

**2.1.2 SUMMARY OF MAJOR CHEMICALS, MICROBIOLOGICAL, AND PHYSICAL  
PARAMETERS OF EDMONTON DRINKING WATER PRODUCED  
AT WATER TREATMENT PLANTS**

**June 2020**

| <b>Parameter</b>               | <b>Unit</b>  | <b>Monthly<br/>Count</b> | <b>Monthly<br/>Average</b> | <b>YTD<br/>Median</b> | <b>YTD<br/>Min</b> | <b>YTD<br/>Max</b> | <b>YTD<br/>Count</b> |
|--------------------------------|--------------|--------------------------|----------------------------|-----------------------|--------------------|--------------------|----------------------|
| Alkalinity Total               | mg CaCO3/L   | 60                       | 118                        | 133                   | 71                 | 157                | 365                  |
| Aluminum                       | mg/L         | 2                        | 0.023                      | 0.044                 | 0.019              | 0.094              | 12                   |
| Arsenic                        | mg/L         | 2                        | <0.0002                    | <0.0002               | <0.0002            | <0.0002            | 12                   |
| Bromate Dissolved              | mg/L         | 10                       | <0.003                     | <0.005                | <0.005             | 0.018              | 70                   |
| Bromodichloromethane           | µg/L         | 60                       | 0.5                        | <0.5                  | <0.5               | 1.9                | 369                  |
| Cadmium                        | mg/L         | 2                        | <0.0002                    | <0.0002               | <0.0002            | <0.0002            | 12                   |
| Calcium Hardness               | mg CaCO3/L   | 60                       | 110                        | 112                   | 73                 | 148                | 365                  |
| Chlorate Dissolved             | mg/L         | 10                       | 0.138                      | <0.100                | <0.100             | 0.200              | 70                   |
| Chloride Dissolved             | mg/L         | 10                       | 6.35                       | 5.76                  | 1.03               | 18.30              | 70                   |
| Chlorite Dissolved             | mg/L         | 10                       | <0.20                      | <0.20                 | <0.20              | <0.20              | 70                   |
| Chromium                       | mg/L         | 2                        | <0.0002                    | <0.0002               | <0.0002            | <0.0002            | 12                   |
| Colour                         | TCU          | 60                       | 1.3                        | 1.3                   | <0.5               | 2.7                | 365                  |
| Conductivity                   | µS/cm        | 10                       | 437                        | 407                   | 366                | 490                | 53                   |
| Copper                         | mg/L         | 2                        | <0.0050                    | <0.0050               | <0.0050            | <0.0050            | 12                   |
| Cryptosporidium                | oocysts/100L | 2                        | <0.1                       | <0.1                  | <0.1               | <0.1               | 14                   |
| Fluoride                       | mg/L         | 60                       | 0.30                       | 0.63                  | <0.05              | 0.72               | 363                  |
| Giardia                        | cysts/100L   | 2                        | <0.1                       | <0.1                  | <0.1               | <0.1               | 14                   |
| Haloacetic Acids, total (HAA5) | ug/L         | 2                        | 36.3                       | 24.5                  | 7.3                | 39.2               | 12                   |
| Hardness, Total                | mg CaCO3/L   | 60                       | 167                        | 178                   | 111                | 203                | 365                  |
| Iron                           | mg/L         | 2                        | <0.0050                    | <0.0050               | <0.0050            | <0.0050            | 12                   |
| Lead                           | mg/L         | 2                        | <0.0002                    | <0.0002               | <0.0002            | <0.0002            | 12                   |
| Manganese                      | mg/L         | 2                        | 0.0026                     | <0.0020               | <0.0020            | 0.0060             | 12                   |
| Mercury                        | mg/L         | 2                        | <0.0002                    | <0.0002               | <0.0002            | <0.0002            | 12                   |
| NDMA                           | ng/L         | 2                        | 2.06                       | 1.63                  | <0.50              | 2.43               | 12                   |
| Nitrate (as N) Dissolved       | mg/L         | 10                       | 0.114                      | 0.095                 | 0.020              | 0.730              | 70                   |
| Nitrite (as N) Dissolved       | mg/L         | 10                       | <0.01                      | <0.01                 | <0.01              | 0.02               | 70                   |
| pH                             | N/A          | 60                       | 7.9                        | 7.9                   | 7.3                | 8.2                | 365                  |
| Potassium                      | mg/L         | 2                        | 1.38                       | 0.70                  | 0.60               | 1.90               | 12                   |
| Sodium                         | mg/L         | 2                        | 30.61                      | 9.90                  | 7.40               | 31.60              | 12                   |
| Sulphate Dissolved             | mg/L         | 10                       | 83.3                       | 57.0                  | 36.8               | 132.0              | 70                   |
| Total Chlorine                 | N/A          | 8                        | 2.03                       | 2.00                  | 1.73               | 2.18               | 89                   |
| Total Dissolved Solids         | mg/L         | 2                        | 273                        | 239                   | 207                | 280                | 12                   |
| Total Organic Carbon           | mg/L C       | 10                       | 2.6                        | 2.1                   | 1.0                | 3.7                | 52                   |
| Trihalomethanes                | mg/L         | 60                       | 0.025                      | 0.016                 | 0.004              | 0.037              | 365                  |
| Turbidity                      | NTU          | 60                       | 0.05                       | 0.05                  | 0.02               | 0.22               | 365                  |
| Uranium                        | mg/L         | 2                        | <0.0005                    | <0.0005               | <0.0005            | 0.0006             | 12                   |
| Zinc                           | mg/L         | 2                        | 0.0054                     | <0.0050               | <0.0050            | 0.0060             | 12                   |
| <b>Bacteriological Data</b>    |              |                          |                            |                       |                    |                    |                      |
| Coliforms, total               | PA/100mL     | 60                       | Absent                     | Absent                | Absent             | Absent             | 365                  |
| E. coli                        | PA/100mL     | 60                       | Absent                     | Absent                | Absent             | Absent             | 365                  |