

Tippet Road (new in 2020) Raw Well Water Analysis 2275 Tippet Road

CDWG=Canadian Drinking Water Guidelines

MAC=Maximum Acceptable Concentration

OG= Operational Guidance Value

AO=Aesthetic Objective

Orange font indicates non-compliance with the Aesthetic Objective (AO) in the Canadian Drinking Water Guidelines (CDWG)

Red font indicates non-compliance with the Maximum Acceptable Concentration (MAC) in the CDWG

	Units	CDWG		February 25 2021	October 28 2021	October 20 2022	October 26 2023
Miscellaneous Inorganics							
Fluoride	mg/L	1.5	MAC	0.15	0.16	0.17	0.16
Alkalinity (total as CaCO)	mg/L			170	150	150	150
Anions							
Dissolved Sulphate	mg/L	500	AO	6.8	9.1	11	11
Dissolved Chloride	mg/L	250	AO	12	10	9.1	7.8
Nitrite	mg/L	1	MAC	<0.005	<0.005	<0.005	<0.05
Miscellaneous							
Apparent Colour	Colour Unit			15	10	10	10
Nutrients							
Total Ammonia	mg/L			1.3	1.2	1.3	1.3
Physical Properties							
Conductivity	µS/cm			330	330	340	340
pH	pH	7.0:10.5	AO	7.07	7.83	8.05	8.19
TDS	mg/L	500	AO	170	220	180	200
Turbidity	NTU			0.6	0.93	1.1	1.1
Microbiological Parameters							
E.coli	MPN/100mL	<1	MAC	0	0	0	0
Total Coliforms	MPN/100mL	<1	MAC	1	0	0	0
Calculated Parameters							
Total Hardness (CaCO)	mg/L			97.9	118	125	131
Nitrate	mg/L	10	MAC	<0.02	<0.02	<0.02	<0.02
Elements							
Total Mercury	mg/L	0.001	MAC	<0.000019	<0.000019	<0.000019	<0.000019
Total Metals							
Total Aluminum	mg/L	0.1	OG	<0.003	<0.003	<0.003	<0.006
Total Antimony	mg/L	0.006	MAC	<0.0005	<0.0005	<0.0005	<0.001
Total Arsenic	mg/L	0.01	MAC	0.00362	0.00157	0.00147	0.00117
Total Barium	mg/L	1	MAC	0.0095	0.0093	0.0095	0.0095
Total Beryllium	mg/L			<0.0001	<0.0001	<0.0001	<0.0002
Total Bismuth	mg/L			<0.001	<0.001	<0.001	<0.002
Total Boron	mg/L	5	MAC	0.073	0.054	0.055	<0.1
Total Cadmium	mg/L	0.005	MAC	<0.00001	<0.00001	<0.00001	<0.00002
Total Chromium	mg/L	0.05	MAC	<0.001	<0.001	<0.001	<0.002
Total Cobalt	mg/L			<0.0002	<0.0002	0.00074	<0.0004
Total Copper	mg/L	2	AO	0.00078	0.00319	0.00253	0.00059
Total Iron	mg/L	0.3	AO	0.317	0.543	0.575	0.606
Total Lead	mg/L	0.05	MAC	<0.0002	<0.0002	<0.0002	<0.0004
Total Manganese	mg/L	0.02 0.12	AO MAC	0.227	0.256	0.272	0.291
Total Molybdenum	mg/L			<0.001	<0.001	<0.001	<0.002
Total Nickel	mg/L			<0.001	<0.001	<0.001	<0.002
Total Selenium	mg/L	0.05	MAC	<0.0001	<0.0001	<0.0001	<0.0002
Total Silicon	mg/L			14.2	15.4	16.5	16.3
Total Silver	mg/L			<0.00002	<0.00002	<0.00002	<0.00004
Total Strontium	mg/L			0.092	0.106	0.112	0.108
Total Thallium	mg/L			<0.00001	<0.00001	<0.00001	<0.00002
Total Tin	mg/L			<0.005	<0.005	<0.005	<0.01
Total Titanium	mg/L			<0.005	<0.005	<0.005	<0.01
Total Uranium	mg/L	0.02	MAC	<0.0001	<0.0001	<0.0001	<0.0002
Total Vanadium	mg/L			<0.005	<0.005	<0.005	<0.01
Total Zinc	mg/L	5	AO	<0.005	0.0053	0.0052	<0.01
Total Zirconium	mg/L			<0.0001	<0.0001	<0.0001	<0.0002
Total Calcium	mg/L			22.6	28.8	30.8	31.7
Total Magnesium	mg/L			10.1	11.3	11.8	12.6
Total Potassium	mg/L			2.61	2.46	2.54	2.59
Total Sodium	mg/L	200	AO	23.4	18	19.5	19.9
Total Sulphur	mg/L			<3	<3	3.6	<6

Notes below about Manganese (2019) from: <https://www.canada.ca/en/health-canada/services/environmental-workplace-health/reports-publications/water-quality/guidelines-canadian-drinking-water-quality-summary-table.html>

Type	Parameter (published, reaffirmed)	MAC (mg/L)	Other value (mg/L)	Common sources of parameter in water	Health considerations	Comments
I = Inorganic chemical parameter	Manganese (2019)	0.12	AO: <0.02	Dissolution of naturally-occurring minerals commonly found in soil and rock. Other sources include industrial discharge, mining activities and leaching from landfills.	Health Basis of MAC: Effects on neurological development and behaviour; deficits in memory, attention, and motor skills. Other: Formula-fed infants (where water containing manganese at levels above the MAC is used to prepare formula) may be especially at risk.	AO based on minimizing the occurrence of discoloured water, consumer complaints and staining of laundry.

CDWG=Canadian Drinking Water Guidelines

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OG= Operational Guidance Value

AO=Aesthetic Objective

Orange font indicates non-compliance with the Aesthetic Objective (AO) in the Canadian Drinking Water Guidelines (CDWG)

Red font indicates non-compliance with the Maximum Acceptable Concentration (MAC) in the CDWG

	Units	CDWG		October 26 2016	September 21 2017	November 6 2018	October 24 2019	November 5 2020
Miscellaneous Inorganics								
Fluoride	mg/L	1.5	MAC	0.19	0.19	0.19	0.23	0.18
Alkalinity (total as CaCO)	mg/L			144	153	145	140	150
Anions								
Dissolved Sulphate	mg/L	500	AO	12.4	14.6	14.1	18	21
Dissolved Chloride	mg/L	250	AO	13	13	12	13	10
Nitrite	mg/L	1	MAC	<0.0050	<0.0050	<0.0050	<0.005	<0.005
Miscellaneous								
Apparent Colour	Colour Unit			20	20	20	20	20
Nutrients								
Total Ammonia	mg/L			1.7	1.6	1.5	1.6	1.8
Physical Properties								
Conductivity	µS/cm			349	343	341	350	360
pH	pH	7.0:10.5	AO	8.09	8.22	8.13	8.06	8.25
TDS	mg/L	500	AO	196	206	174	210	220
Turbidity	NTU			0.68	0.64	0.71	1.2	0.85
Microbiological Parameters								
E.coli	MPN/100mL	<1	MAC	<1.0	<1.0	<1.0	0	0
Total Coliforms	MPN/100mL	<1	MAC	<1.0	<1.0	<1.0	0	0
Calculated Parameters								
Total Hardness (CaCO)	mg/L			110	112	109	110	115
Nitrate	mg/L	10	MAC	<0.020	<0.0020	<0.020	<0.02	<0.002
Elements								
Total Mercury	mg/L	0.001	MAC	<0.00001	<0.00001	<0.000002	<0.000002	<0.0000019
Total Metals								
Total Aluminum	mg/L	0.1	OG	<0.003	<0.003	0.0032	<0.003	<0.003
Total Antimony	mg/L	0.006	MAC	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Total Arsenic	mg/L	0.01	MAC	0.00121	0.00146	0.00127	0.00135	0.00124
Total Barium	mg/L	1	MAC	0.0077	0.0073	0.0074	0.0079	0.0075
Total Beryllium	mg/L			<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Total Bismuth	mg/L			<0.001	<0.001	<0.001	<0.001	<0.001
Total Boron	mg/L	5	MAC	0.079	0.088	0.084	0.079	0.074
Total Cadmium	mg/L	0.005	MAC	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Total Chromium	mg/L	0.05	MAC	<0.001	<0.001	<0.001	<0.001	<0.001
Total Cobalt	mg/L			<0.0005	<0.0002	<0.0002	<0.0002	<0.0002
Total Copper	mg/L	1	AO	0.00042	0.00115	0.00057	0.00043	<0.0002
Total Iron	mg/L	0.3	AO	0.576	0.513	0.56	0.677	0.618
Total Lead	mg/L	0.01	MAC	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Total Manganese	mg/L	0.02 0.12	AO MAC	0.282	0.292	0.295	0.326	0.296
Total Molybdenum	mg/L			<0.001	<0.001	<0.001	<0.001	<0.001
Total Nickel	mg/L			<0.001	<0.001	<0.001	<0.001	<0.001
Total Selenium	mg/L	0.05	MAC	<0.0001	<0.0001	<0.0001	0.00059	0.00082
Total Silicon	mg/L			15	17.9	16	15	14.6
Total Silver	mg/L			<0.00002	<0.00002	<0.00002	<0.00002	<0.00002
Total Strontium	mg/L			0.104	0.108	0.108	0.114	0.11
Total Thallium	mg/L			<0.00005	<0.00001	<0.00001	<0.00001	<0.00001
Total Tin	mg/L			<0.005	<0.005	<0.005	<0.005	<0.005
Total Titanium	mg/L			<0.005	<0.005	<0.005	<0.005	<0.005
Total Uranium	mg/L	0.02	MAC	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Total Vanadium	mg/L			<0.005	<0.005	<0.005	<0.005	<0.005
Total Zinc	mg/L	5	AO	<0.005	<0.005	<0.005	<0.005	<0.005
Total Zirconium	mg/L			<0.0005	<0.0001	<0.0001	<0.0001	<0.0001
Total Calcium	mg/L			27.1	27.6	26.4	27.4	28.2
Total Magnesium	mg/L			10.3	10.4	10.5	10.2	10.9
Total Potassium	mg/L			2.61	2.99	2.79	2.9	2.75
Total Sodium	mg/L	200	AO	29	28.5	28.8	26.8	24.9
Total Sulphur	mg/L			4.5	5.8	4.8	6.1	6.4

Notes below about Manganese (2019) from: <https://www.canada.ca/en/health-canada/services/environmental-workplace-health/reports-publications/water-quality/guidelines-canadian-drinking-water-quality-summary-table.html>

Type	Parameter (published, reaffirmed)	MAC (mg/L)	Other value (mg/L)	Common sources of parameter in water	Health considerations	Comments
I= Inorganic chemical parameter	Manganese (2019)	0.12	AO: <0.02	Dissolution of naturally-occurring minerals commonly found in soil and rock. Other sources include industrial discharge, mining activities and leaching from landfills.	Health Basis of MAC: Effects on neurological development and behaviour; deficits in memory, attention, and motor skills. Other: Formula-fed infants (where water containing manganese at levels above the MAC is used to prepare formula) may be especially at risk.	AO based on minimizing the occurrence of discoloured water, consumer complaints and staining of laundry.

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	Units	CDWG		October 26 2016	September 21 2017	6 2018	October 24 2019	November 5 2020	October 28 2021	October 20 2022	October 26 2023
Miscellaneous Inorganics											
Fluoride	mg/L	1.5	MAC	0.12	0.13	0.14	0.15	0.13	0.14	0.14	0.14
Alkalinity (total as CaCO)	mg/L			152	164	156	150	160	160	160	140
Anions											
Dissolved Sulphate	mg/L	500	AO	11	13.6	11.3	12	12	14	14	13
Dissolved Chloride	mg/L	250	AO	61	52	47	57	49	51	44	47
Nitrite	mg/L	1	MAC	<0.0050	<0.0050	<0.0050	<0.005	<0.005	<0.005	<0.005	<0.005
Miscellaneous											
Apparent Colour	Colour Unit			30	20	20	20	15	10	15	15
Nutrients											
Total Ammonia	mg/L			1.9	1.8	1.7	1.7	1.9	1.7	1.7	1.9
Physical Properties											
Conductivity	µS/cm			512	488	477	470	480	480	480	490
pH	pH	7.0:10.5	AO	8.14	8.23	8.06	8.08	8.26	7.84	8.05	8.17
TDS	mg/L	500	AO	284	276	252	250	270	280	250	300
Turbidity	NTU			1.11	1.02	0.77	1.2	0.86	0.89	1	1.2
Microbiological Parameters											
E.coli	MPN/100mL	<1	MAC	<1.0	<1.0	<1.0	0	0	0	0	0
Total Coliforms	MPN/100mL	<1	MAC	<1.0	<1.0	<1.0	0	0	0	0	0
Calculated Parameters											
Total Hardness (CaCO)	mg/L			149	144	135	138	134	136	141	150
Nitrate	mg/L	10	MAC	<0.020	<0.020	<0.020	<0.02	<0.02	<0.02	<0.02	<0.02
Elements											
Total Mercury	mg/L	0.001	MAC	<0.00001	<0.00001	<0.000002	<0.000002	<0.0000019	<0.0000019	<0.0000019	<0.0000019
Total Metals											
Total Aluminum	mg/L	0.1	OG	<0.003	<0.003	<0.0030	<0.003	<0.003	<0.003	<0.003	<0.006
Total Antimony	mg/L	0.006	MAC	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
Total Arsenic	mg/L	0.01	MAC	0.00395	0.00379	0.0038	0.00365	0.00344	0.00358	0.00329	0.00336
Total Barium	mg/L	1	MAC	0.0095	0.0099	0.0091	0.0089	0.0086	0.009	0.0087	0.0095
Total Beryllium	mg/L			<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0002
Total Bismuth	mg/L			<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.002
Total Boron	mg/L	5	MAC	0.077	0.090	0.073	0.074	0.073	0.072	0.086	<0.1
Total Cadmium	mg/L	0.005	MAC	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00002
Total Chromium	mg/L	0.05	MAC	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.02
Total Cobalt	mg/L			<0.0005	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0004
Total Copper	mg/L	1	AO	0.00035	<0.0002	0.00153	<0.0002	0.0002	0.0002	0.0005	0.00057
Total Iron	mg/L	0.3	AO	0.561	0.556	0.513	0.526	0.52	0.511	0.517	0.554
Total Lead	mg/L	0.01	MAC	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0004
Total Manganese	mg/L	0.02 0.12	AO MAC	0.231	0.230	0.225	0.247	0.288	0.237	0.235	0.272
Total Molybdenum	mg/L			<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.002
Total Nickel	mg/L			<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.002
Total Selenium	mg/L	0.05	MAC	<0.0001	<0.0001	<0.0001	<0.0001	0.00164	<0.0001	0.00048	0.00066
Total Silicon	mg/L			14.5	16.8	14.8	14.6	13.5	15.9	17.9	17
Total Silver	mg/L			<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00004
Total Strontium	mg/L			0.221	0.224	0.218	0.214	0.202	0.221	0.209	0.236
Total Thallium	mg/L			<0.00005	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00002
Total Tin	mg/L			<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01
Total Titanium	mg/L			<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01
Total Uranium	mg/L	0.02	MAC	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0002
Total Vanadium	mg/L			<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01
Total Zinc	mg/L	5	AO	<0.005	<0.005	0.005	<0.005	<0.005	<0.005	0.0057	<0.01
Total Zirconium	mg/L			<0.0005	<0.0001	<0.0001	<0.0001	<0.0001	0.0001	<0.0001	<0.0002
Total Calcium	mg/L			37.1	35.6	33.7	34.9	32.6	33.4	35.3	36.4
Total Magnesium	mg/L			13.7	13.4	12.3	12.4	12.7	12.7	13	14.2
Total Potassium	mg/L			3.31	3.7	3.45	3.48	3.36	3.51	3.25	3.74
Total Sodium	mg/L	200	AO	42.2	39.5	37	36.3	36	35.2	36.5	38.4
Total Sulphur	mg/L			4.1	6.6	3.8	5.7	3.8	4.9	5.3	6.6

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West Bay #4 Raw Well Water Analysis 2473 Nanoose Road (well water has been sent to the WTP since 2012)

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Miscellaneous Inorganics								
Fluoride	mg/L	1.5	MAC	0.18	0.15	0.16	0.17	0.17
Alkalinity (total as CaCO)	mg/L			140	140	140	140	130
Anions								
Dissolved Sulphate	mg/L	500	AO	6.5	8.2	9.8	9	9.3
Dissolved Chloride	mg/L	250	AO	8.2	8.5	8.7	7.6	7.6
Nitrite	mg/L	1	MAC	<0.005	<0.005	<0.005	<0.05	<0.05
Miscellaneous								
Apparent Colour	Colour Unit			20	15	15	10	10
Nutrients								
Total Ammonia	mg/L			1.1	1.2	1.1	1.2	1.2
Physical Properties								
Conductivity	µS/cm			300	310	310	310	320
pH	pH	7.0:10.5	AO	8.05	8.25	7.8	7.99	8.15
TDS	mg/L	500	AO	170	170	210	170	190
Turbidity	NTU			0.73	0.7	0.64	0.74	0.94
Microbiological Parameters								
E.coli	MPN/100mL	<1	MAC	0	0	0	0	0
Total Coliforms	MPN/100mL	<1	MAC	0	0	0	0	0
Calculated Parameters								
Total Hardness (CaCO)	mg/L			107	107	106	112	113
Nitrate	mg/L	10	MAC	<0.02	<0.02	<0.02	<0.02	<0.02
Elements								
Total Mercury	mg/L	0.001	MAC	<0.000002	<0.0000019	<0.0000019	0.0000034	<0.0000019
Total Metals								
Total Aluminum	mg/L	0.1	OG	<0.003	<0.003	<0.003	<0.003	<0.006
Total Antimony	mg/L	0.006	MAC	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
Total Arsenic	mg/L	0.01	MAC	0.00043	0.00042	0.00047	0.00051	0.00042
Total Barium	mg/L	1	MAC	0.006	0.0058	0.006	0.0063	0.006
Total Beryllium	mg/L			<0.0001	<0.0001	<0.0001	<0.0001	<0.0002
Total Bismuth	mg/L			<0.001	<0.001	<0.001	<0.001	<0.002
Total Boron	mg/L	5	MAC	0.062	0.061	0.059	0.061	<0.10
Total Cadmium	mg/L	0.005	MAC	<0.00001	<0.00001	<0.00001	<0.00001	<0.00002
Total Chromium	mg/L	0.05	MAC	0.0011	<0.001	<0.001	<0.001	<0.002
Total Cobalt	mg/L			<0.0002	<0.0002	<0.0002	0.00035	<0.0004
Total Copper	mg/L	2	AO	0.00991	0.00203	0.00131	0.0203	0.00271
Total Iron	mg/L	0.3	AO	0.569	0.548	0.518	0.552	0.541
Total Lead	mg/L	0.05	MAC	<0.0002	<0.0002	<0.0002	<0.0002	<0.0004
Total Manganese	mg/L	0.02 0.12	AO MAC	0.218	0.191	0.191	0.205	0.199
Total Molybdenum	mg/L			<0.001	<0.001	<0.001	<0.001	<0.002
Total Nickel	mg/L			<0.001	<0.001	<0.001	<0.001	<0.002
Total Selenium	mg/L	0.05	MAC	0.00079	0.00023	<0.0001	<0.0001	<0.0002
Total Silicon	mg/L			13.1	12.8	14.5	15.9	15.3
Total Silver	mg/L			<0.00002	<0.00002	<0.00002	<0.00002	<0.00004
Total Strontium	mg/L			0.103	0.0987	0.104	0.109	0.103
Total Thallium	mg/L			<0.00001	<0.00001	<0.00001	<0.00001	<0.00002
Total Tin	mg/L			<0.005	<0.005	<0.005	<0.005	<0.01
Total Titanium	mg/L			<0.005	<0.005	<0.005	<0.005	<0.01
Total Uranium	mg/L	0.02	MAC	<0.0001	<0.0001	<0.0001	<0.0001	<0.0002
Total Vanadium	mg/L			<0.005	<0.005	<0.005	<0.005	<0.01
Total Zinc	mg/L	5	AO	<0.005	<0.005	0.0102	0.0062	<0.01
Total Zirconium	mg/L			<0.0001	<0.0001	<0.0001	<0.0001	<0.0002
Total Calcium	mg/L			27.1	26.8	26.3	28	36.4
Total Magnesium	mg/L			9.64	9.8	9.67	10.3	14.2
Total Potassium	mg/L			2.44	2.26	2.36	2.45	3.74
Total Sodium	mg/L	200	AO	18.7	18	17.5	18.9	38.4
Total Sulphur	mg/L			<3	<3	3.2	<3	6.6

Notes below about Manganese (2019) from: <https://www.canada.ca/en/health-canada/services/environmental-workplace-health/reports-publications/water-quality/guidelines-canadian-drinking-water-quality-summary-table.html>

Type	Parameter (published, reaffirmed)	MAC (mg/L)	Other value (mg/L)	Common sources of parameter in water	Health considerations	Comments
I= Inorganic chemical parameter	Manganese (2019)	0.12	AO: <0.02	Dissolution of naturally-occurring minerals commonly found in soil and rock. Other sources include industrial discharge, mining activities and leaching from landfills.	Health Basis of MAC: Effects on neurological development and behaviour; deficits in memory, attention, and motor skills. Other: Formula-fed infants (where water containing manganese at levels above the MAC is used to prepare formula) may be especially at risk.	AO based on minimizing the occurrence of discoloured water, consumer complaints and staining of laundry.

CDWG=Canadian Drinking Water Guidelines
OG= Operational Guidance Value

MAC=Maximum Acceptable Concentration
AO=Aesthetic Objective

Orange font indicates non-compliance with the Aesthetic Objective (AO) in the Canadian Drinking Water Guidelines (CDWG)

Red font indicates non-compliance with the Maximum Acceptable Concentration (MAC) in the CDWG

	Units	CDWG		October 26 2016*	September 21 2017	October 22 2019	November 19 2020	November 4 2021	November 11 2022	November 9 2023
Miscellaneous Inorganics										
Fluoride	mg/L	1.5	MAC	1.4	1.6	1.5	1.5	1.5	1.5	1.5
Alkalinity (total as CaCO ₃)	mg/L			143	155	140	140	150	140	140
Anions										
Dissolved Sulphate	mg/L	500	AO	12.1	20.9	16	14	14	15	12
Dissolved Chloride	mg/L	250	AO	5.1	18	8.7	7.2	6.9	7.6	4.9
Nitrite	mg/L	1	MAC	<0.0050	<0.0050	<0.005	<0.005	<0.005	<0.005	<0.005
Miscellaneous										
Apparent Colour	Colour Unit			15	10	<5	10	<5	<5	5
Nutrients										
Total Ammonia	mg/L			0.31	0.21	0.25	0.21	0.2	0.21	0.21
Physical Properties										
Conductivity	µS/cm			314	381	330	330	310	320	320
pH	pH	6.5:8.5	AO	8.24	8.3	8.05	8.17	7.97	7.83	7.94
TDS	mg/L	500	AO	182	204	180	160	180	190	1.8
Turbidity	NTU			9.84	0.63	4.3	1.4	0.83	1.5	1.4
Microbiological Parameters										
E.coli	MPN/100mL	<1	MAC	<1.0	<1.0	0	0	0	0	0
Total Coliforms	MPN/100mL	<1	MAC	<1.0	<1.0	0	0	0	0	0
Calculated Parameters										
Total Hardness (CaCO ₃)	mg/L			82.7	97.6	83.3	81.3	83.5	84.4	82
Nitrate	mg/L	10	MAC	<0.020	<0.020	<0.02	<0.02	<0.02	<0.02	<0.02
Elements										
Total Mercury	mg/L	0.001	MAC	<0.00001	<0.00001	<0.000002	<0.0000019	<0.0000019	<0.0000019	<0.0000019
Total Metals										
Total Aluminum	mg/L	0.1	OG	0.174	<0.003	0.108	0.0457	0.0141	0.004	0.0036
Total Antimony	mg/L	0.006	MAC	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Total Arsenic	mg/L	0.01	MAC	0.00094	0.00096	0.0009	0.00095	0.00094	0.00085	0.00086
Total Barium	mg/L	1	MAC	0.139	0.166	0.144	0.138	0.134	0.127	0.127
Total Beryllium	mg/L			<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Total Bismuth	mg/L			<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Total Boron	mg/L	5	MAC	0.327	0.444	0.359	0.371	0.335	0.366	0.316
Total Cadmium	mg/L	0.005	MAC	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Total Chromium	mg/L	0.05	MAC	0.0015	<0.001	0.0012	<0.001	<0.001	<0.001	<0.001
Total Cobalt	mg/L			<0.0005	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Total Copper	mg/L	1	AO	0.00123	0.00022	0.00057	0.00116	0.00178	0.00067	0.00044
Total Iron	mg/L	0.3	AO	0.346	0.18	0.326	0.217	0.198	0.196	0.18
Total Lead	mg/L	0.005	MAC	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Total Manganese	mg/L	0.02 0.12	AO MAC	0.0173	0.0147	0.0149	0.0129	0.0123	0.0131	0.0125
Total Molybdenum	mg/L			0.0025	0.0022	0.0024	0.0027	0.0027	0.0025	0.0025
Total Nickel	mg/L			0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Total Selenium	mg/L	0.05	MAC	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Total Silicon	mg/L			7.75	7.14	6.99	7.39	7.32	7.12	7.76
Total Silver	mg/L			<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002
Total Strontium	mg/L			0.465	0.546	0.504	0.493	0.482	0.462	0.453
Total Thallium	mg/L			<0.00005	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Total Tin	mg/L			<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Total Titanium	mg/L			0.007	<0.005	0.0074	<0.005	<0.005	<0.005	<0.005
Total Uranium	mg/L	0.02	MAC	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Total Vanadium	mg/L			<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Total Zinc	mg/L	5	AO	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Total Zirconium	mg/L			<0.0005	<0.0001	0.0002	<0.0001	<0.0001	<0.0001	<0.0001
Total Calcium	mg/L			23.5	27.2	24.1	23.3	24	24.3	23.6
Total Magnesium	mg/L			5.82	7.2	5.65	5.61	5.74	5.77	5.58
Total Potassium	mg/L			2.23	2.61	2.38	2.39	2.34	2.18	2.2
Total Sodium	mg/L	200	AO	33	42.6	35.5	35	35.2	35.6	35.5
Total Sulphur	mg/L			4.1	7.7	4.8	4.4	4.6	3.9	4.2

Notes below about Manganese (2019) from: <https://www.canada.ca/en/health-canada/services/environmental-workplace-health/reports-publications/water-quality/guidelines-canadian-drinking-water-quality-summary-table.html>

Type	Parameter (published, reaffirmed)	MAC (mg/L)	Other value (mg/L)	Common sources of parameter in water	Health considerations	Comments
I= Inorganic chemical parameter	Manganese (2019)	0.12	AO: <0.02	Dissolution of naturally-occurring minerals commonly found in soil and rock. Other sources include industrial discharge, mining activities and leaching from landfills.	Health Basis of MAC: Effects on neurological development and behaviour; deficits in memory, attention, and motor skills. Other: Formula-fed infants (where water containing manganese at levels above the MAC is used to prepare formula) may be especially at risk.	AO based on minimizing the occurrence of discoloured water, consumer complaints and staining of laundry.

Madrona #4 Raw Well Water Analysis Northwest Bay Logging Road

CDWG=Canadian Drinking Water Guidelines
OG= Operational Guidance Value

MAC=Maximum Acceptable Concentration
AO=Aesthetic Objective

Orange font indicates non-compliance with the Aesthetic Objective (AO) in the Canadian Drinking Water Guidelines (CDWG)

Red font indicates non-compliance with the Maximum Acceptable Concentration (MAC) in the CDWG

	Units	CDWG		October 26 2016	September 20 2017	6 2018	October 24 2019	November 5 2020	October 28 2021	October 20 2022	October 26 2023
Miscellaneous Inorganics											
Fluoride	mg/L	1.5	MAC	0.13	0.12	0.14	0.16	0.12	0.12	0.13	0.14
Alkalinity (total as CaCO)	mg/L			132	132	135	130	140	130	130	130
Anions											
Dissolved Sulphate	mg/L	500	AO	6.38	6.4	6.3	6.1	6.2	6.9	6.3	5.9
Dissolved Chloride	mg/L	250	AO	20	19	22	23	22	17	21	20
Nitrite	mg/L	1	MAC	<0.0050	<0.0050	<0.0050	<0.005	<0.005	<0.005	<0.005	<0.005
Miscellaneous											
Apparent Colour	Colour Unit			15	10	10	15	10	<5	5	5
Nutrients											
Total Ammonia	mg/L			0.34	0.28	0.24	0.31	0.27	0.26	0.27	0.28
Physical Properties											
Conductivity	µS/cm			334	322	327	340	340	300	340	340
pH	pH	7.0:10.5	AO	8.35	8.33	8.23	8.17	8.47	7.93	8.31	8.27
TDS	mg/L	500	AO	186	170	170	180	190	190	180	190
Turbidity	NTU			5.68	0.76	2.25	0.17	0.15	0.19	0.13	0.23
Microbiological Parameters											
E.coli	MPN/100mL	<1	MAC	<1.0	<1.0	<1.0	0	0	0	0	0
Total Coliforms	MPN/100mL	<1	MAC	<1.0	<1.0	<1.0	0	0	0	0	0
Calculated Parameters											
Total Hardness (CaCO)	mg/L			42.7	43.4	40.9	39	42	48.5	43.2	42.8
Nitrate	mg/L	10	MAC	<0.020	<0.020	<0.020	<0.02	<0.02	<0.02	<0.02	<0.02
Elements											
Total Mercury	mg/L	0.001	MAC	<0.00001	<0.00001	<0.000002	<0.000002	<0.0000019	<0.0000019	0.0000024	<0.0000019
Total Metals											
Total Aluminum	mg/L	0.1	OG	0.203	0.0107	0.023	0.0038	<0.003	0.0037	0.0047	<0.003
Total Antimony	mg/L	0.006	MAC	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Total Arsenic	mg/L	0.01	MAC	0.00962	0.00912	0.00867	0.00871	0.00884	0.0097	0.009	0.00879
Total Barium	mg/L	1	MAC	0.0135	0.0111	0.0111	0.0114	0.011	0.0117	0.0112	0.0111
Total Beryllium	mg/L			<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Total Bismuth	mg/L			<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.0001
Total Boron	mg/L	5	MAC	0.165	0.147	0.156	0.155	0.153	0.122	0.171	0.153
Total Cadmium	mg/L	0.005	MAC	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Total Chromium	mg/L	0.05	MAC	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Total Cobalt	mg/L			<0.0005	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Total Copper	mg/L	1	AO	0.00104	0.00041	0.0012	0.00048	0.00027	0.00174	0.00049	0.0006
Total Iron	mg/L	0.3	AO	0.219	0.0179	0.043	0.0113	0.007	0.0164	0.0083	<0.005
Total Lead	mg/L	0.01	MAC	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Total Manganese	mg/L	0.02 0.12	AO MAC	0.0257	0.0232	0.0208	0.0188	0.0204	0.0257	0.021	0.0218
Total Molybdenum	mg/L			0.0038	0.003	0.0037	0.0037	0.0034	0.0026	0.0034	0.0033
Total Nickel	mg/L			<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Total Selenium	mg/L	0.05	MAC	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Total Silicon	mg/L			7.12	8.01	7.04	6.59	6.61	7.97	8.34	7.67
Total Silver	mg/L			<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002
Total Strontium	mg/L			0.0751	0.0764	0.0784	0.0786	0.0777	0.0887	0.0807	0.0777
Total Thallium	mg/L			<0.00005	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Total Tin	mg/L			<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Total Titanium	mg/L			0.0138	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Total Uranium	mg/L	0.02	MAC	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Total Vanadium	mg/L			<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Total Zinc	mg/L	5	AO	<0.005	<0.005	<0.005	<0.005	<0.005	0.008	<0.005	<0.005
Total Zirconium	mg/L			<0.0005	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Total Calcium	mg/L			11.4	11.8	11.1	10.6	11.5	13.3	11.5	11.6
Total Magnesium	mg/L			3.46	3.41	3.19	3.06	3.23	3.71	3.53	3.36
Total Potassium	mg/L			1.57	1.61	1.61	1.7	1.62	1.72	1.58	1.69
Total Sodium	mg/L	200	AO	59.1	53.3	55.9	57.3	54.6	45.2	56.5	53.9
Total Sulphur	mg/L			<3.0	<3.0	<3.0	<3	<3	<3	<3	<3

Notes below about Manganese (2019) from: <https://www.canada.ca/en/health-canada/services/environmental-workplace-health/reports-publications/water-quality/guidelines-canadian-drinking-water-quality-summary-table.html>

Type	Parameter (published, reaffirmed)	MAC (mg/L)	Other value (mg/L)	Common sources of parameter in water	Health considerations	Comments
I= Inorganic chemical parameter	Manganese (2019)	0.12	AO: <0.02	Dissolution of naturally-occurring minerals commonly found in soil and rock. Other sources include industrial discharge, mining activities and leaching from landfills.	Health Basis of MAC: Effects on neurological development and behaviour; deficits in memory, attention, and motor skills. Other: Formula-fed infants (where water containing manganese at levels above the MAC is used to prepare formula) may be especially at risk.	AO based on minimizing the occurrence of discoloured water, consumer complaints and staining of laundry.

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Red font indicates non-compliance with the Maximum Acceptable Concentration (MAC) in the CDWG

	Units	CDWG		October 26 2016	Sept 20 2017	November 6 2018	October 17 2019	October 20 2020	October 28 2021	October 20 2022	October 26 2023
Miscellaneous Inorganics											
Fluoride	mg/L	1.5	MAC	0.056	0.052	0.056	<0.05	<0.05	0.052	0.055	0.05
Alkalinity (total as CaCO)	mg/L			189	194	192	190	210	200	190	180
Anions											
Dissolved Sulphate	mg/L	500	AO	11.6	12.9	13.3	15	17	17	16	16
Dissolved Chloride	mg/L	250	AO	13	15	19	20	23	23	20	21
Nitrite	mg/L	1	MAC	<0.0050	<0.0050	<0.0050	<0.005	<0.005	<0.005	<0.005	<0.005
Miscellaneous											
Apparent Colour	Colour Unit			<5.0	5	<5.0	5	10	<5	<5	5
Nutrients											
Total Ammonia	mg/L			0.084	<0.020	<0.020	0.065	<0.015	<0.015	<0.015	<0.015
Physical Properties											
Conductivity	µS/cm			475	486	505	520	550	530	530	530
pH	pH	7.0:10.5	AO	8.16	8.38	8.06	8.17	8.3	7.82	8.06	8.17
TDS	mg/L	500	AO	260	270	276	320	350	340	310	310
Turbidity	NTU			0.12	<0.10	0.12	<0.10	<0.1	<0.1	0.13	0.79
Microbiological Parameters											
E.coli	MPN/100mL	<1	MAC	<1.0	<1.0	<1.0	0	0	0	0	0
Total Coliforms	MPN/100mL	<1	MAC	<1.0	<1.0	<1.0	0	0	0	0	0
Calculated Parameters											
Total Hardness (CaCO)	mg/L			232	229	243	234	263	238	242	235
Nitrate	mg/L	10	MAC	5.98	7.45	8.78	8.19	9.31	9.2	9.49	8.46
Elements											
Total Mercury	mg/L	0.001	MAC	<0.00001	<0.00001	<0.000002	<0.000002	<0.0000019	<0.0000019	0.0000022	<0.0000019
Total Metals											
Total Aluminum	mg/L	0.1	OG	0.003	<0.003	0.0049	<0.003	<0.003	<0.003	<0.003	<0.003
Total Antimony	mg/L	0.006	MAC	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Total Arsenic	mg/L	0.01	MAC	0.00124	0.00115	0.00109	0.00102	0.0011	0.0015	0.00115	0.0011
Total Barium	mg/L	1	MAC	0.0114	0.0124	0.0129	0.0125	0.014	0.0136	0.0125	0.0136
Total Beryllium	mg/L			<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Total Bismuth	mg/L			<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Total Boron	mg/L	5	MAC	<0.050	<0.050	<0.050	<0.05	<0.05	<0.05	<0.05	<0.05
Total Cadmium	mg/L	0.005	MAC	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Total Chromium	mg/L	0.05	MAC	<0.001	<0.001	<0.001	0.0012	<0.001	<0.001	<0.001	<0.001
Total Cobalt	mg/L			<0.0005	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Total Copper	mg/L	1	AO	0.00347	0.00449	0.00789	0.00299	0.00258	0.00846	0.00335	0.00444
Total Iron	mg/L	0.3	AO	0.006	<0.005	0.013	<0.005	<0.005	0.0062	<0.005	0.0068
Total Lead	mg/L	0.01	MAC	0.00041	0.00034	0.00071	0.00022	<0.00020	0.00045	<0.0002	<0.0002
Total Manganese	mg/L	0.02 0.12	AO MAC	0.0013	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Total Molybdenum	mg/L			<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Total Nickel	mg/L			<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Total Selenium	mg/L	0.05	MAC	0.00043	0.00042	0.00039	0.00044	0.0005	0.00045	0.00046	0.0005
Total Silicon	mg/L			10.1	11.6	10.4	10.2	10.9	10.6	12.3	10.9
Total Silver	mg/L			<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002
Total Strontium	mg/L			0.12	0.132	0.141	0.133	0.152	0.15	0.136	0.141
Total Thallium	mg/L			<0.00005	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Total Tin	mg/L			<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Total Titanium	mg/L			<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Total Uranium	mg/L	0.02	MAC	0.00015	0.00016	0.00015	0.00016	0.00018	0.00019	0.00016	0.00017
Total Vanadium	mg/L			0.0069	0.0071	0.0068	0.0061	0.0066	0.0064	0.0062	0.0062
Total Zinc	mg/L	5	AO	<0.005	<0.005	0.0071	<0.005	<0.005	0.0064	<0.005	0.006
Total Zirconium	mg/L			<0.0005	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Total Calcium	mg/L			63.7	60.9	66.9	65.2	71.8	64.7	66.5	63.2
Total Magnesium	mg/L			17.6	18.8	18.4	17.3	20.4	18.5	18.5	18.7
Total Potassium	mg/L			0.768	0.881	0.873	0.85	0.987	0.901	0.809	0.856
Total Sodium	mg/L	200	AO	9.17	9.55	9.74	8.67	10	9.19	9.19	9.24
Total Sulphur	mg/L			3.9	4.3	3.9	4.5	5.3	5.5	5.8	5.9

 Notes below about Manganese (2019) from: <https://www.canada.ca/en/health-canada/services/environmental-workplace-health/reports-publications/water-quality/guidelines-canadian-drinking-water-quality-summary-table.html>

Type	Parameter (published, reaffirmed)	MAC (mg/L)	Other value (mg/L)	Common sources of parameter in water	Health considerations	Comments
I= Inorganic chemical parameter	Manganese (2019)	0.12	AO: <0.02	Dissolution of naturally-occurring minerals commonly found in soil and rock. Other sources include industrial discharge, mining activities and leaching from landfills.	Health Basis of MAC: Effects on neurological development and behaviour; deficits in memory, attention, and motor skills. Other: Formula-fed infants (where water containing manganese at levels above the MAC is used to prepare formula) may be especially at risk.	AO based on minimizing the occurrence of discoloured water, consumer complaints and staining of laundry.

CDWG=Canadian Drinking Water Guidelines
 OG= Operational Guidance Value

MAC=Maximum Acceptable Concentration
 AO=Aesthetic Objective

Orange font indicates non-compliance with the Aesthetic Objective (AO) in the Canadian Drinking Water Guidelines (CDWG)
Red font indicates non-compliance with the Maximum Acceptable Concentration (MAC) in the CDWG

	Units	CDWG		October 26 2016	October 18 2017	Nov. 16 2018	October 24 2019	November 5 2020	November 4 2021	November 17 2022	November 9 2023
Miscellaneous Inorganics											
Fluoride	mg/L	1.5	MAC	0.14	0.14	0.15	0.17	0.14	0.15	0.15	0.15
Alkalinity (total as CaCO)	mg/L			140	144	143	140	150	150	150	140
Anions											
Dissolved Sulphate	mg/L	500	AO	9.1	7.8	6.9	6.8	6.7	8.9	9.8	8.6
Dissolved Chloride	mg/L	250	AO	11	9.7	9.8	9.4	9.3	9.8	11	7.8
Nitrite	mg/L	1	MAC	<0.0050	<0.0050	<0.0050	<0.005	<0.005	<0.005	<0.005	<0.005
Miscellaneous											
Apparent Colour	Colour Unit			15	15	10	10	15	<5	<5	5
Nutrients											
Total Ammonia	mg/L			1	0.94	1	1	1.1	1.1	1.1	1.1
Physical Properties											
Conductivity	µS/cm			325	319	310	310	330	310	320	330
pH	pH	7.0:10.5	AO	8.2	8.28	8.08	8.05	8.34	8.09	8	7.92
TDS	mg/L	500	AO	176	162	170	160	190	180	170	180
Turbidity	NTU			0.77	0.55	0.45	0.69	0.37	0.31	0.34	0.61
Microbiological Parameters											
E.coli	MPN/100mL	<1	MAC	<1.0	<1.0	<1.0	0	0	0	0	0
Total Coliforms	MPN/100mL	<1	MAC	<1.0	<1.0	<1.0	0	0	0	0	0
Calculated Parameters											
Total Hardness (CaCO)	mg/L			133	129	135	127	122	127	132	129
Nitrate	mg/L	10	MAC	<0.020	<0.020	<0.020	<0.02	<0.02	<0.02	<0.02	<0.02
Elements											
Total Mercury	mg/L	0.001	MAC	<0.00001	<0.00001	<0.000002	<0.000002	<0.0000019	<0.000019	<0.0000019	<0.000019
Total Metals											
Total Aluminum	mg/L	0.1	OG	<0.003	<0.003	0.0034	<0.003	<0.003	<0.003	<0.003	<0.003
Total Antimony	mg/L	0.006	MAC	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Total Arsenic	mg/L	0.01	MAC	0.00043	0.00037	0.00034	0.00037	0.00032	0.00033	0.00032	0.00028
Total Barium	mg/L	1	MAC	0.0177	0.019	0.0178	0.0175	0.0178	0.018	0.0177	0.0177
Total Beryllium	mg/L			<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Total Bismuth	mg/L			<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Total Boron	mg/L	5	MAC	0.058	0.053	0.068	0.06	0.059	0.067	0.062	0.064
Total Cadmium	mg/L	0.005	MAC	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Total Chromium	mg/L	0.05	MAC	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Total Cobalt	mg/L			<0.0005	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Total Copper	mg/L	1	AO	0.00028	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Total Iron	mg/L	0.3	AO	0.198	0.194	0.198	0.206	0.187	0.193	0.2	0.194
Total Lead	mg/L	0.01	MAC	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Total Manganese	mg/L	0.02 0.12	AO MAC	0.109	0.114	0.115	0.113	0.112	0.111	0.108	0.111
Total Molybdenum	mg/L			<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Total Nickel	mg/L			<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Total Selenium	mg/L	0.05	MAC	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Total Silicon	mg/L			10.3	11	11.1	10.1	9.93	10.9	10.8	11.7
Total Silver	mg/L			<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002
Total Strontium	mg/L			0.137	0.139	0.141	0.136	0.137	0.145	0.135	0.14
Total Thallium	mg/L			<0.00005	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Total Tin	mg/L			<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Total Titanium	mg/L			<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Total Uranium	mg/L	0.02	MAC	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Total Vanadium	mg/L			<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Total Zinc	mg/L	5	AO	<0.005	<0.005	0.0076	<0.005	<0.005	<0.005	<0.005	<0.005
Total Zirconium	mg/L			<0.0005	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Total Calcium	mg/L			37.7	36.2	37.6	36	33.9	35.7	37.3	36.2
Total Magnesium	mg/L			9.45	9.49	9.92	8.92	8.96	9.27	9.4	9.3
Total Potassium	mg/L			2.32	2.57	2.58	2.51	2.47	2.62	2.48	2.49
Total Sodium	mg/L	200	AO	14.5	14.3	15.3	14	13.9	14.6	15.2	14.9
Total Sulphur	mg/L			3.5	<3.0	<3.0	<3	<3	<3	3.1	<3

Notes below about Manganese (2019) from: <https://www.canada.ca/en/health-canada/services/environmental-workplace-health/reports-publications/water-quality/guidelines-canadian-drinking-water-quality-summary-table.html>

Type	Parameter (published, reaffirmed)	MAC (mg/L)	Other value (mg/L)	Common sources of parameter in water	Health considerations	Comments
I= Inorganic chemical parameter	Manganese (2019)	0.12	AO: <0.02	Dissolution of naturally-occurring minerals commonly found in soil and rock. Other sources include industrial discharge, mining activities and leaching from landfills.	Health Basis of MAC: Effects on neurological development and behaviour; deficits in memory, attention, and motor skills. Other: Formula-fed infants (where water containing manganese at levels above the MAC is used to prepare formula) may be especially at risk.	AO based on minimizing the occurrence of discoloured water, consumer complaints and staining of laundry.

	Units	CDWG		October 26 2016	October 18 2017	Nov 16 2018	October 24 2019	November 5 2020	November 4 2021	November 17 2022	November 9 2023
Miscellaneous Inorganics											
Fluoride	mg/L	1.5	MAC	0.13	0.13	0.13	0.15	0.13	0.14	0.14	0.14
Alkalinity (total as CaCO)	mg/L			160	166	166	160	170	170	170	160
Anions											
Dissolved Sulphate	mg/L	500	AO	<0.50	<1.0	<1.0	<1	<1	<1	<1.0	<1
Dissolved Chloride	mg/L	250	AO	7.7	7.8	8.4	8.4	8.5	9.1	10	7.1
Nitrite	mg/L	1	MAC	<0.0050	<0.0050	<0.0050	<0.005	<0.005	<0.005	<0.005	<0.005
Miscellaneous											
Apparent Colour	Colour Unit			30	30	15	30	20	10	15	15
Nutrients											
Total Ammonia	mg/L			1.1	0.95	0.96	1	1	0.98	1.1	1
Physical Properties											
Conductivity	µS/cm			330	332	330	330	330	330	340	340
pH	pH	7.0:10.5	AO	8.14	8.26	8.14	8.1	8.34	8.07	7.97	7.89
TDS	mg/L	500	AO	188	174	192	170	200	200	180	180
Turbidity	NTU			3.75	3.15	3.81	4.2	3.2	2.9	3.2	3.6
Microbiological Parameters											
E.coli	MPN/100mL	<1	MAC	<1.0	<1.0	<1.0	0	0	0	0	0
Total Coliforms	MPN/100mL	<1	MAC	4.2	4.2	<1.0	0	0	0	0	0
Calculated Parameters											
Total Hardness (CaCO)	mg/L			133	130	137	129	126	125	131	128
Nitrate	mg/L	10	MAC	<0.020	<0.020	<0.020	<0.02	<0.02	<0.02	<0.02	<0.02
Elements											
Total Mercury	mg/L	0.001	MAC	<0.00001	<0.00001	<0.000002	<0.000002	<0.0000019	<0.0000019	<0.0000019	<0.0000019
Total Metals											
Total Aluminum	mg/L	0.1	OG	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Total Antimony	mg/L	0.006	MAC	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Total Arsenic	mg/L	0.01	MAC	0.00113	0.00116	0.00086	0.00118	0.00105	0.00106	0.0011	0.001
Total Barium	mg/L	1	MAC	0.0149	0.0164	0.0155	0.0159	0.016	0.0154	0.0154	0.015
Total Beryllium	mg/L			<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Total Bismuth	mg/L			<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Total Boron	mg/L	5	MAC	0.05	0.05	0.061	0.054	0.053	0.058	0.056	0.058
Total Cadmium	mg/L	0.005	MAC	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Total Chromium	mg/L	0.05	MAC	<0.001	<0.001	<0.001	0.001	<0.001	<0.001	<0.001	<0.001
Total Cobalt	mg/L			<0.0005	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Total Copper	mg/L	1	AO	0.00115	0.002	0.00055	0.00872	0.00181	0.00164	0.00029	<0.0002
Total Iron	mg/L	0.3	AO	1.13	1.14	1.19	1.15	1.15	1.08	1.16	1.11
Total Lead	mg/L	0.005	MAC	0.00035	0.00021	<0.0002	0.00066	0.00085	<0.0002	<0.0002	<0.0002
Total Manganese	mg/L	0.02 0.12	AO MAC	0.249	0.261	0.266	0.279	0.261	0.257	0.244	0.249
Total Molybdenum	mg/L			<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Total Nickel	mg/L			<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Total Selenium	mg/L	0.05	MAC	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Total Silicon	mg/L			12.6	13.5	13.5	12.4	12.6	13.4	13.3	14.8
Total Silver	mg/L			<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002
Total Strontium	mg/L			0.107	0.112	0.113	0.111	0.106	0.113	0.104	0.106
Total Thallium	mg/L			<0.00005	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Total Tin	mg/L			<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Total Titanium	mg/L			<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Total Uranium	mg/L	0.02	MAC	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Total Vanadium	mg/L			<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Total Zinc	mg/L	5	AO	0.0182	0.0107	<0.005	0.009	0.0097	<0.005	<0.005	<0.005
Total Zirconium	mg/L			<0.0005	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Total Calcium	mg/L			33.2	32.5	34	32.8	31.5	30.9	33	31.8
Total Magnesium	mg/L			12.1	12	12.7	11.4	11.6	11.7	11.7	11.7
Total Potassium	mg/L			1.96	2.13	2.17	2.14	2.09	2.19	2.01	2.06
Total Sodium	mg/L	200	AO	18.6	18.4	20.2	18.8	18.8	19.3	19.5	19.8
Total Sulphur	mg/L			<3.0	<3.0	<3.0	<3.0	<3	<3	<3	<3

Notes below about Manganese (2019) from: <https://www.canada.ca/en/health-canada/services/environmental-workplace-health/reports-publications/water-quality/guidelines-canadian-drinking-water-quality-summary-table.html>

Type	Parameter (published, reaffirmed)	MAC (mg/L)	Other value (mg/L)	Common sources of parameter in water	Health considerations	Comments
I= Inorganic chemical parameter	Manganese (2019)	0.12	AO: <0.02	Dissolution of naturally-occurring minerals commonly found in soil and rock. Other sources include industrial discharge, mining activities and leaching from landfills.	Health Basis of MAC: Effects on neurological development and behaviour; deficits in memory, attention, and motor skills. Other: Formula-fed infants (where water containing manganese at levels above the MAC is used to prepare formula) may be especially at risk.	AO based on minimizing the occurrence of discoloured water, consumer complaints and staining of laundry.

	Units	CDWG		October 26 2016	October 18 2017	November 16 2018	October 24 2019	November 5 2020	November 4 2021	November 17 2022	November 9 2023
Miscellaneous Inorganics											
Fluoride	mg/L	1.5	MAC	0.18	0.17	0.18	0.2	0.16	0.18	0.18	0.17
Alkalinity (total as CaCO)	mg/L			158	164	161	160	170	170	160	160
Anions											
Dissolved Sulphate	mg/L	500	AO	<0.50	<1.0	<1.0	<1.0	<1	<1	<1.0	<1
Dissolved Chloride	mg/L	250	AO	3.7	3.8	3.5	3.4	3.6	3.8	4.6	3.6
Nitrite	mg/L	1	MAC	<0.0050	<0.0050	<0.0050	<0.005	<0.005	<0.005	<0.005	<0.005
Miscellaneous											
Apparent Colour	Colour Unit			15	30	15	15	20	10	15	15
Nutrients											
Total Ammonia	mg/L			1.2	1.1	1.1	1.1	1.2	1.1	1.2	1.1
Physical Properties											
Conductivity	µS/cm			313	314	308	310	320	300	320	320
pH	pH	7.0:10.5	AO	8.1	8.26	8.15	8.14	8.33	8.1	8	8.15
TDS	mg/L	500	AO	190	166	154	180	190	180	180	190
Turbidity	NTU			1.68	1	1.35	1.1	1.5	1.6	1.3	4.2
Microbiological Parameters											
E.coli	MPN/100mL	<1	MAC	<1.0	<1.0	<1.0	0	0	0	0	0
Total Coliforms	MPN/100mL	<1	MAC	<1.0	<1.0	<1.0	0	0	0	0	0
Calculated Parameters											
Total Hardness (CaCO)	mg/L			117	113	123	113	113	116	118	115
Nitrate	mg/L	10	MAC	<0.020	<0.020	<0.020	<0.02	<0.02	<0.02	<0.02	<0.02
Elements											
Total Mercury	mg/L	0.001	MAC	<0.00001	<0.00001	<0.000002	<0.000002	<0.0000019	<0.0000019	<0.0000019	<0.0000019
Total Metals											
Total Aluminum	mg/L	0.1	OG	<0.003	<0.003	0.0036	0.0041	<0.003	<0.003	<0.003	<0.003
Total Antimony	mg/L	0.006	MAC	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Total Arsenic	mg/L	0.01	MAC	0.00233	0.00247	0.00228	0.00231	0.00239	0.00246	0.00235	0.00234
Total Barium	mg/L	1	MAC	0.0082	0.0088	0.0084	0.0082	0.0083	0.0084	0.008	0.008
Total Beryllium	mg/L			<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Total Bismuth	mg/L			<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Total Boron	mg/L	5	MAC	0.062	0.062	0.068	0.061	0.057	0.064	0.061	0.061
Total Cadmium	mg/L	0.005	MAC	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Total Chromium	mg/L	0.05	MAC	<0.001	<0.001	<0.001	0.0012	<0.001	<0.001	<0.001	<0.001
Total Cobalt	mg/L			<0.0005	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Total Copper	mg/L	1	AO	0.00175	0.00086	0.00122	0.00198	0.00078	0.00042	0.00058	0.00023
Total Iron	mg/L	0.3	AO	0.599	0.619	0.663	0.682	0.627	0.642	0.644	0.626
Total Lead	mg/L	0.01	MAC	0.00022	0.00025	<0.0002	0.00025	<0.0002	<0.0002	<0.0002	<0.0002
Total Manganese	mg/L	0.02 0.12	AO MAC	0.231	0.242	0.251	0.256	0.237	0.246	0.229	0.232
Total Molybdenum	mg/L			<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Total Nickel	mg/L			<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Total Selenium	mg/L	0.05	MAC	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Total Silicon	mg/L			15.2	15.4	16.3	14.5	15.3	16.3	15.7	17.4
Total Silver	mg/L			<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002
Total Strontium	mg/L			0.100	0.104	0.106	0.102	0.101	0.108	0.0992	0.0973
Total Thallium	mg/L			<0.00005	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Total Tin	mg/L			<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Total Titanium	mg/L			<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Total Uranium	mg/L	0.02	MAC	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Total Vanadium	mg/L			<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Total Zinc	mg/L	5	AO	0.0084	<0.005	0.0085	0.0057	0.0074	<0.005	<0.005	<0.005
Total Zirconium	mg/L			<0.0005	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Total Calcium	mg/L			28.5	27	29.6	27.8	27.5	27.9	28.9	27.7
Total Magnesium	mg/L			11.1	11.2	11.9	10.6	10.7	11.3	11.1	11.2
Total Potassium	mg/L			2.05	2.22	2.32	2.224	2.21	2.35	2.14	2.17
Total Sodium	mg/L	200	AO	20.6	20.2	22	19.6	19.4	20.5	20.3	20.3
Total Sulphur	mg/L			<3.0	<3.0	<3.0	<3.0	<3	<3	<3	<3

Notes below about Manganese (2019) from: <https://www.canada.ca/en/health-canada/services/environmental-workplace-health/reports-publications/water-quality/guidelines-canadian-drinking-water-quality-summary-table.html>

Type	Parameter (published, reaffirmed)	MAC (mg/L)	Other value (mg/L)	Common sources of parameter in water	Health considerations	Comments
I= Inorganic chemical parameter	Manganese (2019)	0.12	AO: <0.02	Dissolution of naturally-occurring minerals commonly found in soil and rock. Other sources include industrial discharge, mining activities and leaching from landfills.	Health Basis of MAC: Effects on neurological development and behaviour; deficits in memory, attention, and motor skills. Other: Formula-fed infants (where water containing manganese at levels above the MAC is used to prepare formula) may be especially at risk.	AO based on minimizing the occurrence of discoloured water, consumer complaints and staining of laundry.

CDWG=Canadian Drinking Water Guidelines

MAC=Maximum Acceptable Concentration

OG= Operational Guidance Value

AO=Aesthetic Objective

Orange font indicates non-compliance with the Aesthetic Objective (AO) in the Canadian Drinking Water Guidelines (CDWG)
Red font indicates non-compliance with the Maximum Acceptable Concentration (MAC) in the CDWG

	Units	CDWG		November 5 2014	October 27 2015	October 27 2016	October 18 2017	Nov. 16 2018	No longer in use
Miscellaneous Inorganics									
Fluoride	mg/L	1.5	MAC	0.1	0.1	0.063	0.11	0.061	
Alkalinity (total as CaCO)	mg/L			168	185	172	181	175	
Anions									
Dissolved Sulphate	mg/L	500	AO	52.8	35.2	45.5	30	43.8	
Dissolved Chloride	mg/L	250	AO	9.5	9.2	8.5	8.1	9.1	
Nitrite	mg/L	1	MAC	<0.05	<0.0050	<0.0050	<0.0050	<0.0050	
Miscellaneous									
Apparent Colour	Colour Unit			17	15	10	30	10	
Nutrients									
Total Ammonia	mg/L			0.02	0.04	0.069	0.02	<0.020	
Physical Properties									
Conductivity	µS/cm			456	453	445	422	446	
pH	pH	7.0:10.5	AO	7.9	8.1	8.21	8.22	8.11	
TDS	mg/L	500	AO	280	278	258	234	258	
Turbidity	NTU			2.1	2.39	2.54	5.94	11.3	
Microbiological Parameters									
E.coli	MPN/100mL	<1	MAC	<1.0	<1.0	<1.0	<1.0	<1.0	
Total Coliforms	MPN/100mL	<1	MAC	27.1	<1.0	<1.0	<1.0	<1.0	
Calculated Parameters									
Total Hardness (CaCO)	mg/L			230	215	197	201	225	
Nitrate	mg/L	10	MAC	0.1	<0.020	<0.020	<0.020	<0.020	
Elements									
Total Mercury	mg/L	0.001	MAC	<0.00001	<0.00001	<0.00001	<0.00001	<0.000002	
Total Metals									
Total Aluminum	mg/L	0.1	OG	0.03	0.0034	0.0429	0.0061	0.0183	
Total Antimony	mg/L	0.006	MAC	0.0003	<0.0005	<0.0005	<0.0005	<0.0005	
Total Arsenic	mg/L	0.01	MAC	0.0019	0.00124	0.00079	0.00106	0.00093	
Total Barium	mg/L	1	MAC	0.0664	0.0722	0.0613	0.0637	0.0625	
Total Beryllium	mg/L			<0.00005	<0.0001	<0.0001	<0.0001	<0.0001	
Total Bismuth	mg/L			<0.0001	<0.001	<0.001	<0.001	<0.001	
Total Boron	mg/L	5	MAC	0.031	0.06	<0.050	0.053	<0.050	
Total Cadmium	mg/L	0.005	MAC	0.00001	0.000019	<0.00001	0.000012	0.000029	
Total Chromium	mg/L	0.05	MAC	<0.0005	<0.001	<0.001	<0.001	<0.001	
Total Cobalt	mg/L			0.0004	<0.0005	<0.0005	0.00034	0.00025	
Total Copper	mg/L	1	AO	0.0037	0.00852	0.00237	0.00178	0.00262	
Total Iron	mg/L	0.3	AO	0.348	0.413	0.284	0.849	1.85	
Total Lead	mg/L	0.01	MAC	0.0007	0.00128	0.00049	0.00083	0.00098	
Total Manganese	mg/L	0.02 0.12	AO MAC	0.116	0.0931	0.094	0.0855	0.0912	
Total Molybdenum	mg/L			0.00109	<0.001	<0.001	<0.001	<0.001	
Total Nickel	mg/L			0.0009	0.0012	<0.001	<0.001	<0.001	
Total Selenium	mg/L	0.05	MAC	<0.0001	<0.0001	<0.0001	<0.0001	0.00054	
Total Silicon	mg/L			5.3	5.62	5.3	5.8	5.54	
Total Silver	mg/L			<0.00005	<0.00002	<0.00002	<0.00002	<0.00002	
Total Strontium	mg/L			0.203	0.206	0.195	0.182	0.173	
Total Thallium	mg/L			<0.00001	<0.00005	<0.00005	<0.00001	<0.00001	
Total Tin	mg/L			<0.0001	<0.005	<0.005	<0.005	<0.005	
Total Titanium	mg/L			0.0015	<0.005	<0.005	<0.005	<0.005	
Total Uranium	mg/L	0.02	MAC	0.00012	0.00015	0.00011	0.0001	0.0001	
Total Vanadium	mg/L			0.0002	<0.005	<0.005	<0.005	<0.005	
Total Zinc	mg/L	5	AO	0.0625	0.121	0.037	0.2	0.24	
Total Zirconium	mg/L				<0.0005	<0.0005	<0.0001	<0.0001	
Total Calcium	mg/L			87	80.1	72.9	74.7	84.5	
Total Magnesium	mg/L			3.88	3.75	3.67	3.56	3.47	
Total Potassium	mg/L			0.9	0.859	0.791	0.782	0.63	
Total Sodium	mg/L	200	AO	9.1	10.9	7.73	10.2	8.07	
Total Sulphur	mg/L				12.1	15.2	11.2	17.3	

 Notes below about Manganese (2019) from: <https://www.canada.ca/en/health-canada/services/environmental-workplace-health/reports-publications/water-quality/guidelines-canadian-drinking-water-quality-summary-table.html>

Type	Parameter (published, reaffirmed)	MAC (mg/L)	Other value (mg/L)	Common sources of parameter in water	Health considerations	Comments
I= Inorganic chemical parameter	Manganese (2019)	0.12	AO: <0.02	Dissolution of naturally-occurring minerals commonly found in soil and rock. Other sources include industrial discharge, mining activities and leaching from landfills.	Health Basis of MAC: Effects on neurological development and behaviour; deficits in memory, attention, and motor skills. Other: Formula-fed infants (where water containing manganese at levels above the MAC is used to prepare formula) may be especially at risk.	AO based on minimizing the occurrence of discoloured water, consumer complaints and staining of laundry.

CDWG=Canadian Drinking Water Guidelines

MAC=Maximum Acceptable Concentration

OG= Operational Guidance Value

AO=Aesthetic Objective

Orange font indicates non-compliance with the Aesthetic Objective (AO) in the Canadian Drinking Water Guidelines (CDWG)
Red font indicates non-compliance with the Maximum Acceptable Concentration (MAC) in the CDWG

	Units	CDWG		October 19 2010	October 26 2011	October 31 2012	October 21 2013	November 7 2013*	November 5 2014
Miscellaneous Inorganics									
Fluoride	mg/L	1.5	MAC	<1.0	0.1	0.17	0.15	0.14	0.18
Alkalinity (total as CaCO)	mg/L			160	160	160	160	149	158
Anions									
Dissolved Sulphate	mg/L	500	AO	4.9	5.3	4.9	4.7	13	3.6
Dissolved Chloride	mg/L	250	AO	4.9	6.2	5.4	5.6	8.6	4.6
Nitrite	mg/L	1	MAC	<0.1	<0.01	<0.05	<0.05	<0.0050	<0.05
Miscellaneous									
Apparent Colour	Colour Unit			10	11	14	16		17
Nutrients									
Total Ammonia	mg/L			1	1.48	1.39	1.21	1.21	1.1
Physical Properties									
Conductivity	µS/cm			331	324	328	325	340	322
pH	pH	6.5:8.5	AO	7.9	7.9	7.8	8	8.17	7.9
TDS	mg/L	500	AO	168	202	220	170	214	188
Turbidity	NTU			0.6	0.8	0.9	1		1.2
Microbiological Parameters									
E.coli	MPN/100mL	<1	MAC	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Total Coliforms	MPN/100mL	<1	MAC	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Calculated Parameters									
Total Hardness (CaCO)	mg/L			130	63	130	130	137	140
Nitrate	mg/L	10	MAC	<0.1	<0.01	<0.05	<0.05	<0.020	<0.05
Elements									
Total Mercury	mg/L	0.001	MAC	<0.00001	<0.00001	<0.0001	<0.00001	<0.00005	<0.00001
Total Metals									
Total Aluminum	mg/L	0.1	OG	0.008	<0.005	0.003	<0.005	<0.003	<0.005
Total Antimony	mg/L	0.006	MAC	<0.0002	<0.0002	<0.0001	<0.0002	<0.0005	<0.0001
Total Arsenic	mg/L	0.01	MAC	0.0008	0.0005	0.00041	0.0004	0.00025	0.00037
Total Barium	mg/L	1	MAC	0.014	0.013	0.0147	0.014	0.013	0.0143
Total Beryllium	mg/L				<0.00004	<0.00005	<0.00004	<0.0001	<0.00005
Total Bismuth	mg/L				<0.001	0.0001	<0.0010	<0.001	<0.0001
Total Boron	mg/L	5	MAC	0.056	0.053	0.062	0.052	<0.05	0.051
Total Cadmium	mg/L	0.005	MAC	<0.00001	<0.00001	0.00001	<0.00001	<0.00001	<0.00001
Total Chromium	mg/L	0.05	MAC	0.0008	<0.0004	<0.0005	<0.0004	<0.001	<0.0005
Total Cobalt	mg/L				0.00002	<0.0001	<0.00002	<0.0005	<0.0001
Total Copper	mg/L	1	AO	<0.001	0.001	0.0011	<0.001	<0.0002	0.0004
Total Iron	mg/L	0.3	AO	0.275	0.299	0.355	0.374	0.334	0.376
Total Lead	mg/L	0.01	MAC	0.0002	0.0003	<0.0001	0.0002	<0.0002	<0.0001
Total Manganese	mg/L	0.02 0.12	AO MAC	0.168	0.162	0.175	0.179	0.164	0.181
Total Molybdenum	mg/L				0.0003	0.00037	0.0004	<0.001	0.0004
Total Nickel	mg/L			<0.001	<0.001	<0.0002	<0.001	<0.001	<0.0002
Total Selenium	mg/L	0.05	MAC	<0.0006	<0.0006	<0.0001	<0.0006	<0.0001	<0.0001
Total Silicon	mg/L				11	12.4	11.2	11.8	11.9
Total Silver	mg/L			<0.00001	<0.00001	<0.00001	<0.00001	<0.00002	<0.00005
Total Strontium	mg/L				0.117	0.13	0.129	0.126	0.131
Total Thallium	mg/L				<0.00001	<0.00001	<0.00001	<0.00005	<0.00001
Total Tin	mg/L				<0.0001	<0.0001	<0.0001	<0.005	<0.0001
Total Titanium	mg/L				<0.001	<0.0005	<0.0010	<0.005	<0.0005
Total Uranium	mg/L	0.02	MAC	<0.0004	<0.0004	<0.00001	<0.0004	<0.0001	<0.00001
Total Vanadium	mg/L				0.0006	0.0006	0.0005	<0.005	0.0006
Total Zinc	mg/L	5	AO	0.02	0.005	0.0028	0.004	<0.005	0.0074
Total Zirconium	mg/L								
Total Calcium	mg/L			32.7	33.5	34.2	32.9	36	36.2
Total Magnesium	mg/L			11	11.4	11.6	12.2	11.5	12
Total Potassium	mg/L			2.8	2.8	2.9	3.03	2.79	2.9
Total Sodium	mg/L	200	AO	18.7	17.6	18	19.4	14.8	17.5
Total Sulphur	mg/L								

 Notes below about Manganese (2019) from: <https://www.canada.ca/en/health-canada/services/environmental-workplace-health/reports-publications/water-quality/guidelines-canadian-drinking-water-quality-summary-table.html>

Type	Parameter (published, reaffirmed)	MAC (mg/L)	Other value (mg/L)	Common sources of parameter in water	Health considerations	Comments
I= Inorganic chemical parameter	Manganese (2019)	0.12	AO: <0.02	Dissolution of naturally-occurring minerals commonly found in soil and rock. Other sources include industrial discharge, mining activities and leaching from landfills.	Health Basis of MAC: Effects on neurological development and behaviour; deficits in memory, attention, and motor skills. Other: Formula-fed infants (where water containing manganese at levels above the MAC is used to prepare formula) may be especially at risk.	AO based on minimizing the occurrence of discoloured water, consumer complaints and staining of laundry.

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 OG= Operational Guidance Value

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	Units	CDWG		October 26 2016	September 21 2017	6 2018	October 24 2019	November 5 2020	October 14 2021	October 20 2022	October 26 2023
Miscellaneous Inorganics											
Fluoride	mg/L	1.5	MAC	0.16	0.16	0.16	0.18	0.15	0.16	0.16	0.16
Alkalinity (total as CaCO)	mg/L			142	148	146	140	150	150	150	140
Anions											
Dissolved Sulphate	mg/L	500	AO	8.13	9.4	11.4	9.3	11	11	10	11
Dissolved Chloride	mg/L	250	AO	15	16	19	17	17	16	21	16
Nitrite	mg/L	1	MAC	<0.0050	<0.0050	<0.0050	<0.005	<0.005	<0.005	<0.005	<0.005
Miscellaneous											
Apparent Colour	Colour Unit			20	20	15	20	15	<5	10	10
Nutrients											
Total Ammonia	mg/L			1.5	1.3	1.4	1.5	1.4	1.3	1.1	1.2
Physical Properties											
Conductivity	µS/cm			344	342	363	340	350	350	370	360
pH	pH	7.0:10.5	AO	8.14	8	8.03	8.05	8.27	8.21	8.03	8.16
TDS	mg/L	500	AO	192	190	198	180	200	210	210	230
Turbidity	NTU			0.96	1.35	0.88	0.88	0.67	0.84	1.6	
Microbiological Parameters											
E.coli	MPN/100mL	<1	MAC	<1.0	<1.0	<1.0	0	0	0	0	0
Total Coliforms	MPN/100mL	<1	MAC	<1.0	<1.0	<1.0	0	0	0	0	0
Calculated Parameters											
Total Hardness (CaCO)	mg/L			118	118	121	119	114	124	122	124
Nitrate	mg/L	10	MAC	<0.020	<0.020	<0.020	<0.02	<0.02	<0.02	<0.02	<0.02
Elements											
Total Mercury	mg/L	0.001	MAC	<0.00001	<0.00001	<0.000002	<0.000002	<0.0000019	<0.0000019	<0.0000019	<0.0000019
Total Metals											
Total Aluminum	mg/L	0.1	OG	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.006
Total Antimony	mg/L	0.006	MAC	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.001
Total Arsenic	mg/L	0.01	MAC	0.00129	0.00137	0.00178	0.00124	0.00113	0.00144	0.00149	0.00124
Total Barium	mg/L	1	MAC	0.0076	0.0082	0.0087	0.0074	0.0064	0.0079	0.0087	0.0079
Total Beryllium	mg/L			<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0002
Total Bismuth	mg/L			<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.002
Total Boron	mg/L	5	MAC	0.065	0.074	0.067	0.065	0.068	0.064	0.06	<0.10
Total Cadmium	mg/L	0.005	MAC	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00002
Total Chromium	mg/L	0.05	MAC	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.002
Total Cobalt	mg/L			<0.0005	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0004
Total Copper	mg/L	1	AO	0.00029	0.001	<0.0005	<0.0002	0.00024	<0.0002	0.00124	<0.0004
Total Iron	mg/L	0.3	AO	0.588	0.678	0.611	0.622	0.548	0.566	0.706	0.576
Total Lead	mg/L	0.01	MAC	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0004
Total Manganese	mg/L	0.02 0.12	AO MAC	0.23	0.238	0.252	0.243	0.212	0.238	0.312	0.233
Total Molybdenum	mg/L			<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.002
Total Nickel	mg/L			<0.001	0.0011	<0.001	<0.001	<0.001	<0.001	<0.001	<0.002
Total Selenium	mg/L	0.05	MAC	<0.0001	<0.0001	<0.0001	0.00126	0.00054	<0.0001	<0.0001	0.00024
Total Silicon	mg/L			13.7	15.6	14.9	14.4	13.2	15.9	16.3	15.9
Total Silver	mg/L			<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00004
Total Strontium	mg/L			0.113	0.122	0.136	0.122	0.12	0.13	0.126	0.123
Total Thallium	mg/L			<0.00005	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00002
Total Tin	mg/L			<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01
Total Titanium	mg/L			<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01
Total Uranium	mg/L	0.02	MAC	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0002
Total Vanadium	mg/L			<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01
Total Zinc	mg/L	5	AO	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01
Total Zirconium	mg/L			<0.0005	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0002
Total Calcium	mg/L			29.7	28.2	30.4	30.1	27.8	30.9	30.2	30.6
Total Magnesium	mg/L			10.7	11.4	10.9	10.6	10.7	11.4	11.4	11.5
Total Potassium	mg/L			2.36	2.78	2.68	2.67	2.57	2.64	2.69	2.66
Total Sodium	mg/L	200	AO	23.9	24	25	22.5	23.1	21.2	26.6	22.3
Total Sulphur	mg/L			<3.0	3.8	4	3.3	<3	3.5	3.3	<6

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Type	Parameter (published, reaffirmed)	MAC (mg/L)	Other value (mg/L)	Common sources of parameter in water	Health considerations	Comments
I= Inorganic chemical parameter	Manganese (2019)	0.12	AO: <0.02	Dissolution of naturally-occurring minerals commonly found in soil and rock. Other sources include industrial discharge, mining activities and leaching from landfills.	Health Basis of MAC: Effects on neurological development and behaviour; deficits in memory, attention, and motor skills. Other: Formula-fed infants (where water containing manganese at levels above the MAC is used to prepare formula) may be especially at risk.	AO based on minimizing the occurrence of discoloured water, consumer complaints and staining of laundry.

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	Units	CDWG		November 5 2014	October 26 2015	October 26 2016	September 21 2017	November 6 2018
Miscellaneous Inorganics								
Fluoride	mg/L	1.5	MAC	0.25	0.16	0.16	0.16	0.16
Alkalinity (total as CaCO)	mg/L			140	135	139	146	138
Anions								
Dissolved Sulphate	mg/L	500	AO	3.3	3.67	4.49	6.5	6.4
Dissolved Chloride	mg/L	250	AO	7	7.7	7.6	7.9	8
Nitrite	mg/L	1	MAC	<0.05	<0.0050	<0.0050	<0.0050	<0.0050
Miscellaneous								
Apparent Colour	Colour Unit			21	20	20	20	15
Nutrients								
Total Ammonia	mg/L			1.11	1.2	1.2	1.1	1.1
Physical Properties								
Conductivity	µS/cm			293	296	303	296	300
pH	pH	7.0:10.5	AO	7.9	8.22	8.09	8.23	8.08
TDS	mg/L	500	AO	240	168	176	174	148
Turbidity	NTU			0.9	0.56	1.06	1.14	0.61
Microbiological Parameters								
E.coli	MPN/100mL	<1	MAC	<1.0	<1.0	<1.0	<1.0	<1.0
Total Coliforms	MPN/100mL	<1	MAC	<1.0	<1.0	<1.0	<1.0	<1.0
Calculated Parameters								
Total Hardness (CaCO)	mg/L			110	105	103	109	108
Nitrate	mg/L	10	MAC	<0.05	<0.020	<0.020	<0.020	<0.020
Elements								
Total Mercury	mg/L	0.001	MAC	<0.00001	<0.00001	<0.00001	<0.00001	<0.000002
Total Metals								
Total Aluminum	mg/L	0.1	OG	<0.005	<0.003	0.013	<0.003	<0.003
Total Antimony	mg/L	0.006	MAC	<0.0001	<0.0005	<0.0005	<0.0005	<0.0005
Total Arsenic	mg/L	0.01	MAC	0.00043	0.00038	0.00041	0.0004	0.00034
Total Barium	mg/L	1	MAC	0.006	0.0053	0.006	0.0057	0.006
Total Beryllium	mg/L			<0.00005	<0.0001	<0.0001	<0.0001	<0.0001
Total Bismuth	mg/L			<0.0001	<0.001	<0.001	<0.001	<0.001
Total Boron	mg/L	5	MAC	0.066	0.065	0.062	0.071	0.062
Total Cadmium	mg/L	0.005	MAC	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Total Chromium	mg/L	0.05	MAC	<0.0005	<0.001	<0.001	<0.001	<0.001
Total Cobalt	mg/L			<0.0001	<0.0005	<0.0005	<0.0002	<0.0002
Total Copper	mg/L	1	AO	0.0011	0.00051	0.0241	0.00215	<0.0005
Total Iron	mg/L	0.3	AO	0.533	0.527	0.551	0.568	0.54
Total Lead	mg/L	0.01	MAC	0.0003	<0.0002	0.00037	0.00032	<0.0002
Total Manganese	mg/L	0.02 0.12	AO MAC	0.209	0.2	0.203	0.196	0.203
Total Molybdenum	mg/L			0.00022	<0.001	<0.001	<0.001	<0.001
Total Nickel	mg/L			<0.0002	<0.001	<0.001	<0.001	<0.001
Total Selenium	mg/L	0.05	MAC	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Total Silicon	mg/L			14.2	16	14.3	16.1	14.2
Total Silver	mg/L			<0.00005	<0.00002	<0.00002	<0.00002	<0.00002
Total Strontium	mg/L			0.102	0.0929	0.102	0.101	0.106
Total Thallium	mg/L			<0.00001	<0.00005	<0.00005	<0.00001	<0.00001
Total Tin	mg/L			<0.0001	<0.005	<0.005	<0.005	<0.005
Total Titanium	mg/L			0.0006	<0.005	<0.005	<0.005	<0.005
Total Uranium	mg/L	0.02	MAC	<0.00001	<0.0001	<0.0001	<0.0001	<0.0001
Total Vanadium	mg/L			0.0007	<0.005	<0.005	<0.005	<0.005
Total Zinc	mg/L	5	AO	0.0076	<0.005	0.0134	0.0157	<0.005
Total Zirconium	mg/L				<0.0005	<0.0005	<0.0001	<0.0001
Total Calcium	mg/L			27.6	26.9	25.8	28	27.5
Total Magnesium	mg/L			9.53	9.2	9.41	9.46	9.57
Total Potassium	mg/L			2.4	2.35	2.26	2.36	2.28
Total Sodium	mg/L	200	AO	20.6	20.5	18.5	18.5	18.7
Total Sulphur	mg/L				<3.0	<3.0	<3.0	<3.0

Notes below about Manganese (2019) from: <https://www.canada.ca/en/health-canada/services/environmental-workplace-health/reports-publications/water-quality/guidelines-canadian-drinking-water-quality-summary-table.html>

Type	Parameter (published, reaffirmed)	MAC (mg/L)	Other value (mg/L)	Common sources of parameter in water	Health considerations	Comments
I= Inorganic chemical parameter	Manganese (2019)	0.12	AO: <0.02	Dissolution of naturally-occurring minerals commonly found in soil and rock. Other sources include industrial discharge, mining activities and leaching from landfills.	Health Basis of MAC: Effects on neurological development and behaviour; deficits in memory, attention, and motor skills. Other: Formula-fed infants (where water containing manganese at levels above the MAC is used to prepare formula) may be especially at risk.	AO based on minimizing the occurrence of discoloured water, consumer complaints and staining of laundry.

CDWG=Canadian Drinking Water Guidelines

MAC=Maximum Acceptable Concentration

OG= Operational Guidance Value

AO=Aesthetic Objective

Orange font indicates non-compliance with the Aesthetic Objective (AO) in the Canadian Drinking Water Guidelines (CDWG)

Red font indicates non-compliance with the Maximum Acceptable Concentration (MAC) in the CDWG

	Units	CDWG		September 20 2017	November 6 2018	October 17 2019	November 19 2020	November 4 2021
Miscellaneous Inorganics								
Fluoride	mg/L	1.5	MAC	0.082	0.089	0.054	0.082	0.086
Alkalinity (total as CaCO ₃)	mg/L			139	147	140	170	180
Anions								
Dissolved Sulphate	mg/L	500	AO	17.5	15.8	22	17	16
Dissolved Chloride	mg/L	250	AO	23	11	19	6.8	7
Nitrite	mg/L	1	MAC	<0.0050	<0.0050	<0.005	<0.005	<0.005
Miscellaneous								
Apparent Colour	Colour Unit			10	5	5	10	<5
Nutrients								
Total Ammonia	mg/L			0.092	0.086	0.18	0.1	0.096
Physical Properties								
Conductivity	µS/cm			366	344	380	380	360
pH	pH	7.0:10.5	AO	8.29	8.07	8.08	8.22	7.99
TDS	mg/L	500	AO	198	180	230	220	210
Turbidity	NTU			0.19	0.11	<0.1	0.18	0.18
Microbiological Parameters								
E.coli	MPN/100mL	<1	MAC	<1.0	<1.0	0	0	0
Total Coliforms	MPN/100mL	<1	MAC	<1.0	<1.0	0	0	0
Calculated Parameters								
Total Hardness (CaCO ₃)	mg/L			140	142	138	152	157
Nitrate	mg/L	10	MAC	<0.020	<0.020	<0.02	<0.02	<0.02
Elements								
Total Mercury	mg/L	0.001	MAC	<0.00001	<0.000002	0.000027	<0.0000019	<0.0000019
Total Metals								
Total Aluminum	mg/L	0.1	OG	<0.003	<0.003	<0.003	0.0041	<0.003
Total Antimony	mg/L	0.006	MAC	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Total Arsenic	mg/L	0.01	MAC	0.00273	0.00268	0.00232	0.00292	0.00297
Total Barium	mg/L	1	MAC	0.0162	0.0171	0.0172	0.0194	0.0185
Total Beryllium	mg/L			<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Total Bismuth	mg/L			<0.001	<0.001	<0.001	<0.001	<0.001
Total Boron	mg/L	5	MAC	<0.050	<0.050	0.055	<0.05	<0.05
Total Cadmium	mg/L	0.005	MAC	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Total Chromium	mg/L	0.05	MAC	<0.001	<0.001	<0.001	<0.001	<0.001
Total Cobalt	mg/L			<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Total Copper	mg/L	1	AO	0.00024	0.00271	0.00034	0.0004	0.0015
Total Iron	mg/L	0.3	AO	0.0117	0.011	0.0198	0.0572	0.0356
Total Lead	mg/L	0.005	MAC	<0.0002	0.00043	<0.0002	<0.0002	<0.0002
Total Manganese	mg/L	0.02 0.12	AO MAC	0.115	0.118	0.123	0.138	0.143
Total Molybdenum	mg/L			<0.001	0.0011	<0.001	<0.001	<0.001
Total Nickel	mg/L			<0.001	<0.001	<0.001	<0.001	<0.001
Total Selenium	mg/L	0.05	MAC	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Total Silicon	mg/L			11.7	10.4	9.64	10.9	11.4
Total Silver	mg/L			<0.00002	<0.00002	<0.00002	<0.00002	<0.00002
Total Strontium	mg/L			0.116	0.124	0.119	0.132	0.136
Total Thallium	mg/L			<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Total Tin	mg/L			<0.005	<0.005	<0.005	<0.005	<0.005
Total Titanium	mg/L			<0.005	<0.005	<0.005	<0.005	<0.005
Total Uranium	mg/L	0.02	MAC	0.00014	0.00018	0.00017	0.00027	0.00028
Total Vanadium	mg/L			<0.005	<0.005	<0.005	<0.005	<0.005
Total Zinc	mg/L	5	AO	<0.005	<0.005	<0.005	<0.005	<0.005
Total Zirconium	mg/L			<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Total Calcium	mg/L			36.1	36.9	36.8	39.1	40.1
Total Magnesium	mg/L			12.1	12.1	11.3	13.3	13.8
Total Potassium	mg/L			1.36	1.39	1.38	1.52	1.57
Total Sodium	mg/L	200	AO	18.4	17.8	18.7	17.2	17
Total Sulphur	mg/L			5.7	5.3	5.4	5.5	4.9

Notes below about Manganese (2019) from: <https://www.canada.ca/en/health-canada/services/environmental-workplace-health/reports-publications/water-quality/guidelines-canadian-drinking-water-quality-summary-table.html>

Type	Parameter (published, reaffirmed)	MAC (mg/L)	Other value (mg/L)	Common sources of parameter in water	Health considerations	Comments
I= Inorganic chemical parameter	Manganese (2019)	0.12	AO: <0.02	Dissolution of naturally-occurring minerals commonly found in soil and rock. Other sources include industrial discharge, mining activities and leaching from landfills.	Health Basis of MAC: Effects on neurological development and behaviour; deficits in memory, attention, and motor skills. Other: Formula-fed infants (where water containing manganese at levels above the MAC is used to prepare formula) may be especially at risk.	AO based on minimizing the occurrence of discoloured water, consumer complaints and staining of laundry.

Fairwinds #1 Raw Well Water Analysis 2275 Tippet Road (well water has been sent to the WTP since 2012)

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OG= Operational Guidance Value

MAC=Maximum Acceptable Concentration
AO=Aesthetic Objective

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Red font indicates non-compliance with the Maximum Acceptable Concentration (MAC) in the CDWG

	Units	CDWG		October 26 2015	October 26 2016	September 21 2017	November 6 2018	October 24 2019
Miscellaneous Inorganics								
Fluoride	mg/L	1.5	MAC	0.16	0.14	0.16	0.16	0.17
Alkalinity (total as CaCO)	mg/L			146	152	158	151	150
Anions								
Dissolved Sulphate	mg/L	500	AO	9.38	11.8	13.3	12.9	12
Dissolved Chloride	mg/L	250	AO	10	10	10	9.8	11
Nitrite	mg/L	1	MAC	<0.0050	<0.0050	<0.0050	<0.0050	<0.005
Miscellaneous								
Apparent Colour	Colour Unit			30	20	20	15	15
Nutrients								
Total Ammonia	mg/L			1.3	1.4	1.3	1.3	1.2
Physical Properties								
Conductivity	µS/cm			331	343	345	346	340
pH	pH	7.0:10.5	AO	8.29	8.13	8.23	8.11	8.09
TDS	mg/L	500	AO	208	204	196	188	200
Turbidity	NTU			1	1.04	1.18	1.15	1.2
Microbiological Parameters								
E.coli	MPN/100mL	<1	MAC	<1.0	<1.0	<1.0	<1.0	0
Total Coliforms	MPN/100mL	<1	MAC	<1.0	<1.0	<1.0	<1.0	0
Calculated Parameters								
Total Hardness (CaCO)	mg/L			122	120	125	128	123
Nitrate	mg/L	10	MAC	<0.020	<0.020	<0.020	<0.020	<0.02
Elements								
Total Mercury	mg/L	0.001	MAC	<0.00001	<0.00001	<0.00001	<0.000002	<0.000002
Total Metals								
Total Aluminum	mg/L	0.1	OG	<0.003	<0.003	<0.003	0.0062	<0.003
Total Antimony	mg/L	0.006	MAC	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Total Arsenic	mg/L	0.01	MAC	0.0018	0.00174	0.00156	0.00166	0.00139
Total Barium	mg/L	1	MAC	0.0103	0.0109	0.0104	0.0102	0.0103
Total Beryllium	mg/L			<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Total Bismuth	mg/L			<0.001	<0.001	<0.001	<0.001	<0.001
Total Boron	mg/L	5	MAC	0.061	0.059	0.070	0.063	0.06
Total Cadmium	mg/L	0.005	MAC	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Total Chromium	mg/L	0.05	MAC	<0.001	<0.001	<0.001	<0.001	<0.001
Total Cobalt	mg/L			<0.0005	<0.0005	<0.0002	<0.0002	<0.0002
Total Copper	mg/L	1	AO	0.00077	0.00022	<0.0002	0.00038	<0.0002
Total Iron	mg/L	0.3	AO	0.647	0.632	0.659	0.649	0.663
Total Lead	mg/L	0.01	MAC	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Total Manganese	mg/L	0.02 0.12	AO MAC	0.265	0.275	0.278	0.282	0.287
Total Molybdenum	mg/L			<0.001	<0.001	<0.001	<0.001	<0.001
Total Nickel	mg/L			<0.001	<0.001	<0.001	<0.001	<0.001
Total Selenium	mg/L	0.05	MAC	<0.0001	<0.0001	<0.0001	<0.0001	0.00162
Total Silicon	mg/L			17	15.5	15.9	15.3	14.6
Total Silver	mg/L			<0.00002	<0.00002	<0.00002	<0.00002	<0.00002
Total Strontium	mg/L			0.0971	0.108	0.105	0.11	0.108
Total Thallium	mg/L			<0.00005	<0.00005	<0.00001	<0.00001	<0.00001
Total Tin	mg/L			<0.005	<0.005	<0.005	<0.005	<0.005
Total Titanium	mg/L			<0.005	<0.005	<0.005	<0.005	<0.005
Total Uranium	mg/L	0.02	MAC	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Total Vanadium	mg/L			<0.005	<0.005	<0.005	<0.005	<0.005
Total Zinc	mg/L	5	AO	<0.005	0.025	<0.005	0.0055	<0.005
Total Zirconium	mg/L			<0.0005	<0.0005	<0.0001	<0.0001	<0.0001
Total Calcium	mg/L			30.4	29.5	30.1	31.3	30.6
Total Magnesium	mg/L			11.2	11.3	12.1	12.1	11.4
Total Potassium	mg/L			2.5	2.44	2.71	2.43	2.5
Total Sodium	mg/L	200	AO	22.4	20.2	21.6	21.6	20.5
Total Sulphur	mg/L			<3.0	4	5.3	4.3	4.4

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