

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

850' FNL, 1470' FEL, Sec. 21, T-27-N, R-9-W, NMPM

5. Lease Number
NM-011393

6. If Indian, All. or
Tribe Name

7. Unit Agreement Name

8. Well Name & Number
Cleveland #220

9. API Well No.
30-045-27299-27

10. Field and Pool
Basin Fruitland Coal

11. County and State
San Juan 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 checked="" type="checkbox"/> Altering Casing	<input type="checkbox"/> Conversion to Injection
	<input checked="" type="checkbox"/> Other - Stimulate	

13. Describe Proposed or Completed Operations

It is intended to run and cement 4 1/2" casing in the subject well according to the attached procedure and wellbore diagram. The Fruitland Coal will then perforated and fracture treated.

RECEIVED
NOV 14 1997

OIL CON. DIV.
DIST. 3

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

Signed *John J. Shadwell* (PMPOps) Title Regulatory Administrator Date 10/29/97

(This space for Federal or State Office use)

APPROVED BY /s/ Duane W. Spencer Title _____ Date NOV 10 1997

CONDITION OF APPROVAL, if any:

CLEVELAND #220 FRTC
Workover Procedure
B 21 27 9
San Juan County, N.M.
Lat-Long: 36.565491 - 107.789261

PROJECT SUMMARY: Run and cmt 4-1/2" csg inside 7" csg in this FRTC well that was drilled and completed open hole in 1989. The FRTC will then be perfed and foam fraced.

1. Comply to all NMOCD, BLM, and MOI rules and regulations. MOL and RU completion rig. NU 7-1/16" 3000 BOP w/flow tee and stripping head. NU blooie line and 2-7/8" relief line.
2. TOH w/2-3/8" tbg and 7" A-1 PKR. TIH w/6-1/4" bit on 2-3/8" tbg and C.O. w/air/mist to new TD 2140'. Run an advanced integrated data processed GSL neutron log from 2140' to 1800' and correlate to CBL log. Hot-shot log to Mike Pippin 326-9848 to pick perfs.
3. Run 4-1/2" 10.5# K-55 csg to 2140' w/4' sub (shoe jt) w/notched collar on bottom. Land csg in tbg head. Top of donut cut to 4-1/2" 8rd - **Notify P&M.**
4. Cement w/123 sx 65-35 CI "G" POZ (226 cf) w/6% gel, 2% CaCl₂, 1/4 pps cellophane, and 5#/sx Gilsonite. Tail w/51 sx CI "B" (60.2 cf) w/2% CaCl₂ w/5 pps Gilsonite. This is 100% excess for the open hole and 0% excess in the new csg. WOC overnight.
5. Run GR-CCL and coorelate to neutron log. Pressure test csg to 3800 psi. Perf about 40' of FRTC w/2 spf from ~1952' to ~2116' as per Mike Pippin (326-9848). Perf using 3-1/8" hollow steel carrier guns loaded w/Owen 3125306P HSC 12 gm. charges phased at 180 degrees. Average perf dia. = 0.30". Average penetration is 17.48" in Concrete.
6. TIH w/4-1/2" pkr and tbg tester on 2-3/8" tbg and set @ 1700'. Pressure test tbg to 4700 psi. Break down and attempt to balloff FRTC perfs w/2000 gal 15% HCL and 150% excess perf balls. Max pressure = 4550 psi. Lower pkr to 2130' to knock off balls.
7. 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 is for breakdown water. Usable gel water required for frac is 466 bbls.
8. Install MB isolation tool. Frac FRTC down 4-1/2" csg w/64,000 gals. of 70 quality foam using 30# gel as the base fluid and 130,000# 20/40 Arizona sand. Pump at 55 BPM. Monitor bottomhole and surface treating pressures, rate, foam quality, and sand concentration with computer van. Sand to be tagged w/ 3 tracers. Max. pressure is 3800 psi and estimated treating pressure is 2600 psi. Treat per the folowing schedule:

Stage	Foam Vol. (Gals.)	Gel Vol. (Gals.)	Sand Vol. (lbs.)
Pad	14,000	4,200	—
1.0 ppg	10,000	3,000	10,000
2.0 ppg	10,000	3,000	20,000
3.0 ppg	20,000	6,000	60,000
4.0 ppg	10,000	3,000	40,000
Flush	(1,293)	(388)	0
Totals	64,000	19,200	130,000#

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# GWW-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)

- 9. Open well through choke manifold and monitor flow. Flow @ 20 bbl/hr, or less if sand is observed. **Take pitot gauges when possible.**
- 10. Remove MB isolation tool. TIH w/notched collar on 2-3/8" tbg and C.O. to 2130'. Monitor gas and water returns and **take pitot gauges when possible.**
- 11. When wellbore is sufficiently clean, TOH and run after frac gamma-ray log from 2130'-1600'.
- 12. Install KTH attachment spool (to hang 2-3/8" tbg). TIH w/2-3/8" tbg w/standard seating nipple one joint off bottom and again cleanout to 2130'. Use expendable check if necessary. When wellbore is sufficiently clean, land tbg @ 2050' KB. **Take final water and gas samples and rates.**
- 13. ND BOP and NU wellhead and tree. Rig down and release rig.

Recommended: 
Production Engineer

Approve:  9/21/17
Team Leader

Approve:  9/21/17
Drilling Superintendent

VENDORS:

Wireline:	Blue Jet	325-5584
Fracturing:	BJ	327-6662
RA Tagging:	Pro-Technics	326-7133
Cmt	BJ	327-6662

PMP

Pertinent Data Sheet - CLEVELAND #220 FRTC

Location: 850' FNL & 1470' FEL, Unit B, Section 21, T27N, R09W, San Juan County, New Mexico

Field: Basin Fruitland Coal

Elevation: 6218' GL
10' KB

TD: 2098'

PBTD: 2098'

Completed: 5/4/89

Spud Date: 4/6/89

DP #: 3679A

Lease: Fed: NM-011393

GWl: 100%

NRI: 85.00%

Prop#: 012632901

Initial Potential: Pitot = 40 MCF/D

Casing Record:

<u>Hole Size</u>	<u>Csg Size</u>	<u>Wt. & Grade</u>	<u>Depth Set</u>	<u>Cement</u>	<u>Cement (Top)</u>
12-1/4"	9-5/8"	32.3# H-40	239'	177 cf.	Circ 8 Bbl Cmt
8-3/4"	7"	20# K-55	1934'	531 cf.	920' - CBL

Tubing Record:

<u>Tbg. Size</u>	<u>Wt. & Grade</u>	<u>Depth Set</u>	
2-3/8"	4.7# J-55	1992'	61 Jts
	A-1 PKR @	1892'	

Formation Tops:

Ojo Alamo:	1210'
Kirtland Shale:	1340'
Fruitland:	1860'

Logging Record: CBL

Stimulation: Open Hole Natural

Workover History: 12/11/90: Perf 2 holes @ 900' & sq w/250 cf cmt & circ out bradenhead. Drill cmt & CO to 2098' & pressure test to 750 psi - OK. Reran tbg.

7/2/94: Ran A-1 pkr on 2-3-8" tbg & set @ 1892'. Complete temp. aband.

Production history: Well was never 1st delivered to pipeline. Currently TA status. SIBHP = 501 psi. Line pressure = 129 psi.

Pipeline: EPNG

CLEVELAND #220 FRTC

UNIT B SECTION 21 T27N R9W
SAN JUAN COUNTY, NEW MEXICO

PRESENT

