

Summit Scientific

4653 Table Mountain Drive, Golden, Colorado 80403

303.277.9310

October 05, 2022

Levi Kirk
K.P. Kauffman
1675 Broadway
Denver, CO 80202

RE: Suckla Brown Unit 17 Header

Work Order #2209581

Enclosed are the results of analyses for samples received by Summit Scientific on 09/29/22 11:30. 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:
10/05/22 15:44

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW-2	2209581-01	Water	09/29/22 10:00	09/29/22 11:30
MW-3	2209581-02	Water	09/29/22 10:20	09/29/22 11:30
MW-7	2209581-03	Water	09/29/22 10:40	09/29/22 11:30

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

2209581

S₂

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: Levi Kirk

Address: 1675 Broadway

E-Mail: PrimaryContractor@marcomllc.net

City/State/Zip: 80202

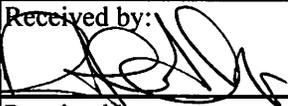
Phone: 303-825-4822

Project Name: Suckia Brown Unit 17 Header

Sampler Name: HC

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	Table 915 organics	Chloride	Sulfate	TDS		
1	MW-2	9-29-22	1000	4					X				X	X	X	X		
2	MW-3	I	1020	4					X				X	X	X	X		Only two VOAS
3	MW-7	I	1040	4					X				X	X	X	X		
4																		
5																		
6																		
7																		
8																		
9																		
10																		

Relinquished by: <u>Hanneman</u>	Date/Time: <u>9-29-22 1130</u>	Received by: 	Date/Time: <u>92922 11.30</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"/> Sample Integrity: Temperature Upon Receipt: <u>S.4</u> Samples Intact: <input checked="" type="radio"/> Yes <input type="radio"/> No	Notes:
Relinquished by:	Date/Time:	Received by:	Date/Time:		
Relinquished by:	Date/Time:	Received by:	Date/Time:		

S₂

Sample Receipt Checklist

S2 Work Order# 2209581

Client: KPK

Client Project ID: Suckia Brown unit 17 Header

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

Airbill #: _____

Matrix (Check all that apply)

Air

Soil/Solid

Water

Other

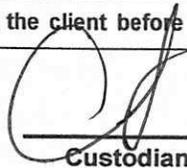
Temp (°C)

Thermometer #

	Yes	No	N/A	Comments (if any)
If samples require cooling, is the temperature < 6°C? ⁽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 checked="" type="checkbox"/>	<input 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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	CF HCl
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 type="checkbox"/>	

Additional Comments (if any):

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


Custodian Printed Name

9-29-22
Date/Time

19:10



K.P. Kauffman
1675 Broadway
Denver CO, 80202

Project: Suckla Brown Unit 17 Header

Project Number: [none]
Project Manager: Levi Kirk

Reported:
10/05/22 15:44

MW-2
2209581-01 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **09/29/22 10:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	160	1.0	ug/l	1	BF10808	09/30/22	10/02/22	EPA 8260B	
Toluene	ND	1.0	"	"	"	"	"	"	
Ethylbenzene	97	1.0	"	"	"	"	"	"	
Xylenes (total)	220	2.0	"	"	"	"	"	"	
Naphthalene	27	1.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	110	1.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	10	1.0	"	"	"	"	"	"	

Date Sampled: **09/29/22 10:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		96.8 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		102 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		104 %	21-167		"	"	"	"	

Anions by EPA Method 300.0

Date Sampled: **09/29/22 10:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chloride	241	12.0	mg/L	200	BFJ0020	10/03/22	10/03/22	EPA 300.0	
Sulfate	345	60.0	"	"	"	"	"	"	

Total Dissolved Solids by SM2540C

Date Sampled: **09/29/22 10:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Total Dissolved Solids	4180	10.0	mg/L	1	BFJ0019	10/03/22	10/04/22	SM2540C	

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:
10/05/22 15:44

MW-3
2209581-02 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **09/29/22 10:20**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	320	10	ug/l	10	BF10808	09/30/22	10/01/22	EPA 8260B	
Toluene	ND	1.0	"	1	"	"	10/02/22	"	
Ethylbenzene	11	1.0	"	"	"	"	"	"	
Xylenes (total)	ND	2.0	"	"	"	"	"	"	
Naphthalene	12	1.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	1.9	1.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	1.0	"	"	"	"	"	"	

Date Sampled: **09/29/22 10:20**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		103 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		98.9 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		129 %	21-167		"	"	"	"	

Anions by EPA Method 300.0

Date Sampled: **09/29/22 10:20**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chloride	478	12.0	mg/L	200	BFJ0020	10/03/22	10/03/22	EPA 300.0	
Sulfate	3140	60.0	"	"	"	"	"	"	

Total Dissolved Solids by SM2540C

Date Sampled: **09/29/22 10:20**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Total Dissolved Solids	5860	10.0	mg/L	1	BFJ0019	10/03/22	10/04/22	SM2540C	

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Project: Suckla Brown Unit 17 Header

Project Number: [none]
Project Manager: Levi Kirk

Reported:
10/05/22 15:44

MW-7
2209581-03 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **09/29/22 10:40**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	85	1.0	ug/l	1	BF10808	09/30/22	10/02/22	EPA 8260B	
Toluene	ND	1.0	"	"	"	"	"	"	
Ethylbenzene	21	1.0	"	"	"	"	"	"	
Xylenes (total)	6.3	2.0	"	"	"	"	"	"	
Naphthalene	1.9	1.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	18	1.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	1.4	1.0	"	"	"	"	"	"	

Date Sampled: **09/29/22 10:40**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<i>Surrogate: 1,2-Dichloroethane-d4</i>		96.2 %	23-173		"	"	"	"	
<i>Surrogate: Toluene-d8</i>		103 %	20-170		"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		112 %	21-167		"	"	"	"	

Anions by EPA Method 300.0

Date Sampled: **09/29/22 10:40**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chloride	99.0	12.0	mg/L	200	BFJ0020	10/03/22	10/03/22	EPA 300.0	
Sulfate	4060	60.0	"	"	"	"	"	"	

Total Dissolved Solids by SM2540C

Date Sampled: **09/29/22 10:40**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Total Dissolved Solids	6140	10.0	mg/L	1	BFJ0019	10/03/22	10/04/22	SM2540C	

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1675 Broadway
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Project: Suckla Brown Unit 17 Header

Project Number: [none]
Project Manager: Levi Kirk

Reported:
10/05/22 15:44

Volatile Organic Compounds by EPA Method 8260B - Quality Control

Summit Scientific

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

Batch BFI0808 - EPA 5030 Water MS

Blank (BFI0808-BLK1)

Prepared: 09/30/22 Analyzed: 10/01/22

Benzene	ND	1.0	ug/l								
Toluene	ND	1.0	"								
Ethylbenzene	ND	1.0	"								
Xylenes (total)	ND	2.0	"								
Naphthalene	ND	1.0	"								
1,2,4-Trimethylbenzene	ND	1.0	"								
1,3,5-Trimethylbenzene	ND	1.0	"								
<i>Surrogate: 1,2-Dichloroethane-d4</i>	11.6		"	13.3		87.0		23-173			
<i>Surrogate: Toluene-d8</i>	13.3		"	13.3		99.8		20-170			
<i>Surrogate: 4-Bromofluorobenzene</i>	12.4		"	13.3		92.6		21-167			

LCS (BFI0808-BS1)

Prepared: 09/30/22 Analyzed: 10/01/22

Benzene	30.5	1.0	ug/l	33.3		91.5		51-132			
Toluene	30.2	1.0	"	33.3		90.5		51-138			
Ethylbenzene	32.6	1.0	"	33.3		97.8		58-146			
m,p-Xylene	64.9	2.0	"	66.7		97.4		57-144			
o-Xylene	30.2	1.0	"	33.3		90.7		53-146			
Naphthalene	29.6	1.0	"	33.3		88.7		70-130			
1,2,4-Trimethylbenzene	30.4	1.0	"	33.3		91.1		70-130			
1,3,5-Trimethylbenzene	31.6	1.0	"	33.3		94.8		70-130			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	11.0		"	13.3		82.6		23-173			
<i>Surrogate: Toluene-d8</i>	14.0		"	13.3		105		20-170			
<i>Surrogate: 4-Bromofluorobenzene</i>	12.4		"	13.3		92.9		21-167			

Matrix Spike (BFI0808-MS1)

Source: 2209584-01

Prepared: 09/30/22 Analyzed: 10/01/22

Benzene	30.4	1.0	ug/l	33.3	ND	91.4		34-141			
Toluene	30.4	1.0	"	33.3	ND	91.3		27-151			
Ethylbenzene	34.7	1.0	"	33.3	ND	104		29-160			
m,p-Xylene	69.1	2.0	"	66.7	ND	104		20-166			
o-Xylene	31.6	1.0	"	33.3	ND	94.8		33-159			
Naphthalene	28.5	1.0	"	33.3	ND	85.4		70-130			
1,2,4-Trimethylbenzene	33.0	1.0	"	33.3	ND	99.1		70-130			
1,3,5-Trimethylbenzene	34.4	1.0	"	33.3	ND	103		70-130			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	8.96		"	13.3		67.2		23-173			
<i>Surrogate: Toluene-d8</i>	13.9		"	13.3		105		20-170			
<i>Surrogate: 4-Bromofluorobenzene</i>	12.5		"	13.3		93.7		21-167			

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1675 Broadway
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Project: Suckla Brown Unit 17 Header

Project Number: [none]
Project Manager: Levi Kirk

Reported:
10/05/22 15:44

Volatile Organic Compounds by EPA Method 8260B - Quality Control

Summit Scientific

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

Batch BFI0808 - EPA 5030 Water MS

Matrix Spike Dup (BFI0808-MSD1)

Source: 2209584-01

Prepared: 09/30/22 Analyzed: 10/01/22

Benzene	30.8	1.0	ug/l	33.3	ND	92.5	34-141	1.21	30	
Toluene	30.3	1.0	"	33.3	ND	90.9	27-151	0.362	30	
Ethylbenzene	32.7	1.0	"	33.3	ND	98.2	29-160	5.81	30	
m,p-Xylene	64.8	2.0	"	66.7	ND	97.1	20-166	6.53	30	
o-Xylene	30.2	1.0	"	33.3	ND	90.7	33-159	4.46	30	
Naphthalene	37.5	1.0	"	33.3	ND	112	70-130	27.4	30	
1,2,4-Trimethylbenzene	30.1	1.0	"	33.3	ND	90.4	70-130	9.18	30	
1,3,5-Trimethylbenzene	31.2	1.0	"	33.3	ND	93.7	70-130	9.72	30	
Surrogate: 1,2-Dichloroethane-d4	13.6		"	13.3		102	23-173			
Surrogate: Toluene-d8	13.7		"	13.3		103	20-170			
Surrogate: 4-Bromofluorobenzene	12.7		"	13.3		95.1	21-167			

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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:
10/05/22 15:44

Anions by EPA Method 300.0 - Quality Control

Summit Scientific

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

Batch BFJ0020 - General Preparation

Blank (BFJ0020-BLK1)

Prepared & Analyzed: 10/03/22

Chloride	ND	0.0600	mg/L						
Sulfate	ND	0.300	"						

LCS (BFJ0020-BS1)

Prepared & Analyzed: 10/03/22

Chloride	2.83	0.0600	mg/L	3.00	94.2	90-110
Sulfate	13.7	0.300	"	15.0	91.2	90-110

Duplicate (BFJ0020-DUP1)

Source: 2209536-01

Prepared & Analyzed: 10/03/22

Chloride	174	12.0	mg/L		177	1.82	20
Sulfate	2190	60.0	"		2240	2.54	20

Matrix Spike (BFJ0020-MS1)

Source: 2209536-01

Prepared & Analyzed: 10/03/22

Chloride	761	12.0	mg/L	600	177	97.2	80-120
Sulfate	5230	60.0	"	3000	2240	99.4	80-120

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 1675 Broadway
 Denver CO, 80202

Project: Suckla Brown Unit 17 Header

Project Number: [none]
 Project Manager: Levi Kirk

Reported:
 10/05/22 15:44

Total Dissolved Solids by SM2540C - Quality Control
Summit Scientific

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

Batch BFJ0019 - General Preparation

Blank (BFJ0019-BLK1)

Prepared: 10/03/22 Analyzed: 10/04/22

Total Dissolved Solids ND 10.0 mg/L

Duplicate (BFJ0019-DUP1)

Source: 2209560-01

Prepared: 10/03/22 Analyzed: 10/04/22

Total Dissolved Solids 904 10.0 mg/L 904 0.00 20

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1675 Broadway
Denver CO, 80202

Project: Suckla Brown Unit 17 Header

Project Number: [none]
Project Manager: Levi Kirk

Reported:
10/05/22 15:44

Notes and Definitions

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