

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 ☐		5. LEASE DESIGNATION AND SERIAL NO. BY 078578		
b. TYPE OF WELL OIL WELL ☐ GAS WELL ☒ OTHER ☐ SINGLE ZONE ☐ MULTIPLE ZONE ☒		6. IF INDIAN, ALLOTTEE OR TRIBE NAME		
2. NAME OF OPERATOR Tenneco Oil Company		7. UNIT AGREEMENT NAME		
3. ADDRESS OF OPERATOR P. O. Box 1714, Durango, Colorado		8. FARM OR LEASE NAME Florence		
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)* At surface 1550' FNL, 1500' FEL, Section 22, T. 30 N., R. 8 W. At proposed prod. zone		9. WELL NO. 45		
14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE* 14 miles		10. FIELD AND POOL, OR WILDCAT Blanco Mesaverde		
15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. line, if any) 1500'	16. NO. OF ACRES IN LEASE 380	11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA Section 22, T. 30 N., R. 8 W.		
18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.	19. PROPOSED DEPTH 7650	12. COUNTY OR PARISH Sag Juan		
21. ELEVATIONS (Show whether DF, RT, GR, etc.) 6080' DF		13. STATE New Mexico		
22. APPROX. DATE WORK WILL START*				
23. PROPOSED CASING AND CEMENTING PROGRAM				
SIZE OF HOLE 6-1/4"	SIZE OF CASING 4-1/2	WEIGHT PER FOOT 11.6 and 10.5	SETTING DEPTH 7650	QUANTITY OF CEMENT See Below

Move in rig, set 7" retainer, test 7" casing for leaks and repair if necessary. Squeeze cement open hole interval, dress off cement plug to 10 feet below 7" casing shoe. Set 3 degree knuckle joint and drill with gas from 3226 to approximate T.D. of 7650'. Run 4-1/2" casing from surface to T.D. cementing with two stage collars; one 50' below base of Mesaverde section and upper 700' above 7" casing shoe with sufficient cement to cover all zones with third stage circulated to surface. Perforate and frac in Mesaverde and Dakota sections. Run packer for zone separation. Run 2-1/16" EUE tubing and complete well with Dakota producing through tubing and Mesaverde through tubing-casing annulus.

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: **J. H. WATKINS** TITLE **District Office Supervisor** DATE **10-29-64**

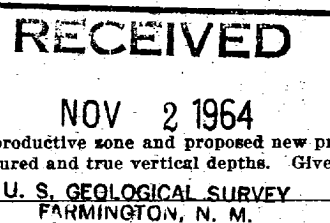
(This space for Federal or State office use)

PERMIT NO. _____ APPROVAL DATE _____

APPROVED BY _____ TITLE _____

CONDITIONS OF APPROVAL, IF ANY:

*See Instructions On Reverse Side



Instructions

General: This form is designed for submitting proposals to perform certain well operations, as indicated, on all types of lands and leases for appropriate action by either a Federal or a State agency, or both, pursuant to applicable Federal and/or State laws and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local, area, or regional procedures and practices, either are shown below or will be issued by, or may be obtained from, the local Federal and/or State office.

Item 1: If the proposal is to redrill to the same reservoir at a different subsurface location or to a new reservoir, use this form with appropriate notations. Consult applicable State or Federal regulations concerning subsequent work proposals or reports on the well.

Item 4: If there are no applicable State requirements, locations on Federal or Indian land should be described in accordance with Federal requirements. Consult local State or Federal office for specific instructions.

Item 14: Needed only when location of well cannot readily be found by road from the land or lease description. A plat, or plats, separate or on this reverse side, showing the roads to, and the surveyed location of, the well, and any other required information, should be furnished when required by Federal or State agency offices.

Items 15 and 18: If well is to be, or has been directionally drilled, give distances for subsurface location of hole in any present or objective production zone.

Item 22: Consult applicable Federal or State regulations, or appropriate officials, concerning approval of the proposal before operations are started.