

UNITED STATES COPY  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

30-015-23759

## 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

APR 28 1981

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

At surface

1880' FSL &amp; 760' FEL

At proposed prod. zone

1880' FSL &amp; 760' FEL

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

2 miles North of Loving, New Mexico

## 15. DISTANCE FROM PROPOSED\*

LOCATION TO NEAREST  
PROPERTY OR LEASE LINE, FT.  
(Also to nearest drlg. unit line, if any)

760'

## 16. NO. OF ACRES IN LEASE

360

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.

## 19. PROPOSED DEPTH

4000'

## 20. ROTARY OR CABLE TOOLS

Rotary

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

3046.4 GR

## 22. APPROX. DATE WORK WILL START\*

May 1, 1981

## 23.

## PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
11"	8 5/8"	24#	440'	500 sxs, circulate
7 7/8"	5 1/2"	14#	4000	1700 sxs

Proposal is to drill a well to adequately test the Delaware formation. Cement will be circulated to surface on the 8 5/8" surface string and 200' above salt section on 5 1/2" production casing. Completion or abandonment will be performed in accordance with prudent practices and regulatory requirements.

Gas on lease is not dedicated.

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

TITLE

Division Operations Manager

DATE

April 8, 1981

(This space for Federal or State office use)

APPROVED

PERMIT NO.

APPROVAL DATE

(On 2-1) GEORGE H. STEVENS

APPROVED BY

APR 27 1981

TITLE

DATE

CONDITIONS OF APPROVAL

FOR

JAMES A. GILLHAM  
DISTRICT SUPERVISOR

\*See Instructions On Reverse Side

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APR 13 1981

U.S. GEOLOGICAL SURVEY  
ARTESIA, NEW MEXICO

MEXICO OIL CONSERVATION COMMISSION  
WELL LOCATION AND ACREAGE DEDICATION PLAT

Form O-102  
Supersedes L-128  
Effective 1-1-65

All distances must be from the outer boundaries of the Section

Operator <b>Pogo Producing Co.</b>			Lease <b>NEL</b>		Well <b>2</b>
Section <b>I</b>	Section <b>9</b>	Township <b>23 South</b>	Range <b>28 East</b>	County <b>Eddy</b>	
Actual Well Location of Well: <b>1880</b> feet from the <b>south</b> line and <b>760</b> feet from the <b>east</b> line					
Ground Level Elev. <b>3046.4' GR</b>	Producing Formation <b>Cherry Canyon</b>	Pool <del>Wildcat Delaware</del> <b>Loving North</b>		Dedicated Acreage <b>40</b>	

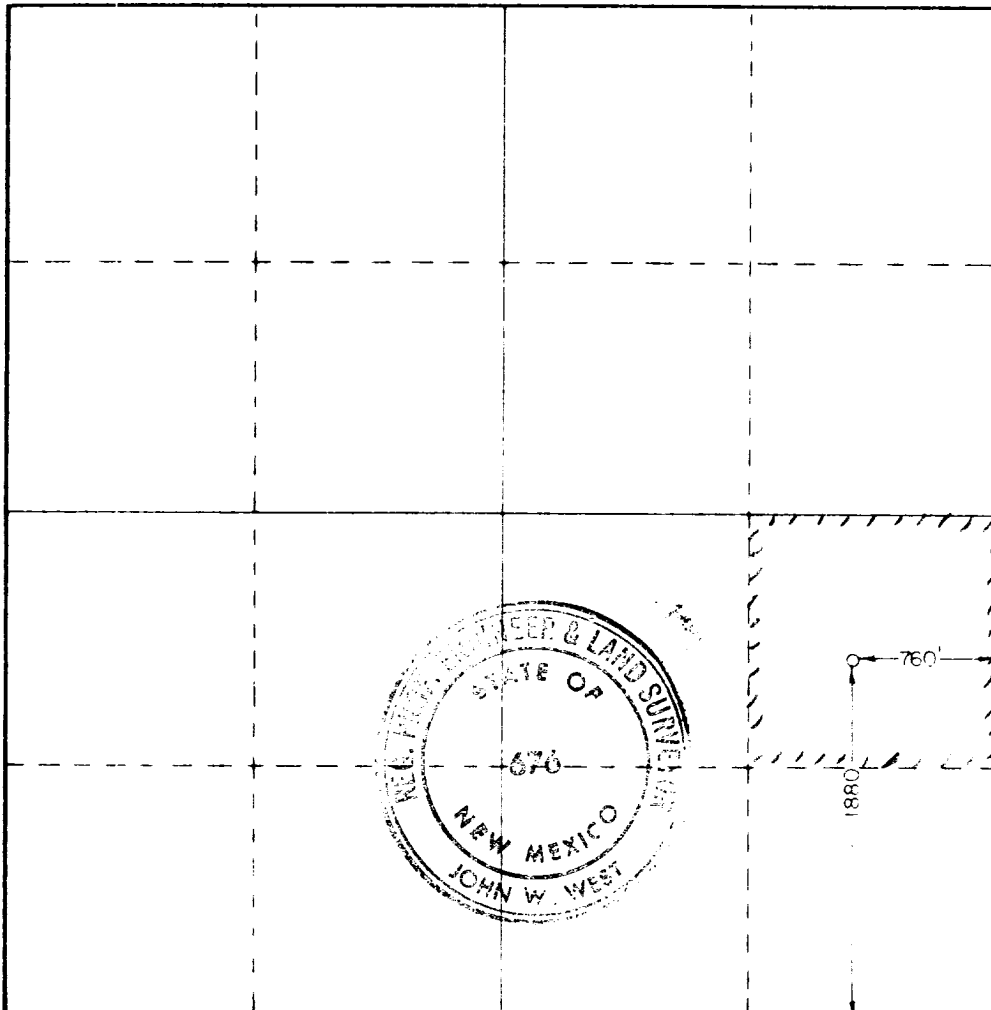
1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling, etc?

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☐ 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 interests, has been approved by the Commission.



CERTIFICATION

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

*B. J. Williams*

Name  
**B. J. Williams**

Position  
**Div. Operations Manager**

Company  
**Pogo Producing Company**

Date  
**April 10, 1981**

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  
**4-6-81**

Registered Professional Engineer and/or Land Surveyor

*John W. West*

Certificate No. **JOHN W. WEST 678**  
**PATRICK A. ROMERO 6868**  
**Ronald J. Eidson 3239**

330 660 90 1320 1650 1980 2310 2640 2970 3300 3630 3960 4290 4620 4950 5280 5610 5940 6270 6600

# APPLICATION FOR DRILLING

Pogo Producing Company

NEL No. 2

Eddy County, New Mexico

In conjunction with permitting the captioned well for drilling in Section 9, T-23-S, R-28-E, Eddy County, New Mexico, Pogo Producing Company submits the following information in accordance with U.S.G.S. (NTL-6) letter dated July 1, 1976:

1. The surface formation is Quaternary Sand and gravel.
2. Estimated tops of geologic markers as follows:

Triassic Red Beds	-	580'
Rustler Anhydrite	-	975'
Delaware Lime	-	2586'
Delaware Sand	-	2610'

3. The depths at which oil, gas or water are expected are: 3650' and 3850'.
4. Casing Program and Cement:

All casing is new.

8 5/8" - 24.0# K-55 STC @ 440' w/500 sxs Cl C w/2% CaCl plus 1/4# flocele per sk.  
5 1/2" - 14.0# K-55 STC @ 4000' w/1400 sxs LT w/1/4# flocele plus 5# gilsonite per sk plus 300 sxs Cl C w/2% CaCl.

5. Blowout Preventors:

From 440' to 4000' - 11" Series 600/900 Type 39.

6. Circulating Medium:

An earthen pit will be used to hold drilling fluids and cuttings. The drilling mud program is as follows:

Natural mud to 440'. Seepage will be controlled by paper. Brine water to 4000' with a viscous sweep prior to logging.

7. Core tests are planned for the Delaware.
8. Ten foot samples of cuttings will be caught from the base of the surface pipe (440') to total depth.
9. Adequate electrical and resistivity logs will be run from total depth to the base of the surface casing at 440', the gamma ray will be run to the surface.

Pogo Producing Company  
NEL No. 2  
Sec. 9, T-23-S, R-28-E  
Eddy County, New Mexico

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10. No abnormal temperatures or additional hazards are expected to be encountered.
11. The anticipated starting date is May 1, 1981 with the completion expected June 1, 1981.

MULTIPOINT SURFACE USE AND OPERATIONS PLAN

Pogo Producing Company

NEL No. 2

1880' FSL & 760' FEL, Section 9, T-23-S, R-28-E

Eddy County, New Mexico

APR 14 1961

This plan is submitted with the Application for Permit to Drill the captioned well. The purpose of this plan is to describe the location of the proposed well, the proposed construction activities and operations plan, the magnitude of necessary surface disturbance involved and the procedures to be followed in rehabilitating the surface after completion of drilling operations.

1. Drilling Pad:

The proposed well will be drilled as a twin well to the Pogo NEL "Com" No. 1 utilizing the same drilling pad and access road. No additional disturbance to the previously approved surface plan is contemplated.

2. Existing Roads:

Existing roads in the vicinity of the planned well are shown on Exhibit A, attached. The well is located  $2\frac{1}{4}$  miles North of Loving.

No additional improvement or maintenance of existing roads will be required.

3. Location of Existing Wells:

Pogo Producing Company has completed the NEL "Com" No. 1 from the Atoka formation approximately 141' NE of the proposed location. The well is currently shut in waiting on pipeline connection.

Gulf Oil Corporation has a producing gas well approximately 4000' SSW.

Coquina has begun drilling a Morrow test approximately 4400' SSE.

4. Location of Existing and/or Proposed Facilities:

Production facilities for the well will be constructed on the drilling pad in the same general area as facilities for the NEL "Com" No. 1.

5. Location and Type of Water Supply:

Water used in the drilling of the well will be purchased and trucked to the well site over existing roads as shown on Exhibit A.

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6. Source of Construction Materials:

None required.

7. Method of Handling Waste Disposal:

- A. Drill cuttings will be disposed of in the drilling pits.
- B. Drilling fluids will be allowed to evaporate in the drilling pits. Oil produced during tests will be stored in steel test tanks until sold. Water produced during tests will be disposed of in the drilling pits.
- C. Sewage will be collected in a pit at least 6' deep below an outside latrine. Suitable chemicals will be added to aid decomposition of the waste material and then back filled following completion of the well. A portable toilet will be utilized with waste picked up by a vacuum truck and removed from the area.
- D. 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 trash pit is shown on Exhibit C.
- E. All trash and debris will be buried or removed from the wellsite within 30 days after cessation of drilling or completion operations.

8. Ancillary Facilities:

None required.

9. Well Site Layout:

- A. Exhibit C shows the relative location and dimensions of the well pad, mud pits, reserve pits, trash pit and major rig components.
- B. The proposed well site is situated on an existing pad and will require no additional land disturbance.
- C. The reserve pit will be lined.

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10. Plans for Restoration of the Surface:

- A. After completion of drilling and/or completion operations, all equipment and other materials not needed will be removed. Pits will be filled after sufficient drying time and the location cleaned of all trash and junk to leave the well site in an aesthetically pleasing condition.
- B. All unguarded pits containing fluids will be fenced until filled.
- C. After abandonment of the well, surface restoration will be in accordance with the agreement BLM regulations. Rehabilitation will be accomplished within 90 days after abandonment.

11. Other Information:

A. Terrain-

The investigated area is situated on the crest of an eminence overlooking the Pecos River flood plain. Areal topography is characterized by riverine terraces and rolling hills with tributary draws, washes and valleys interposed. Subject to sheetwash, crests are covered with frequent limestone cobbles and gravels. Bottomlands are overlain with alluvium subject to puddling and scaling. Soils consist of an interplay of gravelly clay loams, depending on the associated slope, and occasionally harbor quartzite cobbles. Peds belong to the Typic Paleorthid and Typic Haplargid subgroups.

B. Floristics-

Local soils support a low floral overstory of *Prosopis juliflora*, *Yucca glauca*, *Koberlinia spinosa*, *Atriplex canescens*, *Condalia ericoides*, and *Condalia lycioides*. Forbs of the understory are: *Gutierrezia sarothrae*, *Astragalus* sp., *Sartwellia* sp., *Euphorbia* sp., and *Croton* sp. Among the Cactaceae are: *Opuntia macrocentra*, *Opuntia leptocaulis*, and *Opuntia imbricata*. Local grasses are: *Sporobolus* sp., *Scleropogon brevifolius*, and *Boutleoua* sp.

C. Ponds and Streams-

There are no rivers, streams, lakes, or ponds in the immediate area.

D. Occupied Dwellings-

There is a residence located in the extreme NE corner of Section 16, approximately 2200' SSE of the proposed location.

E. Cultural Resources-

No archeological resources were observed in the area.

F. Land Use-

Grazing and hunting in season.



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G. Surface Ownership-

The surface is Federal land and the current grazing lessee is Mr. Gary Thompson, P.O. Box 653, Carlsbad, New Mexico 88220.

12. Operator's Representatives:

W. E. Barnes  
3778 Maple  
Odessa, Texas 79762  
Home phone - 915-362-7935

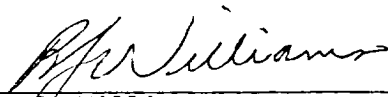
B. J. Williams  
Suite 408 Blanks Bldg.  
P.O. Box 10340  
Midland, Texas 79702  
Office phone - 915-682-6822  
Home phone - 915-694-2215

13. Certification:

I hereby certify that I or persons under my direct supervision, have inspected the proposed drillsite and access route; that I am familiar with the conditions which presently 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.

Date

April 10, 1981

  
B. J. Williams

Division Operations Manager  
Pogo Producing Company

