## UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

1. Type of Well GAS  2. Name of Operator  OIL & GAS COMPANY  OIL & GAS	on Wells	Sundry Notices
San Juan 27- Well Name & San Juan 27- Well Name & San Juan 27- PO Box 4289, Farmington, NM 87499 (505) 326-9700  4. Location of Well, Footage, Sec., T, R, M 10. Field and Po 1750'FSL, 1025'FEL, Sec.21, T-27-N, R-5-W, NMPM Tapacito Pic 11. County and S Rio Arriba C  12. CHECK APPROPRIATE BOX TO INDICATE NATURE OF NOTICE, REPORT, OTHER DATA Type of Submission Type of Action  X Notice of Intent Abandonment Change of Plans New Construction New Construction New Construction Non-Routine Fracturing X Casing Repair Water Shut off 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.	6. If Indian, All. or Tribe Name	GAS
3. Address & Phone No. of Operator PO Box 4289, Farmington, NM 87499 (505) 326-9700  4. Location of Well, Footage, Sec., T, R, M 10. Field and Po 1750'FSL, 1025'FEL, Sec.21, T-27-N, R-5-W, NMPM  12. CHECK APPROPRIATE BOX TO INDICATE NATURE OF NOTICE, REPORT, OTHER DATA Type of Submission Type of Action  X Notice of Intent Recompletion Subsequent Report Plugging Back Y Casing Repair Final Abandonment X Casing Repair X Change of Plans New Construction Non-Routine Fracturing X Casing Repair X Coher - Restimulate  13. Describe Proposed or Completed Operations  It is intended to repair the casing and restimulate the subject well according to the attached procedure.	Can Juan 27-5 Unit	BURLINGTON
Type of Submission  _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.	San Juan 27-5 U #154 5-9700 9. API Well No. 30-039-20622 10. Field and Pool	PO Box 4289, Farmington, NM 874  Location of Well, Footage, Sec.,
It is intended to repair the casing and restimulate the subject well according to the attached procedure.	cof Action Change of Plans New Construction Ck Non-Routine Fracturing Water Shut off Conversion to Injection	Type of Submission _X_ Notice of Intent Subsequent Report X Final Abandonment
		It is intended to repair the c
14. Thereby certify that the foregoing is true and correct.  Signed Manual (Tr3) Title Regulatory Administrator Date 5/19/99  no  (This space for Perpunke W. Spence of the Spence of Title Date  APPROVED BY Title Team Language Date  CONDITION OF APPROVAL, if any:	gulatory Administrator Date 5/19/99	igned Machield (T

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

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<sub>2</sub> 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)	<u>Type</u>
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
	25.200	8.594	75,600	20/40 Az
3 ppg	22.850	8.105	91,400	20/40 Az
4 ppg	•	222 @ 55% N2	0	20/40 Az
Flush	488	_	175,000	20, 10 1
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

• 0.18# BE-6

0.25 gal BA-20

(Foamer mixed on fly)
(Bacteriacide pre-mixed in full tank)
(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.