



CERTIFICATE OF ANALYSIS (GUIDELINE EVALUATION)

Work Order	: VA25A9106		
Client	: Lafarge Canada Inc.	Laboratory	: ALS Environmental - Vancouver
Contact	: Louise Bantok	Account Manager	: Gulraj Dhanaua
Address	: 2300 Rogers Ave Coquitlam British Columbia Canada V3K 5X6	Address	: 8081 Lougheed Highway Burnaby BC Canada V5A 1W9
Telephone	: ----	Telephone	: +1 604 253 4188
Project	: VAID - Texada	Date Samples Received	: 23-Apr-2025 10:50
PO	: 4501832334	Date Analysis Commenced	: 24-Apr-2025
C-O-C number	: ----	Issue Date	: 29-Apr-2025 08:16
Sampler	: ----		
Site	: ----		
Quote number	: Lafarge Western Canada Standing Offer 2024		
No. of samples received	: 12		
No. of samples analysed	: 12		

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
- Guideline Comparison

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.

<i>Signatories</i>	<i>Position</i>	<i>Laboratory Department</i>
Kevin Duarte	Supervisor - Metals ICP Instrumentation	Metals, Burnaby, British Columbia



No Breaches Found

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.

When sampling time information is not provided by the client, sampling dates are shown without a time component. In these instances, the time component has been assumed by the laboratory for processing purposes.

Application of guidelines is provided "as is" without warranty of any kind, either expressed or implied, including, but not limited to fitness for a particular purpose, or non-infringement. ALS assumes no responsibility for errors or omissions in the information. Guidelines are not adjusted for the hardness, pH or temperature of the sample (the most conservative values are used). Measurement uncertainty is not applied to test results prior to comparison with specified criteria values.

Key: LOR: Limit of Reporting (detection limit).

Unit	Description
mg/L	milligrams per litre

>: greater than.

<: less than.

Red shading is applied where the result or the LOR is greater than the Guideline Upper Limit (or lower than the Guideline Lower Limit, if applicable).
For drinking water samples, Red shading is applied where the result for E.coli, fecal or total coliforms is greater than or equal to the Guideline Upper Limit.

Qualifiers

Qualifier	Description
DLM	Detection Limit Adjusted due to sample matrix effects (e.g. chemical interference, colour, turbidity).



Analytical Results Evaluation

Matrix: Water

Client sample ID				VA1-SITE#1 HOTEL	VA2-SITE#2 EARL ST	VA3-SITE#3 MARBLE BAY @VAN ANDA	VA4-SITE#4 BLEWETT/SMELTE R	VA5-SITE#5 SELLENTIN @STUART BAY RD	VA6-SITE#6 WALL ST PUMPHOUSE	VA7-SITE#7 COPPER QUEEN @ALLADIN
Client sampling date / time				22-Apr-2025 07:40	22-Apr-2025 08:15	22-Apr-2025 08:26	22-Apr-2025 08:40	22-Apr-2025 08:00	22-Apr-2025 09:00	22-Apr-2025 09:12
Sub-Matrix				Water	Water	Water	Water	Water	Water	Water
Analyte	CAS Number	Method/Lab	Unit	VA25A9106-001	VA25A9106-002	VA25A9106-003	VA25A9106-004	VA25A9106-005	VA25A9106-006	VA25A9106-007
				Result	Result	Result	Result	Result	Result	Result
Physical Tests										
Hardness (as CaCO ₃), from total Ca/Mg	----	EC100A/VA	mg/L	106	105	107	103	106	105	109
Total Metals										
Aluminum, total	7429-90-5	E420/VA	mg/L	0.0160	0.0148	0.0144	0.0120	0.0151	0.0137	0.0143
Antimony, total	7440-36-0	E420/VA	mg/L	0.00127	0.00131	0.00129	0.00128	0.00125	0.00129	0.00128
Arsenic, total	7440-38-2	E420/VA	mg/L	0.00106	0.00107	0.00092	0.00113	0.00112	0.00114	0.00104
Barium, total	7440-39-3	E420/VA	mg/L	0.00498	0.00491	0.00515	0.00513	0.00506	0.00499	0.00536
Beryllium, total	7440-41-7	E420/VA	mg/L	<0.000100	<0.000100	<0.000100	<0.000100	<0.000100	<0.000100	<0.000100
Bismuth, total	7440-69-9	E420/VA	mg/L	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Boron, total	7440-42-8	E420/VA	mg/L	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Cadmium, total	7440-43-9	E420/VA	mg/L	<0.0000050	0.0000068	0.0000061	<0.0000050	0.0000057	0.0000057	<0.0000050
Calcium, total	7440-70-2	E420/VA	mg/L	38.6	38.2	39.2	37.6	38.4	38.2	39.8
Cesium, total	7440-46-2	E420/VA	mg/L	0.000023	0.000024	0.000024	0.000024	0.000022	0.000022	0.000024
Chromium, total	7440-47-3	E420/VA	mg/L	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Cobalt, total	7440-48-4	E420/VA	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Copper, total	7440-50-8	E420/VA	mg/L	0.0146	0.00306	0.00408	0.00635	0.00378	0.00802	0.0338
Iron, total	7439-89-6	E420/VA	mg/L	0.021	0.035	0.034	0.023	0.192	0.024	0.048
Lead, total	7439-92-1	E420/VA	mg/L	0.000318	0.000465	0.000231	0.000400	0.000365	0.000288	0.000520
Lithium, total	7439-93-2	E420/VA	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010



Matrix: Water

				Client sample ID	VA1-SITE#1 HOTEL	VA2-SITE#2 EARL ST	VA3-SITE#3 MARBLE BAY @VAN ANDA	VA4-SITE#4 BLEWETT/SMELTE R	VA5-SITE#5 SELLENTIN @STUART BAY RD	VA6-SITE#6 WALL ST PUMPHOUSE	VA7-SITE#7 COPPER QUEEN @ALLADIN
Client sampling date / time					22-Apr-2025 07:40	22-Apr-2025 08:15	22-Apr-2025 08:26	22-Apr-2025 08:40	22-Apr-2025 08:00	22-Apr-2025 09:00	22-Apr-2025 09:12
Sub-Matrix					Water	Water	Water	Water	Water	Water	Water
Analyte	CAS Number	Method/Lab	Unit		VA25A9106-001	VA25A9106-002	VA25A9106-003	VA25A9106-004	VA25A9106-005	VA25A9106-006	VA25A9106-007
					Result	Result	Result	Result	Result	Result	Result
Total Metals											
Magnesium, total	7439-95-4	E420/VA	mg/L		2.30	2.25	2.26	2.24	2.35	2.29	2.32
Manganese, total	7439-96-5	E420/VA	mg/L		0.00452	0.00474	0.00491	0.00400	0.0111	0.00392	0.00458
Mercury, total	7439-97-6	E508/VA	mg/L		<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050
Molybdenum, total	7439-98-7	E420/VA	mg/L		0.000314	0.000304	0.000230	0.000305	0.000390	0.000297	0.000264
Nickel, total	7440-02-0	E420/VA	mg/L		<0.00050	<0.00050	0.00082	<0.00050	<0.00050	<0.00050	<0.00050
Phosphorus, total	7723-14-0	E420/VA	mg/L		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Potassium, total	7440-09-7	E420/VA	mg/L		0.274	0.266	0.263	0.268	0.268	0.272	0.272
Rubidium, total	7440-17-7	E420/VA	mg/L		0.00040	0.00037	0.00033	0.00037	0.00034	0.00033	0.00036
Selenium, total	7782-49-2	E420/VA	mg/L		0.000173	0.000194	0.000136	0.000193	0.000161	0.000212	0.000210
Silicon, total	7440-21-3	E420/VA	mg/L		2.84	2.84	2.89	2.80	2.79	2.91	2.90
Silver, total	7440-22-4	E420/VA	mg/L		<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Sodium, total	7440-23-5	E420/VA	mg/L		6.23	6.30	6.28	6.22	6.41	6.65	6.46
Strontium, total	7440-24-6	E420/VA	mg/L		0.151	0.156	0.156	0.155	0.150	0.156	0.152
Sulfur, total	7704-34-9	E420/VA	mg/L		1.04	1.07	<0.50	0.83	0.93	0.84	0.67
Tellurium, total	13494-80-9	E420/VA	mg/L		<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
Thallium, total	7440-28-0	E420/VA	mg/L		<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Thorium, total	7440-29-1	E420/VA	mg/L		<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Tin, total	7440-31-5	E420/VA	mg/L		<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Titanium, total	7440-32-6	E420/VA	mg/L		0.00033	0.00034	<0.00030	0.00034	0.00033	0.00035	0.00033



Matrix: Water

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Client sampling date / time				22-Apr-2025 07:40	22-Apr-2025 08:15	22-Apr-2025 08:26	22-Apr-2025 08:40	22-Apr-2025 08:00	22-Apr-2025 09:00	22-Apr-2025 09:12
Sub-Matrix				Water	Water	Water	Water	Water	Water	Water
Analyte	CAS Number	Method/Lab	Unit	VA25A9106-001	VA25A9106-002	VA25A9106-003	VA25A9106-004	VA25A9106-005	VA25A9106-006	VA25A9106-007
				Result	Result	Result	Result	Result	Result	Result
Total Metals										
Tungsten, total	7440-33-7	E420/VA	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Uranium, total	7440-61-1	E420/VA	mg/L	0.000248	0.000274	0.000230	0.000270	0.000346	0.000255	0.000238
Vanadium, total	7440-62-2	E420/VA	mg/L	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Zinc, total	7440-66-6	E420/VA	mg/L	0.0094	0.0463	0.0134	0.0088	0.0782	0.0099	0.0392
Zirconium, total	7440-67-7	E420/VA	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020

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

Matrix: Water

Client sample ID				VA8-SITE#8 TANK OUTLET	VA9-SITE#9 WALL STEET END HYDRANT	VA10-SITE#10 MARBLE BAY & SELLENTIN ST	RAW SUPPLY	VA-DUP	----	----
Client sampling date / time				22-Apr-2025 07:16	22-Apr-2025 08:50	22-Apr-2025 07:52	22-Apr-2025 06:50	22-Apr-2025 09:12	----	----
Sub-Matrix				Water	Water	Water	Water	Water	----	----
Analyte	CAS Number	Method/Lab	Unit	VA25A9106-008	VA25A9106-009	VA25A9106-010	VA25A9106-011	VA25A9106-012	----	----
				Result	Result	Result	Result	Result	----	----
Physical Tests										
Hardness (as CaCO3), from total Ca/Mg	----	EC100A/VA	mg/L	106	105	109	107	110	----	----
Total Metals										
Aluminum, total	7429-90-5	E420/VA	mg/L	0.0140	0.0138	0.0197	0.0245	0.0136	----	----
Antimony, total	7440-36-0	E420/VA	mg/L	0.00130	0.00128	0.00130	0.00136	0.00130	----	----
Arsenic, total	7440-38-2	E420/VA	mg/L	0.00088	0.00118	0.00097	0.00276	0.00104	----	----
Barium, total	7440-39-3	E420/VA	mg/L	0.00492	0.00525	0.00497	0.00524	0.00532	----	----



Matrix: Water

				Client sample ID	VA8-SITE#8 TANK OUTLET	VA9-SITE#9 WALL STEET END HYDRANT	VA10-SITE#10 MARBLE BAY & SELLENTIN ST	RAW SUPPLY	VA-DUP	----	----
				Client sampling date / time	22-Apr-2025 07:16	22-Apr-2025 08:50	22-Apr-2025 07:52	22-Apr-2025 06:50	22-Apr-2025 09:12	----	----
				Sub-Matrix	Water	Water	Water	Water	Water	----	----
Analyte	CAS Number	Method/Lab	Unit		VA25A9106-008	VA25A9106-009	VA25A9106-010	VA25A9106-011	VA25A9106-012	----	----
					Result	Result	Result	Result	Result	----	----
Total Metals											
Beryllium, total	7440-41-7	E420/VA	mg/L	<0.000100	<0.000100	<0.000100	<0.000100	<0.000100	<0.000100	----	----
Bismuth, total	7440-69-9	E420/VA	mg/L	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	----	----
Boron, total	7440-42-8	E420/VA	mg/L	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	----	----
Cadmium, total	7440-43-9	E420/VA	mg/L	<0.0000050	<0.0000050	0.0000069	<0.000010 ^{DLM} 0	0.0000062	0.0000062	----	----
Calcium, total	7440-70-2	E420/VA	mg/L	38.6	38.3	39.7	39.0	40.3	40.3	----	----
Cesium, total	7440-46-2	E420/VA	mg/L	0.000025	0.000024	0.000025	0.000027	0.000025	0.000025	----	----
Chromium, total	7440-47-3	E420/VA	mg/L	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	----	----
Cobalt, total	7440-48-4	E420/VA	mg/L	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	----	----
Copper, total	7440-50-8	E420/VA	mg/L	0.00487	0.0186	0.0274	0.00378	0.0200	0.0200	----	----
Iron, total	7439-89-6	E420/VA	mg/L	0.020	0.038	0.025	0.039	0.035	0.035	----	----
Lead, total	7439-92-1	E420/VA	mg/L	0.000356	0.000171	0.00274	0.000270	0.000229	0.000229	----	----
Lithium, total	7439-93-2	E420/VA	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	----	----
Magnesium, total	7439-95-4	E420/VA	mg/L	2.32	2.26	2.31	2.35	2.29	2.29	----	----
Manganese, total	7439-96-5	E420/VA	mg/L	0.00635	0.00484	0.00790	0.00898	0.00425	0.00425	----	----
Mercury, total	7439-97-6	E508/VA	mg/L	<0.0000050	<0.0000050	<0.0000050	<0.000005 0	<0.0000050	<0.0000050	----	----
Molybdenum, total	7439-98-7	E420/VA	mg/L	0.000174	0.000377	0.000254	0.0103	0.000259	0.000259	----	----
Nickel, total	7440-02-0	E420/VA	mg/L	<0.00050	<0.00050	0.0101	<0.00050	<0.00050	<0.00050	----	----
Phosphorus, total	7723-14-0	E420/VA	mg/L	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	----	----
Potassium, total	7440-09-7	E420/VA	mg/L	0.264	0.277	0.280	0.261	0.265	0.265	----	----



Matrix: Water

				Client sample ID	VA8-SITE#8 TANK OUTLET	VA9-SITE#9 WALL STEET END HYDRANT	VA10-SITE#10 MARBLE BAY & SELLENTIN ST	RAW SUPPLY	VA-DUP	----	----
				Client sampling date / time	22-Apr-2025 07:16	22-Apr-2025 08:50	22-Apr-2025 07:52	22-Apr-2025 06:50	22-Apr-2025 09:12	----	----
				Sub-Matrix	Water	Water	Water	Water	Water	----	----
Analyte	CAS Number	Method/Lab	Unit		VA25A9106-008	VA25A9106-009	VA25A9106-010	VA25A9106-011	VA25A9106-012	----	----
					Result	Result	Result	Result	Result	----	----
Total Metals											
Rubidium, total	7440-17-7	E420/VA	mg/L		0.00035	0.00034	0.00037	0.00036	0.00036	----	----
Selenium, total	7782-49-2	E420/VA	mg/L		0.000145	0.000200	0.000203	0.000871	0.000146	----	----
Silicon, total	7440-21-3	E420/VA	mg/L		2.81	2.86	3.11	2.80	2.96	----	----
Silver, total	7440-22-4	E420/VA	mg/L		<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	----	----
Sodium, total	7440-23-5	E420/VA	mg/L		6.14	6.97	6.53	3.00	6.56	----	----
Strontium, total	7440-24-6	E420/VA	mg/L		0.149	0.150	0.150	0.154	0.158	----	----
Sulfur, total	7704-34-9	E420/VA	mg/L		<0.50	1.24	0.93	11.2	0.60	----	----
Tellurium, total	13494-80-9	E420/VA	mg/L		<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	----	----
Thallium, total	7440-28-0	E420/VA	mg/L		<0.000010	<0.000010	<0.000010	0.000010	<0.000010	----	----
Thorium, total	7440-29-1	E420/VA	mg/L		<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	----	----
Tin, total	7440-31-5	E420/VA	mg/L		<0.00010	<0.00010	0.00012	<0.00010	<0.00010	----	----
Titanium, total	7440-32-6	E420/VA	mg/L		0.00033	0.00032	0.00039	0.00038	0.00032	----	----
Tungsten, total	7440-33-7	E420/VA	mg/L		<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	----	----
Uranium, total	7440-61-1	E420/VA	mg/L		0.000192	0.000300	0.000220	0.00859	0.000244	----	----
Vanadium, total	7440-62-2	E420/VA	mg/L		<0.00050	<0.00050	<0.00050	0.00101	<0.00050	----	----
Zinc, total	7440-66-6	E420/VA	mg/L		0.0066	0.0095	0.0237	0.0094	0.0257	----	----
Zirconium, total	7440-67-7	E420/VA	mg/L		<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	----	----

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



Summary of Guideline Limits

CERTIFICATE OF ANALYSIS

Work Order	: VA25A9106		
Client	: Lafarge Canada Inc.	Laboratory	: ALS Environmental - Vancouver
Contact	: Louise Bantok	Account Manager	: Gulraj Dhanaua
Address	: 2300 Rogers Ave Coquitlam British Columbia Canada V3K 5X6	Address	: 8081 Lougheed Highway Burnaby BC Canada V5A 1W9
Telephone	: ----	Telephone	: +1 604 253 4188
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Signatories

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<i>Signatories</i>	<i>Position</i>	<i>Laboratory Department</i>
Kevin Duarte	Supervisor - Metals ICP Instrumentation	Metals, Burnaby, British Columbia



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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
mg/L	milligrams 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.

Qualifiers

Qualifier	Description
DLM	Detection Limit Adjusted due to sample matrix effects (e.g. chemical interference, colour, turbidity).



Analytical Results

Sub-Matrix: Water
 (Matrix: Water)

					Client sample ID	VA1-SITE#1 HOTEL	VA2-SITE#2 EARL ST	VA3-SITE#3 MARBLE BAY @VAN ANDA	VA4-SITE#4 BLEWETT/SMELTE R	VA5-SITE#5 SELLENTIN @STUART BAY RD
Client sampling date / time						22-Apr-2025 07:40	22-Apr-2025 08:15	22-Apr-2025 08:26	22-Apr-2025 08:40	22-Apr-2025 08:00
Analyte	CAS Number	Method/Lab	LOR	Unit		VA25A9106-001	VA25A9106-002	VA25A9106-003	VA25A9106-004	VA25A9106-005
						Result	Result	Result	Result	Result
Physical Tests										
Hardness (as CaCO3), from total Ca/Mg	----	EC100A/VA	0.60	mg/L		106	105	107	103	106
Total Metals										
Aluminum, total	7429-90-5	E420/VA	0.0030	mg/L		0.0160	0.0148	0.0144	0.0120	0.0151
Antimony, total	7440-36-0	E420/VA	0.00010	mg/L		0.00127	0.00131	0.00129	0.00128	0.00125
Arsenic, total	7440-38-2	E420/VA	0.00010	mg/L		0.00106	0.00107	0.00092	0.00113	0.00112
Barium, total	7440-39-3	E420/VA	0.00010	mg/L		0.00498	0.00491	0.00515	0.00513	0.00506
Beryllium, total	7440-41-7	E420/VA	0.000100	mg/L		<0.000100	<0.000100	<0.000100	<0.000100	<0.000100
Bismuth, total	7440-69-9	E420/VA	0.000050	mg/L		<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Boron, total	7440-42-8	E420/VA	0.010	mg/L		<0.010	<0.010	<0.010	<0.010	<0.010
Cadmium, total	7440-43-9	E420/VA	0.0000050	mg/L		<0.0000050	0.0000068	0.0000061	<0.0000050	0.0000057
Calcium, total	7440-70-2	E420/VA	0.050	mg/L		38.6	38.2	39.2	37.6	38.4
Cesium, total	7440-46-2	E420/VA	0.000010	mg/L		0.000023	0.000024	0.000024	0.000024	0.000022
Chromium, total	7440-47-3	E420/VA	0.00050	mg/L		<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Cobalt, total	7440-48-4	E420/VA	0.00010	mg/L		<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Copper, total	7440-50-8	E420/VA	0.00050	mg/L		0.0146	0.00306	0.00408	0.00635	0.00378
Iron, total	7439-89-6	E420/VA	0.010	mg/L		0.021	0.035	0.034	0.023	0.192
Lead, total	7439-92-1	E420/VA	0.000050	mg/L		0.000318	0.000465	0.000231	0.000400	0.000365
Lithium, total	7439-93-2	E420/VA	0.0010	mg/L		<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Magnesium, total	7439-95-4	E420/VA	0.0050	mg/L		2.30	2.25	2.26	2.24	2.35
Manganese, total	7439-96-5	E420/VA	0.00010	mg/L		0.00452	0.00474	0.00491	0.00400	0.0111



Analytical Results

Sub-Matrix: Water
 (Matrix: Water)

					Client sample ID	VA1-SITE#1 HOTEL	VA2-SITE#2 EARL ST	VA3-SITE#3 MARBLE BAY @VAN ANDA	VA4-SITE#4 BLEWETT/SMELTE R	VA5-SITE#5 SELLENTIN @STUART BAY RD
Client sampling date / time						22-Apr-2025 07:40	22-Apr-2025 08:15	22-Apr-2025 08:26	22-Apr-2025 08:40	22-Apr-2025 08:00
Analyte	CAS Number	Method/Lab	LOR	Unit		VA25A9106-001	VA25A9106-002	VA25A9106-003	VA25A9106-004	VA25A9106-005
						Result	Result	Result	Result	Result
Total Metals										
Mercury, total	7439-97-6	E508/VA	0.0000050	mg/L		<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050
Molybdenum, total	7439-98-7	E420/VA	0.000050	mg/L		0.000314	0.000304	0.000230	0.000305	0.000390
Nickel, total	7440-02-0	E420/VA	0.00050	mg/L		<0.00050	<0.00050	0.00082	<0.00050	<0.00050
Phosphorus, total	7723-14-0	E420/VA	0.050	mg/L		<0.050	<0.050	<0.050	<0.050	<0.050
Potassium, total	7440-09-7	E420/VA	0.050	mg/L		0.274	0.266	0.263	0.268	0.268
Rubidium, total	7440-17-7	E420/VA	0.00020	mg/L		0.00040	0.00037	0.00033	0.00037	0.00034
Selenium, total	7782-49-2	E420/VA	0.000050	mg/L		0.000173	0.000194	0.000136	0.000193	0.000161
Silicon, total	7440-21-3	E420/VA	0.10	mg/L		2.84	2.84	2.89	2.80	2.79
Silver, total	7440-22-4	E420/VA	0.000010	mg/L		<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Sodium, total	7440-23-5	E420/VA	0.050	mg/L		6.23	6.30	6.28	6.22	6.41
Strontium, total	7440-24-6	E420/VA	0.00020	mg/L		0.151	0.156	0.156	0.155	0.150
Sulfur, total	7704-34-9	E420/VA	0.50	mg/L		1.04	1.07	<0.50	0.83	0.93
Tellurium, total	13494-80-9	E420/VA	0.00020	mg/L		<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
Thallium, total	7440-28-0	E420/VA	0.000010	mg/L		<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Thorium, total	7440-29-1	E420/VA	0.00010	mg/L		<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Tin, total	7440-31-5	E420/VA	0.00010	mg/L		<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Titanium, total	7440-32-6	E420/VA	0.00030	mg/L		0.00033	0.00034	<0.00030	0.00034	0.00033
Tungsten, total	7440-33-7	E420/VA	0.00010	mg/L		<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Uranium, total	7440-61-1	E420/VA	0.000010	mg/L		0.000248	0.000274	0.000230	0.000270	0.000346
Vanadium, total	7440-62-2	E420/VA	0.00050	mg/L		<0.00050	<0.00050	<0.00050	<0.00050	<0.00050



Analytical Results

Sub-Matrix: Water
 (Matrix: Water)

Client sample ID					VA1-SITE#1 HOTEL	VA2-SITE#2 EARL ST	VA3-SITE#3 MARBLE BAY @VAN ANDA	VA4-SITE#4 BLEWETT/SMELTE R	VA5-SITE#5 SELLENTIN @STUART BAY RD
Client sampling date / time					22-Apr-2025 07:40	22-Apr-2025 08:15	22-Apr-2025 08:26	22-Apr-2025 08:40	22-Apr-2025 08:00
Analyte	CAS Number	Method/Lab	LOR	Unit	VA25A9106-001	VA25A9106-002	VA25A9106-003	VA25A9106-004	VA25A9106-005
					Result	Result	Result	Result	Result
Total Metals									
Zinc, total	7440-66-6	E420/VA	0.0030	mg/L	0.0094	0.0463	0.0134	0.0088	0.0782
Zirconium, total	7440-67-7	E420/VA	0.00020	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020

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

Analytical Results

Sub-Matrix: Water
 (Matrix: Water)

Client sample ID					VA6-SITE#6 WALL ST PUMPHOUSE	VA7-SITE#7 COPPER QUEEN @ALLADIN	VA8-SITE#8 TANK OUTLET	VA9-SITE#9 WALL STEET END HYDRANT	VA10-SITE#10 MARBLE BAY & SELLENTIN ST
Client sampling date / time					22-Apr-2025 09:00	22-Apr-2025 09:12	22-Apr-2025 07:16	22-Apr-2025 08:50	22-Apr-2025 07:52
Analyte	CAS Number	Method/Lab	LOR	Unit	VA25A9106-006	VA25A9106-007	VA25A9106-008	VA25A9106-009	VA25A9106-010
					Result	Result	Result	Result	Result
Physical Tests									
Hardness (as CaCO ₃), from total Ca/Mg	----	EC100A/VA	0.60	mg/L	105	109	106	105	109
Total Metals									
Aluminum, total	7429-90-5	E420/VA	0.0030	mg/L	0.0137	0.0143	0.0140	0.0138	0.0197
Antimony, total	7440-36-0	E420/VA	0.00010	mg/L	0.00129	0.00128	0.00130	0.00128	0.00130
Arsenic, total	7440-38-2	E420/VA	0.00010	mg/L	0.00114	0.00104	0.00088	0.00118	0.00097
Barium, total	7440-39-3	E420/VA	0.00010	mg/L	0.00499	0.00536	0.00492	0.00525	0.00497
Beryllium, total	7440-41-7	E420/VA	0.000100	mg/L	<0.000100	<0.000100	<0.000100	<0.000100	<0.000100
Bismuth, total	7440-69-9	E420/VA	0.000050	mg/L	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Boron, total	7440-42-8	E420/VA	0.010	mg/L	<0.010	<0.010	<0.010	<0.010	<0.010
Cadmium, total	7440-43-9	E420/VA	0.0000050	mg/L	0.0000057	<0.0000050	<0.0000050	<0.0000050	0.0000069
Calcium, total	7440-70-2	E420/VA	0.050	mg/L	38.2	39.8	38.6	38.3	39.7



Analytical Results

Sub-Matrix: Water
 (Matrix: Water)

					Client sample ID	VA6-SITE#6 WALL ST PUMPHOUSE	VA7-SITE#7 COPPER QUEEN @ALLADIN	VA8-SITE#8 TANK OUTLET	VA9-SITE#9 WALL STEET END HYDRANT	VA10-SITE#10 MARBLE BAY & SELLENTIN ST
Client sampling date / time						22-Apr-2025 09:00	22-Apr-2025 09:12	22-Apr-2025 07:16	22-Apr-2025 08:50	22-Apr-2025 07:52
Analyte	CAS Number	Method/Lab	LOR	Unit		VA25A9106-006	VA25A9106-007	VA25A9106-008	VA25A9106-009	VA25A9106-010
						Result	Result	Result	Result	Result
Total Metals										
Cesium, total	7440-46-2	E420/VA	0.000010	mg/L		0.000022	0.000024	0.000025	0.000024	0.000025
Chromium, total	7440-47-3	E420/VA	0.00050	mg/L		<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Cobalt, total	7440-48-4	E420/VA	0.00010	mg/L		<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Copper, total	7440-50-8	E420/VA	0.00050	mg/L		0.00802	0.0338	0.00487	0.0186	0.0274
Iron, total	7439-89-6	E420/VA	0.010	mg/L		0.024	0.048	0.020	0.038	0.025
Lead, total	7439-92-1	E420/VA	0.000050	mg/L		0.000288	0.000520	0.000356	0.000171	0.00274
Lithium, total	7439-93-2	E420/VA	0.0010	mg/L		<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Magnesium, total	7439-95-4	E420/VA	0.0050	mg/L		2.29	2.32	2.32	2.26	2.31
Manganese, total	7439-96-5	E420/VA	0.00010	mg/L		0.00392	0.00458	0.00635	0.00484	0.00790
Mercury, total	7439-97-6	E508/VA	0.0000050	mg/L		<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050
Molybdenum, total	7439-98-7	E420/VA	0.000050	mg/L		0.000297	0.000264	0.000174	0.000377	0.000254
Nickel, total	7440-02-0	E420/VA	0.00050	mg/L		<0.00050	<0.00050	<0.00050	<0.00050	0.0101
Phosphorus, total	7723-14-0	E420/VA	0.050	mg/L		<0.050	<0.050	<0.050	<0.050	<0.050
Potassium, total	7440-09-7	E420/VA	0.050	mg/L		0.272	0.272	0.264	0.277	0.280
Rubidium, total	7440-17-7	E420/VA	0.00020	mg/L		0.00033	0.00036	0.00035	0.00034	0.00037
Selenium, total	7782-49-2	E420/VA	0.000050	mg/L		0.000212	0.000210	0.000145	0.000200	0.000203
Silicon, total	7440-21-3	E420/VA	0.10	mg/L		2.91	2.90	2.81	2.86	3.11
Silver, total	7440-22-4	E420/VA	0.000010	mg/L		<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Sodium, total	7440-23-5	E420/VA	0.050	mg/L		6.65	6.46	6.14	6.97	6.53
Strontium, total	7440-24-6	E420/VA	0.00020	mg/L		0.156	0.152	0.149	0.150	0.150
Sulfur, total	7704-34-9	E420/VA	0.50	mg/L		0.84	0.67	<0.50	1.24	0.93



Analytical Results

Sub-Matrix: Water
 (Matrix: Water)

					Client sample ID	VA6-SITE#6 WALL ST PUMPHOUSE	VA7-SITE#7 COPPER QUEEN @ALLADIN	VA8-SITE#8 TANK OUTLET	VA9-SITE#9 WALL STEET END HYDRANT	VA10-SITE#10 MARBLE BAY & SELLENTIN ST
Client sampling date / time						22-Apr-2025 09:00	22-Apr-2025 09:12	22-Apr-2025 07:16	22-Apr-2025 08:50	22-Apr-2025 07:52
Analyte	CAS Number	Method/Lab	LOR	Unit		VA25A9106-006	VA25A9106-007	VA25A9106-008	VA25A9106-009	VA25A9106-010
						Result	Result	Result	Result	Result
Total Metals										
Tellurium, total	13494-80-9	E420/VA	0.00020	mg/L		<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
Thallium, total	7440-28-0	E420/VA	0.000010	mg/L		<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Thorium, total	7440-29-1	E420/VA	0.00010	mg/L		<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Tin, total	7440-31-5	E420/VA	0.00010	mg/L		<0.00010	<0.00010	<0.00010	<0.00010	0.00012
Titanium, total	7440-32-6	E420/VA	0.00030	mg/L		0.00035	0.00033	0.00033	0.00032	0.00039
Tungsten, total	7440-33-7	E420/VA	0.00010	mg/L		<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Uranium, total	7440-61-1	E420/VA	0.000010	mg/L		0.000255	0.000238	0.000192	0.000300	0.000220
Vanadium, total	7440-62-2	E420/VA	0.00050	mg/L		<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Zinc, total	7440-66-6	E420/VA	0.0030	mg/L		0.0099	0.0392	0.0066	0.0095	0.0237
Zirconium, total	7440-67-7	E420/VA	0.00020	mg/L		<0.00020	<0.00020	<0.00020	<0.00020	<0.00020

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

Analytical Results

Sub-Matrix: Water
 (Matrix: Water)

					Client sample ID	RAW SUPPLY	VA-DUP	----	----	----
Client sampling date / time						22-Apr-2025 06:50	22-Apr-2025 09:12	----	----	----
Analyte	CAS Number	Method/Lab	LOR	Unit		VA25A9106-011	VA25A9106-012	----	----	----
						Result	Result	----	----	----
Physical Tests										
Hardness (as CaCO ₃), from total Ca/Mg	----	EC100A/VA	0.60	mg/L		107	110	----	----	----
Total Metals										
Aluminum, total	7429-90-5	E420/VA	0.0030	mg/L		0.0245	0.0136	----	----	----
Antimony, total	7440-36-0	E420/VA	0.00010	mg/L		0.00136	0.00130	----	----	----



Analytical Results

Sub-Matrix: Water
 (Matrix: Water)

Sub-Matrix: Water (Matrix: Water)					Client sample ID	RAW SUPPLY	VA-DUP	----	----	----
Client sampling date / time					22-Apr-2025 06:50	22-Apr-2025 09:12	----	----	----	
Analyte	CAS Number	Method/Lab	LOR	Unit	VA25A9106-011	VA25A9106-012	----	----	----	
					Result	Result	----	----	----	
Total Metals										
Arsenic, total	7440-38-2	E420/VA	0.00010	mg/L	0.00276	0.00104	----	----	----	
Barium, total	7440-39-3	E420/VA	0.00010	mg/L	0.00524	0.00532	----	----	----	
Beryllium, total	7440-41-7	E420/VA	0.000100	mg/L	<0.000100	<0.000100	----	----	----	
Bismuth, total	7440-69-9	E420/VA	0.000050	mg/L	<0.000050	<0.000050	----	----	----	
Boron, total	7440-42-8	E420/VA	0.010	mg/L	<0.010	<0.010	----	----	----	
Cadmium, total	7440-43-9	E420/VA	0.0000050	mg/L	<0.0000100 ^{DLM}	0.0000062	----	----	----	
Calcium, total	7440-70-2	E420/VA	0.050	mg/L	39.0	40.3	----	----	----	
Cesium, total	7440-46-2	E420/VA	0.000010	mg/L	0.000027	0.000025	----	----	----	
Chromium, total	7440-47-3	E420/VA	0.00050	mg/L	<0.00050	<0.00050	----	----	----	
Cobalt, total	7440-48-4	E420/VA	0.00010	mg/L	<0.00010	<0.00010	----	----	----	
Copper, total	7440-50-8	E420/VA	0.00050	mg/L	0.00378	0.0200	----	----	----	
Iron, total	7439-89-6	E420/VA	0.010	mg/L	0.039	0.035	----	----	----	
Lead, total	7439-92-1	E420/VA	0.000050	mg/L	0.000270	0.000229	----	----	----	
Lithium, total	7439-93-2	E420/VA	0.0010	mg/L	<0.0010	<0.0010	----	----	----	
Magnesium, total	7439-95-4	E420/VA	0.0050	mg/L	2.35	2.29	----	----	----	
Manganese, total	7439-96-5	E420/VA	0.00010	mg/L	0.00898	0.00425	----	----	----	
Mercury, total	7439-97-6	E508/VA	0.0000050	mg/L	<0.0000050	<0.0000050	----	----	----	
Molybdenum, total	7439-98-7	E420/VA	0.000050	mg/L	0.0103	0.000259	----	----	----	
Nickel, total	7440-02-0	E420/VA	0.00050	mg/L	<0.00050	<0.00050	----	----	----	
Phosphorus, total	7723-14-0	E420/VA	0.050	mg/L	<0.050	<0.050	----	----	----	
Potassium, total	7440-09-7	E420/VA	0.050	mg/L	0.261	0.265	----	----	----	



Analytical Results

Sub-Matrix: Water
 (Matrix: Water)

					Client sample ID	RAW SUPPLY	VA-DUP	----	----	----
					Client sampling date / time	22-Apr-2025 06:50	22-Apr-2025 09:12	----	----	----
Analyte	CAS Number	Method/Lab	LOR	Unit	VA25A9106-011	VA25A9106-012	----	----	----	----
					Result	Result	----	----	----	----
Total Metals										
Rubidium, total	7440-17-7	E420/VA	0.00020	mg/L	0.00036	0.00036	----	----	----	----
Selenium, total	7782-49-2	E420/VA	0.000050	mg/L	0.000871	0.000146	----	----	----	----
Silicon, total	7440-21-3	E420/VA	0.10	mg/L	2.80	2.96	----	----	----	----
Silver, total	7440-22-4	E420/VA	0.000010	mg/L	<0.000010	<0.000010	----	----	----	----
Sodium, total	7440-23-5	E420/VA	0.050	mg/L	3.00	6.56	----	----	----	----
Strontium, total	7440-24-6	E420/VA	0.00020	mg/L	0.154	0.158	----	----	----	----
Sulfur, total	7704-34-9	E420/VA	0.50	mg/L	11.2	0.60	----	----	----	----
Tellurium, total	13494-80-9	E420/VA	0.00020	mg/L	<0.00020	<0.00020	----	----	----	----
Thallium, total	7440-28-0	E420/VA	0.000010	mg/L	0.000010	<0.000010	----	----	----	----
Thorium, total	7440-29-1	E420/VA	0.00010	mg/L	<0.00010	<0.00010	----	----	----	----
Tin, total	7440-31-5	E420/VA	0.00010	mg/L	<0.00010	<0.00010	----	----	----	----
Titanium, total	7440-32-6	E420/VA	0.00030	mg/L	0.00038	0.00032	----	----	----	----
Tungsten, total	7440-33-7	E420/VA	0.00010	mg/L	<0.00010	<0.00010	----	----	----	----
Uranium, total	7440-61-1	E420/VA	0.000010	mg/L	0.00859	0.000244	----	----	----	----
Vanadium, total	7440-62-2	E420/VA	0.00050	mg/L	0.00101	<0.00050	----	----	----	----
Zinc, total	7440-66-6	E420/VA	0.0030	mg/L	0.0094	0.0257	----	----	----	----
Zirconium, total	7440-67-7	E420/VA	0.00020	mg/L	<0.00020	<0.00020	----	----	----	----

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

QUALITY CONTROL INTERPRETIVE REPORT

Work Order	: VA25A9106	Page	: 1 of 8
Client	: Lafarge Canada Inc.	Laboratory	: ALS Environmental - Vancouver
Contact	: Louise Bantok	Account Manager	: Gulraj Dhanaua
Address	: 2300 Rogers Ave Coquitlam BC Canada V3K 5X6	Address	: 8081 Lougheed Highway Burnaby, British Columbia Canada V5A 1W9
Telephone	: ----	Telephone	: +1 604 253 4188
Project	: VAID - Texada	Date Samples Received	: 23-Apr-2025 10:50
PO	: 4501832334	Issue Date	: 29-Apr-2025 08:16
C-O-C number	: ----		
Sampler	: ----		
Site	: ----		
Quote number	: Lafarge Western Canada Standing Offer 2024		
No. of samples received	: 12		
No. of samples analysed	: 12		

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 Service 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 Duplicate outliers occur.
- No Laboratory Control Sample (LCS) outliers occur
- No Matrix Spike outliers occur.
- Method Blank value outliers occur - please see following pages for full details.
- 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.



Outliers : Quality Control Samples
Duplicates, Method Blanks, Laboratory Control Samples and Matrix Spikes

Matrix: **Water**

Analyte Group	Laboratory sample ID	Client/Ref Sample ID	Analyte	CAS Number	Method	Result	Limits	Comment
Method Blank (MB) Values								
Total Metals	QC-1964028-001	----	Manganese, total	7439-96-5	E420	0.00014 ^B mg/L	0.0001 mg/L	Blank result exceeds permitted value

Result Qualifiers

Qualifier	Description
B	Method Blank exceeds ALS DQO. Associated sample results which are < Limit of Reporting or > 5 times blank level are considered reliable.



Analysis Holding Time Compliance

This report summarizes extraction / preparation and analysis times and compares each with ALS recommended holding times, which are selected to meet known provincial and /or federal requirements. In the absence of regulatory hold times, ALS establishes recommendations based on guidelines published by organizations such as CCME, US EPA, APHA Standard Methods, ASTM, or Environment Canada (where available). Dates and holding times reported below represent the first dates of extraction or analysis. If subsequent tests or dilutions exceeded holding times, qualifiers are added (refer to COA).

If samples are identified below as having been analyzed or extracted outside of recommended holding times, measurement uncertainties may be increased, and this should be taken into consideration when interpreting results.

Where actual sampling date is not provided on the chain of custody, the date of receipt with time at 00:00 is used for calculation purposes.

Where only the sample date without time is provided on the chain of custody, the sampling date at 00:00 is used for calculation purposes.

Matrix: **Water**

Evaluation: ✖ = Holding time exceedance ; ✔ = Within Holding Time

Analyte Group : Analytical Method Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times		Eval	Analysis Date	Holding Times		Eval
				Rec	Actual			Rec	Actual	
Total Metals : Total Mercury in Water by CVAAS										
Glass vial - total (lab preserved) RAW SUPPLY	E508	22-Apr-2025	29-Apr-2025	28 days	7 days	✓	29-Apr-2025	28 days	7 days	✓
Total Metals : Total Mercury in Water by CVAAS										
Glass vial - total (lab preserved) VA10-SITE#10 MARBLE BAY & SELLENTIN ST	E508	22-Apr-2025	29-Apr-2025	28 days	7 days	✓	29-Apr-2025	28 days	7 days	✓
Total Metals : Total Mercury in Water by CVAAS										
Glass vial - total (lab preserved) VA1-SITE#1 HOTEL	E508	22-Apr-2025	29-Apr-2025	28 days	7 days	✓	29-Apr-2025	28 days	7 days	✓
Total Metals : Total Mercury in Water by CVAAS										
Glass vial - total (lab preserved) VA2-SITE#2 EARL ST	E508	22-Apr-2025	29-Apr-2025	28 days	7 days	✓	29-Apr-2025	28 days	7 days	✓
Total Metals : Total Mercury in Water by CVAAS										
Glass vial - total (lab preserved) VA3-SITE#3 MARBLE BAY @VAN ANDA	E508	22-Apr-2025	29-Apr-2025	28 days	7 days	✓	29-Apr-2025	28 days	7 days	✓
Total Metals : Total Mercury in Water by CVAAS										
Glass vial - total (lab preserved) VA4-SITE#4 BLEWETT/SMELTER	E508	22-Apr-2025	29-Apr-2025	28 days	7 days	✓	29-Apr-2025	28 days	7 days	✓
Total Metals : Total Mercury in Water by CVAAS										
Glass vial - total (lab preserved) VA5-SITE#5 SELLENTIN @STUART BAY RD	E508	22-Apr-2025	29-Apr-2025	28 days	7 days	✓	29-Apr-2025	28 days	7 days	✓



Matrix: **Water** Evaluation: ✖ = Holding time exceedance ; ✔ = Within Holding Time

Analyte Group : Analytical Method	Method	Sampling Date	Extraction / Preparation				Analysis			
Container / Client Sample ID(s)			Preparation Date	Holding Times		Eval	Analysis Date	Holding Times		Eval
				Rec	Actual			Rec	Actual	
Total Metals : Total Mercury in Water by CVAAS										
Glass vial - total (lab preserved) VA6-SITE#6 WALL ST PUMPHOUSE	E508	22-Apr-2025	29-Apr-2025	28 days	7 days	✓	29-Apr-2025	28 days	7 days	✓
Total Metals : Total Mercury in Water by CVAAS										
Glass vial - total (lab preserved) VA7-SITE#7 COPPER QUEEN @ALLADIN	E508	22-Apr-2025	29-Apr-2025	28 days	7 days	✓	29-Apr-2025	28 days	7 days	✓
Total Metals : Total Mercury in Water by CVAAS										
Glass vial - total (lab preserved) VA8-SITE#8 TANK OUTLET	E508	22-Apr-2025	29-Apr-2025	28 days	7 days	✓	29-Apr-2025	28 days	7 days	✓
Total Metals : Total Mercury in Water by CVAAS										
Glass vial - total (lab preserved) VA9-SITE#9 WALL STEET END HYDRANT	E508	22-Apr-2025	29-Apr-2025	28 days	7 days	✓	29-Apr-2025	28 days	7 days	✓
Total Metals : Total Mercury in Water by CVAAS										
Glass vial - total (lab preserved) VA-DUP	E508	22-Apr-2025	29-Apr-2025	28 days	7 days	✓	29-Apr-2025	28 days	7 days	✓
Total Metals : Total Metals in Water by CRC ICPMS										
HDPE - total (lab preserved) VA10-SITE#10 MARBLE BAY & SELLENTIN ST	E420	22-Apr-2025	24-Apr-2025	180 days	2 days	✓	25-Apr-2025	180 days	2 days	✓
Total Metals : Total Metals in Water by CRC ICPMS										
HDPE - total (lab preserved) VA1-SITE#1 HOTEL	E420	22-Apr-2025	24-Apr-2025	180 days	2 days	✓	25-Apr-2025	180 days	2 days	✓
Total Metals : Total Metals in Water by CRC ICPMS										
HDPE - total (lab preserved) VA2-SITE#2 EARL ST	E420	22-Apr-2025	24-Apr-2025	180 days	2 days	✓	25-Apr-2025	180 days	2 days	✓
Total Metals : Total Metals in Water by CRC ICPMS										
HDPE - total (lab preserved) VA3-SITE#3 MARBLE BAY @VAN ANDA	E420	22-Apr-2025	24-Apr-2025	180 days	2 days	✓	25-Apr-2025	180 days	2 days	✓



Matrix: **Water** Evaluation: ✖ = Holding time exceedance ; ✔ = Within Holding Time

Analyte Group : Analytical Method Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times		Eval	Analysis Date	Holding Times		Eval
				Rec	Actual			Rec	Actual	
Total Metals : Total Metals in Water by CRC ICPMS										
HDPE - total (lab preserved) VA4-SITE#4 BLEWETT/SMELTER	E420	22-Apr-2025	24-Apr-2025	180 days	2 days	✓	25-Apr-2025	180 days	2 days	✓
Total Metals : Total Metals in Water by CRC ICPMS										
HDPE - total (lab preserved) VA5-SITE#5 SELLENTIN @STUART BAY RD	E420	22-Apr-2025	24-Apr-2025	180 days	2 days	✓	25-Apr-2025	180 days	2 days	✓
Total Metals : Total Metals in Water by CRC ICPMS										
HDPE - total (lab preserved) VA6-SITE#6 WALL ST PUMPHOUSE	E420	22-Apr-2025	24-Apr-2025	180 days	2 days	✓	25-Apr-2025	180 days	2 days	✓
Total Metals : Total Metals in Water by CRC ICPMS										
HDPE - total (lab preserved) VA7-SITE#7 COPPER QUEEN @ALLADIN	E420	22-Apr-2025	24-Apr-2025	180 days	2 days	✓	25-Apr-2025	180 days	2 days	✓
Total Metals : Total Metals in Water by CRC ICPMS										
HDPE - total (lab preserved) VA8-SITE#8 TANK OUTLET	E420	22-Apr-2025	24-Apr-2025	180 days	2 days	✓	25-Apr-2025	180 days	2 days	✓
Total Metals : Total Metals in Water by CRC ICPMS										
HDPE - total (lab preserved) VA9-SITE#9 WALL STEET END HYDRANT	E420	22-Apr-2025	24-Apr-2025	180 days	2 days	✓	25-Apr-2025	180 days	2 days	✓
Total Metals : Total Metals in Water by CRC ICPMS										
HDPE - total (lab preserved) VA-DUP	E420	22-Apr-2025	24-Apr-2025	180 days	2 days	✓	25-Apr-2025	180 days	2 days	✓
Total Metals : Total Metals in Water by CRC ICPMS										
HDPE - total (lab preserved) RAW SUPPLY	E420	22-Apr-2025	24-Apr-2025	180 days	3 days	✓	25-Apr-2025	180 days	3 days	✓

Legend & Qualifier Definitions

Rec. HT: ALS recommended hold time (see units).



Quality Control Parameter Frequency Compliance

The following report summarizes the frequency of laboratory QC samples analyzed within the analytical batches (QC lots) in which the submitted samples were processed. The actual frequency should be greater than or equal to the expected frequency.

Matrix: **Water** Evaluation: ✖ = QC frequency outside specification; ✔ = QC frequency within specification.

Quality Control Sample Type			Count		Frequency (%)		
Analytical Methods	Method	QC Lot #	QC	Regular	Actual	Expected	Evaluation
Laboratory Duplicates (DUP)							
Total Metals in Water by CRC ICPMS	E420	1964028	1	20	5.0	5.0	✔
Total Mercury in Water by CVAAS	E508	1970373	2	40	5.0	5.0	✔
Laboratory Control Samples (LCS)							
Total Metals in Water by CRC ICPMS	E420	1964028	1	20	5.0	5.0	✔
Total Mercury in Water by CVAAS	E508	1970373	2	40	5.0	5.0	✔
Method Blanks (MB)							
Total Metals in Water by CRC ICPMS	E420	1964028	1	20	5.0	5.0	✔
Total Mercury in Water by CVAAS	E508	1970373	2	40	5.0	5.0	✔
Matrix Spikes (MS)							
Total Metals in Water by CRC ICPMS	E420	1964028	1	20	5.0	5.0	✔
Total Mercury in Water by CVAAS	E508	1970373	2	40	5.0	5.0	✔



Methodology References and Summaries

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. Reference methods may incorporate modifications to improve performance (indicated by "mod").

Analytical Methods	Method / Lab	Matrix	Method Reference	Method Descriptions
Total Metals in Water by CRC ICPMS	E420 ALS Environmental - Vancouver	Water	EPA 200.2/6020B (mod)	Water samples are digested with nitric and hydrochloric acids, and analyzed by Collision/Reaction Cell ICPMS. Method Limitation (re: Sulfur): Sulfide and volatile sulfur species may not be recovered by this method.
Total Mercury in Water by CVAAS	E508 ALS Environmental - Vancouver	Water	EPA 1631E (mod)	Water samples undergo a cold-oxidation using bromine monochloride prior to reduction with stannous chloride, and analyzed by CVAAS
Hardness (Calculated) from Total Ca/Mg	EC100A ALS Environmental - Vancouver	Water	APHA 2340B	"Hardness (as CaCO ₃), from total Ca/Mg" is calculated from the sum of total Calcium and Magnesium concentrations, expressed as CaCO ₃ equivalents. "Total Hardness" refers to the sum of Calcium and Magnesium Hardness. Hardness is normally or preferentially calculated from dissolved Calcium and Magnesium concentrations, because hardness is a property of water due to dissolved divalent cations. In non-turbid waters, Hardness from total Ca/Mg is normally comparable to Dissolved Hardness, but may be biased high if particulate forms of Ca or Mg are present.

QUALITY CONTROL REPORT

Work Order	: VA25A9106	Page	: 1 of 10
Client	: Lafarge Canada Inc.	Laboratory	: ALS Environmental - Vancouver
Contact	: Louise Bantok	Account Manager	: Gulraj Dhanaua
Address	: 2300 Rogers Ave Coquitlam BC Canada V3K 5X6	Address	: 8081 Lougheed Highway Burnaby, British Columbia Canada V5A 1W9
Telephone	: ----	Telephone	: +1 604 253 4188
Project	: VAID - Texada	Date Samples Received	: 23-Apr-2025 10:50
PO	: 4501832334	Date Analysis Commenced	: 24-Apr-2025
C-O-C number	: ----	Issue Date	: 29-Apr-2025 08:16
Sampler	: ----		
Site	: ----		
Quote number	: Lafarge Western Canada Standing Offer 2024		
No. of samples received	: 12		
No. of samples analysed	: 12		

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 Quality Control Report contains the following information:

- Laboratory Duplicate (DUP) Report; Relative Percent Difference (RPD) and Data Quality Objectives
- Matrix Spike (MS) Report; Recovery and Data Quality Objectives
- Method Blank (MB) Report; Recovery and Data Quality Objectives
- Laboratory Control Sample (LCS) Report; Recovery and Data Quality Objectives

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
Kevin Duarte	Supervisor - Metals ICP Instrumentation	Vancouver Metals, Burnaby, British Columbia



General Comments

The ALS Quality Control (QC) report is optionally provided to ALS clients upon request. ALS test methods include comprehensive QC checks with every analysis to ensure our high standards of quality are met. Each QC result has a known or expected target value, which is compared against predetermined Data Quality Objectives (DQOs) to provide confidence in the accuracy of associated test results. This report contains detailed results for all QC results applicable to this sample submission. Please refer to the ALS Quality Control Interpretation report (QCI) for applicable method references and methodology 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 Service number is a unique identifier assigned to discrete substances.

DQO = Data Quality Objective.

LOR = Limit of Reporting (detection limit).

RPD = Relative Percent Difference

= Indicates a QC result that did not meet the ALS DQO.

Workorder Comments

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



Laboratory Duplicate (DUP) Report

A Laboratory Duplicate (DUP) is a randomly selected intralaboratory replicate sample. Laboratory Duplicates provide information regarding method precision and sample heterogeneity. ALS DQOs for Laboratory Duplicates are expressed as test-specific limits for Relative Percent Difference (RPD), or as an absolute difference limit of 2 times the LOR for low concentration duplicates within ~ 4-10 times the LOR (cut-off is test-specific).

					Laboratory Duplicate (DUP) Report						
Laboratory sample ID	Client sample ID	Analyte	CAS Number	Method	LOR	Unit	Original Result	Duplicate Result	RPD(%) or Difference	Duplicate Limits	Qualifier
Total Metals (QC Lot: 1964028)											
VA25A9104-001	Anonymous	Aluminum, total	7429-90-5	E420	0.0030	mg/L	0.0462	0.0466	0.780%	20%	----
		Antimony, total	7440-36-0	E420	0.00010	mg/L	0.00051	0.00051	0.000006	Diff <2x LOR	----
		Arsenic, total	7440-38-2	E420	0.00010	mg/L	0.00245	0.00247	0.704%	20%	----
		Barium, total	7440-39-3	E420	0.00010	mg/L	0.0256	0.0255	0.0615%	20%	----
		Beryllium, total	7440-41-7	E420	0.000020	mg/L	<0.000020	<0.000020	0	Diff <2x LOR	----
		Bismuth, total	7440-69-9	E420	0.000050	mg/L	<0.000050	<0.000050	0	Diff <2x LOR	----
		Boron, total	7440-42-8	E420	0.010	mg/L	<0.010	<0.010	0	Diff <2x LOR	----
		Cadmium, total	7440-43-9	E420	0.0000050	mg/L	0.000406	0.000414	1.89%	20%	----
		Calcium, total	7440-70-2	E420	0.050	mg/L	37.7	38.7	2.63%	20%	----
		Cesium, total	7440-46-2	E420	0.000010	mg/L	<0.000010	<0.000010	0	Diff <2x LOR	----
		Chromium, total	7440-47-3	E420	0.00050	mg/L	<0.00050	<0.00050	0	Diff <2x LOR	----
		Cobalt, total	7440-48-4	E420	0.00010	mg/L	0.00037	0.00037	0.000006	Diff <2x LOR	----
		Copper, total	7440-50-8	E420	0.00050	mg/L	0.0236	0.0235	0.436%	20%	----
		Iron, total	7439-89-6	E420	0.010	mg/L	<0.010	<0.010	0	Diff <2x LOR	----
		Lead, total	7439-92-1	E420	0.000050	mg/L	<0.000050	<0.000050	0	Diff <2x LOR	----
		Lithium, total	7439-93-2	E420	0.0010	mg/L	<0.0010	<0.0010	0	Diff <2x LOR	----
		Magnesium, total	7439-95-4	E420	0.0050	mg/L	0.742	0.744	0.211%	20%	----
		Manganese, total	7439-96-5	E420	0.00010	mg/L	0.00159	0.00152	4.39%	20%	----
		Molybdenum, total	7439-98-7	E420	0.000050	mg/L	0.000553	0.000550	0.533%	20%	----
		Nickel, total	7440-02-0	E420	0.00050	mg/L	0.00287	0.00288	0.000008	Diff <2x LOR	----
		Phosphorus, total	7723-14-0	E420	0.050	mg/L	0.509	0.488	0.021	Diff <2x LOR	----
		Potassium, total	7440-09-7	E420	0.050	mg/L	1.26	1.24	1.55%	20%	----
		Rubidium, total	7440-17-7	E420	0.00020	mg/L	0.00039	0.00042	0.00003	Diff <2x LOR	----
		Selenium, total	7782-49-2	E420	0.000050	mg/L	0.000803	0.000891	10.4%	20%	----
		Silicon, total	7440-21-3	E420	0.10	mg/L	1.77	1.74	1.77%	20%	----
		Silver, total	7440-22-4	E420	0.000010	mg/L	0.000097	0.000095	0.000001	Diff <2x LOR	----
		Sodium, total	7440-23-5	E420	0.050	mg/L	11.2	11.1	1.72%	20%	----
		Strontium, total	7440-24-6	E420	0.00020	mg/L	0.118	0.116	1.98%	20%	----
		Sulfur, total	7704-34-9	E420	0.50	mg/L	2.51	2.50	0.01	Diff <2x LOR	----
		Tellurium, total	13494-80-9	E420	0.00020	mg/L	<0.00020	<0.00020	0	Diff <2x LOR	----



Sub-Matrix: Water					Laboratory Duplicate (DUP) Report						
Laboratory sample ID	Client sample ID	Analyte	CAS Number	Method	LOR	Unit	Original Result	Duplicate Result	RPD(%) or Difference	Duplicate Limits	Qualifier
Total Metals (QC Lot: 1964028) - continued											
VA25A9104-001	Anonymous	Thallium, total	7440-28-0	E420	0.000010	mg/L	0.000064	0.000064	0.000000008	Diff <2x LOR	----
		Thorium, total	7440-29-1	E420	0.000010	mg/L	<0.00010	<0.00010	0	Diff <2x LOR	----
		Tin, total	7440-31-5	E420	0.000010	mg/L	0.00021	0.00020	0.00001	Diff <2x LOR	----
		Titanium, total	7440-32-6	E420	0.00030	mg/L	<0.00030	<0.00030	0	Diff <2x LOR	----
		Tungsten, total	7440-33-7	E420	0.000010	mg/L	0.00018	0.00018	0.000004	Diff <2x LOR	----
		Uranium, total	7440-61-1	E420	0.000010	mg/L	0.000187	0.000185	0.959%	20%	----
		Vanadium, total	7440-62-2	E420	0.00050	mg/L	0.00166	0.00165	0.000004	Diff <2x LOR	----
		Zinc, total	7440-66-6	E420	0.0030	mg/L	0.0207	0.0203	0.0003	Diff <2x LOR	----
		Zirconium, total	7440-67-7	E420	0.00020	mg/L	<0.00020	<0.00020	0	Diff <2x LOR	----
Total Metals (QC Lot: 1970373)											
VA25A8990-010	Anonymous	Mercury, total	7439-97-6	E508	0.0000050	mg/L	<0.0000050	<0.0000050	0	Diff <2x LOR	----
Total Metals (QC Lot: 1970374)											
VA25A9106-003	VA3-SITE#3 MARBLE BAY @VAN ANDA	Mercury, total	7439-97-6	E508	0.0000050	mg/L	<0.0000050	<0.0000050	0	Diff <2x LOR	----



Method Blank (MB) Report

A Method Blank is an analyte-free matrix that undergoes sample processing identical to that carried out for test samples. Method Blank results are used to monitor and control for potential contamination from the laboratory environment and reagents. For most tests, the DQO for Method Blanks is for the result to be < LOR.

Sub-Matrix: Water

Analyte	CAS Number	Method	LOR	Unit	Result	Qualifier
Total Metals (QCLot: 1964028)						
Aluminum, total	7429-90-5	E420	0.003	mg/L	<0.0030	----
Antimony, total	7440-36-0	E420	0.0001	mg/L	<0.00010	----
Arsenic, total	7440-38-2	E420	0.0001	mg/L	<0.00010	----
Barium, total	7440-39-3	E420	0.0001	mg/L	<0.00010	----
Beryllium, total	7440-41-7	E420	0.00002	mg/L	<0.000020	----
Bismuth, total	7440-69-9	E420	0.00005	mg/L	<0.000050	----
Boron, total	7440-42-8	E420	0.01	mg/L	<0.010	----
Cadmium, total	7440-43-9	E420	0.000005	mg/L	<0.0000050	----
Calcium, total	7440-70-2	E420	0.05	mg/L	<0.050	----
Cesium, total	7440-46-2	E420	0.00001	mg/L	<0.000010	----
Chromium, total	7440-47-3	E420	0.0005	mg/L	<0.00050	----
Cobalt, total	7440-48-4	E420	0.0001	mg/L	<0.00010	----
Copper, total	7440-50-8	E420	0.0005	mg/L	<0.00050	----
Iron, total	7439-89-6	E420	0.01	mg/L	<0.010	----
Lead, total	7439-92-1	E420	0.00005	mg/L	<0.000050	----
Lithium, total	7439-93-2	E420	0.001	mg/L	<0.0010	----
Magnesium, total	7439-95-4	E420	0.005	mg/L	<0.0050	----
Manganese, total	7439-96-5	E420	0.0001	mg/L	# 0.00014	B
Molybdenum, total	7439-98-7	E420	0.00005	mg/L	<0.000050	----
Nickel, total	7440-02-0	E420	0.0005	mg/L	<0.00050	----
Phosphorus, total	7723-14-0	E420	0.05	mg/L	<0.050	----
Potassium, total	7440-09-7	E420	0.05	mg/L	<0.050	----
Rubidium, total	7440-17-7	E420	0.0002	mg/L	<0.00020	----
Selenium, total	7782-49-2	E420	0.00005	mg/L	<0.000050	----
Silicon, total	7440-21-3	E420	0.1	mg/L	<0.10	----
Silver, total	7440-22-4	E420	0.00001	mg/L	<0.000010	----
Sodium, total	7440-23-5	E420	0.05	mg/L	<0.050	----
Strontium, total	7440-24-6	E420	0.0002	mg/L	<0.00020	----
Sulfur, total	7704-34-9	E420	0.5	mg/L	<0.50	----
Tellurium, total	13494-80-9	E420	0.0002	mg/L	<0.00020	----
Thallium, total	7440-28-0	E420	0.00001	mg/L	<0.000010	----
Thorium, total	7440-29-1	E420	0.0001	mg/L	<0.00010	----



Sub-Matrix: Water

Analyte	CAS Number	Method	LOR	Unit	Result	Qualifier
Total Metals (QCLot: 1964028) - continued						
Tin, total	7440-31-5	E420	0.0001	mg/L	<0.00010	----
Titanium, total	7440-32-6	E420	0.0003	mg/L	<0.00030	----
Tungsten, total	7440-33-7	E420	0.0001	mg/L	<0.00010	----
Uranium, total	7440-61-1	E420	0.00001	mg/L	<0.000010	----
Vanadium, total	7440-62-2	E420	0.0005	mg/L	<0.00050	----
Zinc, total	7440-66-6	E420	0.003	mg/L	<0.0030	----
Zirconium, total	7440-67-7	E420	0.0002	mg/L	<0.00020	----
Total Metals (QCLot: 1970373)						
Mercury, total	7439-97-6	E508	0.000005	mg/L	<0.0000050	----
Total Metals (QCLot: 1970374)						
Mercury, total	7439-97-6	E508	0.000005	mg/L	<0.0000050	----

Qualifiers

Qualifier	Description
B	Method Blank exceeds ALS DQO. Associated sample results which are < Limit of Reporting or > 5 times blank level are considered reliable.



Laboratory Control Sample (LCS) Report

A Laboratory Control Sample (LCS) is an analyte-free matrix that has been fortified (spiked) with test analytes at known concentration and processed in an identical manner to test samples. LCS results are expressed as percent recovery, and are used to monitor and control test method accuracy and precision, independent of test sample matrix.

Sub-Matrix: Water

					Laboratory Control Sample (LCS) Report				
					Spike	Recovery (%)	Recovery Limits (%)		
Analyte	CAS Number	Method	LOR	Unit	Target Concentration	LCS	Low	High	Qualifier
Total Metals (QCLot: 1964028)									
Aluminum, total	7429-90-5	E420	0.003	mg/L	2 mg/L	101	80.0	120	----
Antimony, total	7440-36-0	E420	0.0001	mg/L	1 mg/L	103	80.0	120	----
Arsenic, total	7440-38-2	E420	0.0001	mg/L	1 mg/L	101	80.0	120	----
Barium, total	7440-39-3	E420	0.0001	mg/L	0.25 mg/L	98.0	80.0	120	----
Beryllium, total	7440-41-7	E420	0.00002	mg/L	0.1 mg/L	100	80.0	120	----
Bismuth, total	7440-69-9	E420	0.00005	mg/L	1 mg/L	95.4	80.0	120	----
Boron, total	7440-42-8	E420	0.01	mg/L	1 mg/L	101	80.0	120	----
Cadmium, total	7440-43-9	E420	0.000005	mg/L	0.1 mg/L	98.9	80.0	120	----
Calcium, total	7440-70-2	E420	0.05	mg/L	50 mg/L	101	80.0	120	----
Cesium, total	7440-46-2	E420	0.00001	mg/L	0.05 mg/L	101	80.0	120	----
Chromium, total	7440-47-3	E420	0.0005	mg/L	0.25 mg/L	99.4	80.0	120	----
Cobalt, total	7440-48-4	E420	0.0001	mg/L	0.25 mg/L	96.9	80.0	120	----
Copper, total	7440-50-8	E420	0.0005	mg/L	0.25 mg/L	97.3	80.0	120	----
Iron, total	7439-89-6	E420	0.01	mg/L	1 mg/L	102	80.0	120	----
Lead, total	7439-92-1	E420	0.00005	mg/L	0.5 mg/L	94.3	80.0	120	----
Lithium, total	7439-93-2	E420	0.001	mg/L	0.25 mg/L	102	80.0	120	----
Magnesium, total	7439-95-4	E420	0.005	mg/L	50 mg/L	98.0	80.0	120	----
Manganese, total	7439-96-5	E420	0.0001	mg/L	0.25 mg/L	96.7	80.0	120	----
Molybdenum, total	7439-98-7	E420	0.00005	mg/L	0.25 mg/L	100	80.0	120	----
Nickel, total	7440-02-0	E420	0.0005	mg/L	0.5 mg/L	97.4	80.0	120	----
Phosphorus, total	7723-14-0	E420	0.05	mg/L	10 mg/L	99.4	80.0	120	----
Potassium, total	7440-09-7	E420	0.05	mg/L	50 mg/L	101	80.0	120	----
Rubidium, total	7440-17-7	E420	0.0002	mg/L	0.1 mg/L	99.6	80.0	120	----
Selenium, total	7782-49-2	E420	0.00005	mg/L	1 mg/L	95.1	80.0	120	----
Silicon, total	7440-21-3	E420	0.1	mg/L	10 mg/L	94.5	80.0	120	----
Silver, total	7440-22-4	E420	0.00001	mg/L	0.1 mg/L	92.7	80.0	120	----
Sodium, total	7440-23-5	E420	0.05	mg/L	50 mg/L	100	80.0	120	----
Strontium, total	7440-24-6	E420	0.0002	mg/L	0.25 mg/L	102	80.0	120	----
Sulfur, total	7704-34-9	E420	0.5	mg/L	50 mg/L	91.8	80.0	120	----
Tellurium, total	13494-80-9	E420	0.0002	mg/L	0.1 mg/L	97.3	80.0	120	----
Thallium, total	7440-28-0	E420	0.00001	mg/L	1 mg/L	96.4	80.0	120	----
Thorium, total	7440-29-1	E420	0.0001	mg/L	0.1 mg/L	89.8	80.0	120	----
Tin, total	7440-31-5	E420	0.0001	mg/L	0.5 mg/L	100	80.0	120	----



Sub-Matrix: Water					Laboratory Control Sample (LCS) Report				
					Spike	Recovery (%)	Recovery Limits (%)		
					Target Concentration	LCS	Low	High	Qualifier
Total Metals (QCLot: 1964028) - continued									
Titanium, total	7440-32-6	E420	0.0003	mg/L	0.25 mg/L	92.9	80.0	120	----
Tungsten, total	7440-33-7	E420	0.0001	mg/L	0.1 mg/L	94.9	80.0	120	----
Uranium, total	7440-61-1	E420	0.00001	mg/L	0.005 mg/L	91.9	80.0	120	----
Vanadium, total	7440-62-2	E420	0.0005	mg/L	0.5 mg/L	100	80.0	120	----
Zinc, total	7440-66-6	E420	0.003	mg/L	0.5 mg/L	96.5	80.0	120	----
Zirconium, total	7440-67-7	E420	0.0002	mg/L	0.1 mg/L	99.1	80.0	120	----
Total Metals (QCLot: 1970373)									
Mercury, total	7439-97-6	E508	0.000005	mg/L	0 mg/L	99.0	80.0	120	----
Total Metals (QCLot: 1970374)									
Mercury, total	7439-97-6	E508	0.000005	mg/L	0 mg/L	101	80.0	120	----



Matrix Spike (MS) Report

A Matrix Spike (MS) is a randomly selected intra-laboratory replicate sample that has been fortified (spiked) with test analytes at known concentration, and processed in an identical manner to test samples. Matrix Spikes provide information regarding analyte recovery and potential matrix effects. MS DQO exceedances due to sample matrix may sometimes be unavoidable; in such cases, test results for the associated sample (or similar samples) may be subject to bias. ND – Recovery not determined, background level >= 1x spike level.

Sub-Matrix: Water					Matrix Spike (MS) Report					
					Spike		Recovery (%)	Recovery Limits (%)		
Laboratory sample ID	Client sample ID	Analyte	CAS Number	Method	Concentration	Target	MS	Low	High	Qualifier
Total Metals (QCLot: 1964028)										
VA25A9106-001	VA1-SITE#1 HOTEL	Aluminum, total	7429-90-5	E420	0.187 mg/L	0.2 mg/L	93.5	70.0	130	----
		Antimony, total	7440-36-0	E420	0.0186 mg/L	0.02 mg/L	93.1	70.0	130	----
		Arsenic, total	7440-38-2	E420	0.0196 mg/L	0.02 mg/L	98.1	70.0	130	----
		Barium, total	7440-39-3	E420	0.0184 mg/L	0.02 mg/L	92.2	70.0	130	----
		Beryllium, total	7440-41-7	E420	0.0393 mg/L	0.04 mg/L	98.2	70.0	130	----
		Bismuth, total	7440-69-9	E420	0.00928 mg/L	0.01 mg/L	92.8	70.0	130	----
		Boron, total	7440-42-8	E420	0.099 mg/L	0.1 mg/L	99.1	70.0	130	----
		Cadmium, total	7440-43-9	E420	0.00375 mg/L	0.004 mg/L	93.7	70.0	130	----
		Calcium, total	7440-70-2	E420	ND mg/L	----	ND	70.0	130	----
		Cesium, total	7440-46-2	E420	0.00931 mg/L	0.01 mg/L	93.1	70.0	130	----
		Chromium, total	7440-47-3	E420	0.0371 mg/L	0.04 mg/L	92.8	70.0	130	----
		Cobalt, total	7440-48-4	E420	0.0186 mg/L	0.02 mg/L	93.2	70.0	130	----
		Copper, total	7440-50-8	E420	0.0175 mg/L	0.02 mg/L	87.7	70.0	130	----
		Iron, total	7439-89-6	E420	1.87 mg/L	2 mg/L	93.5	70.0	130	----
		Lead, total	7439-92-1	E420	0.0181 mg/L	0.02 mg/L	90.4	70.0	130	----
		Lithium, total	7439-93-2	E420	0.0976 mg/L	0.1 mg/L	97.6	70.0	130	----
		Magnesium, total	7439-95-4	E420	ND mg/L	----	ND	70.0	130	----
		Manganese, total	7439-96-5	E420	0.0182 mg/L	0.02 mg/L	91.2	70.0	130	----
		Molybdenum, total	7439-98-7	E420	0.0185 mg/L	0.02 mg/L	92.6	70.0	130	----
		Nickel, total	7440-02-0	E420	0.0367 mg/L	0.04 mg/L	91.8	70.0	130	----
		Phosphorus, total	7723-14-0	E420	9.36 mg/L	10 mg/L	93.6	70.0	130	----
		Potassium, total	7440-09-7	E420	3.77 mg/L	4 mg/L	94.2	70.0	130	----
		Rubidium, total	7440-17-7	E420	0.0189 mg/L	0.02 mg/L	94.5	70.0	130	----
		Selenium, total	7782-49-2	E420	0.0391 mg/L	0.04 mg/L	97.7	70.0	130	----
		Silicon, total	7440-21-3	E420	8.82 mg/L	10 mg/L	88.2	70.0	130	----
		Silver, total	7440-22-4	E420	0.00370 mg/L	0.004 mg/L	92.4	70.0	130	----
		Sodium, total	7440-23-5	E420	ND mg/L	----	ND	70.0	130	----
		Strontium, total	7440-24-6	E420	ND mg/L	----	ND	70.0	130	----
		Sulfur, total	7704-34-9	E420	19.2 mg/L	20 mg/L	95.8	70.0	130	----
		Tellurium, total	13494-80-9	E420	0.0360 mg/L	0.04 mg/L	90.0	70.0	130	----
		Thallium, total	7440-28-0	E420	0.00367 mg/L	0.004 mg/L	91.7	70.0	130	----
		Thorium, total	7440-29-1	E420	0.0191 mg/L	0.02 mg/L	95.5	70.0	130	----
		Tin, total	7440-31-5	E420	0.0191 mg/L	0.02 mg/L	95.5	70.0	130	----
		Titanium, total	7440-32-6	E420	0.0363 mg/L	0.04 mg/L	90.8	70.0	130	----
		Tungsten, total	7440-33-7	E420	0.0186 mg/L	0.02 mg/L	92.9	70.0	130	----
		Uranium, total	7440-61-1	E420	0.00358 mg/L	0.004 mg/L	89.5	70.0	130	----
		Vanadium, total	7440-62-2	E420	0.0935 mg/L	0.1 mg/L	93.5	70.0	130	----
		Zinc, total	7440-66-6	E420	0.372 mg/L	0.4 mg/L	93.0	70.0	130	----
		Zirconium, total	7440-67-7	E420	0.0380 mg/L	0.04 mg/L	95.1	70.0	130	----



Sub-Matrix: Water					Matrix Spike (MS) Report					
					Spike		Recovery (%)	Recovery Limits (%)		
Laboratory sample ID	Client sample ID	Analyte	CAS Number	Method	Concentration	Target	MS	Low	High	Qualifier
Total Metals (QCLot: 1970373)										
VA25A8990-011	Anonymous	Mercury, total	7439-97-6	E508	0.0000998 mg/L	0 mg/L	99.8	70.0	130	----
Total Metals (QCLot: 1970374)										
VA25A9106-004	VA4-SITE#4 BLEWETT/SMELTER	Mercury, total	7439-97-6	E508	0.0000986 mg/L	0 mg/L	98.6	70.0	130	----



Chain of Custody (COC) / Analytical Request Form

Canada Toll Free: 1 800 668 9878

www.alsglobal.com

Affix ALS barcode label here
(lab use only)

COC Number: 15 -

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Report To		Report Format / Distribution			Select Service Level Below - Please confirm all E&P TATs with your AM - surcharges will apply									
Company:	Lafarge	Select Report Format:			Regular [R]									
Contact:	Louise Bantok	Quality Control (QC) Report with Report			1 Business day [E1]									
Phone:	6043406320	Select Distribution:			Same Day, Weekend or Statutory holiday [E0]									
Company address below will appear on the final report		Email 1 or Fax			Date and Time Required for all E&P TATs:									
Street:	2300 Rogers Avenue	Email 2			For tests that can not be performed according to the service level selected, you will be contacted.									
City/Province:	Coquitlam, BC	Email 3			Analysis Request									
Postal Code:	V3K 5X6	Invoice Distribution			Indicate Filtered (F), Preserved (P) or Filtered and Preserved (F/P) below									
Invoice To	Same as Report To	Select Invoice Distribution:			Environmental Division Vancouver Work Order Reference VA25A9106 Telephone: +1 604 253 4188									
	Copy of Invoice with Report	Email 1 or Fax												
Company:	Lafarge	Email 2												
Contact:	Mat Kavanagh													
Project Information		Oil and Gas Required Fields (client use)												
ALS Account # / Quote #:		AFE/Cost Center:												
Job #:		Major/Minor Code:												
PO / AFE:		Requisitioner:												
LSD:		Location:												
ALS Lab Work Order # (lab use only)		ALS Contact:												
		Sampler:												
ALS Sample # (lab use only)	Sample Identification and/or Coordinates (This description will appear on the report)	Date (dd-mm-yy)	Time (hh:mm)	Sample Type	Total Metals	Total Hg								
	VA1 - SITE #1 HOTEL	22/04/25	7.40	Water	R	R								
	VA2 - SITE #2 EARL ST	22/04/25	8.15	Water	R	R								
	VA3 - SITE #3 MARBLE BAY @ VAN ANDA	22/04/25	8.26	Water	R	R								
	VA4 - SITE #4 BLEWETT/SMELTER	22/04/25	8.40	Water	R	R								
	VA5 - SITE #5 SELLENTIN @ STURT BAY RD	22/04/25	8.00	Water	R	R								
	VA6 - SITE #6 WALL ST PUMPHOUSE	22/04/25	9.00	Water	R	R								
	VA7 - SITE #7 COPPER QUEEN @ ALLADIN	22/04/25	9.12	Water	R	R								
	VA8 - SITE #8 TANK OUTLET	22/04/25	7.16	Water	R	R								
	VA9 - SITE #9 - WALL STREET END HYDRANT	22/04/25	8.50	Water	R	R								
	VA10 - SITE #10 - MARBLE BAY & SELLENTIN ST	22/04/25	7.52	Water	R	R								
	RAW SUPPLY	22/04/25	6.58	Water	R	R								
	VA-DUP	22/04/25	9.12	Water	R	R								
Drinking Water (DW) Samples ¹ (client use)		Special Instructions / Specify Criteria to add on report by clicking on the drop-down list below (electronic COC only)			SAMPLE CONDITION AS RECEIVED (lab use only)									
Are samples taken from a Regulated DW System? YES		Note: Samples are chlorinated. Please distribute the report to contact@vananda-id.ca			Frozen ☒ SIF Observations Yes ☐ No ☐									
Are samples for human drinking water use? YES					Ice Packs ☒ Ice Cubes ☐ Custody seal intact Yes ☐ No ☐									
					Cooling Initiated ☐									
					INITIAL COOLER TEMPERATURES °C									
					FINAL COOLER TEMPERATURES °C									
					5									
SHIPMENT RELEASE (client use)		INITIAL SHIPMENT RECEPTION (lab use only)			FINAL SHIPMENT RECEPTION (lab use only)									
Released by:	Date:	Time:	Received by:	Date:	Time:	Received by:	Date:	Time:						
MARIANNE SEGERS	22/04/25	9.30				M.G.H	April 23	10:50 AM						

REFER TO BACK PAGE FOR ALS LOCATIONS AND SAMPLING INFORMATION

WHITE - LABORATORY COPY YELLOW - CLIENT COPY

Failure to complete all portions of this form may delay analysis. Please fill in this form LEGIBLY. By the use of this form the user acknowledges and agrees with the Terms and Conditions as specified on the back page of the white - report copy.

1. If any water samples are taken from a Regulated Drinking Water (DW) System, please submit using an Authorized DW COC form.

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