

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	7,00	7,08	7,20
Turbidity (N.T.U.) - Pierrefonds	≤1.0	≤5	0,17	0,32	0,98
Turbidity (N.T.U.) - Dollard-des-Ormeaux			0,15	0,24	0,35
Turbidity (N.T.U.) - Senneville			0,19	0,58	3,86
Turbidity (N.T.U.) - Ste-Anne-de-Bellevue			0,11	0,17	0,36
Biological Characteristics					
			ANNUAL AVERAGE		
Pierrefonds-Roxboro Network					
Total coliforms ⁴ (PRE-ABS/100ml)	>90% ABS ⁹	>90% ABS ⁹	99.8 % ABS ¹⁰		
E. coli ⁴ (PRE-ABS/100ml)	ABS	<1 or 100 % ABS	100 % ABS		
Dollard-Des-Ormeaux Network					
Total coliforms ⁴ (PRE-ABS/100ml)	>90% ABS ⁹	>90% ABS ⁹	99,7 % ABS ¹⁰		
E. coli ⁴ (PRE-ABS/100ml)	ABS	<1 or 100 % ABS	100 % ABS		
Senneville Network (Phillips Aqueduct)					
Total coliforms ⁴ (PRE-ABS/100ml)	< 1 PRE / month ¹¹	< 1 PRE / month ¹¹	100 % ABS ¹⁰		
E. coli ⁴ (PRE-ABS/100ml)	ABS	<1 or 100 % ABS	100 % ABS		
Sainte-Anne-de-Bellevue Network					
Total coliforms ⁴ (PRE-ABS/100ml)	< 1 PRE / month ¹¹	< 1 PRE / month ¹¹	100 % ABS ¹⁰		
E. coli ⁴ (PRE-ABS/100ml)	ABS	<1 or 100 % ABS	100 % ABS		
Inorganic and Organic Chemical Characteristics (mg/L)					
Antimony (Sb)	≤0.006	≤0.006	0,00004	0,00004	0,00004
Aluminum (Al) **	<0.1	--	0,0283	0,0457	0,0684
Silver (Ag) **	--	--	<0.00003	<0.00003	0,00003
Arsenic (As)	≤0.010	≤0.010	0,0003	0,0003	0,0003
Barium (Ba)	≤1.0	≤1.0	0,0139	0,0139	0,0139
Bore (B)	≤5	≤5.0	<0,02	<0,02	<0,02
Bromated (BrO ₃) *	≤0.01	≤0.010	<0.0001	0.0030	0,0047
Cadmium (Cd)	≤0.005	≤0.005	<0,00003	<0,00003	<0,00003
Calcium (Ca) **	--	--	15,36	18,91	23,14
Chromium (Cr)	≤0.05	≤0.050	0,00014	0,00014	0,00014
Cobalt (Co) **	--	--	0,00006	0,00063	0,00092
Copper (Cu) ⁷	≤1.0 ¹	≤1.0	0,0265	0,0265	0,0265
Cyanides (CN ⁻)	≤0.2	≤0.20	<0,004	<0,004	<0,004
Iron (Fe) **	≤0.3 ¹	--	0,0112	0,0568	0,0993
Fluorides (F ⁻)	≤1.5	≤1.50	<0,02	<0,02	<0,02
Magnesium (Mg) **	--	--	2,11	2,97	3,65
Manganese (Mn) **	≤0.05 ¹	--	0,00184	0,00662	0,00992
Mercury (Hg)	≤0.001	≤0.001	<0,00003	<0,00003	<0,00003
Nickel (Ni) **	--	--	0,00050	0,00122	0,00159

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Inorganic and Organic Chemical Characteristics (mg/L)					
Nitrites (NO ₂ -N) + nitrates (NO ₃ -N)	≤1 + ≤10	≤10.0	0,22	0,35	0,69
Lead (Pb) ⁷	≤0.010	≤0.010	0,000235	0,000235	0,000235
Potassium (K) **	--	--	0,64	0,82	1,15
Selenium (Se)	≤0.05	≤0.010	<0,0002	<0,0002	<0,0002
Sodium (Na) **	≤200 ¹	--	4,17	6,09	10,00
Uranium (U)	≤0.02	≤0.020	0,00002	0,00002	0,00002
Zinc (Zn) **	≤5.0 ¹	--	0,00042	0,00117	0,00273

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	Carbamates				
Bendiocarb *	-		27	0.1 à 0.2	N.D.
Carbaryl *	90		70	0.1 à 0.2	N.D.
Carbofuran *	90		70	0.1 à 0.2	N.D.
Volatile Organic Compounds (VOC)					
1,1,1,2-Tétrachloroethane	-		-	0.06 à 0.08	N.D.
1,1,1-Trichloroethane	-		-	0.05 à 0.06	N.D.
1,1,1,2-Tétrachloroethane	-		-	0.06	N.D.
1,1,2-Trichloroethane	-		-	0.05 à 0.06	N.D.
1,1-Dichloroethane	-		-	0.06	N.D.
1,1-Dichloroethylene	14		10	0.06 à 0.07	N.D.
1,1-Dichloropropene	-		-	0.06	N.D.
1,2,3-Trichlorobenzene	-		-	0.04 à 0.06	N.D.
1,2,3-Trichloropropane	-		-	0.06 à 0.09	N.D.
1,2,4-Trichlorobenzene	-		-	0.04 à 0.06	N.D.
1,2,4-Triméthylbenzene	-		-	0.04 à 0.06	N.D.
1,2-Dibromo-3-chloropropane	-		-	0.06 à 0.24	N.D.
1,2-Dibromoethane	-		-	0.04 à 0.06	N.D.
1,2-Dichlorobenzene	200	3 ¹	150	0.06 à 0.07	N.D.
1,2-Dichloroethane	5		5	0.05 à 0.06	N.D.
1,2-Dichloropropane	-		-	0.06	N.D.
1,3,5-Triméthylbenzene	-		-	0.02 à 0.06	N.D.
1,3-Dichlorobenzene	-		-	0.06	N.D.
1,3-Dichloropropane	-		-	0.02 à 0.06	N.D.
1,4-Dichlorobenzene	5	1 ¹	5	0.05 à 0.06	N.D.
1-Chlorobutane	-		-	0.08	N.D.
1-Propene,3-chloro	-		-	0.2	N.D.
2,2-Dichloropropane	-		-	0.06	N.D.
2-Butanone	-		-	0.22	N.D.
2-Chlorotoluene	-		-	0.06	N.D.
2-Nitropropane	-		-	0.31	N.D.
4-Chlorotoluene	-		-	0.04 à 0.06	N.D.
4-Isopropyltoluene	-		-	0.03 à 0.06	N.D.
Acrylonitrile	-		-	0.13	N.D.
Benzene	5		0.5	0.05 à 0.06	N.D.
Bromobenzene	-		-	0.05 à 0.06	N.D.
Bromochloromethane	-		-	0.06 à 0.07	N.D.
Bromoform - Pierrefonds	-				N.D.
Bromoform - Dollard-des-Ormeaux	-		See Note 3	0.06 à 0.09	N.D.
Bromoform - Senneville	-				N.D.

Bromoform - Ste-Anne-de-Bellevue					N.D.
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	Volatile Organic Compounds (VOC)				
Bromodichloromethane - Pierrefonds					5.47
Bromodichloromethane - Dollard-des-Ormeaux	-		See Note 3	0.04 à 0.06	7.64
Bromodichloromethane - Senneville					5.74
Bromodichloromethane - Ste-Anne-de-Bellevue					4.67
Bromomethane	-		-	0.06 à 0.15	N.D.
Chloroacetonitrile	-		-	1.38	N.D.
Chlorobenzene	80	30 ¹	60	0.05 à 0.06	N.D.
Chlorodibromomethane - Pierrefonds					1.00
Chlorodibromomethane - Dollard-des-Ormeaux	-		See Note 3	0.04 à 0.06	1.00
Chlorodibromomethane - Senneville					1.20
Chlorodibromomethane - Ste-Anne-de-Bellevue					0.76
Chloroethane	-		-	0.06 à 0.19	N.D.
Chloroform - Pierrefonds					34.03
Chloroform - Dollard-des-Ormeaux	-		See Note 3	0.05 à 0.06	63.19
Chloroform - Senneville					34.35
Chloroform - Ste-Anne-de-Bellevue					67.48
Chloromethane	-		-	0.06 à 0.08	N.D.
Vinyl chloride	2		2	0.06 0.07	N.D.
cis-1,2-Dichloroethylene	-		-	0.06 à 0.07	N.D.
cis-1,3-Dichloropropene	-		-	0.06 à 0.11	N.D.
Dibromomethane	-		-	0.06	N.D.
Dichlorodifluoromethane	-		-	0.06 à 0.08	N.D.
Dichloromethane	50		50	0.06 à 0.09	N.D.
Diethylether	-		-	0.06 à 0.07	N.D.
Carbon disulfide	-		-	0.08	N.D.
Ethylbenzene	140	1.6 ¹	-	0.03 à 0.06	N.D.
Hexachlorobutadiene	-		-	0.06 à 0.08	N.D.
Hexachloroethane	-		-	0.14	N.D.
Isopropylbenzene	-		-	0.03 à 0.06	N.D.
Methacrylonitrile	-		-	0.12	N.D.
Methyl acrylate	-		-	0.1	N.D.
Methyl methacrylate	-		-	0.19	N.D.
MTBE(methyl tert-butyl ether)	-	15 ¹	-	0.05	N.D.
m-Xylene + p-Xylene + o-Xylene	90	20 ¹	-	0.06 à 0.09	N.D.
Naphthalene	-		-	0.06 à 0.11	N.D.
n-Butylbenzene	-		-	0.04 à 0.06	N.D.
n-Propylbenzene	-		-	0.04 à 0.06	N.D.
Propionitrile	-		-	0.27	N.D.
sec-Butylbenzene	-		-	0.06 à 0.1	N.D.

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Volatile Organic Compounds (VOC)					
Styrene	-		-	0.06 à 0.07	N.D.
tert-Butylbenzene	-		-	0.06 à 0.1	N.D.
Tetrachloroethylene	10		25	0.05 à 0.06	N.D.
Carbon tetrachloride	2		5	0.06 à 0.07	N.D.
Tetrahydrofurane	-		-	0.46	N.D.
Toluene	60	24 ¹	-	0.03 à 0.06	N.D.
trans-1,2-Dichloroethylene	-		-	0.06	N.D.
trans-1,3-Dichloropropene	-		-	0.06 à 0.1	N.D.
Trans-1,4-dichloro-2-butene	-		-	0.14	N.D.
Trichloroethylene	5		5	0.06	N.D.
Trichlorofluoromethane	-		-	0.06 à 0.12	N.D.
Trihalomethanes (total) - Pierrefonds					39.77
Trihalomethanes (total) - Dollard-des-Ormeaux					71.45
Trihalomethanes (total) - Senneville			Voir note 3	0.22 à 0.24	39.48
Trihalomethanes (total) - Ste-Anne-de-Bellevue					72.01
Trihalomethanes (total) - Pierrefonds Annual mean concentration					35.72
Trihalomethanes (total) - Dollard-des-Ormeaux Annual mean concentration					52.71
Trihalomethanes (total) - Senneville Annual mean concentration	100		80 ³	0.22 à 0.24	31.49
Trihalomethanes (total) - Ste-Anne-de-Bellevue Annual mean concentration					42.53
Phenolic Compounds					
2,3,4,6-Tetrachlorophenol *	100	1 ¹	70	0.4 à 1	N.D.
2,4 -Dichlorophenol *	900	0.3 ¹	700	0.3 à 1	N.D.
2,4,6-Trichlorophenol *	5	2 ¹	5	0.4 à 1	N.D.
Pentachlorophenol *	60	30 ¹	42	0.4 à 1	N.D.
Glyphosate					
Glyphosate *	280		210	10 à 15	N.D.
Polycyclic Aromatic Hydrocarbons (PAH)					
Benzo(a)pyrene *	0.04		0.01	0.003 à 0.01	N.D.
Triazine Herbicides					
Atrazine and metabolites *	5		3.5	0.1 à 0.3	N.D.
Cyanazine *	-		9	0.1 à 0.2	N.D.
Metribuzine *	80		60	0.1 à 0.2	N.D.
Simazine *	10		9	0.06 à 0.2	N.D.
Chlorophenoxy Acid and Trichloroacetate Pesticides					
2,4-D *	100		70	0.03 à 0.1	0.04

Dicamba *	120	85	0.1 à 0.6	N.D.
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				MAXIMUM DETECTED (µg/L)
Chlorophenoxy Acid and Trichloroacetate Pesticides				
Dinoseb *	-	7	0.1 à .4	N.D.
Picloram *	190	140	0.06 à 0.1	N.D.
Organochlorine Pesticides				
Metolachlor *	50	35	0.07 à 0.2	N.D.
Methoxychlor *	-	700	0.03 à 0.1	N.D.
Trifluralin *	45	35	0.2	N.D.
Organophosphorus Pesticides				
Azinphos-methyl *	20	17	0.1 à 0.3	N.D.
Chlorpyrifos *	90	70	0.1 à 0.2	N.D.
Diazinon *	20	14	0.07 à 0.2	N.D.
Dimethoate *	20	14	0.1 à 0.2	N.D.
Diuron *	150	110	0.1 à 0.3	N.D.
Malathion *	190	140	0.08 à 0.2	N.D.
Parathion *	-	35	0.2	N.D.
Phorate *	2	1.4	0.1 à 0.2	N.D.
Terbufos *	1	0.5	0.2	N.D.
Others				
Bromoxynil *	5	3.5	0.1 à 0.4	N.D.
Methyl-Diclofop *	9	7	0.1 à 0.2	N.D.
Diquat *	70	50	1 à 10	N.D.
Paraquat *	10	7	0.5 à 0.6	N.D.
Haloacetic acids *	80	60	3.0	23.0

- *: 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. For those old pipes, If service line was made of lead, levels of lead in water were high. If service line was not made of lead, results of lead in water were below maximum allowable concentration (MAC).

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			MIN.	AVE.	MAX.
			Copper and Lead (mg/L)		
<i>Pierrefonds-Roxboro Network</i>					
Copper (Cu)	≤1.0 ¹	≤1.0	0,00683	0,02738	0,12200
Lead (Pb)	≤0.010	≤0.010	0,00003	0,00035	0,00378
<i>Dollard-Des-Ormeaux Network</i>					
Copper (Cu)	≤1.0 ¹	≤1.0	0,00825	0,02587	0,08240
Lead (Pb)	≤0.010	≤0.010	0,00002	0,00028	0,00095
<i>Senneville Network (Phillips Aqueduct)</i>					
Copper (Cu)	≤1.0 ¹	≤1.0	0,01590	0,02252	0,03960
Lead (Pb)	≤0.010	≤0.010	0,00004	0,00236	0,01120
<i>Sainte-Anne-de-Bellevue Network</i>					
Copper (Cu)	≤1.0 ¹	≤1.0	0,00937	0,02445	0,05850
Lead (Pb)	≤0.010	≤0.010	0,00005	0,00047	0,00140

- 8 : The reported detection limit has change during the years according the method.
- 9 : When 21 samples or more are taken over a period of 30 consecutive days
- 10 : There is no requirement for annual average. It is used only as a reference. For all year long, monthly average have been respected
- 11 : When less than 21 water samples are taken over a period of 30 consecutive days, only one of these samples may have a presence of total coliforms