

State of Colorado
Oil and Gas Conservation 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://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: 69175 3. BLM Lease No: _____
2. Name of Operator: PDC ENERGY INC
4. API Number; 05-123-51278-00 5. Multiple completion? ☐ Yes ☐ No
6. Well Name: Stugart Number: 11N
7. Location (QtrQtr, Sec, Twp, Rng, Meridian): SENW,20,5N,66W,6
8. County WELD 9. Field Name: WATTENBERG
10. Minerals: ☐ Fee ☐ State ☐ Federal ☐ Indian

11. Date of Test: 06/21/2023

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: 2355 Fm: _____	Tubing: _____ Fm: _____	Prod Csg 2775 Fm: _____	Intermediate Csg: _____	Surf. Csg 86
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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	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	2355		2775		CONTINUOUS	WATER AND GAS
BRADENHEAD SAMPLE TAKEN?	05:00	2367		2774		CONTINUOUS	WATER H ₂ O
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Gas <input type="checkbox"/> Liquid	10:00	2381		2774		CONTINUOUS	WATER H ₂ O
Character of Bradenhead fluid:	15:00	2355		2775		CONTINUOUS	WATER H ₂ O
<input type="checkbox"/> Clear <input type="checkbox"/> Fresh	20:00	2375		2774		CONTINUOUS	WATER H ₂ O
<input type="checkbox"/> Sulfur <input type="checkbox"/> Salty <input type="checkbox"/> Black	25:00	2348		2775		CONTINUOUS	WATER H ₂ O
Other:(describe)	30:00	2379		2774		CONTINUOUS	WATER H ₂ O
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 type="checkbox"/> No Confirmed open? <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:
	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: Post-Production within 60 days of first sales. 86 PSI gas and ~1 quart fluid at open. blew down to 0 PSI in first few minutes. Steady trickle for entire test. PDC will schedule a sampling event and submit results via form 43 as well as a remediation plan via sundry as soon as possible. PDC will continue to monitor monthly.

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>6/22/2023</u>
Witnessed By: _____	Title: _____	Agency: _____