

DEPARTMENT OF THE INTERIOR

GEOLOGIC SURVEY

COPY TO O.

1. FIELD IDENTIFICATION AND SERIAL NO.

NM-7951

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

C. IF INDIAN, ALLOTTEE OR INDIAN NAME

2. UNIT AGREEMENT NAME

5. FARM OR LEASE NAME

Leonard Bros.

9. WELL NO

19

10. FIELD AND POOL OR FIELD/CAT

Leonard Queen, South

11. REC. T. P. M. OR ALK. AND SURVEY OR AREA

Sec 13, 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 ☒CAB WELL ☐

OTHER

MINCLE 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

660' FNL and 1980' FWL

At proposed prod. zone

Unit C

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

See Point 1:b of Surface Use Plan

15. DISTANCE FROM PROPOSED*

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

16. NO. OF ACRES IN LEASE

2520

17. NO. OF ACRES ASSIGNED TO THIS WELL

40

18. DISTANCE FROM PROPOSED*

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

19. PROPOSED DEPTH

+ 4000'

20. ROTARY OR CABLE TOOLS

Rotary

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

3004.66' GL

22. APPROX. DATE WORK WILL START*

April 10, 1978

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	+ 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 (XXX 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) AS NATE

PERMIT NO.

7-10-78

APPROVED BY
CONDITIONS OF APPROVAL, IF ANY:

TITLE

SEE ATTACHED FOR
CONDITIONS OF APPROVALAPPROVED
AS AMENDED

FEB 23 1978

A. A. L.
ACTING DISTRICT ENGINEER

RECEIVED
FEB 28 1978
OIL CONSERVATION COMM.
HOBBS, N. M.

Oil and Gas
Conservation

February 28, 1978

Oil and Gas
Conservation