

Decourcay Raw Well Water Analysis Between 3274 & 3284 Bisell 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		October 11 2016	September 19 2017	October 23 2018	October 22 2019	October 16 2020	November 2 2021	November 8 2022	October 16 2023	October 30 2024	October 20 2025
Miscellaneous Inorganics													
Fluoride	mg/L	1.5	MAC	0.2	0.17	0.15	0.15	0.14	0.1	0.14	0.14	<0.05	0.13
Alkalinity (total as CaCO ₃)	mg/L			214	207	202	200	180	150	200	190	100	210
Anions													
Dissolved Sulphate	mg/L	500	AO	22	21.9	25.6	25	25	15	24	24	7.8	21
Dissolved Chloride	mg/L	250	AO	55	70	99	91	140	63	130	110	11	110
Nitrite	mg/L	1	MAC	<0.0050	<0.0050	<0.0050	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Miscellaneous													
Apparent Colour	Colour Unit			5	10	5	<5	5	<5	<5	<5	4.3	7.5
Nutrients													
Total Ammonia	mg/L			0.094	<0.020	0.094	0.078	0.029	<0.015	<0.015	<0.015	<0.015	<0.015
Physical Properties													
Conductivity	µS/cm			637	649	746	700	850	510	890	800	260	780
pH	pH	7.0:10.5	AO	7.99	8.41	8.27	8.09	7.94	7.26	7.96	7.6	6.78	7.98
TDS	mg/L	500	AO	356	350	406	390	470	300	470	460	180	420
Turbidity	NTU			0.22	0.25	0.32	0.33	0.19	0.83	0.61	0.4	0.57	1
Microbiological Parameters													
E.coli	MPN/100mL	<1	MAC	<1	<1.0	<1.0	0	0	0	0	0	0	0
Total Coliforms	MPN/100mL	<1	MAC	3.1	<1.0	<1.0	27	32	0	0	0	0	0
Calculated Parameters													
Total Hardness (CaCO ₃)	mg/L			34.4	35.8	46.3	49.8	57.5	34.8	59.7	50.5	71.9	51.3
Nitrate	mg/L	10	MAC	0.126	<0.020	<0.020	0.066	0.042	0.366	0.038	0.022	0.337	<0.02
Elements													
Total Mercury	mg/L	0.001	MAC	<0.00001	<0.00001	0.0000048	0.0000084	0.0000036	0.0000032	0.0000043	0.0000032	0.0000028	0.0000128
Total Metals													
Total Aluminum	mg/L	0.1	OG	0.0067	0.0128	0.0054	0.0067	<0.003	0.0309	0.0101	0.0056	0.0152	0.0058
Total Antimony	mg/L	0.006	MAC	<0.0005	<0.0005	<0.00050	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Total Arsenic	mg/L	0.01	MAC	0.00031	0.00025	0.00023	0.00023	0.00017	0.00018	0.00019	0.0002	0.00015	0.00025
Total Barium	mg/L	1	MAC	0.0064	0.0068	0.0093	0.0091	0.0115	0.0094	0.0102	0.0093	0.0056	0.0095
Total Beryllium	mg/L			<0.0001	<0.0001	<0.00010	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Total Bismuth	mg/L			<0.001	<0.001	<0.0010	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Total Boron	mg/L	5	MAC	0.148	0.152	0.133	0.129	0.115	0.09	0.116	0.131	<0.05	0.149
Total Cadmium	mg/L	0.005	MAC	<0.00001	<0.00001	<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	<0.0010	0.0011	<0.001	<0.001	0.0014	<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	<0.0002	<0.0002
Total Copper	mg/L	1	AO	0.00422	0.00206	0.00156	0.00187	0.00143	0.00184	0.00609	0.00466	0.00691	0.00176
Total Iron	mg/L	0.1	AO	0.0133	0.0186	0.013	0.0803	<0.005	0.0406	0.0306	0.0172	0.0785	0.0506
Total Lead	mg/L	0.01	MAC	0.00026	0.0002	0.00023	0.00023	<0.0002	<0.0002	0.00028	0.0003	0.00331	<0.0002
Total Manganese	mg/L 0.02 0.12	AO MAC	AO MAC	0.0145	0.0094	0.0304	0.0265	0.0503	0.0334	0.0091	0.0099	0.0065	0.0289
Total Molybdenum	mg/L			<0.001	<0.001	<0.0010	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Total Nickel	mg/L			<0.001	<0.001	<0.0010	<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	<0.0001	<0.0001
Total Silicon	mg/L			6.43	7.18	7.75	7.67	7.8	6.96	7.85	8.21	6.48	7.94
Total Silver	mg/L			<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002
Total Strontium	mg/L			0.147	0.142	0.203	0.209	0.255	0.123	0.228	0.214	0.167	0.217
Total Thallium	mg/L			<0.00005	<0.00001	<0.00001	<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	<0.005	<0.005
Total Titanium	mg/L			<0.005	<0.005	<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	0.00014	<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	<0.005	<0.005
Total Zinc	mg/L	5	AO	<0.005	0.0067	0.007	0.0065	0.0061	0.0093	0.0104	0.0095	0.0114	<0.005
Total Zirconium	mg/L			<0.0005	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Total Calcium	mg/L			10.5	11.1	14.2	15.5	17.8	10.6	18.6	15.3	22.8	15.5
Total Magnesium	mg/L			1.98	1.99	2.63	2.71	3.18	2.03	3.23	2.96	3.66	3.07
Total Potassium	mg/L			0.651	0.663	0.857	0.811	0.97	0.673	0.895	0.883	0.347	0.835
Total Sodium	mg/L	200	AO	126	130	142	128	144	96.8	148	155	23	145
Total Sulphur	mg/L			7	7.4	8.2	7.6	8.4	3.8	7.3	7.7	<3	7.2

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.