

## Westerne Heights #1 Raw Well Water Analysis 1260 Westerne Heights Road

CDWG=Canadian Drinking Water Guidelines  
OG= Operational Guidance Value

MAC=Maximum Acceptable Concentration  
AO= Aesthetic Objective

Green font indicates a value flagged for operational considerations.

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

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

	Units	CDWG		Sept 8 2014	October 12 2016	Sept 18 2017	October 25 2018	October 3 2019	October 21 2020	October 21 2021	October 13 2022	October 12 2023
<b>Miscellaneous Inorganics</b>												
Fluoride	mg/L	1.5	MAC	<0.05	0.026	0.031	0.026	<0.05	<0.05	<0.05	<0.05	<0.05
Alkalinity (total as CaCO <sub>3</sub> )	mg/L			46	44.5	47.5	45.1	47	40	50	41	45
<b>Anions</b>												
Dissolved Sulphate	mg/L	500	AO	1.6	1.7	1.8	2.3	1.4	2.9	2.3	2.1	1.9
Dissolved Chloride	mg/L	250	AO	1.4	1.8	2.3	1.6	1.5	1.6	1.2	<1	1.6
Nitrite	mg/L	1	MAC	<0.05	<0.0050	<0.0050	<0.0050	<0.005	<0.0005	<0.0005	<0.005	>0.005
<b>Miscellaneous</b>												
Apparent Colour	Colour Unit			<5	5	5	5	5	5	<5	<5	<5
<b>Nutrients</b>												
Total Ammonia	mg/L			<0.02	0.1	<0.020	0.02	0.07	0.027	0.017	0.018	0.017
<b>Physical Properties</b>												
Conductivity	µS/cm			90.7	97.6	98.5	95.4	95	91	90	93	97
pH	pH	7.0:10.5	OG	7.2	7.79	7.79	7.78	7.61	7.04	6.76	7.2	7.17
TDS	mg/L	500	AO	76	78	82	60	50	74	82	58	64
Turbidity	NTU			<0.5	0.55	0.15	0.34	0.25	0.44	0.28	0.37	0.7
<b>Microbiological Parameters</b>												
E.coli	MPN/100mL	<1	MAC	<1.0	<1.0	<1.0	<1.0	<1.0	0	0	0	0
Total Coliforms	MPN/100mL	<1	MAC	<1.0	4.2	<1.0	<1.0	<1.0	0	0	0	0
<b>Calculated Parameters</b>												
Total Hardness (CaCO <sub>3</sub> )	mg/L			42	41.5	42.6	43.3	41.4	41.2	39.5	40.6	43.8
Nitrate	mg/L	10	MAC	0.10	0.118	0.115	0.117	0.12	0.117	0.138	0.134	0.13
<b>Elements</b>												
Total Mercury	mg/L	0.001	MAC	<0.00001	<0.00001	<0.00001	0.0000083	<0.000002	<0.0000019	<0.0000019	<0.0000019	<0.0000019
<b>Total Metals</b>												
Total Aluminum	mg/L	0.1	OG	<0.025	<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	<0.0005
Total Arsenic	mg/L	0.01	MAC	0.00041	<0.0001	<0.0001	0.00011	<0.001	<0.0001	<0.0001	0.0001	0.00012
Total Barium	mg/L	1	MAC	0.00315	0.0015	0.0014	0.0014	0.0015	0.0015	0.0015	0.0014	0.0014
Total Beryllium	mg/L			<0.00025	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Total Bismuth	mg/L			<0.0005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Total Boron	mg/L	5	MAC	<0.010	<0.050	<0.050	<0.050	<0.05	<0.05	<0.05	<0.05	<0.05
Total Cadmium	mg/L	0.005	MAC	0.00015	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Total Chromium	mg/L	0.05	MAC	<0.0025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Total Cobalt	mg/L			<0.0005	<0.0005	<0.0002	<0.0002	<0.002	<0.0002	<0.0002	<0.0002	<0.0002
Total Copper	mg/L	1	AO	0.0085	0.0028	0.00469	0.00418	0.00249	0.00168	0.00359	0.00105	0.00184
Total Iron	mg/L	0.3	AO	0.058	0.123	0.0845	0.142	0.121	0.152	0.172	0.135	0.204
Total Lead	mg/L	0.01	MAC	0.0035	<0.0002	<0.0002	0.00032	0.00076	0.00063	0.00032	<0.0002	0.00044
Total Manganese	mg/L	0.02 0.12	AO MAC	<0.0050	0.0075	0.0028	0.003	0.0031	0.0033	0.0034	0.0028	0.0027
Total Molybdenum	mg/L			0.00028	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Total Nickel	mg/L			0.0101	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Total Selenium	mg/L	0.05	MAC	<0.0005	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Total Silicon	mg/L			7.5	6.63	7.55	7.17	7.09	7.46	7.48	7.86	7.78
Total Silver	mg/L			<0.00025	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002
Total Strontium	mg/L			0.028	0.0286	0.0281	0.0281	0.0273	0.0262	0.0245	0.0242	0.0273
Total Thallium	mg/L			<0.00005	<0.00005	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Total Tin	mg/L			0.0006	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Total Titanium	mg/L			<0.0025	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Total Uranium	mg/L	0.02	MAC	<0.00005	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Total Vanadium	mg/L			0.0023	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Total Zinc	mg/L	5	AO	0.121	<0.005	0.0058	<0.005	<0.005	<0.005	0.0051	<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			11.7	11.1	11.7	12	11.3	11.2	10.9	11.2	12.1
Total Magnesium	mg/L			3.16	3.34	3.25	3.27	3.2	3.21	2.94	3.09	3.29
Total Potassium	mg/L			<0.5	0.189	0.192	0.179	0.172	0.18	0.167	0.165	0.179
Total Sodium	mg/L	200	AO	2.7	3.18	3.57	2.8	2.52	265	2.29	2.39	2.48
Total Sulphur	mg/L				<3.0	<3.0	<3.0	<3	<3	<3	<3	<3

Notes below about pH (2015) from [https://www.canada.ca/content/dam/hc-sc/migration/hc-sc/ewh-semt/alt\\_formats/pdf/pubs/water-eau/sum\\_guide-res\\_recom/summary-table-EN-2020-02-11.pdf](https://www.canada.ca/content/dam/hc-sc/migration/hc-sc/ewh-semt/alt_formats/pdf/pubs/water-eau/sum_guide-res_recom/summary-table-EN-2020-02-11.pdf)

Type	Parameter (published, reaffirmed)	MAC (mg/L)	Other value (mg/L)	Common sources of parameter in water	Health considerations	Comments
Treatment-related	pH (2015)	None	7.0-10.5	Not applicable	Not applicable	The control of pH is important to maximize treatment effectiveness, control corrosion and reduce leaching from distribution system and plumbing components.