

GEOLOGICAL SURVEY

NM-7951

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK DRILL <input checked="" type="checkbox"/> DEEPEN <input type="checkbox"/> PLUG BACK <input type="checkbox"/>		2. LEASE IDENTIFICATION AND SERIAL NO. NM-7951	
b. TYPE OF WELL OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <input type="checkbox"/> SINGLE ZONE <input type="checkbox"/> MULTIPLE ZONE <input type="checkbox"/>		c. IF INDIAN, ALGONQUIN OR SHOSHONE NAME	
3. NAME OF OPERATOR TENNECO OIL COMPANY		7. UNIT AGREEMENT NAME	
4. ADDRESS OF OPERATOR 720 So. Colorado Blvd., Denver, Colorado 80222		8. FARM OR LEASE NAME Leonard Bros.	
5. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.) At surface 1980' FNL and 1980' FWL		9. WELL NO. 16	
At proposed prod. zone Unit F		10. WELL AND POOL OR WELDCAT Leonard Queen, South	
14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE See Point 1:b of Surface Use Plan		11. REC. T. R. M. OR ALK. AND SURVEY OR AREA Sec 13, T26S, R37E	
15. DISTANCE FROM PROPOSED LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any)		12. COUNTY OR PARISH Lea	
16. NO. OF ACRES IN LEASE 2520		13. STATE New Mexico	
17. DISTANCE FROM PROPOSED LOCATION TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.		14. NO. OF ACRES ASSIGNED TO THIS WELL 40	
18. PROPOSED DEPTH + 4000'		15. ROTARY OR CABLE TOOLS Rotary	
21. ELEVATIONS (Show whether DF, RT, GR, etc.) 3005.11' GL		22. APPROX. DATE WORK WILL START March 11, 1978	
23. PROPOSED CASING AND CEMENTING PROGRAM			
SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH
12-1/4"	8-5/8"	24#	+ 500'
7-7/8"	5-1/2"	15.5#	+4000'
		QUANTITY OF CEMENT	
		Suff. to circulate to surface.	
		Suff. to circulate back up into surface casing.	

1. The geologic name of this surface formation is the Ogallala Lime (Miocene).
- 2&3. Formation Tops (Estimated)
- | | | | |
|----------|---|-------|------------------------------|
| Salado | + | 1140' | Salt |
| Yates | + | 2640' | Possible oil or gas producer |
| 7 Rivers | + | 2845' | Possible oil or gas producer |
| Queen | + | 3365' | Oil and gas |
| Penrose | + | 3470' | Oil and gas |
4. Run 8-5/8" OD, K-55 new casing to +500' and circulate cement to surface. Run 5 1/2" OD, 15.5#, K-55 new casing to T. D. and cement with a sufficient amount to circulate up into surface casing in two stages. Casinghead will be a 10" 900 series w/a 3000 psi rating.
5. Blowout preventors: Hydraulic, double ram, 10". One set of rams will be provided for each size drill pipe in the hole. One set of blind rams at all times. Fill line will be 2", kill line will be 2", choke relief line will be 2" with variable choke. BOP's will be installed, tested and in working order before drilling below surface casing and shall be maintained ready for use until drilling operations are completed. BOP's; drills, and tests will be recorded in the drillers logs.
6. We will use; spud mud = 0-+500'. (8.5 - 9.0 lb. per gallon) Brine gel = 500'-TD. (9.0 - 10.0 lb. per gallon)
7. Auxiliary Equipment
- Kelly cock will be in use at all times.
 - Stabbing valve to fit drill pipe will be present on floor at all times.
 - Mud monitoring will be visual, no abnormal pressures are anticipated in this area.
 - Floats at bits.
 - Drill string safety valve(s) to fit all pipe in the drill string will be maintained on the rig floor while drilling operations are in progress.
8. This well will be pump tested after recovery of any load oil or water. One core may be taken. DLL-GR, CNL-FDC-GR caliper and BHC Sonic logs will be taken. Any other evaluation that may be necessary during the drilling of this well will be conducted as needed.
9. No abnormal pressures or temperatures are anticipated. See point #5 for blowout prevention equipment.
10. The drilling of this well will take approximately eight days. The gas (if, is not) dedicated to El Paso Natural Gas Company.
11. Your office (Telephone 505/393-3612) will be notified of spudding in sufficient time to witness cementing operations. Immediate notice will be given on blowouts, fires, spills and accidents involving life-threatening injuries or loss of life. Prior approval will be obtained before appreciably changing drilling program or commencing plugging operations plug back work, casing repair work or corrective cementing operations.

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 prevention program, if any.

24.

SIGNED

TITLE Div. Production Manager

(For space for Federal or State office use)

SEE ATTACHMENT

Unless Drilling Operations have

Commenced, this drilling approval

APPROVAL DATE

APPROVED BY

TITLE

CONDITIONS OF APPROVAL, IF ANY:

APPROVED
AS AMENDED

FEB 23 1978

A. A. L.

ACTING DISTRICT ENGINEER

RECEIVED

FEB 28 1978

OIL CONSERVATION COMM.
HOBBS, N. M.

Oil Conservation Comm.

FEB 28 1978

HOBBS, N. M.