

| PARAMETERS | HEALTH CANADA RECOMMENDATIONS (2014) | QUEBEC REGULATION DRINKING WATER QUALITY (Q-2,r.40) | DRINKING WATER | | |
|---|--|--|-----------------------|----------|----------|
| | | | CONCENTRATION | | |
| | | | MIN. | AVE. | MAX. |
| Physical Properties | | | | | |
| Conductivity (µS/cm) ** | -- | -- | 234 | 314 | 353 |
| Color (T.C.U.) ** | ≤15 ¹ | -- | <0.3 | 0.98 | 5.00 |
| Agressivity Index ** | -- | -- | 11.5 | 12.0 | 12.3 |
| Ryznar Index | -- | -- | 7.8 | 8.8 | 9.4 |
| Langelier's Saturation Index | -- | -- | -0.87 | -0.37 | 0.24 |
| pH (units) | 6.5 - 8.5 | 6.5 - 8.5 | 7.40 | 7.95 | 8.20 |
| Solids (mg/l) ** | | | 90 | 141 | 155 |
| Total Solids(mg/l) ** | | | 166 | 183 | 264 |
| Temperature (°C) ** | | | 0.00 | 6.12 | 21.00 |
| Turbidity (N.T.U.) | ≤1.0 | ≤5 / ≤1 ² | 0.15 | 0.24 | 0.54 |
| Biological Characteristics | | | | | |
| | | | ANNUAL AVERAGE | | |
| Total coliforms (C.F.U./100ml) | >90% ABS ⁴ | >90% ABS ⁴ | 99.9% ABS | | |
| E. coli (C.F.U./100ml) | ABS ⁴ | <1 or ABS ⁴ | 100% ABS | | |
| HPC (C.F.U./ml) | -- | -- | | | |
| Inorganic and Organic Chemical Characteristics (mg/l) | | | | | |
| Antimony (Sb) | ≤0.006 | ≤0.006 | 0.00013 | 0.00014 | 0.00015 |
| Alkalinity (eq. CaCO ₃) ** | -- | -- | 80 | 92 | 101 |
| Aluminum (Al) ** | <0.1 | -- | 0.00465 | 0.06977 | 0.28850 |
| Silver (Ag) ** | -- | -- | <0.00003 | <0.00003 | 0.00009 |
| Arsenic (As) | ≤0.010 | ≤0.010 | 0.00076 | 0.00082 | 0.00087 |
| Barium (Ba) | ≤1.0 | ≤1.0 | 0.02086 | 0.02098 | 0.02110 |
| Bore (B) | ≤5 | ≤5.0 | <0.02 | <0.02 | <0.02 |
| Bromated (BrO ₃) * | ≤0.01 | ≤0.010 | <0.0001 | 0.00043 | 0.00170 |
| Cadmium (Cd) | ≤0.005 | ≤0.005 | <0.00003 | <0.00003 | <0.00003 |
| Calcium (Ca) ** | -- | -- | 28.40 | 31.95 | 35.68 |
| Total Organic Carbon (TOC) ** | -- | -- | 1.51 | 2.01 | 2.66 |
| Chlorides (Cl) ** | ≤250 ¹ | -- | 25.46 | 27.17 | 28.65 |
| Chromium (Cr) | ≤0.05 | ≤0.050 | 0.00001 | 0.00015 | 0.00028 |
| Cobalt (Co) ** | -- | -- | <0.00002 | <0.00002 | 0.00002 |
| Copper (Cu) ⁷ | ≤1.0 ¹ | ≤1.0 | 0.05767 | 0.08849 | 0.11930 |
| Cyanides (CN) | ≤0.2 | ≤0.20 | <0.004 | <0.004 | <0.004 |
| Total Hardness (eq. CaCO ₃) ** | -- | -- | 107 | 116 | 132 |
| Iron (Fe) ** | ≤0.3 ¹ | -- | 0.01 | 0.02 | 0.03 |
| Fluorides (F) | ≤1.5 | ≤1.50 | 0.13 | 0.13 | 0.13 |
| Magnesium (Mg) ** | -- | -- | 7.40 | 8.21 | 9.11 |
| Manganese (Mn) ** | ≤0.05 ¹ | -- | 0.00003 | 0.00036 | 0.00077 |
| Mercury (Hg) | ≤0.001 | ≤0.001 | <0.00003 | <0.00003 | <0.00003 |
| Nickel (Ni) ** | -- | -- | 0.00042 | 0.00051 | 0.00061 |
| Nitrites (NO ₂ -N) + nitrates (NO ₃ -N) | ≤1 + ≤10 | ≤10.0 | 0.26 | 0.33 | 0.52 |
| Lead (Pb) ⁷ | ≤0.010 | ≤0.010 | 0.00070 | 0.00085 | 0.00100 |
| Potassium (K) ** | -- | -- | 1.43 | 1.58 | 1.78 |

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| | | | MIN. | AVE. | MAX. |
| Inorganic and Organic Chemical Characteristics (mg/l) | | | | | |
| Selenium (Se) | ≤0.05 | ≤0.010 | <0.00021 | <0.00021 | 0.00039 |
| Silica (SiO ₂) ** | -- | -- | 0.55 | 0.90 | 1.20 |
| Sodium (Na) ** | ≤200 ¹ | -- | 13.43 | 14.74 | 16.39 |
| Sulfates (SO ₄) ** | ≤500 ¹ | -- | 22.80 | 24.36 | 27.16 |
| Uranium (U) | ≤0.02 | ≤0.020 | 0.00032 | 0.00034 | 0.00036 |
| Zinc (Zn) ** | ≤5.0 ¹ | -- | <0.00017 | 0.00059 | 0.00171 |

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| | | | | MAXIMUM DETECTED (µg/L) |
| Carbamates | | | | |
| Bendiocarb * | - | | 27 | N.D. |
| Carbaryl * | 90 | | 70 | N.D. |
| Carbofuran * | 90 | | 70 | N.D. |
| Volatile Organic Compounds (VOC) | | | | |
| 1,1,1,2-Tétrachloroethane | - | | - | N.D. |
| 1,1,1-Trichloroethane | - | | - | N.D. |
| 1,1,2,2-Tétrachloroethane | - | | - | N.D. |
| 1,1,2-Trichloroethane | - | | - | N.D. |
| 1,1-Dichloroethane | - | | - | N.D. |
| 1,1-Dichloroethylene | 14 | | 10 | N.D. |
| 1,1-Dichloropropene | - | | - | N.D. |
| 1,2,3-Trichlorobenzene | - | | - | N.D. |
| 1,2,3-Trichloropropane | - | | - | N.D. |
| 1,2,4-Trichlorobenzene | - | | - | N.D. |
| 1,2,4-Triméthylbenzene | - | | - | N.D. |
| 1,2-Dibromo-3-chloropropane | - | | - | N.D. |
| 1,2-Dibromoethane | - | | - | N.D. |
| 1,2-Dichlorobenzene | 200 | 3 ¹ | 150 | N.D. |
| 1,2-Dichloroethane | 5 | | 5 | N.D. |
| 1,2-Dichloropropane | - | | - | N.D. |
| 1,3,5-Triméthylbenzene | - | | - | N.D. |
| 1,3-Dichlorobenzene | - | | - | N.D. |
| 1,3-Dichloropropane | - | | - | N.D. |
| 1,4-Dichlorobenzene | 5 | 1 ¹ | 5 | N.D. |
| 1-Chlorobutane | - | | - | N.D. |
| 1-Propene,3-chloro | - | | - | N.D. |
| 2,2-Dichloropropane | - | | - | N.D. |
| 2-Butanone | - | | - | N.D. |
| 2-Chlorotoluene | - | | - | N.D. |
| 2-Nitropropane | - | | - | N.D. |
| 4-Chlorotoluene | - | | - | N.D. |
| 4-Isopropyltoluene | - | | - | N.D. |
| Acrylonitrile | - | | - | N.D. |
| Benzene | 5 | | 0.5 | N.D. |
| Bromobenzene | - | | - | N.D. |
| Bromochloromethane | - | | - | N.D. |
| Bromoform | - | | See Note 3 | 0.95 |
| Bromodichloromethane | - | | See Note 3 | 13.70 |
| Bromomethane | - | | - | N.D. |
| Chloroacetonitrile | - | | - | N.D. |
| Chlorobenzene | 80 | 30 ¹ | 60 | N.D. |
| Chlorodibromomethane | - | | See Note 3 | 6.17 |
| Chloroethane | - | | - | N.D. |

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| | | | | MAXIMUM DETECTED (µg/L) |
| Volatile Organic Compounds (VOC) | | | | |
| Chloroform | - | | See Note 3 | 49.54 |
| Chloromethane | - | | - | N.D. |
| Vinyl chloride | 2 | | 2 | N.D. |
| cis-1,2-Dichloroethylene | - | | - | N.D. |
| cis-1,3-Dichloropropene | - | | - | N.D. |
| Dibromomethane | - | | - | N.D. |
| Dichlorodifluoromethane | - | | - | N.D. |
| Dichloromethane | 50 | | 50 | N.D. |
| Diethylether | - | | - | 0.15 |
| Carbon disulfide | - | | - | N.D. |
| Ethylbenzene | 140 | 1.6 ¹ | - | N.D. |
| Hexachlorobutadiene | - | | - | N.D. |
| Hexachloroethane | - | | - | N.D. |
| Isopropylbenzene | - | | - | N.D. |
| Methacrylonitrile | - | | - | N.D. |
| Methyl acrylate | - | | - | N.D. |
| Methyl methacrylate | - | | - | N.D. |
| MTBE(methyl tert-butyl ether) | - | 15 ¹ | - | N.D. |
| m-Xylene + p-Xylene + o-Xylene | 90 | 200 ¹ | - | N.D. |
| Naphthalene | - | | - | N.D. |
| n-Butylbenzene | - | | - | N.D. |
| n-Propylbenzene | - | | - | N.D. |
| Propionitrile | - | | - | N.D. |
| sec-Butylbenzene | - | | - | N.D. |
| Styrene | - | | - | N.D. |
| tert-Butylbenzene | - | | - | N.D. |
| Tetrachloroethylene | 30 | | 25 | N.D. |
| Carbon tetrachloride | 2 | | 5 | N.D. |
| Tetrahydrofurane | - | | - | N.D. |
| Toluene | 60 | 24 ¹ | - | 0.05 |
| trans-1,2-Dichloroethylene | - | | - | N.D. |
| trans-1,3-Dichloropropene | - | | - | N.D. |
| Trans-1,4-dichloro-2-butene | - | | - | N.D. |
| Trichloroethylene | 5 | | 5 | N.D. |
| Trichlorofluoromethane | - | | - | N.D. |
| Trihalomethanes (THM) (total) | - | | See Note 3 | 65.23 |
| Trihalomethanes (THM) (total) – Annual mean concentration | 100 | | 80 ³ | 46.58 |
| Phenolic Compounds | | | | |
| 2,3,4,6-Tetrachlorophenol * | 100 | 1 ¹ | 70 | N.D. |
| 2,4 -Dichlorophenol * | 900 | 0.3 ¹ | 700 | N.D. |
| 2,4,6-Trichlorophenol * | 5 | 2 ¹ | 5 | N.D. |
| Pentachlorophenol * | 60 | 30 ¹ | 42 | N.D. |

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|---|--|--|----------------------------|
| | | | MAXIMUM DETECTED (µg/L) |
| Glyphosate | | | |
| Glyphosate * | 280 | 210 | N.D. |
| Polycyclic Aromatic Hydrocarbons (PAH) | | | |
| Benzo(a)pyrene * | 0.01 | 0.01 | N.D. |
| Triazine Herbicides | | | |
| Atrazine and metabolites * | 5 | 3.5 | N.D. |
| Cyanazine * | - | 9 | N.D. |
| Metribuzine * | 80 | 60 | N.D. |
| Simazine * | 10 | 9 | N.D. |
| Chlorophenoxy Acid and Trichloroacetate Pesticides | | | |
| 2,4-D * | 100 | 70 | N.D. |
| Dicamba * | 120 | 85 | N.D. |
| Dinoseb * | - | 7 | N.D. |
| Picloram * | 190 | 140 | N.D. |
| Organochlorine Pesticides | | | |
| Metolachlor * | 50 | 35 | N.D. |
| Methoxychlor * | - | 700 | N.D. |
| Trifluralin * | 45 | 35 | N.D. |
| Organophosphorus Pesticides | | | |
| Azinphos-methyl * | 20 | 17 | N.D. |
| Chlorpyrifos * | 90 | 70 | N.D. |
| Diazinon * | 20 | 14 | N.D. |
| Dimethoate * | 20 | 14 | N.D. |
| Diuron * | 150 | 110 | N.D. |
| Malathion * | 190 | 140 | N.D. |
| Parathion * | - | 35 | N.D. |
| Phorate * | 2 | 1.4 | N.D. |
| Terbufos * | 1 | 0.5 | N.D. |
| Others | | | |
| Bromoxynil * | 5 | 3.5 | N.D. |
| Methyl-Diclofop * | 9 | 7 | N.D. |
| Diquat * | 70 | 50 | N.D. |
| Paraquat * | 10 | 7 | N.D. |

- *: Analyzed by an outside accredited laboratory.
- ** : At the exit of water treatment plant.
- N.D.: Not detected, lower than the detection limit method.
- D.: Detected, but cannot determine quantity.

Notes:

- 1: Esthetical or organoleptic reasons.
- 2: Turbidity must be equal or under 5 NTU and must not overpass 1.0 NTU for more than 5 % of total measures taken within 30 days.
- 3: The annual mean concentration of total THM (chloroform, bromodichloromethane, chlorodibromomethane and bromoform) must not exceed 80 µg/L (samples taken at the end of drinking water distribution network).
- 4: ABS: absence.
- 5: Health reasons objectives.
- 6: Maximum obtained for a sampling site.
- 7: Lead and copper level at the center of water distribution network. When water samples are taken from old pipes (before 1970) results are shown below.

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|-------------|--|--|---------------------------------|---------|---------|
| | | | MIN. | AVE. | MAX. |
| | | | Copper and Lead (mg/l) | | |
| Copper (Cu) | ≤1.0 ¹ | ≤1.0 | 0.00650 | 0.04460 | 0.12650 |
| Lead (Pb) | ≤0.010 | ≤0.010 | 0.00021 | 0.00745 | 0.02032 |