

2.2.1 Bacteriological Data: Water Treatment Plants

September 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	30	0	0	30	0	0	546	0	0	0/100 mL	PA/100 mL
E. coli	30	0	0	30	0	0	546	0	0	0/100 mL	PA/100 mL
Heterotrophic Plate Count	30	30	100	30	30	100	546	89	16	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	30	0	0	30	0	0	545	0	0	N/A	PA/100 mL
E. coli	30	0	0	30	0	0	545	0	0	N/A	PA/100 mL
Heterotrophic Plate Count	30	30	100	30	30	100	545	93	17	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	30	30	100	4	4	100	311	311	100	N/A	MPN/100 mL
E. coli	30	30	100	4	4	100	312	312	100	N/A	MPN/100 mL
Heterotrophic Plate Count	1	1	100	1	1	100	18	18	100	N/A	CFU/mL

**2.2.2 Bacteriological Data: Distribution System
September 2018**

	Coliforms, total			E. coli			HPC		
	Count	# +ve	% +ve	Count	# +ve	% +ve	Count	# +ve	% +ve
January									
FIELD DISTRIBUTION	106	0	0.0	106	0	0.0	104	9	8.7
FIELD DISTRIBUTION - PLPH	53	0	0.0	53	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	66	0	0.0	66	0	0.0	0	0	0.0
FIELD RESERVOIR	44	0	0.0	44	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	58	0	0.0	58	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)	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	60	0	0.0	60	0	0.0	0	0	0.0
FIELD RESERVOIR	58	0	0.0	58	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

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	Coliforms, total			E. coli			HPC		
	Count	# +ve	% +ve	Count	# +ve	% +ve	Count	# +ve	% +ve
June									
FIELD DISTRIBUTION	124	0	0.0	124	0	0.0	124	5	4.0
FIELD DISTRIBUTION - PLPH	58	0	0.0	58	0	0.0	0	0	0.0
FIELD RESERVOIR	52	0	0.0	52	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
August									
FIELD DISTRIBUTION	136	0	0.0	136	0	0.0	136	59	43
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	33
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
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
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
Year to Date	2,049	1	0.0	2,049	0	0.0	1,525	311	20.4

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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September 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	
	Year to Date	50	0	0.0	50	0	0.0	50	13	26.0
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	79	0	0.0	79	0	0.0	4	1	25.0	
September	62	1	1.6	62	0	0.0	0	0	0.0	
	Year to Date	749	8	1.1	749	0	0.0	13	3	23.1