

N.M. OIL CONS. COMMISSION  
P.O. BOX 1980  
HOBBS, NEW MEXICO 88240  
UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENTSUBMIT IN DUPLICATE\*  
(Other instructions on  
reverse side)FORM APPROVED  
OMB NO. 1004-0136  
Expires: February 28, 1995

## APPLICATION FOR PERMIT TO DRILL OR DEEPEN

## 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

## 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 AND 2310' FWL OF SECTION 27

At proposed prod. zone

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

30 AIR MILES WEST OF EUNICE, NEW MEXICO

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

330'

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

1320'

## 16. NO. OF ACRES IN LEASE

320

## 19. PROPOSED DEPTH

9000'

17. NO. OF ACRES ASSIGNED  
TO THIS WELL

40

## 20. ROTARY OR CABLE TOOLS

ROTARY

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

3630' GR

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
7-1/2"	13-3/8"	54.5#	800'	SUFFICIENT TO CIRCULATE
1"	8-5/8"	32#	4500'	SUFFICIENT TO CIRCULATE
7-7/8"	5-1/2"	17#	9000'	TO TIE BACK 200' INTO 8-5/8"

AFTER SETTING PRODUCTION CASING, PAY ZONE WILL BE PERFORATED  
AND STIMULATED AS NECESSARY.SEE ATTACHED FOR: SUPPLEMENTAL DRILLING DATA  
BOP SKETCH  
SURFACE USE AND OPERATIONS PLAN  
HYDROGEN SULFIDE DRILLING OPERATIONS PLANOPER. OGRID NO. 12891PROPERTY NO. 9325POOL CODE 51689EFF. DATE 1-9-95API NO. 30-025-3274Approval Subject to  
General Requirements and  
Special 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

Richard L. Wright

TITLE

Division Operations Mgr.

DATE

November 30, 1994

(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

H. Scott Powers

TITLE

AREA MANAGER

DATE

12/21/94

\*See Instructions On Reverse Side

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DISTRICT I  
P.O. Box 1980, Hobbs, NM 88240

State of New Mexico  
Energy, Minerals and Natural Resources Department

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

DISTRICT II  
P.O. Drawer DD, Artesia, NM 88210

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

OIL CONSERVATION DIVISION

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

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-025-32796	Pool Code 51689	Pool Name UNDES. WEST RED TANK DELAWARE
Property Code 9325	Property Name FEDERAL 27	Well Number 4
OGRID No. 17891	Operator Name POGO PRODUCING COMPANY	Elevation 3630'

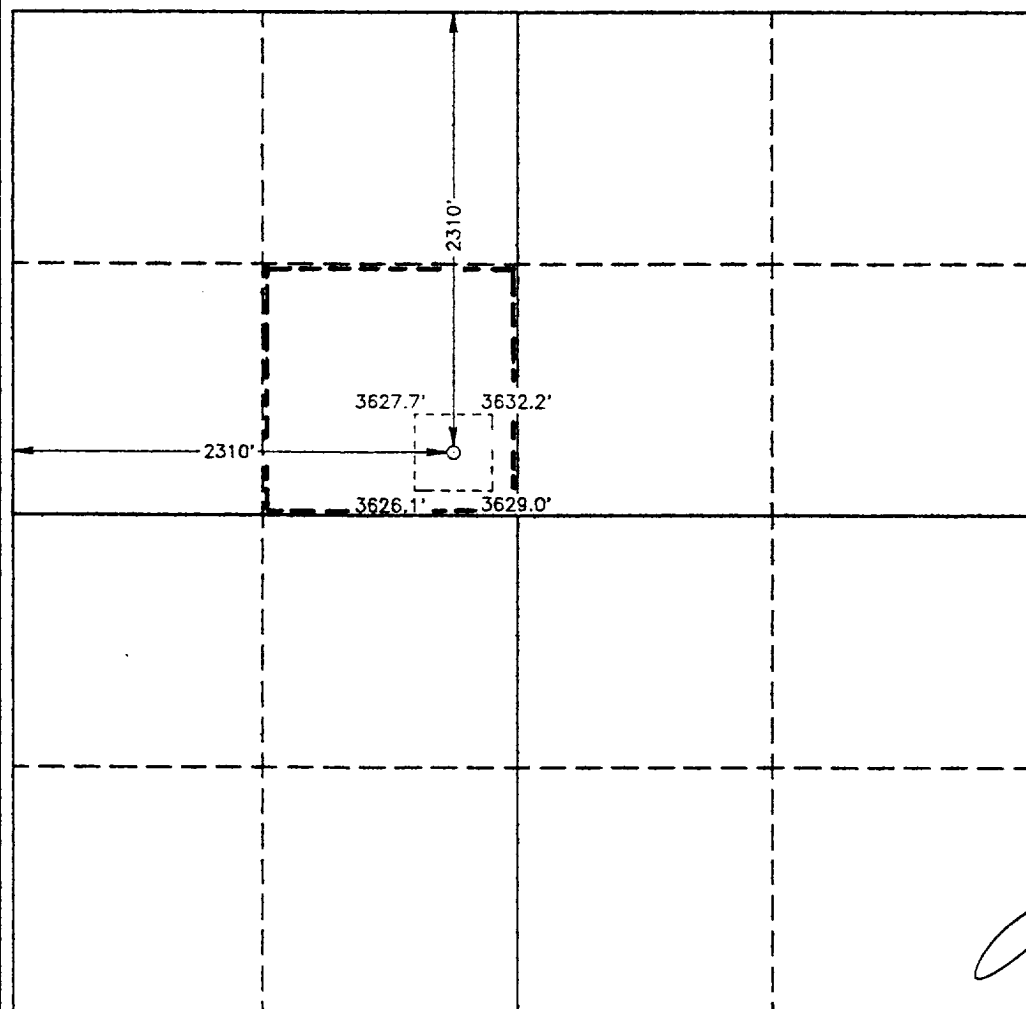
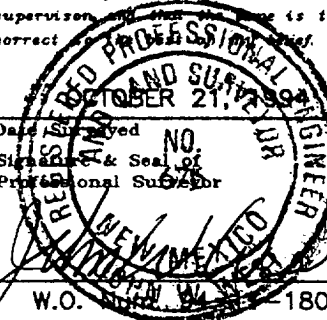
Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
F	27	22 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 N	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><b>OPERATOR CERTIFICATION</b></p> <p>I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief.</p> <p><u>Richard L. Wright</u> Signature</p> <p>Richard L. Wright Printed Name</p> <p>Division Operations Mgr. Title</p> <p>November 30, 1994 Date</p> <p><b>SURVEYOR CERTIFICATION</b></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.</p> <p> Date Surveyed Signature &amp; Seal of Professional Surveyor</p> <p>W.O. 1807-1807</p> <p>Certificate No. JOHN W. WEST, 676 RONALD J. EIDSON, 3239</p>
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SUPPLEMENTAL DRILLING DATA

POGO PRODUCING COMPANY

FEDERAL 27 WELL NO.4

1. SURFACE FORMATION: Quaternary.

2. ESTIMATED TOPS OF GEOLOGIC MARKERS:

Anhydrite	800'
Delaware Lime	4700'
Cherry Canyon	6100'
Brushy Canyon	7400'
Bone Springs	8800'

3. ANTICIPATED POSSIBLE HYDROCARBON BEARING ZONES:

Delaware	Oil
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4. PROPOSED CASING AND CEMENTING PROGRAM:

CASING SIZE	SETTING DEPTH		WEIGHT	GRADE	JOINT
	FROM	TO			
13-3/8"	0	800'	54.5#	J-55	STC
8-5/8"	0	4300'	32#	J-55	STC
"	4300'	4500'	32#	S-80	STC
5-1/2"	0	1000'	17#	N-80	LTC
"	1000'	7000'	17#	J-55	LTC
"	7000'	9000'	17#	N-80	LTC

MINIMUM

DESIGN FACTORS: COLLAPSE 1.1 BURST 1.1 TENSION 1.2

13-3/8" casing to be cemented with 500 sacks of light cement tailed in with 200 sacks of Class "C" with 2% CaCl. Cement to circulate.

8-5/8" casing to be cemented with 1200 sacks of light cement with 10% salt tailed in with 200 sacks of premium cement with 1% CaCl. Cement to circulate.

5-1/2" production casing is to be cemented with approximately 500 sacks

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of light cement followed by 400 sacks of premium cement. Cement to tie back to 3600 feet.

If, during drilling operations, need for stage cementing of casing is indicated, staging tool(s) will be run and positioned to best suit hole conditions at time casing is run.

Cement volumes may be adjusted and cement may have lost circulation and/or other additives depending on hole conditions at the time casing is run.

#### 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 base fluid with gel and paper sweeps for hole cleaning.  
Mud wgt 8.4 ppg - 8.6 ppg  
Viscosity 28 - 32 seconds per quart.

800 feet to 4500 feet: Brine water base fluid with salt gel and paper sweeps for hole cleaning.  
Mud wgt 10.0 ppg - 10.2 ppg  
Viscosity 28 - 32 seconds per quart.

4500 feet to T.D.: Fresh water base fluid with gel and paper sweeps for hole cleaning.  
Mud wgt 8.4 ppg - 8.6 ppg  
Viscosity 28 - 32 seconds per quart.

#### 7. AUXILIARY EQUIPMENT:

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

8. TESTING, LOGGING, AND CORING PROGRAM:

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:

No abnormal pressures or temperatures are expected.

Expected bottom hole pressure is about 3600 psi.

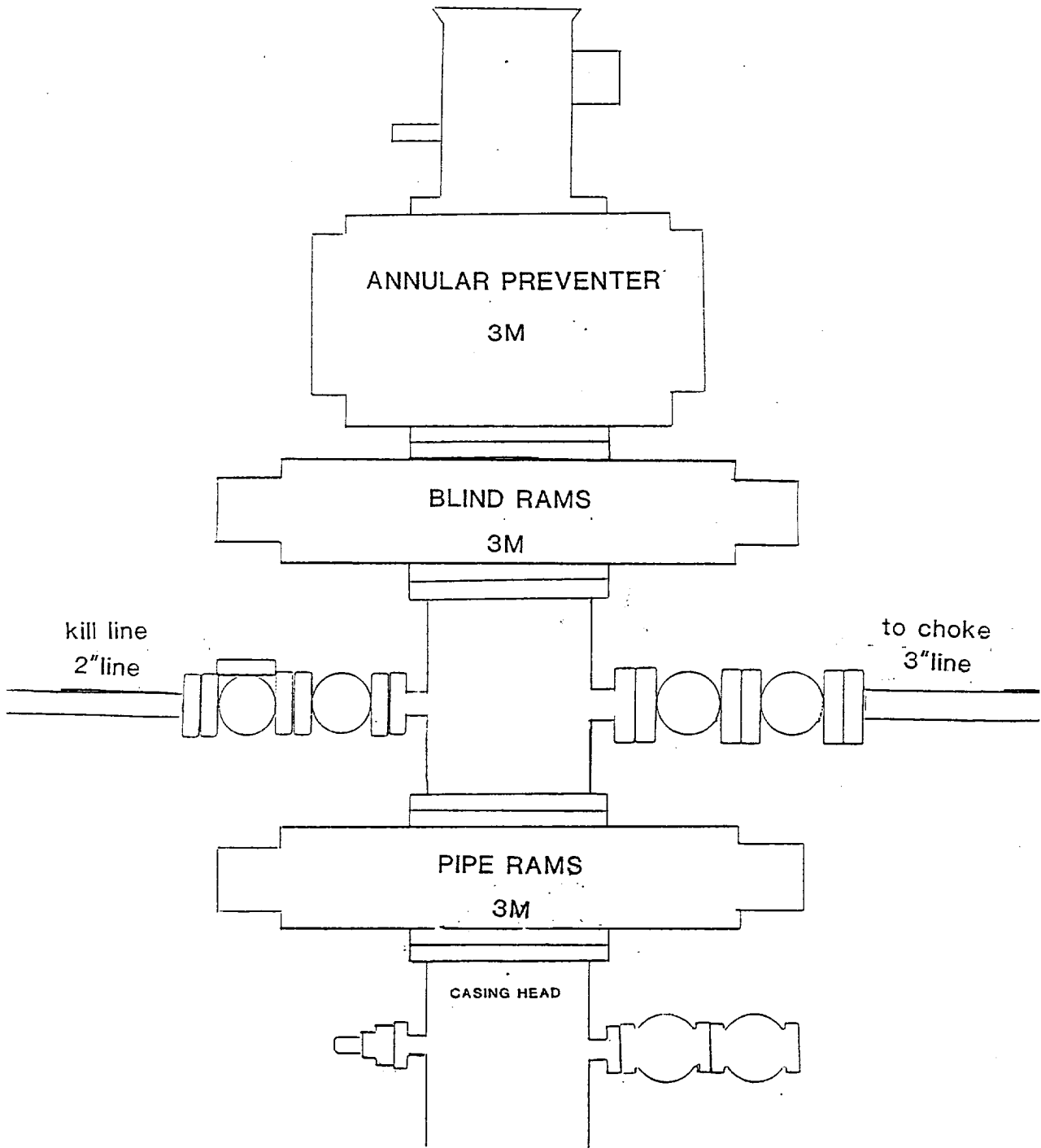
Expected bottom hole temperature is about 125 degrees Fahr.

No hydrogen sulfide gas is expected. The production stream of Pogo Producing Company's wells in this area have been tested specifically for hydrogen sulfide gas and test results were negative. However, since it is possible that low-volume hydrogen sulfide gas may be present in permeable water zones of the Castile formation, drilling operations below the surface casing will be in accordance with the attached "HYDROGEN SULFIDE DRILLING OPERATIONS PLAN" until intermediate casing is set and cemented and this possible source of hydrogen sulfide gas is cased off.

10. ANTICIPATED STARTING DATE:

It is planned that operations will commence upon approval of this application, with drilling and completion operations lasting about 30 days.

PUGO PRODUCING COMPANY  
FEDERAL 27 WELL NO.4





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