

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

(Reverse Side)

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
TENNECO OIL COMPANY

3. ADDRESS OF OPERATOR
720 S. Colorado Blvd., Denver, Colorado 80222

4. LOCATION OF WELL (Report location clearly and in accordance with any State or Federal laws.)
At surface 660' FNL and 1995' FNL
At proposed prod. zone 2080'

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*
See point 1: B7& C 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 WELLS IN LEASE
2560

18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.
19. PROPOSED DEPTH
±3600'

21. ELEVATIONS (Show whether DF, RT, GR, etc.)
2995' KB

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#	±3600'	Suff. to circulate back into surface casing.

1. The geologic name of the surface formation is Ogallala Lime.
- 2&3. Estimated Formation Tons:
- | | | |
|------------------|---------|----------------------------------|
| Anhydrite | ± 960' | Unless Drilling Operations have |
| Salt | ± 1180' | approval of the State or Federal |
| Base Salt | ± 2440' | |
| Yates | ± 2525' | Possible oil or gas producer |
| Seven Rivers | ± 2055' | Possible oil or gas producer |
| Rhodes Marker | ± 2800' | |
| Queen (Main Pay) | ± 3395' | Oil and gas |
| Penrose | ± 3505' | Oil and gas |
4. Set and cement 8-5/8" OD, 24#, K-55 surface casing to ±500', with sufficient cement to circulate 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. Casinghead will be a 10" 900 Series with 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 line 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. 0 - ±500' spud mud. 500'-3000' low solids viscosity to clean hole. 3300' - TD gel water viscosity, as needed to log hole. Brine water (10 lb.) used.
7. Auxillary 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. No cores will be taken. Logs: DLL-Micro-SFL-GR, CML-FDC-GR caliper, run GR to surface, run all other logs 100' into salt.
9. No abnormal temperatures or pressures are anticipated.
10. Anticipated starting date will be as soon as possible after archeological clearance is given. The drilling of this well will take approximately 10 days. The gas is 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 preventer program, if any.

24. SIGNED D. A. Meyer TITLE Div. Production Manager DATE 5-11-78

(This space for Federal or State office use)

PERMIT NO. APPROVAL DATE

APPROVED BY TITLE

CONDITIONS OF APPROVAL, IF ANY:

APPROVED
AS AMENDED
MAY 24 1978
DATE P. A. J.
ACTING DISTRICT ENGINEER

RECEIVED
MAY 9 0 1978
OIL CONSERVATION COMM.
HOBBS, N. M.