

DEPARTMENT OF THE INTERIOR  
GEOLOGIC SURVEY

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

5. FARM DESIGNATION AND SERIAL NO.  
NM-7951

6. IF INDIAN, ADDRESS OF THE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME

Leonard Bros.

9. WELL NO.

21

10. FIELD AND TOWN OR VILLAGE

Leonard Queen, South

11. SEC., T., R., M., OR BLK.

AND SURVEY OR AREA

Sec 14, T26S, R37E

12. COUNTY OR PARISH

Lea

13. STATE

New Mexico

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

TENNECO OIL COMPANY

3. ADDRESS OF OPERATOR

720 So. Colorado Blvd., Denver, Colorado 80222

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

At surface

2180' FWL and 1980' FNL

At proposed prod. zone

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

See Point 1:b of Surface Use Plan

5. DISTANCE FROM PROPOSED\*

LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any)

6. DISTANCE FROM PROPOSED LOCATION\*

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

16. NO. OF ACRES IN LEASE

2520

19. PROPOSED DEPTH

+4000'

17. NO. OF ACRES ASSIGNED TO THIS WELL

40

20. ROTARY OR CABLE TOOLS

Rotary

1. ELEVATIONS (Show whether DF, RT, GR, etc.)

2996.5' GL

22. APPROX. DATE WORK WILL START\*

March 29, 1973

23.

PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12-1/4"	8-5/8"	24#	+ 500'	Suff. to circulate to surface.
7-7/8"	5-1/2"	15.5#	+4000'	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	+	1185'	Salt
Yates	+	2530'	Possible oil or gas producer
7 Rivers	+	2860'	Possible oil or gas producer
Queen	+	3400'	Oil and gas
Penrose	+	3510'	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 will 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 (is, xxxxx) 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.

SIGNED [Signature] TITLE Div. Production Manager

(Leave space for Federal or State Office use)

Unless Drilling Operations have

Commenced, this drilling approval

Expires 6-29-78

PERMIT NO.

APPROVAL DATE

APPROVED BY

CONDITIONS OF APPROVAL, IF ANY:

TITLE

SEE ATTACHED FOR

CONDITIONS OF APPROVAL

APPROVED

AS AMENDED

FEB 23 1978

G.A.L.

ACTING DISTRICT ENGINEER

RECEIVED

FEB 28 1978

OIL CONSERVATION COMM.  
HOBBS, N. M.

RECEIVED  
OIL CONSERVATION COMM.

FEB 28 1978

RECEIVED  
OIL CONSERVATION COMM.