

1. Type of Well
GAS

2. Name of Operator

**BURLINGTON
RESOURCES**

OIL & GAS COMPANY

3. Address & Phone No. of Operator

PO Box 4289, Farmington, NM 87499 (505) 326-9700

4. Location of Well, Footage, Sec., T, R, M

790' FSL 1650' FWL, Sec. 9, T-28-N, R-8-W, NMPM

5. Lease Number
SF-078499-A

6. If Indian, All. or
Tribe Name

7. Unit Agreement Name

8. Well Name & Number
Hardie E #2

9. API Well No.
30-045-07538

10. Field and Pool
Blanco Mesaverde

11. County and State
San Juan Co, NM

12. CHECK APPROPRIATE BOX TO INDICATE NATURE OF NOTICE, REPORT, OTHER DATA

Type of Submission

Type of Action

<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Abandonment	<input type="checkbox"/> Change of Plans
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Recompletion	<input type="checkbox"/> New Construction
<input type="checkbox"/> Final Abandonment	<input type="checkbox"/> Plugging Back	<input type="checkbox"/> Non-Routine Fracturing
	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> Water Shut off
	<input type="checkbox"/> Altering Casing	<input type="checkbox"/> Conversion to Injection
	<input checked="" type="checkbox"/> Other -	

13. Describe Proposed or Completed Operations

It is intended to restimulate and add pay to the Mesaverde formation of the subject well according to the attached procedure and wellbore diagram.

RECEIVED
 MAR 10 PM 1:12
 ORO FARMINGTON, NM

14. I hereby certify that the foregoing is true and correct.

Signed John S. H. (RLG) Title Regulatory Administrator Date 3/4/99
TLW

(This space for Federal or State Office use)

APPROVED BY Chip Hansen Title Acting Team Lead Date 3/12/99

CONDITION OF APPROVAL, if any:

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

NMOCD

✓

Hardie E # 2
Burlington Resources Oil & Gas
Mesaverde Restimulation and Payadd
Unit N - Sec 09 - T28N - R08W
Lat: 36° 40.25'
Long: 107° 41.35'

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- Comply with all BLM, NMOCD, & BR rules & regulations.
 - **Hold Safety Meetings.** Place fire safety equipment in strategic locations.
 - Spot and fill 4 frac tanks with 2% KCl water.
 - (1) 4-1/2" CIBP required for 4-1/2" 10.5# K-55 pipe.
 - (1) 4-1/2" Model 'EA' Retreivamatic Packer
 - 2800' 3-1/2" 9.3# N-80 Frac string
 - 4 jts 2-7/8" 6.5# N-80 buttress tubing
-

The well is completed in the Blanco Mesaverde (CH/PL) and is currently producing 40 MCFD. Cumulative production is 477 MMCF with remaining reserves of 76 MMCF. Pay will be added in the Cliffhouse and the Menefee. The entire interval will be stimulated in one stage with a 30# linear gel frac and 100K# sand.

NOTE: Cliffhouse perfs open 4380' - 4410'
Point Lookout perfs open 4892' - 5034'

1. MIRU. Record and report SI pressures on tubing, casing, and bradenhead. Blow down casing and tubing. Kill well w/ 2% KCl. ND WH, NU BOP.
2. TOOH with 1-1/4" 2.3# J-55 tubing from 5039' (163 joints). Visually inspect tubing, replacing any bad joints.
3. RU wireline unit. Run 4-1/2" gauge ring to 4880'. POOH. TIH with 4-1/2" Mechanical set RBP/4-1/2" packer combo on 2-3/8" tbg. Set RBP at 4370'. TOOH to 2900'. Set packer and pressure test casing and RBP to 1100 psi on surface (Bottom hole pressure = 3000 psi). **NOTE: RBP must be a tension or neutral set.**
4. Release packer, TIH, and latch on to RBP. Release and reset RBP at 4870'. Set packer just above RBP and pressure test to 3000 psi. Release packer and spot 500 gal of 15% HCl. TOOH.
5. RU wireline unit. Run in hole with dump bailer and spot sand on top of RBP. POOH. Run in hole with GR/CCL from 4850' to 4100'. POOH.
6. Under packoff, perforate CH/MN at the following depths with select fire HSC gun using Owen 3125-302T 10g charges (0.29" hole, 16.64" penetration), 1 SPF @ 180 degree phasing.

**4244', 4248', 4347', 4356', 4570', 4574', 4578', 4648', 4652', 4656', 4660',
 4664', 4670', 4732', 4735', 4738', 4822', 4825'**
 (18 total holes, 581' gross interval)

7. TIH with 4-1/2" pkr on 2-3/8" tbg. Set pkr at 4100'.
8. RU stimulation company. Test surface lines to 6000 psi. **Max surface pressure = 3000 psi at 5 BPM. Hold 500 psi on annulus during breakdown and stimulation.** Break down CH/MN w/ 1000 gallons 15% HCl. Drop 60 RCN 7/8" 1.3 SG perf balls evenly spaced throughout job. Attempt to balloff to 3000 psi. Bleed off pressure and release packer. Lower packer to 4835' to knock balls off perforations. TOOH.
9. TIH with 4-1/2" pkr on 3 jts 2-7/8" 6.5# N80 buttress tbg and 3-1/2" 9.3# N80 frac string. Set pkr at 2900'.
10. RU stimulation company. Test surface lines to 6000 psi. **Max surface pressure = 4900 psi at 50 BPM.** Fracture stimulate w/ 100,000# 20/40 Arizona sand with 30# Linear gel at 50 BPM. Increase injection rate as pressure allows. See attached frac schedule for details. (6 frac tanks needed)

Estimated pressure drop due to friction at:			
50 BPM	1919 psi	Max surface pressure	4900 psi
40 BPM	1402 psi	Max surface pressure	4400 psi
30 BPM	935 psi	Max surface pressure	3900 psi
11. Open well through a positive choke or choke manifold and monitor flow. Flow at 20 BPH or less, if sand is observed. When pressures allow, release packer and TOOH. LD 3-1/2" frac string, 2-7/8" N80 buttress tbg, and 4-1/2" packer.
12. TIH w/retrieving head on 2-3/8" tbg and clean out to RBP at 4870'. Pull above perfs and obtain pitot gauge for the Cliffhouse/Menefee.
13. Latch on to RBP, release, and TOOH.
14. TIH w/3-7/8" bit on 2-3/8" tbg and clean out to PBTD (5098'). Clean up to minimal water and trace to no sand. Obtain combined pitot gauge. TOOH.
15. Prepare to run production tubing string as follows: expendable check, one joint 1-1/4" tubing, common seating nipple, and remaining tubing. Land tubing @ 5039'.
16. ND BOP's, NU single tubing hanger wellhead. Pump off expendable check. Obtain final pitot up tubing. If well will not flow on it's own, make swab run to seating nipple. If swab run is not necessary, run a broach on slickline to ensure that the tubing is clear. RD and MOL. Return well to production.

Recommend: 
Production Engineer 2-23-99

Approved:  2/23/99
Basin Opportunities Team Leader

Approved: Bruce W. Borge 3-2-99
Drilling Superintendent

Vendors:

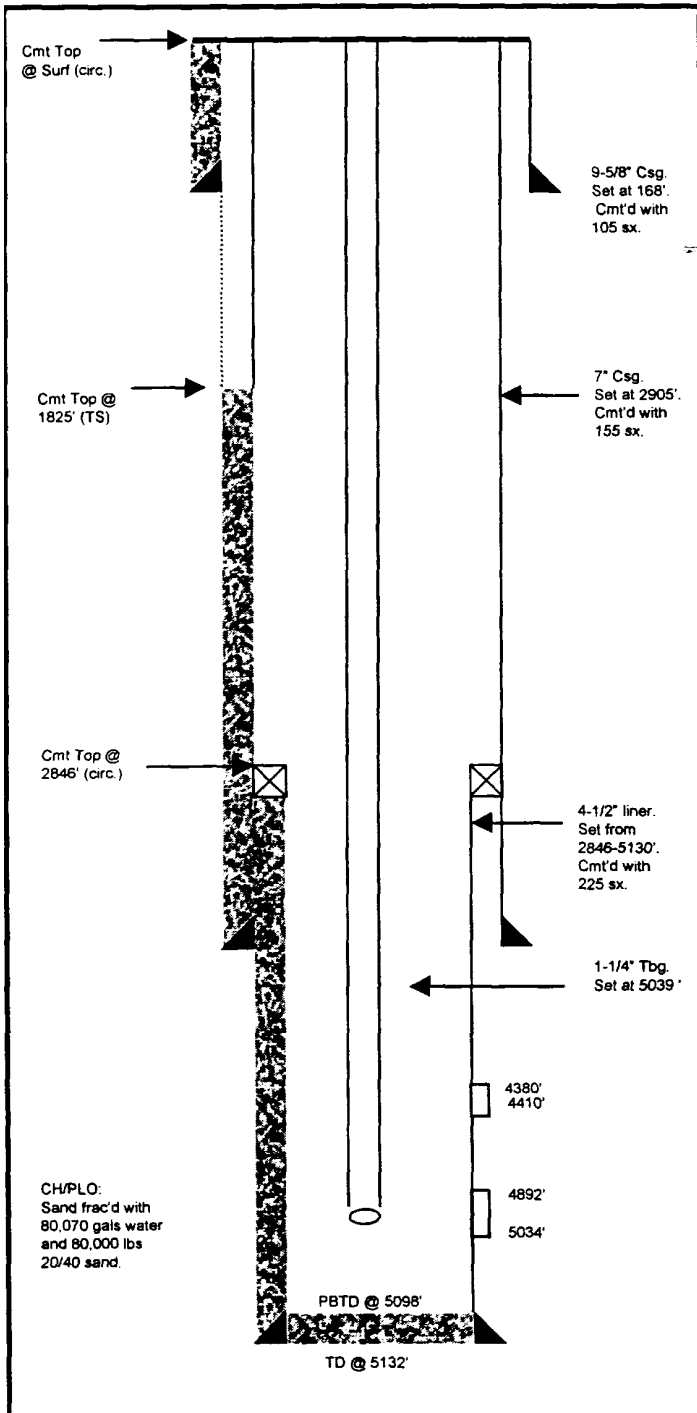
Wireline	Black Warrior	327-5244
Stimulation	Halliburton	324-3500

Production Engineer: **Bobby Goodwin**
326-9713-work
564-7096-pager
599-0992-home

Hardie E #2

Unit N, Section 9, T28N, R8W
San Juan County, NM
Lat: 36° - 40.24566'/Long: 107° - 41.34888'

Current Schematic



Proposed Schematic

