

State of Colorado
Oil and Gas Conservation Commission

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



Document Number:

403222082

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: 10412 3. BLM Lease No: _____

2. Name of Operator: AUSCO PETROLEUM INC

4. API Number; 05-043-06221-00 5. Multiple completion? ☐ Yes ☒ No

6. Well Name: Pathfinder Number: 2

7. Location (QtrQtr, Sec, Twp, Rng, Meridian): NWNW,12,20S,70W,6

8. County FREMONT 9. Field Name: FLORENCE-CANON CITY

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

11. Date of Test: 11/04/2022

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: 298	Tubing: _____	Prod Csg 298	Intermediate	Surf. Csg
	Fm: NBRR	Fm: _____	Fm: NBRR	Csg: 14	32

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? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Elapsed Time (Min:Sec)	Fm: Tubing	Fm: Tubing:	Prod Csg PSIG	Intermedia Csg PSIG	Bradenhead Flow:	Bradenhead Fluid:
Confirmed open? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	00:00	NBRR 298		298	13	CONTINUOUS	GAS AND VAPOR
BRADENHEAD SAMPLE TAKEN?	05:00	NBRR 298		298	13	CONTINUOUS	GAS AND VAPOR
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input checked="" type="checkbox"/> Gas <input type="checkbox"/> Liquid	10:00	NBRR 298		298	13	WHISPER	GAS AND VAPOR
Character of Bradenhead fluid:	15:00	NBRR 298		298	13	DOWN TO 0	GAS AND VAPOR
<input type="checkbox"/> Clear <input type="checkbox"/> Fresh	20:00	NBRR 298		298	13	NO FLOW	NONE
<input type="checkbox"/> Sulfur <input type="checkbox"/> Salty <input type="checkbox"/> Black	25:00	NBRR 298		298	13	NO FLOW	NONE
Other:(describe)	30:00	NBRR 298		298	13	NO FLOW	NONE
REQUIRED - Instantaneous Bradenhead Pressure at End of Test: 0 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 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? <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: Tubing	Fm: Tubing:	Prod Csg PSIG	Intermediate Csg PSIG	Intermediate Flow:	Intermediate Fluid:
	00:00	NBRR 298		298	13	WHISPER	NONE
INTERMEDIATE SAMPLE TAKEN? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input checked="" type="checkbox"/> Gas <input type="checkbox"/> Liquid	05:00	NBRR 298		298	0	DOWN TO 0	NONE
	10:00	NBRR 298		298	0	NO FLOW	NONE
	15:00	NBRR 298		298	0	NO FLOW	NONE
	20:00	NBRR 298		298	0	NO FLOW	NONE
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) _____	25:00	NBRR 298		298	0	NO FLOW	NONE
	30:00	NBRR 298		298	0	NO FLOW	NONE
	REQUIRED - Instantaneous Intermediate Casing Pressure at End of Test: <u>0</u> PSIG						

Comments: Operator conducted a bradenhead test on the subject well while well was pumping and supplying oil & gas via a 2" line to an indirect fired 3-phase separator. Both casing and tubing flowing pressures were reading 298 psi via a common flowline to separator.
Operator will be conducting an MIT within a few weeks, requiring the downhole equipment be pulled to run isolation tools to conduct the MIT and then rerun tubing, pump, and rods. Another bradenhead test will be conducted prior to returning the well to production.

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

Test Performed By: <u>Liz Harkins</u>	Title: <u>Engineer</u>	Phone: <u>(719) 429-4513</u>
Signed: <u>Liz Harkins</u>	Title: <u>Engineer</u>	Date: <u>11/12/2022</u>
Witnessed By: <u>Josh Barnes</u>	Title: <u>Field Technician</u>	Agency: <u>AusCo Petroleum</u>