

### 2.2.1 Bacteriological Data: Water Treatment Plants

December 2016

#### 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	734	1	0	0/100 mL	PA/100 mL
E. coli	31	0	0	31	0	0	734	1	0	0/100 mL	PA/100 mL
Heterotrophic Plate Count	31	0	0	31	0	0	733	15	2	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	733	0	0	N/A	PA/100 mL
E. coli	31	0	0	31	0	0	733	0	0	N/A	PA/100 mL
Heterotrophic Plate Count	31	0	0	31	0	0	732	8	1	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	31	31	100	4	4	100	419	419	100	N/A	MPN/100 mL
E. coli	31	31	100	4	4	100	419	417	100	N/A	MPN/100 mL
Heterotrophic Plate Count	1	1	100	1	1	100	24	24	100	N/A	CFU/mL

January: Incorrect sampling procedure produced a false *E. coli* result at E.L. Smith WTP.

## 2.2.2 Bacteriological Data: Distribution System

December 2016

	Coliforms, total			E. coli			HPC		
	Count	# +ve	% +ve	Count	# +ve	% +ve	Count	# +ve	% +ve
<b>January</b>									
FIELD DISTRIBUTION	115	0	0.0	115	0	0.0	115	9	7.8
FIELD DISTRIBUTION - PLPH	54	0	0.0	54	0	0.0	0		0.0
FIELD RESERVOIR	48	0	0.0	48	0	0.0	48	1	2.1
FIELD RESERVOIR - PLPH (duplicate-not counted)	48	0	0.0	48	0	0.0	0		0.0
Monthly	217	0	0.0	217	0	0.0	163	10	6.1
<b>February</b>									
FIELD DISTRIBUTION	110	0	0.0	110	0	0.0	110	1	0.9
FIELD DISTRIBUTION - PLPH	54	0	0.0	54	0	0.0	0		0.0
FIELD RESERVOIR	47	0	0.0	47	0	0.0	47	0	0.0
FIELD RESERVOIR - PLPH (duplicate-not counted)	47	0	0.0	47	0	0.0	0		0.0
Monthly	211	0	0.0	211	0	0.0	157	1	0.6
<b>March</b>									
FIELD DISTRIBUTION	107	0	0.0	107	0	0.0	107	2	1.9
FIELD DISTRIBUTION - PLPH	57	0	0.0	57	0	0.0	0		0.0
FIELD RESERVOIR	60	0	0.0	60	0	0.0	60	2	3.3
FIELD RESERVOIR - PLPH (duplicate-not counted)	59	0	0.0	59	0	0.0	0		0.0
Monthly	224	0	0.0	224	0	0.0	167	4	2.4
<b>April</b>									
FIELD DISTRIBUTION	110	0	0.0	110	0	0.0	110	1	0.9
FIELD DISTRIBUTION - PLPH	54	0	0.0	54	0	0.0	0		0.0
FIELD RESERVOIR	44	0	0.0	44	0	0.0	44	2	4.5
FIELD RESERVOIR - PLPH (duplicate-not counted)	44	0	0.0	44	0	0.0	0		0.0
Monthly	208	0	0.0	208	0	0.0	154	3	1.9
<b>May</b>									
FIELD DISTRIBUTION	112	1	0.9	112	0	0.0	112	4	3.6
FIELD DISTRIBUTION - PLPH	54	0	0.0	54	0	0.0	0		0.0
FIELD RESERVOIR	48	0	0.0	48	0	0.0	48	0	0.0
FIELD RESERVOIR - PLPH (duplicate-not counted)	48	0	0.0	48	0	0.0	0		0.0
Monthly	214	1	0.5	214	0	0.0	160	4	2.5
<b>June</b>									
FIELD DISTRIBUTION	105	0	0.0	105	0	0.0	105	3	2.9
FIELD DISTRIBUTION - PLPH	54	0	0.0	54	0	0.0	0		0.0
FIELD RESERVOIR	60	0	0.0	60	0	0.0	60	0	0.0
FIELD RESERVOIR - PLPH (duplicate-not counted)	60	0	0.0	60	0	0.0	0		0.0
Monthly	219	0	0.0	219	0	0.0	165	3	1.8

Guidelines for Canadian Drinking Water Quality recommend 180 bacteriological samples for a city the size of Edmonton. HPC are not required.

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

## 2.2.2 Bacteriological Data: Distribution System

December 2016

	Coliforms, total			E. coli			HPC		
	Count	# +ve	% +ve	Count	# +ve	% +ve	Count	# +ve	% +ve
<b>July</b>									
FIELD DISTRIBUTION	108	0	0.0	108	0	0.0	108	9	8.3
FIELD DISTRIBUTION - PLPH	54	0	0.0	54	0	0.0	0		0.0
FIELD RESERVOIR	47	0	0.0	47	0	0.0	47	0	0.0
FIELD RESERVOIR - PLPH (duplicate-not counted)	47	0	0.0	47	0	0.0	0		0.0
Monthly	209	0	0.0	209	0	0.0	155	9	5.8
<b>August</b>									
FIELD DISTRIBUTION	111	1	0.9	111	0	0.0	111	8	7.2
FIELD DISTRIBUTION - PLPH	54	0	0.0	54	0	0.0	0		0.0
FIELD RESERVOIR	60	0	0.0	60	0	0.0	60	1	1.7
FIELD RESERVOIR - PLPH (duplicate-not counted)	48	0	0.0	48	0	0.0	0		0.0
Monthly	225	1	0.4	225	0	0.0	171	9	5.3
<b>September</b>									
FIELD DISTRIBUTION	109	0	0.0	109	0	0.0	108	0	0.0
FIELD DISTRIBUTION - PLPH	54	0	0.0	54	0	0.0	0		0.0
FIELD RESERVOIR	48	0	0.0	48	0	0.0	48	0	0.0
FIELD RESERVOIR - PLPH (duplicate-not counted)	48	0	0.0	48	0	0.0	0		0.0
Monthly	211	0	0.0	211	0	0.0	156	0	0.0
<b>October</b>									
FIELD DISTRIBUTION	104	0	0.0	104	0	0.0	103	2	1.9
FIELD DISTRIBUTION - PLPH	56	0	0.0	56	0	0.0	0		0.0
FIELD RESERVOIR	48	0	0.0	48	0	0.0	48	1	2.1
FIELD RESERVOIR - PLPH (duplicate-not counted)	48	0	0.0	48	0	0.0	0		0.0
Monthly	208	0	0.0	208	0	0.0	151	3	2.0
<b>November</b>									
FIELD DISTRIBUTION	109	0	0.0	109	0	0.0	109	3	2.8
FIELD DISTRIBUTION - PLPH	54	0	0.0	54	0	0.0	0		0.0
FIELD RESERVOIR	58	0	0.0	58	0	0.0	58	3	5.2
FIELD RESERVOIR - PLPH (duplicate-not counted)	58	0	0.0	58	0	0.0	0		0.0
Monthly	221	0	0.0	221	0	0.0	167	6	3.6
<b>December</b>									
FIELD DISTRIBUTION	108	0	0.0	108	0	0.0	108	9	8.3
FIELD DISTRIBUTION - PLPH	53	0	0.0	53	0	0.0	0		0.0
FIELD RESERVOIR	48	0	0.0	48	0	0.0	48	0	0.0
FIELD RESERVOIR - PLPH (duplicate-not counted)	48	0	0.0	48	0	0.0	0		0.0
Monthly	209	0	0.0	209	0	0.0	156	9	5.8
Year to Date	2,576	2	0.1	2,576	0	0.0	1,922	61	3.2

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## 2.2.2 Bacteriological Data: Distribution System

December 2016

### Samples from Depressurizations

	Coliforms, total			E. coli			Heterotrophic Plate Count		
	Count	# +ve	% +ve	Count	# +ve	% +ve	Count	# +ve	% +ve
January	46	0	0.0	46	0	0.0	0	0	0.0
February	50	0	0.0	50	0	0.0	0	0	0.0
March	70	0	0.0	70	0	0.0	0	0	0.0
April	72	0	0.0	72	0	0.0	0	0	0.0
May	76	1	1.3	76	0	0.0	2	0	0.0
June	91	0	0.0	91	0	0.0	0	0	0.0
July	100	1	1.0	100	0	0.0	0	0	0.0
August	106	4	3.8	106	0	0.0	5	0	0.0
September	92	2	2.2	92	1	1.1	1	0	0.0
October	66	1	1.5	66	0	0.0	0	0	0.0
November	55	0	0.0	55	0	0.0	0	0	0.0
December	75	0	0.0	75	0	0.0	0	0	0.0
YTD	899	9	1.0	899	1	0.1	8	0	0.0

### Samples from Complaints

	Coliforms, total			E. coli			Heterotrophic Plate Count		
	Count	# +ve	% +ve	Count	# +ve	% +ve	Count	# +ve	% +ve
January	11	0	0.0	11	0	0.0	11	0	0.0
February	12	0	0.0	12	0	0.0	12	0	0.0
March	16	0	0.0	16	0	0.0	16	0	0.0
April	17	0	0.0	17	0	0.0	17	0	0.0
May	19	0	0.0	19	0	0.0	19	0	0.0
June	16	0	0.0	16	0	0.0	16	0	0.0
July	11	0	0.0	11	0	0.0	11	1	9.1
August	13	0	0.0	13	0	0.0	13	0	0.0
September	18	0	0.0	18	0	0.0	17	1	5.9
October	24	1	4.2	24	0	0.0	24	2	8.3
November	24	0	0.0	24	0	0.0	24	1	4.2
December	9	0	0.0	9	0	0.0	9	0	0.0
YTD	190	1	0.5	190	0	0.0	189	5	2.6

The positive *E. coli* in September was confirmed to be a false positive sample due to a compromised sample point.