

Summit Scientific

4653 Table Mountain Drive, Golden, Colorado 80403

303.277.9310

July 12, 2021

Max Knop

K.P. Kauffman

1675 Broadway

Denver, CO 80202

RE: RMF Consolidation

Work Order #2106263

Enclosed are the results of analyses for samples received by Summit Scientific on 06/11/21 15:00. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink that reads "Muri Premer". The signature is written in a cursive style with a large, stylized 'M' and 'P'.

Muri Premer For Paul Shrewsbury

President



K.P. Kauffman
1675 Broadway
Denver CO, 80202

Project: RMF Consolidation

Project Number: [none]
Project Manager: Max Knop

Reported:
07/12/21 15:58

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
N	2106263-01	Soil	06/10/21 13:40	06/11/21 15:00
W	2106263-02	Soil	06/10/21 13:45	06/11/21 15:00
E	2106263-03	Soil	06/10/21 13:50	06/11/21 15:00
S	2106263-04	Soil	06/10/21 13:55	06/11/21 15:00
BG #1	2106263-05	Soil	06/10/21 14:10	06/11/21 15:00
BG #2	2106263-06	Soil	06/10/21 14:15	06/11/21 15:00
BG #3	2106263-07	Soil	06/10/21 14:20	06/11/21 15:00

Summit Scientific

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Sample Receipt Checklist

S2 Work Order 2106263

Client: KP Kauffman Client Project ID: RMF Consolidation

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

Matrix (check all that apply): Air Soil/Solid Water Other: _____
(Describe)

Temp (°C)	5
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Thermometer ID: 61857155-K

	Yes	No	N/A	Comments (if any)
If samples require cooling, was the temperature at 4°C +/- 2°C ⁽¹⁾ ? NOTE: If samples are delivered the same day of sampling, this requirement is met provided that there is evidence that cooling has begun.	✓			On ice.
Were all samples received intact ⁽¹⁾ ?	✓			
Was adequate sample volume provided ⁽¹⁾ ?	✓			
If custody seals are present, are they intact ⁽¹⁾ ?			✓	
Are samples with holding times due within 48 hours sample due within 48 hours present?			✓	
Is a chain-of-custody (COC) form present and filled out completely ⁽¹⁾ ?	✓			
Does the COC agree with the number and type of sample bottles received ⁽¹⁾ ?	✓			
Do the sample IDs on the bottle labels match the COC ⁽¹⁾ ?	✓			
Is the COC properly relinquished by the client w/ date and time recorded ⁽¹⁾ ?	✓			
For volatiles in water – is there headspace present? If yes, contact client and note in narrative.			✓	
Are samples preserved that require preservation (excluding cooling) ⁽¹⁾ ? Note the type of preservative in the Comments column – HCl, H2SO4, NaOH, HNO3, ect			✓	
If samples are acid preserved for metals, is the pH ≤ 2 ⁽¹⁾ ? Record the pH in Comments.			✓	
If dissolved metals are requested, were samples field filtered?			✓	

Additional Comments (if any):

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

JB
Custodian Printed Name or Initials

[Signature]
Signature of Custodian

6/11/21
Date/Time



K.P. Kauffman
1675 Broadway
Denver CO, 80202

Project: RMF Consolidation

Project Number: [none]
Project Manager: Max Knop

Reported:
07/12/21 15:58

N
2106263-01 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **06/10/21 13:40**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Benzene	ND	0.0020		mg/kg	1	BEF0383	06/17/21	06/18/21	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: **06/10/21 13:40**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: 1,2-Dichloroethane-d4		131 %		23-173		"	"	"	"	
Surrogate: Toluene-d8		118 %		20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		97.6 %		21-167		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **06/10/21 13:40**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
C10-C28 (DRO)	ND	50		mg/kg	1	BEF0384	06/17/21	06/18/21	EPA 8015M	
C28-C36 (ORO)	ND	50		"	"	"	"	"	"	

Date Sampled: **06/10/21 13:40**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: o-Terphenyl		84.8 %		30-150		"	"	"	"	

PAH by EPA Method 8270D SIM

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Project Number: [none]
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N
2106263-01 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

Date Sampled: **06/10/21 13:40**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BEG0107	07/07/21	07/10/21	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: **06/10/21 13:40**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10		49.0 %	40-150		"	"	"	"	
Surrogate: Fluoranthene-d10		64.0 %	40-150		"	"	"	"	

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **06/10/21 13:40**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	0.535	0.0100	mg/L	1	BEF0463	06/22/21	06/23/21	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **06/10/21 13:40**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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Project: RMF Consolidation

Project Number: [none]
Project Manager: Max Knop

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N
2106263-01 (Soil)

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Total Metals by EPA 6020B

Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method
Arsenic	4.52	0.243	mg/kg dry	1	BEF0399	06/18/21	06/19/21	EPA 6020B
Barium	109	0.486	"	"	"	"	"	"
Cadmium	0.405	0.243	"	"	"	"	"	"
Copper	16.3	0.486	"	"	"	"	"	"
Lead	13.7	0.243	"	"	"	"	"	"
Nickel	19.3	0.486	"	"	"	"	"	"
Selenium	1.07	0.316	"	"	"	"	"	"
Silver	0.0388	0.0243	"	"	"	"	"	"
Zinc	54.0	0.486	"	"	"	"	"	"

Hexavalent Chromium by EPA Method 7196

Date Sampled: 06/10/21 13:40

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BEF0410	06/17/21	06/18/21	EPA 7196A	

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

Date Sampled: 06/10/21 13:40

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	262	0.0608	mg/L dry	1	BEF0405	06/18/21	06/21/21	EPA 6020B	
Magnesium	118	0.0608	"	"	"	"	"	"	
Sodium	1190	0.0608	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: 06/10/21 13:40

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	15.3	0.00100	units	1	BEF0488	06/23/21	06/23/21	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: 06/10/21 13:40

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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N
2106263-01 (Soil)

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Physical Parameters by APHA/ASTM/EPA Methods

% Solids	82.2	%	1	BEF0395	06/18/21	06/18/21	Calculation
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Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **06/10/21 13:40**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	5.55	0.0100	mmhos/cm	1	BEF0427	06/21/21	06/21/21	EPA 120.1	

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

Date Sampled: **06/10/21 13:40**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	8.09		pH Units	1	BEF0426	06/21/21	06/21/21	EPA 9045D	

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07/12/21 15:58

W
2106263-02 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **06/10/21 13:45**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0020	mg/kg	1	BEF0383	06/17/21	06/18/21	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: **06/10/21 13:45**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		126 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		112 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		94.2 %	21-167		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **06/10/21 13:45**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	ND	50	mg/kg	1	BEF0384	06/17/21	06/18/21	EPA 8015M	
C28-C36 (ORO)	ND	50	"	"	"	"	"	"	

Date Sampled: **06/10/21 13:45**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl		80.3 %	30-150		"	"	"	"	

PAH by EPA Method 8270D SIM

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Reported:
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W
2106263-02 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

Date Sampled: **06/10/21 13:45**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BEG0107	07/07/21	07/10/21	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: **06/10/21 13:45**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10		54.5 %	40-150		"	"	"	"	
Surrogate: Fluoranthene-d10		74.6 %	40-150		"	"	"	"	

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **06/10/21 13:45**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	0.425	0.0100	mg/L	1	BEF0463	06/22/21	06/23/21	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **06/10/21 13:45**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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Project: RMF Consolidation

Project Number: [none]
Project Manager: Max Knop

Reported:
07/12/21 15:58

W
2106263-02 (Soil)

Summit Scientific

Total Metals by EPA 6020B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Arsenic	3.41	0.229	mg/kg dry	1	BEF0399	06/18/21	06/19/21	EPA 6020B	
Barium	13.9	0.459	"	"	"	"	"	"	
Cadmium	ND	0.229	"	"	"	"	"	"	
Copper	8.81	0.459	"	"	"	"	"	"	
Lead	10.2	0.229	"	"	"	"	"	"	
Nickel	12.5	0.459	"	"	"	"	"	"	
Selenium	0.892	0.298	"	"	"	"	"	"	
Silver	0.0232	0.0229	"	"	"	"	"	"	
Zinc	60.1	0.459	"	"	"	"	"	"	

Hexavalent Chromium by EPA Method 7196

Date Sampled: **06/10/21 13:45**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BEF0410	06/17/21	06/18/21	EPA 7196A	

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

Date Sampled: **06/10/21 13:45**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	82.4	0.0574	mg/L dry	1	BEF0405	06/18/21	06/21/21	EPA 6020B	
Magnesium	20.1	0.0574	"	"	"	"	"	"	
Sodium	203	0.0574	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **06/10/21 13:45**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	5.20	0.00100	units	1	BEF0488	06/23/21	06/23/21	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **06/10/21 13:45**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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Project: RMF Consolidation

Project Number: [none]
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 07/12/21 15:58

W
2106263-02 (Soil)

Summit Scientific

Physical Parameters by APHA/ASTM/EPA Methods

% Solids	87.2	%	1	BEF0395	06/18/21	06/18/21	Calculation
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Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **06/10/21 13:45**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	1.31	0.0100	mmhos/cm	1	BEF0427	06/21/21	06/21/21	EPA 120.1	

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

Date Sampled: **06/10/21 13:45**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	8.29		pH Units	1	BEF0426	06/21/21	06/21/21	EPA 9045D	

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Project: RMF Consolidation

Project Number: [none]
Project Manager: Max Knop

Reported:
07/12/21 15:58

E
2106263-03 (Soil)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **06/10/21 13:50**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0020	mg/kg	1	BEF0383	06/17/21	06/18/21	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: **06/10/21 13:50**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		110 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		104 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		96.1 %	21-167		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **06/10/21 13:50**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	ND	50	mg/kg	1	BEF0384	06/17/21	06/18/21	EPA 8015M	
C28-C36 (ORO)	ND	50	"	"	"	"	"	"	

Date Sampled: **06/10/21 13:50**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl		84.1 %	30-150		"	"	"	"	

PAH by EPA Method 8270D SIM

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Project: RMF Consolidation

Project Number: [none]
Project Manager: Max Knop

Reported:
07/12/21 15:58

E
2106263-03 (Soil)

Summit Scientific

PAH by EPA Method 8270D SIM

Date Sampled: **06/10/21 13:50**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BEG0107	07/07/21	07/10/21	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: **06/10/21 13:50**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10		54.8 %	40-150		"	"	"	"	
Surrogate: Fluoranthene-d10		71.7 %	40-150		"	"	"	"	

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **06/10/21 13:50**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	0.675	0.0100	mg/L	1	BEF0463	06/22/21	06/23/21	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **06/10/21 13:50**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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1675 Broadway
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Project: RMF Consolidation

Project Number: [none]
Project Manager: Max Knop

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07/12/21 15:58

E
2106263-03 (Soil)

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Total Metals by EPA 6020B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Arsenic	5.12	0.242	mg/kg dry	1	BEF0399	06/18/21	06/19/21	EPA 6020B	
Barium	189	0.483	"	"	"	"	"	"	
Cadmium	0.339	0.242	"	"	"	"	"	"	
Copper	16.9	0.483	"	"	"	"	"	"	
Lead	12.8	0.242	"	"	"	"	"	"	
Nickel	18.4	0.483	"	"	"	"	"	"	
Selenium	1.31	0.314	"	"	"	"	"	"	
Silver	0.0593	0.0242	"	"	"	"	"	"	
Zinc	57.5	0.483	"	"	"	"	"	"	

Hexavalent Chromium by EPA Method 7196

Date Sampled: **06/10/21 13:50**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BEF0410	06/17/21	06/18/21	EPA 7196A	

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

Date Sampled: **06/10/21 13:50**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	174	0.0604	mg/L dry	1	BEF0405	06/18/21	06/22/21	EPA 6020B	
Magnesium	123	0.0604	"	"	"	"	"	"	
Sodium	1210	0.0604	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **06/10/21 13:50**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	17.2	0.00100	units	1	BEF0488	06/23/21	06/23/21	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **06/10/21 13:50**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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 Project Manager: Max Knop

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E

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Physical Parameters by APHA/ASTM/EPA Methods

% Solids	82.8	%	1	BEF0395	06/18/21	06/18/21	Calculation
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Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **06/10/21 13:50**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	5.35	0.0100	mmhos/cm	1	BEF0427	06/21/21	06/21/21	EPA 120.1	

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

Date Sampled: **06/10/21 13:50**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	8.13		pH Units	1	BEF0426	06/21/21	06/21/21	EPA 9045D	

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Project Manager: Max Knop

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2106263-04 (Soil)

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Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **06/10/21 13:55**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0020	mg/kg	1	BEF0383	06/17/21	06/18/21	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: **06/10/21 13:55**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		116 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		107 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		96.5 %	21-167		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **06/10/21 13:55**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	ND	50	mg/kg	1	BEF0384	06/17/21	06/18/21	EPA 8015M	
C28-C36 (ORO)	ND	50	"	"	"	"	"	"	

Date Sampled: **06/10/21 13:55**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl		92.4 %	30-150		"	"	"	"	

PAH by EPA Method 8270D SIM

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Project Manager: Max Knop

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PAH by EPA Method 8270D SIM

Date Sampled: **06/10/21 13:55**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BEG0107	07/07/21	07/10/21	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: **06/10/21 13:55**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10		52.9 %	40-150		"	"	"	"	
Surrogate: Fluoranthene-d10		68.1 %	40-150		"	"	"	"	

Total Metals by EPA 6020B Hot Water Soluble Extraction

Date Sampled: **06/10/21 13:55**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Boron	0.633	0.0100	mg/L	1	BEF0463	06/22/21	06/23/21	EPA 6020B	

Total Metals by EPA 6020B

Date Sampled: **06/10/21 13:55**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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Project Manager: Max Knop

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Total Metals by EPA 6020B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Arsenic	7.63	0.235	mg/kg dry	1	BEF0399	06/18/21	06/19/21	EPA 6020B	
Barium	16.8	0.470	"	"	"	"	"	"	
Cadmium	0.497	0.235	"	"	"	"	"	"	
Copper	12.6	0.470	"	"	"	"	"	"	
Lead	14.7	0.235	"	"	"	"	"	"	
Nickel	21.3	0.470	"	"	"	"	"	"	
Selenium	0.737	0.305	"	"	"	"	"	"	
Silver	0.0284	0.0235	"	"	"	"	"	"	
Zinc	81.8	0.470	"	"	"	"	"	"	

Hexavalent Chromium by EPA Method 7196

Date Sampled: **06/10/21 13:55**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BEF0410	06/17/21	06/18/21	EPA 7196A	

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

Date Sampled: **06/10/21 13:55**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	215	0.0587	mg/L dry	1	BEF0405	06/18/21	06/22/21	EPA 6020B	
Magnesium	83.7	0.0587	"	"	"	"	"	"	
Sodium	748	0.0587	"	"	"	"	"	"	

Calculated Analysis

Date Sampled: **06/10/21 13:55**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	11.0	0.00100	units	1	BEF0488	06/23/21	06/23/21	Calculation	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **06/10/21 13:55**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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S
2106263-04 (Soil)

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Physical Parameters by APHA/ASTM/EPA Methods

% Solids	85.1	%	1	BEF0395	06/18/21	06/18/21	Calculation
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Specific Conductance by EPA Method 120.1, Saturated Paste Extraction

Date Sampled: **06/10/21 13:55**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	3.93	0.0100	mmhos/cm	1	BEF0427	06/21/21	06/21/21	EPA 120.1	

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

Date Sampled: **06/10/21 13:55**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	8.02		pH Units	1	BEF0426	06/21/21	06/21/21	EPA 9045D	

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BG #1
2106263-05 (Soil)

Summit Scientific

Total Metals by EPA 6020B

Date Sampled: **06/10/21 14:10**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Arsenic	4.40	0.200	mg/kg dry	1	BEF0399	06/18/21	06/19/21	EPA 6020B	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **06/10/21 14:10**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
% Solids	90.7		%	1	BEF0395	06/18/21	06/18/21	Calculation	

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Project Number: [none]
 Project Manager: Max Knop

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BG #2
2106263-06 (Soil)

Summit Scientific

Total Metals by EPA 6020B

Date Sampled: **06/10/21 14:15**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Arsenic	6.74	0.200	mg/kg dry	1	BEF0399	06/18/21	06/19/21	EPA 6020B	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **06/10/21 14:15**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
% Solids	84.6		%	1	BEF0395	06/18/21	06/18/21	Calculation	

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Project Number: [none]
 Project Manager: Max Knop

Reported:
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BG #3
2106263-07 (Soil)

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Total Metals by EPA 6020B

Date Sampled: **06/10/21 14:20**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Arsenic	2.50	0.200	mg/kg dry	1	BEF0399	06/18/21	06/19/21	EPA 6020B	

Physical Parameters by APHA/ASTM/EPA Methods

Date Sampled: **06/10/21 14:20**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
% Solids	97.5		%	1	BEF0395	06/18/21	06/18/21	Calculation	

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Project: RMF Consolidation

Project Number: [none]
Project Manager: Max Knop

Reported:
07/12/21 15:58

Volatile Organic Compounds by EPA Method 8260B - Quality Control

Summit Scientific

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

Batch BEF0383 - EPA 5030 Soil MS

Blank (BEF0383-BLK1)

Prepared: 06/17/21 Analyzed: 06/18/21

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	0.0359		"	0.0400		89.8	23-173			
Surrogate: Toluene-d8	0.0457		"	0.0400		114	20-170			
Surrogate: 4-Bromofluorobenzene	0.0398		"	0.0400		99.4	21-167			

LCS (BEF0383-BS1)

Prepared: 06/17/21 Analyzed: 06/18/21

Benzene	0.124	0.0020	mg/kg	0.100		124	70-130			
Toluene	0.0793	0.0050	"	0.100		79.3	70-130			
Ethylbenzene	0.0778	0.0050	"	0.100		77.8	70-130			
m,p-Xylene	0.151	0.010	"	0.200		75.6	70-130			
o-Xylene	0.0771	0.0050	"	0.100		77.1	70-130			
1,2,4-Trimethylbenzene	0.0788	0.0050	"	0.100		78.8	70-130			
1,3,5-Trimethylbenzene	0.0782	0.0050	"	0.100		78.2	70-130			
Naphthalene	0.0820	0.0038	"	0.100		82.0	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.0266		"	0.0400		66.4	23-173			
Surrogate: Toluene-d8	0.0442		"	0.0400		110	20-170			
Surrogate: 4-Bromofluorobenzene	0.0362		"	0.0400		90.5	21-167			

Matrix Spike (BEF0383-MS1)

Source: 2106227-01

Prepared: 06/17/21 Analyzed: 06/18/21

Benzene	0.129	0.0020	mg/kg	0.100	ND	129	70-130			
Toluene	0.0793	0.0050	"	0.100	ND	79.3	70-130			
Ethylbenzene	0.0887	0.0050	"	0.100	ND	88.7	70-130			
m,p-Xylene	0.172	0.010	"	0.200	ND	85.9	70-130			
o-Xylene	0.0857	0.0050	"	0.100	ND	85.7	70-130			
1,2,4-Trimethylbenzene	0.0857	0.0050	"	0.100	ND	85.7	70-130			
1,3,5-Trimethylbenzene	0.0860	0.0050	"	0.100	ND	86.0	70-130			
Naphthalene	0.0912	0.0038	"	0.100	ND	91.2	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.0308		"	0.0400		76.9	23-173			
Surrogate: Toluene-d8	0.0392		"	0.0400		98.1	20-170			
Surrogate: 4-Bromofluorobenzene	0.0382		"	0.0400		95.6	21-167			

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Project: RMF Consolidation

Project Number: [none]
Project Manager: Max Knop

Reported:
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Volatile Organic Compounds by EPA Method 8260B - Quality Control

Summit Scientific

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

Batch BEF0383 - EPA 5030 Soil MS

Matrix Spike Dup (BEF0383-MSD1)	Source: 2106227-01			Prepared: 06/17/21 Analyzed: 06/18/21						
Benzene	0.102	0.0020	mg/kg	0.100	ND	102	70-130	23.0	30	
Toluene	0.0833	0.0050	"	0.100	ND	83.3	70-130	5.02	30	
Ethylbenzene	0.0886	0.0050	"	0.100	ND	88.6	70-130	0.135	30	
m,p-Xylene	0.172	0.010	"	0.200	ND	85.8	70-130	0.105	30	
o-Xylene	0.0865	0.0050	"	0.100	ND	86.5	70-130	0.871	30	
1,2,4-Trimethylbenzene	0.0867	0.0050	"	0.100	ND	86.7	70-130	1.11	30	
1,3,5-Trimethylbenzene	0.0857	0.0050	"	0.100	ND	85.7	70-130	0.315	30	
Naphthalene	0.0920	0.0038	"	0.100	ND	92.0	70-130	0.851	30	
<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>0.0308</i>		<i>"</i>	<i>0.0400</i>		<i>77.0</i>	<i>23-173</i>			
<i>Surrogate: Toluene-d8</i>	<i>0.0394</i>		<i>"</i>	<i>0.0400</i>		<i>98.5</i>	<i>20-170</i>			
<i>Surrogate: 4-Bromofluorobenzene</i>	<i>0.0369</i>		<i>"</i>	<i>0.0400</i>		<i>92.3</i>	<i>21-167</i>			

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Project: RMF Consolidation

Project Number: [none]
Project Manager: Max Knop

Reported:
07/12/21 15:58

Extractable Petroleum Hydrocarbons by 8015 - Quality Control
Summit Scientific

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

Batch BEF0384 - EPA 3550A

Blank (BEF0384-BLK1)

Prepared: 06/17/21 Analyzed: 06/18/21

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

LCS (BEF0384-BS1)

Prepared: 06/17/21 Analyzed: 06/18/21

C10-C28 (DRO)	540	50	mg/kg	500	108	70-130				
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Matrix Spike (BEF0384-MS1)

Source: 2106227-01

Prepared: 06/17/21 Analyzed: 06/18/21

C10-C28 (DRO)	491	50	mg/kg	500	16.2	94.9	70-130			
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Matrix Spike Dup (BEF0384-MSD1)

Source: 2106227-01

Prepared: 06/17/21 Analyzed: 06/18/21

C10-C28 (DRO)	479	50	mg/kg	500	16.2	92.5	70-130	2.50	20	
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Project: RMF Consolidation

Project Number: [none]
Project Manager: Max Knop

Reported:
07/12/21 15:58

PAH by EPA Method 8270D SIM - Quality Control

Summit Scientific

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

Batch BEG0107 - EPA 5030 Soil MS

Blank (BEG0107-BLK1)

Prepared: 07/07/21 Analyzed: 07/10/21

Acenaphthene	ND	0.00500	mg/kg							
Anthracene	ND	0.00500	"							
Benzo (a) anthracene	ND	0.00500	"							
Benzo (a) pyrene	ND	0.00500	"							
Benzo (b) fluoranthene	ND	0.00500	"							
Benzo (k) fluoranthene	ND	0.00500	"							
Chrysene	ND	0.00500	"							
Dibenz (a,h) anthracene	ND	0.00500	"							
Fluoranthene	ND	0.00500	"							
Fluorene	ND	0.00500	"							
Indeno (1,2,3-cd) pyrene	ND	0.00500	"							
Pyrene	ND	0.00500	"							
1-Methylnaphthalene	ND	0.00500	"							
2-Methylnaphthalene	ND	0.00500	"							
<i>Surrogate: 2-Methylnaphthalene-d10</i>	<i>0.0188</i>		<i>"</i>	<i>0.0333</i>		<i>56.4</i>	<i>40-150</i>			
<i>Surrogate: Fluoranthene-d10</i>	<i>0.0241</i>		<i>"</i>	<i>0.0333</i>		<i>72.3</i>	<i>40-150</i>			

LCS (BEG0107-BS1)

Prepared: 07/07/21 Analyzed: 07/10/21

Acenaphthene	0.0307	0.00500	mg/kg	0.0333		92.1	31-137			
Anthracene	0.0306	0.00500	"	0.0333		91.9	30-120			
Benzo (a) anthracene	0.0305	0.00500	"	0.0333		91.6	30-120			
Benzo (a) pyrene	0.0298	0.00500	"	0.0333		89.4	30-120			
Benzo (b) fluoranthene	0.0311	0.00500	"	0.0333		93.3	30-120			
Benzo (k) fluoranthene	0.0308	0.00500	"	0.0333		92.3	30-120			
Chrysene	0.0298	0.00500	"	0.0333		89.5	30-120			
Dibenz (a,h) anthracene	0.0131	0.00500	"	0.0333		39.3	30-120			
Fluoranthene	0.0293	0.00500	"	0.0333		87.9	30-120			
Fluorene	0.0314	0.00500	"	0.0333		94.1	30-120			
Indeno (1,2,3-cd) pyrene	0.0128	0.00500	"	0.0333		38.4	30-120			
Pyrene	0.0305	0.00500	"	0.0333		91.4	35-142			
1-Methylnaphthalene	0.0279	0.00500	"	0.0333		83.6	35-142			
2-Methylnaphthalene	0.0256	0.00500	"	0.0333		76.8	35-142			
<i>Surrogate: 2-Methylnaphthalene-d10</i>	<i>0.0261</i>		<i>"</i>	<i>0.0333</i>		<i>78.4</i>	<i>40-150</i>			
<i>Surrogate: Fluoranthene-d10</i>	<i>0.0316</i>		<i>"</i>	<i>0.0333</i>		<i>94.7</i>	<i>40-150</i>			

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K.P. Kauffman
1675 Broadway
Denver CO, 80202

Project: RMF Consolidation

Project Number: [none]
Project Manager: Max Knop

Reported:
07/12/21 15:58

PAH by EPA Method 8270D SIM - Quality Control

Summit Scientific

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

Batch BEG0107 - EPA 5030 Soil MS

Matrix Spike (BEG0107-MS1)	Source: 2106263-01			Prepared: 07/07/21 Analyzed: 07/10/21					
Acenaphthene	0.0272	0.00500	mg/kg	0.0333	ND	81.6	31-137		
Anthracene	0.0274	0.00500	"	0.0333	ND	82.2	30-120		
Benzo (a) anthracene	0.0279	0.00500	"	0.0333	ND	83.6	30-120		
Benzo (a) pyrene	0.0269	0.00500	"	0.0333	ND	80.6	30-120		
Benzo (b) fluoranthene	0.0367	0.00500	"	0.0333	ND	110	30-120		
Benzo (k) fluoranthene	0.0338	0.00500	"	0.0333	ND	101	30-120		
Chrysene	0.0267	0.00500	"	0.0333	ND	80.2	30-120		
Dibenz (a,h) anthracene	0.0112	0.00500	"	0.0333	ND	33.7	30-120		
Fluoranthene	0.0275	0.00500	"	0.0333	ND	82.4	30-120		
Fluorene	0.0281	0.00500	"	0.0333	ND	84.2	30-120		
Indeno (1,2,3-cd) pyrene	0.0110	0.00500	"	0.0333	ND	33.1	30-120		
Pyrene	0.0273	0.00500	"	0.0333	ND	81.9	35-142		
1-Methylnaphthalene	0.0228	0.00500	"	0.0333	ND	68.4	15-130		
2-Methylnaphthalene	0.0230	0.00500	"	0.0333	ND	69.0	15-130		
<i>Surrogate: 2-Methylnaphthalene-d10</i>	<i>0.0233</i>	<i>"</i>	<i>"</i>	<i>0.0333</i>	<i>"</i>	<i>70.0</i>	<i>40-150</i>		
<i>Surrogate: Fluoranthene-d10</i>	<i>0.0293</i>	<i>"</i>	<i>"</i>	<i>0.0333</i>	<i>"</i>	<i>87.8</i>	<i>40-150</i>		

Matrix Spike Dup (BEG0107-MSD1)	Source: 2106263-01			Prepared: 07/07/21 Analyzed: 07/10/21					
Acenaphthene	0.0256	0.00500	mg/kg	0.0333	ND	76.8	31-137	6.02	30
Anthracene	0.0269	0.00500	"	0.0333	ND	80.8	30-120	1.79	30
Benzo (a) anthracene	0.0289	0.00500	"	0.0333	ND	86.6	30-120	3.47	30
Benzo (a) pyrene	0.0274	0.00500	"	0.0333	ND	82.3	30-120	2.06	30
Benzo (b) fluoranthene	0.0373	0.00500	"	0.0333	ND	112	30-120	1.76	30
Benzo (k) fluoranthene	0.0338	0.00500	"	0.0333	ND	101	30-120	0.0977	30
Chrysene	0.0270	0.00500	"	0.0333	ND	81.1	30-120	1.16	30
Dibenz (a,h) anthracene	0.0123	0.00500	"	0.0333	ND	36.8	30-120	8.91	30
Fluoranthene	0.0266	0.00500	"	0.0333	ND	79.8	30-120	3.26	30
Fluorene	0.0273	0.00500	"	0.0333	ND	81.8	30-120	2.86	30
Indeno (1,2,3-cd) pyrene	0.0119	0.00500	"	0.0333	ND	35.7	30-120	7.62	30
Pyrene	0.0274	0.00500	"	0.0333	ND	82.3	35-142	0.479	30
1-Methylnaphthalene	0.0238	0.00500	"	0.0333	ND	71.3	15-130	4.18	50
2-Methylnaphthalene	0.0223	0.00500	"	0.0333	ND	66.8	15-130	3.14	50
<i>Surrogate: 2-Methylnaphthalene-d10</i>	<i>0.0234</i>	<i>"</i>	<i>"</i>	<i>0.0333</i>	<i>"</i>	<i>70.2</i>	<i>40-150</i>		
<i>Surrogate: Fluoranthene-d10</i>	<i>0.0287</i>	<i>"</i>	<i>"</i>	<i>0.0333</i>	<i>"</i>	<i>86.0</i>	<i>40-150</i>		

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K.P. Kauffman
1675 Broadway
Denver CO, 80202

Project: RMF Consolidation

Project Number: [none]
Project Manager: Max Knop

Reported:
07/12/21 15:58

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

Summit Scientific

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

Batch BEF0463 - EPA 3050B

Blank (BEF0463-BLK1)

Prepared: 06/22/21 Analyzed: 06/23/21

Boron ND 0.0100 mg/L

LCS (BEF0463-BS1)

Prepared: 06/22/21 Analyzed: 06/23/21

Boron 5.04 0.0100 mg/L 5.00 101 80-120

Duplicate (BEF0463-DUP1)

Source: 2106263-01

Prepared: 06/22/21 Analyzed: 06/23/21

Boron 0.529 0.0100 mg/L 0.535 0.969 20

Matrix Spike (BEF0463-MS1)

Source: 2106263-01

Prepared: 06/22/21 Analyzed: 06/23/21

Boron 5.31 0.0100 mg/L 5.00 0.535 95.6 75-125

Matrix Spike Dup (BEF0463-MSD1)

Source: 2106263-01

Prepared: 06/22/21 Analyzed: 06/23/21

Boron 5.58 0.0100 mg/L 5.00 0.535 101 75-125 4.90 25

Summit Scientific

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K.P. Kauffman
1675 Broadway
Denver CO, 80202

Project: RMF Consolidation

Project Number: [none]
Project Manager: Max Knop

Reported:
07/12/21 15:58

Total Metals by EPA 6020B - Quality Control
Summit Scientific

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

Batch BEF0399 - EPA 3050B

Blank (BEF0399-BLK1)

Prepared: 06/18/21 Analyzed: 06/19/21

Arsenic	ND	0.200	mg/kg wet						
Arsenic	ND	0.200	"						
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 (BEF0399-BS1)

Prepared: 06/18/21 Analyzed: 06/19/21

Arsenic	39.6	0.200	mg/kg wet	40.0	99.0	80-120
Arsenic	39.6	0.200	"	40.0	99.0	80-120
Barium	36.9	0.400	"	40.0	92.2	80-120
Cadmium	2.00	0.200	"	2.00	100	80-120
Copper	37.0	0.400	"	40.0	92.4	80-120
Lead	18.8	0.200	"	20.0	94.2	80-120
Nickel	37.0	0.400	"	40.0	92.5	80-120
Selenium	3.83	0.260	"	4.00	95.7	80-120
Silver	1.96	0.0200	"	2.00	98.0	80-120
Zinc	39.1	0.400	"	40.0	97.6	80-120

Duplicate (BEF0399-DUP1)

Source: 2106263-01

Prepared: 06/18/21 Analyzed: 06/19/21

Arsenic	5.25	0.243	mg/kg dry	4.52	14.9	20
Arsenic	5.25	0.200	"	4.52	14.9	20
Barium	105	0.486	"	109	3.53	20
Cadmium	0.426	0.243	"	0.405	5.22	20
Copper	16.7	0.486	"	16.3	2.50	20
Lead	11.9	0.243	"	13.7	13.5	20
Nickel	20.5	0.486	"	19.3	6.39	20
Selenium	1.29	0.316	"	1.07	18.4	20
Silver	0.0376	0.0243	"	0.0388	3.08	20
Zinc	55.2	0.486	"	54.0	2.16	20

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K.P. Kauffman
1675 Broadway
Denver CO, 80202

Project: RMF Consolidation

Project Number: [none]
Project Manager: Max Knop

Reported:
07/12/21 15:58

Total Metals by EPA 6020B - Quality Control
Summit Scientific

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

Batch BEF0399 - EPA 3050B

Matrix Spike (BEF0399-MS1)

Source: 2106263-01

Prepared: 06/18/21 Analyzed: 06/19/21

Arsenic	45.9	0.200	mg/kg dry	48.6	4.52	85.1	75-125			
Arsenic	45.9	0.243	"	48.6	4.52	85.1	75-125			
Barium	159	0.486	"	48.6	109	104	75-125			
Cadmium	2.60	0.243	"	2.43	0.405	90.2	75-125			
Copper	56.7	0.486	"	48.6	16.3	83.0	75-125			
Lead	32.7	0.243	"	24.3	13.7	78.3	75-125			
Nickel	62.1	0.486	"	48.6	19.3	88.0	75-125			
Selenium	5.15	0.316	"	4.86	1.07	83.9	75-125			
Silver	2.19	0.0243	"	2.43	0.0388	88.3	75-125			
Zinc	98.0	0.486	"	48.6	54.0	90.5	75-125			

Matrix Spike Dup (BEF0399-MSD1)

Source: 2106263-01

Prepared: 06/18/21 Analyzed: 06/19/21

Arsenic	49.6	0.243	mg/kg dry	48.6	4.52	92.7	75-125	7.78	25	
Arsenic	49.6	0.200	"	48.6	4.52	92.7	75-125	7.78	25	
Barium	169	0.486	"	48.6	109	123	75-125	5.81	25	
Cadmium	2.80	0.243	"	2.43	0.405	98.4	75-125	7.36	25	
Copper	61.6	0.486	"	48.6	16.3	93.1	75-125	8.34	25	
Lead	34.2	0.243	"	24.3	13.7	84.5	75-125	4.56	25	
Nickel	67.3	0.486	"	48.6	19.3	98.6	75-125	8.01	25	
Selenium	5.36	0.316	"	4.86	1.07	88.1	75-125	3.92	25	
Silver	2.40	0.0243	"	2.43	0.0388	97.1	75-125	9.35	25	
Zinc	106	0.486	"	48.6	54.0	107	75-125	7.93	25	

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K.P. Kauffman
1675 Broadway
Denver CO, 80202

Project: RMF Consolidation

Project Number: [none]
Project Manager: Max Knop

Reported:
07/12/21 15:58

Hexavalent Chromium by EPA Method 7196 - Quality Control
Summit Scientific

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

Batch BEF0410 - 3060A Mod

Blank (BEF0410-BLK1)

Prepared: 06/17/21 Analyzed: 06/18/21

Chromium, Hexavalent ND 0.30 mg/kg wet

LCS (BEF0410-BS1)

Prepared: 06/17/21 Analyzed: 06/18/21

Chromium, Hexavalent 26.2 0.30 mg/kg wet 25.0 105 80-120

Duplicate (BEF0410-DUP1)

Source: 2106227-01

Prepared: 06/17/21 Analyzed: 06/18/21

Chromium, Hexavalent ND 0.30 mg/kg dry ND 20

Matrix Spike (BEF0410-MS1)

Source: 2106227-01

Prepared: 06/17/21 Analyzed: 06/18/21

Chromium, Hexavalent 32.5 0.30 mg/kg dry 31.8 ND 102 75-125

Matrix Spike Dup (BEF0410-MSD1)

Source: 2106227-01

Prepared: 06/17/21 Analyzed: 06/18/21

Chromium, Hexavalent 32.5 0.30 mg/kg dry 31.8 ND 102 75-125 0.00 20

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K.P. Kauffman
1675 Broadway
Denver CO, 80202

Project: RMF Consolidation

Project Number: [none]
Project Manager: Max Knop

Reported:
07/12/21 15:58

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

Summit Scientific

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

Batch BEF0405 - General Preparation

Blank (BEF0405-BLK1)

Prepared: 06/18/21 Analyzed: 06/21/21

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

LCS (BEF0405-BS1)

Prepared: 06/18/21 Analyzed: 06/21/21

Calcium	5.43	0.0500	mg/L wet	5.00		109	70-130			
Magnesium	5.64	0.0500	"	5.00		113	70-130			
Sodium	5.25	0.0500	"	5.00		105	70-130			

Summit Scientific

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K.P. Kauffman
 1675 Broadway
 Denver CO, 80202

Project: RMF Consolidation

Project Number: [none]
 Project Manager: Max Knop

Reported:
 07/12/21 15:58

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

Summit Scientific

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

Batch BEF0395 - General Preparation

Duplicate (BEF0395-DUP1)

Source: 2106263-01

Prepared & Analyzed: 06/18/21

% Solids	82.5		%		82.2			0.357		20	
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K.P. Kauffman
 1675 Broadway
 Denver CO, 80202

Project: RMF Consolidation

Project Number: [none]
 Project Manager: Max Knop

Reported:
 07/12/21 15:58

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

Summit Scientific

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

Batch BEF0427 - General Preparation

Blank (BEF0427-BLK1)

Prepared & Analyzed: 06/21/21

Specific Conductance (EC) ND 0.0100 mmhos/cm

LCS (BEF0427-BS1)

Prepared & Analyzed: 06/21/21

Specific Conductance (EC) 0.142 0.0100 mmhos/cm 0.150 94.9 90-110

Duplicate (BEF0427-DUP1)

Source: 2106261-02

Prepared & Analyzed: 06/21/21

Specific Conductance (EC) 1.74 0.0100 mmhos/cm 1.74 0.00 20

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K.P. Kauffman
 1675 Broadway
 Denver CO, 80202

Project: RMF Consolidation

Project Number: [none]
 Project Manager: Max Knop

Reported:
 07/12/21 15:58

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

Summit Scientific

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

Batch BEF0426 - General Preparation

LCS (BEF0426-BS1)

Prepared & Analyzed: 06/21/21

pH	9.24	pH Units	9.21	100	95-105
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Duplicate (BEF0426-DUP1)

Source: 2106261-02

Prepared & Analyzed: 06/21/21

pH	8.12	pH Units	8.11	0.123	20
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Summit Scientific

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K.P. Kauffman
1675 Broadway
Denver CO, 80202

Project: RMF Consolidation

Project Number: [none]
Project Manager: Max Knop

Reported:
07/12/21 15:58

Notes and Definitions

DET Analyte DETECTED
ND Analyte NOT DETECTED at or above the reporting limit
NR Not Reported
dry Sample results reported on a dry weight basis
RPD Relative Percent Difference