

Summit Scientific

4653 Table Mountain Drive, Golden, Colorado 80403

303.277.9310

April 11, 2024

Paul Henchan

Fremont Environmental

PO Box 1289

Wellington, CO 80549

RE: Hanson BC 0-64N67W 1NESE

Work Order #2402290

Enclosed are the results of analyses for samples received by Summit Scientific on 02/15/24 13:25. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read "Jacob Wood". The signature is written in a cursive, flowing style.

Jacob Wood For Ben Shrewsbury

Laboratory Manager



Fremont Environmental
PO Box 1289
Wellington CO, 80549

Project: Hanson BC 0-64N67W 1NESE
Project Number: UWRWE-A2137-ABN
Project Manager: Paul Henchan

Reported:
04/11/24 11:50

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
(FL01-01)Backfill	2402290-01	Soil	02/15/24 00:00	02/15/24 13:25
(PWV)B01@5.0'	2402290-02	Soil	02/15/24 00:00	02/15/24 13:25
(PWV)N01@4.0'	2402290-03	Soil	02/15/24 00:00	02/15/24 13:25
(PWV)S01@4.0'	2402290-04	Soil	02/15/24 00:00	02/15/24 13:25
(PWV)E01@4.0'	2402290-05	Soil	02/15/24 00:00	02/15/24 13:25
(PWV)W01@4.0'	2402290-06	Soil	02/15/24 00:00	02/15/24 13:25
(PWV)Backfill	2402290-07	Soil	02/15/24 00:00	02/15/24 13:25

Summit Scientific

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4653 Table Mountain Drive
Golden, CO 80403
303-277-9310

Lab ID	Page <u>1</u> of <u>1</u>
2402290	

Client: <u>Fremont Env</u>				Send Data To:				Send Invoice To:														
Address:				Project Manager: <u>Paul Henahan</u>				Company:														
City/State/Zip:				E-Mail: <u>Paulh@Fremontenv.com</u>				Project Name/Location:														
Phone:				<u>jeff@Fremontenv.com</u> <u>Ethenb@Fremontenv.com</u>				AFE#:														
Sampler Name: <u>J6</u>				Project Name: <u>Hanson BC 0-64N67W 1NESE</u>				PO/Billing Codes: <u>UWRWE-A2137-ABN</u>														
				Project Number:				Contact:														
				Preservative				Matrix				Analysis Requested				Special Instructions						
ID	Sample Description	Date Sampled	Time Sampled	# of containers	HCl	HNO3	None	Other	Water	Soil	Air-Canister #	Other	BTEX+N	TMBs(915)	DR0,OR0,GR0	PAHs(915)	EC,PH,SAR,Barren	Metals(915)				
1	(FLOI-01) Backfill	2/15/24		2			X			X			X	X	X	X	X	X				
2	(Puv) Boies @																					
3	(Puv) No1 @ 4.0'																					
4	(Puv) So1 @ 4.0'																					
5	(Puv) Eo1 @ 4.0'																					
6	(Puv) Uo1 @ 4.0'																					
7	(Puv) Backfill																					
8																						
9																						
10																						
11																						
12																						
13																						
14																						
15																						

Relinquished by:	Date/Time:	Received by:	Date/Time:	TAT Business Days	Field DO	Notes:	
<u>[Signature]</u>	2/15/24 13:25	<u>[Signature]</u>	2/15/24 13:25	Same Day	X		Field EC
Relinquished by:	Date/Time:	Received by:	Date/Time:	1 Day			Field ORP
				2 Days			Field pH
				3 Days			Field Temp.
Relinquished by:	Date/Time:	Received by:	Date/Time:	Standard		Field Turb.	
Temperature Upon Receipt: <u>10.1</u>	Corrected Temperature	IR gun #:	<u>2</u>	HNO3 lot #:			

S₂

Sample Receipt Checklist

S2 Work Order# 24022910Client: FremontClient Project ID: Hanson BC D-64N67W 1NESEShipped Via: H.D./P.U./FedEx/UPS/USPS/Other ☐Airbill #: ☐

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Matrix (Check all that apply)

Air ☐Soil/Solid ☒Water ☐Other ☐

Temp (°C)

10.1

Thermometer #

Z

	Yes	No	N/A	Comments (if any)
If samples require cooling, is the temperature < 6°C? ⁽¹⁾ NOTE: If samples are delivered the same day of sampling, this requirement is met if there is evidence that cooling has begun.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	on ice
If custody seals are present, are they intact? ⁽¹⁾	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Are samples due within 48 hours present?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Same day
Are water samples with short hold times present? Note the short hold analysis in the comments column - pH, Nitrate/Nitrite, Ferrous Iron (Fe ²⁺), Hexavalent Chromium (Cr ⁶⁺ , Cr VI), COD/BOD, Total Coliform, E. Coli, Total Residual Chlorine (TRC), Dissolved Oxygen	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Is a chain-of-custody (COC) form present and filled out Completely? ⁽¹⁾	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	No sample time S
Is the COC properly relinquished by the client w/ date and time recorded? ⁽¹⁾	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were all samples received intact? ⁽¹⁾	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Was adequate sample volume provided? ⁽¹⁾	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Does the COC agree with the number and type of sample bottles received? ⁽¹⁾	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Do the sample IDs on the bottle labels match the COC? ⁽¹⁾	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
For volatiles in water – is there headspace present? If yes, contact client and note in narrative.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Are samples preserved that require preservation (excluding cooling)? ⁽¹⁾ Note the type of preservative in the comments column – HCl, H ₂ SO ₄ , NaOH, HNO ₃ , etc.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
If samples are acid preserved for metals, is the pH ≤ 2? ⁽¹⁾ Record the pH in Comments.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
If dissolved metals are requested, were samples field filtered?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Additional Comments (if any):				

⁽¹⁾ If NO, then contact the client before proceeding with analysis and note in case narrative.J. H. Wild

Custodian Printed Name

2/15/24 13:25

Date/Time



Fremont Environmental
PO Box 1289
Wellington CO, 80549

Project: Hanson BC 0-64N67W 1NESE
Project Number: UWRWE-A2137-ABN
Project Manager: Paul Henchan

Reported:
04/11/24 11:50

(FL01-01)Backfill
2402290-01 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **02/15/24 00:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Benzene	ND	0.0020		mg/kg	1	BHB0526	02/15/24	02/15/24	EPA 8260B	
Toluene	ND	0.0050		"	"	"	"	"	"	
Ethylbenzene	ND	0.0050		"	"	"	"	"	"	
Xylenes (total)	ND	0.010		"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	0.0050		"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	0.0050		"	"	"	"	"	"	
Naphthalene	ND	0.0038		"	"	"	"	"	"	
Gasoline Range Hydrocarbons	ND	0.50		"	"	"	"	"	"	

Date Sampled: **02/15/24 00:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: 1,2-Dichloroethane-d4	0.0431	108 %		50-150		"	"	"	"	
Surrogate: Toluene-d8	0.0379	94.8 %		50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	0.0385	96.3 %		50-150		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **02/15/24 00:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
C10-C28 (DRO)	ND	50		mg/kg	1	BHB0528	02/15/24	02/16/24	EPA 8015M	
C28-C36 (ORO)	ND	50		"	"	"	"	"	"	

Date Sampled: **02/15/24 00:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: o-Terphenyl	11.7	93.6 %		30-150		"	"	"	"	

PAH by EPA Method 8270D SIM

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(FL01-01)Backfill
2402290-01 (Soil)

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PAH by EPA Method 8270D SIM

Date Sampled: **02/15/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BHB0532	02/16/24	02/17/24	EPA 8270D SIM	
Anthracene	ND	0.00500	"	"	"	"	"	"	
Benzo (a) anthracene	0.00751	0.00500	"	"	"	"	"	"	
Benzo (a) pyrene	ND	0.00500	"	"	"	"	"	"	
Benzo (b) fluoranthene	ND	0.00500	"	"	"	"	"	"	
Benzo (k) fluoranthene	ND	0.00500	"	"	"	"	"	"	
Chrysene	0.00516	0.00500	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	0.00500	"	"	"	"	"	"	
Fluoranthene	0.00810	0.00500	"	"	"	"	"	"	
Fluorene	ND	0.00500	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	ND	0.00500	"	"	"	"	"	"	
Pyrene	0.00936	0.00500	"	"	"	"	"	"	
1-Methylnaphthalene	ND	0.00500	"	"	"	"	"	"	
2-Methylnaphthalene	ND	0.00500	"	"	"	"	"	"	

Date Sampled: **02/15/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10	0.0147	44.0 %	40-150		"	"	"	"	
Surrogate: Fluoranthene-d10	0.0168	50.4 %	40-150		"	"	"	"	

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **02/15/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	ND	2.00	mg/L	1	BHB0737	02/22/24	02/27/24	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **02/15/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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(FL01-01)Backfill
2402290-01 (Soil)

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Total Metals by EPA 6020B

Arsenic	3.48	0.200	mg/kg dry	1	BHC0928	03/07/24	04/04/24	EPA 6020B
Barium	71.6	0.400	"	"	"	"	"	"
Cadmium	ND	0.200	"	"	"	"	"	"
Copper	4.39	0.400	"	"	"	"	"	"
Lead	6.15	0.200	"	"	"	"	"	"
Nickel	5.22	0.400	"	"	"	"	"	"
Silver	0.0324	0.0200	"	"	"	"	"	"
Zinc	17.0	0.400	"	"	"	"	"	"
Selenium	ND	0.260	"	"	"	"	"	"

Soluble Nutrients by EPA 6020/USDA60 6(2) - Saturated Paste Extraction

Date Sampled: **02/15/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	50.9	0.0500	mg/L dry	1	BHB0530	02/15/24	02/20/24	EPA 6020B	
Magnesium	9.09	0.0500	"	"	"	"	"	"	
Sodium	23.0	0.0500	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **02/15/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	0.780	0.00100	units	1	BHB0743	02/22/24	02/22/24	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **02/15/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	90.2		%	1	BHB0536	02/16/24	02/16/24	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **02/15/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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(FL01-01)Backfill
2402290-01 (Soil)

Summit Scientific

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Specific Conductance (EC)	0.370	0.0100	mmhos/cm	1	BHB0537	02/16/24	02/20/24	EPA 120.1
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Physical Parameters by APHA/ASTM/EPA Methods, Saturated Paste Extraction

Date Sampled: **02/15/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	7.98		pH Units	1	BHB0538	02/16/24	02/20/24	EPA 9045D	

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04/11/24 11:50

(PWV)B01@5.0'
2402290-02 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **02/15/24 00:00**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Benzene	ND	0.0020	mg/kg	1	BHB0526	02/15/24	02/15/24	EPA 8260B	
Toluene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	ND	0.010	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	0.0050	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	0.0050	"	"	"	"	"	"	
Naphthalene	ND	0.0038	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	ND	0.50	"	"	"	"	"	"	

Date Sampled: **02/15/24 00:00**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: 1,2-Dichloroethane-d4	0.0462	115 %	50-150		"	"	"	"	
Surrogate: Toluene-d8	0.0383	95.8 %	50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	0.0381	95.2 %	50-150		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **02/15/24 00:00**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
C10-C28 (DRO)	ND	50	mg/kg	1	BHB0528	02/15/24	02/16/24	EPA 8015M	
C28-C36 (ORO)	ND	50	"	"	"	"	"	"	

Date Sampled: **02/15/24 00:00**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: o-Terphenyl	11.6	92.4 %	30-150		"	"	"	"	

PAH by EPA Method 8270D SIM

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(PWV)B01@5.0'
2402290-02 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

Date Sampled: **02/15/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BHB0532	02/16/24	02/17/24	EPA 8270D SIM	
Anthracene	ND	0.00500	"	"	"	"	"	"	
Benzo (a) anthracene	ND	0.00500	"	"	"	"	"	"	
Benzo (a) pyrene	ND	0.00500	"	"	"	"	"	"	
Benzo (b) fluoranthene	ND	0.00500	"	"	"	"	"	"	
Benzo (k) fluoranthene	ND	0.00500	"	"	"	"	"	"	
Chrysene	ND	0.00500	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	0.00500	"	"	"	"	"	"	
Fluoranthene	ND	0.00500	"	"	"	"	"	"	
Fluorene	ND	0.00500	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	ND	0.00500	"	"	"	"	"	"	
Pyrene	ND	0.00500	"	"	"	"	"	"	
1-Methylnaphthalene	ND	0.00500	"	"	"	"	"	"	
2-Methylnaphthalene	ND	0.00500	"	"	"	"	"	"	

Date Sampled: **02/15/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10	0.0147	44.0 %	40-150		"	"	"	"	
Surrogate: Fluoranthene-d10	0.0200	60.0 %	40-150		"	"	"	"	

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **02/15/24 00:00**


Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	ND	2.00	mg/L	1	BHB0737	02/22/24	02/27/24	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **02/15/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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Project: Hanson BC 0-64N67W 1NESE
Project Number: UWRWE-A2137-ABN
Project Manager: Paul Henchan

Reported:
04/11/24 11:50

(PWV)B01@5.0'
2402290-02 (Soil)

Summit Scientific

Total Metals by EPA 6020B

Arsenic	5.94	0.200	mg/kg dry	1	BHD0178	04/05/24	04/10/24	EPA 6020B
Barium	47.0	0.400	"	"	"	"	"	"
Cadmium	ND	0.200	"	"	"	"	"	"
Copper	2.87	0.400	"	"	"	"	"	"
Lead	6.28	0.200	"	"	"	"	"	"
Nickel	4.53	0.400	"	"	"	"	"	"
Silver	0.0267	0.0200	"	"	"	"	"	"
Zinc	21.2	0.400	"	"	"	"	"	"
Selenium	ND	0.260	"	"	"	"	"	"

Soluble Nutrients by EPA 6020/USDA60 6(2) - Saturated Paste Extraction

Date Sampled: **02/15/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	126	0.0500	mg/L dry	1	BHB0530	02/15/24	02/20/24	EPA 6020B	
Magnesium	14.3	0.0500	"	"	"	"	"	"	
Sodium	0.935	0.0500	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **02/15/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	0.0211	0.00100	units	1	BHB0743	02/22/24	02/22/24	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **02/15/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	88.5		%	1	BHB0536	02/16/24	02/16/24	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **02/15/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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Project: Hanson BC 0-64N67W 1NESE
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Project Manager: Paul Henchan

Reported:
04/11/24 11:50

(PWV)B01@5.0'
2402290-02 (Soil)

Summit Scientific

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Specific Conductance (EC)	0.232	0.0100	mmhos/cm	1	BHB0537	02/16/24	02/20/24	EPA 120.1
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Physical Parameters by APHA/ASTM/EPA Methods, Saturated Paste Extraction

Date Sampled: **02/15/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	8.42		pH Units	1	BHB0538	02/16/24	02/20/24	EPA 9045D	

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Project: Hanson BC 0-64N67W 1NESE
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Project Manager: Paul Henchan

Reported:
04/11/24 11:50

(PWV)N01@4.0'
2402290-03 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **02/15/24 00:00**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Benzene	ND	0.0020	mg/kg	1	BHB0526	02/15/24	02/15/24	EPA 8260B	
Toluene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	ND	0.010	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	0.0050	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	0.0050	"	"	"	"	"	"	
Naphthalene	ND	0.0038	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	ND	0.50	"	"	"	"	"	"	

Date Sampled: **02/15/24 00:00**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: 1,2-Dichloroethane-d4	0.0477	119 %	50-150		"	"	"	"	
Surrogate: Toluene-d8	0.0373	93.3 %	50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	0.0374	93.4 %	50-150		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **02/15/24 00:00**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
C10-C28 (DRO)	ND	50	mg/kg	1	BHB0528	02/15/24	02/16/24	EPA 8015M	
C28-C36 (ORO)	ND	50	"	"	"	"	"	"	

Date Sampled: **02/15/24 00:00**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: o-Terphenyl	11.6	93.1 %	30-150		"	"	"	"	

PAH by EPA Method 8270D SIM

Summit Scientific

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Fremont Environmental
PO Box 1289
Wellington CO, 80549

Project: Hanson BC 0-64N67W 1NESE
Project Number: UWRWE-A2137-ABN
Project Manager: Paul Henchan

Reported:
04/11/24 11:50

(PWV)N01@4.0'
2402290-03 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

Date Sampled: **02/15/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BHB0532	02/16/24	02/17/24	EPA 8270D SIM	
Anthracene	ND	0.00500	"	"	"	"	"	"	
Benzo (a) anthracene	ND	0.00500	"	"	"	"	"	"	
Benzo (a) pyrene	ND	0.00500	"	"	"	"	"	"	
Benzo (b) fluoranthene	ND	0.00500	"	"	"	"	"	"	
Benzo (k) fluoranthene	ND	0.00500	"	"	"	"	"	"	
Chrysene	ND	0.00500	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	0.00500	"	"	"	"	"	"	
Fluoranthene	ND	0.00500	"	"	"	"	"	"	
Fluorene	ND	0.00500	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	ND	0.00500	"	"	"	"	"	"	
Pyrene	ND	0.00500	"	"	"	"	"	"	
1-Methylnaphthalene	ND	0.00500	"	"	"	"	"	"	
2-Methylnaphthalene	ND	0.00500	"	"	"	"	"	"	

Date Sampled: **02/15/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10	0.0194	58.3 %	40-150		"	"	"	"	
Surrogate: Fluoranthene-d10	0.0177	53.0 %	40-150		"	"	"	"	

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **02/15/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	ND	2.00	mg/L	1	BHB0737	02/22/24	02/27/24	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **02/15/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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Fremont Environmental
PO Box 1289
Wellington CO, 80549

Project: Hanson BC 0-64N67W 1NESE
Project Number: UWRWE-A2137-ABN
Project Manager: Paul Henchan

Reported:
04/11/24 11:50

(PWV)N01@4.0'
2402290-03 (Soil)

Summit Scientific

Total Metals by EPA 6020B

Arsenic	5.89	0.200	mg/kg dry	1	BHD0178	04/05/24	04/10/24	EPA 6020B
Barium	44.6	0.400	"	"	"	"	"	"
Cadmium	ND	0.200	"	"	"	"	"	"
Copper	2.59	0.400	"	"	"	"	"	"
Lead	5.99	0.200	"	"	"	"	"	"
Nickel	4.16	0.400	"	"	"	"	"	"
Silver	0.0220	0.0200	"	"	"	"	"	"
Zinc	19.6	0.400	"	"	"	"	"	"
Selenium	ND	0.260	"	"	"	"	"	"

Soluble Nutrients by EPA 6020/USDA60 6(2) - Saturated Paste Extraction

Date Sampled: **02/15/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	100	0.0500	mg/L dry	1	BHB0530	02/15/24	02/20/24	EPA 6020B	
Magnesium	14.1	0.0500	"	"	"	"	"	"	
Sodium	12.9	0.0500	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **02/15/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	0.320	0.00100	units	1	BHB0743	02/22/24	02/22/24	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **02/15/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	88.8		%	1	BHB0536	02/16/24	02/16/24	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **02/15/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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Summit Scientific

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Fremont Environmental
PO Box 1289
Wellington CO, 80549

Project: Hanson BC 0-64N67W 1NESE
Project Number: UWRWE-A2137-ABN
Project Manager: Paul Henchan

Reported:
04/11/24 11:50

(PWV)N01@4.0'
2402290-03 (Soil)

Summit Scientific

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Specific Conductance (EC)	0.351	0.0100	mmhos/cm	1	BHB0537	02/16/24	02/20/24	EPA 120.1
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Physical Parameters by APHA/ASTM/EPA Methods, Saturated Paste Extraction

Date Sampled: **02/15/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	8.56		pH Units	1	BHB0538	02/16/24	02/20/24	EPA 9045D	

Summit Scientific

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Fremont Environmental
PO Box 1289
Wellington CO, 80549

Project: Hanson BC 0-64N67W 1NESE
Project Number: UWRWE-A2137-ABN
Project Manager: Paul Henchan

Reported:
04/11/24 11:50

(PWV)S01@4.0'
2402290-04 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **02/15/24 00:00**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Benzene	ND	0.0020	mg/kg	1	BHB0526	02/15/24	02/15/24	EPA 8260B	
Toluene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	ND	0.010	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	0.0050	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	0.0050	"	"	"	"	"	"	
Naphthalene	ND	0.0038	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	ND	0.50	"	"	"	"	"	"	

Date Sampled: **02/15/24 00:00**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: 1,2-Dichloroethane-d4	0.0442	111 %	50-150		"	"	"	"	
Surrogate: Toluene-d8	0.0374	93.6 %	50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	0.0387	96.8 %	50-150		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **02/15/24 00:00**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
C10-C28 (DRO)	ND	50	mg/kg	1	BHB0528	02/15/24	02/16/24	EPA 8015M	
C28-C36 (ORO)	ND	50	"	"	"	"	"	"	

Date Sampled: **02/15/24 00:00**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: o-Terphenyl	12.5	100 %	30-150		"	"	"	"	

PAH by EPA Method 8270D SIM

Summit Scientific

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Fremont Environmental
PO Box 1289
Wellington CO, 80549

Project: Hanson BC 0-64N67W 1NESE
Project Number: UWRWE-A2137-ABN
Project Manager: Paul Henchan

Reported:
04/11/24 11:50

(PWV)S01@4.0'
2402290-04 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

Date Sampled: **02/15/24 00:00**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Acenaphthene	ND	0.00500	mg/kg	1	BHB0532	02/16/24	02/17/24	EPA 8270D SIM	
Anthracene	ND	0.00500	"	"	"	"	"	"	
Benzo (a) anthracene	ND	0.00500	"	"	"	"	"	"	
Benzo (a) pyrene	ND	0.00500	"	"	"	"	"	"	
Benzo (b) fluoranthene	ND	0.00500	"	"	"	"	"	"	
Benzo (k) fluoranthene	ND	0.00500	"	"	"	"	"	"	
Chrysene	ND	0.00500	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	0.00500	"	"	"	"	"	"	
Fluoranthene	ND	0.00500	"	"	"	"	"	"	
Fluorene	ND	0.00500	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	ND	0.00500	"	"	"	"	"	"	
Pyrene	ND	0.00500	"	"	"	"	"	"	
1-Methylnaphthalene	ND	0.00500	"	"	"	"	"	"	
2-Methylnaphthalene	ND	0.00500	"	"	"	"	"	"	

Date Sampled: **02/15/24 00:00**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: 2-Methylnaphthalene-d10	0.0150	44.9 %	40-150		"	"	"	"	
Surrogate: Fluoranthene-d10	0.0137	41.0 %	40-150		"	"	"	"	

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **02/15/24 00:00**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Boron	ND	2.00	mg/L	1	BHB0737	02/22/24	02/27/24	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **02/15/24 00:00**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							

Summit Scientific

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Fremont Environmental
PO Box 1289
Wellington CO, 80549

Project: Hanson BC 0-64N67W 1NESE
Project Number: UWRWE-A2137-ABN
Project Manager: Paul Henchan

Reported:
04/11/24 11:50

(PWV)S01@4.0'
2402290-04 (Soil)

Summit Scientific

Total Metals by EPA 6020B

Arsenic	4.07	0.200	mg/kg dry	1	BHC0928	03/07/24	04/04/24	EPA 6020B
Barium	55.7	0.400	"	"	"	"	"	"
Cadmium	ND	0.200	"	"	"	"	"	"
Copper	3.51	0.400	"	"	"	"	"	"
Lead	4.98	0.200	"	"	"	"	"	"
Nickel	4.31	0.400	"	"	"	"	"	"
Silver	ND	0.0200	"	"	"	"	"	"
Zinc	20.1	0.400	"	"	"	"	"	"
Selenium	ND	0.260	"	"	"	"	"	"

Soluble Nutrients by EPA 6020/USDA60 6(2) - Saturated Paste Extraction

Date Sampled: **02/15/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	60.9	0.0500	mg/L dry	1	BHB0530	02/15/24	02/20/24	EPA 6020B	
Magnesium	9.28	0.0500	"	"	"	"	"	"	
Sodium	7.75	0.0500	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **02/15/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	0.244	0.00100	units	1	BHB0743	02/22/24	02/22/24	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **02/15/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	92.1		%	1	BHB0536	02/16/24	02/16/24	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Summit Scientific

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Fremont Environmental
PO Box 1289
Wellington CO, 80549

Project: Hanson BC 0-64N67W 1NESE
Project Number: UWRWE-A2137-ABN
Project Manager: Paul Henchan

Reported:
04/11/24 11:50

(PWV)S01@4.0'
2402290-04 (Soil)

Summit Scientific

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **02/15/24 00:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Specific Conductance (EC)	0.271	0.0100		mmhos/cm	1	BHB0537	02/16/24	02/20/24	EPA 120.1	

Physical Parameters by APHA/ASTM/EPA Methods, Saturated Paste Extraction

Date Sampled: **02/15/24 00:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
pH	8.44			pH Units	1	BHB0538	02/16/24	02/20/24	EPA 9045D	

Summit Scientific

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Fremont Environmental
PO Box 1289
Wellington CO, 80549

Project: Hanson BC 0-64N67W 1NESE
Project Number: UWRWE-A2137-ABN
Project Manager: Paul Henchan

Reported:
04/11/24 11:50

(PWV)E01@4.0'
2402290-05 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **02/15/24 00:00**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Benzene	ND	0.0020	mg/kg	1	BHB0526	02/15/24	02/15/24	EPA 8260B	
Toluene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	ND	0.010	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	0.0050	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	0.0050	"	"	"	"	"	"	
Naphthalene	ND	0.0038	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	ND	0.50	"	"	"	"	"	"	

Date Sampled: **02/15/24 00:00**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: 1,2-Dichloroethane-d4	0.0440	110 %	50-150		"	"	"	"	
Surrogate: Toluene-d8	0.0369	92.2 %	50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	0.0380	95.1 %	50-150		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **02/15/24 00:00**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
C10-C28 (DRO)	ND	50	mg/kg	1	BHB0528	02/15/24	02/16/24	EPA 8015M	
C28-C36 (ORO)	ND	50	"	"	"	"	"	"	

Date Sampled: **02/15/24 00:00**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: o-Terphenyl	10.0	80.1 %	30-150		"	"	"	"	

PAH by EPA Method 8270D SIM

Summit Scientific

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Fremont Environmental
PO Box 1289
Wellington CO, 80549

Project: Hanson BC 0-64N67W 1NESE
Project Number: UWRWE-A2137-ABN
Project Manager: Paul Henchan

Reported:
04/11/24 11:50

(PWV)E01@4.0'
2402290-05 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

Date Sampled: **02/15/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BHB0532	02/16/24	02/17/24	EPA 8270D SIM	
Anthracene	ND	0.00500	"	"	"	"	"	"	
Benzo (a) anthracene	ND	0.00500	"	"	"	"	"	"	
Benzo (a) pyrene	ND	0.00500	"	"	"	"	"	"	
Benzo (b) fluoranthene	ND	0.00500	"	"	"	"	"	"	
Benzo (k) fluoranthene	ND	0.00500	"	"	"	"	"	"	
Chrysene	ND	0.00500	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	0.00500	"	"	"	"	"	"	
Fluoranthene	ND	0.00500	"	"	"	"	"	"	
Fluorene	ND	0.00500	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	ND	0.00500	"	"	"	"	"	"	
Pyrene	ND	0.00500	"	"	"	"	"	"	
1-Methylnaphthalene	ND	0.00500	"	"	"	"	"	"	
2-Methylnaphthalene	ND	0.00500	"	"	"	"	"	"	

Date Sampled: **02/15/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10	0.0148	44.3 %	40-150		"	"	"	"	
Surrogate: Fluoranthene-d10	0.0153	45.9 %	40-150		"	"	"	"	

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **02/15/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	ND	2.00	mg/L	1	BHB0737	02/22/24	02/27/24	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **02/15/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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Summit Scientific

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Fremont Environmental
PO Box 1289
Wellington CO, 80549

Project: Hanson BC 0-64N67W 1NESE
Project Number: UWRWE-A2137-ABN
Project Manager: Paul Henchan

Reported:
04/11/24 11:50

(PWV)E01@4.0'
2402290-05 (Soil)

Summit Scientific

Total Metals by EPA 6020B

Arsenic	5.23	0.200	mg/kg dry	1	BHC0928	03/07/24	04/04/24	EPA 6020B
Barium	63.5	0.400	"	"	"	"	"	"
Cadmium	0.243	0.200	"	"	"	"	"	"
Copper	4.81	0.400	"	"	"	"	"	"
Lead	6.58	0.200	"	"	"	"	"	"
Nickel	7.43	0.400	"	"	"	"	"	"
Silver	0.0271	0.0200	"	"	"	"	"	"
Zinc	26.5	0.400	"	"	"	"	"	"
Selenium	ND	0.260	"	"	"	"	"	"

Soluble Nutrients by EPA 6020/USDA60 6(2) - Saturated Paste Extraction

Date Sampled: **02/15/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	72.5	0.0500	mg/L dry	1	BHB0530	02/15/24	02/20/24	EPA 6020B	
Magnesium	11.6	0.0500	"	"	"	"	"	"	
Sodium	4.35	0.0500	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **02/15/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	0.125	0.00100	units	1	BHB0743	02/22/24	02/22/24	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **02/15/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	87.1		%	1	BHB0536	02/16/24	02/16/24	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **02/15/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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Summit Scientific

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.



Fremont Environmental
PO Box 1289
Wellington CO, 80549

Project: Hanson BC 0-64N67W 1NESE
Project Number: UWRWE-A2137-ABN
Project Manager: Paul Henchan

Reported:
04/11/24 11:50

(PWV)E01@4.0'
2402290-05 (Soil)

Summit Scientific

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Specific Conductance (EC)	0.404	0.0100	mmhos/cm	1	BHB0537	02/16/24	02/20/24	EPA 120.1
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Physical Parameters by APHA/ASTM/EPA Methods, Saturated Paste Extraction

Date Sampled: **02/15/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	8.03		pH Units	1	BHB0538	02/16/24	02/20/24	EPA 9045D	

Summit Scientific

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Fremont Environmental
PO Box 1289
Wellington CO, 80549

Project: Hanson BC 0-64N67W 1NESE
Project Number: UWRWE-A2137-ABN
Project Manager: Paul Henchan

Reported:
04/11/24 11:50

(PWV)W01@4.0'
2402290-06 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **02/15/24 00:00**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Benzene	ND	0.0020	mg/kg	1	BHB0526	02/15/24	02/15/24	EPA 8260B	
Toluene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	ND	0.010	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	0.0050	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	0.0050	"	"	"	"	"	"	
Naphthalene	ND	0.0038	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	ND	0.50	"	"	"	"	"	"	

Date Sampled: **02/15/24 00:00**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: 1,2-Dichloroethane-d4	0.0449	112 %	50-150		"	"	"	"	
Surrogate: Toluene-d8	0.0370	92.6 %	50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	0.0386	96.4 %	50-150		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **02/15/24 00:00**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
C10-C28 (DRO)	ND	50	mg/kg	1	BHB0528	02/15/24	02/16/24	EPA 8015M	
C28-C36 (ORO)	ND	50	"	"	"	"	"	"	

Date Sampled: **02/15/24 00:00**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: o-Terphenyl	10.9	87.0 %	30-150		"	"	"	"	

PAH by EPA Method 8270D SIM

Summit Scientific

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Fremont Environmental
PO Box 1289
Wellington CO, 80549

Project: Hanson BC 0-64N67W 1NESE
Project Number: UWRWE-A2137-ABN
Project Manager: Paul Henchan

Reported:
04/11/24 11:50

(PWV)W01@4.0'
2402290-06 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

Date Sampled: **02/15/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BHB0532	02/16/24	02/17/24	EPA 8270D SIM	
Anthracene	ND	0.00500	"	"	"	"	"	"	
Benzo (a) anthracene	ND	0.00500	"	"	"	"	"	"	
Benzo (a) pyrene	ND	0.00500	"	"	"	"	"	"	
Benzo (b) fluoranthene	ND	0.00500	"	"	"	"	"	"	
Benzo (k) fluoranthene	ND	0.00500	"	"	"	"	"	"	
Chrysene	ND	0.00500	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	0.00500	"	"	"	"	"	"	
Fluoranthene	ND	0.00500	"	"	"	"	"	"	
Fluorene	ND	0.00500	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	ND	0.00500	"	"	"	"	"	"	
Pyrene	ND	0.00500	"	"	"	"	"	"	
1-Methylnaphthalene	ND	0.00500	"	"	"	"	"	"	
2-Methylnaphthalene	ND	0.00500	"	"	"	"	"	"	

Date Sampled: **02/15/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10	0.0159	47.7 %	40-150		"	"	"	"	
Surrogate: Fluoranthene-d10	0.0189	56.8 %	40-150		"	"	"	"	

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **02/15/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	ND	2.00	mg/L	1	BHB0737	02/22/24	02/27/24	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **02/15/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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Fremont Environmental
PO Box 1289
Wellington CO, 80549

Project: Hanson BC 0-64N67W 1NESE
Project Number: UWRWE-A2137-ABN
Project Manager: Paul Henchan

Reported:
04/11/24 11:50

(PWV)W01@4.0'
2402290-06 (Soil)

Summit Scientific

Total Metals by EPA 6020B

Arsenic	5.58	0.200	mg/kg dry	1	BHC0928	03/07/24	04/04/24	EPA 6020B
Barium	53.5	0.400	"	"	"	"	"	"
Cadmium	ND	0.200	"	"	"	"	"	"
Copper	3.17	0.400	"	"	"	"	"	"
Lead	6.04	0.200	"	"	"	"	"	"
Nickel	4.70	0.400	"	"	"	"	"	"
Silver	0.0229	0.0200	"	"	"	"	"	"
Zinc	22.0	0.400	"	"	"	"	"	"
Selenium	ND	0.260	"	"	"	"	"	"

Soluble Nutrients by EPA 6020/USDA60 6(2) - Saturated Paste Extraction

Date Sampled: **02/15/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	77.6	0.0500	mg/L dry	1	BHB0530	02/15/24	02/20/24	EPA 6020B	
Magnesium	11.8	0.0500	"	"	"	"	"	"	
Sodium	10.9	0.0500	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **02/15/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	0.305	0.00100	units	1	BHB0743	02/22/24	02/22/24	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **02/15/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	87.3		%	1	BHB0536	02/16/24	02/16/24	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **02/15/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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Fremont Environmental
PO Box 1289
Wellington CO, 80549

Project: Hanson BC 0-64N67W 1NESE
Project Number: UWRWE-A2137-ABN
Project Manager: Paul Henchan

Reported:
04/11/24 11:50

(PWV)W01@4.0'
2402290-06 (Soil)

Summit Scientific

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Specific Conductance (EC)	0.385	0.0100	mmhos/cm	1	BHB0537	02/16/24	02/20/24	EPA 120.1
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Physical Parameters by APHA/ASTM/EPA Methods, Saturated Paste Extraction

Date Sampled: **02/15/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	8.66		pH Units	1	BHB0538	02/16/24	02/20/24	EPA 9045D	

Summit Scientific

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Fremont Environmental
PO Box 1289
Wellington CO, 80549

Project: Hanson BC 0-64N67W 1NESE
Project Number: UWRWE-A2137-ABN
Project Manager: Paul Henchan

Reported:
04/11/24 11:50

(PWV)Backfill
2402290-07 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **02/15/24 00:00**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Benzene	ND	0.0020	mg/kg	1	BHB0526	02/15/24	02/15/24	EPA 8260B	
Toluene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	ND	0.010	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	0.0050	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	0.0050	"	"	"	"	"	"	
Naphthalene	ND	0.0038	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	ND	0.50	"	"	"	"	"	"	

Date Sampled: **02/15/24 00:00**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: 1,2-Dichloroethane-d4	0.0446	111 %	50-150		"	"	"	"	
Surrogate: Toluene-d8	0.0367	91.8 %	50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene	0.0380	95.0 %	50-150		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **02/15/24 00:00**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
C10-C28 (DRO)	ND	50	mg/kg	1	BHB0528	02/15/24	02/16/24	EPA 8015M	
C28-C36 (ORO)	ND	50	"	"	"	"	"	"	

Date Sampled: **02/15/24 00:00**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: o-Terphenyl	11.1	88.6 %	30-150		"	"	"	"	

PAH by EPA Method 8270D SIM

Summit Scientific

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Fremont Environmental
PO Box 1289
Wellington CO, 80549

Project: Hanson BC 0-64N67W 1NESE
Project Number: UWRWE-A2137-ABN
Project Manager: Paul Henchan

Reported:
04/11/24 11:50

(PWV)Backfill
2402290-07 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

Date Sampled: **02/15/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BHB0532	02/16/24	02/17/24	EPA 8270D SIM	
Anthracene	ND	0.00500	"	"	"	"	"	"	
Benzo (a) anthracene	0.0419	0.00500	"	"	"	"	"	"	
Benzo (a) pyrene	0.0377	0.00500	"	"	"	"	"	"	
Benzo (b) fluoranthene	0.0838	0.00500	"	"	"	"	"	"	
Benzo (k) fluoranthene	0.0298	0.00500	"	"	"	"	"	"	
Chrysene	0.0458	0.00500	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	0.00500	"	"	"	"	"	"	
Fluoranthene	0.0880	0.00500	"	"	"	"	"	"	
Fluorene	ND	0.00500	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	ND	0.00500	"	"	"	"	"	"	
Pyrene	0.0991	0.00500	"	"	"	"	"	"	
1-Methylnaphthalene	ND	0.00500	"	"	"	"	"	"	
2-Methylnaphthalene	ND	0.00500	"	"	"	"	"	"	

Date Sampled: **02/15/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10	0.0254	76.3 %	40-150		"	"	"	"	
Surrogate: Fluoranthene-d10	0.0198	59.3 %	40-150		"	"	"	"	

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **02/15/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	ND	2.00	mg/L	1	BHB0737	02/22/24	02/27/24	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **02/15/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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Fremont Environmental
PO Box 1289
Wellington CO, 80549

Project: Hanson BC 0-64N67W 1NESE
Project Number: UWRWE-A2137-ABN
Project Manager: Paul Henchan

Reported:
04/11/24 11:50

**(PWV)Backfill
2402290-07 (Soil)**

Summit Scientific

Total Metals by EPA 6020B

Arsenic	7.54	0.200	mg/kg dry	1	BHC0928	03/07/24	04/04/24	EPA 6020B
Barium	97.3	0.400	"	"	"	"	"	"
Cadmium	0.319	0.200	"	"	"	"	"	"
Copper	8.26	0.400	"	"	"	"	"	"
Lead	52.6	0.200	"	"	"	"	"	"
Nickel	5.28	0.400	"	"	"	"	"	"
Silver	0.0531	0.0200	"	"	"	"	"	"
Zinc	40.7	0.400	"	"	"	"	"	"
Selenium	ND	0.260	"	"	"	"	"	"

Soluble Nutrients by EPA 6020/USDA60 6(2) - Saturated Paste Extraction

Date Sampled: **02/15/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	73.9	0.0500	mg/L dry	1	BHB0530	02/15/24	02/20/24	EPA 6020B	
Magnesium	6.68	0.0500	"	"	"	"	"	"	
Sodium	63.2	0.0500	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **02/15/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	1.89	0.00100	units	1	BHB0743	02/22/24	02/22/24	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **02/15/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	89.7		%	1	BHB0536	02/16/24	02/16/24	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **02/15/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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Summit Scientific

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Fremont Environmental
PO Box 1289
Wellington CO, 80549

Project: Hanson BC 0-64N67W 1NESE
Project Number: UWRWE-A2137-ABN
Project Manager: Paul Henchan

Reported:
04/11/24 11:50

(PWV)Backfill
2402290-07 (Soil)

Summit Scientific

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Specific Conductance (EC)	0.549	0.0100	mmhos/cm	1	BHB0537	02/16/24	02/20/24	EPA 120.1
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Physical Parameters by APHA/ASTM/EPA Methods, Saturated Paste Extraction

Date Sampled: **02/15/24 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	7.94		pH Units	1	BHB0538	02/16/24	02/20/24	EPA 9045D	

Summit Scientific

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Fremont Environmental
PO Box 1289
Wellington CO, 80549

Project: Hanson BC 0-64N67W 1NESE
Project Number: UWRWE-A2137-ABN
Project Manager: Paul Henchan

Reported:
04/11/24 11:50

Volatile Organic Compounds by EPA Method 8260B - Quality Control

Summit Scientific

Analyte	Reporting			Spike	Source		%REC		RPD	
	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes

Batch BHB0526 - EPA 5030 Soil MS

Blank (BHB0526-BLK1)

Prepared: 02/15/24 Analyzed: 02/16/24

Benzene	ND	0.0020	mg/kg							
Toluene	ND	0.0050	"							
Ethylbenzene	ND	0.0050	"							
Xylenes (total)	ND	0.010	"							
1,2,4-Trimethylbenzene	ND	0.0050	"							
1,3,5-Trimethylbenzene	ND	0.0050	"							
Naphthalene	ND	0.0038	"							
Gasoline Range Hydrocarbons	ND	0.50	"							
Surrogate: 1,2-Dichloroethane-d4	0.0357		"	0.0400		89.2	50-150			
Surrogate: Toluene-d8	0.0380		"	0.0400		95.0	50-150			
Surrogate: 4-Bromofluorobenzene	0.0370		"	0.0400		92.6	50-150			

LCS (BHB0526-BS1)

Prepared: 02/15/24 Analyzed: 02/16/24

Benzene	0.0859	0.0020	mg/kg	0.100		85.9	70-130			
Toluene	0.103	0.0050	"	0.100		103	70-130			
Ethylbenzene	0.106	0.0050	"	0.100		106	70-130			
m,p-Xylene	0.218	0.010	"	0.200		109	70-130			
o-Xylene	0.108	0.0050	"	0.100		108	70-130			
1,2,4-Trimethylbenzene	0.101	0.0050	"	0.100		101	70-130			
1,3,5-Trimethylbenzene	0.102	0.0050	"	0.100		102	70-130			
Naphthalene	0.0906	0.0038	"	0.100		90.6	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.0345		"	0.0400		86.2	50-150			
Surrogate: Toluene-d8	0.0372		"	0.0400		92.9	50-150			
Surrogate: 4-Bromofluorobenzene	0.0366		"	0.0400		91.4	50-150			

Matrix Spike (BHB0526-MS1)

Source: 2402280-01

Prepared: 02/15/24 Analyzed: 02/16/24

Benzene	0.0442	0.0020	mg/kg	0.100	ND	44.2	70-130			QM-07
Toluene	0.0571	0.0050	"	0.100	ND	57.1	70-130			QM-07
Ethylbenzene	0.0805	0.0050	"	0.100	ND	80.5	70-130			
m,p-Xylene	0.152	0.010	"	0.200	ND	75.9	70-130			
o-Xylene	0.0771	0.0050	"	0.100	ND	77.1	70-130			
1,2,4-Trimethylbenzene	0.0660	0.0050	"	0.100	ND	66.0	70-130			QM-07
1,3,5-Trimethylbenzene	0.0816	0.0050	"	0.100	ND	81.6	70-130			
Naphthalene	0.0374	0.0038	"	0.100	ND	37.4	70-130			QM-07
Surrogate: 1,2-Dichloroethane-d4	0.0399		"	0.0400		99.8	50-150			
Surrogate: Toluene-d8	0.0361		"	0.0400		90.2	50-150			
Surrogate: 4-Bromofluorobenzene	0.0387		"	0.0400		96.7	50-150			

Summit Scientific

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Fremont Environmental
PO Box 1289
Wellington CO, 80549

Project: Hanson BC 0-64N67W 1NESE
Project Number: UWRWE-A2137-ABN
Project Manager: Paul Henchan

Reported:
04/11/24 11:50

Volatile Organic Compounds by EPA Method 8260B - Quality Control
Summit Scientific

Analyte	Reporting			Spike	Source		%REC		RPD	
	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes

Batch BHB0526 - EPA 5030 Soil MS

Matrix Spike Dup (BHB0526-MSD1)		Source: 2402280-01			Prepared: 02/15/24 Analyzed: 02/16/24					
Benzene	0.0479	0.0020	mg/kg	0.100	ND	47.9	70-130	8.01	30	QM-07
Toluene	0.0608	0.0050	"	0.100	ND	60.8	70-130	6.21	30	QM-07
Ethylbenzene	0.0807	0.0050	"	0.100	ND	80.7	70-130	0.298	30	
m,p-Xylene	0.150	0.010	"	0.200	ND	75.1	70-130	1.03	30	
o-Xylene	0.0766	0.0050	"	0.100	ND	76.6	70-130	0.624	30	
1,2,4-Trimethylbenzene	0.0642	0.0050	"	0.100	ND	64.2	70-130	2.86	30	QM-07
1,3,5-Trimethylbenzene	0.0806	0.0050	"	0.100	ND	80.6	70-130	1.18	30	
Naphthalene	0.0446	0.0038	"	0.100	ND	44.6	70-130	17.5	30	QM-07
Surrogate: 1,2-Dichloroethane-d4		0.0428	"	0.0400		107	50-150			
Surrogate: Toluene-d8		0.0382	"	0.0400		95.6	50-150			
Surrogate: 4-Bromofluorobenzene		0.0384	"	0.0400		95.9	50-150			

Summit Scientific

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Fremont Environmental
PO Box 1289
Wellington CO, 80549

Project: Hanson BC 0-64N67W 1NESE
Project Number: UWRWE-A2137-ABN
Project Manager: Paul Henchan

Reported:
04/11/24 11:50

Extractable Petroleum Hydrocarbons by 8015 - Quality Control
Summit Scientific

Analyte	Reporting			Spike	Source		%REC		RPD	
	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes

Batch BHB0528 - EPA 3550A

Blank (BHB0528-BLK1)

Prepared: 02/15/24 Analyzed: 02/16/24

C10-C28 (DRO)	ND	50	mg/kg							
C28-C36 (ORO)	ND	50	"							
Surrogate: o-Terphenyl	14.3		"	12.5		115	30-150			

LCS (BHB0528-BS1)

Prepared: 02/15/24 Analyzed: 02/16/24

C10-C28 (DRO)	387	50	mg/kg	500		77.4	70-130			
Surrogate: o-Terphenyl	16.6		"	12.5		133	30-150			

Matrix Spike (BHB0528-MS1)

Source: 2402280-01

Prepared: 02/15/24 Analyzed: 02/16/24

C10-C28 (DRO)	383	50	mg/kg	500	14.6	73.7	70-130			
Surrogate: o-Terphenyl	15.0		"	12.5		120	30-150			

Matrix Spike Dup (BHB0528-MSD1)

Source: 2402280-01

Prepared: 02/15/24 Analyzed: 02/16/24

C10-C28 (DRO)	381	50	mg/kg	500	14.6	73.3	70-130	0.464	20	
Surrogate: o-Terphenyl	14.0		"	12.5		112	30-150			

Summit Scientific

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Reported:
04/11/24 11:50

PAH by EPA Method 8270D SIM - Quality Control

Summit Scientific

Analyte	Reporting			Spike	Source		%REC		RPD	
	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes

Batch BHB0532 - EPA 5030 Soil MS

Blank (BHB0532-BLK1)

Prepared & Analyzed: 02/16/24

Acenaphthene	ND	0.00500	mg/kg							
Anthracene	ND	0.00500	"							
Benzo (a) anthracene	ND	0.00500	"							
Benzo (a) pyrene	ND	0.00500	"							
Benzo (b) fluoranthene	ND	0.00500	"							
Benzo (k) fluoranthene	ND	0.00500	"							
Chrysene	ND	0.00500	"							
Dibenz (a,h) anthracene	ND	0.00500	"							
Fluoranthene	ND	0.00500	"							
Fluorene	ND	0.00500	"							
Indeno (1,2,3-cd) pyrene	ND	0.00500	"							
Pyrene	ND	0.00500	"							
1-Methylnaphthalene	ND	0.00500	"							
2-Methylnaphthalene	ND	0.00500	"							
Surrogate: 2-Methylnaphthalene-d10	0.0160		"	0.0333		48.0	40-150			
Surrogate: Fluoranthene-d10	0.0320		"	0.0333		96.1	40-150			

LCS (BHB0532-BS1)

Prepared & Analyzed: 02/16/24

Acenaphthene	0.0276	0.00500	mg/kg	0.0333		82.9	31-137			
Anthracene	0.0276	0.00500	"	0.0333		82.9	30-120			
Benzo (a) anthracene	0.0238	0.00500	"	0.0333		71.4	30-120			
Benzo (a) pyrene	0.0208	0.00500	"	0.0333		62.5	30-120			
Benzo (b) fluoranthene	0.0244	0.00500	"	0.0333		73.2	30-120			
Benzo (k) fluoranthene	0.0277	0.00500	"	0.0333		83.2	30-120			
Chrysene	0.0328	0.00500	"	0.0333		98.4	30-120			
Dibenz (a,h) anthracene	0.0253	0.00500	"	0.0333		75.8	30-120			
Fluoranthene	0.0273	0.00500	"	0.0333		82.0	30-120			
Fluorene	0.0303	0.00500	"	0.0333		91.0	30-120			
Indeno (1,2,3-cd) pyrene	0.0206	0.00500	"	0.0333		61.7	30-120			
Pyrene	0.0307	0.00500	"	0.0333		92.0	35-142			
1-Methylnaphthalene	0.0289	0.00500	"	0.0333		86.7	35-142			
2-Methylnaphthalene	0.0351	0.00500	"	0.0333		105	35-142			
Surrogate: 2-Methylnaphthalene-d10	0.0301		"	0.0333		90.4	40-150			
Surrogate: Fluoranthene-d10	0.0278		"	0.0333		83.5	40-150			

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Reported:
04/11/24 11:50

PAH by EPA Method 8270D SIM - Quality Control

Summit Scientific

Analyte	Reporting			Spike		Source		%REC		RPD	
	Result	Limit	Units	Level		Result		%REC	Limits	RPD	Limit

Batch BHB0532 - EPA 5030 Soil MS

Matrix Spike (BHB0532-MS1)

Source: 2402209-61

Prepared & Analyzed: 02/16/24

Acenaphthene	0.0149	0.00500	mg/kg	0.0333	ND	44.6	31-137		
Anthracene	0.0140	0.00500	"	0.0333	ND	42.1	30-120		
Benzo (a) anthracene	0.0175	0.00500	"	0.0333	ND	52.4	30-120		
Benzo (a) pyrene	0.0142	0.00500	"	0.0333	ND	42.7	30-120		
Benzo (b) fluoranthene	0.0157	0.00500	"	0.0333	ND	47.2	30-120		
Benzo (k) fluoranthene	0.0195	0.00500	"	0.0333	ND	58.4	30-120		
Chrysene	0.0142	0.00500	"	0.0333	ND	42.7	30-120		
Dibenz (a,h) anthracene	0.0229	0.00500	"	0.0333	ND	68.6	30-120		
Fluoranthene	0.0145	0.00500	"	0.0333	ND	43.6	30-120		
Fluorene	0.0156	0.00500	"	0.0333	ND	46.8	30-120		
Indeno (1,2,3-cd) pyrene	0.0185	0.00500	"	0.0333	ND	55.5	30-120		
Pyrene	0.0156	0.00500	"	0.0333	ND	46.8	35-142		
1-Methylnaphthalene	0.0145	0.00500	"	0.0333	ND	43.4	15-130		
2-Methylnaphthalene	0.0189	0.00500	"	0.0333	ND	56.6	15-130		
Surrogate: 2-Methylnaphthalene-d10	0.0154		"	0.0333		46.3	40-150		
Surrogate: Fluoranthene-d10	0.0134		"	0.0333		40.1	40-150		

Matrix Spike Dup (BHB0532-MSD1)

Source: 2402209-61

Prepared & Analyzed: 02/16/24

Acenaphthene	0.0181	0.00500	mg/kg	0.0333	ND	54.3	31-137	19.7	30	QR-02
Anthracene	0.0167	0.00500	"	0.0333	ND	50.2	30-120	17.4	30	
Benzo (a) anthracene	0.0157	0.00500	"	0.0333	ND	47.0	30-120	10.9	30	
Benzo (a) pyrene	0.0202	0.00500	"	0.0333	ND	60.5	30-120	34.5	30	
Benzo (b) fluoranthene	0.0135	0.00500	"	0.0333	ND	40.4	30-120	15.7	30	
Benzo (k) fluoranthene	0.0152	0.00500	"	0.0333	ND	45.6	30-120	24.6	30	
Chrysene	0.0171	0.00500	"	0.0333	ND	51.3	30-120	18.3	30	
Dibenz (a,h) anthracene	0.0196	0.00500	"	0.0333	ND	58.9	30-120	15.2	30	
Fluoranthene	0.0166	0.00500	"	0.0333	ND	49.8	30-120	13.4	30	
Fluorene	0.0183	0.00500	"	0.0333	ND	54.9	30-120	15.9	30	
Indeno (1,2,3-cd) pyrene	0.0207	0.00500	"	0.0333	ND	62.1	30-120	11.3	30	
Pyrene	0.0194	0.00500	"	0.0333	ND	58.3	35-142	22.0	30	
1-Methylnaphthalene	0.0182	0.00500	"	0.0333	ND	54.7	15-130	23.0	50	
2-Methylnaphthalene	0.0211	0.00500	"	0.0333	ND	63.2	15-130	11.0	50	
Surrogate: 2-Methylnaphthalene-d10	0.0189		"	0.0333		56.6	40-150			
Surrogate: Fluoranthene-d10	0.0170		"	0.0333		51.1	40-150			

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Project Number: UWRWE-A2137-ABN
Project Manager: Paul Henchan

Reported:
04/11/24 11:50

PAH by EPA Method 8270D SIM - Quality Control

Summit Scientific

Analyte	Reporting			Spike	Source		%REC		RPD	
	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes

Batch BHC0829 - EPA 5030 Soil MS

Blank (BHC0829-BLK1)

Prepared: 03/21/24 Analyzed: 03/22/24

Acenaphthene	ND	0.00500	mg/kg							
Anthracene	ND	0.00500	"							
Benzo (a) anthracene	ND	0.00500	"							
Benzo (a) pyrene	ND	0.00500	"							
Benzo (b) fluoranthene	ND	0.00500	"							
Benzo (k) fluoranthene	ND	0.00500	"							
Chrysene	ND	0.00500	"							
Dibenz (a,h) anthracene	ND	0.00500	"							
Fluoranthene	ND	0.00500	"							
Fluorene	ND	0.00500	"							
Indeno (1,2,3-cd) pyrene	ND	0.00500	"							
Pyrene	ND	0.00500	"							
1-Methylnaphthalene	ND	0.00500	"							
2-Methylnaphthalene	ND	0.00500	"							
Surrogate: 2-Methylnaphthalene-d10	0.0436		"	0.0333		131	40-150			
Surrogate: Fluoranthene-d10	0.0285		"	0.0333		85.6	40-150			

LCS (BHC0829-BS1)

Prepared: 03/21/24 Analyzed: 03/22/24

Acenaphthene	0.0268	0.00500	mg/kg	0.0333	80.4	31-137
Anthracene	0.0284	0.00500	"	0.0333	85.2	30-120
Benzo (a) anthracene	0.0210	0.00500	"	0.0333	62.9	30-120
Benzo (a) pyrene	0.0241	0.00500	"	0.0333	72.3	30-120
Benzo (b) fluoranthene	0.0226	0.00500	"	0.0333	67.9	30-120
Benzo (k) fluoranthene	0.0259	0.00500	"	0.0333	77.8	30-120
Chrysene	0.0279	0.00500	"	0.0333	83.7	30-120
Dibenz (a,h) anthracene	0.0298	0.00500	"	0.0333	89.5	30-120
Fluoranthene	0.0254	0.00500	"	0.0333	76.2	30-120
Fluorene	0.0260	0.00500	"	0.0333	77.9	30-120
Indeno (1,2,3-cd) pyrene	0.0305	0.00500	"	0.0333	91.5	30-120
Pyrene	0.0334	0.00500	"	0.0333	100	35-142
1-Methylnaphthalene	0.0209	0.00500	"	0.0333	62.7	35-142
2-Methylnaphthalene	0.0192	0.00500	"	0.0333	57.5	35-142
Surrogate: 2-Methylnaphthalene-d10	0.0242		"	0.0333	72.7	40-150
Surrogate: Fluoranthene-d10	0.0262		"	0.0333	78.6	40-150

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Project Manager: Paul Henchan

Reported:
04/11/24 11:50

PAH by EPA Method 8270D SIM - Quality Control

Summit Scientific

Analyte	Reporting			Spike		Source		%REC		RPD	
	Result	Limit	Units	Level		Result	%REC	Limits	RPD	Limit	Notes

Batch BHC0829 - EPA 5030 Soil MS

Matrix Spike (BHC0829-MS1)		Source: 2403293-01			Prepared: 03/21/24 Analyzed: 03/22/24						
Acenaphthene	0.0212	0.00500	mg/kg	0.0333	ND	63.5	31-137				
Anthracene	0.0230	0.00500	"	0.0333	ND	68.9	30-120				
Benzo (a) anthracene	0.0206	0.00500	"	0.0333	ND	61.7	30-120				
Benzo (a) pyrene	0.0197	0.00500	"	0.0333	ND	59.2	30-120				
Benzo (b) fluoranthene	0.0153	0.00500	"	0.0333	ND	45.9	30-120				
Benzo (k) fluoranthene	0.0182	0.00500	"	0.0333	ND	54.7	30-120				
Chrysene	0.0219	0.00500	"	0.0333	ND	65.8	30-120				
Dibenz (a,h) anthracene	0.0279	0.00500	"	0.0333	ND	83.6	30-120				
Fluoranthene	0.0211	0.00500	"	0.0333	ND	63.2	30-120				
Fluorene	0.0207	0.00500	"	0.0333	ND	62.1	30-120				
Indeno (1,2,3-cd) pyrene	0.0277	0.00500	"	0.0333	ND	83.2	30-120				
Pyrene	0.0242	0.00500	"	0.0333	ND	72.5	35-142				
1-Methylnaphthalene	0.0173	0.00500	"	0.0333	ND	51.9	15-130				
2-Methylnaphthalene	0.0173	0.00500	"	0.0333	ND	51.8	15-130				
Surrogate: 2-Methylnaphthalene-d10	0.0149		"	0.0333		44.6	40-150				
Surrogate: Fluoranthene-d10	0.0218		"	0.0333		65.5	40-150				

Matrix Spike Dup (BHC0829-MSD1)		Source: 2403293-01			Prepared: 03/21/24 Analyzed: 03/22/24						
Acenaphthene	0.0192	0.00500	mg/kg	0.0333	ND	57.5	31-137	9.95	30		
Anthracene	0.0213	0.00500	"	0.0333	ND	64.0	30-120	7.30	30		
Benzo (a) anthracene	0.0190	0.00500	"	0.0333	ND	57.1	30-120	7.77	30		
Benzo (a) pyrene	0.0183	0.00500	"	0.0333	ND	54.9	30-120	7.50	30		
Benzo (b) fluoranthene	0.0143	0.00500	"	0.0333	ND	42.8	30-120	7.02	30		
Benzo (k) fluoranthene	0.0154	0.00500	"	0.0333	ND	46.1	30-120	16.9	30		
Chrysene	0.0193	0.00500	"	0.0333	ND	57.9	30-120	12.8	30		
Dibenz (a,h) anthracene	0.0269	0.00500	"	0.0333	ND	80.7	30-120	3.52	30		
Fluoranthene	0.0194	0.00500	"	0.0333	ND	58.3	30-120	8.13	30		
Fluorene	0.0192	0.00500	"	0.0333	ND	57.7	30-120	7.43	30		
Indeno (1,2,3-cd) pyrene	0.0261	0.00500	"	0.0333	ND	78.2	30-120	6.21	30		
Pyrene	0.0206	0.00500	"	0.0333	ND	61.9	35-142	15.8	30		
1-Methylnaphthalene	0.0179	0.00500	"	0.0333	ND	53.7	15-130	3.42	50		
2-Methylnaphthalene	0.0172	0.00500	"	0.0333	ND	51.6	15-130	0.325	50		
Surrogate: 2-Methylnaphthalene-d10	0.0186		"	0.0333		55.9	40-150				
Surrogate: Fluoranthene-d10	0.0203		"	0.0333		60.9	40-150				

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Project: Hanson BC 0-64N67W 1NESE
Project Number: UWRWE-A2137-ABN
Project Manager: Paul Henchan

Reported:
04/11/24 11:50

Total Metals by EPA 6020B Hot Water Soluble Extraction - Quality Control
Summit Scientific

Analyte	Reporting			Spike	Source	%REC		RPD		
	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes

Batch BHB0737 - EPA 3050B

Blank (BHB0737-BLK1)

Prepared: 02/22/24 Analyzed: 02/27/24

Boron ND 2.00 mg/L

LCS (BHB0737-BS1)

Prepared: 02/22/24 Analyzed: 02/27/24

Boron 7.26 2.00 mg/L 5.00 145 80-120 QLCS-01

Duplicate (BHB0737-DUP1)

Source: 2402183-01

Prepared: 02/22/24 Analyzed: 02/27/24

Boron 0.124 2.00 mg/L 0.162 26.3 20 QR-01

Matrix Spike (BHB0737-MS1)

Source: 2402183-01

Prepared: 02/22/24 Analyzed: 02/27/24

Boron 7.94 2.00 mg/L 5.00 0.162 156 75-125 QLCS-01

Matrix Spike Dup (BHB0737-MSD1)

Source: 2402183-01

Prepared: 02/22/24 Analyzed: 02/27/24

Boron 7.04 2.00 mg/L 5.00 0.162 138 75-125 12.0 25 QLCS-01

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Project Number: UWRWE-A2137-ABN
Project Manager: Paul Henchan

Reported:
04/11/24 11:50

Total Metals by EPA 6020B - Quality Control
Summit Scientific

Analyte	Reporting			Spike	Source		%REC		RPD	
	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes

Batch BHC0928 - EPA 3050B

Blank (BHC0928-BLK1)

Prepared: 03/25/24 Analyzed: 04/04/24

Arsenic	ND	0.200	mg/kg wet
Barium	ND	0.400	"
Cadmium	ND	0.200	"
Copper	ND	0.400	"
Lead	ND	0.200	"
Nickel	ND	0.400	"
Silver	ND	0.0200	"
Zinc	ND	0.400	"
Selenium	ND	0.260	"

LCS (BHC0928-BS1)

Prepared: 03/25/24 Analyzed: 04/04/24

Arsenic	38.4	0.200	mg/kg wet	40.0	96.0	80-120
Barium	38.1	0.400	"	40.0	95.1	80-120
Cadmium	1.89	0.200	"	2.00	94.4	80-120
Copper	40.3	0.400	"	40.0	101	80-120
Lead	18.7	0.200	"	20.0	93.5	80-120
Nickel	39.5	0.400	"	40.0	98.7	80-120
Silver	1.89	0.0200	"	2.00	94.4	80-120
Zinc	40.1	0.400	"	40.0	100	80-120
Selenium	3.84	0.260	"	4.00	96.0	80-120

Duplicate (BHC0928-DUP1)

Source: 2402290-01

Prepared: 03/25/24 Analyzed: 04/04/24

Arsenic	3.78	0.200	mg/kg dry	3.48	8.21	20
Barium	75.6	0.400	"	71.6	5.39	20
Cadmium	0.199	0.200	"	0.191	4.55	20
Copper	4.90	0.400	"	4.39	11.0	20
Lead	8.04	0.200	"	6.15	26.6	20
Nickel	5.58	0.400	"	5.22	6.81	20
Silver	0.0368	0.0200	"	0.0324	12.8	20
Zinc	19.9	0.400	"	17.0	15.9	20
Selenium	ND	0.260	"	ND		20

QR-04

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Project Manager: Paul Henchan

Reported:
04/11/24 11:50

Total Metals by EPA 6020B - Quality Control
Summit Scientific

Analyte	Reporting			Spike	Source		%REC		RPD	
	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes

Batch BHC0928 - EPA 3050B

Matrix Spike (BHC0928-MS1)		Source: 2402290-01			Prepared: 03/25/24 Analyzed: 04/04/24					
Arsenic	44.3	0.200	mg/kg dry	44.3	3.48	92.1	75-125			
Barium	117	0.400	"	44.3	71.6	101	75-125			
Cadmium	2.39	0.200	"	2.22	0.191	99.2	75-125			
Copper	31.4	0.400	"	44.3	4.39	61.0	75-125			QM-05
Lead	27.0	0.200	"	22.2	6.15	94.0	75-125			
Nickel	32.7	0.400	"	44.3	5.22	61.9	75-125			QM-05
Silver	2.15	0.0200	"	2.22	0.0324	95.6	75-125			
Zinc	46.1	0.400	"	44.3	17.0	65.7	75-125			QM-05
Selenium	3.52	0.260	"	4.43	ND	79.5	75-125			

Matrix Spike Dup (BHC0928-MSD1)		Source: 2402290-01			Prepared: 03/25/24 Analyzed: 04/04/24					
Arsenic	44.2	0.200	mg/kg dry	44.3	3.48	91.9	75-125	0.215	25	
Barium	116	0.400	"	44.3	71.6	99.6	75-125	0.648	25	
Cadmium	2.38	0.200	"	2.22	0.191	98.8	75-125	0.335	25	
Copper	31.4	0.400	"	44.3	4.39	60.9	75-125	0.167	25	QM-05
Lead	26.6	0.200	"	22.2	6.15	92.1	75-125	1.55	25	
Nickel	32.3	0.400	"	44.3	5.22	61.2	75-125	0.956	25	QM-05
Silver	2.13	0.0200	"	2.22	0.0324	94.8	75-125	0.807	25	
Zinc	45.9	0.400	"	44.3	17.0	65.3	75-125	0.403	25	QM-05
Selenium	3.63	0.260	"	4.43	ND	81.9	75-125	3.05	25	

Batch BHD0178 - EPA 3050B

Blank (BHD0178-BLK1)		Prepared: 04/05/24 Analyzed: 04/09/24								
Arsenic	ND	0.200	mg/kg wet							
Barium	ND	0.400	"							
Cadmium	ND	0.200	"							
Copper	ND	0.400	"							
Lead	ND	0.200	"							
Nickel	ND	0.400	"							
Silver	ND	0.0200	"							
Zinc	ND	0.400	"							
Selenium	ND	0.260	"							

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Fremont Environmental
PO Box 1289
Wellington CO, 80549

Project: Hanson BC 0-64N67W 1NESE
Project Number: UWRWE-A2137-ABN
Project Manager: Paul Henchan

Reported:
04/11/24 11:50

Total Metals by EPA 6020B - Quality Control
Summit Scientific

Analyte	Reporting			Spike	Source		%REC		RPD	
	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes

Batch BHD0178 - EPA 3050B

LCS (BHD0178-BS1)

Prepared: 04/05/24 Analyzed: 04/09/24

Arsenic	36.9	0.200	mg/kg wet	40.0		92.1	80-120
Barium	38.6	0.400	"	40.0		96.5	80-120
Cadmium	1.89	0.200	"	2.00		94.5	80-120
Copper	40.6	0.400	"	40.0		102	80-120
Lead	19.1	0.200	"	20.0		95.5	80-120
Nickel	40.0	0.400	"	40.0		100	80-120
Silver	1.91	0.0200	"	2.00		95.4	80-120
Zinc	40.4	0.400	"	40.0		101	80-120
Selenium	4.30	0.260	"	4.00		107	80-120

Duplicate (BHD0178-DUP1)

Source: 2402199-01

Prepared: 04/05/24 Analyzed: 04/09/24

Arsenic	1.25	0.200	mg/kg dry		1.12		10.8	20
Barium	35.2	0.400	"		34.7		1.47	20
Cadmium	0.0763	0.200	"		0.0672		12.8	20
Copper	2.22	0.400	"		2.08		6.35	20
Lead	3.02	0.200	"		2.91		3.54	20
Nickel	2.15	0.400	"		1.99		7.57	20
Silver	0.00877	0.0200	"		0.00973		10.3	20
Zinc	9.48	0.400	"		9.26		2.32	20
Selenium	ND	0.260	"		ND			20

Matrix Spike (BHD0178-MS1)

Source: 2402199-01

Prepared: 04/05/24 Analyzed: 04/09/24

Arsenic	42.7	0.200	mg/kg dry	44.5	1.12	93.4	75-125
Barium	80.6	0.400	"	44.5	34.7	103	75-125
Cadmium	2.25	0.200	"	2.23	0.0672	98.0	75-125
Copper	36.7	0.400	"	44.5	2.08	77.7	75-125
Lead	24.3	0.200	"	22.3	2.91	95.9	75-125
Nickel	36.7	0.400	"	44.5	1.99	78.0	75-125
Silver	2.09	0.0200	"	2.23	0.00973	93.4	75-125
Zinc	45.3	0.400	"	44.5	9.26	80.8	75-125
Selenium	4.55	0.260	"	4.45	ND	102	75-125

Summit Scientific

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Fremont Environmental
PO Box 1289
Wellington CO, 80549

Project: Hanson BC 0-64N67W 1NESE
Project Number: UWRWE-A2137-ABN
Project Manager: Paul Henchan

Reported:
04/11/24 11:50

Total Metals by EPA 6020B - Quality Control
Summit Scientific

Analyte	Reporting			Spike	Source		%REC		RPD	
	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes

Batch BHD0178 - EPA 3050B

Matrix Spike Dup (BHD0178-MSD1)

Source: 2402199-01

Prepared: 04/05/24 Analyzed: 04/09/24

Arsenic	42.9	0.200	mg/kg dry	44.5	1.12	93.9	75-125	0.480	25
Barium	82.0	0.400	"	44.5	34.7	106	75-125	1.70	25
Cadmium	2.30	0.200	"	2.23	0.0672	100	75-125	2.06	25
Copper	36.9	0.400	"	44.5	2.08	78.3	75-125	0.753	25
Lead	24.7	0.200	"	22.3	2.91	97.8	75-125	1.65	25
Nickel	36.9	0.400	"	44.5	1.99	78.3	75-125	0.370	25
Silver	2.16	0.0200	"	2.23	0.00973	96.4	75-125	3.13	25
Zinc	45.4	0.400	"	44.5	9.26	81.1	75-125	0.284	25
Selenium	4.49	0.260	"	4.45	ND	101	75-125	1.33	25

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Fremont Environmental
PO Box 1289
Wellington CO, 80549

Project: Hanson BC 0-64N67W 1NESE
Project Number: UWRWE-A2137-ABN
Project Manager: Paul Henchan

Reported:
04/11/24 11:50

Soluble Nutrients by EPA 6020/USDA60 6(2) - Saturated Paste Extraction - Quality Control

Summit Scientific

Analyte	Reporting			Spike	Source		%REC		RPD	
	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes

Batch BHB0530 - General Preparation

Blank (BHB0530-BLK1)

Prepared: 02/15/24 Analyzed: 02/20/24

Calcium	ND	0.0500	mg/L wet
Magnesium	ND	0.0500	"
Sodium	ND	0.0500	"

LCS (BHB0530-BS1)

Prepared: 02/15/24 Analyzed: 02/20/24

Calcium	5.97	0.0500	mg/L wet	5.00	119	70-130
Magnesium	5.90	0.0500	"	5.00	118	70-130
Sodium	6.31	0.0500	"	5.00	126	70-130

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Fremont Environmental PO Box 1289 Wellington CO, 80549	Project: Hanson BC 0-64N67W 1NESE Project Number: UWRWE-A2137-ABN Project Manager: Paul Henchan	Reported: 04/11/24 11:50
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Physical Parameters by APHA/ASTM/EPA Methods - Quality Control

Summit Scientific

Analyte	Result	Reporting		Spike Level	Source		%REC		RPD	
		Limit	Units		Result	%REC	Limits	RPD	Limit	Notes

Batch BHB0536 - General Preparation

Duplicate (BHB0536-DUP1)		Source: 2402062-04			Prepared & Analyzed: 02/16/24					
% Solids	86.6		%		86.3			0.266	20	

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Fremont Environmental
PO Box 1289
Wellington CO, 80549

Project: Hanson BC 0-64N67W 1NESE
Project Number: UWRWE-A2137-ABN
Project Manager: Paul Henchan

Reported:
04/11/24 11:50

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction - Quality Control
Summit Scientific

Analyte	Result	Reporting		Spike Level	Source		%REC		RPD	
		Limit	Units		Result	%REC	Limits	RPD	Limit	Notes

Batch BHB0537 - General Preparation

Blank (BHB0537-BLK1)

Prepared: 02/16/24 Analyzed: 02/20/24

Specific Conductance (EC) ND 0.0100 mmhos/cm

LCS (BHB0537-BS1)

Prepared: 02/16/24 Analyzed: 02/20/24

Specific Conductance (EC) 0.153 0.0100 mmhos/cm 0.150 102 95-105

Duplicate (BHB0537-DUP1)

Source: 2402280-01

Prepared: 02/16/24 Analyzed: 02/20/24

Specific Conductance (EC) 2.61 0.0100 mmhos/cm 2.64 0.990 20

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Fremont Environmental
PO Box 1289
Wellington CO, 80549

Project: Hanson BC 0-64N67W 1NESE
Project Number: UWRWE-A2137-ABN
Project Manager: Paul Henchan

Reported:
04/11/24 11:50

Physical Parameters by APHA/ASTM/EPA Methods, Saturated Paste Extraction - Quality Control
Summit Scientific

Analyte	Result	Reporting		Spike Level	Source		%REC		RPD	
		Limit	Units		Result	%REC	Limits	RPD	Limit	Notes

Batch BHB0538 - General Preparation

LCS (BHB0538-BS1)

Prepared: 02/16/24 Analyzed: 02/20/24

pH	9.29	pH Units	9.18	101	95-105
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Duplicate (BHB0538-DUP1)

Source: 2402280-01

Prepared: 02/16/24 Analyzed: 02/20/24

pH	8.23	pH Units	8.23	0.00	20
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Summit Scientific

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Division of Environmental Testing

2115 N Scranton St Suite 3040A

Aurora, CO 80045

800-440-5184

March 18, 2024

4653 Table Mountain Drive
Golden, CO 80403
303-277-9310
reports@s2scientific.com

Project Manager : Mikayla Axtell

Project Name : 2402290

Project Number : N/A

Attached are the analytical results for 2402290 N/A received by Elevation Diagnostics, Division of Environmental Testing on February 24, 2024. This is associated with Elevation's number AA05872 .

The results were analyzed under the guidelines of various methods. These methods are identified in the report as follows: "SW" is referring to the EPA's SW-846 Compendium; "EPA" is referring to 40 CFR part 136; "HACH" is referring to a method which was validated by HACH®; "SM" is referring to a revision of the Standard Methods For the Examination of Water and Wastewater; and "ASTM" is referring to the standard test method set forth by ASTM International.

The analytical results in this report apply specifically to the samples listed in the attached Chain of Custody. This report may only be duplicated in full.

Any deviations to sample integrity, method specifications, or Elevation Diagnostics's standard operating procedures are documented in the report below.

Please contact us for any questions or comments concerning the content of this report.

Thank you,

Elevation Diagnostics, Division of Environmental Testing

Kristen Reichel
Laboratory Director
CSO,CCO

**Division of Environmental Testing**

2115 N Scranton St Suite 3040A

Aurora, CO 80045

800-440-5184

FINAL RESULTS REPORT**Report Date :** 3/18/2024**Report Time :** 13:16**REPORT TO**

4653 Table Mountain Drive
Golden, CO 80403
303-277-9310
reports@s2scientific.com

Project Manager : Mikayla Axtell**Project Name :** 2402290**Project Number :** N/A

Sample ID	Customer ID	Analyte Name Analysis Start	Dilution	Result	Units	Reporting Limit	Method Reference
AA05872-1 (FL01-01) BACKFILL							
Collected : 02/15/2024 07:20							
		Chromium VI, Soil					EPA 3060A & EPA
		03/05/2024 13:20		0.128	mg/kg	0.080	7199
AA05873-1 (PWV) B01@5.0							
Collected : 02/15/2024 07:20							
		Chromium VI, Soil					EPA 3060A & EPA
		03/05/2024 13:20		0.102	mg/kg	0.080	7199
AA05874-1 (PWV) N01@4.0							
Collected : 02/15/2024 07:20							
		Chromium VI, Soil					EPA 3060A & EPA
		03/05/2024 13:20		0.100	mg/kg	0.080	7199
AA05875-1 (PWV) S01@4.0							
Collected : 02/15/2024 07:20							
		Chromium VI, Soil					EPA 3060A & EPA
		03/05/2024 13:20		0.106	mg/kg	0.080	7199
AA05876-1 (PWV) E01@4.0							
Collected : 02/15/2024 07:20							
		Chromium VI, Soil					EPA 3060A & EPA
		03/04/2024 11:21		<0.080	mg/kg	0.08	7199
AA05877-1 (PWV) W01@4.0							
Collected : 02/15/2024 07:20							
		Chromium VI, Soil					EPA 3060A & EPA
		03/05/2024 13:20		0.100	mg/kg	0.080	7199
AA05878-1 (PWV) BACKFILL							
Collected : 02/15/2024 07:20							
		Chromium VI, Soil					EPA 3060A & EPA
		03/05/2024 13:20		0.151	mg/kg	0.080	7199

**Division of Environmental Testing**

2115 N Scranton St Suite 3040A

Aurora, CO 80045

800-440-5184

FINAL RESULTS REPORT**Report Date :** 3/18/2024**Report Time :** 13:16**REPORT TO**

4653 Table Mountain Drive
Golden, CO 80403
303-277-9310
reports@s2scientific.com

Project Manager : Mikayla Axtell**Project Name :** 2402290**Project Number :** N/A

Sample ID	Customer ID	Analyte Name Analysis Start	Dilution	Result	Units	Reporting Limit	Method Reference
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QC Report**CHROM_VI_SOIL-2173**

Analyte		Result	Reporting Limit	Units	Spike Level	Source Result	%Rec	% REC Limits	RPD	RPD Limit
DUP	AA05808	0.096	1.0	ppb		0.087			9.8361	
DUP	AA06217	0.086	1.0	mg/kg		0.098			13.043	
MB	AA06242	1.016		ppb						
LCS	AA06244	41.062		ppb	40		102.66			
LCS	AA06245	39.388		ppb	40		98.470			

CHROM_VI_SOIL-2188

Analyte		Result	Reporting Limit	Units	Spike Level	Source Result	%Rec	% REC Limits	RPD	RPD Limit
DUP	AA05873	0.101	0.001	mg/kg		0.102			0.98522	
MB	AA06276	1.615		ppb						
LCS	AA06278	47.809		ppb	40		119.52			
LCS	AA06279	47.220		ppb	40		118.05			



Division of Environmental Testing

2115 N Scranton St Suite 3040A

Aurora, CO 80045

800-440-5184

FINAL RESULTS REPORT

Report Date : 3/18/2024

Report Time : 13:16

REPORT TO
4653 Table Mountain Drive Golden, CO 80403 303-277-9310 reports@s2scientific.com

Project Manager : Mikayla Axtell

Project Name : 2402290

Project Number : N/A

Sample ID	Customer ID	Analyte Name Analysis Start	Dilution	Result	Units	Reporting Limit	Method Reference
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Qualifier

Explanation

H1	Sample received outside of regulatory holding time.
H2	Sample analyzed outside of regulatory holding time due to a laboratory error.
P1	Sample received outside temperature requirements, 0-6°C.
P2	Sample received unpreserved.
P3	Broken or leaking sample container.
P4	Sample improperly collected
P5	Sample improperly preserved
B	The same analyte is found in the associated blank
B1	Blank failed high, indicating possible high bias in sample results.
B2	Blank failed low, indicating possible low bias in sample results.
MS	Matrix Spike / Matrix Spike Duplicate recovery and/or RPD limit exceeded, indicating potential matrix interference.
QC	Associated batch quality control was outside the acceptable range
D1	Duplicate RPD limit exceeded due to low sample concentration.
D2	Duplicate RPD limit exceeded due to matrix interference.
S	Surrogate recovery failed, indicating potential matrix interference.
RL1	Reporting limits raised due to matrix interference.
RL2	Reporting limits raised due to limited sample.
U	Sample result less than method detection limit.
J	Sample result less than reporting limit but higher than method detection limit.
EST	The concentration indicated has been estimated due to high analyte content
E	Electronic loss or corruption of data.
I	Subcontracted sample



Fremont Environmental
PO Box 1289
Wellington CO, 80549

Project: Hanson BC 0-64N67W 1NESE

Project Number: UWRWE-A2137-ABN
Project Manager: Paul Henchan

Reported:
04/11/24 11:50

Notes and Definitions

QR-04	The RPD value for the sample duplicate or MS/MSD was outside of QC acceptance. QC batch accepted based on LCS and/or LCSD recovery and/or RPD values.
QR-02	The RPD result exceeded the QC control limits; however, both percent recoveries were acceptable. Sample results for the QC batch were accepted based on percent recoveries and completeness of QC data.
QR-01	Analyses are not controlled on RPD values from sample concentrations less than 10 times the reporting limit. QC batch accepted based on LCS and/or LCSD QC results.
QM-07	The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS/LCSD recovery.
QM-05	The spike recovery was outside acceptance limits for the MS and/or MSD due to matrix interference. The associated LCS and/or LCSD were within acceptance limits, therefore the data are considered valid.
QLCS-01	The spike recovery was outside acceptance limits for this analyte indicating a potential high bias. The corresponding samples did not exhibit concentrations above reporting level for this analyte. Data quality is not affected.
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference