

Summit Scientific

4653 Table Mountain Drive, Golden, Colorado 80403

303.277.9310

October 03, 2022

Kevin Tautkus

K.P. Kauffman

1675 Broadway

Denver, CO 80202

RE: Solid Waste Storage Facility

Work Order #2209333

Enclosed are the results of analyses for samples received by Summit Scientific on 09/16/22 12:00. If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Mikayla Axtell For Paul Shrewsbury
President



K.P. Kauffman
1675 Broadway
Denver CO, 80202

Project: Solid Waste Storage Facility

Project Number: [none]
Project Manager: Kevin Tautkus

Reported:
10/03/22 11:21

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SW-1@2'	2209333-01	Soil	09/14/22 10:44	09/16/22 12:00
SW-2@2'	2209333-02	Soil	09/14/22 10:46	09/16/22 12:00
SW-3@2'	2209333-03	Soil	09/14/22 10:48	09/16/22 12:00
SW-4@2'	2209333-04	Soil	09/14/22 10:50	09/16/22 12:00
SW-5@2'	2209333-05	Soil	09/14/22 10:52	09/16/22 12:00
SW-6@2'	2209333-06	Soil	09/14/22 10:54	09/16/22 12:00
SW-7@2'	2209333-07	Soil	09/14/22 10:56	09/16/22 12:00
SW-8@2'	2209333-08	Soil	09/14/22 10:58	09/16/22 12:00
SW-9@2'	2209333-09	Soil	09/14/22 11:00	09/16/22 12:00
SW-10@2'	2209333-10	Soil	09/14/22 11:02	09/16/22 12:00
SW-11@2'	2209333-11	Soil	09/14/22 11:04	09/16/22 12:00
SW-12@2'	2209333-12	Soil	09/14/22 11:06	09/16/22 12:00
SW-13@2'	2209333-13	Soil	09/14/22 11:08	09/16/22 12:00
SW-14@2'	2209333-14	Soil	09/14/22 11:10	09/16/22 12:00
SW-15@2'	2209333-15	Soil	09/14/22 11:12	09/16/22 12:00
SW-16@2'	2209333-16	Soil	09/14/22 11:14	09/16/22 12:00
SW-17@2'	2209333-17	Soil	09/14/22 11:30	09/16/22 12:00
BH-1@3'	2209333-18	Soil	09/14/22 11:16	09/16/22 12:00
BH-2@3'	2209333-19	Soil	09/14/22 11:18	09/16/22 12:00
BH-3@3'	2209333-20	Soil	09/14/22 11:20	09/16/22 12:00
BH-4@3'	2209333-21	Soil	09/14/22 11:22	09/16/22 12:00
BH-5@3'	2209333-22	Soil	09/14/22 11:24	09/16/22 12:00
BH-6@3'	2209333-23	Soil	09/14/22 11:26	09/16/22 12:00
BH-7@3'	2209333-24	Soil	09/14/22 11:28	09/16/22 12:00
Background1@2'	2209333-25	Soil	09/14/22 11:32	09/16/22 12:00
Background2@2'	2209333-26	Soil	09/14/22 11:36	09/16/22 12:00
Background3@2'	2209333-27	Soil	09/14/22 11:40	09/16/22 12:00

Summit Scientific

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



K.P. Kauffman
1675 Broadway
Denver CO, 80202

Project: Solid Waste Storage Facility

Project Number: [none]
Project Manager: Kevin Tautkus

Reported:
10/03/22 11:21

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Background4@2'	2209333-28	Soil	09/14/22 11:44	09/16/22 12:00
Background5@2'	2209333-29	Soil	09/14/22 11:48	09/16/22 12:00
Background6@2'	2209333-30	Soil	09/14/22 11:52	09/16/22 12:00

Summit Scientific

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

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2209333.1

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

Page 1 of 3

Client: K.P. Kauffman Company, Inc.

Project Manager: Levi Kirk

Address: 1675 Broadway

E-Mail: Primary Contractor @ Marcom

City/State/Zip: Denver, CO 80202

Phone: 303-825-4822

Project Name: Solid Waste Storage Facility

Sampler Name: HC PCP

Project Number:

ID	Sample Description	Date Sampled	Time Sampled	# of containers	Preservative				Matrix				Analysis Requested								Special Instructions																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
					HCl	HNO ₃	None	Other	Water	Soil	Air-Canister #	Other	Fe	Mn	Pb	Cd	Cr	Cu	Zn	As		Hg	Se	Mo	Co	Ni	Al	S	Ca	Mg	K	Na	Cl	F	Br	I	B	Li	Be	Si	Ti	V	Cr	Mn	Fe	Ni	Cu	Zn	Pb	Cd	Hg	As	Sb	Bi	P	S	Se	Te	Mo	Co	Ni	Al	S	Ca	Mg	K	Na	Cl	F	Br	I	B	Li	Be	Si	Ti	V	Cr	Mn	Fe	Ni	Cu	Zn	Pb	Cd	Hg	As	Sb	Bi	P	S	Se	Te	Mo	Co	Ni	Al	S	Ca	Mg	K	Na	Cl	F	Br	I	B	Li	Be	Si	Ti	V	Cr	Mn	Fe	Ni	Cu	Zn	Pb	Cd	Hg	As	Sb	Bi	P	S	Se	Te	Mo	Co	Ni	Al	S	Ca	Mg	K	Na	Cl	F	Br	I	B	Li	Be	Si	Ti	V	Cr	Mn	Fe	Ni	Cu	Zn	Pb	Cd	Hg	As	Sb	Bi	P	S	Se	Te	Mo	Co	Ni	Al	S	Ca	Mg	K	Na	Cl	F	Br	I	B	Li	Be	Si	Ti	V	Cr	Mn	Fe	Ni	Cu	Zn	Pb	Cd	Hg	As	Sb	Bi	P	S	Se	Te	Mo	Co	Ni	Al	S	Ca	Mg	K	Na	Cl	F	Br	I	B	Li	Be	Si	Ti	V	Cr	Mn	Fe	Ni	Cu	Zn	Pb	Cd	Hg	As	Sb	Bi	P	S	Se	Te	Mo	Co	Ni	Al	S	Ca	Mg	K	Na	Cl	F	Br	I	B	Li	Be	Si	Ti	V	Cr	Mn	Fe	Ni	Cu	Zn	Pb	Cd	Hg	As	Sb	Bi	P	S	Se	Te	Mo	Co	Ni	Al	S	Ca	Mg	K	Na	Cl	F	Br	I	B	Li	Be	Si	Ti	V	Cr	Mn	Fe	Ni	Cu	Zn	Pb	Cd	Hg	As	Sb	Bi	P	S	Se	Te	Mo	Co	Ni	Al	S	Ca	Mg	K	Na	Cl	F	Br	I	B	Li	Be	Si	Ti	V	Cr	Mn	Fe	Ni	Cu	Zn	Pb	Cd	Hg	As	Sb	Bi	P	S	Se	Te	Mo	Co	Ni	Al	S	Ca	Mg	K	Na	Cl	F	Br	I	B	Li	Be	Si	Ti	V	Cr	Mn	Fe	Ni	Cu	Zn	Pb	Cd	Hg	As	Sb	Bi	P	S	Se	Te	Mo	Co	Ni	Al	S	Ca	Mg	K	Na	Cl	F	Br	I	B	Li	Be	Si	Ti	V	Cr	Mn	Fe	Ni	Cu	Zn	Pb	Cd	Hg	As	Sb	Bi	P	S	Se	Te	Mo	Co	Ni	Al	S	Ca	Mg	K	Na	Cl	F	Br	I	B	Li	Be	Si	Ti	V	Cr	Mn	Fe	Ni	Cu	Zn	Pb	Cd	Hg	As	Sb	Bi	P	S	Se	Te	Mo	Co	Ni	Al	S	Ca	Mg	K	Na	Cl	F	Br	I	B	Li	Be	Si	Ti	V	Cr	Mn	Fe	Ni	Cu	Zn	Pb	Cd	Hg	As	Sb	Bi	P	S	Se	Te	Mo	Co	Ni	Al	S	Ca	Mg	K	Na	Cl	F	Br	I	B	Li	Be	Si	Ti	V	Cr	Mn	Fe	Ni	Cu	Zn	Pb	Cd	Hg	As	Sb	Bi	P	S	Se	Te	Mo	Co	Ni	Al	S	Ca	Mg	K	Na	Cl	F	Br	I	B	Li	Be	Si	Ti	V	Cr	Mn	Fe	Ni	Cu	Zn	Pb	Cd	Hg	As	Sb	Bi	P	S	Se	Te	Mo	Co	Ni	Al	S	Ca	Mg	K	Na	Cl	F	Br	I	B	Li	Be	Si	Ti	V	Cr	Mn	Fe	Ni	Cu	Zn	Pb	Cd	Hg	As	Sb	Bi	P	S	Se	Te	Mo	Co	Ni	Al	S	Ca	Mg	K	Na	Cl	F	Br	I	B	Li	Be	Si	Ti	V	Cr	Mn	Fe	Ni	Cu	Zn	Pb	Cd	Hg	As	Sb	Bi	P	S	Se	Te	Mo	Co	Ni	Al	S	Ca	Mg	K	Na	Cl	F	Br	I	B	Li	Be	Si	Ti	V	Cr	Mn	Fe	Ni	Cu	Zn	Pb	Cd	Hg	As	Sb	Bi	P	S	Se	Te	Mo	Co	Ni	Al	S	Ca	Mg	K	Na	Cl	F	Br	I	B	Li	Be	Si	Ti	V	Cr	Mn	Fe	Ni	Cu	Zn	Pb	Cd	Hg	As	Sb	Bi	P	S	Se	Te	Mo	Co	Ni	Al	S	Ca	Mg	K	Na	Cl	F	Br	I	B	Li	Be	Si	Ti	V	Cr	Mn	Fe	Ni	Cu	Zn	Pb	Cd	Hg	As	Sb	Bi	P	S	Se	Te	Mo	Co	Ni	Al	S	Ca	Mg	K	Na	Cl	F	Br	I	B	Li	Be	Si	Ti	V	Cr	Mn	Fe	Ni	Cu	Zn	Pb	Cd	Hg	As	Sb	Bi	P	S	Se	Te	Mo	Co	Ni	Al	S	Ca	Mg	K	Na	Cl	F	Br	I	B	Li	Be	Si	Ti	V	Cr	Mn	Fe	Ni	Cu	Zn	Pb	Cd	Hg	As	Sb	Bi	P	S	Se	Te	Mo	Co	Ni	Al	S	Ca	Mg	K	Na	Cl	F	Br	I	B	Li	Be	Si	Ti	V	Cr	Mn	Fe	Ni	Cu	Zn	Pb	Cd	Hg	As	Sb	Bi	P	S	Se	Te	Mo	Co	Ni	Al	S	Ca	Mg	K	Na	Cl	F	Br	I	B	Li	Be	Si	Ti	V	Cr	Mn	Fe	Ni	Cu	Zn	Pb	Cd	Hg	As	Sb	Bi	P	S	Se	Te	Mo	Co	Ni	Al	S	Ca	Mg	K	Na	Cl	F	Br	I	B	Li	Be	Si	Ti	V	Cr	Mn	Fe	Ni	Cu	Zn	Pb	Cd	Hg	As	Sb	Bi	P	S	Se	Te	Mo	Co	Ni	Al	S	Ca	Mg	K	Na	Cl	F	Br	I	B	Li	Be	Si	Ti	V	Cr	Mn	Fe	Ni	Cu	Zn	Pb	Cd	Hg	As	Sb	Bi	P	S	Se	Te	Mo	Co	Ni	Al	S	Ca	Mg	K	Na	Cl	F	Br	I	B	Li	Be	Si	Ti	V	Cr	Mn	Fe	Ni	Cu	Zn	Pb	Cd	Hg	As	Sb	Bi	P	S	Se	Te	Mo	Co	Ni	Al	S	Ca	Mg	K	Na	Cl	F	Br	I	B	Li	Be	Si	Ti	V	Cr	Mn	Fe	Ni	Cu	Zn	Pb	Cd	Hg	As	Sb	Bi	P	S	Se	Te	Mo	Co	Ni	Al	S	Ca	Mg	K	Na	Cl	F	Br	I	B	Li	Be	Si	Ti	V	Cr	Mn	Fe	Ni	Cu	Zn	Pb	Cd	Hg	As	Sb	Bi	P	S	Se	Te	Mo	Co	Ni	Al	S	Ca	Mg	K	Na	Cl	F	Br	I	B	Li	Be	Si	Ti	V	Cr	Mn	Fe	Ni	Cu	Zn	Pb	Cd	Hg	As	Sb	Bi	P	S	Se	Te	Mo	Co	Ni	Al	S	Ca	Mg	K	Na	Cl	F	Br	I	B	Li	Be	Si	Ti	V	Cr	Mn	Fe	Ni	Cu	Zn	Pb	Cd	Hg	As	Sb	Bi	P	S	Se	Te	Mo	Co	Ni	Al	S	Ca	Mg	K	Na	Cl	F	Br	I	B	Li	Be	Si	Ti	V	Cr	Mn	Fe	Ni	Cu	Zn	Pb	Cd	Hg	As	Sb	Bi	P	S	Se	Te	Mo	Co	Ni	Al	S	Ca	Mg	K	Na	Cl	F	Br	I	B	Li	Be	Si	Ti	V	Cr	Mn	Fe	Ni	Cu	Zn	Pb	Cd	Hg	As	Sb	Bi	P	S	Se	Te	Mo	Co	Ni	Al	S	Ca	Mg	K	Na	Cl	F	Br	I	B	Li	Be	Si	Ti	V	Cr	Mn	Fe	Ni	Cu	Zn	Pb	Cd	Hg	As	Sb	Bi	P	S	Se	Te	Mo	Co	Ni	Al	S	Ca	Mg	K	Na	Cl	F	Br	I	B	Li	Be	Si	Ti	V	Cr	Mn	Fe	Ni	Cu	Zn	Pb	Cd	Hg	As	Sb	Bi	P	S	Se	Te	Mo	Co	Ni	Al	S	Ca	Mg	K	Na	Cl	F	Br	I	B	Li	Be	Si	Ti	V	Cr	Mn	Fe	Ni	Cu	Zn	Pb	Cd	Hg	As	Sb	Bi	P	S	Se	Te	Mo	Co	Ni	Al	S	Ca	Mg	K	Na	Cl	F	Br	I	B	Li	Be	Si	Ti	V	Cr	Mn	Fe	Ni	Cu	Zn	Pb	Cd	Hg	As	Sb	Bi	P	S	Se	Te	Mo	Co	Ni	Al	S	Ca	Mg	K	Na	Cl	F	Br	I	B	Li	Be	Si	Ti	V	Cr	Mn	Fe	Ni	Cu	Zn	Pb	Cd	Hg	As	Sb	Bi	P	S	Se	Te	Mo	Co	Ni	Al	S	Ca	Mg	K	Na	Cl	F	Br	I	B	Li	Be	Si	Ti	V	Cr	Mn	Fe	Ni	Cu	Zn	Pb	Cd	Hg	As	Sb	Bi	P	S	Se	Te	Mo	Co	Ni	Al	S	Ca	Mg	K	Na	Cl	F	Br	I	B	Li	Be	Si	Ti	V	Cr	Mn	Fe	Ni	Cu	Zn	Pb	Cd	Hg	As	Sb	Bi	P	S	Se	Te	Mo	Co	Ni	Al	S	Ca	Mg	K	Na	Cl	F	Br	I	B	Li	Be	Si	Ti	V	Cr	Mn	Fe	Ni	Cu	Zn	Pb	Cd	Hg	As	Sb	Bi	P	S	Se	Te	Mo	Co	Ni	Al	S	Ca	Mg	K	Na	Cl	F	Br	I	B	Li	Be	Si	Ti	V	Cr	Mn	Fe	Ni	Cu	Zn	Pb	Cd	Hg	As	Sb	Bi	P	S	Se	Te	Mo	Co	Ni	Al	S	Ca	Mg	K	Na	Cl	F	Br	I	B	Li	Be	Si	Ti	V	Cr	Mn	Fe	Ni	Cu	Zn	Pb	Cd	Hg	As	Sb	Bi	P	S	Se	Te	Mo	Co	Ni	Al	S	Ca	Mg	K	Na	Cl	F	Br	I	B	Li	Be	Si	Ti	V	Cr	Mn	Fe	Ni	Cu	Zn	Pb	Cd	Hg	As	Sb	Bi	P	S	Se	Te	Mo	Co	Ni	Al	S	Ca	Mg	K	Na	Cl	F	Br	I	B	Li	Be	Si	Ti	V	Cr	Mn	Fe	Ni	Cu	Zn	Pb	Cd	Hg	As	Sb	Bi	P	S	Se	Te	Mo	Co	Ni	Al	S	Ca	Mg	K	Na	Cl	F	Br	I	B	Li	Be	Si	Ti	V	Cr	Mn	Fe	Ni	Cu	Zn	Pb	Cd	Hg	As	Sb	Bi	P	S	Se	Te	Mo	Co	Ni	Al	S	Ca	Mg	K	Na	Cl	F	Br	I	B	Li	Be	Si	Ti	V	Cr	Mn	Fe	Ni	Cu	Zn	Pb	Cd	Hg	As	Sb	Bi	P	S	Se	Te	Mo	Co	Ni	Al	S	Ca	Mg	K	Na	Cl	F	Br	I	B	Li	Be	Si	Ti	V	Cr	Mn	Fe	Ni	Cu	Zn	Pb	Cd	Hg	As	Sb	Bi	P	S	Se	Te	Mo

Summit Scientific

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2209333.2

4653 Table Mountain Drive ♦ Golden, Colorado 80403

303-277-9310 ♦ 303-374-5933 (f)

Page 2 of 3

Client: K.P. Kauffman Company, Inc.

Project Manager: Levi Kirk

Address: 1675 Broadway

E-Mail: Primary Contractor @ Marcom

City/State/Zip: Denver, CO 80202

Phone: 303.825.4822

Project Name: Solid Waste Storage Facility

Sampler Name: HC PCP

Project Number:

ID	Sample Description	Date Sampled	Time Sampled	# of containers	Preservative				Matrix				Analysis Requested								Special Instructions
					HCl	HNO ₃	None	Other	Water	Soil	Air-Canister #	Other	Full Table								
1	SW-1102'	9-14-22	1104	3			X			X				X							
2	SW-1202'		1106				X			X				X							
3	SW-1302'		1108				X			X				X							
4	SW-1402'		1110				X			X				X							
5	SW-1502'		1112				X			X				X							
6	SW-1602'		1114				X			X				X							
7	SW-1702'		1130				X			X				X							
8	B4-103'		1116				X			X				X							
9	B4-203'		1118				X			X				X							
10	B4-303'		1120				X			X				X							

Relinquished by:	Date/Time:	Received by:	Date/Time:	Turn Around Time (Check)	Notes:
<u>Marcom</u>	<u>9/16/22 1200</u>	<u>[Signature]</u>	<u>9/16/22 1200</u>	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"/>	
Relinquished by:	Date/Time:	Received by:	Date/Time:	48 hours <input type="checkbox"/>	
				Sample Integrity:	
				Temperature Upon Receipt:	<u>10.0</u>
				Samples Intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

Summit Scientific

S₂

2209333.3

4653 Table Mountain Drive ♦ Golden, Colorado 80403

303-277-9310 ♦ 303-374-5933 (f)

Page 3 of 3

Client: K.P. Kauffman Company, Inc

Project Manager: Levi Kirk

Address: 1675 Broadway

E-Mail: Primary Contractor @ Marcom

City/State/Zip: Denver, CO 80202

Phone: 303-825-4822

Project Name: Solid Waste Storage Facility

Sampler Name: HC PCP

Project Number:

ID	Sample Description	Date Sampled	Time Sampled	# of containers	Preservative				Matrix			Analysis Requested								Special Instructions
					HCl	HNO ₃	None	Other	Water	Soil	Air-Canister #	Other	Full Table q15	Table q15 Inorganics						
1	Blt-4 @ 3'	9-14-22	1122	3			X			X				X						
2	Blt-5 @ 3'		1124																	
3	Blt-6 @ 3'		1126																	
4	Blt-7 @ 3'		1128																	
5	Background 1 @ 2'		1132	1												X				
6	Background 2 @ 2'		1136	1												X				
7	Background 3 @ 2'		1140	1												X				
8	Background 4 @ 2'		1144	1												X				
9	Background 5 @ 2'		1148	1												X				
10	Background 6 @ 2'		1152	1												X				

Relinquished by:	Date/Time:	Received by:	Date/Time:	Turn Around Time (Check)	Notes:
<u>[Signature]</u>	<u>9/16/22 1200</u>	<u>[Signature]</u>	<u>9/16/22 1200</u>	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"/>	
Relinquished by:	Date/Time:	Received by:	Date/Time:	48 hours <input type="checkbox"/>	
				Sample Integrity:	
				Temperature Upon Receipt:	<u>10.0</u>
				Samples Intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

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3/3

Sample Receipt Checklist

S2 Work Order# 2209333

Client: KPKClient Project ID: Solid waste storage facilityShipped Via: H.D./P.U./FedEx/UPS/USPS/Other ☐Airbill #:

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

Matrix (Check all that apply)

Air ☐Soil/Solid ☒Water ☐Other ☐

Temp (°C)

10.0

Thermometer #

1

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

Additional Comments (if any):

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

Custodian Printed Name

Date/Time

9.16.22 19:10



K.P. Kauffman
1675 Broadway
Denver CO, 80202

Project: Solid Waste Storage Facility

Project Number: [none]
Project Manager: Kevin Tautkus

Reported:
10/03/22 11:21

SW-1@2'
2209333-01 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **09/14/22 10:44**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0020	mg/kg	1	BF10493	09/20/22	09/20/22	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: **09/14/22 10:44**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		129 %	50-150		"	"	"	"	
Surrogate: Toluene-d8		97.0 %	50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		95.1 %	50-150		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **09/14/22 10:44**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	320	50	mg/kg	1	BF10496	09/20/22	09/22/22	EPA 8015M	
C28-C36 (ORO)	290	50	"	"	"	"	"	"	

Date Sampled: **09/14/22 10:44**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl		70.7 %	30-150		"	"	"	"	

PAH by EPA Method 8270D SIM

Summit Scientific

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K.P. Kauffman
1675 Broadway
Denver CO, 80202

Project: Solid Waste Storage Facility

Project Number: [none]
Project Manager: Kevin Tautkus

Reported:
10/03/22 11:21

SW-1@2'
2209333-01 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

Date Sampled: **09/14/22 10:44**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BF10478	09/20/22	09/22/22	EPA 8270D SIM	
Anthracene	ND	0.00500	"	"	"	"	"	"	
Benzo (a) anthracene	ND	0.00500	"	"	"	"	"	"	
Benzo (a) pyrene	ND	0.00500	"	"	"	"	"	"	
Benzo (b) fluoranthene	ND	0.00500	"	"	"	"	"	"	
Benzo (k) fluoranthene	ND	0.00500	"	"	"	"	"	"	
Chrysene	ND	0.00500	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	0.00500	"	"	"	"	"	"	
Fluoranthene	ND	0.00500	"	"	"	"	"	"	
Fluorene	ND	0.00500	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	ND	0.00500	"	"	"	"	"	"	
Pyrene	ND	0.00500	"	"	"	"	"	"	
1-Methylnaphthalene	ND	0.00500	"	"	"	"	"	"	
2-Methylnaphthalene	ND	0.00500	"	"	"	"	"	"	

Date Sampled: **09/14/22 10:44**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10		50.4 %	40-150		"	"	"	"	
Surrogate: Fluoranthene-d10		45.6 %	40-150		"	"	"	"	

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **09/14/22 10:44**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	0.139	0.0100	mg/L	1	BF10571	09/21/22	09/25/22	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **09/14/22 10:44**

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

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K.P. Kauffman
1675 Broadway
Denver CO, 80202

Project: Solid Waste Storage Facility

Project Number: [none]
Project Manager: Kevin Tautkus

Reported:
10/03/22 11:21

SW-1@2'
2209333-01 (Soil)

Summit Scientific

Total Metals by EPA 6020B

Arsenic	2.05	0.208	mg/kg dry	1	BF10567	09/21/22	09/23/22	EPA 6020B
Barium	219	0.415	"	"	"	"	"	"
Cadmium	0.365	0.208	"	"	"	"	"	"
Copper	11.5	0.415	"	"	"	"	"	"
Lead	6.67	0.208	"	"	"	"	"	"
Nickel	9.21	0.415	"	"	"	"	"	"
Selenium	0.528	0.270	"	"	"	"	"	"
Silver	0.0297	0.0208	"	"	"	"	"	"
Zinc	91.4	0.415	"	"	"	"	"	"

Hexavalent Chromium by EPA Method 7196

Date Sampled: **09/14/22 10:44**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BF10740	09/28/22	09/28/22	EPA 7196A	

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

Date Sampled: **09/14/22 10:44**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	90.8	0.0519	mg/L dry	1	BF10617	09/23/22	09/25/22	EPA 6020B	
Magnesium	17.9	0.0519	"	"	"	"	"	"	
Sodium	11.9	0.0519	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **09/14/22 10:44**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	0.299	0.00100	units	1	BF10665	09/26/22	09/26/22	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **09/14/22 10:44**

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

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K.P. Kauffman
1675 Broadway
Denver CO, 80202

Project: Solid Waste Storage Facility

Project Number: [none]
Project Manager: Kevin Tautkus

Reported:
10/03/22 11:21

SW-1@2'
2209333-01 (Soil)

Summit Scientific

Physical Parameters by APHA/ASTM/EPA Methods

% Solids	96.3	%	1	BFI0573	09/21/22	09/23/22	Calculation
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Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **09/14/22 10:44**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.689	0.0100	mmhos/cm	1	BFI0620	09/23/22	09/27/22	EPA 120.1	

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

Date Sampled: **09/14/22 10:44**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	7.83		pH Units	1	BFI0621	09/23/22	09/27/22	EPA 9045D	

Summit Scientific

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K.P. Kauffman
1675 Broadway
Denver CO, 80202

Project: Solid Waste Storage Facility

Project Number: [none]
Project Manager: Kevin Tautkus

Reported:
10/03/22 11:21

SW-2@2'
2209333-02 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **09/14/22 10:46**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Benzene	ND	0.0020	mg/kg	1	BF10493	09/20/22	09/20/22	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: **09/14/22 10:46**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: 1,2-Dichloroethane-d4		109 %	50-150		"	"	"	"	
Surrogate: Toluene-d8		98.9 %	50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		92.6 %	50-150		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **09/14/22 10:46**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
C10-C28 (DRO)	340	50	mg/kg	1	BF10496	09/20/22	09/22/22	EPA 8015M	
C28-C36 (ORO)	290	50	"	"	"	"	"	"	

Date Sampled: **09/14/22 10:46**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: o-Terphenyl		95.4 %	30-150		"	"	"	"	

PAH by EPA Method 8270D SIM

Summit Scientific

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K.P. Kauffman
1675 Broadway
Denver CO, 80202

Project: Solid Waste Storage Facility

Project Number: [none]
Project Manager: Kevin Tautkus

Reported:
10/03/22 11:21

SW-2@2'
2209333-02 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

Date Sampled: **09/14/22 10:46**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BF10478	09/20/22	09/22/22	EPA 8270D SIM	
Anthracene	ND	0.00500	"	"	"	"	"	"	
Benzo (a) anthracene	ND	0.00500	"	"	"	"	"	"	
Benzo (a) pyrene	ND	0.00500	"	"	"	"	"	"	
Benzo (b) fluoranthene	ND	0.00500	"	"	"	"	"	"	
Benzo (k) fluoranthene	ND	0.00500	"	"	"	"	"	"	
Chrysene	0.00730	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: **09/14/22 10:46**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10		58.6 %	40-150		"	"	"	"	
Surrogate: Fluoranthene-d10		46.1 %	40-150		"	"	"	"	

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **09/14/22 10:46**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	0.173	0.0100	mg/L	1	BF10571	09/21/22	09/26/22	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **09/14/22 10:46**

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

Project: Solid Waste Storage Facility

Project Number: [none]
Project Manager: Kevin Tautkus

Reported:
10/03/22 11:21

SW-2@2'
2209333-02 (Soil)

Summit Scientific

Total Metals by EPA 6020B

Arsenic	2.46	0.207	mg/kg dry	1	BF10567	09/21/22	09/23/22	EPA 6020B
Barium	240	0.414	"	"	"	"	"	"
Cadmium	0.414	0.207	"	"	"	"	"	"
Copper	12.8	0.414	"	"	"	"	"	"
Lead	8.35	0.207	"	"	"	"	"	"
Nickel	9.41	0.414	"	"	"	"	"	"
Selenium	0.691	0.269	"	"	"	"	"	"
Silver	0.0290	0.0207	"	"	"	"	"	"
Zinc	49.6	0.414	"	"	"	"	"	"

Hexavalent Chromium by EPA Method 7196

Date Sampled: **09/14/22 10:46**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BF10740	09/28/22	09/28/22	EPA 7196A	

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

Date Sampled: **09/14/22 10:46**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	124	0.0518	mg/L dry	1	BF10617	09/23/22	09/25/22	EPA 6020B	
Magnesium	31.7	0.0518	"	"	"	"	"	"	
Sodium	81.0	0.0518	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **09/14/22 10:46**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	1.68	0.00100	units	1	BF10665	09/26/22	09/26/22	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **09/14/22 10:46**

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

Project: Solid Waste Storage Facility

Project Number: [none]
Project Manager: Kevin Tautkus

Reported:
10/03/22 11:21

SW-2@2'
2209333-02 (Soil)

Summit Scientific

Physical Parameters by APHA/ASTM/EPA Methods

% Solids	96.6	%	1	BFI0573	09/21/22	09/23/22	Calculation
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Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **09/14/22 10:46**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	1.30	0.0100	mmhos/cm	1	BFI0620	09/23/22	09/27/22	EPA 120.1	

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

Date Sampled: **09/14/22 10:46**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	7.55		pH Units	1	BFI0621	09/23/22	09/27/22	EPA 9045D	

Summit Scientific

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K.P. Kauffman
1675 Broadway
Denver CO, 80202

Project: Solid Waste Storage Facility

Project Number: [none]
Project Manager: Kevin Tautkus

Reported:
10/03/22 11:21

SW-3@2'
2209333-03 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **09/14/22 10:48**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Benzene	ND	0.0020	mg/kg	1	BF10493	09/20/22	09/20/22	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: **09/14/22 10:48**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: 1,2-Dichloroethane-d4		121 %	50-150		"	"	"	"	
Surrogate: Toluene-d8		94.4 %	50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		102 %	50-150		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **09/14/22 10:48**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
C10-C28 (DRO)	670	50	mg/kg	1	BF10496	09/20/22	09/22/22	EPA 8015M	
C28-C36 (ORO)	460	50	"	"	"	"	"	"	

Date Sampled: **09/14/22 10:48**

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

PAH by EPA Method 8270D SIM

R-01

Summit Scientific

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K.P. Kauffman
1675 Broadway
Denver CO, 80202

Project: Solid Waste Storage Facility

Project Number: [none]
Project Manager: Kevin Tautkus

Reported:
10/03/22 11:21

SW-3@2'
2209333-03 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

R-01

Date Sampled: **09/14/22 10:48**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.0500	mg/kg	10	BF10478	09/20/22	09/22/22	EPA 8270D SIM	
Anthracene	ND	0.0500	"	"	"	"	"	"	
Benzo (a) anthracene	ND	0.0500	"	"	"	"	"	"	
Benzo (a) pyrene	ND	0.0500	"	"	"	"	"	"	
Benzo (b) fluoranthene	ND	0.0500	"	"	"	"	"	"	
Benzo (k) fluoranthene	ND	0.0500	"	"	"	"	"	"	
Chrysene	ND	0.0500	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	0.0500	"	"	"	"	"	"	
Fluoranthene	ND	0.0500	"	"	"	"	"	"	
Fluorene	ND	0.0500	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	ND	0.0500	"	"	"	"	"	"	
Pyrene	ND	0.0500	"	"	"	"	"	"	
1-Methylnaphthalene	ND	0.0500	"	"	"	"	"	"	
2-Methylnaphthalene	ND	0.0500	"	"	"	"	"	"	S-01

Date Sampled: **09/14/22 10:48**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10		%	40-150		"	"	"	"	S-01
Surrogate: Fluoranthene-d10		89.4 %	40-150		"	"	"	"	

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **09/14/22 10:48**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	0.262	0.0100	mg/L	1	BF10571	09/21/22	09/26/22	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **09/14/22 10:48**

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

Project: Solid Waste Storage Facility

Project Number: [none]
Project Manager: Kevin Tautkus

Reported:
10/03/22 11:21

SW-3@2'
2209333-03 (Soil)

Summit Scientific

Total Metals by EPA 6020B

Arsenic	2.51	0.207	mg/kg dry	1	BF10567	09/21/22	09/23/22	EPA 6020B
Barium	161	0.413	"	"	"	"	"	"
Cadmium	0.502	0.207	"	"	"	"	"	"
Copper	13.8	0.413	"	"	"	"	"	"
Lead	7.45	0.207	"	"	"	"	"	"
Nickel	10.4	0.413	"	"	"	"	"	"
Selenium	0.803	0.269	"	"	"	"	"	"
Silver	0.0299	0.0207	"	"	"	"	"	"
Zinc	108	0.413	"	"	"	"	"	"

Hexavalent Chromium by EPA Method 7196

Date Sampled: **09/14/22 10:48**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BF10740	09/28/22	09/28/22	EPA 7196A	

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

Date Sampled: **09/14/22 10:48**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	324	0.0517	mg/L dry	1	BF10617	09/23/22	09/25/22	EPA 6020B	
Magnesium	87.8	0.0517	"	"	"	"	"	"	
Sodium	152	0.0517	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **09/14/22 10:48**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	1.92	0.00100	units	1	BF10665	09/26/22	09/26/22	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **09/14/22 10:48**

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

Project: Solid Waste Storage Facility

Project Number: [none]
Project Manager: Kevin Tautkus

Reported:
10/03/22 11:21

SW-3@2'
2209333-03 (Soil)

Summit Scientific

Physical Parameters by APHA/ASTM/EPA Methods

% Solids	96.8	%	1	BFI0573	09/21/22	09/23/22	Calculation
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Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **09/14/22 10:48**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	2.98	0.0100	mmhos/cm	1	BFI0620	09/23/22	09/27/22	EPA 120.1	

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

Date Sampled: **09/14/22 10:48**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	7.85		pH Units	1	BFI0621	09/23/22	09/27/22	EPA 9045D	

Summit Scientific

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K.P. Kauffman
1675 Broadway
Denver CO, 80202

Project: Solid Waste Storage Facility

Project Number: [none]
Project Manager: Kevin Tautkus

Reported:
10/03/22 11:21

SW-4@2'
2209333-04 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **09/14/22 10:50**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Benzene	ND	0.0020	mg/kg	1	BF10493	09/20/22	09/20/22	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: **09/14/22 10:50**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: 1,2-Dichloroethane-d4		110 %	50-150		"	"	"	"	
Surrogate: Toluene-d8		93.3 %	50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		96.0 %	50-150		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **09/14/22 10:50**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
C10-C28 (DRO)	540	50	mg/kg	1	BF10496	09/20/22	09/22/22	EPA 8015M	
C28-C36 (ORO)	380	50	"	"	"	"	"	"	

Date Sampled: **09/14/22 10:50**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: o-Terphenyl		79.1 %	30-150		"	"	"	"	

PAH by EPA Method 8270D SIM

R-01

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K.P. Kauffman
1675 Broadway
Denver CO, 80202

Project: Solid Waste Storage Facility

Project Number: [none]
Project Manager: Kevin Tautkus

Reported:
10/03/22 11:21

SW-4@2'
2209333-04 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

R-01

Date Sampled: **09/14/22 10:50**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.0500	mg/kg	10	BF10478	09/20/22	09/22/22	EPA 8270D SIM	
Anthracene	ND	0.0500	"	"	"	"	"	"	
Benzo (a) anthracene	ND	0.0500	"	"	"	"	"	"	
Benzo (a) pyrene	ND	0.0500	"	"	"	"	"	"	
Benzo (b) fluoranthene	ND	0.0500	"	"	"	"	"	"	
Benzo (k) fluoranthene	ND	0.0500	"	"	"	"	"	"	
Chrysene	ND	0.0500	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	0.0500	"	"	"	"	"	"	
Fluoranthene	ND	0.0500	"	"	"	"	"	"	
Fluorene	ND	0.0500	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	ND	0.0500	"	"	"	"	"	"	
Pyrene	ND	0.0500	"	"	"	"	"	"	
1-Methylnaphthalene	ND	0.0500	"	"	"	"	"	"	
2-Methylnaphthalene	ND	0.0500	"	"	"	"	"	"	

Date Sampled: **09/14/22 10:50**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10		%	40-150		"	"	"	"	S-01
Surrogate: Fluoranthene-d10		87.8 %	40-150		"	"	"	"	S-01

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **09/14/22 10:50**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	0.160	0.0100	mg/L	1	BF10571	09/21/22	09/26/22	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **09/14/22 10:50**

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

Project: Solid Waste Storage Facility

Project Number: [none]
Project Manager: Kevin Tautkus

Reported:
10/03/22 11:21

SW-4@2'
2209333-04 (Soil)

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Total Metals by EPA 6020B

Arsenic	2.36	0.209	mg/kg dry	1	BF10567	09/21/22	09/23/22	EPA 6020B
Barium	164	0.418	"	"	"	"	"	"
Cadmium	0.453	0.209	"	"	"	"	"	"
Copper	13.2	0.418	"	"	"	"	"	"
Lead	7.20	0.209	"	"	"	"	"	"
Nickel	10.2	0.418	"	"	"	"	"	"
Selenium	0.869	0.272	"	"	"	"	"	"
Silver	0.0324	0.0209	"	"	"	"	"	"
Zinc	121	0.418	"	"	"	"	"	"

Hexavalent Chromium by EPA Method 7196

Date Sampled: **09/14/22 10:50**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BF10740	09/28/22	09/28/22	EPA 7196A	

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

Date Sampled: **09/14/22 10:50**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	301	0.0522	mg/L dry	1	BF10617	09/23/22	09/25/22	EPA 6020B	
Magnesium	74.8	0.0522	"	"	"	"	"	"	
Sodium	129	0.0522	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **09/14/22 10:50**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	1.72	0.00100	units	1	BF10665	09/26/22	09/26/22	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **09/14/22 10:50**

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

Project: Solid Waste Storage Facility

Project Number: [none]
Project Manager: Kevin Tautkus

Reported:
10/03/22 11:21

SW-4@2'
2209333-04 (Soil)

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Physical Parameters by APHA/ASTM/EPA Methods

% Solids	95.8	%	1	BFI0573	09/21/22	09/23/22	Calculation
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Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **09/14/22 10:50**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	2.73	0.0100	mmhos/cm	1	BFI0620	09/23/22	09/27/22	EPA 120.1	

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

Date Sampled: **09/14/22 10:50**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	7.88		pH Units	1	BFI0621	09/23/22	09/27/22	EPA 9045D	

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K.P. Kauffman
1675 Broadway
Denver CO, 80202

Project: Solid Waste Storage Facility

Project Number: [none]
Project Manager: Kevin Tautkus

Reported:
10/03/22 11:21

SW-5@2'
2209333-05 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **09/14/22 10:52**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Benzene	ND	0.0020	mg/kg	1	BF10493	09/20/22	09/20/22	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: **09/14/22 10:52**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: 1,2-Dichloroethane-d4		130 %	50-150		"	"	"	"	
Surrogate: Toluene-d8		95.2 %	50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		111 %	50-150		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **09/14/22 10:52**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
C10-C28 (DRO)	560	50	mg/kg	1	BF10496	09/20/22	09/22/22	EPA 8015M	
C28-C36 (ORO)	430	50	"	"	"	"	"	"	

Date Sampled: **09/14/22 10:52**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: o-Terphenyl		125 %	30-150		"	"	"	"	

PAH by EPA Method 8270D SIM

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1675 Broadway
Denver CO, 80202

Project: Solid Waste Storage Facility

Project Number: [none]
Project Manager: Kevin Tautkus

Reported:
10/03/22 11:21

SW-5@2'
2209333-05 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

Date Sampled: **09/14/22 10:52**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BF10478	09/20/22	09/22/22	EPA 8270D SIM	
Anthracene	ND	0.00500	"	"	"	"	"	"	
Benzo (a) anthracene	ND	0.00500	"	"	"	"	"	"	
Benzo (a) pyrene	ND	0.00500	"	"	"	"	"	"	
Benzo (b) fluoranthene	ND	0.00500	"	"	"	"	"	"	
Benzo (k) fluoranthene	ND	0.00500	"	"	"	"	"	"	
Chrysene	ND	0.00500	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	0.00500	"	"	"	"	"	"	
Fluoranthene	ND	0.00500	"	"	"	"	"	"	
Fluorene	ND	0.00500	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	ND	0.00500	"	"	"	"	"	"	
Pyrene	ND	0.00500	"	"	"	"	"	"	
1-Methylnaphthalene	ND	0.00500	"	"	"	"	"	"	
2-Methylnaphthalene	ND	0.00500	"	"	"	"	"	"	

Date Sampled: **09/14/22 10:52**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10		44.2 %	40-150		"	"	"	"	
Surrogate: Fluoranthene-d10		41.5 %	40-150		"	"	"	"	

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **09/14/22 10:52**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	0.198	0.0100	mg/L	1	BF10571	09/21/22	09/26/22	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **09/14/22 10:52**

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

Project: Solid Waste Storage Facility

Project Number: [none]
Project Manager: Kevin Tautkus

Reported:
10/03/22 11:21

SW-5@2'
2209333-05 (Soil)

Summit Scientific

Total Metals by EPA 6020B

Arsenic	1.79	0.206	mg/kg dry	1	BF10567	09/21/22	09/23/22	EPA 6020B
Barium	157	0.411	"	"	"	"	"	"
Cadmium	0.438	0.206	"	"	"	"	"	"
Copper	11.8	0.411	"	"	"	"	"	"
Lead	6.41	0.206	"	"	"	"	"	"
Nickel	9.26	0.411	"	"	"	"	"	"
Selenium	0.651	0.267	"	"	"	"	"	"
Silver	0.0330	0.0206	"	"	"	"	"	"
Zinc	89.6	0.411	"	"	"	"	"	"

Hexavalent Chromium by EPA Method 7196

Date Sampled: **09/14/22 10:52**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BF10740	09/28/22	09/28/22	EPA 7196A	

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

Date Sampled: **09/14/22 10:52**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	318	0.0514	mg/L dry	1	BF10617	09/23/22	09/25/22	EPA 6020B	
Magnesium	84.3	0.0514	"	"	"	"	"	"	
Sodium	138	0.0514	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **09/14/22 10:52**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	1.78	0.00100	units	1	BF10665	09/26/22	09/26/22	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **09/14/22 10:52**

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

Project: Solid Waste Storage Facility

Project Number: [none]
Project Manager: Kevin Tautkus

Reported:
10/03/22 11:21

SW-5@2'
2209333-05 (Soil)

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Physical Parameters by APHA/ASTM/EPA Methods

% Solids	97.2	%	1	BFI0573	09/21/22	09/23/22	Calculation
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Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **09/14/22 10:52**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	2.91	0.0100	mmhos/cm	1	BFI0620	09/23/22	09/27/22	EPA 120.1	

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

Date Sampled: **09/14/22 10:52**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	7.91		pH Units	1	BFI0621	09/23/22	09/27/22	EPA 9045D	

Summit Scientific

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K.P. Kauffman
1675 Broadway
Denver CO, 80202

Project: Solid Waste Storage Facility

Project Number: [none]
Project Manager: Kevin Tautkus

Reported:
10/03/22 11:21

SW-6@2'
2209333-06 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **09/14/22 10:54**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Benzene	ND	0.0020	mg/kg	1	BF10493	09/20/22	09/20/22	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: **09/14/22 10:54**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: 1,2-Dichloroethane-d4		114 %	50-150		"	"	"	"	
Surrogate: Toluene-d8		93.0 %	50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		96.1 %	50-150		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **09/14/22 10:54**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
C10-C28 (DRO)	300	50	mg/kg	1	BF10496	09/20/22	09/22/22	EPA 8015M	
C28-C36 (ORO)	250	50	"	"	"	"	"	"	

Date Sampled: **09/14/22 10:54**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: o-Terphenyl		133 %	30-150		"	"	"	"	

PAH by EPA Method 8270D SIM

Summit Scientific

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1675 Broadway
Denver CO, 80202

Project: Solid Waste Storage Facility

Project Number: [none]
Project Manager: Kevin Tautkus

Reported:
10/03/22 11:21

SW-6@2'
2209333-06 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

Date Sampled: **09/14/22 10:54**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BF10478	09/20/22	09/22/22	EPA 8270D SIM	
Anthracene	ND	0.00500	"	"	"	"	"	"	
Benzo (a) anthracene	ND	0.00500	"	"	"	"	"	"	
Benzo (a) pyrene	ND	0.00500	"	"	"	"	"	"	
Benzo (b) fluoranthene	ND	0.00500	"	"	"	"	"	"	
Benzo (k) fluoranthene	ND	0.00500	"	"	"	"	"	"	
Chrysene	ND	0.00500	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	0.00500	"	"	"	"	"	"	
Fluoranthene	ND	0.00500	"	"	"	"	"	"	
Fluorene	ND	0.00500	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	ND	0.00500	"	"	"	"	"	"	
Pyrene	ND	0.00500	"	"	"	"	"	"	
1-Methylnaphthalene	ND	0.00500	"	"	"	"	"	"	
2-Methylnaphthalene	ND	0.00500	"	"	"	"	"	"	

Date Sampled: **09/14/22 10:54**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10		44.3 %	40-150		"	"	"	"	
Surrogate: Fluoranthene-d10		42.8 %	40-150		"	"	"	"	

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **09/14/22 10:54**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	0.115	0.0100	mg/L	1	BF10571	09/21/22	09/26/22	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **09/14/22 10:54**

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

Project: Solid Waste Storage Facility

Project Number: [none]
Project Manager: Kevin Tautkus

Reported:
10/03/22 11:21

SW-6@2'
2209333-06 (Soil)

Summit Scientific

Total Metals by EPA 6020B

Arsenic	1.52	0.208	mg/kg dry	1	BF10567	09/21/22	09/23/22	EPA 6020B
Barium	119	0.416	"	"	"	"	"	"
Cadmium	0.308	0.208	"	"	"	"	"	"
Copper	8.56	0.416	"	"	"	"	"	"
Lead	5.01	0.208	"	"	"	"	"	"
Nickel	6.84	0.416	"	"	"	"	"	"
Selenium	0.469	0.271	"	"	"	"	"	"
Silver	0.0212	0.0208	"	"	"	"	"	"
Zinc	45.0	0.416	"	"	"	"	"	"

Hexavalent Chromium by EPA Method 7196

Date Sampled: **09/14/22 10:54**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BF10740	09/28/22	09/28/22	EPA 7196A	

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

Date Sampled: **09/14/22 10:54**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	66.3	0.0520	mg/L dry	1	BF10633	09/23/22	09/28/22	EPA 6020B	
Magnesium	15.2	0.0520	"	"	"	"	"	"	
Sodium	21.7	0.0520	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **09/14/22 10:54**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	0.625	0.00100	units	1	BF10739	09/28/22	09/28/22	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **09/14/22 10:54**

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

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K.P. Kauffman
1675 Broadway
Denver CO, 80202

Project: Solid Waste Storage Facility

Project Number: [none]
Project Manager: Kevin Tautkus

Reported:
10/03/22 11:21

SW-6@2'
2209333-06 (Soil)

Summit Scientific

Physical Parameters by APHA/ASTM/EPA Methods

% Solids	96.1	%	1	BFI0573	09/21/22	09/23/22	Calculation
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Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **09/14/22 10:54**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.598	0.0100	mmhos/cm	1	BFI0637	09/23/22	09/27/22	EPA 120.1	

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

Date Sampled: **09/14/22 10:54**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	7.91		pH Units	1	BFI0636	09/23/22	09/27/22	EPA 9045D	

Summit Scientific

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K.P. Kauffman
1675 Broadway
Denver CO, 80202

Project: Solid Waste Storage Facility

Project Number: [none]
Project Manager: Kevin Tautkus

Reported:
10/03/22 11:21

SW-7@2'
2209333-07 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **09/14/22 10:56**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Benzene	ND	0.0020	mg/kg	1	BF10493	09/20/22	09/20/22	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: **09/14/22 10:56**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: 1,2-Dichloroethane-d4		113 %	50-150		"	"	"	"	
Surrogate: Toluene-d8		93.1 %	50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		103 %	50-150		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **09/14/22 10:56**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
C10-C28 (DRO)	3300	50	mg/kg	1	BF10496	09/20/22	09/22/22	EPA 8015M	
C28-C36 (ORO)	920	50	"	"	"	"	"	"	

Date Sampled: **09/14/22 10:56**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: o-Terphenyl		128 %	30-150		"	"	"	"	

PAH by EPA Method 8270D SIM

R-01

Summit Scientific

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1675 Broadway
Denver CO, 80202

Project: Solid Waste Storage Facility

Project Number: [none]
Project Manager: Kevin Tautkus

Reported:
10/03/22 11:21

SW-7@2'
2209333-07 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

R-01

Date Sampled: **09/14/22 10:56**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.0500	mg/kg	10	BF10478	09/20/22	09/22/22	EPA 8270D SIM	
Anthracene	0.0867	0.0500	"	"	"	"	"	"	
Benzo (a) anthracene	ND	0.0500	"	"	"	"	"	"	
Benzo (a) pyrene	ND	0.0500	"	"	"	"	"	"	
Benzo (b) fluoranthene	0.147	0.0500	"	"	"	"	"	"	
Benzo (k) fluoranthene	ND	0.0500	"	"	"	"	"	"	
Chrysene	0.306	0.0500	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	0.0500	"	"	"	"	"	"	
Fluoranthene	ND	0.0500	"	"	"	"	"	"	
Fluorene	ND	0.0500	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	ND	0.0500	"	"	"	"	"	"	
Pyrene	0.201	0.0500	"	"	"	"	"	"	
1-Methylnaphthalene	ND	0.0500	"	"	"	"	"	"	
2-Methylnaphthalene	ND	0.0500	"	"	"	"	"	"	

Date Sampled: **09/14/22 10:56**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10		%	40-150		"	"	"	"	S-01
Surrogate: Fluoranthene-d10		114 %	40-150		"	"	"	"	S-01

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **09/14/22 10:56**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	0.115	0.0100	mg/L	1	BF10571	09/21/22	09/26/22	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **09/14/22 10:56**

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

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K.P. Kauffman
1675 Broadway
Denver CO, 80202

Project: Solid Waste Storage Facility

Project Number: [none]
Project Manager: Kevin Tautkus

Reported:
10/03/22 11:21

SW-7@2'
2209333-07 (Soil)

Summit Scientific

Total Metals by EPA 6020B

Arsenic	1.67	0.217	mg/kg dry	1	BF10567	09/21/22	09/23/22	EPA 6020B
Barium	98.9	0.434	"	"	"	"	"	"
Cadmium	0.258	0.217	"	"	"	"	"	"
Copper	7.76	0.434	"	"	"	"	"	"
Lead	4.49	0.217	"	"	"	"	"	"
Nickel	6.61	0.434	"	"	"	"	"	"
Selenium	0.441	0.282	"	"	"	"	"	"
Silver	0.0224	0.0217	"	"	"	"	"	"
Zinc	172	0.434	"	"	"	"	"	"

Hexavalent Chromium by EPA Method 7196

Date Sampled: **09/14/22 10:56**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BF10740	09/28/22	09/28/22	EPA 7196A	

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

Date Sampled: **09/14/22 10:56**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	93.8	0.0542	mg/L dry	1	BF10633	09/23/22	09/28/22	EPA 6020B	
Magnesium	23.2	0.0542	"	"	"	"	"	"	
Sodium	66.1	0.0542	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **09/14/22 10:56**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	1.58	0.00100	units	1	BF10739	09/28/22	09/28/22	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **09/14/22 10:56**

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

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K.P. Kauffman
1675 Broadway
Denver CO, 80202

Project: Solid Waste Storage Facility

Project Number: [none]
Project Manager: Kevin Tautkus

Reported:
10/03/22 11:21

SW-7@2'
2209333-07 (Soil)

Summit Scientific

Physical Parameters by APHA/ASTM/EPA Methods

% Solids	92.3	%	1	BFI0573	09/21/22	09/23/22	Calculation
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Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **09/14/22 10:56**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.903	0.0100	mmhos/cm	1	BFI0637	09/23/22	09/27/22	EPA 120.1	

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

Date Sampled: **09/14/22 10:56**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	8.04		pH Units	1	BFI0636	09/23/22	09/27/22	EPA 9045D	

Summit Scientific

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1675 Broadway
Denver CO, 80202

Project: Solid Waste Storage Facility

Project Number: [none]
Project Manager: Kevin Tautkus

Reported:
10/03/22 11:21

SW-8@2'
2209333-08 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **09/14/22 10:58**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0020	mg/kg	1	BF10493	09/20/22	09/20/22	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: **09/14/22 10:58**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		118 %	50-150		"	"	"	"	
Surrogate: Toluene-d8		97.4 %	50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		95.5 %	50-150		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **09/14/22 10:58**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	1300	50	mg/kg	1	BF10496	09/20/22	09/22/22	EPA 8015M	
C28-C36 (ORO)	800	50	"	"	"	"	"	"	

Date Sampled: **09/14/22 10:58**

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

PAH by EPA Method 8270D SIM

R-01

Summit Scientific

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K.P. Kauffman
1675 Broadway
Denver CO, 80202

Project: Solid Waste Storage Facility

Project Number: [none]
Project Manager: Kevin Tautkus

Reported:
10/03/22 11:21

SW-8@2'
2209333-08 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

R-01

Date Sampled: **09/14/22 10:58**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.0500	mg/kg	10	BF10478	09/20/22	09/22/22	EPA 8270D SIM	
Anthracene	ND	0.0500	"	"	"	"	"	"	
Benzo (a) anthracene	ND	0.0500	"	"	"	"	"	"	
Benzo (a) pyrene	ND	0.0500	"	"	"	"	"	"	
Benzo (b) fluoranthene	ND	0.0500	"	"	"	"	"	"	
Benzo (k) fluoranthene	ND	0.0500	"	"	"	"	"	"	
Chrysene	0.105	0.0500	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	0.0500	"	"	"	"	"	"	
Fluoranthene	ND	0.0500	"	"	"	"	"	"	
Fluorene	ND	0.0500	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	ND	0.0500	"	"	"	"	"	"	
Pyrene	0.0717	0.0500	"	"	"	"	"	"	
1-Methylnaphthalene	ND	0.0500	"	"	"	"	"	"	
2-Methylnaphthalene	ND	0.0500	"	"	"	"	"	"	

Date Sampled: **09/14/22 10:58**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10		%	40-150		"	"	"	"	S-01
Surrogate: Fluoranthene-d10		89.0 %	40-150		"	"	"	"	S-01

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **09/14/22 10:58**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	0.0906	0.0100	mg/L	1	BF10571	09/21/22	09/26/22	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **09/14/22 10:58**

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

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K.P. Kauffman
1675 Broadway
Denver CO, 80202

Project: Solid Waste Storage Facility

Project Number: [none]
Project Manager: Kevin Tautkus

Reported:
10/03/22 11:21

SW-8@2'
2209333-08 (Soil)

Summit Scientific

Total Metals by EPA 6020B

Arsenic	1.61	0.213	mg/kg dry	1	BF10567	09/21/22	09/23/22	EPA 6020B
Barium	124	0.426	"	"	"	"	"	"
Cadmium	0.247	0.213	"	"	"	"	"	"
Copper	8.24	0.426	"	"	"	"	"	"
Lead	4.92	0.213	"	"	"	"	"	"
Nickel	6.78	0.426	"	"	"	"	"	"
Selenium	0.581	0.277	"	"	"	"	"	"
Silver	0.0260	0.0213	"	"	"	"	"	"
Zinc	144	0.426	"	"	"	"	"	"

Hexavalent Chromium by EPA Method 7196

Date Sampled: **09/14/22 10:58**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BF10740	09/28/22	09/28/22	EPA 7196A	

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

Date Sampled: **09/14/22 10:58**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	161	0.0533	mg/L dry	1	BF10633	09/23/22	09/28/22	EPA 6020B	
Magnesium	34.7	0.0533	"	"	"	"	"	"	
Sodium	30.6	0.0533	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **09/14/22 10:58**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	0.570	0.00100	units	1	BF10739	09/28/22	09/28/22	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **09/14/22 10:58**

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

Project: Solid Waste Storage Facility

Project Number: [none]
Project Manager: Kevin Tautkus

Reported:
10/03/22 11:21

SW-8@2'
2209333-08 (Soil)

Summit Scientific

Physical Parameters by APHA/ASTM/EPA Methods

% Solids	93.8	%	1	BFI0573	09/21/22	09/23/22	Calculation
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Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **09/14/22 10:58**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	1.26	0.0100	mmhos/cm	1	BFI0637	09/23/22	09/27/22	EPA 120.1	

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

Date Sampled: **09/14/22 10:58**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	7.94		pH Units	1	BFI0636	09/23/22	09/27/22	EPA 9045D	

Summit Scientific

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1675 Broadway
Denver CO, 80202

Project: Solid Waste Storage Facility

Project Number: [none]
Project Manager: Kevin Tautkus

Reported:
10/03/22 11:21

SW-9@2'
2209333-09 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **09/14/22 11:00**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Benzene	ND	0.0020	mg/kg	1	BF10493	09/20/22	09/21/22	EPA 8260B	
Toluene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	ND	0.010	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	0.0050	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	0.0050	"	"	"	"	"	"	
Naphthalene	ND	0.0038	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	ND	0.50	"	"	"	"	"	"	

Date Sampled: **09/14/22 11:00**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: 1,2-Dichloroethane-d4		101 %	50-150		"	"	"	"	
Surrogate: Toluene-d8		95.9 %	50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		93.7 %	50-150		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **09/14/22 11:00**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
C10-C28 (DRO)	3200	50	mg/kg	1	BF10496	09/20/22	09/22/22	EPA 8015M	
C28-C36 (ORO)	1100	50	"	"	"	"	"	"	

Date Sampled: **09/14/22 11:00**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: o-Terphenyl		135 %	30-150		"	"	"	"	

PAH by EPA Method 8270D SIM

R-01

Summit Scientific

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K.P. Kauffman
1675 Broadway
Denver CO, 80202

Project: Solid Waste Storage Facility

Project Number: [none]
Project Manager: Kevin Tautkus

Reported:
10/03/22 11:21

SW-9@2'
2209333-09 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

R-01

Date Sampled: **09/14/22 11:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.0500	mg/kg	10	BF10478	09/20/22	09/22/22	EPA 8270D SIM	
Anthracene	ND	0.0500	"	"	"	"	"	"	
Benzo (a) anthracene	0.114	0.0500	"	"	"	"	"	"	
Benzo (a) pyrene	ND	0.0500	"	"	"	"	"	"	
Benzo (b) fluoranthene	0.326	0.0500	"	"	"	"	"	"	
Benzo (k) fluoranthene	ND	0.0500	"	"	"	"	"	"	
Chrysene	0.653	0.0500	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	0.0500	"	"	"	"	"	"	
Fluoranthene	0.0978	0.0500	"	"	"	"	"	"	
Fluorene	ND	0.0500	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	ND	0.0500	"	"	"	"	"	"	
Pyrene	0.638	0.0500	"	"	"	"	"	"	
1-Methylnaphthalene	ND	0.0500	"	"	"	"	"	"	
2-Methylnaphthalene	ND	0.0500	"	"	"	"	"	"	

Date Sampled: **09/14/22 11:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10		%	40-150		"	"	"	"	S-01
Surrogate: Fluoranthene-d10		191 %	40-150		"	"	"	"	S-01

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **09/14/22 11:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	0.120	0.0100	mg/L	1	BF10571	09/21/22	09/26/22	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **09/14/22 11:00**

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

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K.P. Kauffman
1675 Broadway
Denver CO, 80202

Project: Solid Waste Storage Facility

Project Number: [none]
Project Manager: Kevin Tautkus

Reported:
10/03/22 11:21

SW-9@2'
2209333-09 (Soil)

Summit Scientific

Total Metals by EPA 6020B

Arsenic	1.60	0.230	mg/kg dry	1	BF10567	09/21/22	09/23/22	EPA 6020B
Barium	106	0.460	"	"	"	"	"	"
Cadmium	0.320	0.230	"	"	"	"	"	"
Copper	9.52	0.460	"	"	"	"	"	"
Lead	5.37	0.230	"	"	"	"	"	"
Nickel	7.30	0.460	"	"	"	"	"	"
Selenium	0.585	0.299	"	"	"	"	"	"
Silver	0.0256	0.0230	"	"	"	"	"	"
Zinc	184	0.460	"	"	"	"	"	"

Hexavalent Chromium by EPA Method 7196

Date Sampled: **09/14/22 11:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BF10740	09/28/22	09/28/22	EPA 7196A	

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

Date Sampled: **09/14/22 11:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	191	0.0575	mg/L dry	1	BF10633	09/23/22	09/28/22	EPA 6020B	
Magnesium	43.3	0.0575	"	"	"	"	"	"	
Sodium	53.2	0.0575	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **09/14/22 11:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	0.904	0.00100	units	1	BF10739	09/28/22	09/28/22	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **09/14/22 11:00**

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

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K.P. Kauffman
1675 Broadway
Denver CO, 80202

Project: Solid Waste Storage Facility

Project Number: [none]
Project Manager: Kevin Tautkus

Reported:
10/03/22 11:21

SW-9@2'
2209333-09 (Soil)

Summit Scientific

Physical Parameters by APHA/ASTM/EPA Methods

% Solids	86.9	%	1	BFI0573	09/21/22	09/23/22	Calculation
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Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **09/14/22 11:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	1.34	0.0100	mmhos/cm	1	BFI0637	09/23/22	09/27/22	EPA 120.1	

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

Date Sampled: **09/14/22 11:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	7.91		pH Units	1	BFI0636	09/23/22	09/27/22	EPA 9045D	

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K.P. Kauffman
1675 Broadway
Denver CO, 80202

Project: Solid Waste Storage Facility

Project Number: [none]
Project Manager: Kevin Tautkus

Reported:
10/03/22 11:21

SW-10@2'
2209333-10 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **09/14/22 11:02**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Benzene	ND	0.0020	mg/kg	1	BF10493	09/20/22	09/21/22	EPA 8260B	
Toluene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	ND	0.010	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	0.0050	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	0.0050	"	"	"	"	"	"	
Naphthalene	ND	0.0038	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	ND	0.50	"	"	"	"	"	"	

Date Sampled: **09/14/22 11:02**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: 1,2-Dichloroethane-d4		117 %	50-150		"	"	"	"	
Surrogate: Toluene-d8		96.4 %	50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		112 %	50-150		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **09/14/22 11:02**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
C10-C28 (DRO)	400	50	mg/kg	1	BF10496	09/20/22	09/26/22	EPA 8015M	
C28-C36 (ORO)	120	50	"	"	"	"	"	"	

Date Sampled: **09/14/22 11:02**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: o-Terphenyl		136 %	30-150		"	"	"	"	

PAH by EPA Method 8270D SIM

Summit Scientific

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K.P. Kauffman
1675 Broadway
Denver CO, 80202

Project: Solid Waste Storage Facility

Project Number: [none]
Project Manager: Kevin Tautkus

Reported:
10/03/22 11:21

SW-10@2'
2209333-10 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

Date Sampled: **09/14/22 11:02**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BF10478	09/20/22	09/22/22	EPA 8270D SIM	
Anthracene	ND	0.00500	"	"	"	"	"	"	
Benzo (a) anthracene	ND	0.00500	"	"	"	"	"	"	
Benzo (a) pyrene	0.00806	0.00500	"	"	"	"	"	"	
Benzo (b) fluoranthene	0.0346	0.00500	"	"	"	"	"	"	
Benzo (k) fluoranthene	ND	0.00500	"	"	"	"	"	"	
Chrysene	0.0616	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	0.0568	0.00500	"	"	"	"	"	"	
1-Methylnaphthalene	ND	0.00500	"	"	"	"	"	"	
2-Methylnaphthalene	ND	0.00500	"	"	"	"	"	"	

Date Sampled: **09/14/22 11:02**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10		49.4 %	40-150		"	"	"	"	
Surrogate: Fluoranthene-d10		43.7 %	40-150		"	"	"	"	

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **09/14/22 11:02**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	0.0635	0.0100	mg/L	1	BF10571	09/21/22	09/26/22	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **09/14/22 11:02**

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

Project: Solid Waste Storage Facility

Project Number: [none]
Project Manager: Kevin Tautkus

Reported:
10/03/22 11:21

SW-10@2'
2209333-10 (Soil)

Summit Scientific

Total Metals by EPA 6020B

Arsenic	0.896	0.215	mg/kg dry	1	BF10567	09/21/22	09/23/22	EPA 6020B
Barium	50.6	0.431	"	"	"	"	"	"
Cadmium	ND	0.215	"	"	"	"	"	"
Copper	4.30	0.431	"	"	"	"	"	"
Lead	2.64	0.215	"	"	"	"	"	"
Nickel	4.31	0.431	"	"	"	"	"	"
Selenium	0.291	0.280	"	"	"	"	"	"
Silver	ND	0.0215	"	"	"	"	"	"
Zinc	55.0	0.431	"	"	"	"	"	"

Hexavalent Chromium by EPA Method 7196

Date Sampled: **09/14/22 11:02**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BF10740	09/28/22	09/28/22	EPA 7196A	

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

Date Sampled: **09/14/22 11:02**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	33.6	0.0539	mg/L dry	1	BF10633	09/23/22	09/28/22	EPA 6020B	
Magnesium	5.25	0.0539	"	"	"	"	"	"	
Sodium	7.56	0.0539	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **09/14/22 11:02**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	0.320	0.00100	units	1	BF10739	09/28/22	09/28/22	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Summit Scientific

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K.P. Kauffman
1675 Broadway
Denver CO, 80202

Project: Solid Waste Storage Facility

Project Number: [none]
Project Manager: Kevin Tautkus

Reported:
10/03/22 11:21

SW-10@2'
2209333-10 (Soil)

Summit Scientific

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **09/14/22 11:02**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
% Solids	92.8			%	1	BF10573	09/21/22	09/23/22	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **09/14/22 11:02**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Specific Conductance (EC)	0.225	0.0100		mmhos/cm	1	BF10637	09/23/22	09/27/22	EPA 120.1	

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

Date Sampled: **09/14/22 11:02**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
pH	7.79			pH Units	1	BF10636	09/23/22	09/27/22	EPA 9045D	

Summit Scientific

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K.P. Kauffman
1675 Broadway
Denver CO, 80202

Project: Solid Waste Storage Facility

Project Number: [none]
Project Manager: Kevin Tautkus

Reported:
10/03/22 11:21

SW-11@2'
2209333-11 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **09/14/22 11:04**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Benzene	ND	0.0020	mg/kg	1	BF10493	09/20/22	09/21/22	EPA 8260B	
Toluene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	ND	0.010	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	0.0050	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	0.0050	"	"	"	"	"	"	
Naphthalene	ND	0.0038	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	ND	0.50	"	"	"	"	"	"	

Date Sampled: **09/14/22 11:04**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: 1,2-Dichloroethane-d4		121 %	50-150		"	"	"	"	
Surrogate: Toluene-d8		98.3 %	50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		95.3 %	50-150		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **09/14/22 11:04**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
C10-C28 (DRO)	ND	50	mg/kg	1	BF10496	09/20/22	09/22/22	EPA 8015M	
C28-C36 (ORO)	ND	50	"	"	"	"	"	"	

Date Sampled: **09/14/22 11:04**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: o-Terphenyl		103 %	30-150		"	"	"	"	

PAH by EPA Method 8270D SIM

Summit Scientific

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K.P. Kauffman
1675 Broadway
Denver CO, 80202

Project: Solid Waste Storage Facility

Project Number: [none]
Project Manager: Kevin Tautkus

Reported:
10/03/22 11:21

SW-11@2'
2209333-11 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

Date Sampled: **09/14/22 11:04**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BF10478	09/20/22	09/22/22	EPA 8270D SIM	
Anthracene	ND	0.00500	"	"	"	"	"	"	
Benzo (a) anthracene	ND	0.00500	"	"	"	"	"	"	
Benzo (a) pyrene	ND	0.00500	"	"	"	"	"	"	
Benzo (b) fluoranthene	ND	0.00500	"	"	"	"	"	"	
Benzo (k) fluoranthene	ND	0.00500	"	"	"	"	"	"	
Chrysene	ND	0.00500	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	0.00500	"	"	"	"	"	"	
Fluoranthene	ND	0.00500	"	"	"	"	"	"	
Fluorene	ND	0.00500	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	ND	0.00500	"	"	"	"	"	"	
Pyrene	ND	0.00500	"	"	"	"	"	"	
1-Methylnaphthalene	ND	0.00500	"	"	"	"	"	"	
2-Methylnaphthalene	ND	0.00500	"	"	"	"	"	"	

Date Sampled: **09/14/22 11:04**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10		45.4 %	40-150		"	"	"	"	
Surrogate: Fluoranthene-d10		45.0 %	40-150		"	"	"	"	

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **09/14/22 11:04**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	0.0672	0.0100	mg/L	1	BF10571	09/21/22	09/26/22	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **09/14/22 11:04**

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

Project: Solid Waste Storage Facility

Project Number: [none]
Project Manager: Kevin Tautkus

Reported:
10/03/22 11:21

SW-11@2'
2209333-11 (Soil)

Summit Scientific

Total Metals by EPA 6020B

Arsenic	1.06	0.210	mg/kg dry	1	BF10567	09/21/22	09/23/22	EPA 6020B
Barium	38.7	0.421	"	"	"	"	"	"
Cadmium	ND	0.210	"	"	"	"	"	"
Copper	3.92	0.421	"	"	"	"	"	"
Lead	2.32	0.210	"	"	"	"	"	"
Nickel	4.54	0.421	"	"	"	"	"	"
Selenium	ND	0.273	"	"	"	"	"	"
Silver	ND	0.0210	"	"	"	"	"	"
Zinc	16.6	0.421	"	"	"	"	"	"

Hexavalent Chromium by EPA Method 7196

Date Sampled: **09/14/22 11:04**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BF10740	09/28/22	09/28/22	EPA 7196A	

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

Date Sampled: **09/14/22 11:04**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	45.5	0.0526	mg/L dry	1	BF10633	09/23/22	09/28/22	EPA 6020B	
Magnesium	5.45	0.0526	"	"	"	"	"	"	
Sodium	7.19	0.0526	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **09/14/22 11:04**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	0.269	0.00100	units	1	BF10739	09/28/22	09/28/22	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Summit Scientific

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K.P. Kauffman
1675 Broadway
Denver CO, 80202

Project: Solid Waste Storage Facility

Project Number: [none]
Project Manager: Kevin Tautkus

Reported:
10/03/22 11:21

SW-11@2'
2209333-11 (Soil)

Summit Scientific

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **09/14/22 11:04**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
% Solids	95.1			%	1	BF10573	09/21/22	09/23/22	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **09/14/22 11:04**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Specific Conductance (EC)	0.203	0.0100		mmhos/cm	1	BF10637	09/23/22	09/27/22	EPA 120.1	

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

Date Sampled: **09/14/22 11:04**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
pH	7.75			pH Units	1	BF10636	09/23/22	09/27/22	EPA 9045D	

Summit Scientific

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K.P. Kauffman
1675 Broadway
Denver CO, 80202

Project: Solid Waste Storage Facility

Project Number: [none]
Project Manager: Kevin Tautkus

Reported:
10/03/22 11:21

SW-12@2'
2209333-12 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **09/14/22 11:06**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Benzene	ND	0.0020	mg/kg	1	BF10493	09/20/22	09/21/22	EPA 8260B	
Toluene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	ND	0.010	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	0.0050	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	0.0050	"	"	"	"	"	"	
Naphthalene	ND	0.0038	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	ND	0.50	"	"	"	"	"	"	

Date Sampled: **09/14/22 11:06**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: 1,2-Dichloroethane-d4		114 %	50-150		"	"	"	"	
Surrogate: Toluene-d8		93.8 %	50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		100 %	50-150		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **09/14/22 11:06**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
C10-C28 (DRO)	ND	50	mg/kg	1	BF10496	09/20/22	09/22/22	EPA 8015M	
C28-C36 (ORO)	ND	50	"	"	"	"	"	"	

Date Sampled: **09/14/22 11:06**

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

PAH by EPA Method 8270D SIM

Summit Scientific

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K.P. Kauffman
1675 Broadway
Denver CO, 80202

Project: Solid Waste Storage Facility

Project Number: [none]
Project Manager: Kevin Tautkus

Reported:
10/03/22 11:21

SW-12@2'
2209333-12 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

Date Sampled: **09/14/22 11:06**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BF10478	09/20/22	09/22/22	EPA 8270D SIM	
Anthracene	ND	0.00500	"	"	"	"	"	"	
Benzo (a) anthracene	ND	0.00500	"	"	"	"	"	"	
Benzo (a) pyrene	ND	0.00500	"	"	"	"	"	"	
Benzo (b) fluoranthene	ND	0.00500	"	"	"	"	"	"	
Benzo (k) fluoranthene	ND	0.00500	"	"	"	"	"	"	
Chrysene	ND	0.00500	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	0.00500	"	"	"	"	"	"	
Fluoranthene	ND	0.00500	"	"	"	"	"	"	
Fluorene	ND	0.00500	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	ND	0.00500	"	"	"	"	"	"	
Pyrene	ND	0.00500	"	"	"	"	"	"	
1-Methylnaphthalene	ND	0.00500	"	"	"	"	"	"	
2-Methylnaphthalene	ND	0.00500	"	"	"	"	"	"	

Date Sampled: **09/14/22 11:06**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10		42.4 %	40-150		"	"	"	"	
Surrogate: Fluoranthene-d10		43.4 %	40-150		"	"	"	"	

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **09/14/22 11:06**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	0.0969	0.0100	mg/L	1	BF10571	09/21/22	09/26/22	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **09/14/22 11:06**

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

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K.P. Kauffman
1675 Broadway
Denver CO, 80202

Project: Solid Waste Storage Facility

Project Number: [none]
Project Manager: Kevin Tautkus

Reported:
10/03/22 11:21

SW-12@2'
2209333-12 (Soil)

Summit Scientific

Total Metals by EPA 6020B

Arsenic	3.38	0.211	mg/kg dry	1	BF10567	09/21/22	09/23/22	EPA 6020B
Barium	79.6	0.422	"	"	"	"	"	"
Cadmium	ND	0.211	"	"	"	"	"	"
Copper	5.98	0.422	"	"	"	"	"	"
Lead	2.08	0.211	"	"	"	"	"	"
Nickel	4.69	0.422	"	"	"	"	"	"
Selenium	0.333	0.275	"	"	"	"	"	"
Silver	ND	0.0211	"	"	"	"	"	"
Zinc	16.9	0.422	"	"	"	"	"	"

Hexavalent Chromium by EPA Method 7196

Date Sampled: **09/14/22 11:06**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BF10740	09/28/22	09/28/22	EPA 7196A	

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

Date Sampled: **09/14/22 11:06**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	51.9	0.0528	mg/L dry	1	BF10633	09/23/22	09/28/22	EPA 6020B	
Magnesium	6.42	0.0528	"	"	"	"	"	"	
Sodium	10.8	0.0528	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **09/14/22 11:06**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	0.376	0.00100	units	1	BF10739	09/28/22	09/28/22	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Summit Scientific

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K.P. Kauffman
1675 Broadway
Denver CO, 80202

Project: Solid Waste Storage Facility

Project Number: [none]
Project Manager: Kevin Tautkus

Reported:
10/03/22 11:21

SW-12@2'
2209333-12 (Soil)

Summit Scientific

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **09/14/22 11:06**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
% Solids	94.7			%	1	BF10573	09/21/22	09/23/22	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **09/14/22 11:06**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Specific Conductance (EC)	0.225	0.0100		mmhos/cm	1	BF10637	09/23/22	09/27/22	EPA 120.1	

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

Date Sampled: **09/14/22 11:06**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
pH	7.88			pH Units	1	BF10636	09/23/22	09/27/22	EPA 9045D	

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K.P. Kauffman
1675 Broadway
Denver CO, 80202

Project: Solid Waste Storage Facility

Project Number: [none]
Project Manager: Kevin Tautkus

Reported:
10/03/22 11:21

SW-13@2'
2209333-13 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **09/14/22 11:08**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Benzene	ND	0.0020	mg/kg	1	BF10493	09/20/22	09/21/22	EPA 8260B	
Toluene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	ND	0.010	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	0.0050	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	0.0050	"	"	"	"	"	"	
Naphthalene	ND	0.0038	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	ND	0.50	"	"	"	"	"	"	

Date Sampled: **09/14/22 11:08**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: 1,2-Dichloroethane-d4		121 %	50-150		"	"	"	"	
Surrogate: Toluene-d8		93.9 %	50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		99.8 %	50-150		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **09/14/22 11:08**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
C10-C28 (DRO)	ND	50	mg/kg	1	BF10496	09/20/22	09/22/22	EPA 8015M	
C28-C36 (ORO)	ND	50	"	"	"	"	"	"	

Date Sampled: **09/14/22 11:08**

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

PAH by EPA Method 8270D SIM

Summit Scientific

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K.P. Kauffman
1675 Broadway
Denver CO, 80202

Project: Solid Waste Storage Facility

Project Number: [none]
Project Manager: Kevin Tautkus

Reported:
10/03/22 11:21

SW-13@2'
2209333-13 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

Date Sampled: **09/14/22 11:08**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BF10478	09/20/22	09/22/22	EPA 8270D SIM	
Anthracene	ND	0.00500	"	"	"	"	"	"	
Benzo (a) anthracene	ND	0.00500	"	"	"	"	"	"	
Benzo (a) pyrene	ND	0.00500	"	"	"	"	"	"	
Benzo (b) fluoranthene	ND	0.00500	"	"	"	"	"	"	
Benzo (k) fluoranthene	ND	0.00500	"	"	"	"	"	"	
Chrysene	ND	0.00500	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	0.00500	"	"	"	"	"	"	
Fluoranthene	ND	0.00500	"	"	"	"	"	"	
Fluorene	ND	0.00500	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	ND	0.00500	"	"	"	"	"	"	
Pyrene	ND	0.00500	"	"	"	"	"	"	
1-Methylnaphthalene	ND	0.00500	"	"	"	"	"	"	
2-Methylnaphthalene	ND	0.00500	"	"	"	"	"	"	

Date Sampled: **09/14/22 11:08**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10		48.6 %	40-150		"	"	"	"	
Surrogate: Fluoranthene-d10		49.2 %	40-150		"	"	"	"	

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **09/14/22 11:08**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	0.0852	0.0100	mg/L	1	BF10571	09/21/22	09/26/22	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **09/14/22 11:08**

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

Project: Solid Waste Storage Facility

Project Number: [none]
Project Manager: Kevin Tautkus

Reported:
10/03/22 11:21

SW-13@2'
2209333-13 (Soil)

Summit Scientific

Total Metals by EPA 6020B

Arsenic	1.13	0.207	mg/kg dry	1	BF10567	09/21/22	09/23/22	EPA 6020B
Barium	63.4	0.413	"	"	"	"	"	"
Cadmium	0.208	0.207	"	"	"	"	"	"
Copper	6.77	0.413	"	"	"	"	"	"
Lead	3.06	0.207	"	"	"	"	"	"
Nickel	5.12	0.413	"	"	"	"	"	"
Selenium	0.376	0.268	"	"	"	"	"	"
Silver	ND	0.0207	"	"	"	"	"	"
Zinc	26.3	0.413	"	"	"	"	"	"

Hexavalent Chromium by EPA Method 7196

Date Sampled: **09/14/22 11:08**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BF10740	09/28/22	09/28/22	EPA 7196A	

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

Date Sampled: **09/14/22 11:08**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	47.4	0.0516	mg/L dry	1	BF10633	09/23/22	09/28/22	EPA 6020B	
Magnesium	7.34	0.0516	"	"	"	"	"	"	
Sodium	5.26	0.0516	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **09/14/22 11:08**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	0.188	0.00100	units	1	BF10739	09/28/22	09/28/22	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **09/14/22 11:08**

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

Project: Solid Waste Storage Facility

Project Number: [none]
Project Manager: Kevin Tautkus

Reported:
10/03/22 11:21

SW-13@2'
2209333-13 (Soil)

Summit Scientific

Physical Parameters by APHA/ASTM/EPA Methods

% Solids	96.8	%	1	BFI0573	09/21/22	09/23/22	Calculation
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Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **09/14/22 11:08**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.356	0.0100	mmhos/cm	1	BFI0637	09/23/22	09/27/22	EPA 120.1	

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

Date Sampled: **09/14/22 11:08**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	7.86		pH Units	1	BFI0636	09/23/22	09/27/22	EPA 9045D	

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1675 Broadway
Denver CO, 80202

Project: Solid Waste Storage Facility

Project Number: [none]
Project Manager: Kevin Tautkus

Reported:
10/03/22 11:21

SW-14@2'
2209333-14 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **09/14/22 11:10**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Benzene	ND	0.0020	mg/kg	1	BF10493	09/20/22	09/21/22	EPA 8260B	
Toluene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	ND	0.010	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	0.0050	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	0.0050	"	"	"	"	"	"	
Naphthalene	ND	0.0038	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	ND	0.50	"	"	"	"	"	"	

Date Sampled: **09/14/22 11:10**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: 1,2-Dichloroethane-d4		123 %	50-150		"	"	"	"	
Surrogate: Toluene-d8		95.6 %	50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		107 %	50-150		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **09/14/22 11:10**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
C10-C28 (DRO)	ND	50	mg/kg	1	BF10496	09/20/22	09/22/22	EPA 8015M	
C28-C36 (ORO)	ND	50	"	"	"	"	"	"	

Date Sampled: **09/14/22 11:10**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: o-Terphenyl		99.5 %	30-150		"	"	"	"	

PAH by EPA Method 8270D SIM

Summit Scientific

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K.P. Kauffman
1675 Broadway
Denver CO, 80202

Project: Solid Waste Storage Facility

Project Number: [none]
Project Manager: Kevin Tautkus

Reported:
10/03/22 11:21

SW-14@2'
2209333-14 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

Date Sampled: **09/14/22 11:10**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BF10478	09/20/22	09/22/22	EPA 8270D SIM	
Anthracene	ND	0.00500	"	"	"	"	"	"	
Benzo (a) anthracene	ND	0.00500	"	"	"	"	"	"	
Benzo (a) pyrene	ND	0.00500	"	"	"	"	"	"	
Benzo (b) fluoranthene	ND	0.00500	"	"	"	"	"	"	
Benzo (k) fluoranthene	ND	0.00500	"	"	"	"	"	"	
Chrysene	ND	0.00500	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	0.00500	"	"	"	"	"	"	
Fluoranthene	ND	0.00500	"	"	"	"	"	"	
Fluorene	ND	0.00500	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	ND	0.00500	"	"	"	"	"	"	
Pyrene	ND	0.00500	"	"	"	"	"	"	
1-Methylnaphthalene	ND	0.00500	"	"	"	"	"	"	
2-Methylnaphthalene	ND	0.00500	"	"	"	"	"	"	

Date Sampled: **09/14/22 11:10**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10		47.9 %	40-150		"	"	"	"	
Surrogate: Fluoranthene-d10		47.4 %	40-150		"	"	"	"	

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **09/14/22 11:10**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	0.140	0.0100	mg/L	1	BF10571	09/21/22	09/26/22	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **09/14/22 11:10**

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

Project: Solid Waste Storage Facility

Project Number: [none]
Project Manager: Kevin Tautkus

Reported:
10/03/22 11:21

SW-14@2'
2209333-14 (Soil)

Summit Scientific

Total Metals by EPA 6020B

Arsenic	1.36	0.206	mg/kg dry	1	BF10567	09/21/22	09/23/22	EPA 6020B
Barium	91.9	0.412	"	"	"	"	"	"
Cadmium	0.255	0.206	"	"	"	"	"	"
Copper	8.64	0.412	"	"	"	"	"	"
Lead	4.20	0.206	"	"	"	"	"	"
Nickel	6.65	0.412	"	"	"	"	"	"
Selenium	0.689	0.268	"	"	"	"	"	"
Silver	ND	0.0206	"	"	"	"	"	"
Zinc	34.6	0.412	"	"	"	"	"	"

Hexavalent Chromium by EPA Method 7196

Date Sampled: **09/14/22 11:10**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BF10740	09/28/22	09/28/22	EPA 7196A	

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

Date Sampled: **09/14/22 11:10**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	31.2	0.0515	mg/L dry	1	BF10633	09/23/22	09/28/22	EPA 6020B	
Magnesium	7.67	0.0515	"	"	"	"	"	"	
Sodium	7.80	0.0515	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **09/14/22 11:10**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	0.324	0.00100	units	1	BF10739	09/28/22	09/28/22	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **09/14/22 11:10**

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

Project: Solid Waste Storage Facility

Project Number: [none]
Project Manager: Kevin Tautkus

Reported:
10/03/22 11:21

SW-14@2'
2209333-14 (Soil)

Summit Scientific

Physical Parameters by APHA/ASTM/EPA Methods

% Solids	97.1	%	1	BFI0573	09/21/22	09/23/22	Calculation
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Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **09/14/22 11:10**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.297	0.0100	mmhos/cm	1	BFI0637	09/23/22	09/27/22	EPA 120.1	

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

Date Sampled: **09/14/22 11:10**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	7.89		pH Units	1	BFI0636	09/23/22	09/27/22	EPA 9045D	

Summit Scientific

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K.P. Kauffman
1675 Broadway
Denver CO, 80202

Project: Solid Waste Storage Facility

Project Number: [none]
Project Manager: Kevin Tautkus

Reported:
10/03/22 11:21

SW-15@2'
2209333-15 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **09/14/22 11:12**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Benzene	ND	0.0020	mg/kg	1	BF10493	09/20/22	09/21/22	EPA 8260B	
Toluene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	ND	0.010	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	0.0050	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	0.0050	"	"	"	"	"	"	
Naphthalene	ND	0.0038	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	ND	0.50	"	"	"	"	"	"	

Date Sampled: **09/14/22 11:12**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: 1,2-Dichloroethane-d4		109 %	50-150		"	"	"	"	
Surrogate: Toluene-d8		93.9 %	50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		96.2 %	50-150		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **09/14/22 11:12**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
C10-C28 (DRO)	89	50	mg/kg	1	BF10496	09/20/22	09/22/22	EPA 8015M	
C28-C36 (ORO)	100	50	"	"	"	"	"	"	

Date Sampled: **09/14/22 11:12**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: o-Terphenyl		87.6 %	30-150		"	"	"	"	

PAH by EPA Method 8270D SIM

Summit Scientific

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K.P. Kauffman
1675 Broadway
Denver CO, 80202

Project: Solid Waste Storage Facility

Project Number: [none]
Project Manager: Kevin Tautkus

Reported:
10/03/22 11:21

SW-15@2'
2209333-15 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

Date Sampled: **09/14/22 11:12**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BF10478	09/20/22	09/22/22	EPA 8270D SIM	
Anthracene	ND	0.00500	"	"	"	"	"	"	
Benzo (a) anthracene	ND	0.00500	"	"	"	"	"	"	
Benzo (a) pyrene	ND	0.00500	"	"	"	"	"	"	
Benzo (b) fluoranthene	ND	0.00500	"	"	"	"	"	"	
Benzo (k) fluoranthene	ND	0.00500	"	"	"	"	"	"	
Chrysene	ND	0.00500	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	0.00500	"	"	"	"	"	"	
Fluoranthene	ND	0.00500	"	"	"	"	"	"	
Fluorene	ND	0.00500	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	ND	0.00500	"	"	"	"	"	"	
Pyrene	ND	0.00500	"	"	"	"	"	"	
1-Methylnaphthalene	ND	0.00500	"	"	"	"	"	"	
2-Methylnaphthalene	ND	0.00500	"	"	"	"	"	"	

Date Sampled: **09/14/22 11:12**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10		45.7 %	40-150		"	"	"	"	
Surrogate: Fluoranthene-d10		43.2 %	40-150		"	"	"	"	

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **09/14/22 11:12**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	0.163	0.0100	mg/L	1	BF10571	09/21/22	09/26/22	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **09/14/22 11:12**

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

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K.P. Kauffman
1675 Broadway
Denver CO, 80202

Project: Solid Waste Storage Facility

Project Number: [none]
Project Manager: Kevin Tautkus

Reported:
10/03/22 11:21

SW-15@2'
2209333-15 (Soil)

Summit Scientific

Total Metals by EPA 6020B

Arsenic	1.88	0.206	mg/kg dry	1	BF10567	09/21/22	09/23/22	EPA 6020B
Barium	231	0.411	"	"	"	"	"	"
Cadmium	0.310	0.206	"	"	"	"	"	"
Copper	9.84	0.411	"	"	"	"	"	"
Lead	6.42	0.206	"	"	"	"	"	"
Nickel	7.59	0.411	"	"	"	"	"	"
Selenium	0.581	0.267	"	"	"	"	"	"
Silver	0.0223	0.0206	"	"	"	"	"	"
Zinc	47.5	0.411	"	"	"	"	"	"

Hexavalent Chromium by EPA Method 7196

Date Sampled: **09/14/22 11:12**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BF10740	09/28/22	09/28/22	EPA 7196A	

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

Date Sampled: **09/14/22 11:12**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	69.8	0.0514	mg/L dry	1	BF10633	09/23/22	09/28/22	EPA 6020B	
Magnesium	13.7	0.0514	"	"	"	"	"	"	
Sodium	5.28	0.0514	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **09/14/22 11:12**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	0.151	0.00100	units	1	BF10739	09/28/22	09/28/22	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **09/14/22 11:12**

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

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K.P. Kauffman
1675 Broadway
Denver CO, 80202

Project: Solid Waste Storage Facility

Project Number: [none]
Project Manager: Kevin Tautkus

Reported:
10/03/22 11:21

SW-15@2'
2209333-15 (Soil)

Summit Scientific

Physical Parameters by APHA/ASTM/EPA Methods

% Solids	97.2	%	1	BFI0573	09/21/22	09/23/22	Calculation
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Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **09/14/22 11:12**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.592	0.0100	mmhos/cm	1	BFI0637	09/23/22	09/27/22	EPA 120.1	

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

Date Sampled: **09/14/22 11:12**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	8.10		pH Units	1	BFI0636	09/23/22	09/27/22	EPA 9045D	

Summit Scientific

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K.P. Kauffman
1675 Broadway
Denver CO, 80202

Project: Solid Waste Storage Facility

Project Number: [none]
Project Manager: Kevin Tautkus

Reported:
10/03/22 11:21

SW-16@2'
2209333-16 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **09/14/22 11:14**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Benzene	ND	0.0020	mg/kg	1	BF10493	09/20/22	09/21/22	EPA 8260B	
Toluene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	ND	0.010	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	0.0050	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	0.0050	"	"	"	"	"	"	
Naphthalene	ND	0.0038	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	ND	0.50	"	"	"	"	"	"	

Date Sampled: **09/14/22 11:14**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: 1,2-Dichloroethane-d4		117 %	50-150		"	"	"	"	
Surrogate: Toluene-d8		93.5 %	50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		101 %	50-150		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **09/14/22 11:14**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
C10-C28 (DRO)	140	50	mg/kg	1	BF10496	09/20/22	09/22/22	EPA 8015M	
C28-C36 (ORO)	130	50	"	"	"	"	"	"	

Date Sampled: **09/14/22 11:14**

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

PAH by EPA Method 8270D SIM

Summit Scientific

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K.P. Kauffman
1675 Broadway
Denver CO, 80202

Project: Solid Waste Storage Facility

Project Number: [none]
Project Manager: Kevin Tautkus

Reported:
10/03/22 11:21

SW-16@2'
2209333-16 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

Date Sampled: **09/14/22 11:14**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BF10478	09/20/22	09/22/22	EPA 8270D SIM	
Anthracene	ND	0.00500	"	"	"	"	"	"	
Benzo (a) anthracene	ND	0.00500	"	"	"	"	"	"	
Benzo (a) pyrene	ND	0.00500	"	"	"	"	"	"	
Benzo (b) fluoranthene	ND	0.00500	"	"	"	"	"	"	
Benzo (k) fluoranthene	ND	0.00500	"	"	"	"	"	"	
Chrysene	0.00804	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: **09/14/22 11:14**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10		47.6 %	40-150		"	"	"	"	
Surrogate: Fluoranthene-d10		41.3 %	40-150		"	"	"	"	

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **09/14/22 11:14**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	0.342	0.0100	mg/L	1	BF10571	09/21/22	09/26/22	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **09/14/22 11:14**

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

Project: Solid Waste Storage Facility

Project Number: [none]
Project Manager: Kevin Tautkus

Reported:
10/03/22 11:21

SW-16@2'
2209333-16 (Soil)

Summit Scientific

Total Metals by EPA 6020B

Arsenic	2.84	0.208	mg/kg dry	1	BF10567	09/21/22	09/23/22	EPA 6020B
Barium	307	0.415	"	"	"	"	"	"
Cadmium	0.622	0.208	"	"	"	"	"	"
Copper	15.9	0.415	"	"	"	"	"	"
Lead	9.23	0.208	"	"	"	"	"	"
Nickel	11.6	0.415	"	"	"	"	"	"
Selenium	0.745	0.270	"	"	"	"	"	"
Silver	0.0344	0.0208	"	"	"	"	"	"
Zinc	55.9	0.415	"	"	"	"	"	"

Hexavalent Chromium by EPA Method 7196

Date Sampled: **09/14/22 11:14**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BF10740	09/28/22	09/28/22	EPA 7196A	

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

Date Sampled: **09/14/22 11:14**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	22.0	0.0519	mg/L dry	1	BF10633	09/23/22	09/28/22	EPA 6020B	
Magnesium	6.11	0.0519	"	"	"	"	"	"	
Sodium	26.7	0.0519	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **09/14/22 11:14**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	1.30	0.00100	units	1	BF10739	09/28/22	09/28/22	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **09/14/22 11:14**

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

Project: Solid Waste Storage Facility

Project Number: [none]
Project Manager: Kevin Tautkus

Reported:
10/03/22 11:21

SW-16@2'
2209333-16 (Soil)

Summit Scientific

Physical Parameters by APHA/ASTM/EPA Methods

% Solids	96.3	%	1	BFI0573	09/21/22	09/23/22	Calculation
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Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **09/14/22 11:14**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.299	0.0100	mmhos/cm	1	BFI0637	09/23/22	09/27/22	EPA 120.1	

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

Date Sampled: **09/14/22 11:14**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	7.87		pH Units	1	BFI0636	09/23/22	09/27/22	EPA 9045D	

Summit Scientific

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K.P. Kauffman
1675 Broadway
Denver CO, 80202

Project: Solid Waste Storage Facility

Project Number: [none]
Project Manager: Kevin Tautkus

Reported:
10/03/22 11:21

SW-17@2'
2209333-17 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **09/14/22 11:30**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Benzene	ND	0.0020	mg/kg	1	BF10493	09/20/22	09/21/22	EPA 8260B	
Toluene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	ND	0.010	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	0.0050	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	0.0050	"	"	"	"	"	"	
Naphthalene	ND	0.0038	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	ND	0.50	"	"	"	"	"	"	

Date Sampled: **09/14/22 11:30**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: 1,2-Dichloroethane-d4		128 %	50-150		"	"	"	"	
Surrogate: Toluene-d8		93.8 %	50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		100 %	50-150		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **09/14/22 11:30**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
C10-C28 (DRO)	190	50	mg/kg	1	BF10496	09/20/22	09/22/22	EPA 8015M	
C28-C36 (ORO)	200	50	"	"	"	"	"	"	

Date Sampled: **09/14/22 11:30**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: o-Terphenyl		113 %	30-150		"	"	"	"	

PAH by EPA Method 8270D SIM

Summit Scientific

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K.P. Kauffman
1675 Broadway
Denver CO, 80202

Project: Solid Waste Storage Facility

Project Number: [none]
Project Manager: Kevin Tautkus

Reported:
10/03/22 11:21

SW-17@2'
2209333-17 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

Date Sampled: **09/14/22 11:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BF10478	09/20/22	09/22/22	EPA 8270D SIM	
Anthracene	ND	0.00500	"	"	"	"	"	"	
Benzo (a) anthracene	ND	0.00500	"	"	"	"	"	"	
Benzo (a) pyrene	ND	0.00500	"	"	"	"	"	"	
Benzo (b) fluoranthene	ND	0.00500	"	"	"	"	"	"	
Benzo (k) fluoranthene	ND	0.00500	"	"	"	"	"	"	
Chrysene	0.00545	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: **09/14/22 11:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10		52.4 %	40-150		"	"	"	"	
Surrogate: Fluoranthene-d10		43.1 %	40-150		"	"	"	"	

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **09/14/22 11:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	0.380	0.0100	mg/L	1	BF10571	09/21/22	09/26/22	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **09/14/22 11:30**

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

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K.P. Kauffman
1675 Broadway
Denver CO, 80202

Project: Solid Waste Storage Facility

Project Number: [none]
Project Manager: Kevin Tautkus

Reported:
10/03/22 11:21

SW-17@2'
2209333-17 (Soil)

Summit Scientific

Total Metals by EPA 6020B

Arsenic	2.44	0.208	mg/kg dry	1	BF10567	09/21/22	09/23/22	EPA 6020B
Barium	168	0.415	"	"	"	"	"	"
Cadmium	0.500	0.208	"	"	"	"	"	"
Copper	13.8	0.415	"	"	"	"	"	"
Lead	7.54	0.208	"	"	"	"	"	"
Nickel	10.7	0.415	"	"	"	"	"	"
Selenium	0.804	0.270	"	"	"	"	"	"
Silver	0.0313	0.0208	"	"	"	"	"	"
Zinc	68.2	0.415	"	"	"	"	"	"

Hexavalent Chromium by EPA Method 7196

Date Sampled: **09/14/22 11:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BF10740	09/28/22	09/28/22	EPA 7196A	

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

Date Sampled: **09/14/22 11:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	357	0.0519	mg/L dry	1	BF10633	09/23/22	09/28/22	EPA 6020B	
Magnesium	92.5	0.0519	"	"	"	"	"	"	
Sodium	183	0.0519	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **09/14/22 11:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	2.23	0.00100	units	1	BF10739	09/28/22	09/28/22	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **09/14/22 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: Solid Waste Storage Facility

Project Number: [none]
Project Manager: Kevin Tautkus

Reported:
10/03/22 11:21

SW-17@2'
2209333-17 (Soil)

Summit Scientific

Physical Parameters by APHA/ASTM/EPA Methods

% Solids	96.3	%	1	BFI0573	09/21/22	09/23/22	Calculation
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Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **09/14/22 11:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	3.35	0.0100	mmhos/cm	1	BFI0637	09/23/22	09/27/22	EPA 120.1	

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

Date Sampled: **09/14/22 11:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	8.10		pH Units	1	BFI0636	09/23/22	09/27/22	EPA 9045D	

Summit Scientific

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K.P. Kauffman
1675 Broadway
Denver CO, 80202

Project: Solid Waste Storage Facility

Project Number: [none]
Project Manager: Kevin Tautkus

Reported:
10/03/22 11:21

BH-1@3'
2209333-18 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **09/14/22 11:16**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Benzene	ND	0.0020	mg/kg	1	BF10493	09/20/22	09/21/22	EPA 8260B	
Toluene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	ND	0.010	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	0.0050	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	0.0050	"	"	"	"	"	"	
Naphthalene	ND	0.0038	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	ND	0.50	"	"	"	"	"	"	

Date Sampled: **09/14/22 11:16**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: 1,2-Dichloroethane-d4		105 %	50-150		"	"	"	"	
Surrogate: Toluene-d8		92.3 %	50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		94.2 %	50-150		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **09/14/22 11:16**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
C10-C28 (DRO)	ND	50	mg/kg	1	BF10496	09/20/22	09/22/22	EPA 8015M	
C28-C36 (ORO)	ND	50	"	"	"	"	"	"	

Date Sampled: **09/14/22 11:16**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: o-Terphenyl		91.3 %	30-150		"	"	"	"	

PAH by EPA Method 8270D SIM

Summit Scientific

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K.P. Kauffman
1675 Broadway
Denver CO, 80202

Project: Solid Waste Storage Facility

Project Number: [none]
Project Manager: Kevin Tautkus

Reported:
10/03/22 11:21

BH-1@3'
2209333-18 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

Date Sampled: **09/14/22 11:16**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BF10478	09/20/22	09/22/22	EPA 8270D SIM	
Anthracene	ND	0.00500	"	"	"	"	"	"	
Benzo (a) anthracene	ND	0.00500	"	"	"	"	"	"	
Benzo (a) pyrene	ND	0.00500	"	"	"	"	"	"	
Benzo (b) fluoranthene	ND	0.00500	"	"	"	"	"	"	
Benzo (k) fluoranthene	ND	0.00500	"	"	"	"	"	"	
Chrysene	ND	0.00500	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	0.00500	"	"	"	"	"	"	
Fluoranthene	ND	0.00500	"	"	"	"	"	"	
Fluorene	ND	0.00500	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	ND	0.00500	"	"	"	"	"	"	
Pyrene	ND	0.00500	"	"	"	"	"	"	
1-Methylnaphthalene	ND	0.00500	"	"	"	"	"	"	
2-Methylnaphthalene	ND	0.00500	"	"	"	"	"	"	

Date Sampled: **09/14/22 11:16**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10		48.4 %	40-150		"	"	"	"	
Surrogate: Fluoranthene-d10		45.3 %	40-150		"	"	"	"	

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **09/14/22 11:16**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	0.113	0.0100	mg/L	1	BF10571	09/21/22	09/26/22	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **09/14/22 11:16**

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

Project: Solid Waste Storage Facility

Project Number: [none]
Project Manager: Kevin Tautkus

Reported:
10/03/22 11:21

BH-1@3'
2209333-18 (Soil)

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Total Metals by EPA 6020B

Arsenic	1.59	0.206	mg/kg dry	1	BF10567	09/21/22	09/23/22	EPA 6020B
Barium	88.6	0.412	"	"	"	"	"	"
Cadmium	ND	0.206	"	"	"	"	"	"
Copper	5.81	0.412	"	"	"	"	"	"
Lead	2.69	0.206	"	"	"	"	"	"
Nickel	5.01	0.412	"	"	"	"	"	"
Selenium	0.379	0.268	"	"	"	"	"	"
Silver	ND	0.0206	"	"	"	"	"	"
Zinc	23.0	0.412	"	"	"	"	"	"

Hexavalent Chromium by EPA Method 7196

Date Sampled: **09/14/22 11:16**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BF10740	09/28/22	09/28/22	EPA 7196A	

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

Date Sampled: **09/14/22 11:16**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	27.9	0.0515	mg/L dry	1	BF10633	09/23/22	09/28/22	EPA 6020B	
Magnesium	4.17	0.0515	"	"	"	"	"	"	
Sodium	7.67	0.0515	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **09/14/22 11:16**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	0.358	0.00100	units	1	BF10739	09/28/22	09/28/22	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Summit Scientific

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K.P. Kauffman
1675 Broadway
Denver CO, 80202

Project: Solid Waste Storage Facility

Project Number: [none]
Project Manager: Kevin Tautkus

Reported:
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BH-1@3'
2209333-18 (Soil)

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Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **09/14/22 11:16**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
% Solids	97.1			%	1	BF10573	09/21/22	09/23/22	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **09/14/22 11:16**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Specific Conductance (EC)	0.172	0.0100		mmhos/cm	1	BF10637	09/23/22	09/27/22	EPA 120.1	

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

Date Sampled: **09/14/22 11:16**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
pH	7.37			pH Units	1	BF10636	09/23/22	09/27/22	EPA 9045D	

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1675 Broadway
Denver CO, 80202

Project: Solid Waste Storage Facility

Project Number: [none]
Project Manager: Kevin Tautkus

Reported:
10/03/22 11:21

BH-2@3'
2209333-19 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **09/14/22 11:18**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Benzene	ND	0.0020	mg/kg	1	BF10493	09/20/22	09/21/22	EPA 8260B	
Toluene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	ND	0.010	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	0.0050	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	0.0050	"	"	"	"	"	"	
Naphthalene	ND	0.0038	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	ND	0.50	"	"	"	"	"	"	

Date Sampled: **09/14/22 11:18**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: 1,2-Dichloroethane-d4		106 %	50-150		"	"	"	"	
Surrogate: Toluene-d8		94.5 %	50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		94.5 %	50-150		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **09/14/22 11:18**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
C10-C28 (DRO)	ND	50	mg/kg	1	BF10496	09/20/22	09/22/22	EPA 8015M	
C28-C36 (ORO)	ND	50	"	"	"	"	"	"	

Date Sampled: **09/14/22 11:18**

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

PAH by EPA Method 8270D SIM

Summit Scientific

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1675 Broadway
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Project: Solid Waste Storage Facility

Project Number: [none]
Project Manager: Kevin Tautkus

Reported:
10/03/22 11:21

BH-2@3'
2209333-19 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

Date Sampled: **09/14/22 11:18**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BF10478	09/20/22	09/22/22	EPA 8270D SIM	
Anthracene	ND	0.00500	"	"	"	"	"	"	
Benzo (a) anthracene	ND	0.00500	"	"	"	"	"	"	
Benzo (a) pyrene	ND	0.00500	"	"	"	"	"	"	
Benzo (b) fluoranthene	ND	0.00500	"	"	"	"	"	"	
Benzo (k) fluoranthene	ND	0.00500	"	"	"	"	"	"	
Chrysene	ND	0.00500	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	0.00500	"	"	"	"	"	"	
Fluoranthene	ND	0.00500	"	"	"	"	"	"	
Fluorene	ND	0.00500	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	ND	0.00500	"	"	"	"	"	"	
Pyrene	ND	0.00500	"	"	"	"	"	"	
1-Methylnaphthalene	ND	0.00500	"	"	"	"	"	"	
2-Methylnaphthalene	ND	0.00500	"	"	"	"	"	"	

Date Sampled: **09/14/22 11:18**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10		49.6 %	40-150		"	"	"	"	
Surrogate: Fluoranthene-d10		46.7 %	40-150		"	"	"	"	

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **09/14/22 11:18**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	0.0848	0.0100	mg/L	1	BF10571	09/21/22	09/26/22	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **09/14/22 11:18**

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

Project: Solid Waste Storage Facility

Project Number: [none]
Project Manager: Kevin Tautkus

Reported:
10/03/22 11:21

BH-2@3'
2209333-19 (Soil)

Summit Scientific

Total Metals by EPA 6020B

Arsenic	0.877	0.210	mg/kg dry	1	BF10567	09/21/22	09/23/22	EPA 6020B
Barium	63.5	0.419	"	"	"	"	"	"
Cadmium	ND	0.210	"	"	"	"	"	"
Copper	5.31	0.419	"	"	"	"	"	"
Lead	2.27	0.210	"	"	"	"	"	"
Nickel	4.78	0.419	"	"	"	"	"	"
Selenium	0.397	0.272	"	"	"	"	"	"
Silver	ND	0.0210	"	"	"	"	"	"
Zinc	18.9	0.419	"	"	"	"	"	"

Hexavalent Chromium by EPA Method 7196

Date Sampled: **09/14/22 11:18**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BF10740	09/28/22	09/28/22	EPA 7196A	

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

Date Sampled: **09/14/22 11:18**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	37.1	0.0524	mg/L dry	1	BF10700	09/27/22	09/30/22	EPA 6020B	
Magnesium	4.05	0.0524	"	"	"	"	"	"	
Sodium	9.21	0.0524	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **09/14/22 11:18**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	0.383	0.00100	units	1	BF10816	09/30/22	09/30/22	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

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K.P. Kauffman
1675 Broadway
Denver CO, 80202

Project: Solid Waste Storage Facility

Project Number: [none]
Project Manager: Kevin Tautkus

Reported:
10/03/22 11:21

BH-2@3'
2209333-19 (Soil)

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Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **09/14/22 11:18**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	95.4		%	1	BF10573	09/21/22	09/23/22	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **09/14/22 11:18**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.230	0.0100	mmhos/cm	1	BF10703	09/27/22	09/30/22	EPA 120.1	

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

Date Sampled: **09/14/22 11:18**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	7.80		pH Units	1	BF10702	09/27/22	09/30/22	EPA 9045D	

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1675 Broadway
Denver CO, 80202

Project: Solid Waste Storage Facility

Project Number: [none]
Project Manager: Kevin Tautkus

Reported:
10/03/22 11:21

BH-3@3'
2209333-20 (Soil)

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Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **09/14/22 11:20**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Benzene	ND	0.0020	mg/kg	1	BF10493	09/20/22	09/21/22	EPA 8260B	
Toluene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	ND	0.010	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	0.0050	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	0.0050	"	"	"	"	"	"	
Naphthalene	ND	0.0038	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	ND	0.50	"	"	"	"	"	"	

Date Sampled: **09/14/22 11:20**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: 1,2-Dichloroethane-d4		119 %	50-150		"	"	"	"	
Surrogate: Toluene-d8		96.8 %	50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		100 %	50-150		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **09/14/22 11:20**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
C10-C28 (DRO)	1300	50	mg/kg	1	BF10496	09/20/22	09/22/22	EPA 8015M	
C28-C36 (ORO)	330	50	"	"	"	"	"	"	

Date Sampled: **09/14/22 11:20**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: o-Terphenyl		92.5 %	30-150		"	"	"	"	

PAH by EPA Method 8270D SIM

Summit Scientific

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1675 Broadway
Denver CO, 80202

Project: Solid Waste Storage Facility

Project Number: [none]
Project Manager: Kevin Tautkus

Reported:
10/03/22 11:21

BH-3@3'
2209333-20 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

Date Sampled: **09/14/22 11:20**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BF10478	09/20/22	09/22/22	EPA 8270D SIM	
Anthracene	ND	0.00500	"	"	"	"	"	"	
Benzo (a) anthracene	0.0251	0.00500	"	"	"	"	"	"	
Benzo (a) pyrene	ND	0.00500	"	"	"	"	"	"	
Benzo (b) fluoranthene	0.0708	0.00500	"	"	"	"	"	"	
Benzo (k) fluoranthene	ND	0.00500	"	"	"	"	"	"	
Chrysene	0.331	0.0500	"	10	"	"	"	"	
Dibenz (a,h) anthracene	ND	0.00500	"	1	"	"	"	"	
Fluoranthene	0.0169	0.00500	"	"	"	"	"	"	
Fluorene	ND	0.00500	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	ND	0.00500	"	"	"	"	"	"	
Pyrene	0.231	0.0500	"	10	"	"	"	"	
1-Methylnaphthalene	ND	0.00500	"	1	"	"	"	"	
2-Methylnaphthalene	ND	0.00500	"	"	"	"	"	"	

Date Sampled: **09/14/22 11:20**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10	51.2 %	40-150	"	"	"	"	"	"	
Surrogate: Fluoranthene-d10	54.2 %	40-150	"	"	"	"	"	"	

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **09/14/22 11:20**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	0.164	0.0100	mg/L	1	BF10571	09/21/22	09/26/22	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **09/14/22 11:20**

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

Project: Solid Waste Storage Facility

Project Number: [none]
Project Manager: Kevin Tautkus

Reported:
10/03/22 11:21

BH-3@3'
2209333-20 (Soil)

Summit Scientific

Total Metals by EPA 6020B

Arsenic	ND	0.216	mg/kg dry	1	BF10567	09/21/22	09/23/22	EPA 6020B
Barium	ND	0.432	"	"	"	"	"	"
Cadmium	ND	0.216	"	"	"	"	"	"
Copper	0.762	0.432	"	"	"	"	"	"
Lead	ND	0.216	"	"	"	"	"	"
Nickel	0.652	0.432	"	"	"	"	"	"
Selenium	0.335	0.281	"	"	"	"	"	"
Silver	ND	0.0216	"	"	"	"	"	"
Zinc	2.90	0.432	"	"	"	"	"	"

Hexavalent Chromium by EPA Method 7196

Date Sampled: **09/14/22 11:20**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BF10740	09/28/22	09/28/22	EPA 7196A	

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

Date Sampled: **09/14/22 11:20**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Calcium	138	0.0540	mg/L dry	1	BF10700	09/27/22	09/30/22	EPA 6020B	
Magnesium	22.1	0.0540	"	"	"	"	"	"	
Sodium	8.94	0.0540	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **09/14/22 11:20**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Sodium Adsorption Ratio	0.186	0.00100	units	1	BF10816	09/30/22	09/30/22	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Summit Scientific

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K.P. Kauffman
1675 Broadway
Denver CO, 80202

Project: Solid Waste Storage Facility

Project Number: [none]
Project Manager: Kevin Tautkus

Reported:
10/03/22 11:21

BH-3@3'
2209333-20 (Soil)

Summit Scientific

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **09/14/22 11:20**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
% Solids	92.6			%	1	BF10573	09/21/22	09/23/22	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **09/14/22 11:20**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Specific Conductance (EC)	0.810	0.0100		mmhos/cm	1	BF10703	09/27/22	09/30/22	EPA 120.1	

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

Date Sampled: **09/14/22 11:20**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
pH	7.44			pH Units	1	BF10702	09/27/22	09/30/22	EPA 9045D	

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1675 Broadway
Denver CO, 80202

Project: Solid Waste Storage Facility

Project Number: [none]
Project Manager: Kevin Tautkus

Reported:
10/03/22 11:21

BH-4@3'
2209333-21 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **09/14/22 11:22**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0020	mg/kg	1	BF10494	09/20/22	09/22/22	EPA 8260B	
Toluene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	ND	0.010	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	0.0050	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	0.0050	"	"	"	"	"	"	
Naphthalene	ND	0.0038	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	ND	0.50	"	"	"	"	"	"	

Date Sampled: **09/14/22 11:22**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		120 %	50-150		"	"	"	"	
Surrogate: Toluene-d8		97.1 %	50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		94.5 %	50-150		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **09/14/22 11:22**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	140	50	mg/kg	1	BF10497	09/20/22	09/23/22	EPA 8015M	
C28-C36 (ORO)	120	50	"	"	"	"	"	"	

Date Sampled: **09/14/22 11:22**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl		108 %	30-150		"	"	"	"	

PAH by EPA Method 8270D SIM

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Project Number: [none]
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Reported:
10/03/22 11:21

BH-4@3'
2209333-21 (Soil)

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PAH by EPA Method 8270D SIM

Date Sampled: **09/14/22 11:22**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BF10477	09/20/22	09/21/22	EPA 8270D SIM	
Anthracene	ND	0.00500	"	"	"	"	"	"	
Benzo (a) anthracene	ND	0.00500	"	"	"	"	"	"	
Benzo (a) pyrene	ND	0.00500	"	"	"	"	"	"	
Benzo (b) fluoranthene	ND	0.00500	"	"	"	"	"	"	
Benzo (k) fluoranthene	ND	0.00500	"	"	"	"	"	"	
Chrysene	ND	0.00500	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	0.00500	"	"	"	"	"	"	
Fluoranthene	ND	0.00500	"	"	"	"	"	"	
Fluorene	ND	0.00500	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	ND	0.00500	"	"	"	"	"	"	
Pyrene	ND	0.00500	"	"	"	"	"	"	
1-Methylnaphthalene	ND	0.00500	"	"	"	"	"	"	
2-Methylnaphthalene	ND	0.00500	"	"	"	"	"	"	

Date Sampled: **09/14/22 11:22**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10		42.0 %	40-150		"	"	"	"	
Surrogate: Fluoranthene-d10		50.5 %	40-150		"	"	"	"	

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **09/14/22 11:22**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	0.0811	0.0100	mg/L	1	BF10569	09/21/22	09/24/22	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **09/14/22 11:22**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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Project Manager: Kevin Tautkus

Reported:
10/03/22 11:21

BH-4@3'
2209333-21 (Soil)

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Total Metals by EPA 6020B

Arsenic	1.18	0.206	mg/kg dry	1	BF10565	09/21/22	09/24/22	EPA 6020B
Barium	97.1	0.411	"	"	"	"	"	"
Cadmium	0.252	0.206	"	"	"	"	"	"
Copper	7.06	0.411	"	"	"	"	"	"
Lead	11.5	0.206	"	"	"	"	"	"
Nickel	5.65	0.411	"	"	"	"	"	"
Selenium	0.394	0.267	"	"	"	"	"	"
Silver	ND	0.0206	"	"	"	"	"	"
Zinc	63.5	0.411	"	"	"	"	"	"

Hexavalent Chromium by EPA Method 7196

Date Sampled: **09/14/22 11:22**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BF10741	09/28/22	09/28/22	EPA 7196A	

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

Date Sampled: **09/14/22 11:22**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	38.1	0.0514	mg/L dry	1	BF10700	09/27/22	09/30/22	EPA 6020B	
Magnesium	7.93	0.0514	"	"	"	"	"	"	
Sodium	10.3	0.0514	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **09/14/22 11:22**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	0.396	0.00100	units	1	BF10816	09/30/22	09/30/22	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **09/14/22 11:22**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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BH-4@3'
2209333-21 (Soil)

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Physical Parameters by APHA/ASTM/EPA Methods

% Solids	97.3	%	1	BFI0573	09/21/22	09/23/22	Calculation
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Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **09/14/22 11:22**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.320	0.0100	mmhos/cm	1	BFI0703	09/27/22	09/30/22	EPA 120.1	

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

Date Sampled: **09/14/22 11:22**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	7.48		pH Units	1	BFI0702	09/27/22	09/30/22	EPA 9045D	

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Project: Solid Waste Storage Facility

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Project Manager: Kevin Tautkus

Reported:
10/03/22 11:21

BH-5@3'
2209333-22 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **09/14/22 11:24**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Benzene	ND	0.0020	mg/kg	1	BF10494	09/20/22	09/22/22	EPA 8260B	
Toluene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	ND	0.010	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	0.0050	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	0.0050	"	"	"	"	"	"	
Naphthalene	ND	0.0038	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	ND	0.50	"	"	"	"	"	"	

Date Sampled: **09/14/22 11:24**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: 1,2-Dichloroethane-d4		115 %	50-150		"	"	"	"	
Surrogate: Toluene-d8		96.8 %	50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		94.6 %	50-150		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **09/14/22 11:24**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
C10-C28 (DRO)	170	50	mg/kg	1	BF10497	09/20/22	09/23/22	EPA 8015M	
C28-C36 (ORO)	100	50	"	"	"	"	"	"	

Date Sampled: **09/14/22 11:24**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: o-Terphenyl		107 %	30-150		"	"	"	"	

PAH by EPA Method 8270D SIM

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BH-5@3'
2209333-22 (Soil)

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PAH by EPA Method 8270D SIM

Date Sampled: **09/14/22 11:24**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BF10477	09/20/22	09/21/22	EPA 8270D SIM	
Anthracene	ND	0.00500	"	"	"	"	"	"	
Benzo (a) anthracene	ND	0.00500	"	"	"	"	"	"	
Benzo (a) pyrene	ND	0.00500	"	"	"	"	"	"	
Benzo (b) fluoranthene	ND	0.00500	"	"	"	"	"	"	
Benzo (k) fluoranthene	ND	0.00500	"	"	"	"	"	"	
Chrysene	0.0159	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	0.00603	0.00500	"	"	"	"	"	"	
1-Methylnaphthalene	ND	0.00500	"	"	"	"	"	"	
2-Methylnaphthalene	ND	0.00500	"	"	"	"	"	"	

Date Sampled: **09/14/22 11:24**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10		41.8 %	40-150		"	"	"	"	
Surrogate: Fluoranthene-d10		45.7 %	40-150		"	"	"	"	

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **09/14/22 11:24**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	0.0728	0.0100	mg/L	1	BF10569	09/21/22	09/24/22	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **09/14/22 11:24**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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10/03/22 11:21

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2209333-22 (Soil)

Summit Scientific

Total Metals by EPA 6020B

Arsenic	1.56	0.213	mg/kg dry	1	BF10565	09/21/22	09/24/22	EPA 6020B
Barium	68.2	0.426	"	"	"	"	"	"
Cadmium	ND	0.213	"	"	"	"	"	"
Copper	5.58	0.426	"	"	"	"	"	"
Lead	3.21	0.213	"	"	"	"	"	"
Nickel	5.26	0.426	"	"	"	"	"	"
Selenium	ND	0.277	"	"	"	"	"	"
Silver	ND	0.0213	"	"	"	"	"	"
Zinc	85.2	0.426	"	"	"	"	"	"

Hexavalent Chromium by EPA Method 7196

Date Sampled: **09/14/22 11:24**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BF10741	09/28/22	09/28/22	EPA 7196A	

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

Date Sampled: **09/14/22 11:24**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	27.4	0.0533	mg/L dry	1	BF10700	09/27/22	09/30/22	EPA 6020B	
Magnesium	7.07	0.0533	"	"	"	"	"	"	
Sodium	7.23	0.0533	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **09/14/22 11:24**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	0.319	0.00100	units	1	BF10816	09/30/22	09/30/22	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

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Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **09/14/22 11:24**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
% Solids	93.8			%	1	BF10573	09/21/22	09/23/22	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **09/14/22 11:24**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Specific Conductance (EC)	0.224	0.0100		mmhos/cm	1	BF10703	09/27/22	09/30/22	EPA 120.1	

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

Date Sampled: **09/14/22 11:24**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
pH	7.76			pH Units	1	BF10702	09/27/22	09/30/22	EPA 9045D	

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10/03/22 11:21

BH-6@3'
2209333-23 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **09/14/22 11:26**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Benzene	ND	0.0020	mg/kg	1	BF10494	09/20/22	09/22/22	EPA 8260B	
Toluene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	ND	0.010	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	0.0050	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	0.0050	"	"	"	"	"	"	
Naphthalene	ND	0.0038	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	ND	0.50	"	"	"	"	"	"	

Date Sampled: **09/14/22 11:26**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: 1,2-Dichloroethane-d4		106 %	50-150		"	"	"	"	
Surrogate: Toluene-d8		93.2 %	50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		95.0 %	50-150		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **09/14/22 11:26**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
C10-C28 (DRO)	810	50	mg/kg	1	BF10497	09/20/22	09/23/22	EPA 8015M	
C28-C36 (ORO)	550	50	"	"	"	"	"	"	

Date Sampled: **09/14/22 11:26**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: o-Terphenyl		118 %	30-150		"	"	"	"	

PAH by EPA Method 8270D SIM

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PAH by EPA Method 8270D SIM

Date Sampled: **09/14/22 11:26**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.0500	mg/kg	10	BF10477	09/20/22	09/21/22	EPA 8270D SIM	
Anthracene	ND	0.0500	"	"	"	"	"	"	
Benzo (a) anthracene	ND	0.0500	"	"	"	"	"	"	
Benzo (a) pyrene	ND	0.0500	"	"	"	"	"	"	
Benzo (b) fluoranthene	ND	0.0500	"	"	"	"	"	"	
Benzo (k) fluoranthene	ND	0.0500	"	"	"	"	"	"	
Chrysene	0.0430	0.00500	"	1	"	"	"	"	
Dibenz (a,h) anthracene	ND	0.0500	"	10	"	"	"	"	
Fluoranthene	ND	0.0500	"	"	"	"	"	"	
Fluorene	ND	0.0500	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	ND	0.0500	"	"	"	"	"	"	
Pyrene	ND	0.0500	"	"	"	"	"	"	
1-Methylnaphthalene	ND	0.0500	"	"	"	"	"	"	
2-Methylnaphthalene	ND	0.0500	"	"	"	"	"	"	

Date Sampled: **09/14/22 11:26**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10		45.0 %	40-150		"	"	"	"	
Surrogate: Fluoranthene-d10		73.1 %	40-150		"	"	"	"	

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **09/14/22 11:26**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	0.107	0.0100	mg/L	1	BF10569	09/21/22	09/24/22	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **09/14/22 11:26**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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10/03/22 11:21

BH-6@3'
2209333-23 (Soil)

Summit Scientific

Total Metals by EPA 6020B

Arsenic	1.95	0.219	mg/kg dry	1	BF10565	09/21/22	09/24/22	EPA 6020B
Barium	126	0.438	"	"	"	"	"	"
Cadmium	0.282	0.219	"	"	"	"	"	"
Copper	7.71	0.438	"	"	"	"	"	"
Lead	5.27	0.219	"	"	"	"	"	"
Nickel	6.49	0.438	"	"	"	"	"	"
Selenium	0.448	0.285	"	"	"	"	"	"
Silver	0.0231	0.0219	"	"	"	"	"	"
Zinc	220	0.438	"	"	"	"	"	"

Hexavalent Chromium by EPA Method 7196

Date Sampled: **09/14/22 11:26**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BF10741	09/28/22	09/28/22	EPA 7196A	

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

Date Sampled: **09/14/22 11:26**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	61.9	0.0547	mg/L dry	1	BF10700	09/27/22	09/30/22	EPA 6020B	
Magnesium	10.5	0.0547	"	"	"	"	"	"	
Sodium	7.51	0.0547	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **09/14/22 11:26**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	0.232	0.00100	units	1	BF10816	09/30/22	09/30/22	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **09/14/22 11:26**

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

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K.P. Kauffman
1675 Broadway
Denver CO, 80202

Project: Solid Waste Storage Facility

Project Number: [none]
Project Manager: Kevin Tautkus

Reported:
10/03/22 11:21

BH-6@3'
2209333-23 (Soil)

Summit Scientific

Physical Parameters by APHA/ASTM/EPA Methods

% Solids	91.3	%	1	BFI0573	09/21/22	09/23/22	Calculation
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Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **09/14/22 11:26**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.374	0.0100	mmhos/cm	1	BFI0703	09/27/22	09/30/22	EPA 120.1	

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

Date Sampled: **09/14/22 11:26**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	7.64		pH Units	1	BFI0702	09/27/22	09/30/22	EPA 9045D	

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K.P. Kauffman
1675 Broadway
Denver CO, 80202

Project: Solid Waste Storage Facility

Project Number: [none]
Project Manager: Kevin Tautkus

Reported:
10/03/22 11:21

BH-7@3'
2209333-24 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **09/14/22 11:28**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Benzene	ND	0.0020	mg/kg	1	BF10494	09/20/22	09/22/22	EPA 8260B	
Toluene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	ND	0.010	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	ND	0.0050	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	0.0050	"	"	"	"	"	"	
Naphthalene	ND	0.0038	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	ND	0.50	"	"	"	"	"	"	

Date Sampled: **09/14/22 11:28**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: 1,2-Dichloroethane-d4		69.8 %	50-150		"	"	"	"	
Surrogate: Toluene-d8		88.4 %	50-150		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		88.0 %	50-150		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **09/14/22 11:28**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
C10-C28 (DRO)	ND	50	mg/kg	1	BF10497	09/20/22	09/23/22	EPA 8015M	
C28-C36 (ORO)	ND	50	"	"	"	"	"	"	

Date Sampled: **09/14/22 11:28**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: o-Terphenyl		109 %	30-150		"	"	"	"	

PAH by EPA Method 8270D SIM

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1675 Broadway
Denver CO, 80202

Project: Solid Waste Storage Facility

Project Number: [none]
Project Manager: Kevin Tautkus

Reported:
10/03/22 11:21

BH-7@3'
2209333-24 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

Date Sampled: **09/14/22 11:28**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BF10477	09/20/22	09/21/22	EPA 8270D SIM	
Anthracene	ND	0.00500	"	"	"	"	"	"	
Benzo (a) anthracene	ND	0.00500	"	"	"	"	"	"	
Benzo (a) pyrene	ND	0.00500	"	"	"	"	"	"	
Benzo (b) fluoranthene	ND	0.00500	"	"	"	"	"	"	
Benzo (k) fluoranthene	ND	0.00500	"	"	"	"	"	"	
Chrysene	ND	0.00500	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	0.00500	"	"	"	"	"	"	
Fluoranthene	ND	0.00500	"	"	"	"	"	"	
Fluorene	ND	0.00500	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	ND	0.00500	"	"	"	"	"	"	
Pyrene	ND	0.00500	"	"	"	"	"	"	
1-Methylnaphthalene	ND	0.00500	"	"	"	"	"	"	
2-Methylnaphthalene	ND	0.00500	"	"	"	"	"	"	

Date Sampled: **09/14/22 11:28**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10		47.6 %	40-150		"	"	"	"	
Surrogate: Fluoranthene-d10		54.6 %	40-150		"	"	"	"	

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **09/14/22 11:28**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	0.0859	0.0100	mg/L	1	BF10569	09/21/22	09/24/22	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **09/14/22 11:28**

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

Project: Solid Waste Storage Facility

Project Number: [none]
Project Manager: Kevin Tautkus

Reported:
10/03/22 11:21

BH-7@3'
2209333-24 (Soil)

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Total Metals by EPA 6020B

Arsenic	0.948	0.206	mg/kg dry	1	BF10565	09/21/22	09/24/22	EPA 6020B
Barium	59.3	0.411	"	"	"	"	"	"
Cadmium	ND	0.206	"	"	"	"	"	"
Copper	5.10	0.411	"	"	"	"	"	"
Lead	2.72	0.206	"	"	"	"	"	"
Nickel	4.38	0.411	"	"	"	"	"	"
Selenium	0.310	0.267	"	"	"	"	"	"
Silver	ND	0.0206	"	"	"	"	"	"
Zinc	18.9	0.411	"	"	"	"	"	"

Hexavalent Chromium by EPA Method 7196

Date Sampled: **09/14/22 11:28**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BF10741	09/28/22	09/28/22	EPA 7196A	

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

Date Sampled: **09/14/22 11:28**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	29.2	0.0514	mg/L dry	1	BF10700	09/27/22	09/30/22	EPA 6020B	
Magnesium	5.07	0.0514	"	"	"	"	"	"	
Sodium	7.85	0.0514	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **09/14/22 11:28**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	0.353	0.00100	units	1	BF10816	09/30/22	09/30/22	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

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K.P. Kauffman
1675 Broadway
Denver CO, 80202

Project: Solid Waste Storage Facility

Project Number: [none]
Project Manager: Kevin Tautkus

Reported:
10/03/22 11:21

BH-7@3'
2209333-24 (Soil)

Summit Scientific

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **09/14/22 11:28**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
% Solids	97.2			%	1	BF10573	09/21/22	09/23/22	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **09/14/22 11:28**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Specific Conductance (EC)	0.202	0.0100		mmhos/cm	1	BF10703	09/27/22	09/30/22	EPA 120.1	

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

Date Sampled: **09/14/22 11:28**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
pH	7.83			pH Units	1	BF10702	09/27/22	09/30/22	EPA 9045D	

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1675 Broadway
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Project: Solid Waste Storage Facility

Project Number: [none]
Project Manager: Kevin Tautkus

Reported:
10/03/22 11:21

Background1@2'
2209333-25 (Soil)

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Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **09/14/22 11:32**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Boron	0.183	0.0100	mg/L	1	BF10569	09/21/22	09/24/22	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **09/14/22 11:32**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Arsenic	3.33	0.211	mg/kg dry	1	BF10565	09/21/22	09/24/22	EPA 6020B	
Barium	90.3	0.423	"	"	"	"	"	"	
Cadmium	ND	0.211	"	"	"	"	"	"	
Copper	6.12	0.423	"	"	"	"	"	"	
Lead	2.27	0.211	"	"	"	"	"	"	
Nickel	4.59	0.423	"	"	"	"	"	"	
Selenium	ND	0.275	"	"	"	"	"	"	
Silver	ND	0.0211	"	"	"	"	"	"	
Zinc	17.5	0.423	"	"	"	"	"	"	

Hexavalent Chromium by EPA Method 7196

Date Sampled: **09/14/22 11:32**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BF10741	09/28/22	09/28/22	EPA 7196A	

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

Date Sampled: **09/14/22 11:32**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Calcium	41.7	0.0529	mg/L dry	1	BF10700	09/27/22	09/30/22	EPA 6020B	
Magnesium	11.8	0.0529	"	"	"	"	"	"	
Sodium	10.2	0.0529	"	"	"	"	"	"	

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K.P. Kauffman
1675 Broadway
Denver CO, 80202

Project: Solid Waste Storage Facility

Project Number: [none]
Project Manager: Kevin Tautkus

Reported:
10/03/22 11:21

Background1@2'
2209333-25 (Soil)

Summit Scientific

Calculated Analysis

Date Sampled: **09/14/22 11:32**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	0.359	0.00100	units	1	BF10816	09/30/22	09/30/22	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **09/14/22 11:32**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	94.6		%	1	BF10573	09/21/22	09/23/22	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **09/14/22 11:32**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.294	0.0100	mmhos/cm	1	BF10703	09/27/22	09/30/22	EPA 120.1	

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

Date Sampled: **09/14/22 11:32**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	7.89		pH Units	1	BF10702	09/27/22	09/30/22	EPA 9045D	

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K.P. Kauffman
1675 Broadway
Denver CO, 80202

Project: Solid Waste Storage Facility

Project Number: [none]
Project Manager: Kevin Tautkus

Reported:
10/03/22 11:21

Background2@2'
2209333-26 (Soil)

Summit Scientific

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **09/14/22 11:36**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Boron	0.0582	0.0100	mg/L	1	BF10569	09/21/22	09/24/22	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **09/14/22 11:36**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Arsenic	3.07	0.205	mg/kg dry	1	BF10565	09/21/22	09/24/22	EPA 6020B	
Barium	26.5	0.409	"	"	"	"	"	"	
Cadmium	ND	0.205	"	"	"	"	"	"	
Copper	3.36	0.409	"	"	"	"	"	"	
Lead	2.54	0.205	"	"	"	"	"	"	
Nickel	3.70	0.409	"	"	"	"	"	"	
Selenium	ND	0.266	"	"	"	"	"	"	
Silver	ND	0.0205	"	"	"	"	"	"	
Zinc	16.3	0.409	"	"	"	"	"	"	

Hexavalent Chromium by EPA Method 7196

Date Sampled: **09/14/22 11:36**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BF10741	09/28/22	09/28/22	EPA 7196A	

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

Date Sampled: **09/14/22 11:36**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Calcium	17.3	0.0512	mg/L dry	1	BF10700	09/27/22	09/30/22	EPA 6020B	
Magnesium	5.55	0.0512	"	"	"	"	"	"	
Sodium	2.93	0.0512	"	"	"	"	"	"	

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K.P. Kauffman
1675 Broadway
Denver CO, 80202

Project: Solid Waste Storage Facility

Project Number: [none]
Project Manager: Kevin Tautkus

Reported:
10/03/22 11:21

Background2@2'
2209333-26 (Soil)

Summit Scientific

Calculated Analysis

Date Sampled: **09/14/22 11:36**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	0.157	0.00100	units	1	BF10816	09/30/22	09/30/22	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **09/14/22 11:36**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	97.7		%	1	BF10573	09/21/22	09/23/22	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **09/14/22 11:36**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.151	0.0100	mmhos/cm	1	BF10703	09/27/22	09/30/22	EPA 120.1	

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

Date Sampled: **09/14/22 11:36**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	7.93		pH Units	1	BF10702	09/27/22	09/30/22	EPA 9045D	

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K.P. Kauffman
1675 Broadway
Denver CO, 80202

Project: Solid Waste Storage Facility

Project Number: [none]
Project Manager: Kevin Tautkus

Reported:
10/03/22 11:21

Background3@2'
2209333-27 (Soil)

Summit Scientific

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **09/14/22 11:40**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Boron	0.0521	0.0100	mg/L	1	BF10569	09/21/22	09/24/22	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **09/14/22 11:40**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Arsenic	1.74	0.211	mg/kg dry	1	BF10565	09/21/22	09/24/22	EPA 6020B	
Barium	197	0.421	"	"	"	"	"	"	
Cadmium	0.281	0.211	"	"	"	"	"	"	
Copper	9.50	0.421	"	"	"	"	"	"	
Lead	5.75	0.211	"	"	"	"	"	"	
Nickel	7.97	0.421	"	"	"	"	"	"	
Selenium	0.434	0.274	"	"	"	"	"	"	
Silver	0.0256	0.0211	"	"	"	"	"	"	
Zinc	127	0.421	"	"	"	"	"	"	

Hexavalent Chromium by EPA Method 7196

Date Sampled: **09/14/22 11:40**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BF10741	09/28/22	09/28/22	EPA 7196A	

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

Date Sampled: **09/14/22 11:40**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Calcium	35.4	0.0527	mg/L dry	1	BF10700	09/27/22	09/30/22	EPA 6020B	
Magnesium	7.05	0.0527	"	"	"	"	"	"	
Sodium	5.55	0.0527	"	"	"	"	"	"	

Calculated Analysis

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K.P. Kauffman
1675 Broadway
Denver CO, 80202

Project: Solid Waste Storage Facility

Project Number: [none]
Project Manager: Kevin Tautkus

Reported:
10/03/22 11:21

Background3@2'
2209333-27 (Soil)

Summit Scientific

Calculated Analysis

Date Sampled: **09/14/22 11:40**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	0.223	0.00100	units	1	BF10816	09/30/22	09/30/22	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **09/14/22 11:40**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	94.9		%	1	BF10573	09/21/22	09/23/22	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **09/14/22 11:40**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.251	0.0100	mmhos/cm	1	BF10703	09/27/22	09/30/22	EPA 120.1	

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

Date Sampled: **09/14/22 11:40**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	7.49		pH Units	1	BF10702	09/27/22	09/30/22	EPA 9045D	

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K.P. Kauffman
1675 Broadway
Denver CO, 80202

Project: Solid Waste Storage Facility

Project Number: [none]
Project Manager: Kevin Tautkus

Reported:
10/03/22 11:21

Background4@2'
2209333-28 (Soil)

Summit Scientific

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **09/14/22 11:44**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Boron	0.107	0.0100	mg/L	1	BF10569	09/21/22	09/24/22	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **09/14/22 11:44**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Arsenic	1.71	0.218	mg/kg dry	1	BF10565	09/21/22	09/24/22	EPA 6020B	
Barium	108	0.437	"	"	"	"	"	"	
Cadmium	0.390	0.218	"	"	"	"	"	"	
Copper	10.4	0.437	"	"	"	"	"	"	
Lead	5.92	0.218	"	"	"	"	"	"	
Nickel	8.61	0.437	"	"	"	"	"	"	
Selenium	0.492	0.284	"	"	"	"	"	"	
Silver	0.0455	0.0218	"	"	"	"	"	"	
Zinc	48.2	0.437	"	"	"	"	"	"	

Hexavalent Chromium by EPA Method 7196

Date Sampled: **09/14/22 11:44**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BF10741	09/28/22	09/28/22	EPA 7196A	

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

Date Sampled: **09/14/22 11:44**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Calcium	15.3	0.0546	mg/L dry	1	BF10700	09/27/22	09/30/22	EPA 6020B	
Magnesium	3.78	0.0546	"	"	"	"	"	"	
Sodium	17.7	0.0546	"	"	"	"	"	"	

Calculated Analysis

Summit Scientific

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K.P. Kauffman
1675 Broadway
Denver CO, 80202

Project: Solid Waste Storage Facility

Project Number: [none]
Project Manager: Kevin Tautkus

Reported:
10/03/22 11:21

Background4@2'
2209333-28 (Soil)

Summit Scientific

Calculated Analysis

Date Sampled: **09/14/22 11:44**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	1.05	0.00100	units	1	BF10816	09/30/22	09/30/22	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **09/14/22 11:44**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	91.6		%	1	BF10573	09/21/22	09/23/22	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **09/14/22 11:44**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.152	0.0100	mmhos/cm	1	BF10703	09/27/22	09/30/22	EPA 120.1	

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

Date Sampled: **09/14/22 11:44**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	7.84		pH Units	1	BF10702	09/27/22	09/30/22	EPA 9045D	

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K.P. Kauffman
1675 Broadway
Denver CO, 80202

Project: Solid Waste Storage Facility

Project Number: [none]
Project Manager: Kevin Tautkus

Reported:
10/03/22 11:21

Background5@2'
2209333-29 (Soil)

Summit Scientific

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **09/14/22 11:48**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Boron	0.0610	0.0100	mg/L	1	BF10569	09/21/22	09/24/22	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **09/14/22 11:48**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Arsenic	9.18	0.209	mg/kg dry	1	BF10565	09/21/22	09/24/22	EPA 6020B	
Barium	43.1	0.418	"	"	"	"	"	"	
Cadmium	ND	0.209	"	"	"	"	"	"	
Copper	8.50	0.418	"	"	"	"	"	"	
Lead	4.11	0.209	"	"	"	"	"	"	
Nickel	7.70	0.418	"	"	"	"	"	"	
Selenium	0.317	0.271	"	"	"	"	"	"	
Silver	0.0239	0.0209	"	"	"	"	"	"	
Zinc	23.5	0.418	"	"	"	"	"	"	

Hexavalent Chromium by EPA Method 7196

Date Sampled: **09/14/22 11:48**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BF10741	09/28/22	09/28/22	EPA 7196A	

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

Date Sampled: **09/14/22 11:48**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Calcium	5.74	0.0522	mg/L dry	1	BF10700	09/27/22	09/30/22	EPA 6020B	
Magnesium	3.01	0.0522	"	"	"	"	"	"	
Sodium	4.84	0.0522	"	"	"	"	"	"	

Calculated Analysis

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1675 Broadway
Denver CO, 80202

Project: Solid Waste Storage Facility

Project Number: [none]
Project Manager: Kevin Tautkus

Reported:
10/03/22 11:21

Background5@2'
2209333-29 (Soil)

Summit Scientific

Calculated Analysis

Date Sampled: **09/14/22 11:48**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	0.407	0.00100	units	1	BF10816	09/30/22	09/30/22	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **09/14/22 11:48**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	95.8		%	1	BF10573	09/21/22	09/23/22	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **09/14/22 11:48**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.0450	0.0100	mmhos/cm	1	BF10703	09/27/22	09/30/22	EPA 120.1	

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

Date Sampled: **09/14/22 11:48**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	7.28		pH Units	1	BF10702	09/27/22	09/30/22	EPA 9045D	

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1675 Broadway
Denver CO, 80202

Project: Solid Waste Storage Facility

Project Number: [none]
Project Manager: Kevin Tautkus

Reported:
10/03/22 11:21

Background6@2'
2209333-30 (Soil)

Summit Scientific

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **09/14/22 11:52**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Boron	0.0715	0.0100	mg/L	1	BF10569	09/21/22	09/24/22	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **09/14/22 11:52**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Arsenic	1.08	0.210	mg/kg dry	1	BF10565	09/21/22	09/24/22	EPA 6020B	
Barium	45.8	0.420	"	"	"	"	"	"	
Cadmium	ND	0.210	"	"	"	"	"	"	
Copper	8.94	0.420	"	"	"	"	"	"	
Lead	3.34	0.210	"	"	"	"	"	"	
Nickel	7.60	0.420	"	"	"	"	"	"	
Selenium	ND	0.273	"	"	"	"	"	"	
Silver	ND	0.0210	"	"	"	"	"	"	
Zinc	26.6	0.420	"	"	"	"	"	"	

Hexavalent Chromium by EPA Method 7196

Date Sampled: **09/14/22 11:52**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BF10741	09/28/22	09/28/22	EPA 7196A	

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

Date Sampled: **09/14/22 11:52**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Calcium	7.15	0.0525	mg/L dry	1	BF10700	09/27/22	09/30/22	EPA 6020B	
Magnesium	3.62	0.0525	"	"	"	"	"	"	
Sodium	1.51	0.0525	"	"	"	"	"	"	

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1675 Broadway
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Project: Solid Waste Storage Facility

Project Number: [none]
Project Manager: Kevin Tautkus

Reported:
10/03/22 11:21

Background6@2'
2209333-30 (Soil)

Summit Scientific

Calculated Analysis

Date Sampled: **09/14/22 11:52**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	0.115	0.00100	units	1	BF10816	09/30/22	09/30/22	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **09/14/22 11:52**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	95.2		%	1	BF10573	09/21/22	09/23/22	Calculation	

Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **09/14/22 11:52**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	0.0401	0.0100	mmhos/cm	1	BF10703	09/27/22	09/30/22	EPA 120.1	

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

Date Sampled: **09/14/22 11:52**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	7.22		pH Units	1	BF10702	09/27/22	09/30/22	EPA 9045D	

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1675 Broadway
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Project: Solid Waste Storage Facility

Project Number: [none]
Project Manager: Kevin Tautkus

Reported:
10/03/22 11:21

Volatile Organic Compounds by EPA Method 8260B - Quality Control

Summit Scientific

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

Batch BF10493 - EPA 5030 Soil MS

Blank (BF10493-BLK1)

Prepared & Analyzed: 09/20/22

Benzene	ND	0.0020	mg/kg							
Toluene	ND	0.0050	"							
Ethylbenzene	ND	0.0050	"							
Xylenes (total)	ND	0.010	"							
1,2,4-Trimethylbenzene	ND	0.0050	"							
1,3,5-Trimethylbenzene	ND	0.0050	"							
Naphthalene	ND	0.0038	"							
Gasoline Range Hydrocarbons	ND	0.50	"							
Surrogate: 1,2-Dichloroethane-d4	0.0293		"	0.0400		73.4	50-150			
Surrogate: Toluene-d8	0.0407		"	0.0400		102	50-150			
Surrogate: 4-Bromofluorobenzene	0.0382		"	0.0400		95.4	50-150			

LCS (BF10493-BS1)

Prepared & Analyzed: 09/20/22

Benzene	0.0596	0.0020	mg/kg	0.0750		79.5	70-130			
Toluene	0.0621	0.0050	"	0.0750		82.8	70-130			
Ethylbenzene	0.0633	0.0050	"	0.0750		84.4	70-130			
m,p-Xylene	0.125	0.010	"	0.150		83.6	70-130			
o-Xylene	0.0641	0.0050	"	0.0750		85.5	70-130			
1,2,4-Trimethylbenzene	0.0596	0.0050	"	0.0750		79.5	70-130			
1,3,5-Trimethylbenzene	0.0608	0.0050	"	0.0750		81.0	70-130			
Naphthalene	0.0770	0.0038	"	0.0750		103	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.0340		"	0.0400		85.1	50-150			
Surrogate: Toluene-d8	0.0380		"	0.0400		95.1	50-150			
Surrogate: 4-Bromofluorobenzene	0.0363		"	0.0400		90.8	50-150			

Matrix Spike (BF10493-MS1)

Source: 2209333-11

Prepared & Analyzed: 09/20/22

Benzene	0.0560	0.0020	mg/kg	0.0750	ND	74.6	70-130			
Toluene	0.0595	0.0050	"	0.0750	ND	79.4	70-130			
Ethylbenzene	0.0586	0.0050	"	0.0750	ND	78.1	70-130			
m,p-Xylene	0.118	0.010	"	0.150	ND	78.4	70-130			
o-Xylene	0.0602	0.0050	"	0.0750	ND	80.3	70-130			
1,2,4-Trimethylbenzene	0.0574	0.0050	"	0.0750	ND	76.5	70-130			
1,3,5-Trimethylbenzene	0.0578	0.0050	"	0.0750	ND	77.1	70-130			
Naphthalene	0.0525	0.0038	"	0.0750	ND	70.0	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.0331		"	0.0400		82.7	50-150			
Surrogate: Toluene-d8	0.0393		"	0.0400		98.2	50-150			
Surrogate: 4-Bromofluorobenzene	0.0360		"	0.0400		90.0	50-150			

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1675 Broadway
Denver CO, 80202

Project: Solid Waste Storage Facility

Project Number: [none]
Project Manager: Kevin Tautkus

Reported:
10/03/22 11:21

Volatile Organic Compounds by EPA Method 8260B - Quality Control

Summit Scientific

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

Batch BFI0493 - EPA 5030 Soil MS

Matrix Spike Dup (BFI0493-MSD1)			Source: 2209333-11		Prepared & Analyzed: 09/20/22					
Benzene	0.0564	0.0020	mg/kg	0.0750	ND	75.2	70-130	0.748	30	
Toluene	0.0592	0.0050	"	0.0750	ND	79.0	70-130	0.505	30	
Ethylbenzene	0.0542	0.0050	"	0.0750	ND	72.3	70-130	7.77	30	
m,p-Xylene	0.108	0.010	"	0.150	ND	72.2	70-130	8.23	30	
o-Xylene	0.0576	0.0050	"	0.0750	ND	76.8	70-130	4.43	30	
1,2,4-Trimethylbenzene	0.0550	0.0050	"	0.0750	ND	73.4	70-130	4.11	30	
1,3,5-Trimethylbenzene	0.0544	0.0050	"	0.0750	ND	72.5	70-130	6.15	30	
Naphthalene	0.0579	0.0038	"	0.0750	ND	77.2	70-130	9.73	30	
Surrogate: 1,2-Dichloroethane-d4	0.0361		"	0.0400		90.2	50-150			
Surrogate: Toluene-d8	0.0398		"	0.0400		99.4	50-150			
Surrogate: 4-Bromofluorobenzene	0.0367		"	0.0400		91.6	50-150			

Batch BFI0494 - EPA 5030 Soil MS

Blank (BFI0494-BLK1)			Prepared: 09/20/22 Analyzed: 09/22/22							
Benzene	ND	0.0020	mg/kg							
Toluene	ND	0.0050	"							
Ethylbenzene	ND	0.0050	"							
Xylenes (total)	ND	0.010	"							
1,2,4-Trimethylbenzene	ND	0.0050	"							
1,3,5-Trimethylbenzene	ND	0.0050	"							
Naphthalene	ND	0.0038	"							
Gasoline Range Hydrocarbons	ND	0.50	"							
Surrogate: 1,2-Dichloroethane-d4	0.0431		"	0.0400		108	50-150			
Surrogate: Toluene-d8	0.0373		"	0.0400		93.2	50-150			
Surrogate: 4-Bromofluorobenzene	0.0373		"	0.0400		93.2	50-150			

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K.P. Kauffman
1675 Broadway
Denver CO, 80202

Project: Solid Waste Storage Facility

Project Number: [none]
Project Manager: Kevin Tautkus

Reported:
10/03/22 11:21

Volatile Organic Compounds by EPA Method 8260B - Quality Control

Summit Scientific

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

Batch BFI0494 - EPA 5030 Soil MS

LCS (BFI0494-BS1)

Prepared: 09/20/22 Analyzed: 09/22/22

Benzene	0.0604	0.0020	mg/kg	0.0750		80.5	70-130			
Toluene	0.0629	0.0050	"	0.0750		83.8	70-130			
Ethylbenzene	0.0631	0.0050	"	0.0750		84.1	70-130			
m,p-Xylene	0.126	0.010	"	0.150		83.9	70-130			
o-Xylene	0.0640	0.0050	"	0.0750		85.3	70-130			
1,2,4-Trimethylbenzene	0.0594	0.0050	"	0.0750		79.2	70-130			
1,3,5-Trimethylbenzene	0.0604	0.0050	"	0.0750		80.6	70-130			
Naphthalene	0.0580	0.0038	"	0.0750		77.3	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.0315		"	0.0400		78.8	50-150			
Surrogate: Toluene-d8	0.0390		"	0.0400		97.5	50-150			
Surrogate: 4-Bromofluorobenzene	0.0361		"	0.0400		90.3	50-150			

Matrix Spike (BFI0494-MS1)

Source: 2209333-21

Prepared: 09/20/22 Analyzed: 09/22/22

Benzene	0.0557	0.0020	mg/kg	0.0750	ND	74.3	70-130			
Toluene	0.0593	0.0050	"	0.0750	ND	79.1	70-130			
Ethylbenzene	0.0567	0.0050	"	0.0750	ND	75.6	70-130			
m,p-Xylene	0.113	0.010	"	0.150	ND	75.4	70-130			
o-Xylene	0.0594	0.0050	"	0.0750	ND	79.2	70-130			
1,2,4-Trimethylbenzene	0.0564	0.0050	"	0.0750	ND	75.2	70-130			
1,3,5-Trimethylbenzene	0.0563	0.0050	"	0.0750	ND	75.1	70-130			
Naphthalene	0.0559	0.0038	"	0.0750	ND	74.5	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.0339		"	0.0400		84.8	50-150			
Surrogate: Toluene-d8	0.0397		"	0.0400		99.3	50-150			
Surrogate: 4-Bromofluorobenzene	0.0355		"	0.0400		88.8	50-150			

Matrix Spike Dup (BFI0494-MSD1)

Source: 2209333-21

Prepared: 09/20/22 Analyzed: 09/22/22

Benzene	0.0640	0.0020	mg/kg	0.0750	ND	85.4	70-130	13.9	30	
Toluene	0.0656	0.0050	"	0.0750	ND	87.5	70-130	10.1	30	
Ethylbenzene	0.0651	0.0050	"	0.0750	ND	86.8	70-130	13.9	30	
m,p-Xylene	0.129	0.010	"	0.150	ND	86.0	70-130	13.1	30	
o-Xylene	0.0657	0.0050	"	0.0750	ND	87.6	70-130	10.0	30	
1,2,4-Trimethylbenzene	0.0608	0.0050	"	0.0750	ND	81.0	70-130	7.48	30	
1,3,5-Trimethylbenzene	0.0613	0.0050	"	0.0750	ND	81.8	70-130	8.52	30	
Naphthalene	0.0550	0.0038	"	0.0750	ND	73.4	70-130	1.57	30	
Surrogate: 1,2-Dichloroethane-d4	0.0346		"	0.0400		86.6	50-150			
Surrogate: Toluene-d8	0.0390		"	0.0400		97.5	50-150			
Surrogate: 4-Bromofluorobenzene	0.0360		"	0.0400		90.0	50-150			

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1675 Broadway
Denver CO, 80202

Project: Solid Waste Storage Facility

Project Number: [none]
Project Manager: Kevin Tautkus

Reported:
10/03/22 11:21

Extractable Petroleum Hydrocarbons by 8015 - Quality Control
Summit Scientific

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

Batch BFI0496 - EPA 3550A

Blank (BFI0496-BLK1)

Prepared: 09/20/22 Analyzed: 09/22/22

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

LCS (BFI0496-BS1)

Prepared: 09/20/22 Analyzed: 09/22/22

C10-C28 (DRO)	592	50	mg/kg	500	118	70-130
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Matrix Spike (BFI0496-MS1)

Source: 2209333-18

Prepared: 09/20/22 Analyzed: 09/22/22

C10-C28 (DRO)	575	50	mg/kg	500	40.0	107	70-130
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Matrix Spike Dup (BFI0496-MSD1)

Source: 2209333-18

Prepared: 09/20/22 Analyzed: 09/22/22

C10-C28 (DRO)	536	50	mg/kg	500	40.0	99.2	70-130	7.01	20
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Batch BFI0497 - EPA 3550A

Blank (BFI0497-BLK1)

Prepared: 09/20/22 Analyzed: 09/23/22

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

LCS (BFI0497-BS1)

Prepared: 09/20/22 Analyzed: 09/23/22

C10-C28 (DRO)	549	50	mg/kg	500	110	70-130
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Matrix Spike (BFI0497-MS1)

Source: 2209339-01

Prepared: 09/20/22 Analyzed: 09/23/22

C10-C28 (DRO)	474	50	mg/kg	500	49.5	85.0	70-130
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Matrix Spike Dup (BFI0497-MSD1)

Source: 2209339-01

Prepared: 09/20/22 Analyzed: 09/23/22

C10-C28 (DRO)	455	50	mg/kg	500	49.5	81.0	70-130	4.24	20
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1675 Broadway
Denver CO, 80202

Project: Solid Waste Storage Facility
Project Number: [none]
Project Manager: Kevin Tautkus

Reported:
10/03/22 11:21

PAH by EPA Method 8270D SIM - Quality Control

Summit Scientific

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

Batch BFI0477 - EPA 5030 Soil MS

Blank (BFI0477-BLK1)

Prepared & Analyzed: 09/20/22

Acenaphthene	ND	0.00500	mg/kg							
Anthracene	ND	0.00500	"							
Benzo (a) anthracene	ND	0.00500	"							
Benzo (a) pyrene	ND	0.00500	"							
Benzo (b) fluoranthene	ND	0.00500	"							
Benzo (k) fluoranthene	ND	0.00500	"							
Chrysene	ND	0.00500	"							
Dibenz (a,h) anthracene	ND	0.00500	"							
Fluoranthene	ND	0.00500	"							
Fluorene	ND	0.00500	"							
Indeno (1,2,3-cd) pyrene	ND	0.00500	"							
Pyrene	ND	0.00500	"							
1-Methylnaphthalene	ND	0.00500	"							
2-Methylnaphthalene	ND	0.00500	"							
Surrogate: 2-Methylnaphthalene-d10	0.0206		"	0.0333		61.7	40-150			
Surrogate: Fluoranthene-d10	0.0291		"	0.0333		87.4	40-150			

LCS (BFI0477-BS1)

Prepared & Analyzed: 09/20/22

Acenaphthene	0.0312	0.00500	mg/kg	0.0333		93.6	31-137			
Anthracene	0.0310	0.00500	"	0.0333		92.9	30-120			
Benzo (a) anthracene	0.0299	0.00500	"	0.0333		89.6	30-120			
Benzo (a) pyrene	0.0299	0.00500	"	0.0333		89.7	30-120			
Benzo (b) fluoranthene	0.0303	0.00500	"	0.0333		90.9	30-120			
Benzo (k) fluoranthene	0.0341	0.00500	"	0.0333		102	30-120			
Chrysene	0.0279	0.00500	"	0.0333		83.8	30-120			
Dibenz (a,h) anthracene	0.0220	0.00500	"	0.0333		66.1	30-120			
Fluoranthene	0.0321	0.00500	"	0.0333		96.3	30-120			
Fluorene	0.0315	0.00500	"	0.0333		94.6	30-120			
Indeno (1,2,3-cd) pyrene	0.0238	0.00500	"	0.0333		71.5	30-120			
Pyrene	0.0341	0.00500	"	0.0333		102	35-142			
1-Methylnaphthalene	0.0259	0.00500	"	0.0333		77.8	35-142			
2-Methylnaphthalene	0.0312	0.00500	"	0.0333		93.6	35-142			
Surrogate: 2-Methylnaphthalene-d10	0.0237		"	0.0333		71.0	40-150			
Surrogate: Fluoranthene-d10	0.0304		"	0.0333		91.3	40-150			

Summit Scientific

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K.P. Kauffman
1675 Broadway
Denver CO, 80202

Project: Solid Waste Storage Facility

Project Number: [none]
Project Manager: Kevin Tautkus

Reported:
10/03/22 11:21

PAH by EPA Method 8270D SIM - Quality Control

Summit Scientific

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

Batch BFI0477 - EPA 5030 Soil MS

Matrix Spike (BFI0477-MS1)

Source: 2209321-01

Prepared & Analyzed: 09/20/22

Acenaphthene	0.0185	0.00500	mg/kg	0.0333	ND	55.5	31-137		
Anthracene	0.0207	0.00500	"	0.0333	ND	62.0	30-120		
Benzo (a) anthracene	0.0213	0.00500	"	0.0333	ND	64.0	30-120		
Benzo (a) pyrene	0.0187	0.00500	"	0.0333	ND	56.0	30-120		
Benzo (b) fluoranthene	0.0184	0.00500	"	0.0333	ND	55.3	30-120		
Benzo (k) fluoranthene	0.0202	0.00500	"	0.0333	ND	60.5	30-120		
Chrysene	0.0186	0.00500	"	0.0333	ND	55.8	30-120		
Dibenz (a,h) anthracene	0.0157	0.00500	"	0.0333	ND	47.2	30-120		
Fluoranthene	0.0217	0.00500	"	0.0333	ND	65.2	30-120		
Fluorene	0.0189	0.00500	"	0.0333	ND	56.8	30-120		
Indeno (1,2,3-cd) pyrene	0.0164	0.00500	"	0.0333	ND	49.2	30-120		
Pyrene	0.0232	0.00500	"	0.0333	ND	69.6	35-142		
1-Methylnaphthalene	0.0147	0.00500	"	0.0333	ND	44.0	15-130		
2-Methylnaphthalene	0.0169	0.00500	"	0.0333	ND	50.6	15-130		
Surrogate: 2-Methylnaphthalene-d10	0.0140		"	0.0333		42.0	40-150		
Surrogate: Fluoranthene-d10	0.0208		"	0.0333		62.3	40-150		

Matrix Spike Dup (BFI0477-MSD1)

Source: 2209321-01

Prepared & Analyzed: 09/20/22

Acenaphthene	0.0194	0.00500	mg/kg	0.0333	ND	58.3	31-137	4.91	30
Anthracene	0.0220	0.00500	"	0.0333	ND	66.0	30-120	6.27	30
Benzo (a) anthracene	0.0236	0.00500	"	0.0333	ND	70.8	30-120	10.1	30
Benzo (a) pyrene	0.0208	0.00500	"	0.0333	ND	62.4	30-120	10.8	30
Benzo (b) fluoranthene	0.0208	0.00500	"	0.0333	ND	62.3	30-120	11.8	30
Benzo (k) fluoranthene	0.0221	0.00500	"	0.0333	ND	66.4	30-120	9.34	30
Chrysene	0.0207	0.00500	"	0.0333	ND	62.1	30-120	10.7	30
Dibenz (a,h) anthracene	0.0170	0.00500	"	0.0333	ND	51.1	30-120	8.02	30
Fluoranthene	0.0234	0.00500	"	0.0333	ND	70.3	30-120	7.56	30
Fluorene	0.0201	0.00500	"	0.0333	ND	60.4	30-120	6.09	30
Indeno (1,2,3-cd) pyrene	0.0184	0.00500	"	0.0333	ND	55.1	30-120	11.4	30
Pyrene	0.0251	0.00500	"	0.0333	ND	75.3	35-142	7.83	30
1-Methylnaphthalene	0.0145	0.00500	"	0.0333	ND	43.6	15-130	1.02	50
2-Methylnaphthalene	0.0182	0.00500	"	0.0333	ND	54.5	15-130	7.32	50
Surrogate: 2-Methylnaphthalene-d10	0.0140		"	0.0333		42.0	40-150		
Surrogate: Fluoranthene-d10	0.0227		"	0.0333		68.1	40-150		

Summit Scientific

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K.P. Kauffman
1675 Broadway
Denver CO, 80202

Project: Solid Waste Storage Facility
Project Number: [none]
Project Manager: Kevin Tautkus

Reported:
10/03/22 11:21

PAH by EPA Method 8270D SIM - Quality Control

Summit Scientific

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

Batch BFI0478 - EPA 5030 Soil MS

Blank (BFI0478-BLK1)

Prepared: 09/20/22 Analyzed: 09/21/22

Acenaphthene	ND	0.00500	mg/kg							
Anthracene	ND	0.00500	"							
Benzo (a) anthracene	ND	0.00500	"							
Benzo (a) pyrene	ND	0.00500	"							
Benzo (b) fluoranthene	ND	0.00500	"							
Benzo (k) fluoranthene	ND	0.00500	"							
Chrysene	ND	0.00500	"							
Dibenz (a,h) anthracene	ND	0.00500	"							
Fluoranthene	ND	0.00500	"							
Fluorene	ND	0.00500	"							
Indeno (1,2,3-cd) pyrene	ND	0.00500	"							
Pyrene	ND	0.00500	"							
1-Methylnaphthalene	ND	0.00500	"							
2-Methylnaphthalene	ND	0.00500	"							
Surrogate: 2-Methylnaphthalene-d10	0.0204		"	0.0333		61.2	40-150			
Surrogate: Fluoranthene-d10	0.0300		"	0.0333		89.9	40-150			

LCS (BFI0478-BS1)

Prepared: 09/20/22 Analyzed: 09/21/22

Acenaphthene	0.0304	0.00500	mg/kg	0.0333		91.2	31-137			
Anthracene	0.0314	0.00500	"	0.0333		94.3	30-120			
Benzo (a) anthracene	0.0294	0.00500	"	0.0333		88.2	30-120			
Benzo (a) pyrene	0.0258	0.00500	"	0.0333		77.4	30-120			
Benzo (b) fluoranthene	0.0261	0.00500	"	0.0333		78.3	30-120			
Benzo (k) fluoranthene	0.0321	0.00500	"	0.0333		96.2	30-120			
Chrysene	0.0285	0.00500	"	0.0333		85.6	30-120			
Dibenz (a,h) anthracene	0.0194	0.00500	"	0.0333		58.1	30-120			
Fluoranthene	0.0323	0.00500	"	0.0333		97.0	30-120			
Fluorene	0.0310	0.00500	"	0.0333		93.1	30-120			
Indeno (1,2,3-cd) pyrene	0.0191	0.00500	"	0.0333		57.2	30-120			
Pyrene	0.0337	0.00500	"	0.0333		101	35-142			
1-Methylnaphthalene	0.0156	0.00500	"	0.0333		46.7	35-142			
2-Methylnaphthalene	0.0288	0.00500	"	0.0333		86.5	35-142			
Surrogate: 2-Methylnaphthalene-d10	0.0261		"	0.0333		78.3	40-150			
Surrogate: Fluoranthene-d10	0.0303		"	0.0333		90.9	40-150			

Summit Scientific

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K.P. Kauffman
1675 Broadway
Denver CO, 80202

Project: Solid Waste Storage Facility

Project Number: [none]
Project Manager: Kevin Tautkus

Reported:
10/03/22 11:21

PAH by EPA Method 8270D SIM - Quality Control

Summit Scientific

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

Batch BFI0478 - EPA 5030 Soil MS

Matrix Spike (BFI0478-MS1)

Source: 2209333-11

Prepared: 09/20/22 Analyzed: 09/21/22

Acenaphthene	0.0179	0.00500	mg/kg	0.0333	ND	53.7	31-137		
Anthracene	0.0191	0.00500	"	0.0333	ND	57.4	30-120		
Benzo (a) anthracene	0.0190	0.00500	"	0.0333	ND	57.1	30-120		
Benzo (a) pyrene	0.0152	0.00500	"	0.0333	ND	45.7	30-120		
Benzo (b) fluoranthene	0.0154	0.00500	"	0.0333	ND	46.2	30-120		
Benzo (k) fluoranthene	0.0193	0.00500	"	0.0333	ND	58.0	30-120		
Chrysene	0.0190	0.00500	"	0.0333	ND	57.1	30-120		
Dibenz (a,h) anthracene	0.0161	0.00500	"	0.0333	ND	48.2	30-120		
Fluoranthene	0.0200	0.00500	"	0.0333	ND	59.9	30-120		
Fluorene	0.0187	0.00500	"	0.0333	ND	56.0	30-120		
Indeno (1,2,3-cd) pyrene	0.0135	0.00500	"	0.0333	ND	40.4	30-120		
Pyrene	0.0216	0.00500	"	0.0333	ND	64.7	35-142		
1-Methylnaphthalene	0.0176	0.00500	"	0.0333	ND	52.9	15-130		
2-Methylnaphthalene	0.0215	0.00500	"	0.0333	ND	64.6	15-130		
Surrogate: 2-Methylnaphthalene-d10	0.0166		"	0.0333		49.9	40-150		
Surrogate: Fluoranthene-d10	0.0192		"	0.0333		57.7	40-150		

Matrix Spike Dup (BFI0478-MSD1)

Source: 2209333-11

Prepared: 09/20/22 Analyzed: 09/21/22

Acenaphthene	0.0188	0.00500	mg/kg	0.0333	ND	56.5	31-137	5.00	30
Anthracene	0.0198	0.00500	"	0.0333	ND	59.5	30-120	3.51	30
Benzo (a) anthracene	0.0204	0.00500	"	0.0333	ND	61.3	30-120	7.03	30
Benzo (a) pyrene	0.0160	0.00500	"	0.0333	ND	47.9	30-120	4.76	30
Benzo (b) fluoranthene	0.0160	0.00500	"	0.0333	ND	48.0	30-120	3.88	30
Benzo (k) fluoranthene	0.0195	0.00500	"	0.0333	ND	58.4	30-120	0.696	30
Chrysene	0.0192	0.00500	"	0.0333	ND	57.6	30-120	0.868	30
Dibenz (a,h) anthracene	0.0161	0.00500	"	0.0333	ND	48.3	30-120	0.234	30
Fluoranthene	0.0206	0.00500	"	0.0333	ND	61.8	30-120	3.20	30
Fluorene	0.0194	0.00500	"	0.0333	ND	58.3	30-120	4.04	30
Indeno (1,2,3-cd) pyrene	0.0150	0.00500	"	0.0333	ND	45.0	30-120	10.8	30
Pyrene	0.0220	0.00500	"	0.0333	ND	66.1	35-142	2.09	30
1-Methylnaphthalene	0.0189	0.00500	"	0.0333	ND	56.8	15-130	7.10	50
2-Methylnaphthalene	0.0220	0.00500	"	0.0333	ND	65.9	15-130	2.07	50
Surrogate: 2-Methylnaphthalene-d10	0.0189		"	0.0333		56.6	40-150		
Surrogate: Fluoranthene-d10	0.0201		"	0.0333		60.2	40-150		

Summit Scientific

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K.P. Kauffman
1675 Broadway
Denver CO, 80202

Project: Solid Waste Storage Facility

Project Number: [none]
Project Manager: Kevin Tautkus

Reported:
10/03/22 11:21

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

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

Batch BFI0569 - EPA 3050B

Blank (BFI0569-BLK1)

Prepared: 09/21/22 Analyzed: 09/24/22

Boron ND 0.0100 mg/L

LCS (BFI0569-BS1)

Prepared: 09/21/22 Analyzed: 09/24/22

Boron 5.23 0.0100 mg/L 5.00 105 80-120

Duplicate (BFI0569-DUP1)

Source: 2209333-21

Prepared: 09/21/22 Analyzed: 09/24/22

Boron 0.0781 0.0100 mg/L 0.0811 3.73 20

Matrix Spike (BFI0569-MS1)

Source: 2209333-21

Prepared: 09/21/22 Analyzed: 09/24/22

Boron 5.35 0.0100 mg/L 5.00 0.0811 105 75-125

Matrix Spike Dup (BFI0569-MSD1)

Source: 2209333-21

Prepared: 09/21/22 Analyzed: 09/24/22

Boron 5.63 0.0100 mg/L 5.00 0.0811 111 75-125 5.12 25

Batch BFI0571 - EPA 3050B

Blank (BFI0571-BLK1)

Prepared: 09/21/22 Analyzed: 09/25/22

Boron ND 0.0100 mg/L

LCS (BFI0571-BS1)

Prepared: 09/21/22 Analyzed: 09/25/22

Boron 5.55 0.0100 mg/L 5.00 111 80-120

Duplicate (BFI0571-DUP1)

Source: 2209333-01

Prepared: 09/21/22 Analyzed: 09/25/22

Boron 0.135 0.0100 mg/L 0.139 3.18 20

Matrix Spike (BFI0571-MS1)

Source: 2209333-01

Prepared: 09/21/22 Analyzed: 09/25/22

Boron 5.62 0.0100 mg/L 5.00 0.139 110 75-125

Summit Scientific

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K.P. Kauffman
1675 Broadway
Denver CO, 80202

Project: Solid Waste Storage Facility

Project Number: [none]
Project Manager: Kevin Tautkus

Reported:
10/03/22 11:21

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

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

Batch BFI0571 - EPA 3050B

Matrix Spike Dup (BFI0571-MSD1)				Source: 2209333-01		Prepared: 09/21/22 Analyzed: 09/25/22					
Boron	5.94	0.0100	mg/L	5.00	0.139	116	75-125	5.44	25		

Summit Scientific

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K.P. Kauffman
1675 Broadway
Denver CO, 80202

Project: Solid Waste Storage Facility

Project Number: [none]
Project Manager: Kevin Tautkus

Reported:
10/03/22 11:21

Total Metals by EPA 6020B - Quality Control

Summit Scientific

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

Batch BFI0565 - EPA 3050B

Blank (BFI0565-BLK1)

Prepared: 09/21/22 Analyzed: 09/24/22

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 (BFI0565-BS1)

Prepared: 09/21/22 Analyzed: 09/24/22

Arsenic	40.8	0.200	mg/kg wet	40.0	102	80-120
Barium	39.4	0.400	"	40.0	98.5	80-120
Cadmium	2.03	0.200	"	2.00	102	80-120
Copper	39.1	0.400	"	40.0	97.7	80-120
Lead	19.5	0.200	"	20.0	97.7	80-120
Nickel	38.7	0.400	"	40.0	96.8	80-120
Selenium	3.67	0.260	"	4.00	91.8	80-120
Silver	1.98	0.0200	"	2.00	98.9	80-120
Zinc	41.4	0.400	"	40.0	103	80-120

Duplicate (BFI0565-DUP1)

Source: 2209333-21

Prepared: 09/21/22 Analyzed: 09/24/22

Arsenic	1.12	0.206	mg/kg dry	1.18	4.96	20
Barium	94.7	0.411	"	97.1	2.54	20
Cadmium	0.256	0.206	"	0.252	1.82	20
Copper	6.81	0.411	"	7.06	3.68	20
Lead	11.3	0.206	"	11.5	1.32	20
Nickel	5.51	0.411	"	5.65	2.58	20
Selenium	0.384	0.267	"	0.394	2.46	20
Silver	0.0188	0.0206	"	0.0189	0.708	20
Zinc	62.0	0.411	"	63.5	2.44	20

Summit Scientific

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K.P. Kauffman
1675 Broadway
Denver CO, 80202

Project: Solid Waste Storage Facility

Project Number: [none]
Project Manager: Kevin Tautkus

Reported:
10/03/22 11:21

Total Metals by EPA 6020B - Quality Control

Summit Scientific

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

Batch BFI0565 - EPA 3050B

Matrix Spike (BFI0565-MS1)		Source: 2209333-21			Prepared: 09/21/22 Analyzed: 09/24/22					
Arsenic	40.5	0.206	mg/kg dry	41.1	1.18	95.7	75-125			
Barium	143	0.411	"	41.1	97.1	110	75-125			
Cadmium	2.31	0.206	"	2.06	0.252	100	75-125			
Copper	45.2	0.411	"	41.1	7.06	92.7	75-125			
Lead	24.2	0.206	"	20.6	11.5	62.1	75-125			QM-05
Nickel	44.0	0.411	"	41.1	5.65	93.2	75-125			
Selenium	3.73	0.267	"	4.11	0.394	81.3	75-125			
Silver	1.91	0.0206	"	2.06	0.0189	92.1	75-125			
Zinc	114	0.411	"	41.1	63.5	122	75-125			

Matrix Spike Dup (BFI0565-MSD1)		Source: 2209333-21			Prepared: 09/21/22 Analyzed: 09/24/22					
Arsenic	40.6	0.206	mg/kg dry	41.1	1.18	95.8	75-125	0.115	25	
Barium	144	0.411	"	41.1	97.1	115	75-125	1.17	25	
Cadmium	2.35	0.206	"	2.06	0.252	102	75-125	1.37	25	
Copper	45.9	0.411	"	41.1	7.06	94.4	75-125	1.51	25	
Lead	24.6	0.206	"	20.6	11.5	63.7	75-125	1.36	25	QM-05
Nickel	44.5	0.411	"	41.1	5.65	94.6	75-125	1.25	25	
Selenium	3.78	0.267	"	4.11	0.394	82.4	75-125	1.26	25	
Silver	1.96	0.0206	"	2.06	0.0189	94.4	75-125	2.48	25	
Zinc	114	0.411	"	41.1	63.5	124	75-125	0.741	25	

Batch BFI0567 - EPA 3050B

Blank (BFI0567-BLK1)		Prepared: 09/21/22 Analyzed: 09/23/22								
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	"							

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K.P. Kauffman
1675 Broadway
Denver CO, 80202

Project: Solid Waste Storage Facility

Project Number: [none]
Project Manager: Kevin Tautkus

Reported:
10/03/22 11:21

Total Metals by EPA 6020B - Quality Control

Summit Scientific

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

Batch BFI0567 - EPA 3050B

LCS (BFI0567-BS1)

Prepared: 09/21/22 Analyzed: 09/23/22

Arsenic	44.0	0.200	mg/kg wet	40.0		110	80-120			
Barium	42.2	0.400	"	40.0		106	80-120			
Cadmium	2.07	0.200	"	2.00		104	80-120			
Copper	43.0	0.400	"	40.0		107	80-120			
Lead	20.3	0.200	"	20.0		101	80-120			
Nickel	42.9	0.400	"	40.0		107	80-120			
Selenium	4.04	0.260	"	4.00		101	80-120			
Silver	2.05	0.0200	"	2.00		102	80-120			
Zinc	44.4	0.400	"	40.0		111	80-120			

Duplicate (BFI0567-DUP1)

Source: 2209333-01

Prepared: 09/21/22 Analyzed: 09/23/22

Arsenic	2.06	0.208	mg/kg dry		2.05			0.493	20	
Barium	219	0.415	"		219			0.0638	20	
Cadmium	0.376	0.208	"		0.365			3.20	20	
Copper	11.7	0.415	"		11.5			1.95	20	
Lead	6.74	0.208	"		6.67			0.991	20	
Nickel	9.30	0.415	"		9.21			0.923	20	
Selenium	0.544	0.270	"		0.528			2.89	20	
Silver	0.0283	0.0208	"		0.0297			4.88	20	
Zinc	92.9	0.415	"		91.4			1.61	20	

Matrix Spike (BFI0567-MS1)

Source: 2209333-01

Prepared: 09/21/22 Analyzed: 09/23/22

Arsenic	47.1	0.208	mg/kg dry	41.5	2.05	108	75-125			
Barium	337	0.415	"	41.5	219	285	75-125			QM-02
Cadmium	2.50	0.208	"	2.08	0.365	103	75-125			
Copper	55.7	0.415	"	41.5	11.5	106	75-125			
Lead	26.2	0.208	"	20.8	6.67	94.0	75-125			
Nickel	54.6	0.415	"	41.5	9.21	109	75-125			
Selenium	4.65	0.270	"	4.15	0.528	99.3	75-125			
Silver	2.07	0.0208	"	2.08	0.0297	98.3	75-125			
Zinc	138	0.415	"	41.5	91.4	112	75-125			

Summit Scientific

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K.P. Kauffman
1675 Broadway
Denver CO, 80202

Project: Solid Waste Storage Facility

Project Number: [none]
Project Manager: Kevin Tautkus

Reported:
10/03/22 11:21

Total Metals by EPA 6020B - Quality Control
Summit Scientific

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

Batch BF10567 - EPA 3050B

Matrix Spike Dup (BF10567-MSD1)		Source: 2209333-01			Prepared: 09/21/22 Analyzed: 09/23/22					
Arsenic	47.5	0.208	mg/kg dry	41.5	2.05	109	75-125	0.815	25	
Barium	343	0.415	"	41.5	219	299	75-125	1.72	25	QM-02
Cadmium	2.55	0.208	"	2.08	0.365	105	75-125	1.82	25	
Copper	56.4	0.415	"	41.5	11.5	108	75-125	1.19	25	
Lead	26.4	0.208	"	20.8	6.67	95.0	75-125	0.807	25	
Nickel	55.2	0.415	"	41.5	9.21	111	75-125	1.14	25	
Selenium	4.68	0.270	"	4.15	0.528	100	75-125	0.655	25	
Silver	2.07	0.0208	"	2.08	0.0297	98.3	75-125	0.0506	25	
Zinc	140	0.415	"	41.5	91.4	117	75-125	1.64	25	

Summit Scientific

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K.P. Kauffman
1675 Broadway
Denver CO, 80202

Project: Solid Waste Storage Facility

Project Number: [none]
Project Manager: Kevin Tautkus

Reported:
10/03/22 11:21

Hexavalent Chromium by EPA Method 7196 - Quality Control

Summit Scientific

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

Batch BFI0740 - 3060A Mod

Blank (BFI0740-BLK1)										
					Prepared & Analyzed: 09/28/22					
Chromium, Hexavalent	ND	0.30	mg/kg wet							
LCS (BFI0740-BS1)										
					Prepared & Analyzed: 09/28/22					
Chromium, Hexavalent	23.8	0.30	mg/kg wet	25.0		95.4	80-120			
Duplicate (BFI0740-DUP1)										
					Source: 2209333-01 Prepared & Analyzed: 09/28/22					
Chromium, Hexavalent	ND	0.30	mg/kg dry		ND				20	
Matrix Spike (BFI0740-MS1)										
					Source: 2209333-01 Prepared & Analyzed: 09/28/22					
Chromium, Hexavalent	27.6	0.30	mg/kg dry	26.0	ND	106	75-125			
Matrix Spike Dup (BFI0740-MSD1)										
					Source: 2209333-01 Prepared & Analyzed: 09/28/22					
Chromium, Hexavalent	30.7	0.30	mg/kg dry	26.0	ND	118	75-125	10.5	20	

Batch BFI0741 - 3060A Mod

Blank (BFI0741-BLK1)										
					Prepared & Analyzed: 09/28/22					
Chromium, Hexavalent	ND	0.30	mg/kg wet							
LCS (BFI0741-BS1)										
					Prepared & Analyzed: 09/28/22					
Chromium, Hexavalent	24.6	0.30	mg/kg wet	25.0		98.2	80-120			
Duplicate (BFI0741-DUP1)										
					Source: 2209333-21 Prepared & Analyzed: 09/28/22					
Chromium, Hexavalent	ND	0.30	mg/kg dry		ND				20	
Matrix Spike (BFI0741-MS1)										
					Source: 2209333-21 Prepared & Analyzed: 09/28/22					
Chromium, Hexavalent	24.9	0.30	mg/kg dry	25.7	ND	97.0	75-125			

Summit Scientific

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K.P. Kauffman
1675 Broadway
Denver CO, 80202

Project: Solid Waste Storage Facility

Project Number: [none]
Project Manager: Kevin Tautkus

Reported:
10/03/22 11:21

Hexavalent Chromium by EPA Method 7196 - Quality Control

Summit Scientific

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

Batch BFI0741 - 3060A Mod

Matrix Spike Dup (BFI0741-MSD1)

Source: 2209333-21

Prepared & Analyzed: 09/28/22

Chromium, Hexavalent	26.8	0.30	mg/kg dry	25.7	ND	104	75-125	7.35	20
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K.P. Kauffman
1675 Broadway
Denver CO, 80202

Project: Solid Waste Storage Facility

Project Number: [none]
Project Manager: Kevin Tautkus

Reported:
10/03/22 11:21

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

Summit Scientific

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

Batch BFI0617 - General Preparation

Blank (BFI0617-BLK1)

Prepared: 09/23/22 Analyzed: 09/25/22

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

LCS (BFI0617-BS1)

Prepared: 09/23/22 Analyzed: 09/25/22

Calcium	6.48	0.0500	mg/L wet	5.00	130	70-130
Magnesium	6.11	0.0500	"	5.00	122	70-130
Sodium	5.77	0.0500	"	5.00	115	70-130

Batch BFI0633 - General Preparation

Blank (BFI0633-BLK1)

Prepared: 09/23/22 Analyzed: 09/28/22

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

LCS (BFI0633-BS1)

Prepared: 09/23/22 Analyzed: 09/28/22

Calcium	5.56	0.0500	mg/L wet	5.00	111	70-130
Magnesium	5.06	0.0500	"	5.00	101	70-130
Sodium	4.55	0.0500	"	5.00	91.0	70-130

Batch BFI0700 - General Preparation

Blank (BFI0700-BLK1)

Prepared: 09/27/22 Analyzed: 09/30/22

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

Summit Scientific

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K.P. Kauffman
1675 Broadway
Denver CO, 80202

Project: Solid Waste Storage Facility

Project Number: [none]
Project Manager: Kevin Tautkus

Reported:
10/03/22 11:21

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

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

Batch BFI0700 - General Preparation

LCS (BFI0700-BS1)				Prepared: 09/27/22 Analyzed: 09/30/22						
Calcium	6.13	0.0500	mg/L wet	5.00		123	70-130			
Magnesium	6.34	0.0500	"	5.00		127	70-130			
Sodium	5.88	0.0500	"	5.00		118	70-130			

Summit Scientific

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K.P. Kauffman
1675 Broadway
Denver CO, 80202

Project: Solid Waste Storage Facility

Project Number: [none]
Project Manager: Kevin Tautkus

Reported:
10/03/22 11:21

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

Summit Scientific

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

Batch BFI0573 - General Preparation

Duplicate (BFI0573-DUP1)		Source: 2209333-01			Prepared: 09/21/22 Analyzed: 09/23/22					
% Solids	96.5		%		96.3		0.200		20	

Summit Scientific

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K.P. Kauffman
1675 Broadway
Denver CO, 80202

Project: Solid Waste Storage Facility

Project Number: [none]
Project Manager: Kevin Tautkus

Reported:
10/03/22 11:21

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

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

Batch BFI0620 - General Preparation

Blank (BFI0620-BLK1) Prepared: 09/23/22 Analyzed: 09/27/22

Specific Conductance (EC) ND 0.0100 mmhos/cm

LCS (BFI0620-BS1) Prepared: 09/23/22 Analyzed: 09/27/22

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

Duplicate (BFI0620-DUP1) Source: 2209330-01 Prepared: 09/23/22 Analyzed: 09/27/22

Specific Conductance (EC) 1.05 0.0100 mmhos/cm 1.03 2.21 20

Batch BFI0637 - General Preparation

Blank (BFI0637-BLK1) Prepared: 09/23/22 Analyzed: 09/27/22

Specific Conductance (EC) ND 0.0100 mmhos/cm

LCS (BFI0637-BS1) Prepared: 09/23/22 Analyzed: 09/27/22

Specific Conductance (EC) 0.154 0.0100 mmhos/cm 0.150 103 95-105

Duplicate (BFI0637-DUP1) Source: 2209332-01 Prepared: 09/23/22 Analyzed: 09/27/22

Specific Conductance (EC) 0.761 0.0100 mmhos/cm 0.756 0.607 20

Batch BFI0703 - General Preparation

Blank (BFI0703-BLK1) Prepared: 09/27/22 Analyzed: 09/30/22

Specific Conductance (EC) ND 0.0100 mmhos/cm

LCS (BFI0703-BS1) Prepared: 09/27/22 Analyzed: 09/30/22

Specific Conductance (EC) 0.154 0.0100 mmhos/cm 0.150 103 95-105

Summit Scientific

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K.P. Kauffman
1675 Broadway
Denver CO, 80202

Project: Solid Waste Storage Facility

Project Number: [none]
Project Manager: Kevin Tautkus

Reported:
10/03/22 11:21

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

Summit Scientific

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

Batch BFI0703 - General Preparation

Duplicate (BFI0703-DUP1)

Source: 2209333-19

Prepared: 09/27/22 Analyzed: 09/30/22

Specific Conductance (EC)	0.239	0.0100	mmhos/cm	0.230	3.97	20
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K.P. Kauffman
1675 Broadway
Denver CO, 80202

Project: Solid Waste Storage Facility

Project Number: [none]
Project Manager: Kevin Tautkus

Reported:
10/03/22 11:21

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

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

Batch BFI0621 - General Preparation

LCS (BFI0621-BS1)					Prepared: 09/23/22 Analyzed: 09/27/22					
pH	9.17		pH Units	9.18		99.9	95-105			
Duplicate (BFI0621-DUP1)					Source: 2209330-01 Prepared: 09/23/22 Analyzed: 09/27/22					
pH	8.76		pH Units	8.78		0.228	20			

Batch BFI0636 - General Preparation

LCS (BFI0636-BS1)					Prepared: 09/23/22 Analyzed: 09/27/22					
pH	9.07		pH Units	9.18		98.8	95-105			
Duplicate (BFI0636-DUP1)					Source: 2209332-01 Prepared: 09/23/22 Analyzed: 09/27/22					
pH	7.75		pH Units	7.79		0.515	20			

Batch BFI0702 - General Preparation

LCS (BFI0702-BS1)					Prepared: 09/27/22 Analyzed: 09/30/22					
pH	9.06		pH Units	9.18		98.7	95-105			
Duplicate (BFI0702-DUP1)					Source: 2209333-19 Prepared: 09/27/22 Analyzed: 09/30/22					
pH	7.83		pH Units	7.80		0.384	20			

Summit Scientific

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K.P. Kauffman
1675 Broadway
Denver CO, 80202

Project: Solid Waste Storage Facility

Project Number: [none]
Project Manager: Kevin Tautkus

Reported:
10/03/22 11:21

Notes and Definitions

S-01	The surrogate recovery for this sample is not available due to sample dilution required from high analyte concentration and/or matrix interference's.
R-01	The Reporting Limit for this analyte has been raised to account for matrix interference.
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.
QM-02	The RPD and/or percent recovery for this QC sample cannot be accurately calculated due to the high concentration of analyte inherent in the sample.
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