

PLUG AND ABANDONMENT PROCEDURE

4-30-98


Duff #4

Pictured Cliffs Well
1750' FNL and 1460' FEL / NE, Sec. 5, T29N, R11W
San Juan County, New Mexico
DPNO 44204A

Note: All cement volumes use 100% excess outside pipe and 50' excess inside pipe. The stabilizing wellbore fluid will be 8.3 ppg, sufficient to balance all exposed formation pressures.

1. Prepare blow pit. Comply with all NMOCD, BLM and Burlington safety regulations. Conduct safety meeting for all personnel on location. NU relief line. Blow down well and kill with water as necessary. ND wellhead and install cementing valve.
2. Open bradenhead valve. Establish rate down 2-7/8" casing with 20 bbls water, record pump rate and pressure. Monitor bradenhead for flow. If no flow or blow, then pump 8 frac balls in additional water and monitor pressure, rate and volumes pumped, to confirm perforations are taking water and there is not a casing leak. If bradenhead flows water or there are other indications of a casing leak, then MO and RU pulling unit to use 1-1/4" IJ tubing workstring to plug the well.
3. **Plug #1 (Pictured Cliffs perforations, Fruitland, Kirtland and Ojo Alamo tops, 2024' - 633'):** Establish rate into Pictured Cliffs perforations. Mix and pump 59 sxs Class B cement (20% excess) and down 2-7/8" casing, displace to 250' with water. Shut in well and WOC.
4. Rig up mast truck and RIH with wireline to tag cement. Pressure test casing to 1000#.
5. **Plug #2 (8-5/8" Surface Casing at 126'):** Perforate 2 squeeze holes at 176'. Establish circulation out bradenhead valve. Mix and pump approximately 58 sxs Class B cement down 2-7/8" casing, circulate good cement out bradenhead. Shut in well and WOC.
6. ND BOP and cut off wellhead below surface casing. Install F&A marker to comply with regulations. RD, MOL, cut off anchors, and restore location.

Approval:

 5/13/98
Operations Engineer

Approval:

 5-10-99
Drilling Superintendent

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

Sundry Notices and Reports on Wells

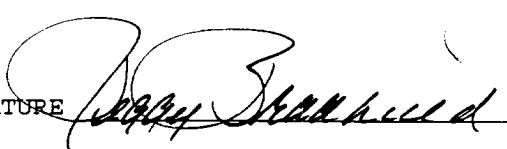
1. Type of Well GAS	API # (assigned by OCD) 30-045-21670 5. Lease Number FEE 6. State Oil&Gas Lease # 7. Lease Name/Unit Name Duff 8. Well No. #4 9. Pool Name or Wildcat Aztec Pictured Cliffs 10. Elevation:
<hr/>	
2. Name of Operator BURLINGTON RESOURCES OIL & GAS COMPANY	
<hr/>	
3. Address & Phone No. of Operator PO Box 4289, Farmington, NM 87499 (505) 326-9700	
<hr/>	
4. Location of Well, Footage, Sec., T, R, M 1750' FNL, 1460' FEL, Sec. 5, T-29-N, R-11-W, NMPM, San Juan County	

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

13. Describe Proposed or Completed Operations

It is intended to plug and abandon the subject well according to the attached procedure.

RECEIVED
JUN 10 1998

SIGNATURE  (KLM) Regulatory Administrator June 5, 1998

vkh

(This space for State Use)

Approved by ORIGINAL SIGNED BY ERNIE BUSCH Title DEPUTY OIL & GAS INSPECTOR, DIST. #3 Date JUN 22 1998

P&A prior to 12-30-98