

**2.2.1 Bacteriological Data: Water Treatment Plants  
2022**

	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	0	0.0	81	1	387	0	0.0	9	1	51	1	10.7	10.7	10.7
E.L. Smith Raw (MPN/100mL)	5	0	0.0	44	31	68	0	0.0	1	1	2	1	15.0	15.0	15.0
<b>Raw River Water Entering the Treatment Plants</b>	<b>37</b>	<b>0</b>	<b>0.0</b>	<b>76</b>	<b>1</b>	<b>387</b>	<b>0</b>	<b>0.0</b>	<b>8</b>	<b>1</b>	<b>51</b>	<b>2</b>	<b>12.9</b>	<b>10.7</b>	<b>15.0</b>
Rossdale Treated (PA/100mL)	31	0	0.0				0	0.0				31	0.61	0.03	1.00
E.L. Smith Treated (PA/100mL)	31	0	0.0				0	0.0				31	0.43	0.03	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>0.52</b>	<b>0.03</b>	<b>1.00</b>
Rossdale Reservoir (PA/100mL)	31	0	0.0				0	0.0				31	0.66	0.03	1.00
E.L. Smith Reservoir (PA/100mL)	31	0	0.0				0	0.0				31	0.49	0.03	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>0.58</b>	<b>0.03</b>	<b>1.00</b>
<b>February</b>															
Rossdale Raw (MPN/100mL)	29	0	0.0	188	1	1,990	0	0.0	12	1	58	1	24.8	24.8	24.8
E.L. Smith Raw (MPN/100mL)	5	0	0.0	57	19	196	0	0.0	1	1	3	1	29.6	29.6	29.6
<b>Raw River Water Entering the Treatment Plants</b>	<b>34</b>	<b>0</b>	<b>0.0</b>	<b>169</b>	<b>1</b>	<b>1,990</b>	<b>0</b>	<b>0.0</b>	<b>10</b>	<b>1</b>	<b>58</b>	<b>2</b>	<b>27.2</b>	<b>24.8</b>	<b>29.6</b>
Rossdale Treated (PA/100mL)	28	0	0.0				0	0.0				28	0.48	0.03	1.00
E.L. Smith Treated (PA/100mL)	28	0	0.0				0	0.0				28	0.40	0.03	1.00
<b>Water Entering the Plant Reservoir</b>	<b>56</b>	<b>0</b>	<b>0.0</b>				<b>0</b>	<b>0.0</b>				<b>56</b>	<b>0.44</b>	<b>0.03</b>	<b>1.00</b>
Rossdale Reservoir (PA/100mL)	28	0	0.0				0	0.0				28	0.61	0.04	1.00
E.L. Smith Reservoir (PA/100mL)	29	0	0.0				0	0.0				29	0.22	0.03	1.00
<b>Treated Water Entering the Distribution System</b>	<b>57</b>	<b>0</b>	<b>0.0</b>				<b>0</b>	<b>0.0</b>				<b>57</b>	<b>0.41</b>	<b>0.03</b>	<b>1.00</b>

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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	0	0.0	1,105	1	7,310	0	0.0	40	1	161	1	11.5	11.5	11.5
E.L. Smith Raw (MPN/100mL)	5	0	0.0	240	8	722	0	0.0	5	1	20	1	15.2	15.2	15.2
<b>Raw River Water Entering the Treatment Plants</b>	<b>37</b>	<b>0</b>	<b>0.0</b>	<b>988</b>	<b>1</b>	<b>7,310</b>	<b>0</b>	<b>0.0</b>	<b>35</b>	<b>1</b>	<b>161</b>	<b>2</b>	<b>13.3</b>	<b>11.5</b>	<b>15.2</b>
Rossdale Treated (PA/100mL)	31	0	0.0				0	0.0				31	0.70	0.03	1.00
E.L. Smith Treated (PA/100mL)	31	0	0.0				0	0.0				31	0.62	0.03	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>0.66</b>	<b>0.03</b>	<b>1.00</b>
Rossdale Reservoir (PA/100mL)	31	0	0.0				0	0.0				31	0.76	0.03	1.00
E.L. Smith Reservoir (PA/100mL)	31	0	0.0				0	0.0				31	0.53	0.03	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>0.64</b>	<b>0.03</b>	<b>1.00</b>
<b>April</b>															
Rossdale Raw (MPN/100mL)	31	0	0.0	356	1	2,420	0	0.0	26	1	276	1	78.4	78.4	78.4
E.L. Smith Raw (MPN/100mL)	5	0	0.0	148	43	291	0	0.0	1	1	2	1	91.7	91.7	91.7
<b>Raw River Water Entering the Treatment Plants</b>	<b>36</b>	<b>0</b>	<b>0.0</b>	<b>327</b>	<b>1</b>	<b>2,420</b>	<b>0</b>	<b>0.0</b>	<b>23</b>	<b>1</b>	<b>276</b>	<b>2</b>	<b>85.0</b>	<b>78.4</b>	<b>91.7</b>
Rossdale Treated (PA/100mL)	30	0	0.0				0	0.0				30	0.75	0.03	1.00
E.L. Smith Treated (PA/100mL)	30	0	0.0				0	0.0				30	0.67	0.03	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>0.71</b>	<b>0.03</b>	<b>1.00</b>
Rossdale Reservoir (PA/100mL)	30	0	0.0				0	0.0				30	0.72	0.03	1.00
E.L. Smith Reservoir (PA/100mL)	30	0	0.0				0	0.0				30	0.75	0.03	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>0.73</b>	<b>0.03</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 2022**

	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	91	0	0.0	0	0.0	60	0.09	0.03	0.37
FIELD DISTRIBUTION - PLPH	60	0	0.0	0	0.0				
FIELD RESERVOIR	50	0	0.0	0	0.0	50	0.07	0.02	0.20
FIELD RESERVOIR - PLPH (duplicate-not counted)	48	0	0.0	0	0.0				
Monthly	201	0	0.0	0	0.0	110	0.09	0.02	0.37
<b>February</b>									
FIELD DISTRIBUTION	89	0	0.0	0	0.0	57	0.09	0.03	0.28
FIELD DISTRIBUTION - PLPH	60	0	0.0	0	0.0	3	0.13	0.13	0.13
FIELD RESERVOIR	48	0	0.0	0	0.0	48	0.11	0.03	0.30
FIELD RESERVOIR - PLPH (duplicate-not counted)	48	0	0.0	0	0.0				
Monthly	197	0	0.0	0	0.0	108	0.10	0.03	0.30
<b>March</b>									
FIELD DISTRIBUTION	85	0	0.0	0	0.0	61	0.09	0.03	0.37
FIELD DISTRIBUTION - PLPH	60	0	0.0	0	0.0				
FIELD RESERVOIR	60	0	0.0	0	0.0	60	0.09	0.03	0.58
FIELD RESERVOIR - PLPH (duplicate-not counted)	59	0	0.0	0	0.0				
Monthly	205	0	0.0	0	0.0	121	0.09	0.03	0.58
<b>April</b>									
FIELD DISTRIBUTION	94	0	0.0	0	0.0	61	0.18	0.03	1.26
FIELD DISTRIBUTION - PLPH	60	0	0.0	0	0.0				
FIELD RESERVOIR	55	0	0.0	0	0.0	55	0.09	0.03	0.37
FIELD RESERVOIR - PLPH (duplicate-not counted)	52	0	0.0	0	0.0				
Monthly	209	0	0.0	0	0.0	116	0.14	0.03	1.26
Year to Date	812	0	0.0	0	0.0	455	0.10	0.02	1.26

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

**April 2022**

Guidelines for Canadian Drinking Water Quality recommend 190 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 190 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.

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April 2022**

		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>	4	0	0.0	0	0.0	4	0.21	0.03	0.68
	<b>February</b>	10	0	0.0	0	0.0	10	0.19	0.03	0.50
	<b>March</b>	12	0	0.0	0	0.0	12	0.17	0.07	0.30
	<b>April</b>	7	0	0.0	0	0.0	7	0.12	0.04	0.21
	<b>Year to Date</b>	33	0	0.0	0	0.0	33	0.17	0.03	0.68
<b>Samples from Depressurizations</b>										
	<b>January</b>	67	0	0.0	0	0.0				
	<b>February</b>	49	0	0.0	0	0.0				
	<b>March</b>	58	0	0.0	0	0.0				
	<b>April</b>	53	0	0.0	0	0.0				
	<b>Year to Date</b>	227	0	0.0	0	0.0				