

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 ☐

## b. TYPE OF WELL

OIL  
WELL ☒GAS  
WELL ☐

OTHER

SINGLE  
ZONE ☒MULTIPLE  
ZONE ☐

## 2. NAME OF OPERATOR

Highland Production Company

## 3. ADDRESS OF OPERATOR

810 N. Dixie Blvd., Suite 202, Odessa, Texas 79761

## 4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.\*)

At surface

660' FEL and 990' FSL

At proposed prod. zone

660' FEL and 990' FSL

## 14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE\*

21 Miles SW of Jal, New Mexico

## 15. DISTANCE FROM PROPOSED\*

LOCATION TO NEAREST

PROPERTY OR LEASE LINE, FT.

(Also to nearest drlg. unit line, if any)

660' FEL

## 16. NO. OF ACRES IN LEASE

160

## 17. NO. OF ACRES ASSIGNED

TO THIS WELL

40

## 18. DISTANCE FROM PROPOSED LOCATION\*

TO NEAREST WELL, DRILLING, COMPLETED,  
OR APPLIED FOR, ON THIS LEASE, FT.

1360.6'

## 19. PROPOSED DEPTH

4550'

## 20. ROTARY OR CABLE TOOLS

Rotary to 4300 and Cable Tool  
into Pay. (4310)

## 21. ELEVATIONS (Show whether DF, RT, GR, etc.)

3167.35 GR

## 22. APPROX. DATE WORK WILL START\*

July 10, 1987

## 23.

## 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#	1,200 Feet	125 SX Class C Circulate
7 7/8"	5 1/2"	15.5#	4,550 Feet	1200 SX HLC/W Class C Circulate

## Additional Information:

1. Surface formation is Tertiary with some Triassic exposed.
2. Estimate geological tops: Rustler - 950', Anhydrite - 1,000', Top Salt - 1,300', Lamar Lime - 4,100', Delaware Top - 4,310'.
3. 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.
4. Proposed circulating medium: 0-1,200' - Spud Mud, 1,200-4,550 - Brine Water.
5. Estimate will encounter water from 890' to 950'.
6. Estimate will encounter oil at 4,310 feet.
7. Logging Program: Gamma Ray Neutron Log.
8. No coring or drill stem testing.
9. No abnormal pressures or temperatures are expected to be encountered.
10. Anticipate startubg date us July 10, 1987.

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

June 29, 1987

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

APPROVED BY

TITLE

DATE

7-15-87

CONDITIONS OF APPROVAL, IF ANY: