

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

Sundry Notices and Reports on Wells: 36

1. Type of Well  
GAS

2. Name of Operator

**BURLINGTON**  
**RESOURCES**

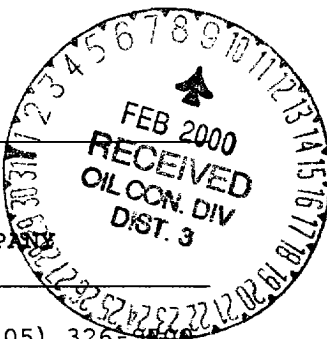
OIL & GAS COMPANY

3. Address & Phone No. of Operator

PO Box 4289, Farmington, NM 87499 (505) 326-5500

4. Location of Well, Footage, Sec., T, R, M

1650'FNL, 1040'FWL, Sec.1, T-26-N, R-10-W, NMPM



5. Lease Number  
SF-077961

6. If Indian, All. or  
Tribe Name

7. Unit Agreement Name  
Huerfano Unit

8. Well Name & Number  
Huerfano Unit #108

9. API Well No.  
30-045-06064

10. Field and Pool  
Angels Peak GP/Basin DK

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 type="checkbox"/> Altering Casing	<input type="checkbox"/> Conversion to Injection
	<input checked="" type="checkbox"/> Other - Commingle; Pump Installation	

13. Describe Proposed or Completed Operations

It is intended to install a pump and commingle the subject well according to the attached procedure.

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

Signed Peggy Cole Title Regulatory Administrator Date 12/29/99  
trc

(This space for Federal or State Office use)

APPROVED BY /s/ Charlie Beecham Title \_\_\_\_\_ Date 1/11/2000

CONDITION OF APPROVAL, if any:

*aldr*

**NAOCO**

## Huerfano Unit #108

Angels Peak Gallup / Basin Dakota

Unit E, Sec. 1, T-26-N, R-10-W

Latitude / Longitude: 36°31.1874' / 107°51.1416'

Recommended Commingle and Pump Installation Procedure 12/22/99

**Project Justification:** The Huerfano Unit #108 was completed in 1960 as a dual producer in the Gallup and Dakota formations. The Gallup was a strong producer until its rate dropped from approximately 400 MCF/D to less than 20 MCF/D in the years between 1973 and 1978 (about 250 MCF/D of this loss occurred in 1973). It is strongly suspected that liquid loading was the culprit, and that the installation of a pumping unit will restore Gallup production to near-1973 levels. Furthermore, the Dakota is showing signs of liquid loading, and will benefit from the commingle/pumping unit installation. Current production rates are 70 MCF/D from the Dakota and 13 MCF/D from the Gallup (3-month averages). Current remaining reserve estimates for the Dakota and Gallup are 450 MMCF and 60 MMCF respectively. It is anticipated that post-workover rates and reserves will be 131 MCF/D and 450 MMCF for the Dakota and 369 MCF/D and 1.26 BCF for the Gallup.

**NOTE: ALL DEPTHS ARE MEASURED FROM KB. KB to GL was 10'**

1. Install a used C-160-173-74 pumping unit, set to pump at no greater than 9 SPM with a 74" stroke.
2. Comply with all NMOCD, BLM and Burlington safety and environmental regulations. Prior to moving in rig, make one-call and then verify rig anchors and dig pit.
3. MIRU workover rig. NU relief-line and blow well down (kill with 2% KCL water only if necessary). ND WH and NU BOP with offset spool and stripping head. Test and record operation of BOP rams. Replace any WH valves that do not operate properly. Test secondary seal and install or replace if necessary. **NOTE: Have WH serviced at machine shop as needed. A single-tubing donut and WH for 2-3/8" tubing will be needed.**
4. **Dakota 2-3/8" tubing set at 6848' (218 jts).** Broach 2-3/8" tubing and set tubing plug in nipple at **6812'**. Fill tubing with half of its volume of 2% KCL water to insure the tubing plug will be held in place. **Gallup, 2-3/8", 4.7#, J-55 tubing set at 6215' (199 jts).** The Gallup tubing is latched into a Baker Parallel String Anchor at **6215'**. To release from the anchor, PU 2,000-5,000# over string weight and rotate 6-8 turns to the right at depth. TOOH and LD 2-3/8" tubing. Visually inspect tubing for corrosion and scale and notify Operations Engineer and Drilling Superintendent if either are present. ND offset spool.
5. PU 4,000# over Dakota 2-3/8" string weight and rotate 6-8 turns to the right at the packer to release Baker Model "E" seal assembly from 7" Baker Model "D" packer (set at **6280'**). No manipulation is necessary to release the tubing anchor. TOOH and stand back 2-3/8" tubing. LD seal assembly and tubing anchor. Visually inspect tubing for corrosion, and replace any bad joints. Check tubing for scale and notify Operations Engineer and Drilling Superintendent if it is present.
6. PU and TIH with 6-1/8" rotary shoe and packer retrieval spear (PRS), bumper sub, and hydraulic jars on 2-3/8" tubing. Mill over packer's upper slips with air/mist and retrieve the packer. **NOTE: When using air/mist, mist rate must not be less than 12 bph.** TOOH and LD packer and retrieval assembly.

7. PU 6-1/8" bit and bit sub on 2-3/8" tubing and TIH to PBTD (6956'), cleaning out with air/mist. Speak with Operations Engineer and Drilling Superintendent, and if necessary, determine the best way to remove scale from the casing and perforations. PU above the Gallup perforations at 5899' and flow the well naturally, making short trips for clean-up when necessary. Discuss sand production with Operations Engineer and Drilling Superintendent to determine when clean-up is sufficient. TOOH with 2-3/8" tubing to LD bit and bit sub.
8. Rabbit all tubing prior to TIH. TIH with purge valve, one joint of 2-3/8", 4.7# tubing, 4' perforated sub, in-line check, 1.78" seating nipple, and then the remaining 2-3/8" tubing. Replace any bad joints.
9. Land tubing at +/- 6936'. **NOTE: If excessive fill was encountered, discuss this landing depth with Operations Engineer and Drilling Superintendent.** ND BOP and NU WH with stuffing box from Henry Production (contact Richard Lopez). Pump off check.
10. If excessive fill was encountered, discuss running a sand screen below the pump with the Operations Engineer and Drilling Superintendent. PU and TIH with 2" x 1.25" x 10' x 14' RHAC-Z insert pump, one 1-1/4" sinker bar (5/8" pin with 3/4" crossover), and 3/4" Grade D rods with spray metal couplings to surface. Test pump action and hang rods on pumping unit. RD and MOL. Return well to production.

Recommended: J. Yon Joubert Approved: Bruce W. Bonger 12-29-99  
Operations Engineer 12/22/99 Drilling Superintendent

Operations Engineer:

L. Tom Loveland

Office 326-9771  
Pager 324-2568  
Home 564-4418

Field Specialist:

R. Lopez

Cell 320-6573  
Pager 324-4282