

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
<b>January</b>															
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
<b>Raw River Water Entering the Treatment Plants</b>	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
<b>Water Entering the Plant Reservoir</b>	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
<b>Treated Water Entering the Distribution System</b>	61	0	0.0				0	0.0				61	0.49	0.10	1.00
<b>February</b>															
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
<b>Raw River Water Entering the Treatment Plants</b>	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
<b>Water Entering the Plant Reservoir</b>	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
<b>Treated Water Entering the Distribution System</b>	57	0	0.0				0	0.0				57	0.71	0.11	1.00

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	Coliforms, total						E. coli					cATP (pg/mL)			
	Count	# +ve	% +ve	Mean	Min	Max	# +ve	% +ve	Mean	Min	Max	Count	Mean	Min	Max
<b>March</b>															
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
<b>Raw River Water Entering the Treatment Plants</b>	<b>36</b>			<b>1,584</b>	<b>1</b>	<b>13,700</b>			<b>79</b>	<b>1</b>	<b>1,760</b>	<b>2</b>	<b>177</b>	<b>60.7</b>	<b>293</b>
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
<b>Water Entering the Plant Reservoir</b>	<b>62</b>	<b>0</b>	<b>0.0</b>				<b>0</b>	<b>0.0</b>				<b>62</b>	<b>0.74</b>	<b>0.12</b>	<b>1.00</b>
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
<b>Treated Water Entering the Distribution System</b>	<b>62</b>	<b>0</b>	<b>0.0</b>				<b>0</b>	<b>0.0</b>				<b>62</b>	<b>0.69</b>	<b>0.10</b>	<b>1.00</b>
<b>April</b>															
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
<b>Raw River Water Entering the Treatment Plants</b>	<b>35</b>			<b>225</b>	<b>1</b>	<b>1,120</b>			<b>8</b>	<b>1</b>	<b>58</b>	<b>2</b>	<b>109</b>	<b>92.2</b>	<b>126</b>
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
<b>Water Entering the Plant Reservoir</b>	<b>60</b>	<b>0</b>	<b>0.0</b>				<b>0</b>	<b>0.0</b>				<b>60</b>	<b>0.61</b>	<b>0.10</b>	<b>1.00</b>
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
<b>Treated Water Entering the Distribution System</b>	<b>60</b>	<b>0</b>	<b>0.0</b>				<b>0</b>	<b>0.0</b>				<b>60</b>	<b>0.57</b>	<b>0.10</b>	<b>1.00</b>

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

**2.2.2 Bacteriological Data: Distribution System**

**April 2024**

	Coliforms, total (PA/100 mL)			E. coli (PA/100 mL)		cATP (pg/mL)			
	Count	# +ve	% +ve	# +ve	% +ve	Count	Mean	Min	Max
<b>January</b>									
FIELD DISTRIBUTION	146	0	0.0	0	0.0	55	0.28	0.11	0.86
FIELD DISTRIBUTION - PLPH	55	1	1.8	0	0.0				
FIELD RESERVOIR	63	0	0.0	0	0.0	63	0.36	0.11	1.26
FIELD RESERVOIR - PLPH (duplicate-not counted)	63	0	0.0	0	0.0				
Monthly	209	1	0.5	0	0.0	118	0.33	0.11	1.26
<b>February</b>									
FIELD DISTRIBUTION	153	0	0.0	0	0.0	54	0.21	0.10	1.09
FIELD DISTRIBUTION - PLPH	54	0	0.0	0	0.0				
FIELD RESERVOIR	52	0	0.0	0	0.0	52	0.20	0.10	0.51
FIELD RESERVOIR - PLPH (duplicate-not counted)	52	0	0.0	0	0.0				
Monthly	205	0	0.0	0	0.0	106	0.21	0.10	1.09
<b>March</b>									
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	198	0	0.0	0	0.0	106	0.26	0.10	0.96
<b>April</b>									
FIELD DISTRIBUTION	151	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	216	1	0.5	0	0.0	120	0.32	0.10	2.48
Year to Date	1,045	2	0.2	0	0.0	450	0.29	0.10	2.48

## **2.2.2 Bacteriological Data: Distribution System**

**April 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**

**April 2024**

		Coliforms, total (PA/100 mL)			E. coli (PA/100 mL)		cATP (pg/mL)			
		Count	# +ve	% +ve	# +ve	% +ve	Count	Mean	Min	Max
<b>Samples from Complaints</b>										
<b>January</b>		15	0	0.0	0	0.0	15	0.36	0.14	1.50
<b>February</b>		7	0	0.0	0	0.0	7	0.17	0.12	0.32
<b>March</b>		13	0	0.0	0	0.0	13	0.18	0.11	0.42
<b>April</b>		16	0	0.0	0	0.0	16	0.35	0.12	0.75
Year to Date		51	0	0.0	0	0.0	51	0.30	0.11	1.50
<b>Samples from Depressurizations</b>										
<b>January</b>		70	0	0.0	0	0.0				
<b>February</b>		48	0	0.0	0	0.0				
<b>March</b>		37	0	0.0	0	0.0				
<b>April</b>		45	0	0.0	0	0.0				
Year to Date		200	0	0.0	0	0.0				