Form 3160-3 (November 1983) (formerly 9-331C)

ONITED STATES DEPARTMENT OF THE INTERIOR

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Form approved. 26 91 74 Budget Bureau No. 1004-0136 Expires August 31, 1985

| | | F LAND MANAG | | | JAN - 1 | 7 1992 | 5. LEASE DESIGNATION AND SERIAL NO. NM-29233 | | |
|---|--|---|---------------------|------------------------------------|-----------------|---|---|--|--|
| APPLICATIO | N FOR PERMIT | | | | i Qe G | DCV | 6. IF INDIAN, ALLOTTEE OR TRIBE NAME | | |
| 1a. TYPE OF WORK | IN TOR PERMIT | 10 DRILL, L | CEPE | IN, OR I | RHS A | 44 | | | |
| | RILL 🛛 | DEEPEN [| 7 | PLI | UG BAC | ж 🗀 | 7. UNIT AGREEMENT NAME | | |
| b. TYPE OF WELL | | | | | OO DAC | ж 🗀 | | | |
| WELL 🖎 | WELL OTHER | | | NE 🔯 | MULTIPI Zone | · 🗆 | S. FARM OR LEASE NAME | | |
| 2. NAME OF OPERATOR | | | | / | | | FEDERAL 12 | | |
| | POGO PR | ODUCING COMPA | ANY 🖊 | • | | | 9. WELL NO. | | |
| 3. ADDRESS OF OPERATOR | | | | | | | 6 | | |
| | P.O. BO. | X 10340, MI | DLAND | , TEXAS | 79702 | | 10. FIELD AND POOL, OR WILDCAT UNDE | | |
| 4. LOCATION OF WELL () | Report location clearly as | d in accordance with | h any S | tate requireme | nts.*) | 7 | LIVINGSTON RIDGE DELAWAR | | |
| at variate | 17001 50 | U AND 10001 | F.U. (| OF CECTIO | N 10 | , | 11. SEC., T., R., M., OR BLK. | | |
| At proposed prod. zo | 1/80 FS | SL AND 1980' | | | W 12 | | AND SURVEY OR AREA | | |
| | | | 11 | た K | | | SEC.12, T.22 S., R.31 | | |
| 14. DISTANCE IN MILES | AND DIRECTION FROM NE | AREST TOWN OR POST | | • | | | 12. COUNTY OR PARISH 13. STATE | | |
| | 28 MILES | S EAST OF CAR | RLSBA | D, NEW MI | EXICO. | | EDDY NEW MEXIC | | |
| 15. DISTANCE FROM PROF LOCATION TO NEARES | OSED* | 1 | | OF ACRES IN | | | F ACRES ASSIGNED | | |
| PROPERTY OR LEASE | | 1780' | | 1120 | | TO TI | HIS WELL 40 | | |
| 18. DISTANCE FROM PRO | POSED LOCATION* | | 19. PRO | HOPOSED DEPTH | | 20 ROTA | RT OR CABLE TOOLS | | |
| TO NEAREST WELL, I OR APPLIED FOR, ON TI | DRILLING, COMPLETED, HIS LEASE, FT. | 1320' | | 8500' | | ROT | | | |
| 21. ELEVATIONS (Show w) | | 10.0 | | 0300 | | וטא | 22. APPROX. DATE WORK WILL START* | | |
| · | ,, | 3595.2' GR | | | | | 1 | | |
| 23. | | 3333.2 GK | | | | | UPON APPROVAL | | |
| | | PROPOSED CASIN | IG AND | CEMENTING | PROGRAM | jac | retary's Potash | | |
| SIZE OF HOLE | BIZE OF CABING | WEIGHT PER FO | OT | SETTING D | TTING DEPTH | | QUANTITY OF CEMENT | | |
| 17-1/2" | 13-3/8" | 54.5# | | 800 | 0' | SUFFI | CIENT TO CIRCULATE | | |
| 11" | 8~5/8" | 24#, 32#, 2 | 28# | 4300 | 0' | SUFFI | CIENT TO CIRCULATE | | |
| 7-7/8" | 5-1/2" | 15.5# & 17 | 7# | 8500 | 0' | TO TI | | | |
| ANI | TER SETTING PROP D STIMULATED AS E ATTACHED FOR: | NECESSARY. | . DRI | LLING DA ⁻ | ГА | | PRATED Post IP-1 1-10-92 Mundre & API | | |
| IN ABOVE SPACE DESCRIBE | : PROPOSED PROGRAM: If drill or deepen direction | proposal is to deeperally, give pertinent o | n or plu iata on | ug back, give d subsurface loc | lata on pre | sent produ measured | octive zone and proposed new productive and true vertical depths. Give blowout | | |
| preventer program, it a | у. | | | | | 200000000000000000000000000000000000000 | and true vertical depths. Give blowout | | |
| 24. | 1. 1 M | 11 | | | | | | | |
| BIGNED KUEL | motox Writes | | Dri | lling and | d Produ | ction | Supt _{bare} December 5, 1991 | | |
| - R | ichard L Wright | | | | | | DATE | | |
| (This space for Fede | rai or State office use) | | | | | | | | |
| PERMIT NO. | | | | PPROVIT DIME | | | | | |
| |)ne co por tigal si | · · · · · · · · · · · · · · · · · · · | | PPROVAL DATE <u>.</u> ÆA MANAG: | | | | | |
| APPROVED BY | german say on the say | TITLE | 0.6 | RISHAU NEX | Joseph States | | DATE 1-6-97_ | | |
| PPRÖVA <mark>L "SOBJECT"</mark> ENERAL REQUIREME | | | | | | | VA. 2 | | |
| DECIMI STIPILI ATIO | | | | | | | | | |

Form C-102 Revised 1-1-89

OIL CONSERVATION DIVISION

<u>DISTRICT I</u> P.O. Box 1980, Hobbs, NM 88240

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

DISTRICT II P.O. Drawer DD, Artonia, NM 68210

WELL LOCATION AND ACREAGE DEDICATION PLAT

DISTRICT III 1000 Rio Brasos Rd., Astec, NM 87410

All Distances must be from the outer boundaries of the section

| Operator POCO PRODUCTNC CO | | | FED. 12 | Well No. | | | | | | |
|--|--|---------------------------------|-----------------------------|-------------------|---------------------|--|--|--|--|--|
| POGO PRODUCING CO. | | | | 0 | | | | | | |
| Unit Letter | Section | Township | Range | | County EDI | υΛ | | | | |
| K Actual Footage Loc | 12 | 22 SOUTH | 31 EAST | NMPM | EDI | U1 | | | | |
| 1700 | | JTH line and | 1980 | | the WEST | 11 | | | | |
| Ground Level Elev | | | Pool | feet from | the WEST | line Dedicated Acreage: | | | | |
| 3595.2 | | DELAWARE | UNDES.LIVINGSTO | ON RIDGE DE | LAWARE | 40 Acres | | | | |
| | preage dedicated to | the subject well by colored | | | | 20200 | | | | |
| 2. If more than | one lease is dedic | cated to the well, outline each | ch and identify the ownersh | nip thereof (both | as to workin | g interest and royalty). | | | | |
| 3. If more than one lease of different ownership is dedicated to the well, have the interest of all owners been consolidated by communitization, unitization, force-pooling, etc.? | | | | | | | | | | |
| Yes No If answer is "yes" type of consolidation | | | | | | | | | | |
| If answer is "no" list of owners and tract descriptions which have actually been consolidated. (Use reverse side of this form necessary. | | | | | | | | | | |
| No allowable will be assigned to the well unit all interests have been consolidated (by communitization, unitization, forced-pooling, otherwise) or until a non-standard unit, eliminating such interest, has been approved by the Division. | | | | | | | | | | |
| | <u> </u> | | | | OPERAT | OR CERTIFICATION | | | | |
| | j j | | <u> </u> | | | sby certify the the information ein is true and complete to the | | | | |
| | i | | i İ | | best of my kn | owledge and belief. | | | | |
| | j | | j | | Signature | The Market | | | | |
| | ļ. | | Į. | | Printed Name | aid antifet | | | | |
| | 1 | | 1 | | | rd L. Wright | | | | |
| | | | | | Position | | | | | |
| | J 1 | | ! | | Dist. Di Company | rlg. & Prod. Supt. | | | | |
| | i | | i | | | PRODUCING COMPANY | | | | |
| | Ī | | Ì | | Deta Necen | mber 4, 1991 | | | | |
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| | <u></u> | | | | SURVEI | OR CERTIFICATION | | | | |
| | <u>. </u> | | | | | fy that the well location shown vas plotted from field notes of | | | | |
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| | i li | | İ | | - | md that the same is true and he best of my knowledge and | | | | |
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| | 1980' <u>-</u> | | : | i F | Date Survey | red | | | | |
| | 3590.5 | <u> </u> | , | | | 11-18-91 | | | | |
| L | | | | | Signature & | | | | | |
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| | j | | i | | WELL. | /17/10 As | | | | |
| | 1 | | | | chilles | MAN MEST 676 | | | | |
| | | | | 4 | | HONALD & SIDSON, 3239 WORKEY JONES, 7977 | | | | |
| 0 330 660 | 990 1320 1650 | 0 1980 2310 2640 | 2000 1500 1000 | 500 0 | W.O. 91 | 1-11-0311 | | | | |

SUPPLEMENTAL DRILLING DATA

POGO PRODUCING COMPANY FEDERAL 12 WELL NO.6

1. SURFACE FORMATION: Quaternary.

2. ESTIMATED TOPS OF GEOLOGIC MARKERS:

| Rustler Anhydrite | 750 ' |
|-------------------|-------|
| Delaware Lime | 4450' |
| Bell Canyon | 4500' |
| Cherry Canyon | 53501 |
| Brushy Canyon | 70001 |

3. ANTICIPATER POSSIBLE HYDROCARBON BEARING ZONES:

Brushy Canyon

0i1

4. PROPOSED CASING AND CEMENTING PROGRAM:

13-3/8" 54.5# K-55 ST&C casing is to be set at approximately 800 feet in 17-1/2" hole. Casing to be cemented with with 500 sacks of Light cement tailed in with 200 sacks of Class "C" with 2% CaCl. Cement to circulate.

8-5/8" 24#, 28#, and 32# J-55 and S-80 ST&C casing is to be set at approximately 4300 feet in 11" hole. Casing is to be cemented with 1200 sacks of Light cement tailed in with 200 sacks of Class "C" with 1% CaCl. Cement to circulate.

5-1/2" 15.5# and 17# K-55 and N-80 LTC casing is to be set at 8500 feet in 7-7/8" hole. Casing is to be cemented with 900 sacks of Class H cement. Cement to tie-back.

5. PRESSURE CONTROL EQUIPMENT:

Blowout prevention equipment, while drilling the 11" hole, will be either a 3000 psi working pressure double ram type preventer or a 3000 psi working pressure annular type preventer.

Blow out prevention equipment, while drilling below the 8-5/8" casing seat, will be a 3000 psi working pressure BOP stack. A BOP sketch is attached.

6. CIRCULATING MEDIUM:

Surface to 800 feet: Fresh water spud mud. Viscosity 30 to 36

as required for hole cleaning.

800 feet to 4300 feet: Brine conditioned as necessary for control

of viscosity. Weight 9.8 to 10. pH 9 to 10.

Viscosity 32 to 36.

4300 feet to T.D.:

Water base drilling fluid conditioned as necessary for control of weight, viscosity, pH and water-loss.

Weight 9 to 10. Viscosity 38-45. pH 9 to 10.

Filtrate while drilling pay zone 6 to 15.

7. AUXILIARY EQUIPMENT:

A mud logging trailer will be in use while drilling below the intermediate casing.

8. TESTING, LOGGING, AND CORING PROGRAMS:

Drill stem tests will be made when well data indicate a test is warranted.

It is planned that electric logs will include GR-CNL-Density logs and GR-DLL logs.

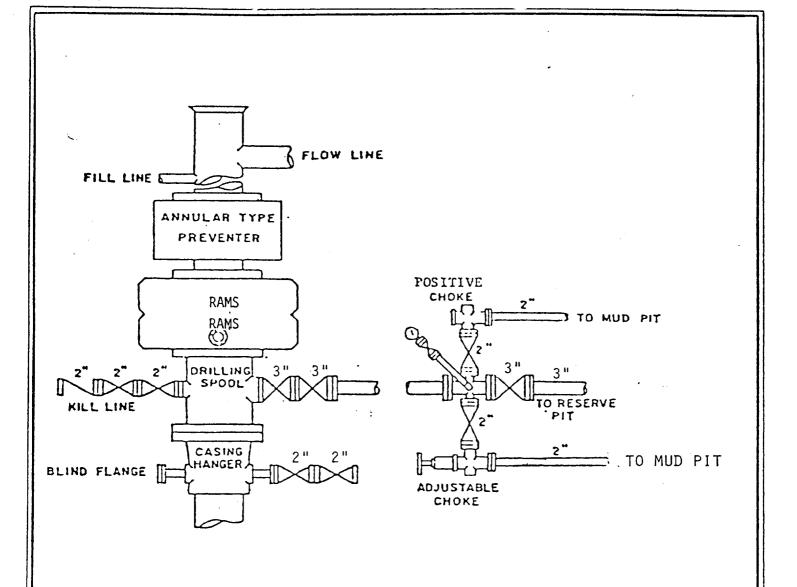
No coring is planned.

9. ABNORMAL PRESSURES, TEMPERATURES, OR HYDROGEN SULFIDE GAS:

None anticipated.

10. ANTICIPATED STARTING DATE:

It is planned that operations will commence upon approval of this application, with drilling and completion operations lasting about 45 days.



BOP STACK

3000 PSI WORKING PRESSURE

BOP ARRANGEMENT

SURFACE USE AND OPERATIONS PLAN

FOR

POGO PRODUCING COMPANY FEDERAL 12 WELL NO.6 1780'FSL & 1980'FWL SEC.12, T.22 S., R.31 E. EDDY COUNTY, NEW MEXICO

LOCATED: 28 air miles east of Carlsbad, New Mexico.

FEDERAL LEASE NUMBER: NM-29233.

LEASE ISSUED: February 1, 1977. Lease is in producing status.

ACRES IN LEASE: 1120.

RECORD LESSEE: E. R. Neff.

SURFACE OWNERSHIP: Federal.

GRAZING PERMITTEE: Kenneth Smith (505) 887-3374

P. O. Box 764

Carlsbad, New Mexico 88220

POOL: Undesignated Livingston Ridge Delaware.

POOL RULES: Statewide Rules. 40 acre spacing for oil.

EXHIBITS: A. Road Map

B. Plat Showing Existing Wells and Existing Roads

C. Drilling Rig Layout

D. Topo Plat

1. EXISTING ROADS:

- A. Exhibit "A" is a portion of a road map showing the location of the proposed well as staked. Point "A" on the plat is on US 62-180 at Milepost 66.8, approximately 37 miles west of Hobbs, New Mexico, where Lea County road C-29 goes south. To go to the proposed well site from this point, exit 62-180 to the south and go 8.9 miles to arrive at Point "B", where there is an east-west caliche road, or 10.4 miles to arrive at Point "C" where a caliche road goes southwesterly. The proposed well site can be reached from either of these points as indicated on Exhibits "B" and "D".
- B. Exhibit "B" shows existing pertinent roads in the vicinity of the proposed well site. Existing roads are color coded.

2. PLANNED ACCESS ROAD:

- A. <u>Length and Width</u>: The new road will be a "Y" about 60 feet long and is shown labeled and color coded red on Exhibit "B" and in more detail on Exhibit "C".
 - B. <u>Surfacing Material</u>: Caliche. Watered, compacted, and graded.
 - C. Maximum Grade: Less than one percent.
 - D. <u>Turnouts</u>: None necessary.
- E. <u>Drainage Design</u>: The new road will be crowned with drainage to the side.
 - F. Culverts: None needed.
 - G. Cuts and Fills: None necessary.
 - H. Gates and Cattle Guards: None necessary. No fences involved.

3. LOCATION OF EXISTING WELLS:

A. Existing wells in the immediate area are shown on Exhibit "B".

4. LOCATION OF EXISTING AND/OR PROPOSED FACILITIES:

A. Production from this well will be delivered to the existing lease tank battery located on the well pad at well No. 1. The flow line will be 3"

SDR-7 polyethylene pipe laid on the ground and will extend from the well to the tank battery alongside the road as shown on Exhibit "B". Anticipated flow line pressure is estimated to be about 60 psi.

5. LOCATION AND TYPE OF WATER SUPPLY:

A. It is not planned that a water well will be drilled. Water necessary for drilling operations will be purchased and trucked to the well site, or will be moved to the well site by temporary pipeline laid on the ground alongside existing and proposed roads.

6. SOURCE OF CONSTRUCTION MATERIALS:

A. Caliche needed for construction work will be taken, if present, from a pit opened on-site within the 400'x 450' work area. Otherwise, caliche will be taken from an existing pit on Federal land in the 400×10^{-5} of Section 12, T.22 S., R.31 E., Eddy County, New Mexico, and will be trucked to the well site over existing and proposed roads. Location of the caliche pit is shown on Exhibit "B".

7. METHODS OF HANDLING WASTE MATERIAL:

- A. Drill cuttings will be disposed of in the drilling pits.
- B. Drilling fluids will be allowed to evaporate in the drilling pits until the pits are dry.
- C. Water produced during tests will be disposed of in the drilling pits or will be stored in tanks for disposal in an approved disposal system.
 - D. Oil produced during tests will be stored in test tanks until sold.
- E. All trash, junk, and other waste material will be contained in trash cages or bins to prevent scattering and will be removed and deposited in an approved sanitary land fill.

8. ANCILLARY FACILITIES:

A. None necessary.

9. WELL SITE LAYOUT:

- A. Exhibit "C" shows the relative location and dimensions of the well pad, mud pits, reserve pit, and waste pit, and the location of major drilling rig components.
 - B. Clearing and levelling of the well site will be required.
 - C. The pad and pit area is staked and flagged.

10. PLANS FOR RESTORATION OF THE SURFACE:

- A. After completion of drilling and/or completion operations, all equipment and other material not needed for operations will be removed from the well site. Pits will be filled and and the location will be cleaned of all trash and junk to leave the well site in an as aesthetically pleasing condition as possible.
 - B. Any unguarded pits containing fluids will be fenced.
- C. After abandonment, all equipment, trash, and junk will be removed and the well site will be cleaned. Any special rehabilitation requirements of the surface management agency will be complied with and accomplished as rapidly as possible.

11. OTHER INFORMATION:

- A. <u>Topography</u>: The land surface in the area is undulating and duny. In the immediate area of the well site, land slope is to the west.
 - B. <u>Soil</u>: Top soil at the well site is sand.
- C. Flora and Fauna: The vegetative cover is moderate and includes mesquite, shinnery oak, sand sage, yucca, weeds, and range grasses. Wildlife in the area is that typical of semi-arid desert land and includes coyotes, rabbits, rodents, reptiles, dove and quail.
- j. <u>Ponds and Streams</u>: There are no rivers, lakes, ponds, or streams in the area.
- E. Residences and Other Structures: There are no occupied dwellings or other structures within a mile of the proposed well site.

- F. <u>Archaeological</u>, <u>Historical</u>, <u>and Cultural Sites</u>: None observed. However, an archaeological reconnaissance is to be accomplished and a report furnished.
 - G. Land Use: Grazing and wildlife habitat.
 - H. Surface Ownership: Federal.

12. OPERATOR'S REPRESENTATIVE:

Richard L. Wright
Drilling and Production Superintendent
Pogo Producing Company
P. O. Box 10340
Midland, Texas 79702
Office Phone: 915-682-6822

13. CERTIFICATION:

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill site and access route; that I am familiar with the conditions which currently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and, that the work associated with the operations proposed herein will be performed by Pogo Producing Company and its contractors and sub-contractors in conformity with this plan and the terms and conditions under which it is approved. This statement is subject to the provisions of 18 U.S.C. 1001 for the filing of a false statement.

November 27, 1991

Date:

Richard L. Wright
Drilling and Production Supt.

