

Summit Scientific

4653 Table Mountain Drive, Golden, Colorado 80403

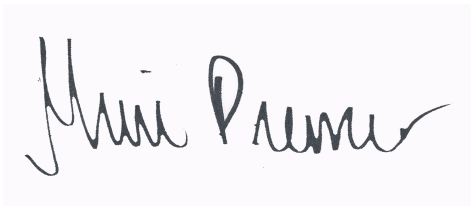
303.277.9310

November 25, 2020

Brent Hedstrom
Crestone Peak Resources
2020 E. Grand Avenue, Suite 515
Laramie, WY 82070
RE: Francis Arens 4-6-15
Work Order #2011152

Enclosed are the results of analyses for samples received by Summit Scientific on 11/12/20 11:10. 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: Francis Arens 4-6-15

Project Number: [none]
Project Manager: Brent Hedstrom

Reported:
11/25/20 09:54

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Surface casing	2011152-01	Water	11/03/20 00:00	11/12/20 11:10

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2011152

S₂

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 W31522 Code 8503 COGCC 286620

Phone: 303-434-3007

Project Name: Francis Arens 4-6-15

Sampler Name:

Project Number:

ID	Sample Description	Date Sampled	Time Sampled	# of containers	Preservative				Matrix				Analysis Requested							Special Instructions		
					HCl	HNO ₃	None	Other	Water	Soil	Air-Canister #	Other	Anion	Cations	TDS	BTEX 8020	DRO	GRO	RSK-175			
1	Surface casing	11/3/2020		9		X	X		X					X	X	X	X	X	X	X		
2																						
3																						
4																						
5																						
6																						
7																						
8																						
9																						
10																						

Relinquished by: <i>BH</i>	Date/Time: 11/12/20 11:10	Received by: <i>MR</i>	Date/Time: 11-12-20 11:10	Turn Around Time (Check)	Notes:
Relinquished by:	Date/Time:	Received by:	Date/Time:	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"/>	
				Sample Integrity:	
				Temperature Upon Receipt: 6.2	
				Samples Intact: <input checked="" type="radio"/> Yes <input type="radio"/> No	

2011152

Sample Receipt Checklist

S2 Work Order _____

Client: Crestone Peak ResourcesClient Project ID: Francis Arens 4-6-15Shipped Via: H.D./P.U./FedEx/UPS/USPS/Other

Airbill #: _____

Matrix (check all that apply):

 Air Soil/Solid Water Other:_____
(Describe)

Temp (°C)	6.2
-----------	-----

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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	anions
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 checked="" type="checkbox"/>	<input 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"/>	add @ lab
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.				

MP

Custodian Printed Name or Initials

Muri Premier

Signature of Custodian

11/12/20

Date/Time



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Surface casing
2011152-01 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: **11/03/20 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	910000	10000	ug/l	10000	BDK0195	11/17/20	11/17/20	EPA 8260B	
Toluene	1600000	10000	"	"	"	"	"	"	
Ethylbenzene	580000	10000	"	"	"	"	"	"	
Xylenes (total)	3700000	20000	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	77000000	5000000	"	"	"	"	"	"	

Date Sampled: **11/03/20 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		326 %	23-173		"	"	"	"	S-02
Surrogate: Toluene-d8		128 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		923 %	21-167		"	"	"	"	S-02

Extractable Petroleum Hydrocarbons by 8015

Date Sampled: **11/03/20 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
C10-C28 (DRO)	290000	5.0	mg/L	1	BDK0196	11/17/20	11/18/20	EPA 8015M	

Date Sampled: **11/03/20 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: o-Terphenyl		287 %	58.9-148		"	"	"	"	S-02

Dissolved Gases by RSK-175

Date Sampled: **11/03/20 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Methane	3.4	1.0	mg/L	100	BDK0224	11/17/20	11/19/20	RSK-175 mod	
Ethane	9.0	1.0	"	"	"	"	"	"	
Propane	19	1.0	"	"	"	"	"	"	

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**Surface casing
 2011152-01 (Water)**

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Dissolved Gases by RSK-175

Date Sampled: **11/03/20 00:00**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: Ethene		11.0 %	70-130		BDK0224	11/17/20	11/19/20	RSK-175 mod	S-04

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Extractable Petroleum Hydrocarbons by 8015 - Quality Control

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

Batch BDK0196 - EPA 3520B

Blank (BDK0196-BLK1)

Prepared: 11/17/20 Analyzed: 11/19/20

C10-C28 (DRO) ND 5.0 mg/L

LCS (BDK0196-BS1)

Prepared: 11/17/20 Analyzed: 11/19/20

C10-C28 (DRO) 49.0 5.0 mg/L 50.0 98.0 70-130

Matrix Spike (BDK0196-MS1)

Source: 2011148-01

Prepared: 11/17/20 Analyzed: 11/19/20

C10-C28 (DRO) 50.3 5.0 mg/L 50.0 4.26 92.0 70-130

Matrix Spike Dup (BDK0196-MSD1)

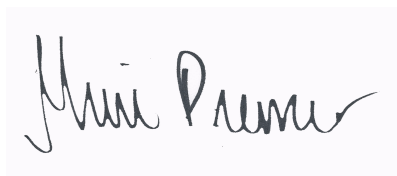
Source: 2011148-01

Prepared: 11/17/20 Analyzed: 11/19/20

C10-C28 (DRO) 49.0 5.0 mg/L 50.0 4.26 89.5 70-130 2.50 20

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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 BDK0224 - GC

Blank (BDK0224-BLK1)

Prepared: 11/17/20 Analyzed: 11/19/20

Methane	ND	0.010	mg/L							
Ethane	ND	0.010	"							
Propane	ND	0.010	"							
Surrogate: Ethene	0.0397		"	0.0364		109	70-130			

LCS (BDK0224-BS1)

Prepared: 11/17/20 Analyzed: 11/19/20

Methane	0.033	0.010	mg/L	0.0428		77.4	70-130			
Ethane	0.077	0.010	"	0.0798		96.2	70-130			
Propane	0.12	0.010	"	0.139		83.5	70-130			
Surrogate: Ethene	0.0692		"	0.0728		95.1	70-130			

Duplicate (BDK0224-DUP1)

Source: 2011145-01

Prepared: 11/17/20 Analyzed: 11/19/20

Methane	3.5	1.0	mg/L		3.4			2.60	30	
Ethane	2.2	1.0	"		2.4			6.68	30	
Propane	2.0	1.0	"		2.0			0.603	30	
Surrogate: Ethene	0.0500		"	0.0364		137	70-130			S-06

Matrix Spike (BDK0224-MS1)

Source: 2011145-01

Prepared: 11/17/20 Analyzed: 11/19/20

Methane	4.3	1.0	mg/L	0.0428	3.4	NR	70-130			QM-02
Ethane	2.5	1.0	"	0.0798	2.4	198	70-130			QM-02
Propane	1.9	1.0	"	0.139	2.0	NR	70-130			QM-02
Surrogate: Ethene	0.0600		"	0.0728		82.4	70-130			

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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-04 A sample matrix effect prevented complete surrogate recovery.
- 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