

## 2.2.1 Bacteriological Data: Water Treatment Plants

September 2020

### Treated Water Entering the Distribution System

	# of +VE Samples YTD		# of Samples YTD		Limit	Required Frequency - Each Plant*	Unit
	Rosssdale	Smith	Rosssdale	Smith	GCDWQ or Approval		
Coliforms, total	0	0	274	275	0/100 mL	[Daily]	PA/100mL
E. coli	0	0	274	275	0/100 mL	[Daily]	PA/100mL

### Water Entering the Plant Reservoir

	# of +VE Samples YTD		# of Samples YTD		Limit	Required Frequency - Each Plant*	Unit
	Rosssdale	Smith	Rosssdale	Smith	GCDWQ or Approval		
Coliforms, total	0	0	274	274	N/A	[Daily]	PA/100mL
E. coli	0	0	274	274	N/A	[Daily]	PA/100mL

### Raw River Water Entering the Treatment Plants

								Limits		Unit	
	ROSSDALE			E.L. SMITH			Rosssdale	Smith	GCDWQ or Approval		Required Frequency - Each Plant*
	Mean	Min	Max	Mean	Min	Max	# of Samples YTD				
Coliforms, total	2,202	23	39,700	1,208	0	6,150	282	41	N/A	[Weekly]	MPN/100 mL
E. coli	183	1	2,250	169	0	710	283	41	N/A	[Weekly]	MPN/100 mL

\* Indicates EPCOR Operations Program.

PA = present or absent, MPN = most probably number

## 2.2.2 Bacteriological Data: Distribution System

September 2020

	Coliforms, total			E. coli		
	Count	# +ve	% +ve	Count	# +ve	% +ve
<b>January</b>						
FIELD DISTRIBUTION	119	0	0.0	119	0	0.0
FIELD DISTRIBUTION - PLPH	60	0	0.0	60	0	0.0
FIELD RESERVOIR	61	0	0.0	61	0	0.0
FIELD RESERVOIR - PLPH (duplicate-not counted)	60	0	0.0	60	0	0.0
Monthly	240	0	0.0	240	0	0.0
<b>February</b>						
FIELD DISTRIBUTION	125	1	0.8	125	0	0.0
FIELD DISTRIBUTION - PLPH	60	0	0.0	60	0	0.0
FIELD RESERVOIR	47	0	0.0	47	0	0.0
FIELD RESERVOIR - PLPH (duplicate-not counted)	47	0	0.0	47	0	0.0
Monthly	232	1	0.4	232	0	0.0
<b>March</b>						
FIELD DISTRIBUTION	113	0	0.0	113	0	0.0
FIELD DISTRIBUTION - PLPH	60	0	0.0	60	0	0.0
FIELD RESERVOIR	48	0	0.0	48	0	0.0
FIELD RESERVOIR - PLPH (duplicate-not counted)	48	0	0.0	48	0	0.0
Monthly	221	0	0.0	221	0	0.0
<b>April</b>						
FIELD DISTRIBUTION	56	0	0.0	56	0	0.0
FIELD DISTRIBUTION - PLPH	60	0	0.0	60	0	0.0
FIELD RESERVOIR	61	0	0.0	61	0	0.0
FIELD RESERVOIR - PLPH (duplicate-not counted)	60	0	0.0	60	0	0.0
Monthly	177	0	0.0	177	0	0.0
<b>May</b>						
FIELD DISTRIBUTION	104	1	1.0	104	0	0.0
FIELD DISTRIBUTION - PLPH	61	0	0.0	61	0	0.0
FIELD RESERVOIR	48	0	0.0	48	0	0.0
FIELD RESERVOIR - PLPH (duplicate-not counted)	47	0	0.0	47	0	0.0
Monthly	213	1	0.5	213	0	0.0
<b>June</b>						
FIELD DISTRIBUTION	134	1	0.7	134	0	0.0
FIELD DISTRIBUTION - PLPH	61	0	0.0	61	0	0.0
FIELD RESERVOIR	55	0	0.0	55	0	0.0
FIELD RESERVOIR - PLPH (duplicate-not counted)	55	0	0.0	55	0	0.0
Monthly	250	1	0.4	250	0	0.0

**2.2.2 Bacteriological Data: Distribution System  
September 2020**

	Coliforms, total			E. coli		
	Count	# +ve	% +ve	Count	# +ve	% +ve
<b>July</b>						
FIELD DISTRIBUTION	121	0	0.0	121	0	0.0
FIELD DISTRIBUTION - PLPH	60	0	0.0	60	0	0.0
FIELD RESERVOIR	55	0	0.0	55	0	0.0
FIELD RESERVOIR - PLPH (duplicate-not counted)	48	0	0.0	48	0	0.0
Monthly	236	0	0.0	236	0	0.0
<b>August</b>						
FIELD DISTRIBUTION	118	0	0.0	118	0	0.0
FIELD DISTRIBUTION - PLPH	60	0	0.0	60	0	0.0
FIELD RESERVOIR	52	0	0.0	52	0	0.0
FIELD RESERVOIR - PLPH (duplicate-not counted)	48	0	0.0	48	0	0.0
Monthly	230	0	0.0	230	0	0.0
<b>September</b>						
FIELD DISTRIBUTION	122	0	0.0	122	0	0.0
FIELD DISTRIBUTION - PLPH	60	0	0.0	60	0	0.0
FIELD RESERVOIR	59	0	0.0	59	0	0.0
FIELD RESERVOIR - PLPH (duplicate-not counted)	47	0	0.0	47	0	0.0
Monthly	241	0	0.0	241	0	0.0
Year to Date	2,040	3	0.1	2,040	0	0.0

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.

EPCOR's operations program specifies a minimum of 190 samples to be collected and analyzed in each month for random bacteriological monitoring purposes. Due to the closure of many public places, buildings and facilities because of COVID-19, and to protect the health of our employees, we were able to collect only 177 samples as part of the random program in April. An additional 58 samples were collected as part of system depressurizations and complaint monitoring. AEP was notified of the variance from the operations program (EDGE # 366491).

**2.2.2 Bacteriological Data: Distribution System**

**September 2020**

	Coliforms, total			E. coli		
	Count	# +ve	% +ve	Count	# +ve	% +ve
<b>Samples from Complaints</b>						
January	8	0	0.0	8	0	0.0
February	4	0	0.0	4	0	0.0
March	5	0	0.0	5	0	0.0
April	6	0	0.0	6	0	0.0
May	11	0	0.0	11	0	0.0
June	9	0	0.0	9	0	0.0
July	8	0	0.0	8	0	0.0
August	14	0	0.0	14	0	0.0
September	12	0	0.0	12	0	0.0
	Year to Date			77	0	0.0
<b>Samples from Depressurizations</b>						
January	69	0	0.0	69	0	0.0
February	51	0	0.0	51	0	0.0
March	52	0	0.0	52	0	0.0
April	52	0	0.0	52	0	0.0
May	61	0	0.0	61	0	0.0
June	82	0	0.0	82	0	0.0
July	105	1	1.0	105	0	0.0
August	102	1	1.0	102	0	0.0
September	99	0	0.0	99	0	0.0
	Year to Date			673	2	0.3