

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

N.M. Oil & Gas Division  
JUL 8 1st 1997  
10-2834

FORM APPROVED  
Budget Bureau No. 1004-0135  
Expires: March 31, 1993

**SUNDRY NOTICES AND REPORTS ON WELLS**

Do not use this form for proposals to drill or to deepen or reentry to a different reservoir.  
Use "APPLICATION FOR PERMIT—" for such proposals

**SUBMIT IN TRIPLICATE**

|  |   |
|--|---|
| 1. Type of Well<br><input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other | 5. Lease Designation and Serial No.<br>NM-88138           |
| 2. Name of Operator<br>Pogo Producing Company  | 6. If Indian, Allottee or Tribe Name                      |
| 3. Address and Telephone No.<br>P. O. Box 10340, Midland, TX 79702-7340 (915)682-5822  | 7. If Unit or CA, Agreement Designation                   |
| 4. Location of Well (Footage, Sec., T., R., M., or Survey Description)<br>1750' FSL & 660' FEL, Section 23, T24S, R29E           | 8. Well Name and No.<br>Canyon 23I Fed. Com #1            |
|  | 9. API Well No.<br>30-015-29318                           |
|  | 10. Field and Pool, or Exploratory Area<br>Wildcat Morrow |
|  | 11. County or Parish, State<br>Eddy County, NM            |

12. CHECK APPROPRIATE BOX(s) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

| TYPE OF SUBMISSION                                   | TYPE OF ACTION                                    |
|--|---|
| <input checked="" type="checkbox"/> Notice of Intent | <input type="checkbox"/> Abandonment              |
| <input type="checkbox"/> Subsequent Report           | <input type="checkbox"/> Recompletion             |
| <input type="checkbox"/> Final Abandonment Notice    | <input checked="" 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  |
|  | <input type="checkbox"/> Dispose Water            |

(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)\*

Pogo Producing Company respectfully request permission to P & A the Atoka formation and recomplete in the Bone Springs formation in the above well. Attached is a copy of the packer installation schematic and procedure Pogo will follow, which was approved by Adam Salameh, BLM Engineer in Carlsbad, NM 10/24/97.

Pogo is planning to begin the work within the next two weeks.

RECEIVED  
OCT 29 A 5:08  
BUREAU OF LAND MGMT.  
ROSWELL OFFICE

|   |   |                         |
|---|---|-------------------------|
| 14. I hereby certify that the foregoing is true and correct |   |                         |
| Signed <u>David B. Glanville</u>                            | Title <u>Senior Operations Engineer</u> | Date <u>10/27/97</u>    |
| (This space for Federal or State office use)                |   |                         |
| Approved by <u>DAVID B. GLANVILLE</u>                       | Title <u>PETROLEUM ENGINEER</u>         | Date <u>NOV 18 1997</u> |
| Conditions 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.

\*See Instruction on Reverse Side

Canyon 23 I Federal Com #1  
Recompletion Procedure

*Bone Springs*

Eng Data: TD 13,950' PBTD 13,564' Elev. 22' KB

*CIBPE 13600' w/ 18' cmt on top*

Perfs: Inactive: 13,618'-13,624', 13,638'-13,642', 13,646'-13,648', 13,650'-13,655', 13,675'-13,680'  
Active: 12,736'-12,748''

Packer: Permanent GT Magnum packer 10,277' & 12,318'  
2-7/8" FJ tubing between pkrs (66) jts FL4S 8.7# N-80

Nipple: Model "R" 2.188" ID 10079'  
Model "R" 2.125" ID 12284'

EOT: W/L Entry Guide Mechanical Disconnect 12344

Tubing: 2-7/8" 7.9# P-105 IJ3SS (311 Jts) 9,904'  
Burst 13,440# Collapse 13,880# Body Yield 180,280#  
Torque 3000 Ft lbs ID 2.323" Drift 2.229"

Casing: 7" 29# P-110 0'-5,591'  
7" 26# N-80 5,591'-9,103'  
7" 29# N-80 9,103'-10,500'

Liner: 5" 18# L-80 FL4S 10,424'-13,928'

Packer Fluid: 8.5 PPG KCL w/chemical additive

Procedure:

1. MIRU slick line w/ mast truck. Release mechanical disconnect @ 12344'. Chase guns to bottom. Top of gun assembly should be  $\pm 13145'$ . RD slick line.
2. MIRU Electric line. Set through tubing bridge plug @ 12720'. Cap plug w/ 35' cmt. RD wireline.
3. MIRU pulling unit. NU BOP's. POOH w/ 2-7/8" 7.9# tbg. Mark last 5 jts (8.7#). Lay down tbg.
4. RIH w/ CIBP on 2-7/8" 6.5# N-80 eue 8rd tbg. Set at 10240'. Spot 50 sk plug (280') on CIBP. PBTD  $\pm 9960'$ . POOH. LD excess tbg.
5. Run CBL. Locate cmt top 2300' calc. Perf 2nd Bone Spring in 7" csg 8782'-8796'', 8866'-8878', 9004'-9032' 1 shot per 2' w/ 4" csg gun spiral phasing.
6. RIH w/ packer on 2-7/8" tbg. Acidize perfs w/ 1500 gals 15% HCL top gun acid using 50 RCNB's. Monitor dead string. Set packer. Swab back load. Evaluate for fracture treatment.
7. Frac as per recommendation. Flowback for forced closure.
8. Set 7" RBP on WL @  $\pm 8700'$ . Perf 7" csg 8064'-8100' (1st Bone Spring) 2 spf 60° spiral phasing w/ 4" csg gun.
9. RIH w/ pkr on 2-7/8" tbg + (1) jt tailpipe. Acidize perfs w/ 1500 gals 15% HCL top gun acid using 100 RCNB's. Monitor dead string. Swab back load. Evaluate for fracture treatment. Circ frac balls above RBP before POOH.
10. Frac as per recommendation. Flow back for forced closure.
11. Remove RBP @ 8700'. Combine zones.
12. Rig up to rod pump. Probable high water cut.



PACKER INSTALLATION PLAN

|  |          |   |             |   |  |               |
|--|----------|---|-------------|---|--|---------------|
| RAY HERRINGTON   |          | POGO PRODUCING                          |             | DATE<br>JULY 20, 1997                           |  |               |
| CANYON 23-1 FED. COM. #1   |          | EDDY COUNTY                             |             | STATE<br>N.M.                                   | <input type="checkbox"/> NEW COMPLETION<br><input type="checkbox"/> WORKOVER |               |
| INSTALLATION   | LENGTH   | FROM                                    | TO          | DESCRIPTION                                     | BL   | LA            |
|  | 31.20    | -0                                      | 31.20       | 1 - JOINT 2 7/8" 7.90 P-105 LJ-333 TUBING.      | 2.875  | 2.261         |
|  | 43       | 31.20                                   | 31.62       | PM X PM 7.90 P-105-LJ333.                       | 2.875  | 2.261         |
|  | 1.90     | 31.60                                   | 33.50       | 2 7/8" 7.00 X 2" P-105 LJ SUB.                  | 2.875  | 2.261         |
|  | 10043.40 | 33.80                                   | 10079.27    | 223 JOINTS 2 7/8" 7.90 P-105 LJ-333 TUBING.     | 2.875  | 2.261         |
|  | 1.00     | 10079.27                                | 10080.00    | 2.500" "K" NIPPLE 2 7/8" 7.90 LJ-333.           | 2.374  | 2.300         |
|  | 31.80    | 10080.00                                | 10082.10    | 1 - JOINT 2 7/8" 7.90 LJ-333                    | 2.875  | 2.261         |
|  | 163.75   | 10082.10                                | 10075.00    | 5 - JOINTS 2 7/8" 8.70 LJ-333.                  | 2.875  | 2.190         |
|  | 1.84     | 10075.00                                | 10077.14    | 2.000 BOMBS LATCH W/2 7/8" 7.90 LJ-333 BDL.     | 2.701  | 2.437<br>.300 |
|  | 3.75     | 10077.14                                | 10080.00    | 0" X 15-230 "BT-1" MACHIN PACKER HYDRAULIC SET. | 3.960  | 2.390         |
|  | 4.75     | 10080.00                                | 10085.60    | 0" HILL-OUT EXTENSION.                          | 3.125  | 2.625         |
|  | 1.84     | 10085.60                                | 10086.40    | HILL-OUT EXTENSION CROSS-OVER FL-45 8.70.       | 2.875  | 2.259         |
|  | 10086.40 | 10086.40                                | 10089.43    | 65 JOINTS 2 7/8" FL-45 8.70 TUBING.             | 2.875  | 2.259         |
|  | 1.90     | 10089.43                                | 10090.30    | 2.125" "K" NIPPLE FL-45 BDL X PM.               | 2.875  | 2.123         |
|  | 30.00    | 10090.30                                | 10216.00    | 1 JOINT 2 7/8" FL-45 8.70 TUBING.               | 2.875  | 2.259         |
|  | 1.84     | 10216.00                                | 10216.87    | FL-45 X 2 7/8" BRD CROSS-OVER.                  | 2.875  | 2.259         |
|  | 1.20     | 10216.87                                | 10218.07    | 2.00" LATCH SEAL ASSEMBLY BOMBS SEAL.           | 3.701  | 2.437<br>.300 |
|  |          |   |             | VORLINE SET                                     |  |               |
|  | 3.75     | 10218.07                                | 10221.00    | 0" X 15-230 "BT-1" MACHIN.                      | 3.960  | 2.390         |
|  | 4.75     | 10221.00                                | 10226.54    | 0" HILL-OUT EXTENSION.                          | 3.125  | 2.625         |
|  | 10.11    | 10226.54                                | 10236.65    | 2 7/8" 8.70 TUBING SUB.                         | 2.875  | 2.259         |
|  | 1.09     | 10236.65                                | 10237.74    | 2.125" "K" NIPPLE.                              | 3.660  | 2.123         |
|  | 10.00    | 10237.74                                | 10247.80    | 2 7/8 6.50 TUBING SUB.                          | 2.875  | 2.441         |
|  | 1.00     | 10247.80                                | 10244.40    | MECHANICAL DISCONNECT.                          |  |               |
|  | 10.11    | 10245.40                                | 10255.51    | 2 7/8" 6.50 H-60 SUB.                           | 2.875  | 2.441         |
|  | 1.01     | 10255.51                                | 10266.00    | 2 7/8" X 2 3/8" CROSS-OVER.                     | 3.660  | 1.995         |
|  | 306.44   | 10266.00                                | 10596.44    | 11 JOINTS 2 3/8" BRD H-60 TUBING.               | 2.375  | 1.995         |
|  | 2.40     | 10596.44                                | 10598.80    | FRONG HEAD.                                     |  |               |
|  | 33.40    | 10598.80                                | 10732.20    | POWER PFW. GUM.                                 |  |               |
| 3.60   | 10732.20 | 10736.00                                | BLANK GUM.  |   |  |               |
| 12.00  | 10736.00 | 10748.00                                | LOADED GUM. |   |  |               |
| GENERAL REMARKS:<br><br>SEAL UNIT SET W/15,000# COMPRESSION.<br>LINER TOP @ 10,242'.<br>TYPE OF FLUID: PACKER FLUID. |          |   |             |   |  |               |
| DRAWING DATE<br>JULY 20, 1997  |          | GUBERSON REPRESENTATIVE<br>JELLY PIERCE |             | OFFICE LOCATION<br>HOBBS, NEW MEXICO            |  |               |
| SERVICE CENTER   |          | SERVICE CENTER REP                      |             | PHONE<br>(505) 392-3583                         |  |               |