Form 3160-3 (November 1983) (formerly 9-331C)	1983)			INTERIOR GEMENT			5. LEASE DESIGNATION AND BERIAL NO. NM-62589		
14. TYPE OF WORK	FOR FERMI	TO DRILL, DEE	PEN,	OR I	LUG	BACK	6. IF INDIAN, ALLOTTEE OR TRIBE NAME		
DRIL b. TYPE OF WELL	.L 🛛	DEEPEN		PL	UG BA	ACK 🗌	7. UNIT AGREEMENT NAME		
OIL CAL			SINGLE Zone	\boxtimes	MULT Zone		S. FARM OR LEASE NAME		
2. NAME OF OPERATOR			1		ZONE	<u> </u>	FEDERAL 23		
2 4000000000000000000000000000000000000	POGO PF	ODUCING COMPAN	γV				9. WELL NO.		
3. ADDRESS OF OPERATOR							2		
4. LOCATION OF WELL (Be	P. U. E	OX 10340, MIDI	LAND,	TEXAS	<u>5 7970</u>)2	10. FIELD AND POOL, OR WILDCAT UNDES.		
At proposed prod. zone	1750' F	SL AND 660' FEL	_ OF S			ut.I	LIVINGSTON RIDGE DELAWARE 11. SEC., T., B., M., OR BLK. AND SURVEY OF ABEA SEC.23, T.22 S., R.31 E.		
14. DISTANCE IN MILES AN	D DIRECTION FROM N	LAREST TOWN OR POST OF	FICE®				12. COUNTY OR PARISH 13. STATE		
· <u> </u>	28 MILE	S EAST OF CARLS	SBAD,	NEW N	1EXICO	ł	EDDY NEW MEXICO		
15. DISTANCE FROM PROPOS LOCATION TO NEAREST PROPERTY OR LEASE LI (Also to nearest drig.	ED"	660'	NO. OF	40	LEASE	17. NO.	OF ACRES ASSIGNED CHIS WELL 4()		
18. DISTANCE FROM PROFO TO NEAREST WELL, DRI OR APPLIED POR, ON THIS	BED LOCATION®	1090 '	PROPOSE 85	D DEPTH			ABY OR CABLE TOOLS		
21. ELEVATIONS (Show whet	her DF, RT, GR, etc.)						22. APPROX. DATE WORK WILL START*		
		3553.8' GR					UPON APPROVAL		
23.		PROPOSED CASING A	AND CEM	ENTINC	PROGR.	AM	my to Roman & 1114 Postost		
SIZE OF HOLE	BIZE OF CABING	WEIGHT PER FOOT		SETTING	DEPTH		QUANTITY OF CEMENT		
17-1/2"	13-3/8"						ICLENT TO CIRCULATE		
7-7/8"	8-5/8"	24#, 32#, 28#	<u>#</u>	<u> 43(</u>		<u>_ _SUFF</u>	ICIENT TO CIRCULATE,		
/-//8	5-1/2"	15.5# & 17#		850)0.	TO T	IE BACK TO 3300'		
AND	STIMULATED AS	DUCTION CASING NECESSARY. SUPPLEMENTAL E BOP SKETCH SURFACE USE AN	DRILLI	NG DA	TA		ORATED Post ID-1 1-31-92 Murbre & API		

IN ABOVE SPACE DESCRIBE PROFOSED 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 pays.

24. SIGNED Richard Wricht

(This space for Federal or State office use)

TITLE Drilling and Production Supt DATE November 1, 1991

PERMIT NO.	APPROVAL DATE	
	е с — т с — т с — т с — т с — т с — т с — т с — т с — т с — т с — т с — т с — т с	
APPROVED BY		DATE 122-92
APPROVAL SUBJECT TO		DATA
GENERAL REQUIREMENTS AND		
SPECIAL STIPULATIONS	*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. Submit to Appropriate District Office State Lease - 4 copies Fee Lease - 3 copies

DISTRICT 1 P.O. Box 1980, Hobbs, NM 88240

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

State of New Mexico Energy, Minerals and Natural Resources Department

-+

OIL CONSERVATION DIVISION

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

d -----

rator				Lease	er boundaries of t			Well No.	
POGO PRODUCING CO.					ERAL 23			2	
Letter	Section	Township		Range			County	·	
I	23	22 5	SOUTH	31	EAST	NMPM	EDI	YC YC	
Footage Loca	ion of Well:	T. C. C.		1	<u>^</u>		0.01107	,	
660			1750 feet from the			the SOUTH			
nd level Elev.	Produci			Pool				Dedicated Acre	age:
553.8	the acreage dedicate	DELAWARE	1 has a start of a sec	1	LIVINGSTON		JELAWARE	40	Acres
	than one lease of di			-			-		
If answer this form i No allowa	on, force-pooling, e Yes [is "no" list the owne f neccessary ble will be assigned	No If an rs and tract descript to the well until all	interests have b	een consolidat	consolidated. (Use ed (by communitiza			g, or otherwise)	
or until a	ion-standard unit, el	iminating such inter	est, has been ap	proved by the	Division.				<u> </u>
, <u></u>							I hereby contained herein best of my knowl Signature Printed Name Richard Position Dist. Dr Company POGO PI Date Novem	had to	he informatic complete to t <u>Juff</u> ht d. Supt COMPANY 991
						3547.8 660 ¹	on this plat w actual surveys supervison, an	128	n field notes or under 1 ne is true a knowledge a

SUPPLEMENTAL DRILLING DATA

POGO PRODUCING COMPANY

FEDERAL 23 WELL NO.2

- 1. SURFACE FORMATION: Quaternary.
- 2. ESTIMATED TOPS OF GEOLOGIC MARKERS:

Rustler Anhydrite	750'
Delaware Lime	4450'
Bell Canyon	4500'
Cherry Canyon	5350'
Brushy Canyon	7000'

3. ANTICIPATER 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 LTC casing is to be set at 8500 feet in 7-7/8" hole. Casing is to be cemented with 900 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.

<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.

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 ARRANGEMENT

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