



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 test. 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: FEE

2. Name of Operator: VANGUARD OPERATING LLC

4. API Number: 05-045-08005-00 5. Multiple completion? ☒ Yes ☐ No

6. Well Name: GIBSON GULCH UNIT Number: 3-30

7. Location (QtrQtr, Sec, Twp, Rng, Meridian): SESW,19,6S,91W,6

8. County GARFIELD 9. Field Name: MAMM CREEK

10. Minerals: ☒ Fee ☐ State ☐ Federal ☐ Indian

11. Date of Test:	06/23/2016
12. Well Status:	<input type="checkbox"/> Flowing <input checked="" type="checkbox"/> Shut In <input type="checkbox"/> Gas Lift <input type="checkbox"/> Pumping <input type="checkbox"/> Injection <input type="checkbox"/> Clock/Intermittent <input type="checkbox"/> Plunger Lift
13. Number of Casing Strings:	<input checked="" type="checkbox"/> Two <input type="checkbox"/> Three <input type="checkbox"/> Liner?

14. EXISTING PRESSURES

Record all pressures as found	Tubing: _____	Tubing: <u>104</u>	Prod Csg <u>260</u>	Intermediate	Surf. Csg
	Fm: _____	Fm: <u>WMFK</u>	Fm: <u>WMFK</u>	Csg: _____	<u>175</u>

BRADENHEAD TEST

Buried valve? <input checked="" type="checkbox"/> Yes <input 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	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 15%;">Elapsed Time (Min:Sec)</th> <th style="width: 15%;">Fm: Tubing</th> <th style="width: 15%;">Fm: Tubing:</th> <th style="width: 15%;">Prod Csg PSIG</th> <th style="width: 15%;">Intermedia Csg PSIG</th> <th style="width: 20%;">Bradenhead Flow:</th> </tr> </thead> <tbody> <tr><td>00:00</td><td><input type="checkbox"/> 104</td><td><input type="checkbox"/></td><td><input type="checkbox"/> 260</td><td></td><td>G</td></tr> <tr><td>05:00</td><td><input type="checkbox"/> 112</td><td><input type="checkbox"/></td><td><input type="checkbox"/> 260</td><td></td><td>V</td></tr> <tr><td>10:00</td><td><input type="checkbox"/> 113</td><td><input type="checkbox"/></td><td><input type="checkbox"/> 260</td><td></td><td>V</td></tr> <tr><td>15:00</td><td><input type="checkbox"/> 117</td><td><input type="checkbox"/></td><td><input type="checkbox"/> 260</td><td></td><td>V</td></tr> <tr><td>20:00</td><td><input type="checkbox"/> 118</td><td><input type="checkbox"/></td><td><input type="checkbox"/> 261</td><td></td><td>V</td></tr> <tr><td>25:00</td><td><input type="checkbox"/> 119</td><td><input type="checkbox"/></td><td><input type="checkbox"/> 261</td><td></td><td>V</td></tr> <tr><td>30:00</td><td><input type="checkbox"/> 120</td><td><input type="checkbox"/></td><td><input type="checkbox"/> 262</td><td></td><td>V</td></tr> </tbody> </table>	Elapsed Time (Min:Sec)	Fm: Tubing	Fm: Tubing:	Prod Csg PSIG	Intermedia Csg PSIG	Bradenhead Flow:	00:00	<input type="checkbox"/> 104	<input type="checkbox"/>	<input type="checkbox"/> 260		G	05:00	<input type="checkbox"/> 112	<input type="checkbox"/>	<input type="checkbox"/> 260		V	10:00	<input type="checkbox"/> 113	<input type="checkbox"/>	<input type="checkbox"/> 260		V	15:00	<input type="checkbox"/> 117	<input type="checkbox"/>	<input type="checkbox"/> 260		V	20:00	<input type="checkbox"/> 118	<input type="checkbox"/>	<input type="checkbox"/> 261		V	25:00	<input type="checkbox"/> 119	<input type="checkbox"/>	<input type="checkbox"/> 261		V	30:00	<input type="checkbox"/> 120	<input type="checkbox"/>	<input type="checkbox"/> 262		V
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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) Sample cylinder number:	Instantaneous Bradenhead PSIG at end of test: > <u>0</u>																																																

INTERMEDIATE CASING TEST

Buried valve? <input type="checkbox"/> Yes <input type="checkbox"/> No	<div>Elapsed Time (Min:Sec)</div> <div>Fm: Tubing</div> <div>Fm: Tubing:</div> <div>Prod Csg PSIG</div> <div>Intermedia Csg PSIG</div> <div>Bradenhead Flow:</div>
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 H ₂ O; M = Mud; W = Whisper; S = Surge; G = Gas	
INTERMEDIATE SAMPLE TAKEN?	
<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Gas <input type="checkbox"/> Liquid	
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)	
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: Aaron Axelson Title: Sr. Production Foreman Phone: (970) 230-0926

Signed: Aaron Axelson Title: Sr. Production Foreman Date: 6/24/2016

Witnessed By: 666802300 Title: NW Field Inspector Agency: COGCC