

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
K 1750' FSL 1625' FWL, Sec. 13, T-25-N, R-6-W, NMPM

5. Lease Number
SF-078884

6. If Indian, All. or
Tribe Name

7. Unit Agreement Name
Canyon Largo Unit

8. Well Name & Number
Canyon Largo U#288

9. API Well No.
30-039-21172

10. Field and Pool
Basin Dakota

11. County and State
Rio Arriba Co, NM

12. CHECK APPROPRIATE BOX TO INDICATE NATURE OF NOTICE, REPORT, OTHER DATA

Type of Submission

Type of Action

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

13. Describe Proposed or Completed Operations

It is intended to restimulate the Dakota 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 *Reggie Spencer* (SD) Title Regulatory Administrator Date 9/22/98
TLW

(This space for Federal or State Office use)

APPROVED BY */s/ Duane W. Spencer* Title _____ Date 9/22/98

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.

NMOC

Canyon Largo Unit #288

Procedure

Burlington Resources

Basin Dakota

Location: Unit K. Sec. 13, T25N. R6W, Rio Arriba County, NM

Lat: 36° 23.8431 min. Long: 107° 25.31526 min.

-
- ☐ Comply with all BLM, NMOCD, & BR rules & regulations.
 - ☐ Conduct daily safety meetings.
 - ☐ Place fire and safety equipment in strategic locations.
 - ☐ 1 frac tanks to be spotted and filled with 2% KCl water.
 - ☐ Inspect tubing for potential problems.
-

Summary

The CLU 288 was drilled and completed in 1976. Initially this well produced from the Upper Dakota (UDK) only. The Encinal Canyon (ENCN) member of the Lower Dakota (LDK) was added in 1993 by perforating, breaking down and balling off with 15% HCL, and fracturing with 35# Xlink gel. This well is currently producing 108 MCFD and 2 BOD, mostly from the ENCN. Core studies have identified a return permeability problem in the ENCN after exposure to water. We also suspect there is damage to both the matrix and the natural fractures caused by gels. There has been some success in other basins using liquid CO₂ to remediate both forms of damage. We intend to test the use of liquid CO₂ as remediation in ENCN with this project.

1. Inspect location and test rig anchors. Prepare blowpit. MIRU completion rig.
2. NU BOP, flow tee, and stripping head. Test operation of BOP and rams. NU blooie line and 2-7/8" relief line. Lay flow line to pit and stake down.
3. Record a pitot test. Sting out of CMTRET. Record a pitot test. Kill UDK w/ 2% KCL as necessary. POOH w/ 224 jts 2-3/8" tubing. Visually inspect tubing for scale buildup. Lay down any joints that have scale.
4. TIH w/ 3-7/8" bit, watermellon mill, drill collars as needed, and 2-3/8" tubing. Drill out CMTRET @ 7092' and clean out to PBTD @ 7160'. Spot 250-gal 15% HCL @ 7135'. PUH above acid and let set for 2-hrs. TIH to 7135'. Reverse acid out and blow well dry w/ air. Record a pitot test. TOOH.
5. TIH w/ RBP, packer, and 2-3/8" tubing. Set RBP @ 6890'. Release from RBP and set packer above RBP. Pressure test RBP to 2500-psi. Pressure test backside to 2500-psi. If pressure test fails isolate casing leaks and prep for squeeze work. TOOH.
6. If a squeeze job is necessary notify BR Regulatory (Peggy Bradfield 326-9727) and the appropriate Regulatory Agency prior to pumping any cement job. Approval is required before the job can be pumped. If verbal approval is obtained, document approval in DIMS/WIMS. Contact the Production Engineer for squeeze procedure.
7. TIH w/ 4-1/2" packer and 2-3/8" tubing. Set packer @ 7090' under 30000-psi of compression. Pump 40-bbl of 2% KCL down backside with rig pump.
8. RU Halliburton. Install 10,000-psi frac valve. Hold safety meeting. Pressure test surface lines to 6000-psi. Stimulate the ENCN w/ 60-tons CO₂ as follows:

Equipment Needed:

V12 Pumping unit (1000 HP)

CO₂ Booster

Acid Monitoring Van

60 Tons CO₂ (3 Transports)

Stimulation Volume:

55 Tons

Pump Cool Down Volume:

5 Tons

Injection Rate:

4 BPM

Anticipated Wellhead Treating Pressure:

4460-psi

Max. Treating Pressure:

5000-psi

Monitor backside pressure for breakthrough during job. RD Halliburton.

9. Shut down and allow CO₂ to soak for 2 days.
10. Equalize and release packer. Flow well back for 2 days. Monitor gas, oil, and water returns. Take pitot gauges and test for CO₂ concentrations twice per day. TOOH. **Attempt to minimize fluid exposure to ENCN.**
11. **Do not kill well to land tubing. Strip tubing into hole.** PU and TIH w/ a pump out plug, one jnt. 2-3/8" tubing, SN, and remaining 2-3/8" tubing. Broach while RIH. Land at 7125'.
12. ND BOP. NU WH. Test seals on tubing head. Pump out tubing plug. Flow well up tubing to ensure plug pumped out.
13. RD. Release rig to next location.

Recommended: De Schwan 9/6/98
Engineering Analyst

Approved: Gerald P. Zia 9-16-98
Team Leader

Approved: Bruce W. Boyer 9-8-98
Drilling Superintendent

Recommended Vendors:

CO ₂ Stimulation	Halliburton	324-3500
Downhole Tools	Baker	325-0216
Production Engineering	Scott Dobson	326-9813-Work 326-8036-Pager 564-3244-Home
Reservoir Engineering	Craig McCracken	326-9706-Work 327-7172-Home

Canyon Largo Unit #288
Unit K, Sec. 13, T25N, R6W
Rio Arriba County, NM

Current

Proposed

Cmt. Top at
Surf (circ.)

