloroethylene (1,1)	<0.5	<0.5	<0.5	11	<0.5	<0.5	<0.5	86	14	
Ethylbenzene	<0.5	<0.5	<0.5	11	<0.5	<0.5	<0.5	86	140 (1.6)	
Methylene Chloride	<0.5	<0.5	<0.5	11	<0.5	<0.5	<0.5	86	50	
Tetrachloroethylene	<0.5	<0.5	<0.5	11	<0.5	<0.5	<0.5	86	10	
Toluene	0.5	<0.5	0.9	11	0.6	<0.5	3.4	86	60 (24)	
Total Xylenes	<1.0	<1.0	<1.0	11	1.0	<1.0	1.2	86	90	
Trichloroethylene	<0.5	<0.5	<0.5	11	<0.5	<0.5	<0.5	86	5	
Vinyl Chloride	<1	<1	<1	11	<1	<1	<1	86	2	

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

July 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	0.170	0.038	0.548	11	0.076	0.012	0.955	86	2.9	0.1/0.2
Beryllium	<0.0002	<0.0002	<0.0002	11	<0.0002	<0.0002	<0.0002	86		
Calcium	50.7	48.7	52.3	11	48.5	39.9	54.3	86		
Cobalt	<0.0002	<0.0002	<0.0002	11	0.0002	<0.0002	0.0006	86		
Iron	0.072	0.007	0.267	11	0.069	<0.005	0.401	86	(0.3)	0.3
Lanthanum	<0.001	<0.001	<0.001	11	<0.001	<0.001	<0.001	86		
Lithium	0.0044	0.0039	0.0048	11	0.0038	0.0026	0.0076	86		
Magnesium	14.4	13.7	15.3	11	13.8	11.3	16.4	86		
Molybdenum	0.0007	0.0006	0.0008	11	0.0008	0.0006	0.0011	86		
Nickel	0.0005	<0.0005	0.0006	11	0.0006	<0.0005	0.0028	86		
Phosphorus	1.01	0.82	1.27	11	0.99	0.33	1.62	86		
Potassium	0.8	0.8	0.8	11	0.9	0.7	2.8	86		
Silicon	2.22	1.89	2.57	11	2.12	1.63	2.69	86		
Silver	<0.0002	<0.0002	<0.0002	11	<0.0002	<0.0002	<0.0002	86		
Sodium	9.9	7.9	13.0	11	11.8	6.6	20.8	86	(200)	
Thallium	<0.0002	<0.0002	<0.0002	11	<0.0003	<0.0002	<0.0005	86		
Tin	<0.0005	<0.0005	<0.0005	11	<0.0005	<0.0005	<0.0005	86		
Titanium	<0.0005	<0.0005	<0.0005	11	<0.0005	<0.0005	<0.0005	86		
Total Hardness (mg/L CaCO3)	186	179	192	11	178	147	201	86		
Vanadium	<0.0005	<0.0005	<0.0005	11	<0.0005	<0.0005	<0.0005	86		
Zinc	<0.005	<0.005	<0.005	11	0.005	<0.005	0.023	86	(5.0)	
Zirconium	<0.001	<0.001	<0.001	11	<0.001	<0.001	<0.001	86		

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

July 2024

	Monthly				YTD				Limits	
	Mean	Min	Max	Count	Mean	Min	Max	Count	*Approval or GCDWQ MAC, (AO or OG)	EPCOR
Secondary Organics (ug/L) * **										
Bromodichloromethane	1.0	0.7	1.4	11	1.2	<0.5	2.1	86		16
Bromoform	<0.5	<0.5	<0.5	11	<0.5	<0.5	<0.5	86		
Chloroform	29.6	20.4	37.6	11	18.0	5.6	37.6	86		
Dibromochloromethane	<0.5	<0.5	<0.5	11	<0.5	<0.5	<0.5	86		
Dichlorobenzene (1,3)	<0.5	<0.5	<0.5	11	<0.5	<0.5	<0.5	86		
Dichloroethylene, cis (1,2)	<0.5	<0.5	<0.5	11	<0.5	<0.5	<0.5	86		
Dichloroethylene, trans (1,2)	<0.5	<0.5	<0.5	11	<0.5	<0.5	<0.5	86		
Dichloropropane (1,2)	<0.5	<0.5	<0.5	11	<0.5	<0.5	<0.5	86		
Methyl t-Butyl Ether (MTBE)	<0.5	<0.5	<0.5	11	<0.5	<0.5	<0.5	86	(15)	
MIBK	<1	<1	<1	11	<1	<1	<1	86		
Styrene	<0.5	<0.5	<0.5	11	<0.5	<0.5	<0.5	86		
Tetrachloroethane (1,1,2,2)	<0.5	<0.5	<0.5	11	<0.5	<0.5	<0.5	86		
Total Volatile Organics (NonTHM)	3.2	2.4	4.6	11	2.1	<1.0	6.9	86		
Total Volatile Organics (Unknown)	12.1	10.4	13.8	2	3.2	<0.5	13.8	17		
Trichlorobenzene (1,2,4)	<0.5	<0.5	<0.5	11	<0.5	<0.5	<0.5	86		
Trichloroethane (1,1,1)	<0.5	<0.5	<0.5	11	<0.5	<0.5	<0.5	86		
Xylene (1,2)	<0.5	<0.5	<0.5	11	<0.5	<0.5	<0.5	86		
Xylene (1,4)	<0.5	<0.5	<0.5	11	0.5	<0.5	1.1	86		

TABLE EXPLANATIONS:

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

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

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

2.2.7 Castledowns Reservoir

July 2024

Parameter	Monthly				YTD				Limits	
	Mean	Min	Max	Count	Mean	Min	Max	Count	*Approval or GCDWQ MAC, (AO or OG)	EPCOR
Physical										
Colour (TCU)	2.0	2.0	2.0	1	1.3	0.6	2.0	3	(15)	10
Conductivity (uS/cm)	421	421	421	1	404	391	421	3		
Odour	Inoff	Inoff	Inoff	1	Inoff	Inoff	Inoff	3		
pH (N/A)	7.8	7.7	7.8	5	7.8	7.7	7.8	11	(7.0 - 10.5)	7.3 - 8.3
Turbidity (NTU)	0.15	0.12	0.19	5	0.13	0.06	0.46	27		1
Primary Inorganics (mg/L) **										
Antimony	<0.0005	<0.0005	<0.0005	1	<0.0004	<0.0002	<0.0005	3	0.006	
Arsenic	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	3	0.01	
Barium	0.069	0.069	0.069	1	0.059	0.051	0.069	3	2	
Boron	0.011	0.011	0.011	1	0.010	0.009	0.011	3	2	
Bromate Dissolved	<0.005	<0.005	<0.005	2	<0.005	<0.005	<0.005	4	0.01	
Cadmium	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	3	0.007	
Chlorate Dissolved	0.143	0.142	0.143	2	0.120	0.050	0.143	4	1	
Chlorite Dissolved	<0.005	<0.005	<0.005	2	<0.005	<0.005	<0.005	4	1	
Chromium	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	3	0.05	
Copper	<0.002	<0.002	<0.002	1	<0.003	<0.002	<0.005	3	2 (1)	
Fluoride	0.66	0.66	0.66	1	0.70	0.66	0.75	3	1.5	0.6 - 0.8
Lead	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	3	0.005	
Manganese	<0.002	<0.002	<0.002	1	<0.002	<0.002	0.003	3	0.12 (0.02)	
Mercury	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	3	0.001	
Nitrate (as N) Dissolved	0.036	0.020	0.060	5	0.054	0.020	0.170	13	10	
Nitrite (as N) Dissolved	<0.010	<0.010	<0.010	5	<0.008	<0.005	0.010	13	1	
Selenium	0.0004	0.0004	0.0004	1	0.0003	0.0002	0.0004	3	0.05	
Strontium	0.431	0.431	0.431	1	0.440	0.431	0.453	3	7.0	
Total Chlorine	1.71	1.67	1.75	5	1.78	1.27	2.06	27	>0.5 and <3.0	>1.0 and <2.4
Uranium	<0.0005	<0.0005	<0.0005	1	<0.0005	<0.0005	<0.0005	3	0.02	
Primary Organics (ug/L) **										
Benzene	1.0	1.0	1.0	1	<0.7	<0.5	1.0	3	5	
Carbon Tetrachloride	1.0	1.0	1.0	1	<0.7	<0.5	1.0	3	2	
Chlorobenzene	1.00	1.00	1.00	1	<0.67	<0.50	1.00	3	80 (30)	
Dichlorobenzene (1,2)	1.00	1.00	1.00	1	<0.67	<0.50	1.00	3		
Dichlorobenzene (1,4)	1.0	1.0	1.0	1	<0.7	<0.5	1.0	3	5 (1)	
Dichloroethane (1,2)	1.0	1.0	1.0	1	<0.7	<0.5	1.0	3	5	
Dichloroethylene (1,1)	1.0	1.0	1.0	1	<0.7	<0.5	1.0	3	14	
Ethylbenzene	1.00	1.00	1.00	1	<0.67	<0.50	1.00	3	140 (1.6)	
Methylene Chloride	1.0	1.0	1.0	1	<0.7	<0.5	1.0	3	50	
Tetrachloroethylene	1.0	1.0	1.0	1	<0.7	<0.5	1.0	3	10	
Toluene	1.00	1.00	1.00	1	<0.67	<0.50	1.00	3	60 (24)	
Total Xylenes	<1	<1	<1	1	<1	<1	<1	3	90	
Trichloroethylene	1.00	1.00	1.00	1	<0.67	<0.50	1.00	3	5	
Vinyl Chloride	2.0	2.0	2.0	1	<1.3	<1.0	2.0	3	2	

2.2.7 Castledowns Reservoir

July 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	119	119	119	1	118	112	122	3		
Aluminum	0.090	0.090	0.090	1	0.048	0.022	0.090	3	2.9	0.1/0.2
Ammonia as NH3	0.20	0.14	0.28	5	0.18	0.14	0.28	10		
Beryllium	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	3		
Bromide Dissolved	<0.030	<0.030	<0.030	2	<0.020	<0.010	<0.030	4		
Calcium	49.5	49.5	49.5	1	47.6	45.5	49.5	3		
Calcium Hardness				0	121	121	121	1		
Calcium Hardness Calculated	124	124	124	1	119	114	124	2		
Chloride Dissolved	7.6	7.5	7.7	2	7.2	6.2	7.7	4	(250)	
Cobalt	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	3		
Iron	<0.005	<0.005	<0.005	1	0.029	<0.005	0.078	3	(0.3)	0.3
Lanthanum	<0.0010	<0.0010	<0.0010	1	<0.0010	<0.0010	<0.0010	3		
Lithium	0.0040	0.0040	0.0040	1	0.0034	0.0030	0.0040	3		
Magnesium	14.0	14.0	14.0	1	13.7	13.3	14.0	3		
Molybdenum	0.0008	0.0008	0.0008	1	0.0008	0.0008	0.0009	3		
Nickel	<0.0005	<0.0005	<0.0005	1	<0.0005	<0.0005	<0.0005	3		
Ortho_P	0.90	0.88	0.92	4	0.89	0.86	0.92	16		
Phosphorus	0.98	0.98	0.98	1	0.96	0.87	1.02	3		
Potassium	0.80	0.80	0.80	1	0.93	0.80	1.20	3		
Silicon	2.33	2.33	2.33	1	2.07	1.67	2.33	3		
Silver	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	3		
Sodium	13.2	13.2	13.2	1	12.4	9.9	14.1	3	(200)	
Sulphate Dissolved	76.1	75.2	76.9	2	73.5	69.6	76.9	4	(500)	
Thallium	<0.0002	<0.0002	<0.0002	1	<0.0003	<0.0002	<0.0005	3		
Tin	<0.0005	<0.0005	<0.0005	1	<0.0005	<0.0005	<0.0005	3		
Titanium	<0.0005	<0.0005	<0.0005	1	<0.0005	<0.0005	<0.0005	3		
Total Hardness (mg/L CaCO3)				0	184	184	184	1		
Total Hardness Calculated	181	181	181	1	175	168	181	2		
Vanadium	<0.0005	<0.0005	<0.0005	1	<0.0005	<0.0005	<0.0005	3		
Zinc	<0.005	<0.005	<0.005	1	<0.005	<0.005	<0.005	3	(5.0)	
Zirconium	<0.0010	<0.0010	<0.0010	1	<0.0010	<0.0010	<0.0010	3		

2.2.7 Castledowns Reservoir

July 2024

Parameter	Monthly				YTD				Limits	
	Mean	Min	Max	Count	Mean	Min	Max	Count	*Approval or GCDWQ MAC, (AO or OG)	EPCOR
Secondary Organics (ug/L) * **										
Bromodichloromethane	1.0	1.0	1.0	1	0.9	0.6	1.2	3		16
Bromoform	1.0	1.0	1.0	1	<0.7	<0.5	1.0	3		
Chloroform	35.6	35.6	35.6	1	20.3	6.9	35.6	3		
Dibromochloromethane	1.00	1.00	1.00	1	<0.67	<0.50	1.00	3		
Dichlorobenzene (1,3)	1.00	1.00	1.00	1	<0.67	<0.50	1.00	3		
Dichloroethylene, cis (1,2)	1.00	1.00	1.00	1	<0.67	<0.50	1.00	3		
Dichloroethylene, trans (1,2)	1.00	1.00	1.00	1	<0.67	<0.50	1.00	3		
Dichloropropane (1,2)	1.0	1.0	1.0	1	<0.7	<0.5	1.0	3		
Methyl t-Butyl Ether (MTBE)	1.0	1.0	1.0	1	<0.7	<0.5	1.0	3	(15)	
MIBK	2.0	2.0	2.0	1	<1.3	<1.0	2.0	3		
Styrene	1.00	1.00	1.00	1	<0.67	<0.50	1.00	3		
Tetrachloroethane (1,1,2,2)	1.0	1.0	1.0	1	<0.7	<0.5	1.0	3		
Total Organic Carbon	1.6	1.4	1.8	5	1.7	0.9	2.3	11		
Total Volatile Organics (NonTHM)	<1.0	<1.0	<1.0	1	<1.0	<1.0	<1.0	3		
Total Volatile Organics (Unknown)				0	0.7	0.7	0.7	1		
Trichlorobenzene (1,2,4)	1.0	1.0	1.0	1	<0.7	<0.5	1.0	3		
Trichloroethane (1,1,1)	1.0	1.0	1.0	1	<0.7	<0.5	1.0	3		
Xylene (1,2)	1.0	1.0	1.0	1	<0.7	<0.5	1.0	3		
Xylene (1,4)	1.0	1.0	1.0	1	<0.7	<0.5	1.0	3		

TABLE EXPLANATIONS:

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

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

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

2.2.8 Clareview Reservoir

July 2024

Parameter	Monthly				YTD				Limits	
	Mean	Min	Max	Count	Mean	Min	Max	Count	*Approval or GCDWQ MAC, (AO or OG)	EPCOR
Physical										
Colour (TCU)				0	0.9	0.7	1.0	4	(15)	10
Conductivity (uS/cm)				0	399	368	421	4		
Odour				0	Inoff	Inoff	Inoff	4		
pH (N/A)	7.8	7.7	7.9	5	7.8	7.7	8.1	14	(7.0 - 10.5)	7.3 - 8.3
Turbidity (NTU)	0.19	0.14	0.26	5	0.15	0.10	0.26	31		1
Primary Inorganics (mg/L) **										
Antimony				0	<0.0004	<0.0002	<0.0005	4	0.006	
Arsenic				0	<0.0002	<0.0002	0.0002	4	0.01	
Barium				0	0.062	0.056	0.068	4	2	
Boron				0	0.009	0.008	0.010	4	2	
Bromate Dissolved	<0.005	<0.005	<0.005	1	<0.005	<0.003	<0.005	5	0.01	
Cadmium				0	<0.0002	<0.0002	<0.0002	4	0.007	
Chlorate Dissolved	0.229	0.229	0.229	1	0.202	0.172	0.229	5	1	
Chlorite Dissolved	<0.005	<0.005	<0.005	1	<0.044	<0.005	<0.200	5	1	
Chromium				0	<0.0002	<0.0002	<0.0002	4	0.05	
Copper				0	<0.003	<0.002	<0.005	4	2 (1)	
Fluoride				0	0.68	0.65	0.71	4	1.5	0.6 - 0.8
Lead				0	<0.0002	<0.0002	<0.0002	4	0.005	
Manganese				0	<0.002	<0.002	<0.002	4	0.12 (0.02)	
Mercury				0	<0.0002	<0.0002	<0.0002	4	0.001	
Nitrate (as N) Dissolved	0.034	0.020	0.070	5	0.061	0.020	0.180	15	10	
Nitrite (as N) Dissolved	<0.010	<0.010	<0.010	5	<0.008	<0.005	0.010	15	1	
Selenium				0	0.0003	0.0002	0.0003	4	0.05	
Strontium				0	0.439	0.405	0.481	4	7.0	
Total Chlorine	1.65	1.60	1.72	5	1.88	1.60	2.09	31	>0.5 and <3.0	>1.0 and <2.4
Uranium				0	<0.0005	<0.0005	0.0005	4	0.02	
Primary Organics (ug/L) **										
Benzene				0	<0.5	<0.5	<0.5	4	5	
Carbon Tetrachloride				0	<0.5	<0.5	<0.5	4	2	
Chlorobenzene				0	<0.50	<0.50	<0.50	4	80 (30)	
Dichlorobenzene (1,2)				0	<0.50	<0.50	<0.50	4		
Dichlorobenzene (1,4)				0	<0.5	<0.5	<0.5	4	5 (1)	
Dichloroethane (1,2)				0	<0.5	<0.5	<0.5	4	5	
Dichloroethylene (1,1)				0	<0.5	<0.5	<0.5	4	14	
Ethylbenzene				0	<0.50	<0.50	<0.50	4	140 (1.6)	
Methylene Chloride				0	<0.5	<0.5	<0.5	4	50	
Tetrachloroethylene				0	<0.5	<0.5	<0.5	4	10	
Toluene				0	<0.50	<0.50	<0.50	4	60 (24)	
Total Xylenes				0	<1	<1	<1	4	90	
Trichloroethylene				0	<0.50	<0.50	<0.50	4	5	
Vinyl Chloride				0	<1.0	<1.0	<1.0	4	2	

2.2.8 Clareview Reservoir

July 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	109	129	4		
Aluminum				0	0.038	0.023	0.078	4	2.9	0.1/0.2
Ammonia as NH3	0.19	0.15	0.22	5	0.19	0.15	0.22	12		
Beryllium				0	<0.0002	<0.0002	<0.0002	4		
Bromide Dissolved	<0.030	<0.030	<0.030	1	<0.026	<0.010	<0.050	5		
Calcium				0	47.4	43.7	51.3	4		
Calcium Hardness				0	124	118	130	2		
Calcium Hardness Calculated				0	113	109	116	2		
Chloride Dissolved	6.2	6.2	6.2	1	6.2	5.5	7.0	5	(250)	
Cobalt				0	<0.0002	<0.0002	<0.0002	4		
Iron				0	0.015	0.012	0.018	4	(0.3)	0.3
Lanthanum				0	<0.0010	<0.0010	<0.0010	4		
Lithium				0	0.0036	0.0032	0.0038	4		
Magnesium				0	13.7	12.2	14.9	4		
Molybdenum				0	0.0008	0.0006	0.0009	4		
Nickel				0	<0.0005	<0.0005	<0.0005	4		
Ortho_P	0.90	0.88	0.92	4	0.88	0.86	0.92	18		
Phosphorus				0	0.95	0.91	0.96	4		
Potassium				0	0.88	0.70	1.10	4		
Silicon				0	2.04	1.93	2.13	4		
Silver				0	<0.0002	<0.0002	<0.0002	4		
Sodium				0	12.1	7.2	16.2	4	(200)	
Sulphate Dissolved	73.2	73.2	73.2	1	70.9	59.6	76.4	5	(500)	
Thallium				0	<0.0003	<0.0002	<0.0005	4		
Tin				0	<0.0005	<0.0005	<0.0005	4		
Titanium				0	<0.0005	<0.0005	<0.0005	4		
Total Hardness (mg/L CaCO3)				0	188	177	198	2		
Total Hardness Calculated				0	166	160	171	2		
Vanadium				0	<0.0005	<0.0005	<0.0005	4		
Zinc				0	<0.005	<0.005	<0.005	4	(5.0)	
Zirconium				0	<0.0010	<0.0010	<0.0010	4		

2.2.8 Clareview Reservoir

July 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	0.9	1.8	4		16
Bromoform				0	<0.5	<0.5	<0.5	4		
Chloroform				0	23.5	13.9	34.8	4		
Dibromochloromethane				0	<0.50	<0.50	<0.50	4		
Dichlorobenzene (1,3)				0	<0.50	<0.50	<0.50	4		
Dichloroethylene, cis (1,2)				0	<0.50	<0.50	<0.50	4		
Dichloroethylene, trans (1,2)				0	<0.50	<0.50	<0.50	4		
Dichloropropane (1,2)				0	<0.5	<0.5	<0.5	4		
Methyl t-Butyl Ether (MTBE)				0	<0.5	<0.5	<0.5	4	(15)	
MIBK				0	<1.0	<1.0	<1.0	4		
Styrene				0	<0.50	<0.50	<0.50	4		
Tetrachloroethane (1,1,2,2)				0	<0.5	<0.5	<0.5	4		
Total Organic Carbon	1.6	1.4	1.7	5	1.9	1.3	2.5	14		
Total Volatile Organics (NonTHM)				0	1.8	<1.0	3.2	4		
Total Volatile Organics (Unknown)				0	1.0	1.0	1.0	1		
Trichlorobenzene (1,2,4)				0	<0.5	<0.5	<0.5	4		
Trichloroethane (1,1,1)				0	<0.5	<0.5	<0.5	4		
Xylene (1,2)				0	<0.5	<0.5	<0.5	4		
Xylene (1,4)				0	<0.5	<0.5	<0.5	4		

TABLE EXPLANATIONS:

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

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

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

2.2.9 Discovery Park Reservoir

July 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	5	(15)	10
Conductivity (uS/cm)				0	399	367	420	5		
Odour				0	Inoff	Inoff	Inoff	5		
pH (N/A)	8.0	7.9	8.1	5	8.0	7.8	8.1	15	(7.0 - 10.5)	7.3 - 8.3
Turbidity (NTU)	0.20	0.16	0.27	5	0.11	0.06	0.27	32		1
Primary Inorganics (mg/L) **										
Antimony				0	<0.0004	<0.0002	<0.0005	5	0.006	
Arsenic				0	<0.0002	<0.0002	0.0003	5	0.01	
Barium				0	0.061	0.054	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	0.111	<0.090	0.129	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	0.77	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	0.036	0.020	0.050	5	0.056	0.020	0.190	16	10	
Nitrite (as N) Dissolved	<0.010	<0.010	<0.010	5	<0.008	<0.005	0.010	16	1	
Selenium				0	0.0003	0.0002	0.0003	5	0.05	
Strontium				0	0.436	0.410	0.474	5	7.0	
Total Chlorine	1.33	1.27	1.38	5	1.43	1.13	1.68	32	>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	

2.2.9 Discovery Park Reservoir

July 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	126	5		
Aluminum				0	0.046	0.021	0.093	5	2.9	0.1/0.2
Ammonia as NH3	0.19	<0.05	0.24	5	0.20	<0.05	0.24	14		
Beryllium				0	<0.0002	<0.0002	<0.0002	5		
Bromide Dissolved				0	<0.026	<0.010	<0.050	5		
Calcium				0	45.5	43.9	46.2	5		
Calcium Hardness				0	119	113	124	2		
Calcium Hardness Calculated				0	113	110	115	3		
Chloride Dissolved				0	7.2	6.0	8.4	5	(250)	
Cobalt				0	<0.0002	<0.0002	<0.0002	5		
Iron				0	<0.005	<0.005	<0.005	5	(0.3)	0.3
Lanthanum				0	<0.0010	<0.0010	<0.0010	5		
Lithium				0	0.0032	0.0030	0.0034	5		
Magnesium				0	13.4	12.7	14.2	5		
Molybdenum				0	0.0008	0.0006	0.0009	5		
Nickel				0	<0.0005	<0.0005	0.0006	5		
Ortho_P	0.92	0.92	0.92	4	0.90	0.86	0.92	18		
Phosphorus				0	0.97	0.91	1.02	5		
Potassium				0	0.88	0.80	1.00	5		
Silicon				0	1.94	1.57	2.21	5		
Silver				0	<0.0002	<0.0002	<0.0002	5		
Sodium				0	14.1	7.4	19.4	5	(200)	
Sulphate Dissolved				0	73.6	58.6	81.0	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	178	174	182	2		
Total Hardness Calculated				0	167	162	170	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		

2.2.9 Discovery Park Reservoir

July 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	1.5	5		16
Bromoform				0	<0.5	<0.5	<0.5	5		
Chloroform				0	23.5	11.7	37.8	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	1.7	1.5	1.9	5	1.8	1.2	2.4	15		
Total Volatile Organics (NonTHM)				0	2.1	<1.0	3.5	5		
Total Volatile Organics (Unknown)				0	1.2	1.2	1.2	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 Parks (AEP) Operating Approval 638-04-00. Limits in brackets indicate Aesthetic Objectives or Operational Guidelines (OG) and are not Approval Limits The EPCOR limits are internal limits set by EPCOR in the Operations Program.

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

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

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

2.2.10 Kaskitayo Reservoir

July 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	4	(15)	10
Conductivity (uS/cm)				0	405	370	426	4		
Odour				0	Inoff	Inoff	Inoff	4		
pH (N/A)	7.8	7.7	7.8	5	7.8	7.6	7.9	14	(7.0 - 10.5)	7.3 - 8.3
Turbidity (NTU)	0.14	0.08	0.19	5	0.09	0.05	0.19	31		1
Primary Inorganics (mg/L) **										
Antimony				0	<0.0004	<0.0002	<0.0005	4	0.006	
Arsenic				0	<0.0002	<0.0002	0.0002	4	0.01	
Barium				0	0.063	0.056	0.069	4	2	
Boron				0	0.009	0.008	0.010	4	2	
Bromate Dissolved				0	<0.005	<0.003	<0.005	4	0.01	
Cadmium				0	<0.0002	<0.0002	<0.0002	4	0.007	
Chlorate Dissolved				0	<0.102	<0.080	0.126	4	1	
Chlorite Dissolved				0	<0.054	<0.005	<0.200	4	1	
Chromium				0	<0.0002	<0.0002	<0.0002	4	0.05	
Copper				0	<0.003	<0.002	<0.005	4	2 (1)	
Fluoride				0	0.69	0.65	0.74	4	1.5	0.6 - 0.8
Lead				0	<0.0002	<0.0002	<0.0002	4	0.005	
Manganese				0	<0.002	<0.002	<0.002	4	0.12 (0.02)	
Mercury				0	<0.0002	<0.0002	<0.0002	4	0.001	
Nitrate (as N) Dissolved	0.032	0.010	0.060	5	0.049	<0.010	0.170	15	10	
Nitrite (as N) Dissolved	<0.010	<0.010	0.010	5	<0.008	<0.005	0.010	15	1	
Selenium				0	0.0003	0.0002	0.0003	4	0.05	
Strontium				0	0.442	0.385	0.483	4	7.0	
Total Chlorine	1.88	1.84	1.92	5	2.00	1.83	2.23	31	>0.5 and <3.0	>1.0 and <2.4
Uranium				0	<0.0005	<0.0005	0.0005	4	0.02	
Primary Organics (ug/L) **										
Benzene				0	<0.5	<0.5	<0.5	4	5	
Carbon Tetrachloride				0	<0.5	<0.5	<0.5	4	2	
Chlorobenzene				0	<0.50	<0.50	<0.50	4	80 (30)	
Dichlorobenzene (1,2)				0	<0.50	<0.50	<0.50	4		
Dichlorobenzene (1,4)				0	<0.5	<0.5	<0.5	4	5 (1)	
Dichloroethane (1,2)				0	<0.5	<0.5	<0.5	4	5	
Dichloroethylene (1,1)				0	<0.5	<0.5	<0.5	4	14	
Ethylbenzene				0	<0.50	<0.50	<0.50	4	140 (1.6)	
Methylene Chloride				0	<0.5	<0.5	<0.5	4	50	
Tetrachloroethylene				0	<0.5	<0.5	<0.5	4	10	
Toluene				0	<0.50	<0.50	<0.50	4	60 (24)	
Total Xylenes				0	<1	<1	<1	4	90	
Trichloroethylene				0	<0.50	<0.50	<0.50	4	5	
Vinyl Chloride				0	<1.0	<1.0	<1.0	4	2	

2.2.10 Kaskitayo Reservoir

July 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	123	118	128	4		
Aluminum				0	0.045	0.022	0.097	4	2.9	0.1/0.2
Ammonia as NH3	0.17	0.11	0.20	5	0.16	0.11	0.20	13		
Beryllium				0	<0.0002	<0.0002	<0.0002	4		
Bromide Dissolved				0	<0.025	<0.010	<0.050	4		
Calcium				0	47.3	43.3	51.2	4		
Calcium Hardness				0	124	118	129	2		
Calcium Hardness Calculated				0	113	108	118	2		
Chloride Dissolved				0	7.2	6.0	8.2	4	(250)	
Cobalt				0	<0.0002	<0.0002	<0.0002	4		
Iron				0	<0.005	<0.005	<0.005	4	(0.3)	0.3
Lanthanum				0	<0.0010	<0.0010	<0.0010	4		
Lithium				0	0.0032	0.0029	0.0036	4		
Magnesium				0	13.7	11.8	15.1	4		
Molybdenum				0	0.0008	0.0006	0.0009	4		
Nickel				0	<0.0005	<0.0005	<0.0005	4		
Ortho_P	0.91	0.90	0.92	4	0.92	0.88	1.02	18		
Phosphorus				0	0.94	0.87	0.98	4		
Potassium				0	0.88	0.70	1.10	4		
Silicon				0	2.04	1.93	2.16	4		
Silver				0	<0.0002	<0.0002	<0.0002	4		
Sodium				0	14.2	7.4	22.0	4	(200)	
Sulphate Dissolved				0	73.7	60.7	79.6	4	(500)	
Thallium				0	<0.0003	<0.0002	<0.0005	4		
Tin				0	<0.0005	<0.0005	<0.0005	4		
Titanium				0	<0.0005	<0.0005	<0.0005	4		
Total Hardness (mg/L CaCO3)				0	184	178	190	2		
Total Hardness Calculated				0	166	157	175	2		
Vanadium				0	<0.0005	<0.0005	<0.0005	4		
Zinc				0	<0.005	<0.005	<0.005	4	(5.0)	
Zirconium				0	<0.0010	<0.0010	<0.0010	4		

2.2.10 Kaskitayo Reservoir

July 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	4		16
Bromoform				0	<0.5	<0.5	<0.5	4		
Chloroform				0	20.8	9.8	31.6	4		
Dibromochloromethane				0	<0.50	<0.50	<0.50	4		
Dichlorobenzene (1,3)				0	<0.50	<0.50	<0.50	4		
Dichloroethylene, cis (1,2)				0	<0.50	<0.50	<0.50	4		
Dichloroethylene, trans (1,2)				0	<0.50	<0.50	<0.50	4		
Dichloropropane (1,2)				0	<0.5	<0.5	<0.5	4		
Methyl t-Butyl Ether (MTBE)				0	<0.5	<0.5	<0.5	4	(15)	
MIBK				0	<1.0	<1.0	<1.0	4		
Styrene				0	<0.50	<0.50	<0.50	4		
Tetrachloroethane (1,1,2,2)				0	<0.5	<0.5	<0.5	4		
Total Organic Carbon	1.6	1.5	1.8	5	1.9	1.2	2.6	14		
Total Volatile Organics (NonTHM)				0	2.1	<1.0	4.1	4		
Total Volatile Organics (Unknown)				0	1.1	1.1	1.1	1		
Trichlorobenzene (1,2,4)				0	<0.5	<0.5	<0.5	4		
Trichloroethane (1,1,1)				0	<0.5	<0.5	<0.5	4		
Xylene (1,2)				0	<0.5	<0.5	<0.5	4		
Xylene (1,4)				0	<0.5	<0.5	<0.5	4		

TABLE EXPLANATIONS:

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

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

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

2.2.11 Londonderry Reservoir

July 2024

Parameter	Monthly				YTD				Limits	
	Mean	Min	Max	Count	Mean	Min	Max	Count	*Approval or GCDWQ MAC, (AO or OG)	EPCOR
Physical										
Colour (TCU)	1.2	1.2	1.2	1	1.0	0.7	1.2	3	(15)	10
Conductivity (uS/cm)	405	405	405	1	395	390	405	3		
Odour	Inoff	Inoff	Inoff	1	Inoff	Inoff	Inoff	3		
pH (N/A)	7.8	7.7	7.9	5	7.8	7.7	7.9	13	(7.0 - 10.5)	7.3 - 8.3
Turbidity (NTU)	0.21	0.10	0.52	5	0.13	0.06	0.52	31		1
Primary Inorganics (mg/L) **										
Antimony	<0.0005	<0.0005	<0.0005	1	<0.0004	<0.0002	<0.0005	3	0.006	
Arsenic	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	3	0.01	
Barium	0.068	0.068	0.068	1	0.059	0.052	0.068	3	2	
Boron	0.011	0.011	0.011	1	0.011	0.010	0.012	3	2	
Bromate Dissolved	<0.005	<0.005	<0.005	2	<0.005	<0.005	<0.005	4	0.01	
Cadmium	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	3	0.007	
Chlorate Dissolved	0.228	0.224	0.232	2	0.221	0.188	0.238	4	1	
Chlorite Dissolved	<0.005	<0.005	<0.005	2	<0.005	<0.005	<0.005	4	1	
Chromium	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	3	0.05	
Copper	<0.002	<0.002	<0.002	1	<0.003	<0.002	<0.005	3	2 (1)	
Fluoride	0.66	0.66	0.66	1	0.70	0.66	0.73	3	1.5	0.6 - 0.8
Lead	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	3	0.005	
Manganese	<0.002	<0.002	<0.002	1	<0.002	<0.002	<0.002	3	0.12 (0.02)	
Mercury	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	3	0.001	
Nitrate (as N) Dissolved	0.032	0.020	0.060	5	0.060	0.020	0.180	15	10	
Nitrite (as N) Dissolved	<0.010	<0.010	<0.010	5	<0.008	<0.005	0.010	15	1	
Selenium	0.0003	0.0003	0.0003	1	0.0003	0.0002	0.0003	3	0.05	
Strontium	0.436	0.436	0.436	1	0.436	0.412	0.459	3	7.0	
Total Chlorine	1.72	1.68	1.74	5	1.94	1.68	2.25	31	>0.5 and <3.0	>1.0 and <2.4
Uranium	<0.0005	<0.0005	<0.0005	1	<0.0005	<0.0005	<0.0005	3	0.02	
Primary Organics (ug/L) **										
Benzene	1.0	1.0	1.0	1	<0.7	<0.5	1.0	3	5	
Carbon Tetrachloride	1.0	1.0	1.0	1	<0.7	<0.5	1.0	3	2	
Chlorobenzene	1.00	1.00	1.00	1	<0.67	<0.50	1.00	3	80 (30)	
Dichlorobenzene (1,2)	1.00	1.00	1.00	1	<0.67	<0.50	1.00	3		
Dichlorobenzene (1,4)	1.0	1.0	1.0	1	<0.7	<0.5	1.0	3	5 (1)	
Dichloroethane (1,2)	1.0	1.0	1.0	1	<0.7	<0.5	1.0	3	5	
Dichloroethylene (1,1)	1.0	1.0	1.0	1	<0.7	<0.5	1.0	3	14	
Ethylbenzene	1.00	1.00	1.00	1	<0.67	<0.50	1.00	3	140 (1.6)	
Methylene Chloride	1.0	1.0	1.0	1	<0.7	<0.5	1.0	3	50	
Tetrachloroethylene	1.0	1.0	1.0	1	<0.7	<0.5	1.0	3	10	
Toluene	1.00	1.00	1.00	1	<0.67	<0.50	1.00	3	60 (24)	
Total Xylenes	<1	<1	<1	1	<1	<1	<1	3	90	
Trichloroethylene	1.00	1.00	1.00	1	<0.67	<0.50	1.00	3	5	
Vinyl Chloride	2.0	2.0	2.0	1	<1.3	<1.0	2.0	3	2	

2.2.11 Londonderry Reservoir

July 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	110	121	3		
Aluminum	0.082	0.082	0.082	1	0.041	0.018	0.082	3	2.9	0.1/0.2
Ammonia as NH3	0.19	0.14	0.21	5	0.18	0.14	0.21	12		
Beryllium	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	3		
Bromide Dissolved	<0.030	<0.030	<0.030		2 <0.020	<0.010	<0.030	4		
Calcium	49.5	49.5	49.5		1 47.8	44.6	49.5	3		
Calcium Hardness				0	122	122	122	1		
Calcium Hardness Calculated	124	124	124	1	118	111	124	2		
Chloride Dissolved	6.4	6.2	6.6	2	6.4	5.7	7.2	4	(250)	
Cobalt	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	3		
Iron	<0.005	<0.005	<0.005	1	<0.005	<0.005	<0.005	3	(0.3)	0.3
Lanthanum	<0.0010	<0.0010	<0.0010	1	<0.0010	<0.0010	<0.0010	3		
Lithium	0.0043	0.0043	0.0043	1	0.0038	0.0033	0.0043	3		
Magnesium	14.2	14.2	14.2	1	13.9	13.3	14.3	3		
Molybdenum	0.0008	0.0008	0.0008		1 0.0009	0.0008	0.0010	3		
Nickel	<0.0005	<0.0005	<0.0005		1 <0.0005	<0.0005	<0.0005	3		
Ortho_P	0.88	0.88	0.88	4	0.89	0.86	0.92	18		
Phosphorus	0.97	0.97	0.97	1	0.96	0.89	1.03	3		
Potassium	0.80	0.80	0.80	1	1.00	0.80	1.40	3		
Silicon	2.29	2.29	2.29	1	2.16	1.83	2.35	3		
Silver	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	3		
Sodium	9.9	9.9	9.9	1	10.9	9.8	13.0	3	(200)	
Sulphate Dissolved	73.5	73.0	74.0	2	73.3	72.9	74.0	4	(500)	
Thallium	<0.0002	<0.0002	<0.0002	1	<0.0003	<0.0002	<0.0005	3		
Tin	<0.0005	<0.0005	<0.0005	1	<0.0005	<0.0005	<0.0005	3		
Titanium	<0.0005	<0.0005	<0.0005	1	<0.0005	<0.0005	<0.0005	3		
Total Hardness (mg/L CaCO3)				0	184	184	184	1		
Total Hardness Calculated	182	182	182		1 174	166	182	2		
Vanadium	<0.0005	<0.0005	<0.0005		1 <0.0005	<0.0005	<0.0005	3		
Zinc	<0.005	<0.005	<0.005	1	<0.005	<0.005	<0.005	3	(5.0)	
Zirconium	<0.0010	<0.0010	<0.0010	1	<0.0010	<0.0010	<0.0010	3		

2.2.11 Londonderry Reservoir

July 2024

Parameter	Monthly				YTD				Limits	
	Mean	Min	Max	Count	Mean	Min	Max	Count	*Approval or GCDWQ MAC, (AO or OG)	EPCOR
Secondary Organics (ug/L) * **										
Bromodichloromethane	1.0	1.0	1.0	1	1.1	1.0	1.4	3		16
Bromoform	1.0	1.0	1.0	1	<0.7	<0.5	1.0	3		
Chloroform	34.3	34.3	34.3	1	19.1	8.5	34.3	3		
Dibromochloromethane	1.00	1.00	1.00	1	<0.67	<0.50	1.00	3		
Dichlorobenzene (1,3)	1.00	1.00	1.00	1	<0.67	<0.50	1.00	3		
Dichloroethylene, cis (1,2)	1.00	1.00	1.00	1	<0.67	<0.50	1.00	3		
Dichloroethylene, trans (1,2)	1.00	1.00	1.00	1	<0.67	<0.50	1.00	3		
Dichloropropane (1,2)	1.0	1.0	1.0	1	<0.7	<0.5	1.0	3		
Methyl t-Butyl Ether (MTBE)	1.0	1.0	1.0	1	<0.7	<0.5	1.0	3	(15)	
MIBK	2.0	2.0	2.0	1	<1.3	<1.0	2.0	3		
Styrene	1.00	1.00	1.00	1	<0.67	<0.50	1.00	3		
Tetrachloroethane (1,1,2,2)	1.0	1.0	1.0	1	<0.7	<0.5	1.0	3		
Total Organic Carbon	1.6	1.5	1.7	5	1.8	1.0	2.5	13		
Total Volatile Organics (NonTHM)	<1.0	<1.0	<1.0	1	<1.0	<1.0	<1.0	3		
Trichlorobenzene (1,2,4)	1.0	1.0	1.0	1	<0.7	<0.5	1.0	3		
Trichloroethane (1,1,1)	1.0	1.0	1.0	1	<0.7	<0.5	1.0	3		
Xylene (1,2)	1.0	1.0	1.0	1	<0.7	<0.5	1.0	3		
Xylene (1,4)	1.0	1.0	1.0	1	<0.7	<0.5	1.0	3		

TABLE EXPLANATIONS:

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

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

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

2.2.12 Millwoods Reservoir

July 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	0.9	<0.5	1.2	3	(15)	10
Conductivity (uS/cm)	418	418	418	1	403	389	418	3		
Odour	Inoff	Inoff	Inoff	1	Inoff	Inoff	Inoff	3		
pH (N/A)	7.8	7.7	7.8	5	7.8	7.7	8.0	13	(7.0 - 10.5)	7.3 - 8.3
Turbidity (NTU)	0.15	0.09	0.20	5	0.10	0.06	0.20	31		1
Primary Inorganics (mg/L) **										
Antimony	<0.0005	<0.0005	<0.0005	1	<0.0004	<0.0002	<0.0005	3	0.006	
Arsenic	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	3	0.01	
Barium	0.071	0.071	0.071	1	0.059	0.051	0.071	3	2	
Boron	0.011	0.011	0.011	1	0.010	0.009	0.011	3	2	
Bromate Dissolved	<0.005	<0.005	<0.005	1	<0.005	<0.005	<0.005	3	0.01	
Cadmium	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	3	0.007	
Chlorate Dissolved	0.171	0.171	0.171	1	0.120	0.090	0.171	3	1	
Chlorite Dissolved	<0.005	<0.005	<0.005	1	<0.005	<0.005	<0.005	3	1	
Chromium	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	3	0.05	
Copper	<0.002	<0.002	<0.002	1	<0.003	<0.002	<0.005	3	2 (1)	
Fluoride	0.67	0.67	0.67	1	0.69	0.67	0.72	3	1.5	0.6 - 0.8
Lead	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	3	0.005	
Manganese	<0.002	<0.002	<0.002	1	<0.002	<0.002	<0.002	3	0.12 (0.02)	
Mercury	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	3	0.001	
Nitrate (as N) Dissolved	0.034	0.010	0.060	5	0.049	0.010	0.160	15	10	
Nitrite (as N) Dissolved	<0.010	<0.010	0.010	5	<0.008	<0.005	0.010	15	1	
Selenium	0.0004	0.0004	0.0004	1	0.0003	0.0002	0.0004	3	0.05	
Strontium	0.441	0.441	0.441	1	0.441	0.422	0.461	3	7.0	
Total Chlorine	1.87	1.85	1.90	5	2.00	1.79	2.21	31	>0.5 and <3.0	>1.0 and <2.4
Uranium	<0.0005	<0.0005	<0.0005	1	<0.0005	<0.0005	<0.0005	3	0.02	
Primary Organics (ug/L) **										
Benzene	1.0	1.0	1.0	1	<0.6	<0.5	1.0	4	5	
Carbon Tetrachloride	1.0	1.0	1.0	1	<0.6	<0.5	1.0	4	2	
Chlorobenzene	1.00	1.00	1.00	1	<0.63	<0.50	1.00	4	80 (30)	
Dichlorobenzene (1,2)	1.00	1.00	1.00	1	<0.63	<0.50	1.00	4		
Dichlorobenzene (1,4)	1.0	1.0	1.0	1	<0.6	<0.5	1.0	4	5 (1)	
Dichloroethane (1,2)	1.0	1.0	1.0	1	<0.6	<0.5	1.0	4	5	
Dichloroethylene (1,1)	1.0	1.0	1.0	1	<0.6	<0.5	1.0	4	14	
Ethylbenzene	1.00	1.00	1.00	1	<0.63	<0.50	1.00	4	140 (1.6)	
Methylene Chloride	1.0	1.0	1.0	1	<0.6	<0.5	1.0	4	50	
Tetrachloroethylene	1.0	1.0	1.0	1	<0.6	<0.5	1.0	4	10	
Toluene	1.00	1.00	1.00	1	<0.63	<0.50	1.00	4	60 (24)	
Total Xylenes	<1	<1	<1	1	<1	<1	<1	4	90	
Trichloroethylene	1.00	1.00	1.00	1	<0.63	<0.50	1.00	4	5	
Vinyl Chloride	2.0	2.0	2.0	1	<1.3	<1.0	2.0	4	2	

2.2.12 Millwoods Reservoir

July 2024

Parameter	Monthly				YTD				Limits	
	Mean	Min	Max	Count	Mean	Min	Max	Count	*Approval or GCDWQ MAC, (AO or OG)	EPCOR
Secondary Inorganics (mg/L) * **										
Alkalinity Total	120	120	120	1	118	112	123	3		
Aluminum	0.077	0.077	0.077	1	0.041	0.022	0.077	3	2.9	0.1/0.2
Ammonia as NH3	0.17	0.11	0.19	5	0.17	0.11	0.19	13		
Beryllium	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	3		
Bromide Dissolved	<0.030	<0.030	<0.030	1	<0.017	<0.010	<0.030	3		
Calcium	49.6	49.6	49.6	1	47.7	45.2	49.6	3		
Calcium Hardness				0	122	122	122	1		
Calcium Hardness Calculated	124	124	124	1	119	113	124	2		
Chloride Dissolved	7.2	7.2	7.2	1	6.8	6.1	7.2	3	(250)	
Cobalt	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	3		
Iron	<0.005	<0.005	<0.005	1	<0.005	<0.005	<0.005	3	(0.3)	0.3
Lanthanum	<0.0010	<0.0010	<0.0010	1	<0.0010	<0.0010	<0.0010	3		
Lithium	0.0041	0.0041	0.0041	1	0.0035	0.0031	0.0041	3		
Magnesium	14.5	14.5	14.5	1	14.0	13.3	14.5	3		
Molybdenum	0.0008	0.0008	0.0008	1	0.0009	0.0007	0.0011	3		
Nickel	<0.0005	<0.0005	<0.0005	1	<0.0005	<0.0005	<0.0005	3		
Ortho_P	0.87	0.86	0.88	4	0.90	0.86	0.96	18		
Phosphorus	0.97	0.97	0.97	1	0.96	0.90	1.01	3		
Potassium	0.80	0.80	0.80	1	0.90	0.80	1.10	3		
Silicon	2.39	2.39	2.39	1	2.12	1.67	2.39	3		
Silver	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	3		
Sodium	12.5	12.5	12.5	1	12.8	12.5	13.3	3	(200)	
Sulphate Dissolved	76.8	76.8	76.8	1	74.4	71.5	76.8	3	(500)	
Thallium	<0.0002	<0.0002	<0.0002	1	<0.0003	<0.0002	<0.0005	3		
Tin	<0.0005	<0.0005	<0.0005	1	<0.0005	<0.0005	<0.0005	3		
Titanium	<0.0005	<0.0005	<0.0005	1	<0.0005	<0.0005	<0.0005	3		
Total Hardness (mg/L CaCO3)				0	185	185	185	1		
Total Hardness Calculated	184	184	184	1	176	168	184	2		
Vanadium	<0.0005	<0.0005	<0.0005	1	<0.0005	<0.0005	<0.0005	3		
Zinc	<0.005	<0.005	<0.005	1	<0.005	<0.005	<0.005	3	(5.0)	
Zirconium	<0.0010	<0.0010	<0.0010	1	<0.0010	<0.0010	<0.0010	3		

2.2.12 Millwoods Reservoir

July 2024

Parameter	Monthly				YTD				Limits	
	Mean	Min	Max	Count	Mean	Min	Max	Count	*Approval or GCDWQ MAC, (AO or OG)	EPCOR
Secondary Organics (ug/L) * **										
Bromodichloromethane	1.0	1.0	1.0	1	0.9	0.7	1.0	4		16
Bromoform	1.0	1.0	1.0	1	<0.6	<0.5	1.0	4		
Chloroform	37.4	37.4	37.4	1	15.6	6.8	37.4	4		
Dibromochloromethane	1.00	1.00	1.00	1	<0.63	<0.50	1.00	4		
Dichlorobenzene (1,3)	1.00	1.00	1.00	1	<0.63	<0.50	1.00	4		
Dichloroethylene, cis (1,2)	1.00	1.00	1.00	1	<0.63	<0.50	1.00	4		
Dichloroethylene, trans (1,2)	1.00	1.00	1.00	1	<0.63	<0.50	1.00	4		
Dichloropropane (1,2)	1.0	1.0	1.0	1	<0.6	<0.5	1.0	4		
Methyl t-Butyl Ether (MTBE)	1.0	1.0	1.0	1	<0.6	<0.5	1.0	4	(15)	
MIBK	2.0	2.0	2.0	1	<1.3	<1.0	2.0	4		
Styrene	1.00	1.00	1.00	1	<0.63	<0.50	1.00	4		
Tetrachloroethane (1,1,2,2)	1.0	1.0	1.0	1	<0.6	<0.5	1.0	4		
Total Organic Carbon	1.6	1.4	1.8	5	1.8	0.9	2.6	13		
Total Volatile Organics (NonTHM)	<1.0	<1.0	<1.0	1	<1.0	<1.0	1.1	4		
Total Volatile Organics (Unknown)				0	1.3	1.3	1.3	1		
Trichlorobenzene (1,2,4)	1.0	1.0	1.0	1	<0.6	<0.5	1.0	4		
Trichloroethane (1,1,1)	1.0	1.0	1.0	1	<0.6	<0.5	1.0	4		
Xylene (1,2)	1.0	1.0	1.0	1	<0.6	<0.5	1.0	4		
Xylene (1,4)	1.0	1.0	1.0	1	<0.6	<0.5	1.0	4		

TABLE EXPLANATIONS:

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

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

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

2.2.13 North Jasper Place Reservoir

July 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	4	(15)	10
Conductivity (uS/cm)				0	402	367	421	4		
Odour				0	Inoff	Inoff	Inoff	4		
pH (N/A)	7.8	7.7	7.9	5	7.8	7.7	8.0	14	(7.0 - 10.5)	7.3 - 8.3
Turbidity (NTU)	0.18	0.14	0.24	5	0.11	0.05	0.24	31		1
Primary Inorganics (mg/L) **										
Antimony				0	<0.0004	<0.0002	<0.0005	4	0.006	
Arsenic				0	<0.0002	<0.0002	0.0003	4	0.01	
Barium				0	0.060	0.054	0.068	4	2	
Boron				0	0.009	0.008	0.010	4	2	
Bromate Dissolved	<0.005	<0.005	<0.005	1	<0.005	<0.003	<0.005	5	0.01	
Cadmium				0	<0.0002	<0.0002	<0.0002	4	0.007	
Chlorate Dissolved	0.141	0.141	0.141	1	<0.110	<0.080	0.141	5	1	
Chlorite Dissolved	<0.005	<0.005	<0.005	1	<0.044	<0.005	<0.200	5	1	
Chromium				0	<0.0002	<0.0002	<0.0002	4	0.05	
Copper				0	<0.003	<0.002	<0.005	4	2 (1)	
Fluoride				0	0.68	0.64	0.71	4	1.5	0.6 - 0.8
Lead				0	<0.0002	<0.0002	<0.0002	4	0.005	
Manganese				0	<0.002	<0.002	<0.002	4	0.12 (0.02)	
Mercury				0	<0.0002	<0.0002	<0.0002	4	0.001	
Nitrate (as N) Dissolved	0.036	0.030	0.050	5	0.064	0.030	0.190	15	10	
Nitrite (as N) Dissolved	<0.010	<0.010	<0.010	5	<0.008	<0.005	0.010	15	1	
Selenium				0	0.0003	0.0002	0.0003	4	0.05	
Strontium				0	0.440	0.416	0.481	4	7.0	
Total Chlorine	1.38	1.29	1.45	5	1.73	1.29	2.07	31	>0.5 and <3.0	>1.0 and <2.4
Uranium				0	<0.0005	<0.0005	<0.0005	4	0.02	
Primary Organics (ug/L) **										
Benzene				0	<0.5	<0.5	<0.5	4	5	
Carbon Tetrachloride				0	<0.5	<0.5	<0.5	4	2	
Chlorobenzene				0	<0.50	<0.50	<0.50	4	80 (30)	
Dichlorobenzene (1,2)				0	<0.50	<0.50	<0.50	4		
Dichlorobenzene (1,4)				0	<0.5	<0.5	<0.5	4	5 (1)	
Dichloroethane (1,2)				0	<0.5	<0.5	<0.5	4	5	
Dichloroethylene (1,1)				0	<0.5	<0.5	<0.5	4	14	
Ethylbenzene				0	<0.50	<0.50	<0.50	4	140 (1.6)	
Methylene Chloride				0	<0.5	<0.5	<0.5	4	50	
Tetrachloroethylene				0	<0.5	<0.5	<0.5	4	10	
Toluene				0	<0.50	<0.50	<0.50	4	60 (24)	
Total Xylenes				0	<1	<1	<1	4	90	
Trichloroethylene				0	<0.50	<0.50	<0.50	4	5	
Vinyl Chloride				0	<1.0	<1.0	<1.0	4	2	

2.2.13 North Jasper Place Reservoir

July 2024

Parameter	Monthly				YTD				Limits	
	Mean	Min	Max	Count	Mean	Min	Max	Count	*Approval or GCDWQ MAC, (AO or OG)	EPCOR
Secondary Inorganics (mg/L) * **										
Alkalinity Total				0	118	112	128	4		
Aluminum				0	0.044	0.024	0.102	4	2.9	0.1/0.2
Ammonia as NH3	0.22	0.16	0.25	5	0.20	0.16	0.25	12		
Beryllium				0	<0.0002	<0.0002	<0.0002	4		
Bromide Dissolved	<0.030	<0.030	<0.030	1	<0.026	<0.010	<0.050	5		
Calcium				0	46.6	43.9	51.0	4		
Calcium Hardness				0	122	116	128	2		
Calcium Hardness Calculated				0	112	110	113	2		
Chloride Dissolved	7.9	7.9	7.9	1	7.1	6.0	8.0	5	(250)	
Cobalt				0	<0.0002	<0.0002	<0.0002	4		
Iron				0	<0.005	<0.005	<0.005	4	(0.3)	0.3
Lanthanum				0	<0.0010	<0.0010	<0.0010	4		
Lithium				0	0.0032	0.0030	0.0036	4		
Magnesium				0	13.5	12.2	14.7	4		
Molybdenum				0	0.0007	0.0005	0.0009	4		
Nickel				0	<0.0005	<0.0005	0.0005	4		
Ortho_P	0.90	0.90	0.90	4	0.90	0.88	0.96	18		
Phosphorus				0	0.97	0.92	1.00	4		
Potassium				0	0.85	0.70	1.00	4		
Silicon				0	1.97	1.78	2.09	4		
Silver				0	<0.0002	<0.0002	<0.0002	4		
Sodium				0	13.8	7.2	19.0	4	(200)	
Sulphate Dissolved	75.9	75.9	75.9	1	73.1	59.5	80.4	5	(500)	
Thallium				0	<0.0003	<0.0002	<0.0005	4		
Tin				0	<0.0005	<0.0005	<0.0005	4		
Titanium				0	<0.0005	<0.0005	<0.0005	4		
Total Hardness (mg/L CaCO3)				0	184	173	194	2		
Total Hardness Calculated				0	164	160	167	2		
Vanadium				0	<0.0005	<0.0005	<0.0005	4		
Zinc				0	<0.005	<0.005	<0.005	4	(5.0)	
Zirconium				0	<0.0010	<0.0010	<0.0010	4		

2.2.13 North Jasper Place Reservoir

July 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	1.6	4		16
Bromoform				0	<0.5	<0.5	<0.5	4		
Chloroform				0	21.8	12.7	36.0	4		
Dibromochloromethane				0	<0.50	<0.50	<0.50	4		
Dichlorobenzene (1,3)				0	<0.50	<0.50	<0.50	4		
Dichloroethylene, cis (1,2)				0	<0.50	<0.50	<0.50	4		
Dichloroethylene, trans (1,2)				0	<0.50	<0.50	<0.50	4		
Dichloropropane (1,2)				0	<0.5	<0.5	<0.5	4		
Methyl t-Butyl Ether (MTBE)				0	<0.5	<0.5	<0.5	4	(15)	
MIBK				0	<1.0	<1.0	<1.0	4		
Styrene				0	<0.50	<0.50	<0.50	4		
Tetrachloroethane (1,1,2,2)				0	<0.5	<0.5	<0.5	4		
Total Organic Carbon	1.7	1.5	1.8	4	1.8	1.2	2.4	13		
Total Volatile Organics (NonTHM)				0	1.9	<1.0	3.4	4		
Total Volatile Organics (Unknown)				0	1.7	1.7	1.7	1		
Trichlorobenzene (1,2,4)				0	<0.5	<0.5	<0.5	4		
Trichloroethane (1,1,1)				0	<0.5	<0.5	<0.5	4		
Xylene (1,2)				0	<0.5	<0.5	<0.5	4		
Xylene (1,4)				0	<0.5	<0.5	<0.5	4		

TABLE EXPLANATIONS:

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

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

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

2.2.14 Ormsby Reservoir

July 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	0.6	1.1	3	(15)	10
Conductivity (uS/cm)	424	424	424	1	409	395	424	3		
Odour	Inoff	Inoff	Inoff	1	Inoff	Inoff	Inoff	3		
pH (N/A)	7.8	7.7	7.8	5	7.8	7.7	8.0	13	(7.0 - 10.5)	7.3 - 8.3
Turbidity (NTU)	0.18	0.10	0.28	5	0.11	0.05	0.28	31		1
Primary Inorganics (mg/L) **										
Antimony	<0.0005	<0.0005	<0.0005	1	<0.0004	<0.0002	<0.0005	3	0.006	
Arsenic	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	3	0.01	
Barium	0.071	0.071	0.071	1	0.060	0.051	0.071	3	2	
Boron	0.011	0.011	0.011	1	0.011	0.010	0.011	3	2	
Bromate Dissolved	<0.005	<0.005	<0.005	1	<0.005	<0.005	<0.005	3	0.01	
Cadmium	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	3	0.007	
Chlorate Dissolved	0.132	0.132	0.132	1	0.091	0.060	0.132	3	1	
Chlorite Dissolved	<0.005	<0.005	<0.005	1	<0.005	<0.005	<0.005	3	1	
Chromium	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	3	0.05	
Copper	<0.002	<0.002	<0.002	1	<0.003	<0.002	<0.005	3	2 (1)	
Fluoride	0.67	0.67	0.67	1	0.69	0.67	0.71	3	1.5	0.6 - 0.8
Lead	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	3	0.005	
Manganese	<0.002	<0.002	<0.002	1	<0.002	<0.002	<0.002	3	0.12 (0.02)	
Mercury	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	3	0.001	
Nitrate (as N) Dissolved	0.032	0.020	0.050	5	0.048	0.010	0.170	15	10	
Nitrite (as N) Dissolved	<0.010	<0.010	<0.010	5	<0.008	<0.005	0.010	15	1	
Selenium	0.0003	0.0003	0.0003	1	0.0003	0.0002	0.0003	3	0.05	
Strontium	0.437	0.437	0.437	1	0.440	0.424	0.458	3	7.0	
Total Chlorine	1.80	1.70	1.84	5	1.94	1.70	2.15	31	>0.5 and <3.0	>1.0 and <2.4
Uranium	<0.0005	<0.0005	<0.0005	1	<0.0005	<0.0005	<0.0005	3	0.02	
Primary Organics (ug/L) **										
Benzene	1.0	1.0	1.0	1	<0.6	<0.5	1.0	4	5	
Carbon Tetrachloride	1.0	1.0	1.0	1	<0.6	<0.5	1.0	4	2	
Chlorobenzene	1.00	1.00	1.00	1	<0.63	<0.50	1.00	4	80 (30)	
Dichlorobenzene (1,2)	1.00	1.00	1.00	1	<0.63	<0.50	1.00	4		
Dichlorobenzene (1,4)	1.0	1.0	1.0	1	<0.6	<0.5	1.0	4	5 (1)	
Dichloroethane (1,2)	1.0	1.0	1.0	1	<0.6	<0.5	1.0	4	5	
Dichloroethylene (1,1)	1.0	1.0	1.0	1	<0.6	<0.5	1.0	4	14	
Ethylbenzene	1.00	1.00	1.00	1	<0.63	<0.50	1.00	4	140 (1.6)	
Methylene Chloride	1.0	1.0	1.0	1	<0.6	<0.5	1.0	4	50	
Tetrachloroethylene	1.0	1.0	1.0	1	<0.6	<0.5	1.0	4	10	
Toluene	1.00	1.00	1.00	1	<0.63	<0.50	1.00	4	60 (24)	
Total Xylenes	<1	<1	<1	1	<1	<1	<1	4	90	
Trichloroethylene	1.00	1.00	1.00	1	<0.63	<0.50	1.00	4	5	
Vinyl Chloride	2.0	2.0	2.0	1	<1.3	<1.0	2.0	4	2	

2.2.14 Ormsby Reservoir

July 2024

Parameter	Monthly				YTD				Limits	
	Mean	Min	Max	Count	Mean	Min	Max	Count	*Approval or GCDWQ MAC, (AO or OG)	EPCOR
Secondary Inorganics (mg/L) * **										
Alkalinity Total	121	121	121	1	119	112	123	3		
Aluminum	0.130	0.130	0.130	1	0.062	0.023	0.130	3	2.9	0.1/0.2
Ammonia as NH3	0.17	0.11	0.19	5	0.16	0.11	0.19	13		
Beryllium	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	3		
Bromide Dissolved	<0.030	<0.030	<0.030	1	<0.017	<0.010	<0.030	3		
Calcium	49.6	49.6	49.6	1	46.9	43.9	49.6	3		
Calcium Hardness				0	122	122	122	1		
Calcium Hardness Calculated	124	124	124	1	117	110	124	2		
Chloride Dissolved	7.7	7.7	7.7	1	7.2	6.3	7.7	3	(250)	
Cobalt	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	3		
Iron	<0.005	<0.005	<0.005	1	<0.005	<0.005	<0.005	3	(0.3)	0.3
Lanthanum	<0.0010	<0.0010	<0.0010	1	<0.0010	<0.0010	<0.0010	3		
Lithium	0.0040	0.0040	0.0040	1	0.0034	0.0030	0.0040	3		
Magnesium	14.2	14.2	14.2	1	13.7	13.1	14.2	3		
Molybdenum	0.0007	0.0007	0.0007	1	0.0009	0.0007	0.0011	3		
Nickel	<0.0005	<0.0005	<0.0005	1	<0.0005	<0.0005	<0.0005	3		
Ortho_P	0.90	0.86	0.94	4	0.91	0.84	0.98	18		
Phosphorus	1.04	1.04	1.04	1	0.97	0.88	1.04	3		
Potassium	0.80	0.80	0.80	1	0.97	0.80	1.30	3		
Silicon	2.39	2.39	2.39	1	2.13	1.68	2.39	3		
Silver	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	3		
Sodium	14.1	14.1	14.1	1	13.8	12.9	14.4	3	(200)	
Sulphate Dissolved	77.8	77.8	77.8	1	75.5	73.6	77.8	3	(500)	
Thallium	<0.0002	<0.0002	<0.0002	1	<0.0003	<0.0002	<0.0005	3		
Tin	<0.0005	<0.0005	<0.0005	1	<0.0005	<0.0005	<0.0005	3		
Titanium	<0.0005	<0.0005	<0.0005	1	<0.0005	<0.0005	<0.0005	3		
Total Hardness (mg/L CaCO3)				0	185	185	185	1		
Total Hardness Calculated	182	182	182	1	173	164	182	2		
Vanadium	<0.0005	<0.0005	<0.0005	1	<0.0005	<0.0005	<0.0005	3		
Zinc	<0.005	<0.005	<0.005	1	<0.005	<0.005	<0.005	3	(5.0)	
Zirconium	<0.0010	<0.0010	<0.0010	1	<0.0010	<0.0010	<0.0010	3		

2.2.14 Ormsby Reservoir

July 2024

Parameter	Monthly				YTD				Limits	
	Mean	Min	Max	Count	Mean	Min	Max	Count	*Approval or GCDWQ MAC, (AO or OG)	EPCOR
Secondary Organics (ug/L) * **										
Bromodichloromethane	1.0	1.0	1.0	1	1.0	0.8	1.1	4		16
Bromoform	1.0	1.0	1.0	1	<0.6	<0.5	1.0	4		
Chloroform	38.1	38.1	38.1	1	15.8	6.6	38.1	4		
Dibromochloromethane	1.00	1.00	1.00	1	<0.63	<0.50	1.00	4		
Dichlorobenzene (1,3)	1.00	1.00	1.00	1	<0.63	<0.50	1.00	4		
Dichloroethylene, cis (1,2)	1.00	1.00	1.00	1	<0.63	<0.50	1.00	4		
Dichloroethylene, trans (1,2)	1.00	1.00	1.00	1	<0.63	<0.50	1.00	4		
Dichloropropane (1,2)	1.0	1.0	1.0	1	<0.6	<0.5	1.0	4		
Methyl t-Butyl Ether (MTBE)	1.0	1.0	1.0	1	<0.6	<0.5	1.0	4	(15)	
MIBK	2.0	2.0	2.0	1	<1.3	<1.0	2.0	4		
Styrene	1.00	1.00	1.00	1	<0.63	<0.50	1.00	4		
Tetrachloroethane (1,1,2,2)	1.0	1.0	1.0	1	<0.6	<0.5	1.0	4		
Total Organic Carbon	1.6	1.4	1.9	5	1.8	0.9	2.5	13		
Total Volatile Organics (NonTHM)	<1.0	<1.0	<1.0	1	<1.1	<1.0	1.2	4		
Total Volatile Organics (Unknown)				0	0.9	0.6	1.2	2		
Trichlorobenzene (1,2,4)	1.0	1.0	1.0	1	<0.6	<0.5	1.0	4		
Trichloroethane (1,1,1)	1.0	1.0	1.0	1	<0.6	<0.5	1.0	4		
Xylene (1,2)	1.0	1.0	1.0	1	<0.6	<0.5	1.0	4		
Xylene (1,4)	1.0	1.0	1.0	1	<0.6	<0.5	1.0	4		

TABLE EXPLANATIONS:

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

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

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

2.2.15 Papaschase 1 Reservoir

July 2024

Parameter	Monthly				YTD				Limits	
	Mean	Min	Max	Count	Mean	Min	Max	Count	*Approval or GCDWQ MAC, (AO or OG)	EPCOR
Physical										
Colour (TCU)	0.8	0.8	0.8	1	0.8	0.7	1.0	3	(15)	10
Conductivity (uS/cm)	408	408	408	1	398	379	408	3		
Odour	Inoff	Inoff	Inoff	1	Inoff	Inoff	Inoff	3		
pH (N/A)	7.8	7.8	7.9	5	7.8	7.6	8.0	13	(7.0 - 10.5)	7.3 - 8.3
Turbidity (NTU)	0.21	0.16	0.24	5	0.15	0.10	0.26	31		1
Primary Inorganics (mg/L) **										
Antimony	<0.0005	<0.0005	<0.0005	1	<0.0004	<0.0002	<0.0005	3	0.006	
Arsenic	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	3	0.01	
Barium	0.071	0.071	0.071	1	0.060	0.050	0.071	3	2	
Boron	0.011	0.011	0.011	1	0.010	0.008	0.011	3	2	
Bromate Dissolved	<0.005	<0.005	<0.005	1	<0.005	<0.005	<0.005	3	0.01	
Cadmium	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	3	0.007	
Chlorate Dissolved	0.256	0.256	0.256	1	0.236	0.190	0.261	3	1	
Chlorite Dissolved	<0.005	<0.005	<0.005	1	<0.005	<0.005	<0.005	3	1	
Chromium	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	3	0.05	
Copper	<0.002	<0.002	<0.002	1	<0.003	<0.002	<0.005	3	2 (1)	
Fluoride	0.68	0.68	0.68	1	0.71	0.68	0.75	3	1.5	0.6 - 0.8
Lead	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	3	0.005	
Manganese	<0.002	<0.002	<0.002	1	<0.002	<0.002	<0.002	3	0.12 (0.02)	
Mercury	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	3	0.001	
Nitrate (as N) Dissolved	0.034	0.010	0.070	5	0.052	0.010	0.160	15	10	
Nitrite (as N) Dissolved	<0.010	<0.010	0.010	5	<0.008	<0.005	0.010	15	1	
Selenium	0.0003	0.0003	0.0003	1	0.0003	0.0002	0.0003	3	0.05	
Strontium	0.433	0.433	0.433	1	0.437	0.423	0.455	3	7.0	
Total Chlorine	1.97	1.81	2.07	5	1.92	1.48	2.15	31	>0.5 and <3.0	>1.0 and <2.4
Uranium	<0.0005	<0.0005	<0.0005	1	<0.0005	<0.0005	<0.0005	3	0.02	
Primary Organics (ug/L) **										
Benzene	1.0	1.0	1.0	1	<0.6	<0.5	1.0	4	5	
Carbon Tetrachloride	1.0	1.0	1.0	1	<0.6	<0.5	1.0	4	2	
Chlorobenzene	1.00	1.00	1.00	1	<0.63	<0.50	1.00	4	80 (30)	
Dichlorobenzene (1,2)	1.00	1.00	1.00	1	<0.63	<0.50	1.00	4		
Dichlorobenzene (1,4)	1.0	1.0	1.0	1	<0.6	<0.5	1.0	4	5 (1)	
Dichloroethane (1,2)	1.0	1.0	1.0	1	<0.6	<0.5	1.0	4	5	
Dichloroethylene (1,1)	1.0	1.0	1.0	1	<0.6	<0.5	1.0	4	14	
Ethylbenzene	1.00	1.00	1.00	1	<0.63	<0.50	1.00	4	140 (1.6)	
Methylene Chloride	1.0	1.0	1.0	1	<0.6	<0.5	1.0	4	50	
Tetrachloroethylene	1.0	1.0	1.0	1	<0.6	<0.5	1.0	4	10	
Toluene	1.00	1.00	1.00	1	<0.63	<0.50	1.00	4	60 (24)	
Total Xylenes	<1	<1	<1	1	<1	<1	<1	4	90	
Trichloroethylene	1.00	1.00	1.00	1	<0.63	<0.50	1.00	4	5	
Vinyl Chloride	2.0	2.0	2.0	1	<1.3	<1.0	2.0	4	2	

2.2.15 Papaschase 1 Reservoir

July 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	118	118	118	1	116	110	120	3		
Aluminum	0.091	0.091	0.091	1	0.044	0.019	0.091	3	2.9	0.1/0.2
Ammonia as NH3	0.17	0.11	0.20	5	0.18	0.11	0.25	13		
Beryllium	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	3		
Bromide Dissolved	<0.030	<0.030	<0.030	1	<0.017	<0.010	<0.030	3		
Calcium	49.2	49.2	49.2	1	48.1	45.1	50.1	3		
Calcium Hardness				0	123	123	123	1		
Calcium Hardness Calculated	123	123	123	1	118	113	123	2		
Chloride Dissolved	5.8	5.8	5.8	1	6.5	5.8	7.5	3	(250)	
Cobalt	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	3		
Iron	0.016	0.016	0.016	1	0.014	0.010	0.016	3	(0.3)	0.3
Lanthanum	<0.0010	<0.0010	<0.0010	1	<0.0010	<0.0010	<0.0010	3		
Lithium	0.0045	0.0045	0.0045	1	0.0037	0.0033	0.0045	3		
Magnesium	14.5	14.5	14.5	1	14.0	13.1	14.5	3		
Molybdenum	0.0008	0.0008	0.0008	1	0.0009	0.0007	0.0011	3		
Nickel	<0.0005	<0.0005	<0.0005	1	<0.0005	<0.0005	<0.0005	3		
Ortho_P	0.86	0.86	0.86	4	0.87	0.86	0.88	18		
Phosphorus	0.95	0.95	0.95	1	0.93	0.88	0.97	3		
Potassium	0.80	0.80	0.80	1	0.90	0.80	1.10	3		
Silicon	2.38	2.38	2.38	1	2.15	1.68	2.39	3		
Silver	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	3		
Sodium	9.4	9.4	9.4	1	10.7	9.4	11.4	3	(200)	
Sulphate Dissolved	75.2	75.2	75.2	1	72.9	70.0	75.2	3	(500)	
Thallium	<0.0002	<0.0002	<0.0002	1	<0.0003	<0.0002	<0.0005	3		
Tin	<0.0005	<0.0005	<0.0005	1	<0.0005	<0.0005	<0.0005	3		
Titanium	<0.0005	<0.0005	<0.0005	1	<0.0005	<0.0005	<0.0005	3		
Total Hardness (mg/L CaCO3)				0	185	185	185	1		
Total Hardness Calculated	182	182	182	1	175	167	182	2		
Vanadium	<0.0005	<0.0005	<0.0005	1	<0.0005	<0.0005	<0.0005	3		
Zinc	<0.005	<0.005	<0.005	1	<0.005	<0.005	<0.005	3	(5.0)	
Zirconium	<0.0010	<0.0010	<0.0010	1	<0.0010	<0.0010	<0.0010	3		

2.2.15 Papaschase 1 Reservoir

July 2024

Parameter	Monthly				YTD				Limits	
	Mean	Min	Max	Count	Mean	Min	Max	Count	*Approval or GCDWQ MAC, (AO or OG)	EPCOR
Secondary Organics (ug/L) * **										
Bromodichloromethane	1.0	1.0	1.0	1	1.0	0.7	1.6	4		16
Bromoform	1.0	1.0	1.0	1	<0.6	<0.5	1.0	4		
Chloroform	35.1	35.1	35.1	1	16.5	7.8	35.1	4		
Dibromochloromethane	1.00	1.00	1.00	1	<0.63	<0.50	1.00	4		
Dichlorobenzene (1,3)	1.00	1.00	1.00	1	<0.63	<0.50	1.00	4		
Dichloroethylene, cis (1,2)	1.00	1.00	1.00	1	<0.63	<0.50	1.00	4		
Dichloroethylene, trans (1,2)	1.00	1.00	1.00	1	<0.63	<0.50	1.00	4		
Dichloropropane (1,2)	1.0	1.0	1.0	1	<0.6	<0.5	1.0	4		
Methyl t-Butyl Ether (MTBE)	1.0	1.0	1.0	1	<0.6	<0.5	1.0	4	(15)	
MIBK	2.0	2.0	2.0	1	<1.3	<1.0	2.0	4		
Styrene	1.00	1.00	1.00	1	<0.63	<0.50	1.00	4		
Tetrachloroethane (1,1,2,2)	1.0	1.0	1.0	1	<0.6	<0.5	1.0	4		
Total Organic Carbon	1.6	1.4	1.9	5	1.8	0.9	2.5	13		
Total Volatile Organics (NonTHM)	<1.0	<1.0	<1.0	1	<1.1	<1.0	1.3	4		
Total Volatile Organics (Unknown)				0	<0.5	<0.5	<0.5	1		
Trichlorobenzene (1,2,4)	1.0	1.0	1.0	1	<0.6	<0.5	1.0	4		
Trichloroethane (1,1,1)	1.0	1.0	1.0	1	<0.6	<0.5	1.0	4		
Xylene (1,2)	1.0	1.0	1.0	1	<0.6	<0.5	1.0	4		
Xylene (1,4)	1.0	1.0	1.0	1	<0.6	<0.5	1.0	4		

TABLE EXPLANATIONS:

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

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

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

2.2.16 Papaschase 2 Reservoir

July 2024

Parameter	Monthly				YTD				Limits	
	Mean	Min	Max	Count	Mean	Min	Max	Count	*Approval or GCDWQ MAC, (AO or OG)	EPCOR
Physical										
Colour (TCU)				0	1.1	0.7	1.4	4	(15)	10
Conductivity (uS/cm)				0	400	375	430	4		
Odour				0	Inoff	Inoff	Inoff	4		
pH (N/A)	7.8	7.7	7.9	5	7.8	7.6	7.9	14	(7.0 - 10.5)	7.3 - 8.3
Turbidity (NTU)	0.13	0.10	0.16	5	0.10	0.05	0.26	31		1
Primary Inorganics (mg/L) **										
Antimony				0	<0.0004	<0.0002	<0.0005	4	0.006	
Arsenic				0	<0.0002	<0.0002	0.0002	4	0.01	
Barium				0	0.062	0.055	0.067	4	2	
Boron				0	0.010	0.008	0.011	4	2	
Bromate Dissolved				0	<0.005	<0.003	<0.005	4	0.01	
Cadmium				0	<0.0002	<0.0002	<0.0002	4	0.007	
Chlorate Dissolved				0	0.193	0.108	0.300	4	1	
Chlorite Dissolved				0	<0.054	<0.005	<0.200	4	1	
Chromium				0	<0.0002	<0.0002	<0.0002	4	0.05	
Copper				0	<0.003	<0.002	<0.005	4	2 (1)	
Fluoride				0	0.71	0.66	0.74	4	1.5	0.6 - 0.8
Lead				0	<0.0002	<0.0002	<0.0002	4	0.005	
Manganese				0	<0.002	<0.002	<0.002	4	0.12 (0.02)	
Mercury				0	<0.0002	<0.0002	<0.0002	4	0.001	
Nitrate (as N) Dissolved	0.032	0.010	0.060	5	0.055	<0.010	0.170	15	10	
Nitrite (as N) Dissolved	<0.010	<0.010	<0.010	5	<0.008	<0.005	0.010	15	1	
Selenium				0	0.0003	<0.0002	0.0003	4	0.05	
Strontium				0	0.445	0.400	0.477	4	7.0	
Total Chlorine	1.79	1.73	1.85	5	1.97	1.73	2.17	31	>0.5 and <3.0	>1.0 and <2.4
Uranium				0	<0.0005	<0.0005	0.0005	4	0.02	
Primary Organics (ug/L) **										
Benzene				0	<0.5	<0.5	<0.5	4	5	
Carbon Tetrachloride				0	<0.5	<0.5	<0.5	4	2	
Chlorobenzene				0	<0.50	<0.50	<0.50	4	80 (30)	
Dichlorobenzene (1,2)				0	<0.50	<0.50	<0.50	4		
Dichlorobenzene (1,4)				0	<0.5	<0.5	<0.5	4	5 (1)	
Dichloroethane (1,2)				0	<0.5	<0.5	<0.5	4	5	
Dichloroethylene (1,1)				0	<0.5	<0.5	<0.5	4	14	
Ethylbenzene				0	<0.50	<0.50	<0.50	4	140 (1.6)	
Methylene Chloride				0	<0.5	<0.5	<0.5	4	50	
Tetrachloroethylene				0	<0.5	<0.5	<0.5	4	10	
Toluene				0	<0.50	<0.50	<0.50	4	60 (24)	
Total Xylenes				0	<1	<1	<1	4	90	
Trichloroethylene				0	<0.50	<0.50	<0.50	4	5	
Vinyl Chloride				0	<1.0	<1.0	<1.0	4	2	

2.2.16 Papaschase 2 Reservoir

July 2024

Parameter	Monthly				YTD				Limits	
	Mean	Min	Max	Count	Mean	Min	Max	Count	*Approval or GCDWQ MAC, (AO or OG)	EPCOR
Secondary Inorganics (mg/L) * **										
Alkalinity Total				0	119	109	128	4		
Aluminum				0	0.051	0.023	0.084	4	2.9	0.1/0.2
Ammonia as NH3	0.18	0.13	0.20	5	0.18	0.13	0.20	13		
Beryllium				0	<0.0002	<0.0002	<0.0002	4		
Bromide Dissolved				0	<0.025	<0.010	<0.050	4		
Calcium				0	48.1	43.0	52.2	4		
Calcium Hardness				0	123	116	130	2		
Calcium Hardness Calculated				0	116	107	124	2		
Chloride Dissolved				0	6.7	5.8	7.2	4	(250)	
Cobalt				0	<0.0002	<0.0002	<0.0002	4		
Iron				0	<0.005	<0.005	<0.005	4	(0.3)	0.3
Lanthanum				0	<0.0010	<0.0010	<0.0010	4		
Lithium				0	0.0036	0.0030	0.0042	4		
Magnesium				0	13.7	12.2	14.8	4		
Molybdenum				0	0.0008	0.0006	0.0009	4		
Nickel				0	<0.0005	<0.0005	<0.0005	4		
Ortho_P	0.86	0.84	0.88	4	0.88	0.84	0.92	18		
Phosphorus				0	0.95	0.89	0.98	4		
Potassium				0	0.85	0.70	1.10	4		
Silicon				0	2.05	1.93	2.14	4		
Silver				0	<0.0002	<0.0002	<0.0002	4		
Sodium				0	11.6	7.0	17.1	4	(200)	
Sulphate Dissolved				0	70.4	59.9	79.4	4	(500)	
Thallium				0	<0.0003	<0.0002	<0.0005	4		
Tin				0	<0.0005	<0.0005	<0.0005	4		
Titanium				0	<0.0005	<0.0005	<0.0005	4		
Total Hardness (mg/L CaCO3)				0	186	177	194	2		
Total Hardness Calculated				0	170	158	181	2		
Vanadium				0	<0.0005	<0.0005	<0.0005	4		
Zinc				0	<0.005	<0.005	<0.005	4	(5.0)	
Zirconium				0	<0.0010	<0.0010	<0.0010	4		

2.2.16 Papaschase 2 Reservoir

July 2024

Parameter	Monthly				YTD				Limits	
	Mean	Min	Max	Count	Mean	Min	Max	Count	*Approval or GCDWQ MAC, (AO or OG)	EPCOR
Secondary Organics (ug/L) * **										
Bromodichloromethane				0	1.2	0.8	1.6	4		16
Bromoform				0	<0.5	<0.5	<0.5	4		
Chloroform				0	19.2	9.9	26.9	4		
Dibromochloromethane				0	<0.50	<0.50	<0.50	4		
Dichlorobenzene (1,3)				0	<0.50	<0.50	<0.50	4		
Dichloroethylene, cis (1,2)				0	<0.50	<0.50	<0.50	4		
Dichloroethylene, trans (1,2)				0	<0.50	<0.50	<0.50	4		
Dichloropropane (1,2)				0	<0.5	<0.5	<0.5	4		
Methyl t-Butyl Ether (MTBE)				0	<0.5	<0.5	<0.5	4	(15)	
MIBK				0	<1.0	<1.0	<1.0	4		
Styrene				0	<0.50	<0.50	<0.50	4		
Tetrachloroethane (1,1,2,2)				0	<0.5	<0.5	<0.5	4		
Total Organic Carbon	1.5	1.4	1.8	5	1.8	1.2	2.6	14		
Total Volatile Organics (NonTHM)				0	2.6	<1.0	5.9	4		
Total Volatile Organics (Unknown)				0	0.6	0.6	0.6	1		
Trichlorobenzene (1,2,4)				0	<0.5	<0.5	<0.5	4		
Trichloroethane (1,1,1)				0	<0.5	<0.5	<0.5	4		
Xylene (1,2)				0	<0.5	<0.5	<0.5	4		
Xylene (1,4)				0	<0.5	<0.5	<0.5	4		

TABLE EXPLANATIONS:

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

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

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

2.2.17 Rosslyn 1 Reservoir

July 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	0.6	1.4	3	(15)	10
Conductivity (uS/cm)	408	408	408	1	402	397	408	3		
Odour	Inoff	Inoff	Inoff	1	Inoff	Inoff	Inoff	3		
pH (N/A)	7.8	7.8	7.9	5	7.8	7.7	7.9	12	(7.0 - 10.5)	7.3 - 8.3
Turbidity (NTU)	0.20	0.18	0.23	5	0.15	0.08	0.53	29		1
Primary Inorganics (mg/L) **										
Antimony	<0.0005	<0.0005	<0.0005	1	<0.0004	<0.0002	<0.0005	3	0.006	
Arsenic	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	3	0.01	
Barium	0.069	0.069	0.069	1	0.059	0.053	0.069	3	2	
Boron	0.011	0.011	0.011	1	0.012	0.010	0.014	3	2	
Bromate Dissolved	<0.005	<0.005	<0.005	2	<0.005	<0.005	<0.005	4	0.01	
Cadmium	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	3	0.007	
Chlorate Dissolved	0.201	0.197	0.204	2	0.184	0.158	0.204	4	1	
Chlorite Dissolved	<0.005	<0.005	<0.005	2	<0.005	<0.005	<0.005	4	1	
Chromium	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	3	0.05	
Copper	0.003	0.003	0.003	1	<0.003	<0.002	<0.005	3	2 (1)	
Fluoride	0.66	0.66	0.66	1	0.70	0.66	0.73	3	1.5	0.6 - 0.8
Lead	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	3	0.005	
Manganese	<0.002	<0.002	<0.002	1	<0.002	<0.002	<0.002	3	0.12 (0.02)	
Mercury	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	3	0.001	
Nitrate (as N) Dissolved	0.034	0.020	0.060	5	0.053	0.020	0.190	13	10	
Nitrite (as N) Dissolved	<0.010	<0.010	<0.010	5	<0.008	<0.005	0.010	13	1	
Selenium	0.0003	0.0003	0.0003	1	0.0003	0.0002	0.0003	3	0.05	
Strontium	0.434	0.434	0.434	1	0.440	0.426	0.459	3	7.0	
Total Chlorine	1.64	1.55	1.69	5	1.85	1.55	2.07	29	>0.5 and <3.0	>1.0 and <2.4
Uranium	<0.0005	<0.0005	<0.0005	1	<0.0005	<0.0005	<0.0005	3	0.02	
Primary Organics (ug/L) **										
Benzene	1.0	1.0	1.0	1	<0.7	<0.5	1.0	3	5	
Carbon Tetrachloride	1.0	1.0	1.0	1	<0.7	<0.5	1.0	3	2	
Chlorobenzene	1.00	1.00	1.00	1	<0.67	<0.50	1.00	3	80 (30)	
Dichlorobenzene (1,2)	1.00	1.00	1.00	1	<0.67	<0.50	1.00	3		
Dichlorobenzene (1,4)	1.0	1.0	1.0	1	<0.7	<0.5	1.0	3	5 (1)	
Dichloroethane (1,2)	1.0	1.0	1.0	1	<0.7	<0.5	1.0	3	5	
Dichloroethylene (1,1)	1.0	1.0	1.0	1	<0.7	<0.5	1.0	3	14	
Ethylbenzene	1.00	1.00	1.00	1	<0.67	<0.50	1.00	3	140 (1.6)	
Methylene Chloride	1.0	1.0	1.0	1	<0.7	<0.5	1.0	3	50	
Tetrachloroethylene	1.0	1.0	1.0	1	<0.7	<0.5	1.0	3	10	
Toluene	1.00	1.00	1.00	1	<0.67	<0.50	1.00	3	60 (24)	
Total Xylenes	<1	<1	<1	1	<1	<1	<1	3	90	
Trichloroethylene	1.00	1.00	1.00	1	<0.67	<0.50	1.00	3	5	
Vinyl Chloride	2.0	2.0	2.0	1	<1.3	<1.0	2.0	3	2	

2.2.17 Rosslyn 1 Reservoir

July 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	118	118	118	1	117	112	122	3		
Aluminum	0.096	0.096	0.096	1	0.049	0.020	0.096	3	2.9	0.1/0.2
Ammonia as NH3	0.19	0.14	0.21	5	0.19	0.14	0.21	10		
Beryllium	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	3		
Bromide Dissolved	<0.030	<0.030	<0.030	2	<0.020	<0.010	<0.030	4		
Calcium	49.1	49.1	49.1	1	48.0	45.2	49.8	3		
Calcium Hardness				0	122	122	122	1		
Calcium Hardness Calculated	123	123	123	1	118	113	123	2		
Chloride Dissolved	6.8	6.7	7.0	2	6.7	5.8	7.6	4	(250)	
Cobalt	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	3		
Iron	0.011	0.011	0.011	1	0.009	0.007	0.011	3	(0.3)	0.3
Lanthanum	<0.0010	<0.0010	<0.0010	1	<0.0010	<0.0010	<0.0010	3		
Lithium	0.0041	0.0041	0.0041	1	0.0036	0.0032	0.0041	3		
Magnesium	14.2	14.2	14.2	1	14.1	13.4	14.6	3		
Molybdenum	0.0008	0.0008	0.0008	1	0.0009	0.0008	0.0010	3		
Nickel	<0.0005	<0.0005	<0.0005	1	<0.0005	<0.0005	<0.0005	3		
Ortho_P	0.89	0.88	0.90	4	0.89	0.86	0.90	18		
Phosphorus	0.98	0.98	0.98	1	0.96	0.91	1.00	3		
Potassium	0.90	0.90	0.90	1	1.07	0.80	1.50	3		
Silicon	2.29	2.29	2.29	1	2.13	1.76	2.35	3		
Silver	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	3		
Sodium	10.7	10.7	10.7	1	11.9	10.7	14.4	3	(200)	
Sulphate Dissolved	74.0	73.9	74.0	2	74.0	73.4	74.6	4	(500)	
Thallium	<0.0002	<0.0002	<0.0002	1	<0.0003	<0.0002	<0.0005	3		
Tin	<0.0005	<0.0005	<0.0005	1	<0.0005	<0.0005	<0.0005	3		
Titanium	<0.0005	<0.0005	<0.0005	1	<0.0005	<0.0005	<0.0005	3		
Total Hardness (mg/L CaCO3)				0	183	183	183	1		
Total Hardness Calculated	181	181	181	1	175	168	181	2		
Vanadium	<0.0005	<0.0005	<0.0005	1	<0.0005	<0.0005	<0.0005	3		
Zinc	<0.005	<0.005	<0.005	1	<0.005	<0.005	<0.005	3	(5.0)	
Zirconium	<0.0010	<0.0010	<0.0010	1	<0.0010	<0.0010	<0.0010	3		

2.2.17 Rosslyn 1 Reservoir

July 2024

Parameter	Monthly				YTD				Limits	
	Mean	Min	Max	Count	Mean	Min	Max	Count	*Approval or GCDWQ MAC, (AO or OG)	EPCOR
Secondary Organics (ug/L) * **										
Bromodichloromethane	1.0	1.0	1.0	1	1.1	0.8	1.5	3		16
Bromoform	1.0	1.0	1.0	1	<0.7	<0.5	1.0	3		
Chloroform	33.5	33.5	33.5	1	18.7	8.9	33.5	3		
Dibromochloromethane	1.00	1.00	1.00	1	<0.67	<0.50	1.00	3		
Dichlorobenzene (1,3)	1.00	1.00	1.00	1	<0.67	<0.50	1.00	3		
Dichloroethylene, cis (1,2)	1.00	1.00	1.00	1	<0.67	<0.50	1.00	3		
Dichloroethylene, trans (1,2)	1.00	1.00	1.00	1	<0.67	<0.50	1.00	3		
Dichloropropane (1,2)	1.0	1.0	1.0	1	<0.7	<0.5	1.0	3		
Methyl t-Butyl Ether (MTBE)	1.0	1.0	1.0	1	<0.7	<0.5	1.0	3	(15)	
MIBK	2.0	2.0	2.0	1	<1.3	<1.0	2.0	3		
Styrene	1.00	1.00	1.00	1	<0.67	<0.50	1.00	3		
Tetrachloroethane (1,1,2,2)	1.0	1.0	1.0	1	<0.7	<0.5	1.0	3		
Total Organic Carbon	1.6	1.4	1.7	5	1.7	1.0	2.5	12		
Total Volatile Organics (NonTHM)	<1.0	<1.0	<1.0	1	<1.0	<1.0	<1.0	3		
Total Volatile Organics (Unknown)				0	1.0	1.0	1.0	1		
Trichlorobenzene (1,2,4)	1.0	1.0	1.0	1	<0.7	<0.5	1.0	3		
Trichloroethane (1,1,1)	1.0	1.0	1.0	1	<0.7	<0.5	1.0	3		
Xylene (1,2)	1.0	1.0	1.0	1	<0.7	<0.5	1.0	3		
Xylene (1,4)	1.0	1.0	1.0	1	<0.7	<0.5	1.0	3		

TABLE EXPLANATIONS:

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

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

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

2.2.18 Rosslyn 2 Reservoir

July 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	4	(15)	10
Conductivity (uS/cm)				0	397	369	419	4		
Odour				0	Inoff	Inoff	Inoff	4		
pH (N/A)	7.8	7.8	7.9	5	7.8	7.7	7.9	14	(7.0 - 10.5)	7.3 - 8.3
Turbidity (NTU)	0.15	0.12	0.18	5	0.11	0.07	0.18	31		1
Primary Inorganics (mg/L) **										
Antimony				0	<0.0004	<0.0002	<0.0005	4	0.006	
Arsenic				0	<0.0002	<0.0002	<0.0002	4	0.01	
Barium				0	0.061	0.054	0.067	4	2	
Boron				0	0.009	0.008	0.010	4	2	
Bromate Dissolved	<0.005	<0.005	<0.005	1	<0.005	<0.003	<0.005	5	0.01	
Cadmium				0	<0.0002	<0.0002	<0.0002	4	0.007	
Chlorate Dissolved	0.200	0.200	0.200	1	0.187	0.147	0.206	5	1	
Chlorite Dissolved	<0.005	<0.005	<0.005	1	<0.044	<0.005	<0.200	5	1	
Chromium				0	<0.0002	<0.0002	<0.0002	4	0.05	
Copper				0	<0.003	<0.002	<0.005	4	2 (1)	
Fluoride				0	0.69	0.67	0.71	4	1.5	0.6 - 0.8
Lead				0	<0.0002	<0.0002	<0.0002	4	0.005	
Manganese				0	<0.002	<0.002	<0.002	4	0.12 (0.02)	
Mercury				0	<0.0002	<0.0002	<0.0002	4	0.001	
Nitrate (as N) Dissolved	0.036	0.020	0.050	5	0.053	0.020	0.170	14	10	
Nitrite (as N) Dissolved	<0.010	<0.010	<0.010	5	<0.009	<0.005	0.010	14	1	
Selenium				0	0.0003	<0.0002	0.0003	4	0.05	
Strontium				0	0.447	0.419	0.482	4	7.0	
Total Chlorine	1.43	1.34	1.48	5	1.75	1.34	2.08	31	>0.5 and <3.0	>1.0 and <2.4
Uranium				0	<0.0005	<0.0005	0.0005	4	0.02	
Primary Organics (ug/L) **										
Benzene				0	<0.5	<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	

2.2.18 Rosslyn 2 Reservoir

July 2024

Parameter	Monthly				YTD				Limits	
	Mean	Min	Max	Count	Mean	Min	Max	Count	*Approval or GCDWQ MAC, (AO or OG)	EPCOR
Secondary Inorganics (mg/L) * **										
Alkalinity Total				0	119	111	127	4		
Aluminum				0	0.041	0.025	0.081	4	2.9	0.1/0.2
Ammonia as NH3	0.22	0.17	0.24	5	0.21	0.17	0.24	12		
Beryllium				0	<0.0002	<0.0002	<0.0002	4		
Bromide Dissolved	<0.030	<0.030	<0.030	1	<0.026	<0.010	<0.050	5		
Calcium				0	47.0	44.5	51.0	4		
Calcium Hardness				0	122	116	128	2		
Calcium Hardness Calculated				0	112	111	113	2		
Chloride Dissolved	6.8	6.8	6.8	1	6.5	5.6	7.4	5	(250)	
Cobalt				0	<0.0002	<0.0002	<0.0002	4		
Iron				0	<0.006	<0.005	0.007	4	(0.3)	0.3
Lanthanum				0	<0.0010	<0.0010	<0.0010	4		
Lithium				0	0.0035	0.0031	0.0037	4		
Magnesium				0	13.7	12.7	14.9	4		
Molybdenum				0	0.0008	0.0006	0.0009	4		
Nickel				0	<0.0005	<0.0005	0.0005	4		
Ortho_P	0.89	0.88	0.90	4	0.89	0.88	0.92	18		
Phosphorus				0	0.96	0.90	0.99	4		
Potassium				0	0.85	0.70	1.00	4		
Silicon				0	1.98	1.70	2.14	4		
Silver				0	<0.0002	<0.0002	<0.0002	4		
Sodium				0	12.0	7.1	16.5	4	(200)	
Sulphate Dissolved	74.4	74.4	74.4	1	72.0	59.4	78.7	5	(500)	
Thallium				0	<0.0003	<0.0002	<0.0005	4		
Tin				0	<0.0005	<0.0005	<0.0005	4		
Titanium				0	<0.0005	<0.0005	<0.0005	4		
Total Hardness (mg/L CaCO3)				0	186	178	194	2		
Total Hardness Calculated				0	165	163	167	2		
Vanadium				0	<0.0005	<0.0005	<0.0005	4		
Zinc				0	<0.005	<0.005	<0.005	4	(5.0)	
Zirconium				0	<0.0010	<0.0010	<0.0010	4		

2.2.18 Rosslyn 2 Reservoir

July 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	5		16
Bromoform				0	<0.5	<0.5	<0.5	5		
Chloroform				0	23.3	14.6	35.3	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	1.6	1.4	1.8	5	1.8	1.3	2.4	14		
Total Volatile Organics (NonTHM)				0	1.7	<1.0	3.4	5		
Total Volatile Organics (Unknown)				0	1.9	1.9	1.9	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 Parks (AEP) Operating Approval 638-04-00. Limits in brackets indicate Aesthetic Objectives or Operational Guidelines (OG) and are not Approval Limits The EPCOR limits are internal limits set by EPCOR in the Operations Program.

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

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

2.2.19 Thorncliff Reservoir

July 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	4	(15)	10
Conductivity (uS/cm)				0	402	368	420	4		
Odour				0	Inoff	Inoff	Inoff	4		
pH (N/A)	7.9	7.8	7.9	5	7.8	7.7	8.0	14	(7.0 - 10.5)	7.3 - 8.3
Turbidity (NTU)	0.21	0.13	0.33	6	0.11	0.05	0.33	32		1
Primary Inorganics (mg/L) **										
Antimony				0	<0.0004	<0.0002	<0.0005	4	0.006	
Arsenic				0	<0.0002	<0.0002	0.0003	4	0.01	
Barium				0	0.061	0.055	0.067	4	2	
Boron				0	0.009	0.008	0.010	4	2	
Bromate Dissolved				0	<0.005	<0.003	<0.005	4	0.01	
Cadmium				0	<0.0002	<0.0002	<0.0002	4	0.007	
Chlorate Dissolved				0	<0.102	<0.080	0.120	4	1	
Chlorite Dissolved				0	<0.054	<0.005	<0.200	4	1	
Chromium				0	<0.0002	<0.0002	<0.0002	4	0.05	
Copper				0	<0.003	<0.002	<0.005	4	2 (1)	
Fluoride				0	0.70	0.64	0.77	4	1.5	0.6 - 0.8
Lead				0	<0.0002	<0.0002	<0.0002	4	0.005	
Manganese				0	<0.002	<0.002	<0.002	4	0.12 (0.02)	
Mercury				0	<0.0002	<0.0002	<0.0002	4	0.001	
Nitrate (as N) Dissolved	0.036	0.030	0.050	5	0.054	<0.010	0.180	15	10	
Nitrite (as N) Dissolved	<0.010	<0.010	<0.010	5	<0.008	<0.005	0.010	15	1	
Selenium				0	0.0003	0.0002	0.0003	4	0.05	
Strontium				0	0.440	0.413	0.476	4	7.0	
Total Chlorine	1.38	1.30	1.44	6	1.75	1.30	2.23	32	>0.5 and <3.0	>1.0 and <2.4
Uranium				0	<0.0005	<0.0005	0.0005	4	0.02	
Primary Organics (ug/L) **										
Benzene				0	<0.6	<0.5	1.0	4	5	
Carbon Tetrachloride				0	<0.6	<0.5	1.0	4	2	
Chlorobenzene				0	<0.63	<0.50	1.00	4	80 (30)	
Dichlorobenzene (1,2)				0	<0.63	<0.50	1.00	4		
Dichlorobenzene (1,4)				0	<0.6	<0.5	1.0	4	5 (1)	
Dichloroethane (1,2)				0	<0.6	<0.5	1.0	4	5	
Dichloroethylene (1,1)				0	<0.6	<0.5	1.0	4	14	
Ethylbenzene				0	<0.63	<0.50	1.00	4	140 (1.6)	
Methylene Chloride				0	<0.6	<0.5	1.0	4	50	
Tetrachloroethylene				0	<0.6	<0.5	1.0	4	10	
Toluene				0	<0.63	<0.50	1.00	4	60 (24)	
Total Xylenes				0	<1	<1	<1	4	90	
Trichloroethylene				0	<0.63	<0.50	1.00	4	5	
Vinyl Chloride				0	<1.3	<1.0	2.0	4	2	

2.2.19 Thorncliff Reservoir

July 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	110	129	4		
Aluminum				0	0.050	0.027	0.101	4	2.9	0.1/0.2
Ammonia as NH3	0.22	0.19	0.26	5	0.20	0.16	0.26	13		
Beryllium				0	<0.0002	<0.0002	<0.0002	4		
Bromide Dissolved				0	<0.025	<0.010	<0.050	4		
Calcium				0	46.8	43.7	50.4	4		
Calcium Hardness				0	122	116	128	2		
Calcium Hardness Calculated				0	112	109	115	2		
Chloride Dissolved				0	7.0	6.0	8.1	4	(250)	
Cobalt				0	<0.0002	<0.0002	<0.0002	4		
Iron				0	<0.005	<0.005	<0.005	4	(0.3)	0.3
Lanthanum				0	<0.0010	<0.0010	<0.0010	4		
Lithium				0	0.0032	0.0030	0.0036	4		
Magnesium				0	13.6	12.4	14.7	4		
Molybdenum				0	0.0008	0.0006	0.0009	4		
Nickel				0	<0.0005	<0.0005	0.0005	4		
Ortho_P	0.90	0.88	0.92	4	0.90	0.88	0.92	24		
Phosphorus				0	0.98	0.93	1.01	4		
Potassium				0	0.85	0.70	1.00	4		
Silicon				0	2.00	1.83	2.11	4		
Silver				0	<0.0002	<0.0002	<0.0002	4		
Sodium				0	13.9	7.3	18.3	4	(200)	
Sulphate Dissolved				0	72.9	59.6	79.7	4	(500)	
Thallium				0	<0.0003	<0.0002	<0.0005	4		
Tin				0	<0.0005	<0.0005	<0.0005	4		
Titanium				0	<0.0005	<0.0005	<0.0005	4		
Total Hardness (mg/L CaCO3)				0	182	174	189	2		
Total Hardness Calculated				0	165	160	169	2		
Vanadium				0	<0.0005	<0.0005	<0.0005	4		
Zinc				0	<0.005	<0.005	<0.005	4	(5.0)	
Zirconium				0	<0.0010	<0.0010	<0.0010	4		

2.2.19 Thorncliff Reservoir

July 2024

Parameter	Monthly				YTD				Limits	
	Mean	Min	Max	Count	Mean	Min	Max	Count	*Approval or GCDWQ MAC, (AO or OG)	EPCOR
Secondary Organics (ug/L) * **										
Bromodichloromethane				0	1.2	0.8	1.6	4		16
Bromoform				0	<0.6	<0.5	1.0	4		
Chloroform				0	20.4	10.9	31.1	4		
Dibromochloromethane				0	<0.63	<0.50	1.00	4		
Dichlorobenzene (1,3)				0	<0.63	<0.50	1.00	4		
Dichloroethylene, cis (1,2)				0	<0.63	<0.50	1.00	4		
Dichloroethylene, trans (1,2)				0	<0.63	<0.50	1.00	4		
Dichloropropane (1,2)				0	<0.6	<0.5	1.0	4		
Methyl t-Butyl Ether (MTBE)				0	<0.6	<0.5	1.0	4	(15)	
MIBK				0	<1.3	<1.0	2.0	4		
Styrene				0	<0.63	<0.50	1.00	4		
Tetrachloroethane (1,1,2,2)				0	<0.6	<0.5	1.0	4		
Total Organic Carbon	1.7	1.6	1.9	5	1.8	1.2	2.3	14		
Total Volatile Organics (NonTHM)				0	1.9	<1.0	3.1	4		
Total Volatile Organics (Unknown)				0	1.2	1.2	1.2	1		
Trichlorobenzene (1,2,4)				0	<0.6	<0.5	1.0	4		
Trichloroethane (1,1,1)				0	<0.6	<0.5	1.0	4		
Xylene (1,2)				0	<0.6	<0.5	1.0	4		
Xylene (1,4)				0	<0.6	<0.5	1.0	4		

TABLE EXPLANATIONS:

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

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

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

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

July 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	39.4	39.4	39.4	1	29.7	20.0	39.4	2	26.9	20.0	39.4	4		
03-SR				0				0	23.0	19.0	27.0	2		
04-SR	36.3	36.3	36.3	1	24.0	15.8	36.3	3	22.6	14.9	36.3	5		
05-RI				0				0	28.5	28.5	28.5	1		
07-RI				0	13.5	9.7	17.3	2	13.2	9.7	17.3	3		
07-SR				0	13.6	10.7	16.4	2	16.0	10.7	20.9	3		
10-SR				0				0	19.8	19.8	19.8	1		
11-SR				0				0	25.8	25.8	25.8	1		
14-RI				0				0	21.6	21.6	21.6	1		
15-SR				0				0	18.3	11.4	25.2	2		
19-SR	40.3	40.3	40.3	1	40.3	40.3	40.3	1	40.3	40.3	40.3	1		
20-DE				0	37.1	37.1	37.1	1	37.1	37.1	37.1	1		
21-DE				0	16.4	16.4	16.4	1	16.4	16.4	16.4	1		
21-SR				0				0	14.4	13.9	14.9	2		
24-SR				0	14.0	13.3	14.6	2	14.0	13.3	14.6	2		
26-DE				0				0	17.0	15.8	18.1	2		
27-SR				0				0	17.5	17.5	17.5	1		
30-SR				0	20.7	8.6	37.0	3	20.7	8.6	37.0	3		
31-DE				0	14.5	13.0	15.9	2	19.1	13.0	26.8	5		
31-RI				0	23.1	15.8	31.8	3	23.5	15.8	31.8	4		
32-SR				0	12.0	12.0	12.0	1	21.1	12.0	25.7	4		
36-DE				0				0	24.2	24.2	24.2	1		
37-SR				0	34.3	34.3	34.3	1	34.3	34.3	34.3	1		
40-SR				0	17.6	9.1	32.2	4	19.1	9.1	32.2	7		
41-SR				0	9.6	9.6	9.6	1	9.6	9.6	9.6	1		
EDMONTON S4	35.1	35.1	35.1	1	24.1	13.0	35.1	2	24.1	13.0	35.1	2		
		Total Count		4				33				63		

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

July 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
	32.1	31.5	32.7	2	19.8	13.9	32.7	8	19.8	13.9	32.7	8		
01-SR				0	21.8	16.8	26.7	2	21.8	16.8	26.7	2		
02-SR	41.1	41.1	41.1	1	30.5	19.8	41.1	2	28.0	19.8	41.1	4		
03-SR				0				0	23.3	19.6	27.0	2		
04-SR	36.2	36.2	36.2	1	25.2	19.1	36.2	3	23.7	19.1	36.2	5		
05-RI				0				0	26.4	26.4	26.4	1		
07-RI				0	16.6	14.2	19.0	2	16.2	14.2	19.0	3		
07-SR				0	15.0	12.9	17.0	2	18.1	12.9	24.5	3		
10-SR				0				0	21.5	21.5	21.5	1		
11-SR				0				0	25.2	25.2	25.2	1		
14-RI				0				0	22.5	22.5	22.5	1		
15-SR				0				0	18.9	14.2	23.5	2		
19-SR	49.3	49.3	49.3	1	49.3	49.3	49.3	1	49.3	49.3	49.3	1		
20-DE				0	29.3	29.3	29.3	1	29.3	29.3	29.3	1		
21-DE				0	16.3	16.3	16.3	1	16.3	16.3	16.3	1		
21-SR				0				0	19.0	16.8	21.1	2		
24-SR				0	17.3	14.0	20.5	2	17.3	14.0	20.5	2		
26-DE				0				0	19.7	17.7	21.7	2		
27-SR				0				0	18.0	18.0	18.0	1		
30-SR				0	19.6	11.3	29.6	3	19.6	11.3	29.6	3		
31-DE				0	17.6	14.7	20.5	2	19.5	13.4	25.0	5		
31-RI				0	19.9	14.0	26.6	3	21.2	14.0	26.6	4		
32-SR				0	18.4	18.4	18.4	1	23.5	18.4	29.8	4		
36-DE				0				0	23.8	23.8	23.8	1		
37-SR				0	27.3	27.3	27.3	1	27.3	27.3	27.3	1		
40-SR				0	17.4	12.0	24.9	4	20.0	12.0	26.4	7		
41-SR				0	12.6	12.6	12.6	1	12.6	12.6	12.6	1		
EDMONTON S4	49.6	49.6	49.6	1	32.7	15.7	49.6	2	32.7	15.7	49.6	2		
		Total Count		6				41				71		

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

July 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
	<0.003	<0.003	<0.004	2	<0.002	<0.001	<0.004	5	<0.002	<0.001	<0.004	5		
03-SR				0				0	0.003	0.002	0.004	2		
04-SR				0	<0.006	<0.006	<0.006	1	<0.006	<0.006	<0.006	1		
05-RI				0				0	0.004	0.004	0.004	1		
07-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		
15-SR				0				0	0.002	0.002	0.002	1		
20-DE				0	<0.003	<0.003	<0.003	1	<0.003	<0.003	<0.003	1		
20-OF				0				0	<0.002	<0.002	<0.002	1		
21-DE				0	<0.005	<0.005	<0.005	1	<0.005	<0.005	<0.005	1		
21-SR				0				0	<0.001	<0.001	<0.001	1		
24-SR				0	<0.002	<0.001	<0.002	2	<0.002	<0.001	<0.002	2		
26-DE				0				0	<0.002	<0.001	<0.002	2		
30-SR				0	<0.003	<0.003	<0.003	1	<0.003	<0.003	<0.003	1		
31-DE				0	<0.006	<0.006	<0.006	1	<0.006	<0.002	0.011	3		
31-RI				0	0.005	<0.003	0.007	2	0.005	<0.003	0.007	2		
32-SR				0				0	0.002	0.002	0.002	1		
36-DE				0				0	0.002	0.002	0.002	1		
40-SR				0	<0.004	<0.002	<0.006	3	<0.004	<0.002	<0.006	6		
EDMONTON S4	<0.002	<0.002	<0.002	1	<0.001	<0.001	<0.002	2	<0.001	<0.001	<0.002	2		
		Total Count		3				21				36		

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

July 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	36.2	36.2	36.2	1	21.3	7.8	36.2	3	21.4	7.8	36.2	6		
Clareview Reservoir				0	25.1	15.4	36.9	4	25.7	15.4	36.9	6		
Discovery Park Reservoir				0	25.0	13.1	39.7	5	25.1	13.1	39.7	7		
Kaskitayo Reservoir				0	22.2	10.8	33.4	4	23.2	10.8	33.4	6		
Londonderry Reservoir	34.7	34.7	34.7	1	20.2	9.8	34.7	3	21.9	9.8	34.7	6		
Millwoods Reservoir	38.3	38.3	38.3	1	16.7	7.8	38.3	4	19.2	7.8	38.3	7		
North Jasper Place Reservoir				0	23.3	14.0	37.9	4	25.4	14.0	37.9	6		
Ormsby Reservoir	39.0	39.0	39.0	1	16.9	7.7	39.0	4	19.6	7.7	39.0	7		
Papaschase Reservoir 1	35.4	35.4	35.4	1	17.5	8.8	35.4	4	20.9	8.8	35.4	8		
Papaschase Reservoir 2				0	20.8	11.0	28.8	4	22.8	11.0	33.1	6		
Rosslyn Reservoir 1	33.8	33.8	33.8	1	19.8	10.0	33.8	3	23.3	10.0	33.8	7		
Rosslyn Reservoir 2				0	25.0	16.1	37.5	5	26.3	16.1	37.5	8		
Thorncliff Reservoir				0	21.9	12.2	32.9	4	23.6	12.2	32.9	6		
		Total Count		6				51				86		

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

July 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
	38.3	35.8	40.7	2	20.0	12.5	40.7	8	20.0	12.5	40.7	8		
		Total Count		2				8				8		

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

July 2024

	Current Month								YTD							
	ROSSDALE				E.L. SMITH				ROSSDALE				E.L. SMITH			
	Mean	Min	Max	Count	Mean	Min	Max	Count	Mean	Min	Max	Count	Mean	Min	Max	Count
Microbiologicals																
Microcystin	<0.2	<0.2	<0.2	1	<0.2	<0.2	<0.2	1	<0.2	<0.2	<0.2	3	<0.2	<0.2	<0.2	3
Physical																
Colour (TCU)	7.8	4.7	14.4	31	7.9	4.9	14.9	31	10.5	4.7	43.8	210	10.7	4.7	43.6	212
Conductivity (uS/cm)	370	353	379	5	366	353	372	5	362	311	415	31	355	311	416	31
FPA-Intensity (N/A)	0.47	0.25	0.75	4	0.47	0.38	0.62	4	0.85	0.25	2.38	40	0.90	0.38	2.25	40
pH (N/A)	8.3	8.3	8.3	1	8.4	8.4	8.4	1	8.2	8.1	8.3	7	8.2	8.1	8.4	7
Total Dissolved Solids (mg/L)	186	186	186	1	184	184	184	1	208	186	231	7	209	184	240	7
Total Suspended Solids	49.6	49.6	49.6	1	154.0	154.0	154.0	1	19.2	<2.5	53.7	7	37.8	<2.5	154.0	7
Turbidity (NTU)	14	2	78	31	33	3	257	31	11	1	367	210	15	1	257	212
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	7	<0.0004	<0.0002	<0.0005	7
Arsenic	0.0011	0.0011	0.0011	1	0.0022	0.0022	0.0022	1	0.0005	0.0002	0.0011	7	0.0007	0.0002	0.0022	7
Barium	0.125	0.125	0.125	1	0.180	0.180	0.180	1	0.078	0.058	0.125	7	0.087	0.057	0.180	7
Boron	0.018	0.018	0.018	1	0.022	0.022	0.022	1	0.012	0.009	0.018	7	0.012	0.008	0.022	7
Cadmium^				0				0	<0.0002	<0.0002	<0.0002	3	<0.0002	<0.0002	<0.0002	3
Cadmium^^	0.00004	0.00004	0.00004	1	0.00008	0.00008	0.00008	1	0.00003	<0.00002	0.00004	4	0.00004	<0.00002	0.00008	4
Chromium	0.0053	0.0053	0.0053	1	0.0099	0.0099	0.0099	1	0.0015	<0.0002	0.0053	7	0.0022	<0.0002	0.0099	7
Copper	0.005	0.005	0.005	1	0.006	0.006	0.006	1	<0.004	<0.002	0.005	7	<0.004	<0.002	0.006	7
Fluoride	0.13	0.12	0.14	5	0.13	0.12	0.13	5	0.11	0.08	0.14	31	0.11	0.08	0.13	31
Lead	0.0013	0.0013	0.0013	1	0.0027	0.0027	0.0027	1	0.0005	<0.0002	0.0013	7	0.0007	<0.0002	0.0027	7
Manganese	0.033	0.033	0.033	1	0.080	0.080	0.080	1	0.017	<0.002	0.050	7	0.024	0.003	0.080	7
Mercury	<0.0026	<0.0002	<0.0050	2	<0.0026	<0.0002	<0.0050	2	<0.0011	<0.0001	<0.0050	10	<0.0011	<0.0001	<0.0050	10
Nitrate (as N) Dissolved	0.03	<0.01	0.09	5	0.02	<0.01	0.06	5	0.07	<0.01	0.19	31	0.06	<0.01	0.18	31
Nitrite (as N) Dissolved	<0.010	<0.010	<0.010	5	<0.010	<0.010	<0.010	5	<0.009	<0.005	<0.010	31	<0.009	<0.005	<0.010	31
Selenium	0.0004	0.0004	0.0004	1	0.0005	0.0005	0.0005	1	0.0003	0.0002	0.0004	7	0.0003	<0.0002	0.0005	7
Total Chlorine	<0.03	<0.03	<0.03	1	<0.03	<0.03	<0.03	1	<0.03	<0.03	<0.03	7	<0.03	<0.03	<0.03	7
Uranium	0.0007	0.0007	0.0007	1	0.0008	0.0008	0.0008	1	0.0006	0.0005	0.0007	7	0.0006	<0.0005	0.0008	7

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

July 2024

	Current Month								YTD							
	ROSSDALE				E.L. SMITH				ROSSDALE				E.L. SMITH			
	Mean	Min	Max	Count	Mean	Min	Max	Count	Mean	Min	Max	Count	Mean	Min	Max	Count
Primary Organics (ug/L) **																
2,4-D	<0.05	<0.05	<0.05	1	<0.05	<0.05	<0.05	1	<0.12	<0.05	<0.25	3	<0.12	<0.05	<0.25	3
Atrazine	<0.05	<0.05	<0.05	1	<0.05	<0.05	<0.05	1	<0.05	<0.05	<0.05	3	<0.05	<0.05	<0.05	3
Benzene	<0.5	<0.5	<0.5	31	<0.5	<0.5	<0.5	31	<0.5	<0.5	<0.5	211	<0.5	<0.5	<0.5	213
Benzo(a)pyrene	<0.005	<0.005	<0.005	1	<0.005	<0.005	<0.005	1	<0.005	<0.005	<0.005	3	<0.005	<0.005	<0.005	3
Bromoxynil	<0.05	<0.05	<0.05	1	<0.05	<0.05	<0.05	1	<0.12	<0.05	<0.25	3	<0.12	<0.05	<0.25	3
Carbon Tetrachloride	<0.5	<0.5	<0.5	31	<0.5	<0.5	<0.5	31	<0.5	<0.5	<1.0	211	<0.5	<0.5	<1.0	213
Chlorobenzene	<0.5	<0.5	<0.5	31	<0.5	<0.5	<0.5	31	<0.5	<0.5	<0.5	211	<0.5	<0.5	<0.5	213
Chlorpyrifos	<0.1	<0.1	<0.1	1	<0.1	<0.1	<0.1	1	<0.1	<0.1	<0.1	3	<0.1	<0.1	<0.1	3
Cyanazine	<0.1	<0.1	<0.1	1	<0.1	<0.1	<0.1	1	<0.1	<0.1	<0.1	3	<0.1	<0.1	<0.1	3
Diazinon	<0.025	<0.025	<0.025	1	<0.025	<0.025	<0.025	1	<0.025	<0.025	<0.025	3	<0.025	<0.025	<0.025	3
Dicamba	<0.1	<0.1	<0.1	1	<0.1	<0.1	<0.1	1	<0.2	<0.1	<0.5	3	<0.2	<0.1	<0.5	3
Dichlorobenzene (1,2)	<0.5	<0.5	<0.5	31	<0.5	<0.5	<0.5	31	<0.5	<0.5	<0.5	211	<0.5	<0.5	<0.5	213
Dichlorobenzene (1,4)	<0.5	<0.5	<0.5	31	<0.5	<0.5	<0.5	31	<0.5	<0.5	<0.5	211	<0.5	<0.5	<0.5	213
Dichloroethane (1,2)	<0.5	<0.5	<0.5	31	<0.5	<0.5	<0.5	31	<0.5	<0.5	<0.5	210	<0.5	<0.5	<0.5	212
Dichloroethylene (1,1)	<0.5	<0.5	<0.5	31	<0.5	<0.5	<0.5	31	<0.5	<0.5	<3.0	211	<0.5	<0.5	<3.0	213
Dichlorophenol (2,4)	<0.2	<0.2	<0.2	1	<0.2	<0.2	<0.2	1	<0.2	<0.2	<0.3	3	<0.2	<0.2	<0.3	3
Diclofop-methyl	<0.1	<0.1	<0.1	1	<0.1	<0.1	<0.1	1	<0.1	<0.1	<0.1	3	<0.1	<0.1	<0.1	3
Dimethoate	<0.05	<0.05	<0.05	1	<0.05	<0.05	<0.05	1	<0.05	<0.05	<0.05	3	<0.05	<0.05	<0.05	3
Diuron	<0.05	<0.05	<0.05	1	<0.05	<0.05	<0.05	1	<0.05	<0.05	<0.05	3	<0.05	<0.05	<0.05	3
Ethylbenzene	<0.5	<0.5	<0.5	31	<0.5	<0.5	<0.5	31	<0.5	<0.5	<0.5	211	<0.5	<0.5	<0.5	213
Glyphosate	<0.2	<0.2	<0.2	1	<0.2	<0.2	<0.2	1	<0.3	<0.2	<0.5	3	<0.3	<0.2	<0.5	3
Malathion	<0.025	<0.025	<0.025	1	<0.025	<0.025	<0.025	1	<0.025	<0.025	<0.025	3	<0.025	<0.025	<0.025	3
MCPA	<0.05	<0.05	<0.05	1	<0.05	<0.05	<0.05	1	<0.12	<0.05	<0.25	3	<0.12	<0.05	<0.25	3
Methylene Chloride	<0.5	<0.5	<0.5	31	<0.5	<0.5	<0.5	31	<0.5	<0.5	<0.5	211	<0.5	<0.5	<0.5	213
Metolachlor	<0.025	<0.025	<0.025	1	<0.025	<0.025	<0.025	1	<0.025	<0.025	<0.025	3	<0.025	<0.025	<0.025	3
Metribuzin	<0.1	<0.1	<0.1	1	<0.1	<0.1	<0.1	1	<0.1	<0.1	<0.1	3	<0.1	<0.1	<0.1	3
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	2	<0.40	<0.40	<0.40	2
Pentachlorophenol	<0.5	<0.5	<0.5	1	<0.5	<0.5	<0.5	1	<0.5	<0.5	<0.5	3	<0.5	<0.5	<0.5	3
Perfluorooctane sulfonic acid (PFOS)	<0.002	<0.002	<0.002	1	<0.002	<0.002	<0.002	1	<0.008	<0.002	<0.020	3	<0.008	<0.002	<0.020	3
Perfluorooctanoic acid (PFOA)	<0.002	<0.002	<0.002	1	<0.002	<0.002	<0.002	1	<0.008	<0.002	<0.020	3	<0.008	<0.002	<0.020	3
Phorate	<0.25	<0.25	<0.25	1	<0.25	<0.25	<0.25	1	<0.25	<0.25	<0.25	3	<0.25	<0.25	<0.25	3
Picloram	<0.1	<0.1	<0.1	1	<0.1	<0.1	<0.1	1	<0.2	<0.1	<0.5	3	<0.2	<0.1	<0.5	3
Simazine	<0.1	<0.1	<0.1	1	<0.1	<0.1	<0.1	1	<0.1	<0.1	<0.1	3	<0.1	<0.1	<0.1	3
Terbufos	<0.5	<0.5	<0.5	1	<0.5	<0.5	<0.5	1	<0.5	<0.5	<0.5	3	<0.5	<0.5	<0.5	3
Tetrachloroethylene	<0.5	<0.5	<0.5	31	<0.5	<0.5	<0.5	31	<0.5	<0.5	<0.5	211	<0.5	<0.5	<0.5	213
Toluene	<0.5	<0.5	<0.5	31	<0.5	<0.5	<0.5	31	<0.5	<0.5	1.7	211	<0.5	<0.5	2.9	213
Total Xylenes	<1.0	<1.0	<1.0	31	<1.0	<1.0	<1.0	31	<1.0	<1.0	<2.5	211	<1.0	<1.0	<2.5	213
Trichloroethylene	<0.5	<0.5	<0.5	31	<0.5	<0.5	<0.5	31	<0.5	<0.5	<0.5	211	<0.5	<0.5	<0.5	213
Trifluralin	<0.1	<0.1	<0.1	1	<0.1	<0.1	<0.1	1	<0.1	<0.1	<0.1	3	<0.1	<0.1	<0.1	3

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

July 2024

	Current Month								YTD							
	ROSSDALE				E.L. SMITH				ROSSDALE				E.L. SMITH			
	Mean	Min	Max	Count	Mean	Min	Max	Count	Mean	Min	Max	Count	Mean	Min	Max	Count
Primary Organics (ug/L) **																
Trihalomethanes	<1	<1	1	31	<1	<1	1	31	<1	<1	1	211	<1	<1	1	213
Vinyl Chloride	<1	<1	<1	31	<1	<1	<1	31	<1	<1	<1	210	<1	<1	<1	212
Radionuclides (Bq/L)																
Cesium-137				0				0	<0.2	<0.2	<0.2	1	<0.1	<0.1	<0.1	1
Gross Alpha				0				0	<0.14	<0.14	<0.14	1	<0.15	<0.15	<0.15	1
Gross Beta				0				0	0.07	0.07	0.07	1	<0.07	<0.07	<0.07	1
Iodine-131				0				0	<0.3	<0.3	<0.3	1	<0.2	<0.2	<0.2	1
Lead-210				0				0	<0.02	<0.02	<0.02	1	<0.02	<0.02	<0.02	1
Radium-226				0				0	<0.005	<0.005	<0.005	1	<0.005	<0.005	<0.005	1
Strontium-90				0				0	<0.05	<0.05	<0.05	1	<0.05	<0.05	<0.05	1
Tritium				0				0	<40	<40	<40	1	<40	<40	<40	1

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

July 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	133	128	138	5	136	128	152	5	129	117	149	31	129	112	152	31
Alkalinity, PHP (mg CaCO3/L)	<3	<3	<3	1	<3	<3	<3	1	<3	<3	<3	7	<3	<3	<3	7
Aluminum	4.200	4.200	4.200	1	7.370	7.370	7.370	1	1.104	0.108	4.200	7	1.633	0.078	7.370	7
Ammonia as NH3	<0.05	<0.05	<0.05	5	<0.05	<0.05	<0.05	5	<0.05	<0.05	0.09	42	<0.06	<0.05	0.14	42
Beryllium	<0.0002	<0.0002	<0.0002	1	0.0002	0.0002	0.0002	1	<0.0002	<0.0002	<0.0002	7	<0.0002	<0.0002	0.0002	7
Calcium Hardness	120	116	122	4	120	116	123	4	117	102	138	28	116	99	140	28
Calcium Hardness Calculated	127	127	127	1	147	147	147	1	121	115	127	3	127	114	147	3
Cobalt	0.0008	0.0008	0.0008	1	0.0018	0.0018	0.0018	1	0.0004	<0.0002	0.0008	7	0.0005	<0.0002	0.0018	7
Free Chlorine	<0.07	<0.07	<0.07	1	<0.07	<0.07	<0.07	1	<0.07	<0.07	<0.07	7	<0.07	<0.07	<0.07	7
Iron	2.110	2.110	2.110	1	4.850	4.850	4.850	1	0.747	0.051	2.110	7	1.179	0.075	4.850	7
Lanthanum	0.001	0.001	0.001	1	0.003	0.003	0.003	1	<0.001	<0.001	0.001	7	<0.001	<0.001	0.003	7
Lithium	0.0076	0.0076	0.0076	1	0.0104	0.0104	0.0104	1	0.0046	0.0033	0.0076	7	0.0049	0.0033	0.0104	7
Magnesium	14.4	14.4	14.4	1	16.6	16.6	16.6	1	14.1	13.3	15.4	7	14.5	13.2	16.6	7
Molybdenum	0.0010	0.0010	0.0010	1	0.0011	0.0011	0.0011	1	0.0009	0.0007	0.0010	7	0.0009	0.0008	0.0011	7
Nickel	0.0034	0.0034	0.0034	1	0.0066	0.0066	0.0066	1	0.0016	0.0005	0.0034	7	0.0020	<0.0005	0.0066	7
Ortho_P				0				0	<0.02	<0.02	<0.02	6	<0.02	<0.02	<0.02	6
Orthophosphate, total	<0.02	<0.02	<0.02	1	<0.02	<0.02	<0.02	1	0.03	<0.02	0.04	2	0.03	<0.02	0.04	2
Phosphorus	0.09	0.09	0.09	1	0.15	0.15	0.15	1	0.04	<0.02	0.09	7	0.05	<0.02	0.15	7
Potassium	2.2	2.2	2.2	1	3.2	3.2	3.2	1	1.2	0.7	2.2	7	1.3	0.7	3.2	7
Silicon	11.20	11.20	11.20	1	18.10	18.10	18.10	1	4.16	1.99	11.20	7	5.39	1.74	18.10	7
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	0.00003	0.00003	0.00003	1	<0.00002	<0.00002	<0.00002	4	<0.00002	<0.00002	0.00003	4
Sodium	4.4	4.4	4.4	1	4.5	4.5	4.5	1	5.0	3.8	7.0	7	4.4	3.8	5.1	7
Strontium	0.434	0.434	0.434	1	0.442	0.442	0.442	1	0.451	0.419	0.499	7	0.452	0.418	0.504	7
Thallium	<0.0002	<0.0002	<0.0002	1	<0.0002	<0.0002	<0.0002	1	<0.0003	<0.0002	<0.0005	7	<0.0003	<0.0002	<0.0005	7
Tin	<0.0005	<0.0005	<0.0005	1	<0.0005	<0.0005	<0.0005	1	<0.0005	<0.0005	<0.0005	7	<0.0005	<0.0005	<0.0005	7
Titanium	0.1140	0.1140	0.1140	1	0.2010	0.2010	0.2010	1	0.0291	0.0015	0.1140	7	0.0454	0.0017	0.2010	7
Total Hardness (mg/L CaCO3)	184	180	187	4	183	182	186	4	177	153	211	28	177	155	203	28
Total Hardness Calculated	187	187	187	1	216	216	216	1	178	170	187	3	187	169	216	3
Total Kjeldahl Nitrogen	0.4	0.4	0.4	1	0.5	0.5	0.5	1	0.2	0.1	0.4	6	0.2	<0.1	0.5	6
Total Kjeldahl Nitrogen (TKN)				0				0	0.3	<0.1	1.0	27	0.6	<0.1	9.4	28
Vanadium	0.0106	0.0106	0.0106	1	0.0198	0.0198	0.0198	1	0.0027	<0.0005	0.0106	7	0.0043	<0.0005	0.0198	7
Zinc	0.011	0.011	0.011	1	0.020	0.020	0.020	1	<0.006	<0.005	0.011	7	0.008	<0.005	0.020	7
Zirconium	0.003	0.003	0.003	1	0.005	0.005	0.005	1	0.001	<0.001	0.003	7	0.002	<0.001	0.005	7

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

July 2024

	Current Month								YTD							
	ROSSDALE				E.L. SMITH				ROSSDALE				E.L. SMITH			
	Mean	Min	Max	Count	Mean	Min	Max	Count	Mean	Min	Max	Count	Mean	Min	Max	Count
Secondary Organics (ug/L) ***																
Aldicarb	<0.1	<0.1	<0.1	1	<0.1	<0.1	<0.1	1	<0.1	<0.1	<0.1	3	<0.1	<0.1	<0.1	3
Aldrin	<0.008	<0.008	<0.008	1	<0.008	<0.008	<0.008	1	<0.008	<0.008	<0.008	3	<0.008	<0.008	<0.008	3
Azinphos-methyl	<0.1	<0.1	<0.1	1	<0.1	<0.1	<0.1	1	<0.1	<0.1	<0.1	3	<0.1	<0.1	<0.1	3
Bromodichloromethane	<0.5	<0.5	<0.5	31	<0.5	<0.5	<0.5	31	<0.5	<0.5	<0.5	211	<0.5	<0.5	<0.5	213
Bromoform	<0.5	<0.5	<0.5	31	<0.5	<0.5	<0.5	31	<0.5	<0.5	<1.0	211	<0.5	<0.5	<1.0	213
Carbaryl	<0.05	<0.05	<0.05	1	<0.05	<0.05	<0.05	1	<0.05	<0.05	<0.05	3	<0.05	<0.05	<0.05	3
Carbofuran	<0.025	<0.025	<0.025	1	<0.025	<0.025	<0.025	1	<0.025	<0.025	<0.025	3	<0.025	<0.025	<0.025	3
Chloroform	<0.5	<0.5	<0.5	31	<0.5	<0.5	<0.5	31	<0.5	<0.5	<0.5	211	<0.5	<0.5	<0.5	213
Dibromochloromethane	<0.5	<0.5	<0.5	31	<0.5	<0.5	<0.5	31	<0.5	<0.5	<0.5	211	<0.5	<0.5	<0.5	213
Dichlorobenzene (1,3)	<0.5	<0.5	<0.5	31	<0.5	<0.5	<0.5	31	<0.5	<0.5	<0.5	211	<0.5	<0.5	<0.5	213
Dichloroethylene, cis (1,2)	<0.5	<0.5	<0.5	31	<0.5	<0.5	<0.5	31	<0.5	<0.5	<0.5	211	<0.5	<0.5	<0.5	213
Dichloroethylene, trans (1,2)	<0.5	<0.5	<0.5	31	<0.5	<0.5	<0.5	31	<0.5	<0.5	<0.5	211	<0.5	<0.5	<0.5	213
Dichloropropane (1,2)	<0.5	<0.5	<0.5	31	<0.5	<0.5	<0.5	31	<0.5	<0.5	<0.5	211	<0.5	<0.5	<0.5	213
Dieldrin	<0.008	<0.008	<0.008	1	<0.008	<0.008	<0.008	1	<0.008	<0.008	<0.008	3	<0.008	<0.008	<0.008	3
Methyl t-Butyl Ether (MTBE)	<0.5	<0.5	<0.5	31	<0.5	<0.5	<0.5	31	<0.5	<0.5	<0.5	211	<0.5	<0.5	<0.5	213
MIBK	<1	<1	<1	31	<1	<1	<1	31	<1	<1	<1	211	<1	<1	<1	213
Parathion	<0.1	<0.1	<0.1	1	<0.1	<0.1	<0.1	1	<0.1	<0.1	<0.1	3	<0.1	<0.1	<0.1	3
Perfluorobutane Sulfonate (PFBS)				0				0	<2	<2	<2	1	<2	<2	<2	1
Perfluorobutanoic acid (PFBA)	<1.01	<0.02	<2.00	2	<1.01	<0.02	<2.00	2	<0.83	<0.02	<2.00	5	<0.83	<0.02	<2.00	5
Perfluorodecanoic Acid (PFDA)	<2	<2	<2	1	<2	<2	<2	1	<2	<2	<2	2	<2	<2	<2	2
Perfluorododecanoic Acid (PFDoA)	<2	<2	<2	1	<2	<2	<2	1	<2	<2	<2	2	<2	<2	<2	2
Perfluoroheptanoic Acid (PFHpA)	<1.001	<0.002	<2.000	2	<1.001	<0.002	<2.000	2	<0.805	<0.002	<2.000	5	<0.805	<0.002	<2.000	5
Perfluorohexane sulfonic acid (PFHxS)	<0.002	<0.002	<0.002	1	<0.002	<0.002	<0.002	1	<0.008	<0.002	<0.020	3	<0.008	<0.002	<0.020	3
Perfluorohexanoic acid (PFHxA)	<1.001	<0.002	<2.000	2	<1.001	<0.002	<2.000	2	<0.805	<0.002	<2.000	5	<0.805	<0.002	<2.000	5
Perfluorononanoic acid (PFNA)	<1.001	<0.002	<2.000	2	<1.001	<0.002	<2.000	2	<0.805	<0.002	<2.000	5	<0.805	<0.002	<2.000	5
Perfluoropentanoic Acid (PFPeA)	<1.001	<0.002	<2.000	2	<1.001	<0.002	<2.000	2	<0.805	<0.002	<2.000	5	<0.805	<0.002	<2.000	5
Perfluoroundecanoic Acid (PFUnA)	<2	<2	<2	1	<2	<2	<2	1	<2	<2	<2	2	<2	<2	<2	2
Styrene	<0.5	<0.5	<0.5	31	<0.5	<0.5	<0.5	31	<0.5	<0.5	<0.5	211	<0.5	<0.5	<0.5	213
Tetrachloroethane (1,1,2,2)	<0.5	<0.5	<0.5	31	<0.5	<0.5	<0.5	31	<0.5	<0.5	<1.0	211	<0.5	<0.5	<1.0	213
Total Organic Carbon	2.4	1.7	3.5	5	2.4	1.8	3.5	5	2.7	1.1	5.4	31	2.6	1.2	5.9	31
Total Volatile Organics (NonTHM)	3.3	<1.0	4.9	31	3.2	<1.0	5.2	31	1.8	<1.0	6.2	211	1.8	<1.0	6.1	213
Total Volatile Organics (Unknown)	1.8	1.5	2.1	2	1.8	1.6	2.1	4	<0.8	<0.5	2.1	23	<0.8	<0.5	2.1	31
Triallate	<0.1	<0.1	<0.1	1	<0.1	<0.1	<0.1	1	<0.1	<0.1	<0.1	3	<0.1	<0.1	<0.1	3
Trichloroacetic acid				0				0	<1	<1	<1	1	<1	<1	<1	1
Trichlorobenzene (1,2,4)	<0.5	<0.5	<0.5	31	<0.5	<0.5	<0.5	31	<0.5	<0.5	<0.5	211	<0.5	<0.5	<0.5	213
Trichloroethane (1,1,1)	<0.5	<0.5	<0.5	31	<0.5	<0.5	<0.5	31	<0.5	<0.5	<0.5	211	<0.5	<0.5	<0.5	213
Xylene (1,2)	<0.5	<0.5	<0.5	31	<0.5	<0.5	<0.5	31	<0.5	<0.5	<0.5	211	<0.5	<0.5	<0.5	213
Xylene (1,4)	<0.5	<0.5	<0.5	31	<0.5	<0.5	<0.5	31	<0.5	<0.5	0.6	211	<0.5	<0.5	0.9	213

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**
05-Jul-2024	7.9
11-Jul-2024	7.77
25-Jul-2024	7.04
30-Jul-2024	7.14

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

2.2.23 REPORTABLE DETECTION LIMITS

Analyte	RDL	Unit
Alkalinity phenolphthalein	3	mg CaCO3/L
Alkalinity Total	6	mg CaCO3/L
Aluminum	0.005	mg/L
Ammonia as N	0.05	mg/L
Ammonia as NH3	0.05	mg/L
Antimony	0.0005	mg/L
Arsenic	0.0002	mg/L
Barium	0.002	mg/L
Benzene	0.5	µg/L
Beryllium	0.0002	mg/L
Bicarbonate	3	mg CaCO3/L
Boron	0.005	mg/L
Bromate Dissolved	0.005	mg/L
Bromide Dissolved	0.03	mg/L
Bromodichloromethane	0.5	µg/L
Bromoform	0.5	µg/L
Cadmium	0.00002	mg/L
Calcium	0.1	mg/L
Carbon Tetrachloride	0.5	µg/L
Carbonate	3	mg/L CaCO3
Cellular ATP	0.1	pg/mL
Chlorate Dissolved	0.01	mg/L
Chloride Dissolved	0.3	mg/L
Chlorite Dissolved	0.005	mg/L
Chlorobenzene	0.5	µg/L
Chloroform	0.5	µg/L
Chromium	0.0002	mg/L
Cobalt	0.0002	mg/L
Coliforms, total	1	PA/100mL
Colour	0.5	TCU
Copper	0.002	mg/L
Dibromochloromethane	0.5	µg/L
Dichlorobenzene (1,2)	0.5	µg/L
Dichlorobenzene (1,3)	0.5	µg/L
Dichlorobenzene (1,4)	0.5	µg/L
Dichloroethane (1,2)	0.5	µg/L
Dichloroethylene (1,1)	0.5	µg/L
Dichloroethylene, cis (1,2)	0.5	µg/L
Dichloroethylene, trans (1,2)	0.5	µg/L
Dichloropropane (1,2)	0.5	µg/L
Dissolved Organic Carbon	0.6	mg/L
E. coli	1	PA/100mL
Ethylbenzene	0.5	µg/L
Fluoride	0.05	mg/L
Free Chlorine	0.07	mg/L
Iron	0.005	mg/L
Lanthanum	0.001	mg/L
Lead	0.0002	mg/L
Lithium	0.0002	mg/L
Magnesium	0.1	mg/L
Manganese	0.002	mg/L
Mercury	0.0002	mg/L

2.2.23 REPORTABLE DETECTION LIMITS

Analyte	RDL	Unit
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
Orthophosphate, total	0.02	mg/L as P
Phosphorus	0.02	mg/L
Potassium	0.1	mg/L
Run1	10	RLU
Run2	10	RLU
Run3	10	RLU
Selenium	0.0002	mg/L
Silicon	0.05	mg/L
Silver	0.00002	mg/L
Sodium	0.1	mg/L
Strontium	0.002	mg/L
Styrene	0.5	µg/L
Sulphate Dissolved	0.5	mg/L
Tetrachloroethane (1,1,2,2)	0.5	µg/L
Tetrachloroethylene	0.5	µg/L
Thallium	0.0002	mg/L
Tin	0.0005	mg/L
Titanium	0.0005	mg/L
Toluene	0.5	µg/L
Total Dissolved Solids	25	mg/L
Total Hardness	2	mg/L CaCO3
Total Kjeldahl Nitrogen	0.1	mg/L N
Total Organic Carbon	0.6	mg/L
Total Volatile Organics (NonTHM)	1.0	µg/L
Total Volatile Organics (Unknown)	0.5	µg/L
Total Xylenes	1.0	µg/L
Trichlorobenzene (1,2,4)	0.5	µg/L
Trichloroethane (1,1,1)	0.5	µg/L
Trichloroethylene	0.5	µg/L
Trihalomethanes	1.0	µg/L
Turbidity	0.04	NTU
Uranium	0.0005	mg/L
UV 254 % Transmittance	99.8	%T/cm
Vanadium	0.0005	mg/L
Vinyl Chloride	1.0	µg/L
Xylene (1,2)	0.5	µg/L
Xylene (1,4)	0.5	µg/L
Zinc	0.005	mg/L
Zirconium	0.001	mg/L

2.2.23 REPORTABLE DETECTION LIMITS

Analyte	RDL	Unit
Contract Lab Analysis		
2,3,4,6-Tetrachlorophenol	0.50	µg/L
2,4,5-T	0.050	µg/L
2,4,6-Trichlorophenol	0.20	µg/L
2,4-D	0.050	µg/L
2,4-Dichlorophenol	0.20	µg/L
6:2 Fluorotelomer sulfonic acid(6:2 FTS)	0.0020	µg/L
8:2 Fluorotelomer sulfonic acid(8:2 FTS)	0.0020	µg/L
a-chlordane	0.0080	µg/L
Alachlor	0.050	µg/L
Aldicarb	0.100	µg/L
Aldrin	0.0080	µg/L
Aldrin + Dieldrin	0.011	µg/L
Ametryn	0.0250	µg/L
Atrazine	0.050	µg/L
Atrazine + N-dealkylated metabolites	0.10	µg/L
Atrazine Desethyl	0.0250	µg/L
Azinphos-methyl	0.100	µg/L
Bendiocarb	0.0250	µg/L
Benzo(a)pyrene	0.0050	ug/L
Bromochloroacetic acid	1.00	ug/L
Bromoxynil	0.050	µg/L
Carbaryl	0.050	µg/L
Carbofuran	0.0250	µg/L
Chlordane, total	0.011	µg/L
Chlorpyrifos	0.10	µg/L
Cyanazine	0.100	µg/L
DDD, total	0.0060	µg/L
DDE, 2,4'-	0.0040	µg/L
DDE, total	0.0060	µg/L
DDT + metabolites, total	0.010	µg/L
DDT, total	0.0060	µg/L
Diazinon	0.0250	µg/L
Dibromoacetic acid	1.00	ug/L
Dicamba	0.10	µg/L
Dichloroacetic acid	1.00	ug/L
Diclofop-methyl	0.100	µg/L
Dieldrin	0.0080	µg/L
Dimethoate	0.050	µg/L
Dimethoate and Omethoate (as Dimethoate)	0.21	µg/L
Dinoseb	0.050	µg/L
Diquat	1.0	µg/L
Diuron	0.050	µg/L
gamma-hexachlorocyclohexane	0.0080	µg/L
g-chlordane	0.0080	µg/L
Glyphosate	0.20	µg/L
Haloacetic Acids, total (HAA5)	5.00	ug/L
Heptachlor	0.0080	µg/L
Heptachlor + Heptachlor epoxide	0.011	µg/L
Heptachlor Epoxide	0.0080	µg/L
Malathion	0.0250	µg/L
MCPA	0.050	µg/L
Mercury	0.0050	µg/L
Methoxychlor	0.0080	µg/L

2.2.23 REPORTABLE DETECTION LIMITS

Analyte	RDL	Unit
Methyl Parathion	0.10	µg/L
Metolachlor	0.0250	µg/L
Metribuzin	0.100	µg/L
Microcystin	0.20	µg/L
Monobromoacetic acid	1.00	ug/L
Monochloroacetic acid	1.00	ug/L
NDMA	0.00300	µg/L
Omethoate	0.050	µg/L
Omethoate (as dimethoate)	0.16	µg/L
op-DDT	0.0040	µg/L
Oxychlordane	0.0080	µg/L
Paraquat (as dichloride)	1.0	µg/L
Parathion	0.10	µg/L
Pentachlorophenol	0.50	µg/L
Perfluorobutane sulfonic acid (PFBS)	0.0020	µg/L
Perfluorobutanoic acid [PFBA]	0.020	µg/L
Perfluoroheptanoic acid [PFHpA]	0.0020	µg/L
Perfluorohexanesulfonic acid [PFHxS]	0.0020	µg/L
Perfluorohexanoic acid [PFHxA]	0.0020	µg/L
Perfluorononanoic acid [PFNA]	0.0020	µg/L
Perfluorooctanesulfonic acid [PFOS]	0.0020	µg/L
Perfluorooctanoic acid (PFOA)	0.0020	µg/L
Perfluoropentanoic acid (PFPeA)	0.0020	µg/L
Phorate	0.250	µg/L
Picloram	0.10	µg/L
pp-DDD	0.0040	µg/L
pp-DDE	0.0040	µg/L
pp-DDT	0.0040	µg/L
Prometon	0.0250	µg/L
Prometryn	0.0250	µg/L
Propazine	0.0250	µg/L
Simazine	0.100	µg/L
Temephos	0.250	µg/L
Terbufos	0.50	µg/L
Terbutryn	0.0250	µg/L
Total Cyanide	0.0020	mg/L
Total Sulphide (as S)	0.0015	mg/L
Triallate	0.100	µg/L
Trichloroacetic acid	1.00	ug/L
Trifluralin	0.10	µg/L

2.2.24 EXPLANATION OF NOTATIONS USED

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

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