

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. NM 010989
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 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 S. Colorado Blvd., Denver, CO 80222		8. FARM OR LEASE NAME Fields
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)* At surface A At proposed prod. zone 1270' FNL, 1270' FEL Unit Letter A		9. WELL NO. 3
14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE* 7.5 Miles North of Aztec		10. FIELD AND POOL, OR WILDCAT 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. 28, T32N, R11W
16. NO. OF ACRES IN LEASE 2480		12. COUNTY OR PARISH San Juan
18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.		13. STATE New Mexico
19. PROPOSED DEPTH 7780		17. NO. OF ACRES ASSIGNED TO THIS WELL E/ 320.00
21. ELEVATIONS (Show whether DF, RT, GR, etc.) 6339 GR		20. ROTARY OR CABLE TOOLS Rotary
22. APPROX. DATE WORK WILL START* ASAP		

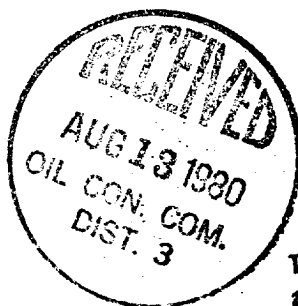
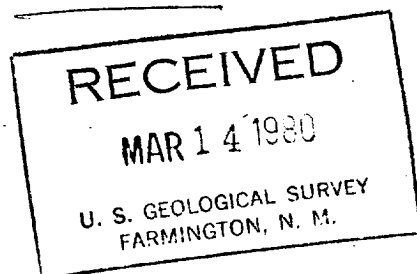
## 23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12 1/4"	9 5/8" new	36#, K-55	+ 250'	Circulate to surface
8 3/4"	7" new	23#, K-55	± 3600'	Circulate to surface
6 1/2"	4 1/2" new	10.5#, 11.6#	± 7500'	Circulate through liner hanger

SEE ATTACHED

No abnormal temperatures, pressure or geologic hazards are expected.

THE GAS IS DEDICATED

This action is subject to administrative  
appeal pursuant to 30 GFR 2901

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 <u>M. L. Freeman</u> TITLE <u>Staff Production Analysis</u> DATE <u>3-7-80</u>	
(This space for Federal or State use)	
PERMIT NO. <u>AS AMENDED</u>	APPROVAL DATE
APPROVED BY <u>James F. Sims</u> TITLE	DATE
CONDITIONS OF APPROVAL, IF ANY AUG 12 1980 JAMES F. SIMS DISTRICT ENGINEER	

\*See Instructions On Reverse Side

NSC-1196

ch 3rd

## OIL CONSERVATION DIVISION

STATE OF NEW MEXICO

P. O. BOX 2088

SANTA FE, NEW MEXICO 87501

Form C-102  
Revised 10-1-78

All distances must be from the outer boundaries of the Section

Operator <b>TENNECO OIL</b>			Lease <b>FIELDS</b>		Well No. <b>3</b>
Unit Letter <b>A</b>	Section <b>28</b>	Township <b>32N</b>	Range <b>11W</b>	County <b>San Juan</b>	
Actual Footage Location of Well:					
1270 feet from the North line and		1270 feet from the East line			
Ground Level Elev. <b>6339</b>	Producing Formation <b>Dakota</b>	Pool <b>Basin Dakota</b>	Dedicated Acreage: <b>320.00</b> Acres		

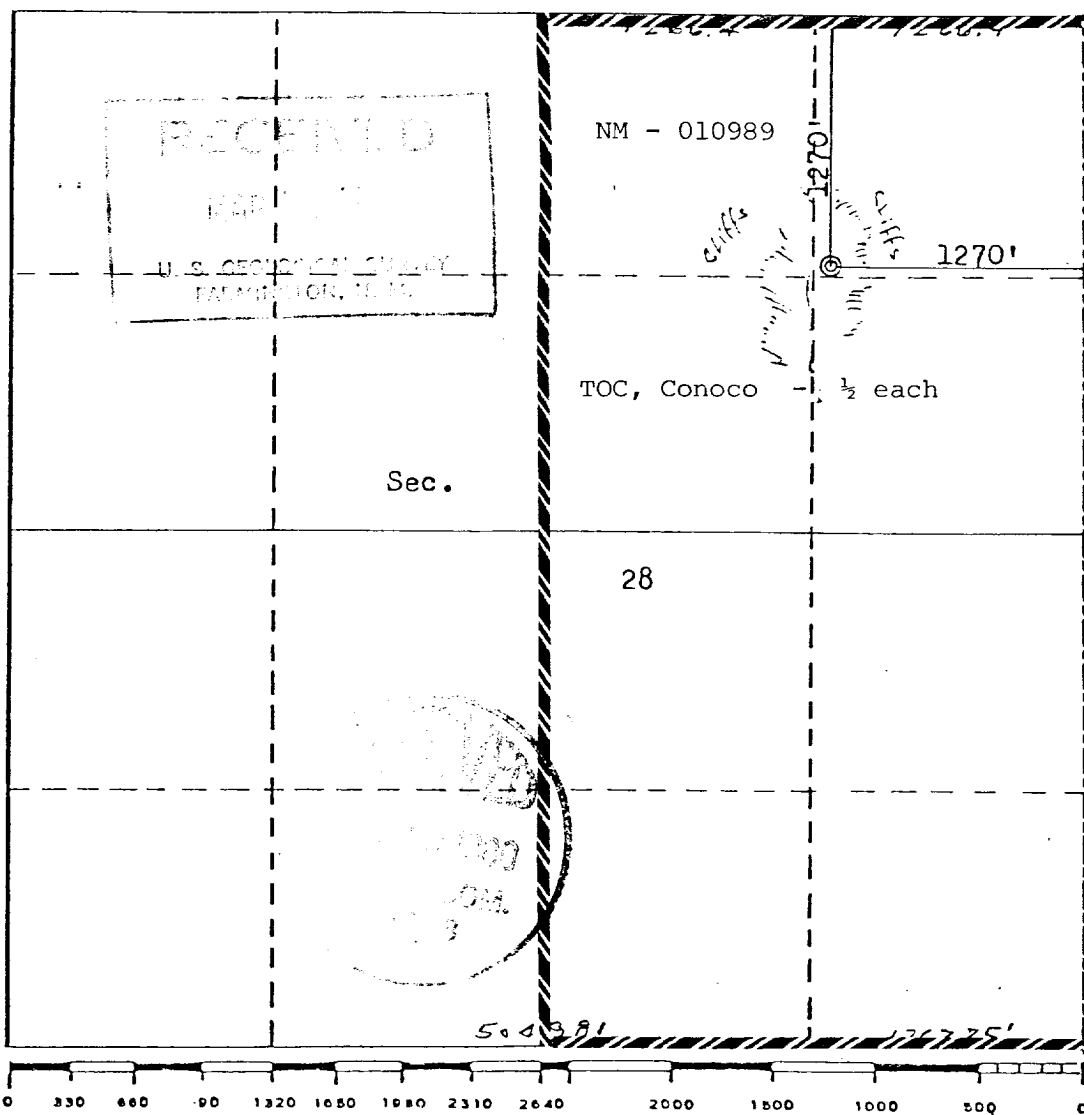
1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
3. If more than one lease of different ownership is 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.

5065.5'



## CERTIFICATION

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

Name  
**M. Lee Freeman**  
Position  
**Staff Production Analyst**  
Company  
**Tenneco Oil Company**  
Date  
**March 7, 1980**

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  
**February 6, 1980**  
Registered Professional Engineer and/or Land Surveyor  
**Fred B. Kerr Jr.**  
Certificate No.  
**3950**

TENNECO OIL COMPANY  
ROCKY MOUNTAIN DIVISION  
PENTHOUSE, 720 SOUTH COLORADO BOULEVARD  
DENVER, COLORADO 80222

DRILLING PROGRAM

DATE: January 30, 1980

LEASE: Fields

WELL NO.: 3

LOCATION: 1270' FNL, 1270' FEL  
Sec. 28, T 32N, R 11W  
San Juan County, New Mexico

FIELD: Basin Dakota

ELEVATION: 6380' Est. G.R.

TOTAL DEPTH: 7780'

PROJECTED HORIZON: Dakota

SUBMITTED BY: \_\_\_\_\_ DATE: \_\_\_\_\_

APPROVED BY: *[Signature]* DATE: 1/31/80

DSB/ms

CC: Administration  
DSB Well File  
Field File

ESTIMATED FORMATION TOPS

Ojo (Water)	1950'
Pictured Cliffs (Gas)	3040'
Lewis	3130'
Cliffhouse (Gas)	4680'
Menefee (Gas)	4830'
Point Lookout (Gas)	5280'
Mancos	5430'
Gallup (Oil/Gas)	6880'
Greenhorn	7410'
Dakota (Gas)	7530'
T.D.	7780'

SURFACE FORMATION: San Jose, Sandstone and shale.

## DRILLING, CASING, AND CEMENT PROGRAM

1. MIRURT.
2. Drill 12 1/4" hole to  $\pm$  250'.
3. Run 9 5/8", 36#, K-55, ST&C casing to  $\pm$  250'. Cement with sufficient volume to circulate cement to surface.
4. WOC a minimum of 12 hours. Riddle up BOE and test to 1000 psi for thirty minutes.
5. Reduce hole to 8 3/4". Drill to  $\pm$  3600'. Run 7", 23#, K-55, ST&C casing to  $\pm$  3600'. Cement with sufficient volume to circulate cement to surface.
6. NU BOE to gas drill.
7. Drill a 6 1/4" hole with gas to 7500'  $\pm$ .
8. Log as directed by the Wellsite Geological Engineer.
9. If productive, run 4 1/2" (3580') 10.5#/(800') 11.6#, K-55, ST&C liner. Cement with sufficient volume to circulate cement to top of liner.
10. If non-productive, plug and abandon as per U.S.G.S. requirements.
11. MORT.

### CASING PROGRAM

Surface:	250', 9 5/8", 36#, K-55, ST&C casing.
Intermediate:	3600', 7", 23#, K-55, ST&C casing.
Liner:	3580', 10.5#, K-55, ST&C casing. 800', 11.6#, K-55, ST&C casing.

0-250'	Native solids. Have sufficient viscosity to clean hole and run casing.
250'-3600'	Benex and water. Have sufficient viscosity to run casing.
3600'-T.D.	Gas.

EVALUATION

Cores and DST's:

No cores or DST's are anticipated.

Deviation Surveys:

1. Survey surface every 100'. Maximum allowable deviation at surface is 1°.
2. From surface to T.D., surveys must be taken every 500' or each trip, whichever is first. This may entail running the TOTCO on wireline. Record surveys on IADC Drilling Report. Maximum allowable change is 1° per 100'.

Samples: None.

Logs:

GR/IND: T.D. to Intermediate.

GR/FDC/CAL: T.D. to base Mesaverde

BLOWOUT EQUIPMENT

10" series-900 double ram hydraulic operated with closing unit and 40 gallon accumulator.

10" series-900 rotating head with 150 psi working pressure minimum, and 7" blowout line.

REFERENCE

Drilling reports for the past 24 hours will include depth, footage, time distribution, activity breakdown, mud properties, bit record, bottom hole assembly, daily and cumulative mud costs, plus any other pertinent information, will be called into Tenneco Oil Company, Denver, Colorado, between 7:30 a.m. and 8:00 a.m.

1. 303-758-7130 (Office) Don Barnes  
303-758-7287 (Office) Don Barnes' private line, Monday-Friday (before 7:45 a.m.)  
303-936-0704 (Home) Don Barnes, weekends and holidays.
2. George Ramsey (Home) 303-771-5154.
3. John Owen (Home) 303-795-0221.

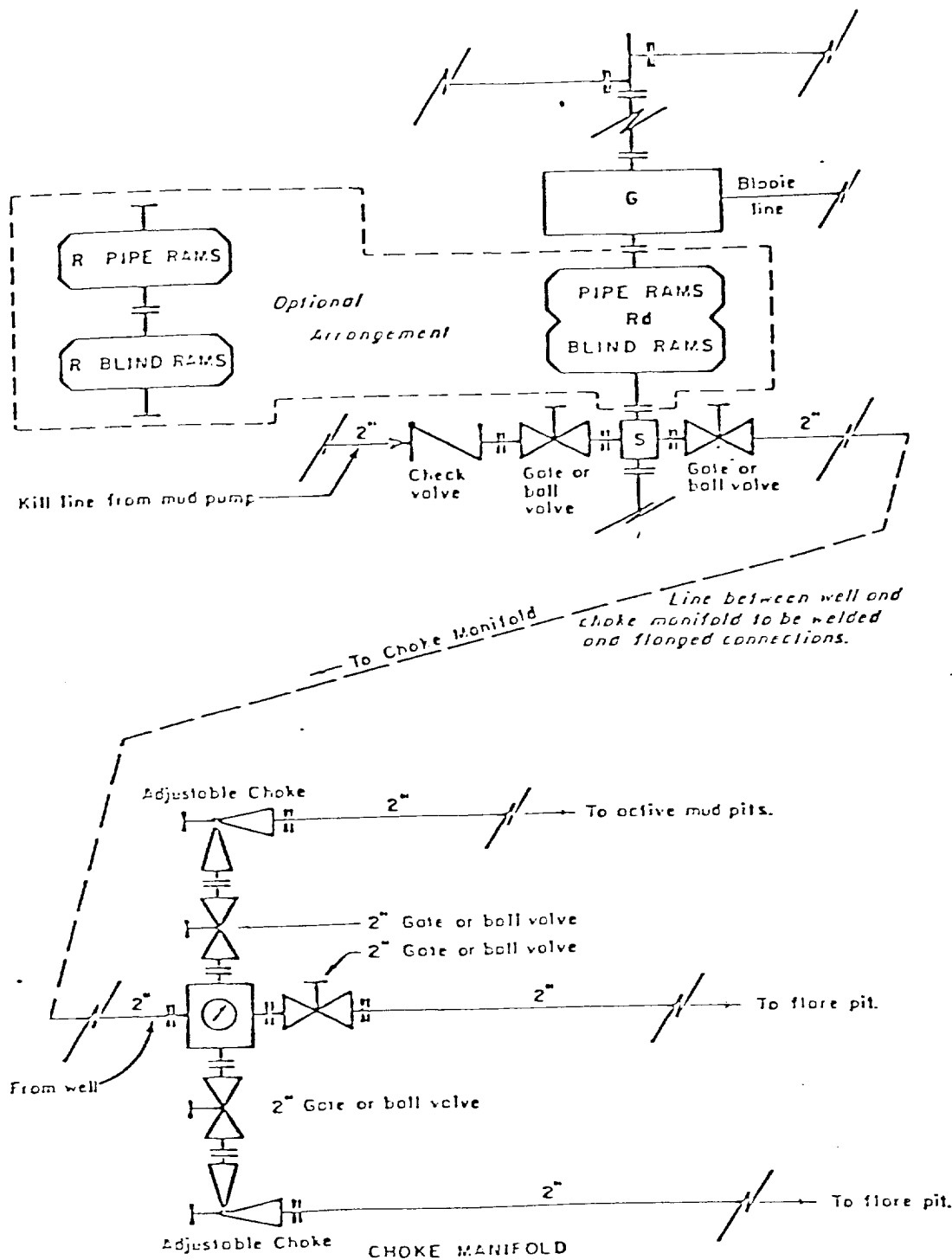
The yellow sheet of the IADC Report is to be filled out completely. The original copy of the drilling time recorder, and copies of any invoices from this well, signed and received for Tenneco Oil Company, will be mailed daily to:

TENNECO OIL COMPANY  
ROCKY MOUNTAIN DIVISION  
PENTHOUSE, 720 SOUTH COLORADO BOULEVARD  
DENVER, COLORADO 80222

ATTENTION: Drilling Department

IN CASE OF EMERGENCY, NOTIFY THE FOLLOWING:

1. Mr. Don Barnes, Division Drilling Engineer.
2. Mr. George E. Ramsey, Jr., Drilling Engineers Supervisor
3. Mr. John W. Owen, Project Drilling Engineer.
4. Mr. Mike Lacey, Division Production Manager (Home 303-979-0509).



All equipment to be 3,000 psi working pressure except as noted.

- Rd Double ram type preventer with two sets of rams.
- R Single ram type preventer with one set of rams.
- S Drilling spool with side outlet connections for choke and kill lines.
- G Rotating head 150 psi working pressure minimum

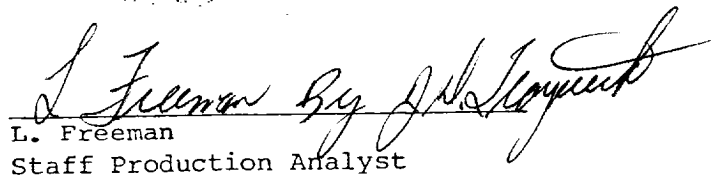
#### ARRANGEMENT C

TENNECO OIL COMPANY  
 ROCKY MOUNTAIN DIVISION  
 REQUIRED MINIMUM  
 BLOWOUT PREVENTER AND  
 CHOKE MANIFOLD



1. Existing Road - Please refer to Map No. 1 which shows the existing roads. New roads which will be required have been marked on this map. All existing and new roads will be properly maintained during the duration of this project.
2. Planned Access Roads - Please refer to Map No. 1. The grade of the access roads will be consistent with that of the local terrain. The road surface will not exceed twenty feet (20') in width. Upon completion of the project, the access road will be adequately drained to control soil erosion. Drainage facilities may include ditches, water bars, culverts or any other measure deemed necessary by trained Company personnel to insure proper drainage. Gates and/or cattleguards will be installed if necessary.
3. Location of Existing Wells - Please refer to Map No. 2.
4. Location of Tank Batteries, Production Facilities, and Production Gathering and Service Lines - Please refer to Maps No. 1 and No. 2. Map No. 2 shows the existing roads and new proposed access roads. All known production facilities are shown on these two maps.
5. Location and Type of Water Supply - Water for the proposed project will be obtained from a private source.
6. Source of Construction Materials - No additional materials will be required to build either the access road or the proposed location.
7. Methods of Handling Waste Materials - All garbage and trash materials will be put into a burn pit shown on the attached Location Plat No. 1. When clean-up operations are begun on the proposed project, the burn pit with its refuse will be buried to a depth of at least three feet (3'). A latrine, the location of which is also shown on Plat No. 1. will be provided for human waste. If large amounts of liquids are left in the reserve pit after completion of the project, the pit will be fenced until the liquids have had adequate time to dry. The location clean-up will not take place until such time as the reserve pit can be properly covered over to prevent run-off from carrying any of these materials into the watershed. No earthen pit will be located on natural drainage; all earthen pits will be so constructed as to prevent leakage from occurring.

8. Ancillary Facilities - No camps or airstrips will be associated with this project.
9. Wellsite Layout - Please refer to the attached Plat No. 1.
10. Plans for Restoration of the Surface - After completion of the proposed project the location will be cleaned and leveled. The location will be left in such a condition that will enable reseeding operations to be carried out. Seed mixture as designated by the responsible government agency will be used. The reseeding operation will be performed during the time period set forth by the regulatory body. The location production equipment will be painted as designated by the responsible government agency.
11. Other Information - The proposed site is located above Kiffen Canyon on a broken mesa tops with many erosional gullies. the soil is sandy clay supporting pinon, juniper, various shrubs.
12. Operator's Representative -  
SEE DRILLING PROGNOSIS
13. Certification - I hereby certify that I, or persons under my direct supervision, have inspected the proposed drillsite and access route; that I am familiar with the conditions which presently exist; that the statements mad in this plan are, to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed by Tenneco Oil Company Company and its contractors and sub-contractors in conformity with this plan and the terms and conditions under which it is approved.

  
L. Freeman  
Staff Production Analyst

Location Profile for  
TENNECO OIL #3 FIELDS  
12701FNL 12701FEL Sec 28-T32N-R11W San Juan County, New Mexico

Vicinity Map for  
TENNECO OIL COMPANY #3 FIELDS  
1270'FNL 1270'FEL Sec 28-T32N-R11W  
SAN JUAN COUNTY, NEW MEXICO

4097000m N.

4096

29

4091

4090

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4088

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4086

4085

4084

4083

T 31 N

T 30 N

Cut 1

