



**BRADENHEAD TEST REPORT**

Step 1. Record all tubing and casing pressures as found. Step 2. Sample now. If intermediate or surface casing pressure > 25 psi. In sensitive areas, 1 psi.  
Step 3. Conduct Bradenhead casing. Step 4. Conduct intermediate casing test. Step 5. Send report to BLM within 3 days and to OGCC within 10 days. Include wellbore diagram if not previously submitted or if wellbore configuration has changed since prior program. Attach gas and liquid analyses if sampled.

1. OGCC Operator Number: 10531 3. BLM Lease No: 52447A  
2. Name of Operator: VANGUARD OPERATING LLC  
4. API Number; 05-045-19621-00 5. Multiple completion? ☒ Yes ☐ No  
6. Well Name: GGU Swanson Number: 32A-29-691  
7. Location (QtrQtr, Sec, Twp, Rng, Meridian): NWSE,29,6S,91W,6  
8. County GARFIELD 9. Field Name: MAMM CREEK  
10. Minerals: ☐ Fee ☐ State ☒ Federal ☐ Indian

11. Date of Test: 06/22/2018  
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>120</u> Fm: <u>WMFK</u>	Tubing: <u>      </u> Fm: <u>      </u>	Prod Csg <u>332</u> Fm: <u>RLNS</u>	Intermediate Csg: <u>      </u>	Surf. Csg <u>154</u>
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**BRADENHEAD TEST**

Buried valve? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Confirmed open? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No 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 Define characteristics of flow in "Bradenhead Flow" column using letter designations below: O = No Flow; C = Continuous; D = Down to 0; V = Vapor H = Water H2O; M = Mud; W = Whisper; S = Surge; G = Gas	Elapsed Time (Min:Sec)	Fm: Tubing	Fm: Tubing:	Prod Csg PSIG	Intermedia Csg PSIG	Bradenhead Flow:
	00:00	WMFK 120	<input type="checkbox"/>	<input type="checkbox"/> 332		G
	05:00	WMFK 122	<input type="checkbox"/>	<input type="checkbox"/> 322		V
	10:00	WMFK 125	<input type="checkbox"/>	<input type="checkbox"/> 322		W
	15:00	WMFK 128	<input type="checkbox"/>	<input type="checkbox"/> 322		W
	20:00	WMFK 132	<input type="checkbox"/>	<input type="checkbox"/> 323		W
	25:00	WMFK 136	<input type="checkbox"/>	<input type="checkbox"/> 323		W
30:00	WMFK 140	<input type="checkbox"/>	<input type="checkbox"/> 323		D	

BRADENHEAD SAMPLE TAKEN?  
☐ Yes ☒ No ☒ Gas ☐ Liquid

Character of Bradenhead fluid: ☐ Clear ☐ Fresh  
☐ Sulfur ☐ Salty ☐ Black

Other:(describe) \_\_\_\_\_

Sample cylinder number: \_\_\_\_\_

Instantaneous Bradenhead PSIG at end of test: > 0

**INTERMEDIATE CASING TEST**

Buried valve? <input type="checkbox"/> Yes <input type="checkbox"/> No Confirmed open? <input type="checkbox"/> Yes <input type="checkbox"/> No With gauges monitoring production, intermediate casing and tubing pressures, open the intermediate casing valve. Record pressures at five minute intervals Characterize flow in "Intermediate Flow" column using letter designations below: O = No Flow; C = Continuous; D = Down to 0; V = Vapor H = Water H2O; M = Mud; W = Whisper; S = Surge; G = Gas	Elapsed Time (Min:Sec)	Fm: Tubing	Fm: Tubing:	Prod Csg PSIG	Intermedia Csg PSIG	Bradenhead Flow:
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		

INTERMEDIATE SAMPLE TAKEN?  
☐ Yes ☐ No ☐ Gas ☐ Liquid

Character of Intermediate fluid: ☐ Clear ☐ Fresh  
☐ Sulfur ☐ Salty ☐ Black

Other:(describe) \_\_\_\_\_

Sample cylinder number: \_\_\_\_\_

Instantaneous Intermediate Casing PSIG at end of test: > \_\_\_\_\_

Comments:

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

Test Performed By: Lee Simpson Title: Production Foreman Phone: (970) 230-1154

Signed: Lee Simpson Title: Production Foreman Date: 6/24/2018

Witnessed By: Darin Holtz Title: Field Inspector Agency: COGCC