

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

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 So. Colorado Blvd., Denver, Colorado 80222

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

At surface 1850' FSL and 1720' FEL

At proposed prod. zone

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

320

17. NO. OF ACRES ASSIGNED
TO THIS WELL

E/320

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

19. PROPOSED DEPTH

±6,865'

20. ROTARY OR CABLE TOOLS

Rotary

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

6.609' GL

22. APPROX. DATE WORK WILL START*

May 1, 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 lb.	±250'	Suff. to circ. back to surface
7-7/8"	4-1/2"	10.5 lb.	±6,865'	Suff. to cement to surface csq.

See attached sheet for drilling program.

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 Div. General Manager

DATE March 30, 1978

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

APPROVED BY

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY:

*See Instructions On Reverse Side

Jicarilla A No. 10

1. The geologic name of this surface formation is San Jose Eocene..

2. Formation Tops (estimated):

Fruitland	+ 2750'
Pictured Cliffs	+ 3135'
Lewis Shale	+ 3230'
Chacra	+ 4035'
Cliffhouse	+ 4840'
Menefee	+ 4950'
Point Lookout	+ 5290'
Mancos Shale	+ 5505'
Gallup	+ 6405'
Sunostee	+ 6910'
	TD= 6940'

3. Water, Oil, Gas or Minerals:

Possible Oil or Gas Producer

Possible Oil or Gas Producer .

Possible Oil or Gas Producer

Possible Oil or Gas Producer

Possible Oil or Gas Producer

Possible Oil or Gas Producer

4. Run 8-5/8" OD, K-55 new casing to +250' and circulate cement to surface. Run 4-1/2" OD, 10.5#, K-55 new casing to TD and cement in three stages with 65/35 pos. mix with 12-1/2 lb/sack gilsonite, tailing in with Class B cement with 2% CaCl₂. Circulate 4 hours between 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. BOE will be checked every 24 hours and recorded in drillers logs.

6. We will use: spud mud from 0 - +250'; Gel chemical w/low solids as needed to maintain good hole conditions from 250' - TD. Quantities of mud will vary with conditions encountered.

7. Auxiliary 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.

8. An AOF test will be taken at the completion of this well. No cores will be taken. Gamma Ray Density and Compensated Neutron logs will be run. Any other evaluation that may be necessary during the drilling of this well will be conducted as needed. Deviation surveys will be taken.

9. No abnormal pressures or temperatures are anticipated. See point #5 for blowout prevention equipment.

10. The drilling of this well will take approximately fifteen days. The gas is contracted to Northwest Pipeline Company. See item 22 on 9-331-C for anticipated starting date.

11. Your office (Telephone 303/247-5144) 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.