

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

720 South Colorado Blvd., Denver, Colorado 80222

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

At surface ~~1100 FNL~~ ~~1120 FNL~~At proposed prod. zone ~~1115/N~~ ~~870/W~~

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

2.9 miles north east of LaPlanta New Mexico

## 15. DISTANCE FROM PROPOSED\*

LOCATION TO NEAREST  
PROPERTY OR LEASE LINE, FT.  
(Also to nearest drlg. unit line, if any)

## 18. DISTANCE FROM PROPOSED LOCATION\*

TO NEAREST WELL, DRILLING, COMPLETED,  
OR APPLIED FOR, ON THIS LEASE, FT.

## 16. NO. OF ACRES IN LEASE

2510.69

## 19. PROPOSED DEPTH

7130

17. NO. OF ACRES ASSIGNED  
TO THIS WELL

N/320 + A/320

## 20. ROTARY OR CABLE TOOLS

Rotary

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

5923 GR

## 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"	36#	±250	Circulate to surface
8 3/4"	7"	23#	±5000	Cement in two stages
6 1/4"	4 1/2"	10.5# & 11.6#	±7130	Circulate to liner top

See Attached.

The gas is dedicated

This action is subject to administrative  
appeal pursuant to 30 CFR 2901ALL OPERATIONS AUTHORIZED ARE  
SUBJECT TO COMPLIANCE WITH ATTACHED  
GENERAL REQUIREMENTS

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

M. L. Freeman

TITLE

Staff Production Analyst

DATE

June 3, 1980

(This space for Federal or State office use)

PERMIT NO.

APPROVED  
AS AMENDED

APPROVAL DATE

APPROVED BY

AUG 12 1980

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY

James F. Sims  
DISTRICT ENGINEER

\*See Instructions On Reverse Side

Hold C-104 for communication



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

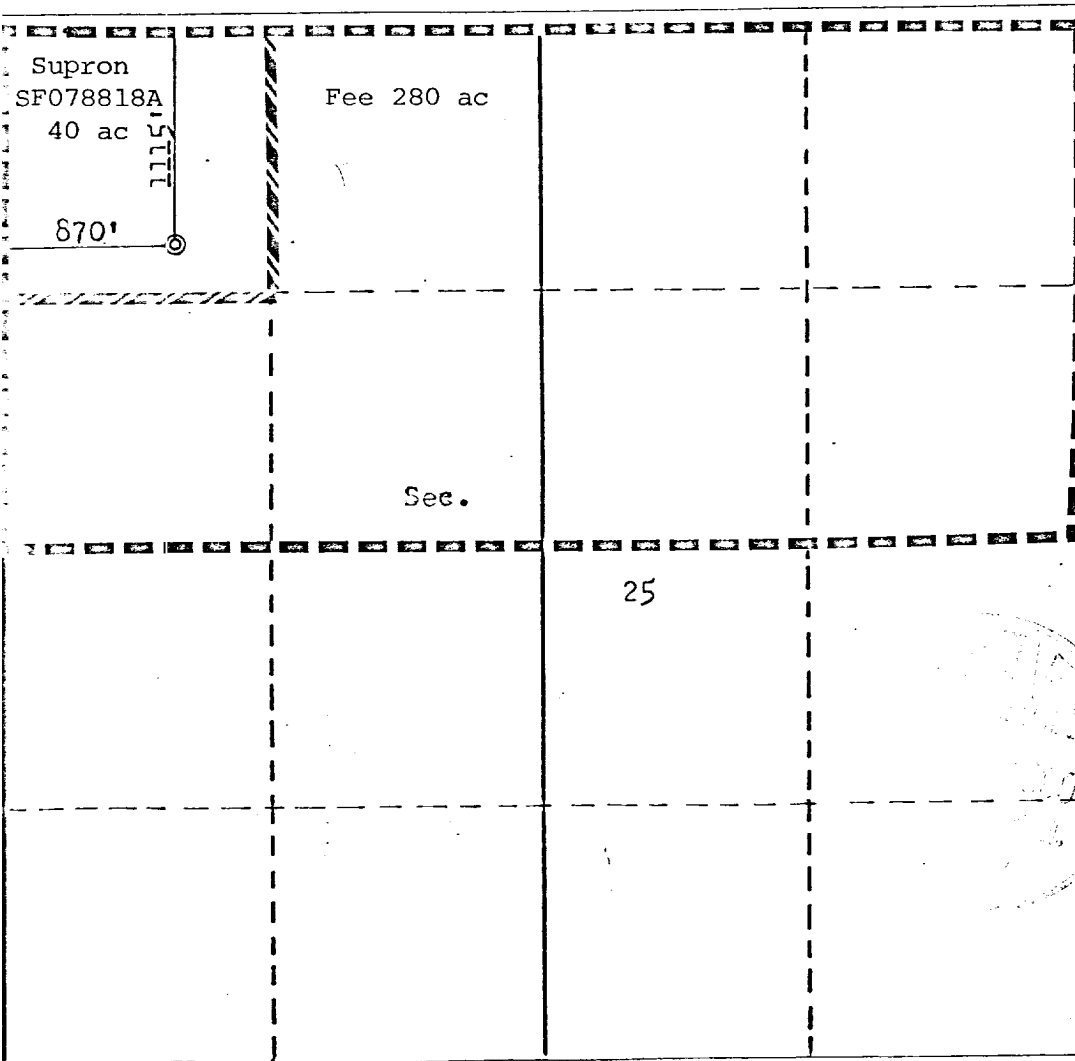
Operator <b>TENNECO OIL COMPANY</b>		Lease <b>6 MONTOKA 25</b>		Well No. <b>1M</b>	
Well Letter <b>D</b>	Section <b>25</b>	Township <b>32N</b>	Range <b>13W</b>	County <b>San Juan</b>	
Actual Footage Location of Well:					
1115 feet from the North		line and 870		feet from the West	
Ground Level Elev. <b>5927</b>	Producing Formation <b>Mesa Verde/Dakota</b>		Pool <b>Blanco M.V./Basin Dakota</b>		Dedicated Acreage: <b>320</b> Acres

1. Outline the acreage dedicated to the subject well by colored pencil or hatchure 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 communitization in progress

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

M. L. Freeman

Position

Staff Production Analyst

Company

Tenneco Oil Company

Date

July 2, 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

June 11, 1980

Registered Professional Engineer  
and/or Land Surveyor

Fred B. Kerr Jr.

Certificate No.

3950

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

## 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 Form 9-331-C for such proposals.)

1. oil ☐ gas ☒ other2. NAME OF OPERATOR  
Tenneco Oil Company3. ADDRESS OF OPERATOR  
720 So. Colorado Blvd., Denver, Colo. 80222

4. LOCATION OF WELL (REPORT LOCATION CLEARLY. See space 17 below.)

AT SURFACE: 1115 FNL, 870 FWL

AT TOP PROD. INTERVAL:

AT TOTAL DEPTH:

16. CHECK APPROPRIATE BOX TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

REQUEST FOR APPROVAL TO:

SUBSEQUENT REPORT OF:

TEST WATER SHUT-OFF ☐  
FRACTURE TREAT ☐  
SHOOT OR ACIDIZE ☐  
REPAIR WELL ☐  
PULL OR ALTER CASING ☐  
MULTIPLE COMPLETE ☐  
CHANGE ZONES ☐  
ABANDON\* ☐  
(other) move location☐  
☐  
☐  
☐  
☐  
☐  
☐  
☐

(NOTE: Report results of multiple completion or zone change on Form 9-330.)

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.)\*

Per the request of Mr. Montoya and the Bureau of Land Management we request permission to relocate approximately 250 feet West of the original requested site. An archaeological survey has been completed and the area inspected by the U.S.G.S. and B.L.M. personnel.

DRILLING OPERATIONS AUTHORIZED ARE  
SUBJECT TO COMPLIANCE WITH ATTACHED  
"GENERAL REQUIREMENTS"This action is subject to administrative  
appeal pursuant to 30 CFR 2901  
Set @ \_\_\_\_\_ Ft.

Subsurface Safety Valve: Manu. and Type \_\_\_\_\_

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

SIGNED M. L. Freeman TITLE Staff Production Analyst DATE July 2, 1980

(This space for Federal or State office use)

APPROVED BY \_\_\_\_\_  
CONDITIONS OF APPROVAL, IF ANY:

TITLE \_\_\_\_\_

DATE \_\_\_\_\_

Bruce W. Smith  
TJR

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

DRILLING PROCEDURE

DATE: May 6, 1980

LEASE: Montoya

WELL NO.: 25-1-M

LOCATION: 1100' FNL, 1120' FWL  
Sec. 25, T32N, R13W  
San Juan County, New Mexico

FIELD: Blanco-Mesaverde  
Basin, Dakota

ELEVATION: 5925 Est. Gr.

TOTAL DEPTH: 7130

PROJECTED HORIZON: Dakota-Mesaverde

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

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

JWO/ms

CC: Administrative (D. Traywick - 1)  
Well File (DSB - 1)  
Field File (3)

ESTIMATED FORMATION TOPS

OJO-Alamo		Water
Fruitland		Gas
Pictured Cliffs	2200	Gas
Lewis	2310	
Cliffhouse	3880	Gas
Menefee	4060	Gas
Point Lookout	4620	Gas
Mancos	4910	
Gallup	5380	Oil/Water
Greenhorn	6720	
Dakota	6850	Gas
TD	7130	

## DRILLING, CASING, AND CEMENT PROGRAM

1. MIRT
2. Drill 12 1/4" Surface hole to  $\pm 250'$ .
3. Run 9 5/8", 36#, K-55, ST&C casing. Set @  $\pm 250'$  TD. Cement with sufficient vol. using Class "B" with 2% Calcium Chloride to circ. cement to surface.
4. Wait on cement minimum of 12 hours. NUBOE. Pressure test to 600 psi  $\frac{1}{2}$  hour. Test high pressure manifold pipe and blind rams.
5. Reduce hole to 8 3/4" and drill to  $\pm 5000'$ .  
Note: Loss of circulation zones  $\pm 3880'$ ,  $\pm 4060'$ ,  $\pm 4620'$ , pre treat mud with  $\pm 20\%$  LCM material. Make every effort to have mud weight below 9ppg prior to penetrating the Mesa Verde Formation @ 3880'.
6. Run open hole logs from 5000' to surface as per Geological Department. See logging instructions.
7. TIH and cond. to run 7" casing. TOH laying down drill pipe and drill collars.
8. Install 7" rams. Run and Run 7" casing equipped with guide shoe, automatic fill float collar and DV tool. Run DV tool  $\pm 3600'$ . Run cement baskets above and below Point Lookout (4620'), Menefee (4060'), and Cliffhouse (3880'). Run centralizers to centralize bottom section of hole- across producing intervals- run cement basket above and below DV tool. Centralize above and below DV tool.
9. Cement in two stages. Cement volumes +20% excess are to be calculated from Caliper Logs.  
1st Stage: 50/50 Poz mix, 4% Gel.  
2nd Stage: 65/35 Poz mix, 6% Gel, Tail in w/ 50 sx neat.
10. Wait on cement 18 hours. NUBOE to gas drill. TIH with 6 1/4" Bit and drill DV tool and shoe joint. Displace water with N<sub>2</sub>, N<sub>2</sub> with Gas. Blow until well is Dusting. Drill to TD- with gas- Dakota Zone can get wet. TOH and lay down square DC before drilling Dakota Zone.
11. Run open hole logs as per Geological Department.
12. Run 4 1/2" Liner from TD to 7" casing. Be sure Liner is below bottom perforation of the Mesa Verde.
13. Cement with sufficient volume to circulate cement to the Liner top.
14. Load hole with water and reverse out excess cement.
15. TOH, LDDP, NDBOE, Install well head.
16. RD- MORT

### MJD PROGRAM

1. 0-250': Native Solids- 8.4- use sufficient viscosity to clean hole and run casing.
2. 250-<sup>+</sup>5000': Low Solids- 8.9 wt., 30/40 FU, W/L, 15cc
3. 5000-TD: Gas

### EVALUATION

#### Cores and DST's:

None Anticipated

#### Deviation Surveys:

Surface: Every 100'- maximum deviation not to exceed  $1\frac{1}{2}^{\circ}$ .

250-TD: 500'- or on trips. This may entail running survey on wire line.  
Maximum deviation  $1^{\circ}$  per 100'- not to exceed  $5^{\circ}$ .

#### Samples:

As per Geological

#### Logs:

SP - GR - Induction

FDC - CNL Density

### BLOWOUT EQUIPMENT

As per Federal requirements and also see Tenneco attached BOE- Program.

## REPORTS

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.

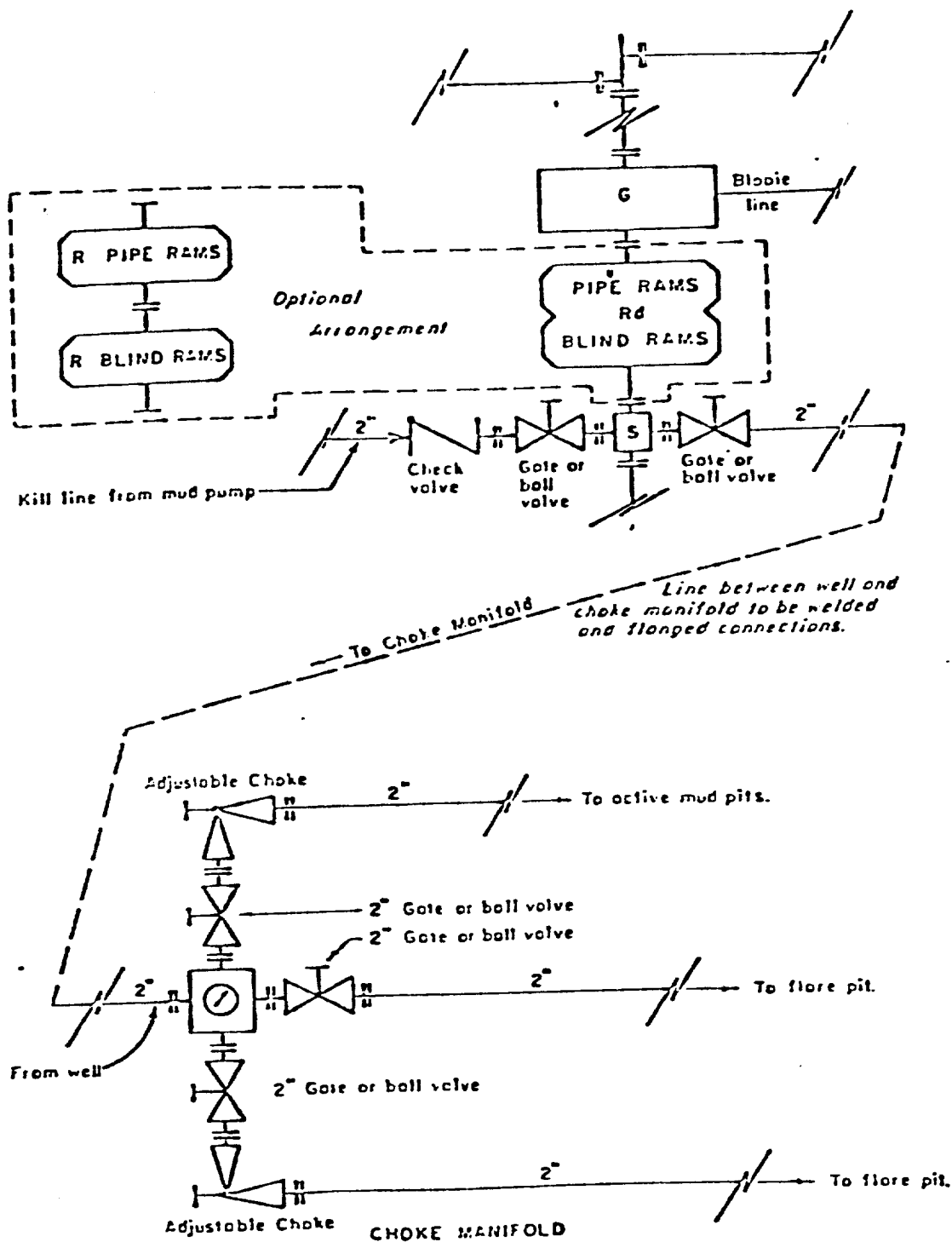
The yellow sheet of the IADC Report is to be filled out completely. The original copy of the drilling time recorder, and copies of any invoices from this well, signed and received for Tenneco Oil Company, will be mailed daily to:

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.

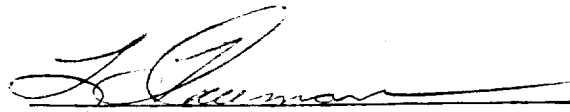
- Rd Double ram type preventer with two sets of rams.
- R Single ram type preventer with one set of rams.
- S Drilling spool with side outlet connections for choke and kill lines.
- G Rotating head 150 psi working pressure minimum

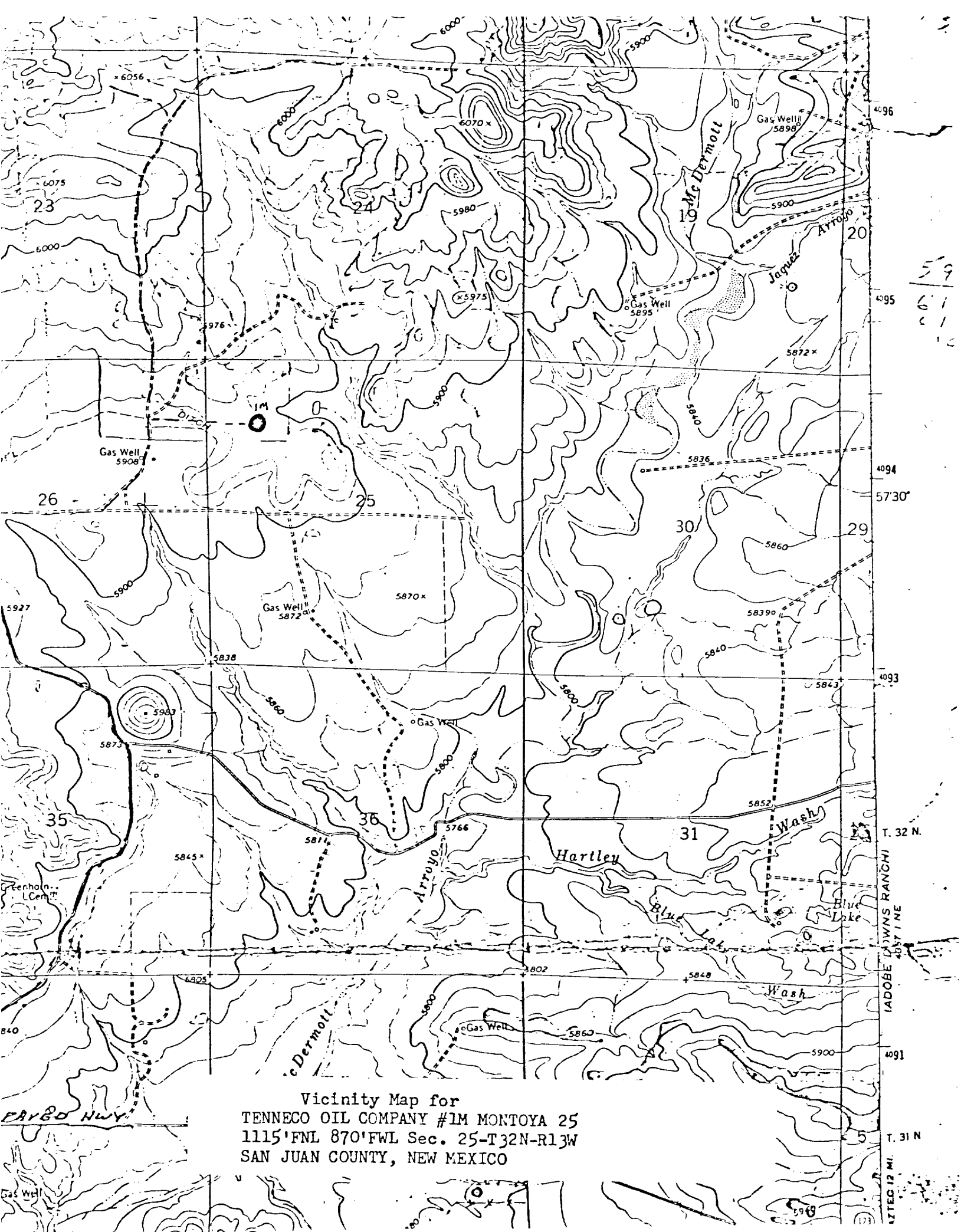
### ARRANGEMENT C

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 on the west side of McDermott arroyo 1½ miles north of Highway 173. The soil is sandy loam supporting sage and native grasses. The surface and minerals are held in public domain.
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 made 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 and its contractors and sub-contractors in conformity with this plan and the terms and conditions under which it is approved.

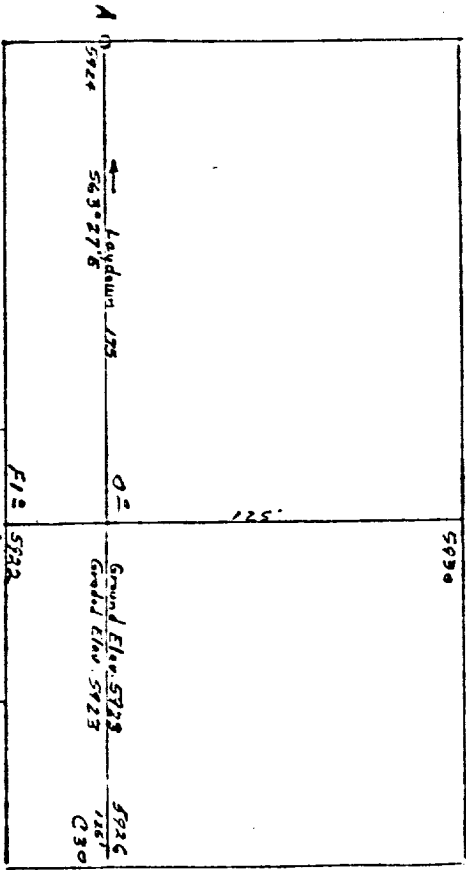
  
L. Freeman  
Staff Production Analyst



Vicinity Map for  
TENNECO OIL COMPANY #1M MONTOYA 25  
1115'FNL 870'FWL Sec. 25-T32N-R13W  
SAN JUAN COUNTY, NEW MEXICO

T. 32 N.  
T. 31 N.  
R. 13 W.  
ADOBÉ DOWNS RANCH  
485' E

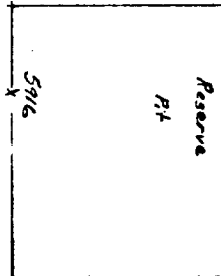
LOCATION FOLIO 107  
 TENNECO OIL COMPANY #1M MONTORA 25  
 1100' FNL 1120' FNL Sec. 25-732N-R13W-----SAN JUAN COUNTY, NEW MEXICO



Scale 1" = 50'

Vert. 1" = 40'      A-A'      Horiz. 1" = 100'

5930					
5920					
5910					



Vert. 1" = 40'      Horiz. 1" = 100'


8-8'

5930					
5920					
5910					


KERR LAND SURVEYING  
 Date: MAY 9, 1980

*[Signature]*

