

Report Transmission Cover Page

Bill To: City of Maple Ridge 11995 Haney Place Maple Ridge, BC, Canada V2X 6A9	Project ID: Project Name: Whonnock 272nd St. Well	Lot ID: 1475448
Attn: Accounts Payable	Project Location: LSD:	Control Number: Date Received: Feb 22, 2021 Date Reported: Feb 25, 2021
Sampled By: Company:	P.O.: Proj. Acct. code:	Report Number: 2596711

Contact	Company	Address
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Delivery	Format	Deliverables
Email - Single Report	PDF	COA
Email - Single Report	PDF	Invoice
Email - Single Report	PDF	Test Report

Notes To Clients:

- Feb 25, 2021 - The analysis of water sample 1475448-1 is below Maximum Acceptable Concentrations for the chemical and bacteriological health related guidelines specified by the September 2020 Guidelines for Canadian Drinking Water Quality for the parameters tested.

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Analytical Report

Bill To: City of Maple Ridge 11995 Haney Place Maple Ridge, BC, Canada V2X 6A9	Project ID: Project Name: Whonnock 272nd St. Well	Lot ID: 1475448
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Reference Number	1475448-1
Sample Date	February 22, 2021
Sample Time	09:10
Sample Location	
Sample Description	Whonnock 272nd St. Well / 8.3 °C
Sample Matrix	Drinking Water

Analyte	Units	Result	Nominal Detection Limit	Guideline Limit	Guideline Comments
Metals Extractable					
Aluminum	Extractable mg/L	0.001	0.001	0.1	Below OG
Antimony	Extractable mg/L	<0.00002	0.00002	0.006	Below MAC
Arsenic	Extractable mg/L	0.0005	0.0001	0.010	Below MAC
Barium	Extractable mg/L	0.0026	0.0001	2.0	Below MAC
Boron	Extractable mg/L	0.005	0.002	5	Below MAC
Cadmium	Extractable mg/L	<0.00001	0.00001	0.007	Below MAC
Chromium	Extractable mg/L	<0.00005	0.00005	0.05	Below MAC
Copper	Extractable mg/L	0.0015	0.0005	1 AO; 2 MAC	Below AO
Lead	Extractable mg/L	0.00005	0.00001	0.005	Below MAC
Selenium	Extractable mg/L	<0.0002	0.0002	0.05	Below MAC
Strontium	Extractable mg/L	0.048	0.0001	7.0	Below MAC
Uranium	Extractable mg/L	<0.00001	0.00001	0.02	Below MAC
Vanadium	Extractable mg/L	<0.00005	0.00005		
Zinc	Extractable mg/L	0.011	0.0005	5.0	Below AO
Microbiological Analysis					
Total Coliforms	Enzyme Substrate Test MPN/100 mL	<1.0	1.0	0 per 100 mL	Below MAC
Escherichia coli	Enzyme Substrate Test MPN/100 mL	<1.0	1.0	0 per 100 mL	Below MAC
Physical and Aggregate Properties					
Colour	True Colour units	<5	5		
Turbidity	NTU	0.53	0.1	0.1	Above OG
Routine Water					
pH - Holding Time		Exceeded			
pH	at 25 °C	7.69	0.01	7.0-10.5	Within Range
Electrical Conductivity	µS/cm at 25 °C	112	1		
Calcium	Extractable mg/L	12	0.01		
Iron	Extractable mg/L	0.16	0.004	0.3	Below AO
Magnesium	Extractable mg/L	2.5	0.02		
Manganese	Extractable mg/L	0.066	0.001	0.02 AO; 0.12 MAC	Above AO
Potassium	Extractable mg/L	1.6	0.04		
Silicon	Extractable mg/L	8.6	0.005		
Sodium	Extractable mg/L	5.8	0.1	200	Below AO
T-Alkalinity	as CaCO3 mg/L	58	5		
Chloride	Dissolved mg/L	1.57	0.05	250	Below AO
Fluoride	Dissolved mg/L	0.06	0.01	1.5	Below MAC
Nitrate - N	Dissolved mg/L	0.09	0.01	10	Below MAC
Nitrite - N	Dissolved mg/L	<0.01	0.01	1	Below MAC

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Sample Date	February 22, 2021
Sample Time	09:10
Sample Location	
Sample Description	Whonnock 272nd St. Well / 8.3 °C
Sample Matrix	Drinking Water

Analyte	Units	Result	Nominal Detection Limit	Guideline Limit	Guideline Comments
Routine Water - Continued					
Sulfate (SO4)	Dissolved mg/L	<0.1	0.1	500	Below AO
Hardness	as CaCO3 (extractable) mg/L	41	1		
Total Dissolved Solids	Extractable mg/L	82	1	500	Below AO

Approved by: 
 Max Hewitt
 Operations Manager

Methodology and Notes

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Method of Analysis

Method Name	Reference	Method	Date Analysis Started	Location
Alk, pH, EC, Turb in water (BC)	APHA	* Alkalinity - Titration Method, 2320 B	Feb 23, 2021	Element Vancouver
Alk, pH, EC, Turb in water (BC)	APHA	* Conductivity, 2510 B	Feb 23, 2021	Element Vancouver
Alk, pH, EC, Turb in water (BC)	APHA	* pH - Electrometric Method, 4500-H+ B	Feb 23, 2021	Element Vancouver
Anions by IEC in water (VAN)	APHA	* Ion Chromatography with Chemical Suppression of Eluent Cond., 4110 B	Feb 22, 2021	Element Vancouver
Metals SemiTrace (Extractable) in water (VAN)	US EPA	* Metals & Trace Elements by ICP-AES, 6010C	Feb 23, 2021	Element Vancouver
Total and E-Coli - Colilert - DW (VAN)	APHA	Enzyme Substrate Test, APHA 9223 B	Feb 22, 2021	Element Vancouver
Trace Metals (extractable) in Water (VAN)	US EPA	* Determination of Trace Elements in Waters and Wastes by ICP-MS, 200.8	Feb 23, 2021	Element Vancouver
True Color in water (VAN)	APHA	* Spectrophotometric - Single Wavelength Method, 2120 C	Feb 22, 2021	Element Vancouver
Turbidity - Water (VAN)	APHA	* Turbidity - Nephelometric Method, 2130 B	Feb 22, 2021	Element Vancouver

* Reference Method Modified

References

APHA	Standard Methods for the Examination of Water and Wastewater
US EPA	US Environmental Protection Agency Test Methods

Guidelines

Guideline Description	Health Canada GCDWQ
Guideline Source	Guidelines for Canadian Drinking Water Quality, Health Canada, Sept 2020
Guideline Comments	MAC = Maximum Acceptable Concentration AO = Aesthetic Objective OG = Operational Guideline for Water Treatment Plants (does not apply to private groundwater wells). Refer to Health Canada for complete guidelines at www.hc-sc.gc.ca

Comments:

- Feb 25, 2021 - The analysis of water sample 1475448-1 is below Maximum Acceptable Concentrations for the chemical and bacteriological health related guidelines specified by the September 2020 Guidelines for Canadian Drinking Water Quality for the parameters tested.

The comparison of test results to guideline limits is provided for information purposes only. This is not to be taken as a statement of conformance / nonconformance to any guideline, regulation or limit. The data user is responsible for all conclusions drawn with respect to the data and is advised to consult official regulatory references when evaluating compliance.

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