

Form 3160-3
(July 1992)

N. OIL CON
P.O. BOX 198
HOBBBS, NEW
DEPARTMENT C
BUREAU OF LA

OPER. CORID NO. 17491
PROPERTY NO. 9321
POOL CODE 39330
EFF. DATE 11/2/95
AP. NO. 30-025-33163

CATE*
1 ON

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

APPLICATION FOR PER

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

1650' FNL & 660' FEL of Sec. 31, T21S. R32E

At proposed prod zone

Same

Unit H

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 lde, if any)

660'

16. NO. OF ACRES IN LEASE

320

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

8800'

20. ROTARY OR CABLE TOOLS

Rotary

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

3689.7' Ground Level

22. APPROX. DATE WORK WILL START*

As soon as approved

23.

PROPOSED CASING AND CEMENTING PROGRAM

R-111-P Potash

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

Joe T. Janice

TITLE

Agent

DATE 09/06/95

(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:

APPROVAL SUBJECT TO
GENERAL REQUIREMENTS AND
SPECIAL STIPULATIONS
ATTACHED

APPROVED BY

FRANK Splendoria

TITLE

Acting State Director

DATE

10-20-95

*See Instructions On Reverse Side

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

5. LEASE DESIGNATION AND SERIAL NO.

NM-42814

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME

Federal 31

9. WELL NO.

4

10. FIELD AND POOL, OR WILDCAT

Undesignated Lost Tank Delaware

11. SEC., T., R., M., OR BLK.
AND SURVEY OR AREA

Section 31, T-21S, R-32E

12. COUNTY OR PARISH

Lea

13. STATE

N.M.

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

1650' FNL & 660' FEL of Section 31, T-21S, R-32E

At proposed prod. zone Same

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

30 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)

660'

16. NO. OF ACRES IN LEASE

320

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

8700

20. ROTARY OR CABLE TOOLS

Rotary

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

3689.7' Ground Level

Carlsbad Surface Water Elevations

22. APPROX. DATE WORK WILL START*

Upon Approval of Application

23.

PROPOSED CASING AND CEMENTING PROGRAM

2-11-93

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
17½	13 3/8"	54.5#	850	Sufficient to Circulate
12½	8 5/8"	32#	4550	Sufficient to Circulate
7 7/8	5 1/2"	15.5# & 17#	8700	1200 sx

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

Approval Subject to
General Requirements and
Special Regulations
Attached



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

James M.C. Ritchie, Jr.
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

Frank
Suber

TITLE

Acting State Director

DATE

8-11-93

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. 4
Unit Letter H	Section 31	Township 21 SOUTH	Range 32 EAST	County LEA	

Actual Footage Location of Well:

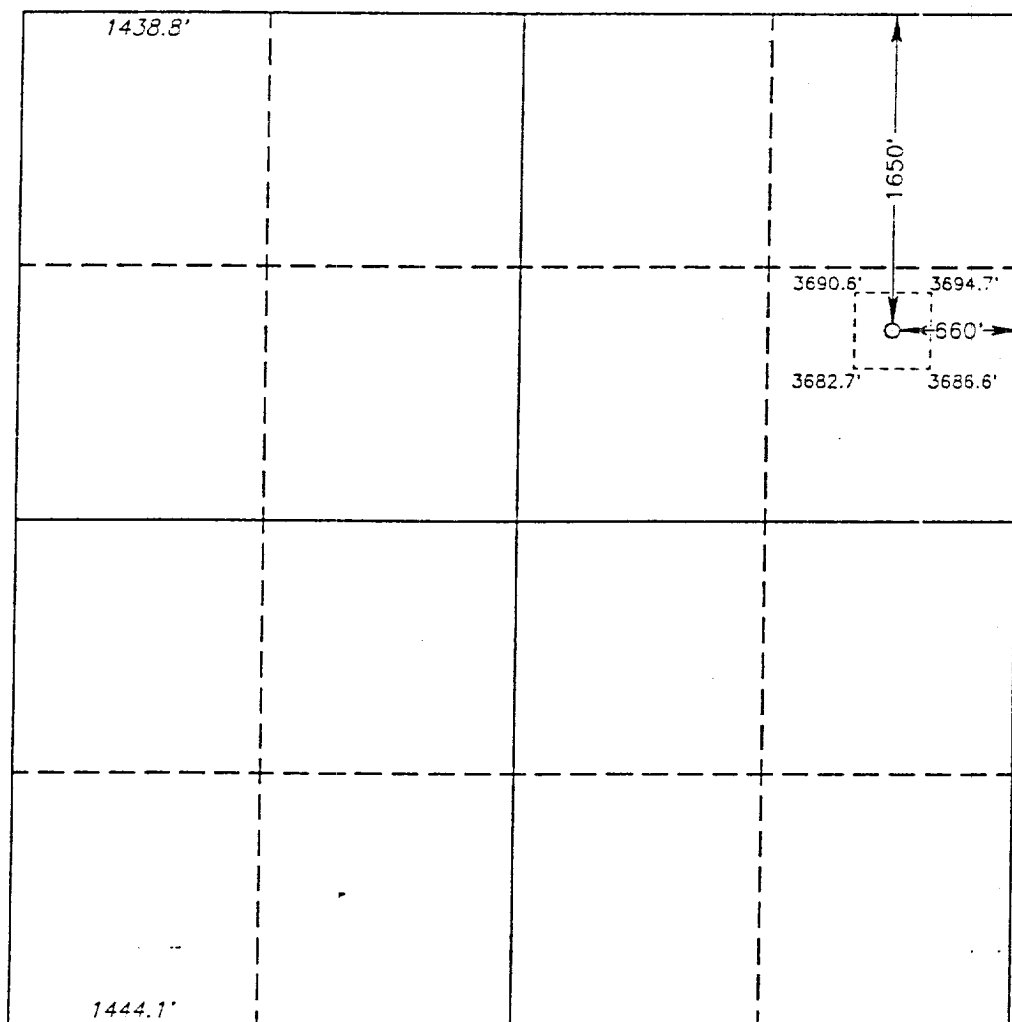
1650 feet from the NORTH line and	660 feet from the EAST line
Ground Level Elev. 3689.7'	Producing Formation Delaware
Pool SE Livingston Right Undesignated Lost Tank Delaware	Dedicated Acreage: 40 Acres

- Outline the acreage dedicated to the subject well by colored pencil or hatchure marks on the plat below.
- If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
- 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
Date
June 25, 1993

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
MAY 17, 1993

Signature & Seal of
Professional Surveyor

GARY L. JONES
NEW MEXICO
7987
Certificate No. JAMES WEST, 676
EIDSON, 3229
JAMES JONES 7987

93-11-0850

SUPPLEMENTAL DRILLING DATA

POGO PRODUCING COMPANY
FEDERAL "31" WELL NO. 4

1. SURFACE FORMATION: Quaternary.

2. ESTIMATED TOPS OF GEOLOGIC MARKERS:

Rustler Anhydrite	800'
Delaware Lime	4600'
Cherry Canyon	5600'
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 sacks of Class "C". Cement to tie back to 8 5/8" casing.

5. PRESSURE CONTROL EQUIPMENT:

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.
- BOP will be as shown in diagram while drilling 7 7/8" bore.

SJS

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~~ 8.5 ppg. Viscosity 38 - 45. ph 9-10. Filtrate while drilling pay zone 6-15.

8.5 ppg
SJS

7. AUXILIARY EQUIPMENT:

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.

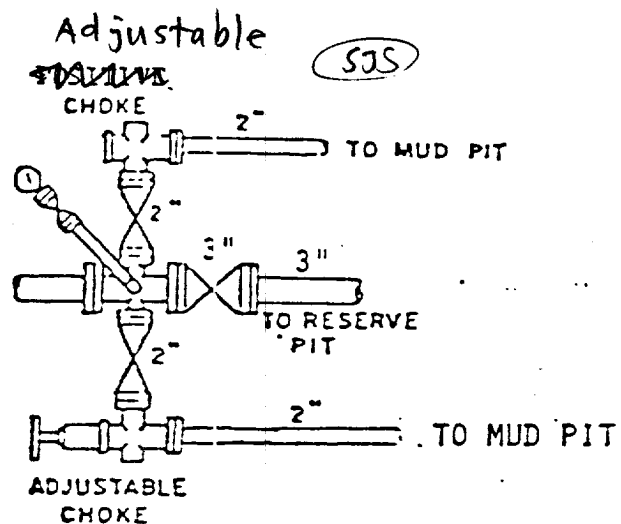
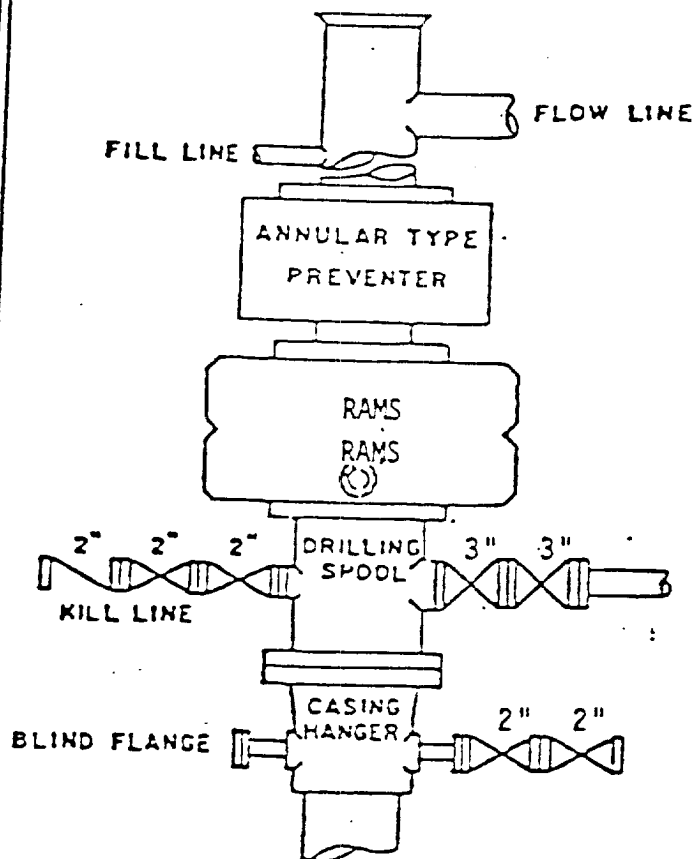
Expected bottom hole pressure is approximately 3700 psi.

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.

1965
Received
Hobbs
OCD



BOP STACK

3000 PSI WORKING PRESSURE

BOP ARRANGEMENT