

Your C.O.C. #: 12738

**Attention: Joe Wools**

North Cedar Improvement District  
PO Box 210  
2100 Yellow Point Rd  
Cedar, BC  
Canada V9X 1W1

**Report Date: 2018/07/13**

Report #: R258877

Version: 1 - Final

**CERTIFICATE OF ANALYSIS**

**MAXXAM JOB #: B853878**

**Received: 2018/07/03, 15:52**

Sample Matrix: DRINKING WATER  
# Samples Received: 1

<b>Analyses</b>	<b>Quantity</b>	<b>Date Extracted</b>	<b>Date Analyzed</b>	<b>Laboratory Method</b>	<b>Analytical Method</b>
Alkalinity - Water	1	N/A	2018/07/07	BBY6SOP-00026	SM 22 2320 B m
Chloride by Automated Colourimetry	1	N/A	2018/07/09	BBY6SOP-00011	SM 22 4500-Cl- E m
True Colour (Single Wavelength) (1)	1	N/A	2018/07/06	VIC SOP-00010	SM 22 2120 C m
Conductance - water	1	N/A	2018/07/07	BBY6SOP-00026	SM 22 2510 B m
Fluoride	1	N/A	2018/07/11	BBY6SOP-00048	SM 22 4500-F C m
Iron Bacteria (1)	1	N/A	2018/07/03	VIC SOP-00114	SM 9240B m
Sulphide (as H <sub>2</sub> S) Calculation - total	1	N/A	2018/07/06	BBY WI-00033	Auto Calc
Hardness Total (calculated as CaCO <sub>3</sub> ) (2)	1	N/A	2018/07/10	BBY WI-00033	Auto Calc
Mercury (Total) by CVAF	1	2018/07/06	2018/07/06	BBY7SOP-00015	BCMOE BCLM Oct2013 m
Heterotropic Plate Count Water Mem. Filt (1)	1	N/A	2018/07/03	BBY4 SOP-00003	SM 9215 m
Na, K, Ca, Mg, S by CRC ICPMS (total)	1	N/A	2018/07/10	BBY WI-00033	Auto Calc
Elements by CRC ICPMS (total)	1	N/A	2018/07/09	BBY7SOP-00003,	EPA 6020b R2 m
Nitrogen (Total)	1	N/A	2018/07/06	BBY6SOP-00016	SM 22 4500-N C m
Ammonia-N (Preserved)	1	N/A	2018/07/10	BBY6SOP-00009	EPA 350.1 m
Nitrate + Nitrite (N)	1	N/A	2018/07/06	BBY6SOP-00010	SM 23 4500-NO3- I m
Nitrite (N) by CFA	1	N/A	2018/07/06	BBY6SOP-00010	SM 22 4500-NO3- I m
Nitrogen - Nitrate (as N)	1	N/A	2018/07/07	BBY WI-00033	Auto Calc
Nitrogen (Tot. Organic) Calculation	1	N/A	2018/07/11	BBY WI-00033	Auto Calc
pH Water (3)	1	N/A	2018/07/07	BBY6SOP-00026	SM 22 4500-H+ B m
Sat. pH and Langelier Index (@ 4.4C)	1	N/A	2018/07/10	BBY WI-00033	Auto Calc
Sat. pH and Langelier Index (@ 60C)	1	N/A	2018/07/10	BBY WI-00033	Auto Calc
Sulphate by Automated Colourimetry	1	N/A	2018/07/09	BBY6SOP-00017	SM 22 4500-SO42- E m
Sulphate Reducing Bacteria (1)	1	N/A	2018/07/03	VIC SOP-00114	SM 9240C m
Sulphide - total	1	N/A	2018/07/06	BBY6SOP-00006	SM 22 4500-S2- D m
Total Dissolved Solids (Filt. Residue) (1)	1	N/A	2018/07/06	VIC SOP-00008	SM 2540C m
Total Coliform & E.Coli by MF-Chromocult (1)	1	N/A	2018/07/04	VIC SOP 00112	SM 9222J
Carbon (Total Organic) (4)	1	N/A	2018/07/09	BBY6SOP-00003	SM 22 5310 C m
Turbidity (1)	1	N/A	2018/07/06	VIC SOP-00011	SM 2130
UV absorbance @254nm-Unfiltered	1	N/A	2018/07/09	BBY6SOP-00055	SM 22 5910 B

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Sample Matrix: DRINKING WATER

# Samples Received: 1

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
UV transmittance @254nm-Unfiltered	1	N/A	2018/07/09	BBY WI-00033	Auto Calc

**Remarks:**

Maxxam Analytics' laboratories are accredited to ISO/IEC 17025:2005 for specific parameters on scopes of accreditation. Unless otherwise noted, procedures used by Maxxam are based upon recognized Provincial, Federal or US method compendia such as CCME, MDDELCC, EPA, APHA.

All work recorded herein has been done in accordance with procedures and practices ordinarily exercised by professionals in Maxxam's profession using accepted testing methodologies, quality assurance and quality control procedures (except where otherwise agreed by the client and Maxxam in writing). All data is in statistical control and has met quality control and method performance criteria unless otherwise noted. All method blanks are reported; unless indicated otherwise, associated sample data are not blank corrected.

Maxxam Analytics' liability is limited to the actual cost of the requested analyses, unless otherwise agreed in writing. There is no other warranty expressed or implied. Maxxam has been retained to provide analysis of samples provided by the Client using the testing methodology referenced in this report. Interpretation and use of test results are the sole responsibility of the Client and are not within the scope of services provided by Maxxam, unless otherwise agreed in writing.

Solid sample results, except biota, are based on dry weight unless otherwise indicated. Organic analyses are not recovery corrected except for isotope dilution methods.

Results relate to samples tested.

This Certificate shall not be reproduced except in full, without the written approval of the laboratory.

Reference Method suffix "m" indicates test methods incorporate validated modifications from specific reference methods to improve performance.

\* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.

(1) This test was performed by Maxxam Victoria

(2) "Total Hardness" was calculated from Total Ca and Mg concentrations and may be biased high (Hardness, or Dissolved Hardness, calculated from Dissolved Ca and Mg, should be used for compliance if available).

(3) The BC-MOE and APHA Standard Method require pH to be analysed within 15 minutes of sampling and therefore field analysis is required for compliance. All Laboratory pH analyses in this report are reported past the BC-MOE/APHA Standard Method holding time.

(4) TOC present in the sample should be considered as non-purgeable TOC.

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**CERTIFICATE OF ANALYSIS**

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Encryption Key

Please direct all questions regarding this Certificate of Analysis to your Project Manager.  
BC Env Customer Service, BC Environmental Customer Service  
Email: Enviro.CS.BC@maxxam.ca  
Phone# (604) 734 7276

=====  
This report has been generated and distributed using a secure automated process.

Maxxam has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per section 5.10.2 of ISO/IEC 17025:2005(E), signing the reports. For Service Group specific validation please refer to the Validation Signature Page.

**VIHA PKG, WELLS/SPRINGS - VICTORIA (DRINKING WATER)**

Maxxam ID					TU0432		
Sampling Date					2018/07/03 09:30		
COC Number					12738		
	UNITS	MAC	AO	OG	RAW WATER WELL #6	RDL	QC Batch
<b>Misc. Inorganics</b>							
UV absorbance (254nm)	AU/cm	-	-	-	<0.010	0.010	905966
<b>ANIONS</b>							
Nitrite (N)	mg/L	1	-	-	<0.0050	0.0050	9053727
<b>Calculated Parameters</b>							
Total Hardness (CaCO3)	mg/L	-	-	-	22.5	0.50	9050022
Nitrate (N)	mg/L	10	-	-	0.165	0.020	9048010
Total Organic Nitrogen (N)	mg/L	-	-	-	<0.020	0.020	9048765
Transmittance at 254nm	%T/cm	-	-	-	>97.7	N/A	9048775
<b>Misc. Inorganics</b>							
Fluoride (F)	mg/L	1.5	-	-	0.024	0.020	9059280
Alkalinity (Total as CaCO3)	mg/L	-	-	-	22.0	1.0	9053269
Total Organic Carbon (C)	mg/L	-	-	-	0.58	0.50	9055587
Alkalinity (PP as CaCO3)	mg/L	-	-	-	<1.0	1.0	9053269
Bicarbonate (HCO3)	mg/L	-	-	-	26.8	1.0	9053269
Carbonate (CO3)	mg/L	-	-	-	<1.0	1.0	9053269
Hydroxide (OH)	mg/L	-	-	-	<1.0	1.0	9053269
<b>Anions</b>							
Dissolved Sulphate (SO4)	mg/L	-	500	-	2.8	1.0	9057212
Dissolved Chloride (Cl)	mg/L	-	250	-	6.5	1.0	9057196
<b>MISCELLANEOUS</b>							
True Colour	Col. Unit	-	15	-	<5	5	9055880
<b>Nutrients</b>							
Total Ammonia (N)	mg/L	-	-	-	<0.020	0.020	9058043
Nitrate plus Nitrite (N)	mg/L	-	-	-	0.165	0.020	9053726
Total Nitrogen (N)	mg/L	-	-	-	0.166	0.020	9053161
<b>Physical Properties</b>							
Conductivity	uS/cm	-	-	-	70.7	2.0	9053270
pH	pH	-	-	7.0:10.5	7.31		9053268
<b>Physical Properties</b>							
Total Dissolved Solids	mg/L	-	500	-	40	10	9053621
Turbidity	NTU	see remark	see remark	see remark	1.4	0.1	9055756
No Fill	No Exceedance						
Grey	Exceeds 1 criteria policy/level						
Black	Exceeds both criteria/levels						
RDL = Reportable Detection Limit							
N/A = Not Applicable							

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**VIHA PKG, WELLS/SPRINGS - VICTORIA (DRINKING WATER)**

<b>Maxxam ID</b>					TU0432		
<b>Sampling Date</b>					2018/07/03 09:30		
<b>COC Number</b>					12738		
	<b>UNITS</b>	<b>MAC</b>	<b>AO</b>	<b>OG</b>	<b>RAW WATER WELL #6</b>	<b>RDL</b>	<b>QC Batch</b>
<b>Elements</b>							
Total Mercury (Hg)	ug/L	1	-	-	<0.0020	0.0020	9053031
<b>Total Metals by ICPMS</b>							
Total Aluminum (Al)	ug/L	-	-	100	4.9	3.0	9054613
Total Antimony (Sb)	ug/L	6	-	-	<0.50	0.50	9054613
Total Arsenic (As)	ug/L	10	-	-	<0.10	0.10	9054613
Total Barium (Ba)	ug/L	1000	-	-	5.0	1.0	9054613
Total Beryllium (Be)	ug/L	-	-	-	<0.10	0.10	9054613
Total Bismuth (Bi)	ug/L	-	-	-	<1.0	1.0	9054613
Total Boron (B)	ug/L	5000	-	-	<50	50	9054613
Total Cadmium (Cd)	ug/L	5	-	-	<0.010	0.010	9054613
Total Chromium (Cr)	ug/L	50	-	-	<1.0	1.0	9054613
Total Cobalt (Co)	ug/L	-	-	-	<0.20	0.20	9054613
Total Copper (Cu)	ug/L	-	1000	-	2.07	0.20	9054613
Total Iron (Fe)	ug/L	-	300	-	113	5.0	9054613
Total Lead (Pb)	ug/L	10	-	-	<0.20	0.20	9054613
Total Manganese (Mn)	ug/L	-	50	-	3.9	1.0	9054613
Total Molybdenum (Mo)	ug/L	-	-	-	<1.0	1.0	9054613
Total Nickel (Ni)	ug/L	-	-	-	<1.0	1.0	9054613
Total Selenium (Se)	ug/L	50	-	-	<0.10	0.10	9054613
Total Silicon (Si)	ug/L	-	-	-	4080	100	9054613
Total Silver (Ag)	ug/L	-	-	-	<0.020	0.020	9054613
Total Strontium (Sr)	ug/L	-	-	-	34.1	1.0	9054613
Total Thallium (Tl)	ug/L	-	-	-	<0.010	0.010	9054613
Total Tin (Sn)	ug/L	-	-	-	<5.0	5.0	9054613
Total Titanium (Ti)	ug/L	-	-	-	<5.0	5.0	9054613
Total Uranium (U)	ug/L	20	-	-	<0.10	0.10	9054613
Total Vanadium (V)	ug/L	-	-	-	<5.0	5.0	9054613
Total Zinc (Zn)	ug/L	-	5000	-	<5.0	5.0	9054613
Total Zirconium (Zr)	ug/L	-	-	-	<0.10	0.10	9054613
Total Calcium (Ca)	mg/L	-	-	-	7.38	0.050	9048009
Total Magnesium (Mg)	mg/L	-	-	-	0.985	0.050	9048009
Total Potassium (K)	mg/L	-	-	-	0.203	0.050	9048009
Total Sodium (Na)	mg/L	-	200	-	4.61	0.050	9048009
Total Sulphur (S)	mg/L	-	-	-	<3.0	3.0	9048009
No Fill	No Exceedance						
Grey	Exceeds 1 criteria policy/level						
Black	Exceeds both criteria/levels						
RDL = Reportable Detection Limit							

**VIHA PKG, WELLS/SPRINGS - VICTORIA (DRINKING WATER)**

<b>Maxxam ID</b>					TU0432		
<b>Sampling Date</b>					2018/07/03 09:30		
<b>COC Number</b>					12738		
	<b>UNITS</b>	<b>MAC</b>	<b>AO</b>	<b>OG</b>	<b>RAW WATER WELL #6</b>	<b>RDL</b>	<b>QC Batch</b>
<b>Microbiological Param.</b>							
Heterotrophic Plate Count	CFU/mL	-	-	-	1	1	9053223
Iron Bacteria	CFU/mL	-	-	-	9000	25	9062355
Sulphate reducing bacteria	CFU/mL	-	-	-	<75	75	9062393
Total Coliforms	CFU/100mL	0	-	-	<b>2.0</b>	N/A	9051871
E. coli	CFU/100mL	0	-	-	0	N/A	9051871
<b>Calculated Parameters</b>							
Langelier Index (@ 4.4C)	N/A	-	-	-	-2.34	N/A	9048768
Langelier Index (@ 60C)	N/A	-	-	-	-1.30	N/A	9048770
Saturation pH (@ 4.4C)	N/A	-	-	-	9.65	N/A	9048768
Saturation pH (@ 60C)	N/A	-	-	-	8.61	N/A	9048770
Total Sulphide (as H2S)	mg/L	-	0.05	-	0.010	0.0053	9047908
<b>MISCELLANEOUS</b>							
Total Sulphide	mg/L	-	0.05	-	0.0091	0.0050	9053138
No Fill	No Exceedance						
Grey	Exceeds 1 criteria policy/level						
Black	Exceeds both criteria/levels						
RDL = Reportable Detection Limit							
N/A = Not Applicable							

### GENERAL COMMENTS

Sample TU0432 [RAW WATER WELL #6] : Sample was analyzed past method specified hold time for UV absorbance @254nm-Unfiltered. {Exceedance of hold time increases the uncertainty of test results but does not necessarily imply that results are compromised.} {Exceedance of hold time increases the uncertainty of test results but does not necessarily imply that results are compromised.}

MAC,AO,OG: The guidelines that have been included in this report have been taken from the Canadian Drinking Water Quality Summary Table, February 2017.

Criteria A = Maximum Acceptable Concentration (MAC) / Criteria B = Aesthetic Objectives (AO) / Criteria C = Operational Guidance Values (OG)

It is recommended to consult these guidelines when interpreting your data since there are non-numerical guidelines that are not included on this report.

#### Turbidity Guidelines:

1. Chemically assisted filtration: less than or equal to 0.3 NTU in 95% of the measurements or 95% of the time each month. Shall not exceed 1.0 NTU at any time.
2. Slow sand / diatomaceous earth filtration: less than or equal to 1.0 NTU in 95% of the measurements or 95% of the time each month. Shall not exceed 3.0 NTU at any time.
3. Membrane filtration: less than or equal to 0.1 NTU in 99% of the measurements made or at least 99% of the time each calendar month. Shall not exceed 0.3 NTU at any time.
4. To ensure effectiveness of disinfection and for good operation of the distribution system, it is recommended that water entering the distribution system have turbidity levels of 1.0 NTU or less.

**Results relate only to the items tested.**

Maxxam Job #: B853878  
Report Date: 2018/07/13

North Cedar Improvement District

### QUALITY ASSURANCE REPORT

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
9053031	EL2	Matrix Spike [TU0432-05]	Total Mercury (Hg)	2018/07/06		101	%	80 - 120
9053031	EL2	Spiked Blank	Total Mercury (Hg)	2018/07/06		100	%	80 - 120
9053031	EL2	Method Blank	Total Mercury (Hg)	2018/07/06	<0.0020		ug/L	
9053031	EL2	RPD [TU0432-05]	Total Mercury (Hg)	2018/07/06	NC		%	20
9053138	KAB	Matrix Spike	Total Sulphide	2018/07/06		88	%	80 - 120
9053138	KAB	Spiked Blank	Total Sulphide	2018/07/06		106	%	80 - 120
9053138	KAB	Method Blank	Total Sulphide	2018/07/06	<0.0050		mg/L	
9053138	KAB	RPD	Total Sulphide	2018/07/06	5.9		%	20
9053161	IC4	Matrix Spike [TU0432-06]	Total Nitrogen (N)	2018/07/06		95	%	80 - 120
9053161	IC4	Spiked Blank	Total Nitrogen (N)	2018/07/06		93	%	80 - 120
9053161	IC4	Method Blank	Total Nitrogen (N)	2018/07/06	<0.020		mg/L	
9053161	IC4	RPD [TU0432-06]	Total Nitrogen (N)	2018/07/06	2.6		%	20
9053268	WAY	Spiked Blank	pH	2018/07/07		101	%	97 - 103
9053268	WAY	RPD	pH	2018/07/07	0.13		%	20
9053269	WAY	Spiked Blank	Alkalinity (Total as CaCO3)	2018/07/07		100	%	80 - 120
9053269	WAY	Method Blank	Alkalinity (Total as CaCO3)	2018/07/07	<1.0		mg/L	
			Alkalinity (PP as CaCO3)	2018/07/07	<1.0		mg/L	
			Bicarbonate (HCO3)	2018/07/07	<1.0		mg/L	
			Carbonate (CO3)	2018/07/07	<1.0		mg/L	
			Hydroxide (OH)	2018/07/07	<1.0		mg/L	
9053270	WAY	Spiked Blank	Conductivity	2018/07/07		100	%	80 - 120
9053270	WAY	Method Blank	Conductivity	2018/07/07	<2.0		uS/cm	
9053621	OMA	Spiked Blank	Total Dissolved Solids	2018/07/06		96	%	80 - 120
9053621	OMA	Method Blank	Total Dissolved Solids	2018/07/06	<10		mg/L	
9053621	OMA	RPD	Total Dissolved Solids	2018/07/06	1.2		%	20
9053726	PSA	Spiked Blank	Nitrate plus Nitrite (N)	2018/07/06		107	%	80 - 120
9053726	PSA	Method Blank	Nitrate plus Nitrite (N)	2018/07/06	<0.020		mg/L	
9053727	PSA	Spiked Blank	Nitrite (N)	2018/07/06		103	%	80 - 120
9053727	PSA	Method Blank	Nitrite (N)	2018/07/06	<0.0050		mg/L	
9054613	JC8	Matrix Spike	Total Aluminum (Al)	2018/07/09		101	%	80 - 120
			Total Antimony (Sb)	2018/07/09		100	%	80 - 120
			Total Arsenic (As)	2018/07/09		99	%	80 - 120
			Total Barium (Ba)	2018/07/09		95	%	80 - 120
			Total Beryllium (Be)	2018/07/09		102	%	80 - 120
			Total Bismuth (Bi)	2018/07/09		98	%	80 - 120
			Total Boron (B)	2018/07/09		109	%	80 - 120
			Total Cadmium (Cd)	2018/07/09		98	%	80 - 120
			Total Chromium (Cr)	2018/07/09		100	%	80 - 120
			Total Cobalt (Co)	2018/07/09		98	%	80 - 120
			Total Copper (Cu)	2018/07/09		98	%	80 - 120
			Total Iron (Fe)	2018/07/09		102	%	80 - 120
			Total Lead (Pb)	2018/07/09		100	%	80 - 120
			Total Manganese (Mn)	2018/07/09		97	%	80 - 120
			Total Molybdenum (Mo)	2018/07/09		100	%	80 - 120
			Total Nickel (Ni)	2018/07/09		96	%	80 - 120
			Total Selenium (Se)	2018/07/09		101	%	80 - 120
			Total Silicon (Si)	2018/07/09		NC	%	80 - 120
			Total Silver (Ag)	2018/07/09		100	%	80 - 120
			Total Strontium (Sr)	2018/07/09		NC	%	80 - 120
			Total Thallium (Tl)	2018/07/09		100	%	80 - 120
			Total Tin (Sn)	2018/07/09		100	%	80 - 120
			Total Titanium (Ti)	2018/07/09		99	%	80 - 120
			Total Uranium (U)	2018/07/09		102	%	80 - 120
			Total Vanadium (V)	2018/07/09		100	%	80 - 120
			Total Zinc (Zn)	2018/07/09		97	%	80 - 120



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**QUALITY ASSURANCE REPORT(CONT'D)**

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
9054613	JC8	Spiked Blank	Total Zirconium (Zr)	2018/07/09		102	%	80 - 120
			Total Aluminum (Al)	2018/07/09		103	%	80 - 120
			Total Antimony (Sb)	2018/07/09		101	%	80 - 120
			Total Arsenic (As)	2018/07/09		99	%	80 - 120
			Total Barium (Ba)	2018/07/09		99	%	80 - 120
			Total Beryllium (Be)	2018/07/09		100	%	80 - 120
			Total Bismuth (Bi)	2018/07/09		99	%	80 - 120
			Total Boron (B)	2018/07/09		106	%	80 - 120
			Total Cadmium (Cd)	2018/07/09		99	%	80 - 120
			Total Chromium (Cr)	2018/07/09		101	%	80 - 120
			Total Cobalt (Co)	2018/07/09		100	%	80 - 120
			Total Copper (Cu)	2018/07/09		99	%	80 - 120
			Total Iron (Fe)	2018/07/09		104	%	80 - 120
			Total Lead (Pb)	2018/07/09		99	%	80 - 120
			Total Manganese (Mn)	2018/07/09		100	%	80 - 120
			Total Molybdenum (Mo)	2018/07/09		96	%	80 - 120
			Total Nickel (Ni)	2018/07/09		101	%	80 - 120
			Total Selenium (Se)	2018/07/09		100	%	80 - 120
			Total Silicon (Si)	2018/07/09		107	%	80 - 120
			Total Silver (Ag)	2018/07/09		100	%	80 - 120
			Total Strontium (Sr)	2018/07/09		101	%	80 - 120
			Total Thallium (Tl)	2018/07/09		100	%	80 - 120
			Total Tin (Sn)	2018/07/09		100	%	80 - 120
			Total Titanium (Ti)	2018/07/09		103	%	80 - 120
			Total Uranium (U)	2018/07/09		100	%	80 - 120
			Total Vanadium (V)	2018/07/09		102	%	80 - 120
Total Zinc (Zn)	2018/07/09		101	%	80 - 120			
9054613	JC8	Method Blank	Total Zirconium (Zr)	2018/07/09		100	%	80 - 120
			Total Aluminum (Al)	2018/07/09	<3.0		ug/L	
			Total Antimony (Sb)	2018/07/09	<0.50		ug/L	
			Total Arsenic (As)	2018/07/09	<0.10		ug/L	
			Total Barium (Ba)	2018/07/09	<1.0		ug/L	
			Total Beryllium (Be)	2018/07/09	<0.10		ug/L	
			Total Bismuth (Bi)	2018/07/09	<1.0		ug/L	
			Total Boron (B)	2018/07/09	<5.0		ug/L	
			Total Cadmium (Cd)	2018/07/09	<0.010		ug/L	
			Total Chromium (Cr)	2018/07/09	<1.0		ug/L	
			Total Cobalt (Co)	2018/07/09	<0.20		ug/L	
			Total Copper (Cu)	2018/07/09	<0.20		ug/L	
			Total Iron (Fe)	2018/07/09	<5.0		ug/L	
			Total Lead (Pb)	2018/07/09	<0.20		ug/L	
			Total Manganese (Mn)	2018/07/09	<1.0		ug/L	
			Total Molybdenum (Mo)	2018/07/09	<1.0		ug/L	
			Total Nickel (Ni)	2018/07/09	<1.0		ug/L	
			Total Selenium (Se)	2018/07/09	<0.10		ug/L	
			Total Silicon (Si)	2018/07/09	<100		ug/L	
			Total Silver (Ag)	2018/07/09	<0.020		ug/L	
			Total Strontium (Sr)	2018/07/09	<1.0		ug/L	
			Total Thallium (Tl)	2018/07/09	<0.010		ug/L	
			Total Tin (Sn)	2018/07/09	<5.0		ug/L	
			Total Titanium (Ti)	2018/07/09	<5.0		ug/L	
			Total Uranium (U)	2018/07/09	<0.10		ug/L	
			Total Vanadium (V)	2018/07/09	<5.0		ug/L	
Total Zinc (Zn)	2018/07/09	<5.0		ug/L				
Total Zirconium (Zr)	2018/07/09	<0.10		ug/L				

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**QUALITY ASSURANCE REPORT(CONT'D)**

QA/QC	Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
9054613	JC8		RPD	Total Aluminum (Al)	2018/07/09	NC		%	20
				Total Antimony (Sb)	2018/07/09	NC		%	20
				Total Arsenic (As)	2018/07/09	4.9		%	20
				Total Barium (Ba)	2018/07/09	2.2		%	20
				Total Beryllium (Be)	2018/07/09	NC		%	20
				Total Bismuth (Bi)	2018/07/09	NC		%	20
				Total Boron (B)	2018/07/09	NC		%	20
				Total Cadmium (Cd)	2018/07/09	NC		%	20
				Total Chromium (Cr)	2018/07/09	1.7		%	20
				Total Cobalt (Co)	2018/07/09	4.3		%	20
				Total Copper (Cu)	2018/07/09	0.18		%	20
				Total Iron (Fe)	2018/07/09	2.7		%	20
				Total Lead (Pb)	2018/07/09	NC		%	20
				Total Manganese (Mn)	2018/07/09	2.3		%	20
				Total Molybdenum (Mo)	2018/07/09	0.23		%	20
				Total Nickel (Ni)	2018/07/09	0.56		%	20
				Total Selenium (Se)	2018/07/09	2.7		%	20
				Total Silicon (Si)	2018/07/09	0.64		%	20
				Total Silver (Ag)	2018/07/09	NC		%	20
				Total Strontium (Sr)	2018/07/09	1.5		%	20
				Total Thallium (Tl)	2018/07/09	NC		%	20
				Total Tin (Sn)	2018/07/09	NC		%	20
				Total Titanium (Ti)	2018/07/09	NC		%	20
				Total Uranium (U)	2018/07/09	NC		%	20
				Total Vanadium (V)	2018/07/09	NC		%	20
				Total Zinc (Zn)	2018/07/09	NC		%	20
				Total Zirconium (Zr)	2018/07/09	NC		%	20
9055587	IC4		Matrix Spike	Total Organic Carbon (C)	2018/07/09		107	%	80 - 120
9055587	IC4		Spiked Blank	Total Organic Carbon (C)	2018/07/09		108	%	80 - 120
9055587	IC4		Method Blank	Total Organic Carbon (C)	2018/07/09	<0.50		mg/L	
9055587	IC4		RPD	Total Organic Carbon (C)	2018/07/09	NC		%	20
9055756	JHW		Spiked Blank	Turbidity	2018/07/06		102	%	80 - 120
9055756	JHW		Method Blank	Turbidity	2018/07/06	<0.1		NTU	
9055756	JHW		RPD	Turbidity	2018/07/06	NC		%	20
9055880	OMA		Spiked Blank	True Colour	2018/07/06		89	%	80 - 120
9055880	OMA		Method Blank	True Colour	2018/07/06	<5		Col. Unit	
9055880	OMA		RPD	True Colour	2018/07/06	4.2		%	10
9055966	KAB		Method Blank	UV absorbance (254nm)	2018/07/09	<0.010		AU/cm	
9055966	KAB		RPD	UV absorbance (254nm)	2018/07/09	0.65		%	20
9057196	BB3		Spiked Blank	Dissolved Chloride (Cl)	2018/07/09		97	%	80 - 120
9057196	BB3		Method Blank	Dissolved Chloride (Cl)	2018/07/09	<1.0		mg/L	
9057212	BB3		Spiked Blank	Dissolved Sulphate (SO4)	2018/07/09		101	%	80 - 120
9057212	BB3		Method Blank	Dissolved Sulphate (SO4)	2018/07/09	<1.0		mg/L	
9058043	BO3		Matrix Spike	Total Ammonia (N)	2018/07/10		NC	%	80 - 120
9058043	BO3		Spiked Blank	Total Ammonia (N)	2018/07/10		105	%	80 - 120
9058043	BO3		Method Blank	Total Ammonia (N)	2018/07/10	<0.020		mg/L	
9058043	BO3		RPD	Total Ammonia (N)	2018/07/10	0.13		%	20
9059280	TSO		Matrix Spike	Fluoride (F)	2018/07/11		98	%	80 - 120
9059280	TSO		Spiked Blank	Fluoride (F)	2018/07/11		102	%	80 - 120

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**QUALITY ASSURANCE REPORT(CONT'D)**

QA/QC	Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
	9059280	TSO	Method Blank	Fluoride (F)	2018/07/11	<0.020		mg/L	

Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.

Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate sample matrix interference.

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

NC (Matrix Spike): The recovery in the matrix spike was not calculated. The relative difference between the concentration in the parent sample and the spike amount was too small to permit a reliable recovery calculation (matrix spike concentration was less than the native sample concentration)

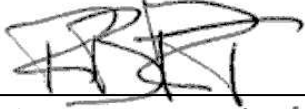
NC (Duplicate RPD): The duplicate RPD was not calculated. The concentration in the sample and/or duplicate was too low to permit a reliable RPD calculation (absolute difference <= 2x RDL).

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### VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by the following individual(s).



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Rob Reinert, B.Sc., Scientific Spécialist

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Maxxam has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per section 5.10.2 of ISO/IEC 17025:2005(E), signing the reports. For Service Group specific validation please refer to the Validation Signature Page.



Victoria: 460 Tennyson Place, Unit 1, Victoria, BC V8Z 6S8 Ph: (250) 395-6112 Toll Free: (866) 385-6112  
 Courtenay: 2755 B Moray Ave, Courtenay, BC V9N 9M9 Ph: (250) 338-7786 Toll Free: (800) 665-8566

Maxxam Job #: \_\_\_\_\_

Company: North Cedar Improvement District

Contact Name: JOE WOLFS

Mailing Address: \_\_\_\_\_

Phone #: 250-361-5503

E-mail: INFO@ACED.BC.CA

After Hours Contact #: \_\_\_\_\_

Regular Turnaround Time (TAT) (5 days for most tests)  **RUSH** Please contact the lab. Surcharges will be applied

Date Required: \_\_\_\_\_

**SPECIAL INSTRUCTIONS:**

Return Cooler  Ship Sample Bottles (please specify)

If your drinking water source services two or more homes, we strongly recommend that you contact local health authorities to find out how the Drinking Water Protection Act applies to this system. Please be aware that, in this situation, we are legally obligated to report results directly to local health authorities.

All information on this form must be completed before testing can commence

Please note your invoice may be subject to a \$60 minimum bill.

Payment Received: Yes  No

**Sample Collection**

For determining drinking water quality, samples should be representative of the water that will be consumed; therefore, we suggest sampling at the kitchen tap. However, other sampling locations may be used to determine pre-treatment water quality or for troubleshooting purposes.

1. Remove aerator/screen from faucet.
2. Let the water run for 5 minutes.
3. Label the bottle with your name, date and time you are taking the sample.
4. Fill all bottle(s) provided. Take care not to touch the inside of the bottle or underside of cap.
5. Cap the sample and place it in fridge or small cooler with icepack.

**Remember:** It is important that you do not contaminate the sample as you handle the container. Wash your hands before you start and be careful not to touch the rim of the bottle or the inside of the cap.

**DON'T:**

- Don't rinse or boil any bottle you receive from the lab.
- Don't let the sample sit out overnight, please refrigerate.
- Don't freeze the sample.

**Sample Transportation & Delivery**

1. Samples should arrive at the laboratories (Courtenay or Victoria) within 24 hrs of sampling. Ship samples between Monday and Thursday to avoid lab scheduling conflicts.
2. The sample should be kept cool during transit (<6°C - refrigerated or packed on ice).
3. Fill out the CI Incomplete or proceed with permit with the sample, and the lab's ability to



B853878\_COC

4. Delivery Opti Personally dr  
Overnight sh overnight co  
Same day Shipp. Contact with details. contact the lab for details.

Sample Identification (Sample Location &/or Description)	Sample Location (eg. Tap, Wellhead)	Date/Time Sampled (24hr)	PLEASE CIRCLE				ANALYSIS REQUESTED PLEASE SELECT BELOW				Report Drinking Water Criteria DWG17
			Samples from a Drinking Water Source? Y/N	Does source supply multiple households? Y/N	Are individuals drinking this water? Y/N	Are you on a boil water advisory? Y/N	Drinking Water Scan	Home Safety Scan	Total Metals Scan including Hardness & Hg	Total Coliform and E. Coli	
1 RAW WATER Well # 6	WELL HEAD	July 3, 18 0930	Y	Y	Y	Y	X	X	X		X
2			Y	Y	Y	Y					X
3			Y	Y	Y	Y					X
4			Y	Y	Y	Y					X
5			Y	Y	Y	Y					X

Unless otherwise agreed to in writing, work submitted on this Chain of Custody is subject to Maxxam's standard Terms and Conditions. available for viewing at [www.maxxam.ca/terms](http://www.maxxam.ca/terms)

Signing of this Chain of Custody document is acknowledgment and acceptance of our terms which are

Print name and sign			Print name and sign			Laboratory Use Only							
*Relinquished By:	Date (yy/mm/dd):	Time (24 hr):	Received by:	Date (yy/mm/dd):	Time (24 hr):	Time Sensitive	Temperature on Receipt (°C)			Custody Seal	Yes	No	N/A
T. Crossley	2018/07/03	15:50	S. OSTROPSKI	18/07/03	13:52	<input type="checkbox"/>	A) 10	B) 15	C) 12	Present?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
							Just sampled & rec'd on ice: <input type="checkbox"/>			Intact?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

For further information and resources on result interpretation, please visit our Drinking Water Resource Center: <http://maxxam.ca/maxxams-resource-centre-for-drinking-water-testing>