

**FORM**  
**17**  
Rev  
11/20

**State of Colorado**  
**Oil and Gas Conservation Commission**

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Document Number:  
402741448

**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; 05-123-49380-00      5. Multiple completion?  Yes  No  
 6. Well Name: Erwin      Number: 3N  
 7. Location (QtrQtr, Sec, Twp, Rng, Meridian): SWSE,27,5N,64W,6  
 8. County WELD      9. Field Name: WATTENBERG  
 10. Minerals:  Fee  State  Federal  Indian

11. Date of Test: 03/16/2021  
 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: _____ Fm: _____	Tubing: _____ Fm: _____	Prod Csg _____ 0 Fm: _____	Intermediate Csg: _____	Surf. Csg _____ 0
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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 = None

Buried valve? <input type="checkbox"/> Yes <input checked="" 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	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 0		NO FLOW	
	05:00	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 0			
	10:00	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 0			
	15:00	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 0			
	20:00	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 0			
	25:00	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 0			
	30:00	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 0			
Instantaneous Bradenhead PSIG at end of test: > <u>0</u>							

## 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	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
INTERMEDIATE SAMPLE TAKEN? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Gas <input type="checkbox"/> Liquid	05:00	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
	10:00	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
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) _____	15:00	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
	20:00	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
	25:00	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
	30:00	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
Instantaneous Intermediate Casing PSIG at end of test: > _____							

Comments: Initial RR test. 0 PSI, no pressure or flow observed for 30 min 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: 7/8/2021

Witnessed By: \_\_\_\_\_ Title: \_\_\_\_\_ Agency: \_\_\_\_\_