

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

(Other instructions on reverse side)

Budget Bureau No. 42-R1425.

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 ☐

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 requirements.)

At surface

660' FHL and 330' FEL

At proposed prod. zone

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

See Surface Use Plan Point 1 B and C

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

2560

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.

19. PROPOSED DEPTH ±3600'

20. ROTARY OR CABLE TOOLS Rotary

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

3010' K.B.

22. APPROX. DATE WORK WILL START\*

July 15, 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#	±3600'	Suff. to circulate back into surface casing.

1. The geologic name of the surface formation is Ogallala Lime.

2. Estimated Formation Tons:

Salt ±1060'  
Base Salt ±2430'  
Yates ±2590'  
Rho es Marker ±2060'  
Queen Main Pay ±3360'  
Penrose ±3460'

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' snud mud. 500'-3300' low solids, viscosity as needed to clean hole. 3300'- T. D. gel water, viscosity as needed to log hole, ten pound brine water is used also.

7. Auxillary Equipment

a. Kelly cock will be in use at all times.  
b. Stabbing valve to fit drill pipe will be present on floor at all times.  
c. Mud monitoring will be visual, no abnormal pressures are anticipated in this area.  
d. Floats at bits.  
e. 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, CIL-FDC-GR caliner, run GR to surface, run all other logs 100' into salt.

9. No abnormal temperatures or pressures are anticipated.

10. Anticipated starting date will depend upon rig availability, probably around July 15, 1978. The drilling 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 snudding in sufficient time to witness cementing operations. Immediate notice will be given on blow ts, 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.

Unless Drilling Operations Have

Commenced, this drilling approval

Expires 9-20-78

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

TITLE Division Production

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

APPROVED

AS AMENDED

JUN 20 1978

A. A. T.

ACTING DISTRICT ENGINEER

DATE