State of Colorado
Oil and Gas Conservation Commission

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

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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://cogcc/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. OGCC Operator Number: 10433   3. BLM Lease No:

2. Name of Operator: LARAMIE ENERGY LLC

4. API Number; 05-077-08662-00   5. Multiple completion? ☐ Yes ☐ No

6. Well Name: HORSESHOE CANYON UNIT   Number: 4-16

7. Location (QtrQtr, Sec, Twp, Rng, Meridian): SENE,16,9S,97W,6

8. County MESA   9. Field Name: SHIRE GULCH

10. Minerals: ☐ Fee ☐ State ☐ Federal ☐ Indian

11. Date of Test: 05/15/2021

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: 39	Tubing:	Prod Csg 442	Intermediate	Surf. Csg
	Fm:	Fm:	Fm:	Csg:	33

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

Buried valve? ☒ Yes ☐ No

Confirmed open? ☒ Yes ☐ No

BRADENHEAD SAMPLE TAKEN?
☐ Yes ☒ No ☐ Gas ☐ Liquid

Character of Bradenhead fluid:
☐ Clear ☐ Fresh
☐ Sulfur ☐ Salty ☐ Black

Other:(describe)

Elapsed Time (Min:Sec)	Fm: Tubing	Fm: Tubing:	Prod Csg PSIG	Intermedia Csg PSIG	Bradenhead Flow:	Bradenhead Fluid:
00:00	☐ 39	☐	☐ 442		CONTINUOUS	
05:00	☐ 39	☐	☐ 442		CONTINUOUS	
10:00	☐ 38	☐	☐ 440		CONTINUOUS	
15:00	☐ 38	☐	☐ 440		WHISPER	
20:00	☐ 38	☐	☐ 440		WHISPER	
25:00	☐ 38	☐	☐ 440		WHISPER	
30:00	☐ 38	☐	☐ 440		WHISPER	

Instantaneous Bradenhead PSIG at end of test: > 0

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 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.

Buried valve? ☐ Yes   ☐ No

Confirmed open? ☐ Yes   ☐ No

INTERMEDIATE SAMPLE TAKEN?

☐ Yes   ☐ No   ☐ Gas   ☐ Liquid

Character of Intermediate fluid:

☐ Clear   ☐ Fresh

☐ Sulfur   ☐ Salty   ☐ Black

Other:(describe)

_____

Elapsed Time (Min:Sec)	Fm: Tubing	Fm: Tubing:	Prod Csg PSIG	Intermediate Csg PSIG	Intermediate Flow:	Intermediate Fluid:
00:00	☐	☐	☐			
05:00	☐	☐	☐			
10:00	☐	☐	☐			
15:00	☐	☐	☐			
20:00	☐	☐	☐			
25:00	☐	☐	☐			
30:00	☐	☐	☐			

Instantaneous Intermediate Casing PSIG at end of test: > _____

Comments:

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

Test Performed By: Jesse Reed   Title: Pumper   Phone: ( ) _____

Signed: Christina Pierce   Title: Engineering Tech   Date: 5/17/2021

Witnessed By: _____   Title: _____   Agency: _____