

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

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

1a. TYPE OF WORK DRILL <input checked="" type="checkbox"/> DEEPEN <input type="checkbox"/> PLUG BACK <input type="checkbox"/>			5. LEASE DESIGNATION AND SERIAL NO. USA-SF-077112	
b. TYPE OF WELL OIL WELL <input type="checkbox"/> GAS WELL <input checked="" type="checkbox"/> OTHER <input type="checkbox"/> SINGLE ZONE <input checked="" type="checkbox"/> MULTIPLE ZONE <input type="checkbox"/>			6. IF INDIAN, ALLOTTEE OR TRIBE NAME	
2. NAME OF OPERATOR Tenneco Oil Company			7. UNIT AGREEMENT NAME	
3. ADDRESS OF OPERATOR 720 South Colorado Blvd, Denver, CO 80222			8. FARM OR LEASE NAME Lackey	
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)* At surface 1475 FNL, 1450 FEL At proposed prod. zone			9. WELL NO. 1	
14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE* See point 1b of Surface Use Plan			10. FIELD AND POOL OR WILDCAT Dakota	
15. 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. 23, T28N, R9W	
16. NO. OF ACRES IN LEASE			12. COUNTY OR PARISH San Juan	
17. NO. OF ACRES ASSIGNED TO THIS WELL 320			13. STATE New Mexico	
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.) 6189 G.L.			22. APPROX. DATE WORK WILL START* February 1979	

## PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
13-3/4"	9-5/8"	36#	+ 250	Sufficient to circulate to surface.
7-7/8"	4 1/2"	10.5#	7230'	Sufficient to circulate to surface.

The geologic name of the surface formation is Tertiary San Jose.

## 83. Estimated Formation Tops

Fruitland	+ 2375'
Pictured Cliffs	+ 2680'
Cliffhouse	+ 4350'
Menefee	+ 4390'
Point Lookout	+ 4950'
Mancos	+ 5060'
Gallup	+ 6120'
Dakota	+ 6990'
Morrison	+ 7270'

Run 9-5/8" OD K-55 new casing to 250' and circulate cement to surface. Drill 8-3/4" hole to + 2400'. If no gas or water flow, reduce hole to 7-7/8" and drill to T.D. Run 4 1/2" OD, K-55 new casing to + 6870' with cement in two stages. Set DV tool at + 4000' and circulate cement to surface. Well head will be an API approved 10" type.

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. BOP's, drills, and tests will be recorded in the IADC Drilling report. They shall be checked every 24 hours. All rig equipment will be tested to above BOE ratings.

0-250' Native solids with sufficient viscosity to clean hole and run casing 0-2600' water and Benex. 2600-T.D. low solids, weight 9.0 ppg water loss 15cc. quantities will vary with condition.

## Auxiliary Equipment

- Kelly cock will be in use at all times.
- Stabbing valve to fit drill pipe will be present on floor at all times.
- Mud monitoring will be visual, no abnormal pressures are anticipated in this area.
- Floats at bits.
- 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.
- Rotating head will be used while drilling with gas.

No cores will be taken. 30' samples - surface to 6000' and 10' samples 6000' to T.D.

GR-FDC-CNL-Caliper-T.D. to base of Mesa Verde. GR-Induction SP-SN T.D. to surface casing.

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

The drilling of this well will take approximately ten days. The gas is not yet contracted.

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 Q. Q. Myers TITLE Div. Production Manager DATE 11-10-78

(This space for Federal or State office use)

PERMIT NO. ok 3rd APPROVAL DATE \_\_\_\_\_

**NEW MEXICO OIL CONSERVATION COMMISSION  
WELL LOCATION AND ACREAGE DEDICATION PLAT**

Form C-102  
Supersedes C-128  
Effective 1-1-65

All distances must be from the outer boundaries of the Section.

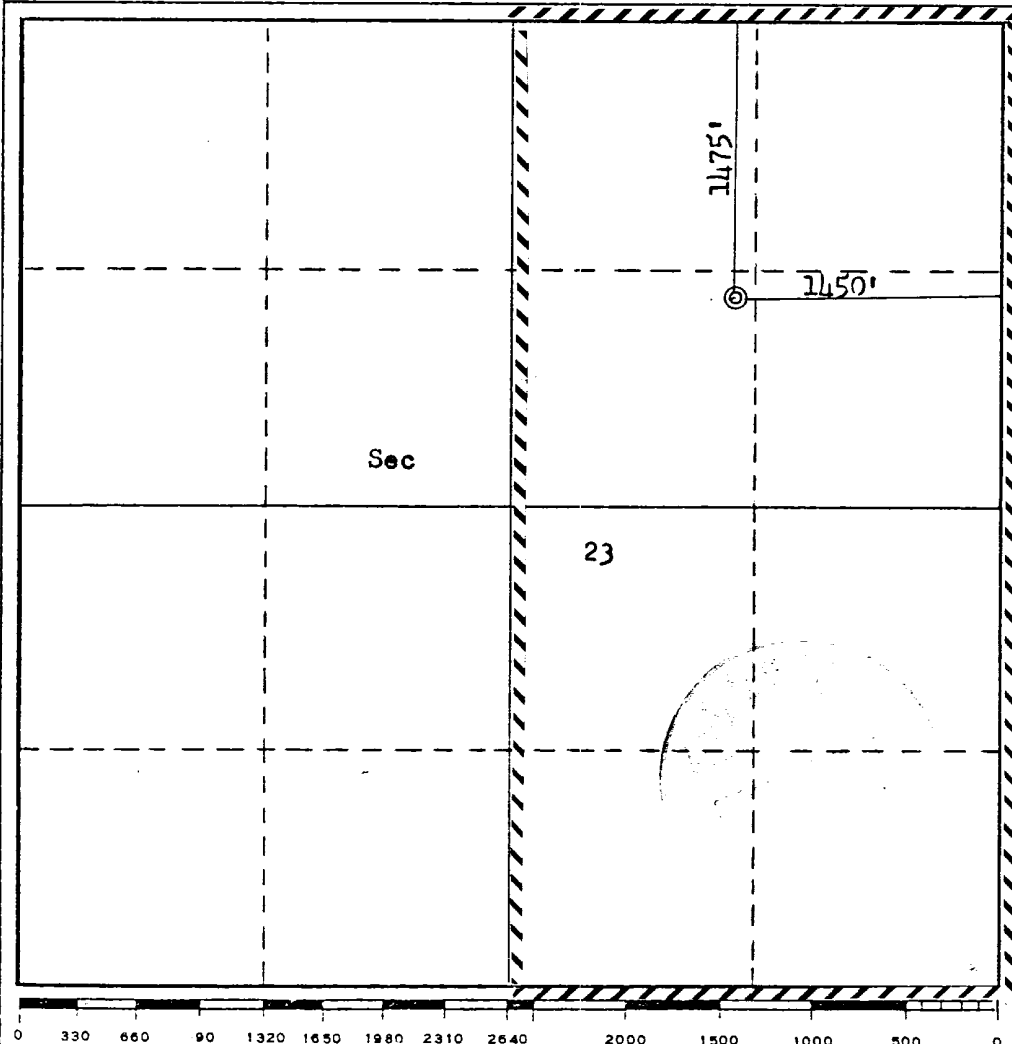
Operator <b>TENNECO OIL COMPANY</b>			Lease <b>LACKEY</b>		Well No. <b>1</b>
Unit Letter <b>G</b>	Section <b>23</b>	Township <b>28N</b>	Range <b>9W</b>	County <b>San Juan</b>	
Actual Footage Location of Well: <b>1475</b> feet from the <b>North</b> line and <b>1450</b> feet from the <b>East</b> line					
Ground Level Elev. <b>6189</b>	Producing Formation <b>Dakota</b>		Pool <b>Basin Dakota</b>		Dedicated Acreage: <b>320</b> Acres

1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling, etc?

☐ Yes ☐ No If answer is "yes," type of consolidation \_\_\_\_\_

If answer is "no," list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.) \_\_\_\_\_

No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commission.



**CERTIFICATION**

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

Name J. A. Rush  
Position Environmental Coordinator  
Company Tenneco Oil Company  
Date November 10, 1978

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

Date Surveyed October 31, 1978  
Registered Professional Engineer and of Land Surveyor  
Fred B. Kerr Jr.  
Certificate No. 3950