

# Summit Scientific

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4653 Table Mountain Drive, Golden, Colorado 80403

303.277.9310

October 12, 2022

Levi Kirk

K.P. Kauffman

1675 Broadway

Denver, CO 80202

RE: Suckla Brown Unit 17 Header

Work Order #2209570

Enclosed are the results of analyses for samples received by Summit Scientific on 09/28/22 16:30. 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: Suckla Brown Unit 17 Header

Project Number: [none]  
Project Manager: Levi Kirk

**Reported:**  
10/12/22 13:51

**ANALYTICAL REPORT FOR SAMPLES**

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SB-1@10'	2209570-01	Soil	09/28/22 09:50	09/28/22 16:30
SB-1@15'	2209570-02	Soil	09/28/22 10:00	09/28/22 16:30
SB-2@7.5'	2209570-03	Soil	09/28/22 11:25	09/28/22 16:30
SB-2@15'	2209570-04	Soil	09/28/22 11:30	09/28/22 16:30
SB-3@6'	2209570-05	Soil	09/28/22 10:30	09/28/22 16:30
SB-4@7.5'	2209570-06	Soil	09/28/22 12:00	09/28/22 16:30
SB-4@15'	2209570-07	Soil	09/28/22 12:05	09/28/22 16:30
Background-2@6-10'	2209570-08	Soil	09/28/22 13:00	09/28/22 16:30

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.*

# Summit Scientific

2209570

4653 Table Mountain Drive ♦ Golden, Colorado 80403  
303-277-9310 ♦ 303-374-5933 (f)

Page 1 of 1

Client: K.P. Kauffman Company, Inc.

Project Manager: ~~Ray Gorka~~ *Lee K. K.*

Address: ~~1700 Lincoln Street, #4500~~ *1675 Broadway*

E-Mail: rgorka@kpk.com, primarycontractor@marcomllc.net

City/State/Zip: ~~Denver, CO 80203~~ *Denver, CO 80202*

mhattel@msn.com

Phone: 303-825-4822

Project Name: *Suctula Brown Unit 17 Header*

Sampler Name: *Mike Hattel (303-517-6551) CP*

Project Number:

ID	Sample Description	Date Sampled	Time Sampled	# of containers	Preservative				Matrix				Analysis Requested				Special Instructions
					HCl	HNO3	None	Other	Water	Soil	Air-Canister #	Other	For Test 915	Test 915 inorganic			
1	<i>SB-1 @ 10'</i>	<i>9.28.22</i>	<i>0950</i>	<i>3</i>			<i>X</i>			<i>X</i>							
2	<i>SB-1 @ 15'</i>		<i>1000</i>														
3	<i>SB-2 @ 7.5'</i>		<i>1125</i>														
4	<i>SB-2 @ 15'</i>		<i>1130</i>														
5	<i>SB-3 @ 6'</i>		<i>1030</i>														
6	<i>SB-4 @ 7.5'</i>		<i>1260</i>														
7	<i>SB-4 @ 15'</i>		<i>1205</i>														
8	<i>Backstop - 2 @ 6-10'</i>		<i>1306</i>	<i>1</i>										<i>X</i>			
9																	
10																	

Relinquished by: <i>Chris Picew</i>	Date/Time: <i>9.28.22 1400</i>	Received by:	Date/Time:	Turn Around Time (Check)	Notes: <i>Bags are in fridge</i>
Relinquished by:	Date/Time:	Received by: <i>JB</i>	Date/Time: <i>9/28/22 1630</i>	Same Day <input type="checkbox"/> 72 hours <input type="checkbox"/>	
Relinquished by:	Date/Time:	Received by:	Date/Time:	24 hours <input type="checkbox"/> Standard <input checked="" type="checkbox"/>	
				48 hours <input type="checkbox"/>	
				Sample Integrity: <i>9.8</i>	
				Temperature Upon Receipt: <i>19</i>	
				Samples Intact: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	

# S<sub>2</sub>

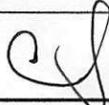
S2 Work Order# 2209570

## Sample Receipt Checklist

Client: KP Kauffman Client Project ID: Suckla Brown Unit 17 HeaderShipped Via: H.D./P.U./FedEx/UPS/USPS/Other  Airbill #: \_\_\_\_\_    Matrix (Check all that apply) Air  Soil/Solid  Water  Other Temp (°C)  Thermometer # 

	Yes	No	N/A	Comments (if any)
If samples require cooling, is the temperature < 6°C? <sup>(1)</sup> <b>NOTE:</b> 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"/>	
If custody seals are present, are they intact? <sup>(1)</sup>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Are samples due within 48 hours present?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" 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 <sup>2+</sup> ), Hexavalent Chromium (Cr <sup>6+</sup> , 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? <sup>(1)</sup>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Is the COC properly relinquished by the client w/ date and time recorded? <sup>(1)</sup>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Were all samples received intact? <sup>(1)</sup>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Was adequate sample volume provided? <sup>(1)</sup>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Does the COC agree with the number and type of sample bottles received? <sup>(1)</sup>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Do the sample IDs on the bottle labels match the COC? <sup>(1)</sup>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
For volatiles in water – is there headspace present? <b>If yes, contact client and note in narrative.</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Are samples preserved that require preservation ( <b>excluding cooling</b> )? <sup>(1)</sup> Note the type of preservative in the comments column – HCl, H <sub>2</sub> SO <sub>4</sub> , NaOH, HNO <sub>3</sub> , etc.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
If samples are acid preserved for metals, is the pH ≤ 2? <sup>(1)</sup> 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):

<sup>(1)</sup> If NO, then contact the client before proceeding with analysis and note in case narrative.  
Custodian Printed Name9-28-22 21:00  
Date/Time



K.P. Kauffman  
1675 Broadway  
Denver CO, 80202

Project: Suckla Brown Unit 17 Header

Project Number: [none]  
Project Manager: Levi Kirk

**Reported:**  
10/12/22 13:51

**SB-1@10'**  
**2209570-01 (Soil)**

**Summit Scientific**

**Volatile Organic Compounds by EPA Method 8260B**

Date Sampled: **09/28/22 09:50**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Benzene	ND	0.0020		mg/kg	1	BF10796	09/30/22	09/30/22	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: **09/28/22 09:50**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: 1,2-Dichloroethane-d4		118 %		50-150		"	"	"	"	
Surrogate: Toluene-d8		101 %		50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		98.2 %		50-150		"	"	"	"	

**Extractable Petroleum Hydrocarbons by 8015**

Date Sampled: **09/28/22 09:50**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
C10-C28 (DRO)	ND	50		mg/kg	1	BF10798	09/30/22	09/30/22	EPA 8015M	
C28-C36 (ORO)	ND	50		"	"	"	"	"	"	

Date Sampled: **09/28/22 09:50**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: o-Terphenyl		73.4 %		30-150		"	"	"	"	

**PAH by EPA Method 8270D SIM**

Summit Scientific

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1675 Broadway  
Denver CO, 80202

Project: Suckla Brown Unit 17 Header

Project Number: [none]  
Project Manager: Levi Kirk

**Reported:**  
10/12/22 13:51

**SB-1@10'**  
**2209570-01 (Soil)**

**Summit Scientific**

**PAH by EPA Method 8270D SIM**

Date Sampled: **09/28/22 09:50**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BF10755	09/29/22	09/30/22	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: **09/28/22 09:50**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10		58.3 %	40-150		"	"	"	"	
Surrogate: Fluoranthene-d10		66.9 %	40-150		"	"	"	"	

**Total Metals by EPA 6020B Hot Water Soluble Extraction**

Date Sampled: **09/28/22 09:50**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>Boron</b>	<b>0.258</b>	0.0100	mg/L	1	BFJ0087	10/05/22	10/08/22	EPA 6020B	

**Total Metals by EPA 6020B**

Date Sampled: **09/28/22 09:50**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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1675 Broadway  
Denver CO, 80202

Project: Suckla Brown Unit 17 Header

Project Number: [none]  
Project Manager: Levi Kirk

**Reported:**  
10/12/22 13:51

**SB-1@10'**  
**2209570-01 (Soil)**

**Summit Scientific**

**Total Metals by EPA 6020B**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Arsenic	4.18	0.229	mg/kg dry	1	BFJ0122	10/06/22	10/08/22	EPA 6020B	
Barium	39.4	0.457	"	"	"	"	"	"	
Cadmium	ND	0.229	"	"	"	"	"	"	
Copper	6.19	0.457	"	"	"	"	"	"	
Lead	6.37	0.229	"	"	"	"	"	"	
Nickel	6.76	0.457	"	"	"	"	"	"	
Selenium	0.607	0.297	"	"	"	"	"	"	
Silver	ND	0.0229	"	"	"	"	"	"	
Zinc	24.7	0.457	"	"	"	"	"	"	

**Hexavalent Chromium by EPA Method 7196**

Date Sampled: **09/28/22 09:50**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BFJ0253	10/11/22	10/12/22	EPA 7196A	

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

Date Sampled: **09/28/22 09:50**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	52.6	0.0572	mg/L dry	1	BFJ0088	10/05/22	10/08/22	EPA 6020B	
Magnesium	38.5	0.0572	"	"	"	"	"	"	
Sodium	92.9	0.0572	"	"	"	"	"	"	

**Calculated Analysis**

Date Sampled: **09/28/22 09:50**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	2.37	0.00100	units	1	BFJ0193	10/08/22	10/08/22	Calculation	

**Physical Parameters by APHA/ASTM/EPA Methods**

Summit Scientific

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K.P. Kauffman  
 1675 Broadway  
 Denver CO, 80202

Project: Suckla Brown Unit 17 Header

Project Number: [none]  
 Project Manager: Levi Kirk

**Reported:**  
 10/12/22 13:51

**SB-1@10'**  
**2209570-01 (Soil)**

**Summit Scientific**

**Physical Parameters by APHA/ASTM/EPA Methods**

Date Sampled: **09/28/22 09:50**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
% Solids	87.5			%	1	BFJ0012	10/03/22	10/03/22	Calculation	

**Specific Conductance by EPA Method 120.1, Saturated Paste Extraction**

Date Sampled: **09/28/22 09:50**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Specific Conductance (EC)	0.866	0.0100		mmhos/cm	1	BFJ0109	10/05/22	10/12/22	EPA 120.1	

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

Date Sampled: **09/28/22 09:50**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
pH	7.38			pH Units	1	BFJ0108	10/05/22	10/12/22	EPA 9045D	

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1675 Broadway  
Denver CO, 80202

Project: Suckla Brown Unit 17 Header

Project Number: [none]  
Project Manager: Levi Kirk

**Reported:**  
10/12/22 13:51

**SB-1@15'**  
**2209570-02 (Soil)**

**Summit Scientific**

**Volatile Organic Compounds by EPA Method 8260B**

Date Sampled: **09/28/22 10:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0020	mg/kg	1	BFI0796	09/30/22	09/30/22	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: **09/28/22 10:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		122 %	50-150		"	"	"	"	
Surrogate: Toluene-d8		97.7 %	50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		110 %	50-150		"	"	"	"	

**Extractable Petroleum Hydrocarbons by 8015**

Date Sampled: **09/28/22 10:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	ND	50	mg/kg	1	BFI0798	09/30/22	10/01/22	EPA 8015M	
C28-C36 (ORO)	ND	50	"	"	"	"	"	"	

Date Sampled: **09/28/22 10:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl		73.2 %	30-150		"	"	"	"	

**PAH by EPA Method 8270D SIM**

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1675 Broadway  
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Project: Suckla Brown Unit 17 Header

Project Number: [none]  
Project Manager: Levi Kirk

**Reported:**  
10/12/22 13:51

**SB-1@15'**  
**2209570-02 (Soil)**

**Summit Scientific**

**PAH by EPA Method 8270D SIM**

Date Sampled: **09/28/22 10:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BF10755	09/29/22	09/30/22	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: **09/28/22 10:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10		64.7 %	40-150		"	"	"	"	
Surrogate: Fluoranthene-d10		67.4 %	40-150		"	"	"	"	

**Total Metals by EPA 6020B Hot Water Soluble Extraction**

Date Sampled: **09/28/22 10:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>Boron</b>	<b>0.299</b>	0.0100	mg/L	1	BFJ0087	10/05/22	10/08/22	EPA 6020B	

**Total Metals by EPA 6020B**

Date Sampled: **09/28/22 10:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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K.P. Kauffman  
1675 Broadway  
Denver CO, 80202

Project: Suckla Brown Unit 17 Header

Project Number: [none]  
Project Manager: Levi Kirk

**Reported:**  
10/12/22 13:51

**SB-1@15'**  
**2209570-02 (Soil)**

**Summit Scientific**

**Total Metals by EPA 6020B**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Arsenic	3.88	0.227	mg/kg dry	1	BFJ0122	10/06/22	10/08/22	EPA 6020B	
Barium	30.1	0.453	"	"	"	"	"	"	
Cadmium	ND	0.227	"	"	"	"	"	"	
Copper	8.67	0.453	"	"	"	"	"	"	
Lead	8.09	0.227	"	"	"	"	"	"	
Nickel	9.31	0.453	"	"	"	"	"	"	
Selenium	0.814	0.295	"	"	"	"	"	"	
Silver	ND	0.0227	"	"	"	"	"	"	
Zinc	33.8	0.453	"	"	"	"	"	"	

**Hexavalent Chromium by EPA Method 7196**

Date Sampled: **09/28/22 10:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BFJ0253	10/11/22	10/12/22	EPA 7196A	

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

Date Sampled: **09/28/22 10:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	30.4	0.0566	mg/L dry	1	BFJ0088	10/05/22	10/08/22	EPA 6020B	
Magnesium	20.6	0.0566	"	"	"	"	"	"	
Sodium	89.5	0.0566	"	"	"	"	"	"	

**Calculated Analysis**

Date Sampled: **09/28/22 10:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	3.07	0.00100	units	1	BFJ0193	10/08/22	10/08/22	Calculation	

**Physical Parameters by APHA/ASTM/EPA Methods**

Summit Scientific

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K.P. Kauffman  
1675 Broadway  
Denver CO, 80202

Project: Suckla Brown Unit 17 Header

Project Number: [none]  
Project Manager: Levi Kirk

**Reported:**  
10/12/22 13:51

**SB-1@15'**  
**2209570-02 (Soil)**

**Summit Scientific**

**Physical Parameters by APHA/ASTM/EPA Methods**

Date Sampled: **09/28/22 10:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	88.3		%	1	BFJ0012	10/03/22	10/03/22	Calculation	

**Specific Conductance by EPA Method 120.1, Saturated Paste Extraction**

Date Sampled: **09/28/22 10:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.675	0.0100	mmhos/cm	1	BFJ0109	10/05/22	10/12/22	EPA 120.1	

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

Date Sampled: **09/28/22 10:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	7.36		pH Units	1	BFJ0108	10/05/22	10/12/22	EPA 9045D	

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K.P. Kauffman  
1675 Broadway  
Denver CO, 80202

Project: Suckla Brown Unit 17 Header

Project Number: [none]  
Project Manager: Levi Kirk

**Reported:**  
10/12/22 13:51

**SB-2@7.5'**  
**2209570-03 (Soil)**

**Summit Scientific**

**Volatile Organic Compounds by EPA Method 8260B**

Date Sampled: **09/28/22 11:25**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Benzene	1.6	0.20	mg/kg	100	BF10796	09/30/22	10/01/22	EPA 8260B	
Toluene	0.017	0.0050	"	1	"	"	10/01/22	"	
Ethylbenzene	4.1	0.50	"	100	"	"	10/01/22	"	
Xylenes (total)	38	1.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	13	0.50	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	8.4	0.50	"	"	"	"	"	"	
Naphthalene	0.98	0.38	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	520	50	"	"	"	"	"	"	

Date Sampled: **09/28/22 11:25**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Surrogate: 1,2-Dichloroethane-d4		109 %	50-150		"	"	"	"	
Surrogate: Toluene-d8		97.8 %	50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		124 %	50-150		"	"	"	"	

**Extractable Petroleum Hydrocarbons by 8015**

Date Sampled: **09/28/22 11:25**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
C10-C28 (DRO)	120	50	mg/kg	1	BF10798	09/30/22	10/01/22	EPA 8015M	
C28-C36 (ORO)	ND	50	"	"	"	"	"	"	

Date Sampled: **09/28/22 11:25**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Surrogate: o-Terphenyl		84.0 %	30-150		"	"	"	"	

**PAH by EPA Method 8270D SIM**

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K.P. Kauffman  
1675 Broadway  
Denver CO, 80202

Project: Suckla Brown Unit 17 Header

Project Number: [none]  
Project Manager: Levi Kirk

**Reported:**  
10/12/22 13:51

**SB-2@7.5'**  
**2209570-03 (Soil)**

**Summit Scientific**

**PAH by EPA Method 8270D SIM**

Date Sampled: **09/28/22 11:25**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BF10755	09/29/22	09/30/22	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	"	"	"	"	"	"	
<b>Chrysene</b>	<b>0.0193</b>	0.00500	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	0.00500	"	"	"	"	"	"	
Fluoranthene	ND	0.00500	"	"	"	"	"	"	
<b>Fluorene</b>	<b>0.0732</b>	0.00500	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	ND	0.00500	"	"	"	"	"	"	
Pyrene	ND	0.00500	"	"	"	"	"	"	
<b>1-Methylnaphthalene</b>	<b>1.69</b>	0.500	"	100	"	"	09/30/22	"	
<b>2-Methylnaphthalene</b>	<b>4.92</b>	0.500	"	"	"	"	"	"	

Date Sampled: **09/28/22 11:25**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10	49.8 %	40-150	"	"	"	"	09/30/22	"	
Surrogate: Fluoranthene-d10	82.1 %	40-150	"	"	"	"	"	"	

**Total Metals by EPA 6020B Hot Water Soluble Extraction**

Date Sampled: **09/28/22 11:25**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>Boron</b>	<b>1.12</b>	0.0100	mg/L	1	BFJ0087	10/05/22	10/08/22	EPA 6020B	

**Total Metals by EPA 6020B**

Date Sampled: **09/28/22 11:25**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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K.P. Kauffman  
1675 Broadway  
Denver CO, 80202

Project: Suckla Brown Unit 17 Header

Project Number: [none]  
Project Manager: Levi Kirk

**Reported:**  
10/12/22 13:51

**SB-2@7.5'**  
**2209570-03 (Soil)**

**Summit Scientific**

**Total Metals by EPA 6020B**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Arsenic	5.68	0.264	mg/kg dry	1	BFJ0122	10/06/22	10/08/22	EPA 6020B	
Barium	174	0.527	"	"	"	"	"	"	
Cadmium	ND	0.264	"	"	"	"	"	"	
Copper	14.8	0.527	"	"	"	"	"	"	
Lead	11.2	0.264	"	"	"	"	"	"	
Nickel	16.4	0.527	"	"	"	"	"	"	
Selenium	1.29	0.343	"	"	"	"	"	"	
Silver	0.0438	0.0264	"	"	"	"	"	"	
Zinc	54.1	0.527	"	"	"	"	"	"	

**Hexavalent Chromium by EPA Method 7196**

Date Sampled: **09/28/22 11:25**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BFJ0253	10/11/22	10/12/22	EPA 7196A	

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

Date Sampled: **09/28/22 11:25**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	12.4	0.0659	mg/L dry	1	BFJ0088	10/05/22	10/08/22	EPA 6020B	
Magnesium	10.4	0.0659	"	"	"	"	"	"	
Sodium	380	0.0659	"	"	"	"	"	"	

**Calculated Analysis**

Date Sampled: **09/28/22 11:25**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	19.3	0.00100	units	1	BFJ0193	10/08/22	10/08/22	Calculation	

**Physical Parameters by APHA/ASTM/EPA Methods**

Date Sampled: **09/28/22 11:25**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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K.P. Kauffman  
 1675 Broadway  
 Denver CO, 80202

Project: Suckla Brown Unit 17 Header

Project Number: [none]  
 Project Manager: Levi Kirk

**Reported:**  
 10/12/22 13:51

**SB-2@7.5'**  
**2209570-03 (Soil)**

**Summit Scientific**

**Physical Parameters by APHA/ASTM/EPA Methods**

<b>% Solids</b>	<b>75.9</b>	%	1	BFJ0012	10/03/22	10/03/22	Calculation
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**Specific Conductance by EPA Method 120.1, Saturated Paste Extraction**

Date Sampled: **09/28/22 11:25**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>Specific Conductance (EC)</b>	<b>1.38</b>	0.0100	mmhos/cm	1	BFJ0109	10/05/22	10/12/22	EPA 120.1	

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

Date Sampled: **09/28/22 11:25**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>pH</b>	<b>8.74</b>		pH Units	1	BFJ0108	10/05/22	10/12/22	EPA 9045D	

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1675 Broadway  
Denver CO, 80202

Project: Suckla Brown Unit 17 Header

Project Number: [none]  
Project Manager: Levi Kirk

**Reported:**  
10/12/22 13:51

**SB-2@15'**  
**2209570-04 (Soil)**

**Summit Scientific**

**Volatile Organic Compounds by EPA Method 8260B**

Date Sampled: **09/28/22 11:30**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Benzene	ND	0.0020	mg/kg	1	BFI0796	09/30/22	10/01/22	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: **09/28/22 11:30**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Surrogate: 1,2-Dichloroethane-d4		142 %	50-150		"	"	"	"	
Surrogate: Toluene-d8		105 %	50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		106 %	50-150		"	"	"	"	

**Extractable Petroleum Hydrocarbons by 8015**

Date Sampled: **09/28/22 11:30**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
C10-C28 (DRO)	ND	50	mg/kg	1	BFI0798	09/30/22	10/01/22	EPA 8015M	
C28-C36 (ORO)	ND	50	"	"	"	"	"	"	

Date Sampled: **09/28/22 11:30**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Surrogate: o-Terphenyl		76.4 %	30-150		"	"	"	"	

**PAH by EPA Method 8270D SIM**

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K.P. Kauffman  
1675 Broadway  
Denver CO, 80202

Project: Suckla Brown Unit 17 Header

Project Number: [none]  
Project Manager: Levi Kirk

**Reported:**  
10/12/22 13:51

**SB-2@15'**  
**2209570-04 (Soil)**

**Summit Scientific**

**PAH by EPA Method 8270D SIM**

Date Sampled: **09/28/22 11:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BFI0755	09/29/22	09/30/22	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	"	"	"	"	"	"	
<b>Fluorene</b>	<b>0.00777</b>	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: **09/28/22 11:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10		63.9 %	40-150		"	"	"	"	
Surrogate: Fluoranthene-d10		67.0 %	40-150		"	"	"	"	

**Total Metals by EPA 6020B Hot Water Soluble Extraction**

Date Sampled: **09/28/22 11:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>Boron</b>	<b>0.489</b>	0.0100	mg/L	1	BFJ0087	10/05/22	10/08/22	EPA 6020B	

**Total Metals by EPA 6020B**

Date Sampled: **09/28/22 11:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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K.P. Kauffman  
1675 Broadway  
Denver CO, 80202

Project: Suckla Brown Unit 17 Header

Project Number: [none]  
Project Manager: Levi Kirk

**Reported:**  
10/12/22 13:51

**SB-2@15'**  
**2209570-04 (Soil)**

**Summit Scientific**

**Total Metals by EPA 6020B**

Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method
Arsenic	11.2	0.244	mg/kg dry	1	BFJ0122	10/06/22	10/08/22	EPA 6020B
Barium	25.0	0.488	"	"	"	"	"	"
Cadmium	ND	0.244	"	"	"	"	"	"
Copper	17.2	0.488	"	"	"	"	"	"
Lead	13.7	0.244	"	"	"	"	"	"
Nickel	9.29	0.488	"	"	"	"	"	"
Selenium	1.19	0.317	"	"	"	"	"	"
Silver	0.0328	0.0244	"	"	"	"	"	"
Zinc	51.1	0.488	"	"	"	"	"	"

**Hexavalent Chromium by EPA Method 7196**

Date Sampled: **09/28/22 11:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BFJ0253	10/11/22	10/12/22	EPA 7196A	

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

Date Sampled: **09/28/22 11:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	111	0.0610	mg/L dry	1	BFJ0088	10/05/22	10/08/22	EPA 6020B	
Magnesium	103	0.0610	"	"	"	"	"	"	
Sodium	901	0.0610	"	"	"	"	"	"	

**Calculated Analysis**

Date Sampled: **09/28/22 11:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	14.8	0.00100	units	1	BFJ0193	10/08/22	10/08/22	Calculation	

**Physical Parameters by APHA/ASTM/EPA Methods**

Date Sampled: **09/28/22 11:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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 Denver CO, 80202

Project: Suckla Brown Unit 17 Header

Project Number: [none]  
 Project Manager: Levi Kirk

**Reported:**  
 10/12/22 13:51

**SB-2@15'**  
**2209570-04 (Soil)**

**Summit Scientific**

**Physical Parameters by APHA/ASTM/EPA Methods**

<b>% Solids</b>	<b>82.0</b>	%	1	BFJ0012	10/03/22	10/03/22	Calculation
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**Specific Conductance by EPA Method 120.1, Saturated Paste Extraction**

Date Sampled: **09/28/22 11:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>Specific Conductance (EC)</b>	<b>4.06</b>	0.0100	mmhos/cm	1	BFJ0109	10/05/22	10/12/22	EPA 120.1	

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

Date Sampled: **09/28/22 11:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>pH</b>	<b>7.38</b>		pH Units	1	BFJ0108	10/05/22	10/12/22	EPA 9045D	

Summit Scientific

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K.P. Kauffman  
1675 Broadway  
Denver CO, 80202

Project: Suckla Brown Unit 17 Header

Project Number: [none]  
Project Manager: Levi Kirk

**Reported:**  
10/12/22 13:51

**SB-3@6'**  
**2209570-05 (Soil)**

**Summit Scientific**

**Volatile Organic Compounds by EPA Method 8260B**

Date Sampled: **09/28/22 10:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0020	mg/kg	1	BFI0796	09/30/22	10/01/22	EPA 8260B	
Toluene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	ND	0.010	"	"	"	"	"	"	
<b>1,2,4-Trimethylbenzene</b>	<b>0.0050</b>	0.0050	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	0.0050	"	"	"	"	"	"	
<b>Naphthalene</b>	<b>0.029</b>	0.0038	"	"	"	"	"	"	
<b>Gasoline Range Hydrocarbons</b>	<b>0.53</b>	0.50	"	"	"	"	"	"	

Date Sampled: **09/28/22 10:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		110 %	50-150		"	"	"	"	
Surrogate: Toluene-d8		101 %	50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		104 %	50-150		"	"	"	"	

**Extractable Petroleum Hydrocarbons by 8015**

Date Sampled: **09/28/22 10:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>C10-C28 (DRO)</b>	<b>120</b>	50	mg/kg	1	BFI0798	09/30/22	10/01/22	EPA 8015M	
C28-C36 (ORO)	ND	50	"	"	"	"	"	"	

Date Sampled: **09/28/22 10:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl		85.3 %	30-150		"	"	"	"	

**PAH by EPA Method 8270D SIM**

Summit Scientific

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K.P. Kauffman  
1675 Broadway  
Denver CO, 80202

Project: Suckla Brown Unit 17 Header

Project Number: [none]  
Project Manager: Levi Kirk

**Reported:**  
10/12/22 13:51

**SB-3@6'**  
**2209570-05 (Soil)**

**Summit Scientific**

**PAH by EPA Method 8270D SIM**

Date Sampled: **09/28/22 10:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BFI0755	09/29/22	09/30/22	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	"	"	"	"	"	"	
<b>Chrysene</b>	<b>0.0163</b>	0.00500	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	0.00500	"	"	"	"	"	"	
Fluoranthene	ND	0.00500	"	"	"	"	"	"	
<b>Fluorene</b>	<b>0.0519</b>	0.00500	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	ND	0.00500	"	"	"	"	"	"	
Pyrene	ND	0.00500	"	"	"	"	"	"	
<b>1-Methylnaphthalene</b>	<b>0.147</b>	0.00500	"	"	"	"	"	"	
<b>2-Methylnaphthalene</b>	<b>0.288</b>	0.0500	"	10	"	"	09/30/22	"	

Date Sampled: **09/28/22 10:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10		55.5 %	40-150		"	"	09/30/22	"	
Surrogate: Fluoranthene-d10		80.9 %	40-150		"	"	"	"	

**Total Metals by EPA 6020B Hot Water Soluble Extraction**

Date Sampled: **09/28/22 10:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>Boron</b>	<b>0.710</b>	0.0100	mg/L	1	BFJ0087	10/05/22	10/08/22	EPA 6020B	

**Total Metals by EPA 6020B**

Date Sampled: **09/28/22 10:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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K.P. Kauffman  
1675 Broadway  
Denver CO, 80202

Project: Suckla Brown Unit 17 Header

Project Number: [none]  
Project Manager: Levi Kirk

**Reported:**  
10/12/22 13:51

**SB-3@6'**  
**2209570-05 (Soil)**

**Summit Scientific**

**Total Metals by EPA 6020B**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Arsenic	5.84	0.241	mg/kg dry	1	BFJ0122	10/06/22	10/08/22	EPA 6020B	
Barium	194	0.483	"	"	"	"	"	"	
Cadmium	0.257	0.241	"	"	"	"	"	"	
Copper	10.3	0.483	"	"	"	"	"	"	
Lead	7.78	0.241	"	"	"	"	"	"	
Nickel	13.8	0.483	"	"	"	"	"	"	
Selenium	0.792	0.314	"	"	"	"	"	"	
Silver	0.0345	0.0241	"	"	"	"	"	"	
Zinc	35.0	0.483	"	"	"	"	"	"	

**Hexavalent Chromium by EPA Method 7196**

Date Sampled: **09/28/22 10:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BFJ0253	10/11/22	10/12/22	EPA 7196A	

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

Date Sampled: **09/28/22 10:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	16.1	0.0604	mg/L dry	1	BFJ0088	10/05/22	10/08/22	EPA 6020B	
Magnesium	17.7	0.0604	"	"	"	"	"	"	
Sodium	253	0.0604	"	"	"	"	"	"	

**Calculated Analysis**

Date Sampled: **09/28/22 10:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	10.4	0.00100	units	1	BFJ0193	10/08/22	10/08/22	Calculation	

**Physical Parameters by APHA/ASTM/EPA Methods**

Date Sampled: **09/28/22 10:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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K.P. Kauffman  
 1675 Broadway  
 Denver CO, 80202

Project: Suckla Brown Unit 17 Header

Project Number: [none]  
 Project Manager: Levi Kirk

**Reported:**  
 10/12/22 13:51

**SB-3@6'**  
**2209570-05 (Soil)**

**Summit Scientific**

**Physical Parameters by APHA/ASTM/EPA Methods**

<b>% Solids</b>	<b>82.8</b>	%	1	BFJ0012	10/03/22	10/03/22	Calculation
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**Specific Conductance by EPA Method 120.1, Saturated Paste Extraction**

Date Sampled: **09/28/22 10:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>Specific Conductance (EC)</b>	<b>1.18</b>	0.0100	mmhos/cm	1	BFJ0109	10/05/22	10/12/22	EPA 120.1	

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

Date Sampled: **09/28/22 10:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>pH</b>	<b>8.13</b>		pH Units	1	BFJ0108	10/05/22	10/12/22	EPA 9045D	

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K.P. Kauffman  
1675 Broadway  
Denver CO, 80202

Project: Suckla Brown Unit 17 Header

Project Number: [none]  
Project Manager: Levi Kirk

**Reported:**  
10/12/22 13:51

**SB-4@7.5'**  
**2209570-06 (Soil)**

**Summit Scientific**

**Volatile Organic Compounds by EPA Method 8260B**

Date Sampled: **09/28/22 12:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0020	mg/kg	1	BF10796	09/30/22	10/01/22	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	"	"	"	"	"	"	
<b>Gasoline Range Hydrocarbons</b>	<b>0.59</b>	<b>0.50</b>	"	"	"	"	"	"	

Date Sampled: **09/28/22 12:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		122 %	50-150		"	"	"	"	
Surrogate: Toluene-d8		99.7 %	50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		125 %	50-150		"	"	"	"	

**Extractable Petroleum Hydrocarbons by 8015**

Date Sampled: **09/28/22 12:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>C10-C28 (DRO)</b>	<b>230</b>	50	mg/kg	1	BF10798	09/30/22	10/01/22	EPA 8015M	
C28-C36 (ORO)	ND	50	"	"	"	"	"	"	

Date Sampled: **09/28/22 12:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl		98.4 %	30-150		"	"	"	"	

**PAH by EPA Method 8270D SIM**

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K.P. Kauffman  
1675 Broadway  
Denver CO, 80202

Project: Suckla Brown Unit 17 Header

Project Number: [none]  
Project Manager: Levi Kirk

**Reported:**  
10/12/22 13:51

**SB-4@7.5'**  
**2209570-06 (Soil)**

**Summit Scientific**

**PAH by EPA Method 8270D SIM**

Date Sampled: **09/28/22 12:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BFI0755	09/29/22	09/30/22	EPA 8270D SIM	
<b>Anthracene</b>	<b>0.0115</b>	0.00500	"	"	"	"	"	"	"
<b>Benzo (a) anthracene</b>	<b>0.0100</b>	0.00500	"	"	"	"	"	"	"
Benzo (a) pyrene	ND	0.00500	"	"	"	"	"	"	"
<b>Benzo (b) fluoranthene</b>	<b>0.00613</b>	0.00500	"	"	"	"	"	"	"
Benzo (k) fluoranthene	ND	0.00500	"	"	"	"	"	"	"
<b>Chrysene</b>	<b>0.0130</b>	0.00500	"	"	"	"	"	"	"
Dibenz (a,h) anthracene	ND	0.00500	"	"	"	"	"	"	"
<b>Fluoranthene</b>	<b>0.0288</b>	0.00500	"	"	"	"	"	"	"
<b>Fluorene</b>	<b>0.0265</b>	0.00500	"	"	"	"	"	"	"
Indeno (1,2,3-cd) pyrene	ND	0.00500	"	"	"	"	"	"	"
<b>Pyrene</b>	<b>0.0167</b>	0.00500	"	"	"	"	"	"	"
<b>1-Methylnaphthalene</b>	<b>0.0837</b>	0.00500	"	"	"	"	"	"	"
2-Methylnaphthalene	ND	0.00500	"	"	"	"	"	"	"

Date Sampled: **09/28/22 12:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10	55.5 %	40-150			"	"	"	"	
Surrogate: Fluoranthene-d10	76.6 %	40-150			"	"	"	"	

**Total Metals by EPA 6020B Hot Water Soluble Extraction**

Date Sampled: **09/28/22 12:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>Boron</b>	<b>0.683</b>	0.0100	mg/L	1	BFJ0087	10/05/22	10/08/22	EPA 6020B	

**Total Metals by EPA 6020B**

Date Sampled: **09/28/22 12:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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K.P. Kauffman  
1675 Broadway  
Denver CO, 80202

Project: Suckla Brown Unit 17 Header

Project Number: [none]  
Project Manager: Levi Kirk

**Reported:**  
10/12/22 13:51

**SB-4@7.5'**  
**2209570-06 (Soil)**

**Summit Scientific**

**Total Metals by EPA 6020B**

Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Arsenic	3.63	0.238	mg/kg dry	1	BFJ0122	10/06/22	10/08/22	EPA 6020B	
Barium	132	0.476	"	"	"	"	"	"	
Cadmium	ND	0.238	"	"	"	"	"	"	
Copper	13.1	0.476	"	"	"	"	"	"	
Lead	10.7	0.238	"	"	"	"	"	"	
Nickel	10.7	0.476	"	"	"	"	"	"	
Selenium	1.25	0.310	"	"	"	"	"	"	
Silver	0.0378	0.0238	"	"	"	"	"	"	
Zinc	45.8	0.476	"	"	"	"	"	"	

**Hexavalent Chromium by EPA Method 7196**

Date Sampled: **09/28/22 12:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BFJ0253	10/11/22	10/12/22	EPA 7196A	

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

Date Sampled: **09/28/22 12:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	450	0.0595	mg/L dry	1	BFJ0088	10/05/22	10/08/22	EPA 6020B	
Magnesium	147	0.0595	"	"	"	"	"	"	
Sodium	970	0.0595	"	"	"	"	"	"	

**Calculated Analysis**

Date Sampled: **09/28/22 12:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	10.2	0.00100	units	1	BFJ0193	10/08/22	10/08/22	Calculation	

**Physical Parameters by APHA/ASTM/EPA Methods**

Date Sampled: **09/28/22 12:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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K.P. Kauffman  
 1675 Broadway  
 Denver CO, 80202

Project: Suckla Brown Unit 17 Header

Project Number: [none]  
 Project Manager: Levi Kirk

**Reported:**  
 10/12/22 13:51

**SB-4@7.5'**  
**2209570-06 (Soil)**

**Summit Scientific**

**Physical Parameters by APHA/ASTM/EPA Methods**

<b>% Solids</b>	<b>84.0</b>	%	1	BFJ0012	10/03/22	10/03/22	Calculation
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**Specific Conductance by EPA Method 120.1, Saturated Paste Extraction**

Date Sampled: **09/28/22 12:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>Specific Conductance (EC)</b>	<b>5.20</b>	0.0100	mmhos/cm	1	BFJ0109	10/05/22	10/12/22	EPA 120.1	

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

Date Sampled: **09/28/22 12:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>pH</b>	<b>7.48</b>		pH Units	1	BFJ0108	10/05/22	10/12/22	EPA 9045D	

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K.P. Kauffman  
1675 Broadway  
Denver CO, 80202

Project: Suckla Brown Unit 17 Header

Project Number: [none]  
Project Manager: Levi Kirk

**Reported:**  
10/12/22 13:51

**SB-4@15'**  
**2209570-07 (Soil)**

**Summit Scientific**

**Volatile Organic Compounds by EPA Method 8260B**

Date Sampled: **09/28/22 12:05**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0020	mg/kg	1	BFI0796	09/30/22	10/01/22	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: **09/28/22 12:05**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		120 %	50-150		"	"	"	"	
Surrogate: Toluene-d8		98.4 %	50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		99.8 %	50-150		"	"	"	"	

**Extractable Petroleum Hydrocarbons by 8015**

Date Sampled: **09/28/22 12:05**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	ND	50	mg/kg	1	BFI0798	09/30/22	10/01/22	EPA 8015M	
C28-C36 (ORO)	ND	50	"	"	"	"	"	"	

Date Sampled: **09/28/22 12:05**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl		87.7 %	30-150		"	"	"	"	

**PAH by EPA Method 8270D SIM**

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1675 Broadway  
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Project: Suckla Brown Unit 17 Header

Project Number: [none]  
Project Manager: Levi Kirk

**Reported:**  
10/12/22 13:51

**SB-4@15'**  
**2209570-07 (Soil)**

**Summit Scientific**

**PAH by EPA Method 8270D SIM**

Date Sampled: **09/28/22 12:05**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BFI0755	09/29/22	09/30/22	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: **09/28/22 12:05**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10		64.9 %	40-150		"	"	"	"	
Surrogate: Fluoranthene-d10		64.1 %	40-150		"	"	"	"	

**Total Metals by EPA 6020B Hot Water Soluble Extraction**

Date Sampled: **09/28/22 12:05**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>Boron</b>	<b>0.866</b>	0.0100	mg/L	1	BFJ0087	10/05/22	10/08/22	EPA 6020B	

**Total Metals by EPA 6020B**

Date Sampled: **09/28/22 12:05**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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K.P. Kauffman  
1675 Broadway  
Denver CO, 80202

Project: Suckla Brown Unit 17 Header

Project Number: [none]  
Project Manager: Levi Kirk

**Reported:**  
10/12/22 13:51

**SB-4@15'**  
**2209570-07 (Soil)**

**Summit Scientific**

**Total Metals by EPA 6020B**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Arsenic	7.82	0.234	mg/kg dry	1	BFJ0122	10/06/22	10/08/22	EPA 6020B	
Barium	26.6	0.468	"	"	"	"	"	"	
Cadmium	ND	0.234	"	"	"	"	"	"	
Copper	10.2	0.468	"	"	"	"	"	"	
Lead	9.48	0.234	"	"	"	"	"	"	
Nickel	11.2	0.468	"	"	"	"	"	"	
Selenium	0.888	0.304	"	"	"	"	"	"	
Silver	0.0244	0.0234	"	"	"	"	"	"	
Zinc	37.1	0.468	"	"	"	"	"	"	

**Hexavalent Chromium by EPA Method 7196**

Date Sampled: **09/28/22 12:05**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BFJ0253	10/11/22	10/12/22	EPA 7196A	

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

Date Sampled: **09/28/22 12:05**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	332	0.0585	mg/L dry	1	BFJ0088	10/05/22	10/08/22	EPA 6020B	
Magnesium	215	0.0585	"	"	"	"	"	"	
Sodium	1290	0.0585	"	"	"	"	"	"	

**Calculated Analysis**

Date Sampled: **09/28/22 12:05**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	13.6	0.00100	units	1	BFJ0193	10/08/22	10/08/22	Calculation	

**Physical Parameters by APHA/ASTM/EPA Methods**

Date Sampled: **09/28/22 12:05**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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K.P. Kauffman  
1675 Broadway  
Denver CO, 80202

Project: Suckla Brown Unit 17 Header

Project Number: [none]  
Project Manager: Levi Kirk

**Reported:**  
10/12/22 13:51

**SB-4@15'**  
**2209570-07 (Soil)**

**Summit Scientific**

**Physical Parameters by APHA/ASTM/EPA Methods**

<b>% Solids</b>	<b>85.5</b>	%	1	BFJ0012	10/03/22	10/03/22	Calculation
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**Specific Conductance by EPA Method 120.1, Saturated Paste Extraction**

Date Sampled: **09/28/22 12:05**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>Specific Conductance (EC)</b>	<b>6.58</b>	0.0100	mmhos/cm	1	BFJ0109	10/05/22	10/12/22	EPA 120.1	

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

Date Sampled: **09/28/22 12:05**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>pH</b>	<b>7.29</b>		pH Units	1	BFJ0108	10/05/22	10/12/22	EPA 9045D	

Summit Scientific

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K.P. Kauffman  
1675 Broadway  
Denver CO, 80202

Project: Suckla Brown Unit 17 Header

Project Number: [none]  
Project Manager: Levi Kirk

**Reported:**  
10/12/22 13:51

**Background-2@6-10'**  
**2209570-08 (Soil)**

**Summit Scientific**

**Total Metals by EPA 6020B Hot Water Soluble Extraction**

Date Sampled: **09/28/22 13:00**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
<b>Boron</b>	<b>0.511</b>	0.0100	mg/L	1	BFJ0087	10/05/22	10/08/22	EPA 6020B	

**Total Metals by EPA 6020B**

Date Sampled: **09/28/22 13:00**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
<b>Arsenic</b>	<b>5.92</b>	0.251	mg/kg dry	1	BFJ0122	10/06/22	10/08/22	EPA 6020B	
<b>Barium</b>	<b>159</b>	0.502	"	"	"	"	"	"	
<b>Cadmium</b>	<b>ND</b>	0.251	"	"	"	"	"	"	
<b>Copper</b>	<b>13.2</b>	0.502	"	"	"	"	"	"	
<b>Lead</b>	<b>13.2</b>	0.251	"	"	"	"	"	"	
<b>Nickel</b>	<b>13.0</b>	0.502	"	"	"	"	"	"	
<b>Selenium</b>	<b>1.22</b>	0.326	"	"	"	"	"	"	
<b>Silver</b>	<b>0.0639</b>	0.0251	"	"	"	"	"	"	
<b>Zinc</b>	<b>46.4</b>	0.502	"	"	"	"	"	"	

**Hexavalent Chromium by EPA Method 7196**

Date Sampled: **09/28/22 13:00**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
<b>Chromium, Hexavalent</b>	<b>ND</b>	0.30	mg/kg dry	1	BFJ0253	10/11/22	10/12/22	EPA 7196A	

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

Date Sampled: **09/28/22 13:00**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
<b>Calcium</b>	<b>97.9</b>	0.0627	mg/L dry	1	BFJ0088	10/05/22	10/08/22	EPA 6020B	
<b>Magnesium</b>	<b>56.4</b>	0.0627	"	"	"	"	"	"	
<b>Sodium</b>	<b>109</b>	0.0627	"	"	"	"	"	"	

**Calculated Analysis**

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K.P. Kauffman  
1675 Broadway  
Denver CO, 80202

Project: Suckla Brown Unit 17 Header

Project Number: [none]  
Project Manager: Levi Kirk

**Reported:**  
10/12/22 13:51

**Background-2@6-10'**  
**2209570-08 (Soil)**

**Summit Scientific**

**Calculated Analysis**

Date Sampled: **09/28/22 13:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	2.17	0.00100	units	1	BFJ0193	10/08/22	10/08/22	Calculation	

**Physical Parameters by APHA/ASTM/EPA Methods**

Date Sampled: **09/28/22 13:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	79.7		%	1	BFJ0012	10/03/22	10/03/22	Calculation	

**Specific Conductance by EPA Method 120.1, Saturated Paste Extraction**

Date Sampled: **09/28/22 13:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	1.25	0.0100	mmhos/cm	1	BFJ0109	10/05/22	10/12/22	EPA 120.1	

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

Date Sampled: **09/28/22 13:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	7.58		pH Units	1	BFJ0108	10/05/22	10/12/22	EPA 9045D	

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1675 Broadway  
Denver CO, 80202

Project: Suckla Brown Unit 17 Header

Project Number: [none]  
Project Manager: Levi Kirk

**Reported:**  
10/12/22 13:51

### Volatile Organic Compounds by EPA Method 8260B - Quality Control

#### Summit Scientific

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

#### Batch BFI0796 - EPA 5030 Soil MS

##### Blank (BFI0796-BLK1)

Prepared & Analyzed: 09/30/22

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	"							
<i>Surrogate: 1,2-Dichloroethane-d4</i>	0.0447		"	0.0400		112	50-150			
<i>Surrogate: Toluene-d8</i>	0.0392		"	0.0400		97.9	50-150			
<i>Surrogate: 4-Bromofluorobenzene</i>	0.0394		"	0.0400		98.5	50-150			

##### LCS (BFI0796-BS1)

Prepared & Analyzed: 09/30/22

Benzene	0.0749	0.0020	mg/kg	0.100		74.9	70-130			
Toluene	0.0815	0.0050	"	0.100		81.5	70-130			
Ethylbenzene	0.0864	0.0050	"	0.100		86.4	70-130			
m,p-Xylene	0.175	0.010	"	0.200		87.3	70-130			
o-Xylene	0.0806	0.0050	"	0.100		80.6	70-130			
1,2,4-Trimethylbenzene	0.0854	0.0050	"	0.100		85.4	70-130			
1,3,5-Trimethylbenzene	0.0874	0.0050	"	0.100		87.4	70-130			
Naphthalene	0.0990	0.0038	"	0.100		99.0	70-130			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	0.0398		"	0.0400		99.4	50-150			
<i>Surrogate: Toluene-d8</i>	0.0425		"	0.0400		106	50-150			
<i>Surrogate: 4-Bromofluorobenzene</i>	0.0368		"	0.0400		92.0	50-150			

##### Matrix Spike (BFI0796-MS1)

Source: 2209566-01

Prepared & Analyzed: 09/30/22

Benzene	0.0789	0.0020	mg/kg	0.100	ND	78.9	70-130			
Toluene	0.0887	0.0050	"	0.100	ND	88.7	70-130			
Ethylbenzene	0.0960	0.0050	"	0.100	ND	96.0	70-130			
m,p-Xylene	0.194	0.010	"	0.200	ND	97.0	70-130			
o-Xylene	0.0877	0.0050	"	0.100	ND	87.7	70-130			
1,2,4-Trimethylbenzene	0.0916	0.0050	"	0.100	ND	91.6	70-130			
1,3,5-Trimethylbenzene	0.0958	0.0050	"	0.100	ND	95.8	70-130			
Naphthalene	0.0741	0.0038	"	0.100	ND	74.1	70-130			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	0.0396		"	0.0400		98.9	50-150			
<i>Surrogate: Toluene-d8</i>	0.0425		"	0.0400		106	50-150			
<i>Surrogate: 4-Bromofluorobenzene</i>	0.0365		"	0.0400		91.4	50-150			

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1675 Broadway  
Denver CO, 80202

Project: Suckla Brown Unit 17 Header

Project Number: [none]  
Project Manager: Levi Kirk

**Reported:**  
10/12/22 13:51

**Volatile Organic Compounds by EPA Method 8260B - Quality Control**

**Summit Scientific**

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

**Batch BFI0796 - EPA 5030 Soil MS**

<b>Matrix Spike Dup (BFI0796-MSD1)</b>	<b>Source: 2209566-01</b>			<b>Prepared &amp; Analyzed: 09/30/22</b>						
Benzene	0.0731	0.0020	mg/kg	0.100	ND	73.1	70-130	7.58	30	
Toluene	0.0814	0.0050	"	0.100	ND	81.4	70-130	8.54	30	
Ethylbenzene	0.0875	0.0050	"	0.100	ND	87.5	70-130	9.19	30	
m,p-Xylene	0.175	0.010	"	0.200	ND	87.6	70-130	10.2	30	
o-Xylene	0.0824	0.0050	"	0.100	ND	82.4	70-130	6.24	30	
1,2,4-Trimethylbenzene	0.0874	0.0050	"	0.100	ND	87.4	70-130	4.69	30	
1,3,5-Trimethylbenzene	0.0896	0.0050	"	0.100	ND	89.6	70-130	6.64	30	
Naphthalene	0.0810	0.0038	"	0.100	ND	81.0	70-130	8.93	30	
<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>0.0422</i>		<i>"</i>	<i>0.0400</i>		<i>105</i>	<i>50-150</i>			
<i>Surrogate: Toluene-d8</i>	<i>0.0422</i>		<i>"</i>	<i>0.0400</i>		<i>105</i>	<i>50-150</i>			
<i>Surrogate: 4-Bromofluorobenzene</i>	<i>0.0372</i>		<i>"</i>	<i>0.0400</i>		<i>93.1</i>	<i>50-150</i>			

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1675 Broadway  
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Project: Suckla Brown Unit 17 Header

Project Number: [none]  
Project Manager: Levi Kirk

**Reported:**  
10/12/22 13:51

**Extractable Petroleum Hydrocarbons by 8015 - Quality Control**  
**Summit Scientific**

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

**Batch BFI0798 - EPA 3550A**

**Blank (BFI0798-BLK1)**

Prepared & Analyzed: 09/30/22

C10-C28 (DRO)	ND	50	mg/kg							
C28-C36 (ORO)	ND	50	"							

**LCS (BFI0798-BS1)**

Prepared & Analyzed: 09/30/22

C10-C28 (DRO)	606	50	mg/kg	500	121	70-130				
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**Matrix Spike (BFI0798-MS1)**

Source: 2209566-01

Prepared & Analyzed: 09/30/22

C10-C28 (DRO)	583	50	mg/kg	500	23.1	112	70-130			
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**Matrix Spike Dup (BFI0798-MSD1)**

Source: 2209566-01

Prepared & Analyzed: 09/30/22

C10-C28 (DRO)	584	50	mg/kg	500	23.1	112	70-130	0.0372	20	
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1675 Broadway  
Denver CO, 80202

Project: Suckla Brown Unit 17 Header

Project Number: [none]  
Project Manager: Levi Kirk

**Reported:**  
10/12/22 13:51

**PAH by EPA Method 8270D SIM - Quality Control**

**Summit Scientific**

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

**Batch BFI0755 - EPA 5030 Soil MS**

**Blank (BFI0755-BLK1)**

Prepared & Analyzed: 09/29/22

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	"								
<i>Surrogate: 2-Methylnaphthalene-d10</i>	0.0324		"	0.0333	97.2	40-150					
<i>Surrogate: Fluoranthene-d10</i>	0.0349		"	0.0333	105	40-150					

**LCS (BFI0755-BS1)**

Prepared & Analyzed: 09/29/22

Acenaphthene	0.0328	0.00500	mg/kg	0.0333	98.3	31-137					
Anthracene	0.0338	0.00500	"	0.0333	102	30-120					
Benzo (a) anthracene	0.0332	0.00500	"	0.0333	99.6	30-120					
Benzo (a) pyrene	0.0330	0.00500	"	0.0333	99.1	30-120					
Benzo (b) fluoranthene	0.0329	0.00500	"	0.0333	98.6	30-120					
Benzo (k) fluoranthene	0.0331	0.00500	"	0.0333	99.2	30-120					
Chrysene	0.0334	0.00500	"	0.0333	100	30-120					
Dibenz (a,h) anthracene	0.0306	0.00500	"	0.0333	91.7	30-120					
Fluoranthene	0.0312	0.00500	"	0.0333	93.6	30-120					
Fluorene	0.0333	0.00500	"	0.0333	99.8	30-120					
Indeno (1,2,3-cd) pyrene	0.0242	0.00500	"	0.0333	72.7	30-120					
Pyrene	0.0256	0.00500	"	0.0333	76.9	35-142					
1-Methylnaphthalene	0.0344	0.00500	"	0.0333	103	35-142					
2-Methylnaphthalene	0.0325	0.00500	"	0.0333	97.5	35-142					
<i>Surrogate: 2-Methylnaphthalene-d10</i>	0.0304		"	0.0333	91.3	40-150					
<i>Surrogate: Fluoranthene-d10</i>	0.0345		"	0.0333	104	40-150					

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1675 Broadway  
Denver CO, 80202

Project: Suckla Brown Unit 17 Header

Project Number: [none]  
Project Manager: Levi Kirk

**Reported:**  
10/12/22 13:51

**PAH by EPA Method 8270D SIM - Quality Control**

**Summit Scientific**

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

**Batch BFI0755 - EPA 5030 Soil MS**

<b>Matrix Spike (BFI0755-MS1)</b>	<b>Source: 2209540-01</b>			<b>Prepared &amp; Analyzed: 09/29/22</b>						
Acenaphthene	0.0221	0.00500	mg/kg	0.0333	ND	66.3	31-137			
Anthracene	0.0218	0.00500	"	0.0333	ND	65.5	30-120			
Benzo (a) anthracene	0.0207	0.00500	"	0.0333	ND	62.2	30-120			
Benzo (a) pyrene	0.0204	0.00500	"	0.0333	ND	61.1	30-120			
Benzo (b) fluoranthene	0.0205	0.00500	"	0.0333	ND	61.4	30-120			
Benzo (k) fluoranthene	0.0206	0.00500	"	0.0333	ND	61.9	30-120			
Chrysene	0.0209	0.00500	"	0.0333	ND	62.6	30-120			
Dibenz (a,h) anthracene	0.0178	0.00500	"	0.0333	ND	53.4	30-120			
Fluoranthene	0.0178	0.00500	"	0.0333	ND	53.5	30-120			
Fluorene	0.0215	0.00500	"	0.0333	ND	64.6	30-120			
Indeno (1,2,3-cd) pyrene	0.0142	0.00500	"	0.0333	ND	42.7	30-120			
Pyrene	0.0233	0.00500	"	0.0333	ND	69.8	35-142			
1-Methylnaphthalene	0.0224	0.00500	"	0.0333	ND	67.1	15-130			
2-Methylnaphthalene	0.0213	0.00500	"	0.0333	ND	63.9	15-130			
<i>Surrogate: 2-Methylnaphthalene-d10</i>	<i>0.0196</i>		<i>"</i>	<i>0.0333</i>		<i>58.9</i>	<i>40-150</i>			
<i>Surrogate: Fluoranthene-d10</i>	<i>0.0225</i>		<i>"</i>	<i>0.0333</i>		<i>67.5</i>	<i>40-150</i>			

<b>Matrix Spike Dup (BFI0755-MSD1)</b>	<b>Source: 2209540-01</b>			<b>Prepared &amp; Analyzed: 09/29/22</b>						
Acenaphthene	0.0216	0.00500	mg/kg	0.0333	ND	64.7	31-137	2.44	30	
Anthracene	0.0210	0.00500	"	0.0333	ND	62.9	30-120	4.04	30	
Benzo (a) anthracene	0.0208	0.00500	"	0.0333	ND	62.4	30-120	0.403	30	
Benzo (a) pyrene	0.0202	0.00500	"	0.0333	ND	60.7	30-120	0.552	30	
Benzo (b) fluoranthene	0.0198	0.00500	"	0.0333	ND	59.4	30-120	3.33	30	
Benzo (k) fluoranthene	0.0201	0.00500	"	0.0333	ND	60.2	30-120	2.78	30	
Chrysene	0.0209	0.00500	"	0.0333	ND	62.8	30-120	0.279	30	
Dibenz (a,h) anthracene	0.0186	0.00500	"	0.0333	ND	55.8	30-120	4.47	30	
Fluoranthene	0.0173	0.00500	"	0.0333	ND	52.0	30-120	2.83	30	
Fluorene	0.0208	0.00500	"	0.0333	ND	62.5	30-120	3.36	30	
Indeno (1,2,3-cd) pyrene	0.0144	0.00500	"	0.0333	ND	43.2	30-120	0.955	30	
Pyrene	0.0219	0.00500	"	0.0333	ND	65.6	35-142	6.24	30	
1-Methylnaphthalene	0.0224	0.00500	"	0.0333	ND	67.3	15-130	0.189	50	
2-Methylnaphthalene	0.0211	0.00500	"	0.0333	ND	63.4	15-130	0.731	50	
<i>Surrogate: 2-Methylnaphthalene-d10</i>	<i>0.0202</i>		<i>"</i>	<i>0.0333</i>		<i>60.7</i>	<i>40-150</i>			
<i>Surrogate: Fluoranthene-d10</i>	<i>0.0222</i>		<i>"</i>	<i>0.0333</i>		<i>66.5</i>	<i>40-150</i>			

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K.P. Kauffman  
1675 Broadway  
Denver CO, 80202

Project: Suckla Brown Unit 17 Header

Project Number: [none]  
Project Manager: Levi Kirk

**Reported:**  
10/12/22 13:51

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

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

**Batch BFJ0087 - EPA 3050B**

**Blank (BFJ0087-BLK1)**

Prepared: 10/05/22 Analyzed: 10/08/22

Boron ND 0.0100 mg/L

**LCS (BFJ0087-BS1)**

Prepared: 10/05/22 Analyzed: 10/08/22

Boron 5.67 0.0100 mg/L 5.00 113 80-120

**Duplicate (BFJ0087-DUP1)**

Source: 2209569-01

Prepared: 10/05/22 Analyzed: 10/08/22

Boron 0.122 0.0100 mg/L 0.124 1.80 20

**Matrix Spike (BFJ0087-MS1)**

Source: 2209569-01

Prepared: 10/05/22 Analyzed: 10/08/22

Boron 6.18 0.0100 mg/L 5.00 0.124 121 75-125

**Matrix Spike Dup (BFJ0087-MSD1)**

Source: 2209569-01

Prepared: 10/05/22 Analyzed: 10/08/22

Boron 6.19 0.0100 mg/L 5.00 0.124 121 75-125 0.197 25

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1675 Broadway  
Denver CO, 80202

Project: Suckla Brown Unit 17 Header

Project Number: [none]  
Project Manager: Levi Kirk

**Reported:**  
10/12/22 13:51

**Total Metals by EPA 6020B - Quality Control**  
**Summit Scientific**

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

**Batch BFJ0122 - EPA 3050B**

**Blank (BFJ0122-BLK1)**

Prepared: 10/06/22 Analyzed: 10/08/22

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 (BFJ0122-BS1)**

Prepared: 10/06/22 Analyzed: 10/08/22

Arsenic	40.0	0.200	mg/kg wet	40.0	100	80-120
Barium	39.8	0.400	"	40.0	99.5	80-120
Cadmium	1.99	0.200	"	2.00	99.5	80-120
Copper	38.4	0.400	"	40.0	95.9	80-120
Lead	18.9	0.200	"	20.0	94.4	80-120
Nickel	38.7	0.400	"	40.0	96.8	80-120
Selenium	3.84	0.260	"	4.00	95.9	80-120
Silver	1.97	0.0200	"	2.00	98.4	80-120
Zinc	40.5	0.400	"	40.0	101	80-120

**Duplicate (BFJ0122-DUP1)**

Source: 2209542-01

Prepared: 10/06/22 Analyzed: 10/08/22

Arsenic	0.924	0.222	mg/kg dry	1.09	16.2	20
Barium	59.1	0.445	"	57.1	3.40	20
Cadmium	0.0884	0.222	"	0.0888	0.354	20
Copper	3.03	0.445	"	3.43	12.5	20
Lead	2.90	0.222	"	2.82	2.79	20
Nickel	4.09	0.445	"	3.52	14.9	20
Selenium	0.369	0.289	"	0.406	9.48	20
Silver	0.0152	0.0222	"	0.0144	4.85	20
Zinc	12.0	0.445	"	13.8	14.3	20

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K.P. Kauffman  
1675 Broadway  
Denver CO, 80202

Project: Suckla Brown Unit 17 Header

Project Number: [none]  
Project Manager: Levi Kirk

**Reported:**  
10/12/22 13:51

**Total Metals by EPA 6020B - Quality Control**  
**Summit Scientific**

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

**Batch BFJ0122 - EPA 3050B**

**Matrix Spike (BFJ0122-MS1)**

Source: 2209542-01

Prepared: 10/06/22 Analyzed: 10/08/22

Arsenic	40.7	0.222	mg/kg dry	44.5	1.09	89.0	75-125			
Barium	99.5	0.445	"	44.5	57.1	95.3	75-125			
Cadmium	2.13	0.222	"	2.22	0.0888	91.7	75-125			
Copper	41.2	0.445	"	44.5	3.43	84.9	75-125			
Lead	20.9	0.222	"	22.2	2.82	81.3	75-125			
Nickel	42.1	0.445	"	44.5	3.52	86.7	75-125			
Selenium	3.87	0.289	"	4.45	0.406	77.9	75-125			
Silver	1.96	0.0222	"	2.22	0.0144	87.4	75-125			
Zinc	53.9	0.445	"	44.5	13.8	90.2	75-125			

**Matrix Spike Dup (BFJ0122-MSD1)**

Source: 2209542-01

Prepared: 10/06/22 Analyzed: 10/08/22

Arsenic	40.5	0.222	mg/kg dry	44.5	1.09	88.6	75-125	0.491	25
Barium	106	0.445	"	44.5	57.1	109	75-125	5.96	25
Cadmium	2.23	0.222	"	2.22	0.0888	96.1	75-125	4.55	25
Copper	41.1	0.445	"	44.5	3.43	84.7	75-125	0.238	25
Lead	21.8	0.222	"	22.2	2.82	85.5	75-125	4.37	25
Nickel	42.3	0.445	"	44.5	3.52	87.2	75-125	0.437	25
Selenium	4.19	0.289	"	4.45	0.406	85.0	75-125	7.79	25
Silver	2.05	0.0222	"	2.22	0.0144	91.5	75-125	4.55	25
Zinc	53.6	0.445	"	44.5	13.8	89.3	75-125	0.716	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: Suckla Brown Unit 17 Header

Project Number: [none]  
Project Manager: Levi Kirk

**Reported:**  
10/12/22 13:51

**Hexavalent Chromium by EPA Method 7196 - Quality Control**  
**Summit Scientific**

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

**Batch BFJ0253 - 3060A Mod**

**Blank (BFJ0253-BLK1)**

Prepared: 10/11/22 Analyzed: 10/12/22

Chromium, Hexavalent ND 0.30 mg/kg wet

**LCS (BFJ0253-BS1)**

Prepared: 10/11/22 Analyzed: 10/12/22

Chromium, Hexavalent 22.5 0.30 mg/kg wet 25.0 90.0 80-120

**Duplicate (BFJ0253-DUP1)**

**Source: 2209570-01**

Prepared: 10/11/22 Analyzed: 10/12/22

Chromium, Hexavalent ND 0.30 mg/kg dry ND 20

**Matrix Spike (BFJ0253-MS1)**

**Source: 2209570-01**

Prepared: 10/11/22 Analyzed: 10/12/22

Chromium, Hexavalent 28.2 0.30 mg/kg dry 28.6 ND 98.8 75-125

**Matrix Spike Dup (BFJ0253-MSD1)**

**Source: 2209570-01**

Prepared: 10/11/22 Analyzed: 10/12/22

Chromium, Hexavalent 37.1 0.30 mg/kg dry 28.6 ND 130 75-125 27.1 20 QM-05

Summit Scientific

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K.P. Kauffman  
1675 Broadway  
Denver CO, 80202

Project: Suckla Brown Unit 17 Header

Project Number: [none]  
Project Manager: Levi Kirk

**Reported:**  
10/12/22 13:51

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

**Summit Scientific**

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

**Batch BFJ0088 - General Preparation**

**Blank (BFJ0088-BLK1)**

Prepared: 10/05/22 Analyzed: 10/08/22

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

**LCS (BFJ0088-BS1)**

Prepared: 10/05/22 Analyzed: 10/08/22

Calcium	5.68	0.0500	mg/L wet	5.00	114	70-130				
Magnesium	5.68	0.0500	"	5.00	114	70-130				
Sodium	5.28	0.0500	"	5.00	106	70-130				

Summit Scientific

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K.P. Kauffman  
 1675 Broadway  
 Denver CO, 80202

Project: Suckla Brown Unit 17 Header

Project Number: [none]  
 Project Manager: Levi Kirk

**Reported:**  
 10/12/22 13:51

**Physical Parameters by APHA/ASTM/EPA Methods - Quality Control**

**Summit Scientific**

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

**Batch BFJ0012 - General Preparation**

**Duplicate (BFJ0012-DUP1)**

**Source: 2209567-04**

Prepared & Analyzed: 10/03/22

% Solids	90.9	%	90.8	0.0690	20
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Summit Scientific

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K.P. Kauffman  
1675 Broadway  
Denver CO, 80202

Project: Suckla Brown Unit 17 Header

Project Number: [none]  
Project Manager: Levi Kirk

**Reported:**  
10/12/22 13:51

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

**Summit Scientific**

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

**Batch BFJ0109 - General Preparation**

**Blank (BFJ0109-BLK1)**

Prepared: 10/05/22 Analyzed: 10/12/22

Specific Conductance (EC) ND 0.0100 mmhos/cm

**LCS (BFJ0109-BS1)**

Prepared: 10/05/22 Analyzed: 10/12/22

Specific Conductance (EC) 0.154 0.0100 mmhos/cm 0.150 102 95-105

**Duplicate (BFJ0109-DUP1)**

Source: 2209302-04

Prepared: 10/05/22 Analyzed: 10/12/22

Specific Conductance (EC) 0.685 0.0100 mmhos/cm 0.780 12.9 20

Summit Scientific

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K.P. Kauffman  
 1675 Broadway  
 Denver CO, 80202

Project: Suckla Brown Unit 17 Header

Project Number: [none]  
 Project Manager: Levi Kirk

**Reported:**  
 10/12/22 13:51

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

**Summit Scientific**

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

**Batch BFJ0108 - General Preparation**

**LCS (BFJ0108-BS1)**

Prepared: 10/05/22 Analyzed: 10/12/22

pH	9.12	pH Units	9.18	99.3	95-105
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**Duplicate (BFJ0108-DUP1)**

Source: 2209302-04

Prepared: 10/05/22 Analyzed: 10/12/22

pH	7.71	pH Units	7.71	0.00	20
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Summit Scientific

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K.P. Kauffman  
1675 Broadway  
Denver CO, 80202

Project: Suckla Brown Unit 17 Header

Project Number: [none]  
Project Manager: Levi Kirk

**Reported:**  
10/12/22 13:51

### 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