



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: 10079 3. BLM Lease No: _____
2. Name of Operator: ANTERO RESOURCES PICEANCE CORPORATION
4. API Number; 05-045-12062-00 5. Multiple completion? ☐ Yes ☐ No
6. Well Name: VALLEY FARMS Number: B4
7. Location (QtrQtr, Sec, Twp, Rng, Meridian): SENE,16,6S,92W,6
8. County GARFIELD 9. Field Name: MAMM CREEK
10. Minerals: ☒ Fee ☐ State ☐ Federal ☐ Indian

11. Date of Test: 02/01/2012
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>633</u>	Tubing: _____	Prod Csg <u>918</u>	Intermediate	Surf. Csg
	Fm: <u>WFCM</u>	Fm: _____	Fm: <u>WFCM</u>	Csg: _____	<u>150</u>

BRADENHEAD TEST

Buried valve? ☐ Yes ☒ No
Confirmed 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 H2O; M = Mud; W = Whisper; S = Surge; G = Gas

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

Character of Bradenhead fluid: ☐ Clear ☐ Fresh

☐ Sulfur ☐ Salty ☐ Black

Other:(describe) Milky White

Sample cylinder number: _____

Elapsed Time (Min:Sec)	Fm: Tubing	Fm: Tubing:	Prod Csg PSIG	Intermedia Csg PSIG	Bradenhead Flow:
00:00	WFCM 633		918		C
05:00	WFCM 630		918		C
10:00	WFCM 638		920		C
15:00	WFCM 640		917		C
20:00	WFCM 639		918		C
25:00	WFCM 637		918		C
30:00	WFCM 638		920		C

Instantaneous Bradenhead PSIG at end of test: > 0

INTERMEDIATE CASING TEST

Buried valve? ☐ Yes ☐ No
Confirmed 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 H2O; M = Mud; W = Whisper; S = Surge; G = Gas

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

Character of Intermediate fluid: ☐ Clear ☐ Fresh

☐ Sulfur ☐ Salty ☐ Black

Other:(describe) _____

Sample cylinder number: _____

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

Instantaneous Intermediate Casing PSIG at end of test: > _____

Comments: _____

The producing formation is WMFK. Bradenhead flow complete letter designations for the bradenhead test elapsed time periods are as follows: C & G (00:00), C & G (05:00), C, W & G (10:00), C, W & G (15:00), C, W & G (20:00), C, W & G (25:00), C, W & G (30:00).

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

Test Performed By: Andrew Terrazal Title: Pumper Phone: (720) 209-9019

Signed: Shauna Redican Title: Permit Representative Date: 2/2/2012

Witnessed By: _____ Title: _____ Agency: _____