

# Summit Scientific

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4653 Table Mountain Drive, Golden, Colorado 80403

303.277.9310

September 20, 2021


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

RE: Parker 1

Work Order #2109138

Enclosed are the results of analyses for samples received by Summit Scientific on 09/09/21 17:00. 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: Parker 1  
Project Number: [none]  
Project Manager: Brent Hedstrom

**Reported:**  
09/20/21 13:36

**ANALYTICAL REPORT FOR SAMPLES**

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Surface Casing	2109138-01	Water	09/01/21 00:00	09/09/21 17:00

Summit Scientific

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# Summit Scientific

S<sub>2</sub>

2109138

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

Page 1 of 1

Client: Crestone Peak Resources

Project Manager: Brent Hedstrom

Address: 10188 East I-25 Frontage road

E-Mail: brent.hedstrom@crestonepr.com

City/State/Zip: Firestone, CO 80504

COGCC 242624 LOE W768048 8503

Phone: 303-434-3007

Project Name: Parker 1

Sampler Name:

Project Number:

ID	Sample Description	Date Sampled	Time Sampled	# of containers	Preservative				Matrix				Analysis Requested							Special Instructions		
					HCl	HNO3	None	Other	Water	Soil	Air-Canister #	Other	Anion	Cations	TDS	BTEX 8020	DRO	GRO	RSK-175			
1	Surface Casing	9/1/2021		2										X	X	X	X	X	X	X		
2																						
3																						
4																						
5																						
6																						
7																						
8																						
9																						
10																						
Relinquished by:		Date/Time:		Received by:		Date/Time:		Turn Around Time (Check)				Notes:										
<i>BA</i>		9/8/21		<i>Will Rali</i>		9/9/21 1700		Same Day <input type="checkbox"/> 72 hours <input type="checkbox"/>														
								24 hours <input type="checkbox"/> Standard <input checked="" type="checkbox"/>														
								48 hours <input type="checkbox"/>														
Relinquished by:		Date/Time:		Received by:		Date/Time:		Sample Integrity:														
								Temperature Upon Receipt: <u>20</u>														
Relinquished by:		Date/Time:		Received by:		Date/Time:		Samples Intact: <input checked="" type="radio"/> Yes <input type="radio"/> No														

2109138

Sample Receipt Checklist

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

Client: Crestone Client Project ID: Parker 1

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

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

Temp (°C)	<u>20</u>
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Thermometer ID: 61857155-K

	Yes	No	N/A	Comments (if any)
If samples require cooling, was the temperature at 4°C +/- 2°C <sup>(1)</sup> ? NOTE: If samples are delivered the same day of sampling, this requirement is met provided that there is evidence that cooling has begun.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<u>on ice</u>
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 checked="" type="checkbox"/> <u>Weg</u>	
If custody seals are present, are they intact <sup>(1)</sup> ?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Are samples with holding times due within 48 hours sample due within 48 hours present?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" 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? <b>If yes, contact client and note in narrative.</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Are samples preserved that require preservation <b>(excluding cooling)</b> <sup>(1)</sup> ? Note the type of preservative in the Comments column – HCl, H2SO4, NaOH, HNO3, ect	<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.

NG  
Custodian Printed Name or Initials

Will Dahi  
Signature of Custodian

9/9/21  
Date/Time



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

Project: Parker 1

Project Number: [none]  
Project Manager: Brent Hedstrom

**Reported:**  
09/20/21 13:36

**Surface Casing**  
**2109138-01 (Water)**

**Summit Scientific**

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

Date Sampled: **09/01/21 00:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Benzene	ND	1.0		ug/l	1	BEI0271	09/13/21	09/16/21	EPA 8260B	
Toluene	ND	1.0		"	"	"	"	"	"	
Ethylbenzene	ND	1.0		"	"	"	"	"	"	
<b>Xylenes (total)</b>	<b>19</b>	2.0		"	"	"	"	"	"	
Gasoline Range Hydrocarbons	ND	500		"	"	"	"	"	"	

Date Sampled: **09/01/21 00:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: 1,2-Dichloroethane-d4		116 %		23-173		"	"	"	"	
Surrogate: Toluene-d8		103 %		20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		99.2 %		21-167		"	"	"	"	

**Extractable Petroleum Hydrocarbons by 8015**

Date Sampled: **09/01/21 00:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
C10-C28 (DRO)	ND	5.0		mg/L	1	BEI0272	09/13/21	09/15/21	EPA 8015M	

Date Sampled: **09/01/21 00:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: o-Terphenyl		136 %		58.9-148		"	"	"	"	

**Total Metals by EPA Method 200.8**

Date Sampled: **09/01/21 00:00**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
<b>Calcium</b>	<b>15900</b>	500		ug/l	10	BEI0211	09/10/21	09/11/21	EPA 200.8	
<b>Magnesium</b>	<b>1490</b>	500		"	"	"	"	"	"	

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**Surface Casing**  
**2109138-01 (Water)**

**Summit Scientific**

**Total Metals by EPA Method 200.8**

Analyte	Result	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method
Potassium	3640	500	ug/l	10	BEI0211	09/10/21	09/11/21	EPA 200.8
Sodium	451000	500	"	"	"	"	"	"

**Anions by EPA Method 300.0**

Date Sampled: **09/01/21 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Chloride	491	30.0	mg/L	500	BEI0289	09/14/21	09/14/21	EPA 300.0	
Sulfate	2.51	0.300	"	1	"	"	"	"	

**Total Dissolved Solids by SM2540C**

Date Sampled: **09/01/21 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Total Dissolved Solids	1220	10.0	mg/L	1	BEI0205	09/10/21	09/10/21	SM2540C	

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Project: Parker 1  
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**Reported:**  
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**Volatile Organic Compounds by EPA Method 8260B - Quality Control**

**Summit Scientific**

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

**Batch BEI0271 - EPA 5030 Water MS**

**Blank (BEI0271-BLK1)**

Prepared: 09/13/21 Analyzed: 09/15/21

Benzene	ND	1.0	ug/l							
Toluene	ND	1.0	"							
Ethylbenzene	ND	1.0	"							
Xylenes (total)	ND	2.0	"							
Gasoline Range Hydrocarbons	ND	500	"							
<i>Surrogate: 1,2-Dichloroethane-d4</i>	12.9		"	13.3		97.1	23-173			
<i>Surrogate: Toluene-d8</i>	13.6		"	13.3		102	20-170			
<i>Surrogate: 4-Bromofluorobenzene</i>	12.6		"	13.3		94.9	21-167			

**LCS (BEI0271-BS1)**

Prepared: 09/13/21 Analyzed: 09/15/21

Benzene	28.9	1.0	ug/l	33.3		86.8	70-130			
Toluene	33.9	1.0	"	33.3		102	70-130			
Ethylbenzene	37.3	1.0	"	33.3		112	70-130			
m,p-Xylene	75.4	2.0	"	66.7		113	70-130			
o-Xylene	35.9	1.0	"	33.3		108	70-130			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	12.7		"	13.3		95.2	23-173			
<i>Surrogate: Toluene-d8</i>	13.6		"	13.3		102	20-170			
<i>Surrogate: 4-Bromofluorobenzene</i>	13.1		"	13.3		98.2	21-167			

**Matrix Spike (BEI0271-MS1)**

Source: 2109142-01

Prepared: 09/13/21 Analyzed: 09/15/21

Benzene	29.6	1.0	ug/l	33.3	ND	88.8	70-130			
Toluene	34.7	1.0	"	33.3	ND	104	70-130			
Ethylbenzene	38.4	1.0	"	33.3	ND	115	70-130			
m,p-Xylene	76.9	2.0	"	66.7	ND	115	70-130			
o-Xylene	36.8	1.0	"	33.3	ND	110	70-130			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	13.2		"	13.3		99.3	23-173			
<i>Surrogate: Toluene-d8</i>	13.7		"	13.3		103	20-170			
<i>Surrogate: 4-Bromofluorobenzene</i>	13.1		"	13.3		98.0	21-167			

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 09/20/21 13:36

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

**Summit Scientific**

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

**Batch BEI0271 - EPA 5030 Water MS**

**Matrix Spike Dup (BEI0271-MSD1)**

Source: 2109142-01

Prepared: 09/13/21 Analyzed: 09/15/21

Benzene	28.8	1.0	ug/l	33.3	ND	86.4	70-130	2.74	30	
Toluene	33.6	1.0	"	33.3	ND	101	70-130	3.04	30	
Ethylbenzene	37.1	1.0	"	33.3	ND	111	70-130	3.47	30	
m,p-Xylene	75.2	2.0	"	66.7	ND	113	70-130	2.30	30	
o-Xylene	36.4	1.0	"	33.3	ND	109	70-130	1.15	30	
Surrogate: 1,2-Dichloroethane-d4	13.4		"	13.3		101	23-173			
Surrogate: Toluene-d8	13.4		"	13.3		101	20-170			
Surrogate: 4-Bromofluorobenzene	13.4		"	13.3		101	21-167			

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 09/20/21 13:36

**Extractable Petroleum Hydrocarbons by 8015 - Quality Control**  
**Summit Scientific**

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

**Batch BEI0272 - EPA 3520B**

**Blank (BEI0272-BLK1)**

Prepared: 09/13/21 Analyzed: 09/15/21

C10-C28 (DRO) ND 5.0 mg/L

**LCS (BEI0272-BS1)**

Prepared: 09/13/21 Analyzed: 09/15/21

C10-C28 (DRO) 51.5 5.0 mg/L 50.0 103 70-130

**LCS Dup (BEI0272-BSD1)**

Prepared: 09/13/21 Analyzed: 09/15/21

C10-C28 (DRO) 55.7 5.0 mg/L 50.0 111 70-130 7.77 20

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**Total Metals by EPA Method 200.8 - Quality Control**  
**Summit Scientific**

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

**Batch BEI0211 - EPA 200.8**

**Blank (BEI0211-BLK1)**

Prepared & Analyzed: 09/10/21

Calcium	ND	50.0	ug/l						
Magnesium	ND	50.0	"						
Potassium	ND	50.0	"						
Sodium	ND	50.0	"						

**LCS (BEI0211-BS1)**

Prepared & Analyzed: 09/10/21

Calcium	5430	50.0	ug/l	5000		109	85-115		
Magnesium	5070	50.0	"	5000		101	85-115		
Potassium	5040	50.0	"	5000		101	85-115		
Sodium	5050	50.0	"	5000		101	85-115		

**Duplicate (BEI0211-DUP1)**

Source: 2109068-01

Prepared: 09/10/21 Analyzed: 09/11/21

Calcium	297000	50.0	ug/l		294000			0.765	20
Magnesium	94700	50.0	"		95200			0.520	20
Potassium	8860	50.0	"		8900			0.364	20
Sodium	95700	50.0	"		95600			0.123	20

**Matrix Spike (BEI0211-MS1)**

Source: 2109068-01

Prepared: 09/10/21 Analyzed: 09/11/21

Calcium	299000	50.0	ug/l	5000	294000	98.8	70-130		
Magnesium	102000	50.0	"	5000	95200	127	70-130		
Potassium	13900	50.0	"	5000	8900	100	70-130		
Sodium	102000	50.0	"	5000	95600	128	70-130		

**Matrix Spike Dup (BEI0211-MSD1)**

Source: 2109068-01

Prepared: 09/10/21 Analyzed: 09/11/21

Calcium	298000	50.0	ug/l	5000	294000	71.2	70-130	0.462	25
Magnesium	101000	50.0	"	5000	95200	109	70-130	0.898	25
Potassium	13700	50.0	"	5000	8900	96.8	70-130	1.29	25
Sodium	102000	50.0	"	5000	95600	120	70-130	0.392	25

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**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 BEI0289 - General Preparation**

**Blank (BEI0289-BLK1)**

Prepared & Analyzed: 09/14/21

Chloride	ND	0.0600	mg/L							
Sulfate	ND	0.300	"							

**LCS (BEI0289-BS1)**

Prepared & Analyzed: 09/14/21

Chloride	2.94	0.0600	mg/L	3.00	97.9	90-110				
Sulfate	16.0	0.300	"	15.0	107	90-110				

**Duplicate (BEI0289-DUP1)**

Source: 2109185-01

Prepared & Analyzed: 09/14/21

Chloride	127	0.0600	mg/L		95.2		28.4	20		QM-02
Sulfate	ND	0.300	"		1230		200	20		QM-02

**Matrix Spike (BEI0289-MS1)**

Source: 2109185-01

Prepared & Analyzed: 09/14/21

Chloride	130	0.0600	mg/L	3.00	95.2	NR	80-120			QM-02
Sulfate	ND	0.300	"	15.0	1230	NR	80-120			QM-02

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Project: Parker 1

Project Number: [none]  
 Project Manager: Brent Hedstrom

**Reported:**  
 09/20/21 13:36

**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 BEI0205 - General Preparation**

**Blank (BEI0205-BLK1)**

Prepared & Analyzed: 09/10/21

Total Dissolved Solids                      ND                      10.0                      mg/L

**Duplicate (BEI0205-DUP1)**

**Source: 2109101-01**

Prepared & Analyzed: 09/10/21

Total Dissolved Solids                      1610                      10.0                      mg/L                      1610                      0.124                      20

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Project: Parker 1  
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09/20/21 13:36

### 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