

Your Project #: LEECH-METALS  
Your C.O.C. #: 08464666

**Attention: Christoph Moch**

Capital Regional District  
Water Department  
479 Island Hwy  
Victoria, BC  
Canada V9B 1H7

**Report Date: 2019/02/13**  
Report #: R2685529  
Version: 1 - Final

**CERTIFICATE OF ANALYSIS**

**MAXXAM JOB #: B909536**

**Received: 2019/02/07, 14:01**

Sample Matrix: DRINKING WATER  
# Samples Received: 6

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Hardness Total (calculated as CaCO <sub>3</sub> ) (1)	6	N/A	2019/02/12	BBY WI-00033	Auto Calc
Mercury (Total) by CVAf	6	2019/02/12	2019/02/13	BBY7SOP-00015	BCMOE BCLM Oct2013 m
Na, K, Ca, Mg, S by CRC ICPMS (total)	6	N/A	2019/02/12	BBY WI-00033	Auto Calc
Elements by CRC ICPMS (total)	2	N/A	2019/02/11	BBY7SOP-00003,	EPA 6020b R2 m
Elements by CRC ICPMS (total)	4	2019/02/09	2019/02/11	BBY7SOP-00003 BBY7SOP-00002	EPA 6020b R2 m

**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. Where applicable, unless otherwise noted, Measurement Uncertainty has not been accounted for when stating conformity to the referenced standard.

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. Maxxam is not responsible for the accuracy or any data impacts, that result from the information provided by the customer or their agent.

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. When sampling is not conducted by Maxxam, results relate to the supplied 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) "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).

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Encryption Key

Please direct all questions regarding this Certificate of Analysis to your Project Manager.  
Debbie Nordbruget, Project Manager  
Email: DNordbruget@maxxam.ca  
Phone# (250)385-6112

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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.

Maxxam Job #: B909536  
Report Date: 2019/02/13

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Client Project #: LEECH-METALS

### ELEMENTS BY ATOMIC SPECTROSCOPY (DRINKING WATER)

Maxxam ID					VE9170	VE9172	VE9173	VE9174		
Sampling Date					2019/02/06 09:30	2019/02/05 10:30	2019/02/05 09:30	2019/02/05 09:45		
COC Number					08464666	08464666	08464666	08464666		
	UNITS	MAC	AO	OG	WEST LEECH	CHRIS CREEK	LEECH HEAD	WEEKS OUT	RDL	QC Batch
Total Metals by ICPMS										
Total Aluminum (Al)	ug/L	-	-	100	57.3	40.2	109	232	3.0	9318547
Total Antimony (Sb)	ug/L	6	-	-	<0.50	<0.50	<0.50	<0.50	0.50	9318547
Total Arsenic (As)	ug/L	10	-	-	0.10	<0.10	<0.10	0.11	0.10	9318547
Total Barium (Ba)	ug/L	1000	-	-	3.4	2.0	2.9	3.5	1.0	9318547
Total Beryllium (Be)	ug/L	-	-	-	<0.10	<0.10	<0.10	<0.10	0.10	9318547
Total Bismuth (Bi)	ug/L	-	-	-	<1.0	<1.0	<1.0	<1.0	1.0	9318547
Total Boron (B)	ug/L	5000	-	-	<50	<50	<50	<50	50	9318547
Total Cadmium (Cd)	ug/L	5	-	-	<0.010	<0.010	<0.010	<0.010	0.010	9318547
Total Chromium (Cr)	ug/L	50	-	-	<1.0	<1.0	<1.0	<1.0	1.0	9318547
Total Cobalt (Co)	ug/L	-	-	-	<0.20	<0.20	<0.20	<0.20	0.20	9318547
Total Copper (Cu)	ug/L	-	1000	-	<0.50	0.61	0.63	0.77	0.50	9318547
Total Iron (Fe)	ug/L	-	300	-	21	15	75	193	10	9318547
Total Lead (Pb)	ug/L	10	-	-	<0.20	<0.20	<0.20	<0.20	0.20	9318547
Total Manganese (Mn)	ug/L	-	50	-	<1.0	<1.0	1.8	6.1	1.0	9318547
Total Molybdenum (Mo)	ug/L	-	-	-	<1.0	<1.0	<1.0	<1.0	1.0	9318547
Total Nickel (Ni)	ug/L	-	-	-	<1.0	<1.0	<1.0	<1.0	1.0	9318547
Total Selenium (Se)	ug/L	50	-	-	<0.10	<0.10	<0.10	<0.10	0.10	9318547
Total Silicon (Si)	ug/L	-	-	-	2280	1870	1700	1680	100	9318547
Total Silver (Ag)	ug/L	-	-	-	<0.020	<0.020	<0.020	<0.020	0.020	9318547
Total Strontium (Sr)	ug/L	-	-	-	13.4	7.6	10.2	10.0	1.0	9318547
Total Thallium (Tl)	ug/L	-	-	-	<0.010	<0.010	<0.010	<0.010	0.010	9318547
Total Tin (Sn)	ug/L	-	-	-	<5.0	<5.0	<5.0	<5.0	5.0	9318547
Total Titanium (Ti)	ug/L	-	-	-	<5.0	<5.0	<5.0	6.0	5.0	9318547
Total Uranium (U)	ug/L	20	-	-	<0.10	<0.10	<0.10	<0.10	0.10	9318547
Total Vanadium (V)	ug/L	-	-	-	<5.0	<5.0	<5.0	<5.0	5.0	9318547
Total Zinc (Zn)	ug/L	-	5000	-	<5.0	<5.0	<5.0	<5.0	5.0	9318547
Total Zirconium (Zr)	ug/L	-	-	-	<0.10	<0.10	<0.10	<0.10	0.10	9318547
No Fill	No Exceedance									
Grey	Exceeds 1 criteria policy/level									
Black	Exceeds both criteria/levels									
RDL = Reportable Detection Limit										

Maxxam Job #: B909536  
Report Date: 2019/02/13

Capital Regional District  
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### TOT. METALS W/ CV HG FOR DRINKING WATER (DRINKING WATER)

Maxxam ID					VE9169			VE9170		
Sampling Date					2019/02/06 12:30			2019/02/06 09:30		
COC Number					08464666			08464666		
	UNITS	MAC	AO	OG	LEECH TUNNEL	RDL	QC Batch	WEST LEECH	RDL	QC Batch
Calculated Parameters										
Total Hardness (CaCO3)	mg/L	-	-	-	7.91	0.50	9316211	6.46	0.50	9316211
Elements										
Total Mercury (Hg)	ug/L	1	-	-	<0.0020	0.0020	9320537	<0.0020	0.0020	9320537
Total Metals by ICPMS										
Total Aluminum (Al)	ug/L	-	-	100	58.8	3.0	9318586			
Total Antimony (Sb)	ug/L	6	-	-	<0.50	0.50	9318586			
Total Arsenic (As)	ug/L	10	-	-	<0.10	0.10	9318586			
Total Barium (Ba)	ug/L	1000	-	-	2.7	1.0	9318586			
Total Beryllium (Be)	ug/L	-	-	-	<0.10	0.10	9318586			
Total Bismuth (Bi)	ug/L	-	-	-	<1.0	1.0	9318586			
Total Boron (B)	ug/L	5000	-	-	<50	50	9318586			
Total Cadmium (Cd)	ug/L	5	-	-	<0.010	0.010	9318586			
Total Chromium (Cr)	ug/L	50	-	-	<1.0	1.0	9318586			
Total Cobalt (Co)	ug/L	-	-	-	<0.20	0.20	9318586			
Total Copper (Cu)	ug/L	-	1000	-	0.43	0.20	9318586			
Total Iron (Fe)	ug/L	-	300	-	23.6	5.0	9318586			
Total Lead (Pb)	ug/L	10	-	-	<0.20	0.20	9318586			
Total Manganese (Mn)	ug/L	-	50	-	<1.0	1.0	9318586			
Total Molybdenum (Mo)	ug/L	-	-	-	<1.0	1.0	9318586			
Total Nickel (Ni)	ug/L	-	-	-	<1.0	1.0	9318586			
Total Selenium (Se)	ug/L	50	-	-	<0.10	0.10	9318586			
Total Silicon (Si)	ug/L	-	-	-	2160	100	9318586			
Total Silver (Ag)	ug/L	-	-	-	<0.020	0.020	9318586			
Total Strontium (Sr)	ug/L	-	-	-	14.4	1.0	9318586			
Total Thallium (Tl)	ug/L	-	-	-	<0.010	0.010	9318586			
Total Tin (Sn)	ug/L	-	-	-	<5.0	5.0	9318586			
Total Titanium (Ti)	ug/L	-	-	-	<5.0	5.0	9318586			
Total Uranium (U)	ug/L	20	-	-	<0.10	0.10	9318586			
Total Vanadium (V)	ug/L	-	-	-	<5.0	5.0	9318586			
Total Zinc (Zn)	ug/L	-	5000	-	<5.0	5.0	9318586			
Total Zirconium (Zr)	ug/L	-	-	-	<0.10	0.10	9318586			
Total Calcium (Ca)	mg/L	-	-	-	2.33	0.050	9316624	1.85	0.050	9316624
Total Magnesium (Mg)	mg/L	-	-	-	0.512	0.050	9316624	0.446	0.050	9316624
No Fill	No Exceedance									
Grey	Exceeds 1 criteria policy/level									
Black	Exceeds both criteria/levels									
RDL = Reportable Detection Limit										

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**TOT. METALS W/ CV HG FOR DRINKING WATER (DRINKING WATER)**

Maxxam ID					VE9169			VE9170		
Sampling Date					2019/02/06 12:30			2019/02/06 09:30		
COC Number					08464666			08464666		
	UNITS	MAC	AO	OG	LEECH TUNNEL	RDL	QC Batch	WEST LEECH	RDL	QC Batch
Total Potassium (K)	mg/L	-	-	-	0.124	0.050	9316624	0.212	0.050	9316624
Total Sodium (Na)	mg/L	-	200	-	1.72	0.050	9316624	1.99	0.050	9316624
Total Sulphur (S)	mg/L	-	-	-	<3.0	3.0	9316624	<3.0	3.0	9316624
No Fill	No Exceedance									
Grey	Exceeds 1 criteria policy/level									
Black	Exceeds both criteria/levels									
RDL = Reportable Detection Limit										

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### TOT. METALS W/ CV HG FOR DRINKING WATER (DRINKING WATER)

Maxxam ID					VE9171			VE9172	VE9173	VE9174		
Sampling Date					2019/02/05 12:00			2019/02/05 10:30	2019/02/05 09:30	2019/02/05 09:45		
COC Number					08464666			08464666	08464666	08464666		
	UNITS	MAC	AO	OG	CRAGG	RDL	QC Batch	CHRIS CREEK	LEECH HEAD	WEEKS OUT	RDL	QC Batch
Calculated Parameters												
Total Hardness (CaCO3)	mg/L	-	-	-	6.80	0.50	9316211	6.48	5.94	5.41	0.50	9316211
Elements												
Total Mercury (Hg)	ug/L	1	-	-	<0.0020	0.0020	9320537	<0.0020	<0.0020	<0.0020	0.0020	9320537
Total Metals by ICPMS												
Total Aluminum (Al)	ug/L	-	-	100	54.8	3.0	9318586					
Total Antimony (Sb)	ug/L	6	-	-	<0.50	0.50	9318586					
Total Arsenic (As)	ug/L	10	-	-	<0.10	0.10	9318586					
Total Barium (Ba)	ug/L	1000	-	-	1.7	1.0	9318586					
Total Beryllium (Be)	ug/L	-	-	-	<0.10	0.10	9318586					
Total Bismuth (Bi)	ug/L	-	-	-	<1.0	1.0	9318586					
Total Boron (B)	ug/L	5000	-	-	<50	50	9318586					
Total Cadmium (Cd)	ug/L	5	-	-	<0.010	0.010	9318586					
Total Chromium (Cr)	ug/L	50	-	-	<1.0	1.0	9318586					
Total Cobalt (Co)	ug/L	-	-	-	<0.20	0.20	9318586					
Total Copper (Cu)	ug/L	-	1000	-	0.41	0.20	9318586					
Total Iron (Fe)	ug/L	-	300	-	13.2	5.0	9318586					
Total Lead (Pb)	ug/L	10	-	-	<0.20	0.20	9318586					
Total Manganese (Mn)	ug/L	-	50	-	<1.0	1.0	9318586					
Total Molybdenum (Mo)	ug/L	-	-	-	<1.0	1.0	9318586					
Total Nickel (Ni)	ug/L	-	-	-	<1.0	1.0	9318586					
Total Selenium (Se)	ug/L	50	-	-	<0.10	0.10	9318586					
Total Silicon (Si)	ug/L	-	-	-	1690	100	9318586					
Total Silver (Ag)	ug/L	-	-	-	<0.020	0.020	9318586					
Total Strontium (Sr)	ug/L	-	-	-	8.5	1.0	9318586					
Total Thallium (Tl)	ug/L	-	-	-	<0.010	0.010	9318586					
Total Tin (Sn)	ug/L	-	-	-	<5.0	5.0	9318586					
Total Titanium (Ti)	ug/L	-	-	-	<5.0	5.0	9318586					
Total Uranium (U)	ug/L	20	-	-	<0.10	0.10	9318586					
Total Vanadium (V)	ug/L	-	-	-	<5.0	5.0	9318586					
Total Zinc (Zn)	ug/L	-	5000	-	<5.0	5.0	9318586					
Total Zirconium (Zr)	ug/L	-	-	-	<0.10	0.10	9318586					
Total Calcium (Ca)	mg/L	-	-	-	1.82	0.050	9316624	1.67	1.61	1.42	0.050	9316624
Total Magnesium (Mg)	mg/L	-	-	-	0.551	0.050	9316624	0.559	0.464	0.450	0.050	9316624
No Fill	No Exceedance											
Grey	Exceeds 1 criteria policy/level											
Black	Exceeds both criteria/levels											
RDL = Reportable Detection Limit												

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**TOT. METALS W/ CV HG FOR DRINKING WATER (DRINKING WATER)**

Maxxam ID					VE9171			VE9172	VE9173	VE9174		
Sampling Date					2019/02/05 12:00			2019/02/05 10:30	2019/02/05 09:30	2019/02/05 09:45		
COC Number					08464666			08464666	08464666	08464666		
	UNITS	MAC	AO	OG	CRAGG	RDL	QC Batch	CHRIS CREEK	LEECH HEAD	WEEKS OUT	RDL	QC Batch
Total Potassium (K)	mg/L	-	-	-	<0.050	0.050	9316624	0.051	0.066	0.079	0.050	9316624
Total Sodium (Na)	mg/L	-	200	-	1.30	0.050	9316624	1.30	1.38	1.44	0.050	9316624
Total Sulphur (S)	mg/L	-	-	-	<3.0	3.0	9316624	<3.0	<3.0	<3.0	3.0	9316624
No Fill	No Exceedance											
Grey	Exceeds 1 criteria policy/level											
Black	Exceeds both criteria/levels											
RDL = Reportable Detection Limit												

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## GENERAL COMMENTS

Each temperature is the average of up to three cooler temperatures taken at receipt

Package 1	7.7°C
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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.

Measurement of Uncertainty has not been accounted for when stating conformity to the selected criteria, where applicable.

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



Maxxam Job #: B909536  
Report Date: 2019/02/13

## QUALITY ASSURANCE REPORT

Capital Regional District  
Client Project #: LEECH-METALS

QC Batch	Parameter	Date	Matrix Spike		Spiked Blank		Method Blank		RPD	
			% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
9318547	Total Aluminum (Al)	2019/02/11	100	80 - 120	100	80 - 120	<3.0	ug/L	16	20
9318547	Total Antimony (Sb)	2019/02/11	104	80 - 120	104	80 - 120	<0.50	ug/L		
9318547	Total Arsenic (As)	2019/02/11	101	80 - 120	102	80 - 120	<0.10	ug/L		
9318547	Total Barium (Ba)	2019/02/11	100	80 - 120	101	80 - 120	<1.0	ug/L	0.81	20
9318547	Total Beryllium (Be)	2019/02/11	96	80 - 120	96	80 - 120	<0.10	ug/L		
9318547	Total Bismuth (Bi)	2019/02/11	102	80 - 120	103	80 - 120	<1.0	ug/L		
9318547	Total Boron (B)	2019/02/11	94	80 - 120	93	80 - 120	<50	ug/L		
9318547	Total Cadmium (Cd)	2019/02/11	104	80 - 120	104	80 - 120	<0.010	ug/L	NC	20
9318547	Total Chromium (Cr)	2019/02/11	99	80 - 120	101	80 - 120	<1.0	ug/L	NC	20
9318547	Total Cobalt (Co)	2019/02/11	98	80 - 120	100	80 - 120	<0.20	ug/L		
9318547	Total Copper (Cu)	2019/02/11	98	80 - 120	99	80 - 120	<0.50	ug/L	NC	20
9318547	Total Iron (Fe)	2019/02/11	106	80 - 120	106	80 - 120	<10	ug/L		
9318547	Total Lead (Pb)	2019/02/11	102	80 - 120	103	80 - 120	<0.20	ug/L	NC	20
9318547	Total Manganese (Mn)	2019/02/11	99	80 - 120	100	80 - 120	<1.0	ug/L		
9318547	Total Molybdenum (Mo)	2019/02/11	104	80 - 120	104	80 - 120	<1.0	ug/L		
9318547	Total Nickel (Ni)	2019/02/11	99	80 - 120	102	80 - 120	<1.0	ug/L		
9318547	Total Selenium (Se)	2019/02/11	101	80 - 120	100	80 - 120	<0.10	ug/L		
9318547	Total Silicon (Si)	2019/02/11	95	80 - 120	92	80 - 120	<100	ug/L		
9318547	Total Silver (Ag)	2019/02/11	102	80 - 120	103	80 - 120	<0.020	ug/L		
9318547	Total Strontium (Sr)	2019/02/11	98	80 - 120	100	80 - 120	<1.0	ug/L		
9318547	Total Thallium (Tl)	2019/02/11	101	80 - 120	102	80 - 120	<0.010	ug/L		
9318547	Total Tin (Sn)	2019/02/11	101	80 - 120	103	80 - 120	<5.0	ug/L		
9318547	Total Titanium (Ti)	2019/02/11	98	80 - 120	101	80 - 120	<5.0	ug/L		
9318547	Total Uranium (U)	2019/02/11	100	80 - 120	102	80 - 120	<0.10	ug/L		
9318547	Total Vanadium (V)	2019/02/11	99	80 - 120	100	80 - 120	<5.0	ug/L	NC	20
9318547	Total Zinc (Zn)	2019/02/11	102	80 - 120	102	80 - 120	<5.0	ug/L	NC	20
9318547	Total Zirconium (Zr)	2019/02/11	101	80 - 120	102	80 - 120	<0.10	ug/L		
9318586	Total Aluminum (Al)	2019/02/11	98	80 - 120	97	80 - 120	<3.0	ug/L	0.91	20
9318586	Total Antimony (Sb)	2019/02/11	102	80 - 120	102	80 - 120	<0.50	ug/L	NC	20
9318586	Total Arsenic (As)	2019/02/11	99	80 - 120	98	80 - 120	<0.10	ug/L	NC	20
9318586	Total Barium (Ba)	2019/02/11	98	80 - 120	99	80 - 120	<1.0	ug/L	0.77	20
9318586	Total Beryllium (Be)	2019/02/11	95	80 - 120	94	80 - 120	<0.10	ug/L		
9318586	Total Bismuth (Bi)	2019/02/11	101	80 - 120	101	80 - 120	<1.0	ug/L		

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# QUALITY ASSURANCE REPORT(CONT'D)

Capital Regional District  
Client Project #: LEECH-METALS

QC Batch	Parameter	Date	Matrix Spike		Spiked Blank		Method Blank		RPD	
			% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
9318586	Total Boron (B)	2019/02/11	92	80 - 120	93	80 - 120	<50	ug/L	NC	20
9318586	Total Cadmium (Cd)	2019/02/11	102	80 - 120	102	80 - 120	<0.010	ug/L	NC	20
9318586	Total Chromium (Cr)	2019/02/11	102	80 - 120	100	80 - 120	<1.0	ug/L	NC	20
9318586	Total Cobalt (Co)	2019/02/11	102	80 - 120	99	80 - 120	<0.20	ug/L	NC	20
9318586	Total Copper (Cu)	2019/02/11	101	80 - 120	99	80 - 120	<0.20	ug/L	1.1	20
9318586	Total Iron (Fe)	2019/02/11	103	80 - 120	107	80 - 120	<5.0	ug/L	0.093	20
9318586	Total Lead (Pb)	2019/02/11	101	80 - 120	101	80 - 120	<0.20	ug/L	NC	20
9318586	Total Manganese (Mn)	2019/02/11	101	80 - 120	98	80 - 120	<1.0	ug/L	1.7	20
9318586	Total Molybdenum (Mo)	2019/02/11	102	80 - 120	101	80 - 120	<1.0	ug/L	NC	20
9318586	Total Nickel (Ni)	2019/02/11	103	80 - 120	101	80 - 120	<1.0	ug/L	4.1	20
9318586	Total Selenium (Se)	2019/02/11	96	80 - 120	97	80 - 120	<0.10	ug/L	NC	20
9318586	Total Silicon (Si)	2019/02/11	86	80 - 120	89	80 - 120	<100	ug/L	2.4	20
9318586	Total Silver (Ag)	2019/02/11	101	80 - 120	100	80 - 120	<0.020	ug/L	NC	20
9318586	Total Strontium (Sr)	2019/02/11	96	80 - 120	96	80 - 120	<1.0	ug/L		
9318586	Total Thallium (Tl)	2019/02/11	103	80 - 120	103	80 - 120	<0.010	ug/L		
9318586	Total Tin (Sn)	2019/02/11	100	80 - 120	100	80 - 120	<5.0	ug/L		
9318586	Total Titanium (Ti)	2019/02/11	103	80 - 120	99	80 - 120	<5.0	ug/L		
9318586	Total Uranium (U)	2019/02/11	101	80 - 120	100	80 - 120	<0.10	ug/L	NC	20
9318586	Total Vanadium (V)	2019/02/11	102	80 - 120	99	80 - 120	<5.0	ug/L	NC	20
9318586	Total Zinc (Zn)	2019/02/11	NC	80 - 120	103	80 - 120	<5.0	ug/L	1.2	20
9318586	Total Zirconium (Zr)	2019/02/11	99	80 - 120	96	80 - 120	<0.10	ug/L		
9320537	Total Mercury (Hg)	2019/02/13	97	80 - 120	93	80 - 120	<0.0020	ug/L	NC	20

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).

Maxxam Job #: B909536  
Report Date: 2019/02/13

Capital Regional District  
Client Project #: LEECH-METALS

### VALIDATION SIGNATURE PAGE

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



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.

Invoice Information		Report Information (if differs from Invoice)		Project Information (where applicable)		Turnaround Time (TAT) Required																																								
Company Name:	Capital Regional District	Company Name:	Capital Regional District	Quotation #:		<input checked="" type="checkbox"/> Regular TAT 5 days (Most analyses)																																								
Contact Name:	Christoph Moch	Contact Name:	Christoph Moch, Jessica Dupuis, Jennifer Blaney	P.O. #/ AFE#:		PLEASE PROVIDE ADVANCE NOTICE FOR RUSH PROJECTS																																								
Address:	479 Island Highway Victoria, BC PC: V9B 1H7	Address:		Project #:	Leech - Metals	Rush TAT (Surcharges will be applied)																																								
Phone:	250-474-9603	Phone:	CM 250-474-9603; JD 250-474-9643; JB 250-474-9680	Site Location:		<input type="checkbox"/> Same Day	<input type="checkbox"/> 2 Days																																							
Email:	cmoch@crd.bc.ca	Email:	cmoch@crd.bc.ca; jdupuis@crd.bc.ca; jblaney@crd.bc.ca	Site #:		<input type="checkbox"/> 1 Day	<input type="checkbox"/> 3 Days																																							
Regulatory Criteria		Special Instructions		Analysis Requested		Rush Confirmation #:																																								
<input type="checkbox"/> BC CSR Soil <input type="checkbox"/> CCME (Specify) <input checked="" type="checkbox"/> Drinking Water <input type="checkbox"/> BC CSR Water <input type="checkbox"/> Other (Specify) <input type="checkbox"/> BC Water Quality		<input type="checkbox"/> Return Cooler <input type="checkbox"/> Ship Sample Bottles (Please Specify)		<input type="checkbox"/> BTEX/VPH <input type="checkbox"/> MTBE <input type="checkbox"/> VOC/VPH <input type="checkbox"/> EPH <input type="checkbox"/> PAH <input type="checkbox"/> LEPH/MEPH <input type="checkbox"/> CCME-PHC <input type="checkbox"/> BTEX/F1 <input type="checkbox"/> F2-F4 <input type="checkbox"/> Dissolved Metals <input type="checkbox"/> Filtered? <input type="checkbox"/> Preserved? <input type="checkbox"/> Dissolved Mercury <input type="checkbox"/> Filtered? <input type="checkbox"/> Preserved? <input type="checkbox"/> Total Metals <input type="checkbox"/> Field Preserved? <input checked="" type="checkbox"/> <input type="checkbox"/> Total Mercury <input type="checkbox"/> Field Preserved? <input checked="" type="checkbox"/> <input type="checkbox"/> Chloride <input type="checkbox"/> Fluoride <input type="checkbox"/> Sulphate <input type="checkbox"/> TSS <input type="checkbox"/> TDS <input type="checkbox"/> BOD <input type="checkbox"/> COD <input type="checkbox"/> pH <input type="checkbox"/> Conductivity <input type="checkbox"/> Alkalinity <input type="checkbox"/> Nitrite <input type="checkbox"/> Nitrate <input type="checkbox"/> Ammonia <input type="checkbox"/> Bromate <input type="checkbox"/> Bromide <input type="checkbox"/> TOC <input type="checkbox"/> DePa (THKs)		LABORATORY USE ONLY CUSTODY SEAL Y <input checked="" type="checkbox"/> N Present Intact Na 7, 5, 11 COOLING MEDIA PRESENT Y <input checked="" type="checkbox"/> N COMMENTS																																								
SAMPLES MUST BE KEPT COOL ( < 10 °C ) FROM TIME OF SAMPLING UNTIL DELIVERY TO MAXXAM																																														
Sample Identification	Lab Identification	Date Sampled (YYYY/MM/DD)	Time Sampled (HH:MM)	Matrix	BTEX/VPH	MTBE	VOC/VPH	EPH	PAH	LEPH/MEPH	CCME-PHC	BTEX/F1	F2-F4	Dissolved Metals	Filtered?	Preserved?	Dissolved Mercury	Filtered?	Preserved?	Total Metals	Field Preserved?	Total Mercury	Field Preserved?	Chloride	Fluoride	Sulphate	TSS	TDS	BOD	COD	pH	Conductivity	Alkalinity	Nitrite	Nitrate	Ammonia	Bromate	Bromide	TOC	DePa (THKs)	# OF CONTAINERS SUBMITTED	HOLD - DO NOT ANALYZE				
1	Leech Tunnel		2019-02-06	12:30	water																X	X																								
2	West Leech		2019-02-06	9:30	water																X	X																								
3	Cragg		2019-02-05	12:00	water																X	X																								
4	Chris Creek		2019-02-05	10:30	water																X	X																								
5	Leech Head		2019-02-05	9:30	water																X	X																								
6	Weeks Out		2019-02-05	9:45	water																X	X																								
7																																														
8																																														
9																																														
10																																														
RELINQUISHED BY: (Signature/Print)		DATE: (YYYY/MM/DD)		TIME: (HH:MM)		RECEIVED BY: (Signature/Print)		DATE: (YYYY/MM/DD)		TIME: (HH:MM)		MAXXAM JOB #																																		
Sophie Vigne SOPHIE VIGNE		2019/02/07		1401		[Signature]		2019/02/07		1401																																				



B909536\_COC