UNITED STATES

DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

| Sundry Not: | ices and Reports on Wel | 45 | | |
|--|--|--|---|--|
| 1. Type of Well GAS | 070 (1 | | SF-078138 | |
| 2. Name of Operator BURLINGTON RESOURCES | | 7. | Unit Agreement Nar | |
| 3. Address & Phone No. of Operat PO Box 4289, Farmington, NM | | 9. | Well Name & Number Morris A #13A API Well No. 30-045-26586 | |
| 1. Location of Well, Footage, Sec. 15, 1 | эс., т, R, M Г-30-N, R-11-W, NMPM | | Field and Pool Blanco Mesaverde County and State San Juan Co, NM | |
| 2. CHECK APPROPRIATE BOX TO INI | | | DATA | |
| Type of Submission _X_ Notice of Intent Subsequent Report | | ction Change of Plans New Construction Non-Routine Fracturing Water Shut off | | |
| Final Abandonment | Altering Casing _ _X_ Other - Pay add | Conversion t | o Injection | |
| It is intended to add pay to the attached pro | | iagram. DEG[DEC ON G() | | |
| I hereby certify that the | foregoing is true and | correct. | | |

MORRIS A #13A MV Workover Procedure I 15 30 11 San Juan County, N.M.

Lat-Long: 36-48.55 - 107-58.38

PROJECT SUMMARY: This is a Menefee payadd in a 1985 vintage MV well.

- Comply to all NMOCD, BLM, and BROG rules and regulations. MOL and RU completion rig. NU 7-1/16" 3000 psi BOP w/flow tee and stripping head. NU blooie line and 2-7/8" relief line.
- 2. Set blanking plug in S.N. of 2-3/8" tbg @ 4923' and test to 3000 psi. TOH w/2-3/8" tbg. TIH w/4-1/2" csg scraper on 2-3/8" tbg. Run to 4570'. TOH.
- 3. MI Wireline. Set 4-1/2" RBP @ 4570' and top w/1 sx sand. Load hole w/1% KCL water. Run CBL 4570'-2494' and correlate to attached open hole log. Pressure to 800 psi during CBL, if necessary. Hot shot log to Mike Pippin (326-9848). Pressure test csg to 800 psi.
- TIH w/2-3/8" tbg to 4460' and spot 170 gal 15% HCL acid across Menefee (4460'-4206').
 Caution: Care should be taken not to get acid on old wet Cliffhouse sq perfs @ 4033'-65'.

All acid on this well to contain the following additives per 1000 gal:

| 2 gal | CI-22 | corrosion inhibitor |
|---------|----------------|---------------------|
| 5 gal | Ferrotrol-300L | iron control |
| 1 gal | Flo-back 20 | Surfactant |
| 0.5 gal | Clay Master-5C | clay control |

- 5. Perf Menefee w/1 spf @ 4206', 11', 35', 42', 55', 4315', 19', 37', 60', 91', 95', 4411', 15', 17', 37', 44', 50', 54'. Total 18 holes. Perf w/select fire HSC gun using HSC-3125-302T 10 gr Owen jets which should give a 0.29" hole and 16.64" of penetration in concrete.
- 6. TIH w/4-1/2" pkr on 2-3/8" tbg and set @ 4100'. W/ 500 psi on the annulus, breakdown and attempt to balloff Menefee perfs w/1500 gal 15% HCL acid and 45 RCN 7/8" 1.3 sp gr perf balls. Use same acid additives as Step #4. Max. pressure is 4700 psi. Lower pkr to 4460' to knock off perf balls. TOH.
- 7. Spot and fill 5-400 bbl. frac tanks w/2% KCL water. If necessary, filter all water to 25 microns. Thirteen tanks are for fracing and one tank is for breakdown water. Usable water required for frac is 1460 bbls.
- 8. TIH w/ 4-1/2" pkr, 1700' 2-7/8" 6.5# N-80 w/shaved collars (3.5" O.D. 2.441" I.D.) and 2450' 3-1/2" 9.3# N-80 rental frac string and set @ 4150'. W/500 psi on annulus, frac Menefee w/60,000 gals. of 30# gel and 90,000# 20/40 Arizona sand. Pump at 40 BPM. Sand to be tagged w/ 3 RA tracers. Max. pressure is 4700 psi and estimated treating pressure is 4200 psi. Pipe string friction @ 40 BPM is 2559 psi. Treat per the following:

| | Water | Sand Vol | |
|--------------|----------|----------|--|
| <u>Stage</u> | (Gals.) | (lbs.) | |
| Pad | 15,000 | | |
| 1.0 ppg | 10,000 | 10,000 | |
| 2.0 ppg | 25,000 | 50,000 | |
| 3.0 ppg | 10,000 | 30,000 | |
| Flush | _(1,308) | 0 | |
| Totals | 60,000 | 90,000# | |

If well is on vaccum near end of frac job, cut flush as necessary to avoid overflushing and slow rate during flush. Frac with the following additives per 1000 gal frac fluid.

* 30# J-48

(Guar Gel mix in full tank - 16,000 gai) (Non-ionic Surfactant mix in full tank)

* 1.0 gal. Aqua Flow

(Enzyme Breaker mix on fly)

* 1.0# gvw-3 * 1.0# B-5

(Breaker mix on fly)

* 0.38# - Fracide 20

(Bacteriacide in full tank)

- 9. TOH w/frac string and pkr. TIH w/retrieving tool on 2-3/8" tbg and C.O. Menefee w/air/mist to ret BP @ 4570'. Take pitot gauges when possible.
- 10. When wellbore is sufficiently clean, retrieve BP @ 4570' and TOH.
- 11. TIH w/3-7/8" bit on 2-3/8" tbg and C.O. to PBTD5040' w/air/mist. Take pitot gauges when possible. When wellbore is sufficiently clean, TOH and run after frac gamma-ray log from 4700'-3800' and Perf Eff. Log for all MV intervals from 5002' to 4000' including the sq holes from 4033'-65'.
- 12. TIH w/2-3/8" tbg w/standard seating nipple one joint off bottom and again cleanout to 5040'. Use expendable check if necessary. When wellbore is sufficiently clean, land tog @ 4800' KB. Take final water and gas rates.
- 13. ND BOP and NU wellhead and tree. Rig down and release rig.

Production Engineer

Approve:

VENDORS:

Wireline Basin 327-5244 Fracturing: BJ 327-6222 RA Tag: **Pro-Technics** 326-7133 Pkr and Ret BP Schlum. 325-5096

PMP

Pertinent Data Sheet - MORRIS A #13A MV

Location: 1500' FSL & 1190' FEL, Unit I, Section 15, T30N, R11W, San Juan County, New Mexico

Field: Blanco Mesaverde

Elevation:

5868' GL

TD: 5155'

14' KB

PBTD: 5040'

Completed: 12/17/85

Spud Date: 11/16/85

DP #: 54401A

LEASE: Fed: SF 078138

GWI: 100% NRI: 84 375% **Prop#:** 012648700

Initial Potential: SICP=1097 PSI

Casing Record:

| Hole Size | Csg Size | Wt. & Grade | Depth Set | Cement | Cmt Top |
|-----------|--------------|--------------------|-------------|--------|-----------------|
| 12-1/4" | 9-5/8" | 32.3# H-40 | 206' | 138 cf | Circ Cmt |
| 8-3/4" | 7" | 20.0# K-55 | 2658' | 529 cf | 600' - Survey |
| 6-1/4" | 4-1/2" liner | 10. 5# K-55 | 2494'-5058' | 446 cf | Circ 30 Bbl Cmt |

Tubing Record:

Tbg. Size 2-3/8"

Wt. & Grade 4.70# J-55 EUE

Depth Set 4954'

159 Jts

S.N. @ 4923'

Formation Tops:

Mesaverde

3849"

Menefee:

4102'

Point Lookout:

4600'

Logging Record: Induction, Density, Temp

Perf Lower Point Lookout w/1 spf @ 4776', 88', 94', 4802', 08', 14', 21', 27', 42', 60', 93', 4906', Stimulation: 22', 46', 53', 58', 5002' & fraced w/64,300# sand in slick water. Perfed upper Point Lookout w/1 spf @ 4605', 10', 14', 18', 26', 32', 37', 42', 47', 52', 69', 74', 85', 91', 96', 4720', 36', 41' & fraced w/66,600# sand in slick water. Perfed Cliffhouse w/4 spf @ 4033', 63', 64', 65' & fraced w/7610 gals slickwater. Sq Cliffhouse perfs (4033'-65') w/100 sx cmt.

Workover History:

NONE

Production History: 1st delivered 1/15/85. Current MV capacity is 86 MCF/D. Cum is 487 MMCF & 1740 BO.

Pipeline: EPNG

MORRIS A #13A MV

UNIT I SECTION 15 T30N R11W SAN JUAN COUNTY, NEW MEXICO

