

State of New Mexico  
Energy, Minerals and Natural Resources Department  
Oil Conservation Division

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  
1490' FSL, 800' FEL, Sec.2, T-27-N, R-5-W, NMPM, Rio Arriba County

API # (assigned by OCD)  
30-039-25598

5. Lease Number

6. State Oil&Gas Lease #  
E-290-38

7. Lease Name/Unit Name  
San Juan 27-5 Unit

8. Well No.  
111M

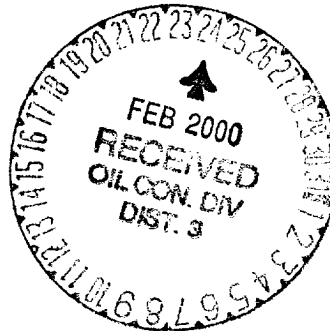
9. Pool Name or Wildcat  
Blanco MV/Basin DK

10. Elevation:

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

13. Describe Proposed or Completed Operations

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



SIGNATURE Jenny Cole (MQOpps) Regulatory Administrator February 22, 2000

no  
(This space for State Use)

Approved by SSS Title SUPERVISOR DISTRICT #3 Date FEB 24 2000

# San Juan 27-5 Unit #111M

Lewis Payadd Procedure  
Unit I, Section 2, T-27N, R-05 W  
Lat: 36° 35.97' Long: 107° 19.25'

*This well was originally drilled in 1997 and is currently completed in the Cliff House, Menefee, Point Lookout and Dakota. It is intended to add the Lewis to the existing Mesaverde production. The Lewis will be sand fracture stimulated in two stages using 100,000 lbs 20/40 sand and 75Q 20 lb linear gel in each stage. Foam will be used to limit fluid damage to the Lewis and aid in the flowback. The flowback choke schedule is to be used to ensure that the proppant remains in the fractures.*

- Comply with all BLM, NMOCD, and BR rules and regulations.
- Hold safety meetings.
- Place fire safety equipment in strategic locations.
- Inspect location and test rig anchors.
- Dig flowback pit or set flowback tank.
- Set and fill 3-400 BBL Frac tanks w/ 2% KCl water. Test and filter if necessary.

## Equipment Needed:

- (3) Frac Tanks with 2% KCl water
- (2) 4-1/2" CIBP
- (1) 4-1/2" RBP
- (1) 4-1/2" Packer
- 4300' -- 3-1/2" N-80 9.3#

## PROCEDURE:

1. MIRU. Record and report SI pressures on tubing, casing, and bradenhead. Lay blowdown line and blow well down. Kill well with 2% KCl water. ND WH, NU BOP. Test and record operation of rams. NU blooie line and 2-7/8" relief line. Redress production wellhead as needed.
2. TOOH w/ 2-3/8" 4.7# J-55 tubing set at 8539' (SN @ 8506'). Visually inspect tubing, note and report any corrosion and/or scale\*\* in/on tubing. Replace bad joints as needed.

\*\* If tubing is scaled up, contact the production engineer so a scale analysis can be run to determine if an acid treatment is needed.

3. RU wireline. Run 4-1/2" gauge ring to 5720'. If ring tags up before 5720', TIH with 3-7/8" Bit, 4-1/2" 11.6# casing scraper on 2-3/8" tubing and CO to 8584'. TOOH. TIH with 4-1/2" CIBP on/off tool and 4-1/2" packer. Set CIBP @ ± 5700'. Load Hole w/ 2% KCl water. Set packer @ ± 4670'. Pressure test CIBP and casing to 3800 psi. Release packer and TOOH.
4. Correlate to GR-CBL-CCL and perforate the Lower Lewis as follows using Scallop HSC guns loaded with TAG-4000-311T 23 gm, .42" diameter, 22.2" penetration charges at 1 SPF in the following intervals from bottom up:

**5620-10, 5580-70, 5494-84, 5432-22, 5361-51, 5306-5296**

RD wireline.

5. TIH with 4-1/2" RBP, on/off tool and 4-1/2" packer on 2-3/8" tubing.

Set RBP at RBP setting depth. PUH ± 10 ft and set Packer. RU stimulation company and pressure test RBP and lines to 3800 psi. Release packer, and reset packer at Packer Setting Depth. Breakdown perforations and establish an injection rate between 8 and 10 BPM with 333 gals of Acetic Acid + 5% NH<sub>4</sub>Cl \*\*. Breakdown to the **Max pressure of 3800 psi**. Release packer and RBP. Repeat for the remaining intervals.

\*\* All Acid to contain the following additives/ 1000 gal:

1000 gal	10%	Acetic Acid
2 gal	MSA II	corrosion inhibitor
5%	NH <sub>4</sub> CL	clay control

# ● San Juan 27-5 Unit #111M ●

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RBP Setting Depth	Packer Setting Depth	Perforation Intervals
5690	5510	5570-80, 5610-20
5550	5370	5422-32, 5484-94
5405	5230	5296-5306, 5351-61

- TOOH w/ RBP, Packer, and 2-3/8" tubing. PU and TIH w/ 4-1/2" packer, 2 joints 2-3/8" 4.7# J-55, 2-3/8" X 2 7/8 crossover, 21 joints 2-7/8" 6.4# BUTTRESS, 2-7/8" Buttress X 3-1/2" 9.3# crossover and 3-1/2" 9.3# N-80 Frac String. Set Packer @ 4670'.
- Pressure Test surface lines to 7000 psi. Fracture stimulate Lower Lewis with 100,000 lbs 20/40 sand 75Q foam with 20 lb linear gel at a rate of 35 BPM in 0.5 to 3.0 ppg stages. Apply 500 psi to annulus. Monitor annulus pressure throughout stimulation. **Tag sand with 3 radioactive isotopes. Maximum Surface Treating Pressure is 6000 psi.** At 35 BPM friction pressure is approximately 4770 psi. Slow rate during flush. Flush to 100' above top perf with 75Q foam.
- Record ISIP, 5, 10 and 15 shut-in pressure. Shut-in frac valve. RD stimulation company. Install flowback line above frac valve. Lay flowback line to dual-choke manifold and pit. Begin flowback after stimulation company has rigged down from frac valve. Open well to pit on accordance with flowback schedule listed in the table below. Do not shut well in during flowback. When schedule dictates a larger choke size, open ball valve upstream of adjustable choke and open adjustable choke on manifold to pre-determined size listed in table and begin flowing through adjustable choke. Close ball valve upstream of positive flow bean and change out flow bean to next larger size in table. Open ball valve upstream of positive flow bean and begin flowing. Close ball valve upstream of adjustable choke and close adjustable choke.

10/64" Choke	Approximately 2 hrs.
12/64" Choke	Approximately 2 hrs.
14/64" Choke	Approximately 2 hrs.
16/64" Choke	Approximately 3 hrs.
18/64" Choke	Approximately 3 hrs.
20/64" Choke	Approximately 3 hrs.
22/64" Choke	Approximately 3 hrs.
24/64" Choke	Approximately 3 hrs.
32/64" Choke	Approximately 3 hrs.

**NOTE: Follow this schedule to utilize a 24+ hour flowback. If well begins to slug or make large amounts of sand to surface, drop to next lower choke size. If well begins to taper off in liquid production (mostly N<sub>2</sub>), change to next larger choke size before time schedule dictates.**

- Release packer and TOOH. Stand back 3-1/2" frac string, 3-1/2" X 2-7/8" crossover, 2-7/8" frac string, 2-7/8"X2-3/8" cross over, and 2-3/8" Frac String.
- TIH w/ 4-1/2" CIBP, on/off tool and 4-1/2" packer on 2-3/8" tbg and set CIBP @  $\pm$  5240'. PUH, set packer @ 4670', and pressure test CIBP and casing to 3800 psi. Release packer and TOOH.
- RU wireline. Correlate to GR-CBL-CCL and perforate the Upper Lewis as follows using Scallop HSC guns loaded with TAG-4000-311T 23 gm, .42" diameter, 22.2" penetration charges at 1 SPF in the following intervals from bottom up:

**San Juan 27-5 Unit #111M**  
**Lewis Payadd Procedure**  
Unit I, Section 2, T-27N, R-05 W  
**Lat: 36° 35.97' Long: 107° 19.25'**

5208-5198, 5160-50, 5120-10, 4993-83, 4920-10, 4820-10

RD wireline.

12. TIH with 4-1/2" RBP, on/off tool and 4-1/2" packer on 2-3/8" tubing.

Set RBP at RBP setting depth. PUH  $\pm$  10 ft and set Packer. RU stimulation company and pressure test RBP and lines to 3800 psi. Release packer, and reset packer at Packer Setting Depth. Breakdown perforations and establish an injection rate between 8 and 10 BPM with 333 gals of Acetic Acid + 5% NH<sub>4</sub>Cl \*\*. Breakdown to the **Max pressure of 3800 psi**. Release packer and RBP. Repeat for the remaining intervals.

\*\* All Acid to contain the following additives/ 1000 gal:

1000 gal	10%	Acetic Acid
2 gal	MSA II	corrosion inhibitor
5%	NH <sub>4</sub> CL	clay control

RBP Setting Depth	Packer Setting Depth	Perforation Intervals
5230	5130	5150-60, 5198-5208
5140	4930	4983-93, 5110-20
4970	4760	4810-20, 4910-20

13. TOOH w/ RBP, Packer, and 2-3/8" tubing and stand back. TIH w/ 4-1/2" packer, 2 joints 2-3/8" 4.7# J-55, 2-3/8" X 2 7/8 crossover, 21 joints 2-7/8" 6.4# BUTTRESS, 2-7/8" Buttress X 3-1/4" 9.3# crossover and 3-1/2" 9.3# N-80 Frac String. Set Packer @ 4670'. 2

14. Pressure Test surface lines to 7000 psi. Fracture stimulate Lower Lewis with 100,000 lbs 20/40 sand in 75Q foam with 20 lb linear gel at a rate of 35 BPM in 0.5 to 3.0 ppg stages. Apply 500 psi to annulus. Monitor annulus pressure throughout stimulation. **Tag sand with 3 radioactive isotopes. Maximum Surface Treating Pressure is 6000 psi.** At 35 BPM friction pressure is approximately 3300 psi. Slow rate during flush. Flush to 100' above top perf with 75Q foam.

15. Record ISIP, 5, 10 and 15 shut-in pressure. Shut-in frac valve. RD stimulation company. Install flowback line above frac valve. Lay flowback line to dual-choke manifold and pit. Begin flowback after stimulation company has rigged down from frac valve. Open well to pit on accordance with flowback schedule listed in the table below. Do not shut well in during flowback. When schedule dictates a larger choke size, open ball valve upstream of adjustable choke and open adjustable choke on manifold to pre-determined size listed in table and begin flowing through adjustable choke. Close ball valve upstream of positive flow bean and change out flow bean to next larger size in table. Open ball valve upstream of positive flow bean and begin flowing. Close ball valve upstream of adjustable choke and close adjustable choke.

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16. Release packer and TOOH. Release packer and TOOH. Laydown 3-1/2" frac string, 3-1/2" X 2-7/8" crossover, 2-7/8" frac string, 2-7/8"X2-3/8" cross over, and 2-3/8" Frac String.
17. TIH w/ 3-7/8" bit on 2-3/8" tubing and CO to CIBP @ 5240'. Monitor gas and water returns. When sand and water allow (less than 5 BPH and trace sand), take a Upper Lewis pitot gauge. DO CIBP @ 5240' with a minimum of 12 BPH mist rate.
18. CO to CIBP @ 5700'. Monitor gas and water returns. When sand and water allow (less than 5 BPH and trace sand), take a complete Lewis pitot gauge. DO CIBP @ 5700' with a minimum of 12 BPH mist rate.
19. Continue to CO to PBTD with air. Blow well at PBTD and monitor water rates. If needed continue to blow well for clean up. When water rates are below 5 BPH and there is no sand production, TOOH.
20. TIH with an expendable check, one 2-3/8" joint, seating nipple, and remaining production tubing. Broach tubing while running in hole. CO with air/mist to PBTD again, if necessary. Obtain final pitot gauge. Land tubing at ± 8539'. ND BOP. NU WH. Pump off expendable check. RDMO. Contact Production Operations for well tie-in.
21. RU Pro-Technics. Run After Frac Log across Lewis (5800' – 4600'). RD Pro-Technics.

Recommended: Michele Quisel  
Production Engineer  
12-17-99

Approved: [Signature] 12/20/00  
Drilling Superintendent

Approved: [Signature] 12/21/99  
Team Leader

Contact:

Michele Quisel 324-6162 (WORK) 326-8196(PAGER) 564-9097(HOME)

Vendors:	Wireline:	Black Warrior	326-6669
	RA Tagging:	Pro-Technics	326-7133

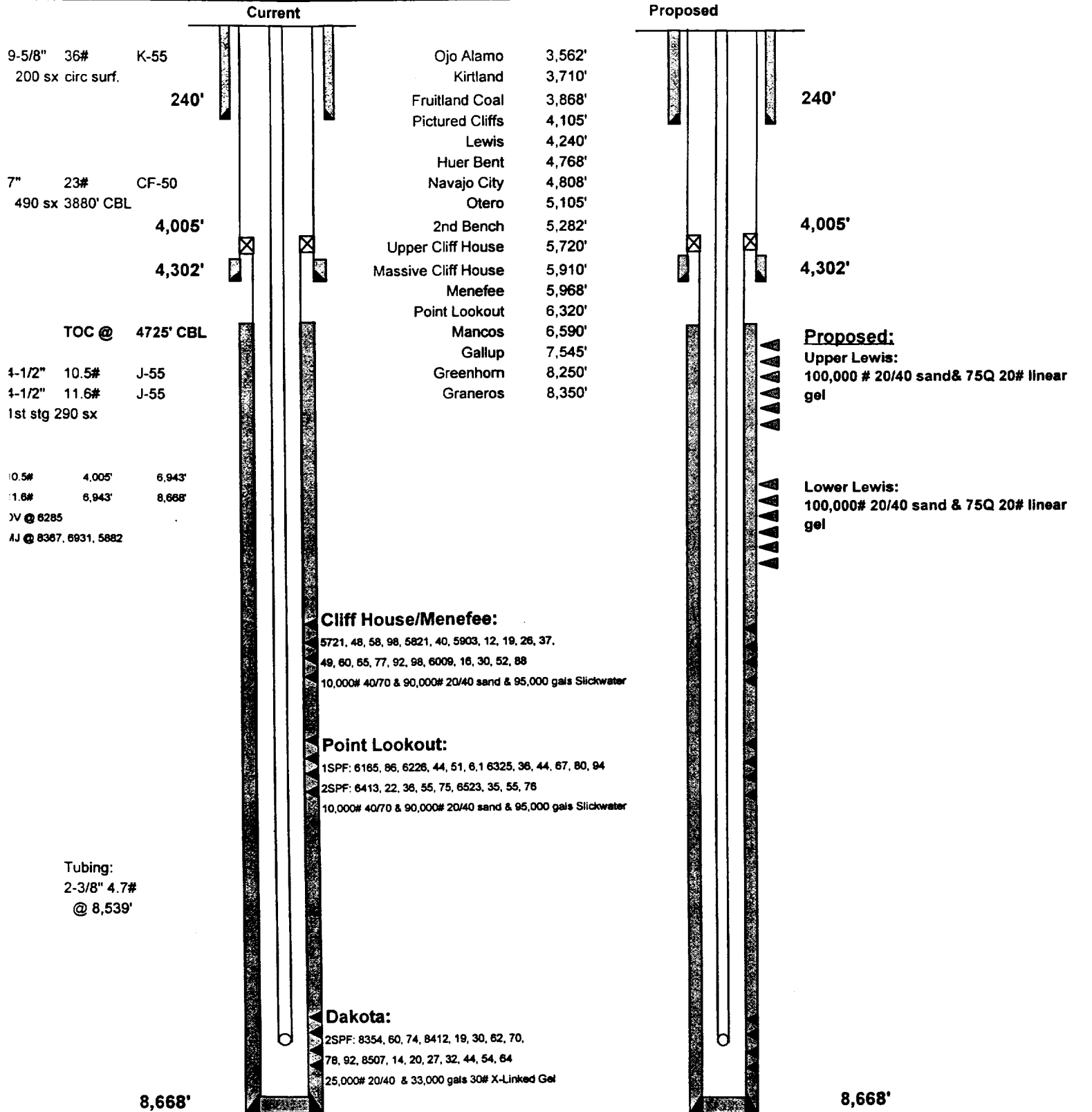
1490' FSL, 800' FEL  
Unit I Sec. 2, T-27 R-05W  
Rio Arriba County, New Mexico

KB 7314

GL 7302

Lat: 36° 35.97'

Long: 107° 19.25'



PBTD = 8,584'  
TD = 8,670'

12/17/1999

MSQ