

2.2.1 Bacteriological Data: Water Treatment Plants

August 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	244	245	0/100 mL	[Daily]	PA/100mL
E. coli	0	0	244	245	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	244	244	N/A	[Daily]	PA/100mL
E. coli	0	0	244	244	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	2,457	57	39,700	1,350	0	6,150	251	36	N/A	[Weekly]	MPN/100 mL
E. coli	201	1	2,250	188	0	710	252	36	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

August 2020

	Coliforms, total			E. coli		
	Count	# +ve	% +ve	Count	# +ve	% +ve
January						
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
February						
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
March						
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
April						
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
May						
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
June						
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

August 2020

	Coliforms, total			E. coli		
	Count	# +ve	% +ve	Count	# +ve	% +ve
July						
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
August						
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
Year to Date	1,799	3	0.2	1,799	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

August 2020

	Coliforms, total			E. coli		
	Count	# +ve	% +ve	Count	# +ve	% +ve
Samples from Complaints						
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
Year to Date	65	0	0.0	65	0	0.0
Samples from Depressurizations						
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
Year to Date	574	2	0.3	574	0	0.0