N OPER. OGRID NO. 11071
PROPERTY NO. 13460
POOL CODE 51683
EFF. DATE 6/17/96
API NO. 30-025-32657

Form 3160-3
(July 1992)

DEPARTM
BUREA

...PLICATE*
...tructions on
...e side)

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

APPLICATION FO

1a. TYPE OF WORK
DRILL [X] Change of Location DEEPEN [ ]

b. TYPE OF WELL
OIL WELL [X] GAS WELL [ ] OTHER SINGLE ZONE [X] MULTIPLE ZONE [ ]

2. NAME OF OPERATOR
Pogo Producing Company

3. ADDRESS AND TELEPHONE NO.
P.O.Box 10340, Midland, Texas 79702

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*)
At surface 2310' FNL & 1980' FEL of Section 27 Unit G
At proposed prod. zone Same

5. LEASE DESIGNATION AND SERIAL NO.
NM-81272

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME, WELL NO.
Prize Federal

9. API WELL NO.
7

10. FIELD AND POOL, OR WILDCAT
Undes. Red Tank Bone Springs

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
Sec. 27, T-22S, R-32E

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*
30 air miles west southeast of Eunice, N.M.

12. COUNTY OR PARISH
Lea Co.

13. STATE
N.M.

15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any) 1650'

16. NO. OF ACRES IN LEASE 640

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. 1320'

19. PROPOSED DEPTH 9000'

20. ROTARY OR CABLE TOOLS Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.) 3644' Ground Level

Carlsbad Controlled Water Basin

22. APPROX. DATE WORK WILL START* Upon Approval

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	GRADE, SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
14-3/4"	10-3/4" ~~32.75~~ ~~32#~~ ~~J55~~ H-40		800'	650 sx (circ)
9-7/8"	7-5/8" ~~26~~ ~~26#~~ J55,N80		4600'	1300 sx (circ)
6-3/4"	4-1/2"	11.6# J55,N80	~~9300'~~ 9000'	1100 sx (4100')

From 1980/N & 1650/E To 2310/N & 1980/E

The operator proposes to drill to a depth sufficient to test the Delaware and Bone Springs for oil. Specific programs are outlined in the following attachments:

DRILLING PROGRAM
SURFACE USE AND OPERATING PLAN
HYDROGEN SULFIDE DRILLING OPERATIONS PLAN
EXHIBIT A - ROAD MAP
EXHIBIT B - EXISTING WELL MAP
EXHIBIT C - LOCATION AND ACREAGE DEDICATION PLAT - C-1 Drilling Rig Layout
EXHIBIT D - TOPO MAP
EXHIBIT E - 3M BOP EQUIPMENT

Subject to ... Requirements and ... Stipulations Attached

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 James W. C. Rotha Jr. TITLE Agent DATE 5/01/96

(This space for Federal or State office use)

PERMIT NO. _____ APPROVAL DATE _____

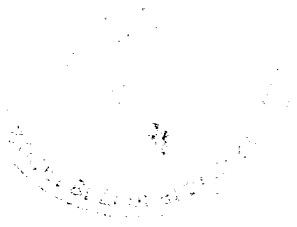
Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

CONDITIONS OF APPROVAL, IF ANY:

APPROVED BY /s/ TIMOTHY J. BURKE TITLE Acting Area Manager DATE JUN 12 1996

*See Instructions On Reverse Side

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.



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

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

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

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

State of New Mexico
Energy, Minerals and Natural Resources Departme..

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

OIL CONSERVATION DIVISION

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

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code	Pool Name
30-025-32657	51683	UNDES. RED TANK BONE Springs

Property Code	Property Name	Well Number
13460	PRIZE FEDERAL	7

OGRID No.	Operator Name	Elevation
017891	POGO PRODUCING COMPANY	3644

Surface Location

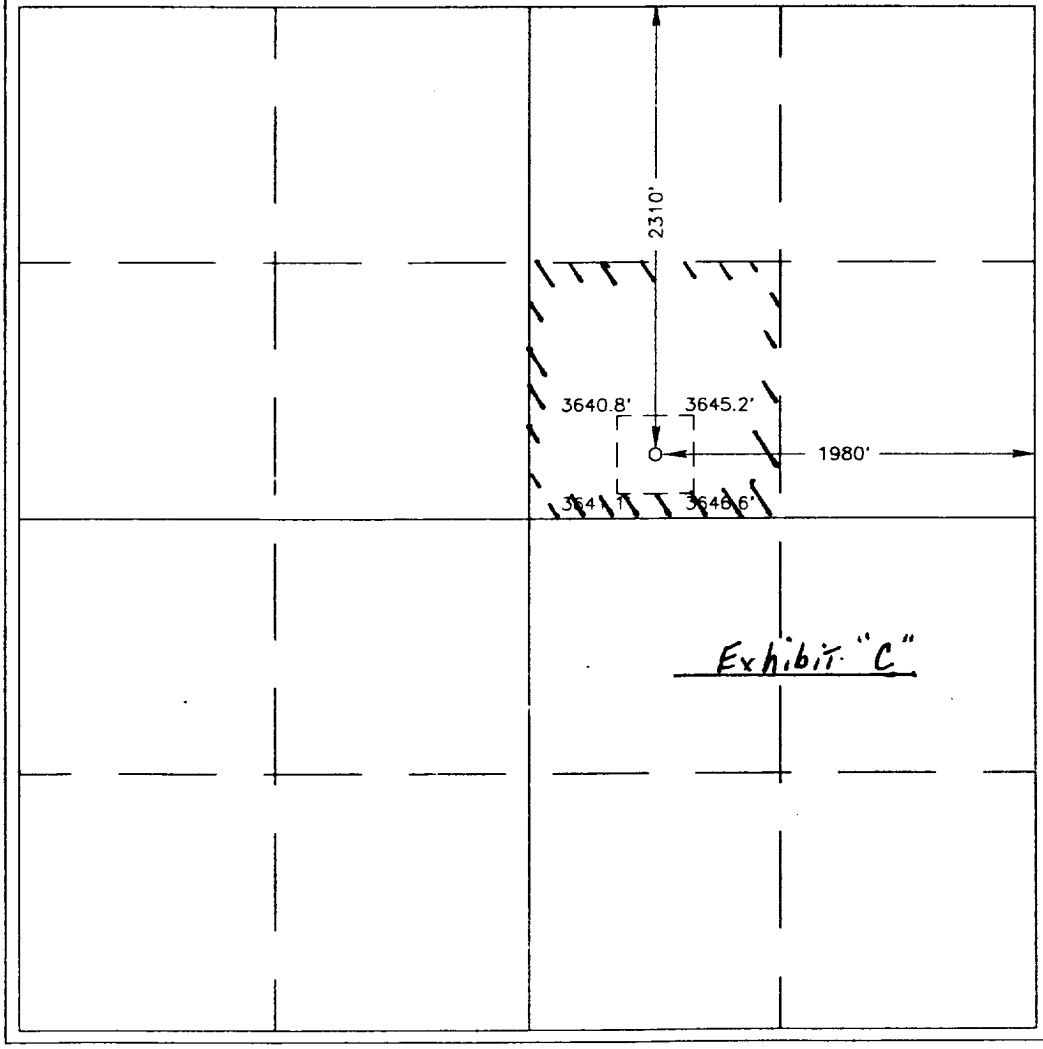
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
G	27	22 S	32 E		2310	NORTH	1980	EAST	LEA

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	Joint or Infill	Consolidation Code	Order No.
40			

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



OPERATOR CERTIFICATION

I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief.

James M.C. Ritchie Jr.
Signature

JAMES M.C. Ritchie JR.
Printed Name

AGENT
Title

MAY 1, 1996
Date

SURVEYOR CERTIFICATION

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 supervison, and that the same is true and correct to the best of my belief.

APRIL 22, 1996
Date Surveyed

DMCC

Signature & Seal of Professional Surveyor

RONALD J. EIDSON NEW MEXICO 3239 REGISTERED PROFESSIONAL SURVEYOR

4-24-96

96-11-0485

Certificate No. JOHN W. WEST 676
RONALD J. EIDSON 3239
GARY L. EIDSON 12641

DRILLING PROGRAM

Attached to Form 3160-3

Pogo Producing Company

Prize Federal Well No. 7
2310' FNL & 1980' FEL
Unit Letter G, SW/NE
Section 27, T22S, R323E
Lea County, New Mexico

1. **Geologic Name of Surface Formation:** Permian

2. **Estimated Tops of Important Geologic Markers and**
3. **Estimated Depths of Fresh Water, Oil, and Gas:**

Formation	Depth	Fluid Content
Anhydrite	800'	-----
Lamar Lime	4700'	-----
Cherry Canyon	6100'	Oil
Brushy Canyon	7400'	Oil
Bone Springs	8800'	Oil
Total Depth	9000'	

No other formations are expected to give up oil, gas, or fresh water in measurable quantities. The surface fresh water sands will be protected by setting 10-3/4" casing at 800' into the Rustler anhydrite and circulating cement to surface. Potash will be protected by setting 7-5/8" intermediate casing at 4600' and circulating cement to surface. 4-1/2" production casing will be set at TD, and cement will be tied back at least 200' into the 7-5/8" intermediate casing, thus ensuring that all zones are adequately isolated.

The pore pressure gradient is normal (+8.4 ppg) down through the Bone Springs. No abnormal pressures are anticipated.

4. **Casing and Cementing Program**

Hole Size	Casing From	To	Casing OD	Weight, Grade, Coupling, Cond.
* 20"	0'	40'	16"	65# H40 used conductor
14-3/4"	0'	800'	10-3/4"	32# J-55 STC new
9-7/8"	0'	4,600'	7-5/8"	26# J55, N-80 LTC new
6-3/4"	0	9,000'	4-1/2"	11.6# J55 & N-80 LTC new

* Setting conductor pipe will be at drilling contractor's option.

All used casing will be drifted and hydrostatically tested to at least 90% of new pipe rating.

Minimum Design Factors: Collapse 1.125, Burst 1.1, Tension 1.7

16" conductor casing set at 40'
Cement to surface with ready-mix. No centralizers.

10-3/4" surface casing set at 800'
The surface casing will be set into the Rustler anhydrite to protect all fresh water formations.
Centralize the bottom 3 joints and every 4th joint to surface.
Cement to surface with 450 sx of Class C with 4% gel, 2% CaCl2 (13.5 ppg, 1.74 ft3/sx) followed by 200 sx Class C with 2% CaCl2 (14.8 ppg, 1.32 ft3/sx).

7-5/8" intermediate casing set at 4600'
The intermediate casing will be set within 100' of the top of the Delaware to isolate all salt stringers.
Centralize the bottom 3 joints.
Cement to surface with 1100 sx of 35/65 Pozmix Class H with 6% gel, 5% salt, 1/4# FC (12.8 ppg, 1.94 ft3/sx) followed by 200 sx Class C with 1% CaCl2 (15.6 ppg, 1.19 ft3/sx).

4-1/2" production casing set at TD'
Centralize every joint from TD to bottom of the intermediate casing.
Cement to tie back into 8-5/8" intermediate casing at least 200'.
A 2-stage cement job will be required with a DV tool at +6000'.
Stage 1: 350 sx 50/50 Pozmix Class H with 2% gel, 5% salt, 1/4# FC (14.2 ppg, 1.34 ft3/sx).
Stage 2: 650 sx 50/50 Pozmix Class H with 2% gel, 5% salt, 1/4# FC (14.2 ppg, 1.34 ft3/sx) followed by 100 sx Class H (15.6 ppg, 1.19 ft3/sx).

5. **Minimum Specifications for Pressure Control:**

9-7/8" hole

The following BOP equipment will be nippled up on the 10-3/4" casing and used continuously until TD is reached for the 9-7/8" hole.

The blowout preventer equipment (BOP) shown in Exhibit E will consist of a 3000 psi WP double ram type preventer and a 3M annular (bag type) preventer with rotating head. Both BOP's will be hydraulically operated. At the drilling contractor's option, 5M BOP's may be substituted. H2S trim will not be required.

Before drilling out from under the 13-3/8" casing, all BOP's and accessory equipment will be tested to 1000 psi with the rig pump. Pipe rams will be operationally checked each 24 hour period. Blind rams will be operationally checked on each trip out of the hole. These checks will be noted on the daily tour sheets.

BLM method to calculate minimum BOP requirements:
(.052)(10 ppg)(4600') - (0.22 psi/ft)(4600') = 1380 psi
Minimum BOP requirements: 2M BOP stack and manifold system

6-3/4" hole

The following BOP equipment will be nippled up on the 7-5/8" casing and used continuously until TD is reached for the 6-3/4" hole.

The blowout preventer equipment (BOP) shown in Exhibit E will consist of a 3000 psi WP double ram type preventer and a 3M annular (bag type) preventer with rotating head. Both BOP's will be hydraulically operated. At the drilling contractor's option, 5M BOP's may be substituted. H2S trim will not be required.

Before drilling out from under the 7-5/8" intermediate casing, all BOP's and accessory equipment will be tested to 1000 psi with the rig pump. Pipe rams will be operationally checked each 24 hour period. Blind rams will be operationally checked on each trip out of the hole. These checks will be noted on the daily tour sheets.

BLM method to calculate minimum BOP requirements:
(.052)(8.4 ppg)(9000') - (0.22 psi/ft)(9000') = 2700 psi
Minimum BOP requirements: 3M BOP stack and manifold system

6. **Proposed Mud System:**

The well will be drilled to TD with a combination of fresh water and 10# brine. The applicable depths and properties of this system are as follows:

Depth	Type	Weight (ppg)	Viscosity (sec)	Water Loss (cc)
0-800'	Fresh water	8.4	28	NC
800-4600'	Brine	10.0	29	NC
4600-TD	Fresh	8.4	28-32	16

Sufficient mud materials to maintain mud properties and meet minimum lost circulation requirements will be kept at the wellsite at all times.

7. **Auxiliary Well Control and Monitoring Equipment:**

a) A kelly cock will be kept in the string at all times.

b) A full opening drill pipe stabbing valve (TIW/inside BOP) with proper drill pipe connections will be on the rig floor at all times.

c) An electronic pit volume totalizer system will NOT be used. The drilling fluids system will be visually monitored at all times.

d) A mudlogging unit will be continuously monitoring drilling penetration rate and hydrocarbon shows from 2900' to TD.

8. **Logging, Testing, and Coring Program:**

a) Drillstem tests will be run on the basis of drilling shows.

b) The electric logging program will consist of:
1) 6-3/4" hole - Gamma ray, dual induction log, compensated neutron and litho-density logs.

c) No conventional cores are planned. Selected intervals may be sidewall cored based upon shows and openhole logs.

d) Further testing procedures will be determined after the 4-1/2" production casing has been cemented at TD.

9. **Abnormal Conditions, Pressures, Temperatures, and Potential Hazards:**

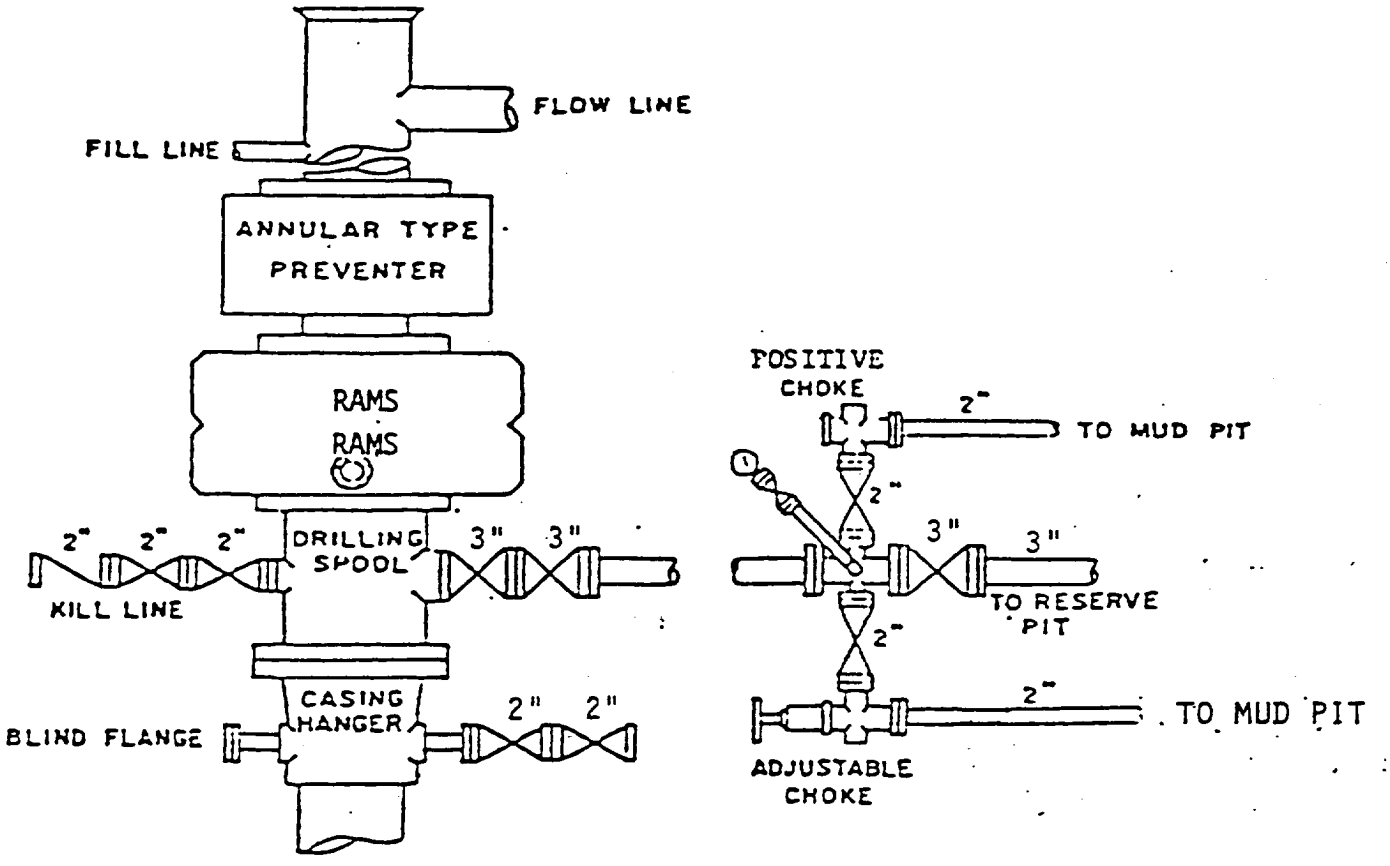
No abnormal pressures, temperatures, or other potential hazard are anticipated.

No hydrogen sulfide or other hazardous gases or fluids have been encountered, reported, or are known to exist at this depth in this area. No major lost circulation zones have been reported in offsetting wells.

The maximum anticipated bottom hole pressure is approximately 3918 psi. (9000' x .433 psi/ft = 3897 psi.)
The maximum anticipated bottom hole temperature is 132 deg F.

10. **Anticipated Starting Date and Duration of Operations:**

Road and location work will not begin until approval has been received from the BLM. The anticipated spud date is June 15, 1996. Once commenced, the drilling operation should be complete in 15 days. If the well is productive, an additional 30 days will be required for completion, testing, and installation of permanent facilities.



BOP STACK

3000 PSI WORKING PRESSURE

Exhibit "E"

BOP ARRANGEMENT