-26861 (M) Form 3160 NA OTT COND. COMMISS EIVED ructions on LICATE (November 1983) er DD 1983) or DD UNITED STATES Feverse side of the INTERIOR OCT 1 1 1991 Budget Bureau No. 1004-0136 (formerly 2reverse side) Expires August 31, 1985 5. LEASE DESIGNATION AND SERIAL NO. BUREAU OF LAND MANAGEMENT NM-29233 APPLICATION FOR PERMIT TO DRILL, DEEPEN, 6. IF INDIAN, ALLOTTEE OR TRIBE NAME 1a. TYPE OF WORK DRILL 🖂 7. UNIT AGREEMENT NAME DEEPEN [ PLUG BACK b. TYPE OF WELL WELL X WELL BINGLE ZONE MULTIPLE ZONE OTHER S. FARM OR LEASE NAME 2. NAME OF OPERATOR FEDERAL 12 POGO PRODUCING COMPANY 9. WELL NO. 3. ADDRESS OF OPERATOR 5 P. O. BOX 10340, MIDLAND, TEXAS 79702 10. FIELD AND POOL, OR WILDCAT 4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.\*) LIVINGSTON RIDGE DELAWARE At surface 11. SEC., T., R., M., OR BLK.
AND SURVEY OR AREA 660' FNL AND 330' FWL OF SECTION 12 At proposed prod. zone lit. D SEC.12, T.22 S., R.31 E. 14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE 12. COUNTY OR PARISE | 15. STATE 28 MILES EAST OF CARLSBAD, NEW MEXICO 10. DISTANCE FROM PROPOSED\*
LOCATION TO NEAREST
PROPERTY OR LEASE LINE, PT.
(Also to nearest drig. unit line, if any) **EDDY** NEW MEXICO 16. NO. OF ACRES IN LEASE 17. NO. OF ACRES ASSIGNED TO THIS WELL 330' 1120 40 DISTANCE FROM PROPOSED LOCATION<sup>®</sup>
TO NEAREST WELL, DRILLING, COMPLETED,
OR APPLIED FOR, ON THIS LEASE, FT. 19. PROPOSED DEPTH 20. ROTARY OR CABLE TOOLS 1320' 8500' ROTARY 21. ELEVATIONS (Show whether DF, RT, GR, etc.) 22. APPROX. DATE WORK WILL START\* 3552.7' GR Carlsbad Controlled Water Basin 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 13-3/8" 54.5# ٥00 ا SUFFICIENT TO CIRCULATE 11" 8-5/8" , 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. Murlin & APT SEE ATTACHED FOR: SUPPLEMENTAL DRILLING DATA BOP SKETCH SURFACE USE AND OPERATIONS PLAN 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. 94 Drilling and Production Supt. DATE August 12, 1991 (This space for Federal or State office use) APPROVAL DATE GREAT ANNACER One Famer or Filmords, Monuel CARLSHAD MEDIA WEE AREA 10-10-91 AIFPROVAL'S SUBJECT TH'ANY

\*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.

GENERAL REQUIREMENTS AND

SPECIAL STIPULATIONS

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

# State of New Mexico Energy, Minerals and Natural Resources Departnant

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, Arlesia, NM 88210

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

WELL LOCATION AND ACREAGE DEDICATION PLAT
All Distances must be from the outer boundaries of the section

Operator				Lease		<del></del>		Well No.		
POGO PRODUCING CO.				FEDERAL 12				5		
	Section	Township		Range			County	DD17		
D	12	22	SOUTH	31	EAST	NMPM	E	DDY		
Actual Footage Location	on of Well:	NODWI		220			tim em			
660 f	feet from the	NORTH g Formation	line and	330 Pool	<del></del>	feet from	the WEST	line Dedicated Acre	Page:	
3552.7	DELAWAF	-	CANYON)		.LIVINGSTON	PINGE D	IEI AMARE	40	•	
					marks on the plat be		LLAMAIL	70	Acres	
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 neccessary.  No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise)										
	on-standard unit, elir				· •		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			
					•		OPERAT	OR CERTIF	ICATION	
52.2 60 <sup>1</sup>	Į.				ļ				he information	
- 13225.5 - 13255.5 - 13555.5	<u> </u>				İ	c	ontained herei	n in true and	complete to the	
	.7				Ţ		est of my lowwi	edge and belief.	12 4	
-330	II.				}	Si	gnatury			
3557.	.2				ļ		Ashi.	Al la	Rul 4	
549.	!				1	P	rinted Name	y cov	0	
LF					.+	<b></b>	Richard	L. Wrigh	t	
	i i				1		osition			
	ł	•			1			and Pro	d. Supt.	
1	ļ				i		ompany	DUCTNO C	OMD A NIV	
	i	j			i		PUGU PRO	DUCING C	UMPANT	
	i				i	1 1-	August 1	2, 1991		
	i				İ			OR CERTIF	ICATION	
					<del> </del>					
	ļ				ļ				location shown	
	!			and the state of t	!		•		n field notes of or under my	
	ļ		Act and	OFFSS		s	upervison, and	i that the san	ne is true and	
	!			ROFESS		!!		best of my	knowledge and	
,	ļ			AND SU	"Konon		elief.			
	1			<u></u> NO	[e]e	1	Date Surveyed			
			100	676	(m)		Signature & Sea	8-5-91		
	1	l	112	).	(E)		rofessional Su			
	,			EN MEY	X// //			(		
	i	1		OHAL MI	NS/		$\Lambda$	1.	111	
	i			VV.	Time		1/	( /.//	11/	
	i				İ		_//	MU L	/W	
	<b>i</b>				.i		entique No.	✓ SốHN W. WI ONALD L EIDS	EST, 676 SON, 3239	
							<u></u>	OMALD & EID	oun, 3239	
9 330 660 99	0 1320 1650	1980 2310 264	0 200	0 1500	1000 500					

### SUPPLEMENTAL DRILLING DATA

# POGO PRODUCING COMPANY FEDERAL 12 WELL NO.5

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

0il

### 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 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:

ŝ

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.

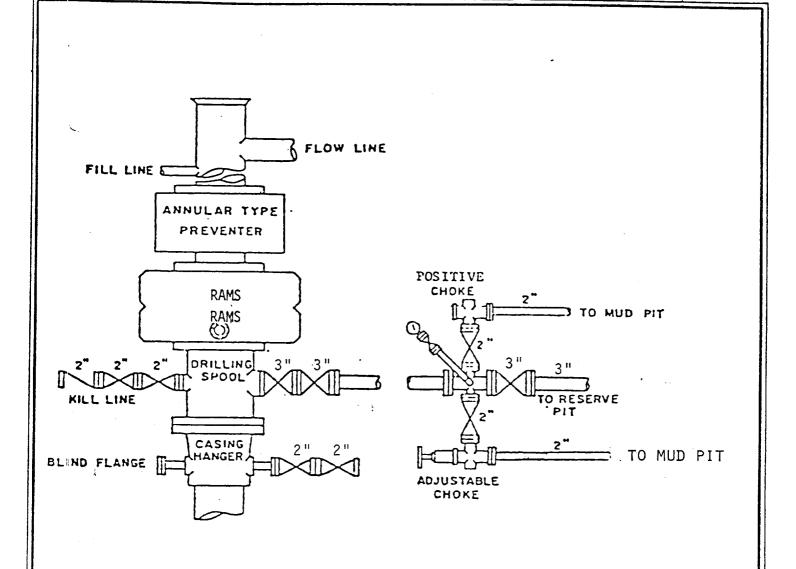
No coring is planned.

# 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.5 660'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. <u>Surfacing Material</u>: Caliche. Watered, compacted and graded.
  - C. Maximum Grade: Less than one percent.
  - D. <u>Turnouts</u>: None necessary.
- E. <u>Drainage Design</u>: 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  $SE_4SW_4$  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 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. <u>Topography</u>: The land surface in the area is undulating and duny. In the immediate area of the well site, land slope is to the west.
  - B. <u>Soil</u>: 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.
- p. <u>Ponds and Streams</u>: 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. <u>Archaeological</u>, <u>Historical</u>, <u>and Cultural Sites</u>: 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

