|  | ~.   | OPEH. OGRID N   | NO. 17841  | MMI                        | SSION  |
|--|--|---|--|----------------------------|--|
| Form 3160-3  |  | PROPERTY NO   |  | LICATE                     | FORM APPROVED  |
| (July 1992)  | UNI.   | TE POOL CODE  | 51483  | CO. 8                      | OMB NO. 1004-0136<br>B8240 Expires: February 28, 1995  |
|  | DEPARTMEN  | CEE. DATE   | 12/18/95   |                            | 5. LEASE DESIGNATION AND SERIAL NO. NM-77060   |
|  | BUREAU OF  | — APINO. 3D   | -025-3323  | 31                         | 6. IF INDIAN, ALLOTTEE OR TRIBE NAME   |
|  | ICATION FOR P  | E   |  |                            |  |
|  | RILL 🖾   | DEEPEN  |  |                            | 7. UNIT AGREEMENT NAMB   |
|  | GAS OTHER  |   | HINGLE X MULTIPERONE ZONE                                      | PLE                        | 8. FARM OR LEASE NAME, WELL NO   |
| 2. NAME OF OPERATOR POGO Produ   |  |   |  |                            | Red Tank Federal #3  |
| 3. ADDRESS AND TELEPHONE NO  | 9  |   |  |                            | 10. FIELD AND POOL, OR WILDCAT   |
| P.O. Box 1034  | O, Midland, Tx<br>Report location clearly and  | 78702 (915)   | 682-6822   |                            | Red Tank Bone Spring   |
| 4. INCATION OF WILL ( At SHILACE 3301  | FNL & 1650' FEL  | Sec.33 T22S   | R-32E  |                            | 11. 82C., T., M., OR BLE.  |
| At proposed prod. to   | Lea Co.  | NM  | UnitB  |                            | Sec.33 T22S R32E   |
| Marian IV WILLIAM  | AND DIRECTION FEOM NEA   | REST TOWN OR POST OFFIC   |  |                            | 12. COUNTY OR PARISH 13. STATE   |
| IT. DISTANCE IN MILES  | AND DIMECTION FOUR NEW   |   |  |                            | Lea N.M.   |
| 15. DISTANCE FROM PRO  |  |   | O. OF ACRES IN LEASE   | 17. NO. (                  | OF ACBEN ASSIGNED<br>HIS WELL  |
| LOCATION TO NEARE<br>PROPERTY OR LEASE<br>(Aims to Dearest dr  | ST<br>LINE, FT.<br>lig. unit line, if any,   | 330'  | 1160   |                            | 40   |
| 16 10 - 10 1 FLOS 100  | DPOSED INCATION  | 1320'   | NOPOS - DEPTH<br>9000 1  | i _                        | RY OR CABLE TOOLS  |
| OR APPILEI: FOR, ON T  | HIS LEASE, FT.   | 1320  | 9000   |                            | 22. APPROX. DATE WORK WILL START*  |
| 21. PLEVATIONS (Show *   | bether DF, RT, GR, etc.)   | 3608' GF  | )<br>\   |                            | as soon as approved  |
| 28.  |  | PROPOSED CASING AN  | D CEMENTING PROGRA   | M Car                      | shad Controlled Water Besin  |
|  | OR NOE, SIZE OF CASING   | WEIGHT PER FOOT   | SETTING DEPTH  | 1                          | QUANTITY OF CEMENT   |
| BIZE OF ROLL   | J-55 13-3/8"   | 54.5#   | 800'   | 700 sx                     | Circulate to surface   |
| 1111   | J-55 S80 8-5/8   | 32 #  | 46001  | 1400 s                     |  |
| 7-7/8  | .1-55 S80 5-12"  | 17 #  | 9000'  | 900 sx                     | Top of cement 3600'  |
|  |  |   |  |                            |  |
| . Drill 17-%' with 500 sa  | hole to 800'. Light cement.  | Run & set 800'c<br>Tail in with 20                                      | of 13-3/8" J-55<br>00 sx class "C"                             | 54.5#<br>+ 2% C            | ST&C casing. Cement aCl. Circulate to surfac   |
| 32# ST&C +   | nole to 4600'. R<br>4300' of J-55 <b>3</b><br>th 200 sx. Premi   | 2# ST&C casing.   | Cement with 1:   | 200 sx                     | ollows: 300' of S-80 light cement + 10% salt. to surface.  |
| 17# LT&C, €  | 6000'of J-55 17#   | LT&C, 1000' of  | N-80 17#, LT&  | C. Ceme                    | llows: 2000' of N-80 nt with 500sx light e at 3600', verify  |
|  |  |   |  |                            |  |
| with log.  | Approvel Subject<br>Georgi Requirer<br>Special Stipulatio<br>Attached  | ne <b>nts and</b><br>ma   |  | A REU                      | MO Marine |
| with log.  | General Requirer<br>Special Stipulatio<br>Attsched   | ments and<br>me   | a on present productive zone<br>aal depths. Give blowbul preve |                            | if any.  |
| with log.  N ABOVE SPACE DESCRI  | General Requirer<br>Special Stipulatio<br>Attached   | ments and<br>me   | a on present productive zone cal depths. Give blowbut preve    | and proposed enter postam. |  |
| with log.  N ABOVE SPACE DESCRI  | General Requirer Special Silpulatio Attached  BE PROPOSED PROGRAM: If the control of the control | ments and<br>me   |  |                            | 8 1995   |
| with log.  N ABOVE SPACE DESCRI  | General Requirer<br>Special Stipulatio<br>Attsched   | ments and<br>me   | Agent  |                            | 8 1995   |
| with log.  N ABOVE SPACE DESCRI  Regen directionally, give per  H.  SIGNED  (This space for Fed  | General Requirer Special Silpulation Attached  BE PROPOSED PROGRAM: If the proposed program is located to the proposed program is located to the proposed program in the proposed program is located to the proposed program in the proposed program is located to the proposed program in the proposed program is located to the proposed program in the proposed program is located to the proposed program in the proposed program is located to the proposed program in the proposed program is located to the proposed program in the proposed program is located to the proposed program in the proposed program is located to the proposed program in the proposed program is located to the proposed program in the proposed program is located to the proposed program in the proposed program is located to the proposed program in the proposed program is located to the proposed program in the proposed program is located to the proposed program in the proposed program is located to the proposed program in the proposed program is located to the program in the program in the program is located to the program in the program in the program is located to the program in the program in the program is located to the program in the program  | proposal is to deepen, give dates and measured and true vertice.  TITLE | Agent AFPROVAL DATE  | DIST I                     | 16 any.  8 1995  DATE 10-17-95   |
| with log,  N ABOVE SPACE DESCRI  Regen directionally, give per  H.  SIGNED  (This Space for Fed  | BE PROPOSED PROGRAM: He then date on sursurface location of the proposed program of the program of the proposed program of the | proposal is to deepen, give dates and measured and true vertice.  TITLE | Agent AFPROVAL DATE  | DIST I                     | 8 1995   |
| N ABOVE SPACE DESCRIPTION OF THE STATE OF TH | BE PROPOSED PROGRAM: He then date on sursurface location of the proposed program of the program of the proposed program of the | proposal is to deepen, give dates and measured and true vertice.  TITLE | Agent AFPROVAL DATE  | DIST I                     | 16 any.  8 1995  DATE 10-17-95   |

DISTRICT III

#### State of New Mexic

Energy, Minerals and Natural Resources Department

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

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

OIL CONSERVATION DIVISION

1000 Rio Brazos Rd., Aztec, NM 87410
DISTRICT IV
P.O. BOX 2088, SANTA FE, N.M. 87504-2088

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

□ AMENDED REPORT

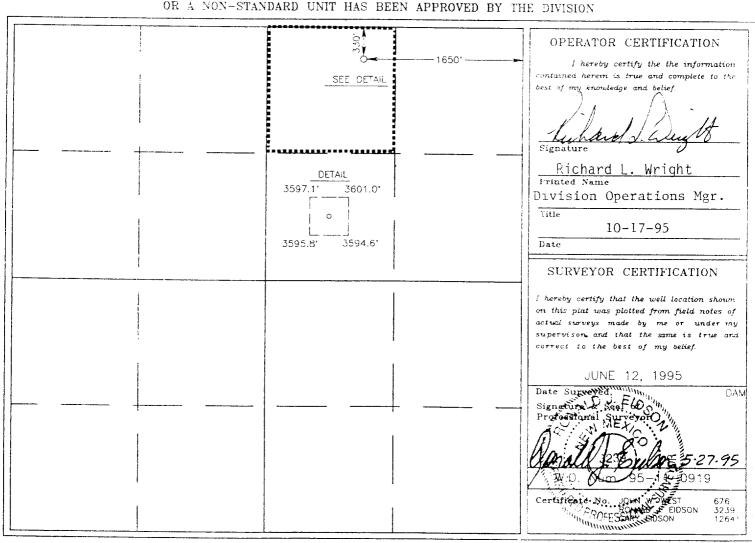
Fee Lease - 3 Copies

## WELL LOCATION AND ACREAGE DEDICATION PLAT

| API<br>3レ-しつ      | Number<br>5-33 | 231   | 516           | Pool Code<br>83                                 |           | Pool Name<br>Red Tank Bone Spring |                  |               |                |               |
|-------------------|----------------|---|---------------|---|-----------|-----------------------------------|------------------|---------------|----------------|---------------|
| Property<br>17271 | Code ·         | Property Name Well Number RED TANK 33 FEDERAL 3 |               |   |           |                                   | aber             |               |                |               |
| ogrid n<br>17891  | 0.             |   |               | Operator Name Elevation POGO PRODUCING CO. 3608 |           |                                   |                  |               |                |               |
|                   |                |   |               |   | Surfac    | e Loca                            | ation            |               |                |               |
| UL or lot No.     | Section<br>33  | Township 22 S                                   | Range<br>32 E | Lot Idn   | Feet from | m the<br>330                      | North/South line | Peet from the | East/West line | County<br>LEA |
|                   |                |   | Bottom        | Hole Loc  | cation I  | Diffe                             | rent From Sur    | face          |                | 1             |
| UL or lot No.     | Section        | Township  | Range         | Lot Idn   | Feet from | n the                             | North/South line | Feet from the | East/West line | County        |
| Dedicated Acres   | s Joint o      | r Infili Col                                    | nsolidation ( | Code Or   | der 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.



#### APPLICATION TO DRILL

POGO Producing Co.
Red Tank Federal #3
330' FNL & 1650' FEL Sec.33
T22S-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:
- 2. Elevation above sea level:
- 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: 9000'
- 6. Estimated tops of geological markers:

| Rustler Anhydrite | 850 <b>'</b>  | Brushy Canyon | 7400' |
|-------------------|---------------|---------------|-------|
| Delaware Lime     | 4800 <b>'</b> | Bone Springs  | 8800' |
| Cherry Canyon     | 6100'         |               |       |

# 7. Possible mineral bearing formations:

Delaware Oil Bone Spring Oil

8. Casing program:

| HOLE SIZE | INTERVAL     | OD CSG  | WEIGHT | THREAD | COLLAR | GRADE     | COND. |
|-----------|--------------|---------|--------|--------|--------|-----------|-------|
| 17-1/2"   | 0 - 800'     | 13-3/8" | 54.5   | 8-R    | ST&C   | J-55      | New   |
| 11"       | 800' -4600'  | 8-5/8"  | 32     | 8-R    | ST&C   | J-55, N80 | New   |
| 7-7/8"    | 4600' -9000' | 5-1/2"  | 17     | 8-%    | LT&C   | J-55, N80 | New   |

#### APPLICATION TO DRILL

POGO Producing Co.
Red Tank Federal # 3
330' FNL & 1650' FEL Sec. 33
T22S-R32E Lea Co. NM

## 9. Cementing and Setting Depth:

| 13-3/8" | Surface Casing      | Run and set 800' of 13-3/8" J-55 54.5 ST&C casing. Cement with 500 sx light cement. Tail   |
|---------|---------------------|--|
|         |                     | in with 200 sx Class "C" + 2% CaCl. Circulate to surface.  |
| 8-5/8"  | Intermediate casing | Run and set 4600' of 8-5/8" J-55 & S-80 as follows: 300' of 32# S-80 ST&C, 4300' of 32# J-55 ST&C. Cement with 1200 sx of light cement + 10% salt, tail in with 200 sx premium cement + 1% CaCl. Circulate to surface. |
| 5-1/2"  | Production casing   | Run and set 9000' of J-55 & N-80 casing as follows: 2000' of 17# N-80 LT&C, 6000' of 17# J-55 LT&C, 1000' of 17# N-80 LT&C. Cement with 500 sx of light cement tail in with 400 sx premium. TC 3600'.                  |

10. Pressure Control Equipment: Exhibit "E". A Blow-out Preventer (no less than 900 series 3000 psi 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 nippled 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 and 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 3600 PSI and BHT 125°

## 11. Proposed Mud Circulating System:

|    | ,          |         |           |            |  |
|----|------------|---------|-----------|------------|--|
|    | DEPTH      | MUD WT. | MUD VISC. | FLUID LOSS | TYPE MUD   |
|    | 0-800'     | 8.4-8.6 | 30-36     | N.C        | Fresh water spud mud. Use paper to control seepage.  |
| 8  | 300'-4600' | 9.8-10  | 32-36     | N.C.       | Brine water with Gel to control viscosity for hole cleaning. Lime for PH control 9-10 pH.                  |
| 46 | 00'-TD     | 9-10    | 38-45     | 6-10cc     | Brine water with Gel to control viscosity PH 9&10, control with lime. Water loss thru pay section 6-10 cc. |

Sufficient mud materials to maintain mud properties, meet lost circulation and weight increase requirments will be kept at wellsite 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 RED TANK "33" FEDERAL # 3 330' FNL & 1650' FEL SEC. 33 T22S-R32E LEA CO. NM

# 12. Testing, Logging, and Coring Program:

- A. Mud logger will be on well from 4600' to TD.
- B. DST'S will be run when shows indicate that a test is needed.
- C. Open hole logs: Dual-laterolog, Gamma Ray, Caliper, CNL -Density.
- D. No coreing is planned at this time.

## 13. Potential Hazards:

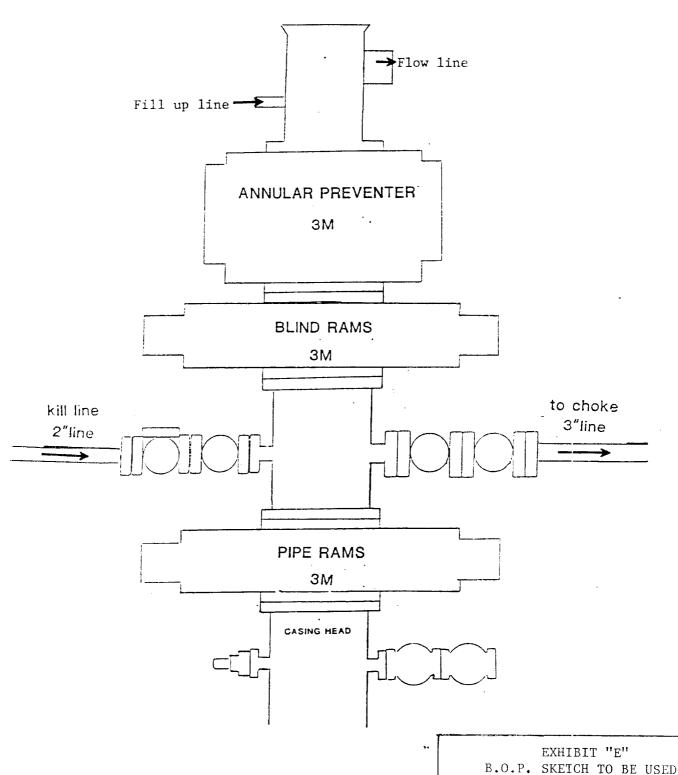
No abnormal pressures or temperature zones are expected in this well. (nothing abnormal encountered in offset well at this depth ) Hydrogen Sulfide gas is not anticipated, however all precautions will be observed and detection equipment will be installed. No lost circulation is expected (none reported in this area). Estimated BHP 3600 PSI estimated EHT 125°.  $\rm H_{\odot}S$  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 12/01/95 Drilling is expected to take 25 to 30 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 Bone Spring pay will be perforated and stimulated. The well will be stimulated, swab tested and completed as an oil well



B.O.P. SKETCH TO BE USED ON POGO PRODUCING COMPANY RED TANK FEDERAL #3

330' FNL & 1650' FEL SEC. 31 T22S-R32E LEA CO. NM