

**State of Colorado**  
**Energy & Carbon Management Commission**



Document Number:

404657550

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**BRADENHEAD TEST REPORT**

Step 1. Before opening any valves, record all tubing and casing pressures as found.  
 Step 2. Collect liquid and gas samples as required; consult Bradenhead Testing and Reporting Instructions and Guidance for field specific Orders at <http://ecmc/reg.html#/opguidance>  
 Step 3. Conduct Bradenhead test.  
 Step 4. Submit Form 17 within 10 days of test. Attach a wellbore diagram if not previously submitted or if wellbore configuration has changed since last wellbore diagram was submitted.  
 Step 5. Submit sample analytical results via Form 43.

1. ECMC Operator Number: 17180      3. BLM Lease No: \_\_\_\_\_  
 2. Name of Operator: CITATION OIL & GAS CORP  
 4. API Number; 05-017-06744-00      5. Multiple completion?     Yes     No  
 6. Well Name: FRONTERA UNIT 21-13      Number: 10  
 7. Location (QtrQtr, Sec, Twp, Rng, Meridian): NENW,13,15S,42W,6  
 8. County CHEYENNE      9. Field Name: FRONTERA  
 10. Minerals:     Fee     State     Federal     Indian

11. Date of Test: 05/12/2026  
 12. Well Status:     Flowing  
                           Shut In     Gas Lift  
                           Pumping     Injection  
                           Clock/Intermitter  
                           Plunger Lift  
 13. Number of Casing Strings:  
                           Two     Three     Liner?

**14. EXISTING PRESSURES**

Record all pressures as found	Tubing: <u>13</u> Fm: _____	Tubing: _____ Fm: _____	Prod Csg <u>33</u> Fm: _____	Intermediate Csg: _____	Surf. Csg <u>1</u>
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**BRADENHEAD TEST**

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.  
 Describe character of flow in "Bradenhead Flow" column: O = No Flow; C = Continuous; D = Down to 0; S = Surge; W = Whisper  
 Describe fluid type in "Bradenhead Fluid" column: H = Water H2O; M = Mud; G = Gas; V = Vapor; L = Liquid Hydrocarbon; H & M = Water & Mud; H & G = Water & Gas; H & V = Water & Vapor; M & G = Mud & Gas; M & V = Mud & Vapor; G & V = Gas & Vapor; H & L = Water & Liquid Hydrocarbon; M & L = Mud & Liquid Hydrocarbon; G & L = Gas & Liquid Hydrocarbon; V & L = Vapor & Liquid Hydrocarbon; N = None

Elapsed Time (Min:Sec)	Fm: Tubing	Fm: Tubing:	Prod Csg PSIG	Intermedia Csg PSIG	Bradenhead Flow:	Bradenhead Fluid:
00:00	13		33		DOWN TO 0	GAS
05:00	19		20		NO FLOW	NONE
10:00	19		22		NO FLOW	NONE
15:00	26		26		NO FLOW	NONE
20:00	23		25		NO FLOW	NONE
25:00	23		25		NO FLOW	NONE
30:00	24		25		NO FLOW	NONE
REQUIRED - Instantaneous Bradenhead Pressure at End of Test: <u>0</u> PSIG						

### INTERMEDIATE CASING TEST

With gauges monitoring production, intermediate casing and tubing pressures, open the intermediate casing valve. Record pressures at five minute intervals.

Describe character of flow in "Intermediate Flow" column: O = No Flow; C = Continuous; D = Down to 0; S = Surge; W = Whisper

Describe fluid type in "Intermediate Fluid" column: H = Water H<sub>2</sub>O; M = Mud; G = Gas; V = Vapor; L = Liquid Hydrocarbon; H & M = Water & Mud; H & G = Water & Gas; H & V = Water & Vapor; M & G = Mud & Gas; M & V = Mud & Vapor; G & V = Gas & Vapor; H & L = Water & Liquid Hydrocarbon; M & L = Mud & Liquid Hydrocarbon; G & L = Gas & Liquid Hydrocarbon; V & L = Vapor & Liquid Hydrocarbon; N = None.

	Elapsed Time (Min:Sec)	Fm: Tubing	Fm: Tubing:	Prod Csg PSIG	Intermediate Csg PSIG	Intermediate Flow:	Intermediate Fluid:	
Buried valve? <input type="checkbox"/> Yes <input type="checkbox"/> No	00:00							
Confirmed open? <input type="checkbox"/> Yes <input type="checkbox"/> No	05:00							
INTERMEDIATE SAMPLE TAKEN? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Gas <input type="checkbox"/> Liquid	10:00							
Character of Intermediate fluid: <input type="checkbox"/> Clear <input type="checkbox"/> Fresh <input type="checkbox"/> Sulfur <input type="checkbox"/> Salty <input type="checkbox"/> Black Other:(describe) _____	15:00							
	20:00							
	25:00							
	30:00							
REQUIRED - Instantaneous Intermediate Casing Pressure at End of Test: _____							PSIG	

Comments:

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

Test Performed By: Emily Fitzjohn Title: Environ Professional Phone: (303) 6426098

Signed: Emily Fitzjohn Title: Environ Professional Date: 5/13/2026

Witnessed By: \_\_\_\_\_ Title: \_\_\_\_\_ Agency: \_\_\_\_\_