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

Sundry Notices and Reports on Wells

1. **Type of Well**
GAS

API # (assigned by OCD)
30-039-20613

5. **Lease Number**
Fee

6. **State Oil&Gas Lease #**

2. **Name of Operator**
BURLINGTON RESOURCES OIL & GAS COMPANY

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

8. **Well No.**
156

3. **Address & Phone No. of Operator**
PO Box 4289, Farmington, NM 87499 (505) 326-9700

9. **Pool Name or Wildcat**
Tapacito Pict.Cliffs

4. **Location of Well, Footage, Sec., T, R, M**
1840'FNL, 1600'FEL, Sec.22, T-27-N, R-5-W, NMPM, Rio Arriba County

10. **Elevation:**

G

Type of Submission	Type of Action	
_X_ Notice of Intent	___ Abandonment	___ Change of Plans
	___ Recompletion	___ New Construction
___ Subsequent Report	___ Plugging Back	___ Non-Routine Fracturing
	_X_ Casing Repair	___ Water Shut off
___ Final Abandonment	___ Altering Casing	___ Conversion to Injection
	_X_ Other - Restimulate	

13. Describe Proposed or Completed Operations

It is intended to repair the casing and restimulate the subject well according to the attached procedure.

RECEIVED
MAY 20 1999
OIL CON. DIV.
DIST. 3

SIGNATURE _____ (TMS) Regulatory Administrator May 19, 1999

no

(This space for State Use)

Approved by ORIGINAL SIGNED BY CHARLIE T. PERRIN Title DEPUTY OIL & GAS INSPECTOR, DIST. #3 Date MAY 20 1999

Casing Repair

1. MOL, hold safety meeting, and RU completion rig. Insure all safety equipment is strategically located and functioning properly. NU relief lines to blow pit. ND wellhead and NU 7-1/16" 3M BOP, stripping head, and blooie line. Test BOP.

2. PU and TIH with a 2-7/8" RBP and 1-1/4" tubing. Set RBP at 2050'. Release from BP. Spot 10' of sand on BP. TOOH.

3. PU 1 jt. 2-7/8" tubing and screw into casing. MIRU wireline specialties. Freepoint 2-7/8" casing.

4. PU 2-7/8" packer. TIH with 2-7/8" packer on 1-1/4" tubing. Set packer at lowest 100% freepoint in casing. Pressure test casing below and above packer. Release packer and TOOH. If casing leak is below packer RDMO. If leak is above packer continue with step 5.

5. RIH with stringshot. Back off casing at lowest joint 100% free. RDMO wireline specialties.

6. Circulate hole clean. TOOH and lay down old 2-7/8" casing.

7. PU and TIH with new 2-7/8" casing. Screw in to existing casing.

8. Pressure test casing to 3700-psi for 15 minutes.

9. TIH with 1-1/4" tubing. Clean out to top of RBP. Latch on to 2-7/8" RBP and TOOH. Lay down RBP. TIH. CO to PBTD. TOOH and lay down 1-1/4" tubing.

10. RDMO

Rigless Procedure

11. Install 2 7/8 In. 6.5# N-80 EUE 8rd sub and 5000 psi frac valve. Lay flowback line to pit.

12. Set two (2) 400 bbl frac tank(s) on location and fill with 640 bbl 2% KCl water. Treat tank with biocide prior to filling. Heat gel tank to 60-70 °F in winter.

13. RU stimulation company to frac down 2 7/8" casing. Hold pre-job safety meeting with all personnel on location. Pressure test surface lines to 4700 psi prior to stimulation. Breakdown perforations by bullheading 200 gals 15% inhibited acid with the following additives:

    - 1 gal/M HAI-81M (corrosion inhibitor)
    - 1 gal/M SSO-21M (surfactant)

    Fracture stimulate in 1 to 4 ppg stages at 35 BPM constant downhole rate with 53,488 gal of 70Q N_2 foamed 30# linear guar gel and 175,000# 20/40 mesh Arizona sand. **Maintain a bottom hole frac gradient of 0.65 psi/ft throughout job**. When sand is in hopper and the concentration begins to drop, call flush. **Maintain previous stage's slurry and N2 rates. Quick flush to 100 ft. above top perforation with +/- 222 fluid gals**. Maximum treating pressure is 3,700 psi. Monitor bottomhole treating pressure, surface treating pressure, downhole rate, foam quality, and sand concentration with computer van. Treat per the following schedule:

Stage	Foam Volume (gal)	Clean Gel Volume (gal)	Sand Volume (lbs)	Type
Pad	3,075	923	0	
1 ppg	2,000	627	2,000	20/40 Az
2 ppg	3,000	982	6,000	20/40 Az
3 ppg	25,200	8,594	75,600	20/40 Az
4 ppg	22,850	8,105	91,400	20/40 Az
Flush	488	222 @ 55% N2	0	20/40 Az
Totals	**56,613**	**19,453**	**175,000**	

Treat frac fluid with the following additives per 1000 gallons:

- 30# WG-19 (Gelling agent pre-mixed in full tank)
- 2.0 gal SSO-21M (Non-ionic surfactant pre-mixed in full tank)
- 0.5# GBW-3 (Enzyme breaker mixed on fly)

- 3.0 gal AQF-2 (Foamer mixed on fly)
- 0.18# BE-6 (Bacteriacide pre-mixed in full tank)
- 0.25 gal BA-20 (pH buffer mixed on fly)

14. Shut well in after frac and record ISIP. Empty remaining fluid in frac tanks to pit and RD stimulation company. Install flowback line above frac valve. Wait 1 hour before commencing flowback. Open well to pit in accordance to **flowback schedule enclosed in procedure**. If choke plugs off, shut well in and remove obstruction from choke and return to flowback schedule. **Do not replace with next larger choke size until schedule dictates.** Continue cleaning well up until fluid returns are negligible. **Take pitot gauges when possible.**

15. ND flowback line, frac valve, and isolation tool. NU production valve with flow tee. NU flowback line.

Swab Rig Clean-Up

16. MIRU Silver Star. PU and RIH with 2 1/4" sand bailer. CO to PBTD at 2,219 '. Monitor gas and water returns. **Take pitot gauges when possible.**

17. Continue cleaning up after frac until sand returns are a trace and fluid recovery is less than 2 BPH. TOOH. **Take final pitot gauge.**

18. RD and release swabbing unit.