



3600 Fremont Ave. N.
Seattle, WA 98103
T: (206) 352-3790
F: (206) 352-7178
info@fremontanalytical.com

PES Environmental, Inc.
Brian O'Neal
2101 Fourth Avenue, Suite 1310
Seattle, WA 98121

RE: American Linen
Work Order Number: 2111543

December 21, 2021

Attention Brian O'Neal:

Fremont Analytical, Inc. received 7 sample(s) on 11/29/2021 for the analyses presented in the following report.

This report consists of the following:

- Case Narrative
- Analytical Results
- Applicable Quality Control Summary Reports
- Chain of Custody

All analyses were performed consistent with the Quality Assurance program of Fremont Analytical, Inc. Please contact the laboratory if you should have any questions about the results.

Thank you for using Fremont Analytical.

Sincerely,

A handwritten signature in blue ink, appearing to read "Brianna Barnes".

Brianna Barnes
Project Manager

*DoD-ELAP Accreditation #79636 by PJLA, ISO/IEC 17025:2017 and QSM 5.3 for Environmental Testing
ORELAP Certification: WA 100009 (NELAP Recognized) for Environmental Testing
Washington State Department of Ecology Accredited for Environmental Testing, Lab ID C910*

Original



Date: 12/21/2021

CLIENT: PES Environmental, Inc.
Project: American Linen
Work Order: 2111543

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Date/Time Collected	Date/Time Received
2111543-001	MW107-112921	11/29/2021 10:40 AM	11/29/2021 4:15 PM
2111543-002	MW-160-112921	11/29/2021 12:25 PM	11/29/2021 4:15 PM
2111543-003	W-MW-01-112921	11/29/2021 2:20 PM	11/29/2021 4:15 PM
2111543-004	R-MW6-112921	11/29/2021 12:30 PM	11/29/2021 4:15 PM
2111543-005	MW-144R-112921	11/29/2021 2:00 PM	11/29/2021 4:15 PM
2111543-006	MW104-112921	11/29/2021 10:40 AM	11/29/2021 4:15 PM
2111543-007	MW-161-112921	11/29/2021 12:20 PM	11/29/2021 4:15 PM

Note: If no "Time Collected" is supplied, a default of 12:00AM is assigned

Original

CLIENT: PES Environmental, Inc.
Project: American Linen

I. SAMPLE RECEIPT:

Samples receipt information is recorded on the attached Sample Receipt Checklist.

II. GENERAL REPORTING COMMENTS:

Results are reported on a wet weight basis unless dry-weight correction is denoted in the units field on the analytical report ("mg/kg-dry" or "ug/kg-dry").

Matrix Spike (MS) and MS Duplicate (MSD) samples are tested from an analytical batch of "like" matrix to check for possible matrix effect. The MS and MSD will provide site specific matrix data only for those samples which are spiked by the laboratory. The sample chosen for spike purposes may or may not have been a sample submitted in this sample delivery group. The validity of the analytical procedures for which data is reported in this analytical report is determined by the Laboratory Control Sample (LCS) and the Method Blank (MB). The LCS and the MB are processed with the samples and the MS/MSD to ensure method criteria are achieved throughout the entire analytical process.

III. ANALYSES AND EXCEPTIONS:

Exceptions associated with this report will be footnoted in the analytical results page(s) or the quality control summary page(s) and/or noted below.

Anions by EPA method 300.0 have been subcontracted due to instrument delays.



20 December 2021

Brianna Barnes
Fremont Analytical
3600 Fremont Avenue N.
Seattle, WA 98103

RE: Anions

Please find enclosed sample receipt documentation and analytical results for samples from the project referenced above.

Sample analyses were performed according to ARI's Quality Assurance Plan and any provided project specific Quality Assurance Plan. Each analytical section of this report has been approved and reviewed by an analytical peer, the appropriate Laboratory Supervisor or qualified substitute, and a technical reviewer.

Should you have any questions or problems, please feel free to contact us at your convenience.

Associated Work Order(s)
21K0442

Associated SDG ID(s)
N/A

Shelly
Fishel

Digitally signed
by Shelly Fishel
Date: 2021.12.20
11:59:31 -08'00'

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed in the enclose Narrative. ARI, an accredited laboratory, certifies that the report results for which ARI is accredited meets all the requirements of the accrediting body. A list of certified analyses, accreditations, and expiration dates is included in this report.

Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or his/her designee, as verified by the following signature.

Analytical Resources, LLC

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Shelly Fishel, Project Manager





CHAIN OF CUSTODY RECORD

Omega COCID 1207

PAGE: 1 OF: 1

ADDRESS

Fremont Analytical, Inc.
 3600 Fremont Ave. N.
 Seattle, WA 98103
 TEL: 206-352-3790
 FAX: 206-352-7178
 Website: www.fremontanalytical.com

ART WO
 ↓

SUB CONTRACTOR: ARI <i>21K0442</i> COMPANY: Analytical Resources Inc.		SPECIAL INSTRUCTIONS / COMMENTS: Standard TAT. Please email results to Brianna Barnes at bbarnes@fremontanalytical.com and Matt Langston at mlangston@fremontanalytical.com.
ADDRESS: 4611 South 134th Place, Suite 100		
CITY, STATE, ZIP: Tukwila, WA 98168		
PHONE: (206) 695-6200	FAX: _____ EMAIL: _____	
ACCOUNT #: _____		

ITEM #	SAMPLE ID	CLIENT SAMPLE ID	BOTTLE TYPE	MATRIX	DATE COLLECTED	NUMBER OF CONTAINERS	COMMENTS: Methanol Preserved Weights HOT Sample Notation, Additional Sample Description.
1	2111543-001A TEST_SUB	MW107-112921	250 HDPE NON	Groundwater	11/29/2021 10:40:00 AM	1	Nitrate, Chloride, and Sulfate
2	2111543-002A TEST_SUB	MW160-112921	250 HDPE NON	Groundwater	11/29/2021 12:25:00 PM	1	Nitrate, Chloride, and Sulfate
3	2111543-003A TEST_SUB	W-MW-01-112921	250 HDPE NON	Groundwater	11/29/2021 2:20:00 PM	1	Nitrate, Chloride, and Sulfate
4	2111543-004A TEST_SUB	R-MW6-112921	250 HDPE NON	Groundwater	11/29/2021 12:30:00 PM	1	Nitrate, Chloride, and Sulfate
5	2111543-005A TEST_SUB	MW-144R-112921	250 HDPE NON	Groundwater	11/29/2021 2:00:00 PM	1	Nitrate, Chloride, and Sulfate
6	2111543-006A TEST_SUB	MW104-112921	250 HDPE NON	Groundwater	11/29/2021 10:40:00 AM	1	Nitrate, Chloride, and Sulfate
7	2111543-007A TEST_SUB	MW-161-112921	250 HDPE NON	Groundwater	11/29/2021 12:20:00 PM	1	Nitrate, Chloride, and Sulfate

Relinquished By: <i>Justine Marthy</i>	Date: <i>11/30</i>	Time: <i>8:40</i>	Received By: <i>[Signature]</i>	Date: <i>11/30</i>	Time: <i>12:57</i>	REPORT TRANSMITTAL DESIRED: <input type="checkbox"/> HARDCOPY (extra cost) <input type="checkbox"/> FAX <input type="checkbox"/> EMAIL <input type="checkbox"/> ONLINE FOR LAB USE ONLY Temp of samples _____ °C Attempt to Cool? _____ Comments: _____
Relinquished By:	Date:	Time:	Received By:	Date:	Time:	
TAT: Standard <input type="checkbox"/> RUSH <input type="checkbox"/> Next BD <input type="checkbox"/> 2nd BD <input type="checkbox"/> 3rd BD <input type="checkbox"/> Note: RUSH requests will incur surcharges!						



Fremont Analytical
3600 Fremont Avenue N.
Seattle WA, 98103

Project: Anions
Project Number: 2111543
Project Manager: Brianna Barnes

Reported:
20-Dec-2021 11:36

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW107-112921	21K0442-01	Water	29-Nov-2021 10:40	30-Nov-2021 12:57
MW160-112921	21K0442-02	Water	29-Nov-2021 12:25	30-Nov-2021 12:57
W-MW-01-112921	21K0442-03	Water	29-Nov-2021 14:20	30-Nov-2021 12:57
R-MW6-112921	21K0442-04	Water	29-Nov-2021 12:30	30-Nov-2021 12:57
MW-144R-112921	21K0442-05	Water	29-Nov-2021 14:00	30-Nov-2021 12:57
MW104-112921	21K0442-06	Water	29-Nov-2021 10:40	30-Nov-2021 12:57
MW-161-112921	21K0442-07	Water	29-Nov-2021 12:20	30-Nov-2021 12:57



Fremont Analytical
3600 Fremont Avenue N.
Seattle WA, 98103

Project: Anions
Project Number: 2111543
Project Manager: Brianna Barnes

Reported:
20-Dec-2021 11:36

Work Order Case Narrative

Client: Fremont Analytical
Project: Anions
Work Order: 21K0442

Sample receipt

Samples as listed on the preceding page were received 30-Nov-2021 12:57 under ARI work order 21K0442. For details regarding sample receipt, please refer to the Cooler Receipt Form.

Wet Chemistry

The sample(s) were prepared and analyzed within the recommended holding times except Nitrate. Run started with issues meeting calibration verifications and maintenance was performed to bring back into optimal conditions. This push samples out of hold. Deviations have been flagged.

Initial and continuing calibrations were within method requirements.

The method blank(s) were clean at the reporting limits.

The blank spike (BS/LCS) percent recoveries were within control limits except Sulfate in the original run where recovery was 77.68%. The samples were reanalyzed in hold. Only reanalysis has been reported.



Cooler Receipt Form

ARI Client: Fremont Project Name: 21K543
 COC No(s): 1207 Delivered by: Fed-Ex UPS Courier Hand Delivered Other:
 Assigned ARI Job No: 21K0442 Tracking No: NA

Preliminary Examination Phase:

Were intact, properly signed and dated custody seals attached to the outside of the cooler? YES NO
 Were custody papers included with the cooler? YES NO
 Were custody papers properly filled out (ink, signed, etc.) YES NO

Temperature of Cooler(s) (°C) (recommended 2.0-6.0 °C for chemistry) 4.9

Time 12:57 Temp Gun ID#: DOO 2565

If cooler temperature is out of compliance fill out form 00070F

Cooler Accepted by: [Signature] Date: 11/30/21 Time: 12:57

Complete custody forms and attach all shipping documents

Log-In Phase:

Was a temperature blank included in the cooler? YES NO
 What kind of packing material was used? ... Bubble Wrap Wet Ice Gel Packs Baggies Foam Block Paper Other: _____
 Was sufficient ice used (if appropriate)? NA YES NO
 How were bottles sealed in plastic bags? Individually Grouped Not
 Did all bottles arrive in good condition (unbroken)? YES NO
 Were all bottle labels complete and legible? YES NO
 Did the number of containers listed on COC match with the number of containers received? YES NO
 Did all bottle labels and tags agree with custody papers? YES NO
 Were all bottles used correct for the requested analyses? YES NO
 Do any of the analyses (bottles) require preservation? (attach preservation sheet, excluding VOCs) ... NA YES NO
 Were all VOC vials free of air bubbles? NA YES NO
 Was sufficient amount of sample sent in each bottle? YES NO
 Date VOC Trip Blank was made at ARI: NA YES
 Were the sample(s) split by ARI? NA YES Date/Time: _____ Equipment: _____ Split by: _____

Samples Logged by: [Signature] Date: 11/30/21 Time: 13:43 Labels checked by: _____

**** Notify Project Manager of discrepancies or concerns ****

Sample ID on Bottle	Sample ID on COC	Sample ID on Bottle	Sample ID on COC

Additional Notes, Discrepancies, & Resolutions:

By: _____ Date: _____



Fremont Analytical 3600 Fremont Avenue N. Seattle WA, 98103	Project: Anions Project Number: 2111543 Project Manager: Brianna Barnes	Reported: 20-Dec-2021 11:36
---	---	---------------------------------------

MW107-112921
21K0442-01 (Water)

Wet Chemistry

Method: EPA 300.0 Sampled: 11/29/2021 10:40
Instrument: IC930 Analyst: BF Analyzed: 12/01/2021 11:12

Analysis by: Analytical Resources, LLC

Sample Preparation: Preparation Method: No Prep Wet Chem Extract ID: 21K0442-01 A
Preparation Batch: BJK0741 Sample Size: 10 mL
Prepared: 11/30/2021 Final Volume: 10 mL

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Nitrate-N	14797-55-8	1	0.100	0.100	ND	mg/L	H, U



Fremont Analytical
3600 Fremont Avenue N.
Seattle WA, 98103

Project: Anions
Project Number: 2111543
Project Manager: Brianna Barnes

Reported:
20-Dec-2021 11:36

MW107-112921
21K0442-01RE1 (Water)

Wet Chemistry

Method: EPA 300.0

Sampled: 11/29/2021 10:40

Instrument: IC930 Analyst: BF

Analyzed: 12/02/2021 11:57

Analysis by: Analytical Resources, LLC

Sample Preparation: Preparation Method: No Prep Wet Chem
Preparation Batch: BJK0741
Prepared: 11/30/2021

Sample Size: 10 mL
Final Volume: 10 mL

Extract ID: 21K0442-01RE1 A

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Sulfate	14808-79-8	1	0.100	0.100	0.326	mg/L	



Fremont Analytical 3600 Fremont Avenue N. Seattle WA, 98103	Project: Anions Project Number: 2111543 Project Manager: Brianna Barnes	Reported: 20-Dec-2021 11:36
---	---	---------------------------------------

MW107-112921
21K0442-01RE2 (Water)

Wet Chemistry

Method: EPA 300.0 Sampled: 11/29/2021 10:40
Instrument: IC930 Analyst: BF Analyzed: 12/14/2021 21:09

Analysis by: Analytical Resources, LLC

Sample Preparation: Preparation Method: No Prep Wet Chem Extract ID: 21K0442-01RE2 A
Preparation Batch: BJK0741 Sample Size: 10 mL
Prepared: 11/30/2021 Final Volume: 10 mL

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Chloride	16887-00-6	20	2.00	2.00	91.4	mg/L	D



Fremont Analytical 3600 Fremont Avenue N. Seattle WA, 98103	Project: Anions Project Number: 2111543 Project Manager: Brianna Barnes	Reported: 20-Dec-2021 11:36
---	---	---------------------------------------

MW160-112921
21K0442-02 (Water)

Wet Chemistry

Method: EPA 300.0 Sampled: 11/29/2021 12:25
Instrument: IC930 Analyst: BF Analyzed: 12/01/2021 12:32

Analysis by: Analytical Resources, LLC

Sample Preparation: Preparation Method: No Prep Wet Chem Extract ID: 21K0442-02 A
Preparation Batch: BJK0741 Sample Size: 10 mL
Prepared: 11/30/2021 Final Volume: 10 mL

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Chloride	16887-00-6	1	0.100	0.100	6.37	mg/L	

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Nitrate-N	14797-55-8	1	0.100	0.100	ND	mg/L	H, U



Fremont Analytical 3600 Fremont Avenue N. Seattle WA, 98103	Project: Anions Project Number: 2111543 Project Manager: Brianna Barnes	Reported: 20-Dec-2021 11:36
---	---	---------------------------------------

MW160-112921
21K0442-02RE1 (Water)

Wet Chemistry

Method: EPA 300.0 Sampled: 11/29/2021 12:25
Instrument: IC930 Analyst: BF Analyzed: 12/02/2021 12:17

Analysis by: Analytical Resources, LLC

Sample Preparation: Preparation Method: No Prep Wet Chem Extract ID: 21K0442-02RE1 A
Preparation Batch: BJK0741 Sample Size: 10 mL
Prepared: 11/30/2021 Final Volume: 10 mL

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Sulfate	14808-79-8	1	0.100	0.100	2.34	mg/L	



Fremont Analytical 3600 Fremont Avenue N. Seattle WA, 98103	Project: Anions Project Number: 2111543 Project Manager: Brianna Barnes	Reported: 20-Dec-2021 11:36
---	---	---------------------------------------

W-MW-01-112921
21K0442-03 (Water)

Wet Chemistry

Method: EPA 300.0 Sampled: 11/29/2021 14:20
Instrument: IC930 Analyst: BF Analyzed: 12/01/2021 12:52

Analysis by: Analytical Resources, LLC

Sample Preparation: Preparation Method: No Prep Wet Chem Extract ID: 21K0442-03 A
Preparation Batch: BJK0741 Sample Size: 10 mL
Prepared: 11/30/2021 Final Volume: 10 mL

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Nitrate-N	14797-55-8	1	0.100	0.100	ND	mg/L	U



Fremont Analytical
3600 Fremont Avenue N.
Seattle WA, 98103

Project: Anions
Project Number: 2111543
Project Manager: Brianna Barnes

Reported:
20-Dec-2021 11:36

W-MW-01-112921
21K0442-03RE1 (Water)

Wet Chemistry

Method: EPA 300.0

Sampled: 11/29/2021 14:20

Instrument: IC930 Analyst: BF

Analyzed: 12/02/2021 18:57

Analysis by: Analytical Resources, LLC

Sample Preparation: Preparation Method: No Prep Wet Chem
Preparation Batch: BJK0741
Prepared: 11/30/2021

Sample Size: 10 mL
Final Volume: 10 mL

Extract ID: 21K0442-03RE1 A

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Sulfate	14808-79-8	1	0.100	0.100	3.99	mg/L	



Fremont Analytical 3600 Fremont Avenue N. Seattle WA, 98103	Project: Anions Project Number: 2111543 Project Manager: Brianna Barnes	Reported: 20-Dec-2021 11:36
---	---	---------------------------------------

W-MW-01-112921
21K0442-03RE2 (Water)

Wet Chemistry

Method: EPA 300.0 Sampled: 11/29/2021 14:20
Instrument: IC930 Analyst: BF Analyzed: 12/14/2021 21:29

Analysis by: Analytical Resources, LLC

Sample Preparation: Preparation Method: No Prep Wet Chem Extract ID: 21K0442-03RE2 A
Preparation Batch: BJK0741 Sample Size: 10 mL
Prepared: 11/30/2021 Final Volume: 10 mL

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Chloride	16887-00-6	5	0.500	0.500	24.4	mg/L	D



Fremont Analytical 3600 Fremont Avenue N. Seattle WA, 98103	Project: Anions Project Number: 2111543 Project Manager: Brianna Barnes	Reported: 20-Dec-2021 11:36
---	---	---------------------------------------

R-MW6-112921
21K0442-04 (Water)

Wet Chemistry

Method: EPA 300.0 Sampled: 11/29/2021 12:30
Instrument: IC930 Analyst: BF Analyzed: 12/01/2021 13:12

Analysis by: Analytical Resources, LLC

Sample Preparation: Preparation Method: No Prep Wet Chem Extract ID: 21K0442-04 A
Preparation Batch: BJK0741 Sample Size: 10 mL
Prepared: 11/30/2021 Final Volume: 10 mL

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Nitrate-N	14797-55-8	1	0.100	0.100	ND	mg/L	U, H



Fremont Analytical 3600 Fremont Avenue N. Seattle WA, 98103	Project: Anions Project Number: 2111543 Project Manager: Brianna Barnes	Reported: 20-Dec-2021 11:36
---	---	---------------------------------------

R-MW6-112921
21K0442-04RE2 (Water)

Wet Chemistry

Method: EPA 300.0 Sampled: 11/29/2021 12:30
Instrument: IC930 Analyst: BF Analyzed: 12/14/2021 21:49

Analysis by: Analytical Resources, LLC

Sample Preparation: Preparation Method: No Prep Wet Chem Extract ID: 21K0442-04RE2 A
Preparation Batch: BJK0741 Sample Size: 10 mL
Prepared: 11/30/2021 Final Volume: 10 mL

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Chloride	16887-00-6	5	0.500	0.500	19.0	mg/L	D



Fremont Analytical 3600 Fremont Avenue N. Seattle WA, 98103	Project: Anions Project Number: 2111543 Project Manager: Brianna Barnes	Reported: 20-Dec-2021 11:36
---	---	---------------------------------------

R-MW6-112921
21K0442-04RE3 (Water)

Wet Chemistry

Method: EPA 300.0 Sampled: 11/29/2021 12:30
Instrument: IC930 Analyst: BF Analyzed: 12/14/2021 22:08

Analysis by: Analytical Resources, LLC

Sample Preparation: Preparation Method: No Prep Wet Chem Extract ID: 21K0442-04RE3 A
Preparation Batch: BJK0741 Sample Size: 10 mL
Prepared: 11/30/2021 Final Volume: 10 mL

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Sulfate	14808-79-8	50	5.00	5.00	185	mg/L	D



Fremont Analytical 3600 Fremont Avenue N. Seattle WA, 98103	Project: Anions Project Number: 2111543 Project Manager: Brianna Barnes	Reported: 20-Dec-2021 11:36
---	---	---------------------------------------

MW-144R-112921
21K0442-05 (Water)

Wet Chemistry

Method: EPA 300.0 Sampled: 11/29/2021 14:00
Instrument: IC930 Analyst: BF Analyzed: 12/01/2021 13:32

Analysis by: Analytical Resources, LLC

Sample Preparation: Preparation Method: No Prep Wet Chem Extract ID: 21K0442-05 A
Preparation Batch: BJK0741 Sample Size: 10 mL
Prepared: 11/30/2021 Final Volume: 10 mL

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Nitrate-N	14797-55-8	1	0.100	0.100	0.191	mg/L	



Fremont Analytical 3600 Fremont Avenue N. Seattle WA, 98103	Project: Anions Project Number: 2111543 Project Manager: Brianna Barnes	Reported: 20-Dec-2021 11:36
---	---	---------------------------------------

MW-144R-112921
21K0442-05RE1 (Water)

Wet Chemistry

Method: EPA 300.0 Sampled: 11/29/2021 14:00
Instrument: IC930 Analyst: BF Analyzed: 12/02/2021 19:37

Analysis by: Analytical Resources, LLC

Sample Preparation: Preparation Method: No Prep Wet Chem Extract ID: 21K0442-05RE1 A
Preparation Batch: BJK0741 Sample Size: 10 mL
Prepared: 11/30/2021 Final Volume: 10 mL

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Sulfate	14808-79-8	1	0.100	0.100	ND	mg/L	U



Fremont Analytical 3600 Fremont Avenue N. Seattle WA, 98103	Project: Anions Project Number: 2111543 Project Manager: Brianna Barnes	Reported: 20-Dec-2021 11:36
---	---	---------------------------------------

MW-144R-112921
21K0442-05RE2 (Water)

Wet Chemistry

Method: EPA 300.0 Sampled: 11/29/2021 14:00
Instrument: IC930 Analyst: BF Analyzed: 12/14/2021 22:28

Analysis by: Analytical Resources, LLC

Sample Preparation: Preparation Method: No Prep Wet Chem Extract ID: 21K0442-05RE2 A
Preparation Batch: BJK0741 Sample Size: 10 mL
Prepared: 11/30/2021 Final Volume: 10 mL

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Chloride	16887-00-6	20	2.00	2.00	88.2	mg/L	D



Fremont Analytical 3600 Fremont Avenue N. Seattle WA, 98103	Project: Anions Project Number: 2111543 Project Manager: Brianna Barnes	Reported: 20-Dec-2021 11:36
---	---	---------------------------------------

MW104-112921
21K0442-06 (Water)

Wet Chemistry

Method: EPA 300.0 Sampled: 11/29/2021 10:40
Instrument: IC930 Analyst: BF Analyzed: 12/01/2021 13:52

Analysis by: Analytical Resources, LLC

Sample Preparation: Preparation Method: No Prep Wet Chem Extract ID: 21K0442-06 A
Preparation Batch: BJK0741 Sample Size: 10 mL
Prepared: 11/30/2021 Final Volume: 10 mL

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Chloride	16887-00-6	1	0.100	0.100	9.84	mg/L	

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Nitrate-N	14797-55-8	1	0.100	0.100	ND	mg/L	U, H



Fremont Analytical 3600 Fremont Avenue N. Seattle WA, 98103	Project: Anions Project Number: 2111543 Project Manager: Brianna Barnes	Reported: 20-Dec-2021 11:36
---	---	---------------------------------------

MW104-112921
21K0442-06RE1 (Water)

Wet Chemistry

Method: EPA 300.0 Sampled: 11/29/2021 10:40
Instrument: IC930 Analyst: BF Analyzed: 12/02/2021 19:57

Analysis by: Analytical Resources, LLC

Sample Preparation: Preparation Method: No Prep Wet Chem Extract ID: 21K0442-06RE1 A
Preparation Batch: BJK0741 Sample Size: 10 mL
Prepared: 11/30/2021 Final Volume: 10 mL

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Sulfate	14808-79-8	1	0.100	0.100	5.22	mg/L	



Fremont Analytical
3600 Fremont Avenue N.
Seattle WA, 98103

Project: Anions
Project Number: 2111543
Project Manager: Brianna Barnes

Reported:
20-Dec-2021 11:36

MW-161-112921
21K0442-07 (Water)

Wet Chemistry

Method: EPA 300.0

Sampled: 11/29/2021 12:20

Instrument: IC930 Analyst: BF

Analyzed: 12/01/2021 14:12

Analysis by: Analytical Resources, LLC

Sample Preparation: Preparation Method: No Prep Wet Chem
Preparation Batch: BJK0741
Prepared: 11/30/2021

Sample Size: 10 mL
Final Volume: 10 mL

Extract ID: 21K0442-07 A

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Nitrate-N	14797-55-8	1	0.100	0.100	ND	mg/L	U, H



Fremont Analytical
3600 Fremont Avenue N.
Seattle WA, 98103

Project: Anions
Project Number: 2111543
Project Manager: Brianna Barnes

Reported:
20-Dec-2021 11:36

MW-161-112921
21K0442-07RE1 (Water)

Wet Chemistry

Method: EPA 300.0

Sampled: 11/29/2021 12:20

Instrument: IC930 Analyst: BF

Analyzed: 12/02/2021 20:17

Analysis by: Analytical Resources, LLC

Sample Preparation: Preparation Method: No Prep Wet Chem
Preparation Batch: BJK0741
Prepared: 11/30/2021

Sample Size: 10 mL
Final Volume: 10 mL

Extract ID: 21K0442-07RE1 A

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Sulfate	14808-79-8	1	0.100	0.100	9.33	mg/L	



Fremont Analytical 3600 Fremont Avenue N. Seattle WA, 98103	Project: Anions Project Number: 2111543 Project Manager: Brianna Barnes	Reported: 20-Dec-2021 11:36
---	---	---------------------------------------

MW-161-112921
21K0442-07RE2 (Water)

Wet Chemistry

Method: EPA 300.0 Sampled: 11/29/2021 12:20
Instrument: IC930 Analyst: BF Analyzed: 12/14/2021 22:48

Analysis by: Analytical Resources, LLC

Sample Preparation: Preparation Method: No Prep Wet Chem Extract ID: 21K0442-07RE2 A
Preparation Batch: BJK0741 Sample Size: 10 mL
Prepared: 11/30/2021 Final Volume: 10 mL

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Chloride	16887-00-6	5	0.500	0.500	12.6	mg/L	D



Fremont Analytical 3600 Fremont Avenue N. Seattle WA, 98103	Project: Anions Project Number: 2111543 Project Manager: Brianna Barnes	Reported: 20-Dec-2021 11:36
---	---	---------------------------------------

Analysis by: Analytical Resources, LLC

Wet Chemistry - Quality Control

Batch BJK0741 - No Prep Wet Chem

Instrument: IC930 Analyst: BF

QC Sample/Analyte	Result	Detection Limit	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Blank (BJK0741-BLK1)						Prepared: 30-Nov-2021 Analyzed: 01-Dec-2021 08:31					
Chloride	ND	0.100	0.100	mg/L							U
Nitrate-N	ND	0.100	0.100	mg/L							U
Blank (BJK0741-BLK2)						Prepared: 30-Nov-2021 Analyzed: 16-Dec-2021 17:50					
Sulfate	ND	0.100	0.100	mg/L							U
LCS (BJK0741-BS1)						Prepared: 30-Nov-2021 Analyzed: 01-Dec-2021 08:51					
Chloride	4.55	0.100	0.100	mg/L	5.00		91.0	90-110			
LCS (BJK0741-BS2)						Prepared: 30-Nov-2021 Analyzed: 14-Dec-2021 16:51					
Nitrate-N	5.18	0.100	0.100	mg/L	5.00		104	90-110			
Sulfate	5.10	0.100	0.100	mg/L	5.00		102	90-110			



Fremont Analytical
3600 Fremont Avenue N.
Seattle WA, 98103

Project: Anions
Project Number: 2111543
Project Manager: Brianna Barnes

Reported:
20-Dec-2021 11:36

Certified Analyses included in this Report

Analyte	Certifications
EPA 300.0 in Water	
Chloride	DoD-ELAP,WADOE,WA-DW,NELAP
Nitrate-N	DoD-ELAP,WADOE,WA-DW,NELAP
Sulfate	DoD-ELAP,WADOE,WA-DW,NELAP

Code	Description	Number	Expires
ADEC	Alaska Dept of Environmental Conservation	17-015	03/28/2023
DoD-ELAP	DoD-Environmental Laboratory Accreditation Program	66169	02/28/2022
NELAP	ORELAP - Oregon Laboratory Accreditation Program	WA100006-012	05/12/2022
WADOE	WA Dept of Ecology	C558	06/30/2022
WA-DW	Ecology - Drinking Water	C558	06/30/2022



Fremont Analytical
3600 Fremont Avenue N.
Seattle WA, 98103

Project: Anions
Project Number: 2111543
Project Manager: Brianna Barnes

Reported:
20-Dec-2021 11:36

Notes and Definitions

- D The reported value is from a dilution
- H Hold time violation - Hold time was exceeded.
- U This analyte is not detected above the reporting limit (RL) or if noted, not detected above the limit of detection (LOD).
- DET Analyte DETECTED
- ND Analyte NOT DETECTED at or above the reporting limit
- NR Not Reported
- dry Sample results reported on a dry weight basis
- RPD Relative Percent Difference
- [2C] Indicates this result was quantified on the second column on a dual column analysis.

Client Name: **PES**

 Work Order Number: **2111543**

 Logged by: **Gabrielle Coeulle**

 Date Received: **11/29/2021 4:15:00 PM**

Chain of Custody

1. Is Chain of Custody complete? Yes No Not Present
2. How was the sample delivered? Client

Log In

3. Coolers are present? Yes No NA
4. Shipping container/cooler in good condition? Yes No
5. Custody Seals present on shipping container/cooler?
(Refer to comments for Custody Seals not intact) Yes No Not Present
6. Was an attempt made to cool the samples? Yes No NA
7. Were all items received at a temperature of >2°C to 6°C * Yes No NA
8. Sample(s) in proper container(s)? Yes No
9. Sufficient sample volume for indicated test(s)? Yes No
10. Are samples properly preserved? Yes No
11. Was preservative added to bottles? Yes No NA
12. Is there headspace in the VOA vials? Yes No NA
13. Did all samples containers arrive in good condition(unbroken)? Yes No
14. Does paperwork match bottle labels? Yes No
15. Are matrices correctly identified on Chain of Custody? Yes No
16. Is it clear what analyses were requested? Yes No
17. Were all holding times able to be met? Yes No

Special Handling (if applicable)

18. Was client notified of all discrepancies with this order? Yes No NA

Person Notified:	<input type="text"/>	Date:	<input type="text"/>
By Whom:	<input type="text"/>	Via:	<input type="checkbox"/> eMail <input type="checkbox"/> Phone <input type="checkbox"/> Fax <input type="checkbox"/> In Person
Regarding:	<input type="text"/>		
Client Instructions:	<input type="text"/>		

19. Additional remarks:

Item Information

Item #	Temp °C
Sample 1	2.4

* Note: DoD/ELAP and TNI require items to be received at 4°C +/- 2°C



20 December 2021

Brianna Barnes
Fremont Analytical
3600 Fremont Avenue N.
Seattle, WA 98103

RE: Anions

Please find enclosed sample receipt documentation and analytical results for samples from the project referenced above.

Sample analyses were performed according to ARI's Quality Assurance Plan and any provided project specific Quality Assurance Plan. Each analytical section of this report has been approved and reviewed by an analytical peer, the appropriate Laboratory Supervisor or qualified substitute, and a technical reviewer.

Should you have any questions or problems, please feel free to contact us at your convenience.

Associated Work Order(s)
21K0442

Associated SDG ID(s)
N/A

Shelly
Fishel

Digitally signed
by Shelly Fishel
Date: 2021.12.20
11:59:31 -08'00'

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed in the enclosed Narrative. ARI, an accredited laboratory, certifies that the report results for which ARI is accredited meets all the requirements of the accrediting body. A list of certified analyses, accreditations, and expiration dates is included in this report.

Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or his/her designee, as verified by the following signature.

Analytical Resources, LLC

Shelly Fishel, Project Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.





CHAIN OF CUSTODY RECORD

Omega COCID 1207

PAGE: 1 OF: 1

ADDRESS

Fremont Analytical, Inc.
 3600 Fremont Ave. N.
 Seattle, WA 98103
 TEL: 206-352-3790
 FAX: 206-352-7178
 Website: www.fremontanalytical.com

ART WO
 ↓

SUB CONTRACTOR: ARI <i>21K0442</i> COMPANY: Analytical Resources Inc.		SPECIAL INSTRUCTIONS / COMMENTS: Standard TAT. Please email results to Brianna Barnes at bbarnes@fremontanalytical.com and Matt Langston at mlangston@fremontanalytical.com.
ADDRESS: 4611 South 134th Place, Suite 100		
CITY, STATE, ZIP: Tukwila, WA 98168		
PHONE: (206) 695-6200	FAX: _____ EMAIL: _____	
ACCOUNT #: _____		

ITEM #	SAMPLE ID	CLIENT SAMPLE ID	BOTTLE TYPE	MATRIX	DATE COLLECTED	NUMBER OF CONTAINERS	COMMENTS: Methanol Preserved Weights HOT Sample Notation, Additional Sample Description.
1	2111543-001A TEST_SUB	MW107-112921	250 HDPE NON	Groundwater	11/29/2021 10:40:00 AM	1	Nitrate, Chloride, and Sulfate
2	2111543-002A TEST_SUB	MW160-112921	250 HDPE NON	Groundwater	11/29/2021 12:25:00 PM	1	Nitrate, Chloride, and Sulfate
3	2111543-003A TEST_SUB	W-MW-01-112921	250 HDPE NON	Groundwater	11/29/2021 2:20:00 PM	1	Nitrate, Chloride, and Sulfate
4	2111543-004A TEST_SUB	R-MW6-112921	250 HDPE NON	Groundwater	11/29/2021 12:30:00 PM	1	Nitrate, Chloride, and Sulfate
5	2111543-005A TEST_SUB	MW-144R-112921	250 HDPE NON	Groundwater	11/29/2021 2:00:00 PM	1	Nitrate, Chloride, and Sulfate
6	2111543-006A TEST_SUB	MW104-112921	250 HDPE NON	Groundwater	11/29/2021 10:40:00 AM	1	Nitrate, Chloride, and Sulfate
7	2111543-007A TEST_SUB	MW-161-112921	250 HDPE NON	Groundwater	11/29/2021 12:20:00 PM	1	Nitrate, Chloride, and Sulfate

Relinquished By: <i>Justine Marthy</i>	Date: <i>11/30</i>	Time: <i>8:40</i>	Received By: <i>[Signature]</i>	Date: <i>11/30</i>	Time: <i>12:57</i>	REPORT TRANSMITTAL DESIRED: <input type="checkbox"/> HARDCOPY (extra cost) <input type="checkbox"/> FAX <input type="checkbox"/> EMAIL <input type="checkbox"/> ONLINE
Relinquished By:	Date:	Time:	Received By:	Date:	Time:	
TAT: Standard <input type="checkbox"/> RUSH <input type="checkbox"/> Next BD <input type="checkbox"/> 2nd BD <input type="checkbox"/> 3rd BD <input type="checkbox"/>						FOR LAB USE ONLY
Note: RUSH requests will incur surcharges!						Temp of samples _____ °C Attempt to Cool? _____
Comments: _____						



Fremont Analytical
3600 Fremont Avenue N.
Seattle WA, 98103

Project: Anions
Project Number: 2111543
Project Manager: Brianna Barnes

Reported:
20-Dec-2021 11:36

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW107-112921	21K0442-01	Water	29-Nov-2021 10:40	30-Nov-2021 12:57
MW160-112921	21K0442-02	Water	29-Nov-2021 12:25	30-Nov-2021 12:57
W-MW-01-112921	21K0442-03	Water	29-Nov-2021 14:20	30-Nov-2021 12:57
R-MW6-112921	21K0442-04	Water	29-Nov-2021 12:30	30-Nov-2021 12:57
MW-144R-112921	21K0442-05	Water	29-Nov-2021 14:00	30-Nov-2021 12:57
MW104-112921	21K0442-06	Water	29-Nov-2021 10:40	30-Nov-2021 12:57
MW-161-112921	21K0442-07	Water	29-Nov-2021 12:20	30-Nov-2021 12:57



Fremont Analytical
3600 Fremont Avenue N.
Seattle WA, 98103

Project: Anions
Project Number: 2111543
Project Manager: Brianna Barnes

Reported:
20-Dec-2021 11:36

Work Order Case Narrative

Client: Fremont Analytical
Project: Anions
Work Order: 21K0442

Sample receipt

Samples as listed on the preceding page were received 30-Nov-2021 12:57 under ARI work order 21K0442. For details regarding sample receipt, please refer to the Cooler Receipt Form.

Wet Chemistry

The sample(s) were prepared and analyzed within the recommended holding times except Nitrate. Run started with issues meeting calibration verifications and maintenance was performed to bring back into optimal conditions. This push samples out of hold. Deviations have been flagged.

Initial and continuing calibrations were within method requirements.

The method blank(s) were clean at the reporting limits.

The blank spike (BS/LCS) percent recoveries were within control limits except Sulfate in the original run where recovery was 77.68%. The samples were reanalyzed in hold. Only reanalysis has been reported.



Cooler Receipt Form

ARI Client: Fremont Project Name: 211543
 COC No(s): 1207 Delivered by: Fed-Ex UPS Courier Hand Delivered Other:
 Assigned ARI Job No: 21K0442 Tracking No: NA

Preliminary Examination Phase:

Were intact, properly signed and dated custody seals attached to the outside of the cooler? YES NO
 Were custody papers included with the cooler? YES NO
 Were custody papers properly filled out (ink, signed, etc.) YES NO

Temperature of Cooler(s) (°C) (recommended 2.0-6.0 °C for chemistry) 4.9

Time 12:57

If cooler temperature is out of compliance fill out form 00070F Temp Gun ID#: DOO 2565

Cooler Accepted by: [Signature] Date: 11/30/21 Time: 12:57
Complete custody forms and attach all shipping documents

Log-In Phase:

Was a temperature blank included in the cooler? YES NO
 What kind of packing material was used? ... Bubble Wrap Wet Ice Gel Packs Baggies Foam Block Paper Other: _____
 Was sufficient ice used (if appropriate)? NA YES NO
 How were bottles sealed in plastic bags? Individually Grouped Not
 Did all bottles arrive in good condition (unbroken)? YES NO
 Were all bottle labels complete and legible? YES NO
 Did the number of containers listed on COC match with the number of containers received? YES NO
 Did all bottle labels and tags agree with custody papers? YES NO
 Were all bottles used correct for the requested analyses? YES NO
 Do any of the analyses (bottles) require preservation? (attach preservation sheet, excluding VOCs) ... NA YES NO
 Were all VOC vials free of air bubbles? NA YES NO
 Was sufficient amount of sample sent in each bottle? YES NO
 Date VOC Trip Blank was made at ARI: NA
 Were the sample(s) split by ARI? NA YES Date/Time: _____ Equipment: _____ Split by: _____

Samples Logged by: [Signature] Date: 11/30/21 Time: 13:43 Labels checked by: _____
**** Notify Project Manager of discrepancies or concerns ****

Sample ID on Bottle	Sample ID on COC	Sample ID on Bottle	Sample ID on COC

Additional Notes, Discrepancies, & Resolutions:

By: _____ Date: _____



Fremont Analytical
3600 Fremont Avenue N.
Seattle WA, 98103

Project: Anions
Project Number: 2111543
Project Manager: Brianna Barnes

Reported:
20-Dec-2021 11:36

MW107-112921
21K0442-01 (Water)

Wet Chemistry

Method: EPA 300.0

Sampled: 11/29/2021 10:40

Instrument: IC930 Analyst: BF

Analyzed: 12/01/2021 11:12

Analysis by: Analytical Resources, LLC

Sample Preparation: Preparation Method: No Prep Wet Chem
Preparation Batch: BJK0741
Prepared: 11/30/2021

Sample Size: 10 mL
Final Volume: 10 mL

Extract ID: 21K0442-01 A

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Nitrate-N	14797-55-8	1	0.100	0.100	ND	mg/L	H, U



Fremont Analytical 3600 Fremont Avenue N. Seattle WA, 98103	Project: Anions Project Number: 2111543 Project Manager: Brianna Barnes	Reported: 20-Dec-2021 11:36
---	---	---------------------------------------

MW107-112921
21K0442-01RE1 (Water)

Wet Chemistry

Method: EPA 300.0 Sampled: 11/29/2021 10:40
Instrument: IC930 Analyst: BF Analyzed: 12/02/2021 11:57

Analysis by: Analytical Resources, LLC

Sample Preparation: Preparation Method: No Prep Wet Chem Extract ID: 21K0442-01RE1 A
Preparation Batch: BJK0741 Sample Size: 10 mL
Prepared: 11/30/2021 Final Volume: 10 mL

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Sulfate	14808-79-8	1	0.100	0.100	0.326	mg/L	



Fremont Analytical
3600 Fremont Avenue N.
Seattle WA, 98103

Project: Anions
Project Number: 2111543
Project Manager: Brianna Barnes

Reported:
20-Dec-2021 11:36

MW107-112921
21K0442-01RE2 (Water)

Wet Chemistry

Method: EPA 300.0

Sampled: 11/29/2021 10:40

Instrument: IC930 Analyst: BF

Analyzed: 12/14/2021 21:09

Analysis by: Analytical Resources, LLC

Sample Preparation: Preparation Method: No Prep Wet Chem
Preparation Batch: BJK0741
Prepared: 11/30/2021

Sample Size: 10 mL
Final Volume: 10 mL

Extract ID: 21K0442-01RE2 A

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Chloride	16887-00-6	20	2.00	2.00	91.4	mg/L	D



Fremont Analytical 3600 Fremont Avenue N. Seattle WA, 98103	Project: Anions Project Number: 2111543 Project Manager: Brianna Barnes	Reported: 20-Dec-2021 11:36
---	---	---------------------------------------

MW160-112921
21K0442-02 (Water)

Wet Chemistry

Method: EPA 300.0 Sampled: 11/29/2021 12:25
Instrument: IC930 Analyst: BF Analyzed: 12/01/2021 12:32

Analysis by: Analytical Resources, LLC

Sample Preparation: Preparation Method: No Prep Wet Chem Extract ID: 21K0442-02 A
Preparation Batch: BJK0741 Sample Size: 10 mL
Prepared: 11/30/2021 Final Volume: 10 mL

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Chloride	16887-00-6	1	0.100	0.100	6.37	mg/L	

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Nitrate-N	14797-55-8	1	0.100	0.100	ND	mg/L	H, U



Fremont Analytical 3600 Fremont Avenue N. Seattle WA, 98103	Project: Anions Project Number: 2111543 Project Manager: Brianna Barnes	Reported: 20-Dec-2021 11:36
---	---	---------------------------------------

MW160-112921
21K0442-02RE1 (Water)

Wet Chemistry

Method: EPA 300.0 Sampled: 11/29/2021 12:25
Instrument: IC930 Analyst: BF Analyzed: 12/02/2021 12:17

Analysis by: Analytical Resources, LLC

Sample Preparation: Preparation Method: No Prep Wet Chem Extract ID: 21K0442-02RE1 A
Preparation Batch: BJK0741 Sample Size: 10 mL
Prepared: 11/30/2021 Final Volume: 10 mL

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Sulfate	14808-79-8	1	0.100	0.100	2.34	mg/L	



Fremont Analytical 3600 Fremont Avenue N. Seattle WA, 98103	Project: Anions Project Number: 2111543 Project Manager: Brianna Barnes	Reported: 20-Dec-2021 11:36
---	---	---------------------------------------

W-MW-01-112921
21K0442-03 (Water)

Wet Chemistry

Method: EPA 300.0 Sampled: 11/29/2021 14:20
Instrument: IC930 Analyst: BF Analyzed: 12/01/2021 12:52

Analysis by: Analytical Resources, LLC

Sample Preparation: Preparation Method: No Prep Wet Chem Extract ID: 21K0442-03 A
Preparation Batch: BJK0741 Sample Size: 10 mL
Prepared: 11/30/2021 Final Volume: 10 mL

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Nitrate-N	14797-55-8	1	0.100	0.100	ND	mg/L	U



Fremont Analytical
3600 Fremont Avenue N.
Seattle WA, 98103

Project: Anions
Project Number: 2111543
Project Manager: Brianna Barnes

Reported:
20-Dec-2021 11:36

W-MW-01-112921
21K0442-03RE1 (Water)

Wet Chemistry

Method: EPA 300.0

Sampled: 11/29/2021 14:20

Instrument: IC930 Analyst: BF

Analyzed: 12/02/2021 18:57

Analysis by: Analytical Resources, LLC

Sample Preparation:

Preparation Method: No Prep Wet Chem

Extract ID: 21K0442-03RE1 A

Preparation Batch: BJK0741

Sample Size: 10 mL

Prepared: 11/30/2021

Final Volume: 10 mL

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Sulfate	14808-79-8	1	0.100	0.100	3.99	mg/L	



Fremont Analytical
3600 Fremont Avenue N.
Seattle WA, 98103

Project: Anions
Project Number: 2111543
Project Manager: Brianna Barnes

Reported:
20-Dec-2021 11:36

W-MW-01-112921
21K0442-03RE2 (Water)

Wet Chemistry

Method: EPA 300.0

Sampled: 11/29/2021 14:20

Instrument: IC930 Analyst: BF

Analyzed: 12/14/2021 21:29

Analysis by: Analytical Resources, LLC

Sample Preparation: Preparation Method: No Prep Wet Chem
Preparation Batch: BJK0741
Prepared: 11/30/2021

Sample Size: 10 mL
Final Volume: 10 mL

Extract ID: 21K0442-03RE2 A

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Chloride	16887-00-6	5	0.500	0.500	24.4	mg/L	D



Fremont Analytical 3600 Fremont Avenue N. Seattle WA, 98103	Project: Anions Project Number: 2111543 Project Manager: Brianna Barnes	Reported: 20-Dec-2021 11:36
---	---	---------------------------------------

R-MW6-112921
21K0442-04 (Water)

Wet Chemistry

Method: EPA 300.0 Sampled: 11/29/2021 12:30
Instrument: IC930 Analyst: BF Analyzed: 12/01/2021 13:12

Analysis by: Analytical Resources, LLC

Sample Preparation: Preparation Method: No Prep Wet Chem Extract ID: 21K0442-04 A
Preparation Batch: BJK0741 Sample Size: 10 mL
Prepared: 11/30/2021 Final Volume: 10 mL

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Nitrate-N	14797-55-8	1	0.100	0.100	ND	mg/L	U, H



Fremont Analytical 3600 Fremont Avenue N. Seattle WA, 98103	Project: Anions Project Number: 2111543 Project Manager: Brianna Barnes	Reported: 20-Dec-2021 11:36
---	---	---------------------------------------

R-MW6-112921
21K0442-04RE2 (Water)

Wet Chemistry

Method: EPA 300.0 Sampled: 11/29/2021 12:30
Instrument: IC930 Analyst: BF Analyzed: 12/14/2021 21:49

Analysis by: Analytical Resources, LLC

Sample Preparation: Preparation Method: No Prep Wet Chem Extract ID: 21K0442-04RE2 A
Preparation Batch: BJK0741 Sample Size: 10 mL
Prepared: 11/30/2021 Final Volume: 10 mL

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Chloride	16887-00-6	5	0.500	0.500	19.0	mg/L	D



Fremont Analytical
3600 Fremont Avenue N.
Seattle WA, 98103

Project: Anions
Project Number: 2111543
Project Manager: Brianna Barnes

Reported:
20-Dec-2021 11:36

R-MW6-112921
21K0442-04RE3 (Water)

Wet Chemistry

Method: EPA 300.0

Sampled: 11/29/2021 12:30

Instrument: IC930 Analyst: BF

Analyzed: 12/14/2021 22:08

Analysis by: Analytical Resources, LLC

Sample Preparation: Preparation Method: No Prep Wet Chem
Preparation Batch: BJK0741
Prepared: 11/30/2021

Sample Size: 10 mL
Final Volume: 10 mL

Extract ID: 21K0442-04RE3 A

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Sulfate	14808-79-8	50	5.00	5.00	185	mg/L	D



Fremont Analytical 3600 Fremont Avenue N. Seattle WA, 98103	Project: Anions Project Number: 2111543 Project Manager: Brianna Barnes	Reported: 20-Dec-2021 11:36
---	---	---------------------------------------

MW-144R-112921
21K0442-05 (Water)

Wet Chemistry

Method: EPA 300.0 Sampled: 11/29/2021 14:00
Instrument: IC930 Analyst: BF Analyzed: 12/01/2021 13:32

Analysis by: Analytical Resources, LLC

Sample Preparation: Preparation Method: No Prep Wet Chem Extract ID: 21K0442-05 A
Preparation Batch: BJK0741 Sample Size: 10 mL
Prepared: 11/30/2021 Final Volume: 10 mL

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Nitrate-N	14797-55-8	1	0.100	0.100	0.191	mg/L	



Fremont Analytical
3600 Fremont Avenue N.
Seattle WA, 98103

Project: Anions
Project Number: 2111543
Project Manager: Brianna Barnes

Reported:
20-Dec-2021 11:36

MW-144R-112921
21K0442-05RE1 (Water)

Wet Chemistry

Method: EPA 300.0

Sampled: 11/29/2021 14:00

Instrument: IC930 Analyst: BF

Analyzed: 12/02/2021 19:37

Analysis by: Analytical Resources, LLC

Sample Preparation: Preparation Method: No Prep Wet Chem
Preparation Batch: BJK0741
Prepared: 11/30/2021

Sample Size: 10 mL
Final Volume: 10 mL

Extract ID: 21K0442-05RE1 A

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Sulfate	14808-79-8	1	0.100	0.100	ND	mg/L	U



Fremont Analytical
3600 Fremont Avenue N.
Seattle WA, 98103

Project: Anions
Project Number: 2111543
Project Manager: Brianna Barnes

Reported:
20-Dec-2021 11:36

MW-144R-112921
21K0442-05RE2 (Water)

Wet Chemistry

Method: EPA 300.0

Sampled: 11/29/2021 14:00

Instrument: IC930 Analyst: BF

Analyzed: 12/14/2021 22:28

Analysis by: Analytical Resources, LLC

Sample Preparation:

Preparation Method: No Prep Wet Chem

Extract ID: 21K0442-05RE2 A

Preparation Batch: BJK0741

Sample Size: 10 mL

Prepared: 11/30/2021

Final Volume: 10 mL

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Chloride	16887-00-6	20	2.00	2.00	88.2	mg/L	D



Fremont Analytical 3600 Fremont Avenue N. Seattle WA, 98103	Project: Anions Project Number: 2111543 Project Manager: Brianna Barnes	Reported: 20-Dec-2021 11:36
---	---	---------------------------------------

MW104-112921
21K0442-06 (Water)

Wet Chemistry

Method: EPA 300.0 Sampled: 11/29/2021 10:40
Instrument: IC930 Analyst: BF Analyzed: 12/01/2021 13:52

Analysis by: Analytical Resources, LLC

Sample Preparation: Preparation Method: No Prep Wet Chem Extract ID: 21K0442-06 A
Preparation Batch: BJK0741 Sample Size: 10 mL
Prepared: 11/30/2021 Final Volume: 10 mL

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Chloride	16887-00-6	1	0.100	0.100	9.84	mg/L	

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Nitrate-N	14797-55-8	1	0.100	0.100	ND	mg/L	U, H



Fremont Analytical 3600 Fremont Avenue N. Seattle WA, 98103	Project: Anions Project Number: 2111543 Project Manager: Brianna Barnes	Reported: 20-Dec-2021 11:36
---	---	---------------------------------------

MW104-112921
21K0442-06RE1 (Water)

Wet Chemistry

Method: EPA 300.0 Sampled: 11/29/2021 10:40
Instrument: IC930 Analyst: BF Analyzed: 12/02/2021 19:57

Analysis by: Analytical Resources, LLC

Sample Preparation: Preparation Method: No Prep Wet Chem Extract ID: 21K0442-06RE1 A
Preparation Batch: BJK0741 Sample Size: 10 mL
Prepared: 11/30/2021 Final Volume: 10 mL

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Sulfate	14808-79-8	1	0.100	0.100	5.22	mg/L	



Fremont Analytical 3600 Fremont Avenue N. Seattle WA, 98103	Project: Anions Project Number: 2111543 Project Manager: Brianna Barnes	Reported: 20-Dec-2021 11:36
---	---	---------------------------------------

MW-161-112921
21K0442-07 (Water)

Wet Chemistry

Method: EPA 300.0 Sampled: 11/29/2021 12:20
Instrument: IC930 Analyst: BF Analyzed: 12/01/2021 14:12

Analysis by: Analytical Resources, LLC

Sample Preparation: Preparation Method: No Prep Wet Chem Extract ID: 21K0442-07 A
Preparation Batch: BJK0741 Sample Size: 10 mL
Prepared: 11/30/2021 Final Volume: 10 mL

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Nitrate-N	14797-55-8	1	0.100	0.100	ND	mg/L	U, H



Fremont Analytical 3600 Fremont Avenue N. Seattle WA, 98103	Project: Anions Project Number: 2111543 Project Manager: Brianna Barnes	Reported: 20-Dec-2021 11:36
---	---	---------------------------------------

MW-161-112921
21K0442-07RE1 (Water)

Wet Chemistry

Method: EPA 300.0 Sampled: 11/29/2021 12:20
Instrument: IC930 Analyst: BF Analyzed: 12/02/2021 20:17

Analysis by: Analytical Resources, LLC

Sample Preparation: Preparation Method: No Prep Wet Chem Extract ID: 21K0442-07RE1 A
Preparation Batch: BJK0741 Sample Size: 10 mL
Prepared: 11/30/2021 Final Volume: 10 mL

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Sulfate	14808-79-8	1	0.100	0.100	9.33	mg/L	



Fremont Analytical 3600 Fremont Avenue N. Seattle WA, 98103	Project: Anions Project Number: 2111543 Project Manager: Brianna Barnes	Reported: 20-Dec-2021 11:36
---	---	---------------------------------------

MW-161-112921
21K0442-07RE2 (Water)

Wet Chemistry

Method: EPA 300.0 Sampled: 11/29/2021 12:20
Instrument: IC930 Analyst: BF Analyzed: 12/14/2021 22:48

Analysis by: Analytical Resources, LLC

Sample Preparation: Preparation Method: No Prep Wet Chem Extract ID: 21K0442-07RE2 A
Preparation Batch: BJK0741 Sample Size: 10 mL
Prepared: 11/30/2021 Final Volume: 10 mL

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Chloride	16887-00-6	5	0.500	0.500	12.6	mg/L	D



Fremont Analytical 3600 Fremont Avenue N. Seattle WA, 98103	Project: Anions Project Number: 2111543 Project Manager: Brianna Barnes	Reported: 20-Dec-2021 11:36
---	---	---------------------------------------

Analysis by: Analytical Resources, LLC

Wet Chemistry - Quality Control

Batch BJK0741 - No Prep Wet Chem

Instrument: IC930 Analyst: BF

QC Sample/Analyte	Result	Detection Limit	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Blank (BJK0741-BLK1)						Prepared: 30-Nov-2021 Analyzed: 01-Dec-2021 08:31					
Chloride	ND	0.100	0.100	mg/L							U
Nitrate-N	ND	0.100	0.100	mg/L							U
Blank (BJK0741-BLK2)						Prepared: 30-Nov-2021 Analyzed: 16-Dec-2021 17:50					
Sulfate	ND	0.100	0.100	mg/L							U
LCS (BJK0741-BS1)						Prepared: 30-Nov-2021 Analyzed: 01-Dec-2021 08:51					
Chloride	4.55	0.100	0.100	mg/L	5.00		91.0	90-110			
LCS (BJK0741-BS2)						Prepared: 30-Nov-2021 Analyzed: 14-Dec-2021 16:51					
Nitrate-N	5.18	0.100	0.100	mg/L	5.00		104	90-110			
Sulfate	5.10	0.100	0.100	mg/L	5.00		102	90-110			



Fremont Analytical 3600 Fremont Avenue N. Seattle WA, 98103	Project: Anions Project Number: 2111543 Project Manager: Brianna Barnes	Reported: 20-Dec-2021 11:36
---	---	---------------------------------------

Certified Analyses included in this Report

Analyte	Certifications
EPA 300.0 in Water	
Chloride	DoD-ELAP,WADOE,WA-DW,NELAP
Nitrate-N	DoD-ELAP,WADOE,WA-DW,NELAP
Sulfate	DoD-ELAP,WADOE,WA-DW,NELAP

Code	Description	Number	Expires
ADEC	Alaska Dept of Environmental Conservation	17-015	03/28/2023
DoD-ELAP	DoD-Environmental Laboratory Accreditation Program	66169	02/28/2022
NELAP	ORELAP - Oregon Laboratory Accreditation Program	WA100006-012	05/12/2022
WADOE	WA Dept of Ecology	C558	06/30/2022
WA-DW	Ecology - Drinking Water	C558	06/30/2022



Fremont Analytical
3600 Fremont Avenue N.
Seattle WA, 98103

Project: Anions
Project Number: 2111543
Project Manager: Brianna Barnes

Reported:
20-Dec-2021 11:36

Notes and Definitions

- D The reported value is from a dilution
- H Hold time violation - Hold time was exceeded.
- U This analyte is not detected above the reporting limit (RL) or if noted, not detected above the limit of detection (LOD).
- DET Analyte DETECTED
- ND Analyte NOT DETECTED at or above the reporting limit
- NR Not Reported
- dry Sample results reported on a dry weight basis
- RPD Relative Percent Difference
- [2C] Indicates this result was quantified on the second column on a dual column analysis.



3600 Fremont Ave. N.
Seattle, WA 98103
T: (206) 352-3790
F: (206) 352-7178
info@fremontanalytical.com

PES Environmental, Inc.
Bill Haldeman
2101 Fourth Avenue, Suite 1310
Seattle, WA 98121

RE: American Linen
Work Order Number: 2111568

December 14, 2021

Attention Bill Haldeman:

Fremont Analytical, Inc. received 5 sample(s) on 11/30/2021 for the analyses presented in the following report.

Ion Chromatography by EPA Method 300.0

This report consists of the following:

- Case Narrative
- Analytical Results
- Applicable Quality Control Summary Reports
- Chain of Custody

All analyses were performed consistent with the Quality Assurance program of Fremont Analytical, Inc. Please contact the laboratory if you should have any questions about the results.

Thank you for using Fremont Analytical.

Sincerely,

Brianna Barnes
Project Manager

*DoD-ELAP Accreditation #79636 by PJLA, ISO/IEC 17025:2017 and QSM 5.3 for Environmental Testing
ORELAP Certification: WA 100009 (NELAP Recognized) for Environmental Testing
Washington State Department of Ecology Accredited for Environmental Testing, Lab ID C910*

Original



Date: 12/14/2021

CLIENT: PES Environmental, Inc.
Project: American Linen
Work Order: 2111568

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Date/Time Collected	Date/Time Received
2111568-001	MW-145R-113021	11/30/2021 9:55 AM	11/30/2021 4:18 PM
2111568-002	MW-142-113021	11/30/2021 1:00 PM	11/30/2021 4:18 PM
2111568-003	MW-190-113021	11/30/2021 12:15 PM	11/30/2021 4:18 PM
2111568-004	MW102-113021	11/30/2021 10:10 AM	11/30/2021 4:18 PM
2111568-005	MW-189-113021	11/30/2021 2:40 PM	11/30/2021 4:18 PM

Note: If no "Time Collected" is supplied, a default of 12:00AM is assigned

Original

CLIENT: PES Environmental, Inc.

Project: American Linen

I. SAMPLE RECEIPT:

Samples receipt information is recorded on the attached Sample Receipt Checklist.

II. GENERAL REPORTING COMMENTS:

Results are reported on a wet weight basis unless dry-weight correction is denoted in the units field on the analytical report ("mg/kg-dry" or "ug/kg-dry").

Matrix Spike (MS) and MS Duplicate (MSD) samples are tested from an analytical batch of "like" matrix to check for possible matrix effect. The MS and MSD will provide site specific matrix data only for those samples which are spiked by the laboratory. The sample chosen for spike purposes may or may not have been a sample submitted in this sample delivery group. The validity of the analytical procedures for which data is reported in this analytical report is determined by the Laboratory Control Sample (LCS) and the Method Blank (MB). The LCS and the MB are processed with the samples and the MS/MSD to ensure method criteria are achieved throughout the entire analytical process.

III. ANALYSES AND EXCEPTIONS:

Exceptions associated with this report will be footnoted in the analytical results page(s) or the quality control summary page(s) and/or noted below.

2111568-001A

C-IC-ANIONS has been Sub Contracted.

2111568-002A

C-IC-ANIONS has been Sub Contracted.

2111568-003A

C-IC-ANIONS has been Sub Contracted.

2111568-004A

C-IC-ANIONS has been Sub Contracted.

2111568-005A

C-IC-ANIONS has been Sub Contracted.



13 December 2021

Brianna Barnes
Fremont Analytical
3600 Fremont Avenue N.
Seattle, WA 98103

RE: Anions

Please find enclosed sample receipt documentation and analytical results for samples from the project referenced above.

Sample analyses were performed according to ARI's Quality Assurance Plan and any provided project specific Quality Assurance Plan. Each analytical section of this report has been approved and reviewed by an analytical peer, the appropriate Laboratory Supervisor or qualified substitute, and a technical reviewer.

Should you have any questions or problems, please feel free to contact us at your convenience.

Associated Work Order(s)
21L0014

Associated SDG ID(s)
N/A

Digitally signed by Shelly Fishel
Date: 2021.12.13 18:36:50 -08'00'

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed in the enclose Narrative. ARI, an accredited laboratory, certifies that the report results for which ARI is accredited meets all the requirements of the accrediting body. A list of certified analyses, accreditations, and expiration dates is included in this report.

Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or his/her designee, as verified by the following signature.

Analytical Resources, LLC

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Shelly Fishel, Project Manager





CHAIN OF CUSTODY RECORD

Omega COCID 1217

PAGE: 1 OF: 1

ADDRESS

Fremont Analytical, Inc.
 3600 Fremont Ave. N.
 Seattle, WA 98103
 TEL: 206-352-3790
 FAX: 206-352-7178

Website: www.fremontanalytical.com

ARI WO: 21L0014

SUB CONTRACTOR: ARI	COMPANY: Analytical Resources Inc.	SPECIAL INSTRUCTIONS / COMMENTS: Nitrate, Chloride, Sulfate. Standard TAT. Please email results to Brianna Barnes at bbarnes@fremontanalytical.com and Matt Langston at mlangston@fremontanalytical.com.	
ADDRESS: 4611 South 134th Place, Suite 100			
CITY, STATE, ZIP: Tukwila, WA 98168			
PHONE: (206) 695-6200	FAX: _____		EMAIL: _____
ACCOUNT #: _____			

ITEM #	SAMPLE ID	CLIENT SAMPLE ID	BOTTLE TYPE	MATRIX	DATE COLLECTED	NUMBER OF CONTAINERS	COMMENTS: Methanol Preserved Weights HOT Sample Notation, Additional Sample Description.
1	2111568-001A	MW-145R-113021	250 HDPE NON	Groundwater	11/30/2021 9:55:00 AM	1	Nitrate, Chloride, Sulfate
	C-IC-ANIONS						
2	2111568-002A	MW-142-113021	250 HDPE NON	Groundwater	11/30/2021 1:00:00 PM	1	Nitrate, Chloride, Sulfate
	C-IC-ANIONS						
3	2111568-003A	MW-190-113021	250 HDPE NON	Groundwater	11/30/2021 12:15:00 PM	1	Nitrate, Chloride, Sulfate
	C-IC-ANIONS						
4	2111568-004A	MW102-113021	250 HDPE NON	Groundwater	11/30/2021 10:10:00 AM	1	Nitrate, Chloride, Sulfate
	C-IC-ANIONS						
5	2111568-005A	MW-189-113021	250 HDPE NON	Groundwater	11/30/2021 2:40:00 PM	1	Nitrate, Chloride, Sulfate
	C-IC-ANIONS						

Relinquished By: <i>Justine Maritz</i>	Date: <i>12/1</i>	Time: <i>8:30</i>	Received By: <i>[Signature]</i>	Date: <i>12/13/21</i>	Time: <i>8:52</i>
Relinquished By:	Date:	Time:	Received By:	Date:	Time:
Relinquished By:	Date:	Time:	Received By:	Date:	Time:
TAT: Standard <input type="checkbox"/> RUSH <input type="checkbox"/> Next BD <input type="checkbox"/> 2nd BD <input type="checkbox"/> 3rd BD <input type="checkbox"/>					
Note: RUSH requests will incur surcharges!					

REPORT TRANSMITTAL DESIRED:	
<input type="checkbox"/> HARDCOPY (extra cost)	<input type="checkbox"/> FAX <input type="checkbox"/> EMAIL <input type="checkbox"/> ONLINE
FOR LAB USE ONLY	
Temp of samples _____ °C	Attempt to Cool? _____
Comments: _____	



Fremont Analytical
3600 Fremont Avenue N.
Seattle WA, 98103

Project: Anions
Project Number: 2111568
Project Manager: Brianna Barnes

Reported:
13-Dec-2021 18:33

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW-145R-113021	21L0014-01	Water	30-Nov-2021 09:55	01-Dec-2021 12:52
MW-142-113021	21L0014-02	Water	30-Nov-2021 01:00	01-Dec-2021 12:52
MW-190-113021	21L0014-03	Water	30-Nov-2021 12:15	01-Dec-2021 12:52
MW102-113021	21L0014-04	Water	30-Nov-2021 10:10	01-Dec-2021 12:52
MW-189-113021	21L0014-05	Water	30-Nov-2021 14:40	01-Dec-2021 12:52



Fremont Analytical
3600 Fremont Avenue N.
Seattle WA, 98103

Project: Anions
Project Number: 2111568
Project Manager: Brianna Barnes

Reported:
13-Dec-2021 18:33

Work Order Case Narrative

Client: Fremont Analytical
Project: Anions
Work Order: 21L0014

Sample receipt

Samples as listed on the preceding page were received 01-Dec-2021 12:52 under ARI work order 21L0014. For details regarding sample receipt, please refer to the Cooler Receipt Form.

Wet Chemistry

The sample(s) were prepared and analyzed within the recommended holding times.

Initial and continuing calibrations were within method requirements.

The method blank(s) were clean at the reporting limits.

The blank spike (BS/LCS) percent recoveries were within control limits.



Cooler Receipt Form

ARI Client: Fremont

Project Name: LB 12/1/21
2111500-2111508

COC No(s): 1217

Delivered by: Fed-Ex UPS Courier Hand Delivered Other: _____

Assigned ARI Job No: 21L0014

Tracking No: _____ NA

Preliminary Examination Phase:

Were intact, properly signed and dated custody seals attached to the outside of the cooler? YES NO

Were custody papers included with the cooler? YES NO

Were custody papers properly filled out (ink, signed, etc.) YES NO

Temperature of Cooler(s) (°C) (recommended 2.0-6.0 °C for chemistry)

Time 12:52

5.1

If cooler temperature is out of compliance fill out form 00070F

Temp Gun ID#: DOO 9708

Cooler Accepted by: LN

Date: 12/1/21

Time: 12:52

Complete custody forms and attach all shipping documents

Log-In Phase:

Was a temperature blank included in the cooler? YES NO

What kind of packing material was used? ... Bubble Wrap Wet Ice Gel Packs Baggies Foam Block Paper Other: _____

Was sufficient ice used (if appropriate)? NA YES NO

How were bottles sealed in plastic bags? Individually Grouped Not

Did all bottles arrive in good condition (unbroken)? YES NO

Were all bottle labels complete and legible? YES NO

Did the number of containers listed on COC match with the number of containers received? YES NO

Did all bottle labels and tags agree with custody papers? YES NO

Were all bottles used correct for the requested analyses? YES NO

Do any of the analyses (bottles) require preservation? (attach preservation sheet, excluding VOCs) ... NA YES NO

Were all VOC vials free of air bubbles? NA YES NO

Was sufficient amount of sample sent in each bottle? YES NO

Date VOC Trip Blank was made at ARI: NA

Were the sample(s) split by ARI? NA YES Date/Time: _____ Equipment: _____ Split by: _____

Samples Logged by: LN Date: 12/1/21 Time: 15:08 15:43 LB 12/1/21 Labels checked by: _____

**** Notify Project Manager of discrepancies or concerns ****

Sample ID on Bottle	Sample ID on COC	Sample ID on Bottle	Sample ID on COC

Additional Notes, Discrepancies, & Resolutions:

By: _____ Date: _____



Fremont Analytical 3600 Fremont Avenue N. Seattle WA, 98103	Project: Anions Project Number: 2111568 Project Manager: Brianna Barnes	Reported: 13-Dec-2021 18:33
---	---	---------------------------------------

MW-145R-113021
21L0014-01 (Water)

Wet Chemistry

Method: EPA 300.0 Sampled: 11/30/2021 09:55
Instrument: IC930 Analyst: BF Analyzed: 12/01/2021 21:57

Analysis by: Analytical Resources, LLC

Sample Preparation: Preparation Method: No Prep Wet Chem Extract ID: 21L0014-01 A
Preparation Batch: BJL0039 Sample Size: 10 mL
Prepared: 12/01/2021 Final Volume: 10 mL

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Nitrate-N	14797-55-8	1	0.100	0.100	ND	mg/L	U



Fremont Analytical 3600 Fremont Avenue N. Seattle WA, 98103	Project: Anions Project Number: 2111568 Project Manager: Brianna Barnes	Reported: 13-Dec-2021 18:33
---	---	---------------------------------------

MW-145R-113021
21L0014-01RE1 (Water)

Wet Chemistry

Method: EPA 300.0 Sampled: 11/30/2021 09:55
Instrument: IC930 Analyst: BF Analyzed: 12/12/2021 14:24

Analysis by: Analytical Resources, LLC

Sample Preparation: Preparation Method: No Prep Wet Chem Extract ID: 21L0014-01RE1 A
Preparation Batch: BJL0039 Sample Size: 10 mL
Prepared: 12/01/2021 Final Volume: 10 mL

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Chloride	16887-00-6	5	0.500	0.500	24.4	mg/L	D

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Sulfate	14808-79-8	5	0.500	0.500	25.3	mg/L	D



Fremont Analytical
3600 Fremont Avenue N.
Seattle WA, 98103

Project: Anions
Project Number: 2111568
Project Manager: Brianna Barnes

Reported:
13-Dec-2021 18:33

MW-142-113021
21L0014-02 (Water)

Wet Chemistry

Method: EPA 300.0

Sampled: 11/30/2021 01:00

Instrument: IC930 Analyst: BF

Analyzed: 12/01/2021 21:37

Analysis by: Analytical Resources, LLC

Sample Preparation: Preparation Method: No Prep Wet Chem
Preparation Batch: BJL0039
Prepared: 12/01/2021

Sample Size: 10 mL
Final Volume: 10 mL

Extract ID: 21L0014-02 A

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Nitrate-N	14797-55-8	1	0.100	0.100	ND	mg/L	U



Fremont Analytical
3600 Fremont Avenue N.
Seattle WA, 98103

Project: Anions
Project Number: 2111568
Project Manager: Brianna Barnes

Reported:
13-Dec-2021 18:33

MW-142-113021
21L0014-02RE1 (Water)

Wet Chemistry

Method: EPA 300.0

Sampled: 11/30/2021 01:00

Instrument: IC930 Analyst: BF

Analyzed: 12/12/2021 15:24

Analysis by: Analytical Resources, LLC

Sample Preparation:

Preparation Method: No Prep Wet Chem
Preparation Batch: BJL0039
Prepared: 12/01/2021

Sample Size: 10 mL
Final Volume: 10 mL

Extract ID: 21L0014-02RE1 A

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Chloride	16887-00-6	10	1.00	1.00	12.0	mg/L	D

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Sulfate	14808-79-8	10	1.00	1.00	62.5	mg/L	D



Fremont Analytical 3600 Fremont Avenue N. Seattle WA, 98103	Project: Anions Project Number: 2111568 Project Manager: Brianna Barnes	Reported: 13-Dec-2021 18:33
---	---	---------------------------------------

MW-190-113021
21L0014-03 (Water)

Wet Chemistry

Method: EPA 300.0 Sampled: 11/30/2021 12:15
Instrument: IC930 Analyst: BF Analyzed: 12/01/2021 22:17

Analysis by: Analytical Resources, LLC

Sample Preparation: Preparation Method: No Prep Wet Chem Extract ID: 21L0014-03 A
Preparation Batch: BJL0039 Sample Size: 10 mL
Prepared: 12/01/2021 Final Volume: 10 mL

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Nitrate-N	14797-55-8	1	0.100	0.100	ND	mg/L	U



Fremont Analytical 3600 Fremont Avenue N. Seattle WA, 98103	Project: Anions Project Number: 2111568 Project Manager: Brianna Barnes	Reported: 13-Dec-2021 18:33
---	---	---------------------------------------

MW-190-113021
21L0014-03RE1 (Water)

Wet Chemistry

Method: EPA 300.0 Sampled: 11/30/2021 12:15
Instrument: IC930 Analyst: BF Analyzed: 12/12/2021 15:44

Analysis by: Analytical Resources, LLC

Sample Preparation: Preparation Method: No Prep Wet Chem Extract ID: 21L0014-03RE1 A
Preparation Batch: BJL0039 Sample Size: 10 mL
Prepared: 12/01/2021 Final Volume: 10 mL

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Chloride	16887-00-6	10	1.00	1.00	11.9	mg/L	D

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Sulfate	14808-79-8	10	1.00	1.00	39.6	mg/L	D



Fremont Analytical 3600 Fremont Avenue N. Seattle WA, 98103	Project: Anions Project Number: 2111568 Project Manager: Brianna Barnes	Reported: 13-Dec-2021 18:33
---	---	---------------------------------------

MW102-113021
21L0014-04 (Water)

Wet Chemistry

Method: EPA 300.0 Sampled: 11/30/2021 10:10
Instrument: IC930 Analyst: BF Analyzed: 12/01/2021 22:37

Analysis by: Analytical Resources, LLC

Sample Preparation: Preparation Method: No Prep Wet Chem Extract ID: 21L0014-04 A
Preparation Batch: BJL0039 Sample Size: 10 mL
Prepared: 12/01/2021 Final Volume: 10 mL

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Chloride	16887-00-6	1	0.100	0.100	4.77	mg/L	

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Nitrate-N	14797-55-8	1	0.100	0.100	ND	mg/L	U

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Sulfate	14808-79-8	1	0.100	0.100	2.09	mg/L	



Fremont Analytical
3600 Fremont Avenue N.
Seattle WA, 98103

Project: Anions
Project Number: 2111568
Project Manager: Brianna Barnes

Reported:
13-Dec-2021 18:33

MW-189-113021
21L0014-05 (Water)

Wet Chemistry

Method: EPA 300.0

Sampled: 11/30/2021 14:40

Instrument: IC930 Analyst: BF

Analyzed: 12/01/2021 22:57

Analysis by: Analytical Resources, LLC

Sample Preparation:

Preparation Method: No Prep Wet Chem

Extract ID: 21L0014-05 A

Preparation Batch: BJL0039

Sample Size: 10 mL

Prepared: 12/01/2021

Final Volume: 10 mL

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Nitrate-N	14797-55-8	1	0.100	0.100	ND	mg/L	U



Fremont Analytical 3600 Fremont Avenue N. Seattle WA, 98103	Project: Anions Project Number: 2111568 Project Manager: Brianna Barnes	Reported: 13-Dec-2021 18:33
---	---	---------------------------------------

MW-189-113021
21L0014-05RE1 (Water)

Wet Chemistry

Method: EPA 300.0 Sampled: 11/30/2021 14:40
Instrument: IC930 Analyst: BF Analyzed: 12/12/2021 16:04

Analysis by: Analytical Resources, LLC

Sample Preparation: Preparation Method: No Prep Wet Chem Extract ID: 21L0014-05RE1 A
Preparation Batch: B JL0039 Sample Size: 10 mL
Prepared: 12/01/2021 Final Volume: 10 mL

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Chloride	16887-00-6	10	1.00	1.00	17.2	mg/L	D

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Sulfate	14808-79-8	10	1.00	1.00	44.4	mg/L	D



Fremont Analytical 3600 Fremont Avenue N. Seattle WA, 98103	Project: Anions Project Number: 2111568 Project Manager: Brianna Barnes	Reported: 13-Dec-2021 18:33
---	---	---------------------------------------

Analysis by: Analytical Resources, LLC

Wet Chemistry - Quality Control

Batch BJL0039 - No Prep Wet Chem

Instrument: IC930 Analyst: BF

QC Sample/Analyte	Result	Detection Limit	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Blank (BJL0039-BLK1)						Prepared: 01-Dec-2021 Analyzed: 02-Dec-2021 02:37					
Chloride	ND	0.100	0.100	mg/L							U
Nitrate-N	ND	0.100	0.100	mg/L							U
Sulfate	ND	0.100	0.100	mg/L							U
LCS (BJL0039-BS1)						Prepared: 01-Dec-2021 Analyzed: 02-Dec-2021 02:57					
Chloride	4.78	0.100	0.100	mg/L	5.00		95.6	90-110			
Nitrate-N	5.01	0.100	0.100	mg/L	5.00		100	90-110			
Sulfate	5.01	0.100	0.100	mg/L	5.00		100	90-110			



Fremont Analytical 3600 Fremont Avenue N. Seattle WA, 98103	Project: Anions Project Number: 2111568 Project Manager: Brianna Barnes	Reported: 13-Dec-2021 18:33
---	---	---------------------------------------

Certified Analyses included in this Report

Analyte	Certifications
EPA 300.0 in Water	
Chloride	DoD-ELAP,WADOE,WA-DW,NELAP
Nitrate-N	DoD-ELAP,WADOE,WA-DW,NELAP
Sulfate	DoD-ELAP,WADOE,WA-DW,NELAP

Code	Description	Number	Expires
ADEC	Alaska Dept of Environmental Conservation	17-015	03/28/2023
DoD-ELAP	DoD-Environmental Laboratory Accreditation Program	66169	02/28/2022
NELAP	ORELAP - Oregon Laboratory Accreditation Program	WA100006-012	05/12/2022
WADOE	WA Dept of Ecology	C558	06/30/2022
WA-DW	Ecology - Drinking Water	C558	06/30/2022



Fremont Analytical
3600 Fremont Avenue N.
Seattle WA, 98103

Project: Anions
Project Number: 2111568
Project Manager: Brianna Barnes

Reported:
13-Dec-2021 18:33

Notes and Definitions

- D The reported value is from a dilution
- U This analyte is not detected above the reporting limit (RL) or if noted, not detected above the limit of detection (LOD).
- DET Analyte DETECTED
- ND Analyte NOT DETECTED at or above the reporting limit
- NR Not Reported
- dry Sample results reported on a dry weight basis
- RPD Relative Percent Difference
- [2C] Indicates this result was quantified on the second column on a dual column analysis.

Client Name: **PES**
 Logged by: **Clare Griggs**

Work Order Number: **2111568**
 Date Received: **11/30/2021 4:18:00 PM**

Chain of Custody

1. Is Chain of Custody complete? Yes No Not Present
 2. How was the sample delivered? Client

Log In

3. Coolers are present? Yes No NA
 4. Shipping container/cooler in good condition? Yes No
 5. Custody Seals present on shipping container/cooler?
 (Refer to comments for Custody Seals not intact) Yes No Not Present
 6. Was an attempt made to cool the samples? Yes No NA
 7. Were all items received at a temperature of >2°C to 6°C * Yes No NA
 8. Sample(s) in proper container(s)? Yes No
 9. Sufficient sample volume for indicated test(s)? Yes No
 10. Are samples properly preserved? Yes No
 11. Was preservative added to bottles? Yes No NA
 12. Is there headspace in the VOA vials? Yes No NA
 13. Did all samples containers arrive in good condition(unbroken)? Yes No
 14. Does paperwork match bottle labels? Yes No
 15. Are matrices correctly identified on Chain of Custody? Yes No
 16. Is it clear what analyses were requested? Yes No
 17. Were all holding times able to be met? Yes No

Special Handling (if applicable)

18. Was client notified of all discrepancies with this order? Yes No NA

Person Notified:	<input type="text"/>	Date:	<input type="text"/>
By Whom:	<input type="text"/>	Via:	<input type="checkbox"/> eMail <input type="checkbox"/> Phone <input type="checkbox"/> Fax <input type="checkbox"/> In Person
Regarding:	<input type="text"/>		
Client Instructions:	<input type="text"/>		

19. Additional remarks:

Item Information

Item #	Temp °C
Sample	4.5

* Note: DoD/ELAP and TNI require items to be received at 4°C +/- 2°C



13 December 2021

Brianna Barnes
Fremont Analytical
3600 Fremont Avenue N.
Seattle, WA 98103

RE: Anions

Please find enclosed sample receipt documentation and analytical results for samples from the project referenced above.

Sample analyses were performed according to ARI's Quality Assurance Plan and any provided project specific Quality Assurance Plan. Each analytical section of this report has been approved and reviewed by an analytical peer, the appropriate Laboratory Supervisor or qualified substitute, and a technical reviewer.

Should you have any questions or problems, please feel free to contact us at your convenience.

Associated Work Order(s)
21L0014

Associated SDG ID(s)
N/A

Digitally signed by Shelly Fishel
Date: 2021.12.13 18:36:50 -08'00'

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed in the enclose Narrative. ARI, an accredited laboratory, certifies that the report results for which ARI is accredited meets all the requirements of the accrediting body. A list of certified analyses, accreditations, and expiration dates is included in this report.

Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or his/her designee, as verified by the following signature.

Analytical Resources, LLC

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Shelly Fishel, Project Manager





CHAIN OF CUSTODY RECORD

Omega COCID 1217

PAGE: 1 OF: 1

ADDRESS

Fremont Analytical, Inc.
 3600 Fremont Ave. N.
 Seattle, WA 98103
 TEL: 206-352-3790
 FAX: 206-352-7178

Website: www.fremontanalytical.com

ARI WO: 21L0014

SUB CONTRACTOR: ARI		COMPANY: Analytical Resources Inc.		SPECIAL INSTRUCTIONS / COMMENTS:					
ADDRESS: 4611 South 134th Place, Suite 100		Nitrate, Chloride, Sulfate. Standard TAT. Please email results to Brianna Barnes at bbarnes@fremontanalytical.com and Matt Langston at mlangston@fremontanalytical.com.							
CITY, STATE, ZIP: Tukwila, WA 98168									
PHONE: (206) 695-6200	FAX:					EMAIL:			
ACCOUNT #:									

ITEM #	SAMPLE ID	CLIENT SAMPLE ID	BOTTLE TYPE	MATRIX	DATE COLLECTED	NUMBER OF CONTAINERS	COMMENTS: Methanol Preserved Weights HOT Sample Notation, Additional Sample Description.
1	2111568-001A	MW-145R-113021	250 HDPE NON	Groundwater	11/30/2021 9:55:00 AM	1	Nitrate, Chloride, Sulfate
	C-IC-ANIONS						
2	2111568-002A	MW-142-113021	250 HDPE NON	Groundwater	11/30/2021 1:00:00 PM	1	Nitrate, Chloride, Sulfate
	C-IC-ANIONS						
3	2111568-003A	MW-190-113021	250 HDPE NON	Groundwater	11/30/2021 12:15:00 PM	1	Nitrate, Chloride, Sulfate
	C-IC-ANIONS						
4	2111568-004A	MW102-113021	250 HDPE NON	Groundwater	11/30/2021 10:10:00 AM	1	Nitrate, Chloride, Sulfate
	C-IC-ANIONS						
5	2111568-005A	MW-189-113021	250 HDPE NON	Groundwater	11/30/2021 2:40:00 PM	1	Nitrate, Chloride, Sulfate
	C-IC-ANIONS						

Relinquished By: <i>Justine Maritz</i>	Date: <i>12/1</i>	Time: <i>8:30</i>	Received By: <i>[Signature]</i>	Date: <i>12/13/21</i>	Time: <i>8:52</i>	REPORT TRANSMITTAL DESIRED:	
Relinquished By:	Date:	Time:	Received By:	Date:	Time:	<input type="checkbox"/> HARDCOPY (extra cost)	<input type="checkbox"/> FAX
Relinquished By:	Date:	Time:	Received By:	Date:	Time:	<input type="checkbox"/> EMAIL	<input type="checkbox"/> ONLINE
TAT: Standard <input type="checkbox"/> RUSH <input type="checkbox"/> Next BD <input type="checkbox"/> 2nd BD <input type="checkbox"/> 3rd BD <input type="checkbox"/>						FOR LAB USE ONLY	
Note: RUSH requests will incur surcharges!						Temp of samples _____ °C Attempt to Cool? _____	
						Comments: _____	



Fremont Analytical
3600 Fremont Avenue N.
Seattle WA, 98103

Project: Anions
Project Number: 2111568
Project Manager: Brianna Barnes

Reported:
13-Dec-2021 18:33

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW-145R-113021	21L0014-01	Water	30-Nov-2021 09:55	01-Dec-2021 12:52
MW-142-113021	21L0014-02	Water	30-Nov-2021 01:00	01-Dec-2021 12:52
MW-190-113021	21L0014-03	Water	30-Nov-2021 12:15	01-Dec-2021 12:52
MW102-113021	21L0014-04	Water	30-Nov-2021 10:10	01-Dec-2021 12:52
MW-189-113021	21L0014-05	Water	30-Nov-2021 14:40	01-Dec-2021 12:52



Fremont Analytical
3600 Fremont Avenue N.
Seattle WA, 98103

Project: Anions
Project Number: 2111568
Project Manager: Brianna Barnes

Reported:
13-Dec-2021 18:33

Work Order Case Narrative

Client: Fremont Analytical
Project: Anions
Work Order: 21L0014

Sample receipt

Samples as listed on the preceding page were received 01-Dec-2021 12:52 under ARI work order 21L0014. For details regarding sample receipt, please refer to the Cooler Receipt Form.

Wet Chemistry

The sample(s) were prepared and analyzed within the recommended holding times.

Initial and continuing calibrations were within method requirements.

The method blank(s) were clean at the reporting limits.

The blank spike (BS/LCS) percent recoveries were within control limits.



Cooler Receipt Form

ARI Client: Fremont

Project Name: LB 12/1/21
~~2111500~~ 2111508

COC No(s): 1217

Delivered by: Fed-Ex UPS Courier Hand Delivered Other: _____

Assigned ARI Job No: 21L0014

Tracking No: _____ NA

Preliminary Examination Phase:

Were intact, properly signed and dated custody seals attached to the outside of the cooler? _____

YES NO
YES NO
YES NO

Were custody papers included with the cooler? _____

Were custody papers properly filled out (ink, signed, etc.) _____

Temperature of Cooler(s) (°C) (recommended 2.0-6.0 °C for chemistry) _____

Time 12:52

5.1

If cooler temperature is out of compliance fill out form 00070F

Temp Gun ID#: DOO 9708

Cooler Accepted by: LN

Date: 12/1/21

Time: 12:52

Complete custody forms and attach all shipping documents

Log-In Phase:

Was a temperature blank included in the cooler? _____

YES NO

What kind of packing material was used? ... Bubble Wrap Wet Ice Gel Packs Baggies Foam Block Paper Other: _____

Was sufficient ice used (if appropriate)? _____

NA YES NO

How were bottles sealed in plastic bags? _____

Individually Grouped Not

Did all bottles arrive in good condition (unbroken)? _____

YES NO

Were all bottle labels complete and legible? _____

YES NO

Did the number of containers listed on COC match with the number of containers received? _____

YES NO

Did all bottle labels and tags agree with custody papers? _____

YES NO

Were all bottles used correct for the requested analyses? _____

YES NO

Do any of the analyses (bottles) require preservation? (attach preservation sheet, excluding VOCs) ...

NA YES NO

Were all VOC vials free of air bubbles? _____

NA YES NO

Was sufficient amount of sample sent in each bottle? _____

YES NO

Date VOC Trip Blank was made at ARI _____

NA

Were the sample(s) split by ARI? NA

NA

YES

Date/Time: _____

Equipment: _____

Split by: _____

Samples Logged by: LN

Date: 12/1/21

Time: 15:08

Labels checked by: 15:43 LB 12/1/21

**** Notify Project Manager of discrepancies or concerns ****

Sample ID on Bottle	Sample ID on COC	Sample ID on Bottle	Sample ID on COC

Additional Notes, Discrepancies, & Resolutions:

By: _____ Date: _____



Fremont Analytical 3600 Fremont Avenue N. Seattle WA, 98103	Project: Anions Project Number: 2111568 Project Manager: Brianna Barnes	Reported: 13-Dec-2021 18:33
---	---	---------------------------------------

MW-145R-113021
21L0014-01 (Water)

Wet Chemistry

Method: EPA 300.0 Sampled: 11/30/2021 09:55
Instrument: IC930 Analyst: BF Analyzed: 12/01/2021 21:57

Analysis by: Analytical Resources, LLC

Sample Preparation: Preparation Method: No Prep Wet Chem Extract ID: 21L0014-01 A
Preparation Batch: BJL0039 Sample Size: 10 mL
Prepared: 12/01/2021 Final Volume: 10 mL

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Nitrate-N	14797-55-8	1	0.100	0.100	ND	mg/L	U



Fremont Analytical 3600 Fremont Avenue N. Seattle WA, 98103	Project: Anions Project Number: 2111568 Project Manager: Brianna Barnes	Reported: 13-Dec-2021 18:33
---	---	---------------------------------------

MW-145R-113021
21L0014-01RE1 (Water)

Wet Chemistry

Method: EPA 300.0 Sampled: 11/30/2021 09:55
Instrument: IC930 Analyst: BF Analyzed: 12/12/2021 14:24

Analysis by: Analytical Resources, LLC

Sample Preparation: Preparation Method: No Prep Wet Chem Extract ID: 21L0014-01RE1 A
Preparation Batch: BJL0039 Sample Size: 10 mL
Prepared: 12/01/2021 Final Volume: 10 mL

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Chloride	16887-00-6	5	0.500	0.500	24.4	mg/L	D

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Sulfate	14808-79-8	5	0.500	0.500	25.3	mg/L	D



Fremont Analytical
3600 Fremont Avenue N.
Seattle WA, 98103

Project: Anions
Project Number: 2111568
Project Manager: Brianna Barnes

Reported:
13-Dec-2021 18:33

MW-142-113021
21L0014-02 (Water)

Wet Chemistry

Method: EPA 300.0

Sampled: 11/30/2021 01:00

Instrument: IC930 Analyst: BF

Analyzed: 12/01/2021 21:37

Analysis by: Analytical Resources, LLC

Sample Preparation: Preparation Method: No Prep Wet Chem
Preparation Batch: BJL0039
Prepared: 12/01/2021

Sample Size: 10 mL
Final Volume: 10 mL

Extract ID: 21L0014-02 A

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Nitrate-N	14797-55-8	1	0.100	0.100	ND	mg/L	U



Fremont Analytical
3600 Fremont Avenue N.
Seattle WA, 98103

Project: Anions
Project Number: 2111568
Project Manager: Brianna Barnes

Reported:
13-Dec-2021 18:33

MW-142-113021
21L0014-02RE1 (Water)

Wet Chemistry

Method: EPA 300.0

Sampled: 11/30/2021 01:00

Instrument: IC930 Analyst: BF

Analyzed: 12/12/2021 15:24

Analysis by: Analytical Resources, LLC

Sample Preparation:

Preparation Method: No Prep Wet Chem

Extract ID: 21L0014-02RE1 A

Preparation Batch: B JL0039

Sample Size: 10 mL

Prepared: 12/01/2021

Final Volume: 10 mL

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Chloride	16887-00-6	10	1.00	1.00	12.0	mg/L	D

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Sulfate	14808-79-8	10	1.00	1.00	62.5	mg/L	D



Fremont Analytical 3600 Fremont Avenue N. Seattle WA, 98103	Project: Anions Project Number: 2111568 Project Manager: Brianna Barnes	Reported: 13-Dec-2021 18:33
---	---	---------------------------------------

MW-190-113021
21L0014-03 (Water)

Wet Chemistry

Method: EPA 300.0 Sampled: 11/30/2021 12:15
Instrument: IC930 Analyst: BF Analyzed: 12/01/2021 22:17

Analysis by: Analytical Resources, LLC

Sample Preparation: Preparation Method: No Prep Wet Chem Extract ID: 21L0014-03 A
Preparation Batch: B JL0039 Sample Size: 10 mL
Prepared: 12/01/2021 Final Volume: 10 mL

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Nitrate-N	14797-55-8	1	0.100	0.100	ND	mg/L	U



Fremont Analytical 3600 Fremont Avenue N. Seattle WA, 98103	Project: Anions Project Number: 2111568 Project Manager: Brianna Barnes	Reported: 13-Dec-2021 18:33
---	---	---------------------------------------

MW-190-113021
21L0014-03RE1 (Water)

Wet Chemistry

Method: EPA 300.0 Sampled: 11/30/2021 12:15
Instrument: IC930 Analyst: BF Analyzed: 12/12/2021 15:44

Analysis by: Analytical Resources, LLC

Sample Preparation: Preparation Method: No Prep Wet Chem Extract ID: 21L0014-03RE1 A
Preparation Batch: B JL0039 Sample Size: 10 mL
Prepared: 12/01/2021 Final Volume: 10 mL

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Chloride	16887-00-6	10	1.00	1.00	11.9	mg/L	D

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Sulfate	14808-79-8	10	1.00	1.00	39.6	mg/L	D



Fremont Analytical 3600 Fremont Avenue N. Seattle WA, 98103	Project: Anions Project Number: 2111568 Project Manager: Brianna Barnes	Reported: 13-Dec-2021 18:33
---	---	---------------------------------------

MW102-113021
21L0014-04 (Water)

Wet Chemistry

Method: EPA 300.0 Sampled: 11/30/2021 10:10
Instrument: IC930 Analyst: BF Analyzed: 12/01/2021 22:37

Analysis by: Analytical Resources, LLC

Sample Preparation: Preparation Method: No Prep Wet Chem Extract ID: 21L0014-04 A
Preparation Batch: BJL0039 Sample Size: 10 mL
Prepared: 12/01/2021 Final Volume: 10 mL

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Chloride	16887-00-6	1	0.100	0.100	4.77	mg/L	

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Nitrate-N	14797-55-8	1	0.100	0.100	ND	mg/L	U

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Sulfate	14808-79-8	1	0.100	0.100	2.09	mg/L	



Fremont Analytical 3600 Fremont Avenue N. Seattle WA, 98103	Project: Anions Project Number: 2111568 Project Manager: Brianna Barnes	Reported: 13-Dec-2021 18:33
---	---	---------------------------------------

MW-189-113021
21L0014-05 (Water)

Wet Chemistry

Method: EPA 300.0 Sampled: 11/30/2021 14:40
Instrument: IC930 Analyst: BF Analyzed: 12/01/2021 22:57

Analysis by: Analytical Resources, LLC

Sample Preparation: Preparation Method: No Prep Wet Chem Extract ID: 21L0014-05 A
Preparation Batch: BJL0039 Sample Size: 10 mL
Prepared: 12/01/2021 Final Volume: 10 mL

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Nitrate-N	14797-55-8	1	0.100	0.100	ND	mg/L	U



Fremont Analytical 3600 Fremont Avenue N. Seattle WA, 98103	Project: Anions Project Number: 2111568 Project Manager: Brianna Barnes	Reported: 13-Dec-2021 18:33
---	---	---------------------------------------

MW-189-113021
21L0014-05RE1 (Water)

Wet Chemistry

Method: EPA 300.0 Sampled: 11/30/2021 14:40
Instrument: IC930 Analyst: BF Analyzed: 12/12/2021 16:04

Analysis by: Analytical Resources, LLC

Sample Preparation: Preparation Method: No Prep Wet Chem Extract ID: 21L0014-05RE1 A
Preparation Batch: B JL0039 Sample Size: 10 mL
Prepared: 12/01/2021 Final Volume: 10 mL

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Chloride	16887-00-6	10	1.00	1.00	17.2	mg/L	D

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Sulfate	14808-79-8	10	1.00	1.00	44.4	mg/L	D



Fremont Analytical
3600 Fremont Avenue N.
Seattle WA, 98103

Project: Anions
Project Number: 2111568
Project Manager: Brianna Barnes

Reported:
13-Dec-2021 18:33

Analysis by: Analytical Resources, LLC

Wet Chemistry - Quality Control

Batch BJL0039 - No Prep Wet Chem

Instrument: IC930 Analyst: BF

QC Sample/Analyte	Result	Detection Limit	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Blank (BJL0039-BLK1)						Prepared: 01-Dec-2021 Analyzed: 02-Dec-2021 02:37					
Chloride	ND	0.100	0.100	mg/L							U
Nitrate-N	ND	0.100	0.100	mg/L							U
Sulfate	ND	0.100	0.100	mg/L							U
LCS (BJL0039-BS1)						Prepared: 01-Dec-2021 Analyzed: 02-Dec-2021 02:57					
Chloride	4.78	0.100	0.100	mg/L	5.00		95.6	90-110			
Nitrate-N	5.01	0.100	0.100	mg/L	5.00		100	90-110			
Sulfate	5.01	0.100	0.100	mg/L	5.00		100	90-110			



Fremont Analytical
3600 Fremont Avenue N.
Seattle WA, 98103

Project: Anions
Project Number: 2111568
Project Manager: Brianna Barnes

Reported:
13-Dec-2021 18:33

Certified Analyses included in this Report

Analyte	Certifications
EPA 300.0 in Water	
Chloride	DoD-ELAP,WADOE,WA-DW,NELAP
Nitrate-N	DoD-ELAP,WADOE,WA-DW,NELAP
Sulfate	DoD-ELAP,WADOE,WA-DW,NELAP

Code	Description	Number	Expires
ADEC	Alaska Dept of Environmental Conservation	17-015	03/28/2023
DoD-ELAP	DoD-Environmental Laboratory Accreditation Program	66169	02/28/2022
NELAP	ORELAP - Oregon Laboratory Accreditation Program	WA100006-012	05/12/2022
WADOE	WA Dept of Ecology	C558	06/30/2022
WA-DW	Ecology - Drinking Water	C558	06/30/2022



Fremont Analytical
3600 Fremont Avenue N.
Seattle WA, 98103

Project: Anions
Project Number: 2111568
Project Manager: Brianna Barnes

Reported:
13-Dec-2021 18:33

Notes and Definitions

- D The reported value is from a dilution
- U This analyte is not detected above the reporting limit (RL) or if noted, not detected above the limit of detection (LOD).
- DET Analyte DETECTED
- ND Analyte NOT DETECTED at or above the reporting limit
- NR Not Reported
- dry Sample results reported on a dry weight basis
- RPD Relative Percent Difference
- [2C] Indicates this result was quantified on the second column on a dual column analysis.



3600 Fremont Ave. N.
Seattle, WA 98103
T: (206) 352-3790
F: (206) 352-7178
info@fremontanalytical.com

PES Environmental, Inc.
Brian O'Neal
2101 Fourth Avenue, Suite 1310
Seattle, WA 98121

RE: ALS
Work Order Number: 2112044

December 21, 2021

Attention Brian O'Neal:

Fremont Analytical, Inc. received 11 sample(s) on 12/2/2021 for the analyses presented in the following report.

Ion Chromatography by EPA Method 300.0

This report consists of the following:

- Case Narrative
- Analytical Results
- Applicable Quality Control Summary Reports
- Chain of Custody

All analyses were performed consistent with the Quality Assurance program of Fremont Analytical, Inc. Please contact the laboratory if you should have any questions about the results.

Thank you for using Fremont Analytical.

Sincerely,

A handwritten signature in blue ink, appearing to read "Brianna Barnes".

Brianna Barnes
Project Manager

*DoD-ELAP Accreditation #79636 by PJLA, ISO/IEC 17025:2017 and QSM 5.3 for Environmental Testing
ORELAP Certification: WA 100009 (NELAP Recognized) for Environmental Testing
Washington State Department of Ecology Accredited for Environmental Testing, Lab ID C910*

Original



Date: 12/21/2021

CLIENT: PES Environmental, Inc.
Project: ALS
Work Order: 2112044

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Date/Time Collected	Date/Time Received
2112044-001	MW-168-120221	12/02/2021 10:10 AM	12/02/2021 4:28 PM
2112044-002	MW-167-120221	12/02/2021 11:50 AM	12/02/2021 4:28 PM
2112044-003	MW-165-120221	12/02/2021 12:35 PM	12/02/2021 4:28 PM
2112044-004	MW-166-120221	12/02/2021 2:15 PM	12/02/2021 4:28 PM
2112044-005	MW-174-120221	12/02/2021 10:30 AM	12/02/2021 4:28 PM
2112044-006	MW-175-120221	12/02/2021 12:05 PM	12/02/2021 4:28 PM
2112044-007	MW-173-120221	12/02/2021 12:55 PM	12/02/2021 4:28 PM
2112044-008	MW-176-120221	12/02/2021 3:00 PM	12/02/2021 4:28 PM
2112044-009	MW-155-120221	12/02/2021 10:27 AM	12/02/2021 4:28 PM
2112044-010	MW-159-120221	12/02/2021 12:15 PM	12/02/2021 4:28 PM
2112044-011	MW-301-120221	12/02/2021 2:30 PM	12/02/2021 4:28 PM

Note: If no "Time Collected" is supplied, a default of 12:00AM is assigned

CLIENT: PES Environmental, Inc.
Project: ALS

I. SAMPLE RECEIPT:

Samples receipt information is recorded on the attached Sample Receipt Checklist.

II. GENERAL REPORTING COMMENTS:

Results are reported on a wet weight basis unless dry-weight correction is denoted in the units field on the analytical report ("mg/kg-dry" or "ug/kg-dry").

Matrix Spike (MS) and MS Duplicate (MSD) samples are tested from an analytical batch of "like" matrix to check for possible matrix effect. The MS and MSD will provide site specific matrix data only for those samples which are spiked by the laboratory. The sample chosen for spike purposes may or may not have been a sample submitted in this sample delivery group. The validity of the analytical procedures for which data is reported in this analytical report is determined by the Laboratory Control Sample (LCS) and the Method Blank (MB). The LCS and the MB are processed with the samples and the MS/MSD to ensure method criteria are achieved throughout the entire analytical process.

III. ANALYSES AND EXCEPTIONS:

Exceptions associated with this report will be footnoted in the analytical results page(s) or the quality control summary page(s) and/or noted below.

Anions by EPA 300.0 have been subcontracted due to instrument delays.



16 December 2021

Brianna Barnes
Fremont Analytical
3600 Fremont Avenue N.
Seattle, WA 98103

RE: Anions

Please find enclosed sample receipt documentation and analytical results for samples from the project referenced above.

Sample analyses were performed according to ARI's Quality Assurance Plan and any provided project specific Quality Assurance Plan. Each analytical section of this report has been approved and reviewed by an analytical peer, the appropriate Laboratory Supervisor or qualified substitute, and a technical reviewer.

Should you have any questions or problems, please feel free to contact us at your convenience.

Associated Work Order(s)
21L0052

Associated SDG ID(s)
N/A

Digitally signed by
Shelly Fishel
Date: 2021.12.16
18:52:10 -08'00'

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed in the enclose Narrative. ARI, an accredited laboratory, certifies that the report results for which ARI is accredited meets all the requirements of the accrediting body. A list of certified analyses, accreditations, and expiration dates is included in this report.

Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or his/her designee, as verified by the following signature.

Analytical Resources, LLC

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Shelly Fishel, Project Manager





CHAIN OF CUSTODY RECORD

Omega COCID 1228

PAGE: 1 OF: 2

ADDRESS

Fremont Analytical, Inc.
 3600 Fremont Ave. N.
 Seattle, WA 98103
 TEL: 206-352-3790
 FAX: 206-352-7178
 Website: www.fremontanalytical.com

ARI Job #: 21L0052

SUB CONTRACTOR: ARI		COMPANY: Analytical Resources Inc.		SPECIAL INSTRUCTIONS / COMMENTS:					
ADDRESS: 4611 South 134th Place, Suite 100		Standard TAT. Please email results to Brianna Barnes at bbarnes@fremontanalytical.com and Matt Langston at mlangston@fremontanalytical.com.							
CITY, STATE, ZIP: Tukwila, WA 98168									
PHONE: (206) 695-6200	FAX:					EMAIL:			
ACCOUNT #:									

ITEM #	SAMPLE ID	CLIENT SAMPLE ID	BOTTLE TYPE	MATRIX	DATE COLLECTED	NUMBER OF CONTAINERS	COMMENTS: Methanol Preserved Weights HOT Sample Notation, Additional Sample Description.
1	2112044-001A	MW-168-120221	250 HDPE NON	Groundwater	12/2/2021 10:10:00 AM	1	Nitrate, Chloride, Sulfate
	C-IC-ANIONS, PREP-IC-ANIONS						
2	2112044-002A	MW-167-120221	250 HDPE NON	Groundwater	12/2/2021 11:50:00 AM	1	Nitrate, Chloride, Sulfate
	C-IC-ANIONS, PREP-IC-ANIONS						
3	2112044-003A	MW-165-120221	250 HDPE NON	Groundwater	12/2/2021 12:35:00 PM	1	Nitrate, Chloride, Sulfate
	C-IC-ANIONS, PREP-IC-ANIONS						
4	2112044-004A	MW-166-120221	250 HDPE NON	Groundwater	12/2/2021 2:15:00 PM	1	Nitrate, Chloride, Sulfate
	C-IC-ANIONS, PREP-IC-ANIONS						
5	2112044-005A	MW-174-120221	250 HDPE NON	Groundwater	12/2/2021 10:30:00 AM	1	Nitrate, Chloride, Sulfate
	C-IC-ANIONS, PREP-IC-ANIONS						
6	2112044-006A	MW-175-120221	250 HDPE NON	Groundwater	12/2/2021 12:05:00 PM	1	Nitrate, Chloride, Sulfate
	C-IC-ANIONS, PREP-IC-ANIONS						
7	2112044-007A	MW-173-120221	250 HDPE NON	Groundwater	12/2/2021 12:55:00 PM	1	Nitrate, Chloride, Sulfate
	C-IC-ANIONS, PREP-IC-ANIONS						
8	2112044-008A	MW-176-120221	250 HDPE NON	Groundwater	12/2/2021 3:00:00 PM	1	Nitrate, Chloride, Sulfate
	C-IC-ANIONS, PREP-IC-ANIONS						
9	2112044-009A	MW-155-120221	250 HDPE NON	Groundwater	12/2/2021 10:27:00 AM	1	Nitrate, Chloride, Sulfate
	C-IC-ANIONS, PREP-IC-ANIONS						

Relinquished By: <i>gley drey</i>	Date: 12/13/21	Time: 9:05	Received By: <i>Blaine</i>	Date: 12/13/21	Time: 11:10
Relinquished By:	Date:	Time:	Received By:	Date:	Time:
Relinquished By:	Date:	Time:	Received By:	Date:	Time:

REPORT TRANSMITTAL DESIRED:

HARDCOPY (extra cost) FAX EMAIL ONLINE

FOR LAB USE ONLY

Temp of samples _____ °C Attempt to Cool? _____

Comments: _____

TAT: Standard RUSH Next BD 2nd BD 3rd BD

Note: RUSH requests will incur surcharges!



CHAIN OF CUSTODY RECORD

Omega COCID 1228

PAGE: 2 OF: 2

ADDRESS

Fremont Analytical, Inc.
3600 Fremont Ave. N.
Seattle, WA 98103
TEL: 206-352-3790
FAX: 206-352-7178

Website: www.fremontanalytical.com

ARI Job #: 21L0052

SUB CONTRACTOR: ARI	COMPANY: Analytical Resources Inc.	SPECIAL INSTRUCTIONS / COMMENTS: Standard TAT. Please email results to Brianna Barnes at bbarnes@fremontanalytical.com and Matt Langston at mlangston@fremontanalytical.com.
ADDRESS: 4611 South 134th Place, Suite 100		
CITY, STATE, ZIP: Tukwila, WA 98168		
PHONE: (206) 695-6200	FAX: _____ EMAIL: _____	
ACCOUNT #: _____		

ITEM #	SAMPLE ID	CLIENT SAMPLE ID	BOTTLE TYPE	MATRIX	DATE COLLECTED	NUMBER OF CONTAINERS	COMMENTS: Methanol Preserved Weights HOT Sample Notation, Additional Sample Description.
10	2112044-010A	MW-159-120221	250 HDPE NON	Groundwater	12/2/2021 12:15:00 PM	1	Nitrate, Chloride, Sulfate
	C-IC-ANIONS, PREP-IC-ANIONS						
11	2112044-011A	MW-301-120221	250 HDPE NON	Groundwater	12/2/2021 2:30:00 PM	1	Nitrate, Chloride, Sulfate
	C-IC-ANIONS, PREP-IC-ANIONS						

Relinquished By: <i>[Signature]</i>	Date: 12/03/21	Time: 9:05	Received By: <i>[Signature]</i>	Date: 12/03/21	Time: 11:10
Relinquished By:	Date:	Time:	Received By:	Date:	Time:
Relinquished By:	Date:	Time:	Received By:	Date:	Time:
TAT: Standard <input type="checkbox"/> RUSH <input type="checkbox"/> Next BD <input type="checkbox"/> 2nd BD <input type="checkbox"/> 3rd BD <input type="checkbox"/>					
Note: RUSH requests will incur surcharges!					

REPORT TRANSMITTAL DESIRED:	
<input type="checkbox"/> HARDCOPY (extra cost)	<input type="checkbox"/> FAX <input type="checkbox"/> EMAIL <input type="checkbox"/> ONLINE
FOR LAB USE ONLY	
Temp of samples: _____ °C	Attempt to Cool? _____
Comments: _____	



Fremont Analytical
3600 Fremont Avenue N.
Seattle WA, 98103

Project: Anions
Project Number: 2112044
Project Manager: Brianna Barnes

Reported:
16-Dec-2021 18:49

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW-168-120221	21L0052-01	Water	02-Dec-2021 10:10	03-Dec-2021 11:10
MW-167-120221	21L0052-02	Water	02-Dec-2021 11:50	03-Dec-2021 11:10
MW-165-120221	21L0052-03	Water	02-Dec-2021 12:35	03-Dec-2021 11:10
MW-166-120221	21L0052-04	Water	02-Dec-2021 14:15	03-Dec-2021 11:10
MW-174-120221	21L0052-05	Water	02-Dec-2021 10:30	03-Dec-2021 11:10
MW-175-120221	21L0052-06	Water	02-Dec-2021 12:05	03-Dec-2021 11:10
MW-173-120221	21L0052-07	Water	02-Dec-2021 12:55	03-Dec-2021 11:10
MW-176-120221	21L0052-08	Water	02-Dec-2021 15:00	03-Dec-2021 11:10
MW-155-120221	21L0052-09	Water	02-Dec-2021 10:27	03-Dec-2021 11:10
MW-159-120221	21L0052-10	Water	02-Dec-2021 12:15	03-Dec-2021 11:10
MW-301-120221	21L0052-11	Water	02-Dec-2021 14:30	03-Dec-2021 11:10



Fremont Analytical
3600 Fremont Avenue N.
Seattle WA, 98103

Project: Anions
Project Number: 2112044
Project Manager: Brianna Barnes

Reported:
16-Dec-2021 18:49

Work Order Case Narrative

Client: Fremont Analytical
Project: Anions
Work Order: 21L0052

Sample receipt

Samples as listed on the preceding page were received 03-Dec-2021 11:10 under ARI work order 21L0052. For details regarding sample receipt, please refer to the Cooler Receipt Form.

Wet Chemistry

The sample(s) were prepared and analyzed within the recommended holding times except Nitrate reanalysis. The initial run was performed in hold but due to analyst error calibration verification tube ran dry. The original data has been reported to show that they were run in hold but only reanalysis data should be used.

Initial and continuing calibrations were within method requirements.

The method blank(s) were clean at the reporting limits.

The blank spike (BS/LCS) percent recoveries were within control limits.

The matrix spike (MS) percent recoveries and the duplicate (DUP) relative percent difference (RPD) were within advisory control limits.



Cooler Receipt Form

ARI Client: Fremont RD 12/3/21 Project Name: Anions

COC No(s): 1228 ~~NA~~ Delivered by: Fed-Ex UPS Courier Hand Delivered Other: _____

Assigned ARI Job No: 21L0052 Tracking No: _____ NA

Preliminary Examination Phase:

- Were intact, properly signed and dated custody seals attached to the outside of the cooler? YES NO
- Were custody papers included with the cooler? YES NO
- Were custody papers properly filled out (ink, signed, etc.) YES NO
- Temperature of Cooler(s) (°C) (recommended 2.0-6.0 °C for chemistry)

Time 110 22

If cooler temperature is out of compliance fill out form 00070F Temp Gun ID#: DOO 2567

Cooler Accepted by: Date: 12/3/21 Time: 1110

Complete custody forms and attach all shipping documents

Log-In Phase:

- Was a temperature blank included in the cooler? YES NO
- What kind of packing material was used? ... Bubble Wrap Wet Ice Gel Packs Baggies Foam Block Paper Other: _____
- Was sufficient ice used (if appropriate)? NA YES NO
- How were bottles sealed in plastic bags? Individually Grouped Not
- Did all bottles arrive in good condition (unbroken)? YES NO
- Were all bottle labels complete and legible? YES NO
- Did the number of containers listed on COC match with the number of containers received? YES NO
- Did all bottle labels and tags agree with custody papers? YES NO
- Were all bottles used correct for the requested analyses? YES NO
- Do any of the analyses (bottles) require preservation? (attach preservation sheet, excluding VOCs) ... NA YES NO
- Were all VOC vials free of air bubbles? NA YES NO
- Was sufficient amount of sample sent in each bottle? YES NO
- Date VOC Trip Blank was made at ARI NA
- Were the sample(s) split by ARI? NA YES YES Date/Time: _____ Equipment: _____ Split by: _____

Samples Logged by: RV Date: 12/3/21 Time: 1145 Labels checked by: _____

** Notify Project Manager of discrepancies or concerns **

Sample ID on Bottle	Sample ID on COC	Sample ID on Bottle	Sample ID on COC

Additional Notes, Discrepancies, & Resolutions:

By: _____ Date: _____



Fremont Analytical
3600 Fremont Avenue N.
Seattle WA, 98103

Project: Anions
Project Number: 2112044
Project Manager: Brianna Barnes

Reported:
16-Dec-2021 18:49

MW-168-120221
21L0052-01 (Water)

Wet Chemistry

Method: EPA 300.0

Sampled: 12/02/2021 10:10

Instrument: IC930 Analyst: BF

Analyzed: 12/03/2021 22:13

Analysis by: Analytical Resources, LLC

Sample Preparation:

Preparation Method: No Prep Wet Chem

Extract ID: 21L0052-01 A

Preparation Batch: BJL0104

Sample Size: 10 mL

Prepared: 12/03/2021

Final Volume: 10 mL

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Nitrate-N	14797-55-8	1	0.100	0.100	ND	mg/L	U



Fremont Analytical 3600 Fremont Avenue N. Seattle WA, 98103	Project: Anions Project Number: 2112044 Project Manager: Brianna Barnes	Reported: 16-Dec-2021 18:49
---	---	---------------------------------------

MW-168-120221
21L0052-01RE1 (Water)

Wet Chemistry

Method: EPA 300.0 Sampled: 12/02/2021 10:10
Instrument: IC930 Analyst: BF Analyzed: 12/07/2021 09:10

Analysis by: Analytical Resources, LLC

Sample Preparation: Preparation Method: No Prep Wet Chem Extract ID: 21L0052-01RE1 A
Preparation Batch: BJL0104 Sample Size: 10 mL
Prepared: 12/03/2021 Final Volume: 10 mL

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Nitrate-N	14797-55-8	1	0.100	0.100	0.130	mg/L	H

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Sulfate	14808-79-8	1	0.100	0.100	5.92	mg/L	



Fremont Analytical 3600 Fremont Avenue N. Seattle WA, 98103	Project: Anions Project Number: 2112044 Project Manager: Brianna Barnes	Reported: 16-Dec-2021 18:49
---	---	---------------------------------------

MW-168-120221
21L0052-01RE2 (Water)

Wet Chemistry

Method: EPA 300.0 Sampled: 12/02/2021 10:10
Instrument: IC930 Analyst: BF Analyzed: 12/15/2021 07:44

Analysis by: Analytical Resources, LLC

Sample Preparation: Preparation Method: No Prep Wet Chem Extract ID: 21L0052-01RE2 A
Preparation Batch: BJL0104 Sample Size: 10 mL
Prepared: 12/03/2021 Final Volume: 10 mL

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Chloride	16887-00-6	10	1.00	1.00	27.9	mg/L	D



Fremont Analytical 3600 Fremont Avenue N. Seattle WA, 98103	Project: Anions Project Number: 2112044 Project Manager: Brianna Barnes	Reported: 16-Dec-2021 18:49
---	---	---------------------------------------

MW-167-120221
21L0052-02 (Water)

Wet Chemistry

Method: EPA 300.0 Sampled: 12/02/2021 11:50
Instrument: IC930 Analyst: BF Analyzed: 12/04/2021 00:13

Analysis by: Analytical Resources, LLC

Sample Preparation: Preparation Method: No Prep Wet Chem Extract ID: 21L0052-02 A
Preparation Batch: BJL0104 Sample Size: 10 mL
Prepared: 12/03/2021 Final Volume: 10 mL

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Nitrate-N	14797-55-8	1	0.100	0.100	ND	mg/L	U



Fremont Analytical 3600 Fremont Avenue N. Seattle WA, 98103	Project: Anions Project Number: 2112044 Project Manager: Brianna Barnes	Reported: 16-Dec-2021 18:49
---	---	---------------------------------------

MW-167-120221
21L0052-02RE1 (Water)

Wet Chemistry

Method: EPA 300.0 Sampled: 12/02/2021 11:50
Instrument: IC930 Analyst: BF Analyzed: 12/07/2021 10:10

Analysis by: Analytical Resources, LLC

Sample Preparation: Preparation Method: No Prep Wet Chem Extract ID: 21L0052-02RE1 A
Preparation Batch: BJL0104 Sample Size: 10 mL
Prepared: 12/03/2021 Final Volume: 10 mL

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Nitrate-N	14797-55-8	1	0.100	0.100	ND	mg/L	H, U



Fremont Analytical 3600 Fremont Avenue N. Seattle WA, 98103	Project: Anions Project Number: 2112044 Project Manager: Brianna Barnes	Reported: 16-Dec-2021 18:49
---	---	---------------------------------------

MW-167-120221
21L0052-02RE2 (Water)

Wet Chemistry

Method: EPA 300.0 Sampled: 12/02/2021 11:50
Instrument: IC930 Analyst: BF Analyzed: 12/15/2021 10:24

Analysis by: Analytical Resources, LLC

Sample Preparation: Preparation Method: No Prep Wet Chem Extract ID: 21L0052-02RE2 A
Preparation Batch: BJL0104 Sample Size: 10 mL
Prepared: 12/03/2021 Final Volume: 10 mL

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Chloride	16887-00-6	10	1.00	1.00	28.5	mg/L	D



Fremont Analytical 3600 Fremont Avenue N. Seattle WA, 98103	Project: Anions Project Number: 2112044 Project Manager: Brianna Barnes	Reported: 16-Dec-2021 18:49
---	---	---------------------------------------

MW-165-120221
21L0052-03 (Water)

Wet Chemistry

Method: EPA 300.0 Sampled: 12/02/2021 12:35
Instrument: IC930 Analyst: BF Analyzed: 12/04/2021 00:33

Analysis by: Analytical Resources, LLC

Sample Preparation: Preparation Method: No Prep Wet Chem Extract ID: 21L0052-03 A
Preparation Batch: BJL0104 Sample Size: 10 mL
Prepared: 12/03/2021 Final Volume: 10 mL

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Nitrate-N	14797-55-8	1	0.100	0.100	ND	mg/L	U



Fremont Analytical 3600 Fremont Avenue N. Seattle WA, 98103	Project: Anions Project Number: 2112044 Project Manager: Brianna Barnes	Reported: 16-Dec-2021 18:49
---	---	---------------------------------------

MW-165-120221
21L0052-03RE1 (Water)

Wet Chemistry

Method: EPA 300.0 Sampled: 12/02/2021 12:35
Instrument: IC930 Analyst: BF Analyzed: 12/07/2021 10:30

Analysis by: Analytical Resources, LLC

Sample Preparation: Preparation Method: No Prep Wet Chem Extract ID: 21L0052-03RE1 A
Preparation Batch: BJL0104 Sample Size: 10 mL
Prepared: 12/03/2021 Final Volume: 10 mL

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Nitrate-N	14797-55-8	1	0.100	0.100	ND	mg/L	U, H

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Sulfate	14808-79-8	1	0.100	0.100	0.198	mg/L	



Fremont Analytical
3600 Fremont Avenue N.
Seattle WA, 98103

Project: Anions
Project Number: 2112044
Project Manager: Brianna Barnes

Reported:
16-Dec-2021 18:49

MW-165-120221
21L0052-03RE2 (Water)

Wet Chemistry

Method: EPA 300.0

Sampled: 12/02/2021 12:35

Instrument: IC930 Analyst: BF

Analyzed: 12/15/2021 10:43

Analysis by: Analytical Resources, LLC

Sample Preparation: Preparation Method: No Prep Wet Chem
Preparation Batch: BJL0104
Prepared: 12/03/2021

Sample Size: 10 mL
Final Volume: 10 mL

Extract ID: 21L0052-03RE2 A

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Chloride	16887-00-6	10	1.00	1.00	55.4	mg/L	D



Fremont Analytical 3600 Fremont Avenue N. Seattle WA, 98103	Project: Anions Project Number: 2112044 Project Manager: Brianna Barnes	Reported: 16-Dec-2021 18:49
---	---	---------------------------------------

MW-166-120221
21L0052-04 (Water)

Wet Chemistry

Method: EPA 300.0 Sampled: 12/02/2021 14:15
Instrument: IC930 Analyst: BF Analyzed: 12/04/2021 00:53

Analysis by: Analytical Resources, LLC

Sample Preparation: Preparation Method: No Prep Wet Chem Extract ID: 21L0052-04 A
Preparation Batch: BJL0104 Sample Size: 10 mL
Prepared: 12/03/2021 Final Volume: 10 mL

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Nitrate-N	14797-55-8	1	0.100	0.100	ND	mg/L	U



Fremont Analytical 3600 Fremont Avenue N. Seattle WA, 98103	Project: Anions Project Number: 2112044 Project Manager: Brianna Barnes	Reported: 16-Dec-2021 18:49
---	---	---------------------------------------

MW-166-120221
21L0052-04RE1 (Water)

Wet Chemistry

Method: EPA 300.0 Sampled: 12/02/2021 14:15
Instrument: IC930 Analyst: BF Analyzed: 12/07/2021 10:50

Analysis by: Analytical Resources, LLC

Sample Preparation: Preparation Method: No Prep Wet Chem Extract ID: 21L0052-04RE1 A
Preparation Batch: BJL0104 Sample Size: 10 mL
Prepared: 12/03/2021 Final Volume: 10 mL

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Nitrate-N	14797-55-8	1	0.100	0.100	1.72	mg/L	H



Fremont Analytical 3600 Fremont Avenue N. Seattle WA, 98103	Project: Anions Project Number: 2112044 Project Manager: Brianna Barnes	Reported: 16-Dec-2021 18:49
---	---	---------------------------------------

MW-166-120221
21L0052-04RE2 (Water)

Wet Chemistry

Method: EPA 300.0 Sampled: 12/02/2021 14:15
Instrument: IC930 Analyst: BF Analyzed: 12/15/2021 11:03

Analysis by: Analytical Resources, LLC

Sample Preparation: Preparation Method: No Prep Wet Chem Extract ID: 21L0052-04RE2 A
Preparation Batch: BJL0104 Sample Size: 10 mL
Prepared: 12/03/2021 Final Volume: 10 mL

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Chloride	16887-00-6	20	2.00	2.00	76.0	mg/L	D



Fremont Analytical
3600 Fremont Avenue N.
Seattle WA, 98103

Project: Anions
Project Number: 2112044
Project Manager: Brianna Barnes

Reported:
16-Dec-2021 18:49

MW-166-120221
21L0052-04RE3 (Water)

Wet Chemistry

Method: EPA 300.0

Sampled: 12/02/2021 14:15

Instrument: IC930 Analyst: BF

Analyzed: 12/15/2021 11:23

Analysis by: Analytical Resources, LLC

Sample Preparation:

Preparation Method: No Prep Wet Chem

Extract ID: 21L0052-04RE3 A

Preparation Batch: BJL0104

Sample Size: 10 mL

Prepared: 12/03/2021

Final Volume: 10 mL

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Sulfate	14808-79-8	2	0.200	0.200	12.2	mg/L	D



Fremont Analytical 3600 Fremont Avenue N. Seattle WA, 98103	Project: Anions Project Number: 2112044 Project Manager: Brianna Barnes	Reported: 16-Dec-2021 18:49
---	---	---------------------------------------

MW-174-120221
21L0052-05 (Water)

Wet Chemistry

Method: EPA 300.0 Sampled: 12/02/2021 10:30
Instrument: IC930 Analyst: BF Analyzed: 12/04/2021 01:13

Analysis by: Analytical Resources, LLC

Sample Preparation: Preparation Method: No Prep Wet Chem Extract ID: 21L0052-05 A
Preparation Batch: BJL0104 Sample Size: 10 mL
Prepared: 12/03/2021 Final Volume: 10 mL

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Nitrate-N	14797-55-8	1	0.100	0.100	ND	mg/L	U



Fremont Analytical 3600 Fremont Avenue N. Seattle WA, 98103	Project: Anions Project Number: 2112044 Project Manager: Brianna Barnes	Reported: 16-Dec-2021 18:49
---	---	---------------------------------------

MW-174-120221
21L0052-05RE1 (Water)

Wet Chemistry

Method: EPA 300.0 Sampled: 12/02/2021 10:30
Instrument: IC930 Analyst: BF Analyzed: 12/07/2021 11:10

Analysis by: Analytical Resources, LLC

Sample Preparation: Preparation Method: No Prep Wet Chem Extract ID: 21L0052-05RE1 A
Preparation Batch: BJL0104 Sample Size: 10 mL
Prepared: 12/03/2021 Final Volume: 10 mL

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Nitrate-N	14797-55-8	1	0.100	0.100	0.178	mg/L	H

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Sulfate	14808-79-8	1	0.100	0.100	5.42	mg/L	



Fremont Analytical 3600 Fremont Avenue N. Seattle WA, 98103	Project: Anions Project Number: 2112044 Project Manager: Brianna Barnes	Reported: 16-Dec-2021 18:49
---	---	---------------------------------------

MW-174-120221
21L0052-05RE2 (Water)

Wet Chemistry

Method: EPA 300.0 Sampled: 12/02/2021 10:30
Instrument: IC930 Analyst: BF Analyzed: 12/15/2021 11:43

Analysis by: Analytical Resources, LLC

Sample Preparation: Preparation Method: No Prep Wet Chem Extract ID: 21L0052-05RE2 A
Preparation Batch: BJL0104 Sample Size: 10 mL
Prepared: 12/03/2021 Final Volume: 10 mL

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Chloride	16887-00-6	20	2.00	2.00	68.7	mg/L	D



Fremont Analytical 3600 Fremont Avenue N. Seattle WA, 98103	Project: Anions Project Number: 2112044 Project Manager: Brianna Barnes	Reported: 16-Dec-2021 18:49
---	---	---------------------------------------

MW-175-120221
21L0052-06 (Water)

Wet Chemistry

Method: EPA 300.0 Sampled: 12/02/2021 12:05
Instrument: IC930 Analyst: BF Analyzed: 12/04/2021 01:33

Analysis by: Analytical Resources, LLC

Sample Preparation: Preparation Method: No Prep Wet Chem Extract ID: 21L0052-06 A
Preparation Batch: BJL0104 Sample Size: 10 mL
Prepared: 12/03/2021 Final Volume: 10 mL

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Nitrate-N	14797-55-8	1	0.100	0.100	ND	mg/L	U



Fremont Analytical 3600 Fremont Avenue N. Seattle WA, 98103	Project: Anions Project Number: 2112044 Project Manager: Brianna Barnes	Reported: 16-Dec-2021 18:49
---	---	---------------------------------------

MW-175-120221
21L0052-06RE1 (Water)

Wet Chemistry

Method: EPA 300.0 Sampled: 12/02/2021 12:05
Instrument: IC930 Analyst: BF Analyzed: 12/07/2021 11:30

Analysis by: Analytical Resources, LLC

Sample Preparation: Preparation Method: No Prep Wet Chem Extract ID: 21L0052-06RE1 A
Preparation Batch: BJL0104 Sample Size: 10 mL
Prepared: 12/03/2021 Final Volume: 10 mL

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Nitrate-N	14797-55-8	1	0.100	0.100	ND	mg/L	U, H

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Sulfate	14808-79-8	1	0.100	0.100	0.144	mg/L	



Fremont Analytical 3600 Fremont Avenue N. Seattle WA, 98103	Project: Anions Project Number: 2112044 Project Manager: Brianna Barnes	Reported: 16-Dec-2021 18:49
---	---	---------------------------------------

MW-175-120221
21L0052-06RE2 (Water)

Wet Chemistry

Method: EPA 300.0 Sampled: 12/02/2021 12:05
Instrument: IC930 Analyst: BF Analyzed: 12/15/2021 12:02

Analysis by: Analytical Resources, LLC

Sample Preparation: Preparation Method: No Prep Wet Chem Extract ID: 21L0052-06RE2 A
Preparation Batch: BJL0104 Sample Size: 10 mL
Prepared: 12/03/2021 Final Volume: 10 mL

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Chloride	16887-00-6	20	2.00	2.00	72.2	mg/L	D



Fremont Analytical
3600 Fremont Avenue N.
Seattle WA, 98103

Project: Anions
Project Number: 2112044
Project Manager: Brianna Barnes

Reported:
16-Dec-2021 18:49

MW-173-120221
21L0052-07 (Water)

Wet Chemistry

Method: EPA 300.0

Sampled: 12/02/2021 12:55

Instrument: IC930 Analyst: BF

Analyzed: 12/04/2021 01:53

Analysis by: Analytical Resources, LLC

Sample Preparation: Preparation Method: No Prep Wet Chem
Preparation Batch: BJL0104
Prepared: 12/03/2021

Sample Size: 10 mL
Final Volume: 10 mL

Extract ID: 21L0052-07 A

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Nitrate-N	14797-55-8	1	0.100	0.100	ND	mg/L	U



Fremont Analytical 3600 Fremont Avenue N. Seattle WA, 98103	Project: Anions Project Number: 2112044 Project Manager: Brianna Barnes	Reported: 16-Dec-2021 18:49
---	---	---------------------------------------

MW-173-120221
21L0052-07RE1 (Water)

Wet Chemistry

Method: EPA 300.0 Sampled: 12/02/2021 12:55
Instrument: IC930 Analyst: BF Analyzed: 12/07/2021 12:50

Analysis by: Analytical Resources, LLC

Sample Preparation: Preparation Method: No Prep Wet Chem Extract ID: 21L0052-07RE1 A
Preparation Batch: BJL0104 Sample Size: 10 mL
Prepared: 12/03/2021 Final Volume: 10 mL

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Nitrate-N	14797-55-8	1	0.100	0.100	ND	mg/L	U, H

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Sulfate	14808-79-8	1	0.100	0.100	0.275	mg/L	



Fremont Analytical 3600 Fremont Avenue N. Seattle WA, 98103	Project: Anions Project Number: 2112044 Project Manager: Brianna Barnes	Reported: 16-Dec-2021 18:49
---	---	---------------------------------------

MW-173-120221
21L0052-07RE2 (Water)

Wet Chemistry

Method: EPA 300.0 Sampled: 12/02/2021 12:55
Instrument: IC930 Analyst: BF Analyzed: 12/15/2021 13:02

Analysis by: Analytical Resources, LLC

Sample Preparation: Preparation Method: No Prep Wet Chem Extract ID: 21L0052-07RE2 A
Preparation Batch: BJL0104 Sample Size: 10 mL
Prepared: 12/03/2021 Final Volume: 10 mL

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Chloride	16887-00-6	10	1.00	1.00	42.2	mg/L	D



Fremont Analytical 3600 Fremont Avenue N. Seattle WA, 98103	Project: Anions Project Number: 2112044 Project Manager: Brianna Barnes	Reported: 16-Dec-2021 18:49
---	---	---------------------------------------

MW-176-120221
21L0052-08 (Water)

Wet Chemistry

Method: EPA 300.0 Sampled: 12/02/2021 15:00
Instrument: IC930 Analyst: BF Analyzed: 12/04/2021 02:13

Analysis by: Analytical Resources, LLC

Sample Preparation: Preparation Method: No Prep Wet Chem Extract ID: 21L0052-08 A
Preparation Batch: BJL0104 Sample Size: 10 mL
Prepared: 12/03/2021 Final Volume: 10 mL

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Nitrate-N	14797-55-8	1	0.100	0.100	ND	mg/L	U



Fremont Analytical 3600 Fremont Avenue N. Seattle WA, 98103	Project: Anions Project Number: 2112044 Project Manager: Brianna Barnes	Reported: 16-Dec-2021 18:49
---	---	---------------------------------------

MW-176-120221
21L0052-08RE1 (Water)

Wet Chemistry

Method: EPA 300.0 Sampled: 12/02/2021 15:00
Instrument: IC930 Analyst: BF Analyzed: 12/07/2021 13:10

Analysis by: Analytical Resources, LLC

Sample Preparation: Preparation Method: No Prep Wet Chem Extract ID: 21L0052-08RE1 A
Preparation Batch: BJL0104 Sample Size: 10 mL
Prepared: 12/03/2021 Final Volume: 10 mL

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Nitrate-N	14797-55-8	1	0.100	0.100	ND	mg/L	U, H

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Sulfate	14808-79-8	1	0.100	0.100	0.988	mg/L	



Fremont Analytical 3600 Fremont Avenue N. Seattle WA, 98103	Project: Anions Project Number: 2112044 Project Manager: Brianna Barnes	Reported: 16-Dec-2021 18:49
---	---	---------------------------------------

MW-176-120221
21L0052-08RE2 (Water)

Wet Chemistry

Method: EPA 300.0 Sampled: 12/02/2021 15:00
Instrument: IC930 Analyst: BF Analyzed: 12/15/2021 13:22

Analysis by: Analytical Resources, LLC

Sample Preparation: Preparation Method: No Prep Wet Chem Extract ID: 21L0052-08RE2 A
Preparation Batch: BJL0104 Sample Size: 10 mL
Prepared: 12/03/2021 Final Volume: 10 mL

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Chloride	16887-00-6	20	2.00	2.00	57.5	mg/L	D



Fremont Analytical 3600 Fremont Avenue N. Seattle WA, 98103	Project: Anions Project Number: 2112044 Project Manager: Brianna Barnes	Reported: 16-Dec-2021 18:49
---	---	---------------------------------------

MW-155-120221
21L0052-09 (Water)

Wet Chemistry

Method: EPA 300.0 Sampled: 12/02/2021 10:27
Instrument: IC930 Analyst: BF Analyzed: 12/04/2021 02:33

Analysis by: Analytical Resources, LLC

Sample Preparation: Preparation Method: No Prep Wet Chem Extract ID: 21L0052-09 A
Preparation Batch: BJL0104 Sample Size: 10 mL
Prepared: 12/03/2021 Final Volume: 10 mL

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Nitrate-N	14797-55-8	1	0.100	0.100	8.28	mg/L	



Fremont Analytical 3600 Fremont Avenue N. Seattle WA, 98103	Project: Anions Project Number: 2112044 Project Manager: Brianna Barnes	Reported: 16-Dec-2021 18:49
---	---	---------------------------------------

MW-155-120221
21L0052-09RE1 (Water)

Wet Chemistry

Method: EPA 300.0 Sampled: 12/02/2021 10:27
Instrument: IC930 Analyst: BF Analyzed: 12/07/2021 13:30

Analysis by: Analytical Resources, LLC

Sample Preparation: Preparation Method: No Prep Wet Chem Extract ID: 21L0052-09RE1 A
Preparation Batch: BJL0104 Sample Size: 10 mL
Prepared: 12/03/2021 Final Volume: 10 mL

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Chloride	16887-00-6	1	0.100	0.100	9.58	mg/L	

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Nitrate-N	14797-55-8	1	0.100	0.100	8.40	mg/L	H



Fremont Analytical 3600 Fremont Avenue N. Seattle WA, 98103	Project: Anions Project Number: 2112044 Project Manager: Brianna Barnes	Reported: 16-Dec-2021 18:49
---	---	---------------------------------------

MW-155-120221
21L0052-09RE2 (Water)

Wet Chemistry

Method: EPA 300.0 Sampled: 12/02/2021 10:27
Instrument: IC930 Analyst: BF Analyzed: 12/15/2021 13:42

Analysis by: Analytical Resources, LLC

Sample Preparation: Preparation Method: No Prep Wet Chem Extract ID: 21L0052-09RE2 A
Preparation Batch: BJL0104 Sample Size: 10 mL
Prepared: 12/03/2021 Final Volume: 10 mL

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Sulfate	14808-79-8	10	1.00	1.00	53.6	mg/L	D



Fremont Analytical 3600 Fremont Avenue N. Seattle WA, 98103	Project: Anions Project Number: 2112044 Project Manager: Brianna Barnes	Reported: 16-Dec-2021 18:49
---	---	---------------------------------------

MW-159-120221
21L0052-10 (Water)

Wet Chemistry

Method: EPA 300.0 Sampled: 12/02/2021 12:15
Instrument: IC930 Analyst: BF Analyzed: 12/04/2021 02:53

Analysis by: Analytical Resources, LLC

Sample Preparation: Preparation Method: No Prep Wet Chem Extract ID: 21L0052-10 A
Preparation Batch: BJL0104 Sample Size: 10 mL
Prepared: 12/03/2021 Final Volume: 10 mL

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Nitrate-N	14797-55-8	1	0.100	0.100	ND	mg/L	U



Fremont Analytical 3600 Fremont Avenue N. Seattle WA, 98103	Project: Anions Project Number: 2112044 Project Manager: Brianna Barnes	Reported: 16-Dec-2021 18:49
---	---	---------------------------------------

MW-159-120221
21L0052-10RE1 (Water)

Wet Chemistry

Method: EPA 300.0 Sampled: 12/02/2021 12:15
Instrument: IC930 Analyst: BF Analyzed: 12/07/2021 13:50

Analysis by: Analytical Resources, LLC

Sample Preparation: Preparation Method: No Prep Wet Chem Extract ID: 21L0052-10RE1 A
Preparation Batch: BJL0104 Sample Size: 10 mL
Prepared: 12/03/2021 Final Volume: 10 mL

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Chloride	16887-00-6	1	0.100	0.100	5.96	mg/L	

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Nitrate-N	14797-55-8	1	0.100	0.100	ND	mg/L	U, H



Fremont Analytical
3600 Fremont Avenue N.
Seattle WA, 98103

Project: Anions
Project Number: 2112044
Project Manager: Brianna Barnes

Reported:
16-Dec-2021 18:49

MW-301-120221
21L0052-11 (Water)

Wet Chemistry

Method: EPA 300.0

Sampled: 12/02/2021 14:30

Instrument: IC930 Analyst: BF

Analyzed: 12/04/2021 04:13

Analysis by: Analytical Resources, LLC

Sample Preparation:

Preparation Method: No Prep Wet Chem

Extract ID: 21L0052-11 A

Preparation Batch: BJL0104

Sample Size: 10 mL

Prepared: 12/03/2021

Final Volume: 10 mL

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Nitrate-N	14797-55-8	1	0.100	0.100	1.54	mg/L	



Fremont Analytical
3600 Fremont Avenue N.
Seattle WA, 98103

Project: Anions
Project Number: 2112044
Project Manager: Brianna Barnes

Reported:
16-Dec-2021 18:49

MW-301-120221
21L0052-11RE1 (Water)

Wet Chemistry

Method: EPA 300.0

Sampled: 12/02/2021 14:30

Instrument: IC930 Analyst: BF

Analyzed: 12/07/2021 14:10

Analysis by: Analytical Resources, LLC

Sample Preparation:

Preparation Method: No Prep Wet Chem

Extract ID: 21L0052-11RE1 A

Preparation Batch: BJL0104

Sample Size: 10 mL

Prepared: 12/03/2021

Final Volume: 10 mL

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Nitrate-N	14797-55-8	1	0.100	0.100	1.56	mg/L	H



Fremont Analytical 3600 Fremont Avenue N. Seattle WA, 98103	Project: Anions Project Number: 2112044 Project Manager: Brianna Barnes	Reported: 16-Dec-2021 18:49
---	---	---------------------------------------

MW-301-120221
21L0052-11RE2 (Water)

Wet Chemistry

Method: EPA 300.0 Sampled: 12/02/2021 14:30
Instrument: IC930 Analyst: BF Analyzed: 12/15/2021 14:01

Analysis by: Analytical Resources, LLC

Sample Preparation: Preparation Method: No Prep Wet Chem Extract ID: 21L0052-11RE2 A
Preparation Batch: BJL0104 Sample Size: 10 mL
Prepared: 12/03/2021 Final Volume: 10 mL

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Chloride	16887-00-6	10	1.00	1.00	39.6	mg/L	D

Analyte	CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Sulfate	14808-79-8	10	1.00	1.00	17.0	mg/L	D



Fremont Analytical
3600 Fremont Avenue N.
Seattle WA, 98103

Project: Anions
Project Number: 2112044
Project Manager: Brianna Barnes

Reported:
16-Dec-2021 18:49

Analysis by: Analytical Resources, LLC

Wet Chemistry - Quality Control

Batch BJL0104 - No Prep Wet Chem

Instrument: IC930 Analyst: BF

QC Sample/Analyte	Result	Detection Limit	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Blank (BJL0104-BLK2)						Prepared: 03-Dec-2021 Analyzed: 15-Dec-2021 03:25					
Chloride	ND	0.100	0.100	mg/L							U
Nitrate-N	ND	0.100	0.100	mg/L							U
Sulfate	ND	0.100	0.100	mg/L							U
LCS (BJL0104-BS2)						Prepared: 03-Dec-2021 Analyzed: 15-Dec-2021 03:45					
Chloride	4.85	0.100	0.100	mg/L	5.00		97.0	90-110			
Nitrate-N	5.18	0.100	0.100	mg/L	5.00		104	90-110			
Sulfate	5.11	0.100	0.100	mg/L	5.00		102	90-110			
Duplicate (BJL0104-DUP2)						Source: 21L0052-01RE1 Prepared: 03-Dec-2021 Analyzed: 07-Dec-2021 09:30					
Nitrate-N	0.137	0.100	0.100	mg/L		0.130			5.24	20	H
Sulfate	5.90	0.100	0.100	mg/L		5.92			0.25	20	
Duplicate (BJL0104-DUP3)						Source: 21L0052-01RE2 Prepared: 03-Dec-2021 Analyzed: 15-Dec-2021 08:04					
Chloride	28.4	1.00	1.00	mg/L		27.9			1.88	20	D
Matrix Spike (BJL0104-MS2)						Source: 21L0052-01RE1 Prepared: 03-Dec-2021 Analyzed: 07-Dec-2021 09:50					
Nitrate-N	1.91	0.100	0.100	mg/L	2.00	0.130	88.8	75-125			H
Sulfate	8.01	0.100	0.100	mg/L	2.00	5.92	104	75-125			
Recovery limits for target analytes in MS/MSD QC samples are advisory only.											
Matrix Spike (BJL0104-MS3)						Source: 21L0052-01RE2 Prepared: 03-Dec-2021 Analyzed: 15-Dec-2021 09:04					
Chloride	70.2	2.00	2.00	mg/L	50.0	27.9	84.6	75-125			D

Recovery limits for target analytes in MS/MSD QC samples are advisory only.



Fremont Analytical
3600 Fremont Avenue N.
Seattle WA, 98103

Project: Anions
Project Number: 2112044
Project Manager: Brianna Barnes

Reported:
16-Dec-2021 18:49

Certified Analyses included in this Report

Analyte	Certifications
<i>EPA 300.0 in Water</i>	
Chloride	DoD-ELAP,WADOE,WA-DW,NELAP
Nitrate-N	DoD-ELAP,WADOE,WA-DW,NELAP
Sulfate	DoD-ELAP,WADOE,WA-DW,NELAP

Code	Description	Number	Expires
ADEC	Alaska Dept of Environmental Conservation	17-015	03/28/2023
DoD-ELAP	DoD-Environmental Laboratory Accreditation Program	66169	02/28/2022
NELAP	ORELAP - Oregon Laboratory Accreditation Program	WA100006-012	05/12/2022
WADOE	WA Dept of Ecology	C558	06/30/2022
WA-DW	Ecology - Drinking Water	C558	06/30/2022



Fremont Analytical
3600 Fremont Avenue N.
Seattle WA, 98103

Project: Anions
Project Number: 2112044
Project Manager: Brianna Barnes

Reported:
16-Dec-2021 18:49

Notes and Definitions

- D The reported value is from a dilution
- H Hold time violation - Hold time was exceeded.
- U This analyte is not detected above the reporting limit (RL) or if noted, not detected above the limit of detection (LOD).
- DET Analyte DETECTED
- ND Analyte NOT DETECTED at or above the reporting limit
- NR Not Reported
- dry Sample results reported on a dry weight basis
- RPD Relative Percent Difference
- [2C] Indicates this result was quantified on the second column on a dual column analysis.

Client Name: **PES**

 Work Order Number: **2112044**

 Logged by: **Clare Griggs**

 Date Received: **12/2/2021 4:28:00 PM**

Chain of Custody

1. Is Chain of Custody complete? Yes No Not Present
2. How was the sample delivered? Client

Log In

3. Coolers are present? Yes No NA
4. Shipping container/cooler in good condition? Yes No
5. Custody Seals present on shipping container/cooler?
(Refer to comments for Custody Seals not intact) Yes No Not Present
6. Was an attempt made to cool the samples? Yes No NA
7. Were all items received at a temperature of >2°C to 6°C * Yes No NA
8. Sample(s) in proper container(s)? Yes No
9. Sufficient sample volume for indicated test(s)? Yes No
10. Are samples properly preserved? Yes No
11. Was preservative added to bottles? Yes No NA
12. Is there headspace in the VOA vials? Yes No NA
13. Did all samples containers arrive in good condition(unbroken)? Yes No
14. Does paperwork match bottle labels? Yes No
15. Are matrices correctly identified on Chain of Custody? Yes No
16. Is it clear what analyses were requested? Yes No
17. Were all holding times able to be met? Yes No

Special Handling (if applicable)

18. Was client notified of all discrepancies with this order? Yes No NA

Person Notified:	<input type="text"/>	Date:	<input type="text"/>
By Whom:	<input type="text"/>	Via:	<input type="checkbox"/> eMail <input type="checkbox"/> Phone <input type="checkbox"/> Fax <input type="checkbox"/> In Person
Regarding:	<input type="text"/>		
Client Instructions:	<input type="text"/>		

19. Additional remarks:

Item Information

Item #	Temp °C
Sample	4.4

* Note: DoD/ELAP and TNI require items to be received at 4°C +/- 2°C



Fremont Analytical

3600 Fremont Ave N.
Seattle, WA 98103
Tel: 206-352-3790
Fax: 206-352-7178

Chain of Custody Record & Laboratory Services Agreement

Date: 12/2/21 Page: 2 of 2

Laboratory Project No (Internal): 2112014
Special Remarks:

Client: PES Environmental

Address: See pg. 1

City, State, zip: See pg. 1

Telephone: See pg. 1

Fax: See pg. 1

Project No: ALS

Collected by: See pg. 1

Location: See pg. 1

Report To (PM): See pg. 1

PM Email:

Sample Disposal: Return to client Disposal by lab (after 30 days)

Sample Name	Sample Date	Sample Time	Sample Type (Matrix)*	# of Cont.	<input type="checkbox"/> VOCs (EPA 8260 / 624) <input type="checkbox"/> BTEX <input type="checkbox"/> Gasoline Range Organics (GX) <input type="checkbox"/> Hydrocarbon Identification (HClD) <input type="checkbox"/> Diesel/heavy Oil Range Organics (Ox) <input type="checkbox"/> SVOCs (EPA 8270 / 625) <input type="checkbox"/> PAHs (EPA 8270 - SIM) <input type="checkbox"/> PCBs (EPA 8270 - 625) <input type="checkbox"/> Metals** (EPA 8082 / 608) <input type="checkbox"/> Total (T) / Dissolved (D) <input type="checkbox"/> Anions (IC)*** <input type="checkbox"/> EDB (8011)	Comments
1 MW-301-120221	12/2/21	1430	GW	1		
2						
3						
4						
5						
6						
7						
8						
9						
10						

*Matrix: A = Air, AQ = Aqueous, B = Bulk, O = Other, P = Product, S = Soil, SD = Sediment, SL = Solid, W = Water, DW = Drinking Water, GW = Ground Water, SW = Storm Water, WW = Waste Water

**Metals (Circle): MTCA-5 RCRA-8 Priority Pollutants TAL Individual: Ag Al As B Ba Be Ca Cd Co Cr Cu Fe Hg K Mg Mn Mo Na Ni Pb Sn Sr Ti V Zn

***Anions (Circle): Nitrate Nitrite Chloride Sulfate Bromide O-Phosphate Fluoride Nitrate+Nitrite

I represent that I am authorized to enter into this Agreement with Fremont Analytical on behalf of the Client named above, that I have verified Client's agreement to each of the terms on the front and backside of this Agreement.

Turn-around Time:
 Standard Next Day
 3 Day Same Day
 2 Day (specify) _____

Relinquished (Signature) Print Name: Alex Trege Date/Time: 12/02/21 16:28

Relinquished (Signature) Print Name: Alex Trege Date/Time: 12/2/21 15:52