

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,

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



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



Case Narrative

WO#: **2111543** Date: **12/21/2021**

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

Shelly Frish?

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.



4611 S. 134th Place, Suite 100 • Tukwila, WA 98168 • Ph: (206) 695-6200 • Fax: (206) 695-6202 Page 4 of 32

Page 1 of 27 21K0442 ARISample FINAL 20 Dec 2021 1136



CHAIN OF CUSTODY RECORD Omega COCID 1207

a 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

ARTWO

SUB CONTI ADDRESS	ARI 2.44 4611 South 134t	Analytical R	esources Inc.	Standard TAT. Please	SPECIAL INSTRUCTIONS / COMMENTS Standard TAT. Please email results to Brianna Barnes at bbarnes@fremontanalytical.com and Mat Langston at mlangston@fremontanalytical.com.					
CITY, STAT	^{E, ZIP:} Tukwila, WA 98					autremontanal	ytical.com.			
HIMANIE.	06) 695-6200 FAX:	EMA	JL:							
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.			
i	2111543-001A	MW107-112921	250 HDPE NON	Groundwater	11/29/2021 10:40:00 AM	1	Nitrate, Chloride, and Sulfate			
•	TEST_SUB				and the second					
2	2111543-002A	MW160-112921	250 HDPE NON	Groundwater	11/29/2021 12:25:00 PM	1	Nitrate, Chloride, and Sulfate			
	TEST_SUB									
3	2111543-003A	W-MW-01-112921	250 HDPE NON	Groundwater	11/29/2021 2:20:00 PM	1	Nitrate, Chloride, and Sulfate			
5	TEST_SUB						induce, enonce, and surface.			
4	2111543-004A	R-MW6-112921	250 HDPE NON	Groundwater	11/29/2021 12:30:00 PM	1	Nitrate, Chloride, and Sulfate			
7	TEST_SUB						induce, and sunde			
5	2111543-005A	MW-144R-112921	250 HDPE NON	Groundwater	11/29/2021 2:00:00 PM	1	Nitrate, Chloride, and Sulfate			
	TEST_SUB						Hiddley chionae, and Sanate			
6	2111543-006A	MW104-112921	250 HDPE NON	Groundwater	11/29/2021 10:40:00 AM	1	Nitrate, Chloride, and Sulfate			
U	TEST_SUB			1						
7	2111543-007A	MW-161-112921	250 HDPE NON	Groundwater	11/29/2021 12:20:00 PM	1	Nitrate, Chloride, and Sulfate			
1	TEST_SUB	an a	A second of the second	1		*				

Relinquished By: Relinquished By:	11/30	Time 8:4	U NY	Date 3001	Lime: ST-	REPORT TRANSMITTAL DESIRED:
	Date:	l'ime:	Received By:	Date 1	lime:	HARDCOPY (extra cost) FAX EMAIL ONLINE
Relinquished By:	Date:	Time	Received By:	Date: 1	îime:	FOR LAB USE ONLY
TAT: Sta	ndard 📋	RUS	H Next BD 2nd BD	3rd BD		Temp of samples °C Attempt to Cool ?
	Salara ay 10 y laga saya sa sa		Note: RUSH requests will incur			Comments.

0



MW-161-112921

Analytical Report

30-Nov-2021 12:57

30-Nov-2021 12:57

30-Nov-2021 12:57

30-Nov-2021 12:57

29-Nov-2021 12:30

29-Nov-2021 14:00

29-Nov-2021 10:40

29-Nov-2021 12:20

Fremont Analytical 3600 Fremont Avenue N.	Proj	Project: Anions Project Number: 2111543						
Seattle WA, 98103	20-Dec-2021 11:36							
ANALYTICAL REPORT FOR SAMPLES								
	ANALY HCAI	L REPORT FOR SAMPLI	LS					
Sample ID	ANALY IICAI	Matrix	Date Sampled	Date Received				
Sample ID MW107-112921				Date Received 30-Nov-2021 12:57				
•	Laboratory ID	Matrix	Date Sampled					

Water

Water

Water

Water

21K0442-07

W-MW-01-112921	21K0442-03
R-MW6-112921	21K0442-04
MW-144R-112921	21K0442-05
MW104-112921	21K0442-06



Analytical Report

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.

side of the cooler?	NO NO NO NO NO
$\frac{42}{12}$ Temp Gun ID#: <u>D0025</u> $\frac{1150}{24}$ Time: <u>12:57</u> ch all shipping documents	10
$\frac{42}{12}$ Temp Gun ID#: <u>D0025</u> $\frac{1150}{24}$ Time: <u>12:57</u> ch all shipping documents	10
$\frac{49}{11}$ Temp Gun ID#: <u>D00</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>160</u> <u>16</u>	
$\frac{49}{160}$ $\frac{160}{26}$	40 (eS
Ice Get Packs Baggies Foam Block Paper Other: NA YES Individually Grouped YES	NO NO NO NO NO NO NO NO
Sample ID on Bottle Sample ID on COC	
· · · · · · · · · · · · · · · · · · ·	NA YES Individually Grouped YES YES YES YES YES YES YES YES YES YES

By:

Date:



Fremont Analytical Project: Anions						
3600 Fremont Avenue N.	Project Number: 2111543	Reported:				
Seattle WA, 98103	Project Manager: Brianna Barnes	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:	ample Preparation: Preparation Method: No Prep Wet Chem					H	Extract ID: 21K0442-01 A		
	Preparation Batch: BJK0741	Sample Size: 10) mL						
	Prepared: 11/30/2021	Final Volume: 1	0 mL						
				Detection	Reporting				
Analyte		CAS Number	Dilution	Limit	Limit	Result	Units	Notes	
Nitrate-N		14797-55-8	1	0.100	0.100	ND	mg/L	H, U	

Analytical Report



		MW107-112921	
5	Seattle WA, 98103	Project Manager: Brianna Barnes	
3	3600 Fremont Avenue N.	Project Number: 2111543	
H	Fremont Analytical	Project: Anions	
H	Fremont Analytical	Project: Anions	

21K0442-01RE1 (Water)

Wet Chemistry								
Method: EPA 300.0						S	ampled: 11/	29/2021 10:40
Instrument: IC930 Anal	yst: BF					Aı	nalyzed: 12/	02/2021 11:57
Analysis by: Analytic	al Resources, LLC							
Sample Preparation:	Preparation Method: No Prep Wet Chem					Extra	et ID: 21K0	0442-01RE1 A
	Preparation Batch: BJK0741	Sample Size: 1) mL					
	Prepared: 11/30/2021	Final Volume:	0 mL					
				Detection	Reporting			
Analyte		CAS Number	Dilution	Limit	Limit	Result	Units	Notes
Sulfate		14808-79-8	1	0.100	0.100	0.326	mg/L	

Analytical Report

Reported: 20-Dec-2021 11:36



Fremont Analytical Project: Anions 3600 Fremont Avenue N. Project Number: 2111543 Seattle WA, 98103 Project Manager: Brianna Barnes

MW107-112921

21K0442-01RE2 (Water)

Wet Chemistry								
Method: EPA 300.0						S	ampled: 11/	29/2021 10:40
Instrument: IC930 Anal	yst: BF					Ar	nalyzed: 12/	14/2021 21:09
Analysis by: Analytic	al Resources, LLC							
Sample Preparation:	Sample Preparation: Preparation Method: No Prep Wet Chem Preparation Batch: BJK0741					Extra	ct ID: 21K0	442-01RE2 A
	Prepared: 11/30/2021	Final Volume:	0 mL					
				Detection	Reporting			
Analyte		CAS Number	Dilution	Limit	Limit	Result	Units	Notes
Chloride		16887-00-6	20	2.00	2.00	91.4	mg/L	D

Analytical Report

Reported: 20-Dec-2021 11:36



Fremont Analytical	Project: Anions	
3600 Fremont Avenue N.	Project Number: 2111543	Reported:
Seattle WA, 98103	Project Manager: Brianna Barnes	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		

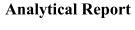
Sample Preparation:	Preparation Method: No Prep Wet Chem Preparation Batch: BJK0741 Prepared: 11/30/2021	Sample Size: 10 mL Final Volume: 10 mL]	Extract ID: 21K0442-02 A		
				Detection	Reporting			
Analyte		CAS Number	Dilution	Limit	Limit	Result	Units	Notes
Chloride		16887-00-6	1	0.100	0.100	6.37	mg/L	
				Detection	Reporting			
Analyte		CAS Number	Dilution	Limit	Limit	Result	Units	Notes
Nitrate-N		14797-55-8	1	0.100	0.100	ND	mg/L	H, U



Fremont Analytical Project: Anions 3600 Fremont Avenue N. Project Number: 2111543 Seattle WA, 98103 Project Manager: Brianna Barnes MW160-112921

21K0442-02RE1 (Water)

Wet Chemistry								
Method: EPA 300.0						S	ampled: 11/	29/2021 12:25
Instrument: IC930 Analyst: BF Analyzed: 12/02					02/2021 12:17			
Analysis by: Analytic	al Resources, LLC							
Sample Preparation:	Preparation Method: No Prep Wet Chem					Extra	ct ID: 21K0	442-02RE1 A
	Preparation Batch: BJK0741	Sample Size: 1) mL					
	Prepared: 11/30/2021	Final Volume:	0 mL					
				Detection	Reporting			
Analyte		CAS Number	Dilution	Limit	Limit	Result	Units	Notes
Sulfate		14808-79-8	1	0.100	0.100	2.34	mg/L	



Reported:

20-Dec-2021 11:36



Fremont Analytical	Project: Anions	
3600 Fremont Avenue N.	Project Number: 2111543	Reported:
Seattle WA, 98103	Project Manager: Brianna Barnes	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		

Analysis Dy. Analytic	ai Kesources, 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: 21K0442-03 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

Analytical Report



Fremont Analytical Project: Anions 3600 Fremont Avenue N. Project Number: 2111543 Seattle WA, 98103 Project Manager: Brianna Barnes 20-Dec-2021 11:36 W-MW-01-112921 21K0442-03RE1 (Water)

Wet Chemistry								
Method: EPA 300.0						S	ampled: 11/	29/2021 14:20
Instrument: IC930 Analyst: BF					Analyzed: 12/02/2021 18:57			
Analysis by: Analytic	al Resources, LLC							
Sample Preparation:	Preparation Method: No Prep Wet Chem		, T			Extra	ct ID: 21K0	0442-03RE1 A
	Preparation Batch: BJK0741	Sample Size: 10						
	Prepared: 11/30/2021	Final Volume: 1	0 mL					
				Detection	Reporting			
Analyte		CAS Number	Dilution	Limit	Limit	Result	Units	Notes
Sulfate		14808-79-8	1	0.100	0.100	3.99	mg/L	

Reported:



Fremont Analytical Project: Anions 3600 Fremont Avenue N. Project Number: 2111543 Seattle WA, 98103 Project Manager: Brianna Barnes W-MW-01-112921

21K0442-03RE2 (Water)

Wet Chemistry								
Method: EPA 300.0						S	ampled: 11/2	29/2021 14:20
Instrument: IC930 Analyst: BF					Ar	Analyzed: 12/14/2021 21:29		
Analysis by: Analytic	al Resources, LLC							
Sample Preparation:	Sample Preparation: Preparation Method: No Prep Wet Chem Preparation Batch: BJK0741					Extra	ct ID: 21K0	442-03RE2 A
	Prepared: 11/30/2021	Final Volume:		Detection	Reporting			
Analyte		CAS Number	Dilution	Limit	Limit	Result	Units	Notes
Chloride		16887-00-6	5	0.500	0.500	24.4	mg/L	D

Analytical Report

Reported:

20-Dec-2021 11:36



Fremont Analytical	Project: Anions					
3600 Fremont Avenue N.	Project Number: 2111543	Reported:				
Seattle WA, 98103	Project Manager: Brianna Barnes	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 Preparation Batch: BJK0741 Prepared: 11/30/2021	Sample Size: 10 mL Final Volume: 10 mL				Η	Extract ID: 21K0442-04 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	

Analytical Report



Fremont Analytical 3600 Fremont Avenue N. Seattle WA, 98103

R-MW6-112921

21K0442-04RE2 (Water)

Wet Chemistry								
Method: EPA 300.0						S	ampled: 11/	29/2021 12:30
Instrument: IC930 Analyst: BF Analyzed: 1					nalyzed: 12/	14/2021 21:49		
Analysis by: Analytic	al Resources, LLC							
Sample Preparation:	Preparation Method: No Prep Wet Chem					Extra	et ID: 21K0	0442-04RE2 A
	Preparation Batch: BJK0741	Sample Size: 1) mL					
	Prepared: 11/30/2021	Final Volume:	0 mL					
				Detection	Reporting			
Analyte		CAS Number	Dilution	Limit	Limit	Result	Units	Notes
Chloride		16887-00-6	5	0.500	0.500	19.0	mg/L	D

Analytical Report

Reported: 20-Dec-2021 11:36

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



Fremont Analytical Project: Anions 3600 Fremont Avenue N. Project Number: 2111543 Seattle WA, 98103 Project Manager: Brianna Barnes

Reported:

20-Dec-2021 11:36

R-MW6-112921

21K0442-04RE3 (Water)

Wet Chemistry								
Method: EPA 300.0						S	ampled: 11/	29/2021 12:30
Instrument: IC930 Analyst: BF						Ar	nalyzed: 12/	14/2021 22:08
Analysis by: Analytic	al Resources, LLC							
Sample Preparation:	Preparation Method: No Prep Wet Chem					Extra	et ID: 21K0	0442-04RE3 A
	Preparation Batch: BJK0741	Sample Size: 10) mL					
	Prepared: 11/30/2021	Final Volume: 1	0 mL					
				Detection	Reporting			
Analyte		CAS Number	Dilution	Limit	Limit	Result	Units	Notes
Sulfate		14808-79-8	50	5.00	5.00	185	mg/L	D



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Fremont Analytical		Project: Anions	
3600 Fremont Avenue	N.	Project Number: 2111543	Reported:
Seattle WA, 98103		Project Manager: Brianna Barnes	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 Anal	yst: BF		Analyzed: 12/01/2021 13:32
Analysis by: Analytic	al Resources, LLC		
Sample Preparation:	Preparation Method: No Prep Wet Cl	hem	Extract ID: 21K0442-05 A
	Preparation Batch: BJK0741	Sample Size: 10 mL	
	Prepared: 11/30/2021	Final Volume: 10 mL	

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



Fremont Analytical Project: Anions 3600 Fremont Avenue N. Project Number: 2111543 Seattle WA, 98103 Project Manager: Brianna Barnes MW-144R-112921

21K0442-05RE1 (Water)

Wet Chemistry								
Method: EPA 300.0						S	ampled: 11/	29/2021 14:00
Instrument: IC930 Anal	yst: BF				Analyzed: 12/02/2021			02/2021 19:37
Analysis by: Analytic	al Resources, LLC							
Sample Preparation:	Preparation Method: No Prep Wet Chem Preparation Batch: BJK0741 Prepared: 11/30/2021	Sample Size: 10 Final Volume: 1				Extra	act ID: 21K(442-05RE1 A
		010N 1		Detection	Reporting	D 1	1 1 1	N
Analyte		CAS Number	Dilution	Limit	Limit	Result	Units	Notes
Sulfate		14808-79-8	1	0.100	0.100	ND	mg/L	U

Analytical Report

Reported: 20-Dec-2021 11:36



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Fremont Analytical 3600 Fremont Avenue N. Seattle WA, 98103	Project: Anions Project Number: 2111543 Project Manager: Brianna Barnes	Reported: 20-Dec-2021 11:36
Wet Chemistry		
Method: EPA 300.0 Instrument: IC930 Analyst: BF		Sampled: 11/29/2021 14:00 Analyzed: 12/14/2021 22:28

Analysis by: Analytical Resources. LLC

Analysis by: Analytical Resources, LEC									
Sample Preparation:	Preparation Method: No Prep Wet Chem Preparation Batch: BJK0741 Prepared: 11/30/2021	Sample Size: 10 Final Volume: 1			Extra	et ID: 21K(0442-05RE2 A		
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	



11:36

Fremont Analytical	Project: Anions	
3600 Fremont Avenue N.	Project Number: 2111543	Reported:
Seattle WA, 98103	Project Manager: Brianna Barnes	20-Dec-2021 11:
	MW104-112921	
	21K0442-06 (Water)	
Wet Chemistry		

wet Chemistry										
Method: EPA 300.0						S	Sampled: 11/29/2021 10:40			
Instrument: IC930 Analy	yst: BF					Aı	Analyzed: 12/01/2021 13:52			
Analysis by: Analytica	al Resources, LLC									
Sample Preparation:	Preparation Method: No Prep Wet Chem Preparation Batch: BJK0741 Prepared: 11/30/2021	Sample Size: 10 Final Volume: 1]	Extract ID: 2	21K0442-06 A					
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 Project: Anions 3600 Fremont Avenue N. Project Number: 2111543 Seattle WA, 98103 Project Manager: Brianna Barnes

MW104-112921

21K0442-06RE1 (Water)

Wet Chemistry								
Method: EPA 300.0						S	ampled: 11/	29/2021 10:40
Instrument: IC930 Anal	yst: BF			Analyzed: 12/02/2021			02/2021 19:57	
Analysis by: Analytic	al Resources, LLC							
Sample Preparation:	Preparation Method: No Prep Wet Chem Preparation Batch: BJK0741 Prepared: 11/30/2021	Sample Size: 10 Final Volume: 1				Extra	act ID: 21K0	0442-06RE1 A
				Detection	Reporting			
Analyte		CAS Number	Dilution	Limit	Limit	Result	Units	Notes
Sulfate		14808-79-8	1	0.100	0.100	5.22	mg/L	

Analytical Report

Reported:

20-Dec-2021 11:36



Fremont Analytical Project: Anions								
3600 Fremont Avenue N.	Reported:							
Seattle WA, 98103	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 Anal Analysis by: Analytic	•					Ar	nalyzed: 12/	01/2021 14:12
Sample Preparation:	Preparation Method: No Prep Wet Chem Preparation Batch: BJK0741 Prepared: 11/30/2021	Sample Size: 1 Final Volume:				Ι	Extract ID: 2	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

Analytical Report



Fremont AnalyticalProject: Anions3600 Fremont Avenue N.Project Number: 2111543Seattle WA, 98103Project Manager: Brianna Barnes

MW-161-112921

21K0442-07RE1 (Water)

Wet Chemistry								
Method: EPA 300.0						S	ampled: 11/	29/2021 12:20
Instrument: IC930 Anal	yst: BF				Analyzed: 12/02/2021 2			
Analysis by: Analytic	al Resources, LLC							
Sample Preparation:	Preparation Method: No Prep Wet Chem Preparation Batch: BJK0741	Sample Size: 1) mL			Extra	et ID: 21K	0442-07RE1 A
	Prepared: 11/30/2021	Final Volume:	0 mL					
				Detection	Reporting			
Analyte		CAS Number	Dilution	Limit	Limit	Result	Units	Notes
Sulfate		14808-79-8	1	0.100	0.100	9.33	mg/L	

Reported:

20-Dec-2021 11:36



Fremont Analytical Project: Anions 3600 Fremont Avenue N. Project Number: 2111543 Seattle WA, 98103 Project Manager: Brianna Barnes

MW-161-112921

21K0442-07RE2 (Water)

Wet Chemistry								
Method: EPA 300.0						S	ampled: 11/	29/2021 12:20
Instrument: IC930 Anal	yst: BF					Aı	nalyzed: 12/	14/2021 22:48
Analysis by: Analytic	al Resources, LLC							
Sample Preparation:	Preparation Method: No Prep Wet Chem Preparation Batch: BJK0741	Sample Size: 10	0 mL			Extra	et ID: 21K0	0442-07RE2 A
	Prepared: 11/30/2021	Final Volume:	l0 mL					
				Detection	Reporting			
Analyte		CAS Number	Dilution	Limit	Limit	Result	Units	Notes
Chloride		16887-00-6	5	0.500	0.500	12.6	mg/L	D

Analytical Report

Reported:

20-Dec-2021 11:36



Analytical Report

Reported:

20-Dec-2021 11:36

Fremont AnalyticalProject: Anions3600 Fremont Avenue N.Project Number: 2111543Seattle WA, 98103Project Manager: Brianna Barnes

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)				Prepa	ared: 30-Nov	/-2021 An	alyzed: 01-	Dec-2021 0	8:31		
Chloride	ND	0.100	0.100	mg/L							U
Nitrate-N	ND	0.100	0.100	mg/L							U
Blank (BJK0741-BLK2)				Prepa	ared: 30-Nov	/-2021 An	alyzed: 16-	Dec-2021 1	7:50		
Sulfate	ND	0.100	0.100	mg/L							U
LCS (BJK0741-BS1)				Prepa	ared: 30-Nov	/-2021 An	alyzed: 01-	Dec-2021 0	8:51		
Chloride	4.55	0.100	0.100	mg/L	5.00		91.0	90-110			
LCS (BJK0741-BS2)				Prepa	ared: 30-Nov	/-2021 An	alyzed: 14-	Dec-2021 1	6:51		
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	Project: Anions	
3600 Fremont Avenue N.	Project Number: 2111543	Reported:
Seattle WA, 98103	Project Manager: Brianna Barnes	20-Dec-2021 11:36

Certified Analyses included in this Report

Analyte		Certifications		
EPA 300.0 in	Water			
Chloride		DoD-ELAP,WADOE,W	/A-DW,NELAP	
Nitrate-N		DoD-ELAP,WADOE,W	/A-DW,NELAP	
Sulfate		DoD-ELAP,WADOE,W	/A-DW,NELAP	
Code	Description		Number	Expires
ADEC	Alaska Dept of Environ	mental Conservation	17-015	03/28/2023

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



Analytical Report

Fremont	Analytical	Project: Anions	
3600 Fre	emont Avenue N.	Project Number: 2111543	Reported:
Seattle W	VA, 98103	Project Manager: Brianna Barnes	S 20-Dec-2021 11:36
		Notes and Definitions	
D	The reported value is from a dilution		
Н	Hold time violation - Hold time was exc	eeded.	
U	This analyte is not detected above the re	porting limit (RL) or if noted, not detected above	the limit of detection (LOD).
DET	Analyte DETECTED		
ND	Analyte NOT DETECTED at or above t	ne 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 th	e second column on a dual column analysis.	



Sample Log-In Check List

С	lient Name:	PES	Work Ord	der Numb	per: 2111543	
Lo	ogged by:	Gabrielle Coeuille	Date Rec	eived:	11/29/202 [,]	1 4:15:00 PM
Cha	in of Cust	ody				
1.	Is Chain of C	ustody complete?	Yes	✓	No 🗌	Not Present
2.	How was the	sample delivered?	<u>Client</u>			
Log	In					
-	Coolers are p	present?	Yes	✓	No 🗌	
4.	Shipping con	tainer/cooler in good condition?	Yes	✓	No 🗌	
5.		ls present on shipping container/cooler? nments for Custody Seals not intact)	Yes	✓	No 🗌	Not Present
6.	Was an atter	npt made to cool the samples?	Yes	✓	Νο	
7.	Were all item	s received at a temperature of >2°C to 6°C *	Yes	✓	No 🗌	
8.	Sample(s) in	proper container(s)?	Yes	✓	No 🗌	
9.	Sufficient sar	nple volume for indicated test(s)?	Yes	✓	No 🗌	
10.	Are samples	properly preserved?	Yes	✓	No 🗌	
11.	Was preserv	ative added to bottles?	Yes		No 🗹	NA 🗌
12.	Is there head	Ispace in the VOA vials?	Yes		No 🗌	NA 🔽
13.	Did all sampl	es containers arrive in good condition(unbroken)?	Yes	✓	No 🗌	
14.	Does paperw	vork match bottle labels?	Yes	✓	No 🗌	
15.	Are matrices	correctly identified on Chain of Custody?	Yes	✓	No 🗌	
16.	Is it clear wh	at analyses were requested?	Yes	✓	No 🗌	
17.	Were all hold	ling times able to be met?	Yes	✓	No 🗌	
Spe	cial Handl	ing (if applicable)				
-		otified of all discrepancies with this order?	Yes		No 🗌	NA 🔽
	Person	Notified: Date	:			
	By Who	m: Via:	e Mail	🗌 Ph	one 🗌 Fax [In Person
	Regardi	ng:				
	Client	nstructions:				
19	Additional rei	narks:				<u>_</u>

Item Information

Item #	Temp °C
Sample 1	2.4

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

Page 1		om	www.fremontanalytical.com	www.fremc					00 20 ++	COC 1 3 - 1
Date/Time	Print Name		Received (Signature) x		Date/Time	0	Print Name	Print	Relinquished (Signature) x	Relinquíshe x
1479/24 1415	Olyner Lor	1	* A Signature)	21 @ 1530	N/29/21 @	vennovsky	T	S Print Na	Relinguished (Signature)	Relinquishe
eement 2 Day (specify)	have verified Client's agre	ied above, that I l	If of the Client nam	Analytical on beha	th Fremont	Agreement with	nto this Ag side of this	to enter i and back	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.	I repre to each
🗌 3 Day 📄 Same Day			Nitrate+Nitrite	O-Phosphate Fluoride	vide O-P	fate Bromide	ride Sulfate	Chloride	***Anions (Circle): (Nitrate?) Nitrite	***Anions
K Standard 🗌 Next Day	b Sb Se Sr Sn Ti Ti V Zn	Mg Mn Mo Na Ni Pb Sb Se	Cu Fe Hg K	Ag Al As B Ba Be Ca Cd Co Cr	tuat: Ag Al	TAL Individual:	Λ	Priority Pollutants	*Metals (Circle): MTCA-5 RCRA-8	**Metals
Turn-arc	GW = Ground Water, SW = Storm Water, WW = Waste Water	W = Ground Water, S		SL = Solid, W = Water, DW = Drinking Water,	- Sediment, S	S=Soll, SD=	P = Product	O = Other,	Matrix: A = AIr, AQ = Aqueous, B = Bulk, D = Other, P = Product, S = Soll, SD = Sediment,	•Matrix: A
						-	-	1		10
				-	-	+	-	1		00
		-			-	-	-	1		11111
		X			+	5 06	ocel	+	100-101-101-WM	MM
		X			+	04al	D		166611-401mm	mw
		×			-	g	IHOD		MW-1442-112921	5MW
		×			-	1230	12		R-MW6-112921	AR-W
		×			+	80	06hl		166611-10-MW-M	M-M
		×			1-	S	seel		1266-11-001- MM	2mw
		×			H	40 GW	OHOI IE/ 66/	11/20	MW 107-112921	1 MW
Comments			444 124 4310 434 1440 4024 4310 434 1440 4024 4310 433 1440 44 147 4310 433 1440	255 10 x 055 10 x 05 5 10 x 05 10 x 05 5 10	# of Cont.	Sample Sample Type (Matrix)*	ple Sample	Sample	lame	Sample Name
11	11111	s, com	15	brian	PM Email:		-	3980	206-529-3980	Fax:
Sample Disposal: 🗌 Return to client 🙀 Disposal by lab (after 30 days)	Sample Disposai: 🗌 Retu		O'Neel	Report To (PM): Bineun	Report To		S	398	206-529-3985	Telephone:
			AW	Location: Seatha,	Location:		1018	9 9	ary, state, zp: Seattle, WA, 98121	City, State,
		ć	TM + HRC	collected by: SPK, RTM +	Collected	ō	#1310	Ave	7	Address: 2101
			.02. SOIE	Project No: 1413,001.02.	Project No			entel	m	client: PES
	Special Remarks:			me: American	Project Name:	Fax: 206-352-7178	Fax: 20	TAKATA	Anolyi	
nternal): X1115A3	Laboratory Project No (internal):	1 of: 1	Page:	11/29/21	Date: 11	Tel: 206-352-3790	Tel: 20		Freilio	-16
Laboratory Services Agreement	poratory Serv	10000	Chain of Custody Record &	hain of Cu	0	3600 Fremont Ave N.	3600 Fren			HANS?

age 1 of 2



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

Shelly Frish?

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.



4611 S. 134th Place, Suite 100 • Tukwila, WA 98168 • Ph: (206) 695-6200 • Fax: (206) 695-6202



CHAIN OF CUSTODY RECORD Omega COCID 1207

a 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

APT	1.20
ART	we
V	

SUB CONT	ARI 2.44	h Place, Suite 100	Analytical F	Resources Inc.	Standard TAT. Please	SPECIAL INSTRUCTIONS / COMMENTS: Standard TAT. Please email results to Brianna Barnes at bbarnes@fremontanalytical.com and Matt Langston at mlangston@fremontanalytical.com.			
CITY, STAT	^{E, ZIP:} Tukwila, WA 98				Langston at mlangstor	n@fremontanal	lytical.com.		
PHONE: (2	06) 695-6200 FAX:	EMA	IL:						
ACCOUNT #	h:	7. 2							
				T					
ITEM #	SAMPLE ID	CLIENT SAMPLE ID	BOTTLE TYPE	MATRIX	DATE COLLECTED	NUMBER OF CONTAINERS	COMMENTS: Methanol Preserved Weights HOT Sample Notation, Additional Sample Description.		
ł	2111543-001A	MW107-112921	250 HDPE NON	Groundwater	11/29/2021 10:40:00 AM	1	Nitrate, Chloride, and Sulfate		
т 	TEST_SUB						made, enonce, and sunate		
2	2111543-002A	MW160-112921	250 HDPE NON	Groundwater	11/29/2021 12:25:00 PM	1	Nitrate, Chloride, and Sulfate		
-	TEST_SUB								
3	2111543-003A	W-MW-01-112921	250 HDPE NON	Groundwater	11/29/2021 2:20:00 PM	1	Nitrate, Chloride, and Sulfate		
J	TEST_SUB						Hadde, chonde, and Sundte		
4	2111543-004A	R-MW6-112921	250 HDPE NON	Groundwater	11/29/2021 12:30:00 PM	1	Nitrate, Chloride, and Sulfate		
	TEST_SUB					-	induce, chonde, and Sunate		
5	2111543-005A	MW-144R-112921	250 HDPE NON	Groundwater	11/29/2021 2:00:00 PM	1	Nitrate, Chloride, and Sulfate		
J	TEST_SUB			wk			Hadde, chionae, and Sunate		
6	2111543-006A	MW104-112921	250 HDPE NON	Groundwater	11/29/2021 10:40:00 AM	1	Nitrate, Chloride, and Sulfate		
U	TEST_SUB		ator a series and a series of the series of	1					
7	2111543-007A	MW-161-112921	250 HDPE NON	Groundwater	11/29/2021 12:20:00 PM	1	Nitrate, Chloride, and Sulfate		
1	TEST SUB	and the second	A sector of the sector sector	1	,,	*			

Relinquished By:	11/30) Time 8:4	O Received By:	Date SOD Time: ST	REPORT TRANSMITTAL DESIRED:	
(elynquished By:	Date:	Time:	Received By:	Date Time:	HARDCOPY (extra cost)	ONLINE
Relinquished By:	Date:	Time	Received By:	Date: Time:	FOR LAB USE ONLY	
TAT: Sta	ndard 📃	RUS	SH Next BD 2nd Bl	D 3rd BD	Temp of samples C Attempt to Cool ?	
			Note: RUSH requests will inc		Comments.	



Samo	ale ID	Laboratory ID	Matrix	Date Sampled	Date Received		
ANALYTICAL REPORT FOR SAMPLES							
Seat	tle WA, 98103	Project M	anager: Brianna Barnes		20-Dec-2021 11:36		
3600	3600 Fremont Avenue N. Project Number: 2111543				Reported:		
Fren	nont Analytical		Project: Anions				

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



Analytical Report

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.

Analytical Resource Analytical Chemists		Cooler Rec	eipt Form
ARI Client: <u>Fremon</u> COC No(s): <u>1207</u> Assigned ARI Job No: 214 (+ 1/30/2 09977 (MA)/30/2	Project Name: 244542 Delivered by: Fed-Ex UPS Couri Tracking No:	
reliminary Examination Phase:			
Were intact, properly signed and da	ated custody seals attached to the	outside of the cooler?	VES NO
Were custody papers included with	the cooler?		YES NO
Were custody papers properly filled Temperature of Cooler(s) (°C) (rec Time 12.52 If cooler temperature is out of comp cooler Accepted by:	ommended 2.0-6.0 °C for chemist	ry) <u>49</u> vate: <u>11/30/21</u>	(YES) NO Temp Gun ID#: DO0,25(05 12:57
.og-In Phase:		attach all shipping documents	ana ana amin'ny faritr'o dia mampina amin'ny faritr'o amin'ny faritr'o dia mampina amin'ny faritr'o dia mampina
Was sufficient ice used (if approp How were bottles sealed in plastic Did all bottles arrive in good cond Were all bottle labels complete ar Did the number of containers liste Did all bottle labels and tags agre Were all bottles used correct for t	riate)? b bags? ition (unbroken)? ad legible? ed on COC match with the number e with custody papers? he requested analyses? equire preservation? (attach prese bles? sent in each bottle? at ARI. YES Date/Time: Date:30	of containers received? ervation sheet, excluding VOCs) Equipment: 101	NA YES NO Individually Grouped No YES NO YES NO YES NO YES NO YES NO
Sample ID on Bottle	Sample ID on COC	Sample ID on Bottle	Sample ID on COC
Additional Notes, Discrepancie	s, & Resolutions:		

By:

Date:



Analytical	Report
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Fremont Analytical Project: Anions									
3600 Fremont Avenue 1	N. Pro	Project Number: 2111543						rted:	
Seattle WA, 98103	Proj	ect Manager: Brianna	Barnes				20-Dec-2021 11:36		
		MW107-11292	1						
		21K0442-01 (Wate	er)						
Wet Chemistry									
Method: EPA 300.0						S	ampled: 11/	29/2021 10:40	
Instrument: IC930 Anal	yst: BF					A	nalyzed: 12/	01/2021 11:12	
Analysis by: Analytic	al Resources, LLC								
Sample Preparation:	Preparation Method: No Prep Wet Chem Preparation Batch: BJK0741 Prepared: 11/30/2021	Sample Size: 10 Final Volume: 1]	Extract ID: 2	21K0442-01 A	
	I			Detection	Reporting				
Analyte		CAS Number	Dilution	Limit	Limit	Result	Units	Notes	
Nitrate-N		14797-55-8	1	0.100	0.100	ND	mg/L	H, U	



Fremont Analytical	Project: Anions			
3600 Fremont Avenue N.	Project Number: 2111543	Reported:		
Seattle WA, 98103	A, 98103 Project Manager: Brianna Barnes			
	MW107-112921			
	21K0442-01RE1 (Water)			
Wet Chemistry				
Method: EPA 300.0		Sampled: 11/29/2021 10:40		
Instrument: IC930 Analyst: BF Analyzed: 12/0				

Analysis by: Analytical Resources, LLC

Sample Preparation: Preparation Method: No Prep Wet Chem						Extra	et ID: 21K	0442-01RE1 A
Sampre 110 parament	Preparation Batch: BJK0741 Prepared: 11/30/2021	Sample Size: 10 Final Volume: 1						
				Detection	Reporting			
Analyte		CAS Number	Dilution	Limit	Limit	Result	Units	Notes
Sulfate		14808-79-8	1	0.100	0.100	0.326	mg/L	



Fremont Analytical	Project: Anions	
3600 Fremont Avenue N.	Project Number: 2111543	Reported:
Seattle WA, 98103	Project Manager: Brianna Barnes	20-Dec-2021 11:36
	MW107-112921	
	21K0442-01RE2 (Water)	
Wet Chemistry		
Method: EPA 300.0		Sampled: 11/29/2021 10:40
nstrument: IC930 Analyst: BF		Analyzed: 12/14/2021 21:09
Analysis by: Analytical Resources, LLC		

Analysis by. Analytic	ai Resources, EEC							
Sample Preparation:	Preparation Method: No Prep Wet Chem Preparation Batch: BJK0741 Sample Size: 10 mL					Extract ID: 21K0442-01RE2 A		
	rieparation Daten. DJK0741	Sample Size. I	0 mL					
	Prepared: 11/30/2021	Final Volume: 1	l0 mL					
				Detection	Reporting			
Analyte		CAS Number	Dilution	Limit	Limit	Result	Units	Notes
Chloride		16887-00-6	20	2.00	2.00	91.4	mg/L	D



Fremont Analytical	Project: Anions	
3600 Fremont Avenue N.	Project Number: 2111543	Reported:
Seattle WA, 98103	Project Manager: Brianna Barnes	20-Dec-2021 11:36
	MW160-112921	
Wet Chemistry		
Method: EPA 300.0		Sampled: 11/29/2021 12:25
Instrument: IC930 Analyst: BF Analyzed: 1		

Analysis by: Analytical Resources, LLC

Sample Preparation:	Preparation Method: No Prep Wet Chem]	Extract ID: 2	21K0442-02 A
	Preparation Batch: BJK0741 Prepared: 11/30/2021	Sample Size: 10 Final Volume: 1						
				Detection	Reporting			
Analyte		CAS Number	Dilution	Limit	Limit	Result	Units	Notes
Chloride		16887-00-6	1	0.100	0.100	6.37	mg/L	
				Detection	Reporting			
Analyte		CAS Number	Dilution	Limit	Limit	Result	Units	Notes
Nitrate-N		14797-55-8	1	0.100	0.100	ND	mg/L	H, U



Analytical	Report
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Fremont Analytical	Project: Anions	
3600 Fremont Avenue N.	Project Number: 2111543	Reported:
Seattle WA, 98103	Project Manager: Brianna Barnes	20-Dec-2021 11:36
	MW160-112921	
	21K0442-02RE1 (Water)	
Wet Chemistry		
Method: EPA 300.0		Sampled: 11/29/2021 12:25
nstrument: IC930 Analyst: BF		Analyzed: 12/02/2021 12:17
Analysis by: Analytical Resources, LLC		

Sample Preparation:	Preparation Method: No Prep Wet Chem Preparation Batch: BJK0741 Prepared: 11/30/2021	Sample Size: 10 Final Volume: 1				Extra	act ID: 21K(0442-02RE1 A
				Detection	Reporting			
Analyte		CAS Number	Dilution	Limit	Limit	Result	Units	Notes
Sulfate		14808-79-8	1	0.100	0.100	2.34	mg/L	



Fremont Analytical		Project: Anions						
3600 Fremont Avenue N	enue N. Project Number: 2111543 Reported:							rted:
Seattle WA, 98103 Project Manager: Brianna Barnes					20-Dec-2021 11:36			
		W-MW-01-1129						
		21K0442-03 (Wate	er)					
Wet Chemistry								
Method: EPA 300.0						S	ampled: 11/	/29/2021 14:20
Instrument: IC930 Anal	yst: BF					Aı	nalyzed: 12/	01/2021 12:52
Analysis by: Analytic	al Resources, LLC							
Sample Preparation:	Preparation Method: No Prep Wet Chem Preparation Batch: BJK0741 Prepared: 11/30/2021	Sample Size: 10 Final Volume: 1				I	Extract ID: 2	21K0442-03 A
				Detection	Reporting			
Analyte		CAS Number	Dilution	Limit	Limit	Result	Units	Notes
Nitrate-N		14797-55-8	1	0.100	0.100	ND	mg/L	U



Fremont Analytical	Project: Anions	
3600 Fremont Avenue N.	Project Number: 2111543	Reported:
Seattle WA, 98103	Project Manager: Brianna Barnes	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		

mary sis by mary de											
Sample Preparation:	Preparation Method: No Prep Wet Chem	/et Chem					Extract ID: 21K0442-03RE1 A				
	Preparation Batch: BJK0741	Sample Size: 10 mL									
	Prepared: 11/30/2021	Final Volume:									
				Detection	Reporting						
Analyte		CAS Number	Dilution	Limit	Limit	Result	Units	Notes			
Sulfate		14808-79-8	1	0.100	0.100	3.99	mg/L				



Fremont Analytical	Project: Anions	
3600 Fremont Avenue N.	Project Number: 2111543	Reported:
Seattle WA, 98103	Project Manager: Brianna Barnes	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				Extra	et ID: 21K0)442-03RE2 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		Project: Anions						
3600 Fremont Avenue N	J. Proje	ct Number: 2111543	3				Repo	rted:
Seattle WA, 98103	8103Project Manager: Brianna Barnes20-D						20-Dec-20)21 11:36
		R-MW6-11292	1					
	2	21K0442-04 (Wat	er)					
Wet Chemistry								
Method: EPA 300.0						Sa	ampled: 11/	29/2021 12:30
Instrument: IC930 Anal	yst: BF					Ar	alyzed: 12/	01/2021 13:12
Analysis by: Analytic	al Resources, LLC							
Sample Preparation:	Preparation Method: No Prep Wet Chem					E	Extract ID: 2	21K0442-04 A
	Preparation Batch: BJK0741	Sample Size: 1	0 mL					
	Prepared: 11/30/2021	Final Volume:	10 mL					
				Detection	Reporting			
Analyte		CAS Number	Dilution	Limit	Limit	Result	Units	Notes

14797-55-8

1

0.100

0.100

ND

mg/L

U, H



Fremont Analytical	Project: Anions	
3600 Fremont Avenue N.	Project Number: 2111543	Reported:
Seattle WA, 98103	Project Manager: Brianna Barnes	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						Ar	nalyzed: 12/	14/2021 21:49
Analysis by: Analytic	al Resources, LLC							
Sample Preparation:	Preparation Method: No Prep Wet Chem					Extra	et ID: 21K0	0442-04RE2 A
	Preparation Batch: BJK0741	Sample Size: 1) mL					
	Prepared: 11/30/2021	Final Volume:	0 mL					
				Detection	Reporting			
Analyte		CAS Number	Dilution	Limit	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 Instrument: IC930 Analyst: BF		Sampled: 11/29/2021 12:30 Analyzed: 12/14/2021 22:08

Analysis by: Analytical Resources, LLC

Analysis by. Analytica									
Sample Preparation:	Preparation Method: No Prep Wet Chem Preparation Batch: BJK0741 Prepared: 11/30/2021	Sample Size: 10 Final Volume: 1			Extra	xtract 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		Project: Anions						
3600 Fremont Avenue 1	N. Proje	ect Number: 2111543	3				Repor	ted:
Seattle WA, 98103	Projec	et Manager: Brianna	Barnes				20-Dec-20	21 11:36
		MW-144R-1129	21					
		21K0442-05 (Wat	er)					
Wet Chemistry								
Method: EPA 300.0						S	ampled: 11/2	29/2021 14:00
Instrument: IC930 Anal	yst: BF					Ar	alyzed: 12/	01/2021 13:32
Analysis by: Analytic	al Resources, LLC							
Sample Preparation:	Preparation Method: No Prep Wet Chem Preparation Batch: BJK0741 Prepared: 11/30/2021	Sample Size: 1 Final Volume:				E	Extract ID: 2	21K0442-05 A
Analyte		CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes

14797-55-8

1

0.100

0.100

0.191

mg/L

Nitrate-N



Fremont Analytical 3600 Fremont Avenue N. Seattle WA, 98103	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: Analy	tical Resou	irces, LLC

Sample Preparation:	Preparation Method: No Prep Wet Chem Preparation Batch: BJK0741 Prepared: 11/30/2021	Sample Size: 10 mL Final Volume: 10 mL				Extra	tract ID: 21K0442-05RE1 A			
Amelata		CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	NI-6		
Analyte Sulfate		14808-79-8	Dilution	0.100	0.100	ND	mg/L	Notes		



Fremont Analytical	Project: Anions	
3600 Fremont Avenue N.	Project Number: 2111543	Reported:
Seattle WA, 98103	Project Manager: Brianna Barnes	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

Analysis by. Analytic								
Sample Preparation:	Imple Preparation: Preparation Method: No Prep Wet Chem					Extract ID: 21K0442-05RE2 A		
	Preparation Batch: BJK0741	Sample Size: 1) mL					
	Prepared: 11/30/2021	Final Volume:	0 mL					
				Detection	Reporting			
Analyte		CAS Number	Dilution	Limit	Limit	Result	Units	Notes
Chloride		16887-00-6	20	2.00	2.00	88.2	mg/L	D



Fremont Analytical	Project: Anions	
3600 Fremont Avenue N.	Project Number: 2111543	Reported:
Seattle WA, 98103	Project Manager: Brianna Barnes	20-Dec-2021 11:36
	MW104-112921	
	21K0442-06 (Water)	
Wet Chemistry		
Method: EPA 300.0		Sampled: 11/29/2021 10:40

Method. EITT 500.0						umpied. 11/	29/2021 10.40
nstrument: IC930 Analyst: BF							01/2021 13:52
al Resources, LLC							
Preparation Method: No Prep Wet Chem Preparation Batch: BJK0741 Prepared: 11/30/2021	•				Ι	Extract ID: 2	21K0442-06 A
			Detection	Reporting			
	CAS Number	Dilution	Limit	Limit	Result	Units	Notes
	16887-00-6	1	0.100	0.100	9.84	mg/L	
			Detection	Reporting			
	CAS Number	Dilution	Limit	Limit	Result	Units	Notes
	14797-55-8	1	0.100	0.100	ND	mg/L	U, H
	al Resources, LLC Preparation Method: No Prep Wet Chem Preparation Batch: BJK0741	al Resources, LLC Preparation Method: No Prep Wet Chem Preparation Batch: BJK0741 Sample Size: 10 Prepared: 11/30/2021 Final Volume: 1 CAS Number 16887-00-6 CAS Number	al Resources, LLC Preparation Method: No Prep Wet Chem Preparation Batch: BJK0741 Sample Size: 10 mL Final Volume: 10 mL CAS Number Dilution 16887-00-6 1 CAS Number Dilution	al Resources, LLC Preparation Method: No Prep Wet Chem Preparation Batch: BJK0741 Sample Size: 10 mL Prepared: 11/30/2021 Final Volume: 10 mL Detection CAS Number Dilution Detection CAS Number Dilution Limit Detection CAS Number Dilution Limit	al Resources, LLC Preparation Method: No Prep Wet Chem Preparation Batch: BJK0741 Sample Size: 10 mL Prepared: 11/30/2021 Final Volume: 10 mL CAS Number Dilution Limit Limit Limit Limit CAS Number Detection Reporting CAS Number Dilution 0.100 CAS Number Dilution Limit	yst: BF al Resources, LLC Preparation Method: No Prep Wet Chem Preparation Batch: BJK0741 Sample Size: 10 mL Prepared: 11/30/2021 Final Volume: 10 mL Limit Resources CAS Number Dilution Detection Reporting Limit Resources Limit Resources Limit Resources Limit Resources Limit Resources Limit Resources Limit Resources Limit Limit Limit Resources Limit Limit Limit Resources Limit Limit Resources Limit Limit Limit Resources Limit Resources Limit Limit Resources Limit Limit Resources Limit Limit Resources Limit Re	yst: BF al Resources, LLC Preparation Method: No Prep Wet Chem Preparation Batch: BJK0741 Sample Size: 10 mL Prepared: 11/30/2021 CAS Number Dilution Detection Reporting Limit Result Units Detection Reporting CAS Number Dilution Limit Result Units Detection Reporting CAS Number Dilution Limit Result Units



Fremont Analytical	Project: Anions	
3600 Fremont Avenue N.	Project Number: 2111543	Reported:
Seattle WA, 98103	Project Manager: Brianna Barnes	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

Analysis Dy. Analytica								
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: 21K0442-06RE1			
Analyte		CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes
Sulfate		14808-79-8	1	0.100	0.100	5.22	mg/L	Notes



Nitrate-N

Ana	lytical	Report
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Fremont Analytical		Project: Anions						
3600 Fremont Avenue N	N. Proj	ect Number: 2111543	5				Repo	rted:
Seattle WA, 98103	Proje	ect Manager: Brianna	Barnes				20-Dec-20	021 11:36
		MW-161-11292	1					
		21K0442-07 (Wat	er)					
Wet Chemistry								
Method: EPA 300.0						S	ampled: 11/	29/2021 12:20
Instrument: IC930 Analy	yst: BF					Ar	nalyzed: 12/	01/2021 14:12
Analysis by: Analytic:	al Resources, LLC							
Sample Preparation:	Preparation Method: No Prep Wet Chem Preparation Batch: BJK0741 Prepared: 11/30/2021	Sample Size: 1 Final Volume:				Ι	Extract ID: 2	21K0442-07 A
Analyte		CAS Number	Dilution	Detection Limit	Reporting Limit	Result	Units	Notes

14797-55-8

1

0.100

0.100

ND

mg/L

U, H

4611 S. 134th Place, Suite 100 • Tukwila, WA 98168 • Ph: (206) 695-6200 • Fax: (206) 695-6202



Fremont Analytical	Project: Anions	
3600 Fremont Avenue N.	Project Number: 2111543	Reported:
Seattle WA, 98103	Project Manager: Brianna Barnes	20-Dec-2021 11:36
	MW-161-112921	
	21K0442-07RE1 (Water)	
Wet Chemistry		
Method: EPA 300.0		Sampled: 11/29/2021 12:20

Method: EPA 300.0						S	ampled: 11/	29/2021 12:20
Instrument: IC930 Analy	yst: BF					Ar	alyzed: 12/	02/2021 20:17
Analysis by: Analytic:	al Resources, LLC							
Sample Preparation:	Preparation Method: No Prep Wet Chem					Extra	ct ID: 21K0	0442-07RE1 A
	Preparation Batch: BJK0741	Sample Size: 1	0 mL					
	Prepared: 11/30/2021	Final Volume:	l0 mL					
				Detection	Reporting			
Analyte		CAS Number	Dilution	Limit	Limit	Result	Units	Notes
Sulfate		14808-79-8	1	0.100	0.100	9.33	mg/L	



Fremont Analytical	Project: Anions	
3600 Fremont Avenue N.	Project Number: 2111543	Reported:
Seattle WA, 98103	20-Dec-2021 11:36	
	MW-161-112921	
	21K0442-07RE2 (Water)	
Wet Chemistry		
Aethod: EPA 300.0		Sampled: 11/29/2021 12:20

Instrument: IC930 Anal Analysis by: Analytic								14/2021 22:48
Sample Preparation:	Preparation Method: No Prep Wet Chem Preparation Batch: BJK0741 Prepared: 11/30/2021	Sample Size: 1 Final Volume:				Extra	et ID: 21K(0442-07RE2 A
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 AnalyticalProject: Anions3600 Fremont Avenue N.Project Number: 2111543Seattle WA, 98103Project 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)				Prep	ared: 30-Nov	v-2021 An	alyzed: 01-	Dec-2021 0	8:31		
Chloride	ND	0.100	0.100	mg/L							U
Nitrate-N	ND	0.100	0.100	mg/L							U
Blank (BJK0741-BLK2)				Prep	ared: 30-Nov	v-2021 An	alyzed: 16-	Dec-2021 1	7:50		
Sulfate	ND	0.100	0.100	mg/L							U
LCS (BJK0741-BS1)				Prep	ared: 30-Nov	v-2021 An	alyzed: 01-	Dec-2021 0	8:51		
Chloride	4.55	0.100	0.100	mg/L	5.00		91.0	90-110			
LCS (BJK0741-BS2)				Prep	ared: 30-Nov	v-2021 An	alyzed: 14-	Dec-2021 1	6:51		
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	Project: Anions	
I	3600 Fremont Avenue N.	Project Number: 2111543	Reported:
	Seattle WA, 98103	Project Manager: Brianna Barnes	20-Dec-2021 11:36
1			

Certified Analyses included in this Report

Analyte		Certifications		
EPA 300.0 in V	Vater			
Chloride		DoD-ELAP,WADOE,WA	A-DW,NELAP	
Nitrate-N		DoD-ELAP,WADOE,WA	A-DW,NELAP	
Sulfate		DoD-ELAP,WADOE,WA	A-DW,NELAP	
Code	Description		Number	Expires
ADEC	Alaska Dept of Environn	nental Conservation	17-015	03/28/2023

ADEC	Alaska Dept of Environmental Conservation	17-015	03/20/2023
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	Project: Anions	
3600 Fre	mont Avenue N.	Project Number: 2111543	Reported:
Seattle W	VA, 98103	Project Manager: Brianna Barnes	20-Dec-2021 11:36
		Notes and Definitions	
D	The reported value is from a dilution		
Н	Hold time violation - Hold time was exceeded	I.	
U	This analyte is not detected above the reportir	ng limit (RL) or if noted, not detected above the limit of detection (L	OD).
DET	Analyte DETECTED		
ND	Analyte NOT DETECTED at or above the rep	porting 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	ond 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



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



Case Narrative

WO#: **2111568** Date: **12/14/2021**

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

Shelly Fishel 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

Shelly Fricht

Shelly Fishel, Project Manager

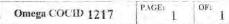
The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



4611 S. 134th Place, Suite 100 • Tukwila, WA 98168 • Ph: (206) 695-6200 • Fax: (206) 695-6202 Page 4 of 22

Page 1 of 17 21L0014 ARISample FINAL 13 Dec 2021 1833





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: 2120019

SUB CONTR	ATOR: ARI	COMPANY:	Analytical R	esources Inc.	SPECIAL INSTRUCTIONS / C					
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. 				
СПҮ, STATE	Tukwila, WA 98	168								
PHONE: (2	06) 695-6200 FAX:	EMAI	L:							
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.			
	2111568-001A	MW-145R-113021	250 HDPE NON	Groundwater	11/30/2021 9:55:00 AM	1	Nitrate, Chloride, Sulfate			
1	C-IC-ANIONS									
2	2111568-002A	MW-142-113021	250 HDPE NON	Groundwater	11/30/2021 1:00:00 PM	1	Nitrate, Chloride, Sulfate			
Z	C-IC-ANIONS									
	2111568-003A	MW-190-113021	250 HDPE NON	Groundwater	11/30/2021 12:15:00 PM	1	Nitrate, Chloride, Sulfate			
3	C-IC-ANIONS									
4	2111568-004A	MW102-113021	250 HDPE NON	Groundwater	11/30/2021 10:10:00 AM	1	Nitrate, Chloride, Sulfate			
4	C-IC-ANIONS	an a				and the second				
-	2111568-005A	MW-189-113021	250 HDPE NON	Groundwater	11/30/2021 2:40:00 PM	1	Nitrate, Chloride, Sulfate			
5	C-IC-ANIONS									

andquished by: Martha	Date 12/	Time \$ 30	Received By:	Pate	2 13:52	REPORT TRANSMITTAL DESIRED:
dunquished By	Date:	Time:	Received By:	Date:	Time:	☐ HARDCOPY (extra cost)
Relinquished By	Date:	Time:	Received By:	Date:	Time:	FOR LAB USE ONLY
TAT: Sta	ndard 🗌	RUSH	I Next BD 🗌 2nd Bl) [] 3n	d BD	Temp of samples°C Attempt to Cool ?
			Note: RUSH requests will inc	ur surcharges!		Page 5 of 22



Sample ID

MW-145R-113021

MW-142-113021

MW-190-113021

MW102-113021

MW-189-113021

Date Received

01-Dec-2021 12:52

01-Dec-2021 12:52

01-Dec-2021 12:52

01-Dec-2021 12:52

01-Dec-2021 12:52

Date Sampled

30-Nov-2021 09:55

30-Nov-2021 01:00

30-Nov-2021 12:15

30-Nov-2021 10:10

30-Nov-2021 14:40

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

Matrix

Water

Water

Water

Water

Water

Laboratory ID

21L0014-01

21L0014-02

21L0014-03

21L0014-04

21L0014-05

4611 S. 134th Place. Suite 100 • Tukwila. WA 98168 • Ph: (206) 695-6200 • Fax: (206) 695-6202	



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.

Analytical Resource Analytical Chemists		Cooler Rec	eipt Form
•			6-12/1/21
ARI Client: Fremont		011111	2111568
1017	E E	Project Name: 71150	DO FILLEO
COC No(s):	014 18	Delivered by: Fed-Ex UPS Cour	ier Hand Delivered Other:
Assigned ARI Job No: 2110	MIT M	Tracking No:	(NA)
Preliminary Examination Phase:	0/121		
Were intact, properly signed and dat	ed custody seals attached to th	e outside of the cooler?	(YES) NO
Were custody papers included with t	he cooler?	***********************************	(YES) NO
Were custody papers properly filled Temperature of Cooler(s) (°C) (recor	그는 이 생님이 그가 가장했다. 그 가지 가지 않았던 일이 이 나라 있는 것		YES NO
Time 12.52		5.	
If cooler temperature is out of compli	ance fill out form 00070F		Temp Gun JD#: 0009708
Cooler Accepted by:			12:50
Log-In Phase:	Complete custody forms an	d attach all shipping documents	
Log-in Flidse.		Ι	\sim
Was a temperature blank included	in the cooler?	······	YES (NO)
What kind of packing material wa	as used? Bubble Wra	p Wet Ice Sel Packs Baggies Foam	Block Paper Other:
Was sufficient ice used (if appropria	ate)?		NA (YES) NO
How were bottles sealed in plastic I	bags?		Individually (Grouped) Not
Did all bottles arrive in good conditi	on (unbroken)?		(YES) NO
Were all bottle labels complete and	legible?		VES NO
Did the number of containers listed			
Did all bottle labels and tags agree			YES NO
Were all bottles used correct for the			XX
Do any of the analyses (bottles) rec			
Were all VOC vials free of air bubbl			
Was sufficient amount of sample se			YES NO
Date VOC Trip Blank was made at			YES NO
More the complete) andit			NA
by ARI?	YES Date/Time:	Equipment:	Split by:
	MILA	1 ICIA	59312121121
Samples Logged by:	Date:		bels checked by:
	** Notify Project Manager o	f discrepancies or concerns **	
Sample ID on Bottle	Sample ID on COC	Sample ID on Bottle	Sample ID on COC
Additional Notes, Discrepancies,	& Resolutions:	-	1
<u>^</u>			

Date:

By:



Fremont Analytical 3600 Fremont Avenue N Seattle WA, 98103		Project: Anions ect Number: 2111568 ect Manager: Brianna					Repor 13-Dec-20	
		MW-145R-11302						
		21L0014-01 (Wate	er)					
Wet Chemistry								
Method: EPA 300.0						S	ampled: 11/.	30/2021 09:55
Instrument: IC930 Analys	st: BF					Ar	nalyzed: 12/	01/2021 21:57
Analysis by: Analytica	Resources, LLC							
Sample Preparation:	Preparation Method: No Prep Wet Chem]	Extract ID: 2	21L0014-01 A
	Preparation Batch: BJL0039	Sample Size: 10) mL					
	Prepared: 12/01/2021	Final Volume: 1	0 mL					
				Detection	Reporting			
Analyte		CAS Number	Dilution	Limit	Limit	Result	Units	Notes
Nitrate-N		14797-55-8	1	0.100	0.100	ND	mg/L	U



Fremont Analytical

Seattle WA, 98103

3600 Fremont Avenue

Analytical Report

	Project:	Anio
N.	Project Number:	211
	Project Manager:	Bria

ions 1568 ianna Barnes

Reported: 13-Dec-2021 18:33

MW-145R-113021

21L0014-01RE1 (Water)

Wet Chemistry								
Method: EPA 300.0						S	ampled: 11/	/30/2021 09:55
Instrument: IC930 Analy	strument: IC930 Analyst: BF Analyzed: 12/12/2021 1						/12/2021 14:24	
Analysis by: Analytics	al Resources, LLC							
Sample Preparation:	Preparation Method: No Prep Wet Chem Preparation Batch: BJL0039 Prepared: 12/01/2021	Sample Size: 10 Final Volume: 1				Extra	act ID: 21L0	0014-01RE1 A
				Detection	Reporting			
Analyte		CAS Number	Dilution	Limit	Limit	Result	Units	Notes
Chloride		16887-00-6	5	0.500	0.500	24.4	mg/L	D
				Detection	Reporting			
Analyte		CAS Number	Dilution	Limit	Limit	Result	Units	Notes
Sulfate		14808-79-8	5	0.500	0.500	25.3	mg/L	D



Fremont Analytical		Project: Anions		
3600 Fremont Avenue	N.	Project Number: 2111568		Reported:
Seattle WA, 98103		Project Manager: Brianna Barnes		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 Anal	lyst: BF			Analyzed: 12/01/2021 21:37
Analysis by: Analytic	al Resources, LLC			
Sample Preparation:	Preparation Method: No Prep Wet Che	m		Extract ID: 21L0014-02 A
	Preparation Batch: BJL0039	Sample Size: 10 mL		
	Prepared: 12/01/2021	Final Volume: 10 mL		
			Detection Reporting	

			Detection	Reporting				1
Analyte	CAS Number	Dilution	Limit	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

MW-142-113021

21L0014-02RE1 (Water)

Wet Chemistry								
Method: EPA 300.0						S	ampled: 11	/30/2021 01:00
Instrument: IC930 Anal	yst: BF	Analyzed: 12/12/2021 15:24						
Analysis by: Analytic	al Resources, LLC							
Sample Preparation:	Preparation Method: No Prep Wet Chem Preparation Batch: BJL0039 Prepared: 12/01/2021	Sample Size: 10 Final Volume: 1				Extra	act ID: 21L	0014-02RE1 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

Analytical Report

13-Dec-2021 18:33

Reported:

Project: Anions

Project Number: 2111568 Project Manager: Brianna Barnes



Fremont Analytical	Project: Anions	
3600 Fremont Avenue N.	Project Number: 2111568	Reported:
Seattle WA, 98103	Project Manager: Brianna Barnes	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: Analytic	al Resources, LLC							
Sample Preparation:	Preparation Method: No Prep Wet Chem						Extract ID: 2	21L0014-03 A
	Preparation Batch: BJL0039	Sample Size: 10 mL						
	Prepared: 12/01/2021	Final Volume: 10 mL						
				Detection	Reporting			
Analyte		CAS Number	Dilution	Limit	Limit	Result	Units	Notes
Nitrate-N		14797-55-8	1	0.100	0.100	ND	mg/L	U



Seattle WA, 98103

Analytical Report

Reported:

13-Dec-2021 18:33

NAXX 100	112021
Project Manager:	Brianna Barnes
Project Number:	2111568
Project:	Anions

MW-190-113021

21L0014-03RE1 (Water)

Wet Chemistry								
Method: EPA 300.0						S	ampled: 11/	/30/2021 12:15
Instrument: IC930 Analy	vst: BF		Analyzed: 12/12/2021 15:44					/12/2021 15:44
Analysis by: Analytica	al Resources, LLC							
Sample Preparation:	Preparation Method: No Prep Wet Chem					Extra	act ID: 21L	0014-03RE1 A
	Preparation Batch: BJL0039	Sample Size: 10) mL					
	Prepared: 12/01/2021	Final Volume: 1	0 mL					
				Detection	Reporting			
Analyte		CAS Number	Dilution	Limit	Limit	Result	Units	Notes
Chloride		16887-00-6	10	1.00	1.00	11.9	mg/L	D
				Detection	Reporting			
Analyte		CAS Number	Dilution	Limit	Limit	Result	Units	Notes
Sulfate		14808-79-8	10	1.00	1.00	39.6	mg/L	D



Seattle WA, 98103

Analytical Report

MW103	112021
Project Manager:	Brianna Barnes
Project Number:	2111568
Project:	Anions

Reported: 13-Dec-2021 18:33

MW102-113021

Wet Chemistry									
Method: EPA 300.0						S	ampled: 11	/30/2021 10:10	
Instrument: IC930 Analy	vst: BF					Analyzed: 12/01/2021 22:37			
Analysis by: Analytica	al 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: 1	0 mL						
				Detection	Reporting				
Analyte		CAS Number	Dilution	Limit	Limit	Result	Units	Notes	
Chloride		16887-00-6	1	0.100	0.100	4.77	mg/L		
				Detection	Reporting				
Analyte		CAS Number	Dilution	Limit	Limit	Result	Units	Notes	
Nitrate-N		14797-55-8	1	0.100	0.100	ND	mg/L	U	
				Detection	Reporting				
Analyte		CAS Number	Dilution	Limit	Limit	Result	Units	Notes	
Sulfate		14808-79-8	1	0.100	0.100	2.09	mg/L		



Fremont Analytical	Project: Anions	
3600 Fremont Avenue N.	Project Number: 2111568	Reported:
Seattle WA, 98103	Project Manager: Brianna Barnes	13-Dec-2021 18:33
	MW-189-113021	
	21L0014-05 (Water)	

Wet Chemistry								
Method: EPA 300.0						S	ampled: 11/	30/2021 14:40
Instrument: IC930 Anal	yst: BF			Analyzed: 12/01/2021 22:5				01/2021 22:57
Analysis by: Analytic	al Resources, LLC							
Sample Preparation:	Preparation Method: No Prep Wet Chem		o t				Extract ID: 2	21L0014-05 A
	Preparation Batch: BJL0039 Prepared: 12/01/2021	Sample Size: 10 Final Volume: 1						
				Detection	Reporting			
Analyte		CAS Number	Dilution	Limit	Limit	Result	Units	Notes
Nitrate-N		14797-55-8	1	0.100	0.100	ND	mg/L	U



Seattle WA, 98103

Analytical Report

Reported:

13-Dec-2021 18:33

MW-189	-113021
Project Manager:	Brianna Barnes
Project Number:	2111568
Project:	Anions
Project:	Anions

21L0014-05RE1 (Water)

Wet Chemistry								
Method: EPA 300.0						S	ampled: 11/	/30/2021 14:40
Instrument: IC930 Analy	yst: BF					Aı	nalyzed: 12/	12/2021 16:04
Analysis by: Analytic:	al Resources, LLC							
Sample Preparation:	Preparation Method: No Prep Wet Chem Preparation Batch: BJL0039 Prepared: 12/01/2021	Sample Size: 10 Final Volume: 1				Extra	act ID: 21L0	0014-05RE1 A
				Detection	Reporting			
Analyte		CAS Number	Dilution	Limit	Limit	Result	Units	Notes
Chloride		16887-00-6	10	1.00	1.00	17.2	mg/L	D
				Detection	Reporting			
Analyte		CAS Number	Dilution	Limit	Limit	Result	Units	Notes
Sulfate		14808-79-8	10	1.00	1.00	44.4	mg/L	D



Fremont AnalyticalProject: Anions3600 Fremont Avenue N.Project Number: 2111568Seattle WA, 98103Project 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)				Prepa	ared: 01-Dec	-2021 Ana	alyzed: 02-	Dec-2021 02	2:37		
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)				Prepa	ared: 01-Dec	-2021 Ana	alyzed: 02-	Dec-2021 02	2:57		
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	Project: Anions	
3600 Fremont Avenue N.	Project Number: 2111568	Reported:
Seattle WA, 98103	Project Manager: Brianna Barnes	13-Dec-2021 18:33

Certified Analyses included in this Report

Analyte		Certifications	Certifications				
EPA 300.0 ir	n Water						
Chloride		DoD-ELAP,WADOE,W	A-DW,NELAP				
Nitrate-N		DoD-ELAP,WADOE,W	DoD-ELAP,WADOE,WA-DW,NELAP				
Sulfate		DoD-ELAP,WADOE,W	DoD-ELAP,WADOE,WA-DW,NELAP				
Code	Description		Number	Expires			
ADEC	Alaska Dept of Environm	nental Conservation	17-015	03/28/2023			

Alaska Dept of Environmental Conservation	17-015	03/28/2023
DoD-Environmental Laboratory Accreditation Program	66169	02/28/2022
ORELAP - Oregon Laboratory Accreditation Program	WA100006-012	05/12/2022
WA Dept of Ecology	C558	06/30/2022
Ecology - Drinking Water	C558	06/30/2022
	DoD-Environmental Laboratory Accreditation Program ORELAP - Oregon Laboratory Accreditation Program WA Dept of Ecology	DoD-Environmental Laboratory Accreditation Program66169ORELAP - Oregon Laboratory Accreditation ProgramWA100006-012WA Dept of EcologyC558



Fremont	Analytical	Project: Anions				
3600 Fremont Avenue N. Pro		Project Number: 2111568	Reported:			
Seattle WA, 98103 P		Project Manager: Brianna Barnes	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 report	ing 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.				



Sample Log-In Check List

Client Name: PES	Work Order Numb	per: 2111568	
Logged by: Clare Griggs	Date Received:	11/30/202	1 4:18:00 PM
Chain of Custody			
1. Is Chain of Custody complete?	Yes 🖌	No 🗌	Not Present
2. How was the sample delivered?	<u>Client</u>		
<u>Log In</u>			
3. Coolers are present?	Yes 🖌	No 🗌	
4. Shipping container/cooler in good condition?	Yes 🖌	No 🗌	
 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 🗌	
7. Were all items received at a temperature of $>2^{\circ}C$ to $6^{\circ}C$ *	Yes ✔	No 🗌	
8 Sample(s) in proper container(s)?	Yes 🖌	N. 🗆	
9 Sufficient sample volume for indicated test(s)?	Yes 🗸	N. 🗌	
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 🗌	
<u>Special Handling (if applicable)</u>			
18. Was client notified of all discrepancies with this order?	Yes	No 🗌	NA 🖌
Person Notified: Date			
By Whom: Via:	eMaii Pn	one 🗌 Fax [In Person
Regarding:			
Client Instructions:			
19 Additional remarks:			

Item Information

Item #	Temp ⁰C
Sample	4.5

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

2	www.fremontanalytical.com	www.frem			COC 1.3 - 11.06.20
ame Date/Time Date/Time	Received (Signature)	Date/Time		Print Name	Relinquished (Signatur)
T	Received (Signature) AM _ 1 Print Name	Sobi IS41	11	Print Name R.T. Malar JA	Relinquished (Signature)
2 Day	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.	Fremont Analytical on b	is Agreement with f this Agreement.	d to enter into th t and backside o	I represent that I am authorized to enter into this Agreement wit to each of the terms on the front and backside of this Agreement.
	ide Nitrate+Nitrite	e O-Phosphate Fluoride	Sulfate Bromide	te Chloride	***Anions (Circle): (Nitrate) Nitrite
		n' Ag Al As B Ba Be Ca C	ts TAL Individu	Priority Pollutants	MTCA-5
SW = Storm Water, WW = Waste Water Turn-ground Time:	B = Bulk, O = Other, P = Product, S = Soli, SD = Sediment, SL = Solid, W = Water, DW = Drinking Water, GW = Ground Water, SW = Store	ediment, SL = Solid, W = Wate	roduct, S = Soll, SD = S	k. O = Other, P = P	*Matrix: A = Air, AQ = Aqueous, B = Bul
					10
					9
					00
					7 6
	X	1	30/21 :440 GW	=	MW-189-113621
	X	1	10 0 101	X	MWIQ2 - 11302
	X	1	12/5	-	3MW-190-113021
	×	1	1300		142-113021
	×.		0955 400	1 11/30/21	1 MW-145R-11392
Comments		and US-US-COMBINE	Sample Sample Type Time (Matrix)*	Sample	Sample Name
M	MAN QNVS. CO	PM Email: BILL . I			Fax:
Sample Disposal: 🗌 Return to client 🔹 Disposal by lab (after 30 days)	AN	Report To (PM): B. H	and a first produce of party in the set of a state of the set of t	229 3980	Telephone: 206 S20
	E WA /	LOCATION: SEATTLE OWA	121	WA 98	City, State, ZO: SEATTLE WA 98/2/
	collected by: R. Kelaughlin S. Keurovsky	Collected by: R. Mc	1310	IVE Ste	Address 2101 4th AVE Ste 1310
	sol. 05.601	Project No: 1413.001.05.60		JMENTA	CIEME PES ENVIRONMENTAL
Special Remarks:	ICAN UNEN	Project Name: AME	Fax: 206-352-7178	STONY DECL	And
Laboratory Project No (Internal): 2112568	Page: 1 of: 1	Date: 11-30-21	Tel: 206-352-3790	-	I GIIUIU
Laboratory Services Agreement	Chain of Custody Record & Labor	Chain of	3600 Fremont Ave N.	36	

1.05



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

Shelly Fishel 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

Shelly Fricht

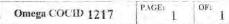
Shelly Fishel, Project Manager

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.



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ADDRESS

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

APT WO: 2120019

SUB CONTR	ATOR: ARI	COMPANY:	Analytical R	esources Inc.	SPECIAL INSTRUCTIONS / C			
ADDRESS:	4611 South 134t	h 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.		
СПҮ, STATE	, ZIP: Tukwila, WA 98	3168						
PHONE: (2	06) 695-6200 FAX:	EMAI	L:					
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.	
	2111568-001A	MW-145R-113021	250 HDPE NON	Groundwater	11/30/2021 9:55:00 AM	1	Nitrate, Chloride, Sulfate	
1	C-IC-ANIONS							
	2111568-002A	MW-142-113021	250 HDPE NON	Groundwater	11/30/2021 1:00:00 PM	1	Nitrate, Chloride, Sulfate	
2	C-IC-ANIONS							
	2111568-003A	MW-190-113021	250 HDPE NON	Groundwater	11/30/2021 12:15:00 PM	1	Nitrate, Chloride, Sulfate	
3	C-IC-ANIONS							
	2111568-004A	MW102-113021	250 HDPE NON	Groundwater	11/30/2021 10:10:00 AM	1	Nitrate, Chloride, Sulfate	
4	C-IC-ANIONS	an a				and a subset of the subset of		
	2111568-005A	MW-189-113021	250 HDPE NON	Groundwater	11/30/2021 2:40:00 PM	1	Nitrate, Chloride, Sulfate	
5	C-IC-ANIONS			n Anna I anna fan san a' anna anna an anna anna anna an				

Contquished by: Marth	Date 12/	1 Time: 4:30	Received By:	Pate	HTTP:SZ-	REPORT TRANSMITTAL DESIRED:
dunquished By:	Date:	Time:	Received By:	Date:	Time:	HARDCOPY (extra cost) FAX EMAIL ON
Relinquished By	Dafe:	Time:	Received By:	Date	Time:	FOR LAB USE ONLY
TAT: Sta	ndard 🗌	RUSE	I Next BD 2nd BD] 3rd	BD []	Temp of samples°C Attempt to Cool ? Comments:
			Note: RUSH requests will incur su	urcharges!		



Sample ID

MW-145R-113021

MW-142-113021

MW-190-113021

MW102-113021

MW-189-113021

Date Received

01-Dec-2021 12:52

01-Dec-2021 12:52

01-Dec-2021 12:52

01-Dec-2021 12:52

01-Dec-2021 12:52

Date Sampled

30-Nov-2021 09:55

30-Nov-2021 01:00

30-Nov-2021 12:15

30-Nov-2021 10:10

30-Nov-2021 14:40

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

Matrix

Water

Water

Water

Water

Water

Laboratory ID

21L0014-01

21L0014-02

21L0014-03

21L0014-04

21L0014-05

AG11 S 134th Place Suite 100	Tukwila W/A 08168 . Dh. (206) 695-6200 • Fax: (206) 695-6202
4011 5. 154th Place, Suite 100 •	TUKWIIA, WA 90100 - PII. (.	200) 693-6200 • Fax. (200) 693-6202



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.

Analytical Resources, Incorporated Analytical Chemists and Consultants	Cooler Rece	1. 2 - 1
ARI Client: FICMONA COC No(s): 1217 Assigned ARI Job No: 21L0014 Preliminary Examination Phase: Were intact, properly signed and dated custody seals attached to the Were custody papers included with the cooler? Were custody papers properly filled out (ink, signed, etc.) Were custody papers properly filled out (ink, signed, etc.) Temperature of Cooler(s) (°C) (recommended 2.0-6.0 °C for cheme Time 12.52 If cooler temperature is out of compliance fill out form 00070F Cooler Accepted by: A Complete custody forms at	Project Name: <u>21111500</u> Delivered by: Fed-Ex UPS Courier Tracking No: the outside of the cooler?	
Log-In Phase: Was a temperature blank included in the cooler? What kind of packing material was used? Was sufficient ice used (if appropriate)? How were bottles sealed in plastic bags? Did all bottles arrive in good condition (unbroken)? Were all bottle labels complete and legible? Did the number of containers listed on COC match with the numb Did all bottle labels and tags agree with custody papers? Were all bottle used correct for the requested analyses? Do any of the analyses (bottles) require preservation? (attach pre Were all VOC vials free of air bubbles? Was sufficient amount of sample sent in each bottle? Date VOC Trip Blank was made at ARI. Were the sample(s) split WAR YES Date/Time: Samples Logged by: Date:	ap Wet Ice & Packs Baggies Foam Blo	YES NO NA YES NO Individually Grouped Not VES NO VES NO
Sample ID on Bottle Sample ID on COC Additional Notes, Discrepancies, & Resolutions:	Sample ID on Bottle	Sample ID on COC

Date:

By:



Fremont Analytical Project: Anions 3600 Fremont Avenue N. Project Number: 2111568 **Reported:** Seattle WA, 98103 Project Manager: Brianna Barnes 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 Extract ID: 21L0014-01 A Sample Preparation: Preparation Method: No Prep Wet Chem Preparation Batch: BJL0039 Sample Size: 10 mL Prepared: 12/01/2021 Final Volume: 10 mL

<u>_</u>							
			Detection	Reporting			
Analyte	CAS No	umber Dil	ution Limi	Limit	Result	Units	Notes
Nitrate-N	147	797-55-8	1 0.100	0.100	ND	mg/L	U

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Seattle WA, 98103

Analytical Report

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						S	ampled: 11/	30/2021 09:55
Instrument: IC930 Analyst: BF						Ar	nalyzed: 12/	12/2021 14:24
Analysis by: Analytics	al 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				Extra	act ID: 21L0	0014-01RE1 A
				Detection	Reporting			
Analyte		CAS Number	Dilution	Limit	Limit	Result	Units	Notes
Chloride		16887-00-6	5	0.500	0.500	24.4	mg/L	D
				Detection	Reporting			
Analyte		CAS Number	Dilution	Limit	Limit	Result	Units	Notes
Sulfate		14808-79-8	5	0.500	0.500	25.3	mg/L	D



Fremont Analytical

Seattle WA, 98103

3600 Fremont Avenue N.

Reported:	
13-Dec-2021 18:33	

MW-142-113021

21L0014-02 (Water)

Wet Chemistry								
Method: EPA 300.0						S	ampled: 11/	30/2021 01:00
Instrument: IC930 Anal	yst: BF		Analyzed: 12/01/2021 2				01/2021 21:37	
Analysis by: Analytic	al Resources, LLC							
Sample Preparation:	Preparation Method: No Prep Wet Chem]	Extract ID: 2	21L0014-02 A
	Preparation Batch: BJL0039	Sample Size: 10) mL					
	Prepared: 12/01/2021	Final Volume: 1	Final Volume: 10 mL					
				Detection	Reporting			
Analyte		CAS Number	Dilution	Limit	Limit	Result	Units	Notes
Nitrate-N		14797-55-8	1	0.100	0.100	ND	mg/L	U

Page 8 of 17 21L0014 ARISample FINAL 13 Dec 2021 1833

Analytical Report

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



Seattle WA, 98103

Analytical Report

	112021
Project Manager:	Brianna Barnes
Project Number:	2111568
Project:	Anions

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					Aı	nalyzed: 12/	/12/2021 15:24	
Analysis by: Analytics	al Resources, LLC							
Sample Preparation:	Preparation Method: No Prep Wet Chem Preparation Batch: BJL0039 Prepared: 12/01/2021	Sample Size: 10 Final Volume: 1	Extra	act ID: 21L0	0014-02RE1 A			
				Detection	Reporting			
Analyte		CAS Number	Dilution	Limit	Limit	Result	Units	Notes
Chloride		16887-00-6	10	1.00	1.00	12.0	mg/L	D
				Detection	Reporting			
Analyte		CAS Number	Dilution	Limit	Limit	Result	Units	Notes
Sulfate		14808-79-8	10	1.00	1.00	62.5	mg/L	D



Analytical Report	

Fremont Analytical 3600 Fremont Avenue N Soattle WA 98103		Project: Anions ject Number: 2111568					Repo 13-Dec-20	
Seattle WA, 98103 Project Manager: Brianna Barnes MW-190-113021							15-Det-20	J21 16.55
	21L0014-03 (Water)							
Wet Chemistry								
Method: EPA 300.0						S	ampled: 11/	30/2021 12:15
Instrument: IC930 Analy	st: BF					Ar	alyzed: 12/	01/2021 22:17
Analysis by: Analytica	l Resources, LLC							
Sample Preparation:	Preparation Method: No Prep Wet Chem]	Extract ID:	21L0014-03 A
	Preparation Batch: BJL0039	Sample Size: 10						
	Prepared: 12/01/2021	Final Volume: 1	0 mL					
				Detection	Reporting			
Analyte		CAS Number	Dilution	Limit	Limit	Result	Units	Notes
Nitrate-N		14797-55-8	1	0.100	0.100	ND	mg/L	U



Seattle WA, 98103

Analytical Report

MW-190-113021	
Project Manager: Brianna Barnes	13-Dec-2021 18:33
Project Number: 2111568	Reported:
Project: Anions	

21L0014-03RE1 (Water)

Wet Chemistry								
Method: EPA 300.0						S	ampled: 11/	30/2021 12:15
Instrument: IC930 Analyst: BF					Aı	nalyzed: 12/	/12/2021 15:44	
Analysis by: Analytic	al Resources, LLC							
Sample Preparation:	Preparation Method: No Prep Wet Chem					Extra	act ID: 21L0	0014-03RE1 A
	Preparation Batch: BJL0039	Sample Size: 1	0 mL					
	Prepared: 12/01/2021	Final Volume: 1	l0 mL					
				Detection	Reporting			
Analyte		CAS Number	Dilution	Limit	Limit	Result	Units	Notes
Chloride		16887-00-6	10	1.00	1.00	11.9	mg/L	D
				Detection	Reporting			
Analyte		CAS Number	Dilution	Limit	Limit	Result	Units	Notes
Sulfate		14808-79-8	10	1.00	1.00	39.6	mg/L	D



Seattle WA, 98103

Analytical Report

MW102-113021	
Project Manager: Brianna Barnes	
Project Number: 2111568	
Project: Anions	

Reported: 13-Dec-2021 18:33

21L0014-04 (Water)

Wet Chemistry								
Method: EPA 300.0						S	ampled: 11	/30/2021 10:10
Instrument: IC930 Anal	yst: BF					Aı	nalyzed: 12	/01/2021 22:37
Analysis by: Analytic	al Resources, LLC							
Sample Preparation:	Preparation Method: No Prep Wet Chem Preparation Batch: BJL0039 Prepared: 12/01/2021	Sample Size: 1) Final Volume: 1]	Extract ID:	21L0014-04 A
				Detection	Reporting			
Analyte		CAS Number	Dilution	Limit	Limit	Result	Units	Notes
Chloride		16887-00-6	1	0.100	0.100	4.77	mg/L	
				Detection	Reporting			
Analyte		CAS Number	Dilution	Limit	Limit	Result	Units	Notes
Nitrate-N		14797-55-8	1	0.100	0.100	ND	mg/L	U
				Detection	Reporting			
Analyte		CAS Number	Dilution	Limit	Limit	Result	Units	Notes
Sulfate		14808-79-8	1	0.100	0.100	2.09	mg/L	



Fremont Analytical

Seattle WA, 98103

3600 Fremont Avenue N.

Reported:

13-Dec-2021 18:33

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

Project: Anions Project Number: 2111568

Project Manager: Brianna Barnes

Wet Chemistry								
Method: EPA 300.0						S	ampled: 11	/30/2021 14:40
Instrument: IC930 Anal	yst: BF					Aı	halyzed: 12	/01/2021 22:57
Analysis by: Analytic	al Resources, LLC							
Sample Preparation:	Preparation Method: No Prep Wet Chem]	Extract ID:	21L0014-05 A
	Preparation Batch: BJL0039	Sample Size: 1	0 mL					
	Prepared: 12/01/2021	Final Volume:	l0 mL					
				Detection	Reporting			
Analyte		CAS Number	Dilution	Limit	Limit	Result	Units	Notes
Nitrate-N		14797-55-8	1	0.100	0.100	ND	mg/L	U

Page 13 of 17 21L0014 ARISample FINAL 13 Dec 2021 1833

Analytical Report



Seattle WA, 98103

Analytical Report

Project: Anions	
Project Number: 2111568	Reported:
Project Manager: Brianna Barnes	13-Dec-2021 18:33
MW-189-113021	
21L0014-05RE1 (Water)	

Wet Chemistry								
Method: EPA 300.0						S	ampled: 11/	30/2021 14:40
Instrument: IC930 Anal	yst: BF					Aı	nalyzed: 12/	12/2021 16:04
Analysis by: Analytic	al 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				Extra	act ID: 21L0	0014-05RE1 A
				Detection	Reporting			
Analyte		CAS Number	Dilution	Limit	Limit	Result	Units	Notes
Chloride		16887-00-6	10	1.00	1.00	17.2	mg/L	D
				Detection	Reporting			
Analyte		CAS Number	Dilution	Limit	Limit	Result	Units	Notes
Sulfate		14808-79-8	10	1.00	1.00	44.4	mg/L	D



Fremont AnalyticalProject: Anions3600 Fremont Avenue N.Project Number: 2111568Seattle WA, 98103Project 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)				Prepa	ared: 01-Dec	-2021 Ana	alyzed: 02-	Dec-2021 02	2:37		
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)				Prepa	ared: 01-Dec	-2021 Ana	alyzed: 02-	Dec-2021 02	2:57		
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	Project: Anions	
3600 Fremont Avenue N.	Project Number: 2111568	Reported:
Seattle WA, 98103	Project Manager: Brianna Barnes	13-Dec-2021 18:33

Certified Analyses included in this Report

Analyte		Certifications				
EPA 300.0 in	Water					
Chloride		DoD-ELAP,WADOE,W	A-DW,NELAP			
Nitrate-N		DoD-ELAP,WADOE,W	DoD-ELAP,WADOE,WA-DW,NELAP			
Sulfate		DoD-ELAP,WADOE,W	A-DW,NELAP			
Code	Description		Number	Expires		
ADEC	Alaska Dept of Environr	nental Conservation	17-015	03/28/2023		

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	Project: Anions							
3600 Fre	mont Avenue N.	Project Number: 2111568	Reported:						
Seattle W	/A, 98103	Project Manager: Brianna Barnes	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 reportir	ng 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 c	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,

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



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



Case Narrative

WO#: **2112044** Date: **12/21/2021**

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

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

Shelly Fricht

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.



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Page 1 of 42 21L0052 ARISample FINAL 16 Dec 2021 1849



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

AR1 Job #:2110052

SUB CONTRATOR: ARI COMPANY: Analytical Resources Inc.				esources Inc.	SPECIAL INSTRUCTIONS /	SPECIAL INSTRUCTIONS / COMMENTS:						
ADDRESS:		th Place, Suite 100				 Standard TAT. Please email results to Brianna Barnes at bbarnes@fremontanalytical.com and Matt Langston at mlangston@fremontanalytical.com. 						
CITY, STATE	Tukwila, WA 9	8168		an a								
PHONE: (2	06) 695-6200 FAX:	EMA	IL:									
ACCOUNT #												
ITEM #	SAMPLE ID	CLIENT SAMPLE ID	BOITLE 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					
.1	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					
2	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	C-ANIONS										
4	2112044-004A	MW-166-120221	250 HDPE NON	Groundwater	12/2/2021 2:15:00 PM	1	Nitrate, Chloride, Sulfate					
т	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					
5	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					
0	C-IC-ANIONS, PREP-IC	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					
0	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					

Reinquished By: GBU JOBD 12113/21 9:05 Plane		Received By:	Date: 12/03/2	Time:	REPORT TRANSMITTAL DESIRED:				
Relinquished By:	Date:	Time:	Received By:	Date:	Time:	HARDCOPY (extra cost)			
Relinquished By:	Date:	Time:	Received By:	Date:	Time:	FOR LAB USE ONLY			
TAT:	Standard	RUSH	I Next BD □ 2nd BD □			Temp of samples°C Attempt to Cool ?			
141.		RUSE	Note: RUSH requests will incur si			Comments:			
THE REAL PROPERTY AND ADDRESS OF THE PARTY	CONTRACTOR OF THE OWNER			numeros de la constanción de la constan El constanción de la c		Page 5 of 48			

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and Plant

Page 2 of 42 21L0052 ARISample FINAL 16 Dec 2021 1849

1.1



CHAIN OF CUSTODY RECORD

PAGE: 2 Omega COCID 1228

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 #: 2110052

SUB CONTR	ATOR: ARI	COMPANY:	Analytical R	esources Inc.		SPECIAL INSTRUCTIONS / COMMENTS: Standard TAT. Please email results to Brianna Barnes at bbarnes@fremontanalytical.com and Matt Langst at mlangston@fremontanalytical.com.					
ADDRESS:	4611 South 134	th Place, Suite 100									
CITY, STATE	, ZIP: Tukwila, WA 9	8168									
PHONE: (2	06) 695-6200 FAX:	EMA	IL:								
ACCOUNT #	1										
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				
10	C-IC-ANIONS, PREP-IC	C-ANIONS									
	2112044-011A	MW-301-120221	250 HDPE NON	Groundwater	12/2/2021 2:30:00 PM	1	Nitrate, Chloride, Sulfate				
11	C-IC-ANIONS, PREP-IC	C-ANIONS		ala de la composition							

Religguished Bring Stan	Date: 12/03/21	Time: 9:05	Received By:	Date JUOT2 Time: 110		REPORT TRANSMITTAL DESIRED:
Relinquished By:	Date:	Time:	Received By:	Date:	Time:	HARDCOPY (extra cost) FAX EMAIL ONLINE
Relinquished By:	Date:	Time:	Received By:	Date:	Time:	FOR LAB USE ONLY
		<u> </u>				Temp of samples°C Attempt to Cool ?
TAT: S	itandard 📋	RUSH	H Next BD 2nd BD] 3rd	BD 🗌	Countents.
			Note: RUSH requests will incur su	urcharges!		Page 6 of 48

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Fremont Analytical	Project: Anions					
3600 Fremont Avenue N.	Project Number: 2112044	Reported:				
Seattle WA, 98103	Project Manager: Brianna Barnes	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.

Analytical Resources, Incorporated Analytical Chemists and Consultants

Cooler Receipt Form

ARI Client:	Fremont	R10 12 3	21 Project Name:	Anions	
COC No(s): _	1228	AB	Delivered by: Fed-Ex	JPS Courier Hand Delivere	d Other:
Assigned ARI	I Job No: 21LÜ	052	Tracking No:		NA:
Preliminary Ex	xamination Phase:				
Were intact, p	properly signed and da	ated custody seals attached to t	the outside of the cooler?	Œ	S) NO
Were custody	papers included with	the cooler?		Č	S NO
		l out (ink, signed, etc.) ommended 2.0-6.0 °C for chem		Ć	S NO
Time 110			2.2		
If cooler temp	perature is out of comp	liance fill out form 00070F		Temp Gun ID# <u>:</u>	DO0 2565
Cooler Accepte	ed by:	R	Date: 12/03/21	Time:(110	
		Complete custody forms a			
Log-In Pha	ase:				
Was a temp	erature blank include	f in the cooler?			YES N
What kind	l of packing material w	vas used? Bubble Wr	ap Wet Ice GelPacks Bagg	ies Foam Block Paper Oth	ər:
Was sufficie	ent ice used (if approp	iate)?		NA	(YES) N
		: bags?		Individually	Grouped
		tion (unbroken)?			N C
		d legible?			CESP N
		d on COC match with the numb			CES N
		e with custody papers?			CEP I
		ne requested analyses?			RES I
		equire preservation? (attach pre	a contraction of the second second		YES C
		bles?		NA	YES I
		sent in each bottle?			YES
	rip Blank was made a mple(s) split	t ARI		\cup	
by ARI?	MPIOLOY OPIN		Equipmen		Split by:
Samples Logge	d bur	7 Data: 12/3	2 Time: 1145	Debelo abooked hur	
Samples Logge	eu by	** Notify Project Manager			
		notity i roject manager	or discrepancies of conc	enis	
Sample	e ID on Bottle	Sample ID on COC	Sample ID on B	ottle Sampl	e ID on COC
				ounpr	
Additional I	Notes, Discrepancie	s, & Resolutions:			
	8 (A)	2			

Date:

By:



Project: Anions Project Number: 2112044 Project Manager: Brianna Barnes	Reported: 16-Dec-2021 18:49					
MW-168-120221 21L0052-01 (Water)						
	Sampled: 12/02/2021 10:10 Analyzed: 12/03/2021 22:13					
	Project Number: 2112044 Project Manager: Brianna Barnes MW-168-120221					

Analysis by: Analytical Resources, LLC

Sample Preparation:	Preparation Method: No Prep Wet Chem Preparation Batch: BJL0104 Prepared: 12/03/2021	Sample Size: 10 Final Volume: 1]	Extract ID: 21L0052-01 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	U

Analytical Report



Fremont Analytical 3600 Fremont Avenue N.

Seattle WA, 98103

Analytical Report

Reported:

16-Dec-2021 18:49

MW-168	2.120221
Project Manager:	Brianna Barnes
Project Number:	2112044
Project:	Anions

MW-168-120221

21L0052-01RE1 (Water)

Wet Chemistry								
Method: EPA 300.0						S	ampled: 12/	02/2021 10:10
Instrument: IC930 Analy	yst: BF					Ar	nalyzed: 12/	07/2021 09:10
Analysis by: Analytic	al Resources, LLC							
Sample Preparation:	Preparation Method: No Prep Wet Chem					Extra	act ID: 21L0	0052-01RE1 A
	Preparation Batch: BJL0104	Sample Size: 1) mL					
	Prepared: 12/03/2021	Final Volume:	0 mL					
				Detection	Reporting			
Analyte		CAS Number	Dilution	Limit	Limit	Result	Units	Notes
Nitrate-N		14797-55-8	1	0.100	0.100	0.130	mg/L	Н
				Detection	Reporting			
Analyte		CAS Number	Dilution	Limit	Limit	Result	Units	Notes
Sulfate		14808-79-8	1	0.100	0.100	5.92	mg/L	



Fremont Analytical 3600 Fremont Avenue N.	Project: Anions Project Number: 2112044	Deneutode
Seattle WA, 98103	Project Manager: Brianna Barnes	Reported: 16-Dec-2021 18:49
	MW-168-120221	
	21L0052-01RE2 (Water)	

Wet Chemistry									
Method: EPA 300.0						S	ampled: 12/	02/2021 10:10	
Instrument: IC930 Anal	yst: BF					Analyzed: 12/15/2021 07:4			
Analysis by: Analytic	al Resources, LLC								
Sample Preparation:	Preparation Method: No Prep Wet Chem					Extra	act ID: 21L0	052-01RE2 A	
	Preparation Batch: BJL0104	Sample Size: 1	0 mL						
	Prepared: 12/03/2021	Final Volume:	l0 mL						
				Detection	Reporting				
Analyte		CAS Number	Dilution	Limit	Limit	Result	Units	Notes	
Chloride		16887-00-6	10	1.00	1.00	27.9	mg/L	D	



Fremont Analytical	Project: Anions	
3600 Fremont Avenue N.	Project Number: 2112044	Reported:
Seattle WA, 98103	Project Manager: Brianna Barnes	16-Dec-2021 18:49
	MW-167-120221	
	21L0052-02 (Water)	
Wet Chemistry		

Method: EPA 300.0						S	ampled: 12/	02/2021 11:50
Instrument: IC930 Analy	yst: BF					Aı	nalyzed: 12/	04/2021 00:13
Analysis by: Analytic:	al Resources, LLC							
Sample Preparation:	Preparation Method: No Prep Wet Chem						Extract ID: 2	21L0052-02 A
	Preparation Batch: BJL0104	Sample Size: 10) mL					
	Prepared: 12/03/2021	Final Volume: 1	0 mL					
				Detection	Reporting			
Analyte		CAS Number	Dilution	Limit	Limit	Result	Units	Notes
Nitrate-N		14797-55-8	1	0.100	0.100	ND	mg/L	U



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Fremont Analytical Project: Anions 3600 Fremont Avenue N. Project Number: 2112044 Seattle WA, 98103 Project Manager: Brianna Barnes MW-167-120221

21L0052-02RE1 (Water)

Wet Chemistry									
Method: EPA 300.0						S	ampled: 12/	02/2021 11:50	
Instrument: IC930 Anal	yst: BF					Analyzed: 12/07/2021 10:1			
Analysis by: Analytic	al Resources, LLC								
Sample Preparation:	Preparation Method: No Prep Wet Chem Preparation Batch: BJL0104	Sample Size: 1	0 mL			Extra	act ID: 21L0	0052-02RE1 A	
	Prepared: 12/03/2021	Final Volume:	l0 mL						
				Detection	Reporting				
Analyte		CAS Number	Dilution	Limit	Limit	Result	Units	Notes	
Nitrate-N		14797-55-8	1	0.100	0.100	ND	mg/L	H, U	

Analytical Report

Reported:

16-Dec-2021 18:49



Page 15 of 48

Fremont AnalyticalProject: Anions3600 Fremont Avenue N.Project Number: 2112044Reported:Seattle WA, 98103Project Manager: Brianna Barnes16-Dec-2021 18:49MW-167-12022121L0052-02RE2 (Water)

Wet Chemistry								
Method: EPA 300.0						S	ampled: 12/	02/2021 11:50
Instrument: IC930 Anal	yst: BF				Analyzed: 12/15/2021 10:2			
Analysis by: Analytic	al Resources, LLC							
Sample Preparation:	Preparation Method: No Prep Wet Chem					Extra	act ID: 21L0	0052-02RE2 A
	Preparation Batch: BJL0104	Sample Size: 1) mL					
	Prepared: 12/03/2021	Final Volume:	0 mL					
				Detection	Reporting			
Analyte		CAS Number	Dilution	Limit	Limit	Result	Units	Notes
Chloride		16887-00-6	10	1.00	1.00	28.5	mg/L	D



Fremont Analytical	Project: Anions	
3600 Fremont Avenue N.	Project Number: 2112044	Reported:
Seattle WA, 98103	Project Manager: Brianna Barnes	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 Anal	Instrument: IC930 Analyst: BF							04/2021 00:33
Analysis by: Analytic	al Resources, LLC							
Sample Preparation:	Preparation Method: No Prep Wet Chem Preparation Batch: BJL0104 Prepared: 12/03/2021	Sample Size: 1 Final Volume: 1]	Extract ID:	21L0052-03 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

Analytical Report

NANY 1/2	120221
Project Manager:	Brianna Barnes
Project Number:	2112044
Project:	Anions

Reported: 16-Dec-2021 18:49

MW-165-120221

21L0052-03RE1 (Water)

Wet Chemistry								
Method: EPA 300.0						S	ampled: 12/	02/2021 12:35
Instrument: IC930 Analyst: BF						Aı	nalyzed: 12/	07/2021 10:30
Analysis by: Analytics	al Resources, LLC							
Sample Preparation:	Preparation Method: No Prep Wet Chem Preparation Batch: BJL0104 Prepared: 12/03/2021	Sample Size: 10 Final Volume: 1				Extra	act ID: 21L0	0052-03RE1 A
				Detection	Reporting			
Analyte		CAS Number	Dilution	Limit	Limit	Result	Units	Notes
Nitrate-N		14797-55-8	1	0.100	0.100	ND	mg/L	U, H
				Detection	Reporting			
Analyte		CAS Number	Dilution	Limit	Limit	Result	Units	Notes
Sulfate		14808-79-8	1	0.100	0.100	0.198	mg/L	



Fremont Analytical Project: Anions 3600 Fremont Avenue N. Project Number: 2112044 Seattle WA, 98103 Project Manager: Brianna Barnes MW-165-120221

21L0052-03RE2 (Water)

Wet Chemistry								
Method: EPA 300.0						S	ampled: 12/	02/2021 12:35
Instrument: IC930 Anal	yst: BF		Analyzed: 12/15/2021 10:4					15/2021 10:43
Analysis by: Analytic	al Resources, LLC							
Sample Preparation:	Preparation Method: No Prep Wet Chem Preparation Batch: BJL0104 Prepared: 12/03/2021	Sample Size: 10 Final Volume: 1				Extra	act ID: 21L0	0052-03RE2 A
				Detection	Reporting			
Analyte		CAS Number	Dilution	Limit	Limit	Result	Units	Notes
Chloride		16887-00-6	10	1.00	1.00	55.4	mg/L	D

Analytical Report

16-Dec-2021 18:49

Reported:



Fremont Analytical	Project: Anions	
3600 Fremont Avenue N.	Project Number: 2112044	Reported:
Seattle WA, 98103	Project Manager: Brianna Barnes	16-Dec-2021 18:49
	MW-166-120221	
	21L0052-04 (Water)	
Wet Chemistry		
M.d. 1 EDA 200 0		G1. 1. 12/02/2021 14:15

Method: EPA 300.0						Sampled: 12/02/2021 14:15			
Instrument: IC930 Analy	Instrument: IC930 Analyst: BF						Analyzed: 12/04/2021 00:53		
Analysis by: Analytics	al Resources, LLC								
Sample Preparation:	Preparation Method: No Prep Wet Chem Preparation Batch: BJL0104 Prepared: 12/03/2021	Sample Size: 10 Final Volume: 1]	Extract ID: 1	21L0052-04 A	
				Detection	Reporting				
Analyte		CAS Number	Dilution	Limit	Limit	Result	Units	Notes	
Nitrate-N		14797-55-8	1	0.100	0.100	ND	mg/L	U	



	MW-166-120221	
Seattle WA, 98103	Project Manager: Brianna Barnes	
3600 Fremont Avenue N.	Project Number: 2112044	
Fremont Analytical	Project: Anions	

MW-166-120221

21L0052-04RE1 (Water)

Wet Chemistry								
Method: EPA 300.0						S	ampled: 12/	02/2021 14:15
Instrument: IC930 Anal	yst: BF		Analyzed: 12/07/2021 10				07/2021 10:50	
Analysis by: Analytic	al Resources, LLC							
Sample Preparation:	Preparation Method: No Prep Wet Chem Preparation Batch: BJL0104	Sample Size: 1	0 mL			Extra	act ID: 21L0	052-04RE1 A
	Prepared: 12/03/2021	Final Volume:	l0 mL					
				Detection	Reporting			
Analyte		CAS Number	Dilution	Limit	Limit	Result	Units	Notes
Nitrate-N		14797-55-8	1	0.100	0.100	1.72	mg/L	Н

Analytical Report

Reported: 16-Dec-2021 18:49



Fremont Analytical

Instrument: IC930 Analyst: BF

3600 Fremont Avenue N.	Project Number: 2112044	Reported:
Seattle WA, 98103	Project Manager: Brianna Barnes	16-Dec-2021 18:49
	MW-166-120221	
	21L0052-04RE2 (Water)	
Wet Chemistry		
Method: EPA 300.0		Sampled: 12/02/2021 14:1

Analysis by: Analytic	al 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				Extra	act ID: 21L	0052-04RE2 A
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

Project: Anions

Analytical Report

Analyzed: 12/15/2021 11:03



Fremont Analytical Project: Anions 3600 Fremont Avenue N. Project Number: 2112044 **Reported:** Seattle WA, 98103 Project Manager: Brianna Barnes 16-Dec-2021 18:49 MW-166-120221

21L0052-04RE3 (Water)

Wet Chemistry								
Method: EPA 300.0						S	ampled: 12/0	02/2021 14:15
Instrument: IC930 Anal	yst: BF				Analyzed: 12/15/2021 11:2			
Analysis by: Analytic	al Resources, LLC							
Sample Preparation:	Preparation Method: No Prep Wet Chem Preparation Batch: BJL0104 Prepared: 12/03/2021	Sample Size: 1 Final Volume:				Extra	act ID: 21L0	052-04RE3 A
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	Project: Anions				
3600 Fremont Avenue N.	Project Number: 2112044	Reported:			
Seattle WA, 98103	Project Manager: Brianna Barnes	16-Dec-2021 18:49			
MW-174-120221					
	21L0052-05 (Water)				
Wet Chemistry					

wet enemistry								
Method: EPA 300.0 Sampled: 12						02/2021 10:30		
Instrument: IC930 Analyst: BF Analyzed: 12/04					04/2021 01:13			
Analysis by: Analytic	al 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: 1	21L0052-05 A
				Detection	Reporting			
Analyte		CAS Number	Dilution	Limit	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

Analytical Report

Reported:

16-Dec-2021 18:49

MW-174	-120221
Project Manager:	Brianna Barnes
Project Number:	2112044
Project:	Anions

21L0052-05RE1 (Water)

Wet Chemistry								
Method: EPA 300.0						S	ampled: 12/	/02/2021 10:30
Instrument: IC930 Analy	Instrument: IC930 Analyst: BF					Aı	nalyzed: 12/	/07/2021 11:10
Analysis by: Analytic:	al Resources, LLC							
Sample Preparation:	Preparation Method: No Prep Wet Chem Preparation Batch: BJL0104 Prepared: 12/03/2021	Sample Size: 10 Final Volume: 1				Extra	act ID: 21L0	0052-05RE1 A
				Detection	Reporting			
Analyte		CAS Number	Dilution	Limit	Limit	Result	Units	Notes
Nitrate-N		14797-55-8	1	0.100	0.100	0.178	mg/L	Н
				Detection	Reporting			
Analyte		CAS Number	Dilution	Limit	Limit	Result	Units	Notes
Sulfate		14808-79-8	1	0.100	0.100	5.42	mg/L	



Page 25 of 48

Fremont Analytical 3600 Fremont Avenue N. Project Number: 2112044 **Reported:** Seattle WA, 98103 Project Manager: Brianna Barnes 16-Dec-2021 18:49 MW-174-120221 21L0052-05RE2 (Water)

Wet Chemistry								
Method: EPA 300.0						S	ampled: 12/	02/2021 10:30
Instrument: IC930 Analyst: BF			Aı	Analyzed: 12/15/2021 11:43				
Analysis by: Analytic	al Resources, LLC							
Sample Preparation:	Preparation Method: No Prep Wet Chem					Extra	act ID: 21L0	052-05RE2 A
	Preparation Batch: BJL0104	Sample Size: 1	0 mL					
	Prepared: 12/03/2021	Final Volume:	l0 mL					
				Detection	Reporting			
Analyte		CAS Number	Dilution	Limit	Limit	Result	Units	Notes
Chloride		16887-00-6	20	2.00	2.00	68.7	mg/L	D

Project: Anions



Fremont Analytical	Project: Anions							
3600 Fremont Avenue N.	Project Number: 2112044	Reported:						
Seattle WA, 98103	Project Manager: Brianna Barnes	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						

Sample Size: 10 mL

Final Volume: 10 mL

Dilution

1

CAS Number

14797-55-8

Ensurant Analatical		

Analysis by: Analytical Resources, LLC

Preparation Method: No Prep Wet Chem

Preparation Batch: BJL0104

Prepared: 12/03/2021

Sample Preparation:

Analyte

Nitrate-N

Analytical Report

Extract ID: 21L0052-06 A

Notes

U

Units

mg/L

Result

ND

Reporting

Limit

0.100

Detection

Limit

0.100



Fremont Analytical 3600 Fremont Avenue N.

Seattle WA, 98103

Analytical Report

MW-175-120221	
Project Manager: Brianna Barnes	16-Dec-2021 18:49
Project Number: 2112044	Reported:
Project: Anions	

21L0052-06RE1 (Water)

Wet Chemistry									
Method: EPA 300.0						S	ampled: 12/	02/2021 12:05	
Instrument: IC930 Anal	yst: BF					Aı	nalyzed: 12/	07/2021 11:30	
Analysis by: Analytic	al 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: 21L0052-06RE1 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	
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

Page 25 of 42 21L0052 ARISample FINAL 16 Dec 2021 1849

3600 Fremont Avenue	N. Pro	iect Number: 2112044	Reported:				
Seattle WA, 98103	Proj	ect Manager: Brianna Barnes	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 Anal	lyst: BF		Analyzed: 12/15/2021 12:02				
Analysis by: Analytic	al 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: 21L0052-06RE2 A				
			Detection Benerting				

Project: Anions

Prepared: 12/05/2021	Final volume. I	UIIL						_
			Detection	Reporting				
Analyte	CAS Number	Dilution	Limit	Limit	Result	Units	Notes	ĺ
Chloride	16887-00-6	20	2.00	2.00	72.2	mg/L	D	



Instrument: IC930 Analyst: BF

Sample Preparation:

Analyte

Nitrate-N

Analysis by: Analytical Resources, LLC

Preparation Method: No Prep Wet Chem

Preparation Batch: BJL0104

Prepared: 12/03/2021

Fremont Analytical	Project: Anions						
3600 Fremont Avenue N.	Project Number: 2112044	Reported:					
Seattle WA, 98103	Project Manager: Brianna Barnes	16-Dec-2021 18:49					
MW-173-120221							
	21L0052-07 (Water)						
Wet Chemistry							
Method: EPA 300.0		Sampled: 12/02/2021 12:55					

Sample Size: 10 mL

Final Volume: 10 mL

Dilution

1

CAS Number

14797-55-8

Detection

Limit

0.100

Reporting Limit

0.100

Analyzed: 12/04/2021 01:53

Extract ID: 21L0052-07 A

Notes

U

Units

mg/L

Result

ND



Fremont Analytical 3600 Fremont Avenue N.

Seattle WA, 98103

Analytical Report

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						S	ampled: 12/	02/2021 12:55
Instrument: IC930 Analyst: BF					Ar	nalyzed: 12/	07/2021 12:50	
Analysis by: Analytics	al 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			Extra	act ID: 21L0	0052-07RE1 A	
				Detection	Reporting			
Analyte		CAS Number	Dilution	Limit	Limit	Result	Units	Notes
Nitrate-N		14797-55-8	1	0.100	0.100	ND	mg/L	U, H
				Detection	Reporting			
Analyte		CAS Number	Dilution	Limit	Limit	Result	Units	Notes
Sulfate		14808-79-8	1	0.100	0.100	0.275	mg/L	



Fremont Analytical	Project: Anions						
3600 Fremont Avenue N.	Project Number: 2112044	Reported:					
Seattle WA, 98103	Project Manager: Brianna Barnes	16-Dec-2021 18:49					
MW-173-120221							
	21L0052-07RE2 (Water)						
Wet Chemistry							

Method: EPA 300.0						S	ampled: 12/	02/2021 12:55
Instrument: IC930 Analyst: BF					Aı	nalyzed: 12/	15/2021 13:02	
Analysis by: Analytic	al Resources, LLC							
Sample Preparation:	Preparation Method: No Prep Wet Chem Preparation Batch: BJL0104 Prepared: 12/03/2021	Sample Size: 10 Final Volume: 1			Extra	act ID: 21L0	0052-07RE2 A	
				Detection	Reporting			
Analyte		CAS Number	Dilution	Limit	Limit	Result	Units	Notes
Chloride		16887-00-6	10	1.00	1.00	42.2	mg/L	D



Fremont Analytical	Project: Anions	
3600 Fremont Avenue N.	Project Number: 2112044	Reported:
Seattle WA, 98103	Project Manager: Brianna Barnes	16-Dec-2021 18:49
	MW-176-120221	
	21L0052-08 (Water)	
Wet Chemistry		

wet Chemistry								
Method: EPA 300.0						S	ampled: 12/	02/2021 15:00
Instrument: IC930 Anal	yst: BF					Analyzed: 12/04/2021 02:13		
Analysis by: Analytic	al Resources, LLC							
Sample Preparation:	Preparation Method: No Prep Wet Chem Preparation Batch: BJL0104 Prepared: 12/03/2021	Sample Size: 10 Final Volume: 1					Extract ID: 2	21L0052-08 A
				Detection	Reporting			
Analyte		CAS Number	Dilution	Limit	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

Analytical Report

16-Dec-2021 18:49
Reported:

21L0052-08RE1 (Water)

Wet Chemistry								
Method: EPA 300.0						S	ampled: 12/	02/2021 15:00
Instrument: IC930 Anal	yst: BF					Ar	nalyzed: 12/	07/2021 13:10
Analysis by: Analytic	al Resources, LLC							
Sample Preparation:	Preparation Method: No Prep Wet Chem Preparation Batch: BJL0104 Prepared: 12/03/2021	Sample Size: 10 Final Volume: 1				Extra	act ID: 21L0	0052-08RE1 A
				Detection	Reporting			
Analyte		CAS Number	Dilution	Limit	Limit	Result	Units	Notes
Nitrate-N		14797-55-8	1	0.100	0.100	ND	mg/L	U, H
				Detection	Reporting			
Analyte		CAS Number	Dilution	Limit	Limit	Result	Units	Notes
Sulfate		14808-79-8	1	0.100	0.100	0.988	mg/L	



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Fremont Analytical Project: Anions 3600 Fremont Avenue N. Project Number: 2112044 Seattle WA, 98103 Project Manager: Brianna Barnes

MW-176-120221

21L0052-08RE2 (Water)

Wet Chemistry								
Method: EPA 300.0						S	ampled: 12/	02/2021 15:00
Instrument: IC930 Anal					Aı	nalyzed: 12/	15/2021 13:22	
Analysis by: Analytic	al Resources, LLC							
Sample Preparation:	Preparation Method: No Prep Wet Chem					Extra	act ID: 21L0	0052-08RE2 A
	Preparation Batch: BJL0104	Sample Size: 1) mL					
	Prepared: 12/03/2021	Final Volume:	0 mL					
				Detection	Reporting			
Analyte		CAS Number	Dilution	Limit	Limit	Result	Units	Notes
Chloride		16887-00-6	20	2.00	2.00	57.5	mg/L	D

Analytical Report

Reported: 16-Dec-2021 18:49



Fremont Analytical		Project: Anions	
3600 Fremont Avenue	N.	Project Number: 2112044	Reported:
Seattle WA, 98103	:	Project Manager: Brianna Barnes	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 Anal	yst: BF		Analyzed: 12/04/2021 02:33
Analysis by: Analytic	al Resources, LLC		
Sample Preparation:	Preparation Method: No Prep Wet Che	m	Extract ID: 21L0052-09 A
	Preparation Batch: BJL0104	Sample Size: 10 mL	

	Treparation Batem BrEotor	Sumple Size: 10	me					
	Prepared: 12/03/2021	Final Volume: 1	0 mL					
				Detection	Reporting			
Analyte		CAS Number	Dilution	Limit	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

Analytical Report

MW-155-120221	
Project Manager: Brianna Barnes	16-Dec-2021 18:49
Project Number: 2112044	Reported:
Project: Anions	

21L0052-09RE1 (Water)

Wet Chemistry								
Method: EPA 300.0						S	ampled: 12/	02/2021 10:27
Instrument: IC930 Analy	yst: BF					Aı	nalyzed: 12/	07/2021 13:30
Analysis by: Analytic	al Resources, LLC							
Sample Preparation:	Preparation Method: No Prep Wet Chem Preparation Batch: BJL0104 Prepared: 12/03/2021	Sample Size: 10 Final Volume: 1				Extra	act ID: 21L0	0052-09RE1 A
				Detection	Reporting			
Analyte		CAS Number	Dilution	Limit	Limit	Result	Units	Notes
Chloride		16887-00-6	1	0.100	0.100	9.58	mg/L	
				Detection	Reporting			
Analyte		CAS Number	Dilution	Limit	Limit	Result	Units	Notes
Nitrate-N		14797-55-8	1	0.100	0.100	8.40	mg/L	Н



Fremont Analytical Project: Anions 3600 Fremont Avenue N. Project Number: 2112044 Seattle WA, 98103 Project Manager: Brianna Barnes 16-Dec-2021 18:49 MW-155-120221

21L0052-09RE2 (Water)

Wet Chemistry								
Method: EPA 300.0						S	ampled: 12/	02/2021 10:27
Instrument: IC930 Anal					Aı	nalyzed: 12/	15/2021 13:42	
Analysis by: Analytic	al Resources, LLC							
Sample Preparation:	Preparation Method: No Prep Wet Chem Preparation Batch: BJL0104 Prepared: 12/03/2021	Sample Size: 1 Final Volume:				Extra	act ID: 21L0	0052-09RE2 A
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

Reported:



Fremont Analytical	Project: Anions	
3600 Fremont Avenue N.	Project Number: 2112044	Reported:
Seattle WA, 98103	Project Manager: Brianna Barnes	16-Dec-2021 18:49
	MW-159-120221	
	21L0052-10 (Water)	
Wet Chemistry		

wet Chemistry								
Method: EPA 300.0						S	ampled: 12/	02/2021 12:15
Instrument: IC930 Anal	yst: BF					Aı	nalyzed: 12/	04/2021 02:53
Analysis by: Analytic	al Resources, LLC							
Sample Preparation:	Preparation Method: No Prep Wet Chem Preparation Batch: BJL0104 Prepared: 12/03/2021	Sample Size: 10 Final Volume: 1]	Extract ID: 2	21L0052-10 A
				Detection	Reporting			
Analyte		CAS Number	Dilution	Limit	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

Analytical Report

Reported:

16-Dec-2021 18:49

MW-159	-120221
Project Manager:	Brianna Barnes
Project Number:	2112044
Project:	Anions

21L0052-10RE1 (Water)

Wet Chemistry								
Method: EPA 300.0						S	ampled: 12/	02/2021 12:15
Instrument: IC930 Anal	yst: BF					Aı	nalyzed: 12/	07/2021 13:50
Analysis by: Analytic	al Resources, LLC							
Sample Preparation:	Preparation Method: No Prep Wet Chem Preparation Batch: BJL0104 Prepared: 12/03/2021	Sample Size: 10 Final Volume: 1				Extra	act ID: 21L(0052-10RE1 A
	110pulot. 12/05/2021	i mai voitame. I		Detection	Reporting			
Analyte		CAS Number	Dilution	Limit	Limit	Result	Units	Notes
Chloride		16887-00-6	1	0.100	0.100	5.96	mg/L	
				Detection	Reporting			
Analyte		CAS Number	Dilution	Limit	Limit	Result	Units	Notes
Nitrate-N		14797-55-8	1	0.100	0.100	ND	mg/L	U, H



Fremont Analytical		Project: Anions	
3600 Fremont Avenue N. Pr		Project Number: 2112044	Reported:
Seattle WA, 98103		Project Manager: Brianna Barnes	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 Anal	lyst: BF		Analyzed: 12/04/2021 04:13
Analysis by: Analytic	al Resources, LLC		
Sample Preparation:	Preparation Method: No Prep Wet Ch		Extract ID: 21L0052-11 A
	Preparation Batch: BIL 0104	Sample Size: 10 mL	

Sample Preparation:	Preparation Method: No Prep Wet Chem Preparation Batch: BJL0104 Prepared: 12/03/2021	Sample Size: 10 Final Volume: 1				I	Extract ID:	21L0052-11
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 Project: Anions 3600 Fremont Avenue N. Project Number: 2112044 Seattle WA, 98103 Project Manager: Brianna Barnes

MW-301-120221

21L0052-11RE1 (Water)

Wet Chemistry								
Method: EPA 300.0						S	ampled: 12/	02/2021 14:30
Instrument: IC930 Anal	Instrument: IC930 Analyst: BF							07/2021 14:10
Analysis by: Analytic	al Resources, LLC							
Sample Preparation:	Preparation Method: No Prep Wet Chem					Extra	act ID: 21L0	0052-11RE1 A
	Preparation Batch: BJL0104	Sample Size: 1) mL					
	Prepared: 12/03/2021	Final Volume:	0 mL					
				Detection	Reporting			
Analyte		CAS Number	Dilution	Limit	Limit	Result	Units	Notes
Nitrate-N		14797-55-8	1	0.100	0.100	1.56	mg/L	Н

Analytical Report

Reported:

16-Dec-2021 18:49



Fremont Analytical 3600 Fremont Avenue N.

Seattle WA, 98103

Analytical Report

Reported:

16-Dec-2021 18:49

MW 201	
Project Manager:	Brianna Barnes
Project Number:	2112044
Project:	Anions

MW-301-120221

21L0052-11RE2 (Water)

Wet Chemistry								
Method: EPA 300.0						S	ampled: 12/	/02/2021 14:30
Instrument: IC930 Anal	yst: BF					Aı	nalyzed: 12/	15/2021 14:01
Analysis by: Analytic	al Resources, LLC							
Sample Preparation:	Preparation Method: No Prep Wet Chem					Extra	act ID: 21L0	0052-11RE2 A
	Preparation Batch: BJL0104	Sample Size: 10) mL					
	Prepared: 12/03/2021	Final Volume: 1	0 mL					
				Detection	Reporting			
Analyte		CAS Number	Dilution	Limit	Limit	Result	Units	Notes
Chloride		16887-00-6	10	1.00	1.00	39.6	mg/L	D
				Detection	Reporting			
Analyte		CAS Number	Dilution	Limit	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

		Detection	Reporting		Spike	Source	0/220	%REC		RPD	
QC Sample/Analyte	Result	Limit	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Blank (BJL0104-BLK2)				Prep	ared: 03-Dec	-2021 An	alyzed: 15-	Dec-2021 0.	3:25		
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)				Prep	ared: 03-Dec	-2021 An	alyzed: 15-	Dec-2021 0.	3:45		
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)	S	ource: 21L	.0052-01RE1	Prep	ared: 03-Dec	-2021 An	alyzed: 07-	Dec-2021 0	9:30		
Nitrate-N	0.137	0.100	0.100	mg/L		0.130			5.24	20	Н
Sulfate	5.90	0.100	0.100	mg/L		5.92			0.25	20	
Duplicate (BJL0104-DUP3)	S	ource: 21L	0052-01RE2	Prep	ared: 03-Dec	-2021 An	alyzed: 15-	Dec-2021 0	3:04		
Chloride	28.4	1.00	1.00	mg/L		27.9			1.88	20	D
Matrix Spike (BJL0104-MS2)	S	ource: 21L	.0052-01RE1	Prep	ared: 03-Dec	-2021 An	alyzed: 07-	Dec-2021 0	9:50		
Nitrate-N	1.91	0.100	0.100	mg/L	2.00	0.130	88.8	75-125			Н
Sulfate	8.01	0.100	0.100	mg/L	2.00	5.92	104	75-125			
Recovery limits for target analytes in MS/MSI	D QC samples are	advisory on	y.								
Matrix Spike (BJL0104-MS3)	S	ource: 21L	0052-01RE2	Prep	ared: 03-Dec	-2021 An	alyzed: 15-	Dec-2021 0	9:04		
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	Project: Anions	
3600 Fremont Avenue N.	Project Number: 2112044	Reported:
Seattle WA, 98103	Project Manager: Brianna Barnes	16-Dec-2021 18:49

Certified Analyses included in this Report

Analyte		Certifications		
EPA 300.0 in	Water			
Chloride		DoD-ELAP,WADOE,W	/A-DW,NELAP	
Nitrate-N		DoD-ELAP,WADOE,W	/A-DW,NELAP	
Sulfate		DoD-ELAP,WADOE,W	/A-DW,NELAP	
Code	Description		Number	Expires
ADEC	Alaska Dept of Environm	ental Conservation	17-015	03/28/2023

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	Project: Anions	
3600 Fre	mont Avenue N.	Project Number: 2112044	Reported:
Seattle W	/A, 98103	Project Manager: Brianna Barnes	16-Dec-2021 18:49
		Notes and Definitions	
D	The reported value is from a dilution		
Н	Hold time violation - Hold time was exceeded		
U	This analyte is not detected above the reportin	g limit (RL) or if noted, not detected above the limit of detection (LC	DD).
DET	Analyte DETECTED		
ND	Analyte NOT DETECTED at or above the rep	porting 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	ond column on a dual column analysis.	



Sample Log-In Check List

С	lient Name:	PES	Work Or	der Num	per: 2112044	
Lo	ogged by:	Clare Griggs	Date Re	ceived:	12/2/2021	4:28:00 PM
<u>Cha</u>	in of Cust	ody				
1.	Is Chain of C	ustody complete?	Yes	✓	No 🗌	Not Present
2.	How was the	sample delivered?	Clien	<u>t</u>		
Log	In					
-	Coolers are p	present?	Yes	✓	No 🗌	
0.	- 1			_	_	_
4.	Shipping con	tainer/cooler in good condition?	Yes	✓	No	
5.		Is present on shipping container/cooler? nments for Custody Seals not intact)	Yes	✓	No 🗌	Not Present
6.	Was an atter	npt made to cool the samples?	Yes	✓	No 🗌	
7.	Were all item	is received at a temperature of >2°C to 6°C *	Yes	✓	No 🗌	
8.	Sample(s) in	proper container(s)?	Yes	✓	No 🗌	
9.	Sufficient sar	nple volume for indicated test(s)?	Yes	✓	No 🗌	
10.	Are samples	properly preserved?	Yes	✓	No 🗌	
11.	Was preserv	ative added to bottles?	Yes		No 🔽	NA
12.	Is there head	Ispace in the VOA vials?	Yes		No 🗌	NA 🗹
		es containers arrive in good condition(unbroken)?	Yes	✓	No 🗌	
14.	Does paperw	ork match bottle labels?	Yes	✓	No 🗌	
15.	Are matrices	correctly identified on Chain of Custody?	Yes	✓	No 🗌	
		at analyses were requested?	Yes	✓	No 🗌	
17.	Were all hold	ling times able to be met?	Yes	✓	No 🗌	
Sne	cial Handl	ing (if applicable)				
-		otified of all discrepancies with this order?	Yes		No 🗌	NA 🖌
.0.		Notified: Date				
	By Wha		• p eMa	ы ПРъ	one 🗌 Fax [In Person
	Regardi					
		nstructions;				
40	Additional rei	p.				

Item Information

Item #	Temp °C
Sample	4.4

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

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Page 1		om	www.fremontanalytical.com	www.fremo					COC 1.3 - 11.06.20	COC 1.
		2	X Variational Parameter		Datel time		0	Print Name	× Vannengising	x
Date/Time	HUX Incho 10	top +	* Charles	e/21 1552	Date/Time	hin	P. Trn Lau	Print Name	Relinquistant (Signature) × A-Tell Joury hu	Relinq
2 Day (specify)	ve verified Chent's agreemen	ied above, that I have	alf of the Client nan	Analytical on beh	Fremont	nent with reement.	his Agree of this Ag	enter into t d/backside	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.	toe
3 Day Same Day			Nitrate+Nitrite	O-Phosphate Fluoride	se O-Ph	Bromide	Sulfate	Chloride	***Anions (Circle): Nitrate Nitrite	***An
Standard 🗌 Next Day	Sb Se Sr Sn Ti Ti V Zn	Mg Mn Mo Na Ni Pb	Cr Cu Fe Hg K	s B Ba Be Ca Cd Co	Individual: Ag Al As B	Individu	nts TAL	Priority Pollutants	**Metals (Circle): MTCA-5 RCRA-8 P	**Met
Turn-ar	= Storm Water, WW = Waste Water	GW = Ground Water, SW = Storm Water,	DW = Drinking Water, G	SL = Solid, W = Water,		Soil, SD = S	product, S =	= Other, P = I	*Matrix: A = Air, AQ = Aqueous, B = Bulk, O = Other, P = Product, S = Soil, SD = Sediment,	*Matri
		X			۲	4	1215	4	10/MW-159-120221	10 M
		X			4	-	10077		120001-551-MW	NMe
		X			r	-	1500		166361-941-MW	MI
		X			1		12SS		166061-541-WM	MI
		X			H		Soel		lepoel-Stl-mW"	6MI
		X			1		1030		160001-hell-mws	SMI
		X			r	-	1415		MW-166-120231	AM
		×			+	_	SEEN		122021-Sal-mWE	ME
		X			٢	-	INS0		1660-1-5-130221	N
		X			Þ	Gw	1010	vele/er	100-168-120221	N
Comments			ALL AND BE CHANGE	25-10-	# of Cont.	Sample Type (Matrix)*	Sample	Sample	Sample Name	Sam
	N	envs. com	oneal ?	brian. oneal@	PM Email:		SS	-3985	206-229-	Fax:
Sample Disposal: 🔲 Return to client 🛛 🕅 Disposal by lab (after 30 days)	Sample Disposal: Return to di	al	n Cive	mi Brian	Report To (PM):		80	39	home: 204-529-3980	Telephone:
			OwA	Seattle,	Location:		12136		ony, state, up. Seattle, WA,	City, St
		SPIC/HRC	Jin	collected by: R. Mc Cuuch	Collected b	U	#1310		Address: 2101 4th Ave	Addre
Netterte 10 IN, Jaie June	NITESTIC 10	M	DI.D.J. SDIE	2	Project No:		Q	vente	cient PES Environmental	Client:
1 Hall Lines	Special Remarks:			ALS	-	2-7178	Fax: 206-352-7178		Analytical	R
· 2112044	Laboratory Project No (internal):	1 # 2	Page	12/2/21	Date: 1	98103	Seattle, WA 98103 Tel: 206-352-3790	-	remot	-1
s Agreement	Laboratory Services Agreement	_	Chain of Custody Record &	hain of Cu	0	Ave N.	3600 Fremont Ave N	36		3

Sample Disposal Return to client Chipposal by lab (after 30 days)	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. Inquished (Signature) Print Name Pr	Print Name	Reinquisted (Signature)
Turn-oro	Fremont Analytical on behalf of the Client named above, that I have veri Date/Time 2/2/2/ 1552 × Quillo Down Ale	. Contract	11-14-14-1
Comments	Fremont Analytical on behalf of the Client named above, that I have veri	Mandlin 12	Relinquished (Signature)
nt Koisposal by lab		r into this Agreement with ckside of this Agreement.	I represent that I am authorized to enter into this Agreement wit to each of the terms on the front and backside of this Agreement.
	fe O-Phosphate Fluoride Nikrate+Nikrite	Chioride Sulfate Bromide	***Anions (Circle): (Vitrate) Nitrite (C
	Al As B Ba Be Ca Cd Co Cr Cu Fe Hg K Mg Mn Mo Na Ni Pb Sb Se	Priority Pollutants TAL Individual: Ag	**Metais (Circle): MTCA-5 RCRA-8 Priori
Comments	SD = Sediment, SL = Solid, W = Water, DW = Drinking Water, GW = Ground Water, SW = Storm	0 = Other, P = Product, S = Soil, SD = S	latrix: A = Air, AQ = Aqueous, B = Bulk,
Comments			10
Comments			
Imple Disposal: Return to client Comments			
Imple Disposal: Return to client Cosposal by lab (after 30 day)		2/2/21 1430 GW	MW-301-120321 12
Imple Disposal: Return to client Disposal by lab (after 30 days	not 100 0	Sample Sample Sample Time (Matrix)*	Sample Name
Imple Disposal: 🗌 Return to client 🛛 🕅 Disposal by lab (after 30 days	8		Fax:
t	Report To (PM):	/	Telephone:
	Location: See pg, 1	F	city, state, zip: Sog pq.
	Collected by:		Address:
	Project No:	th	client: PES Environmental
Special Remarks:	TNAME ALS	Fax: 206-352-7178	11 Anniyinat
Laboratory Project No (internal): 2112044	Date: $12/2/21$ Page: 2 of 2 un		FIGHIUHU
Laboratory Services Agreement	Chain of Custody Record & Labora		