

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

Sundry Notices and Reports on Wells

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

1650' FSL 1650' FWL, Sec.14, T-28-N, R-8-W, NMPM

5. Lease Number
SF-078390-A

6. If Indian, All. or
Tribe Name

7. Unit Agreement Name

8. Well Name & Number

Hardie D #2

9. API Well No.

30-045-07424

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

☒ Notice of Intent
☐ Subsequent Report
☐ Final Abandonment

Type of Action

☐ Abandonment ☐ Change of Plans
☐ Recompletion ☐ New Construction
☐ Plugging Back ☐ Non-Routine Fracturing
☐ Casing Repair ☐ Water Shut off
☐ Altering Casing ☐ Conversion to Injection
☐ Other -

13. Describe Proposed or Completed Operations

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

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

Signed [Signature] (LD) Title Regulatory Administrator Date 11/3/98
TLW

(This space for Federal or State Office use)

APPROVED BY [Signature] Title [Signature] Date NOV 13 1998
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.

Hardie D #2
Menefee Pay Add Procedure
Unit K, Section 14, T28N, R08W
Lat: 36°- 39.51324'/Long: 107° - 39.18000'

The well is currently completed in the Cliffhouse and Point Lookout. It is intended to add the Menefee to this existing Mesaverde producer. The pay add will be sand fracture stimulated in a single stage using a total of 36,000 gals 30 lb linear gel and 58,500 lbs 20/40 sand.

1. Inspect location and test rig anchors. Comply with all NMOCD, BLM, Forestry & BR rules and regulations. Dig flowback pit or set flowback tank. Haul to location 7 jts 2-3/8" N-80 tubing, 2-3/8" X 2-7/8" N-80 crossover, 4700', 2-7/8" N-80 buttress frac string and 4-400 bbl frac tanks.
2. MIRU. Fill 400 bbl tanks with 2% KCL water. Run fluid tests on water. Filter water based upon stimulation company water analysis. Record and report SI pressures on tubing, casing and bradenhead. Lay blowdown line. Blow well down and kill with 2% KCL water as necessary. ND WH and NU BOP with flow tee and stripping head. Test operation of rams. NU blooie line and 2-7/8" relief line. Redress production wellhead as needed.
3. TOOH with 2-3/8" Mesaverde production string set at 5244'. Visually inspect tubing, note and report any scale in/on tubing. Replace bad joints as needed.
4. PU and RIH with a 3-7/8" bit, 4-1/2" (10.5 lb/ft) casing scraper on the 2-3/8" tubing string. Clean out to PBTD (~5261') with air/mist. TOOH.
5. RU wireline. RIH and set CIBP at 5080'. RD wireline.
6. RIH with 4-1/2" packer on 2-3/8" tubing. Set packer just above CIBP and pressure test to 3600 psi. Release packer and load hole with 20 bbls (~1200') 2% KCL water. PUH with packer to 5050'. Spot 250 gals 15% HCL across the Menefee perforation interval of 4737 to 5040'. TOOH.

All acid on this well to contain the following additives per 1000 gals.

2 gal	HAI-81M	Corrosion inhibitor
5 gal	FE-1A	Iron Control
5 gal	FE-2A	Iron Control
1 gal	SSO-21	Surfactant
1 gal	ClaSta XP	Clay control

7. MIRU logging company. Run GR-CBL-CCL from PBTD til out of water. Evaluate CBL. Good cement bond must exist from PBTD to 4500' to continue with procedure.
8. RU wireline. Perforate Menefee as follows using select fire HSC guns loaded with Owens HSC-3125 302T 10 gram charges (Av. perf diameter - 0.29", Av. pen. -16.64" in concrete).

**4737', 4745', 4747', 4760', 4766', 4777', 4782', 4793', 4794', 4802', 4818', 4820',
4914', 4916', 4920', 4922', 4972', 4974', 4977', 5012', 5014', 5028', 5030', 5038',
5040' (25 holes total)**

RDMO wireline company.

9. TIH with 4-1/2" bottom Baker C-cup straddle packer, 4 jts 2-3/8" N-80 tubing, 4-1/2" top straddle packer, 3 joints 2-3/8" N-80 tubing, 2-3/8" X 2-7/8" N-80 crossover, and remaining 2-7/8", N-80 buttress frac string. Set bottom packer at ~4640' and top packer ~4520' (Cliffhouse perfs 4542-4606').
10. RU stimulation company. Pressure test surface lines to 6500 psi. Apply 500 psi to backside. Monitor backside for communication. Establish an injection rate into perfs with 2% KCL water at maximum pressure of 3600 psi. Once pressure has broken back and stabilized, continue to breakdown Menefee perforations with 1000 gals 15% HCL at the maximum rate pressures will allow. Use the following additives.

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11. **Maximum surface treating pressure is 5500 psi. Monitor backside during stimulation.** Fracture stimulate Menefee with 58,500 lbs 20/40 Arizona sand in 35,000 gals 30 lb linear gel at **40 BPM**. **If pressures allow, increase injection rate accordingly.** Average surface treating pressure will be 5240 psi. Total estimated tubing and perforation friction will be 5401 psi. Treat per the following schedule:

Stage	Water (gals)	Sand Volume (lbs)
Pad	5,000	
1.0 ppg	6,500	6,500
2.0 ppg	16,250	32,500
3.0 ppg	6,500	19,500
Flush (slickwater)	1,176	
Totals	35,426	58,500

Slow rate during flush. If well is on vacuum near end of frac job, cut flush as necessary to avoid overflushing.

Frac with the following additives per 1000 gals frac fluid. **Gel will be mixed on the fly.**

*	7.5 gal	LGC-8	Gel
*	0.18 lb	BE-6	Biocide
*	0.4 lb	SP	Oxidizing Breaker
*	0.2 lb	GBW-3	Enzyme Breaker

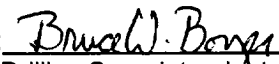
RDMO stimulation company.

12. Open well through a positive choke or choke manifold. Monitor flow. Flow at 20 BPH or less, if sand is observed. When pressures allow, release packers and TOOH. LD 2-7/8" buttress frac string, 2-7/8" X 2-3/8" N-80 crossover, 2-3/8" N-80 tubing, top 4-1/2" straddle packer, 2-3/8" N-80 tubing and bottom 4-1/2" straddle packer.
13. RIH with 3-7/8" bit on 2-3/8" tubing and clean out to CIBP at 5080'. Monitor gas and water returns when applicable. **Take Cliffhouse/Menefee pitot gauge before drilling up CIBP.** Drill up CIBP. CO to PBTD with air. Blow well at PBTD to check water rates. If needed, continue to blow well for clean up. TOOH.

Hardie D #2
1999 Discretionary Menefee Pay Add

14. TIH with an expendable check, one 2-3/8" joint, standard SN and remaining 2-3/8" tubing. Broach tubing while running in hole. CO with air/mist to PBDT again, if necessary. **Obtain final Cliffhouse/Menefee/Point Lookout pitot gauge.** Land tubing at 5224'. ND BOP. NU WH. Pump off expendable check. RDMO. Contact Production Operations for well tie-in.

Recommended: 
Production Engineer

Approved:  11-2-98
Drilling Superintendent

Approved:  10/27/98
Team Leader

Contact:

Jennifer Dobson

599-4026 (work)

564-3244 (home)

324-2461 (pager)

PERTINENT DATA SHEET

10/14/98

LATITUDE: 36° 39.51324'

LONGITUDE: 107° 39.18000'

WELLNAME: Hardie D #2 LEASE NUMBER: SF 078390-A				DP NUMBER: 50590A - MV PROP. NUMBER: 012578400 - MV																																			
WELL TYPE: Blanco Mesaverde				ELEVATION: DF 6357' GL 6347'																																			
LOCATION: 1650' FSL, 1650' FWL Unit K, Sec. 14, T28N, R08W San Juan County, NM				INITIAL POTENTIAL: MV 3,362 MCFD INITIAL SITP: 1,040 psi																																			
OWNERSHIP: <div style="display: flex; justify-content: space-between;"> <div> GWI: 100.0000% NRI: 83.5000% SJBT: 0.0000% </div> <div> DRILLING: SPUD DATE: 6/8/62 COMPLETED: 6/27/62 TOTAL DEPTH: 5282' PBTD: 5261' </div> </div>																																							
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Hardie D #2

Unit K, Section 14, T28N, R8W
San Juan County, NM
Lat: 36° - 39.51324'/Long: 107° - 39.18000'

Current Schematic

Proposed Schematic

