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C. L. D. angen new r

3160(067) NM-40655

CCC- 3-6-23 T-0:B-un 41-2-23 ALVant 4/5/93

Galme 4/1/53

CERTIFIED--RETURN RECEIPT REQUESTED P 864 875 258

Pogo Producing Company Attention: Richard L. Wright P. O. Box 10340 Midland, TX 79702

RE: Amax 24 Federal Well No. 6 NM-40655 2080' FNL & 1750' FWL, Sec. 24, T23S, R31E Eddy County, New Mexico

APR 13 1993

Dear Mr. Wright:

On January 19, 1993, Pogo Producing Company filed an Application for Permit to Drill (APD) at the above referenced location. I am pleased to approve your APD at the present location. Your copy of the APD, with attached stipulations, is enclosed.

Through our analysis of the APD, we have determined that the well site is located a sufficient distance from the ore zones that potash resources should not be impacted.

If you need any additional information, please contact Tony Herrell in the Carlsbad Resource Area at (505) 887-6544.

Sincerely,

15/ Kathy Eaton

for Larry L. Woodard State Director

1 Enclosure

bcc: NM (910, L. Woodard) NM (920, R. Smith) NM (060, A. Lopez) NM (060, L. Cone) NM (067, T. Herrell)

067:CCCranston:nf:3/12/93:A:\24AMAX6.AL

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Form 3160-3 (November 1983) (formerly 9-331()	ovember 1983)			LICATE ctions on ide)	E• Form approved. Budget Bureau No. 1004-0136 Expires August 31, 1985				
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A. TYPE OF WORK					-				
b. TIPE OF WELL		7	DEEPEN [7. UNIT AGREEMENT NAME					
	OIL CAR WELL OTHER SINGLE ZONE						AMAX 24 FEDERAL		
POGO PRODUCING COMPANY					10]	9. WELL NO.			
P.O. BOX 10340, MIDLAND, TEXAS 7772					D	6 10. FIELD AND POOL, OR WELDCAT UNDE			
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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 II P.O. Drawer DD, Arlenia, NM 88210

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

WELL LOCATION AND ACREAGE DEDICATION PLAT

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

All Distances must be from the outer boundaries of the section

				11.		······			Well No.
Operator P(DGO PRODUCING COMPANY			AMAX "24" FEDERAL			6		
Unit Letter	Section		Township	Ri	nge			County	
F		24	23 SO	υтн		31 EAST	NMPM		EDDY
Actual Footage Loc	ation of	Well:		<u>. </u>					
2080 ree	t from U	NO	RTH line and		1750		feet from	the WES	
Ground Level Klev	7. Pr	oducing For			ool				Dedicated Acreage:
3511.5'		DELAWAR	E (BRUSHY (CANYON)	UNDES.	SAND DUN	ES BRUSHY	CANYON	40 Acres
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otherwise) or u	intil a r	ion-standa	rd unit, elimina	ting such inter	est, nas	Been approve	d by the bitta		
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175	50' <u>35</u>		⇒)>3517.4°					Jan	uary 7, 1993
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		3510.1						SURVEY	OR CERTIFICATION
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SUPPLEMENTAL DRILLING DATA

POGO PRODUCING COMPANY

AMAX 24 FEDERAL WELL NO. 6

!. SURFACE FORMATION: Quaternary.

2. ESTIMATED TOPS OF GEOLOGIC MARKERS:

Rustler Anhydrite	800'
Delaware Lime	4440 '
Bell Canyon	4480'
Cherry Canyon	5300'
Brushy Canyon	6650'

3. ANTICIPATED POSSIBLE HYDROCARBON BEARING ZONES:

Brushy Canyon 0il

4.	PROPOSED	CASING	AND	CEMENTING	PROGRAM:

	SETTING DEP				
CASING SIZE	FROM	<u>T0</u>	WEIGHT	GRADE	JOINT
13-3/8"	0	800'	54.5#	J-55	STC
8-5/8" "	0 1000' 2200'	1000' 2200' 4300'	32# 24# 32#	J-55 J-55 J-55	STC STC STC
5-1/2"	0 1000' 6000'	1000' 6000' 8500'	17# 15.5# 17#	J-55 J-55 N-80	LTC LTC LTC
MINIMUM DESIGN FACTORS:	COLLAPSE_	<u>1.125</u> BUR	ST <u> 1.1 </u>	TENSION	1.7

13-3/8" 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" casing to be cemented with 1200 sacks of Light cement with 10% salt tailed in with 200 sacks of Class "C" with 1% CaCl. Cement to circulate.

5-1/2" casing is to be cemented with approximately 500 sacks of Light cement tailed in with 700 sacks of Class "H" with the top of the Class "H" calculated to be at or above the shoe of the intermediate casing. If need for a stage tool is indicated, it will be positioned to best suit hole conditions. Cement to circulate.

Cement may have lost circulation or other additives depending on hole conditions at the time casing is run.

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 fee	et: Brine conditioned as necessary for control of viscosity. Weight 9.8 to 10. pH 9 to 10. Viscosity 32 to 36.
<u>4300 feet to T.D.:</u>	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:

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 about 3600 psi. Expected bottom hole temperature is about 127degrees 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.



SURFACE USE AND OPERATIONS PLAN

FOR

POGO PRODUCING COMPANY AMAX 24 FEDERAL WELL NO. 6 2080'FNL & 1750'FWL SEC.24, T.23 S., R.31 E. EDDY COUNTY, NEW MEXICO

LOCATED: 21 miles east of Loving, New Mexico.

FEDERAL LEASE NUMBER: NM-40655

LEASE DATE: July 1, 1980.

ACRES IN LEASE: 320.

LESSEE: Pogo et al.

SURFACE OWNERSHIP: Federal.

<u>GRAZING PERMITTEE</u>: J. C. Mills P. O. Box 190 Abernathy, Texas 79311

POOL: Undesignated Sand Dunes Brushy Canyon.

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" ia a portion of a road map showing the location of the proposed well as staked. Point "A" on the plat is on State highway 128 at Milepost 17.6, approximately 36 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 798 2.7 miles to where a caliche road goes east to Pogo's Amax 24 Federal well No. 1. The proposed well site is 1200 feet east of this well No. 1. Also see Exhibits "B" and "D".

The well site can also be reached by going south off US 62-180 at Milepost 66.8, approximately 38 miles west of Hobbs, New Mexico, where Lea County road C-29 goes south. To go to the proposed well site from this point, go south on Lea C-29 and Eddy 798 18.5 miles to the above referred to point where the caliche road goes east to the Amax 24 Federal well No. 1.

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 about 1100 feet long, extending from the existing well No. 1 to this proposed well. The new road, which is staked and flagged, is shown labeled and color coded red on Exhibit "B".

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

C. Maximum Grade: Less than one percent.

D. Road Turnouts: Probably one.

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 the lease tank battery

located, as shown on Exhibit "B", on the well pad at well No. 8. The flow line will be 3" SDR-7 polyethylene pipe laid on the ground alongside the planned access road to near well No. 1, and then south alongside the existing flow line to the tank battery at well No. 8, as shown on Exhibit "B". Anticipated flow line pressure is 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 archaeologically cleared work area. Otherwise, caliche will be taken from an existing pit on Federal land in the $SW_{2}NW_{2}$ of Section 1, T.23 S., R.31 E., Eddy County, New Mexico, and will be trucked to the well site over existing and proposed roads.

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 or will be stored in tanks for disposal in an approved disposal system.

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

E. All trash, junk, and other waste material will be contained in trash cages or bins to prevent scattering and will be removed and deposited in an approved sanitary land fill.

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, and reserve pit, and the location of major drilling rig components.

B. Clearing and levelling of the pad and pit area 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 general area is gently undulating and duny. In the immediate area of the well site the land surface slopes gently to the west. Regionally, drainage is to the west and southwest.

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-desert land and includes coyotes, rabbits, rodents, reptiles, dove and quail.

D. <u>Ponds and Streams</u>: There are no rivers, lakes, ponds, or streams in the area.

E. <u>Residences and Other Structures</u>: 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 Division Operations Supervisor 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.

December 31, 1992 Date:

Richard L. Wright Division Operations Supervisor

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