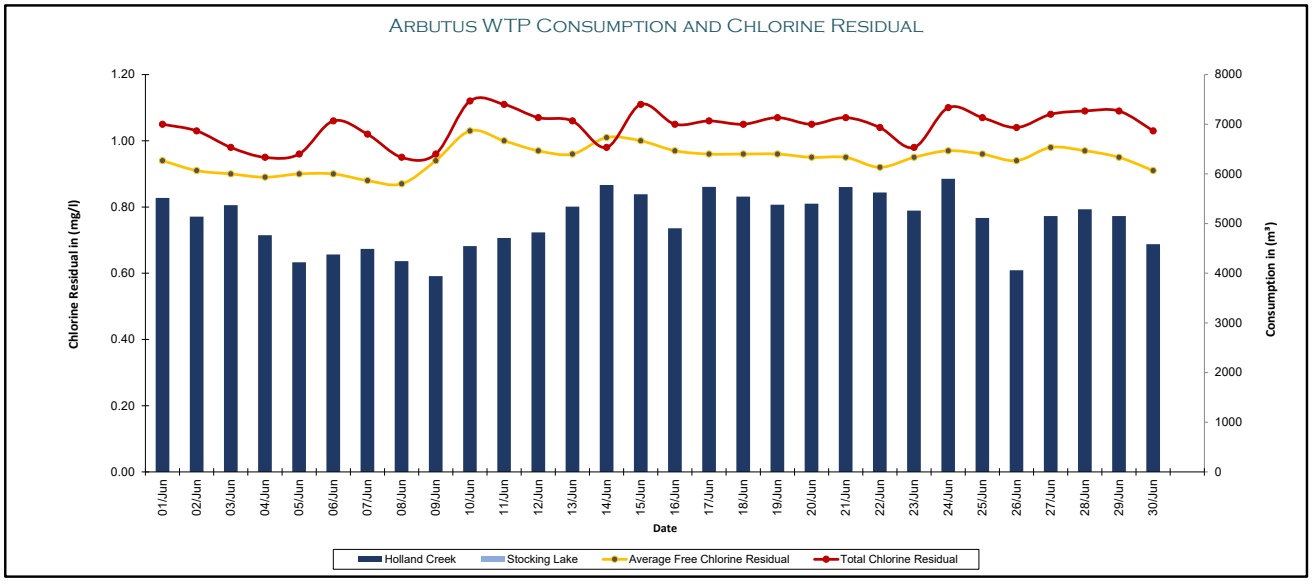
Town of Ladysmith - Arbutus Water treatment Plant

June 2026 - Monthly Report

Date	Daily Flow			Chlorine Residual				CT*	External Lab Testing					
	Stocking Lake	Holland Creek	Combined Flow	Free Min	Free Max	Free Avg	Total		HPC	E.coli	Total Coliforms	Aluminum	THM	HAA
	m³	m³	m³	mg/l	mg/l	mg/l	mg/l	Minutes·mg/l	CFU	MPN	MPN	mg/l	mg/l	mg/l
01-Jun	0	5515	5515	0.94	0.95	0.94	1.05	78						
02-Jun	0	5140	5140	1.00	0.95	0.91	1.03	72	< 1	< 1	< 1			
03-Jun	0	5370	5370	0.90	0.93	0.90	0.98	79						
04-Jun	0	4765	4765	0.86	0.90	0.89	0.95	88						
05-Jun	0	4222	4222	0.90	0.91	0.90	0.96	92						
06-Jun	0	4378	4378	0.90	0.94	0.90	1.06	93						
07-Jun	0	4489	4489	0.87	0.90	0.88	1.02	96						
08-Jun	0	4243	4243	0.86	0.90	0.87	0.95	93						
09-Jun	0	3941	3941	0.82	0.94	0.94	0.96	86	< 1	< 1	< 1			
10-Jun	0	4548	4548	0.94	1.05	1.03	1.12	97						
11-Jun	0	4709	4709	0.99	1.03	1.00	1.11	100						
12-Jun	0	4823	4823	0.96	1.00	0.97	1.07	103						
13-Jun	0	5340	5340	0.96	0.97	0.96	1.06	113						
14-Jun	0	5776	5776	0.94	1.01	1.01	0.98	117						
15-Jun	0	5592	5592	1.00	1.04	1.00	1.11	117						
16-Jun	0	4907	4907	0.97	1.01	0.97	1.05	100	< 1	< 1	< 1	0.0130	0.0145	0.0095
17-Jun	0	5739	5739	0.96	0.98	0.96	1.06	118						
18-Jun	0	5542	5542	0.96	0.97	0.96	1.05	117						
19-Jun	0	5380	5380	0.94	0.96	0.96	1.07	114						
20-Jun	0	5401	5401	0.94	0.96	0.95	1.05	113						
21-Jun	0	5735	5735	0.93	0.96	0.95	1.07	119						
22-Jun	0	5625	5625	0.91	0.96	0.92	1.04	118						
23-Jun	0	5261	5261	0.89	0.95	0.95	0.98	111	< 1	< 1	< 1			
24-Jun	0	5902	5902	0.95	0.98	0.97	1.10	120						
25-Jun	0	5112	5112	0.96	0.98	0.96	1.07	108						
26-Jun	0	4060	4060	0.93	0.97	0.94	1.04	91						
27-Jun	0	5153	5153	0.94	0.98	0.98	1.08	107						
28-Jun	0	5289	5289	0.97	0.99	0.97	1.09	108						
29-Jun	0	5151	5151	0.95	0.98	0.95	1.09	112						
30-Jun	0	4584	4584	0.91	0.96	0.91	1.03	98						
Total	0	151692	151692											
Average	0	5056	5056	0.93	0.97	0.95	1.04	103	< 1	< 1	< 1	0.0130	0.0145	0.00945

*CT - Recorded as the minimum value at the highest daily flow ** Manual Residual were not taken



VEOLIA

InSight

Town of Ladysmith Arbutus DWTP

Monthly LRV and Turbidity Report

05/31/2026 - 07/01/2026

LRV Monthly Average

Asset	Parameter	Health	Avg	Std. Dev	Points	LL	L	%In	% between L and LL	% < LL	Unit
UF 1	LRV		5.0	0.0	32	4.25	4.5	100 %	0 %	0 %	#
UF 2	LRV		4.992	0.02	32	4.25	4.5	100 %	0 %	0 %	#
UF 3	LRV		5.0	0.0	32	4.25	4.5	100 %	0 %	0 %	#

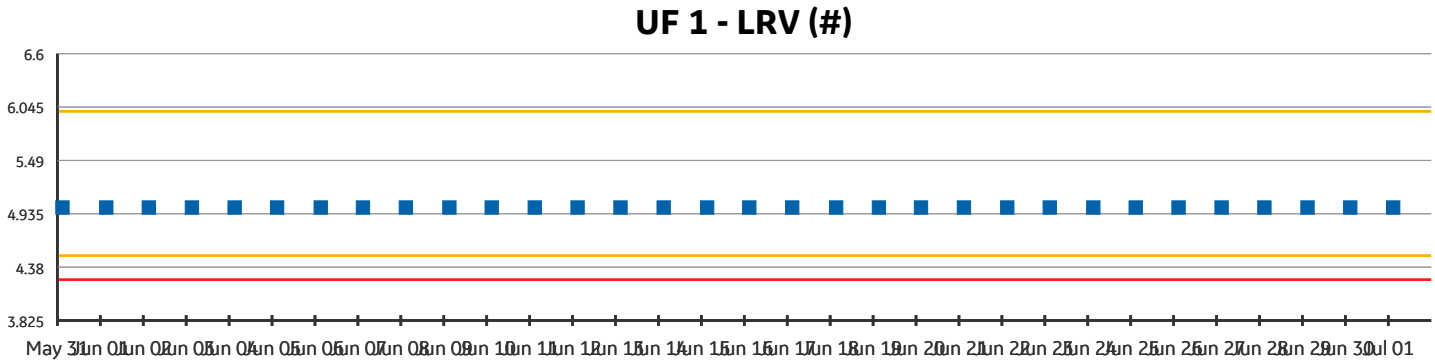
LRV Daily Values

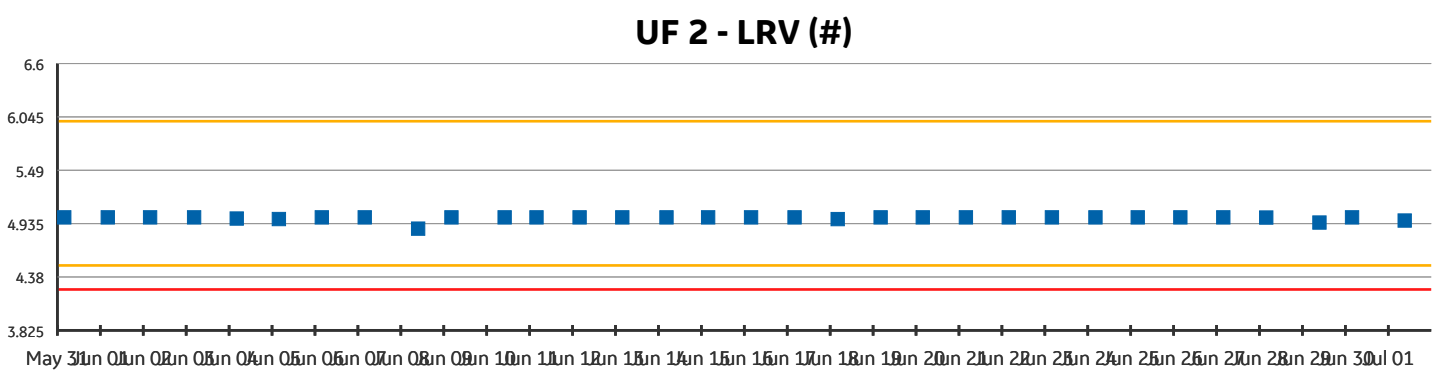
Asset	Parameter	May 31	Jun 01	Jun 02	Jun 03	Jun 04	Jun 05	Jun 06	Jun 07	Jun 08	Jun 09	Jun 10	Jun 11
UF 1	LRV	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
UF 2	LRV	5.0	5.0	5.0	5.0	4.988	4.983	5.0	5.0	4.883	5.0	5.0	5.0
UF 3	LRV	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0

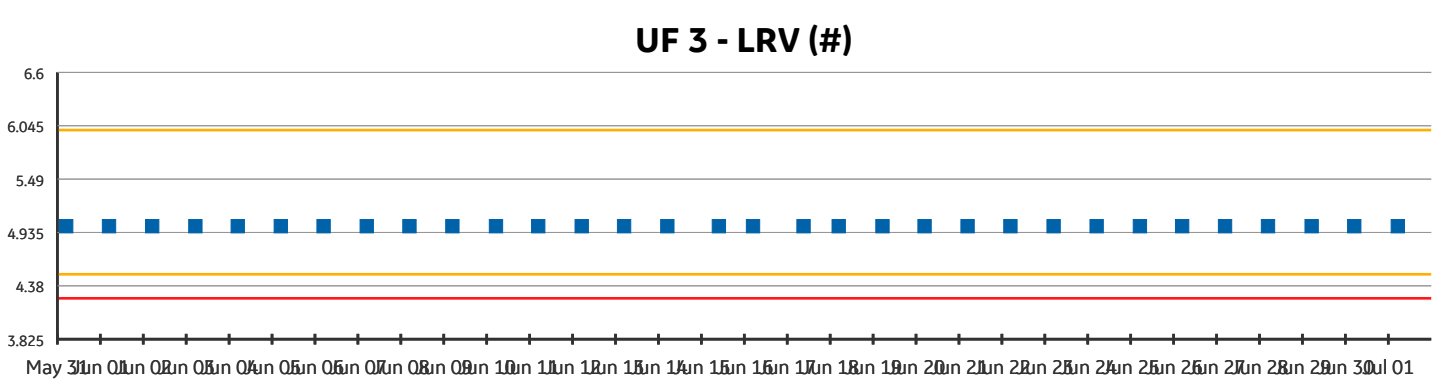
Asset	Jun 12	Jun 13	Jun 14	Jun 15	Jun 16	Jun 17	Jun 18	Jun 19	Jun 20	Jun 21	Jun 22	Jun 23	Jun 24	Jun 25	Jun 26	Jun 27
UF 1	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
UF 2	5.0	5.0	5.0	5.0	5.0	5.0	4.982	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
UF 3	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0

Asset	Jun 28	Jun 29	Jun 30	Jul 01
UF 1	5.0	5.0	5.0	5.0
UF 2	4.998	4.946	5.0	4.967
UF 3	5.0	5.0	5.0	5.0

LRV Raw Data







Turbidity Monthly Average

Asset	Parameter	Health	Avg	Std. Dev	Points	H	HH	%In	% between H and HH	% > HH	Unit
UF 1	PermeateTurbidity		0.019	0.0	45213	--	--	100 %	0 %	0 %	NTU
UF 2	PermeateTurbidity		0.018	0.0	45213	--	--	100 %	0 %	0 %	NTU
UF 3	PermeateTurbidity		0.015	0.0	45213	--	--	100 %	0 %	0 %	NTU
UF 1	PermeateTurbidityAfterBP		0.019	0.0	567	0.1	0.3	100 %	0 %	0 %	NTU
UF 2	PermeateTurbidityAfterBP		0.018	0.0	568	0.1	0.3	100 %	0 %	0 %	NTU
UF 3	PermeateTurbidityAfterBP		0.015	0.0	593	0.1	0.3	100 %	0 %	0 %	NTU

Turbidity Daily Averages

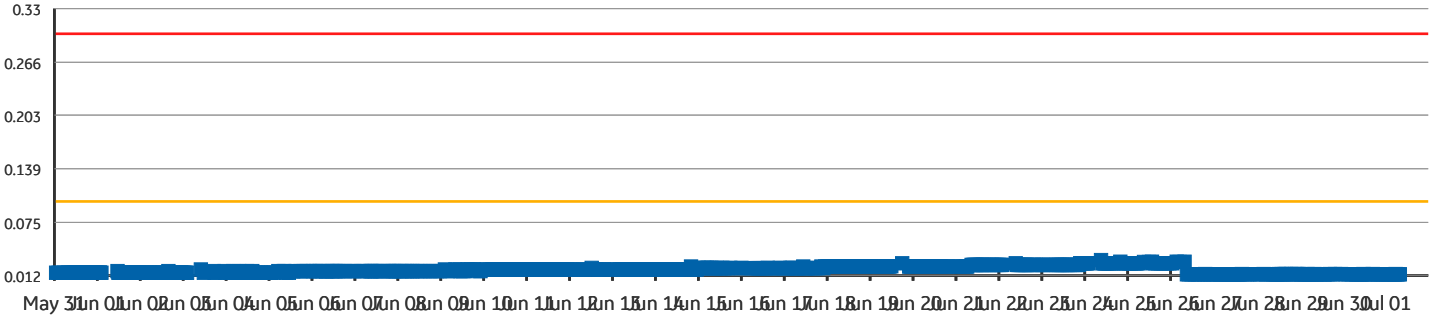
Asset	Parameter	May 31	Jun 01	Jun 02	Jun 03	Jun 04	Jun 05	Jun 06	Jun 07	Jun 08	Jun 09	Jun 10
UF 1	PermeateTurbidity	0.015	0.015	0.015	0.016	0.016	0.017	0.017	0.017	0.017	0.017	0.019
UF 2	PermeateTurbidity	0.02	0.018	0.018	0.018	0.018	0.017	0.018	0.018	0.018	0.017	0.018
UF 3	PermeateTurbidity	0.013	0.014	0.014	0.014	0.014	0.014	0.014	0.015	0.015	0.015	0.015
UF 1	PermeateTurbidityAfterBP	0.015	0.015	0.015	0.016	0.015	0.016	0.017	0.017	0.017	0.018	0.019
UF 2	PermeateTurbidityAfterBP	0.019	0.019	0.019	0.019	0.019	0.017	0.018	0.019	0.017	0.017	0.019
UF 3	PermeateTurbidityAfterBP	0.013	0.013	0.014	0.013	0.013	0.014	0.014	0.015	0.015	0.015	0.015

Asset	Jun 11	Jun 12	Jun 13	Jun 14	Jun 15	Jun 16	Jun 17	Jun 18	Jun 19	Jun 20	Jun 21	Jun 22	Jun 23	Jun 24	Jun 25
UF 1	0.019	0.019	0.019	0.019	0.02	0.021	0.021	0.022	0.023	0.023	0.024	0.024	0.025	0.027	0.026
UF 2	0.018	0.018	0.018	0.018	0.019	0.019	0.019	0.019	0.019	0.019	0.019	0.019	0.02	0.019	0.02
UF 3	0.015	0.015	0.016	0.015	0.017	0.015	0.016	0.015	0.015	0.015	0.015	0.016	0.015	0.015	0.015
UF 1	0.019	0.019	0.019	0.019	0.021	0.02	0.021	0.022	0.023	0.022	0.024	0.024	0.025	0.027	0.027
UF 2	0.018	0.019	0.019	0.019	0.019	0.019	0.019	0.019	0.019	0.019	0.019	0.019	0.019	0.02	0.021
UF 3	0.015	0.015	0.016	0.015	0.017	0.015	0.016	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015

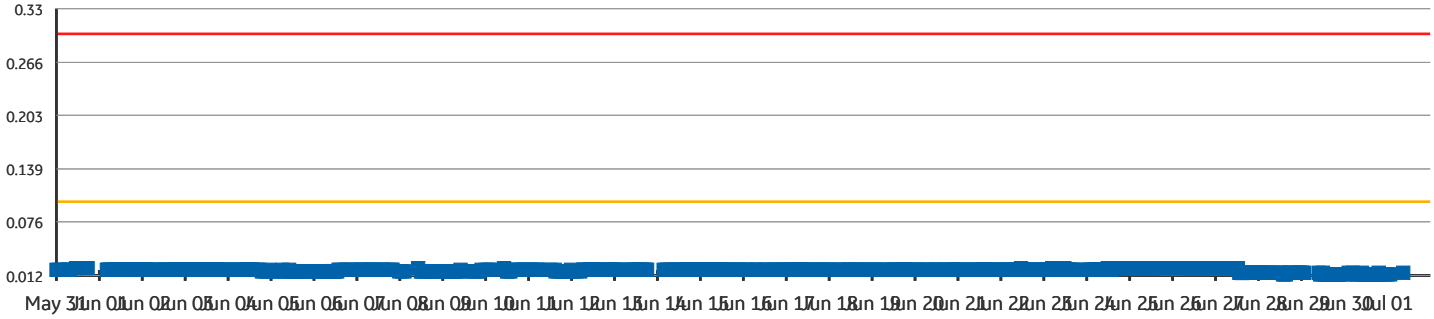
Asset	Jun 26	Jun 27	Jun 28	Jun 29	Jun 30	Jul 01
UF 1	0.018	0.013	0.013	0.013	0.013	0.013
UF 2	0.021	0.018	0.015	0.015	0.014	0.015
UF 3	0.015	0.015	0.016	0.015	0.016	0.016
UF 1	0.017	0.013	0.013	0.013	0.013	0.013
UF 2	0.021	0.018	0.015	0.014	0.014	0.014
UF 3	0.016	0.015	0.015	0.015	0.016	0.015

Turbidity Raw Data

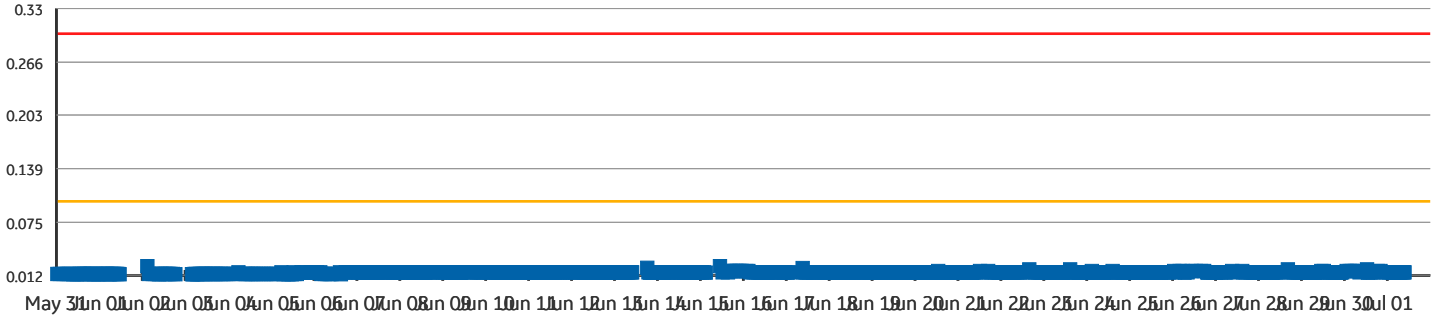
UF 1 - PermeateTurbidityAfterBP (NTU)



UF 2 - PermeateTurbidityAfterBP (NTU)



UF 3 - PermeateTurbidityAfterBP (NTU)



CERTIFICATE OF ANALYSIS

Work Order	:	**VA26B4200**			
Client	:	**Town of Ladysmith**	Laboratory	:	ALS Environmental - Vancouver
Contact	:	Shawn Baker	Account Manager	:	Kevin Bhikadia
Address	:	410 Esplanade PO Box 220 Ladysmith British Columbia Canada V9G 1A2	Address	:	8081 Lougheed Highway Burnaby BC Canada V5A 1W9
Telephone	:	----	E-mail	:	Kevin.Bhikadia@alsglobal.com
Project	:	----	Telephone	:	+1 604 253 4188
PO	:	10977	Date Samples Received	:	03-Jun-2026 12:17
C-O-C number	:	----	Date Analysis Commenced	:	03-Jun-2026
Sampler	:	----	Issue Date	:	08-Jun-2026 14:17
Site	:	Town of Ladysmith			
Quote number	:	Town of Ladysmith Standing Offer			
No. of samples received	:	4			
No. of samples analysed	:	4			

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. This document shall not be reproduced, except in full.

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results

Additional information pertinent to this report will be found in the following separate attachments: Quality Control Report, QC Interpretive report to assist with Quality Review and Sample Receipt Notification (SRN).

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is conducted in accordance with US FDA 21 CFR Part 11.

Signatories	*Position*	*Laboratory Department*
Claire Yang	Lab Assistant	Inorganics, Burnaby, British Columbia
Miles Gropen	Department Manager - Inorganics	Microbiology, Burnaby, British Columbia
Monica Ko	Supervisor - Inorganic	Inorganics, Burnaby, British Columbia

General Comments

The analytical methods used by ALS are developed using internationally recognized reference methods (where available), such as those published by US EPA, APHA Standard Methods, ASTM, ISO, Environment Canada, BC MOE, and Ontario MOE. Refer to the ALS Quality Control Interpretive report (QCI) for applicable references and methodology summaries. Reference methods may incorporate modifications to improve performance.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis.

Where the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

Please refer to Quality Control Interpretive report (QCI) for information regarding Holding Time compliance.

Key: CAS Number: Chemical Abstracts Services number is a unique identifier assigned to discrete substances.
LOR: Limit of Reporting (detection limit).

Unit	*Description*
-	no units
CFU/mL	colony forming units per millilitre
CU	colour units (1 cu = 1 mg/l pt)
mg/L	milligrams per litre
MPN/100mL	most probable number per hundred millilitres
NTU	nephelometric turbidity units
pH units	pH units
µS/cm	microsiemens per centimetre

<: less than.
>: greater than.
Surrogate: An analyte that is similar in behavior to target analyte(s), but that does not occur naturally in environmental samples. For applicable tests, surrogates are added to samples prior to analysis as a check on recovery.

Test results reported relate only to the samples as received by the laboratory.
UNLESS OTHERWISE STATED on SRN or QCI Report, ALL SAMPLES WERE RECEIVED IN ACCEPTABLE CONDITION.

Workorder Comments

Sample name: " Treated Water (post reservoir)" Exceeded Recommended Holding Time prior to receipt at the lab for Microbiology analysis. Please check PM for any other concerns.

Analytical Results

Sub-Matrix: Water
(Matrix: Water)

Analyte	CAS Number	Method/Lab	LOR	Unit	Client sample ID	Raw Water ----	DAF Effluent ----	UF Effluent ----	Treated Water (post reservoir) ----	----
					Client sampling date / time	02-Jun-2026 10:15	02-Jun-2026 10:20	02-Jun-2026 10:25	02-Jun-2026 10:30	----
						VA26B4200-001	VA26B4200-002	VA26B4200-003	VA26B4200-004	----
						Result	Result	Result	Result	----
Sample Preparation										
Dissolved carbon filtration location	----	EP358/VA	-	-		field	field	field	----	----
Physical Tests										
Alkalinity, total (as CaCO3)	----	E290/VA	1.0	mg/L		----	----	----	12.8	----
Colour, true	----	E329/VA	5.0	CU		----	----	----	<5.0	----
Conductivity	----	E100/VA	2.0	µS/cm		----	----	----	54.6	----
pH	----	E108/VA	0.10	pH units		----	----	----	7.01	----
Turbidity	----	E121/VA	0.10	NTU		----	----	----	<0.10	----
Organic / Inorganic Carbon										
Carbon, dissolved organic [DOC]	----	E358-L/VA	0.50	mg/L		2.25	1.29	0.84	----	----
Carbon, total organic [TOC]	----	E355-L/VA	0.50	mg/L		2.04	1.29	0.97	----	----
Microbiological Tests										
Heterotrophic plate count [HPC]	----	E020/VA	1	CFU/mL		----	----	----	<1	----
Coliforms, Escherichia coli [E. coli]	----	E010/VA	1	MPN/100 mL		----	----	----	<1	----
Coliforms, total	----	E010/VA	1	MPN/100 mL		----	----	----	<1	----

Please refer to the General Comments section for an explanation of any qualifiers detected.

Quality Control Interpretive Report

Work Order	:	**VA26B4200**			
Client	:	Town of Ladysmith	Laboratory	:	ALS Environmental - Vancouver
Contact	:	Shawn Baker	Account Manager	:	Kevin Bhikadia
Address	:	410 Esplanade PO Box 220 Ladysmith BC Canada V9G 1A2	Address	:	8081 Lougheed Highway Burnaby British Columbia Canada V5A 1W9
Telephone	:	----	Telephone	:	+1 604 253 4188
Project	:	----	Date Samples Received	:	03-Jun-2026 12:17
PO	:	10977	Issue Date	:	08-Jun-2026 14:16
C-O-C number	:	----			
Sampler	:	----			
Site	:	Town of Ladysmith			
Quote number	:	Town of Ladysmith Standing Offer			
No. of samples received	:	4			
No. of samples analysed	:	4			

This report is automatically generated by the ALS LIMS (Laboratory Information Management System) through evaluation of Quality Control (QC) results and other QA parameters associated with this submission, and is intended to facilitate rapid data validation by auditors or reviewers. The report highlights any exceptions and outliers to ALS Data Quality Objectives, provides holding time details and exceptions, summarizes QC sample frequencies, and lists applicable methodology references and summaries.

Key

Anonymous: Refers to samples which are not part of this work order, but which formed part of the QC process lot.
CAS Number: Chemical Abstracts Services number is a unique identifier assigned to discrete substances.
DQO: Data Quality Objective.
LOR: Limit of Reporting (detection limit).
RPD: Relative Percent Difference.

Workorder Comments

Holding times are displayed as "---" if no guidance exists from CCME, Canadian provinces, or broadly recognized international references.

Summary of Outliers

Outliers : Quality Control Samples

- No Method Blank value outliers occur.
- No Duplicate outliers occur.
- No Laboratory Control Sample (LCS) outliers occur
- No Laboratory Control Sample Duplicate (LCSD) outliers occur
- No Matrix Spike outliers occur.
- No Matrix Spike Duplicate (MSD) outliers occur.
- No Test sample Surrogate recovery outliers exist.

Outliers: Reference Material (RM) Samples

- No Reference Material (RM) Sample outliers occur.

Outliers : Analysis Holding Time Compliance (Breaches)

- Analysis Holding Time Outliers exist.

Outliers : Frequency of Quality Control Samples

- No Quality Control Sample Frequency Outliers occur.

CERTIFICATE OF ANALYSIS

Work Order	:	**VA26B4906**		
Client	:	**Town of Ladysmith**	Laboratory	: ALS Environmental - Vancouver
Contact	:	Shawn Baker	Account Manager	: Kevin Bhikadia
Address	:	410 Esplanade PO Box 220 Ladysmith British Columbia Canada V9G 1A2	Address	: 8081 Lougheed Highway Burnaby BC Canada V5A 1W9
Telephone	:	----	E-mail	: Kevin.Bhikadia@alsglobal.com
Project	:	Arbutus Water Treatment Plant - Weekly Sampling	Telephone	: +1 604 253 4188
PO	:	10977	Date Samples Received	: 10-Jun-2026 10:25
C-O-C number	:	----	Date Analysis Commenced	: 10-Jun-2026
Sampler	:	Oswal Deo	Issue Date	: 17-Jun-2026 12:56
Site	:	Town of Ladysmith		
Quote number	:	Town of Ladysmith Standing Offer		
No. of samples received	:	4		
No. of samples analysed	:	4		

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Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is conducted in accordance with US FDA 21 CFR Part 11.

Signatories	*Position*	*Laboratory Department*
Claire Yang	Lab Assistant	Inorganics, Burnaby, British Columbia
Lindsay Gung	Department Manager - Inorganics	Inorganics, Burnaby, British Columbia
Lindsay Gung	Department Manager - Inorganics	Microbiology, Burnaby, British Columbia
Miles Gropen	Department Manager - Inorganics	Inorganics, Burnaby, British Columbia
Miles Gropen	Department Manager - Inorganics	Microbiology, Burnaby, British Columbia

General Comments

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pH units	pH units
µS/cm	microsiemens per centimetre

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Workorder Comments

Sample name : Treated Water (post reservoir): Exceeded Recommended Holding Time prior to receipt at the lab for Microbiology analysis.

Analytical Results

Sub-Matrix: Water
(Matrix: Water)

Analyte	CAS Number	Method/Lab	LOR	Unit	Raw Water ----	DAF Effluent ----	UF Effluent ----	Treated Water (post reservoir) ----	----
Client sampling date / time					09-Jun-2026 09:30	09-Jun-2026 09:40	09-Jun-2026 09:45	09-Jun-2026 09:50	----
					VA26B4906-001	**VA26B4906-002**	**VA26B4906-003**	**VA26B4906-004**	**----**
					Result	Result	Result	Result	----
Sample Preparation									
Dissolved carbon filtration location	----	EP358/VA	-	-	field	field	field	----	----
Physical Tests									
Alkalinity, total (as CaCO3)	----	E290/VA	1.0	mg/L	----	----	----	13.7	----
Colour, true	----	E329/VA	5.0	CU	----	----	----	<5.0	----
Conductivity	----	E100/VA	2.0	µS/cm	----	----	----	56.4	----
pH	----	E108/VA	0.10	pH units	----	----	----	7.53	----
Turbidity	----	E121/VA	0.10	NTU	----	----	----	1.12	----
Organic / Inorganic Carbon									
Carbon, dissolved organic [DOC]	----	E358-L/VA	0.50	mg/L	2.63	1.24	1.06	----	----
Carbon, total organic [TOC]	----	E355-L/VA	0.50	mg/L	2.67	1.28	0.93	----	----
Microbiological Tests									
Heterotrophic plate count [HPC]	----	E020/VA	1	CFU/mL	----	----	----	<1	----
Coliforms, Escherichia coli [E. coli]	----	E010/VA	1	MPN/100 mL	----	----	----	<1	----
Coliforms, total	----	E010/VA	1	MPN/100 mL	----	----	----	<1	----

Please refer to the General Comments section for an explanation of any qualifiers detected.

ALS Canada Ltd.

right solutions.
right partner.

Quality Control Interpretive Report

Work Order	:	**VA26B4906**		
Client	:	Town of Ladysmith	Laboratory	: ALS Environmental - Vancouver
Contact	:	Shawn Baker	Account Manager	: Kevin Bhikadia
Address	:	410 Esplanade PO Box 220 Ladysmith BC Canada V9G 1A2	Address	: 8081 Lougheed Highway Burnaby British Columbia Canada V5A 1W9
Telephone	:	----	Telephone	: +1 604 253 4188
Project	:	Arbutus Water Treatment Plant - Weekly Sampling	Date Samples Received	: 10-Jun-2026 10:25
PO	:	10977	Issue Date	: 17-Jun-2026 12:56
C-O-C number	:	----		
Sampler	:	Oswal Deo		
Site	:	Town of Ladysmith		
Quote number	:	Town of Ladysmith Standing Offer		
No. of samples received	:	4		
No. of samples analysed	:	4		

This report is automatically generated by the ALS LIMS (Laboratory Information Management System) through evaluation of Quality Control (QC) results and other QA parameters associated with this submission, and is intended to facilitate rapid data validation by auditors or reviewers. The report highlights any exceptions and outliers to ALS Data Quality Objectives, provides holding time details and exceptions, summarizes QC sample frequencies, and lists applicable methodology references and summaries.

Key

Anonymous: Refers to samples which are not part of this work order, but which formed part of the QC process lot.
CAS Number: Chemical Abstracts Services number is a unique identifier assigned to discrete substances.
DQO: Data Quality Objective.
LOR: Limit of Reporting (detection limit).
RPD: Relative Percent Difference.

Workorder Comments

Holding times are displayed as "---" if no guidance exists from CCME, Canadian provinces, or broadly recognized international references.

Summary of Outliers

Outliers : Quality Control Samples

- No Method Blank value outliers occur.
- No Duplicate outliers occur.
- No Laboratory Control Sample (LCS) outliers occur
- No Laboratory Control Sample Duplicate (LCSD) outliers occur
- No Matrix Spike outliers occur.
- No Matrix Spike Duplicate (MSD) outliers occur.
- No Test sample Surrogate recovery outliers exist.

Outliers: Reference Material (RM) Samples

- No Reference Material (RM) Sample outliers occur.

Outliers : Analysis Holding Time Compliance (Breaches)

- Analysis Holding Time Outliers exist.

Outliers : Frequency of Quality Control Samples

- No Quality Control Sample Frequency Outliers occur.

CERTIFICATE OF ANALYSIS

Work Order	:	**VA26B5626**		
Client	:	**Town of Ladysmith**	Laboratory	: ALS Environmental - Vancouver
Contact	:	Shawn Baker	Account Manager	: Kevin Bhikadia
Address	:	410 Esplanade PO Box 220 Ladysmith British Columbia Canada V9G 1A2	Address	: 8081 Lougheed Highway Burnaby BC Canada V5A 1W9
Telephone	:	----	E-mail	: Kevin.Bhikadia@alsglobal.com
Project	:	Arbutus Water Treatment Plant - Monthly Sampling	Telephone	: +1 604 253 4188
PO	:	10977	Date Samples Received	: 17-Jun-2026 09:45
C-O-C number	:	----	Date Analysis Commenced	: 18-Jun-2026
Sampler	:	Oswal Deo	Issue Date	: 23-Jun-2026 08:56
Site	:	Town of Ladysmith		
Quote number	:	Town of Ladysmith Standing Offer		
No. of samples received	:	1		
No. of samples analysed	:	1		

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. This document shall not be reproduced, except in full.

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results
- Surrogate Control Limits

Additional information pertinent to this report will be found in the following separate attachments: Quality Control Report, QC Interpretive report to assist with Quality Review and Sample Receipt Notification (SRN).

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is conducted in accordance with US FDA 21 CFR Part 11.

Signatories	*Position*	*Laboratory Department*
Dan Gebert	Supervisor - Metals Mercury & Speciation	Metals, Burnaby, British Columbia
Ophelia Chiu	Department Manager - Organics	Organics, Burnaby, British Columbia
Parth Goswami	Team Leader - LCMS	LCMS, Waterloo, Ontario

General Comments

The analytical methods used by ALS are developed using internationally recognized reference methods (where available), such as those published by US EPA, APHA Standard Methods, ASTM, ISO, Environment Canada, BC MOE, and Ontario MOE. Refer to the ALS Quality Control Interpretive report (QCI) for applicable references and methodology summaries. Reference methods may incorporate modifications to improve performance.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis.

Where the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

Please refer to Quality Control Interpretive report (QCI) for information regarding Holding Time compliance.

Key: CAS Number: Chemical Abstracts Services number is a unique identifier assigned to discrete substances.
LOR: Limit of Reporting (detection limit).

Unit	*Description*
mg/L	milligrams per litre
µg/L	micrograms per litre

<: less than.
>: greater than.
Surrogate: An analyte that is similar in behavior to target analyte(s), but that does not occur naturally in environmental samples. For applicable tests, surrogates are added to samples prior to analysis as a check on recovery.

Test results reported relate only to the samples as received by the laboratory.
UNLESS OTHERWISE STATED on SRN or QCI Report, ALL SAMPLES WERE RECEIVED IN ACCEPTABLE CONDITION.

Analytical Results

Sub-Matrix: Water
(Matrix: Water)

Analyte	CAS Number	Method/Lab	LOR	Unit	Client sample ID: Treated Water (post reservoir) ----	----	----	----	----
					Client sampling date / time: 16-Jun-2026 11:30	----	----	----	----
					VA26B5626-001	----	----	----	----
					Result	----	----	----	----
Total Metals									
Aluminum, total	7429-90-5	E420/VA	0.0030	mg/L	0.0130	----	----	----	----
Volatile Organic Compounds [THMs]									
Bromodichloromethane	75-27-4	E611B/VA	1.0	µg/L	1.9	----	----	----	----
Bromoform	75-25-2	E611B/VA	1.0	µg/L	<1.0	----	----	----	----
Chloroform	67-66-3	E611B/VA	1.0	µg/L	12.3	----	----	----	----
Dibromochloromethane	124-48-1	E611B/VA	1.0	µg/L	<1.0	----	----	----	----
Trihalomethanes [THMs], total	----	E611B/VA	2.0	µg/L	14.2	----	----	----	----
Volatile Organic Compounds [THMs] Surrogates									
Bromofluorobenzene, 4-	460-00-4	E611B/VA	1.0	%	93.3	----	----	----	----
Difluorobenzene, 1,4-	540-36-3	E611B/VA	1.0	%	103	----	----	----	----
Haloacetic Acids									
Bromochloroacetic acid	5589-96-8	E750/WT	1.00	µg/L	<1.00	----	----	----	----
Dibromoacetic acid	631-64-1	E750/WT	1.00	µg/L	<1.00	----	----	----	----
Dichloroacetic acid	79-43-6	E750/WT	1.00	µg/L	4.48	----	----	----	----
Monobromoacetic acid	79-08-3	E750/WT	1.00	µg/L	<1.00	----	----	----	----
Monochloroacetic acid	79-11-8	E750/WT	1.00	µg/L	<1.00	----	----	----	----
Trichloroacetic acid	76-03-9	E750/WT	1.00	µg/L	4.97	----	----	----	----
Haloacetic acids, total [HAA5]	n/a	E750/WT	5.00	µg/L	9.45	----	----	----	----

Please refer to the General Comments section for an explanation of any qualifiers detected.

ALS Canada Ltd.

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Quality Control Interpretive Report

Work Order	:	**VA26B5626**		
Client	:	Town of Ladysmith	Laboratory	: ALS Environmental - Vancouver
Contact	:	Shawn Baker	Account Manager	: Kevin Bhikadia
Address	:	410 Esplanade PO Box 220 Ladysmith BC Canada V9G 1A2	Address	: 8081 Lougheed Highway Burnaby British Columbia Canada V5A 1W9
Telephone	:	----	Telephone	: +1 604 253 4188
Project	:	Arbutus Water Treatment Plant - Monthly Sampling	Date Samples Received	: 17-Jun-2026 09:45
PO	:	10977	Issue Date	: 23-Jun-2026 08:56
C-O-C number	:	----		
Sampler	:	Oswal Deo		
Site	:	Town of Ladysmith		
Quote number	:	Town of Ladysmith Standing Offer		
No. of samples received	:	1		
No. of samples analysed	:	1		

This report is automatically generated by the ALS LIMS (Laboratory Information Management System) through evaluation of Quality Control (QC) results and other QA parameters associated with this submission, and is intended to facilitate rapid data validation by auditors or reviewers. The report highlights any exceptions and outliers to ALS Data Quality Objectives, provides holding time details and exceptions, summarizes QC sample frequencies, and lists applicable methodology references and summaries.

Key

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CAS Number: Chemical Abstracts Services number is a unique identifier assigned to discrete substances.
DQO: Data Quality Objective.
LOR: Limit of Reporting (detection limit).
RPD: Relative Percent Difference.

Workorder Comments

Holding times are displayed as "---" if no guidance exists from CCME, Canadian provinces, or broadly recognized international references.

Summary of Outliers

Outliers : Quality Control Samples

- No Method Blank value outliers occur.
- No Duplicate outliers occur.
- No Laboratory Control Sample (LCS) outliers occur
- No Laboratory Control Sample Duplicate (LCSD) outliers occur
- No Matrix Spike outliers occur.
- No Matrix Spike Duplicate (MSD) outliers occur.
- No Test sample Surrogate recovery outliers exist.

Outliers: Reference Material (RM) Samples

- No Reference Material (RM) Sample outliers occur.

Outliers : Analysis Holding Time Compliance (Breaches)

- No Analysis Holding Time Outliers exist.

Outliers : Frequency of Quality Control Samples

- No Quality Control Sample Frequency Outliers occur.

CERTIFICATE OF ANALYSIS

Work Order	:	**VA26B5628**			
Client	:	**Town of Ladysmith**	Laboratory	:	ALS Environmental - Vancouver
Contact	:	Shawn Baker	Account Manager	:	Kevin Bhikadia
Address	:	410 Esplanade PO Box 220 Ladysmith British Columbia Canada V9G 1A2	Address	:	8081 Lougheed Highway Burnaby BC Canada V5A 1W9
Telephone	:	----	E-mail	:	Kevin.Bhikadia@alsglobal.com
Project	:	Arbutus Water Treatment Plant - Weekly Sampling	Telephone	:	+1 604 253 4188
PO	:	10977	Date Samples Received	:	17-Jun-2026 09:45
C-O-C number	:	----	Date Analysis Commenced	:	17-Jun-2026
Sampler	:	Oswal Deo	Issue Date	:	24-Jun-2026 15:45
Site	:	Town of Ladysmith			
Quote number	:	Town of Ladysmith Standing Offer			
No. of samples received	:	4			
No. of samples analysed	:	4			

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This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results

Additional information pertinent to this report will be found in the following separate attachments: Quality Control Report, QC Interpretive report to assist with Quality Review and Sample Receipt Notification (SRN).

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is conducted in accordance with US FDA 21 CFR Part 11.

Signatories	*Position*	*Laboratory Department*
Claire Yang	Lab Assistant	Inorganics, Burnaby, British Columbia
Lindsay Gung	Department Manager - Inorganics	Microbiology, Burnaby, British Columbia
Monica Ko	Supervisor - Inorganic	Inorganics, Burnaby, British Columbia

General Comments

The analytical methods used by ALS are developed using internationally recognized reference methods (where available), such as those published by US EPA, APHA Standard Methods, ASTM, ISO, Environment Canada, BC MOE, and Ontario MOE. Refer to the ALS Quality Control Interpretive report (QCI) for applicable references and methodology summaries. Reference methods may incorporate modifications to improve performance.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis.

Where the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

Please refer to Quality Control Interpretive report (QCI) for information regarding Holding Time compliance.

Key: CAS Number: Chemical Abstracts Services number is a unique identifier assigned to discrete substances.
LOR: Limit of Reporting (detection limit).

Unit	*Description*
-	no units
CFU/mL	colony forming units per millilitre
CU	colour units (1 cu = 1 mg/l pt)
mg/L	milligrams per litre
MPN/100mL	most probable number per hundred millilitres
NTU	nephelometric turbidity units
pH units	pH units
µS/cm	microsiemens per centimetre

<: less than.
>: greater than.
Surrogate: An analyte that is similar in behavior to target analyte(s), but that does not occur naturally in environmental samples. For applicable tests, surrogates are added to samples prior to analysis as a check on recovery.

Test results reported relate only to the samples as received by the laboratory.
UNLESS OTHERWISE STATED on SRN or QCI Report, ALL SAMPLES WERE RECEIVED IN ACCEPTABLE CONDITION.

Analytical Results

Sub-Matrix: Water
(Matrix: Water)

Analyte	CAS Number	Method/Lab	LOR	Unit	Client sample ID	Raw Water ----	DAF Effluent ----	UF Effluent ----	Treated Water (post reservoir) ----	----
					Client sampling date / time	16-Jun-2026 11:05	16-Jun-2026 11:10	16-Jun-2026 11:20	16-Jun-2026 11:30	----
						VA26B5628-001	VA26B5628-002	VA26B5628-003	VA26B5628-004	----
						Result	Result	Result	Result	----
Sample Preparation										
Dissolved carbon filtration location	----	EP358/VA	-	-		field	field	field	----	----
Physical Tests										
Alkalinity, total (as CaCO3)	----	E290/VA	1.0	mg/L		----	----	----	12.4	----
Colour, true	----	E329/VA	5.0	CU		----	----	----	<5.0	----
Conductivity	----	E100/VA	2.0	µS/cm		----	----	----	54.8	----
pH	----	E108/VA	0.10	pH units		----	----	----	7.39	----
Turbidity	----	E121/VA	0.10	NTU		----	----	----	<0.10	----
Organic / Inorganic Carbon										
Carbon, dissolved organic [DOC]	----	E358-L/VA	0.50	mg/L		2.69	1.08	1.31	----	----
Carbon, total organic [TOC]	----	E355-L/VA	0.50	mg/L		2.61	1.25	1.10	----	----
Microbiological Tests										
Heterotrophic plate count [HPC]	----	E020/VA	1	CFU/mL		----	----	----	<1	----
Coliforms, Escherichia coli [E. coli]	----	E010/VA	1	MPN/100 mL		----	----	----	<1	----
Coliforms, total	----	E010/VA	1	MPN/100 mL		----	----	----	<1	----

Please refer to the General Comments section for an explanation of any qualifiers detected.

Quality Control Interpretive Report

Work Order	:	**VA26B5628**			
Client	:	Town of Ladysmith	Laboratory	:	ALS Environmental - Vancouver
Contact	:	Shawn Baker	Account Manager	:	Kevin Bhikadia
Address	:	410 Esplanade PO Box 220 Ladysmith BC Canada V9G 1A2	Address	:	8081 Lougheed Highway Burnaby British Columbia Canada V5A 1W9
Telephone	:	----	Telephone	:	+1 604 253 4188
Project	:	Arbutus Water Treatment Plant - Weekly Sampling	Date Samples Received	:	17-Jun-2026 09:45
PO	:	10977	Issue Date	:	24-Jun-2026 15:45
C-O-C number	:	----			
Sampler	:	Oswal Deo			
Site	:	Town of Ladysmith			
Quote number	:	Town of Ladysmith Standing Offer			
No. of samples received	:	4			
No. of samples analysed	:	4			

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RPD: Relative Percent Difference.

Workorder Comments

Holding times are displayed as "---" if no guidance exists from CCME, Canadian provinces, or broadly recognized international references.

Summary of Outliers

Outliers : Quality Control Samples

- No Method Blank value outliers occur.
- No Duplicate outliers occur.
- No Laboratory Control Sample (LCS) outliers occur
- No Laboratory Control Sample Duplicate (LCSD) outliers occur
- No Matrix Spike outliers occur.
- No Matrix Spike Duplicate (MSD) outliers occur.
- No Test sample Surrogate recovery outliers exist.

Outliers: Reference Material (RM) Samples

- No Reference Material (RM) Sample outliers occur.

Outliers : Analysis Holding Time Compliance (Breaches)

- Analysis Holding Time Outliers exist.

Outliers : Frequency of Quality Control Samples

- Quality Control Sample Frequency Outliers occur - please see following pages for full details.

CERTIFICATE OF ANALYSIS

Work Order	:	**VA26B6435**			
Client	:	**Town of Ladysmith**	Laboratory	:	ALS Environmental - Vancouver
Contact	:	Shawn Baker	Account Manager	:	Kevin Bhikadia
Address	:	410 Esplanade PO Box 220 Ladysmith British Columbia Canada V9G 1A2	Address	:	8081 Lougheed Highway Burnaby BC Canada V5A 1W9
Telephone	:	----	E-mail	:	Kevin.Bhikadia@alsglobal.com
Project	:	Arbutus Water Treatment Plant - Weekly Sampling	Telephone	:	+1 604 253 4188
PO	:	10940	Date Samples Received	:	24-Jun-2026 10:50
C-O-C number	:	----	Date Analysis Commenced	:	24-Jun-2026
Sampler	:	Oswal Deo	Issue Date	:	02-Jul-2026 09:25
Site	:	Town of Ladysmith			
Quote number	:	Town of Ladysmith Standing Offer			
No. of samples received	:	4			
No. of samples analysed	:	4			

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- General Comments
- Analytical Results

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Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is conducted in accordance with US FDA 21 CFR Part 11.

Signatories	*Position*	*Laboratory Department*
Caitlin Macey	Team Leader - Inorganics	Microbiology, Burnaby, British Columbia
Lia Xie	Lab Assistant	Inorganics, Burnaby, British Columbia
Miles Gropen	Department Manager - Inorganics	Inorganics, Burnaby, British Columbia

General Comments

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Where the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

Please refer to Quality Control Interpretive report (QCI) for information regarding Holding Time compliance.

Key: CAS Number: Chemical Abstracts Services number is a unique identifier assigned to discrete substances.
LOR: Limit of Reporting (detection limit).

Unit	*Description*
-	no units
CFU/mL	colony forming units per millilitre
CU	colour units (1 cu = 1 mg/l pt)
mg/L	milligrams per litre
MPN/100mL	most probable number per hundred millilitres
NTU	nephelometric turbidity units
pH units	pH units
µS/cm	microsiemens per centimetre

<: less than.
>: greater than.
Surrogate: An analyte that is similar in behavior to target analyte(s), but that does not occur naturally in environmental samples. For applicable tests, surrogates are added to samples prior to analysis as a check on recovery.

Test results reported relate only to the samples as received by the laboratory.
UNLESS OTHERWISE STATED on SRN or QCI Report, ALL SAMPLES WERE RECEIVED IN ACCEPTABLE CONDITION.

Workorder Comments

Sample(s) Treated Water(Post reservoir): Exceeded Recommended Holding Time prior to receipt at the lab for HPC analysis.Requested analysis will be carried from the expired samples.

Analytical Results

Sub-Matrix: Water
(Matrix: Water)

Analyte	CAS Number	Method/Lab	LOR	Unit	Client sample ID: Raw Water ----	DAF Effluent ----	UF Effluent ----	Treated Water (post reservoir) ----	----
					Client sampling date / time: 23-Jun-2026 09:30	23-Jun-2026 09:35	23-Jun-2026 09:40	23-Jun-2026 09:45	----
					VA26B6435-001	VA26B6435-002	VA26B6435-003	VA26B6435-004	----
					Result	Result	Result	Result	----
Sample Preparation									
Dissolved carbon filtration location	----	EP358/VA	-	-	field	field	field	----	----
Physical Tests									
Alkalinity, total (as CaCO3)	----	E290/VA	1.0	mg/L	----	----	----	12.6	----
Colour, true	----	E329/VA	5.0	CU	----	----	----	<5.0	----
Conductivity	----	E100/VA	2.0	µS/cm	----	----	----	56.0	----
pH	----	E108/VA	0.10	pH units	----	----	----	7.35	----
Turbidity	----	E121/VA	0.10	NTU	----	----	----	<0.10	----
Organic / Inorganic Carbon									
Carbon, dissolved organic [DOC]	----	E358-L/VA	0.50	mg/L	2.42	1.32	0.94	----	----
Carbon, total organic [TOC]	----	E355-L/VA	0.50	mg/L	2.51	1.58	1.16	----	----
Microbiological Tests									
Heterotrophic plate count [HPC]	----	E020/VA	1	CFU/mL	----	----	----	<1	----
Coliforms, Escherichia coli [E. coli]	----	E010/VA	1	MPN/100 mL	----	----	----	<1	----
Coliforms, total	----	E010/VA	1	MPN/100 mL	----	----	----	<1	----

Please refer to the General Comments section for an explanation of any qualifiers detected.

Quality Control Interpretive Report

Work Order	:	**VA26B6435**		
Client	:	Town of Ladysmith	Laboratory	: ALS Environmental - Vancouver
Contact	:	Shawn Baker	Account Manager	: Kevin Bhikadia
Address	:	410 Esplanade PO Box 220 Ladysmith BC Canada V9G 1A2	Address	: 8081 Lougheed Highway Burnaby British Columbia Canada V5A 1W9
Telephone	:	----	Telephone	: +1 604 253 4188
Project	:	Arbutus Water Treatment Plant - Weekly Sampling	Date Samples Received	: 24-Jun-2026 10:50
PO	:	10940	Issue Date	: 02-Jul-2026 09:25
C-O-C number	:	----		
Sampler	:	Oswal Deo		
Site	:	Town of Ladysmith		
Quote number	:	Town of Ladysmith Standing Offer		
No. of samples received	:	4		
No. of samples analysed	:	4		

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Key

Anonymous: Refers to samples which are not part of this work order, but which formed part of the QC process lot.
CAS Number: Chemical Abstracts Services number is a unique identifier assigned to discrete substances.
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LOR: Limit of Reporting (detection limit).
RPD: Relative Percent Difference.

Workorder Comments

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Summary of Outliers

Outliers : Quality Control Samples

- No Method Blank value outliers occur.
- No Duplicate outliers occur.
- No Laboratory Control Sample (LCS) outliers occur
- No Laboratory Control Sample Duplicate (LCSD) outliers occur
- No Matrix Spike outliers occur.
- No Matrix Spike Duplicate (MSD) outliers occur.
- No Test sample Surrogate recovery outliers exist.

Outliers: Reference Material (RM) Samples

- No Reference Material (RM) Sample outliers occur.

Outliers : Analysis Holding Time Compliance (Breaches)

- Analysis Holding Time Outliers exist.

Outliers : Frequency of Quality Control Samples

- No Quality Control Sample Frequency Outliers occur.