

N.M. OIL & GAS  
P.O. BOX  
HOBBS, NM  
DEPARTMENT OF  
BUREAU OF LANDSOPER. OGRID NO. 17291  
PROPERTY NO. 9321  
POOL CODE 39390  
EFF. DATE 11/2/95  
API NO. 31-025-33161FORM APPROVED  
OMB NO. 1004-0136  
Expires: February 28, 1995

## APPLICATION FOR PERMIT

## 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

(Richard Wright)

## 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 330' FNL &amp; 1880' FEL of Sec. 31, T21S R32E

At proposed prod. zone

Same as above

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

Approximately 30 miles East of Carlsbad 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'

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

3684.0' Ground Level

## 23.

## PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	GRADE SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
17 1/2"	J-55 13 3/8"	54.5	850'	700 Sx Circulate to surface
12 1/4"	J-55 8 5/8"	32 & 24	4500'	1400 Sx Circulate to surface
7 7/8"	J-55, N-80 5 1/2"	17 & 15.5	8800'	1300 Sx Tie back to 4300'±

1. Drill 17 1/2" hole to 850'. Run and set 850' of 13 3/8" J-55 54.5# ST&C casing. Cement with 500 Sx. Light tail in with 200Sx. Class "C". Circulate cement to surface.
2. Drill 12 1/4" hole to 4500'. Run and set 4500' 8 5/8" J-55 ST&C casing, bottom 2300' 32# middle 1200' 24# & top 1000' 32# casing. Cement with 1200 Sx. of Light cement tail in with 200 Sx. Class "C". Circulate cement to surface.
3. Drill 7 7/8" hole to 8800'. Run and set 8800' of 5 1/2" casing, bottom 2800' 17# N-80 LT&C, middle 5000' 15.5# J-55 LT&C, top 1000' 17# J-55 LT&C. Cement with 600 Sx. Class "H" tail in with 700 Sx. Class "C". Bring cement back to at least 4300' 200' into 8 5/8" intermediate casing.
4. After setting production casing, pay zone will be perforated and stimulated as necessary. See attached for: Supplemental Drilling Data, BOP Sketches, Surface Use and Operations Plan.

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

*Goet J. Lucco*

TITLE

Agent

DATE

09/06/95

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

APPROVAL SUBJECT TO  
GENERAL REQUIREMENTS AND  
SPECIAL STIPULATIONS  
ATTACHED

APPROVED BY

*Goet J. Lucco*

TITLE

Acting State Director

DATE

10-17-95

\*See Instructions On Reverse Side

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK DRILL <input checked="" type="checkbox"/> DEEPEN <input type="checkbox"/> PLUG BACK <input type="checkbox"/>		5. LEASE DESIGNATION AND SERIAL NO. NM-42814		
b. TYPE OF WELL OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <input type="checkbox"/>		6. IF INDIAN, ALLOTTEE OR TRIBE NAME		
2. NAME OF OPERATOR Pogo Producing Company		7. UNIT AGREEMENT NAME		
3. ADDRESS OF OPERATOR P.O. Box 10340, Midland, Texas 79702		8. FARM OR LEASE NAME Federal 31		
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)* At surface 330' FNL & 1880' FEL of Section 31, T-21S, R-32E At proposed prod. zone Same as above		9. WELL NO. 2		
14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE* 30 miles East of Carlsbad, New Mexico		10. FIELD AND POOL, OR WILDCAT Undesignated Lost Tank Delaware		
15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any) 330'		11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA Section 31, T-21S, R-32E		
16. NO. OF ACRES IN LEASE 320		12. COUNTY OR PARISH Lea		
17. NO. OF ACRES ASSIGNED TO THIS WELL 40		13. STATE N.M.		
18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT. 1320'		20. ROTARY OR CABLE TOOLS Rotary		
21. ELEVATIONS (Show whether DF, RT, GR, etc.) 3684.0' Ground Level		22. APPROX. DATE WORK WILL START* Upon Approval of Application		
23. PROPOSED CASING AND CEMENTING PROGRAM				
SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
17 1/2"	13 3/8"	54.5#	850'	Sufficient to Circulate
12 1/4"	8 5/8"	32#	4500'	Sufficient to Circulate
7 7/8"	5 1/2"	15.5# & 17#	8700'	1200 sx (see slips)

After setting Production Casing, Pay Zone will be perforated and stimulated as necessary.

See attached for: Supplemental Drilling Data  
BOP Sketches  
Surface Use and Operations Plan

Approved: [Signature]  
Bureau of Land Management  
Carlsbad, New Mexico



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: [Signature] James M.C. Ritchie, Jr.		TITLE: Agent		DATE: June 25, 1993	
(This space for Federal or State office use)					
PERMIT NO.		APPROVAL DATE			
APPROVED BY: [Signature] Kathy Carter		TITLE: Act. State Director		DATE: 8-10-93	
CONDITIONS OF APPROVAL, IF ANY:					

\*See Instructions On Reverse Side

OIL CONSERVATION DIVISION

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

P.O. Box 2088

Santa Fe, New Mexico 87504-2088

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

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

WELL LOCATION AND ACREAGE DEDICATION PLAT

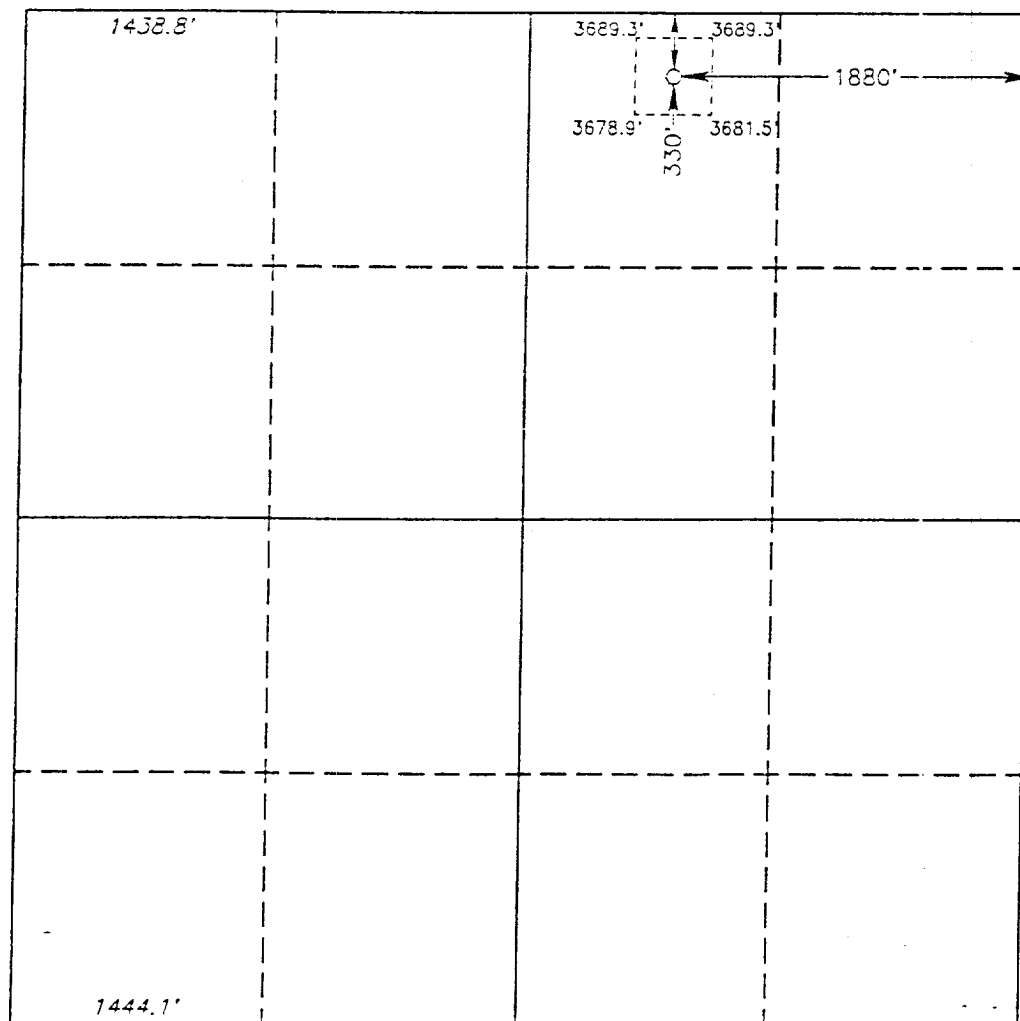
All Distances must be from the outer boundaries of the section

Operator POGO PRODUCING CO.			Lease FEDERAL "31"		Well No. 2
Unit Letter B	Section 31	Township 21 SOUTH	Range 32 EAST	NMPM	County LEA
Actual Footage Location of Well: 330 feet from the NORTH line and 1880 feet from the EAST line					
Ground Level Elev. 3684.0'	Producing Formation Delaware	Pool SE Livingston Ridge Undesignated Test Tank 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 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.



OPERATOR CERTIFICATION

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

Signature  
James M.C. Ritchie, Jr.

Printed Name

Agent

Position

Pogo Producing Company

Company

June 25, 1993

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

Date Surveyed

JUNE 16, 1993

Signature & Seal of  
Professional Surveyor

GARY L. JONES  
NEW MEXICO  
2077  
Certificate No. JOHN W. WEST 876  
RONALD J. JENSEN 3239  
JONES 7977  
93-1-3548

SUPPLEMENTAL DRILLING DATA

POGO PRODUCING COMPANY  
FEDERAL "31" WELL NO. 2

1. SURFACE FORMATION: Quaternary.

2. ESTIMATED TOPS OF GEOLOGIC MARKERS:

Rustler Anhydrite	800'
Delaware Lime	4600'
Cherry Canyon	5800'
Brushy Canyon	7300'

3. ANTICIPATED POSSIBLE HYDROCARBON BEARING ZONE:

Delaware Oil

4. PROPOSED CASING AND CEMENTING PROGRAM:

<u>CASING SIZE</u>	<u>SETTING DEPTH</u>		<u>WEIGHT</u>	<u>GRADE</u>	<u>JOINT</u>
	<u>FROM</u>	<u>TO</u>			
13 3/8"	0	850'	54.5#	J-55	STC
8 5/8"	0	1000'	32#	J-55	STC
"	1000'	2200'	24#	J-55	STC
"	2200'	4500'	32#	J-55	STC
5 1/2"	0	1000'	17#	J-55	LTC
"	1000'	6000'	15.5#	J-55	LTC
"	6000'	8800'	17#	N-80	LTC

MINIMUM DESIGN FACTORS: Collapse 1.125 Burst 1.1 Tension 1.7

13 3/8" casing is to be set at approximately 850' in 17-1/2" hole. Casing to be cemented with 500 sacks of Light cement tailed in with 200 sacks of Class "C". Cement to circulate.

8 5/8" casing is to be set at approximately 4500' in 11" hole. Casing is to be cemented with 1200 sacks of Light cement tailed in with 200 sacks of Class "C". Cement to circulate.

5 1/2" casing is to be set at 8800' in 7 7/8" hole. Casing is to be cemented with 600 sacks of Class "H" cement tailed in with 700 sx Class "C". Cement to tie back to 8 5/8" casing.

5. PRESSURE CONTROL EQUIPMENT:

SOS

Blowout prevention equipment, while drilling the 12 1/4" hole, will be either a 3000 psi working pressure double ram type preventer or a 3000 psi working pressure annular type preventer.

6. CIRCULATING MEDIUM:

Surface to 850 feet:

Fresh water spud mud. Viscosity 30 to 36 as required for hole cleaning.

850 feet to 4500 feet:

Brine conditioned as necessary for control of viscosity. Weight 9.8 to 10.0. PH 9 to 10. Viscosity 32 to 36.

4500 feet to T.D.:

Water based drilling fluid conditioned as necessary for control of weight, viscosity, ph and water-loss. Weight 9 to 10. Viscosity 38 - 45. ph 9-10. Filtrate while drilling pay zone 6-15.

0.5 ppg

7. AUXILIARY EQUIPMENT:

SJS

A mudlogging trailer will be used while drilling below 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.

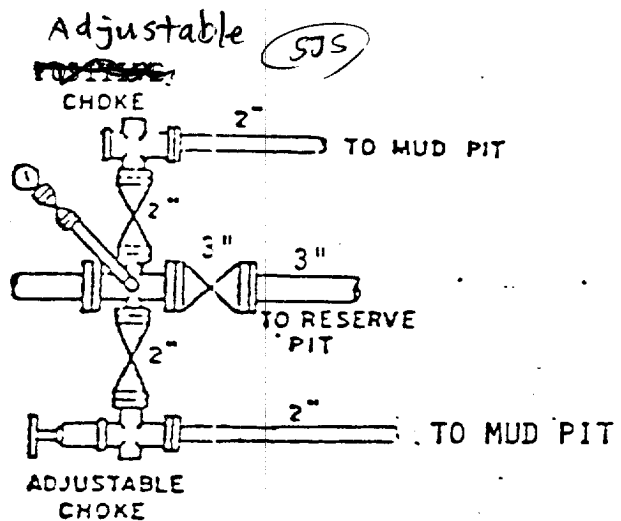
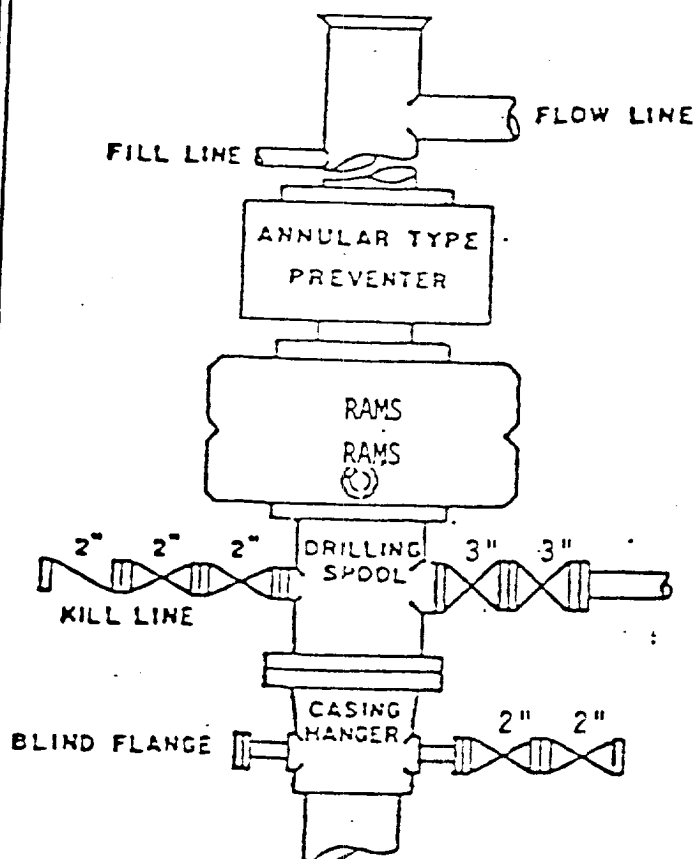
Expected bottom hole pressure is approximately 3700 psi.

Expected bottom hole temperature is approximately 130 degrees Fahr

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.

1995  
**Received**  
Hobbs  
OCD



BOP STACK

3000 PSI WORKING PRESSURE

BOP ARRANGEMENT