

Summit Scientific

4653 Table Mountain Drive, Golden, Colorado 80403

303.277.9310

February 04, 2021

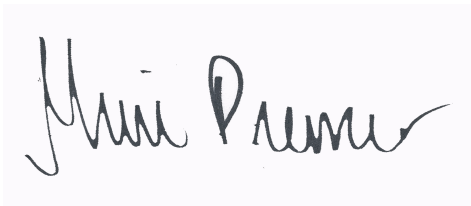
Brent Hedstrom
Crestone Peak Resources
2020 E. Grand Avenue, Suite 515
Laramie, WY 82070

RE: AA 12-8

Work Order #2101200

Enclosed are the results of analyses for samples received by Summit Scientific on 01/20/21 09:00. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink, reading "Muri Premier", is displayed on a light purple rectangular background.

Muri Premier For Paul Shrewsbury
President



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

Project: AA 12-8
Project Number: [none]
Project Manager: Brent Hedstrom

Reported:
02/04/21 10:07

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Surface Casing	2101200-01	Water	01/12/21 13:00	01/20/21 09:00

Summit Scientific

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S₂

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

2/10/200

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



Phone: 303-434-3007

Project Name: AA 12-8

Sampler Name:

Project Number:

					Preservative				Matrix				Analysis Requested								Special Instructions
ID	Sample Description	Date Sampled	Time Sampled	# of containers	HCl	HNO3	None	Other	Water	Soil	Air-Canister #	Other	Anion	Cations	TDS	BTEX 8020	DRO	GRO	RSK-175		
1	Surface casing	1/12/2021	13:00	9		X	X		X				X	X	X	X	X	X	X		COGCC 267878
2																					LOE/AFE W11930 8503
3																					
4																					
5																					
6																					
7																					
8																					
9																					
10																					

Relinquished by: 	Date/Time: 1-20-21 9AM	Received by: 	Date/Time: 1-20-21 9:00	Turn Around Time (Check) 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"/>	Notes:
Relinquished by:	Date/Time:	Received by:	Date/Time:	Sample Integrity: Temperature Upon Receipt: 3.7 Samples Intact: <input checked="" type="radio"/> Yes <input type="radio"/> No	
Relinquished by:	Date/Time:	Received by:	Date/Time:		

Sample Receipt Checklist

S2 Work Order 2101200

Client: Crestone Peak Resources Client Project ID: AA 12-8

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

☒ ☐ ☐ ☐ ☐

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

Temp (°C)	3.7
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Thermometer ID: 61857155-K

	Yes	No	N/A	Comments (if any)
If samples require cooling, was the temperature at 4°C +/- 2°C ⁽¹⁾ ? NOTE: If samples are delivered the same day of sampling, this requirement is met provided that there is evidence that cooling has begun.	<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 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 ⁽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, ect	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	HNO3
If samples are acid preserved for metals, is the pH ≤ 2 ⁽¹⁾ ? Record the pH in Comments.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input 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): HNO3 needs to be added @ digestion				
⁽¹⁾ If NO, then contact the client before proceeding with analysis and note in case narrative.				

MP

Custodian Printed Name or Initials

Muri Premer

Signature of Custodian

1/20/21

Date/Time



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

Project: AA 12-8
Project Number: [none]
Project Manager: Brent Hedstrom

Reported:
02/04/21 10:07

Surface Casing
2101200-01 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **01/12/21 13:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	600000	10000	ug/l	10000	BEA0281	01/26/21	01/30/21	EPA 8260B	
Toluene	980000	10000	"	"	"	"	"	"	
Ethylbenzene	470000	10000	"	"	"	"	"	"	
Xylenes (total)	2300000	20000	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	160000000	5000000	"	"	"	"	"	"	

Date Sampled: **01/12/21 13:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4	400 %	23-173	"	"	"	"	"	"	S-02
Surrogate: Toluene-d8	1390 %	20-170	"	"	"	"	"	"	S-02
Surrogate: 4-Bromofluorobenzene	1450 %	21-167	"	"	"	"	"	"	S-02

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **01/12/21 13:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	270000	50	mg/L	10	BEA0203	01/21/21	01/30/21	EPA 8015M	

Date Sampled: **01/12/21 13:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl	550 %	58.9-148	"	"	"	"	"	"	S-02

Dissolved Gases by RSK-175

Date Sampled: **01/12/21 13:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Methane	7.6	1.0	mg/L	100	BEA0264	01/22/21	01/25/21	RSK-175 mod	
Ethane	18	1.0	"	"	"	"	"	"	
Propane	20	1.0	"	"	"	"	"	"	

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Surface Casing
2101200-01 (Water)

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Dissolved Gases by RSK-175

Date Sampled: **01/12/21 13:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: Ethene		13.7 %	70-130		BEA0264	01/22/21	01/25/21	RSK-175 mod	S-02

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Project: AA 12-8
Project Number: [none]
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Reported:
02/04/21 10:07

Volatile Organic Compounds by EPA Method 8260B - Quality Control

Summit Scientific

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

Batch BEA0281 - EPA 5030 Water MS

Blank (BEA0281-BLK1)

Prepared & Analyzed: 01/26/21

Benzene	ND	1.0	ug/l							
Toluene	ND	1.0	"							
Ethylbenzene	ND	1.0	"							
Xylenes (total)	ND	2.0	"							
Gasoline Range Hydrocarbons	ND	500	"							
Surrogate: 1,2-Dichloroethane-d4	14.6		"	13.3		109	23-173			
Surrogate: Toluene-d8	13.8		"	13.3		104	20-170			
Surrogate: 4-Bromofluorobenzene	12.8		"	13.3		96.1	21-167			

LCS (BEA0281-BS1)

Prepared & Analyzed: 01/26/21

Benzene	44.2	1.0	ug/l	41.7		106	70-130			
Toluene	40.3	1.0	"	41.7		96.6	70-130			
Ethylbenzene	42.4	1.0	"	41.7		102	70-130			
m,p-Xylene	80.8	2.0	"	83.3		97.0	70-130			
o-Xylene	38.9	1.0	"	41.7		93.4	70-130			
Surrogate: 1,2-Dichloroethane-d4	13.9		"	13.3		104	23-173			
Surrogate: Toluene-d8	13.4		"	13.3		100	20-170			
Surrogate: 4-Bromofluorobenzene	13.3		"	13.3		100	21-167			

Matrix Spike (BEA0281-MS1)

Source: 2101209-21

Prepared & Analyzed: 01/26/21

Benzene	47.1	1.0	ug/l	41.7	ND	113	70-130			
Toluene	42.5	1.0	"	41.7	ND	102	70-130			
Ethylbenzene	43.1	1.0	"	41.7	ND	103	70-130			
m,p-Xylene	81.7	2.0	"	83.3	ND	98.1	70-130			
o-Xylene	39.8	1.0	"	41.7	ND	95.6	70-130			
Surrogate: 1,2-Dichloroethane-d4	16.6		"	13.3		124	23-173			
Surrogate: Toluene-d8	13.8		"	13.3		104	20-170			
Surrogate: 4-Bromofluorobenzene	13.9		"	13.3		104	21-167			

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Project: AA 12-8
Project Number: [none]
Project Manager: Brent Hedstrom

Reported:
02/04/21 10:07

Volatile Organic Compounds by EPA Method 8260B - Quality Control
Summit Scientific

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

Batch BEA0281 - EPA 5030 Water MS

Matrix Spike Dup (BEA0281-MSD1)	Source: 2101209-21			Prepared & Analyzed: 01/26/21						
Benzene	44.3	1.0	ug/l	41.7	ND	106	70-130	6.19	30	
Toluene	40.4	1.0	"	41.7	ND	96.8	70-130	5.21	30	
Ethylbenzene	43.1	1.0	"	41.7	ND	103	70-130	0.0464	30	
m,p-Xylene	81.9	2.0	"	83.3	ND	98.3	70-130	0.220	30	
o-Xylene	39.7	1.0	"	41.7	ND	95.4	70-130	0.226	30	
Surrogate: 1,2-Dichloroethane-d4	14.3		"	13.3		107	23-173			
Surrogate: Toluene-d8	13.2		"	13.3		98.9	20-170			
Surrogate: 4-Bromofluorobenzene	13.8		"	13.3		104	21-167			

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Project Number: [none]
Project Manager: Brent Hedstrom

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Extractable Petroleum Hydrocarbons by 8015 - Quality Control
Summit Scientific

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

Batch BEA0203 - EPA 3520B

Blank (BEA0203-BLK1)

Prepared & Analyzed: 01/21/21

C10-C28 (DRO) ND 5.0 mg/L

LCS (BEA0203-BS1)

Prepared & Analyzed: 01/21/21

C10-C28 (DRO) 43.1 5.0 mg/L 33.3 129 70-130

Matrix Spike (BEA0203-MS1)

Source: 2101149-01

Prepared & Analyzed: 01/21/21

C10-C28 (DRO) 41.9 5.0 mg/L 33.3 1.04 123 70-130

Matrix Spike Dup (BEA0203-MSD1)

Source: 2101149-01

Prepared & Analyzed: 01/21/21

C10-C28 (DRO) 41.1 5.0 mg/L 33.3 1.04 120 70-130 2.01 20

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Project: AA 12-8
Project Number: [none]
Project Manager: Brent Hedstrom

Reported:
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Dissolved Gases by RSK-175 - Quality Control
Summit Scientific

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

Batch BEA0264 - GC

Blank (BEA0264-BLK1)

Prepared: 01/22/21 Analyzed: 01/25/21

Methane	ND	0.010	mg/L							
Ethane	ND	0.010	"							
Propane	ND	0.010	"							
Surrogate: Ethene	0.0387		"	0.0364		106	70-130			

LCS (BEA0264-BS1)

Prepared: 01/22/21 Analyzed: 01/25/21

Methane	0.030	0.010	mg/L	0.0428		71.1	70-130			
Ethane	0.090	0.010	"	0.0798		112	70-130			
Propane	0.18	0.010	"	0.139		130	70-130			
Surrogate: Ethene	0.0728		"	0.0728		100	70-130			

Duplicate (BEA0264-DUP1)

Source: 2101200-01

Prepared: 01/22/21 Analyzed: 01/25/21

Methane	7.7	1.0	mg/L		7.6			1.56	30	
Ethane	18	1.0	"		18			1.29	30	
Propane	21	1.0	"		20			1.76	30	
Surrogate: Ethene	0.00400		"	0.0364		11.0	70-130			S-02

Matrix Spike (BEA0264-MS1)

Source: 2101200-01

Prepared: 01/22/21 Analyzed: 01/25/21

Methane	7.7	1.0	mg/L	0.0428	7.6	234	70-130			QM-02
Ethane	18	1.0	"	0.0798	18	814	70-130			QM-02
Propane	21	1.0	"	0.139	20	555	70-130			QM-02
Surrogate: Ethene	0.00800		"	0.0728		11.0	70-130			QM-02

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Notes and Definitions

S-02 The surrogate recovery for this sample cannot be accurately quantified due to interference from coeluting organic compounds present in the sample extract.

QM-02 The RPD and/or percent recovery for this QC spike 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