

FORM  
17Rev  
6/99State of Colorado  
Oil and Gas Conservation Commission

1120 Lincoln Street, Suite 801, Denver, Colorado 80205 Phone: (303) 894-2100 Fax: (303) 894-2109



DE ET OE ES

Document Number:

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## 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: 10084 3. BLM Lease No: \_\_\_\_\_  
 2. Name of Operator: PIONEER NATURAL RESOURCES USA INC  
 4. API Number: 05-071-08133-00 5. Multiple completion? ☐ Yes ☐ No  
 6. Well Name: TOMAHAWK Number: 44-9  
 7. Location (QtrQtr, Sec, Twp, Rng, Meridian): SESE,9,33S,65W,6  
 8. County LAS ANIMAS 9. Field Name: PURGATOIRE RIVER  
 10. Minerals: ☒ Fee ☐ State ☐ Federal ☐ Indian

11. Date of Test: 09/14/2010

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: 68<br>Fm: _____ | Tubing: _____<br>Fm: _____ | Prod Csg 3<br>Fm: _____ | Intermediate<br>Csg: _____ | Surf. Csg<br>1 |
|-------------------------------|-------------------------|----------------------------|-------------------------|----------------------------|----------------|

## BRADENHEAD TEST

Buried valve? ☐ Yes ☒ NoConfirmed open? ☒ Yes ☐ 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 H<sub>2</sub>O; M = Mud; W = Whisper; S = Surge; G = Gas

BRADENHEAD SAMPLE TAKEN?

☐ Yes ☒ No ☐ Gas ☐ LiquidCharacter of Bradenhead fluid: ☐ Clear ☐ Fresh☐ Sulfur ☐ Salty ☐ Black

Other:(describe)

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

Instantaneous Bradenhead PSIG at end of test: &gt; 1

| Elapsed Time (Min:Sec) | Fm: Tubing | Fm: Tubing: | Prod Csg PSIG | Intermedia Csg PSIG | Bradenhead Flow: |
|------------------------|------------|-------------|---------------|---------------------|------------------|
| 00:00                  | 68         |             | 3             |                     | O                |
|                        |            |             |               |                     |                  |
|                        |            |             |               |                     |                  |
|                        |            |             |               |                     |                  |
|                        |            |             |               |                     |                  |
|                        |            |             |               |                     |                  |
|                        |            |             |               |                     |                  |
|                        |            |             |               |                     |                  |
|                        |            |             |               |                     |                  |

## INTERMEDIATE CASING TEST

Buried valve? ☐ Yes ☐ NoConfirmed open? ☐ Yes ☐ 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<sub>2</sub>O; M = Mud; W = Whisper; S = Surge; G = Gas

INTERMEDIATE SAMPLE TAKEN?

☐ Yes ☐ No ☐ Gas ☐ LiquidCharacter of Intermediate fluid: ☐ Clear ☐ Fresh☐ Sulfur ☐ Salty ☐ Black

Other:(describe)

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

Instantaneous Intermediate Casing PSIG at end of test: &gt;

| Elapsed Time (Min:Sec) | Fm: Tubing | Fm: Tubing: | Prod Csg PSIG | Intermedia Csg PSIG | Bradenhead Flow: |
|------------------------|------------|-------------|---------------|---------------------|------------------|
|                        |            |             |               |                     |                  |
|                        |            |             |               |                     |                  |
|                        |            |             |               |                     |                  |
|                        |            |             |               |                     |                  |
|                        |            |             |               |                     |                  |
|                        |            |             |               |                     |                  |
|                        |            |             |               |                     |                  |
|                        |            |             |               |                     |                  |
|                        |            |             |               |                     |                  |

Comments:

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

Test Performed By: Travis Ridings Title: Floorhand Phone: (719) 846-7898

Signed: Travis Ridings Title: Floorhand Date: 9/14/2010

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