

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

30-045-24279

## 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 S. Colorado Blvd., Denver, CO 80222

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)\*  
At surfaceN  
At proposed prod. zone 1090' FSL, 1475' FWL  
Unit Letter N

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

7 Miles North of Aztec

## 15. DISTANCE FROM PROPOSED\*

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

## 16. NO. OF ACRES IN LEASE

2480.00

18. DISTANCE FROM PROPOSED LOCATION\*  
TO NEAREST WELL, DRILLING, COMPLETED,  
OR APPLIED FOR, ON THIS LEASE, FT.

## 19. PROPOSED DEPTH

8130

17. NO. OF ACRES ASSIGNED  
TO THIS WELL

W 320.00

## 20. ROTARY OR CABLE TOOLS

Rotary

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

6455 GR

## 22. APPROX. DATE WORK WILL START\*

ASAP

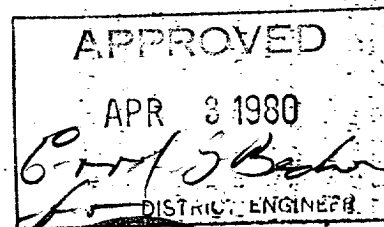
## 23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12 1/4"	9 5/8" 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#	8130'	Circulate through liner hanger

SEE ATTACHED

No abnormal temperature, pressure or geologic hazards expected.

THE GAS IS DEDICATED



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

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

APPROVED BY

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY:

ok Frank

NM000

\*See Instructions On Reverse Side

## OIL CONSERVATION DIVISION

STATE OF NEW MEXICO  
ENERGY AND MINERALS DEPARTMENT

P. O. BOX 2088

SANTA FE, NEW MEXICO 87501

Form C-107  
Revised 10-1-78

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

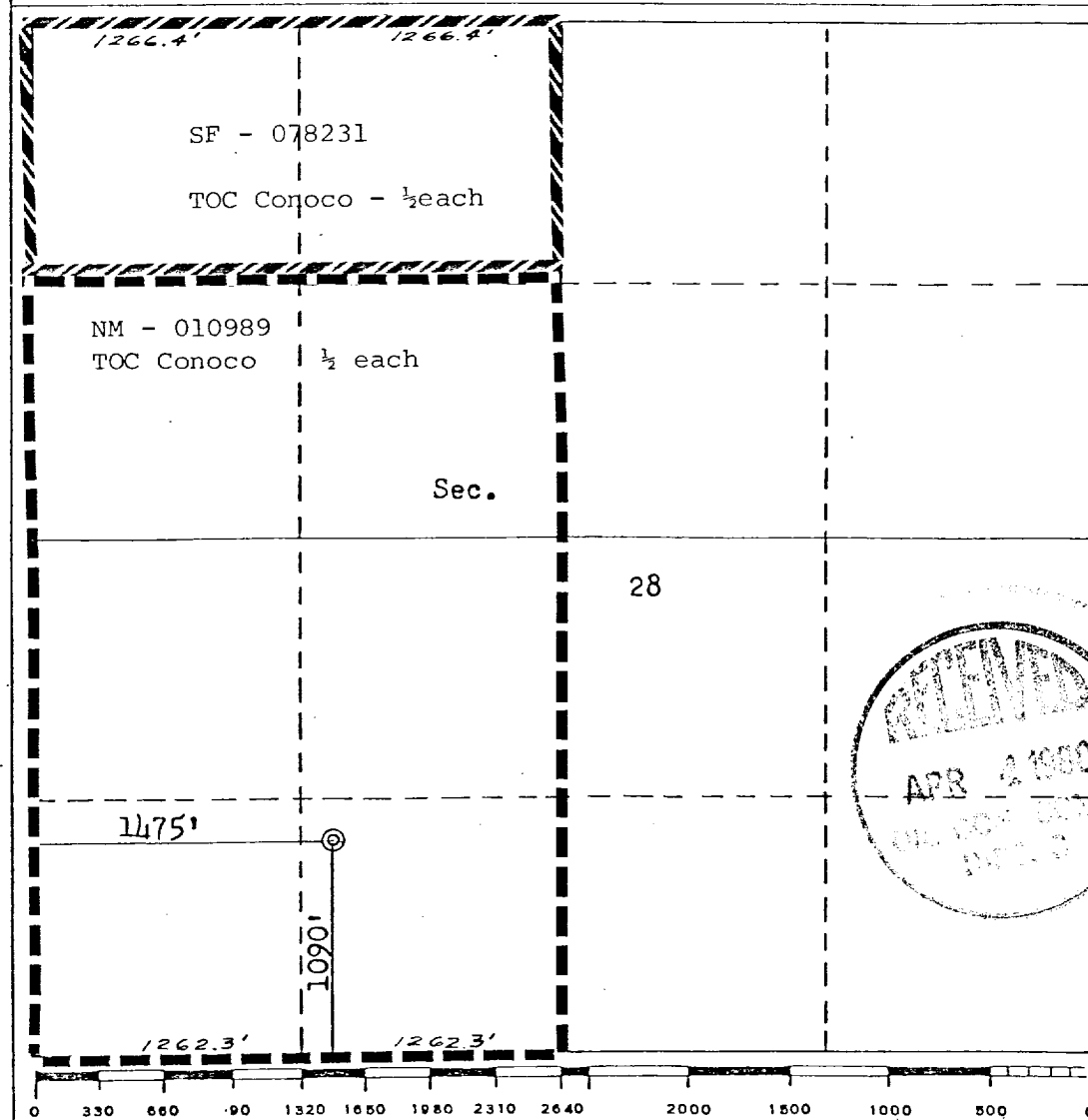
Operator <b>TENNECO OIL COMPANY</b>			Lease <b>FIELDS COM</b>		Well No. <b>4</b>
Unit Letter <b>N</b>	Section <b>28</b>	Township <b>32N</b>	Range <b>11W</b>	County <b>San Juan</b>	
Actual Footage Location of Well: <b>1090</b> feet from the <b>South</b> line and <b>1475</b> feet from the <b>West</b> line					
Ground Level Elev. <b>6455</b>	Producing Formation <b>Dakota</b>		Pool <b>Basin Dakota</b>		Dedicated Acreage: <b>W 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 Communitization

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. 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 4, 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 Com

WELL NO.: 4

LOCATION: 1090' FSL, 1475' FWL  
Sec. 28, T 32N, R 11W  
San Juan County, New Mexico

FIELD: Basin Dakota

ELEVATION: 6465', Est. K.B.

TOTAL DEPTH: 8130'

PROJECTED HORIZON: Dakota

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

DATE: \_\_\_\_\_

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

DATE: 1/31/80

DSB/ms

CC: Administration  
DSB Well File  
Field File

ESTIMATED FORMATION TOPS

Ojo (Water	2220'
Pictured Cliffs (Gas)	3170'
Lewis	3260'
Cliffhouse (Gas)	5120'
Menefee (Gas)	5180
Point Lookout (Gas)	5630'
Mancos	5780'
Gallup (Oil)	7230
Greenhorn	7760'
Dakota (Gas)	7880'
T.D.	8130'

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. Nipple 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#/(1150') 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', 4 1/2", 10.5#, K-55, ST&C casing. 1150', 4 1/2", 11.6#, K-55, ST&C casing.

## MUD PROGRAM

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 10'.
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 10' 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.

## 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.

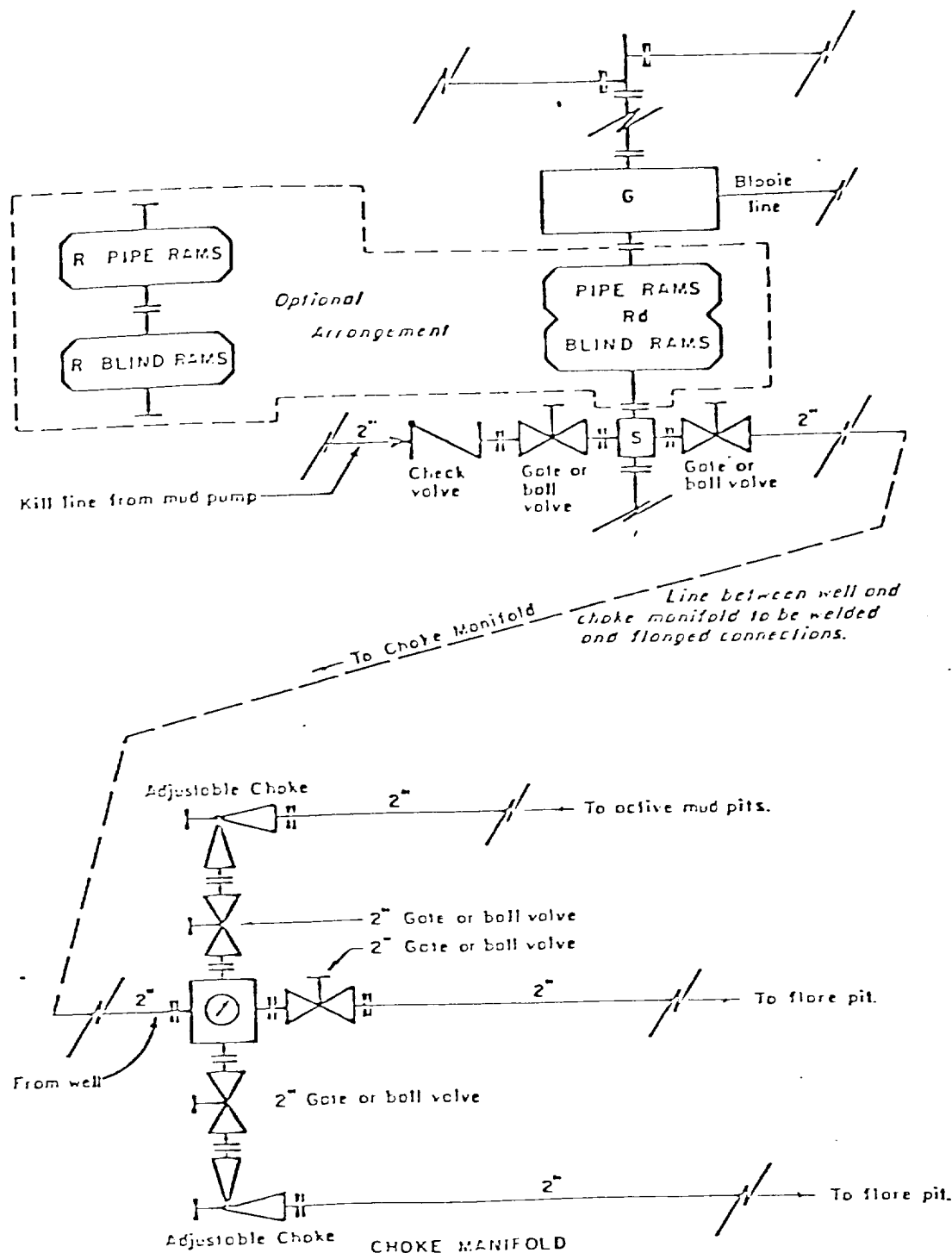
The yellow sheet of the IADC Report is to be filled out completely. The original copy of the drilling time recorder, and copies of any invoices from this well, signed and received for Tenneco Oil Company, will be mailed daily to:

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



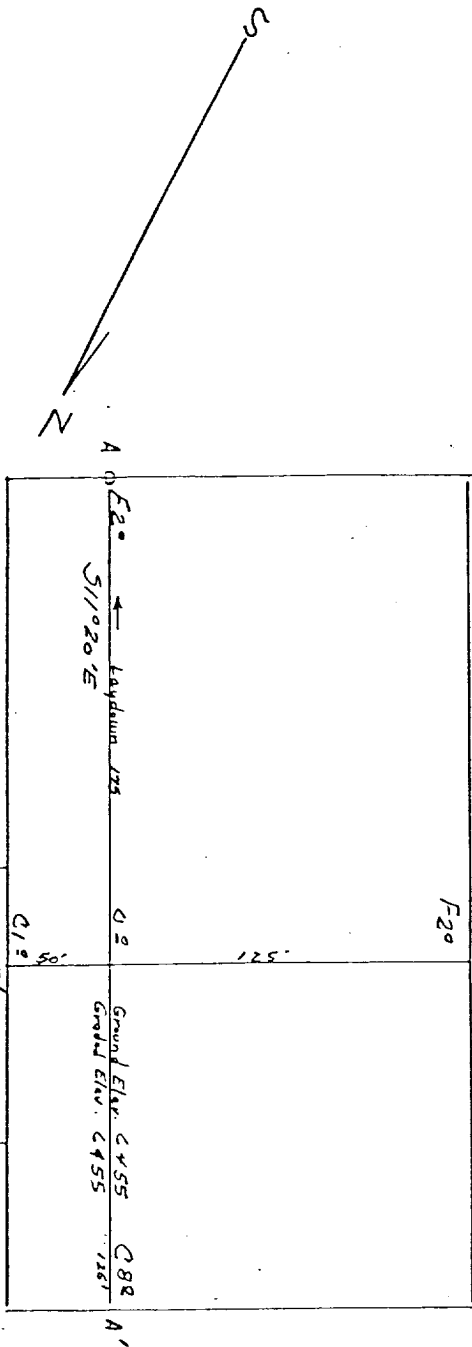
1. Existing Road - Please refer to Map No. 1 which shows the existing roads. The roads which will be required have been marked on this map. All existing and new roads will be properly maintained during the duration of this project.
2. Planned Access Roads - Please refer to Map No. 1. The grade of the 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. Location of Construction Materials - No additional materials will be required to build either the access road or the proposed location.
7. Handling of 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 located above Kiffen Canyon in an area of very broken topography. The soil is sandy clay supporting pinon, juniper, bitter brush and native grasses. The minerals and surface 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 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

No Road Needed

Location Profile for  
 TENNECO OIL COMPANY #4 FIELDS CO. #  
 1090 FSL 1175 FWL Sec 28-T32N-R11W San Juan County, New Mexico

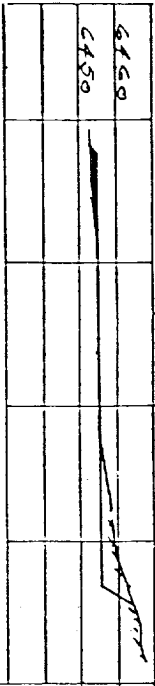


Scale: 1" = 50'

Vert. 1" = 40'

A-A' ±

Horiz. 1" = 100'



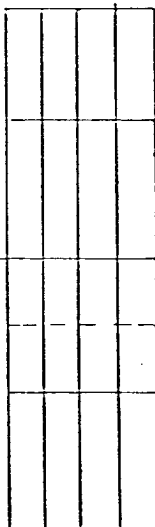
B-B' ±



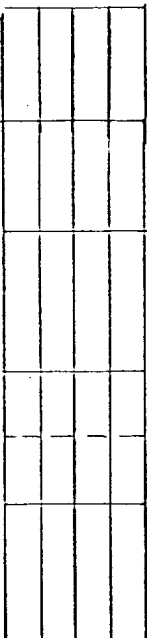
Vert. 1" = 40'

C-C' ±

Horiz. 1" = 100'



D-D' ±



KERR LAND SURVEYING  
 Date: 2/9/80

*[Signature]*

Vicinity Map for  
TENNECO OIL COMPANY #4 FIELDS COM  
1090' FSL 1475' FWL Sec 28-T32N-R11W  
SAN JUAN COUNTY, NEW MEXICO

