

2.2.1 Bacteriological Data: Water Treatment Plants

August 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 | 486 | 0 | 0 | 0/100 mL | PA/100 mL |
| E. coli | 31 | 0 | 0 | 31 | 0 | 0 | 486 | 0 | 0 | 0/100 mL | PA/100 mL |
| Heterotrophic Plate Count | 31 | 10 | 32 | 31 | 12 | 39 | 486 | 29 | 6 | 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 | 485 | 0 | 0 | N/A | PA/100 mL |
| E. coli | 31 | 0 | 0 | 31 | 0 | 0 | 485 | 0 | 0 | N/A | PA/100 mL |
| Heterotrophic Plate Count | 31 | 10 | 32 | 31 | 12 | 39 | 485 | 33 | 7 | 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 | 277 | 277 | 100 | N/A | MPN/100 mL |
| E. coli | 31 | 31 | 100 | 5 | 5 | 100 | 278 | 278 | 100 | N/A | MPN/100 mL |
| Heterotrophic Plate Count | 1 | 1 | 100 | 1 | 1 | 100 | 16 | 16 | 100 | N/A | CFU/mL |

2.2.2 Bacteriological Data: Distribution System
August 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 |

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

| | 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 |
| Year to Date | 1,814 | 1 | 0.1 | 1,814 | 0 | 0.0 | 1,346 | 132 | 9.8 |

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.

**2.2.2 Bacteriological Data: Distribution System
August 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 | | | |
| | Year to Date | | | 45 | 0 | 0.0 | 45 | 0 | 0.0 | 45 | 8 | 17.8 |
| 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 | | | |
| | Year to Date | | | 687 | 7 | 1.0 | 687 | 0 | 0.0 | 13 | 3 | 23.1 |