



Production Well Monitoring Fieldsheet

Sample Date

8/10/22

Samplers

MH

Client(s)

Citation Oil & Gas Corp (Williams #1 Bradenhead Sampling)

Frequency

SP

* * * Well Information * * *

O&G Well Name

Speaker 3-13

API#

05-017-07205

Spud Date

Completed Date

Radius Assc. BWQ Well

NA

County

Cheyenne

State

CO

Qtr-Qtr

NENW

Sec

13

Twn

12

Rng

51

Elevation

4995

UTM Easting

692322

UTM Northing

4276752

Billing/WO#

Project Code

Directions to Well:

Coordinates:

38.641525, -102.823868

Fac ID

Reason for Sample

Annual

Form 17 performed?

yes

Ground Slope Away from Well?

to west

Condition of Well

Good, pumping

Area Desc/Proximity

in oil field, stand alone SE of battery

* * * Sampling Information * * *

Individuals Present During Sampling

Bob Rogers

LEL(%)

0

LEL Sample Location

wellhead/atmosphere

Sample Location	Gas Sample?	Water Sample?	Condensate Sample?	Sample/ Visit Time	Pre-PSI	Post-PSI (sample)	Comments
Bradenhead (BHD)	yes	NO	NO	1545	16	16	Post 17 : 0 psi (dead at end)
Production Casing (C)	NO	NO	NO	—	50	50	
Production Tubing (T)	NO	NO	NO	—	45	45	
Other:							
Duplicate:							

SIW Collected?

IsoFlask Collected?

W Sample Exceptions?

Pictures Taken?

yes

Radius Assc. BWQ Well Sampled Today?

Water ☐ Condensate ☐ Sample Parameters:

Sample Location	Time	Temp (°C)	pH	EC (uS/cm)	Color	Odor	Sediment	Bubbles / Effervescence	LEL (%)

Water Sample Bottles Filled

Isoflask	BTEX (3 pres VOAs)	GRO (3 pres VOAs)	SIW (filtered)	Anions	Cations (dissolved metals)	Alkalinity	DRO	TDS	VRSK (3 unpres voas)

Weather

90° sunny

Field Conditions

DRY

Comments

State of Colorado
Oil and Gas Conservation Commission

1120 Lincoln Street, Suite 801, Denver, Colorado 80203 (303) 894-2100 Fax: (303) 894-2109



FOR OGCC USE ONLY

BRADENHEAD TEST REPORT

Step 1. Record all tubing and casing pressures as found.
Step 2. Sample now, if intermediate or surface casing pressure >25 psi. In sensitive areas, 1 psi.
Step 3. Conduct Bradenhead test.
Step 4. Conduct intermediate casing test.
Step 5. Send report to BLM within 30 days and to OGCC within 10 days. Include wellbore diagram if not previously submitted or if wellbore configuration has changed since prior program. Attach gas and liquid analyses if sampled.

1. OGCC Operator Number: 17180	11. Date of Test: 8/10/22
2. Name of Operator: Citation Oil & Gas Corp	12. Well Status: <input type="checkbox"/> Flowing <input type="checkbox"/> Shut In
3. BLM Lease No: LOC 58168	<input type="checkbox"/> Gas Lift <input checked="" type="checkbox"/> Pumping <input type="checkbox"/> Injection
4. API Number: 05-017-07205	<input type="checkbox"/> Clock/Intermittent
5. Multiple completion? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Plunger Lift
6. Well Name: Speaker	13. Number of Casing Strings: <input checked="" type="checkbox"/> Two <input type="checkbox"/> Three <input type="checkbox"/> Liner?
7. Location (QtrQtr, Sec, Twp, Rng, Meridian): NE/NW 13-12-51	
8. County: Cheyenne	
9. Field Name: Speaker Unit	
10. Minerals: <input type="checkbox"/> Fee <input type="checkbox"/> State <input checked="" type="checkbox"/> Federal <input type="checkbox"/> Indian	

14. STEP 1: EXISTING PRESSURES					
Record all pressures as found	Tubing: 45 Fm: Motrw	Tubing: 50 psi g Fm: Motrw	Prod. Casing: 50 psi g Fm: Motrw	Intermediate Casing: /	Surface Casing: 16 psi g
15. STEP 2: See instructions above.					

16. STEP 3: BRADENHEAD TEST							
Buried valve? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Confirmed open? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Elapsed Time (Min:Sec)	Fm: Motrw Tubing:	Fm: Tubing:	Production Casing PSIG	Intermediate Casing PSIG	Bradenhead Flow:
With gauges monitoring production, intermediate casing and tubing pressures, open surface casing (bradenhead) valve (if no intermediate casing, monitor only the production casing and tubing pressures.) Record pressures at five minute intervals. Define characteristics of flow in "Bradenhead Flow" column using letter designations below: O = No Flow; C = Continuous; D = Down to 0; V = Vapor H = Water H2O; M = Mud; W = Whisper; S = Surge; G = Gas		00:	45	/	50	/	0
BRADENHEAD SAMPLE TAKEN? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Gas <input type="checkbox"/> Liquid		05:	45	/	50	/	0
Character of Bradenhead fluid: <input type="checkbox"/> Clear <input type="checkbox"/> Fresh <input type="checkbox"/> Sulfur <input type="checkbox"/> Salty <input type="checkbox"/> Black <input type="checkbox"/> Other: (describe) no fluid		10:	45	/	50	/	0
Sample cylinder number: 91K9-CC		15:	45	/	50	/	0
		20:	45	/	50	/	0
		25:	45	/	50	/	0
		30:	45	/	50	/	0
						Note instantaneous Bradenhead PSIG at end of test: > 0	

17. STEP 4: INTERMEDIATE CASING TEST							
Buried valve? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Confirmed open? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Elapsed Time (Min:Sec)	Fm: Tubing:	Fm: Tubing:	Production Casing PSIG	Intermediate Casing PSIG	Intermediate Flow:
With gauges monitoring production casing and tubing pressures, open the intermediate casing valve. Record pressures at five minute intervals. Characterize flow in "Intermediate Flow" column using letter designations below: O = No Flow; C = Continuous; D = Down to 0; V = Vapor H = Water H2O; M = Mud; W = Whisper; S = Surge; G = Gas		00:					
INTERMEDIATE SAMPLE TAKEN? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Gas <input type="checkbox"/> Liquid		05:					
Character of Intermediate fluid: <input type="checkbox"/> Clear <input type="checkbox"/> Fresh <input type="checkbox"/> Sulfur <input type="checkbox"/> Salty <input type="checkbox"/> Black <input type="checkbox"/> Other: (describe)		10:					
Sample cylinder number:		15:					
		20:					
		25:					
		30:					
						Note instantaneous Intermediate Casing PSIG at end of test: >	
18. Comments: Blow down occurred in < 5 min NO INTERMEDIATE CASING							

19. STEP 5: See instructions above.

I hereby certify that the statements made in this form are, to the best of my knowledge, true, correct, and complete.

Test Performed by: Michelle Henry Title: Field Technician Phone: 847 254 8790

Signed: [Signature] Title: " " Date: 8/10/2022

WITNESSED BY: [Signature] Title: Sr Prod Foreman Agency: COGC



dig
Dolan Integration Group

Geochemistry for Energy

1317 West 121st Ave
Westminster, CO 80234
p: 303.531.2030

Send Data to:

Name: Ben Shoup
Company: Absaroka
Address: 112 High St.
City, State, Zip: Buffalo, WY 82834
Phone: 307-299-5950
Email: ben.shoup@absarokasolutions.com

Addition Information:

AFE# 0
Project:
WO#
Location: ~~8000~~ NENW 13-12S-51W
Sampler: Michelle Henry
Facility ID: 0
Notes:

Turnaround Time:

☒ Standard (≤ 10 business days)

☐ Rush (≤ 5 business days)

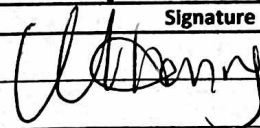
☐ Expedited Rush (≤ 3 business days)

Sample Description

Analysis Requested

Container Number	Sample Identification	Date Sampled	Time	Gas Composition* N ₂ , O ₂ +Ar, CO ₂ , He, H ₂ , C ₁ -C ₆ +	RSK-175: N ₂ , O ₂ +Ar, CO ₂ , He, H ₂ , C ₁ -C ₆ + with dissolved C ₁ , C ₂ , & C ₃ (water samples only)	δ ¹³ C Methane (Carbon)	δD Methane (Hydrogen)	δ ¹³ C Ethane- Pentane (C ₂ - C ₅ , if present)	δ ¹³ C CO ₂ (if present)	Comments
IST	SP_0_BHD	8/10/2022	1545	X		X	X	X	X	
IST	SP_0_C	8/10/2022		X		X	X	X	X	

Chain-of-Custody Record

Signature	Company	Date	Time
Relinquished by 	Absaroka Solutions	8/10/2022	1545
Received by			
Relinquished by			
Received by			
Relinquished by			
Received by			

*Gas composition vs RSK-175: Gas composition is a basic analysis of the concentration (ppm) of gases within the headspace of the sample (headspace is created at the lab). RSK-175 is a specific analysis technique combined with calculations to give the total dissolved gas of each species in the water sample (mg/L). Why one or the other? Gas composition gives us a quick, general look at relative concentrations and ratios (e.g., gas wetness). RSK-175 gives us an exact total of gas present in the sample (headspace and dissolved in the water). Questions? Give us a call at 303-531-2030.

Michell Honey pg 1/1

Date: 8/15/22

Site: Speaker 3-13

Obj: Form 17

Personnel: MH, BR

Weather: 90° sunny

PPE: 0

14:00 Travel

14:15 arrive on site. BR travel
to shop to get fittings
for pressure gauge

~~14:45~~ to 15:15 BR on site

15:45 collect pressure readings
and BHD sample. No
casing sample collected.
Not required on Form 17.

15:50 Begin Form 17.

Blow down lasting 45 min

16:20 Complete 17.

No water produced

16:30 FWPP

16:45 off site - Travel