

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

Box 1714, Durango, Colorado

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

At surface

400' FSL, 350' FEL, Section 19, T30N, R9W, San Juan Co., N.M.

At proposed prod. zone

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

## 10. 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 WELL18. DISTANCE FROM PROPOSED LOCATION\*  
TO NEAREST WELL, DRILLING, COMPLETED,  
OR APPLIED FOR, ON THIS LEASE, FT.

## 19. PROPOSED DEPTH

7200'

## 20. ROTARY OR CABLE TOOLS

Rotary

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

6013'DF

## 22. APPROX. DATE WORK WILL START\*

October 4, 1965

## 23.

## PROPOSED CASING AND CEMENTING PROGRAM

| SIZE OF HOLE | SIZE OF CASING | WEIGHT PER FOOT | SETTING DEPTH | QUANTITY OF CEMENT  |
|--------------|----------------|-----------------|---------------|---------------------|
| 6-1/4        | 4-1/2          | 11.60           | 7200          | 2 stages - cemented |
| 6-1/4        | 4-1/2          | 10.50           | 6200          | to surface          |

Move in workover rig, pull tubing, clean out open hole 5060-5260, cement open hole w/200 sx cement. Set cement retainer at 4300' and cement perforations 4366-4528 w/200 sx. Cut off 5-1/2 casing using free point indicator and pull casing. Spot 50 sx cement at casing stub. Set knuckle joint at 3-1/2° and gas drill to approximate TD of 7200'. Perforate and frac Dakota formation and Mesaverde formation. Set packer above Dakota formation. Run 2-3/8" tubing landed in packer. Set cement stage collar approximately 300' below bottom of Mesaverde.



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.

Original Signed By  
HAROLD C. NICHOLS

SIGNED

H. C. Nichols

TITLE Senior Production Clerk DATE 10-1-65

(This space for Federal or State office use)

PERMIT NO. \_\_\_\_\_

APPROVAL DATE \_\_\_\_\_

APPROVED BY \_\_\_\_\_

TITLE \_\_\_\_\_

CONDITIONS OF APPROVAL, IF ANY:

RECEIVED

DATE OCT 4 1965

U. S. GEOLOGICAL SURVEY  
FARMINGTON, N. M.

\*See Instructions On Reverse Side

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEYSUBMIT IN TRIPLICATE\*  
(Other instructions on reverse side)Form approved.  
Budget Bureau No. 42-R1424.

5. LEASE DESIGNATION AND SERIAL NO.

SF 076934

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME

Mansfield

9. WELL NO.

1

10. FIELD AND-POOL, OR WILDCAT Dual

Blanco MV &amp; Basin Dakota

11. SEC. T., R., M., OR BLK. AND  
SURVEY OR AREA

Sec. 19, T-30-N, R-9-W

12. COUNTY OR PARISH

San Juan

13. STATE

New Mexico

## SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir.  
Use "APPLICATION FOR PERMIT" for such proposals.)

|   |  |
|---|--|
| 1. OIL WELL <input type="checkbox"/> GAS WELL <input checked="" type="checkbox"/> OTHER   |  |
| 2. NAME OF OPERATOR<br>Tenneco Oil Company  |  |
| 3. ADDRESS OF OPERATOR<br>P. O. Box 1714 - Durango, Colorado  |  |
| 4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*<br>See also space 17 below.)<br>At surface<br>400' FSL, 350' FEL |  |
| 14. PERMIT NO.  | 15. ELEVATIONS (Show whether DF, RT, GR, etc.)<br>6013' DF |

16.

## Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

## NOTICE OF INTENTION TO:

TEST WATER SHUT-OFF

FRACTURE TREAT

SHOOT OR ACIDIZE

REPAIR WELL

(Other)

PULL OR ALTER CASING

MULTIPLE COMPLETE

ABANDON\*

CHANGE PLANS

## SUBSEQUENT REPORT OF:

WATER SHUT-OFF

FRACTURE TREATMENT

SHOOTING OR ACIDIZING

(Other) Dual

REPAIRING WELL

ALTERING CASING

ABANDONMENT\*

(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)\*

10-1-65 rig up, cleaned out to 5237'. Set cement retainer at 4305'. Squeezed open hole 5060-5237 and perfs 4366-4528 with 400 sacks. Cut off 5-1/2" casing at 2000' and pulled 64 joints. Cemented at 2025' with 125 sacks and 75 sacks in collar. WOC. Set 125 sacks cement plug at 1725-2000'. Set knuckle joint 1830'. Drilled to 3250'. Ran IES, GR Density Caliper log. Set 77 joints 7" 23# J-55 casing set at 3250' with 425 sacks cement followed by 175 sacks. Good circulation. WOC. Drilled to 7352'. Ran 4-1/2" liner, 135 joints 10.5# and 11.6# J-55 casing set at 2999-7350'. Cement with 400 sacks. WOC. Cleaned out to 7321' PBTD. Spotted 300 gallons acid over lower Dakota. Perf 7240-7316' frac with 55,000 gallons water and 35,000 pounds sand. Perf 7176-7195 frac with 51,000 gallons water and 40,000 pounds sand. Perf 7076-7124 frac with 35,000 gallons water and 24,000 pounds sand. Perf Lookout with 2 holes per foot 4890-5069, frac with 98,000 gallons water and 80,000 pounds sand. Perf Cliffhouse with 1 hole per foot 4362-4742, frac with 102,000 gallons water and 80,000 pounds sand. Cleaned out to 7321' PB. Released rig 11-1-65. Set production packer at 7012'. Ran 220 joints 2-3/8" tubing, set in packer. Set tree. Completed 11-1-65. Testing well. Will run packer leakage and deliverability tests.

18. I hereby certify that the foregoing is true and correct

SIGNED

Harold C. Nichols

TITLE Senior Production Clerk

DATE November 17, 1965

(This space for Federal or State office use)

APPROVED BY

CONDITIONS OF APPROVAL, IF ANY:

## Distribution:

5 Copies - USGS, Farmington

1 Copy - Continental

1 Copy - File

\*See Instructions on Reverse Side

RECEIVED

NOV 18 1965

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FARMINGTON, N. M.