

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

Sundry Notices and Reports on Wells

<p>1. Type of Well GAS</p> <hr/> <p>2. Name of Operator <b>BURLINGTON RESOURCES</b> OIL &amp; GAS COMPANY</p> <hr/> <p>3. Address &amp; Phone No. of Operator PO Box 4289, Farmington, NM 87499 (505) 326-9700</p> <hr/> <p>4. Location of Well, Footage, Sec., T, R, M 1590' FNL 880' FEL, Sec.12, T-26-N, R-9-W, NMPM</p>	<p>5. Lease Number SF-078388</p> <p>6. If Indian, All. or Tribe Name</p> <p>7. Unit Agreement Name Huerfanito Unit</p> <p>8. Well Name &amp; Number Huerfanito Unit #66</p> <p>9. API Well No. 30-045-05944</p> <p>10. Field and Pool Basin Fruitland Coal</p> <p>11. County and State San Juan Co, NM</p>
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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 -	

13. Describe Proposed or Completed Operations

It is intended to foam frac the Fruitland Coal formation of the subject well according to the attached procedure and wellbore diagram.

RECEIVED  
FEB 16 1999  
BUREAU OF LAND MANAGEMENT

14. I hereby certify that the foregoing is true and correct.

Signed [Signature] (NMPM) Title Regulatory Administrator Date 2/16/99  
TLW

(This space for Federal or State Office use)  
APPROVED BY [Signature] Title Reg. Eng. Date 2/19/99

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.

HUERFANITO UNIT #66 FRTC  
 Workover Procedure  
 H 12 26 9  
 San Juan County, N.M.  
 Lat-Long: 36 – 30.31 & 107 – 44.07

**PROJECT SUMMARY:** Foam frac the FRTC in this 1953 vintage well that was recompleted to the FRTC (natural) in 1990.

1. Comply to all NMOCD, BLM, and BROG rules and regulations. MOL and RU completion rig. NU BOP w/flow tee and stripping head. NU blooie line and 2-7/8" relief line.
2. TIH to tag (sand fill) or PBSD 1900'. If sand fill is encountered, CO w/air/mist to 1900'. TOH w/60 jts 2-3/8" tbg.
3. Run 5-1/2" csg scraper on 2-3/8" tbg to 1780'. TOH.
4. Spot and fill 3-400 bbl. frac tanks w/1% KCL water. If necessary, filter all water to 25 microns. Two tanks are for gel and one tank for breakdown water. Usable water required for frac is 719 bbls.
5. TIH w/5-1/2" pkr on 3-1/2" 9.3# N-80 w/shaved collars (4.25" O.D. 2.992" I.D.) rental frac string and set @ 1700'. (Run 2 jts 2-7/8" N-80 tbg above pkr). Pressure to 300 psi on annulus and prepare to frac.
6. Fracture treat FRTC down frac string w/100,000 gals. of 70 quality foam using 30# gel as the base fluid and 200,000# 20/40 Arizona sand. Pump at 60 BPM. Monitor bottomhole and surface treating pressures, rate, foam quality, and sand concentration with computer van. Sand to be tagged w/ 3 RA tracers. Max. pressure is 6000 psi and estimated treating pressure is 4234 psi. (Pipe friction is 3284 psi @ 60 BPM). Treat per the following schedule:

<u>Stage</u>	<u>Foam Vol. (Gals.)</u>	<u>Gel Vol. (Gals.)</u>	<u>Sand Vol. (lbs.)</u>
Pad	20,000	6,000	—
1.0 ppg	20,000	6,000	20,000
2.0 ppg	20,000	6,000	40,000
3.0 ppg	20,000	6,000	60,000
4.0 ppg	20,000	6,000	80,000
Flush	( 620)	(186)	0
Totals	100,000	30,000	200,000#

Shut well in after frac for six hours in an attempt to allow the gel to break. Treat frac fluid w/the following additives per 1000 gallons:

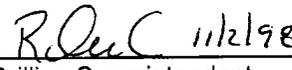
- \* 30# J-48 (Guar Gel mix in full tank - 16,000 gal)
- \* 1.0 gal. Aqua Flow (Non-ionic Surfactant mix in full tank)
- \* 1.0# GVV-3 (Enzyme Breaker mix on fly)
- \* 1.0# B - 5 (Breaker mix on fly)
- \* 5.0 gal Fracfoam I (Foamer mix on fly)
- \* 0.38# FracCide 20 (Bacteriacide mix on full tank)

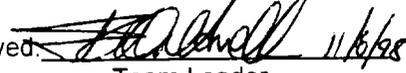
7. Open well through choke manifold and monitor flow. Flow @ 20 bbl/hr, or less if sand is observed. **Take pitot gauges when possible.**

HUERFANITO UNIT #66 FRTC - FRAC EXISTING FRTC

8. Release pkr and TOH w/frac string. TIH w/notched collar on 2-3/8" tbg and clean out to 1900' w/air/mist.
9. Monitor gas and water returns and **take pitot gauges when possible.**
10. When wellbore is sufficiently clean, TOH and run after frac gamma-ray log and perf eff log from 1900'-1600'.
11. TIH w/2-3/8" tbg w/standard seating nipple one joint off bottom and again cleanout to 1900'. When wellbore is sufficiently clean, land tbg @ 1880' KB. **Take final water and gas rates.**
12. ND BOP and NU wellhead and tree. Rig down and release rig.

Recommended:  10/28/98  
Production Engineer

Approved:  11/2/98  
Drilling Superintendent

Approved:  11/6/98  
Team Leader

VENDORS:

Wireline:	Basin	327-5244
Fracturing:	Howco	325-3575
RA Tagging:	Pro-Technics	326-7133
Packers:	Schlum.	325-5006

PMP

# HUERFANITO UNIT #66 FRTC

UNIT H SECTION 12 T26N R9W  
SAN JUAN COUNTY, NEW MEXICO

