

FORM  
17Rev  
11/20

## State of Colorado

## Energy &amp; Carbon Management Commission

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



Document Number:

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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; 05-123-51789-00 5. Multiple completion? ☐ Yes ☐ No

6. Well Name: Hen Number: 09N

7. Location (QtrQtr, Sec, Twp, Rng, Meridian): SWNE,8,4N,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: 956 Fm: _____	Tubing: _____ Fm: _____	Prod Csg 1407 Fm: _____	Intermediate Csg: _____	Surf. Csg 79
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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 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 = NoneBuried valve? ☒ Yes ☐ NoConfirmed 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	956		1407		CONTINUOUS	GAS AND LIQUID HYDROCARBON
05:00	940		1407		WHISPER	GAS AND LIQUID HYDROCARBON
10:00	935		1407		WHISPER	GAS AND LIQUID HYDROCARBON
15:00	936		1589		SURGE	GAS AND LIQUID HYDROCARBON
20:00	946		1407		SURGE	GAS AND LIQUID HYDROCARBON
25:00	945		1407		WHISPER	GAS AND LIQUID HYDROCARBON
30:00	940		1407		WHISPER	GAS AND LIQUID HYDROCARBON

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 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.

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						
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) _____	20:00						
	25:00						
	30:00						
	REQUIRED - Instantaneous Intermediate Casing Pressure at End of Test: _____ PSIG						

Comments: Annual test. 79 PSI gas and oily black foam flow blew down to 0 PSI in seconds. whisper gas and foam continued to surge for 16 minutes. Whisper gas and liquid hydrocarbon drips for remainder of test. ~1.25 gallons total. PDC will monitor pressure and re-test according to bradenhead policy.

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: <u>Jessica Johannsen</u>	Title: <u>Regulatory Analyst</u>	Date: <u>9/24/2024</u>
Witnessed By: _____	Title: _____	Agency: _____