

# Summit Scientific

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4653 Table Mountain Drive, Golden, Colorado 80403

303.277.9310

August 11, 2020

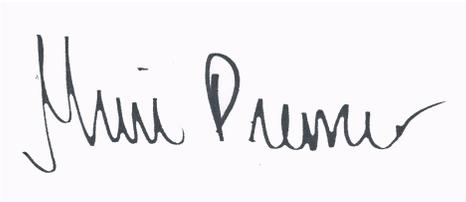
Brent Hedstrom  
Crestone Peak Resources  
2020 E. Grand Avenue, Suite 515  
Laramie, WY 82070

RE: FILE 3I-32H

Work Order #2007304

Enclosed are the results of analyses for samples received by Summit Scientific on 07/30/20 12:00. 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".

Muri Premer For Paul Shrewsbury  
President



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

Project: FILE 3I-32H

Project Number: [none]

Project Manager: Brent Hedstrom

**Reported:**  
08/11/20 17:00

**ANALYTICAL REPORT FOR SAMPLES**

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
FILE 3I-32H	2007304-01	Water	07/21/20 00:00	07/30/20 12:00

Summit Scientific

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# Summit Scientific

2007304

S<sub>2</sub>

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

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

LOE C82218

Phone: 303-434-3007

Project Name: FILE 3I-32H

COGCC 434284

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	FILE 3I-32H	7/21/2020		11					X					X	X	X	X	X	X	X	
2																					
3																					
4																					
5																					
6																					
7																					
8																					
9																					
10																					

Relinquished by: 	Date/Time: 12:00 7/30/20	Received by: 	Date/Time: 12:00 07-30-20	Turn Around Time (Check) Same Day <input type="checkbox"/> 72 hours 24 hours <input type="checkbox"/> Standard <input checked="" type="checkbox"/> 48 hours <input type="checkbox"/>	Notes:  ON ICE
Relinquished by:	Date/Time:	Received by:	Date/Time:	Sample Integrity: Temperature Upon Receipt: 11.6 Samples Intact: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
Relinquished by:	Date/Time:	Received by:	Date/Time:		

2007304

Sample Receipt Checklist

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

Client: Crestone Peak Resources Client Project ID: File 31-32H

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

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

Temp (°C)	11.6
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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"/>	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 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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	anions
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 checked="" type="checkbox"/>	<input 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, ect	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input 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 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 preserved bottle not at less than 2

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

MP  
Custodian Printed Name or Initials

  
Signature of Custodian

7/30/20  
Date/Time



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

Project: FILE 3I-32H

Project Number: [none]  
Project Manager: Brent Hedstrom

**Reported:**  
08/11/20 17:00

**FILE 3I-32H**  
**2007304-01 (Water)**

Summit Scientific

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

Date Sampled: **07/21/20 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>Benzene</b>	<b>7300</b>	1000	ug/l	1000	2008002	08/03/20	08/04/20	EPA 8260B	
<b>Toluene</b>	<b>56000</b>	1000	"	"	"	"	"	"	
<b>Ethylbenzene</b>	<b>23000</b>	1000	"	"	"	"	"	"	
<b>Xylenes (total)</b>	<b>180000</b>	2000	"	"	"	"	"	"	
<b>Gasoline Range Hydrocarbons</b>	<b>16000000</b>	500000	"	"	"	"	"	"	

Date Sampled: **07/21/20 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4	144 %	23-173	"	"	"	"	"	"	
Surrogate: Toluene-d8	104 %	20-170	"	"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene	190 %	21-167	"	"	"	"	"	"	S-02

**Extractable Petroleum Hydrocarbons by 8015**

Date Sampled: **07/21/20 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>C10-C28 (DRO)</b>	<b>1000000</b>	500	mg/L	100	2008003	08/03/20	08/04/20	EPA 8015M	

Date Sampled: **07/21/20 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl	21500 %	58.9-148	"	"	"	"	"	"	S-02

**Dissolved Gases by RSK-175**

Date Sampled: **07/21/20 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>Methane</b>	<b>1.6</b>	1.0	mg/L	100	2008073	08/03/20	08/11/20	RSK-175 mod	
<b>Ethane</b>	<b>1.7</b>	0.10	"	10	"	"	"	"	
<b>Propane</b>	<b>0.60</b>	0.10	"	"	"	"	"	"	

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Project: FILE 3I-32H

Project Number: [none]  
 Project Manager: Brent Hedstrom

**Reported:**  
 08/11/20 17:00

**FILE 3I-32H**  
**2007304-01 (Water)**

**Summit Scientific**

**Dissolved Gases by RSK-175**

Date Sampled: **07/21/20 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: Ethene		24.7 %	70-130		2008073	08/03/20	08/11/20	RSK-175 mod	S-06

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Project: FILE 3I-32H  
Project Number: [none]  
Project Manager: Brent Hedstrom

**Reported:**  
08/11/20 17:00

**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 2008002 - EPA 5030 Water MS**

**Blank (2008002-BLK1)**

Prepared: 08/03/20 Analyzed: 08/05/20

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>	13.9		"	13.3		104		23-173			
<i>Surrogate: Toluene-d8</i>	12.7		"	13.3		95.6		20-170			
<i>Surrogate: 4-Bromofluorobenzene</i>	11.9		"	13.3		89.0		21-167			

**LCS (2008002-BS1)**

Prepared: 08/03/20 Analyzed: 08/05/20

Benzene	36.9	1.0	ug/l	33.3		111		70-130			
Toluene	37.3	1.0	"	33.3		112		70-130			
Ethylbenzene	41.1	1.0	"	33.3		123		70-130			
m,p-Xylene	83.4	2.0	"	66.7		125		70-130			
o-Xylene	40.0	1.0	"	33.3		120		70-130			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	14.1		"	13.3		106		23-173			
<i>Surrogate: Toluene-d8</i>	13.0		"	13.3		97.4		20-170			
<i>Surrogate: 4-Bromofluorobenzene</i>	12.5		"	13.3		94.1		21-167			

**Matrix Spike (2008002-MS1)**

Source: 2007320-01

Prepared: 08/03/20 Analyzed: 08/05/20

Benzene	37.4	1.0	ug/l	33.3	ND	112		70-130			
Toluene	38.1	1.0	"	33.3	ND	114		70-130			
Ethylbenzene	40.6	1.0	"	33.3	ND	122		70-130			
m,p-Xylene	82.0	2.0	"	66.7	ND	123		70-130			
o-Xylene	38.7	1.0	"	33.3	ND	116		70-130			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	14.5		"	13.3		108		23-173			
<i>Surrogate: Toluene-d8</i>	13.1		"	13.3		98.3		20-170			
<i>Surrogate: 4-Bromofluorobenzene</i>	12.4		"	13.3		93.2		21-167			

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Project: FILE 3I-32H

Project Number: [none]  
 Project Manager: Brent Hedstrom

**Reported:**  
 08/11/20 17:00

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

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

**Batch 2008002 - EPA 5030 Water MS**

**Matrix Spike Dup (2008002-MSD1)**

Source: 2007320-01

Prepared: 08/03/20 Analyzed: 08/05/20

Benzene	37.7	1.0	ug/l	33.3	ND	113	70-130	0.692	30	
Toluene	38.9	1.0	"	33.3	ND	117	70-130	2.18	30	
Ethylbenzene	40.8	1.0	"	33.3	ND	122	70-130	0.442	30	
m,p-Xylene	81.4	2.0	"	66.7	ND	122	70-130	0.710	30	
o-Xylene	39.4	1.0	"	33.3	ND	118	70-130	1.95	30	
Surrogate: 1,2-Dichloroethane-d4	15.6		"	13.3		117	23-173			
Surrogate: Toluene-d8	13.1		"	13.3		98.0	20-170			
Surrogate: 4-Bromofluorobenzene	12.9		"	13.3		96.6	21-167			

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Project: FILE 3I-32H

Project Number: [none]  
 Project Manager: Brent Hedstrom

**Reported:**  
 08/11/20 17:00

**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 2008003 - EPA 3520B**

**Blank (2008003-BLK1)**

Prepared: 08/03/20 Analyzed: 08/04/20

C10-C28 (DRO) ND 5.0 mg/L

**LCS (2008003-BS1)**

Prepared: 08/03/20 Analyzed: 08/04/20

C10-C28 (DRO) 49.8 5.0 mg/L 50.0 99.6 70-130

**Matrix Spike (2008003-MS1)**

Source: 2007321-03

Prepared: 08/03/20 Analyzed: 08/04/20

C10-C28 (DRO) 45.0 5.0 mg/L 50.0 ND 90.0 70-130

**Matrix Spike Dup (2008003-MSD1)**

Source: 2007321-03

Prepared: 08/03/20 Analyzed: 08/04/20

C10-C28 (DRO) 39.1 5.0 mg/L 50.0 ND 78.3 70-130 13.9 20

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 Laramie WY, 82070

Project: FILE 3I-32H

Project Number: [none]  
 Project Manager: Brent Hedstrom

**Reported:**  
 08/11/20 17:00

**Dissolved Gases by RSK-175 - Quality Control**  
**Summit Scientific**

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

**Batch 2008073 - GC**

**Blank (2008073-BLK1)**

Prepared: 08/07/20 Analyzed: 08/10/20

Methane	ND	0.010	mg/L							
Ethane	ND	0.010	"							
Propane	ND	0.010	"							
Surrogate: Ethene	0.0279		"	0.0364		76.6	70-130			

**LCS (2008073-BS1)**

Prepared: 08/07/20 Analyzed: 08/10/20

Methane	0.033	0.010	mg/L	0.0428		76.9	70-130			
Ethane	0.083	0.010	"	0.0798		104	70-130			
Propane	0.12	0.010	"	0.139		88.4	70-130			
Surrogate: Ethene	0.0716		"	0.0728		98.3	70-130			

**LCS Dup (2008073-BSD1)**

Prepared: 08/07/20 Analyzed: 08/10/20

Methane	0.032	0.010	mg/L	0.0428		75.1	70-130	2.46	200	
Ethane	0.086	0.010	"	0.0798		108	70-130	3.54	200	
Propane	0.13	0.010	"	0.139		92.4	70-130	4.46	200	
Surrogate: Ethene	0.0664		"	0.0728		91.2	70-130			

**Duplicate (2008073-DUP1)**

Source: 2007305-01

Prepared: 08/07/20 Analyzed: 08/10/20

Methane	0.63	0.10	mg/L		0.66			5.41	30	
Ethane	0.34	0.10	"		0.36			3.14	30	
Propane	0.13	0.10	"		0.13			2.28	30	
Surrogate: Ethene	0.0340		"	0.0364		93.4	70-130			

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Project: FILE 3I-32H

Project Number: [none]  
Project Manager: Brent Hedstrom

**Reported:**  
08/11/20 17:00

### Notes and Definitions

- S-06 The recovery of this surrogate is outside control limits due to sample dilution required from high analyte concentration and/or matrix interferences.
- S-02 The surrogate recovery for this sample cannot be accurately quantified due to interference from coeluting organic compounds present in the sample extract.
- 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