

## Topographic Location Map

### Crestone Peak Resources

Harsch 42-27

COGCC Location ID: 321484

HARSCH-62N69W 27NWNE

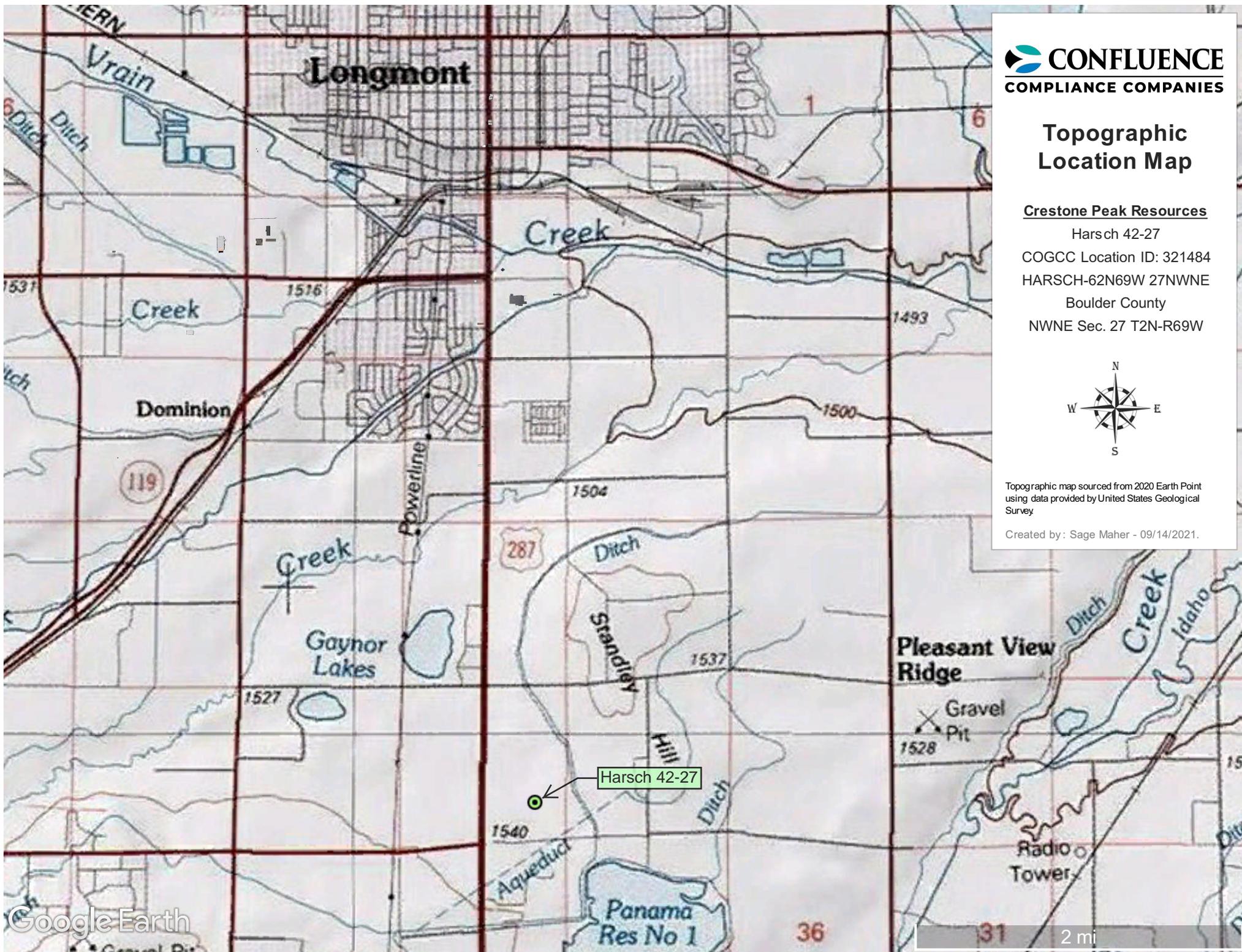
Boulder County

NWNE Sec. 27 T2N-R69W



Topographic map sourced from 2020 Earth Point using data provided by United States Geological Survey

Created by: Sage Maher - 09/14/2021.



## Soil and Groundwater Sample Locations

### Crestone Peak Resources

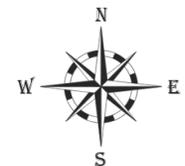
Harsch 42-27

COGCC Location ID: 321484

HARSH-62N69W 27NWNE

Boulder County

NWNE Sec. 27 T2N-R69W



### Legend

-  Soil Sample Location
-  Groundwater Sample Location

**\*Red text indicates Table 915-1 exceedance**

Field-generated spatial data was collected using a handheld GPS unit with submeter accuracy. Illustration discrepancies may be present in this diagram due to the inherent limitations of data accuracy for both project data and the underlying aerial imagery. The position of illustrated data may have been manually adjusted to align with the aerial imagery in a manner more representative of field conditions for presentation purposes only.

Map created by Sage Maher on 10/14/2021.



Soil Screening and Remediation Limits					Organic Compounds (mg/kg [ppm])								
COGCC Table 915-1 Groundwater Protection -->					NA	500	0.0026	0.69	0.78	9.9	0.0081	0.0087	0.0038
Location	Sample Date	Latitude - Y (WGS84) Decimal Degrees	Longitude - X (WGS84) Decimal Degrees	Sample ID	PID (ppm)	TPH (total volatile and extractable petroleum hydrocarbons (GRO+DRO+ORO))	Benzene	Toluene	Ethylbenzene	Xylenes - total (sum of o-, m-, p- isomers)	1,2,4-trimethylbenzene	1,3,5-trimethylbenzene	Naphthalene
Harsch 42-27	10/8/2021	40.112769	-105.101412	SB01@5-6	7.4	<50	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038
Harsch 42-27	10/8/2021	40.112755	-105.101507	SB02@4-5	3.2	<50	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038
Harsch 42-27	10/8/2021	40.112654	-105.101487	SB03@3-4	2.6	<50	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038
Harsch 42-27	10/8/2021	40.112654	-105.101487	SB03@4-5	2.7	<50	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038
Harsch 42-27	10/8/2021	40.112556	-105.101382	SB04@4-5	1.6	<50	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038

Soil Screening and Remediation Limits					Organic Compounds (mg/kg [ppm])														
COGCC Table 915-1 Groundwater Protection ->					NA	0.55	5.8	0.011	0.24	0.3	2.9	9	0.096	8.9	0.54	0.98	0.006	0.019	1.3
Location	Sample Date	Latitude - Y (WGS84) Decimal Degrees	Longitude - X (WGS84) Decimal Degrees	Sample ID	PID (ppm)	Acenaphthene	Anthracene	Benzo(A)anthracene	Benzo(A)pyrene	Benzo(B)fluoranthene	Benzo(K)fluoranthene	Chrysene	Dibenzo(A,H)anthracene	Fluoranthene	Fluorene	Indeno(1,2,3,C,D)pyrene	1-Methylnaphthalene	2-Methylnaphthalene	Pyrene
Harsch 42-27	10/8/2021	40.112769	-105.101412	SB01@5-6	7.4	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Harsch 42-27	10/8/2021	40.112755	-105.101507	SB02@4-5	3.2	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Harsch 42-27	10/8/2021	40.112654	-105.101487	SB03@3-4	2.6	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Harsch 42-27	10/8/2021	40.112654	-105.101487	SB03@4-5	2.7	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Harsch 42-27	10/8/2021	40.112556	-105.101382	SB04@4-5	1.6	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050

Soil Screening and Remediation Limits					Soil Suitability for Reclamation					Metals (mg/kg [ppm])									
COGCC Table 915-1 Groundwater Protection -->					NA	4	6	6-8.3	2	0.29	82	0.38	0.00067	46	14	26	0.26	0.8	370
Location	Sample Date	Latitude - Y (WGS84) Decimal Degrees	Longitude - X (WGS84) Decimal Degrees	Sample ID	PID (ppm)	EC (Specific Conductance) (millimhos/centimeter) (by saturated paste method)	SAR (Sodium Adsorption Ratio) (calculation) (by saturated paste method)	pH (pH Units) (by saturated paste method)	Boron - Hot Water Soluble (mg/L)	Arsenic	Barium	Cadmium (mg/kg)	Chromium (VI)	Copper	Lead	Nickel	Selenium	Silver	Zinc
Harsch 42-27	10/8/2021	40.112769	-105.101412	SB01@5-6	7.4	4.210	12.1	8.34	0.499	3.53	117	0.299	<0.30	18.8	14.5	18.8	1.32	0.109	78.6
Harsch 42-27	10/8/2021	40.112755	-105.101507	SB02@4-5	3.2	7.96	11.9	8.16	0.209	5.07	116	0.254	<0.30	18.3	16.7	16.1	1.4	0.101	74.6
Harsch 42-27	10/8/2021	40.112654	-105.101487	SB03@3-4	2.6	11.5	13.8	8.27	0.357	5.73	65.7	0.284	<0.30	16.7	15.8	18.0	0.988	0.106	74.6
Harsch 42-27	10/8/2021	40.112654	-105.101487	SB03@4-5	2.7	10.80	13.8	8.25	0.335	6.81	75.6	0.28	<0.30	17.9	14.6	18.5	1.05	0.0986	83.0
Harsch 42-27	10/8/2021	40.112556	-105.101382	SB04@4-5	1.6	10.30	13.3	8.25	0.284	6.41	101	0.288	<0.30	18.9	15.2	18.9	1.37	0.102	90.6
Harsch 42-27	10/8/2021	40.112693	-105.101568	BKG01@4-5	NA	8.58	15.5	8.29	0.325	5.61	94.9	<0.251	<0.30	16.3	13.4	16.9	1.04	0.0725	71.2

# Laboratory Results Summary Table - Groundwater

10/19/2021

					Organic Compounds (µg/L)							Inorganics (mg/L)		
COGCC Allowable Concentration (915-Groundwater)					5	560-1,000	700	1,400-10,000	140	67	67	1.25xBG	250 or 1.25xBG	250 or 1.25xBG
Location	Sample Date	Latitude (WGS84) Decimal Degrees	Longitude (WGS84) Decimal Degrees	Sample ID	Benzene	Toluene	Ethylbenzene	Xylenes - total	Naphthalene	1,2,4-trimethylbenzene	1,3,5-trimethylbenzene	TDS 1.25 x background	Chlorides 1.25 x background	Sulfates 1.25 x background
Harsch 42-27	10/8/21	40.112789	-105.101409	SB01_GW	88	27	2.1	42	<1.0	5.3	4	14800	1180	10400
Harsch 42-27	10/8/21	40.112693	-105.101568	BKG01_GW	NA	NA	NA	NA	NA	NA	NA	27900	1760	17800



## Photo Illustrations of Remediation Investigation









# Summit Scientific

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4653 Table Mountain Drive, Golden, Colorado 80403

303.277.9310

October 18, 2021

Sage Maher

Crestone Peak Resources

2020 E. Grand Avenue, Suite 515

Laramie, WY 82070

RE: Harsch 42-27

Work Order #2110125

Enclosed are the results of analyses for samples received by Summit Scientific on 10/08/21 16:00. 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 initial "M" and a long, sweeping underline.

Muri Premer For Paul Shrewsbury

President



Crestone Peak Resources  
2020 E. Grand Avenue, Suite 515  
Laramie WY, 82070

Project: Harsch 42-27

Project Number: [none]  
Project Manager: Sage Maher

**Reported:**  
10/18/21 17:39

**ANALYTICAL REPORT FOR SAMPLES**

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SB01@5-6	2110125-01	Soil	10/08/21 11:55	10/08/21 16:00
SB02@4-5	2110125-02	Soil	10/08/21 13:00	10/08/21 16:00
SB03@3-4	2110125-03	Soil	10/08/21 14:00	10/08/21 16:00
SB03@4-5	2110125-04	Soil	10/08/21 14:10	10/08/21 16:00
SB04@4-5	2110125-05	Soil	10/08/21 15:30	10/08/21 16:00

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.*

# Summit Scientific

2110125

S<sub>2</sub>

4653 Table Mountain Drive ♦ Golden, Colorado 80403  
303-277-9310

Client: Confluence Compliance Companies

Project Manager: Sage Maher

Address: 403 1/2 Rockwood Lane

E-Mail: Sage.Maher@confluence-cc.com; Remediation@confluence-cc.com

City/State/Zip: Grand Junction, Colorado 81507

David.Tewkesbury@CrestonePR.com

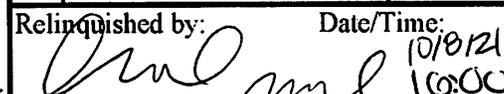
Phone: 404-641-8912

Project Name: Harsch 42-27

Sampler Name: Sage Maher

Project Number: TBD

ID	Sample Description	Date Sampled	Time Sampled	# of containers	Preservative				Matrix				Analysis Requested					Special Instructions	
					HCl	HNO3	None	Other	Water	Soil	Air-Canister #	Other	DR010K0	915 VOLs	915 PBT	915 Metals	915 PHT/EC1		915 STR/15min
1	SB01@5-U	10/8/21	1155	3			X			X				X	X	X	X	X	
2	SB02@4-5	↓	1300	↓															
3	SB03@3-4	↓	1400	↓															
4	SB03@4-5	↓	1410	↓															
5	SB04@4-5	↓	1530	↓															
6																			
7																			
8																			
9																			
10																			

Relinquished by: 	Date/Time: 10/8/21 10:00	Received by: 	Date/Time: 10-8-21 1600	Turn Around Time (Check)	Notes: Please run TPH + VOLs on 48 hrs! Thanks ☺  Bill to: Crestone Peak Resources (CPR)
Relinquished by:	Date/Time:	Received by:	Date/Time:	Same Day <input type="checkbox"/>	
Relinquished by:	Date/Time:	Received by:	Date/Time:	24 hours <input type="checkbox"/>	
				48 hours <input checked="" type="checkbox"/>	
				Sample Integrity:	
				Temperature Upon Receipt: 20.9	
				Samples Intact: <input checked="" type="radio"/> Yes <input type="radio"/> No	



2110125

Sample Receipt Checklist

S2 Work Order# \_\_\_\_\_

Client: Confluence Compliance Co. Client Project ID: Harsco 42-27

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

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

Temp (°C) 20.9

Thermometer ID: 61857155-K

	Yes	No	N/A	Comments (if any)
If samples require cooling, was the temperature at 4°C +/- 2°C <sup>(1)</sup> ? 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"/>	
Were all samples received intact <sup>(1)</sup> ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Was adequate sample volume provided <sup>(1)</sup> ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
If custody seals are present, are they intact <sup>(1)</sup> ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Are samples with holding times due within 48 hours sample due within 48 hours present?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<u>48 hrs</u>
Is a chain-of-custody (COC) form present and filled out completely <sup>(1)</sup> ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Does the COC agree with the number and type of sample bottles received <sup>(1)</sup> ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Do the sample IDs on the bottle labels match the COC <sup>(1)</sup> ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Is the COC properly relinquished by the client w/ date and time recorded <sup>(1)</sup> ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
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) <sup>(1)</sup> ? Note the type of preservative in the Comments column – HCl, H2SO4, NaOH, HNO3, etc.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
If samples are acid preserved for metals, is the pH ≤ 2 <sup>(1)</sup> ? Record the pH in Comments.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
If dissolved metals are requested, were samples field filtered?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Additional Comments (if any):				
<b><sup>(1)</sup> If NO, then contact the client before proceeding with analysis and note in case narrative.</b>				

[Signature]  
Custodian Printed Name or Initials

10-8-21  
Date/Time



Crestone Peak Resources  
2020 E. Grand Avenue, Suite 515  
Laramie WY, 82070

Project: Harsch 42-27

Project Number: [none]  
Project Manager: Sage Maher

**Reported:**  
10/18/21 17:39

**SB01@5-6**  
**2110125-01 (Soil)**

**Summit Scientific**

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

Date Sampled: **10/08/21 11:55**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Benzene	ND	0.0020	mg/kg	1	BEJ0185	10/11/21	10/12/21	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: **10/08/21 11:55**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Surrogate: 1,2-Dichloroethane-d4		99.4 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		95.8 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		97.4 %	21-167		"	"	"	"	

**Extractable Petroleum Hydrocarbons by 8015**

Date Sampled: **10/08/21 11:55**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
C10-C28 (DRO)	ND	50	mg/kg	1	BEJ0186	10/11/21	10/12/21	EPA 8015M	
C28-C36 (ORO)	ND	50	"	"	"	"	"	"	

Date Sampled: **10/08/21 11:55**

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

**PAH by EPA Method 8270D SIM**

Summit Scientific

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Crestone Peak Resources  
2020 E. Grand Avenue, Suite 515  
Laramie WY, 82070

Project: Harsch 42-27

Project Number: [none]  
Project Manager: Sage Maher

**Reported:**  
10/18/21 17:39

**SB01@5-6**  
**2110125-01 (Soil)**

**Summit Scientific**

**PAH by EPA Method 8270D SIM**

Date Sampled: **10/08/21 11:55**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BEJ0171	10/11/21	10/12/21	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: **10/08/21 11:55**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10		85.3 %	40-150		"	"	"	"	
Surrogate: Fluoranthene-d10		71.0 %	40-150		"	"	"	"	

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

Date Sampled: **10/08/21 11:55**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>Boron</b>	<b>0.499</b>	0.0100	mg/L	1	BEJ0175	10/11/21	10/12/21	EPA 6020B	

**Total Metals by EPA 6020B**

Date Sampled: **10/08/21 11:55**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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Crestone Peak Resources  
2020 E. Grand Avenue, Suite 515  
Laramie WY, 82070

Project: Harsch 42-27

Project Number: [none]  
Project Manager: Sage Maher

**Reported:**  
10/18/21 17:39

**SB01@5-6**  
**2110125-01 (Soil)**

**Summit Scientific**

**Total Metals by EPA 6020B**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Arsenic	6.45	0.249	mg/kg dry	1	BEJ0167	10/11/21	10/11/21	EPA 6020B	
Barium	117	0.498	"	"	"	"	"	"	
Cadmium	0.299	0.249	"	"	"	"	"	"	
Copper	18.8	0.498	"	"	"	"	"	"	
Lead	14.5	0.249	"	"	"	"	"	"	
Nickel	18.8	0.498	"	"	"	"	"	"	
Selenium	1.32	0.324	"	"	"	"	"	"	
Silver	0.109	0.0249	"	"	"	"	"	"	
Zinc	78.6	0.498	"	"	"	"	"	"	

**Hexavalent Chromium by EPA Method 7196**

Date Sampled: 10/08/21 11:55

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BEJ0181	10/11/21	10/11/21	EPA 7196A	

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

Date Sampled: 10/08/21 11:55

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	71.9	0.0623	mg/L dry	1	BEJ0172	10/11/21	10/16/21	EPA 6020B	
Magnesium	160	0.0623	"	"	"	"	"	"	
Sodium	802	0.0623	"	"	"	"	"	"	

**Calculated Analysis**

Date Sampled: 10/08/21 11:55

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	12.1	0.00100	units	1	BEJ0303	10/17/21	10/17/21	Calculation	

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

Date Sampled: 10/08/21 11:55

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

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Crestone Peak Resources  
 2020 E. Grand Avenue, Suite 515  
 Laramie WY, 82070

Project: Harsch 42-27

Project Number: [none]  
 Project Manager: Sage Maher

**Reported:**  
 10/18/21 17:39

**SB01@5-6**  
**2110125-01 (Soil)**

**Summit Scientific**

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

<b>% Solids</b>	<b>80.3</b>	%	1	BEJ0177	10/11/21	10/12/21	Calculation
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**Specific Conductance by EPA Method 120.1, Saturated Paste Extraction**

Date Sampled: **10/08/21 11:55**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>Specific Conductance (EC)</b>	<b>4.21</b>	0.0100	mmhos/cm	1	BEJ0207	10/12/21	10/12/21	EPA 120.1	

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

Date Sampled: **10/08/21 11:55**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>pH</b>	<b>8.34</b>		pH Units	1	BEJ0206	10/12/21	10/12/21	EPA 9045D	

Summit Scientific

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Crestone Peak Resources  
2020 E. Grand Avenue, Suite 515  
Laramie WY, 82070

Project: Harsch 42-27

Project Number: [none]  
Project Manager: Sage Maher

**Reported:**  
10/18/21 17:39

**SB02@4-5**  
**2110125-02 (Soil)**

**Summit Scientific**

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

Date Sampled: **10/08/21 13:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0020	mg/kg	1	BEJ0185	10/11/21	10/12/21	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: **10/08/21 13:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		100 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		97.9 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		96.7 %	21-167		"	"	"	"	

**Extractable Petroleum Hydrocarbons by 8015**

Date Sampled: **10/08/21 13:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	ND	50	mg/kg	1	BEJ0186	10/11/21	10/12/21	EPA 8015M	
C28-C36 (ORO)	ND	50	"	"	"	"	"	"	

Date Sampled: **10/08/21 13:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl		95.3 %	30-150		"	"	"	"	

**PAH by EPA Method 8270D SIM**

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Crestone Peak Resources  
2020 E. Grand Avenue, Suite 515  
Laramie WY, 82070

Project: Harsch 42-27

Project Number: [none]  
Project Manager: Sage Maher

**Reported:**  
10/18/21 17:39

**SB02@4-5**  
**2110125-02 (Soil)**

**Summit Scientific**

**PAH by EPA Method 8270D SIM**

Date Sampled: **10/08/21 13:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BEJ0171	10/11/21	10/12/21	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: **10/08/21 13:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10		71.6 %	40-150		"	"	"	"	
Surrogate: Fluoranthene-d10		68.4 %	40-150		"	"	"	"	

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

Date Sampled: **10/08/21 13:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>Boron</b>	<b>0.209</b>	0.0100	mg/L	1	BEJ0175	10/11/21	10/12/21	EPA 6020B	

**Total Metals by EPA 6020B**

Date Sampled: **10/08/21 13:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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Crestone Peak Resources  
2020 E. Grand Avenue, Suite 515  
Laramie WY, 82070

Project: Harsch 42-27

Project Number: [none]  
Project Manager: Sage Maher

**Reported:**  
10/18/21 17:39

**SB02@4-5**  
**2110125-02 (Soil)**

**Summit Scientific**

**Total Metals by EPA 6020B**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Arsenic	5.07	0.250	mg/kg dry	1	BEJ0167	10/11/21	10/11/21	EPA 6020B	
Barium	116	0.501	"	"	"	"	"	"	
Cadmium	0.254	0.250	"	"	"	"	"	"	
Copper	18.3	0.501	"	"	"	"	"	"	
Lead	16.7	0.250	"	"	"	"	"	"	
Nickel	16.1	0.501	"	"	"	"	"	"	
Selenium	1.40	0.325	"	"	"	"	"	"	
Silver	0.101	0.0250	"	"	"	"	"	"	
Zinc	74.6	0.501	"	"	"	"	"	"	

**Hexavalent Chromium by EPA Method 7196**

Date Sampled: 10/08/21 13:00

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BEJ0181	10/11/21	10/11/21	EPA 7196A	

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

Date Sampled: 10/08/21 13:00

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	334	0.0626	mg/L dry	1	BEJ0172	10/11/21	10/16/21	EPA 6020B	
Magnesium	469	0.0626	"	"	"	"	"	"	
Sodium	1440	0.0626	"	"	"	"	"	"	

**Calculated Analysis**

Date Sampled: 10/08/21 13:00

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	11.9	0.00100	units	1	BEJ0303	10/17/21	10/17/21	Calculation	

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

Date Sampled: 10/08/21 13:00

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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Crestone Peak Resources  
 2020 E. Grand Avenue, Suite 515  
 Laramie WY, 82070

Project: Harsch 42-27

Project Number: [none]  
 Project Manager: Sage Maher

**Reported:**  
 10/18/21 17:39

**SB02@4-5**  
**2110125-02 (Soil)**

**Summit Scientific**

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

% Solids	79.9	%	1	BEJ0177	10/11/21	10/12/21	Calculation
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**Specific Conductance by EPA Method 120.1, Saturated Paste Extraction**

Date Sampled: **10/08/21 13:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	7.96	0.0100	mmhos/cm	1	BEJ0207	10/12/21	10/12/21	EPA 120.1	

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

Date Sampled: **10/08/21 13:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	8.16		pH Units	1	BEJ0206	10/12/21	10/12/21	EPA 9045D	

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Crestone Peak Resources  
2020 E. Grand Avenue, Suite 515  
Laramie WY, 82070

Project: Harsch 42-27

Project Number: [none]  
Project Manager: Sage Maher

**Reported:**  
10/18/21 17:39

**SB03@3-4**  
**2110125-03 (Soil)**

**Summit Scientific**

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

Date Sampled: **10/08/21 14:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0020	mg/kg	1	BEJ0185	10/11/21	10/12/21	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: **10/08/21 14:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		114 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		105 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		98.9 %	21-167		"	"	"	"	

**Extractable Petroleum Hydrocarbons by 8015**

Date Sampled: **10/08/21 14:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	ND	50	mg/kg	1	BEJ0186	10/11/21	10/12/21	EPA 8015M	
C28-C36 (ORO)	ND	50	"	"	"	"	"	"	

Date Sampled: **10/08/21 14:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl		102 %	30-150		"	"	"	"	

**PAH by EPA Method 8270D SIM**

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Crestone Peak Resources  
2020 E. Grand Avenue, Suite 515  
Laramie WY, 82070

Project: Harsch 42-27

Project Number: [none]  
Project Manager: Sage Maher

**Reported:**  
10/18/21 17:39

**SB03@3-4**  
**2110125-03 (Soil)**

**Summit Scientific**

**PAH by EPA Method 8270D SIM**

Date Sampled: **10/08/21 14:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BEJ0171	10/11/21	10/12/21	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: **10/08/21 14:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10		83.6 %	40-150		"	"	"	"	
Surrogate: Fluoranthene-d10		71.8 %	40-150		"	"	"	"	

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

Date Sampled: **10/08/21 14:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>Boron</b>	<b>0.357</b>	0.0100	mg/L	1	BEJ0175	10/11/21	10/12/21	EPA 6020B	

**Total Metals by EPA 6020B**

Date Sampled: **10/08/21 14:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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Crestone Peak Resources  
2020 E. Grand Avenue, Suite 515  
Laramie WY, 82070

Project: Harsch 42-27

Project Number: [none]  
Project Manager: Sage Maher

**Reported:**  
10/18/21 17:39

**SB03@3-4**  
**2110125-03 (Soil)**

**Summit Scientific**

**Total Metals by EPA 6020B**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Arsenic	5.73	0.247	mg/kg dry	1	BEJ0167	10/11/21	10/11/21	EPA 6020B	
Barium	65.7	0.494	"	"	"	"	"	"	
Cadmium	0.284	0.247	"	"	"	"	"	"	
Copper	16.7	0.494	"	"	"	"	"	"	
Lead	15.8	0.247	"	"	"	"	"	"	
Nickel	18.0	0.494	"	"	"	"	"	"	
Selenium	0.988	0.321	"	"	"	"	"	"	
Silver	0.106	0.0247	"	"	"	"	"	"	
Zinc	74.6	0.494	"	"	"	"	"	"	

**Hexavalent Chromium by EPA Method 7196**

Date Sampled: 10/08/21 14:00

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BEJ0181	10/11/21	10/11/21	EPA 7196A	

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

Date Sampled: 10/08/21 14:00

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	303	0.0617	mg/L dry	1	BEJ0172	10/11/21	10/16/21	EPA 6020B	
Magnesium	833	0.0617	"	"	"	"	"	"	
Sodium	2050	0.0617	"	"	"	"	"	"	

**Calculated Analysis**

Date Sampled: 10/08/21 14:00

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	13.8	0.00100	units	1	BEJ0303	10/17/21	10/17/21	Calculation	

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

Date Sampled: 10/08/21 14:00

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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Crestone Peak Resources  
 2020 E. Grand Avenue, Suite 515  
 Laramie WY, 82070

Project: Harsch 42-27

Project Number: [none]  
 Project Manager: Sage Maher

**Reported:**  
 10/18/21 17:39

**SB03@3-4**  
**2110125-03 (Soil)**

**Summit Scientific**

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

<b>% Solids</b>	<b>81.0</b>	%	1	BEJ0177	10/11/21	10/12/21	Calculation
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**Specific Conductance by EPA Method 120.1, Saturated Paste Extraction**

Date Sampled: **10/08/21 14:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>Specific Conductance (EC)</b>	<b>11.5</b>	0.0100	mmhos/cm	1	BEJ0207	10/12/21	10/12/21	EPA 120.1	

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

Date Sampled: **10/08/21 14:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>pH</b>	<b>8.27</b>		pH Units	1	BEJ0206	10/12/21	10/12/21	EPA 9045D	

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Crestone Peak Resources  
2020 E. Grand Avenue, Suite 515  
Laramie WY, 82070

Project: Harsch 42-27

Project Number: [none]  
Project Manager: Sage Maher

**Reported:**  
10/18/21 17:39

**SB03@4-5**  
**2110125-04 (Soil)**

**Summit Scientific**

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

Date Sampled: **10/08/21 14:10**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0020	mg/kg	1	BEJ0185	10/11/21	10/12/21	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: **10/08/21 14:10**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		101 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		95.2 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		97.4 %	21-167		"	"	"	"	

**Extractable Petroleum Hydrocarbons by 8015**

Date Sampled: **10/08/21 14:10**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	ND	50	mg/kg	1	BEJ0186	10/11/21	10/12/21	EPA 8015M	
C28-C36 (ORO)	ND	50	"	"	"	"	"	"	

Date Sampled: **10/08/21 14:10**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl		105 %	30-150		"	"	"	"	

**PAH by EPA Method 8270D SIM**

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Crestone Peak Resources  
2020 E. Grand Avenue, Suite 515  
Laramie WY, 82070

Project: Harsch 42-27

Project Number: [none]  
Project Manager: Sage Maher

**Reported:**  
10/18/21 17:39

**SB03@4-5**  
**2110125-04 (Soil)**

**Summit Scientific**

**PAH by EPA Method 8270D SIM**

Date Sampled: **10/08/21 14:10**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BEJ0171	10/11/21	10/12/21	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: **10/08/21 14:10**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10		86.1 %	40-150		"	"	"	"	
Surrogate: Fluoranthene-d10		74.2 %	40-150		"	"	"	"	

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

Date Sampled: **10/08/21 14:10**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>Boron</b>	<b>0.335</b>	0.0100	mg/L	1	BEJ0175	10/11/21	10/12/21	EPA 6020B	

**Total Metals by EPA 6020B**

Date Sampled: **10/08/21 14:10**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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Crestone Peak Resources  
2020 E. Grand Avenue, Suite 515  
Laramie WY, 82070

Project: Harsch 42-27

Project Number: [none]  
Project Manager: Sage Maher

**Reported:**  
10/18/21 17:39

**SB03@4-5**  
**2110125-04 (Soil)**

**Summit Scientific**

**Total Metals by EPA 6020B**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Arsenic	6.81	0.248	mg/kg dry	1	BEJ0167	10/11/21	10/11/21	EPA 6020B	
Barium	75.6	0.497	"	"	"	"	"	"	
Cadmium	0.280	0.248	"	"	"	"	"	"	
Copper	17.9	0.497	"	"	"	"	"	"	
Lead	14.6	0.248	"	"	"	"	"	"	
Nickel	18.5	0.497	"	"	"	"	"	"	
Selenium	1.05	0.323	"	"	"	"	"	"	
Silver	0.0986	0.0248	"	"	"	"	"	"	
Zinc	83.0	0.497	"	"	"	"	"	"	

**Hexavalent Chromium by EPA Method 7196**

Date Sampled: 10/08/21 14:10

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BEJ0181	10/11/21	10/11/21	EPA 7196A	

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

Date Sampled: 10/08/21 14:10

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	359	0.0621	mg/L dry	1	BEJ0172	10/11/21	10/16/21	EPA 6020B	
Magnesium	821	0.0621	"	"	"	"	"	"	
Sodium	2070	0.0621	"	"	"	"	"	"	

**Calculated Analysis**

Date Sampled: 10/08/21 14:10

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	13.8	0.00100	units	1	BEJ0303	10/17/21	10/17/21	Calculation	

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

Date Sampled: 10/08/21 14:10

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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Crestone Peak Resources  
 2020 E. Grand Avenue, Suite 515  
 Laramie WY, 82070

Project: Harsch 42-27

Project Number: [none]  
 Project Manager: Sage Maher

**Reported:**  
 10/18/21 17:39

**SB03@4-5**  
**2110125-04 (Soil)**

**Summit Scientific**

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

<b>% Solids</b>	<b>80.5</b>	%	1	BEJ0177	10/11/21	10/12/21	Calculation
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**Specific Conductance by EPA Method 120.1, Saturated Paste Extraction**

Date Sampled: **10/08/21 14:10**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>Specific Conductance (EC)</b>	<b>10.8</b>	0.0100	mmhos/cm	1	BEJ0207	10/12/21	10/12/21	EPA 120.1	

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

Date Sampled: **10/08/21 14:10**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>pH</b>	<b>8.25</b>		pH Units	1	BEJ0206	10/12/21	10/12/21	EPA 9045D	

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Crestone Peak Resources  
2020 E. Grand Avenue, Suite 515  
Laramie WY, 82070

Project: Harsch 42-27

Project Number: [none]  
Project Manager: Sage Maher

**Reported:**  
10/18/21 17:39

**SB04@4-5**  
**2110125-05 (Soil)**

**Summit Scientific**

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

Date Sampled: **10/08/21 15:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	0.0020	mg/kg	1	BEJ0185	10/11/21	10/12/21	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: **10/08/21 15:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		100 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		94.4 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		97.8 %	21-167		"	"	"	"	

**Extractable Petroleum Hydrocarbons by 8015**

Date Sampled: **10/08/21 15:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	ND	50	mg/kg	1	BEJ0186	10/11/21	10/12/21	EPA 8015M	
C28-C36 (ORO)	ND	50	"	"	"	"	"	"	

Date Sampled: **10/08/21 15:30**

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

**PAH by EPA Method 8270D SIM**

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Crestone Peak Resources  
2020 E. Grand Avenue, Suite 515  
Laramie WY, 82070

Project: Harsch 42-27

Project Number: [none]  
Project Manager: Sage Maher

**Reported:**  
10/18/21 17:39

**SB04@4-5**  
**2110125-05 (Soil)**

**Summit Scientific**

**PAH by EPA Method 8270D SIM**

Date Sampled: **10/08/21 15:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Acenaphthene	ND	0.00500	mg/kg	1	BEJ0171	10/11/21	10/12/21	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: **10/08/21 15:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 2-Methylnaphthalene-d10		79.3 %	40-150		"	"	"	"	
Surrogate: Fluoranthene-d10		74.5 %	40-150		"	"	"	"	

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

Date Sampled: **10/08/21 15:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>Boron</b>	<b>0.284</b>	0.0100	mg/L	1	BEJ0175	10/11/21	10/12/21	EPA 6020B	

**Total Metals by EPA 6020B**

Date Sampled: **10/08/21 15:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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Crestone Peak Resources  
2020 E. Grand Avenue, Suite 515  
Laramie WY, 82070

Project: Harsch 42-27

Project Number: [none]  
Project Manager: Sage Maher

**Reported:**  
10/18/21 17:39

**SB04@4-5**  
**2110125-05 (Soil)**

**Summit Scientific**

**Total Metals by EPA 6020B**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Arsenic	6.41	0.257	mg/kg dry	1	BEJ0167	10/11/21	10/11/21	EPA 6020B	
Barium	101	0.514	"	"	"	"	"	"	
Cadmium	0.288	0.257	"	"	"	"	"	"	
Copper	18.9	0.514	"	"	"	"	"	"	
Lead	15.2	0.257	"	"	"	"	"	"	
Nickel	18.9	0.514	"	"	"	"	"	"	
Selenium	1.37	0.334	"	"	"	"	"	"	
Silver	0.102	0.0257	"	"	"	"	"	"	
Zinc	90.6	0.514	"	"	"	"	"	"	

**Hexavalent Chromium by EPA Method 7196**

Date Sampled: 10/08/21 15:30

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BEJ0181	10/11/21	10/11/21	EPA 7196A	

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

Date Sampled: 10/08/21 15:30

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Calcium	364	0.0642	mg/L dry	1	BEJ0172	10/11/21	10/16/21	EPA 6020B	
Magnesium	737	0.0642	"	"	"	"	"	"	
Sodium	1920	0.0642	"	"	"	"	"	"	

**Calculated Analysis**

Date Sampled: 10/08/21 15:30

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	13.3	0.00100	units	1	BEJ0303	10/17/21	10/17/21	Calculation	

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

Date Sampled: 10/08/21 15:30

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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Crestone Peak Resources  
 2020 E. Grand Avenue, Suite 515  
 Laramie WY, 82070

Project: Harsch 42-27

Project Number: [none]  
 Project Manager: Sage Maher

**Reported:**  
 10/18/21 17:39

**SB04@4-5**  
**2110125-05 (Soil)**

**Summit Scientific**

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

% Solids	77.8	%	1	BEJ0177	10/11/21	10/12/21	Calculation
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**Specific Conductance by EPA Method 120.1, Saturated Paste Extraction**

Date Sampled: **10/08/21 15:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	10.3	0.0100	mmhos/cm	1	BEJ0207	10/12/21	10/12/21	EPA 120.1	

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

Date Sampled: **10/08/21 15:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	8.25		pH Units	1	BEJ0206	10/12/21	10/12/21	EPA 9045D	

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Crestone Peak Resources  
2020 E. Grand Avenue, Suite 515  
Laramie WY, 82070

Project: Harsch 42-27

Project Number: [none]  
Project Manager: Sage Maher

**Reported:**  
10/18/21 17:39

**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 BEJ0185 - EPA 5030 Soil MS**

**Blank (BEJ0185-BLK1)**

Prepared: 10/11/21 Analyzed: 10/12/21

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	"							
<i>Surrogate: 1,2-Dichloroethane-d4</i>	0.0396		"	0.0400		99.1	23-173			
<i>Surrogate: Toluene-d8</i>	0.0380		"	0.0400		95.1	20-170			
<i>Surrogate: 4-Bromofluorobenzene</i>	0.0390		"	0.0400		97.6	21-167			

**LCS (BEJ0185-BS1)**

Prepared: 10/11/21 Analyzed: 10/12/21

Benzene	0.101	0.0020	mg/kg	0.100		101	70-130			
Toluene	0.0961	0.0050	"	0.100		96.1	70-130			
Ethylbenzene	0.116	0.0050	"	0.100		116	70-130			
m,p-Xylene	0.226	0.010	"	0.200		113	70-130			
o-Xylene	0.110	0.0050	"	0.100		110	70-130			
1,2,4-Trimethylbenzene	0.114	0.0050	"	0.100		114	70-130			
1,3,5-Trimethylbenzene	0.110	0.0050	"	0.100		110	70-130			
Naphthalene	0.104	0.0038	"	0.100		104	70-130			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	0.0401		"	0.0400		100	23-173			
<i>Surrogate: Toluene-d8</i>	0.0387		"	0.0400		96.8	20-170			
<i>Surrogate: 4-Bromofluorobenzene</i>	0.0389		"	0.0400		97.2	21-167			

**Matrix Spike (BEJ0185-MS1)**

Source: 2110117-02

Prepared: 10/11/21 Analyzed: 10/12/21

Benzene	0.102	0.0020	mg/kg	0.100	ND	102	70-130			
Toluene	0.0964	0.0050	"	0.100	ND	96.4	70-130			
Ethylbenzene	0.115	0.0050	"	0.100	ND	115	70-130			
m,p-Xylene	0.223	0.010	"	0.200	ND	112	70-130			
o-Xylene	0.111	0.0050	"	0.100	ND	111	70-130			
1,2,4-Trimethylbenzene	0.114	0.0050	"	0.100	ND	114	70-130			
1,3,5-Trimethylbenzene	0.110	0.0050	"	0.100	ND	110	70-130			
Naphthalene	0.108	0.0038	"	0.100	ND	108	70-130			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	0.0398		"	0.0400		99.4	23-173			
<i>Surrogate: Toluene-d8</i>	0.0384		"	0.0400		96.0	20-170			
<i>Surrogate: 4-Bromofluorobenzene</i>	0.0388		"	0.0400		97.0	21-167			

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Crestone Peak Resources  
 2020 E. Grand Avenue, Suite 515  
 Laramie WY, 82070

Project: Harsch 42-27

Project Number: [none]  
 Project Manager: Sage Maher

**Reported:**  
 10/18/21 17:39

**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		

**Batch BEJ0185 - EPA 5030 Soil MS**

Matrix Spike Dup (BEJ0185-MSD1)	Source: 2110117-02			Prepared: 10/11/21		Analyzed: 10/12/21				
Benzene	0.104	0.0020	mg/kg	0.100	ND	104	70-130	1.60	30	
Toluene	0.0993	0.0050	"	0.100	ND	99.3	70-130	2.97	30	
Ethylbenzene	0.116	0.0050	"	0.100	ND	116	70-130	1.12	30	
m,p-Xylene	0.226	0.010	"	0.200	ND	113	70-130	1.46	30	
o-Xylene	0.111	0.0050	"	0.100	ND	111	70-130	0.594	30	
1,2,4-Trimethylbenzene	0.114	0.0050	"	0.100	ND	114	70-130	0.343	30	
1,3,5-Trimethylbenzene	0.111	0.0050	"	0.100	ND	111	70-130	0.109	30	
Naphthalene	0.108	0.0038	"	0.100	ND	108	70-130	0.555	30	
Surrogate: 1,2-Dichloroethane-d4	0.0422		"	0.0400		105	23-173			
Surrogate: Toluene-d8	0.0405		"	0.0400		101	20-170			
Surrogate: 4-Bromofluorobenzene	0.0389		"	0.0400		97.2	21-167			

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Crestone Peak Resources  
 2020 E. Grand Avenue, Suite 515  
 Laramie WY, 82070

Project: Harsch 42-27

Project Number: [none]  
 Project Manager: Sage Maher

**Reported:**  
 10/18/21 17:39

**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 BEJ0186 - EPA 3550A**

**Blank (BEJ0186-BLK1)**

Prepared: 10/11/21 Analyzed: 10/12/21

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

**LCS (BEJ0186-BS1)**

Prepared: 10/11/21 Analyzed: 10/12/21

C10-C28 (DRO)	417	50	mg/kg	500	83.5	70-130				
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**Matrix Spike (BEJ0186-MS1)**

Source: 2110117-02

Prepared: 10/11/21 Analyzed: 10/12/21

C10-C28 (DRO)	472	50	mg/kg	500	11.1	92.2	70-130			
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**Matrix Spike Dup (BEJ0186-MSD1)**

Source: 2110117-02

Prepared: 10/11/21 Analyzed: 10/12/21

C10-C28 (DRO)	386	50	mg/kg	500	11.1	75.1	70-130	20.0	20	
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2020 E. Grand Avenue, Suite 515  
Laramie WY, 82070

Project: Harsch 42-27

Project Number: [none]  
Project Manager: Sage Maher

**Reported:**  
10/18/21 17:39

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

**Summit Scientific**

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

**Batch BEJ0171 - EPA 5030 Soil MS**

**Blank (BEJ0171-BLK1)**

Prepared: 10/11/21 Analyzed: 10/12/21

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>0.0335</i>		<i>"</i>	<i>0.0333</i>		<i>100</i>		<i>40-150</i>			
<i>Surrogate: Fluoranthene-d10</i>	<i>0.0278</i>		<i>"</i>	<i>0.0333</i>		<i>83.4</i>		<i>40-150</i>			

**LCS (BEJ0171-BS1)**

Prepared: 10/11/21 Analyzed: 10/12/21

Acenaphthene	0.0276	0.00500	mg/kg	0.0333		82.7		31-137			
Anthracene	0.0269	0.00500	"	0.0333		80.6		30-120			
Benzo (a) anthracene	0.0275	0.00500	"	0.0333		82.4		30-120			
Benzo (a) pyrene	0.0274	0.00500	"	0.0333		82.1		30-120			
Benzo (b) fluoranthene	0.0300	0.00500	"	0.0333		90.1		30-120			
Benzo (k) fluoranthene	0.0313	0.00500	"	0.0333		94.0		30-120			
Chrysene	0.0262	0.00500	"	0.0333		78.6		30-120			
Dibenz (a,h) anthracene	0.0273	0.00500	"	0.0333		81.9		30-120			
Fluoranthene	0.0250	0.00500	"	0.0333		75.0		30-120			
Fluorene	0.0268	0.00500	"	0.0333		80.4		30-120			
Indeno (1,2,3-cd) pyrene	0.0225	0.00500	"	0.0333		67.4		30-120			
Pyrene	0.0237	0.00500	"	0.0333		71.2		35-142			
1-Methylnaphthalene	0.0267	0.00500	"	0.0333		80.0		35-142			
2-Methylnaphthalene	0.0264	0.00500	"	0.0333		79.1		35-142			
<i>Surrogate: 2-Methylnaphthalene-d10</i>	<i>0.0290</i>		<i>"</i>	<i>0.0333</i>		<i>87.0</i>		<i>40-150</i>			
<i>Surrogate: Fluoranthene-d10</i>	<i>0.0288</i>		<i>"</i>	<i>0.0333</i>		<i>86.5</i>		<i>40-150</i>			

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Crestone Peak Resources  
2020 E. Grand Avenue, Suite 515  
Laramie WY, 82070

Project: Harsch 42-27

Project Number: [none]  
Project Manager: Sage Maher

**Reported:**  
10/18/21 17:39

**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 BEJ0171 - EPA 5030 Soil MS**

<b>Matrix Spike (BEJ0171-MS1)</b>	<b>Source: 2110122-01</b>			Prepared: 10/11/21		Analyzed: 10/12/21				
Acenaphthene	0.0220	0.00500	mg/kg	0.0333	ND	66.1	31-137			
Anthracene	0.0234	0.00500	"	0.0333	ND	70.1	30-120			
Benzo (a) anthracene	0.0280	0.00500	"	0.0333	ND	84.0	30-120			
Benzo (a) pyrene	0.0267	0.00500	"	0.0333	ND	80.1	30-120			
Benzo (b) fluoranthene	0.0301	0.00500	"	0.0333	ND	90.3	30-120			
Benzo (k) fluoranthene	0.0271	0.00500	"	0.0333	ND	81.4	30-120			
Chrysene	0.0260	0.00500	"	0.0333	ND	77.9	30-120			
Dibenz (a,h) anthracene	0.0240	0.00500	"	0.0333	ND	72.0	30-120			
Fluoranthene	0.0322	0.00500	"	0.0333	ND	96.7	30-120			
Fluorene	0.0219	0.00500	"	0.0333	ND	65.8	30-120			
Indeno (1,2,3-cd) pyrene	0.0228	0.00500	"	0.0333	ND	68.3	30-120			
Pyrene	0.0289	0.00500	"	0.0333	ND	86.8	35-142			
1-Methylnaphthalene	0.0201	0.00500	"	0.0333	ND	60.4	15-130			
2-Methylnaphthalene	0.0211	0.00500	"	0.0333	ND	63.4	15-130			
<i>Surrogate: 2-Methylnaphthalene-d10</i>	<i>0.0215</i>		<i>"</i>	<i>0.0333</i>		<i>64.5</i>	<i>40-150</i>			
<i>Surrogate: Fluoranthene-d10</i>	<i>0.0240</i>		<i>"</i>	<i>0.0333</i>		<i>71.9</i>	<i>40-150</i>			

<b>Matrix Spike Dup (BEJ0171-MSD1)</b>	<b>Source: 2110122-01</b>			Prepared: 10/11/21		Analyzed: 10/12/21				
Acenaphthene	0.0283	0.00500	mg/kg	0.0333	ND	85.0	31-137	25.0	30	
Anthracene	0.0279	0.00500	"	0.0333	ND	83.8	30-120	17.9	30	
Benzo (a) anthracene	0.0287	0.00500	"	0.0333	ND	86.0	30-120	2.35	30	
Benzo (a) pyrene	0.0286	0.00500	"	0.0333	ND	85.8	30-120	6.90	30	
Benzo (b) fluoranthene	0.0315	0.00500	"	0.0333	ND	94.5	30-120	4.53	30	
Benzo (k) fluoranthene	0.0304	0.00500	"	0.0333	ND	91.3	30-120	11.5	30	
Chrysene	0.0260	0.00500	"	0.0333	ND	78.0	30-120	0.106	30	
Dibenz (a,h) anthracene	0.0292	0.00500	"	0.0333	ND	87.7	30-120	19.7	30	
Fluoranthene	0.0256	0.00500	"	0.0333	ND	76.9	30-120	22.8	30	
Fluorene	0.0270	0.00500	"	0.0333	ND	81.0	30-120	20.7	30	
Indeno (1,2,3-cd) pyrene	0.0262	0.00500	"	0.0333	ND	78.5	30-120	13.9	30	
Pyrene	0.0246	0.00500	"	0.0333	ND	73.9	35-142	16.0	30	
1-Methylnaphthalene	0.0281	0.00500	"	0.0333	ND	84.3	15-130	32.9	50	
2-Methylnaphthalene	0.0290	0.00500	"	0.0333	ND	86.9	15-130	31.3	50	
<i>Surrogate: 2-Methylnaphthalene-d10</i>	<i>0.0290</i>		<i>"</i>	<i>0.0333</i>		<i>86.9</i>	<i>40-150</i>			
<i>Surrogate: Fluoranthene-d10</i>	<i>0.0301</i>		<i>"</i>	<i>0.0333</i>		<i>90.2</i>	<i>40-150</i>			

Summit Scientific

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Crestone Peak Resources  
 2020 E. Grand Avenue, Suite 515  
 Laramie WY, 82070

Project: Harsch 42-27

Project Number: [none]  
 Project Manager: Sage Maher

**Reported:**  
 10/18/21 17:39

**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 BEJ0175 - EPA 3050B**

**Blank (BEJ0175-BLK1)**

Prepared: 10/11/21 Analyzed: 10/12/21

Boron ND 0.0100 mg/L

**LCS (BEJ0175-BS1)**

Prepared: 10/11/21 Analyzed: 10/12/21

Boron 4.78 0.0100 mg/L 5.00 95.6 80-120

**Duplicate (BEJ0175-DUP1)**

Source: 2110117-01

Prepared: 10/11/21 Analyzed: 10/12/21

Boron 0.0646 0.0100 mg/L 0.0773 17.9 20

**Matrix Spike (BEJ0175-MS1)**

Source: 2110117-01

Prepared: 10/11/21 Analyzed: 10/12/21

Boron 4.55 0.0100 mg/L 5.00 0.0773 89.5 75-125

**Matrix Spike Dup (BEJ0175-MSD1)**

Source: 2110117-01

Prepared: 10/11/21 Analyzed: 10/12/21

Boron 5.02 0.0100 mg/L 5.00 0.0773 98.8 75-125 9.68 25

Summit Scientific

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Crestone Peak Resources  
2020 E. Grand Avenue, Suite 515  
Laramie WY, 82070

Project: Harsch 42-27

Project Number: [none]  
Project Manager: Sage Maher

**Reported:**  
10/18/21 17:39

**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 BEJ0167 - EPA 3050B**

**Blank (BEJ0167-BLK1)**

Prepared & Analyzed: 10/11/21

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 (BEJ0167-BS1)**

Prepared & Analyzed: 10/11/21

Arsenic	46.9	0.200	mg/kg wet	40.0	117	80-120
Barium	44.2	0.400	"	40.0	110	80-120
Cadmium	2.33	0.200	"	2.00	117	80-120
Copper	46.4	0.400	"	40.0	116	80-120
Lead	21.4	0.200	"	20.0	107	80-120
Nickel	45.9	0.400	"	40.0	115	80-120
Selenium	4.41	0.260	"	4.00	110	80-120
Silver	2.21	0.0200	"	2.00	110	80-120
Zinc	44.2	0.400	"	40.0	111	80-120

**Duplicate (BEJ0167-DUP1)**

Source: 2110125-01

Prepared & Analyzed: 10/11/21

Arsenic	6.21	0.249	mg/kg dry	6.45	3.78	20
Barium	116	0.498	"	117	0.841	20
Cadmium	0.288	0.249	"	0.299	3.82	20
Copper	18.7	0.498	"	18.8	0.916	20
Lead	14.5	0.249	"	14.5	0.156	20
Nickel	18.7	0.498	"	18.8	0.403	20
Selenium	1.47	0.324	"	1.32	10.6	20
Silver	0.0987	0.0249	"	0.109	10.4	20
Zinc	80.1	0.498	"	78.6	1.83	20

Summit Scientific

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Crestone Peak Resources  
 2020 E. Grand Avenue, Suite 515  
 Laramie WY, 82070

Project: Harsch 42-27

Project Number: [none]  
 Project Manager: Sage Maher

**Reported:**  
 10/18/21 17:39

**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 BEJ0167 - EPA 3050B**

**Matrix Spike (BEJ0167-MS1)**

Source: 2110125-01

Prepared & Analyzed: 10/11/21

Arsenic	66.8	0.249	mg/kg dry	49.8	6.45	121	75-125			
Barium	177	0.498	"	49.8	117	120	75-125			
Cadmium	3.13	0.249	"	2.49	0.299	114	75-125			
Copper	71.4	0.498	"	49.8	18.8	105	75-125			
Lead	38.0	0.249	"	24.9	14.5	94.1	75-125			
Nickel	73.6	0.498	"	49.8	18.8	110	75-125			
Selenium	5.33	0.324	"	4.98	1.32	80.3	75-125			
Silver	2.67	0.0249	"	2.49	0.109	103	75-125			
Zinc	140	0.498	"	49.8	78.6	123	75-125			

**Matrix Spike Dup (BEJ0167-MSD1)**

Source: 2110125-01

Prepared & Analyzed: 10/11/21

Arsenic	64.4	0.249	mg/kg dry	49.8	6.45	116	75-125	3.59	25
Barium	157	0.498	"	49.8	117	79.4	75-125	12.1	25
Cadmium	2.85	0.249	"	2.49	0.299	102	75-125	9.40	25
Copper	70.7	0.498	"	49.8	18.8	104	75-125	0.942	25
Lead	35.7	0.249	"	24.9	14.5	84.8	75-125	6.25	25
Nickel	71.6	0.498	"	49.8	18.8	106	75-125	2.81	25
Selenium	5.19	0.324	"	4.98	1.32	77.5	75-125	2.67	25
Silver	2.46	0.0249	"	2.49	0.109	94.5	75-125	8.09	25
Zinc	132	0.498	"	49.8	78.6	108	75-125	5.81	25

Summit Scientific

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Crestone Peak Resources  
 2020 E. Grand Avenue, Suite 515  
 Laramie WY, 82070

Project: Harsch 42-27

Project Number: [none]  
 Project Manager: Sage Maher

**Reported:**  
 10/18/21 17:39

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

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

**Batch BEJ0181 - 3060A Mod**

**Blank (BEJ0181-BLK1)**

Prepared & Analyzed: 10/11/21

Chromium, Hexavalent      ND      0.30    mg/kg wet

**LCS (BEJ0181-BS1)**

Prepared & Analyzed: 10/11/21

Chromium, Hexavalent      28.6      0.30    mg/kg wet      25.0      114      80-120

**Duplicate (BEJ0181-DUP1)**

**Source: 2109464-01**

Prepared & Analyzed: 10/11/21

Chromium, Hexavalent      ND      0.30    mg/kg dry      ND      20

**Matrix Spike (BEJ0181-MS1)**

**Source: 2109464-01**

Prepared & Analyzed: 10/11/21

Chromium, Hexavalent      31.7      0.30    mg/kg dry      30.1      ND      105      75-125

**Matrix Spike Dup (BEJ0181-MSD1)**

**Source: 2109464-01**

Prepared & Analyzed: 10/11/21

Chromium, Hexavalent      31.8      0.30    mg/kg dry      30.1      ND      106      75-125      0.379      20

Summit Scientific

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Crestone Peak Resources  
 2020 E. Grand Avenue, Suite 515  
 Laramie WY, 82070

Project: Harsch 42-27

Project Number: [none]  
 Project Manager: Sage Maher

**Reported:**  
 10/18/21 17:39

**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 BEJ0172 - General Preparation**

**Blank (BEJ0172-BLK1)**

Prepared: 10/11/21 Analyzed: 10/16/21

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

**LCS (BEJ0172-BS1)**

Prepared: 10/11/21 Analyzed: 10/16/21

Calcium	5.60	0.0500	mg/L wet	5.00		112	70-130			
Magnesium	5.63	0.0500	"	5.00		113	70-130			
Sodium	5.62	0.0500	"	5.00		112	70-130			

Summit Scientific

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Crestone Peak Resources  
 2020 E. Grand Avenue, Suite 515  
 Laramie WY, 82070

Project: Harsch 42-27

Project Number: [none]  
 Project Manager: Sage Maher

**Reported:**  
 10/18/21 17:39

**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 BEJ0177 - General Preparation**

<b>Duplicate (BEJ0177-DUP1)</b>		<b>Source: 2110052-01</b>		Prepared: 10/11/21 Analyzed: 10/12/21	
% Solids	78.7	%		76.6	2.67 20

Summit Scientific

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Crestone Peak Resources  
 2020 E. Grand Avenue, Suite 515  
 Laramie WY, 82070

Project: Harsch 42-27

Project Number: [none]  
 Project Manager: Sage Maher

**Reported:**  
 10/18/21 17:39

**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			Limits	RPD	Limit		

**Batch BEJ0207 - General Preparation**

**Blank (BEJ0207-BLK1)**

Prepared & Analyzed: 10/12/21

Specific Conductance (EC) ND 0.0100 mmhos/cm

**LCS (BEJ0207-BS1)**

Prepared & Analyzed: 10/12/21

Specific Conductance (EC) 0.148 0.0100 mmhos/cm 0.150 98.5 90-110

**Duplicate (BEJ0207-DUP1)**

Source: 2110117-01

Prepared & Analyzed: 10/12/21

Specific Conductance (EC) 1.74 0.0100 mmhos/cm 1.73 0.346 20

Summit Scientific

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Crestone Peak Resources  
 2020 E. Grand Avenue, Suite 515  
 Laramie WY, 82070

Project: Harsch 42-27

Project Number: [none]  
 Project Manager: Sage Maher

**Reported:**  
 10/18/21 17:39

**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 BEJ0206 - General Preparation**

**LCS (BEJ0206-BS1)**

Prepared & Analyzed: 10/12/21

pH 9.24 pH Units 9.18 101 95-105

**Duplicate (BEJ0206-DUP1)**

Source: 2110117-01

Prepared & Analyzed: 10/12/21

pH 8.02 pH Units 8.03 0.125 20

Summit Scientific

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Crestone Peak Resources  
2020 E. Grand Avenue, Suite 515  
Laramie WY, 82070

Project: Harsch 42-27

Project Number: [none]  
Project Manager: Sage Maher

**Reported:**  
10/18/21 17:39

### 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

# Summit Scientific

---

4653 Table Mountain Drive, Golden, Colorado 80403

303.277.9310

October 18, 2021

Sage Maher

Crestone Peak Resources

2020 E. Grand Avenue, Suite 515

Laramie, WY 82070

RE: Harsch 42-27

Work Order #2110126

Enclosed are the results of analyses for samples received by Summit Scientific on 10/08/21 16:00. 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 initial "M" and a long, sweeping underline.

Muri Premer For Paul Shrewsbury  
President



Crestone Peak Resources  
2020 E. Grand Avenue, Suite 515  
Laramie WY, 82070

Project: Harsch 42-27

Project Number: [none]  
Project Manager: Sage Maher

**Reported:**  
10/18/21 17:46

**ANALYTICAL REPORT FOR SAMPLES**

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
BKG01@4-5	2110126-01	Soil	10/08/21 13:30	10/08/21 16:00

Summit Scientific

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S<sub>2</sub>

2110126

Sample Receipt Checklist

S2 Work Order# \_\_\_\_\_

Client: Confluence Compliance Co Client Project ID: Harsch 42-27

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

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

Temp (°C) 20.9

Thermometer ID: 61857155-K

	Yes	No	N/A	Comments (if any)
If samples require cooling, was the temperature at 4°C +/- 2°C <sup>(1)</sup> ? NOTE: If samples are delivered the same day of sampling, this requirement is met if there is evidence that cooling has begun.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	on ICE
Were all samples received intact <sup>(1)</sup> ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Was adequate sample volume provided <sup>(1)</sup> ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
If custody seals are present, are they intact <sup>(1)</sup> ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Are samples with holding times due within 48 hours sample due within 48 hours present?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Is a chain-of-custody (COC) form present and filled out completely <sup>(1)</sup> ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Does the COC agree with the number and type of sample bottles received <sup>(1)</sup> ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Do the sample IDs on the bottle labels match the COC <sup>(1)</sup> ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Is the COC properly relinquished by the client w/ date and time recorded <sup>(1)</sup> ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
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) <sup>(1)</sup> ? Note the type of preservative in the Comments column – HCl, H <sub>2</sub> SO <sub>4</sub> , NaOH, HNO <sub>3</sub> , etc.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
If samples are acid preserved for metals, is the pH ≤ 2 <sup>(1)</sup> ? Record the pH in Comments.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
If dissolved metals are requested, were samples field filtered?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Additional Comments (if any):				

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

*[Signature]*  
Custodian Printed Name or Initials

10-8-21  
Date/Time



Crestone Peak Resources  
2020 E. Grand Avenue, Suite 515  
Laramie WY, 82070

Project: Harsch 42-27

Project Number: [none]  
Project Manager: Sage Maher

**Reported:**  
10/18/21 17:46

**BKG01@4-5**  
**2110126-01 (Soil)**

Summit Scientific

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

Date Sampled: **10/08/21 13:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>Boron</b>	<b>0.325</b>	0.0100	mg/L	1	BEJ0175	10/11/21	10/12/21	EPA 6020B	

**Total Metals by EPA 6020B**

Date Sampled: **10/08/21 13:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>Arsenic</b>	<b>5.61</b>	0.251	mg/kg dry	1	BEJ0167	10/11/21	10/11/21	EPA 6020B	
<b>Barium</b>	<b>94.9</b>	0.501	"	"	"	"	"	"	
<b>Cadmium</b>	<b>ND</b>	0.251	"	"	"	"	"	"	
<b>Copper</b>	<b>16.3</b>	0.501	"	"	"	"	"	"	
<b>Lead</b>	<b>13.4</b>	0.251	"	"	"	"	"	"	
<b>Nickel</b>	<b>16.9</b>	0.501	"	"	"	"	"	"	
<b>Selenium</b>	<b>1.04</b>	0.326	"	"	"	"	"	"	
<b>Silver</b>	<b>0.0725</b>	0.0251	"	"	"	"	"	"	
<b>Zinc</b>	<b>71.2</b>	0.501	"	"	"	"	"	"	

**Hexavalent Chromium by EPA Method 7196**

Date Sampled: **10/08/21 13:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chromium, Hexavalent	ND	0.30	mg/kg dry	1	BEJ0181	10/11/21	10/11/21	EPA 7196A	

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

Date Sampled: **10/08/21 13:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>Calcium</b>	<b>155</b>	0.0627	mg/L dry	1	BEJ0172	10/11/21	10/16/21	EPA 6020B	
<b>Magnesium</b>	<b>478</b>	0.0627	"	"	"	"	"	"	
<b>Sodium</b>	<b>1730</b>	0.0627	"	"	"	"	"	"	

Summit Scientific

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Crestone Peak Resources  
2020 E. Grand Avenue, Suite 515  
Laramie WY, 82070

Project: Harsch 42-27

Project Number: [none]  
Project Manager: Sage Maher

**Reported:**  
10/18/21 17:46

**BKG01@4-5**  
**2110126-01 (Soil)**

**Summit Scientific**

**Calculated Analysis**

Date Sampled: **10/08/21 13:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Sodium Adsorption Ratio	15.5	0.00100	units	1	BEJ0303	10/17/21	10/17/21	Calculation	

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

Date Sampled: **10/08/21 13:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
% Solids	79.8		%	1	BEJ0168	10/11/21	10/11/21	Calculation	

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

Date Sampled: **10/08/21 13:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Specific Conductance (EC)	8.58	0.0100	mmhos/cm	1	BEJ0207	10/12/21	10/12/21	EPA 120.1	

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

Date Sampled: **10/08/21 13:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
pH	8.29		pH Units	1	BEJ0206	10/12/21	10/12/21	EPA 9045D	

Summit Scientific

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



Crestone Peak Resources  
 2020 E. Grand Avenue, Suite 515  
 Laramie WY, 82070

Project: Harsch 42-27

Project Number: [none]  
 Project Manager: Sage Maher

**Reported:**  
 10/18/21 17:46

**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 BEJ0175 - EPA 3050B**

**Blank (BEJ0175-BLK1)**

Prepared: 10/11/21 Analyzed: 10/12/21

Boron ND 0.0100 mg/L

**LCS (BEJ0175-BS1)**

Prepared: 10/11/21 Analyzed: 10/12/21

Boron 4.78 0.0100 mg/L 5.00 95.6 80-120

**Duplicate (BEJ0175-DUP1)**

Source: 2110117-01

Prepared: 10/11/21 Analyzed: 10/12/21

Boron 0.0646 0.0100 mg/L 0.0773 17.9 20

**Matrix Spike (BEJ0175-MS1)**

Source: 2110117-01

Prepared: 10/11/21 Analyzed: 10/12/21

Boron 4.55 0.0100 mg/L 5.00 0.0773 89.5 75-125

**Matrix Spike Dup (BEJ0175-MSD1)**

Source: 2110117-01

Prepared: 10/11/21 Analyzed: 10/12/21

Boron 5.02 0.0100 mg/L 5.00 0.0773 98.8 75-125 9.68 25

Summit Scientific

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Crestone Peak Resources  
2020 E. Grand Avenue, Suite 515  
Laramie WY, 82070

Project: Harsch 42-27

Project Number: [none]  
Project Manager: Sage Maher

**Reported:**  
10/18/21 17:46

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

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

**Batch BEJ0167 - EPA 3050B**

**Blank (BEJ0167-BLK1)**

Prepared & Analyzed: 10/11/21

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 (BEJ0167-BS1)**

Prepared & Analyzed: 10/11/21

Arsenic	46.9	0.200	mg/kg wet	40.0	117	80-120
Barium	44.2	0.400	"	40.0	110	80-120
Cadmium	2.33	0.200	"	2.00	117	80-120
Copper	46.4	0.400	"	40.0	116	80-120
Lead	21.4	0.200	"	20.0	107	80-120
Nickel	45.9	0.400	"	40.0	115	80-120
Selenium	4.41	0.260	"	4.00	110	80-120
Silver	2.21	0.0200	"	2.00	110	80-120
Zinc	44.2	0.400	"	40.0	111	80-120

**Duplicate (BEJ0167-DUP1)**

Source: 2110125-01

Prepared & Analyzed: 10/11/21

Arsenic	6.21	0.249	mg/kg dry	6.45	3.78	20
Barium	116	0.498	"	117	0.841	20
Cadmium	0.288	0.249	"	0.299	3.82	20
Copper	18.7	0.498	"	18.8	0.916	20
Lead	14.5	0.249	"	14.5	0.156	20
Nickel	18.7	0.498	"	18.8	0.403	20
Selenium	1.47	0.324	"	1.32	10.6	20
Silver	0.0987	0.0249	"	0.109	10.4	20
Zinc	80.1	0.498	"	78.6	1.83	20

Summit Scientific

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Crestone Peak Resources  
 2020 E. Grand Avenue, Suite 515  
 Laramie WY, 82070

Project: Harsch 42-27

Project Number: [none]  
 Project Manager: Sage Maher

**Reported:**  
 10/18/21 17:46

**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 BEJ0167 - EPA 3050B**

**Matrix Spike (BEJ0167-MS1)**

Source: 2110125-01

Prepared & Analyzed: 10/11/21

Arsenic	66.8	0.249	mg/kg dry	49.8	6.45	121	75-125			
Barium	177	0.498	"	49.8	117	120	75-125			
Cadmium	3.13	0.249	"	2.49	0.299	114	75-125			
Copper	71.4	0.498	"	49.8	18.8	105	75-125			
Lead	38.0	0.249	"	24.9	14.5	94.1	75-125			
Nickel	73.6	0.498	"	49.8	18.8	110	75-125			
Selenium	5.33	0.324	"	4.98	1.32	80.3	75-125			
Silver	2.67	0.0249	"	2.49	0.109	103	75-125			
Zinc	140	0.498	"	49.8	78.6	123	75-125			

**Matrix Spike Dup (BEJ0167-MSD1)**

Source: 2110125-01

Prepared & Analyzed: 10/11/21

Arsenic	64.4	0.249	mg/kg dry	49.8	6.45	116	75-125	3.59	25
Barium	157	0.498	"	49.8	117	79.4	75-125	12.1	25
Cadmium	2.85	0.249	"	2.49	0.299	102	75-125	9.40	25
Copper	70.7	0.498	"	49.8	18.8	104	75-125	0.942	25
Lead	35.7	0.249	"	24.9	14.5	84.8	75-125	6.25	25
Nickel	71.6	0.498	"	49.8	18.8	106	75-125	2.81	25
Selenium	5.19	0.324	"	4.98	1.32	77.5	75-125	2.67	25
Silver	2.46	0.0249	"	2.49	0.109	94.5	75-125	8.09	25
Zinc	132	0.498	"	49.8	78.6	108	75-125	5.81	25

Summit Scientific

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Crestone Peak Resources  
 2020 E. Grand Avenue, Suite 515  
 Laramie WY, 82070

Project: Harsch 42-27

Project Number: [none]  
 Project Manager: Sage Maher

**Reported:**  
 10/18/21 17:46

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

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

**Batch BEJ0181 - 3060A Mod**

**Blank (BEJ0181-BLK1)**

Prepared & Analyzed: 10/11/21

Chromium, Hexavalent      ND      0.30    mg/kg wet

**LCS (BEJ0181-BS1)**

Prepared & Analyzed: 10/11/21

Chromium, Hexavalent      28.6      0.30    mg/kg wet      25.0      114      80-120

**Duplicate (BEJ0181-DUP1)**

**Source: 2109464-01**

Prepared & Analyzed: 10/11/21

Chromium, Hexavalent      ND      0.30    mg/kg dry      ND      20

**Matrix Spike (BEJ0181-MS1)**

**Source: 2109464-01**

Prepared & Analyzed: 10/11/21

Chromium, Hexavalent      31.7      0.30    mg/kg dry      30.1      ND      105      75-125

**Matrix Spike Dup (BEJ0181-MSD1)**

**Source: 2109464-01**

Prepared & Analyzed: 10/11/21

Chromium, Hexavalent      31.8      0.30    mg/kg dry      30.1      ND      106      75-125      0.379      20

Summit Scientific

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Crestone Peak Resources  
 2020 E. Grand Avenue, Suite 515  
 Laramie WY, 82070

Project: Harsch 42-27

Project Number: [none]  
 Project Manager: Sage Maher

**Reported:**  
 10/18/21 17:46

**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 BEJ0172 - General Preparation**

**Blank (BEJ0172-BLK1)**

Prepared: 10/11/21 Analyzed: 10/16/21

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

**LCS (BEJ0172-BS1)**

Prepared: 10/11/21 Analyzed: 10/16/21

Calcium	5.60	0.0500	mg/L wet	5.00		112	70-130			
Magnesium	5.63	0.0500	"	5.00		113	70-130			
Sodium	5.62	0.0500	"	5.00		112	70-130			

Summit Scientific

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Crestone Peak Resources  
 2020 E. Grand Avenue, Suite 515  
 Laramie WY, 82070

Project: Harsch 42-27

Project Number: [none]  
 Project Manager: Sage Maher

**Reported:**  
 10/18/21 17:46

**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 BEJ0168 - General Preparation**

**Duplicate (BEJ0168-DUP1)**

**Source: 2110099-01**

Prepared & Analyzed: 10/11/21

% Solids	91.3		%		90.2			1.12	20	
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Summit Scientific

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Crestone Peak Resources  
 2020 E. Grand Avenue, Suite 515  
 Laramie WY, 82070

Project: Harsch 42-27

Project Number: [none]  
 Project Manager: Sage Maher

**Reported:**  
 10/18/21 17:46

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

**Summit Scientific**

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

**Batch BEJ0207 - General Preparation**

**Blank (BEJ0207-BLK1)**

Prepared & Analyzed: 10/12/21

Specific Conductance (EC) ND 0.0100 mmhos/cm

**LCS (BEJ0207-BS1)**

Prepared & Analyzed: 10/12/21

Specific Conductance (EC) 0.148 0.0100 mmhos/cm 0.150 98.5 90-110

**Duplicate (BEJ0207-DUP1)**

Source: 2110117-01

Prepared & Analyzed: 10/12/21

Specific Conductance (EC) 1.74 0.0100 mmhos/cm 1.73 0.346 20

Summit Scientific

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Crestone Peak Resources  
 2020 E. Grand Avenue, Suite 515  
 Laramie WY, 82070

Project: Harsch 42-27

Project Number: [none]  
 Project Manager: Sage Maher

**Reported:**  
 10/18/21 17:46

**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 BEJ0206 - General Preparation**

**LCS (BEJ0206-BS1)**

Prepared & Analyzed: 10/12/21

pH 9.24 pH Units 9.18 101 95-105

**Duplicate (BEJ0206-DUP1)**

Source: 2110117-01

Prepared & Analyzed: 10/12/21

pH 8.02 pH Units 8.03 0.125 20

Summit Scientific

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Crestone Peak Resources  
2020 E. Grand Avenue, Suite 515  
Laramie WY, 82070

Project: Harsch 42-27  
Project Number: [none]  
Project Manager: Sage Maher

**Reported:**  
10/18/21 17:46

### 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

# Summit Scientific

---

4653 Table Mountain Drive, Golden, Colorado 80403

303.277.9310

October 19, 2021

Sage Maher

Crestone Peak Resources

2020 E. Grand Avenue, Suite 515

Laramie, WY 82070

RE: Harsch 42-27

Work Order #2110127

Enclosed are the results of analyses for samples received by Summit Scientific on 10/08/21 16:00. 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 initial "M" and a long, sweeping underline.

Muri Premer For Paul Shrewsbury  
President



Crestone Peak Resources  
2020 E. Grand Avenue, Suite 515  
Laramie WY, 82070

Project: Harsch 42-27

Project Number: [none]  
Project Manager: Sage Maher

**Reported:**  
10/19/21 11:26

**ANALYTICAL REPORT FOR SAMPLES**

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SB01_GW	2110127-01	Water	10/08/21 13:45	10/08/21 16:00

Summit Scientific

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# Summit Scientific

2110127

S<sub>2</sub>

4653 Table Mountain Drive ♦ Golden, Colorado 80403  
303-277-9310

Page 1 of 1

Client: Confluence Compliance Companies

Project Manager: Sage Maher

Address: 403 1/2 Rockwood Lane

E-Mail: Sage.Maher@confluence-cc.com; Remediation@confluence-cc.com

City/State/Zip: Grand Junction, Colorado 81507

David.Tewkesbury@CrestonePR.com

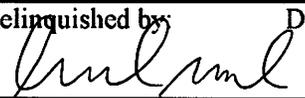
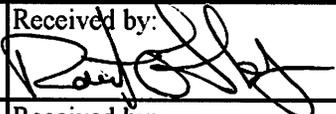
Phone: 404-641-8912

Project Name: Harsch 42-27

Sampler Name: Sage Maher

Project Number: TBD

ID	Sample Description	Date Sampled	Time Sampled	# of containers	Preservative				Matrix				Analysis Requested				Special Instructions	
					HCl	HNO3	None	Other	Water	Soil	Air-Canister #	Other	915 VOLCS	TDS	Chloride	Sulfate		
1	SP01-GW	10/8/21	1345	4	3		1		X					X	X	X	X	
2																		
3																		
4																		
5																		
6																		
7																		
8																		
9																		
10																		

Relinquished by: 	Date/Time: 10/8/21 1600	Received by: 	Date/Time: 10-8-21 1600	<b>Turn Around Time (Check)</b> Same Day <input type="checkbox"/> 72 hours <input checked="" type="checkbox"/> 24 hours <input type="checkbox"/> Standard <input type="checkbox"/> 48 hours <input type="checkbox"/> <b>Sample Integrity:</b> Temperature Upon Receipt: 20.9 Samples Intact: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<b>Notes:</b>  Bill to: Crestone Peak Resources (CPR)
Relinquished by:	Date/Time:	Received by:	Date/Time:		
Relinquished by:	Date/Time:	Received by:	Date/Time:		



2110127

Sample Receipt Checklist

S2 Work Order# \_\_\_\_\_

Client: Confluence Compliance Co Client Project ID: Harsh 42-27

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

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

Temp (°C) 20.9

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 if there is evidence that cooling has begun.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	on ICE
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"/>	
If custody seals are present, are they intact (1)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Are samples with holding times due within 48 hours sample due within 48 hours present?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input 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"/>	
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"/>	
Is the COC properly relinquished by the client w/ date and time recorded (1)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
For volatiles in water – is there headspace present? If yes, contact client and note in narrative.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Are samples preserved that require preservation (excluding cooling) (1)? Note the type of preservative in the Comments column – HCl, H2SO4, NaOH, HNO3, 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.

Rustafsky  
Custodian Printed Name or Initials

10.8.21  
Date/Time



Crestone Peak Resources  
2020 E. Grand Avenue, Suite 515  
Laramie WY, 82070

Project: Harsch 42-27

Project Number: [none]  
Project Manager: Sage Maher

**Reported:**  
10/19/21 11:26

**SB01\_GW**  
**2110127-01 (Water)**

**Summit Scientific**

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

Date Sampled: **10/08/21 13:45**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>Benzene</b>	<b>88</b>	1.0	ug/l	1	BEJ0182	10/11/21	10/12/21	EPA 8260B	
<b>Toluene</b>	<b>27</b>	1.0	"	"	"	"	"	"	
<b>Ethylbenzene</b>	<b>2.1</b>	1.0	"	"	"	"	"	"	
<b>Xylenes (total)</b>	<b>42</b>	2.0	"	"	"	"	"	"	
Naphthalene	ND	1.0	"	"	"	"	"	"	
<b>1,2,4-Trimethylbenzene</b>	<b>5.3</b>	1.0	"	"	"	"	"	"	
<b>1,3,5-Trimethylbenzene</b>	<b>4.0</b>	1.0	"	"	"	"	"	"	

Date Sampled: **10/08/21 13:45**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		94.7 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		98.0 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		92.1 %	21-167		"	"	"	"	

**Anions by EPA Method 300.0**

Date Sampled: **10/08/21 13:45**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>Chloride</b>	<b>1180</b>	12.0	mg/L	200	BEJ0180	10/11/21	10/11/21	EPA 300.0	
<b>Sulfate</b>	<b>10400</b>	60.0	"	"	"	"	"	"	

**Total Dissolved Solids by SM2540C**

Date Sampled: **10/08/21 13:45**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>Total Dissolved Solids</b>	<b>14800</b>	10.0	mg/L	1	BEJ0204	10/12/21	10/13/21	SM2540C	

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.





Crestone Peak Resources  
2020 E. Grand Avenue, Suite 515  
Laramie WY, 82070

Project: Harsch 42-27

Project Number: [none]  
Project Manager: Sage Maher

**Reported:**  
10/19/21 11:26

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

#### Summit Scientific

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

#### Batch BEJ0182 - EPA 5030 Water MS

##### Blank (BEJ0182-BLK1)

Prepared: 10/11/21 Analyzed: 10/12/21

Benzene	ND	1.0	ug/l								
Toluene	ND	1.0	"								
Ethylbenzene	ND	1.0	"								
Xylenes (total)	ND	2.0	"								
Naphthalene	ND	1.0	"								
1,2,4-Trimethylbenzene	ND	1.0	"								
1,3,5-Trimethylbenzene	ND	1.0	"								
Surrogate: 1,2-Dichloroethane-d4	11.9		"	13.3		89.2	23-173				
Surrogate: Toluene-d8	13.1		"	13.3		98.2	20-170				
Surrogate: 4-Bromofluorobenzene	12.8		"	13.3		95.6	21-167				

##### LCS (BEJ0182-BS1)

Prepared: 10/11/21 Analyzed: 10/12/21

Benzene	31.6	1.0	ug/l	33.3		94.9	51-132				
Toluene	38.8	1.0	"	33.3		116	51-138				
Ethylbenzene	42.0	1.0	"	33.3		126	58-146				
m,p-Xylene	80.8	2.0	"	66.7		121	57-144				
o-Xylene	41.1	1.0	"	33.3		123	53-146				
Naphthalene	37.4	1.0	"	33.3		112	70-130				
1,2,4-Trimethylbenzene	39.8	1.0	"	33.3		119	70-130				
1,3,5-Trimethylbenzene	38.5	1.0	"	33.3		115	70-130				
Surrogate: 1,2-Dichloroethane-d4	12.9		"	13.3		96.5	23-173				
Surrogate: Toluene-d8	13.1		"	13.3		98.3	20-170				
Surrogate: 4-Bromofluorobenzene	12.3		"	13.3		92.1	21-167				

##### Matrix Spike (BEJ0182-MS1)

Source: 2110107-01

Prepared: 10/11/21 Analyzed: 10/12/21

Benzene	34.1	1.0	ug/l	33.3	ND	102	34-141				
Toluene	39.3	1.0	"	33.3	ND	118	27-151				
Ethylbenzene	42.3	1.0	"	33.3	ND	127	29-160				
m,p-Xylene	82.4	2.0	"	66.7	ND	124	20-166				
o-Xylene	41.7	1.0	"	33.3	ND	125	33-159				
Naphthalene	37.5	1.0	"	33.3	1.01	109	70-130				
1,2,4-Trimethylbenzene	40.4	1.0	"	33.3	ND	121	70-130				
1,3,5-Trimethylbenzene	39.1	1.0	"	33.3	ND	117	70-130				
Surrogate: 1,2-Dichloroethane-d4	13.3		"	13.3		99.6	23-173				
Surrogate: Toluene-d8	13.1		"	13.3		98.6	20-170				
Surrogate: 4-Bromofluorobenzene	12.4		"	13.3		92.9	21-167				

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.



Crestone Peak Resources  
 2020 E. Grand Avenue, Suite 515  
 Laramie WY, 82070

Project: Harsch 42-27

Project Number: [none]  
 Project Manager: Sage Maher

**Reported:**  
 10/19/21 11:26

**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 BEJ0182 - EPA 5030 Water MS**

Matrix Spike Dup (BEJ0182-MSD1)	Source: 2110107-01			Prepared: 10/11/21		Analyzed: 10/12/21				
Benzene	33.0	1.0	ug/l	33.3	ND	99.0	34-141	3.43	30	
Toluene	39.0	1.0	"	33.3	ND	117	27-151	0.793	30	
Ethylbenzene	42.2	1.0	"	33.3	ND	127	29-160	0.331	30	
m,p-Xylene	81.1	2.0	"	66.7	ND	122	20-166	1.58	30	
o-Xylene	41.7	1.0	"	33.3	ND	125	33-159	0.0240	30	
Naphthalene	41.3	1.0	"	33.3	1.01	121	70-130	9.68	30	
1,2,4-Trimethylbenzene	40.1	1.0	"	33.3	ND	120	70-130	0.745	30	
1,3,5-Trimethylbenzene	39.0	1.0	"	33.3	ND	117	70-130	0.282	30	
Surrogate: 1,2-Dichloroethane-d4	14.4		"	13.3		108	23-173			
Surrogate: Toluene-d8	13.0		"	13.3		97.8	20-170			
Surrogate: 4-Bromofluorobenzene	12.4		"	13.3		92.6	21-167			

Summit Scientific

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Crestone Peak Resources  
 2020 E. Grand Avenue, Suite 515  
 Laramie WY, 82070

Project: Harsch 42-27

Project Number: [none]  
 Project Manager: Sage Maher

**Reported:**  
 10/19/21 11:26

**Anions by EPA Method 300.0 - Quality Control**  
**Summit Scientific**

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

**Batch BEJ0180 - General Preparation**

**Blank (BEJ0180-BLK1)**

Prepared & Analyzed: 10/11/21

Chloride	ND	0.0600	mg/L							
Sulfate	ND	0.300	"							

**LCS (BEJ0180-BS1)**

Prepared & Analyzed: 10/11/21

Chloride	3.26	0.0600	mg/L	3.00	109	90-110				
Sulfate	15.8	0.300	"	15.0	106	90-110				

**Duplicate (BEJ0180-DUP1)**

Source: 2110127-01

Prepared & Analyzed: 10/11/21

Chloride	966	12.0	mg/L		1180		19.9	20		
Sulfate	8350	60.0	"		10400		21.4	20		QM-02

**Matrix Spike (BEJ0180-MS1)**

Source: 2110127-01

Prepared & Analyzed: 10/11/21

Chloride	2200	12.0	mg/L	600	1180	170	80-120			QM-02
Sulfate	15700	60.0	"	3000	10400	177	80-120			QM-02

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.*



Crestone Peak Resources  
 2020 E. Grand Avenue, Suite 515  
 Laramie WY, 82070

Project: Harsch 42-27

Project Number: [none]  
 Project Manager: Sage Maher

**Reported:**  
 10/19/21 11:26

**Total Dissolved Solids by SM2540C - Quality Control**  
**Summit Scientific**

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

**Batch BEJ0204 - General Preparation**

**Blank (BEJ0204-BLK1)**

Prepared: 10/12/21 Analyzed: 10/13/21

Total Dissolved Solids                      ND                      10.0                      mg/L

**Duplicate (BEJ0204-DUP1)**

**Source: 2110111-01**

Prepared: 10/12/21 Analyzed: 10/13/21

Total Dissolved Solids                      1710                      10.0                      mg/L                      1480                      14.4                      20

Summit Scientific

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



Crestone Peak Resources  
2020 E. Grand Avenue, Suite 515  
Laramie WY, 82070

Project: Harsch 42-27

Project Number: [none]  
Project Manager: Sage Maher

**Reported:**  
10/19/21 11:26

### Notes and Definitions

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

# Summit Scientific

---

4653 Table Mountain Drive, Golden, Colorado 80403

303.277.9310

October 19, 2021

Sage Maher

Crestone Peak Resources

2020 E. Grand Avenue, Suite 515

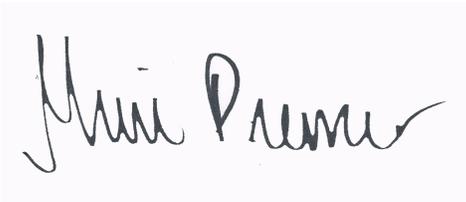
Laramie, WY 82070

RE: Harsch 42-27

Work Order #2110128

Enclosed are the results of analyses for samples received by Summit Scientific on 10/08/21 16:00. 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 initial "M" and a long, sweeping underline.

Muri Premer For Paul Shrewsbury  
President



Crestone Peak Resources  
2020 E. Grand Avenue, Suite 515  
Laramie WY, 82070

Project: Harsch 42-27

Project Number: [none]  
Project Manager: Sage Maher

**Reported:**  
10/19/21 11:33

**ANALYTICAL REPORT FOR SAMPLES**

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
BKG01_GW	2110128-01	Water	10/08/21 14:30	10/08/21 16:00

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.*

# Summit Scientific 2110128

S<sub>2</sub>

4653 Table Mountain Drive ♦ Golden, Colorado 80403  
303-277-9310

Client: Confluence Compliance Companies

Project Manager: Sage Maher

Address: 403 1/2 Rockwood Lane

E-Mail: Sage.Maher@confluence-cc.com; Remediation@confluence-cc.com

City/State/Zip: Grand Junction, Colorado 81507

David.Tewkesbury@CrestonePR.com

Phone: 404-641-8912

Project Name: Harsco 42-27

Sampler Name: Sage Maher

Project Number: TBD

ID	Sample Description	Date Sampled	Time Sampled	# of containers	Preservative				Matrix				Analysis Requested				Special Instructions		
					HCl	HNO3	None	Other	Water	Soil	Air-Canister #	Other	TDS	Chloride	Sulfate				
1	BKG01-GW	10/8/21	1430	1			X		X					X	X	X			
2																			
3																			
4																			
5																			
6																			
7																			
8																			
9																			
10																			

Relinquished by: <i>[Signature]</i>	Date/Time: 10/8/21 16:00	Received by: <i>[Signature]</i>	Date/Time: 10/8/21 16:00	Turn Around Time (Check)	Notes:
Relinquished by:	Date/Time:	Received by:	Date/Time:	Same Day <input type="checkbox"/>	72 hours <input checked="" type="checkbox"/> Standard <input type="checkbox"/> 48 hours <input type="checkbox"/>
Relinquished by:	Date/Time:	Received by:	Date/Time:	Sample Integrity:	
Relinquished by:	Date/Time:	Received by:	Date/Time:	Temperature Upon Receipt: 20.9	
				Samples Intact: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Bill to: Crestone Peak Resources (CPR)



2110128

Sample Receipt Checklist

S2 Work Order# \_\_\_\_\_

Client: Confluence Compliance Co Client Project ID: Harsch 42-27

Shipped Via:  H.D.  P.U.  FedEx  UPS  USPS  Other \_\_\_\_\_ Airbill #: \_\_\_\_\_

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

Temp (°C) 20.9

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 if there is evidence that cooling has begun.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	on ICE
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"/>	
If custody seals are present, are they intact (1)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Are samples with holding times due within 48 hours sample due within 48 hours present?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input 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"/>	
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"/>	
Is the COC properly relinquished by the client w/ date and time recorded (1)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
For volatiles in water – is there headspace present? If yes, contact client and note in narrative.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Are samples preserved that require preservation (excluding cooling) (1)? Note the type of preservative in the Comments column – HCl, H2SO4, NaOH, HNO3, 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.

[Signature]  
Custodian Printed Name or Initials

10-8-21  
Date/Time



Crestone Peak Resources  
 2020 E. Grand Avenue, Suite 515  
 Laramie WY, 82070

Project: Harsch 42-27

Project Number: [none]  
 Project Manager: Sage Maher

**Reported:**  
 10/19/21 11:33

**BKG01\_GW**  
**2110128-01 (Water)**

**Summit Scientific**

**Anions by EPA Method 300.0**

Date Sampled: **10/08/21 14:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chloride	<b>1760</b>	12.0	mg/L	200	BEJ0180	10/11/21	10/11/21	EPA 300.0	
Sulfate	<b>17800</b>	150	"	500	"	"	"	"	

**Total Dissolved Solids by SM2540C**

Date Sampled: **10/08/21 14:30**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>Total Dissolved Solids</b>	<b>27900</b>	10.0	mg/L	1	BEJ0204	10/12/21	10/13/21	SM2540C	

Summit Scientific

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Crestone Peak Resources  
 2020 E. Grand Avenue, Suite 515  
 Laramie WY, 82070

Project: Harsch 42-27

Project Number: [none]  
 Project Manager: Sage Maher

**Reported:**  
 10/19/21 11:33

**Anions by EPA Method 300.0 - Quality Control**

**Summit Scientific**

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

**Batch BEJ0180 - General Preparation**

**Blank (BEJ0180-BLK1)**

Prepared & Analyzed: 10/11/21

Chloride	ND	0.0600	mg/L							
Sulfate	ND	0.300	"							

**LCS (BEJ0180-BS1)**

Prepared & Analyzed: 10/11/21

Chloride	3.26	0.0600	mg/L	3.00	109	90-110				
Sulfate	15.8	0.300	"	15.0	106	90-110				

**Duplicate (BEJ0180-DUP1)**

Source: 2110127-01

Prepared & Analyzed: 10/11/21

Chloride	966	12.0	mg/L		1180		19.9	20		
Sulfate	8350	60.0	"		10400		21.4	20		QM-02

**Matrix Spike (BEJ0180-MS1)**

Source: 2110127-01

Prepared & Analyzed: 10/11/21

Chloride	2200	12.0	mg/L	600	1180	170	80-120			QM-02
Sulfate	15700	60.0	"	3000	10400	177	80-120			QM-02

Summit Scientific

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Crestone Peak Resources  
 2020 E. Grand Avenue, Suite 515  
 Laramie WY, 82070

Project: Harsch 42-27

Project Number: [none]  
 Project Manager: Sage Maher

**Reported:**  
 10/19/21 11:33

**Total Dissolved Solids by SM2540C - Quality Control**  
**Summit Scientific**

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

**Batch BEJ0204 - General Preparation**

**Blank (BEJ0204-BLK1)**

Prepared: 10/12/21 Analyzed: 10/13/21

Total Dissolved Solids                      ND                      10.0                      mg/L

**Duplicate (BEJ0204-DUP1)**

**Source: 2110111-01**

Prepared: 10/12/21 Analyzed: 10/13/21

Total Dissolved Solids                      1710                      10.0                      mg/L                      1480                      14.4                      20

Summit Scientific

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Crestone Peak Resources  
2020 E. Grand Avenue, Suite 515  
Laramie WY, 82070

Project: Harsch 42-27

Project Number: [none]  
Project Manager: Sage Maher

**Reported:**  
10/19/21 11:33

### Notes and Definitions

- 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