

Summit Scientific

4653 Table Mountain Drive, Golden, Colorado 80403

303.277.9310

October 10, 2022

Levi Kirk

K.P. Kauffman

1675 Broadway

Denver, CO 80202

RE: Rodgers #1 Flowline

Work Order #2209611

Enclosed are the results of analyses for samples received by Summit Scientific on 09/30/22 16:45. 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: Rodgers #1 Flowline

Project Number: [none]
Project Manager: Levi Kirk

Reported:
10/10/22 15:58

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SW-9@13'	2209611-01	Soil	09/30/22 10:00	09/30/22 16:45
SW-10@13'	2209611-02	Soil	09/30/22 10:05	09/30/22 16:45
SW-11@13'	2209611-03	Soil	09/30/22 10:10	09/30/22 16:45
SW-12@13'	2209611-04	Soil	09/30/22 10:15	09/30/22 16:45
SW-13@13'	2209611-05	Soil	09/30/22 10:20	09/30/22 16:45
SW-14@13'	2209611-06	Soil	09/30/22 10:25	09/30/22 16:45
BH-9@15'	2209611-07	Soil	09/30/22 10:30	09/30/22 16:45
BH-10@15'	2209611-08	Soil	09/30/22 10:35	09/30/22 16:45

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

2209611

S₂

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

Page 1 of 1

Client: H.P. Koffman

Project Manager: Lewi Kirk

Address: 1675 Broadway

E-Mail: primarycontractor@marcorllc.net

City/State/Zip: Denver CO, 80202

Phone: 303.825.4822

Project Name: Rodgers #1 Flowline

Sampler Name: Chris P.

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	Full Table	915							
1	SW-9 @ 13'	9.30.22	1008	3			X			X											
2	SW-10 @ 13'		1008																		
3	SW-11 @ 13'		1010																		
4	SW-12 @ 13'		1015																		
5	SW-13 @ 13'		1020																		
6	SW-14 @ 13'		1025																		
7	BH-9 @ 15'		1030																		
8	BH-10 @ 15'		1035																		
9																					
10																					

Relinquished by: <u>[Signature]</u>	Date/Time: <u>9.30.22 1230</u>	Received by: <u>S2 North Office</u>	Date/Time: <u>9/30/22 1230</u>	Turn Around Time (Check) Same Day <input type="checkbox"/> 72 hours <input type="checkbox"/> 24 hours <input type="checkbox"/> Standard <input type="checkbox"/> 48 hours <input checked="" type="checkbox"/> Sample Integrity: Temperature Upon Receipt: <u>8.5</u> Samples Intact: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Notes: on ice
Relinquished by: <u>S2 North Office</u>	Date/Time: <u>1645</u>	Received by: <u>[Signature]</u>	Date/Time: <u>9/30/22 1645</u>		
Relinquished by:	Date/Time:	Received by:	Date/Time:		

S₂

Sample Receipt Checklist

S2 Work Order# 2209611

Client: KP Kaufman Client Project ID: Rodgers #1 Floreline

Shipped Via: H.D./P.U./FedEx/UPS/USPS/Other [] Airbill #: []

Matrix (Check all that apply) Air [] Soil/Solid [x] Water [] Other []

Temp (°C) 8.5 Thermometer # []

Table with 5 columns: Yes, No, N/A, Comments (if any). Rows include: If samples require cooling, is the temperature < 6°C? (1), If custody seals are present, are they intact? (1), Are samples due within 48 hours present?, Are water samples with short hold times present?, Is a chain-of-custody (COC) form present and filled out Completely? (1), Is the COC properly relinquished by the client w/ date and time recorded? (1), Were all samples received intact? (1), Was adequate sample volume provided? (1), Does the COC agree with the number and type of sample bottles received? (1), Do the sample IDs on the bottle labels match the COC? (1), For volatiles in water - is there headspace present? If yes, contact client and note in narrative., Are samples preserved that require preservation (excluding cooling)? (1) Note the type of preservative in the comments column - HCl, H2SO4, NaOH, HNO3, etc., If samples are acid preserved for metals, is the pH <= 2? (1) Record the pH in Comments., If dissolved metals are requested, were samples field filtered?

Additional Comments (if any):

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

Custodian Printed Name

Date/Time 9-30-22 19:15



K.P. Kauffman
1675 Broadway
Denver CO, 80202

Project: Rodgers #1 Flowline

Project Number: [none]
Project Manager: Levi Kirk

Reported:
10/10/22 15:58

SW-9@13'
2209611-01 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **09/30/22 10:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Benzene	ND	0.0020		mg/kg	1	BFJ0045	10/03/22	10/04/22	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: **09/30/22 10:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: 1,2-Dichloroethane-d4		137 %		50-150		"	"	"	"	
Surrogate: Toluene-d8		97.4 %		50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		106 %		50-150		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **09/30/22 10:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
C10-C28 (DRO)	ND	50		mg/kg	1	BFJ0046	10/03/22	10/05/22	EPA 8015M	
C28-C36 (ORO)	ND	50		"	"	"	"	"	"	

Date Sampled: **09/30/22 10:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: o-Terphenyl		78.8 %		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: Rodgers #1 Flowline

Project Number: [none]
Project Manager: Levi Kirk

Reported:
10/10/22 15:58

SW-9@13'
2209611-01 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

Date Sampled: **09/30/22 10:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BFJ0004	10/03/22	10/04/22	EPA 8270D SIM	
Anthracene	0.0305	0.00500	"	"	"	"	"	"	
Benzo (a) anthracene	0.0562	0.00500	"	"	"	"	"	"	
Benzo (a) pyrene	0.0393	0.00500	"	"	"	"	"	"	
Benzo (b) fluoranthene	0.0516	0.00500	"	"	"	"	"	"	
Benzo (k) fluoranthene	0.0195	0.00500	"	"	"	"	"	"	
Chrysene	0.0959	0.00500	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	0.00500	"	"	"	"	"	"	
Fluoranthene	0.127	0.00500	"	"	"	"	"	"	
Fluorene	0.00704	0.00500	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	0.0310	0.00500	"	"	"	"	"	"	
Pyrene	0.108	0.00500	"	"	"	"	"	"	
1-Methylnaphthalene	ND	0.00500	"	"	"	"	"	"	
2-Methylnaphthalene	ND	0.00500	"	"	"	"	"	"	

Date Sampled: **09/30/22 10:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10		40.2 %	40-150		"	"	"	"	
Surrogate: Fluoranthene-d10		57.4 %	40-150		"	"	"	"	

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **09/30/22 10:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	0.685	0.0100	mg/L	1	BFJ0052	10/04/22	10/06/22	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **09/30/22 10:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Arsenic	5.86	0.219	mg/kg dry	1	BFJ0051	10/04/22	10/05/22	EPA 6020B	

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: Rodgers #1 Flowline

Project Number: [none]
Project Manager: Levi Kirk

Reported:
10/10/22 15:58

SW-9@13'
2209611-01 (Soil)

Summit Scientific

Total Metals by EPA 6020B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Barium	33.7	0.439	mg/kg dry	1	BFJ0051	10/04/22	10/05/22	EPA 6020B	
Cadmium	ND	0.219	"	"	"	"	"	"	
Copper	8.85	0.439	"	"	"	"	"	"	
Lead	10.1	0.219	"	"	"	"	"	"	
Nickel	10.6	0.439	"	"	"	"	"	"	
Selenium	0.646	0.285	"	"	"	"	"	"	
Silver	ND	0.0219	"	"	"	"	"	"	
Zinc	52.6	0.439	"	"	"	"	"	"	

Hexavalent Chromium by EPA Method 7196

Date Sampled: **09/30/22 10:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BFJ0061	10/04/22	10/04/22	EPA 7196A	

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

Date Sampled: **09/30/22 10:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	136	0.0548	mg/L dry	1	BFJ0053	10/04/22	10/06/22	EPA 6020B	
Magnesium	86.7	0.0548	"	"	"	"	"	"	
Sodium	249	0.0548	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **09/30/22 10:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	4.11	0.00100	units	1	BFJ0169	10/07/22	10/07/22	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **09/30/22 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: Rodgers #1 Flowline

Project Number: [none]
 Project Manager: Levi Kirk

Reported:
 10/10/22 15:58

SW-9@13'
2209611-01 (Soil)

Summit Scientific

Physical Parameters by APHA/ASTM/EPA Methods

% Solids	91.2	%	1	BFJ0055	10/04/22	10/05/22	Calculation
-----------------	-------------	---	---	---------	----------	----------	-------------

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **09/30/22 10:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	2.00	0.0100	mmhos/cm	1	BFJ0075	10/04/22	10/10/22	EPA 120.1	

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

Date Sampled: **09/30/22 10:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	7.53		pH Units	1	BFJ0076	10/04/22	10/10/22	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: Rodgers #1 Flowline

Project Number: [none]
Project Manager: Levi Kirk

Reported:
10/10/22 15:58

SW-10@13'
2209611-02 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **09/30/22 10:05**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0020	mg/kg	1	BFJ0045	10/03/22	10/04/22	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: **09/30/22 10:05**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		139 %	50-150		"	"	"	"	
Surrogate: Toluene-d8		99.4 %	50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		109 %	50-150		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **09/30/22 10:05**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	ND	50	mg/kg	1	BFJ0046	10/03/22	10/05/22	EPA 8015M	
C28-C36 (ORO)	ND	50	"	"	"	"	"	"	

Date Sampled: **09/30/22 10:05**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl		73.1 %	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: Rodgers #1 Flowline

Project Number: [none]
Project Manager: Levi Kirk

Reported:
10/10/22 15:58

SW-10@13'
2209611-02 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

Date Sampled: **09/30/22 10:05**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BFJ0004	10/03/22	10/04/22	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: **09/30/22 10:05**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10		42.2 %	40-150		"	"	"	"	
Surrogate: Fluoranthene-d10		70.3 %	40-150		"	"	"	"	

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **09/30/22 10:05**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	0.688	0.0100	mg/L	1	BFJ0052	10/04/22	10/06/22	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **09/30/22 10:05**

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: Rodgers #1 Flowline

Project Number: [none]
Project Manager: Levi Kirk

Reported:
10/10/22 15:58

SW-10@13'
2209611-02 (Soil)

Summit Scientific

Total Metals by EPA 6020B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Arsenic	5.75	0.221	mg/kg dry	1	BFJ0051	10/04/22	10/05/22	EPA 6020B	
Barium	21.9	0.441	"	"	"	"	"	"	
Cadmium	ND	0.221	"	"	"	"	"	"	
Copper	8.73	0.441	"	"	"	"	"	"	
Lead	11.2	0.221	"	"	"	"	"	"	
Nickel	10.1	0.441	"	"	"	"	"	"	
Selenium	0.759	0.287	"	"	"	"	"	"	
Silver	ND	0.0221	"	"	"	"	"	"	
Zinc	48.4	0.441	"	"	"	"	"	"	

Hexavalent Chromium by EPA Method 7196

Date Sampled: **09/30/22 10:05**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BFJ0061	10/04/22	10/04/22	EPA 7196A	

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

Date Sampled: **09/30/22 10:05**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	193	0.0551	mg/L dry	1	BFJ0053	10/04/22	10/06/22	EPA 6020B	
Magnesium	126	0.0551	"	"	"	"	"	"	
Sodium	293	0.0551	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **09/30/22 10:05**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	4.03	0.00100	units	1	BFJ0169	10/07/22	10/07/22	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: Rodgers #1 Flowline

Project Number: [none]
Project Manager: Levi Kirk

Reported:
10/10/22 15:58

SW-10@13'
2209611-02 (Soil)

Summit Scientific

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **09/30/22 10:05**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	90.7		%	1	BFJ0055	10/04/22	10/05/22	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **09/30/22 10:05**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	2.46	0.0100	mmhos/cm	1	BFJ0075	10/04/22	10/10/22	EPA 120.1	

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

Date Sampled: **09/30/22 10:05**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	7.77		pH Units	1	BFJ0076	10/04/22	10/10/22	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: Rodgers #1 Flowline

Project Number: [none]
Project Manager: Levi Kirk

Reported:
10/10/22 15:58

SW-11@13'
2209611-03 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

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

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Benzene	ND	0.0020		mg/kg	1	BFJ0045	10/03/22	10/04/22	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: **09/30/22 10:10**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: 1,2-Dichloroethane-d4		118 %		50-150		"	"	"	"	
Surrogate: Toluene-d8		98.2 %		50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		97.6 %		50-150		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

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

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
C10-C28 (DRO)	100	50		mg/kg	1	BFJ0046	10/03/22	10/05/22	EPA 8015M	
C28-C36 (ORO)	ND	50		"	"	"	"	"	"	

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

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: o-Terphenyl		88.6 %		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: Rodgers #1 Flowline

Project Number: [none]
Project Manager: Levi Kirk

Reported:
10/10/22 15:58

SW-11@13'
2209611-03 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BFJ0004	10/03/22	10/04/22	EPA 8270D SIM	
Anthracene	0.00760	0.00500	"	"	"	"	"	"	
Benzo (a) anthracene	0.0188	0.00500	"	"	"	"	"	"	
Benzo (a) pyrene	0.00761	0.00500	"	"	"	"	"	"	
Benzo (b) fluoranthene	0.0124	0.00500	"	"	"	"	"	"	
Benzo (k) fluoranthene	0.00524	0.00500	"	"	"	"	"	"	
Chrysene	0.0142	0.00500	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	0.00500	"	"	"	"	"	"	
Fluoranthene	0.0601	0.00500	"	"	"	"	"	"	
Fluorene	0.0144	0.00500	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	ND	0.00500	"	"	"	"	"	"	
Pyrene	0.0558	0.00500	"	"	"	"	"	"	
1-Methylnaphthalene	0.0103	0.00500	"	"	"	"	"	"	
2-Methylnaphthalene	ND	0.00500	"	"	"	"	"	"	

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10		47.5 %	40-150		"	"	"	"	
Surrogate: Fluoranthene-d10		65.7 %	40-150		"	"	"	"	

Total Metals by EPA 6020B Hot Water Soluble Extraction

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	0.483	0.0100	mg/L	1	BFJ0052	10/04/22	10/06/22	EPA 6020B	

Total Metals by EPA 6020B

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Arsenic	5.75	0.224	mg/kg dry	1	BFJ0051	10/04/22	10/05/22	EPA 6020B	

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: Rodgers #1 Flowline

Project Number: [none]
Project Manager: Levi Kirk

Reported:
10/10/22 15:58

SW-11@13'
2209611-03 (Soil)

Summit Scientific

Total Metals by EPA 6020B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Barium	23.7	0.448	mg/kg dry	1	BFJ0051	10/04/22	10/05/22	EPA 6020B	
Cadmium	ND	0.224	"	"	"	"	"	"	
Copper	8.86	0.448	"	"	"	"	"	"	
Lead	10.4	0.224	"	"	"	"	"	"	
Nickel	10.5	0.448	"	"	"	"	"	"	
Selenium	0.725	0.291	"	"	"	"	"	"	
Silver	ND	0.0224	"	"	"	"	"	"	
Zinc	51.4	0.448	"	"	"	"	"	"	

Hexavalent Chromium by EPA Method 7196

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BFJ0061	10/04/22	10/04/22	EPA 7196A	

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

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	176	0.0560	mg/L dry	1	BFJ0053	10/04/22	10/06/22	EPA 6020B	
Magnesium	102	0.0560	"	"	"	"	"	"	
Sodium	349	0.0560	"	"	"	"	"	"	

Calculated Analysis

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	5.20	0.00100	units	1	BFJ0169	10/07/22	10/07/22	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **09/30/22 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: Rodgers #1 Flowline

Project Number: [none]
 Project Manager: Levi Kirk

Reported:
 10/10/22 15:58

SW-11@13'
2209611-03 (Soil)

Summit Scientific

Physical Parameters by APHA/ASTM/EPA Methods

% Solids	89.3	%	1	BFJ0055	10/04/22	10/05/22	Calculation
-----------------	-------------	---	---	---------	----------	----------	-------------

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	2.36	0.0100	mmhos/cm	1	BFJ0075	10/04/22	10/10/22	EPA 120.1	

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

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	7.80		pH Units	1	BFJ0076	10/04/22	10/10/22	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: Rodgers #1 Flowline

Project Number: [none]
Project Manager: Levi Kirk

Reported:
10/10/22 15:58

SW-12@13'
2209611-04 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **09/30/22 10:15**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0020	mg/kg	1	BFJ0045	10/03/22	10/04/22	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: **09/30/22 10:15**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		129 %	50-150		"	"	"	"	
Surrogate: Toluene-d8		98.2 %	50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		104 %	50-150		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **09/30/22 10:15**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	52	50	mg/kg	1	BFJ0046	10/03/22	10/05/22	EPA 8015M	
C28-C36 (ORO)	ND	50	"	"	"	"	"	"	

Date Sampled: **09/30/22 10:15**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl		82.6 %	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: Rodgers #1 Flowline

Project Number: [none]
Project Manager: Levi Kirk

Reported:
10/10/22 15:58

SW-12@13'
2209611-04 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

Date Sampled: **09/30/22 10:15**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BFJ0004	10/03/22	10/04/22	EPA 8270D SIM	
Anthracene	ND	0.00500	"	"	"	"	"	"	
Benzo (a) anthracene	0.00594	0.00500	"	"	"	"	"	"	
Benzo (a) pyrene	ND	0.00500	"	"	"	"	"	"	
Benzo (b) fluoranthene	ND	0.00500	"	"	"	"	"	"	
Benzo (k) fluoranthene	ND	0.00500	"	"	"	"	"	"	
Chrysene	0.00543	0.00500	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	0.00500	"	"	"	"	"	"	
Fluoranthene	0.0267	0.00500	"	"	"	"	"	"	
Fluorene	0.0102	0.00500	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	ND	0.00500	"	"	"	"	"	"	
Pyrene	0.0216	0.00500	"	"	"	"	"	"	
1-Methylnaphthalene	0.0107	0.00500	"	"	"	"	"	"	
2-Methylnaphthalene	0.0186	0.00500	"	"	"	"	"	"	

Date Sampled: **09/30/22 10:15**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10		44.2 %	40-150		"	"	"	"	
Surrogate: Fluoranthene-d10		54.2 %	40-150		"	"	"	"	

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **09/30/22 10:15**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	0.454	0.0100	mg/L	1	BFJ0052	10/04/22	10/06/22	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **09/30/22 10:15**

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: Rodgers #1 Flowline

Project Number: [none]
Project Manager: Levi Kirk

Reported:
10/10/22 15:58

SW-12@13'
2209611-04 (Soil)

Summit Scientific

Total Metals by EPA 6020B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Arsenic	4.32	0.213	mg/kg dry	1	BFJ0051	10/04/22	10/05/22	EPA 6020B	
Barium	63.2	0.426	"	"	"	"	"	"	
Cadmium	ND	0.213	"	"	"	"	"	"	
Copper	8.57	0.426	"	"	"	"	"	"	
Lead	8.55	0.213	"	"	"	"	"	"	
Nickel	9.76	0.426	"	"	"	"	"	"	
Selenium	0.621	0.277	"	"	"	"	"	"	
Silver	0.0341	0.0213	"	"	"	"	"	"	
Zinc	40.4	0.426	"	"	"	"	"	"	

Hexavalent Chromium by EPA Method 7196

Date Sampled: **09/30/22 10:15**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BFJ0061	10/04/22	10/04/22	EPA 7196A	

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

Date Sampled: **09/30/22 10:15**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	410	0.0533	mg/L dry	1	BFJ0053	10/04/22	10/06/22	EPA 6020B	
Magnesium	190	0.0533	"	"	"	"	"	"	
Sodium	315	0.0533	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **09/30/22 10:15**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	3.23	0.00100	units	1	BFJ0169	10/07/22	10/07/22	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **09/30/22 10:15**

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: Rodgers #1 Flowline

Project Number: [none]
 Project Manager: Levi Kirk

Reported:
 10/10/22 15:58

SW-12@13'
2209611-04 (Soil)

Summit Scientific

Physical Parameters by APHA/ASTM/EPA Methods

% Solids	93.8	%	1	BFJ0055	10/04/22	10/05/22	Calculation
-----------------	-------------	---	---	---------	----------	----------	-------------

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **09/30/22 10:15**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	3.53	0.0100	mmhos/cm	1	BFJ0075	10/04/22	10/10/22	EPA 120.1	

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

Date Sampled: **09/30/22 10:15**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	7.59		pH Units	1	BFJ0076	10/04/22	10/10/22	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: Rodgers #1 Flowline

Project Number: [none]
Project Manager: Levi Kirk

Reported:
10/10/22 15:58

SW-13@13'
2209611-05 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **09/30/22 10:20**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0020	mg/kg	1	BFJ0045	10/03/22	10/04/22	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: **09/30/22 10:20**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		137 %	50-150		"	"	"	"	
Surrogate: Toluene-d8		100 %	50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		104 %	50-150		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **09/30/22 10:20**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	180	50	mg/kg	1	BFJ0046	10/03/22	10/05/22	EPA 8015M	
C28-C36 (ORO)	ND	50	"	"	"	"	"	"	

Date Sampled: **09/30/22 10:20**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl		93.5 %	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: Rodgers #1 Flowline

Project Number: [none]
Project Manager: Levi Kirk

Reported:
10/10/22 15:58

SW-13@13'
2209611-05 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

Date Sampled: **09/30/22 10:20**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	0.00729	0.00500	mg/kg	1	BFJ0004	10/03/22	10/04/22	EPA 8270D SIM	
Anthracene	0.00665	0.00500	"	"	"	"	"	"	
Benzo (a) anthracene	0.0113	0.00500	"	"	"	"	"	"	
Benzo (a) pyrene	ND	0.00500	"	"	"	"	"	"	
Benzo (b) fluoranthene	0.00864	0.00500	"	"	"	"	"	"	
Benzo (k) fluoranthene	ND	0.00500	"	"	"	"	"	"	
Chrysene	0.0142	0.00500	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	0.00500	"	"	"	"	"	"	
Fluoranthene	0.0466	0.00500	"	"	"	"	"	"	
Fluorene	0.0231	0.00500	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	ND	0.00500	"	"	"	"	"	"	
Pyrene	0.0319	0.00500	"	"	"	"	"	"	
1-Methylnaphthalene	0.0379	0.00500	"	"	"	"	"	"	
2-Methylnaphthalene	0.0404	0.00500	"	"	"	"	"	"	

Date Sampled: **09/30/22 10:20**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10		49.9 %	40-150		"	"	"	"	
Surrogate: Fluoranthene-d10		64.3 %	40-150		"	"	"	"	

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **09/30/22 10:20**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	0.658	0.0100	mg/L	1	BFJ0052	10/04/22	10/06/22	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **09/30/22 10:20**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Arsenic	5.59	0.215	mg/kg dry	1	BFJ0051	10/04/22	10/05/22	EPA 6020B	

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: Rodgers #1 Flowline

Project Number: [none]
Project Manager: Levi Kirk

Reported:
10/10/22 15:58

SW-13@13'
2209611-05 (Soil)

Summit Scientific

Total Metals by EPA 6020B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Barium	42.1	0.431	mg/kg dry	1	BFJ0051	10/04/22	10/05/22	EPA 6020B	
Cadmium	ND	0.215	"	"	"	"	"	"	
Copper	9.89	0.431	"	"	"	"	"	"	
Lead	11.4	0.215	"	"	"	"	"	"	
Nickel	11.0	0.431	"	"	"	"	"	"	
Selenium	0.742	0.280	"	"	"	"	"	"	
Silver	0.0244	0.0215	"	"	"	"	"	"	
Zinc	50.6	0.431	"	"	"	"	"	"	

Hexavalent Chromium by EPA Method 7196

Date Sampled: **09/30/22 10:20**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BFJ0061	10/04/22	10/04/22	EPA 7196A	

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

Date Sampled: **09/30/22 10:20**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	207	0.0538	mg/L dry	1	BFJ0053	10/04/22	10/06/22	EPA 6020B	
Magnesium	108	0.0538	"	"	"	"	"	"	
Sodium	327	0.0538	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **09/30/22 10:20**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	4.59	0.00100	units	1	BFJ0169	10/07/22	10/07/22	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **09/30/22 10:20**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	92.9		%	1	BFJ0055	10/04/22	10/05/22	Calculation	

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: Rodgers #1 Flowline

Project Number: [none]
 Project Manager: Levi Kirk

Reported:
 10/10/22 15:58

SW-13@13'
2209611-05 (Soil)

Summit Scientific

Physical Parameters by APHA/ASTM/EPA Methods

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **09/30/22 10:20**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	2.52	0.0100	mmhos/cm	1	BFJ0075	10/04/22	10/10/22	EPA 120.1	

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

Date Sampled: **09/30/22 10:20**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	7.52		pH Units	1	BFJ0076	10/04/22	10/10/22	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: Rodgers #1 Flowline

Project Number: [none]
Project Manager: Levi Kirk

Reported:
10/10/22 15:58

SW-14@13'
2209611-06 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **09/30/22 10:25**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0020	mg/kg	1	BFJ0045	10/03/22	10/04/22	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: **09/30/22 10:25**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		127 %	50-150		"	"	"	"	
Surrogate: Toluene-d8		99.0 %	50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		102 %	50-150		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **09/30/22 10:25**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	ND	50	mg/kg	1	BFJ0046	10/03/22	10/05/22	EPA 8015M	
C28-C36 (ORO)	ND	50	"	"	"	"	"	"	

Date Sampled: **09/30/22 10:25**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl		84.5 %	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: Rodgers #1 Flowline

Project Number: [none]
Project Manager: Levi Kirk

Reported:
10/10/22 15:58

SW-14@13'
2209611-06 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

Date Sampled: **09/30/22 10:25**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BFJ0004	10/03/22	10/04/22	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: **09/30/22 10:25**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10		44.0 %	40-150		"	"	"	"	
Surrogate: Fluoranthene-d10		62.7 %	40-150		"	"	"	"	

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **09/30/22 10:25**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	0.652	0.0100	mg/L	1	BFJ0052	10/04/22	10/06/22	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **09/30/22 10:25**

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: Rodgers #1 Flowline

Project Number: [none]
Project Manager: Levi Kirk

Reported:
10/10/22 15:58

SW-14@13'
2209611-06 (Soil)

Summit Scientific

Total Metals by EPA 6020B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Arsenic	4.92	0.225	mg/kg dry	1	BFJ0051	10/04/22	10/05/22	EPA 6020B	
Barium	76.2	0.450	"	"	"	"	"	"	
Cadmium	ND	0.225	"	"	"	"	"	"	
Copper	10.1	0.450	"	"	"	"	"	"	
Lead	9.60	0.225	"	"	"	"	"	"	
Nickel	12.0	0.450	"	"	"	"	"	"	
Selenium	0.735	0.292	"	"	"	"	"	"	
Silver	0.0278	0.0225	"	"	"	"	"	"	
Zinc	51.5	0.450	"	"	"	"	"	"	

Hexavalent Chromium by EPA Method 7196

Date Sampled: **09/30/22 10:25**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BFJ0061	10/04/22	10/04/22	EPA 7196A	

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

Date Sampled: **09/30/22 10:25**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	53.8	0.0562	mg/L dry	1	BFJ0053	10/04/22	10/06/22	EPA 6020B	
Magnesium	26.7	0.0562	"	"	"	"	"	"	
Sodium	169	0.0562	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **09/30/22 10:25**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	4.71	0.00100	units	1	BFJ0169	10/07/22	10/07/22	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **09/30/22 10:25**

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: Rodgers #1 Flowline

Project Number: [none]
 Project Manager: Levi Kirk

Reported:
 10/10/22 15:58

SW-14@13'
2209611-06 (Soil)

Summit Scientific

Physical Parameters by APHA/ASTM/EPA Methods

% Solids	88.9	%	1	BFJ0055	10/04/22	10/05/22	Calculation
-----------------	-------------	---	---	---------	----------	----------	-------------

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **09/30/22 10:25**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.983	0.0100	mmhos/cm	1	BFJ0075	10/04/22	10/10/22	EPA 120.1	

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

Date Sampled: **09/30/22 10:25**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	7.81		pH Units	1	BFJ0076	10/04/22	10/10/22	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: Rodgers #1 Flowline

Project Number: [none]
Project Manager: Levi Kirk

Reported:
10/10/22 15:58

BH-9@15'
2209611-07 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0020	mg/kg	1	BFJ0045	10/03/22	10/04/22	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: **09/30/22 10:30**

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		100 %	50-150		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	ND	50	mg/kg	1	BFJ0046	10/03/22	10/05/22	EPA 8015M	
C28-C36 (ORO)	ND	50	"	"	"	"	"	"	

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl		73.7 %	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: Rodgers #1 Flowline

Project Number: [none]
Project Manager: Levi Kirk

Reported:
10/10/22 15:58

BH-9@15'
2209611-07 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BFJ0004	10/03/22	10/04/22	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	0.0157	0.00500	"	"	"	"	"	"	
Fluorene	ND	0.00500	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	ND	0.00500	"	"	"	"	"	"	
Pyrene	0.0112	0.00500	"	"	"	"	"	"	
1-Methylnaphthalene	ND	0.00500	"	"	"	"	"	"	
2-Methylnaphthalene	ND	0.00500	"	"	"	"	"	"	

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10	45.1 %	40-150			"	"	"	"	
Surrogate: Fluoranthene-d10	69.2 %	40-150			"	"	"	"	

Total Metals by EPA 6020B Hot Water Soluble Extraction

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	0.329	0.0100	mg/L	1	BFJ0052	10/04/22	10/06/22	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **09/30/22 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: Rodgers #1 Flowline

Project Number: [none]
Project Manager: Levi Kirk

Reported:
10/10/22 15:58

BH-9@15'
2209611-07 (Soil)

Summit Scientific

Total Metals by EPA 6020B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Arsenic	5.19	0.225	mg/kg dry	1	BFJ0051	10/04/22	10/05/22	EPA 6020B	
Barium	17.8	0.451	"	"	"	"	"	"	
Cadmium	ND	0.225	"	"	"	"	"	"	
Copper	6.16	0.451	"	"	"	"	"	"	
Lead	6.62	0.225	"	"	"	"	"	"	
Nickel	8.51	0.451	"	"	"	"	"	"	
Selenium	0.524	0.293	"	"	"	"	"	"	
Silver	ND	0.0225	"	"	"	"	"	"	
Zinc	39.5	0.451	"	"	"	"	"	"	

Hexavalent Chromium by EPA Method 7196

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BFJ0061	10/04/22	10/04/22	EPA 7196A	

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

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	508	0.0563	mg/L dry	1	BFJ0053	10/04/22	10/06/22	EPA 6020B	
Magnesium	199	0.0563	"	"	"	"	"	"	
Sodium	306	0.0563	"	"	"	"	"	"	

Calculated Analysis

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	2.92	0.00100	units	1	BFJ0169	10/07/22	10/07/22	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: Rodgers #1 Flowline

Project Number: [none]
Project Manager: Levi Kirk

Reported:
10/10/22 15:58

BH-9@15'
2209611-07 (Soil)

Summit Scientific

Physical Parameters by APHA/ASTM/EPA Methods

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	88.8		%	1	BFJ0055	10/04/22	10/05/22	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	3.62	0.0100	mmhos/cm	1	BFJ0075	10/04/22	10/10/22	EPA 120.1	

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

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	7.19		pH Units	1	BFJ0076	10/04/22	10/10/22	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: Rodgers #1 Flowline

Project Number: [none]
Project Manager: Levi Kirk

Reported:
10/10/22 15:58

BH-10@15'
2209611-08 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **09/30/22 10:35**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0020	mg/kg	1	BFJ0045	10/03/22	10/04/22	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: **09/30/22 10:35**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		116 %	50-150		"	"	"	"	
Surrogate: Toluene-d8		98.6 %	50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		99.4 %	50-150		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **09/30/22 10:35**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	ND	50	mg/kg	1	BFJ0046	10/03/22	10/05/22	EPA 8015M	
C28-C36 (ORO)	ND	50	"	"	"	"	"	"	

Date Sampled: **09/30/22 10:35**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl		68.9 %	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: Rodgers #1 Flowline

Project Number: [none]
Project Manager: Levi Kirk

Reported:
10/10/22 15:58

BH-10@15'
2209611-08 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

Date Sampled: **09/30/22 10:35**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BFJ0004	10/03/22	10/04/22	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: **09/30/22 10:35**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10		48.3 %	40-150		"	"	"	"	
Surrogate: Fluoranthene-d10		72.2 %	40-150		"	"	"	"	

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **09/30/22 10:35**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	0.262	0.0100	mg/L	1	BFJ0052	10/04/22	10/06/22	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **09/30/22 10:35**

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: Rodgers #1 Flowline

Project Number: [none]
Project Manager: Levi Kirk

Reported:
10/10/22 15:58

BH-10@15'
2209611-08 (Soil)

Summit Scientific

Total Metals by EPA 6020B

Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Arsenic	7.32	0.242	mg/kg dry	1	BFJ0051	10/04/22	10/05/22	EPA 6020B	
Barium	27.2	0.483	"	"	"	"	"	"	
Cadmium	ND	0.242	"	"	"	"	"	"	
Copper	9.68	0.483	"	"	"	"	"	"	
Lead	11.5	0.242	"	"	"	"	"	"	
Nickel	10.8	0.483	"	"	"	"	"	"	
Selenium	0.817	0.314	"	"	"	"	"	"	
Silver	ND	0.0242	"	"	"	"	"	"	
Zinc	54.0	0.483	"	"	"	"	"	"	

Hexavalent Chromium by EPA Method 7196

Date Sampled: **09/30/22 10:35**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BFJ0061	10/04/22	10/04/22	EPA 7196A	

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

Date Sampled: **09/30/22 10:35**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	90.7	0.0604	mg/L dry	1	BFJ0053	10/04/22	10/06/22	EPA 6020B	
Magnesium	42.5	0.0604	"	"	"	"	"	"	
Sodium	171	0.0604	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **09/30/22 10:35**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	3.71	0.00100	units	1	BFJ0169	10/07/22	10/07/22	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: Rodgers #1 Flowline

Project Number: [none]
Project Manager: Levi Kirk

Reported:
10/10/22 15:58

BH-10@15'
2209611-08 (Soil)

Summit Scientific

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **09/30/22 10:35**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	82.8		%	1	BFJ0055	10/04/22	10/05/22	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **09/30/22 10:35**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	1.18	0.0100	mmhos/cm	1	BFJ0075	10/04/22	10/10/22	EPA 120.1	

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

Date Sampled: **09/30/22 10:35**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	7.54		pH Units	1	BFJ0076	10/04/22	10/10/22	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: Rodgers #1 Flowline

Project Number: [none]
Project Manager: Levi Kirk

Reported:
10/10/22 15:58

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 BFJ0045 - EPA 5030 Soil MS

Blank (BFJ0045-BLK1)

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

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>	0.0388		"	0.0400		96.9	50-150			
<i>Surrogate: Toluene-d8</i>	0.0354		"	0.0400		88.6	50-150			
<i>Surrogate: 4-Bromofluorobenzene</i>	0.0369		"	0.0400		92.2	50-150			

LCS (BFJ0045-BS1)

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

Benzene	0.103	0.0020	mg/kg	0.125		82.0	70-130			
Toluene	0.0908	0.0050	"	0.125		72.6	70-130			
Ethylbenzene	0.148	0.0050	"	0.125		118	70-130			
m,p-Xylene	0.293	0.010	"	0.250		117	70-130			
o-Xylene	0.129	0.0050	"	0.125		103	70-130			
1,2,4-Trimethylbenzene	0.151	0.0050	"	0.125		121	70-130			
1,3,5-Trimethylbenzene	0.155	0.0050	"	0.125		124	70-130			
Naphthalene	0.118	0.0038	"	0.125		94.3	70-130			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	0.0393		"	0.0400		98.2	50-150			
<i>Surrogate: Toluene-d8</i>	0.0359		"	0.0400		89.7	50-150			
<i>Surrogate: 4-Bromofluorobenzene</i>	0.0350		"	0.0400		87.5	50-150			

Matrix Spike (BFJ0045-MS1)

Source: 2209562-01

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

Benzene	0.103	0.0020	mg/kg	0.125	ND	82.5	70-130			
Toluene	0.0932	0.0050	"	0.125	ND	74.6	70-130			
Ethylbenzene	0.158	0.0050	"	0.125	ND	127	70-130			
m,p-Xylene	0.312	0.010	"	0.250	ND	125	70-130			
o-Xylene	0.139	0.0050	"	0.125	ND	111	70-130			
1,2,4-Trimethylbenzene	0.161	0.0050	"	0.125	ND	129	70-130			
1,3,5-Trimethylbenzene	0.154	0.0050	"	0.125	ND	123	70-130			
Naphthalene	0.135	0.0038	"	0.125	ND	108	70-130			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	0.0392		"	0.0400		98.0	50-150			
<i>Surrogate: Toluene-d8</i>	0.0358		"	0.0400		89.5	50-150			
<i>Surrogate: 4-Bromofluorobenzene</i>	0.0350		"	0.0400		87.4	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: Rodgers #1 Flowline

Project Number: [none]
Project Manager: Levi Kirk

Reported:
10/10/22 15:58

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 BFJ0045 - EPA 5030 Soil MS

Matrix Spike Dup (BFJ0045-MSD1)	Source: 2209562-01			Prepared: 10/03/22 Analyzed: 10/04/22						
Benzene	0.102	0.0020	mg/kg	0.125	ND	81.2	70-130	1.55	30	
Toluene	0.0937	0.0050	"	0.125	ND	75.0	70-130	0.546	30	
Ethylbenzene	0.159	0.0050	"	0.125	ND	127	70-130	0.624	30	
m,p-Xylene	0.310	0.010	"	0.250	ND	124	70-130	0.588	30	
o-Xylene	0.139	0.0050	"	0.125	ND	111	70-130	0.194	30	
1,2,4-Trimethylbenzene	0.155	0.0050	"	0.125	ND	124	70-130	4.04	30	
1,3,5-Trimethylbenzene	0.158	0.0050	"	0.125	ND	126	70-130	2.62	30	
Naphthalene	0.134	0.0038	"	0.125	ND	107	70-130	0.714	30	
Surrogate: 1,2-Dichloroethane-d4	0.0390		"	0.0400		97.6	50-150			
Surrogate: Toluene-d8	0.0358		"	0.0400		89.5	50-150			
Surrogate: 4-Bromofluorobenzene	0.0348		"	0.0400		86.9	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: Rodgers #1 Flowline

Project Number: [none]
Project Manager: Levi Kirk

Reported:
10/10/22 15:58

Extractable Petroleum Hydrocarbons by 8015 - Quality Control
Summit Scientific

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

Batch BFJ0046 - EPA 3550A

Blank (BFJ0046-BLK1)

Prepared & Analyzed: 10/03/22

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

LCS (BFJ0046-BS1)

Prepared & Analyzed: 10/03/22

C10-C28 (DRO)	578	50	mg/kg	500	116	70-130					
---------------	-----	----	-------	-----	-----	--------	--	--	--	--	--

Matrix Spike (BFJ0046-MS1)

Source: 2209562-01

Prepared & Analyzed: 10/03/22

C10-C28 (DRO)	592	50	mg/kg	500	13.7	116	70-130				
---------------	-----	----	-------	-----	------	-----	--------	--	--	--	--

Matrix Spike Dup (BFJ0046-MSD1)

Source: 2209562-01

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

C10-C28 (DRO)	602	50	mg/kg	500	13.7	118	70-130	1.78	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: Rodgers #1 Flowline

Project Number: [none]
Project Manager: Levi Kirk

Reported:
10/10/22 15:58

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 BFJ0004 - EPA 5030 Soil MS

Blank (BFJ0004-BLK1)

Prepared & Analyzed: 10/03/22

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>	<i>0.0219</i>		<i>"</i>	<i>0.0333</i>		<i>65.8</i>	<i>40-150</i>			
<i>Surrogate: Fluoranthene-d10</i>	<i>0.0319</i>		<i>"</i>	<i>0.0333</i>		<i>95.8</i>	<i>40-150</i>			

LCS (BFJ0004-BS1)

Prepared & Analyzed: 10/03/22

Acenaphthene	0.0294	0.00500	mg/kg	0.0333		88.2	31-137			
Anthracene	0.0290	0.00500	"	0.0333		87.0	30-120			
Benzo (a) anthracene	0.0246	0.00500	"	0.0333		73.9	30-120			
Benzo (a) pyrene	0.0238	0.00500	"	0.0333		71.4	30-120			
Benzo (b) fluoranthene	0.0267	0.00500	"	0.0333		80.1	30-120			
Benzo (k) fluoranthene	0.0321	0.00500	"	0.0333		96.2	30-120			
Chrysene	0.0333	0.00500	"	0.0333		100	30-120			
Dibenz (a,h) anthracene	0.0219	0.00500	"	0.0333		65.8	30-120			
Fluoranthene	0.0293	0.00500	"	0.0333		87.8	30-120			
Fluorene	0.0310	0.00500	"	0.0333		93.0	30-120			
Indeno (1,2,3-cd) pyrene	0.0330	0.00500	"	0.0333		98.9	30-120			
Pyrene	0.0338	0.00500	"	0.0333		101	35-142			
1-Methylnaphthalene	0.0253	0.00500	"	0.0333		76.0	35-142			
2-Methylnaphthalene	0.0311	0.00500	"	0.0333		93.3	35-142			
<i>Surrogate: 2-Methylnaphthalene-d10</i>	<i>0.0260</i>		<i>"</i>	<i>0.0333</i>		<i>77.9</i>	<i>40-150</i>			
<i>Surrogate: Fluoranthene-d10</i>	<i>0.0288</i>		<i>"</i>	<i>0.0333</i>		<i>86.4</i>	<i>40-150</i>			

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: Rodgers #1 Flowline

Project Number: [none]
Project Manager: Levi Kirk

Reported:
10/10/22 15:58

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 BFJ0004 - EPA 5030 Soil MS

Matrix Spike (BFJ0004-MS1)		Source: 2209421-02			Prepared & Analyzed: 10/03/22						
Acenaphthene	0.0147	0.00500	mg/kg	0.0333	ND	44.0	31-137				
Anthracene	0.0135	0.00500	"	0.0333	ND	40.5	30-120				
Benzo (a) anthracene	0.0160	0.00500	"	0.0333	ND	47.9	30-120				
Benzo (a) pyrene	0.0144	0.00500	"	0.0333	ND	43.3	30-120				
Benzo (b) fluoranthene	0.0241	0.00500	"	0.0333	ND	72.4	30-120				
Benzo (k) fluoranthene	0.0158	0.00500	"	0.0333	ND	47.4	30-120				
Chrysene	0.0137	0.00500	"	0.0333	ND	41.0	30-120				
Dibenz (a,h) anthracene	0.0140	0.00500	"	0.0333	ND	42.1	30-120				
Fluoranthene	0.0140	0.00500	"	0.0333	ND	42.0	30-120				
Fluorene	0.0166	0.00500	"	0.0333	ND	49.7	30-120				
Indeno (1,2,3-cd) pyrene	0.0140	0.00500	"	0.0333	ND	42.1	30-120				
Pyrene	0.0139	0.00500	"	0.0333	ND	41.6	35-142				
1-Methylnaphthalene	0.0134	0.00500	"	0.0333	ND	40.1	15-130				
2-Methylnaphthalene	0.0202	0.00500	"	0.0333	ND	60.5	15-130				
<i>Surrogate: 2-Methylnaphthalene-d10</i>	<i>0.0259</i>		<i>"</i>	<i>0.0333</i>		<i>77.7</i>	<i>40-150</i>				
<i>Surrogate: Fluoranthene-d10</i>	<i>0.0144</i>		<i>"</i>	<i>0.0333</i>		<i>43.1</i>	<i>40-150</i>				

Matrix Spike Dup (BFJ0004-MSD1)		Source: 2209421-02			Prepared & Analyzed: 10/03/22						
Acenaphthene	0.0146	0.00500	mg/kg	0.0333	ND	43.8	31-137	0.456	30		
Anthracene	0.0137	0.00500	"	0.0333	ND	41.2	30-120	1.70	30		
Benzo (a) anthracene	0.0137	0.00500	"	0.0333	ND	41.0	30-120	15.5	30		
Benzo (a) pyrene	0.0156	0.00500	"	0.0333	ND	46.9	30-120	8.20	30		
Benzo (b) fluoranthene	0.0259	0.00500	"	0.0333	ND	77.6	30-120	6.94	30		
Benzo (k) fluoranthene	0.0181	0.00500	"	0.0333	ND	54.4	30-120	13.8	30		
Chrysene	0.0143	0.00500	"	0.0333	ND	43.0	30-120	4.83	30		
Dibenz (a,h) anthracene	0.0151	0.00500	"	0.0333	ND	45.3	30-120	7.14	30		
Fluoranthene	0.0141	0.00500	"	0.0333	ND	42.2	30-120	0.475	30		
Fluorene	0.0158	0.00500	"	0.0333	ND	47.3	30-120	4.93	30		
Indeno (1,2,3-cd) pyrene	0.0164	0.00500	"	0.0333	ND	49.3	30-120	16.0	30		
Pyrene	0.0146	0.00500	"	0.0333	ND	43.9	35-142	5.40	30		
1-Methylnaphthalene	0.0158	0.00500	"	0.0333	ND	47.4	15-130	16.6	50		
2-Methylnaphthalene	0.0176	0.00500	"	0.0333	ND	52.7	15-130	13.7	50		
<i>Surrogate: 2-Methylnaphthalene-d10</i>	<i>0.0205</i>		<i>"</i>	<i>0.0333</i>		<i>61.5</i>	<i>40-150</i>				
<i>Surrogate: Fluoranthene-d10</i>	<i>0.0143</i>		<i>"</i>	<i>0.0333</i>		<i>42.9</i>	<i>40-150</i>				

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: Rodgers #1 Flowline

Project Number: [none]
Project Manager: Levi Kirk

Reported:
10/10/22 15:58

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

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

Batch BFJ0052 - EPA 3050B

Blank (BFJ0052-BLK1)

Prepared: 10/04/22 Analyzed: 10/06/22

Boron ND 0.0100 mg/L

LCS (BFJ0052-BS1)

Prepared: 10/04/22 Analyzed: 10/06/22

Boron 5.80 0.0100 mg/L 5.00 116 80-120

Duplicate (BFJ0052-DUP1)

Source: 2209542-01

Prepared: 10/04/22 Analyzed: 10/06/22

Boron 0.0886 0.0100 mg/L 0.0878 0.905 20

Matrix Spike (BFJ0052-MS1)

Source: 2209542-01

Prepared: 10/04/22 Analyzed: 10/06/22

Boron 6.04 0.0100 mg/L 5.00 0.0878 119 75-125

Matrix Spike Dup (BFJ0052-MSD1)

Source: 2209542-01

Prepared: 10/04/22 Analyzed: 10/06/22

Boron 6.39 0.0100 mg/L 5.00 0.0878 126 75-125 5.63 25 QM-07

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: Rodgers #1 Flowline

Project Number: [none]
Project Manager: Levi Kirk

Reported:
10/10/22 15:58

Total Metals by EPA 6020B - Quality Control
Summit Scientific

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

Batch BFJ0051 - EPA 3050B

Blank (BFJ0051-BLK1)

Prepared: 10/04/22 Analyzed: 10/05/22

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 (BFJ0051-BS1)

Prepared: 10/04/22 Analyzed: 10/05/22

Arsenic	41.8	0.200	mg/kg wet	40.0		104	80-120
Barium	43.7	0.400	"	40.0		109	80-120
Cadmium	2.21	0.200	"	2.00		110	80-120
Copper	40.4	0.400	"	40.0		101	80-120
Lead	21.9	0.200	"	20.0		109	80-120
Nickel	39.9	0.400	"	40.0		99.8	80-120
Selenium	3.79	0.260	"	4.00		94.7	80-120
Silver	2.18	0.0200	"	2.00		109	80-120
Zinc	42.4	0.400	"	40.0		106	80-120

Duplicate (BFJ0051-DUP1)

Source: 2208413-07

Prepared: 10/04/22 Analyzed: 10/05/22

Arsenic	5.17	0.257	mg/kg dry		4.98		3.66	20
Barium	143	0.514	"		131		8.69	20
Cadmium	0.363	0.257	"		0.333		8.80	20
Copper	13.5	0.514	"		12.7		5.72	20
Lead	10.7	0.257	"		9.88		7.72	20
Nickel	16.2	0.514	"		15.4		4.80	20
Selenium	0.839	0.334	"		0.742		12.4	20
Silver	0.0430	0.0257	"		0.0395		8.49	20
Zinc	53.8	0.514	"		51.3		4.67	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: Rodgers #1 Flowline

Project Number: [none]
Project Manager: Levi Kirk

Reported:
10/10/22 15:58

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 BFJ0051 - EPA 3050B

Matrix Spike (BFJ0051-MS1)

Source: 2208413-07

Prepared: 10/04/22 Analyzed: 10/05/22

Arsenic	54.4	0.257	mg/kg dry	51.4	4.98	96.2	75-125			
Barium	184	0.514	"	51.4	131	102	75-125			
Cadmium	2.93	0.257	"	2.57	0.333	101	75-125			
Copper	61.0	0.514	"	51.4	12.7	94.0	75-125			
Lead	32.5	0.257	"	25.7	9.88	88.1	75-125			
Nickel	64.3	0.514	"	51.4	15.4	95.3	75-125			
Selenium	4.72	0.334	"	5.14	0.742	77.5	75-125			
Silver	2.55	0.0257	"	2.57	0.0395	97.6	75-125			
Zinc	102	0.514	"	51.4	51.3	99.1	75-125			

Matrix Spike Dup (BFJ0051-MSD1)

Source: 2208413-07

Prepared: 10/04/22 Analyzed: 10/05/22

Arsenic	55.5	0.257	mg/kg dry	51.4	4.98	98.5	75-125	2.10	25
Barium	184	0.514	"	51.4	131	102	75-125	0.0154	25
Cadmium	2.98	0.257	"	2.57	0.333	103	75-125	1.63	25
Copper	62.5	0.514	"	51.4	12.7	96.9	75-125	2.42	25
Lead	32.8	0.257	"	25.7	9.88	89.3	75-125	0.955	25
Nickel	65.8	0.514	"	51.4	15.4	98.2	75-125	2.28	25
Selenium	5.01	0.334	"	5.14	0.742	83.2	75-125	5.95	25
Silver	2.57	0.0257	"	2.57	0.0395	98.7	75-125	1.05	25
Zinc	104	0.514	"	51.4	51.3	103	75-125	1.74	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: Rodgers #1 Flowline

Project Number: [none]
Project Manager: Levi Kirk

Reported:
10/10/22 15:58

Hexavalent Chromium by EPA Method 7196 - Quality Control
Summit Scientific

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

Batch BFJ0061 - 3060A Mod

Blank (BFJ0061-BLK1)

Prepared & Analyzed: 10/04/22

Chromium, Hexavalent ND 0.30 mg/kg wet

LCS (BFJ0061-BS1)

Prepared & Analyzed: 10/04/22

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

Duplicate (BFJ0061-DUP1)

Source: 2209611-01

Prepared & Analyzed: 10/04/22

Chromium, Hexavalent ND 0.30 mg/kg dry ND 20

Matrix Spike (BFJ0061-MS1)

Source: 2209611-01

Prepared & Analyzed: 10/04/22

Chromium, Hexavalent 40.7 0.30 mg/kg dry 27.4 ND 148 75-125 QM-05

Matrix Spike Dup (BFJ0061-MSD1)

Source: 2209611-01

Prepared & Analyzed: 10/04/22

Chromium, Hexavalent 36.6 0.30 mg/kg dry 27.4 ND 133 75-125 10.6 20 QM-05

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: Rodgers #1 Flowline

Project Number: [none]
Project Manager: Levi Kirk

Reported:
10/10/22 15:58

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

Summit Scientific

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

Batch BFJ0053 - General Preparation

Blank (BFJ0053-BLK1)

Prepared: 10/04/22 Analyzed: 10/06/22

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

LCS (BFJ0053-BS1)

Prepared: 10/04/22 Analyzed: 10/06/22

Calcium	6.21	0.0500	mg/L wet	5.00		124	70-130			
Magnesium	6.34	0.0500	"	5.00		127	70-130			
Sodium	5.87	0.0500	"	5.00		117	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: Rodgers #1 Flowline

Project Number: [none]
 Project Manager: Levi Kirk

Reported:
 10/10/22 15:58

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

Summit Scientific

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

Batch BFJ0055 - General Preparation

Duplicate (BFJ0055-DUP1)

Source: 2209549-01

Prepared: 10/04/22 Analyzed: 10/05/22

% Solids	87.0		%		86.7			0.344		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: Rodgers #1 Flowline

Project Number: [none]
Project Manager: Levi Kirk

Reported:
10/10/22 15:58

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

Summit Scientific

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

Batch BFJ0075 - General Preparation

Blank (BFJ0075-BLK1)

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

Specific Conductance (EC) ND 0.0100 mmhos/cm

LCS (BFJ0075-BS1)

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

Specific Conductance (EC) 0.156 0.0100 mmhos/cm 0.150 104 95-105

Duplicate (BFJ0075-DUP1)

Source: 2209542-01

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

Specific Conductance (EC) 0.211 0.0100 mmhos/cm 0.218 3.54 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: Rodgers #1 Flowline

Project Number: [none]
 Project Manager: Levi Kirk

Reported:
 10/10/22 15:58

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 BFJ0076 - General Preparation

LCS (BFJ0076-BS1)

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

pH	9.08	pH Units	9.18	98.9	95-105
----	------	----------	------	------	--------

Duplicate (BFJ0076-DUP1)

Source: 2209542-01

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

pH	7.70	pH Units	7.61	1.18	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: Rodgers #1 Flowline

Project Number: [none]
Project Manager: Levi Kirk

Reported:
10/10/22 15:58

Notes and Definitions

- QM-07 The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS/LCSD recovery.
- QM-05 The spike recovery was outside acceptance limits for the MS and/or MSD due to matrix interference. The associated LCS and/or LCSD were within acceptance limits, therefore the data are considered valid.
- 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