

2.2.1 Bacteriological Data: Water Treatment Plants

December 2018

Treated Water Entering the Distribution System

	ROSSDALE			E.L. SMITH			YTD (combined)			Limit	Unit
	# Samples	# +ve	% +ve	# Samples	# +ve	% +ve	# Samples	# +ve	% +ve	Approval	
Coliforms, total	31	0	0	31	0	0	730	0	0	0/100 mL	PA/100mL
E. coli	31	0	0	31	0	0	730	0	0	0/100 mL	PA/100mL
Heterotrophic Plate Count	31	31	100	31	31	100	730	273	37	N/A	CFU/mL

Water Entering the Plant Reservoir

	ROSSDALE			E.L. SMITH			YTD (combined)			Limit	Unit
	# Samples	# +ve	% +ve	# Samples	# +ve	% +ve	# Samples	# +ve	% +ve	Approval	
Coliforms, total	31	0	0	31	0	0	729	0	0	N/A	PA/100mL
E. coli	31	0	0	31	0	0	729	0	0	N/A	PA/100mL
Heterotrophic Plate Count	31	31	100	31	31	100	729	277	38	N/A	CFU/mL

Raw River Water Entering the Treatment Plants

	ROSSDALE			E.L. SMITH			YTD (combined)			Limit	Unit
	# Samples	# +ve	% +ve	# Samples	# +ve	% +ve	# Samples	# +ve	% +ve	Approval	
Coliforms, total	32	31	97	5	5	100	417	417	100	N/A	MPN/100 mL
E. coli	32	31	97	5	5	100	419	419	100	N/A	MPN/100 mL
Heterotrophic Plate Count	1	1	100	1	1	100	25	25	100	N/A	CFU/mL

2.2.2 Bacteriological Data: Distribution System

December 2018

	Coliforms, total			E. coli			HPC		
	Count	# +ve	% +ve	Count	# +ve	% +ve	Count	# +ve	% +ve
January									
FIELD DISTRIBUTION	105	0	0.0	105	0	0.0	104	9	8.7
FIELD DISTRIBUTION - PLPH	54	0	0.0	54	0	0.0	0	0	0.0
FIELD RESERVOIR	55	0	0.0	55	0	0.0	55	0	0.0
FIELD RESERVOIR - PLPH (duplicate-not counted)	66	0	0.0	66	0	0.0	0	0	0.0
Monthly	214	0	0.0	214	0	0.0	159	9	5.7
February									
FIELD DISTRIBUTION	96	0	0.0	96	0	0.0	96	3	3.1
FIELD DISTRIBUTION - PLPH	63	0	0.0	63	0	0.0	0	0	0.0
FIELD RESERVOIR	47	0	0.0	47	0	0.0	44	0	0.0
FIELD RESERVOIR - PLPH (duplicate-not counted)	55	0	0.0	55	0	0.0	0	0	0.0
Monthly	206	0	0.0	206	0	0.0	140	3	2.1
March									
FIELD DISTRIBUTION	97	0	0.0	97	0	0.0	97	6	6.2
FIELD DISTRIBUTION - PLPH	57	0	0.0	57	0	0.0	0	0	0.0
FIELD RESERVOIR	45	0	0.0	45	0	0.0	44	1	2.3
FIELD RESERVOIR - PLPH (duplicate-not counted)	56	0	0.0	56	0	0.0	0	0	0.0
Monthly	199	0	0.0	199	0	0.0	141	7	5.0
April									
FIELD DISTRIBUTION	97	0	0.0	97	0	0.0	97	7	7.2
FIELD DISTRIBUTION - PLPH	57	0	0.0	57	0	0.0	0	0	0.0
FIELD RESERVOIR	44	0	0.0	44	0	0.0	44	1	2.3
FIELD RESERVOIR - PLPH (duplicate-not counted)	50	0	0.0	50	0	0.0	0	0	0.0
Monthly	198	0	0.0	198	0	0.0	141	8	5.7
May									
FIELD DISTRIBUTION	152	1	0.7	152	0	0.0	152	15	9.9
FIELD DISTRIBUTION - PLPH	58	0	0.0	58	0	0.0	0	0	0.0
FIELD RESERVOIR	60	0	0.0	60	0	0.0	58	4	6.9
FIELD RESERVOIR - PLPH (duplicate-not counted)	60	0	0.0	60	0	0.0	0	0	0.0
Monthly	270	1	0.4	270	0	0.0	210	19	9.0
June									
FIELD DISTRIBUTION	124	0	0.0	124	0	0.0	124	5	4.0
FIELD DISTRIBUTION - PLPH	57	0	0.0	57	0	0.0	0	0	0.0
FIELD RESERVOIR	53	0	0.0	53	0	0.0	52	1	1.9
FIELD RESERVOIR - PLPH (duplicate-not counted)	49	0	0.0	49	0	0.0	0	0	0.0
Monthly	234	0	0.0	234	0	0.0	176	6	3.4
July									
FIELD DISTRIBUTION	131	0	0.0	131	0	0.0	131	4	3.1
FIELD DISTRIBUTION - PLPH	57	0	0.0	57	0	0.0	0	0	0.0
FIELD RESERVOIR	63	0	0.0	63	0	0.0	63	1	1.6
FIELD RESERVOIR - PLPH (duplicate-not counted)	59	0	0.0	59	0	0.0	0	0	0.0
Monthly	251	0	0.0	251	0	0.0	194	5	2.6

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	Coliforms, total			E. coli			HPC		
	Count	# +ve	% +ve	Count	# +ve	% +ve	Count	# +ve	% +ve
August									
FIELD DISTRIBUTION	136	0	0.0	136	0	0.0	136	59	43.4
FIELD DISTRIBUTION - PLPH	57	0	0.0	57	0	0.0	0	0	0.0
FIELD RESERVOIR	49	0	0.0	49	0	0.0	49	16	32.7
FIELD RESERVOIR - PLPH (duplicate-not counted)	48	0	0.0	48	0	0.0	0	0	0.0
Monthly	242	0	0.0	242	0	0.0	185	75	40.5
September									
FIELD DISTRIBUTION	131	0	0.0	131	0	0.0	131	131	100.0
FIELD DISTRIBUTION - PLPH	56	0	0.0	56	0	0.0	0	0	0.0
FIELD RESERVOIR	48	0	0.0	48	0	0.0	48	48	100.0
FIELD RESERVOIR - PLPH (duplicate-not counted)	37	0	0.0	37	0	0.0	0	0	0.0
Monthly	235	0	0.0	235	0	0.0	179	179	100.0
October									
FIELD DISTRIBUTION	133	0	0.0	133	0	0.0	133	133	100.0
FIELD DISTRIBUTION - PLPH	56	0	0.0	56	0	0.0	0	0	0.0
FIELD RESERVOIR	59	0	0.0	59	0	0.0	59	59	100.0
FIELD RESERVOIR - PLPH (duplicate-not counted)	58	0	0.0	58	0	0.0	0	0	0.0
Monthly	248	0	0.0	248	0	0.0	192	192	100.0
November									
FIELD DISTRIBUTION	107	0	0.0	107	0	0.0	107	107	100.0
FIELD DISTRIBUTION - PLPH	55	0	0.0	55	0	0.0	0	0	0.0
FIELD RESERVOIR	53	0	0.0	53	0	0.0	53	53	100
FIELD RESERVOIR - PLPH (duplicate-not counted)	60	0	0.0	60	0	0.0	0	0	0.0
Monthly	215	0	0.0	215	0	0.0	160	160	100.0
December									
FIELD DISTRIBUTION	102	0	0.0	102	0	0.0	102	102	100.0
FIELD DISTRIBUTION - PLPH	56	0	0.0	56	0	0.0	0	0	0.0
FIELD RESERVOIR	55	0	0.0	55	0	0.0	55	55	100.0
FIELD RESERVOIR - PLPH (duplicate-not counted)	48	0	0.0	48	0	0.0	0	0	0.0
Monthly	213	0	0.0	213	0	0.0	157	157	100.0
Year to Date	2,725	1	0.0	2,725	0	0.0	2,034	820	40.3

Guidelines for Canadian Drinking Water Quality recommend 180 bacteriological samples for a city the size of Edmonton. Total Coliform and E.coli testing is required in the AEP Approval. HPC bacteria testing is additional testing and is not required by approval.

Testing conducted by Laboratory for Public Health are labelled with PLPH.

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December 2018

	Coliforms, total			E. coli			HPC		
	Count	# +ve	% +ve	Count	# +ve	% +ve	Count	# +ve	% +ve
Samples from Complaints									
January	7	0	0.0	7	0	0.0	7	1	14.3
February	5	0	0.0	5	0	0.0	5	0	0.0
March	6	0	0.0	6	0	0.0	6	0	0.0
April	3	0	0.0	3	0	0.0	3	0	0.0
May	4	0	0.0	4	0	0.0	4	0	0.0
June	5	0	0.0	5	0	0.0	5	0	0.0
July	4	0	0.0	4	0	0.0	4	1	25.0
August	11	0	0.0	11	0	0.0	11	6	54.5
September	5	0	0.0	5	0	0.0	5	5	100.0
October	5	0	0.0	5	0	0.0	5	5	100.0
November	10	0	0.0	10	0	0.0	10	10	100.0
December	12	0	0.0	12	0	0.0	12	12	100.0
Year to Date	77	0	0.0	77	0	0.0	77	40	51.9
Samples from Depressurizations									
January	76	0	0.0	76	0	0.0	0	0	0.0
February	101	0	0.0	101	0	0.0	0	0	0.0
March	64	0	0.0	64	0	0.0	0	0	0.0
April	59	0	0.0	59	0	0.0	0	0	0.0
May	115	1	0.9	115	0	0.0	9	2	22.2
June	80	0	0.0	80	0	0.0	0	0	0.0
July	113	6	5.3	113	0	0.0	0	0	0.0
August	75	0	0.0	75	0	0.0	0	0	0.0
September	62	1	1.6	62	0	0.0	0	0	0.0
October	63	0	0.0	63	0	0.0	0	0	0.0
November	58	0	0.0	58	0	0.0	0	0	0.0
December	41	0	0.0	41	0	0.0	0	0	0.0
Year to Date	907	8	0.9	907	0	0.0	9	2	22.2