

State of Colorado
Energy & Carbon Management Commission



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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: 69175 3. BLM Lease No: _____
 2. Name of Operator: PDC ENERGY INC
 4. API Number; 05-123-51815-00 5. Multiple completion? Yes No
 6. Well Name: Drake Number: 17N
 7. Location (QtrQtr, Sec, Twp, Rng, Meridian): SWNW,17,4N,64W,6
 8. County WELD 9. Field Name: WATTENBERG
 10. Minerals: Fee State Federal Indian

11. Date of Test: 09/23/2024
 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>965</u> Fm: _____	Tubing: _____ Fm: _____	Prod Csg <u>2817</u> Fm: _____	Intermediate Csg: _____	Surf. Csg <u>145</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

Buried valve? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Confirmed open? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No BRADENHEAD SAMPLE TAKEN? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Gas <input type="checkbox"/> Liquid Character of Bradenhead fluid: <input type="checkbox"/> Clear <input type="checkbox"/> Fresh <input type="checkbox"/> Sulfur <input type="checkbox"/> Salty <input type="checkbox"/> Black Other:(describe) _____	Elapsed Time (Min:Sec)	Fm: Tubing	Fm: Tubing:	Prod Csg PSIG	Intermedia Csg PSIG	Bradenhead Flow:	Bradenhead Fluid:
	00:00	965		2817		CONTINUOUS	GAS AND LIQUID HYDROCARBON
	05:00	1882		2816		WHISPER	GAS
	10:00	1963		2815		WHISPER	GAS AND LIQUID HYDROCARBON
	15:00	1867		2817		WHISPER	WATER AND GAS
	20:00	1879		2813		WHISPER	WATER AND GAS
	25:00	2023		2815		WHISPER	WATER AND GAS
	30:00	1965		1815		WHISPER	WATER AND GAS
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 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 type="checkbox"/> No	Elapsed Time (Min:Sec)	Fm: Tubing	Fm: Tubing:	Prod Csg PSIG	Intermediate Csg PSIG	Intermediate Flow:	Intermediate Fluid:
Confirmed open? <input type="checkbox"/> Yes <input type="checkbox"/> No	00:00						
INTERMEDIATE SAMPLE TAKEN? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Gas <input type="checkbox"/> Liquid	05:00						
	10:00						
	15:00						
	20:00						
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) _____	25:00						
	30:00						
	REQUIRED - Instantaneous Intermediate Casing Pressure at End of Test: _____ PSIG						

Comments: Post-Production test within 60 days of first sales. 145 PSI gas and liquid hydrocarbon blew down to 0 PSI within first minute of test, whisper gas and slight fluid flow for the remainder of the test, ~1.25 gallons total fluid. PDC will monitor bradenhead pressure monthly and submit annual test.

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

Test Performed By: _____ Title: _____ Phone: () _____

Signed: Jessica Johannsen Title: Regulatory Analyst Date: 9/24/2024

Witnessed By: _____ Title: _____ Agency: _____