

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK

DRILL ☒

DEEPEN ☐

PLUG BACK ☐

b. TYPE OF WELL

OIL  
WELL ☒

GAS  
WELL ☐

OTHER

SINGLE  
ZONE ☒

MULTIPLE  
ZONE ☐

2. NAME OF OPERATOR

POGO PRODUCING COMPANY

3. ADDRESS OF OPERATOR

P.O. BOX 10340, MIDLAND, TEXAS 79702

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

At surface

1980' FNL AND 330' FWL OF SECTION 12

At proposed prod. zone

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

28 MILES EAST OF CARLSBAD, NEW MEXICO

15. DISTANCE FROM PROPOSED\*

LOCATION TO NEAREST  
PROPERTY OR LEASE LINE, FT.  
(Also to nearest drlg. 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

1120

19. PROPOSED DEPTH

8500'

17. NO. OF ACRES ASSIGNED  
TO THIS WELL

40

20. ROTARY OR CABLE TOOLS

ROTARY

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

3558.7 GR

Carlsbad Controlled Water

22. APPROX. DATE WORK WILL START\*

UPON APPROVAL

23. PROPOSED CASING AND CEMENTING PROGRAM

R-111-P Potash Secretary's Potash

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
17-1/2"	13-3/8"	54.5#	800'	SUFFICIENT TO CIRCULATE
11"	8-5/8"	24#, 28#, 32#	4300'	SUFFICIENT TO CIRCULATE
7-7/8"	5-1/2"	15.5# & 17#	8500'	1000 SACKS - SEE STIPS.

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

Part ID-1  
10-18-91  
New Loc & API

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, 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 Drilling and Production Supt. DATE August 9, 1991

(This space for Federal or State office use)

PERMIT NO. \_\_\_\_\_ APPROVAL DATE \_\_\_\_\_

APPROVED BY \_\_\_\_\_ TITLE \_\_\_\_\_ DATE 10-10-91

CONDITIONS OF APPROVAL, IF ANY:

APPROVAL SUBJECT TO

GENERAL REQUIREMENTS AND

SPECIAL STIPULATIONS

ATTACHED

\*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.

Submit to Appropriate  
District Office  
State Lease - 4 copies  
Fee Lease - 3 copies

State of New Mexico  
Energy, Minerals and Natural Resources Department

Form C-102  
Revised 1-1-89

OIL CONSERVATION DIVISION

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

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

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

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

WELL LOCATION AND ACREAGE DEDICATION PLAT

All Distances must be from the outer boundaries of the section

Operator POGO PRODUCING CO.			Lease FEDERAL 12		Well No. 4
Unit Letter E	Section 12	Township 22 SOUTH	Range 31 EAST	County EDDY	
Actual Footage Location of Well: 1980 feet from the NORTH line and 330 feet from the WEST line					
Ground level Elev. 3558.7	Producing Formation DELAWARE (BRUSHY CANYON)		Pool LIVINGSTON RIDGE DELAWARE	Dedicated Acreage: 40 Acres	

1. Outline the acreage dedicated to the subject well by colored pencil or hatchure marks on the plat below.

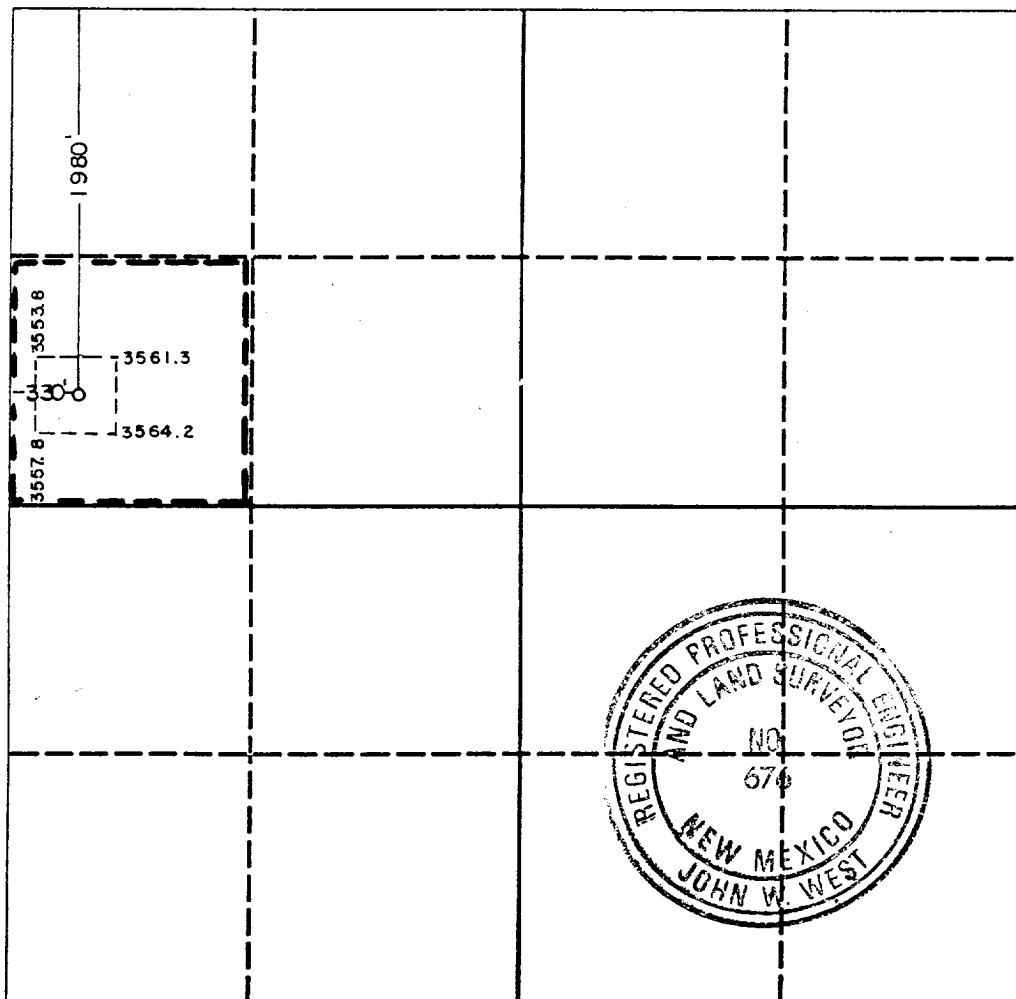
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).

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 the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.) \_\_\_\_\_

No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interest, has been approved by the Division.



OPERATOR CERTIFICATION

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

Signature \_\_\_\_\_

Printed Name \_\_\_\_\_

Richard L. Wright

Position \_\_\_\_\_

Drilling and Prod. Supt.

Company \_\_\_\_\_

POGO PRODUCING COMPANY

Date \_\_\_\_\_

August 9, 1991

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

Date Surveyed \_\_\_\_\_

8-5-91

Signature & Seal of Professional Surveyor \_\_\_\_\_

Certificate No. \_\_\_\_\_

JOHN W. WEST, 676

RONALD J. EIDSON, 3239

SUPPLEMENTAL DRILLING DATA

POGO PRODUCING COMPANY

FEDERAL 12 WELL NO.4

1. SURFACE FORMATION: Quaternary.

2. ESTIMATED TOPS OF GEOLOGIC MARKERS:

Rustler Anhydrite	750'
Delaware	4450'
Bell Canyon	4550'
Cherry Canyon	5450'
Brushy Canyon	7200'

3. ANTICIPATED POSSIBLE HYDROCARBON BEARING ZONES:

Brushy Canyon	Oil
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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 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 LT&C casing is to be set at 8500 feet in 7-7/8" hole. Casing is to be cemented with 1000 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:

No drill stem tests are planned.

Compensated Neutron - Litho Density Log and Phasor Induction Log/GR from total depth back to intermediate casing. Gamma Ray log will be continued back to surface.

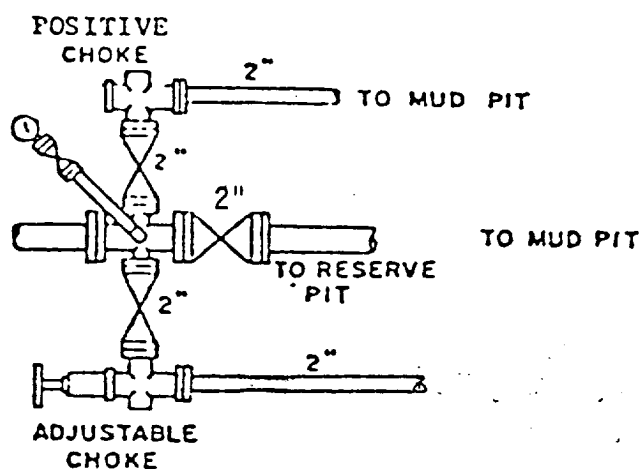
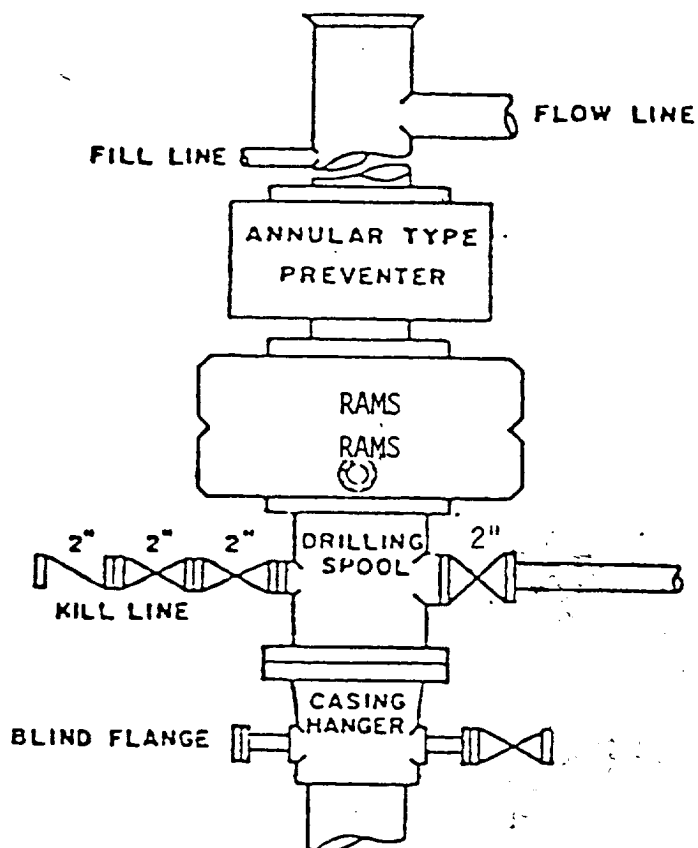
No coring is planned.

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.4  
1980'FNL & 330'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: 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. The proposed well site can be reached by, either going south off US 62-180, or by going north off State 128. Point "A" on the plat is on 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 on the paved road and go 8.9 miles to arrive at Point "C", or 10.5 miles to arrive at Point "D". Also see Exhibits "B" and "D". The proposed well site can be reached from either point as indicated.

Point "B" on the plat is on State highway 128 at Milepost 17.6, about 36 road miles west of Jal, New Mexico, where Eddy County road 798 goes north. To go to the proposed well site from this point, go north on Eddy 798 11 miles to arrive at the above mentioned Point "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. Length and Width: The new road will be 12 feet wide and approximately 500 feet long, and is shown labeled and color coded red on Exhibit "B". The centerline of the proposed new road is staked and flagged.

B. Surfacing Material: Caliche. Watered, compacted and graded.

C. Maximum Grade: Less than one percent.

D. Turnouts: None necessary.

E. Drainage Design: 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 a 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 at well No.1 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 the existing pit on Federal land in the SE $\frac{1}{4}$ SW $\frac{1}{4}$  of Section 12, T.22 S., R.31 E., Eddy County, New Mexico. Caliche 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

D. Oil produced during tests will be stored in test tanks until sold.

E. Trash, waste paper, garbage and junk will be buried in a separate trash pit and covered with a minimum of 24 inches of dirt. All waste material will be contained to prevent scattering by the wind. Location of the trash pit is shown on Exhibit "C".

F. All trash and debris will be buried or removed from the well site within thirty days after finishing drilling and/or completion operations.

#### 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 trash 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 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. Topography: The land surface in the area is undulating and dunny. In the immediate area of the well site, land slope is to the west.

B. Soil: 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.

D. Ponds and Streams: 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. Archaeological, Historical, and Cultural Sites: 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:

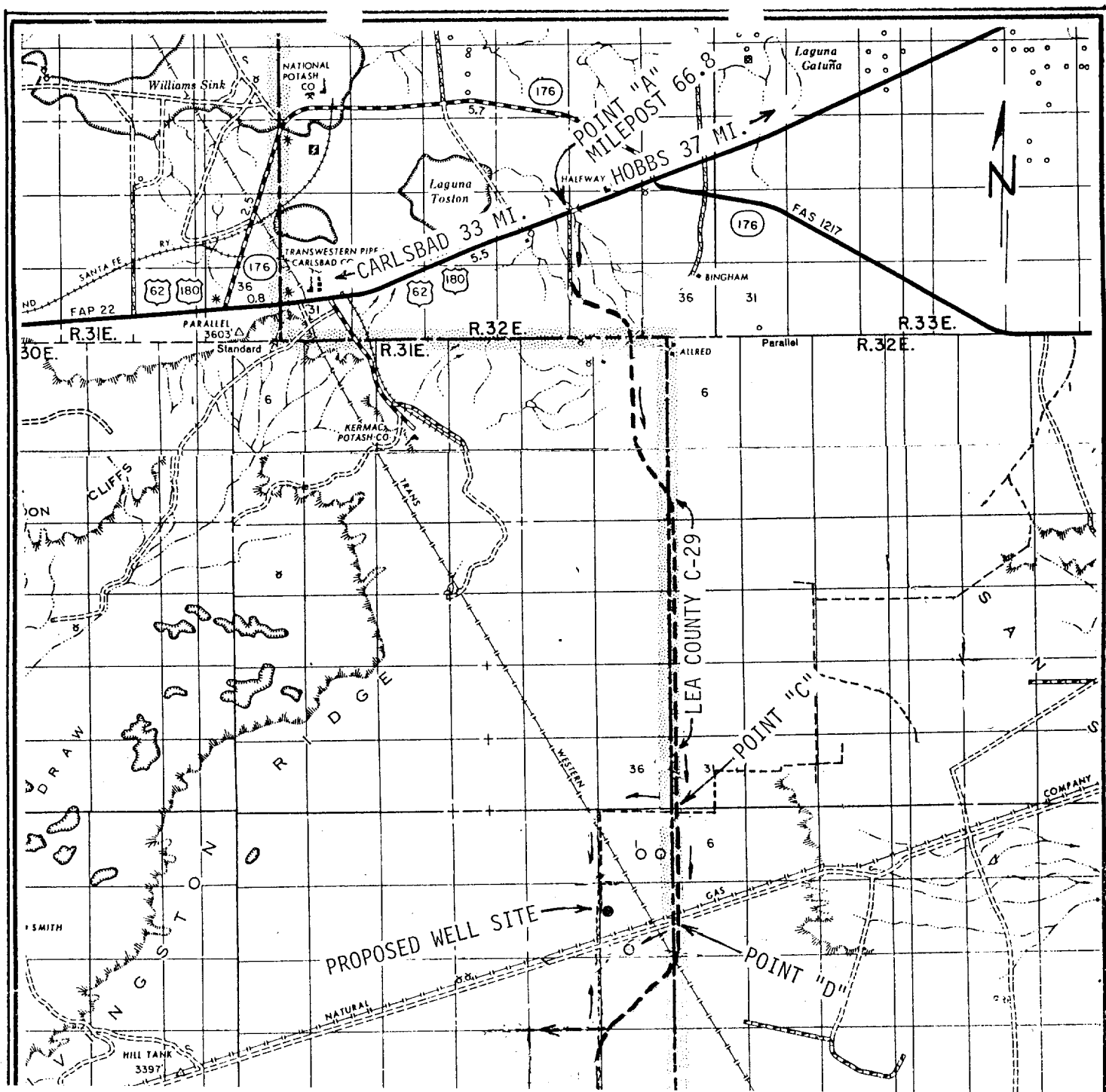
Richard L. Wright  
Drilling and Production Superintendent  
Pogo Producing Company  
P. O. Box 10340  
Midland, Texas 79702  
Office Phone: 915-682-6822

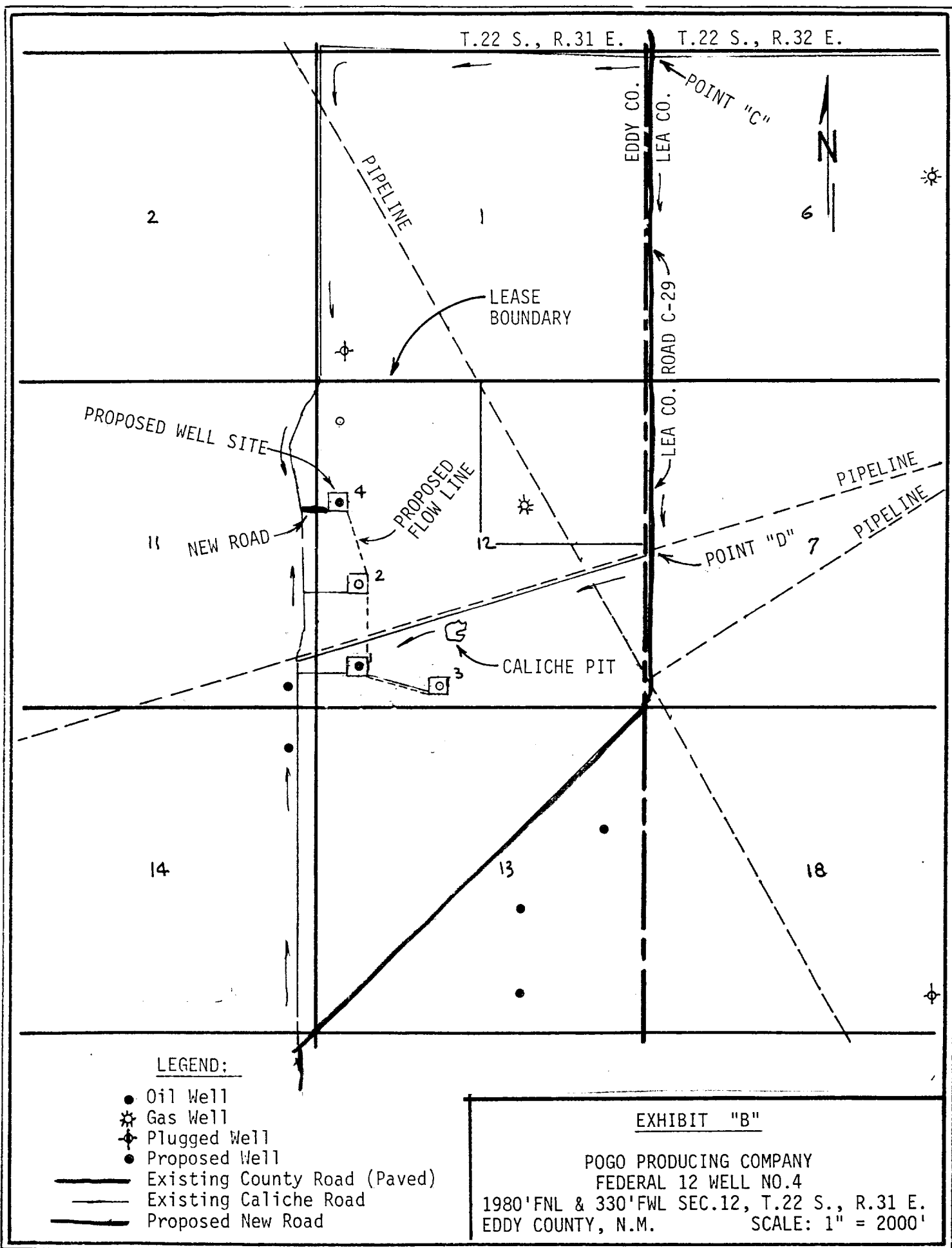
13. CERTIFICATION:

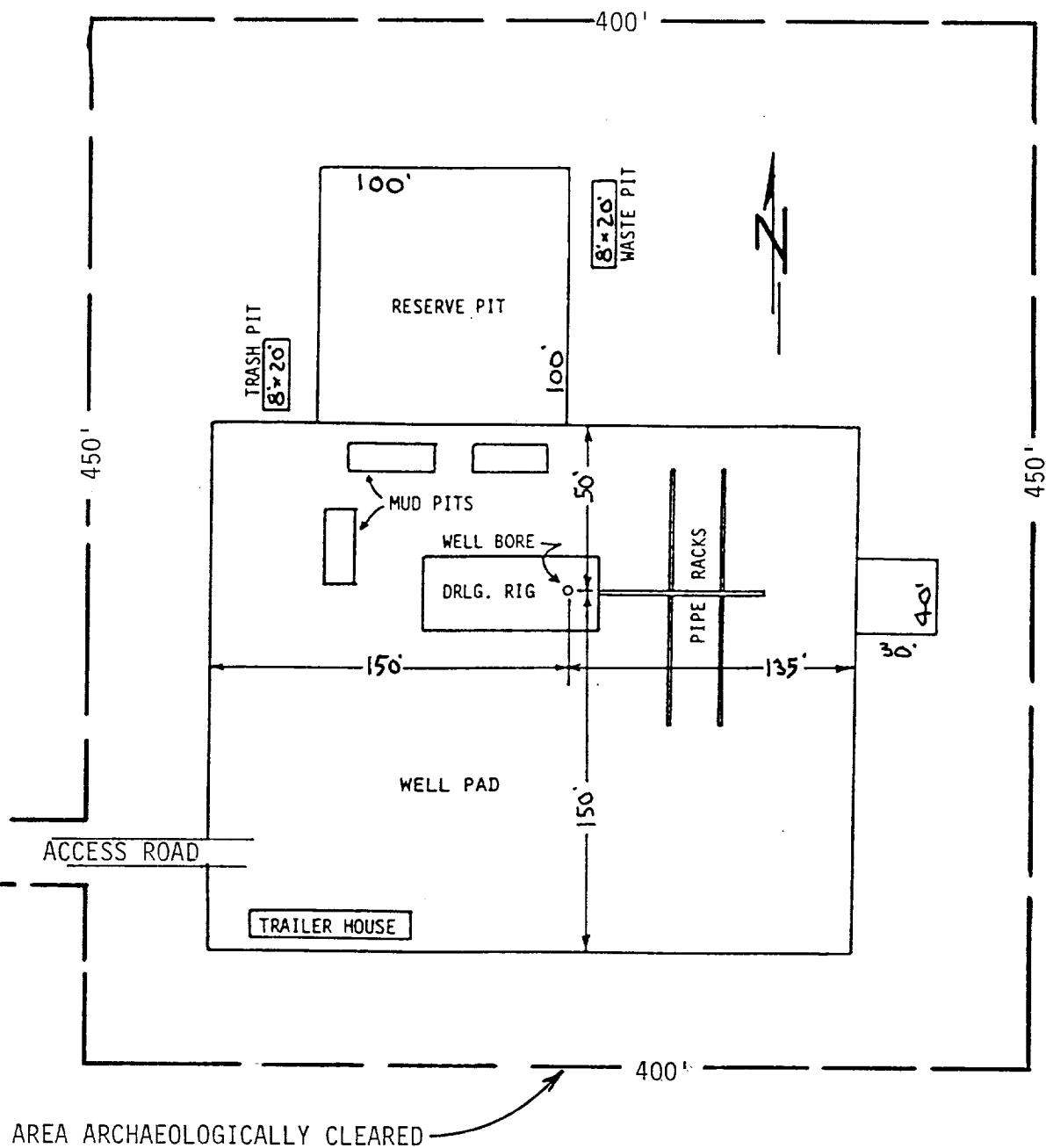
I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill site and access route; that I am familiar with the conditions which currently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and, that the work associated 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.

August 6, 1991  
Date:

  
Richard L. Wright  
Drilling and Production Supt.  
Pogo Producing Company







### EXHIBIT "C"

POGO PRODUCING COMPANY  
FEDERAL 12 WELL NO.4

DRILLING RIG LAYOUT  
SCALE: None

