

2.2.1 Bacteriological Data: Water Treatment Plants

August 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 | 490 | 1 | 0 | 0/100 mL | PA/100 mL |
| E. coli | 31 | 0 | 0 | 31 | 0 | 0 | 490 | 1 | 0 | 0/100 mL | PA/100 mL |
| Heterotrophic Plate Count | 31 | 0 | 0 | 31 | 1 | 3 | 489 | 12 | 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 | 30 | 0 | 0 | 31 | 0 | 0 | 489 | 0 | 0 | N/A | PA/100 mL |
| E. coli | 30 | 0 | 0 | 31 | 0 | 0 | 489 | 0 | 0 | N/A | PA/100 mL |
| Heterotrophic Plate Count | 30 | 0 | 0 | 31 | 0 | 0 | 488 | 4 | 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 | 5 | 5 | 100 | 280 | 280 | 100 | N/A | MPN/100 mL |
| E. coli | 31 | 31 | 100 | 5 | 5 | 100 | 280 | 280 | 100 | N/A | MPN/100 mL |
| Heterotrophic Plate Count | 1 | 1 | 100 | 1 | 1 | 100 | 16 | 16 | 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

August 2016

| | Coliforms, total | | | E. coli | | | HPC | | |
|--|------------------|-------|-------|---------|-------|-------|-------|-------|-------|
| | Count | # +ve | % +ve | Count | # +ve | % +ve | Count | # +ve | % +ve |
| January | | | | | | | | | |
| 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 |
| February | | | | | | | | | |
| 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 |
| March | | | | | | | | | |
| FIELD DISTRIBUTION | 107 | 0 | 0.0 | 107 | 0 | 0.0 | 107 | 2 | 1.9 |
| 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 | 2 | 3.3 |
| FIELD RESERVOIR - PLPH (duplicate-not counted) | 59 | 0 | 0.0 | 59 | 0 | 0.0 | 0 | | 0.0 |
| Monthly | 221 | 0 | 0.0 | 221 | 0 | 0.0 | 167 | 4 | 2.4 |
| April | | | | | | | | | |
| 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 |
| May | | | | | | | | | |
| 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 |
| June | | | | | | | | | |
| 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 178 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

August 2016

| | Coliforms, total | | | E. coli | | | HPC | | |
|--|------------------|-------|-------|---------|-------|-------|-------|-------|-------|
| | Count | # +ve | % +ve | Count | # +ve | % +ve | Count | # +ve | % +ve |
| July | | | | | | | | | |
| 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 |
| August | | | | | | | | | |
| 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 |
| Year to Date | 1,724 | 2 | 0.1 | 1,724 | 0 | 0.0 | 1,292 | 43 | 3.3 |

Guidelines for Canadian Drinking Water Quality recommend 178 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

August 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 |
| YTD | 611 | 6 | 1.0 | 611 | 0 | 0.0 | 7 | 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 |
| YTD | 115 | 0 | 0.0 | 115 | 0 | 0.0 | 115 | 1 | 0.9 |