

PARAMETERS	HEALTH CANADA RECOMMENDATIONS (2017)	QUEBEC REGULATION DRINKING WATER QUALITY (Q-2,r.40)	DRINKING WATER		
			CONCENTRATION		
			MIN.	AVE.	MAX.
Physical Properties					
pH (units)	7,0-10,5 ⁵	6,5 - 8,5	6,80	7,08	7,30
Turbidity (N.T.U.) ²	≤1,0	≤5	0,08	0,17	0,26
Biological Characteristics					
			ANNUAL AVERAGE		
Total coliforms (C.F.U./100ml)	>90% ABS ⁴	>90% ABS ⁴	100 % ABS ⁸		
E. coli (C.F.U./100ml)	ABS ⁴	<1 or ABS ⁴	100 % ABS ⁸		
Inorganic and Organic Chemical Characteristics (mg/l)					
Antimony (Sb)	≤0.006	≤0.006	0,00011	0,00011	0,00011
Aluminum (Al) **	<0.1	--	0,00853	0,01444	0,02150
Silver (Ag) **	--	--	<0,00003	<0,00003	0,00003
Arsenic (As)	≤0.010	≤0.010	0,00040	0,00040	0,00040
Barium (Ba)	≤1.0	≤1.0	0,01810	0,01810	0,01810
Bore (B)	≤5	≤5.0	0,04700	0,04700	0,04700
Bromated (BrO ₃) *	≤0.01	≤0.010	<0,0001	0,00073	0,00260
Cadmium (Cd)	≤0.005	≤0.005	<0,00004	<0,00004	<0,00004
Calcium (Ca) **	--	--	10,80	15,38	21,30
Chromium (Cr)	≤0.05	≤0.050	0,00009	0,00009	0,00009
Cobalt (Co) **	--	--	0,00002	0,00003	0,00004
Copper (Cu) ⁷	≤1.0 ¹	≤1.0	0,01360	0,01360	0,01360
Cyanides (CN ⁻)	≤0.2	≤0.20	<0,004	<0,004	<0,004
Iron (Fe) **	≤0.3 ¹	--	<0,00432	<0,00432	0,00299
Fluorides (F ⁻)	≤1.5	≤1.50	0,09	0,09	0,09
Magnesium (Mg) **	--	--	2,23	3,37	4,83
Manganese (Mn) **	≤0.05 ¹	--	0,00512	0,00592	0,00701
Mercury (Hg)	≤0.001	≤0.001	<0,00003	<0,00003	<0,00003
Nickel (Ni) **	--	--	0,00033	0,00039	0,00047
Nitrites (NO ₂ -N) + nitrates (NO ₃ -N)	≤1 + ≤10	≤10.0	0,15	0,25	0,32
Lead (Pb) ⁷	≤0.010	≤0.010	0,00012	0,00012	0,00012
Potassium (K) **	--	--	0,69	0,94	1,14
Selenium (Se)	≤0.05	≤0.010	<0,00021	<0,00021	<0,00021
Sodium (Na) **	≤200 ¹	--	9,53	15,97	22,10
Uranium (U)	≤0.02	≤0.020	0,00002	0,00002	0,00002

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Carbamates					
Bendiocarb *	-		27	0,20	N.D.
Carbaryl *	90		70	0,20	N.D.
Carbofuran *	90		70	0,20	N.D.
Volatile Organic Compounds (VOC)					
1,1,1,2-Tétrachloroethane	-		-	0,06	N.D.
1,1,1-Trichloroethane	-		-	0,06	N.D.
1,1,2,2-Tétrachloroethane	-		-	0,06	N.D.
1,1,2-Trichloroethane	-		-	0,06	N.D.
1,1-Dichloroethane	-		-	0,06	N.D.
1,1-Dichloroethylene	14		10	0,06	N.D.
1,1-Dichloropropene	-		-	0,06	N.D.
1,2,3-Trichlorobenzene	-		-	0,06	N.D.
1,2,3-Trichloropropane	-		-	0,06	N.D.
1,2,4-Trichlorobenzene	-		-	0,06	N.D.
1,2,4-Triméthylbenzene	-		-	0,06	N.D.
1,2-Dibromo-3-chloropropane	-		-	0,06	N.D.
1,2-Dibromoethane	-		-	0,06	N.D.
1,2-Dichlorobenzene	200	3 ¹	150	0,06	N.D.
1,2-Dichloroethane	5		5	0,06	N.D.
1,2-Dichloropropane	-		-	0,06	N.D.
1,3,5-Triméthylbenzene	-		-	0,06	N.D.
1,3-Dichlorobenzene	-		-	0,06	N.D.
1,3-Dichloropropane	-		-	0,06	N.D.
1,4-Dichlorobenzene	5	1 ¹	5	0,06	N.D.
2,2-Dichloropropane	-		-	0,06	N.D.
2-Chlorotoluene	-		-	0,06	N.D.
4-Chlorotoluene	-		-	0,06	N.D.
4-Isopropyltoluene	-		-	0,06	N.D.
Benzene	5		0,5	0,06	N.D.
Bromobenzene	-		-	0,06	N.D.
Bromochloromethane	-		-	0,06	N.D.
Bromoform	-		See Note 3	0,06	0,10
Bromodichloromethane	-		See Note 3	0,06	14,90
Bromomethane	-		-	0,06	N.D.
Chlorobenzene	80	30 ¹	60	0,06	N.D.

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					MAXIMUM DETECTED (µg/L)
Volatile Organic Compounds (VOC)					
Chlorodibromomethane	-		See Note 3	0,06	3,90
Chloroethane	-		-	0,06	N.D.
Chloroform	-		See Note 3	0,06	73,50
Chloromethane	-		-	0,06	N.D.
Vinyl chloride	2		2	0,06	N.D.
cis-1,2-Dichloroethylene	-		-	0,06	N.D.
cis-1,3-Dichloropropene	-		-	0,06	N.D.
Dibromomethane	-		-	0,06	N.D.
Dichlorodifluoromethane	-		-	0,06	N.D.
Dichloromethane	50		50	0,06	N.D.
Diethylether	-		-	0,06	N.D.
Carbon disulfide	-		-	0,06	N.D.
Ethylbenzene	140	1,6 ¹	-	0,06	N.D.
Hexachlorobutadiene	-		-	0,06	N.D.
Isopropylbenzene	-		-	0,06	N.D.
MTBE(methyl tert-butyl ether)	-	15 ¹	-	0,06	N.D.
m-Xylene + p-Xylene + o-Xylene	90	20 ¹	-	0,06	N.D.
Naphthalene	-		-	0,06	N.D.
n-Butylbenzene	-		-	0,06	N.D.
n-Propylbenzene	-		-	0,06	N.D.
sec-Butylbenzene	-		-	0,06	N.D.
Styrene	-		-	0,06	N.D.
tert-Butylbenzene	-		-	0,06	N.D.
Tetrachloroethylene	10		25	0,06	N.D.
Carbon tetrachloride	2		5	0,06	N.D.
Toluene	60	24 ¹	-	0,06	N.D.
trans-1,2-Dichloroethylene	-		-	0,06	N.D.
trans-1,3-Dichloropropene	-		-	0,06	N.D.
Trichloroethylene	5		5	0,06	N.D.
Trichlorofluoromethane	-		-	0,06	N.D.
Trihalomethanes (THM) (total) ⁶	-		See Note 3	0,24	82,80
Trihalomethanes (THM) (total) – Annual mean concentration	100		80 ³	0,24	69,45

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Phenolic Compounds					
2,3,4,6-Tetrachlorophenol *	100	1 [†]	70	0,40	N.D.
2,4 -Dichlorophenol *	900	0,3 [†]	700	0,30	N.D.
2,4,6-Trichlorophenol *	5	2 [†]	5	0,40	N.D.
Pentachlorophenol *	60	30 [†]	42	0,40	N.D.
Glyphosate					
Glyphosate *	280		210	10,00	N.D.
Polycyclic Aromatic Hydrocarbons (PAH)					
Benzo(a)pyrene *	0,04		0,01	0,003	N.D.
Triazine Herbicides					
Atrazine and metabolites *	5		3,5	0,30	N.D.
Cyanazine *	-		9	0,20	N.D.
Metribuzine *	80		60	0,20	N.D.
Simazine *	10		9	0,20	N.D.
Chlorophenoxy Acid and Trichloroacetate Pesticides					
2,4-D *	100		70	0,03	N.D.
Dicamba *	120		85	0,60	N.D.
Dinoseb *	-		7	0,40	N.D.
Picloram *	190		140	0,06	N.D.
Organochlorine Pesticides					
Metolachlor *	50		35	0,20	N.D.
Methoxychlor *	-		700	0,03	N.D.
Trifluralin *	45		35	0,20	N.D.
Organophosphorus Pesticides					
Azinphos-methyl *	20		17	0,30	N.D.
Chlorpyrifos *	90		70	0,20	N.D.
Diazinon *	20		14	0,20	N.D.
Dimethoate *	20		14	0,20	N.D.
Diuron *	150		110	0,30	N.D.
Malathion *	190		140	0,20	N.D.
Parathion *	-		35	0,20	N.D.
Phorate *	2		1,4	0,20	N.D.
Terbufos *	1		0,5	0,20	N.D.
Others					
Bromoxynil *	5		3,5	0,40	N.D.
Methyl-Diclofop *	9		7	0,20	N.D.
Diquat *	70		50	10,00	N.D.
Paraquat *	10		7	0,60	N.D.
Haloacetic Acids *	80		60	3,00	29,60

- * : Analyzed by an outside accredited laboratory.
- ** : At the exit of water treatment plant.
- RDL: Reported Detection Limit.
- 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 (nephelometric turbidity units).
- 3: The annual mean concentration of total THM (chloroform, bromodichloromethane, chlorodibromomethane and bromoform) calculated over four consecutive quarters must not exceed 80 µg/L (samples taken at the end of drinking water distribution network).
- 4: ABS = Absence. PRE= presence
- 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.
- 8: There is no requirement for annual average. It is used only as a reference. For all year long, monthly average have been respected

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			MIN.	AVE.	MAX.
Copper and Lead (mg/l)					
Copper (Cu)	≤1.0 ¹	≤1.0	0,00719	0,02456	0,06540
Lead (Pb)	≤0.010	≤0.010	0,00016	0,00147	0,00848