

**ANALYSIS INFORMATION**

**REPORTED TO PROJECT** Ootischenia Improvement District  
Weekly Microbiological Analysis

**WORK ORDER REPORTED** 5080870  
Aug-20-15

Analysis Description	Method Reference	Technique	Location
Alkalinity in Water (Total)	APHA 2320 B*	Titration with H2SO4	Kelowna
Anions in Water by IC	APHA 4110 B	Ion Chromatography with Chemical Suppression of Eluent Conductivity	Kelowna
Colour, True	APHA 2120 C	Spectrophotometry (456 nm)	Kelowna
Conductivity in Water	APHA 2510 B	Conductivity Meter	Kelowna
Cyanide, Total in Water	APHA 4500-CN- C / APHA 4500-CN- E	Distillation / Colorimetry	Kelowna
E. coli (CCA)	APHA 9222*	Membrane Filtration / Chromocult Agar	Kelowna
Hardness (as CaCO3)	APHA 2340 B	Calculation	N/A
Mercury, total by CVAFS	EPA 245.7*	BrCl2 Oxidation / Cold Vapor Atomic Fluorescence Spectrometry (CVAFS)	Richmond
pH in Water	APHA 4500-H+ B	Electrometry	Kelowna
Solids, Total Dissolved	APHA 1030 E	Calculation	N/A
Total Coliforms (CCA)	APHA 9222*	Membrane Filtration / Chromocult Agar	Kelowna
Total Recoverable Metals	APHA 3030E* / APHA 3125 B	HNO3+HCl Hot Block Digestion / Inductively Coupled Plasma Mass Spectrometry (ICP-MS)	Richmond
Transmissivity at 254 nm	APHA 5910 B	Ultraviolet Absorption	Kelowna
Turbidity	APHA 2130 B	Nephelometry	Kelowna

*Note: An asterisk in the Method Reference indicates that the CARO method has been modified from the reference method*

**Method Reference Descriptions:**

APHA Standard Methods for the Examination of Water and Wastewater, 22nd Edition, American Public Health Association/American Water Works Association/Water Environment Federation  
EPA United States Environmental Protection Agency Test Methods

**Glossary of Terms:**

MRL Method Reporting Limit  
< Less than the Reported Detection Limit (RDL) - the RDL may be higher than the MRL due to various factors such as dilutions, limited sample volume, high moisture, or interferences  
% T Percent Transmittance  
CFU/100 mL Colony Forming Units per 100 millilitres  
CU Colour Units (referenced against a platinum cobalt standard)  
mg/L Milligrams per litre  
NTU Nephelometric Turbidity Units  
pH units pH < 7 = acidic, pH > 7 = basic  
µS/cm Microsiemens per centimetre

**Standards / Guidelines Referenced in this Report:**

Guidelines for Canadian Drinking Water Quality (Oct 2014)  
Website: [http://www.hc-sc.gc.ca/ewh-semt/alt\\_formats/pdf/pubs/water-eau/sum\\_guide-res\\_recom/sum\\_guide-res\\_recom-eng.pdf](http://www.hc-sc.gc.ca/ewh-semt/alt_formats/pdf/pubs/water-eau/sum_guide-res_recom/sum_guide-res_recom-eng.pdf)

*Note: In some cases, the values displayed on the report represent the lowest guideline and are to be verified by the end user*

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Analyte	Result / Recovery	Standard / Guideline	MRL / Units Limits	Prepared	Analyzed	Notes
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**Sample ID: Well 5 (5080870-01) [Water] Sampled: Aug-12-15 14:45**

**Anions**

Chloride	2.01	AO ≤ 250	0.10 mg/L	N/A	Aug-15-15	
Fluoride	0.14	MAC = 1.5	0.10 mg/L	N/A	Aug-15-15	
Nitrate as N	1.48	MAC = 10	0.010 mg/L	N/A	Aug-15-15	
Nitrite as N	< 0.010	MAC = 1	0.010 mg/L	N/A	Aug-15-15	
Sulfate	22.2	AO ≤ 500	1.0 mg/L	N/A	Aug-15-15	

**General Parameters**

Alkalinity, Total as CaCO3	95	N/A	1 mg/L	N/A	Aug-14-15	
Colour, True	< 5	AO ≤ 15	5 CU	N/A	Aug-14-15	
Conductivity (EC)	244	N/A	2 µS/cm	N/A	Aug-14-15	
Cyanide, Total	< 0.010	MAC = 0.2	0.010 mg/L	Aug-18-15	Aug-19-15	
pH	7.95	6.5-8.5	0.01 pH units	N/A	Aug-14-15	HT2
Turbidity	< 0.1	OG < 0.1	0.1 NTU	Aug-14-15	Aug-14-15	
UV Transmittance @ 254nm	98.2	N/A	0.1 % T	N/A	Aug-14-15	

**Calculated Parameters**

Hardness, Total (Total as CaCO3)	124	N/A	5.0 mg/L	N/A	N/A	
Solids, Total Dissolved	139	AO ≤ 500	2.0 mg/L	N/A	N/A	

**Total Recoverable Metals**

Aluminum, total	< 0.05	OG < 0.1	0.05 mg/L	Aug-18-15	Aug-20-15	
Antimony, total	< 0.001	MAC = 0.006	0.001 mg/L	Aug-18-15	Aug-20-15	
Arsenic, total	< 0.005	MAC = 0.01	0.005 mg/L	Aug-18-15	Aug-20-15	
Barium, total	0.06	MAC = 1	0.05 mg/L	Aug-18-15	Aug-20-15	
Beryllium, total	< 0.001	N/A	0.001 mg/L	Aug-18-15	Aug-20-15	
Boron, total	< 0.04	MAC = 5	0.04 mg/L	Aug-18-15	Aug-20-15	
Cadmium, total	< 0.0001	MAC = 0.005	0.0001 mg/L	Aug-18-15	Aug-20-15	
Calcium, total	41.4	N/A	2.0 mg/L	Aug-18-15	Aug-20-15	
Chromium, total	< 0.005	MAC = 0.05	0.005 mg/L	Aug-18-15	Aug-20-15	
Cobalt, total	< 0.0005	N/A	0.0005 mg/L	Aug-18-15	Aug-20-15	
Copper, total	< 0.002	AO ≤ 1	0.002 mg/L	Aug-18-15	Aug-20-15	
Iron, total	0.11	AO ≤ 0.3	0.10 mg/L	Aug-18-15	Aug-20-15	
Lead, total	< 0.001	MAC = 0.01	0.001 mg/L	Aug-18-15	Aug-20-15	
Magnesium, total	5.1	N/A	0.1 mg/L	Aug-18-15	Aug-20-15	
Manganese, total	< 0.002	AO ≤ 0.05	0.002 mg/L	Aug-18-15	Aug-20-15	
Mercury, total	< 0.00002	MAC = 0.001	0.00002 mg/L	Aug-18-15	Aug-19-15	
Molybdenum, total	0.006	N/A	0.001 mg/L	Aug-18-15	Aug-20-15	
Nickel, total	0.002	N/A	0.002 mg/L	Aug-18-15	Aug-20-15	
Phosphorus, total	0.3	N/A	0.2 mg/L	Aug-18-15	Aug-20-15	
Potassium, total	1.7	N/A	0.2 mg/L	Aug-18-15	Aug-20-15	
Selenium, total	< 0.005	MAC = 0.05	0.005 mg/L	Aug-18-15	Aug-20-15	
Silicon, total	9	N/A	5 mg/L	Aug-18-15	Aug-20-15	
Silver, total	< 0.0005	N/A	0.0005 mg/L	Aug-18-15	Aug-20-15	
Sodium, total	2.6	AO ≤ 200	0.2 mg/L	Aug-18-15	Aug-20-15	
Uranium, total	0.0020	MAC = 0.02	0.0002 mg/L	Aug-18-15	Aug-20-15	
Vanadium, total	< 0.01	N/A	0.01 mg/L	Aug-18-15	Aug-20-15	
Zinc, total	< 0.04	AO ≤ 5	0.04 mg/L	Aug-18-15	Aug-20-15	

**SAMPLE ANALYTICAL DATA**

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**Sample ID: Well 5 (5080870-01) [Water] Sampled: Aug-12-15 14:45, Continued**

**Microbiological Parameters**

Coliforms, Total	< 1	MAC = None Detected	1	CFU/100 mL	Aug-13-15	Aug-14-15	
E. coli	< 1	MAC = None Detected	1	CFU/100 mL	Aug-13-15	Aug-14-15	

**Sample / Analysis Qualifiers:**

HT2 The 15 minute recommended holding time (from sampling to analysis) has been exceeded - field analysis is recommended.