Form 3160–3 (November 1983) (formerly 9–331C) UNI I ED STATES DEPARTMENT OF THE INTERIOF BUREAU OF LAND MANAGEMENT							Carlos a series and the series of the series			Budget Bureau No. 1004-0136 Expires August 31, 1985 5. LEASE DESIGNATION AND BEBIAL NO.		
APPLICAT	IION	FOR PERN	AIT TO D	RILL, C	DEEPEN	I, OR PL	UG B	ACK	6. IF INDI.	AN, ALLOTTE	B OR TRIBE NAME	
1a. TIPE OF WORKb. TIPE OF WELL	DRILL	XX	D	eepen []	PLUC	G BAC	ж 🗆	7. UNIT A	GREMENT N	(AMB	
OIL UNAME OF OPERAT	GAS WELL	ХК отн	ER		SINGI ZONE		MULTIPL	*		RAL 31	MB	
POGO PRODUCING COMPANY									9. WELL N	ro, 1		
3. ADDRESS OF OPERATOR P. O. BOX 10340, MIDLAND, TEXAS 79702										1 10. FIELD AND POOL, OR WILDCAT		
4. LOCATION OF WELL (Beport location clearly and in accordance with any State requirements.*) At surface									UNDES. BILBREY MORROW GAS			
2310' FSL AND 660' FEL OF SECTION 31 At proposed prod. zone									11. SEC., T., R., M., OB BLK. AND BURVEY OR AREA SEC.31, T.21 S., R.32 E.			
14. DISTANCE IN M	ILES AND	DIRECTION FROM	NEAREST TO	WN OB POST	OFFICE					T OR PARISH		
		30 MI	LES EAST	OF CAR	RLSBAD,	NEW MEX	(ICO		LEA		NEW MEXICO	
15. DISTANCE FROM LOCATION TO NI PROPERTY OR LE	LAREST	•		1		F ACRES IN LE			F ACRES ASS HIS WELL			
(Also to heares 18. DISTANCE FROM	it drig, ur	it line, if any)	660		320 19. PROPOSED DEPTH			320 20. ROTARY OR CABLE TOOLS				
TO NEAREST WI	LL, DRILL	ING, COMPLETED	. –		Ly. LAUPU	15,100'			ROTARY			
21. ELEVATIONS (Sho	w whether	DF, RT, GR, e	tc.) 3663	' GL ^C			· · · ·		22. APPR	OX. DATE WO	VAL	
23.			PROPO	SED CASIN	IG AND CI	EMENTING PI	ROGRAM			1.00	Tent of the motion	
SIZE OF HOLE	F HOLE SIZE OF CASING WEIGHT PER I		IGHT PER FO	OOT SETTING DEPTH			QUANTITY OF CEMENT					
17-1/2		13-3/8"		54.5#		800'		SUFFICIENT TO CIRCULATE				
<u>12-1/4</u> 8-1/2		9-5/8" 40#		<u>40#</u> 6# & 29	a#	<u>4700'</u> # 12,500'		<u>SUFFICIENT TO CIRCULATE</u> 1125 SACKS				
•	6-1/2 / / 20 6-1/8" 5" Liner			18# 15,100'			300 SACKS					
		AFTER SET AND STIMU	LATED AS	NECESS	GARY. FOR: SL BC	IG, PAY Z JPPLEMENT JP SKETCH JRFACE US	AL DR	ILLING	DATA		RECEIVED	
(This space for PERMIT NO	s to drill it ay. <i>F</i> / <i>by</i> chard Federal o	or deepen dire	ctionally, give	e pertinent	data on su	ing and	Produ	ction !	and true ve	•rtical depth	d new productive as. Give blowout	
GENERAL R Special St	EGUIREN	ients and	*S	ee Instruc	tions On	Reverse Sid	de					

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.

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

State of New Mexico Energy, Minerals and Natural Resources Department

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JOHN

RONALD J EIDSON,

WEST

dicate 1

OIL CONSERVATION DIVISION

P.O. Box 2088 Santa Fe, New Mexico 87504-2088

DISTRICT II P.O. DERME DD. Artesis, NM 88210

DISTRICT III 1000 Rio Branes Rd., Aziec, NM \$7410

WELL LOCATION AND ACREAGE DEDICATION PLAT All Distances must be from the outer boundaries of the section Weil No. Lange Operator 1 Federal 31 POGO PRODUCING COMPANY County Township Range Section Unit Letter Lea 21 South 32 East 31 т NMPM Actual Footage Location of Well: feet from the East 660 South 2310 line line and feet from th Dedicated Acreage: Pool Ground level Elev. **Producing Formation** 320 UNDESIGNATED BILBREY MORROW GAS 3663.0 MORROW Acres 1. Outline the acreage dedicated to the subject well by colored peacil 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 interest of all owners been consolidated by communitization, unitization, force-pooling, etc.? Yes If answer is "yes" type of consolidation No No 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) or until a non-standard unit, eliminating such interest, has been approved by the Division. OPERATOR CERTIFICATION I hereby certify that the information contained herein in true and complete to the best of my knowledge and belief. Signatury Printed Name Richard Wright Position Drilling and Prod. Supt. Company POGO PRODUCING COMPANY Dete November 9, 1990 SURVEYOR CERTIFICATION 3665.4--3662.2 I hereby certify that the well location sho 660 on this plat was plotted from field notes of actual surveys made by me or under my -^j3673.I 672.9 supervison, and that the same is true and correct to the best of my knowledge and belief. Date Surveyed October 31,1990 ō Signature & Seal of 231 Professional Surveyor

1500

2000

1000

500

0

660

990

1329 1650 1980 2310 2640

25630

SUPPLEMENTAL DRILLING DATA

POGO PRODUCING COMPANY

WELL NO.1 FEDERAL 31

1. SURFACE FORMATION: Quaternary.

2. ESTIMATED TOPS OF GEOLOGIC MARKERS:

Rustler Anhydrite	730'
Delaware Lime	4600'
Bone Springs	8610'
Wolfcamp	11,750'
Strawn	13,125'
Atoka	13,320'
Morrow Lime	13,830'
Morrow Clastics	14,060'
Lower Morrow	14,720'

3. ANTICIPATED POSSIBLE HYDROCARBON BEARING ZONES:

MORROW

Gas

4. PROPOSED CASING AND CEMENTING PROGRAM:

Casing design data sheet and cementing program are attached.

5. PRESSURE CONTROL EQUIPMENT:

Blowout prevention equipment, while drilling below the surface casing, will be a 3000 psi working pressure stack.

The BOP stack, while drilling below the first intermediate casing will be a 5000 psi working pressure stack, and, while drilling below the second intermediate casing, a 10,000 psi working pressure stack will be in use.

BOP sketches are attached.

6. CIRCULATING MEDIUM:

<u>Surface to 800 feet</u>: Fresh water gel spud mud. Viscosity 34 to 38 as required for hole cleaning.

- 800 feet to 4700 feet: Brine conditioned as necessary for control of viscosity. Weight 8.4 to 10. Viscosity 32 to 36. PH 9 to 10.
- <u>4700 feet to 12,500 feet:</u> Fresh water cut with brine if necessary to increase weight. Weight 9.5 to 10. Viscosity 28-30. pH 9 to 10
- <u>12,500 feet to T.D</u>.: Water base drilling fluid conditioned as necessary for control of viscosity, pH, and water-loss. Weight 10 to 12. Viscosity 38-40. pH 9 to 10. Filtrate 6 to 15 cc.

7. AUXILIARY EQUIPMENT:

Geolograph from surface to total depth.

Mud logging trailer to be in use below 4700 feet.

8. TESTING, LOGGING AND CORING PROGRAMS:

Drill stem tests will be made when 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 AND TEMPERATURES:

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 65 days.

.



POSITIVE CHOKE 2" TO MUD PIT

3000 PSI WORKING PRESSURE

BOP ARRANGEMENT



BOP ARRANGEMENT

2"

3"

2"

TO MUD PIT

TO RESERVE

TO MUD PIT

