

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

## APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK <b>DRILL</b> <input checked="" type="checkbox"/> <b>DEEPEN</b> <input checked="" type="checkbox"/> <b>PLUG BACK</b> <input type="checkbox"/>			5. LEASE DESIGNATION AND SERIAL NO. SF 078116
b. TYPE OF WELL OIL WELL <input type="checkbox"/> GAS WELL <input checked="" type="checkbox"/> OTHER <input type="checkbox"/> SINGLE ZONE <input type="checkbox"/> MULTIPLE ZONE <input checked="" type="checkbox"/>			6. IF INDIAN, ALLOTTEE OR TRIBE NAME
2. NAME OF OPERATOR Tenneco Oil Company			7. UNIT AGREEMENT NAME
3. ADDRESS OF OPERATOR Box 1714, Durango, Colorado			8. FARM OR LEASE NAME Florance
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)* At surface 990' FNL 990' FEL At proposed prod. zone same			9. WELL NO. 2
14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE* Approximately 10 miles			10. FIELD AND POOL, OR WILDCAT Blanco MV & Basin Dakota
10. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any)			11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA Sec. 20, T30N, R9W
16. NO. OF ACRES IN LEASE 320			12. COUNTY OR PARISH San Juan
17. NO. OF ACRES ASSIGNED TO THIS WELL 320			13. STATE N.M.
18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.			20. ROTARY OR CABLE TOOLS Rotary
21. ELEVATIONS (Show whether DF, RT, GR, etc.) 5980 GR			22. APPROX. DATE WORK WILL START* August 3, 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	11.6#	7087	2 stages - 200 sacks, 1st stage
				2nd stage - sufficient to
				circulate cement to surface.

Rig up rotary rig - 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' below 7" casing shoe, set 3 deg. knuckle jt. and drill w/gas from TD 5130 to approximate TD of 7087. Run 4-1/2" casing from surface to TD. Cement w/2 stage collar approximately 500' above top of Mesaverde section. 2nd stage cementing to have sufficient volume to circulate to surface. Perforate and frac Mesaverde and Dakota sections, run packer for zone separation, run tubing for Dakota production 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  
HAROLD C. NICHOLS  
SIGNED H. C. Nichols TITLE Senior Production Clerk DATE Aug. 2, 1965  
(This space for Federal or State office use)

PERMIT NO. \_\_\_\_\_ APPROVAL DATE \_\_\_\_\_

APPROVED BY CCM  
CONDITIONS OF APPROVAL, IF ANY:

*Used C110 on Dakota  
for gas*

\*See Instructions On Reverse Side

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