

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

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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://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: 47120      3. BLM Lease No: \_\_\_\_\_  
 2. Name of Operator: KERR MCGEE OIL & GAS ONSHORE LP  
 4. API Number; 05-123-19537-00      5. Multiple completion?  Yes  No  
 6. Well Name: HSR-HUNTER      Number: 16-32  
 7. Location (QtrQtr, Sec, Twp, Rng, Meridian): SESE,32,5N,67W,6  
 8. County WELD      9. Field Name: WATTENBERG  
 10. Minerals:  Fee  State  Federal  Indian

11. Date of Test: 11/23/2020  
 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>358</u> Fm: _____	Tubing: _____ Fm: _____	Prod Csg <u>358</u> Fm: _____	Intermediate Csg: _____	Surf. Csg <u>72</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 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	Elapsed Time (Min:Sec)	Fm: Tubing	Fm: Tubing:	Prod Csg PSIG	Intermedia Csg PSIG	Bradenhead Flow:	Bradenhead Fluid:
		<input type="checkbox"/> 358	<input type="checkbox"/>	<input type="checkbox"/> 358		CONTINUOUS	LIQUID HYDROCARBON
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) _____	05:00	<input type="checkbox"/> 358	<input type="checkbox"/>	<input type="checkbox"/> 358		CONTINUOUS	LIQUID HYDROCARBON
	10:00	<input type="checkbox"/> 358	<input type="checkbox"/>	<input type="checkbox"/> 358		WHISPER	LIQUID HYDROCARBON
	15:00	<input type="checkbox"/> 358	<input type="checkbox"/>	<input type="checkbox"/> 358		WHISPER	LIQUID HYDROCARBON
	20:00	<input type="checkbox"/> 358	<input type="checkbox"/>	<input type="checkbox"/> 358		WHISPER	LIQUID HYDROCARBON
	25:00	<input type="checkbox"/> 358	<input type="checkbox"/>	<input type="checkbox"/> 358		WHISPER	LIQUID HYDROCARBON
	30:00	<input type="checkbox"/> 358	<input type="checkbox"/>	<input type="checkbox"/> 358		WHISPER	LIQUID HYDROCARBON
	Instantaneous Bradenhead PSIG at end of test: > <u>1</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: Surface Casing produced Condensate.

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

Test Performed By: JUSTIN LEE Title: BRADENHEAD OPS Phone: (970) 7681583

Signed: JUSTIN LEE Title: BRADENHEAD OPS Date: 12/4/2020

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