

Summit Scientific

4653 Table Mountain Drive, Golden, Colorado 80403

303.277.9310

November 09, 2022

Levi Kirk

K.P. Kauffman

1675 Broadway

Denver, CO 80202

RE: Rocky Mountain Fuel Consolidation Line

Work Order #2210314

Enclosed are the results of analyses for samples received by Summit Scientific on 10/18/22 16:00. If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Mikayla Axtell For Paul Shrewsbury
President



K.P. Kauffman
1675 Broadway
Denver CO, 80202

Project: Rocky Mountain Fuel Consolidation Line

Project Number: [none]
Project Manager: Levi Kirk

Reported:
11/09/22 14:09

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SW-17@9'	2210314-01	Soil	10/18/22 10:00	10/18/22 16:00
SW-18@9'	2210314-02	Soil	10/18/22 10:02	10/18/22 16:00
SW-19@9'	2210314-03	Soil	10/18/22 10:04	10/18/22 16:00
SW-20@9'	2210314-04	Soil	10/18/22 10:06	10/18/22 16:00
SW-21@9'	2210314-05	Soil	10/18/22 10:08	10/18/22 16:00
SW-22@9'	2210314-06	Soil	10/18/22 10:10	10/18/22 16:00
SW-23@9'	2210314-07	Soil	10/18/22 10:12	10/18/22 16:00
SW-24@9'	2210314-08	Soil	10/18/22 10:14	10/18/22 16:00
SW-25@9'	2210314-09	Soil	10/18/22 10:06	10/18/22 16:00
SW-26@9'	2210314-10	Soil	10/18/22 10:18	10/18/22 16:00
SW-27@9'	2210314-11	Soil	10/18/22 10:20	10/18/22 16:00
BH-9@14'	2210314-12	Soil	10/18/22 10:22	10/18/22 16:00
BH-10@14'	2210314-13	Soil	10/18/22 10:24	10/18/22 16:00
BH-11@14'	2210314-14	Soil	10/18/22 10:26	10/18/22 16:00
BH-12@14'	2210314-15	Soil	10/18/22 10:28	10/18/22 16:00
BH-13@14'	2210314-16	Soil	10/18/22 10:30	10/18/22 16:00

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.

2212314.7

Summit Scientific

S₂

4653 Table Mountain Drive ♦ Golden, Colorado 80403

303-277-9310 ♦ 303-374-5933 (f)

Page 1 of 2

Client: K.P. Kauffman/Macon

Project Manager: Levi K. R.L.

Address: 1675 Broadway

E-Mail: Primary Contractor@maconmllc.net

City/State/Zip: Denver, CO 80202

Phone: 303.925.7822

Project Name: Rocky Mountain Fuels Consolidation Line

Sampler Name: CP & SS

Project Number: N/A

ID	Sample Description	Date Sampled	Time Sampled	# of containers	Preservative				Matrix				Analysis Requested								Special Instructions
					HCl	HNO ₃	None	Other	Water	Soil	Air-Canister #	Other	Full Test								
1	SW-17 @ 9'	10.18.22	1000	3			X			X			X								
2	SW-18 @ 9'		1002																		
3	SW-19 @ 9'		1004																		
4	SW-20 @ 9'		1006																		
5	SW-21 @ 9'		1008																		
6	SW-22 @ 9'		1010																		
7	SW-23 @ 9'		1012																		
8	SW-24 @ 9'		1014																		
9	SW-25 @ 9'		1016																		
10	SW-26 @ 9'		1018																		

Relinquished by:	Date/Time:	Received by:	Date/Time:	Turn Around Time (Check)	Notes:
Theresa L. Loe	10.18.22 1205	SZ	101822 1205	Same Day — 72 hours	
Relinquished by:	Date/Time:	Received by:	Date/Time:	24 hours — Standard <input checked="" type="checkbox"/>	
SL	101822 1000	[Signature]	101822 1000	48 hours —	
Relinquished by:	Date/Time:	Received by:	Date/Time:	Sample Integrity:	
				Temperature Upon Receipt: 11.3	
				Samples Intact: <input checked="" type="radio"/> Yes <input type="radio"/> No	

22/23/4.2

Summit Scientific

S₂

4653 Table Mountain Drive ♦ Golden, Colorado 80403

303-277-9310 ♦ 303-374-5933 (f)

Page 2 of 2

Client: kp. k & f m e n / Mar ComProject Manager: Levi KirkAddress: 1675 BroadwayE-Mail: primarycontracts@marcomllc.netCity/State/Zip: Denver, CO 80202Phone: 303.825.4822Project Name: Rocky Mountain Facies Consolidation LineSampler Name: CP & SSProject Number: N/A

ID	Sample Description	Date Sampled	Time Sampled	# of containers	Preservative				Matrix				Analysis Requested								Special Instructions
					HCl	HNO ₃	None	Other	Water	Soil	Air-Canister #	Other	Full Table 915								
1	SW-27 @ 9'	10.18.22	1020	3			X			X			X								
2	BH-9 @ 14'		1022																		
3	BH-10 @ 14'		1024																		
4	BH-11 @ 14'		1026																		
5	BH-12 @ 14'		1028																		
6	BH-13 @ 14'		1030																		
7																					
8																					
9																					
10																					

Relinquished by: <u>Chris Piccolo</u>	Date/Time: <u>10.18.22 1205</u>	Received by: <u>SZ</u>	Date/Time: <u>10/18/22 1205</u>	Turn Around Time (Check) Same Day <input type="checkbox"/> 72 hours 24 hours <input type="checkbox"/> Standard <input checked="" type="checkbox"/> 48 hours <input type="checkbox"/>	Notes:
Relinquished by: <u>SZ</u>	Date/Time: <u>10/18/22 1000</u>	Received by: <u>[Signature]</u>	Date/Time: <u>10/18/22 1000</u>	Sample Integrity: Temperature Upon Receipt: <u>11.3</u> Samples Intact: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
Relinquished by:	Date/Time:	Received by:	Date/Time:		

S₂

2/2

Sample Receipt Checklist

S2 Work Order# 2210314

Client: KPK

Client Project ID:

Rocky Mountain Fuel Consolidation Line

Shipped Via: H.D./P.U./FedEx/UPS/USPS/Other

Airbill #:

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	-------------------------------------	--------------------------	--------------------------	--------------------------

Matrix (Check all that apply)

Air

☐

Soil/Solid

☐

Water

☐

Other

☐

Temp (°C)

113

Thermometer #

1

	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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Are samples due within 48 hours present?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
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):				
<p>⁽¹⁾ If NO, then contact the client before proceeding with analysis and note in case narrative.</p>				

Custodian Printed Name

Date/Time

10-18-22



K.P. Kauffman
1675 Broadway
Denver CO, 80202

Project: Rocky Mountain Fuel Consolidation Line

Project Number: [none]
Project Manager: Levi Kirk

Reported:
11/09/22 14:09

SW-17@9'
2210314-01 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **10/18/22 10:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0020	mg/kg	1	BFJ0584	10/21/22	10/21/22	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: **10/18/22 10:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		112 %	50-150		"	"	"	"	
Surrogate: Toluene-d8		126 %	50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		119 %	50-150		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **10/18/22 10:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	ND	50	mg/kg	1	BFJ0587	10/21/22	10/22/22	EPA 8015M	
C28-C36 (ORO)	ND	50	"	"	"	"	"	"	

Date Sampled: **10/18/22 10:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl		111 %	30-150		"	"	"	"	

PAH by EPA Method 8270D SIM

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.



K.P. Kauffman
1675 Broadway
Denver CO, 80202

Project: Rocky Mountain Fuel Consolidation Line
Project Number: [none]
Project Manager: Levi Kirk

Reported:
11/09/22 14:09

SW-17@9'
2210314-01 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

Date Sampled: **10/18/22 10:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BFJ0565	10/21/22	10/21/22	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: **10/18/22 10:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10		52.1 %	40-150		"	"	"	"	
Surrogate: Fluoranthene-d10		113 %	40-150		"	"	"	"	

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **10/18/22 10:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	0.642	0.0100	mg/L	1	BFJ0561	10/21/22	10/21/22	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **10/18/22 10:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
---------	--------	-----------------	-------	----------	-------	----------	----------	--------	-------

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.



K.P. Kauffman
1675 Broadway
Denver CO, 80202

Project: Rocky Mountain Fuel Consolidation Line

Project Number: [none]
Project Manager: Levi Kirk

Reported:
11/09/22 14:09

SW-17@9'
2210314-01 (Soil)

Summit Scientific

Total Metals by EPA 6020B

Arsenic	0.947	0.233	mg/kg dry	1	BFJ0569	10/21/22	10/22/22	EPA 6020B
Barium	40.8	0.467	"	"	"	"	"	"
Cadmium	0.427	0.233	"	"	"	"	"	"
Copper	12.5	0.467	"	"	"	"	"	"
Lead	29.5	0.233	"	"	"	"	"	"
Nickel	6.40	0.467	"	"	"	"	"	"
Selenium	ND	0.303	"	"	"	"	"	"
Silver	0.0584	0.0233	"	"	"	"	11/06/22	"
Zinc	29.0	0.467	"	"	"	"	10/22/22	"

Hexavalent Chromium by EPA Method 7196

Date Sampled: **10/18/22 10:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BFJ0680	10/25/22	10/26/22	EPA 7196A	

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

Date Sampled: **10/18/22 10:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	19.2	0.0584	mg/L dry	1	BFJ0650	10/24/22	10/26/22	EPA 6020B	
Magnesium	11.9	0.0584	"	"	"	"	"	"	
Sodium	562	0.0584	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **10/18/22 10:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	24.8	0.00100	units	1	BFJ0743	10/26/22	10/26/22	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **10/18/22 10:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
---------	--------	-----------------	-------	----------	-------	----------	----------	--------	-------

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.



K.P. Kauffman
1675 Broadway
Denver CO, 80202

Project: Rocky Mountain Fuel Consolidation Line

Project Number: [none]
Project Manager: Levi Kirk

Reported:
11/09/22 14:09

SW-17@9'
2210314-01 (Soil)

Summit Scientific

Physical Parameters by APHA/ASTM/EPA Methods

% Solids	85.7	%	1	BFJ0542	10/20/22	10/21/22	Calculation
----------	------	---	---	---------	----------	----------	-------------

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **10/18/22 10:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	2.81	0.0100	mmhos/cm	1	BFJ0692	10/25/22	10/26/22	EPA 120.1	

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

Date Sampled: **10/18/22 10:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	8.40		pH Units	1	BFJ0691	10/25/22	10/26/22	EPA 9045D	

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.



K.P. Kauffman
1675 Broadway
Denver CO, 80202

Project: Rocky Mountain Fuel Consolidation Line
Project Number: [none]
Project Manager: Levi Kirk

Reported:
11/09/22 14:09

SW-18@9'
2210314-02 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **10/18/22 10:02**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Benzene	ND	0.0020	mg/kg	1	BFJ0584	10/21/22	10/21/22	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: **10/18/22 10:02**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: 1,2-Dichloroethane-d4		95.8 %	50-150		"	"	"	"	
Surrogate: Toluene-d8		109 %	50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		117 %	50-150		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **10/18/22 10:02**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
C10-C28 (DRO)	ND	50	mg/kg	1	BFJ0587	10/21/22	10/22/22	EPA 8015M	
C28-C36 (ORO)	ND	50	"	"	"	"	"	"	

Date Sampled: **10/18/22 10:02**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: o-Terphenyl		82.4 %	30-150		"	"	"	"	

PAH by EPA Method 8270D SIM

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.



K.P. Kauffman
1675 Broadway
Denver CO, 80202

Project: Rocky Mountain Fuel Consolidation Line
Project Number: [none]
Project Manager: Levi Kirk

Reported:
11/09/22 14:09

SW-18@9'
2210314-02 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

Date Sampled: **10/18/22 10:02**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BFJ0565	10/21/22	10/21/22	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: **10/18/22 10:02**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10		53.3 %	40-150		"	"	"	"	
Surrogate: Fluoranthene-d10		107 %	40-150		"	"	"	"	

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **10/18/22 10:02**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	0.611	0.0100	mg/L	1	BFJ0561	10/21/22	10/21/22	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **10/18/22 10:02**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
---------	--------	-----------------	-------	----------	-------	----------	----------	--------	-------

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.



K.P. Kauffman
1675 Broadway
Denver CO, 80202

Project: Rocky Mountain Fuel Consolidation Line

Project Number: [none]
Project Manager: Levi Kirk

Reported:
11/09/22 14:09

SW-18@9'
2210314-02 (Soil)

Summit Scientific

Total Metals by EPA 6020B

Arsenic	7.85	0.232	mg/kg dry	1	BFJ0569	10/21/22	10/22/22	EPA 6020B
Barium	48.2	0.465	"	"	"	"	"	"
Cadmium	1.10	0.232	"	"	"	"	"	"
Copper	29.1	0.465	"	"	"	"	"	"
Lead	46.5	0.232	"	"	"	"	"	"
Nickel	14.9	0.465	"	"	"	"	"	"
Selenium	0.430	0.302	"	"	"	"	"	"
Silver	0.0423	0.0232	"	"	"	"	11/06/22	"
Zinc	96.7	0.465	"	"	"	"	10/22/22	"

Hexavalent Chromium by EPA Method 7196

Date Sampled: **10/18/22 10:02**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BFJ0680	10/25/22	10/26/22	EPA 7196A	

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

Date Sampled: **10/18/22 10:02**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	432	0.0581	mg/L dry	1	BFJ0650	10/24/22	10/26/22	EPA 6020B	
Magnesium	231	0.0581	"	"	"	"	"	"	
Sodium	2380	0.0581	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **10/18/22 10:02**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	23.0	0.00100	units	1	BFJ0743	10/26/22	10/26/22	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **10/18/22 10:02**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
---------	--------	-----------------	-------	----------	-------	----------	----------	--------	-------

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.



K.P. Kauffman
1675 Broadway
Denver CO, 80202

Project: Rocky Mountain Fuel Consolidation Line

Project Number: [none]
Project Manager: Levi Kirk

Reported:
11/09/22 14:09

SW-18@9'
2210314-02 (Soil)

Summit Scientific

Physical Parameters by APHA/ASTM/EPA Methods

% Solids	86.0	%	1	BFJ0542	10/20/22	10/21/22	Calculation
----------	------	---	---	---------	----------	----------	-------------

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **10/18/22 10:02**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	4.10	0.0100	mmhos/cm	1	BFJ0692	10/25/22	10/26/22	EPA 120.1	

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

Date Sampled: **10/18/22 10:02**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	8.02		pH Units	1	BFJ0691	10/25/22	10/26/22	EPA 9045D	

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.



K.P. Kauffman
1675 Broadway
Denver CO, 80202

Project: Rocky Mountain Fuel Consolidation Line

Project Number: [none]
Project Manager: Levi Kirk

Reported:
11/09/22 14:09

SW-19@9'
2210314-03 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **10/18/22 10:04**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Benzene	ND	0.0020	mg/kg	1	BFJ0584	10/21/22	10/21/22	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: **10/18/22 10:04**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: 1,2-Dichloroethane-d4		85.6 %	50-150		"	"	"	"	
Surrogate: Toluene-d8		111 %	50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		118 %	50-150		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **10/18/22 10:04**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
C10-C28 (DRO)	ND	50	mg/kg	1	BFJ0587	10/21/22	10/22/22	EPA 8015M	
C28-C36 (ORO)	ND	50	"	"	"	"	"	"	

Date Sampled: **10/18/22 10:04**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: o-Terphenyl		90.0 %	30-150		"	"	"	"	

PAH by EPA Method 8270D SIM

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.



K.P. Kauffman
1675 Broadway
Denver CO, 80202

Project: Rocky Mountain Fuel Consolidation Line

Project Number: [none]
Project Manager: Levi Kirk

Reported:
11/09/22 14:09

SW-19@9'
2210314-03 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

Date Sampled: **10/18/22 10:04**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BFJ0565	10/21/22	10/21/22	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: **10/18/22 10:04**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10		47.4 %	40-150		"	"	"	"	
Surrogate: Fluoranthene-d10		88.9 %	40-150		"	"	"	"	

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **10/18/22 10:04**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	0.485	0.0100	mg/L	1	BFJ0561	10/21/22	10/21/22	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **10/18/22 10:04**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
---------	--------	-----------------	-------	----------	-------	----------	----------	--------	-------

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.



K.P. Kauffman
1675 Broadway
Denver CO, 80202

Project: Rocky Mountain Fuel Consolidation Line

Project Number: [none]
Project Manager: Levi Kirk

Reported:
11/09/22 14:09

SW-19@9'
2210314-03 (Soil)

Summit Scientific

Total Metals by EPA 6020B

Arsenic	1.71	0.252	mg/kg dry	1	BFJ0569	10/21/22	10/22/22	EPA 6020B
Barium	277	0.504	"	"	"	"	"	"
Cadmium	0.605	0.252	"	"	"	"	"	"
Copper	11.1	0.504	"	"	"	"	"	"
Lead	17.9	0.252	"	"	"	"	"	"
Nickel	11.9	0.504	"	"	"	"	"	"
Selenium	ND	0.328	"	"	"	"	"	"
Silver	0.0393	0.0252	"	"	"	"	11/06/22	"
Zinc	42.5	0.504	"	"	"	"	10/22/22	"

Hexavalent Chromium by EPA Method 7196

Date Sampled: **10/18/22 10:04**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BFJ0680	10/25/22	10/26/22	EPA 7196A	

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

Date Sampled: **10/18/22 10:04**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	46.6	0.0630	mg/L dry	1	BFJ0650	10/24/22	10/26/22	EPA 6020B	
Magnesium	32.3	0.0630	"	"	"	"	"	"	
Sodium	1090	0.0630	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **10/18/22 10:04**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	30.0	0.00100	units	1	BFJ0743	10/26/22	10/26/22	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **10/18/22 10:04**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
---------	--------	-----------------	-------	----------	-------	----------	----------	--------	-------

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.



K.P. Kauffman
1675 Broadway
Denver CO, 80202

Project: Rocky Mountain Fuel Consolidation Line

Project Number: [none]
Project Manager: Levi Kirk

Reported:
11/09/22 14:09

SW-19@9'
2210314-03 (Soil)

Summit Scientific

Physical Parameters by APHA/ASTM/EPA Methods

% Solids	79.3	%	1	BFJ0542	10/20/22	10/21/22	Calculation
----------	------	---	---	---------	----------	----------	-------------

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **10/18/22 10:04**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	4.57	0.0100	mmhos/cm	1	BFJ0692	10/25/22	10/26/22	EPA 120.1	

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

Date Sampled: **10/18/22 10:04**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	8.28		pH Units	1	BFJ0691	10/25/22	10/26/22	EPA 9045D	

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.



K.P. Kauffman
1675 Broadway
Denver CO, 80202

Project: Rocky Mountain Fuel Consolidation Line

Project Number: [none]
Project Manager: Levi Kirk

Reported:
11/09/22 14:09

SW-20@9'
2210314-04 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **10/18/22 10:06**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Benzene	ND	0.0020	mg/kg	1	BFJ0584	10/21/22	10/21/22	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: **10/18/22 10:06**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: 1,2-Dichloroethane-d4		96.2 %	50-150		"	"	"	"	
Surrogate: Toluene-d8		111 %	50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		116 %	50-150		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **10/18/22 10:06**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
C10-C28 (DRO)	ND	50	mg/kg	1	BFJ0587	10/21/22	10/22/22	EPA 8015M	
C28-C36 (ORO)	ND	50	"	"	"	"	"	"	

Date Sampled: **10/18/22 10:06**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: o-Terphenyl		97.9 %	30-150		"	"	"	"	

PAH by EPA Method 8270D SIM

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.



K.P. Kauffman
1675 Broadway
Denver CO, 80202

Project: Rocky Mountain Fuel Consolidation Line
Project Number: [none]
Project Manager: Levi Kirk

Reported:
11/09/22 14:09

SW-20@9'
2210314-04 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

Date Sampled: **10/18/22 10:06**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BFJ0565	10/21/22	10/21/22	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: **10/18/22 10:06**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10		52.1 %	40-150		"	"	"	"	
Surrogate: Fluoranthene-d10		87.5 %	40-150		"	"	"	"	

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **10/18/22 10:06**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	0.917	0.0100	mg/L	1	BFJ0561	10/21/22	10/21/22	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **10/18/22 10:06**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
---------	--------	-----------------	-------	----------	-------	----------	----------	--------	-------

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.



K.P. Kauffman
1675 Broadway
Denver CO, 80202

Project: Rocky Mountain Fuel Consolidation Line

Project Number: [none]
Project Manager: Levi Kirk

Reported:
11/09/22 14:09

SW-20@9'
2210314-04 (Soil)

Summit Scientific

Total Metals by EPA 6020B

Arsenic	1.88	0.248	mg/kg dry	1	BFJ0569	10/21/22	10/22/22	EPA 6020B
Barium	224	0.496	"	"	"	"	"	"
Cadmium	0.656	0.248	"	"	"	"	"	"
Copper	12.0	0.496	"	"	"	"	"	"
Lead	20.0	0.248	"	"	"	"	"	"
Nickel	12.0	0.496	"	"	"	"	"	"
Selenium	0.342	0.323	"	"	"	"	"	"
Silver	0.0422	0.0248	"	"	"	"	11/06/22	"
Zinc	41.2	0.496	"	"	"	"	10/22/22	"

Hexavalent Chromium by EPA Method 7196

Date Sampled: **10/18/22 10:06**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BFJ0680	10/25/22	10/26/22	EPA 7196A	

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

Date Sampled: **10/18/22 10:06**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	492	0.0621	mg/L dry	1	BFJ0650	10/24/22	10/26/22	EPA 6020B	
Magnesium	204	0.0621	"	"	"	"	"	"	
Sodium	2120	0.0621	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **10/18/22 10:06**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	20.3	0.00100	units	1	BFJ0743	10/26/22	10/26/22	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **10/18/22 10:06**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
---------	--------	-----------------	-------	----------	-------	----------	----------	--------	-------

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.



K.P. Kauffman
1675 Broadway
Denver CO, 80202

Project: Rocky Mountain Fuel Consolidation Line

Project Number: [none]
Project Manager: Levi Kirk

Reported:
11/09/22 14:09

SW-20@9'
2210314-04 (Soil)

Summit Scientific

Physical Parameters by APHA/ASTM/EPA Methods

% Solids	80.6	%	1	BFJ0542	10/20/22	10/21/22	Calculation
----------	------	---	---	---------	----------	----------	-------------

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **10/18/22 10:06**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	2.96	0.0100	mmhos/cm	1	BFJ0692	10/25/22	10/26/22	EPA 120.1	

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

Date Sampled: **10/18/22 10:06**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	7.91		pH Units	1	BFJ0691	10/25/22	10/26/22	EPA 9045D	

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.



K.P. Kauffman
1675 Broadway
Denver CO, 80202

Project: Rocky Mountain Fuel Consolidation Line

Project Number: [none]
Project Manager: Levi Kirk

Reported:
11/09/22 14:09

SW-21@9'
2210314-05 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **10/18/22 10:08**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Benzene	ND	0.0020	mg/kg	1	BFJ0584	10/21/22	10/21/22	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: **10/18/22 10:08**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: 1,2-Dichloroethane-d4		98.8 %	50-150		"	"	"	"	
Surrogate: Toluene-d8		111 %	50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		131 %	50-150		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **10/18/22 10:08**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
C10-C28 (DRO)	ND	50	mg/kg	1	BFJ0587	10/21/22	10/22/22	EPA 8015M	
C28-C36 (ORO)	ND	50	"	"	"	"	"	"	

Date Sampled: **10/18/22 10:08**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: o-Terphenyl		93.8 %	30-150		"	"	"	"	

PAH by EPA Method 8270D SIM

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.



K.P. Kauffman
1675 Broadway
Denver CO, 80202

Project: Rocky Mountain Fuel Consolidation Line
Project Number: [none]
Project Manager: Levi Kirk

Reported:
11/09/22 14:09

SW-21@9'
2210314-05 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

Date Sampled: **10/18/22 10:08**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BFJ0565	10/21/22	10/21/22	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: **10/18/22 10:08**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10		57.0 %	40-150		"	"	"	"	
Surrogate: Fluoranthene-d10		106 %	40-150		"	"	"	"	

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **10/18/22 10:08**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	0.904	0.0100	mg/L	1	BFJ0561	10/21/22	10/21/22	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **10/18/22 10:08**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
---------	--------	-----------------	-------	----------	-------	----------	----------	--------	-------

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.



K.P. Kauffman
1675 Broadway
Denver CO, 80202

Project: Rocky Mountain Fuel Consolidation Line

Project Number: [none]
Project Manager: Levi Kirk

Reported:
11/09/22 14:09

SW-21@9'
2210314-05 (Soil)

Summit Scientific

Total Metals by EPA 6020B

Arsenic	1.74	0.241	mg/kg dry	1	BFJ0569	10/21/22	10/22/22	EPA 6020B
Barium	268	0.483	"	"	"	"	"	"
Cadmium	0.641	0.241	"	"	"	"	"	"
Copper	11.7	0.483	"	"	"	"	"	"
Lead	18.7	0.241	"	"	"	"	"	"
Nickel	11.7	0.483	"	"	"	"	"	"
Selenium	0.537	0.314	"	"	"	"	"	"
Silver	0.0492	0.0241	"	"	"	"	11/06/22	"
Zinc	39.7	0.483	"	"	"	"	10/22/22	"

Hexavalent Chromium by EPA Method 7196

Date Sampled: **10/18/22 10:08**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BFJ0680	10/25/22	10/26/22	EPA 7196A	

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

Date Sampled: **10/18/22 10:08**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	434	0.0603	mg/L dry	1	BFJ0650	10/24/22	10/26/22	EPA 6020B	
Magnesium	278	0.0603	"	"	"	"	"	"	
Sodium	2900	0.0603	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **10/18/22 10:08**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	26.7	0.00100	units	1	BFJ0743	10/26/22	10/26/22	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **10/18/22 10:08**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
---------	--------	-----------------	-------	----------	-------	----------	----------	--------	-------

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.



K.P. Kauffman
1675 Broadway
Denver CO, 80202

Project: Rocky Mountain Fuel Consolidation Line

Project Number: [none]
Project Manager: Levi Kirk

Reported:
11/09/22 14:09

SW-21@9'
2210314-05 (Soil)

Summit Scientific

Physical Parameters by APHA/ASTM/EPA Methods

% Solids	82.9	%	1	BFJ0542	10/20/22	10/21/22	Calculation
----------	------	---	---	---------	----------	----------	-------------

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **10/18/22 10:08**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	5.18	0.0100	mmhos/cm	1	BFJ0692	10/25/22	10/26/22	EPA 120.1	

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

Date Sampled: **10/18/22 10:08**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	7.99		pH Units	1	BFJ0691	10/25/22	10/26/22	EPA 9045D	

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.



K.P. Kauffman
1675 Broadway
Denver CO, 80202

Project: Rocky Mountain Fuel Consolidation Line

Project Number: [none]
Project Manager: Levi Kirk

Reported:
11/09/22 14:09

SW-22@9'
2210314-06 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **10/18/22 10:10**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Benzene	ND	0.0020	mg/kg	1	BFJ0584	10/21/22	10/21/22	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: **10/18/22 10:10**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: 1,2-Dichloroethane-d4		95.8 %	50-150		"	"	"	"	
Surrogate: Toluene-d8		118 %	50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		120 %	50-150		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **10/18/22 10:10**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
C10-C28 (DRO)	ND	50	mg/kg	1	BFJ0587	10/21/22	10/22/22	EPA 8015M	
C28-C36 (ORO)	ND	50	"	"	"	"	"	"	

Date Sampled: **10/18/22 10:10**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: o-Terphenyl		104 %	30-150		"	"	"	"	

PAH by EPA Method 8270D SIM

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.



K.P. Kauffman
1675 Broadway
Denver CO, 80202

Project: Rocky Mountain Fuel Consolidation Line
Project Number: [none]
Project Manager: Levi Kirk

Reported:
11/09/22 14:09

SW-22@9'
2210314-06 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

Date Sampled: **10/18/22 10:10**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BFJ0565	10/21/22	10/22/22	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: **10/18/22 10:10**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10		49.8 %	40-150		"	"	"	"	
Surrogate: Fluoranthene-d10		90.1 %	40-150		"	"	"	"	

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **10/18/22 10:10**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	0.460	0.0100	mg/L	1	BFJ0561	10/21/22	10/21/22	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **10/18/22 10:10**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
---------	--------	-----------------	-------	----------	-------	----------	----------	--------	-------

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.



K.P. Kauffman
1675 Broadway
Denver CO, 80202

Project: Rocky Mountain Fuel Consolidation Line

Project Number: [none]
Project Manager: Levi Kirk

Reported:
11/09/22 14:09

SW-22@9'
2210314-06 (Soil)

Summit Scientific

Total Metals by EPA 6020B

Arsenic	1.43	0.236	mg/kg dry	1	BFJ0569	10/21/22	10/22/22	EPA 6020B
Barium	116	0.472	"	"	"	"	"	"
Cadmium	0.639	0.236	"	"	"	"	"	"
Copper	11.0	0.472	"	"	"	"	"	"
Lead	18.8	0.236	"	"	"	"	"	"
Nickel	11.5	0.472	"	"	"	"	"	"
Selenium	0.311	0.307	"	"	"	"	"	"
Silver	0.0410	0.0236	"	"	"	"	11/06/22	"
Zinc	38.6	0.472	"	"	"	"	10/22/22	"

Hexavalent Chromium by EPA Method 7196

Date Sampled: **10/18/22 10:10**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BFJ0680	10/25/22	10/26/22	EPA 7196A	

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

Date Sampled: **10/18/22 10:10**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	221	0.0590	mg/L dry	1	BFJ0650	10/24/22	10/26/22	EPA 6020B	
Magnesium	148	0.0590	"	"	"	"	"	"	
Sodium	2040	0.0590	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **10/18/22 10:10**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	26.1	0.00100	units	1	BFJ0743	10/26/22	10/26/22	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **10/18/22 10:10**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
---------	--------	-----------------	-------	----------	-------	----------	----------	--------	-------

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.



K.P. Kauffman
1675 Broadway
Denver CO, 80202

Project: Rocky Mountain Fuel Consolidation Line

Project Number: [none]
Project Manager: Levi Kirk

Reported:
11/09/22 14:09

SW-22@9'
2210314-06 (Soil)

Summit Scientific

Physical Parameters by APHA/ASTM/EPA Methods

% Solids	84.8	%	1	BFJ0542	10/20/22	10/21/22	Calculation
----------	------	---	---	---------	----------	----------	-------------

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **10/18/22 10:10**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	9.88	0.0100	mmhos/cm	1	BFJ0692	10/25/22	10/26/22	EPA 120.1	

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

Date Sampled: **10/18/22 10:10**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	8.00		pH Units	1	BFJ0691	10/25/22	10/26/22	EPA 9045D	

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.



K.P. Kauffman
1675 Broadway
Denver CO, 80202

Project: Rocky Mountain Fuel Consolidation Line

Project Number: [none]
Project Manager: Levi Kirk

Reported:
11/09/22 14:09

SW-23@9'
2210314-07 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **10/18/22 10:12**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Benzene	ND	0.0020	mg/kg	1	BFJ0584	10/21/22	10/21/22	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: **10/18/22 10:12**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: 1,2-Dichloroethane-d4		98.0 %	50-150		"	"	"	"	
Surrogate: Toluene-d8		111 %	50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		117 %	50-150		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **10/18/22 10:12**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
C10-C28 (DRO)	ND	50	mg/kg	1	BFJ0587	10/21/22	10/22/22	EPA 8015M	
C28-C36 (ORO)	ND	50	"	"	"	"	"	"	

Date Sampled: **10/18/22 10:12**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: o-Terphenyl		106 %	30-150		"	"	"	"	

PAH by EPA Method 8270D SIM

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.



K.P. Kauffman
1675 Broadway
Denver CO, 80202

Project: Rocky Mountain Fuel Consolidation Line
Project Number: [none]
Project Manager: Levi Kirk

Reported:
11/09/22 14:09

SW-23@9'
2210314-07 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

Date Sampled: **10/18/22 10:12**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BFJ0565	10/21/22	10/22/22	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: **10/18/22 10:12**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10		57.2 %	40-150		"	"	"	"	
Surrogate: Fluoranthene-d10		114 %	40-150		"	"	"	"	

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **10/18/22 10:12**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	0.674	0.0100	mg/L	1	BFJ0561	10/21/22	10/21/22	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **10/18/22 10:12**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
---------	--------	-----------------	-------	----------	-------	----------	----------	--------	-------

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.



K.P. Kauffman
1675 Broadway
Denver CO, 80202

Project: Rocky Mountain Fuel Consolidation Line

Project Number: [none]
Project Manager: Levi Kirk

Reported:
11/09/22 14:09

SW-23@9'
2210314-07 (Soil)

Summit Scientific

Total Metals by EPA 6020B

Arsenic	2.17	0.231	mg/kg dry	1	BFJ0569	10/21/22	10/22/22	EPA 6020B
Barium	58.3	0.461	"	"	"	"	"	"
Cadmium	0.389	0.231	"	"	"	"	"	"
Copper	9.33	0.461	"	"	"	"	"	"
Lead	23.8	0.231	"	"	"	"	"	"
Nickel	6.59	0.461	"	"	"	"	"	"
Selenium	ND	0.300	"	"	"	"	"	"
Silver	0.0392	0.0231	"	"	"	"	11/06/22	"
Zinc	25.0	0.461	"	"	"	"	10/22/22	"

Hexavalent Chromium by EPA Method 7196

Date Sampled: **10/18/22 10:12**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BFJ0680	10/25/22	10/26/22	EPA 7196A	

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

Date Sampled: **10/18/22 10:12**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	464	0.0577	mg/L dry	1	BFJ0650	10/24/22	10/26/22	EPA 6020B	
Magnesium	176	0.0577	"	"	"	"	"	"	
Sodium	1600	0.0577	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **10/18/22 10:12**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	16.0	0.00100	units	1	BFJ0743	10/26/22	10/26/22	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **10/18/22 10:12**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
---------	--------	-----------------	-------	----------	-------	----------	----------	--------	-------

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.



K.P. Kauffman
1675 Broadway
Denver CO, 80202

Project: Rocky Mountain Fuel Consolidation Line

Project Number: [none]
Project Manager: Levi Kirk

Reported:
11/09/22 14:09

SW-23@9'
2210314-07 (Soil)

Summit Scientific

Physical Parameters by APHA/ASTM/EPA Methods

% Solids	86.7	%	1	BFJ0542	10/20/22	10/21/22	Calculation
----------	------	---	---	---------	----------	----------	-------------

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **10/18/22 10:12**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	8.77	0.0100	mmhos/cm	1	BFJ0692	10/25/22	10/26/22	EPA 120.1	

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

Date Sampled: **10/18/22 10:12**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	7.90		pH Units	1	BFJ0691	10/25/22	10/26/22	EPA 9045D	

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.



K.P. Kauffman
1675 Broadway
Denver CO, 80202

Project: Rocky Mountain Fuel Consolidation Line

Project Number: [none]
Project Manager: Levi Kirk

Reported:
11/09/22 14:09

SW-24@9'
2210314-08 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **10/18/22 10:14**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Benzene	ND	0.0020	mg/kg	1	BFJ0584	10/21/22	10/21/22	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: **10/18/22 10:14**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: 1,2-Dichloroethane-d4		98.8 %	50-150		"	"	"	"	
Surrogate: Toluene-d8		112 %	50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		120 %	50-150		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **10/18/22 10:14**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
C10-C28 (DRO)	ND	50	mg/kg	1	BFJ0587	10/21/22	10/22/22	EPA 8015M	
C28-C36 (ORO)	ND	50	"	"	"	"	"	"	

Date Sampled: **10/18/22 10:14**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: o-Terphenyl		110 %	30-150		"	"	"	"	

PAH by EPA Method 8270D SIM

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.



K.P. Kauffman
1675 Broadway
Denver CO, 80202

Project: Rocky Mountain Fuel Consolidation Line
Project Number: [none]
Project Manager: Levi Kirk

Reported:
11/09/22 14:09

SW-24@9'
2210314-08 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

Date Sampled: **10/18/22 10:14**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BFJ0565	10/21/22	10/22/22	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: **10/18/22 10:14**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10		56.2 %	40-150		"	"	"	"	
Surrogate: Fluoranthene-d10		110 %	40-150		"	"	"	"	

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **10/18/22 10:14**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	0.444	0.0100	mg/L	1	BFJ0561	10/21/22	10/21/22	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **10/18/22 10:14**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
---------	--------	-----------------	-------	----------	-------	----------	----------	--------	-------

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.



K.P. Kauffman
1675 Broadway
Denver CO, 80202

Project: Rocky Mountain Fuel Consolidation Line

Project Number: [none]
Project Manager: Levi Kirk

Reported:
11/09/22 14:09

SW-24@9'
2210314-08 (Soil)

Summit Scientific

Total Metals by EPA 6020B

Arsenic	4.53	0.230	mg/kg dry	1	BFJ0569	10/21/22	10/22/22	EPA 6020B
Barium	58.4	0.460	"	"	"	"	"	"
Cadmium	0.700	0.230	"	"	"	"	"	"
Copper	17.4	0.460	"	"	"	"	"	"
Lead	31.1	0.230	"	"	"	"	"	"
Nickel	15.7	0.460	"	"	"	"	"	"
Selenium	0.385	0.299	"	"	"	"	"	"
Silver	0.0331	0.0230	"	"	"	"	11/06/22	"
Zinc	66.8	0.460	"	"	"	"	10/22/22	"

Hexavalent Chromium by EPA Method 7196

Date Sampled: **10/18/22 10:14**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BFJ0680	10/25/22	10/26/22	EPA 7196A	

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

Date Sampled: **10/18/22 10:14**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	270	0.0574	mg/L dry	1	BFJ0650	10/24/22	10/26/22	EPA 6020B	
Magnesium	109	0.0574	"	"	"	"	"	"	
Sodium	1230	0.0574	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **10/18/22 10:14**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	16.0	0.00100	units	1	BFJ0743	10/26/22	10/26/22	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **10/18/22 10:14**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
---------	--------	-----------------	-------	----------	-------	----------	----------	--------	-------

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.



K.P. Kauffman
1675 Broadway
Denver CO, 80202

Project: Rocky Mountain Fuel Consolidation Line
Project Number: [none]
Project Manager: Levi Kirk

Reported:
11/09/22 14:09

SW-24@9'
2210314-08 (Soil)

Summit Scientific

Physical Parameters by APHA/ASTM/EPA Methods

% Solids	87.0	%	1	BFJ0542	10/20/22	10/21/22	Calculation
----------	------	---	---	---------	----------	----------	-------------

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **10/18/22 10:14**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	6.78	0.0100	mmhos/cm	1	BFJ0692	10/25/22	10/26/22	EPA 120.1	

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

Date Sampled: **10/18/22 10:14**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	7.91		pH Units	1	BFJ0691	10/25/22	10/26/22	EPA 9045D	

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.



K.P. Kauffman
1675 Broadway
Denver CO, 80202

Project: Rocky Mountain Fuel Consolidation Line

Project Number: [none]
Project Manager: Levi Kirk

Reported:
11/09/22 14:09

SW-25@9'
2210314-09 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **10/18/22 10:06**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Benzene	ND	0.0020	mg/kg	1	BFJ0584	10/21/22	10/21/22	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: **10/18/22 10:06**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: 1,2-Dichloroethane-d4		86.0 %	50-150		"	"	"	"	
Surrogate: Toluene-d8		110 %	50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		119 %	50-150		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **10/18/22 10:06**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
C10-C28 (DRO)	ND	50	mg/kg	1	BFJ0587	10/21/22	10/22/22	EPA 8015M	
C28-C36 (ORO)	ND	50	"	"	"	"	"	"	

Date Sampled: **10/18/22 10:06**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: o-Terphenyl		110 %	30-150		"	"	"	"	

PAH by EPA Method 8270D SIM

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.



K.P. Kauffman
1675 Broadway
Denver CO, 80202

Project: Rocky Mountain Fuel Consolidation Line
Project Number: [none]
Project Manager: Levi Kirk

Reported:
11/09/22 14:09

SW-25@9'
2210314-09 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

Date Sampled: **10/18/22 10:06**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BFJ0565	10/21/22	10/22/22	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: **10/18/22 10:06**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10		55.9 %	40-150		"	"	"	"	
Surrogate: Fluoranthene-d10		99.8 %	40-150		"	"	"	"	

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **10/18/22 10:06**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	0.355	0.0100	mg/L	1	BFJ0561	10/21/22	10/21/22	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **10/18/22 10:06**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
---------	--------	-----------------	-------	----------	-------	----------	----------	--------	-------

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.



K.P. Kauffman
1675 Broadway
Denver CO, 80202

Project: Rocky Mountain Fuel Consolidation Line

Project Number: [none]
Project Manager: Levi Kirk

Reported:
11/09/22 14:09

SW-25@9'
2210314-09 (Soil)

Summit Scientific

Total Metals by EPA 6020B

Arsenic	0.558	0.226	mg/kg dry	1	BFJ0569	10/21/22	10/22/22	EPA 6020B
Barium	22.5	0.452	"	"	"	"	"	"
Cadmium	0.576	0.226	"	"	"	"	"	"
Copper	17.4	0.452	"	"	"	"	"	"
Lead	20.8	0.226	"	"	"	"	"	"
Nickel	3.99	0.452	"	"	"	"	"	"
Selenium	ND	0.294	"	"	"	"	"	"
Silver	0.0407	0.0226	"	"	"	"	11/08/22	"
Zinc	17.0	0.452	"	"	"	"	10/22/22	"

Hexavalent Chromium by EPA Method 7196

Date Sampled: **10/18/22 10:06**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BFJ0680	10/25/22	10/26/22	EPA 7196A	

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

Date Sampled: **10/18/22 10:06**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	187	0.0565	mg/L dry	1	BFJ0650	10/24/22	10/26/22	EPA 6020B	
Magnesium	80.2	0.0565	"	"	"	"	"	"	
Sodium	1120	0.0565	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **10/18/22 10:06**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	17.3	0.00100	units	1	BFJ0743	10/26/22	10/26/22	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **10/18/22 10:06**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
---------	--------	-----------------	-------	----------	-------	----------	----------	--------	-------

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.



K.P. Kauffman
1675 Broadway
Denver CO, 80202

Project: Rocky Mountain Fuel Consolidation Line

Project Number: [none]
Project Manager: Levi Kirk

Reported:
11/09/22 14:09

SW-25@9'
2210314-09 (Soil)

Summit Scientific

Physical Parameters by APHA/ASTM/EPA Methods

% Solids	88.5	%	1	BFJ0542	10/20/22	10/21/22	Calculation
----------	------	---	---	---------	----------	----------	-------------

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **10/18/22 10:06**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	6.44	0.0100	mmhos/cm	1	BFJ0692	10/25/22	10/26/22	EPA 120.1	

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

Date Sampled: **10/18/22 10:06**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	7.84		pH Units	1	BFJ0691	10/25/22	10/26/22	EPA 9045D	

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.



K.P. Kauffman
1675 Broadway
Denver CO, 80202

Project: Rocky Mountain Fuel Consolidation Line
Project Number: [none]
Project Manager: Levi Kirk

Reported:
11/09/22 14:09

SW-26@9'
2210314-10 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **10/18/22 10:18**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Benzene	ND	0.0020	mg/kg	1	BFJ0584	10/21/22	10/21/22	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: **10/18/22 10:18**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: 1,2-Dichloroethane-d4		96.5 %	50-150		"	"	"	"	
Surrogate: Toluene-d8		112 %	50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		119 %	50-150		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **10/18/22 10:18**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
C10-C28 (DRO)	ND	50	mg/kg	1	BFJ0587	10/21/22	10/22/22	EPA 8015M	
C28-C36 (ORO)	ND	50	"	"	"	"	"	"	

Date Sampled: **10/18/22 10:18**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: o-Terphenyl		101 %	30-150		"	"	"	"	

PAH by EPA Method 8270D SIM

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.



K.P. Kauffman
1675 Broadway
Denver CO, 80202

Project: Rocky Mountain Fuel Consolidation Line

Project Number: [none]
Project Manager: Levi Kirk

Reported:
11/09/22 14:09

SW-26@9'
2210314-10 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

Date Sampled: **10/18/22 10:18**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BFJ0565	10/21/22	10/22/22	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: **10/18/22 10:18**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10		53.4 %	40-150		"	"	"	"	
Surrogate: Fluoranthene-d10		114 %	40-150		"	"	"	"	

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **10/18/22 10:18**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	0.298	0.0100	mg/L	1	BFJ0561	10/21/22	10/21/22	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **10/18/22 10:18**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
---------	--------	-----------------	-------	----------	-------	----------	----------	--------	-------

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.



K.P. Kauffman
1675 Broadway
Denver CO, 80202

Project: Rocky Mountain Fuel Consolidation Line

Project Number: [none]
Project Manager: Levi Kirk

Reported:
11/09/22 14:09

SW-26@9'
2210314-10 (Soil)

Summit Scientific

Total Metals by EPA 6020B

Arsenic	1.72	0.224	mg/kg dry	1	BFJ0569	10/21/22	10/22/22	EPA 6020B
Barium	176	0.448	"	"	"	"	"	"
Cadmium	0.525	0.224	"	"	"	"	"	"
Copper	11.0	0.448	"	"	"	"	"	"
Lead	24.4	0.224	"	"	"	"	"	"
Nickel	11.4	0.448	"	"	"	"	"	"
Selenium	ND	0.291	"	"	"	"	"	"
Silver	0.0331	0.0224	"	"	"	"	11/08/22	"
Zinc	42.2	0.448	"	"	"	"	10/22/22	"

Hexavalent Chromium by EPA Method 7196

Date Sampled: **10/18/22 10:18**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BFJ0680	10/25/22	10/26/22	EPA 7196A	

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

Date Sampled: **10/18/22 10:18**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	179	0.0559	mg/L dry	1	BFJ0650	10/24/22	10/26/22	EPA 6020B	
Magnesium	72.8	0.0559	"	"	"	"	"	"	
Sodium	1160	0.0559	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **10/18/22 10:18**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	18.5	0.00100	units	1	BFJ0743	10/26/22	10/26/22	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **10/18/22 10:18**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
---------	--------	-----------------	-------	----------	-------	----------	----------	--------	-------

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.



K.P. Kauffman
1675 Broadway
Denver CO, 80202

Project: Rocky Mountain Fuel Consolidation Line
Project Number: [none]
Project Manager: Levi Kirk

Reported:
11/09/22 14:09

SW-26@9'
2210314-10 (Soil)

Summit Scientific

Physical Parameters by APHA/ASTM/EPA Methods

% Solids	89.4	%	1	BFJ0542	10/20/22	10/21/22	Calculation
----------	------	---	---	---------	----------	----------	-------------

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **10/18/22 10:18**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	6.44	0.0100	mmhos/cm	1	BFJ0692	10/25/22	10/26/22	EPA 120.1	

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

Date Sampled: **10/18/22 10:18**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	7.94		pH Units	1	BFJ0691	10/25/22	10/26/22	EPA 9045D	

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.



K.P. Kauffman
1675 Broadway
Denver CO, 80202

Project: Rocky Mountain Fuel Consolidation Line

Project Number: [none]
Project Manager: Levi Kirk

Reported:
11/09/22 14:09

SW-27@9'
2210314-11 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **10/18/22 10:20**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Benzene	ND	0.0020	mg/kg	1	BFJ0584	10/21/22	10/21/22	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: **10/18/22 10:20**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: 1,2-Dichloroethane-d4		96.5 %	50-150		"	"	"	"	
Surrogate: Toluene-d8		112 %	50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		118 %	50-150		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **10/18/22 10:20**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
C10-C28 (DRO)	ND	50	mg/kg	1	BFJ0587	10/21/22	10/22/22	EPA 8015M	
C28-C36 (ORO)	ND	50	"	"	"	"	"	"	

Date Sampled: **10/18/22 10:20**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: o-Terphenyl		95.2 %	30-150		"	"	"	"	

PAH by EPA Method 8270D SIM

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.



K.P. Kauffman
1675 Broadway
Denver CO, 80202

Project: Rocky Mountain Fuel Consolidation Line
Project Number: [none]
Project Manager: Levi Kirk

Reported:
11/09/22 14:09

SW-27@9'
2210314-11 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

Date Sampled: **10/18/22 10:20**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BFJ0565	10/21/22	10/22/22	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: **10/18/22 10:20**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10		55.3 %	40-150		"	"	"	"	
Surrogate: Fluoranthene-d10		111 %	40-150		"	"	"	"	

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **10/18/22 10:20**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	0.392	0.0100	mg/L	1	BFJ0561	10/21/22	10/21/22	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **10/18/22 10:20**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
---------	--------	-----------------	-------	----------	-------	----------	----------	--------	-------

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.



K.P. Kauffman
1675 Broadway
Denver CO, 80202

Project: Rocky Mountain Fuel Consolidation Line
Project Number: [none]
Project Manager: Levi Kirk

Reported:
11/09/22 14:09

SW-27@9'
2210314-11 (Soil)

Summit Scientific

Total Metals by EPA 6020B

Arsenic	1.05	0.227	mg/kg dry	1	BFJ0569	10/21/22	10/22/22	EPA 6020B
Barium	127	0.455	"	"	"	"	"	"
Cadmium	0.252	0.227	"	"	"	"	"	"
Copper	7.30	0.455	"	"	"	"	"	"
Lead	13.3	0.227	"	"	"	"	"	"
Nickel	10.3	0.455	"	"	"	"	"	"
Selenium	ND	0.295	"	"	"	"	"	"
Silver	ND	0.0227	"	"	"	"	11/08/22	"
Zinc	40.4	0.455	"	"	"	"	10/22/22	"

Hexavalent Chromium by EPA Method 7196

Date Sampled: **10/18/22 10:20**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BFJ0680	10/25/22	10/26/22	EPA 7196A	

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

Date Sampled: **10/18/22 10:20**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	46.0	0.0568	mg/L dry	1	BFJ0650	10/24/22	10/26/22	EPA 6020B	
Magnesium	29.6	0.0568	"	"	"	"	"	"	
Sodium	963	0.0568	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **10/18/22 10:20**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	27.2	0.00100	units	1	BFJ0743	10/26/22	10/26/22	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

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.



K.P. Kauffman
1675 Broadway
Denver CO, 80202

Project: Rocky Mountain Fuel Consolidation Line
Project Number: [none]
Project Manager: Levi Kirk

Reported:
11/09/22 14:09

SW-27@9'
2210314-11 (Soil)

Summit Scientific

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **10/18/22 10:20**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	88.0		%	1	BFJ0542	10/20/22	10/21/22	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **10/18/22 10:20**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	4.86	0.0100	mmhos/cm	1	BFJ0692	10/25/22	10/26/22	EPA 120.1	

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

Date Sampled: **10/18/22 10:20**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	8.03		pH Units	1	BFJ0691	10/25/22	10/26/22	EPA 9045D	

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.



K.P. Kauffman
1675 Broadway
Denver CO, 80202

Project: Rocky Mountain Fuel Consolidation Line

Project Number: [none]
Project Manager: Levi Kirk

Reported:
11/09/22 14:09

BH-9@14'
2210314-12 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **10/18/22 10:22**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Benzene	ND	0.0020	mg/kg	1	BFJ0584	10/21/22	10/21/22	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: **10/18/22 10:22**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: 1,2-Dichloroethane-d4		100 %	50-150		"	"	"	"	
Surrogate: Toluene-d8		112 %	50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		129 %	50-150		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **10/18/22 10:22**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
C10-C28 (DRO)	ND	50	mg/kg	1	BFJ0587	10/21/22	10/22/22	EPA 8015M	
C28-C36 (ORO)	ND	50	"	"	"	"	"	"	

Date Sampled: **10/18/22 10:22**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: o-Terphenyl		94.8 %	30-150		"	"	"	"	

PAH by EPA Method 8270D SIM

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.



K.P. Kauffman
1675 Broadway
Denver CO, 80202

Project: Rocky Mountain Fuel Consolidation Line
Project Number: [none]
Project Manager: Levi Kirk

Reported:
11/09/22 14:09

BH-9@14'
2210314-12 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

Date Sampled: **10/18/22 10:22**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BFJ0565	10/21/22	10/22/22	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: **10/18/22 10:22**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10		46.9 %	40-150		"	"	"	"	
Surrogate: Fluoranthene-d10		97.1 %	40-150		"	"	"	"	

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **10/18/22 10:22**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	0.438	0.0100	mg/L	1	BFJ0561	10/21/22	10/21/22	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **10/18/22 10:22**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
---------	--------	-----------------	-------	----------	-------	----------	----------	--------	-------

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.



K.P. Kauffman
1675 Broadway
Denver CO, 80202

Project: Rocky Mountain Fuel Consolidation Line

Project Number: [none]
Project Manager: Levi Kirk

Reported:
11/09/22 14:09

BH-9@14'
2210314-12 (Soil)

Summit Scientific

Total Metals by EPA 6020B

Arsenic	1.03	0.243	mg/kg dry	1	BFJ0569	10/21/22	10/22/22	EPA 6020B
Barium	80.6	0.486	"	"	"	"	"	"
Cadmium	0.755	0.243	"	"	"	"	"	"
Copper	14.4	0.486	"	"	"	"	"	"
Lead	30.0	0.243	"	"	"	"	"	"
Nickel	14.2	0.486	"	"	"	"	"	"
Selenium	0.526	0.316	"	"	"	"	"	"
Silver	0.0467	0.0243	"	"	"	"	11/08/22	"
Zinc	91.1	0.486	"	"	"	"	10/22/22	"

Hexavalent Chromium by EPA Method 7196

Date Sampled: **10/18/22 10:22**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BFJ0680	10/25/22	10/26/22	EPA 7196A	

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

Date Sampled: **10/18/22 10:22**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	56.0	0.0608	mg/L dry	1	BFJ0650	10/24/22	10/26/22	EPA 6020B	
Magnesium	30.6	0.0608	"	"	"	"	"	"	
Sodium	835	0.0608	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **10/18/22 10:22**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	22.3	0.00100	units	1	BFJ0743	10/26/22	10/26/22	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **10/18/22 10:22**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
---------	--------	-----------------	-------	----------	-------	----------	----------	--------	-------

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.



K.P. Kauffman
1675 Broadway
Denver CO, 80202

Project: Rocky Mountain Fuel Consolidation Line

Project Number: [none]
Project Manager: Levi Kirk

Reported:
11/09/22 14:09

BH-9@14'
2210314-12 (Soil)

Summit Scientific

Physical Parameters by APHA/ASTM/EPA Methods

% Solids	82.3	%	1	BFJ0542	10/20/22	10/21/22	Calculation
----------	------	---	---	---------	----------	----------	-------------

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **10/18/22 10:22**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	4.11	0.0100	mmhos/cm	1	BFJ0692	10/25/22	10/26/22	EPA 120.1	

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

Date Sampled: **10/18/22 10:22**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	8.15		pH Units	1	BFJ0691	10/25/22	10/26/22	EPA 9045D	

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.



K.P. Kauffman
1675 Broadway
Denver CO, 80202

Project: Rocky Mountain Fuel Consolidation Line

Project Number: [none]
Project Manager: Levi Kirk

Reported:
11/09/22 14:09

BH-10@14'
2210314-13 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **10/18/22 10:24**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Benzene	ND	0.0020	mg/kg	1	BFJ0584	10/21/22	10/22/22	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: **10/18/22 10:24**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: 1,2-Dichloroethane-d4		101 %	50-150		"	"	"	"	
Surrogate: Toluene-d8		124 %	50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		117 %	50-150		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **10/18/22 10:24**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
C10-C28 (DRO)	ND	50	mg/kg	1	BFJ0587	10/21/22	10/22/22	EPA 8015M	
C28-C36 (ORO)	ND	50	"	"	"	"	"	"	

Date Sampled: **10/18/22 10:24**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: o-Terphenyl		92.6 %	30-150		"	"	"	"	

PAH by EPA Method 8270D SIM

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.



K.P. Kauffman
1675 Broadway
Denver CO, 80202

Project: Rocky Mountain Fuel Consolidation Line
Project Number: [none]
Project Manager: Levi Kirk

Reported:
11/09/22 14:09

BH-10@14'
2210314-13 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

Date Sampled: **10/18/22 10:24**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BFJ0565	10/21/22	10/22/22	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	0.0103	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: **10/18/22 10:24**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10		54.7 %	40-150		"	"	"	"	
Surrogate: Fluoranthene-d10		102 %	40-150		"	"	"	"	

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **10/18/22 10:24**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	0.292	0.0100	mg/L	1	BFJ0561	10/21/22	10/21/22	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **10/18/22 10:24**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
---------	--------	-----------------	-------	----------	-------	----------	----------	--------	-------

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.



K.P. Kauffman
1675 Broadway
Denver CO, 80202

Project: Rocky Mountain Fuel Consolidation Line

Project Number: [none]
Project Manager: Levi Kirk

Reported:
11/09/22 14:09

BH-10@14'
2210314-13 (Soil)

Summit Scientific

Total Metals by EPA 6020B

Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Arsenic	0.522	0.231	mg/kg dry	1	BFJ0569	10/21/22	10/22/22	EPA 6020B	
Barium	94.1	0.463	"	"	"	"	"	"	
Cadmium	1.46	0.231	"	"	"	"	"	"	
Copper	13.1	0.463	"	"	"	"	"	"	
Lead	24.9	0.231	"	"	"	"	"	"	
Nickel	18.8	0.463	"	"	"	"	"	"	
Selenium	0.915	0.301	"	"	"	"	"	"	
Silver	0.0305	0.0231	"	"	"	"	11/08/22	"	
Zinc	74.9	0.463	"	"	"	"	10/22/22	"	

Hexavalent Chromium by EPA Method 7196

Date Sampled: **10/18/22 10:24**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BFJ0680	10/25/22	10/26/22	EPA 7196A	

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

Date Sampled: **10/18/22 10:24**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	282	0.0578	mg/L dry	1	BFJ0650	10/24/22	10/26/22	EPA 6020B	
Magnesium	108	0.0578	"	"	"	"	"	"	
Sodium	557	0.0578	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **10/18/22 10:24**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	7.15	0.00100	units	1	BFJ0743	10/26/22	10/26/22	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **10/18/22 10:24**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
---------	--------	-----------------	-------	----------	-------	----------	----------	--------	-------

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.



K.P. Kauffman
1675 Broadway
Denver CO, 80202

Project: Rocky Mountain Fuel Consolidation Line

Project Number: [none]
Project Manager: Levi Kirk

Reported:
11/09/22 14:09

BH-10@14'
2210314-13 (Soil)

Summit Scientific

Physical Parameters by APHA/ASTM/EPA Methods

% Solids	86.5	%	1	BFJ0542	10/20/22	10/21/22	Calculation
----------	------	---	---	---------	----------	----------	-------------

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **10/18/22 10:24**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	4.04	0.0100	mmhos/cm	1	BFJ0692	10/25/22	10/26/22	EPA 120.1	

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

Date Sampled: **10/18/22 10:24**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	7.72		pH Units	1	BFJ0691	10/25/22	10/26/22	EPA 9045D	

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.



K.P. Kauffman
1675 Broadway
Denver CO, 80202

Project: Rocky Mountain Fuel Consolidation Line

Project Number: [none]
Project Manager: Levi Kirk

Reported:
11/09/22 14:09

BH-11@14'
2210314-14 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **10/18/22 10:26**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Benzene	ND	0.0020	mg/kg	1	BFJ0584	10/21/22	10/22/22	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: **10/18/22 10:26**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: 1,2-Dichloroethane-d4		92.6 %	50-150		"	"	"	"	
Surrogate: Toluene-d8		112 %	50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		117 %	50-150		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **10/18/22 10:26**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
C10-C28 (DRO)	ND	50	mg/kg	1	BFJ0587	10/21/22	10/22/22	EPA 8015M	
C28-C36 (ORO)	ND	50	"	"	"	"	"	"	

Date Sampled: **10/18/22 10:26**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: o-Terphenyl		95.5 %	30-150		"	"	"	"	

PAH by EPA Method 8270D SIM

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.



K.P. Kauffman
1675 Broadway
Denver CO, 80202

Project: Rocky Mountain Fuel Consolidation Line

Project Number: [none]
Project Manager: Levi Kirk

Reported:
11/09/22 14:09

BH-11@14'
2210314-14 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

Date Sampled: **10/18/22 10:26**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BFJ0565	10/21/22	10/22/22	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: **10/18/22 10:26**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10		52.9 %	40-150		"	"	"	"	
Surrogate: Fluoranthene-d10		104 %	40-150		"	"	"	"	

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **10/18/22 10:26**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	0.459	0.0100	mg/L	1	BFJ0561	10/21/22	10/21/22	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **10/18/22 10:26**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
---------	--------	-----------------	-------	----------	-------	----------	----------	--------	-------

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.



K.P. Kauffman
1675 Broadway
Denver CO, 80202

Project: Rocky Mountain Fuel Consolidation Line

Project Number: [none]
Project Manager: Levi Kirk

Reported:
11/09/22 14:09

BH-11@14'
2210314-14 (Soil)

Summit Scientific

Total Metals by EPA 6020B

Arsenic	1.53	0.246	mg/kg dry	1	BFJ0569	10/21/22	10/22/22	EPA 6020B
Barium	177	0.492	"	"	"	"	"	"
Cadmium	0.708	0.246	"	"	"	"	"	"
Copper	12.2	0.492	"	"	"	"	"	"
Lead	17.0	0.246	"	"	"	"	"	"
Nickel	12.0	0.492	"	"	"	"	"	"
Selenium	0.332	0.320	"	"	"	"	"	"
Silver	0.0655	0.0246	"	"	"	"	11/08/22	"
Zinc	43.4	0.492	"	"	"	"	10/22/22	"

Hexavalent Chromium by EPA Method 7196

Date Sampled: **10/18/22 10:26**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BFJ0680	10/25/22	10/26/22	EPA 7196A	

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

Date Sampled: **10/18/22 10:26**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	178	0.0615	mg/L dry	1	BFJ0650	10/24/22	10/26/22	EPA 6020B	
Magnesium	103	0.0615	"	"	"	"	"	"	
Sodium	1600	0.0615	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **10/18/22 10:26**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	23.6	0.00100	units	1	BFJ0743	10/26/22	10/26/22	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **10/18/22 10:26**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
---------	--------	-----------------	-------	----------	-------	----------	----------	--------	-------

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.



K.P. Kauffman
1675 Broadway
Denver CO, 80202

Project: Rocky Mountain Fuel Consolidation Line

Project Number: [none]
Project Manager: Levi Kirk

Reported:
11/09/22 14:09

BH-11@14'
2210314-14 (Soil)

Summit Scientific

Physical Parameters by APHA/ASTM/EPA Methods

% Solids	81.3	%	1	BFJ0542	10/20/22	10/21/22	Calculation
----------	------	---	---	---------	----------	----------	-------------

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **10/18/22 10:26**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	7.36	0.0100	mmhos/cm	1	BFJ0692	10/25/22	10/26/22	EPA 120.1	

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

Date Sampled: **10/18/22 10:26**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	7.96		pH Units	1	BFJ0691	10/25/22	10/26/22	EPA 9045D	

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.



K.P. Kauffman
1675 Broadway
Denver CO, 80202

Project: Rocky Mountain Fuel Consolidation Line

Project Number: [none]
Project Manager: Levi Kirk

Reported:
11/09/22 14:09

BH-12@14'
2210314-15 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **10/18/22 10:28**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Benzene	ND	0.0020	mg/kg	1	BFJ0584	10/21/22	10/22/22	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: **10/18/22 10:28**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: 1,2-Dichloroethane-d4		93.4 %	50-150		"	"	"	"	
Surrogate: Toluene-d8		111 %	50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		117 %	50-150		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **10/18/22 10:28**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
C10-C28 (DRO)	ND	50	mg/kg	1	BFJ0587	10/21/22	10/22/22	EPA 8015M	
C28-C36 (ORO)	ND	50	"	"	"	"	"	"	

Date Sampled: **10/18/22 10:28**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: o-Terphenyl		90.4 %	30-150		"	"	"	"	

PAH by EPA Method 8270D SIM

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.



K.P. Kauffman
1675 Broadway
Denver CO, 80202

Project: Rocky Mountain Fuel Consolidation Line
Project Number: [none]
Project Manager: Levi Kirk

Reported:
11/09/22 14:09

BH-12@14'
2210314-15 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

Date Sampled: **10/18/22 10:28**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BFJ0565	10/21/22	10/22/22	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: **10/18/22 10:28**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10		60.7 %	40-150		"	"	"	"	
Surrogate: Fluoranthene-d10		108 %	40-150		"	"	"	"	

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **10/18/22 10:28**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	0.276	0.0100	mg/L	1	BFJ0561	10/21/22	10/21/22	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **10/18/22 10:28**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
---------	--------	-----------------	-------	----------	-------	----------	----------	--------	-------

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.



K.P. Kauffman
1675 Broadway
Denver CO, 80202

Project: Rocky Mountain Fuel Consolidation Line

Project Number: [none]
Project Manager: Levi Kirk

Reported:
11/09/22 14:09

BH-12@14'
2210314-15 (Soil)

Summit Scientific

Total Metals by EPA 6020B

Arsenic	28.7	0.235	mg/kg dry	1	BFJ0569	10/21/22	10/22/22	EPA 6020B
Barium	313	0.470	"	"	"	"	"	"
Cadmium	1.03	0.235	"	"	"	"	"	"
Copper	17.7	0.470	"	"	"	"	"	"
Lead	37.9	0.235	"	"	"	"	"	"
Nickel	18.0	0.470	"	"	"	"	"	"
Selenium	0.684	0.306	"	"	"	"	"	"
Silver	0.0480	0.0235	"	"	"	"	11/08/22	"
Zinc	78.3	0.470	"	"	"	"	10/22/22	"

Hexavalent Chromium by EPA Method 7196

Date Sampled: **10/18/22 10:28**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BFJ0680	10/25/22	10/26/22	EPA 7196A	

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

Date Sampled: **10/18/22 10:28**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	19.5	0.0588	mg/L dry	1	BFJ0650	10/24/22	10/26/22	EPA 6020B	
Magnesium	15.0	0.0588	"	"	"	"	"	"	
Sodium	591	0.0588	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **10/18/22 10:28**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	24.5	0.00100	units	1	BFJ0743	10/26/22	10/26/22	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **10/18/22 10:28**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
---------	--------	-----------------	-------	----------	-------	----------	----------	--------	-------

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.



K.P. Kauffman
1675 Broadway
Denver CO, 80202

Project: Rocky Mountain Fuel Consolidation Line
Project Number: [none]
Project Manager: Levi Kirk

Reported:
11/09/22 14:09

BH-12@14'
2210314-15 (Soil)

Summit Scientific

Physical Parameters by APHA/ASTM/EPA Methods

% Solids	85.0	%	1	BFJ0542	10/20/22	10/21/22	Calculation
----------	------	---	---	---------	----------	----------	-------------

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **10/18/22 10:28**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	3.14	0.0100	mmhos/cm	1	BFJ0692	10/25/22	10/26/22	EPA 120.1	

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

Date Sampled: **10/18/22 10:28**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	7.94		pH Units	1	BFJ0691	10/25/22	10/26/22	EPA 9045D	

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.



K.P. Kauffman
1675 Broadway
Denver CO, 80202

Project: Rocky Mountain Fuel Consolidation Line

Project Number: [none]
Project Manager: Levi Kirk

Reported:
11/09/22 14:09

BH-13@14'
2210314-16 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **10/18/22 10:30**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Benzene	ND	0.0020	mg/kg	1	BFJ0584	10/21/22	10/22/22	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: **10/18/22 10:30**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: 1,2-Dichloroethane-d4		98.6 %	50-150		"	"	"	"	
Surrogate: Toluene-d8		113 %	50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		118 %	50-150		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **10/18/22 10:30**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
C10-C28 (DRO)	ND	50	mg/kg	1	BFJ0587	10/21/22	10/22/22	EPA 8015M	
C28-C36 (ORO)	ND	50	"	"	"	"	"	"	

Date Sampled: **10/18/22 10:30**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: o-Terphenyl		89.9 %	30-150		"	"	"	"	

PAH by EPA Method 8270D SIM

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.



K.P. Kauffman
1675 Broadway
Denver CO, 80202

Project: Rocky Mountain Fuel Consolidation Line

Project Number: [none]
Project Manager: Levi Kirk

Reported:
11/09/22 14:09

BH-13@14'
2210314-16 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

Date Sampled: **10/18/22 10:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BFJ0565	10/21/22	10/22/22	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: **10/18/22 10:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10		51.5 %	40-150		"	"	"	"	
Surrogate: Fluoranthene-d10		97.6 %	40-150		"	"	"	"	

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **10/18/22 10:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	0.392	0.0100	mg/L	1	BFJ0561	10/21/22	10/21/22	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **10/18/22 10:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
---------	--------	-----------------	-------	----------	-------	----------	----------	--------	-------

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.



K.P. Kauffman
1675 Broadway
Denver CO, 80202

Project: Rocky Mountain Fuel Consolidation Line

Project Number: [none]
Project Manager: Levi Kirk

Reported:
11/09/22 14:09

BH-13@14'
2210314-16 (Soil)

Summit Scientific

Total Metals by EPA 6020B

Arsenic	1.09	0.237	mg/kg dry	1	BFJ0569	10/21/22	10/22/22	EPA 6020B
Barium	35.4	0.475	"	"	"	"	"	"
Cadmium	0.648	0.237	"	"	"	"	"	"
Copper	13.7	0.475	"	"	"	"	"	"
Lead	23.6	0.237	"	"	"	"	"	"
Nickel	10.2	0.475	"	"	"	"	"	"
Selenium	0.486	0.308	"	"	"	"	"	"
Silver	0.0285	0.0237	"	"	"	"	11/08/22	"
Zinc	48.8	0.475	"	"	"	"	10/22/22	"

Hexavalent Chromium by EPA Method 7196

Date Sampled: **10/18/22 10:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BFJ0680	10/25/22	10/26/22	EPA 7196A	

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

Date Sampled: **10/18/22 10:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	376	0.0593	mg/L dry	1	BFJ0650	10/24/22	10/26/22	EPA 6020B	
Magnesium	125	0.0593	"	"	"	"	"	"	
Sodium	1140	0.0593	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **10/18/22 10:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	13.0	0.00100	units	1	BFJ0743	10/26/22	10/26/22	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **10/18/22 10:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
---------	--------	-----------------	-------	----------	-------	----------	----------	--------	-------

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.



K.P. Kauffman
1675 Broadway
Denver CO, 80202

Project: Rocky Mountain Fuel Consolidation Line

Project Number: [none]
Project Manager: Levi Kirk

Reported:
11/09/22 14:09

BH-13@14'
2210314-16 (Soil)

Summit Scientific

Physical Parameters by APHA/ASTM/EPA Methods

% Solids	84.3	%	1	BFJ0542	10/20/22	10/21/22	Calculation
----------	------	---	---	---------	----------	----------	-------------

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **10/18/22 10:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	6.60	0.0100	mmhos/cm	1	BFJ0692	10/25/22	10/26/22	EPA 120.1	

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

Date Sampled: **10/18/22 10:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	7.72		pH Units	1	BFJ0691	10/25/22	10/26/22	EPA 9045D	

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.



K.P. Kauffman
1675 Broadway
Denver CO, 80202

Project: Rocky Mountain Fuel Consolidation Line

Project Number: [none]
Project Manager: Levi Kirk

Reported:
11/09/22 14:09

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 BFJ0584 - EPA 5030 Soil MS

Blank (BFJ0584-BLK1)

Prepared & Analyzed: 10/21/22

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	0.0392		"	0.0400		98.0	50-150			
Surrogate: Toluene-d8	0.0453		"	0.0400		113	50-150			
Surrogate: 4-Bromofluorobenzene	0.0473		"	0.0400		118	50-150			

LCS (BFJ0584-BS1)

Prepared & Analyzed: 10/21/22

Benzene	0.161	0.0020	mg/kg	0.125		129	70-130			
Toluene	0.162	0.0050	"	0.125		130	70-130			
Ethylbenzene	0.131	0.0050	"	0.125		105	70-130			
m,p-Xylene	0.255	0.010	"	0.250		102	70-130			
o-Xylene	0.114	0.0050	"	0.125		91.2	70-130			
1,2,4-Trimethylbenzene	0.123	0.0050	"	0.125		98.0	70-130			
1,3,5-Trimethylbenzene	0.126	0.0050	"	0.125		101	70-130			
Naphthalene	0.144	0.0038	"	0.125		115	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.0403		"	0.0400		101	50-150			
Surrogate: Toluene-d8	0.0454		"	0.0400		113	50-150			
Surrogate: 4-Bromofluorobenzene	0.0462		"	0.0400		115	50-150			

Matrix Spike (BFJ0584-MS1)

Source: 2210314-01

Prepared & Analyzed: 10/21/22

Benzene	0.134	0.0020	mg/kg	0.125	ND	107	70-130			
Toluene	0.136	0.0050	"	0.125	ND	109	70-130			
Ethylbenzene	0.131	0.0050	"	0.125	ND	105	70-130			
m,p-Xylene	0.260	0.010	"	0.250	ND	104	70-130			
o-Xylene	0.116	0.0050	"	0.125	ND	93.1	70-130			
1,2,4-Trimethylbenzene	0.126	0.0050	"	0.125	ND	101	70-130			
1,3,5-Trimethylbenzene	0.129	0.0050	"	0.125	ND	103	70-130			
Naphthalene	0.0960	0.0038	"	0.125	ND	76.8	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.0431		"	0.0400		108	50-150			
Surrogate: Toluene-d8	0.0454		"	0.0400		114	50-150			
Surrogate: 4-Bromofluorobenzene	0.0477		"	0.0400		119	50-150			

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.



K.P. Kauffman
1675 Broadway
Denver CO, 80202

Project: Rocky Mountain Fuel Consolidation Line
Project Number: [none]
Project Manager: Levi Kirk

Reported:
11/09/22 14:09

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

Batch BFJ0584 - EPA 5030 Soil MS

Matrix Spike Dup (BFJ0584-MSD1)		Source: 2210314-01			Prepared & Analyzed: 10/21/22						
Benzene	0.138	0.0020	mg/kg	0.125	ND	110	70-130	3.07	30		
Toluene	0.134	0.0050	"	0.125	ND	107	70-130	1.58	30		
Ethylbenzene	0.133	0.0050	"	0.125	ND	106	70-130	1.00	30		
m,p-Xylene	0.257	0.010	"	0.250	ND	103	70-130	1.25	30		
o-Xylene	0.115	0.0050	"	0.125	ND	92.1	70-130	1.09	30		
1,2,4-Trimethylbenzene	0.121	0.0050	"	0.125	ND	97.2	70-130	3.73	30		
1,3,5-Trimethylbenzene	0.127	0.0050	"	0.125	ND	102	70-130	1.38	30		
Naphthalene	0.0954	0.0038	"	0.125	ND	76.3	70-130	0.658	30		
Surrogate: 1,2-Dichloroethane-d4		0.0379	"	0.0400		94.7	50-150				
Surrogate: Toluene-d8		0.0450	"	0.0400		112	50-150				
Surrogate: 4-Bromofluorobenzene		0.0456	"	0.0400		114	50-150				

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.



K.P. Kauffman
1675 Broadway
Denver CO, 80202

Project: Rocky Mountain Fuel Consolidation Line
Project Number: [none]
Project Manager: Levi Kirk

Reported:
11/09/22 14:09

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 BFJ0587 - EPA 3550A

Blank (BFJ0587-BLK1)

Prepared: 10/21/22 Analyzed: 10/22/22

C10-C28 (DRO)	ND	50	mg/kg							
C28-C36 (ORO)	ND	50	"							
Surrogate: o-Terphenyl	13.6		"	12.5		109	30-150			

LCS (BFJ0587-BS1)

Prepared: 10/21/22 Analyzed: 10/22/22

C10-C28 (DRO)	486	50	mg/kg	500		97.3	70-130			
Surrogate: o-Terphenyl	13.0		"	12.5		104	30-150			

Matrix Spike (BFJ0587-MS1)

Source: 2210314-01

Prepared: 10/21/22 Analyzed: 10/22/22

C10-C28 (DRO)	448	50	mg/kg	500	ND	89.7	70-130			
Surrogate: o-Terphenyl	12.2		"	12.5		97.4	30-150			

Matrix Spike Dup (BFJ0587-MSD1)

Source: 2210314-01

Prepared: 10/21/22 Analyzed: 10/22/22

C10-C28 (DRO)	445	50	mg/kg	500	ND	89.0	70-130	0.759	20	
Surrogate: o-Terphenyl	12.5		"	12.5		100	30-150			

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.



K.P. Kauffman
1675 Broadway
Denver CO, 80202

Project: Rocky Mountain Fuel Consolidation Line
Project Number: [none]
Project Manager: Levi Kirk

Reported:
11/09/22 14:09

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 BFJ0565 - EPA 5030 Soil MS

Blank (BFJ0565-BLK1)

Prepared & Analyzed: 10/21/22

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	0.0249		"	0.0333		74.6		40-150			
Surrogate: Fluoranthene-d10	0.0373		"	0.0333		112		40-150			

LCS (BFJ0565-BS1)

Prepared & Analyzed: 10/21/22

Acenaphthene	0.0358	0.00500	mg/kg	0.0333		107		31-137			
Anthracene	0.0338	0.00500	"	0.0333		101		30-120			
Benzo (a) anthracene	0.0358	0.00500	"	0.0333		107		30-120			
Benzo (a) pyrene	0.0206	0.00500	"	0.0333		61.7		30-120			
Benzo (b) fluoranthene	0.0153	0.00500	"	0.0333		45.9		30-120			
Benzo (k) fluoranthene	0.0149	0.00500	"	0.0333		44.8		30-120			
Chrysene	0.0346	0.00500	"	0.0333		104		30-120			
Dibenz (a,h) anthracene	0.0163	0.00500	"	0.0333		49.0		30-120			
Fluoranthene	0.0359	0.00500	"	0.0333		108		30-120			
Fluorene	0.0372	0.00500	"	0.0333		112		30-120			
Indeno (1,2,3-cd) pyrene	0.0246	0.00500	"	0.0333		73.9		30-120			
Pyrene	0.0335	0.00500	"	0.0333		101		35-142			
1-Methylnaphthalene	0.0301	0.00500	"	0.0333		90.4		35-142			
2-Methylnaphthalene	0.0228	0.00500	"	0.0333		68.5		35-142			
Surrogate: 2-Methylnaphthalene-d10	0.0330		"	0.0333		98.9		40-150			
Surrogate: Fluoranthene-d10	0.0269		"	0.0333		80.6		40-150			

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.



K.P. Kauffman
1675 Broadway
Denver CO, 80202

Project: Rocky Mountain Fuel Consolidation Line
Project Number: [none]
Project Manager: Levi Kirk

Reported:
11/09/22 14:09

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 BFJ0565 - EPA 5030 Soil MS

Matrix Spike (BFJ0565-MS1)			Source: 2210314-03		Prepared & Analyzed: 10/21/22						
Acenaphthene	0.0231	0.00500	mg/kg	0.0333	ND	69.2	31-137				
Anthracene	0.0168	0.00500	"	0.0333	ND	50.4	30-120				
Benzo (a) anthracene	0.0184	0.00500	"	0.0333	ND	55.3	30-120				
Benzo (a) pyrene	0.0142	0.00500	"	0.0333	ND	42.7	30-120				
Benzo (b) fluoranthene	0.0164	0.00500	"	0.0333	ND	49.1	30-120				
Benzo (k) fluoranthene	0.0134	0.00500	"	0.0333	ND	40.3	30-120				
Chrysene	0.0148	0.00500	"	0.0333	ND	44.5	30-120				
Dibenz (a,h) anthracene	0.0160	0.00500	"	0.0333	ND	47.9	30-120				
Fluoranthene	0.0228	0.00500	"	0.0333	ND	68.5	30-120				
Fluorene	0.0178	0.00500	"	0.0333	ND	53.4	30-120				
Indeno (1,2,3-cd) pyrene	0.0149	0.00500	"	0.0333	ND	44.7	30-120				
Pyrene	0.0153	0.00500	"	0.0333	ND	46.0	35-142				
1-Methylnaphthalene	0.0148	0.00500	"	0.0333	ND	44.3	15-130				
2-Methylnaphthalene	0.0173	0.00500	"	0.0333	ND	51.8	15-130				
Surrogate: 2-Methylnaphthalene-d10	0.0145		"	0.0333		43.5	40-150				
Surrogate: Fluoranthene-d10	0.0242		"	0.0333		72.5	40-150				

Matrix Spike Dup (BFJ0565-MSD1)			Source: 2210314-03		Prepared & Analyzed: 10/21/22						
Acenaphthene	0.0203	0.00500	mg/kg	0.0333	ND	61.0	31-137	12.6	30		
Anthracene	0.0184	0.00500	"	0.0333	ND	55.2	30-120	9.01	30		
Benzo (a) anthracene	0.0170	0.00500	"	0.0333	ND	50.9	30-120	8.36	30		
Benzo (a) pyrene	0.0192	0.00500	"	0.0333	ND	57.5	30-120	29.6	30		
Benzo (b) fluoranthene	0.0137	0.00500	"	0.0333	ND	41.2	30-120	17.6	30		
Benzo (k) fluoranthene	0.0134	0.00500	"	0.0333	ND	40.2	30-120	0.127	30		
Chrysene	0.0137	0.00500	"	0.0333	ND	41.2	30-120	7.77	30		
Dibenz (a,h) anthracene	0.0135	0.00500	"	0.0333	ND	40.5	30-120	16.9	30		
Fluoranthene	0.0200	0.00500	"	0.0333	ND	60.0	30-120	13.3	30		
Fluorene	0.0165	0.00500	"	0.0333	ND	49.5	30-120	7.45	30		
Indeno (1,2,3-cd) pyrene	0.0145	0.00500	"	0.0333	ND	43.5	30-120	2.64	30		
Pyrene	0.0143	0.00500	"	0.0333	ND	43.0	35-142	6.85	30		
1-Methylnaphthalene	0.0134	0.00500	"	0.0333	ND	40.3	15-130	9.30	50		
2-Methylnaphthalene	0.0171	0.00500	"	0.0333	ND	51.3	15-130	1.01	50		
Surrogate: 2-Methylnaphthalene-d10	0.0134		"	0.0333		40.2	40-150				
Surrogate: Fluoranthene-d10	0.0221		"	0.0333		66.3	40-150				

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.



K.P. Kauffman
1675 Broadway
Denver CO, 80202

Project: Rocky Mountain Fuel Consolidation Line

Project Number: [none]
Project Manager: Levi Kirk

Reported:
11/09/22 14:09

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 BFJ0561 - EPA 3050B

Blank (BFJ0561-BLK1)

Prepared & Analyzed: 10/21/22

Boron ND 0.0100 mg/L

LCS (BFJ0561-BS1)

Prepared & Analyzed: 10/21/22

Boron 5.58 0.0100 mg/L 5.00 112 80-120

Duplicate (BFJ0561-DUP1)

Source: 2210314-01

Prepared & Analyzed: 10/21/22

Boron 0.661 0.0100 mg/L 0.642 2.94 20

Matrix Spike (BFJ0561-MS1)

Source: 2210314-01

Prepared & Analyzed: 10/21/22

Boron 6.03 0.0100 mg/L 5.00 0.642 108 75-125

Matrix Spike Dup (BFJ0561-MSD1)

Source: 2210314-01

Prepared & Analyzed: 10/21/22

Boron 6.07 0.0100 mg/L 5.00 0.642 108 75-125 0.548 25

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.



K.P. Kauffman
1675 Broadway
Denver CO, 80202

Project: Rocky Mountain Fuel Consolidation Line
Project Number: [none]
Project Manager: Levi Kirk

Reported:
11/09/22 14:09

Total Metals by EPA 6020B - Quality Control
Summit Scientific

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

Batch BFJ0569 - EPA 3050B

Blank (BFJ0569-BLK1)

Prepared: 10/21/22 Analyzed: 10/22/22

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	"
Selenium	ND	0.260	"
Silver	ND	0.0200	"
Zinc	ND	0.400	"

LCS (BFJ0569-BS1)

Prepared: 10/21/22 Analyzed: 10/22/22

Arsenic	45.1	0.200	mg/kg wet	40.0	113	80-120
Barium	40.5	0.400	"	40.0	101	80-120
Cadmium	2.03	0.200	"	2.00	101	80-120
Copper	44.1	0.400	"	40.0	110	80-120
Lead	21.2	0.200	"	20.0	106	80-120
Nickel	43.0	0.400	"	40.0	108	80-120
Selenium	4.14	0.260	"	4.00	103	80-120
Silver	1.96	0.0200	"	2.00	98.0	80-120
Zinc	42.7	0.400	"	40.0	107	80-120

Duplicate (BFJ0569-DUP1)

Source: 2210314-01

Prepared: 10/21/22 Analyzed: 10/22/22

Arsenic	0.934	0.233	mg/kg dry	0.947	1.34	20
Barium	40.7	0.467	"	40.8	0.469	20
Cadmium	0.449	0.233	"	0.427	5.12	20
Copper	12.7	0.467	"	12.5	1.00	20
Lead	29.5	0.233	"	29.5	0.0158	20
Nickel	6.45	0.467	"	6.40	0.741	20
Selenium	ND	0.303	"	ND		20
Silver	0.0587	0.0233	"	0.0584	0.579	20
Zinc	29.2	0.467	"	29.0	0.822	20

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.



K.P. Kauffman
1675 Broadway
Denver CO, 80202

Project: Rocky Mountain Fuel Consolidation Line

Project Number: [none]
Project Manager: Levi Kirk

Reported:
11/09/22 14:09

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 BFJ0569 - EPA 3050B

Matrix Spike (BFJ0569-MS1)		Source: 2210314-01			Prepared: 10/21/22 Analyzed: 10/22/22					
Arsenic	13.0	0.233	mg/kg dry	46.7	0.947	25.9	75-125			QM-05
Barium	98.2	0.467	"	46.7	40.8	123	75-125			
Cadmium	2.65	0.233	"	2.33	0.427	95.1	75-125			
Copper	49.8	0.467	"	46.7	12.5	79.8	75-125			
Lead	48.3	0.233	"	23.3	29.5	80.3	75-125			
Nickel	42.6	0.467	"	46.7	6.40	77.6	75-125			
Selenium	5.01	0.303	"	4.67	ND	107	75-125			
Silver	2.67	0.0233	"	2.33	0.0584	112	75-125			
Zinc	69.3	0.467	"	46.7	29.0	86.3	75-125			

Matrix Spike Dup (BFJ0569-MSD1)		Source: 2210314-01			Prepared: 10/21/22 Analyzed: 10/22/22					
Arsenic	13.1	0.233	mg/kg dry	46.7	0.947	26.0	75-125	0.265	25	QM-05
Barium	96.5	0.467	"	46.7	40.8	119	75-125	1.81	25	
Cadmium	2.81	0.233	"	2.33	0.427	102	75-125	5.95	25	
Copper	50.1	0.467	"	46.7	12.5	80.5	75-125	0.640	25	
Lead	54.7	0.233	"	23.3	29.5	108	75-125	12.5	25	
Nickel	42.9	0.467	"	46.7	6.40	78.1	75-125	0.572	25	
Selenium	5.60	0.303	"	4.67	ND	120	75-125	11.1	25	
Silver	2.43	0.0233	"	2.33	0.0584	102	75-125	9.45	25	
Zinc	69.4	0.467	"	46.7	29.0	86.6	75-125	0.206	25	

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.



K.P. Kauffman
1675 Broadway
Denver CO, 80202

Project: Rocky Mountain Fuel Consolidation Line
Project Number: [none]
Project Manager: Levi Kirk

Reported:
11/09/22 14:09

Hexavalent Chromium by EPA Method 7196 - Quality Control
Summit Scientific

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

Batch BFJ0680 - 3060A Mod

Blank (BFJ0680-BLK1)

Prepared: 10/25/22 Analyzed: 10/26/22

Chromium, Hexavalent ND 0.30 mg/kg wet

LCS (BFJ0680-BS1)

Prepared: 10/25/22 Analyzed: 10/26/22

Chromium, Hexavalent 21.9 0.30 mg/kg wet 25.0 87.6 80-120

Duplicate (BFJ0680-DUP1)

Source: 2210314-05

Prepared: 10/25/22 Analyzed: 10/26/22

Chromium, Hexavalent ND 0.30 mg/kg dry ND 20

Matrix Spike (BFJ0680-MS1)

Source: 2210314-05

Prepared: 10/25/22 Analyzed: 10/26/22

Chromium, Hexavalent 26.8 0.30 mg/kg dry 30.2 ND 88.8 75-125

Matrix Spike Dup (BFJ0680-MSD1)

Source: 2210314-05

Prepared: 10/25/22 Analyzed: 10/26/22

Chromium, Hexavalent 26.2 0.30 mg/kg dry 30.2 ND 86.8 75-125 2.28 20

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.



K.P. Kauffman
1675 Broadway
Denver CO, 80202

Project: Rocky Mountain Fuel Consolidation Line

Project Number: [none]
Project Manager: Levi Kirk

Reported:
11/09/22 14:09

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 BFJ0650 - General Preparation

Blank (BFJ0650-BLK1)

Prepared: 10/24/22 Analyzed: 10/26/22

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

LCS (BFJ0650-BS1)

Prepared: 10/24/22 Analyzed: 10/26/22

Calcium	5.31	0.0500	mg/L wet	5.00	106	70-130
Magnesium	5.30	0.0500	"	5.00	106	70-130
Sodium	5.14	0.0500	"	5.00	103	70-130

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.



K.P. Kauffman
1675 Broadway
Denver CO, 80202

Project: Rocky Mountain Fuel Consolidation Line

Project Number: [none]
Project Manager: Levi Kirk

Reported:
11/09/22 14:09

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 BFJ0542 - General Preparation

Duplicate (BFJ0542-DUP1)

Source: 2210314-01

Prepared: 10/20/22 Analyzed: 10/21/22

% Solids	85.9	%	85.7	0.226	20
----------	------	---	------	-------	----

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.



K.P. Kauffman
1675 Broadway
Denver CO, 80202

Project: Rocky Mountain Fuel Consolidation Line

Project Number: [none]
Project Manager: Levi Kirk

Reported:
11/09/22 14:09

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 BFJ0692 - General Preparation

Blank (BFJ0692-BLK1)

Prepared: 10/25/22 Analyzed: 10/26/22

Specific Conductance (EC) ND 0.0100 mmhos/cm

LCS (BFJ0692-BS1)

Prepared: 10/25/22 Analyzed: 10/26/22

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

Duplicate (BFJ0692-DUP1)

Source: 2210285-01

Prepared: 10/25/22 Analyzed: 10/26/22

Specific Conductance (EC) 0.921 0.0100 mmhos/cm 0.940 1.98 20

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.



K.P. Kauffman
1675 Broadway
Denver CO, 80202

Project: Rocky Mountain Fuel Consolidation Line

Project Number: [none]
Project Manager: Levi Kirk

Reported:
11/09/22 14:09

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 BFJ0691 - General Preparation

LCS (BFJ0691-BS1)

Prepared: 10/25/22 Analyzed: 10/26/22

pH	9.20	pH Units	9.18	100	95-105
----	------	----------	------	-----	--------

Duplicate (BFJ0691-DUP1)

Source: 2210285-01

Prepared: 10/25/22 Analyzed: 10/26/22

pH	9.07	pH Units	8.17	10.4	20
----	------	----------	------	------	----

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.



K.P. Kauffman
1675 Broadway
Denver CO, 80202

Project: Rocky Mountain Fuel Consolidation Line

Project Number: [none]
Project Manager: Levi Kirk

Reported:
11/09/22 14:09

Notes and Definitions

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.
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