

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK DRILL ☒ DEEPEN ☐ PLUG BACK ☐			5. LEASE DESIGNATION AND SERIAL NO. LC-062749 B	
b. TYPE OF WELL OIL WELL ☒ GAS WELL ☐ OTHER ☐			6. IF INDIAN, ALLOTTEE OR TRIBE NAME	
2. NAME OF OPERATOR Highland Production Company			7. UNIT AGREEMENT NAME	
3. ADDRESS OF OPERATOR 810 N. Dixie Blvd., Suite 202, Odessa, Texas 79761			8. FARM OR LEASE NAME Conoco/Federal	
4. LOCATION OF WELL (Report location clearly, and in accordance with any State requirements.) At surface 330' FEL and 2310' FNL At proposed prod. zone 330' FEL and 2310' FNL			9. WELL NO. 2	
14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE* 21 Miles SW of Jal, New Mexico			10. FIELD AND POOL, OR WILDCAT East Mason (Delaware)	
15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any) 330' FEL			11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA Section 19, T-26-S, R-32-E, NMPM	
16. NO. OF ACRES IN LEASE 280			12. COUNTY OR PARISH Lea	
17. NO. OF ACRES ASSIGNED TO THIS WELL 40			13. STATE New Mexico	
18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT. 1980'			20. ROTARY OR CABLE TOOLS Rotary to 4350' and Cable Tool to TD	
21. ELEVATIONS (Show whether DF, RT, GR, etc.) 3169.2 GR			22. APPROX. DATE WORK WILL START* 6/1/88	

PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12 1/2"	8 5/8"	24#	1200'	125 Sacks Class C - Circulate
7 7/8"	5 1/2"	15.5#	4550'	1200 Sacks HLC/W Class C - Circulate

Additional Information:

- Surface formation is Tertiary with some Triassic Exposed.
- Estimated geological tops: Rustler - 950'; Anhydrite - 1,000'; ^{Top}Base Salt - 1,300'; Castile - 3,000'; Lamar Lime - 4,100'; Top of Delaware - 4,300'.
- Pressure control equipment: Double hydraulic pressure tested to 3,000 PSI, full closing hydril on top tested to 3,000 PSI. Pressure control diagram is attached. Testing will be on installation, daily and on trips.
- Proposed circulating medium: 0-1,200' - Soud Mud; 1,200-4,500' - Brine Water;
- Estimate will encounter water from 390' to 950'.
- Estimate will encounter oil at 4,370'.
- Logging Program: Acoustic velocity gamma ray caliper log: FoRoxo guard log.
- No coring or drill stem testing.
- No abnormal pressures or temperatures are expected to be encountered.
- Anticipated starting date is June 1, 1988.

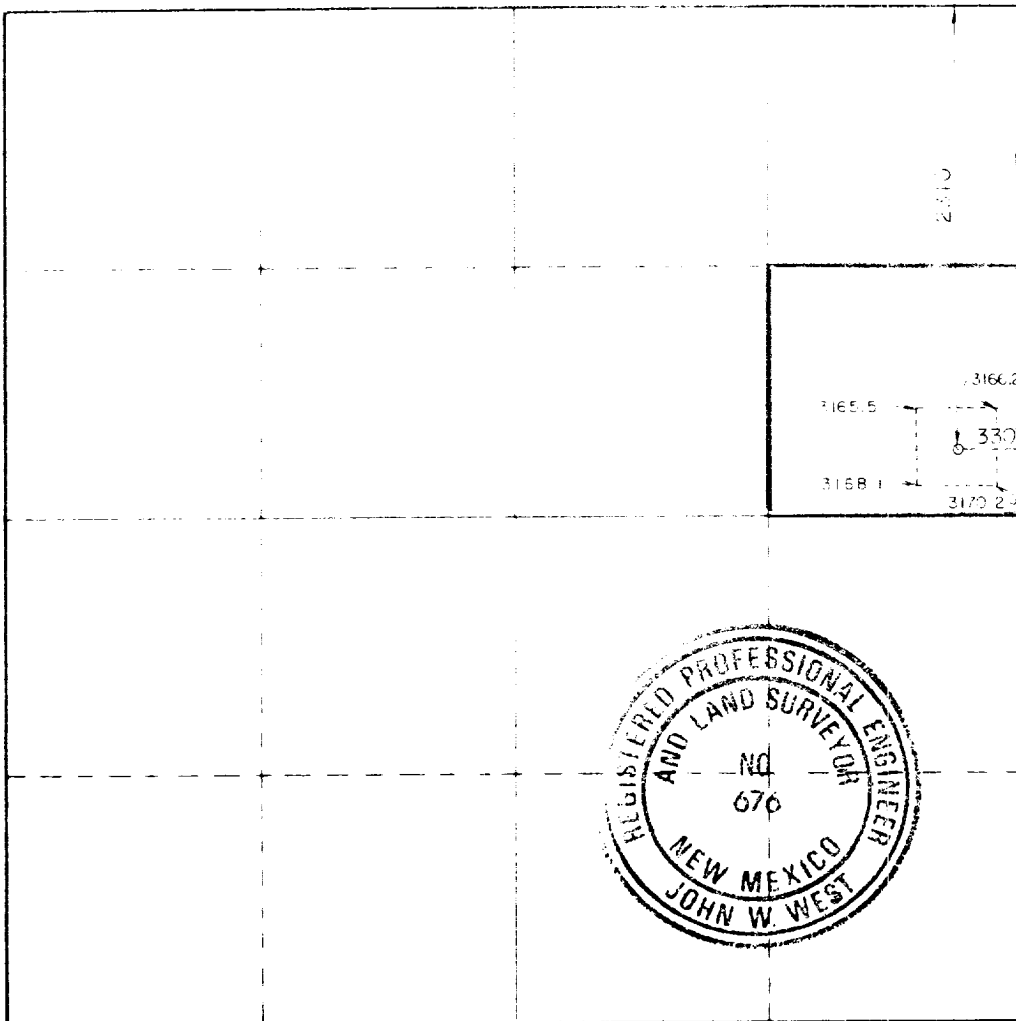
IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program if any.

24. SIGNER <i>[Signature]</i> TITLE President		DATE April 22, 1988
(This space for Federal or State office use)		
PERMIT NO.	APPROVAL DATE	
APPROVED BY	TITLE	DATE
CONDITIONS OF APPROVAL, IF ANY:		

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APR 23 1988
5 23 55
40 PM '88

Supervises C-138
He lives in 1961

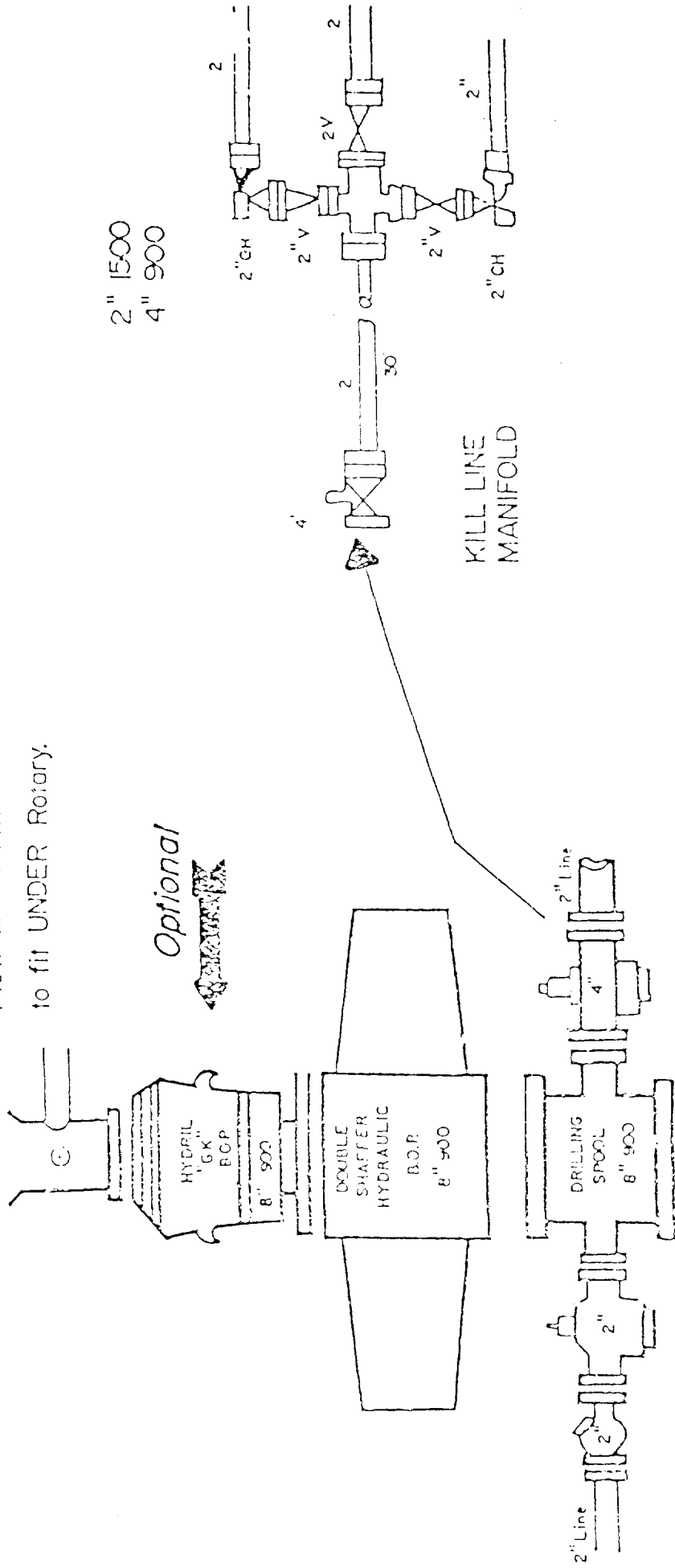
State	Delaware	Federal "A"
County	North East	
Township		
City		
Post Office		
Street		
Room		
Latitude		
Longitude		
Elevation		
Population		
Area		
Notes		



Certificate No	JOHN W. WEST,	676
	RONALD J. EIDSON,	3239

ASE ROTARY TABLE

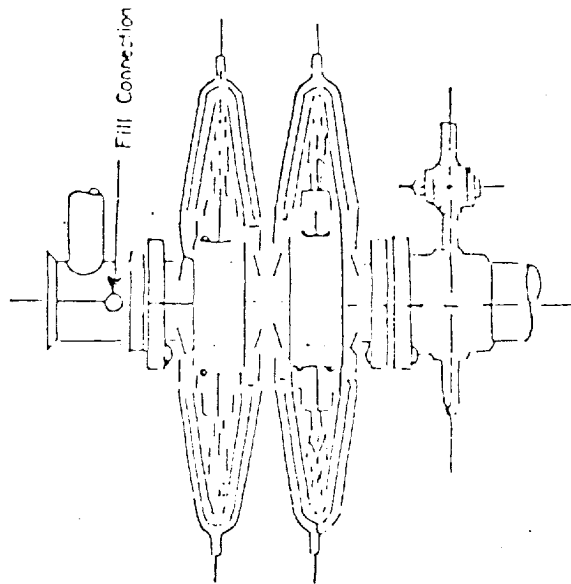
Flow line will have to be made
to fit UNDER Rotary.



Application to Drill
Conoco Federal "A" Well No. 2
Highland Production Company



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MAY 24 1988
FBI
HOLLY SPRING



Shaffer Type E Series 900 Hydraulic B.O.P.

3000 PSI WORKING PRESSURE BLOWOUT PREVENTER HOOK-UP

Series 900 Flanges, or Better.

Note: B.O.P. system will meet the conditions of drilling approval
required by the USGS District Office in Hobbs, New Mexico.

*Application to Drill
Conoco Federal "A" No. 2
Highland Production Company*

88-81-6 8204
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OCD
HOBBS OFFICE