

**UNIT
DEPARTMENT
BUREAU OF I**

APPLICATION FOR PE

OPER. OGRID NO. 17801
 PROPERTY NO. 9327 ICATE*
 POOL CODE 40299 on
 EFF. DATE 12/8/95
 API NO. 30-025-33216

FORM APPROVED
 OMB NO. 1004-0136
 Expires: February 28, 1995

1a. TYPE OF WORK

DRILL DEEPEN

b. TYPE OF WELL

OIL WELL GAS WELL OTHER SINGLE ZONE MULTIPLE ZONE

2. NAME OF OPERATOR

Pogo Producing Company (Richard Wright)

3. ADDRESS AND TELEPHONE NO.

P.O. Box 10340 Midland, Texas 79702 915-682-6822

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)*

At surface
 2310' FNL & 2310' FWL Sec. 31 T21S-R32E Lea Co. New Mexico
 At proposed prod. zone Same
 Unit F

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*

Approximately 30 miles East of Carlsbad New Mexico

10. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drig. unit line, if any)

330'

16. NO. OF ACRES IN LEASE

160

17. NO. OF ACRES ASSIGNED TO THIS WELL

40

18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.

1650'

19. PROPOSED DEPTH

8800'

20. ROTARY OR CABLE TOOLS

Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.)

3643' GR

Carlsbad Controlled Water Basin

22. APPROX. DATE WORK WILL START*

As soon as approved

23. PROPOSED CASING AND CEMENTING PROGRAM

Secretary's Potash

| SIZE OF HOLE | GRADE SIZE OF CASING | WEIGHT PER FOOT | SETTING DEPTH | QUANTITY OF CEMENT |
|--------------|----------------------|-----------------|---------------|------------------------------|
| 17 1/2" | J-55 13 3/8" | 54.5 | 850' | 700 Sx Circulate to surface |
| 12 1/4" | J-55 8 5/8" | 32 & 24 | 4500' | 1400 Sx Circulate to surface |
| 7 7/8" | J-55, N-80 5 1/2" | 17 & 15.5 | 8800' | 1300 Sx Tie back to 4300'± |

1. Drill 17 1/2" hole to 850'. Run and set 850' of 13 3/8" J-55 54.5# ST&C casing. Cement with 500 Sx. Light tail in with 200Sx. Class "C". Circulate cement to surface.
2. Drill 12 1/4" hole to 4500'. Run and set 4500' 8 5/8" J-55 ST&C casing, bottom 2300' 32# middle 1200' 24# & top 1000' 32# casing. Cement with 1200 Sx. of Light cement tail in with 200 Sx. Class "C". Circulate cement to surface.
3. Drill 7 7/8" hole to 8800'. Run and set 8800' of 5 1/2" casing, bottom 2800' 17# N-80 LT&C, middle 5000' 15.5# J-55 LT&C, top 1000' 17# J-55 LT&C. Cement with 600 Sx. Class "H" tail in with 700 Sx. Class "C". Bring cement back to at least 4300' 200' into 8 5/8" intermediate casing.
4. After setting production casing, pay zone will be perforated and stimulated as necessary. See attached for: Supplemental Drilling Data, BOP Sketches, Surface Use and Operations Plan.

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

24. SIGNED Gilbert J Lucero TITLE Agent APPROVAL SUBJECT TO General Requirements and Special Stipulations Attached DATE 10/14/95

(This space for Federal or State office use)

PERMIT NO. _____ APPROVAL DATE _____

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon. CONDITIONS OF APPROVAL, IF ANY:

APPROVED BY Gilbert J Lucero TITLE Acting State Director DATE NOV 22 1995

*See Instructions On Reverse Side

DISTRICT I
P.O. Box 1980, Hobbs, NM 88241-1980

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-102
Revised February 10, 1994
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

DISTRICT II
P.O. Drawer DD, Artesia, NM 88211-0719

DISTRICT III
1000 Rio Brazos Rd., Artesia, NM 87410

OIL CONSERVATION DIVISION

P.O. Box 2088
Santa Fe, New Mexico 87504-2088

DISTRICT IV
P.O. BOX 2088, SANTA FE, N.M. 87504-2088

AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

| | | |
|----------------------------|---|--|
| API Number 30-025-33216 | Pool Code 51698 40299 | Pool Name Lost West Red Tank Delaware |
| Property Code 9327 | Property Name FEDERAL "31" | Well Number 10 |
| OGRID No. 17891 | Operator Name POGO PRODUCING COMPANY | Elevation 3643 |

Surface Location

| UL or lot No. | Section | Township | Range | Lot Idn | Feet from the | North/South line | Feet from the | East/West line | County |
|---------------|---------|----------|-------|---------|---------------|------------------|---------------|----------------|--------|
| F | 31 | 21 S | 32 E | | 2310 | NORTH | 2310 | WEST | LEA |

Bottom Hole Location If Different From Surface

| UL or lot No. | Section | Township | Range | Lot Idn | Feet from the | North/South line | Feet from the | East/West line | County |
|-----------------------|-----------------|--------------------|-----------|---------|---------------|------------------|---------------|----------------|--------|
| | | | | | | | | | |
| Dedicated Acres 40 | Joint or Infill | Consolidation Code | Order No. | | | | | | |

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

| | |
|--|---|
| | <p>OPERATOR CERTIFICATION</p> <p>I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief.</p> <p><i>Richard L. Wright</i> Signature</p> <p>Richard L. Wright Printed Name</p> <p>Division Operations MGR. Title</p> <p>10/14/95 Date</p> |
| | <p>SURVEYOR CERTIFICATION</p> <p>I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.</p> <p>SEPTEMBER 9, 1995 Date Surveyed</p> <p><i>John W. Eidsen</i> Signature & Seal of Professional Surveyor</p> <p>W.C. Num. 95-18-1365</p> |
| | <p>Certificate No. JOHN W. WEST 676 EIDSON 3239 GARY EIDSON 12641</p> |
| | |

STATEMENT ACCEPTING RESPONSIBILITY FOR OPERATIONS

RECEIVED
NOV 16 AM '95
CAMEL
AREA

Operators Name: Pogo Producing Company
Street or Box: P. O. Box 10340
City, State: Midland, Texas
Zip Code: 79702-7340

The undersigned accepts all applicable terms, conditions, stipulations, and restrictions concerning operations conducted on the leased land or portions thereof, as described below:

Lease No.: NM-86710

Well Name: Federal 31 #10

Legal Description of Land: SE/4, NW/4 Section 31,
T21S, R 32E, Lea County,
New Mexico

Formation(s) (if applicable): _____

Bone Coverage: (State if individual bonded or another's bond)
Individual

BLM Bond File No. 0405

Authorized Signature: Richard L. Wright
Richard L. Wright

Title: Division Operations Manager

Date: November 7, 1995

APPLICATION TO DRILL

POGO PRODUCING COMPANY
FEDERAL "31" #10
2310' FNL & 2310' FWL
SEC. 31 T21S-R32E
LEA CO. NM

In response to questions asked under Section II B of Bulletin NTL-6 the following information is provided for your consideration:

1. Location: 2310' FNL & 2310' FWL SEC.31, T21-S R32E Lea Co., NM
2. Elevation above sea level: 3643' GR
3. Geologic name of surface formation: Quaternary Aeolian Deposits.
4. Drilling tools and associated equipment: Conventional rotary drilling rig using fluid as a circulating medium for solids removal.
5. Proposed drilling depth: 8800'
6. Estimated tops of geological markers:

| | |
|-------------------|-------|
| Rustler Anhydrite | 800' |
| Delaware Lime | 4600' |
| Cherry Canyon | 5600' |
| Brushy Canyon | 7300' |

7. Possible mineral bearing formation:

| | |
|----------|-----|
| Delaware | Oil |
|----------|-----|

8. Casing program:

| <u>Hole size</u> | <u>Interval</u> | <u>OD casing</u> | <u>Weight</u> | <u>Thread</u> | <u>Collar</u> | <u>Grade</u> | <u>Condition</u> |
|------------------|-----------------|------------------|---------------|---------------|---------------|--------------|------------------|
| 17½" | 0- 850' | 13 3/8" | 54.5 | 8-R | ST&C | J-55 | New |
| 12¼" | 0-4500' | 8 5/8" | 24 & 32 | 8-R | ST&C | J-55 | New |
| 7 7/8" | 0-8800' | 5½" | 15.5 & 17 | 8-R | LT&C | J-55 & N-80 | New |

APPLICATION TO DRILL

POGO PRODUCING COMPANY
 FEDERAL "31" #10
 2310' FNL & 2310' FWL SEC. 31
 T21S-R32E LEA CO., NM

9. Casing Cementing and Setting Depth:

| | | |
|---------|-------------------|--|
| 13 3/8" | Surface Casing | Set 850' of 13 3/8" J-55 54.5# ST&C casing. Cement with 500 Sx. Light cement tail in W/200 Sx. Class "C" + additives, circulate cement to surface. |
| 8 5/8" | Intermediate Csg. | Set 4500' of 8 5/8" J-55 24 & 32 # ST&C Csg. Cement W/1200 Sx. Light cement tail in with 700 Sx. Class "C" circulate cement to surface. |
| 5 1/2" | Production Csg. | Set 8800' of 5 1/2" J-55 & N-80 15.5 & 17# LT&C Casing. Cement w/600 Sx. Class "H" tail in W/700 Sx. Class "C" bring cement back to 200' into the 8 5/8' casing. |

10. Pressure Control Equipment: Exhibit "E". A Blow-out Preventer (no less than 900 Series 3000PSI working pressure) consisting of double ram type preventer with bag type preventer. Units will be hydraulically operated. Exhibit "E-1" Choke Manifold and Closing Unit. Blind rams on top, pipe rams on bottom to correspond with size of drill pipe in use. BOP will be nipped up on 13 3/8" casing and remain on well until casing is run and cemented. BOP will be tested as well as choke manifold. BOP will be worked at least once each day while drilling & blind ram will be worked on trips when no drill pipe is in hole. Flow sensor PVT, full opening stabbing valve and upper kelley cock will be utilized. Anticipated BHP 3700 PSI and 130° BHT.

11. Proposed Mud Circulating System:

| DEPTH | MUD. WT. | MUD VISC. | FLUID LOSS | TYPE MUD |
|-----------|----------|-----------|------------|---|
| 0-850' | 8.6-9 | 30-36 | NC | Fresh water base Spud mud use paper as needed for seepage. |
| 850-4500' | 9.8-10 | 32-36 | NC | Brine water with Gel to control viscosity to clean hole add paper for seepage. |
| 4500'-TD | 9-10 | 38-45 | 6-10 CC | Brine with Gel for viscosity Starch for water loss control, lime for pH paper for seepage control |

Sufficient mud materials to maintain mud properties, meet lost circulation and weight increase requirements will be kept at well site at all times. In order to run casing and log well viscosity may have to be raised and water loss may have to be lowered.

APPLICATION TO DRILL
POGO PRODUCING COMPANY
FEDERAL "31" #10
2310' FNL & 2310' FWL SEC.31
T21S-R32E LEA CO., NM

12. Testing, Logging, and Coring Program:

- A. Mud logger will be rigged up after intermediate casing is set at 4500'
- B. Drill stem tests will be run when shows dictate.
- C. Open hole logs will be run. GR-CNL DENSITY DUAL LATEROLOG AND CALIPER.

13. Potential Hazards:

No abnormal pressures or temperature zones are expected in this well. (nothing abnormal encountered in offset well at this depth) Hydrogen Sulfide gas is not anticipated, however all precautions will be observed and detection equipment will be installed. No lost circulation is expected (none reported in this area). Estimated BHP 3700 PSI estimated BHT 130°. H₂S contingency plan is included in this APD.

14. Anticipated spud date and duration of operation:

Road and location will begin after the BUREAU OF LAND MANAGEMENT has approved this APD. Anticipated spud date is 10/15/95 . Drilling is expected to take 15 to 20 days. If production casing is run an additional 30 days will be required to complete and construct surface facilities in order to place well on production.

15. Other facets of operation:

After running casing cased hole correlation logs will be run from TD over the pay intervals. The Delaware pay will be perforated and stimulated. The well will be stimulated, swab tested and completed as an oil well

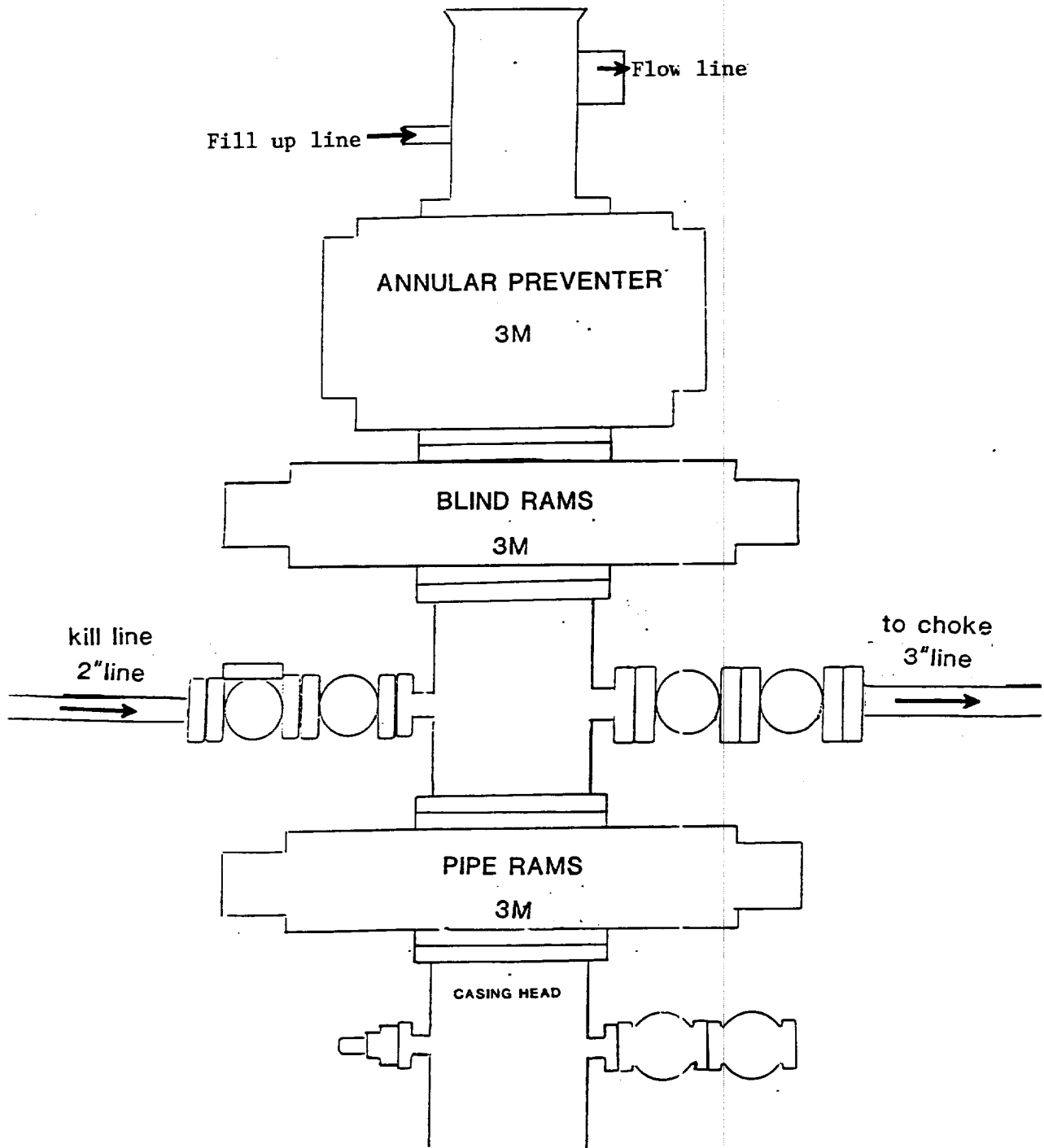


EXHIBIT "E"
 B.O.P. SKETCH TO BE USED ON
 POGO PRODUCING COMPANY
 FEDERAL 31 WELL #10
 2310' FNL & 2310' FWL SEC. 31
 T21S-R32E LEA CO. NM