



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: 10203 3. BLM Lease No: _____
2. Name of Operator: BLACK RAVEN ENERGY INC
4. API Number; 05-087-05234-00 5. Multiple completion? ☐ Yes ☐ No
6. Well Name: NICHOLS Number: 4
7. Location (QtrQtr, Sec, Twp, Rng, Meridian): NENE,24,1N,58W,6
8. County MORGAN 9. Field Name: ADENA
10. Minerals: ☐ Fee ☐ State ☐ Federal ☐ Indian

11. Date of Test: 10/16/2015
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: _____	Tubing: _____	Prod Csg _____ 0	Intermediate	Surf. Csg
	Fm: _____	Fm: _____	Fm: _____	Csg: _____	_____ 0

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	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 0		W
	05:00	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 0		D
	10:00	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 0		D
	15:00	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 0		D
	20:00	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 0		D
	25:00	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 0		D
30:00	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 0		D	
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 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? <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:

Dug up wellhead, connected 1st riser with 1" valve to surface for future test. A performed bradenhead test as reported.

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

Test Performed By: Billy Hataway Title: Director Field Operations Phone: (303) 308-1330

Signed: Billy Hataway Title: Field Operations Director Date: 12/16/2015

Witnessed By: Kym Schure Title: Field Inspector Agency: COGCC