

# Summit Scientific

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4653 Table Mountain Drive, Golden, Colorado 80403

303.277.9310

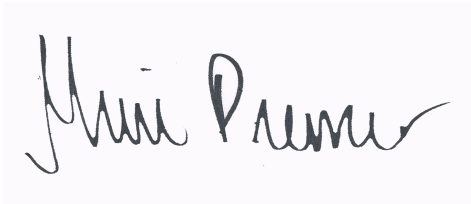
December 28, 2021

James Miller  
Civatas Resources  
650 Southgate Drive  
Windsor, CO 80550

RE: Brown 41-5  
Work Order #2111197

Enclosed are the results of analyses for samples received by Summit Scientific on 11/10/21 14:40. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read "Muri Premer", is displayed on a light purple rectangular background.

Muri Premer For Paul Shrewsbury  
President



Civatas Resources  
650 Southgate Drive  
Windsor CO, 80550

Project: Brown 41-5  
Project Number: [none]  
Project Manager: James Miller

**Reported:**  
12/28/21 10:49

### ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Brown 41-5	2111197-01	Water	11/10/21 10:29	11/10/21 14:40
Brown 41-5	2111197-02	Water	11/10/21 10:29	11/10/21 14:40

Summit Scientific

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# Summit Scientific

2111197

S<sub>2</sub>

4653 Table Mountain Drive ♦ Golden, Colorado 80403

303-277-9310

Page 1 of 1

Client: Civitas Resources

Project Manager: James Miller

Address: 650 Southgate Drive

E-Mail: jmillier@civiresources.com

City/State/Zip: Windsor, CO 80550

AFE#: COCW56957

Phone: 720-984-7460

Project Name: Brown 41-5

Sampler Name: Josh Rios

Project Number:

ID	Sample Description	Date Sampled	Time Sampled	# of containers	Preservative				Matrix				Analysis Requested								Special Instructions	
					HCl	HNO <sub>3</sub>	None	Other	Water	Soil	Air-Canister #	Other	Anion	Cations	TDS	BTEX 8020	DRO	GRO	RSK-175			
1	Brown 41-5	#####	10:29	1		X								X	X	X	X	X	X	X		
2	Brown 41-5	#####	10:29	1										X	X	X	X	X	X	X		
3																						
4																						
5																						
6																						
7																						
8																						
9																						
10																						

Relinquished by:	Date/Time:	Received by:	Date/Time:	Turn Around Time (Check)	Notes: COGCC EDD Bill to: Crestone
<i>Josh Rios</i>	11/10 2:40	<i>James Miller</i>	11-10-21 14:40	Same Day <input type="checkbox"/> 72 hours <input type="checkbox"/>	
Relinquished by:	Date/Time:	Received by:	Date/Time:	24 hours <input type="checkbox"/> Standard <input checked="" type="checkbox"/>	
Relinquished by:	Date/Time:	Received by:	Date/Time:	48 hours <input type="checkbox"/>	
				Sample Integrity:	
				Temperature Upon Receipt: 23.4	
				Samples Intact: <input checked="" type="radio"/> Yes <input type="radio"/> No	

S<sub>2</sub>

2111197

## Sample Receipt Checklist

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

Client: Civitas Resources Client Project ID: Brown 41-5

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

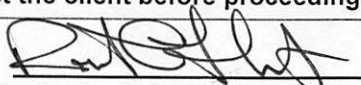
☐ ☒ ☐ ☐ ☐
Matrix (check all that apply): ☐ Air ☐ Soil/Solid ☒ Water ☐ Other: \_\_\_\_\_  
(Describe)

Temp (°C)	234
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Thermometer ID: G86A9201901378

	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 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, H <sub>2</sub> SO <sub>4</sub> , NaOH, HNO <sub>3</sub> , etc.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	HNO <sub>3</sub>
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.
  
 Custodian Printed Name or Initials

 11.10.21  
 Date/Time



Civatas Resources  
650 Southgate Drive  
Windsor CO, 80550

Project: Brown 41-5  
Project Number: [none]  
Project Manager: James Miller

**Reported:**  
12/28/21 10:49

**Brown 41-5**  
**2111197-01 (Water)**

**Summit Scientific**

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

Date Sampled: **11/10/21 10:29**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Benzene	ND	1.0	ug/l	1	BEK0324	11/15/21	11/16/21	EPA 8260B	
Toluene	ND	1.0	"	"	"	"	"	"	
Ethylbenzene	ND	1.0	"	"	"	"	"	"	
Xylenes (total)	ND	2.0	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	ND	500	"	"	"	"	"	"	

Date Sampled: **11/10/21 10:29**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Surrogate: 1,2-Dichloroethane-d4		96.4 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		99.2 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		99.3 %	21-167		"	"	"	"	

**Extractable Petroleum Hydrocarbons by 8015**

Date Sampled: **11/10/21 10:29**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
<b>C10-C28 (DRO)</b>	<b>230000</b>	5.0	mg/L	1	BEK0291	11/12/21	11/12/21	EPA 8015M	

Date Sampled: **11/10/21 10:29**

Analyte	Result	Reporting		Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit	Units						
Surrogate: o-Terphenyl		183 %	58.9-148		"	"	"	"	S-02

Summit Scientific

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650 Southgate Drive  
Windsor CO, 80550

Project: Brown 41-5  
Project Number: [none]  
Project Manager: James Miller

**Reported:**  
12/28/21 10:49

**Brown 41-5**  
**2111197-02 (Water)**

**Summit Scientific**

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

Date Sampled: **11/10/21 10:29**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Benzene	ND	1.0	ug/l	1	BEK0324	11/15/21	11/24/21	EPA 8260B	
Toluene	ND	1.0	"	"	"	"	"	"	
Ethylbenzene	ND	1.0	"	"	"	"	"	"	
Xylenes (total)	ND	2.0	"	"	"	"	"	"	
Gasoline Range Hydrocarbons	ND	500	"	"	"	"	"	"	

Date Sampled: **11/10/21 10:29**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: 1,2-Dichloroethane-d4		99.9 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		97.3 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		102 %	21-167		"	"	"	"	

**Extractable Petroleum Hydrocarbons by 8015**

Date Sampled: **11/10/21 10:29**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
<b>C10-C28 (DRO)</b>	<b>430000</b>	5.0	mg/L	1	BEK0291	11/12/21	11/12/21	EPA 8015M	

Date Sampled: **11/10/21 10:29**

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: o-Terphenyl		296 %	58.9-148		"	"	"	"	S-02

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Project: Brown 41-5  
Project Number: [none]  
Project Manager: James Miller

**Reported:**  
12/28/21 10:49

## 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 BEK0324 - EPA 5030 Water MS

##### Blank (BEK0324-BLK1)

Prepared: 11/15/21 Analyzed: 11/16/21

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	12.8		"	13.3		95.9	23-173			
Surrogate: Toluene-d8	13.1		"	13.3		98.2	20-170			
Surrogate: 4-Bromofluorobenzene	14.0		"	13.3		105	21-167			

##### LCS (BEK0324-BS1)

Prepared: 11/15/21 Analyzed: 11/16/21

Benzene	34.2	1.0	ug/l	41.7		82.1	70-130			
Toluene	35.6	1.0	"	41.7		85.6	70-130			
Ethylbenzene	41.6	1.0	"	41.7		99.8	70-130			
m,p-Xylene	80.7	2.0	"	83.3		96.9	70-130			
o-Xylene	38.3	1.0	"	41.7		91.9	70-130			
Surrogate: 1,2-Dichloroethane-d4	13.1		"	13.3		98.1	23-173			
Surrogate: Toluene-d8	13.2		"	13.3		99.2	20-170			
Surrogate: 4-Bromofluorobenzene	13.6		"	13.3		102	21-167			

##### Matrix Spike (BEK0324-MS1)

Source: 2111228-02

Prepared: 11/15/21 Analyzed: 11/16/21

Benzene	34.6	1.0	ug/l	41.7	ND	83.1	70-130			
Toluene	35.6	1.0	"	41.7	ND	85.5	70-130			
Ethylbenzene	42.2	1.0	"	41.7	ND	101	70-130			
m,p-Xylene	81.8	2.0	"	83.3	ND	98.1	70-130			
o-Xylene	38.9	1.0	"	41.7	ND	93.4	70-130			
Surrogate: 1,2-Dichloroethane-d4	13.5		"	13.3		101	23-173			
Surrogate: Toluene-d8	13.3		"	13.3		99.9	20-170			
Surrogate: 4-Bromofluorobenzene	14.4		"	13.3		108	21-167			

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Project: Brown 41-5  
Project Number: [none]  
Project Manager: James Miller

**Reported:**  
12/28/21 10:49

**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 BEK0324 - EPA 5030 Water MS**

Matrix Spike Dup (BEK0324-MSD1)	Source: 2111228-02			Prepared: 11/15/21 Analyzed: 11/16/21						
Benzene	34.4	1.0	ug/l	41.7	ND	82.6	70-130	0.666	30	
Toluene	35.0	1.0	"	41.7	ND	84.0	70-130	1.70	30	
Ethylbenzene	42.1	1.0	"	41.7	ND	101	70-130	0.190	30	
m,p-Xylene	81.2	2.0	"	83.3	ND	97.5	70-130	0.663	30	
o-Xylene	38.8	1.0	"	41.7	ND	93.0	70-130	0.412	30	
Surrogate: 1,2-Dichloroethane-d4	14.3		"	13.3		107	23-173			
Surrogate: Toluene-d8	13.1		"	13.3		98.0	20-170			
Surrogate: 4-Bromofluorobenzene	14.3		"	13.3		107	21-167			

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650 Southgate Drive  
Windsor CO, 80550

Project: Brown 41-5

Project Number: [none]

Project Manager: James Miller

**Reported:**  
12/28/21 10:49

**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 BEK0291 - EPA 3520B**

**Blank (BEK0291-BLK1)**

Prepared & Analyzed: 11/12/21

C10-C28 (DRO) ND 5.0 mg/L

**LCS (BEK0291-BS1)**

Prepared & Analyzed: 11/12/21

C10-C28 (DRO) 43.6 5.0 mg/L 50.0 87.2 70-130

**LCS Dup (BEK0291-BSD1)**

Prepared & Analyzed: 11/12/21

C10-C28 (DRO) 45.8 5.0 mg/L 50.0 91.6 70-130 4.98 20

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650 Southgate Drive  
Windsor CO, 80550

Project: Brown 41-5

Project Number: [none]  
Project Manager: James Miller

**Reported:**  
12/28/21 10:49

### 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.
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