

# North Island Laboratories

• 2755 B Moray Avenue, Courtenay, B.C. V9N 8M9 Tel: (250) 338-7786 Fax: (250) 338-7553

## Certificate of Analysis

Report To: Union Bay Improvement District  
PO Box 70  
Union Bay BC  
V0R 3B0

Lab Number: 86415  
Date Reported: 17 Mar 11  
Date Completed: 17 Mar 11  
Date Received: 7 Mar 11 11:40

86415-01 McLeod Reservoir

Treated Water

Sampled By: UBID  
Sampling Date: 7 Mar 11 0:00

Test	Result	Units	Drinking Water Guidelines
Alkalinity	<10	mg/L	
Colour - Apparent	18	Colour units	15 AO
Conductivity	34.5	uS	
Hardness (CaCO <sub>3</sub> )	9.3	mg/L	80-100
pH	7.1	pH Units	6.5-8.5
Total Dissolved Solids	58	mg/L	500 AO
Turbidity	2.3	NTU's	5 AO
Chloride	5.9	mg/L	250 AO
Fluoride	<1.0	mg/L	1.5 MAC
Nitrate (N)	<0.1	mg/L	10 MAC
Nitrite (N)	<0.1	mg/L	1 MAC
Sulphate	2.6	mg/L	500 AO
T-Aluminium	0.16	mg/L	0.1 Operational Std.
T-Antimony	<0.0002	mg/L	0.006 MAC
T-Arsenic	0.0002	mg/L	0.010 MAC
T-Barium	0.006	mg/L	1.0 MAC
T-Boron	0.01	mg/L	5 IMAC
T-Cadmium	<0.00001	mg/L	0.005 MAC
T-Calcium	2.65	mg/L	
T-Chromium	0.0004	mg/L	0.05 MAC
T-Copper	0.015	mg/L	1.0 AO
T-Iron	0.191	mg/L	0.3 AO
T-Lead	0.0002	mg/L	0.010 MAC
T-Lithium	<0.001	mg/L	
T-Magnesium	0.66	mg/L	
T-Manganese	0.026	mg/L	0.05 AO
T-Mercury	<0.00001	mg/L	1 ug/L MAC

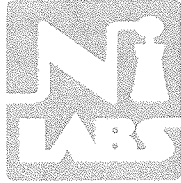
AO = Aesthetic Objective; MAC = Max. Allowable Concentration; IMAC = Interim MAC  
> = Greater than; < = Less than

Results relate only to samples as submitted. This certificate must not be reproduced, except in its entirety, without written consent from the laboratory.

Canadian Drinking Water Guidelines as listed on Dec. 5th, 2005 and are subject to change.

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86415-01 McLeod Reservoir

Treated Water

Sampled By: UBID

Sampling Date: 7 Mar 11 0:00

Test	Result	Units	Drinking Water Guidelines
T-Nickel	<0.001	mg/L	
T-Phosphorus	<0.01	mg/L	
T-Potassium	0.2	mg/L	
T-Selenium	<0.0006	mg/L	0.01 MAC
T-Silver	<0.00001	mg/L	
T-Sodium	2.42	mg/L	200 AO
T-Uranium	<0.0004	mg/L	0.02 MAC
T-Zinc	0.003	mg/L	5 AO

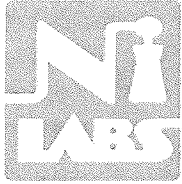
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## 86415-01

For further information regarding sampling, lab results and well disinfection, please check our web site: <http://www.nilabs.com>. For information on wells and ground water see: [www.wellwaterprotection.bc.ca](http://www.wellwaterprotection.bc.ca)  
We suggest the following Health Canada website for further information regarding the latest drinking water quality guidelines to help you assess your results:  
[http://www.hc-sc.gc.ca/ewh-semt/water-eau/drink-potab/guide/doc\\_sup-appui-eng.php](http://www.hc-sc.gc.ca/ewh-semt/water-eau/drink-potab/guide/doc_sup-appui-eng.php)

**Total Coliform:** The Total Coliform group (of micro-organisms) includes: The fecal coliform, which are common to the intestinal tract of both man and animals, and the non-fecal coliforms that are naturally present in soils and on vegetation. The precise sanitary significance of the Total Coliform test may be difficult to establish. The test is offered as an indicator of bacterial contamination.

**E.coli:** The E.coli test has been shown to be an indicator of the potential presence of enteric pathogens in water. Because it is relatively specific for fecal contamination, the E.coli measurement is preferred for monitoring raw (untreated i.e. wells) water quality and for indicating the potential presence of pathogens at source. Any untreated supply that contains E.coli should receive disinfection.

Test	Method	Analyst	Date
Alkalinity	Titration to 4.5	NiSL	11/03/2011
Chloride	Ion Chromatography	NiSL	07/03/2011
Colour - Apparent	Exova Subcontract Exova Subcontract	EXL	03/09/2011
Conductivity	Conductivity meter	NiSL	11/03/2011
Fluoride	Ion Chromatography	NiSL	07/03/2011
Hardness (CaCO3)	calc	EXL	16/03/2011
Nitrate (N)	Ion Chromatography	NiSL	07/03/2011
Nitrite (N)	Ion Chromatography	NiSL	07/03/2011
pH	pH meter	NiSL	09/03/2011
Sulphate	Ion Chromatography	NiSL	07/03/2011
T-Aluminium	ICP-MS, USEPA 200.8 Exova Subcontract	EXL	03/09/2011
T-Antimony	ICP-MS, USEPA 200.8 Exova Subcontract	EXL	03/09/2011
T-Arsenic	ICP-MS, USEPA 200.8 Exova Subcontract	EXL	03/09/2011
T-Barium	ICP-MS, USEPA 200.8 Exovat Subcontract	EXL	03/09/2011
T-Boron	ICP-MS, USEPA 200.8 Exova Subcontract	EXL	03/09/2011
T-Cadmium	ICP-MS, USEPA 200.8 Exova Subcontract	EXL	03/09/2011
T-Calcium	ICP, APHA 3120B Exova Subcontract	EXL	03/09/2011
T-Chromium	ICP-MS, USEPA 200.8 Exova Subcontract	EXL	03/09/2011
T-Copper	ICP-MS, USEPA 200.8 Exovat Subcontract	EXL	03/09/2011
T-Iron	ICP, APHA 3120B Exova Subcontract	EXL	03/09/2011
T-Lead	ICP-MS, USEPA 200.8 Exova Subcontract	EXL	03/09/2011
T-Lithium	ICP-MS, USEPA 200.8 Exova Subcontract	EXL	03/09/2011

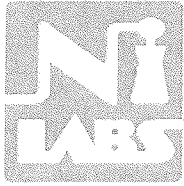
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T-Magnesium	ICP, APHA 3120B Exova Subcontract	EXL	03/09/2011
T-Manganese	ICP-MS, USEPA 200.8 Exova Subcontract	EXL	03/09/2011
T-Mercury	CVAAS Exova Subcontract	EXL	03/09/2011
T-Nickel	ICP-MS, USEPA 200.8 Exova Subcontract	EXL	03/09/2011
T-Phosphorus	ICP-MS, USEPA 200.8 Exova Subcontract	EXL	03/09/2011
T-Potassium	ICP, APHA 3120B Exova Subcontract	EXL	03/09/2011
T-Selenium	ICP-MS, USEPA 200.8 Exova Subcontract	EXL	03/09/2011
T-Silver	ICP-MS, USEPA 200.8 Exovat Subcontract	EXL	03/09/2011
T-Sodium	ICP, APHA 3120B Exova Subcontract	EXL	03/09/2011
T-Uranium	ICP-MS, USEPA 200.8 Exova Subcontract	EXL	03/09/2011
T-Zinc	ICP-MS, USEPA 200.8 Exova Subcontract	EXL	03/09/2011
Total Dissolved Solids	gravimetric Norwest Subcontract	EXL	03/09/2011
Turbidity	Nephelometer	NIsL	08/03/2011

Approved By:

Catherine Black, Owner/Operator

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