

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. 30-025-29799 NY 27506LC-668281-A		
b. TYPE OF WELL OIL WELL ☒ GAS WELL ☐ OTHER ☐ SINGLE ZONE ☒ MULTIPLE ZONE ☐			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, 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 Feet FEL and 2310 Feet FSL of Section 19. At proposed prod. zone 330 Feet FEL and 2310 Feet FSL of Section 19.			9. WELL NO. 1		
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 Feet 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 160			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. 2970 Feet			19. PROPOSED DEPTH 4550		
20. ROTARY OR CABLE TOOLS Rotary to 4350 and Cable tool to 4370.			21. APPROX. DATE WORK WILL START* November 15, 1986		
22. ELEVATIONS (Show whether DF, RT, GR, etc.) 3174.15 Ground Level Elevation					

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 Feet	125 SX Class C Circulate
7 7/8"	5 1/2"	1.05#	4550 Feet	1200 SX HLC/W Class C Circulate

Additional Information:

- Surface formation is Tertiary with some Triassic Exposed.
- Estimated geological tops: Rustler - 950', Anhydrite - 1,000', Base Sale - 1,300', Yates - 3,000', Lamar Lime - 4,100', Delaware Top - 4,300.
- Pressure control equipment: Double hydrolic 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: 0-1,000' - Spud Mud, 1,000-4,500' - Brine Water.
- Estimate will encounter water from 890' to 950'.
- Estimate will encounter oil at 4,370.
- Logging Program: Acoustic velocity gamma ray caliper log: FoRxo guard log.
- No coring or drill stem testing.
- No abnormal pressures or temperatures are expected to be encountered.
- Anticipated starting date is November 15, 1986.

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. SIGNED Marvin L. Smith TITLE President DATE October 27, 1986
(This space for Federal or State office use)

PERMIT NO. _____ APPROVAL DATE _____

APPROVED BY _____ TITLE _____ DATE 11-17-86
CONDITIONS OF APPROVAL, IF ANY:

APPROVAL SUBJECT TO
GENERAL REQUIREMENTS AND
SPECIAL STIPULATIONS
ATTACHED

Instructions

General: This form is designed for submitting proposals to perform certain well operations, as indicated, on all types of lands and leases for appropriate action by either a Federal or a State agency, or both, pursuant to applicable Federal and/or State laws and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local, area, or regional procedures and practices, either are shown below or will be issued by, or may be obtained from, the local Federal and/or State office.

Item 1: If the proposal is to redrill to the same reservoir at a different subsurface location or to a new reservoir, use this form with appropriate notations. Consult applicable State or Federal regulations concerning subsequent work proposals or reports on the well.

Item 4: If there are no applicable State requirements, locations on Federal or Indian land should be described in accordance with Federal requirements. Consult local State or Federal office for specific instructions.

Item 14: Needed only when location of well cannot readily be found by road from the land or lease description. A plat, or plats, separate or on this reverse side, showing the roads to, and the surveyed location of, the well, and any other required information, should be furnished when required by Federal or State agency offices.

Items 15 and 18: If well is to be, or has been directionally drilled, give distances for subsurface location of hole in any present or objective production zone.

Item 22: Consult applicable Federal or State regulations, or appropriate officials, concerning approval of the proposal before operations are started.