

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 S. Colorado Blvd., Denver, Colorado 80222

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

At surface

990 FSL, 990 FEL

At proposed prod. zone

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

10 miles South of Navajo Dam P.O.

## 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

160

17. NO. OF ACRES ASSIGNED  
TO THIS WELL

E 320.00

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

## 19. PROPOSED DEPTH

6670

## 20. ROTARY OR CABLE TOOLS

Rotary

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

575'

## 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	± 200'	150 sx class B CIRCULATE
8 3/4"	7" new	23# K-55	± 3800'	Circulate to surface
6 1/4"	4 1/2" new	10.5# K-55	± 6670'	Circulate to liner hanger

SEE ATTACHED

No abnormal temperatures, pressures, or geologic hazards are expected.

THE GAS IS DEDICATED

RECEIVED  
MAR 14 1980U. S. GEOLOGICAL SURVEY  
FARMINGTON, N. M.APPROVED  
AS AMENDED

MAY 21 1980

JAMES F. SIMS  
DISTRICT ENGINEERMAY 22 1980  
OIL CON. COM.  
DIST. 3

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. Lee Freeman

TITLE

Staff Production Analyst

DATE

March 7, 1980

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

APPROVED BY

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY:

\*See Instructions On Reverse Side

All distances must be from the outer boundaries of the Section

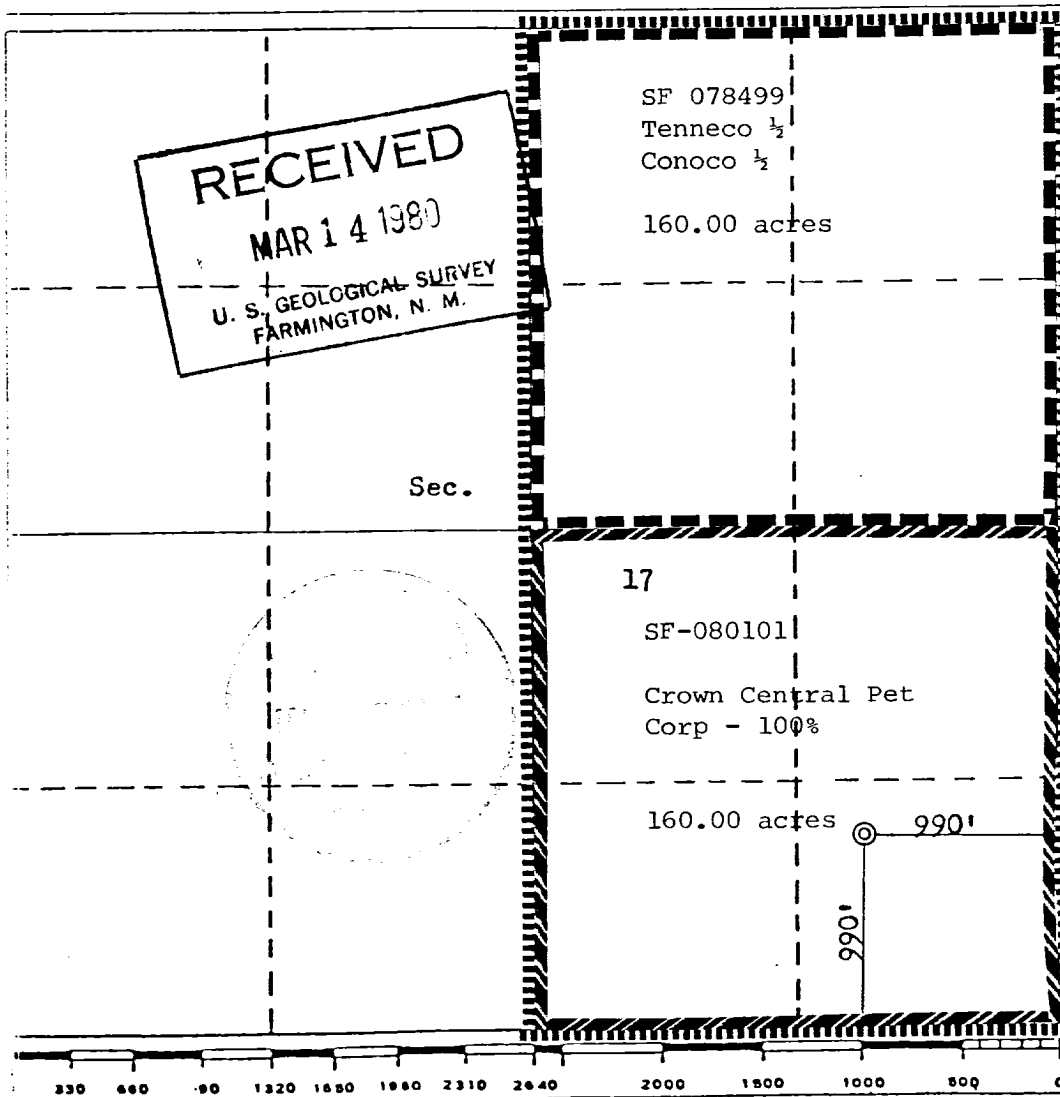
Operator <b>TENNECO OIL COMPANY</b>			Lease <b>TAPP COM</b>		Well No. <b>5</b>
Drill Letter <b>P</b>	Section <b>17</b>	Township <b>28N</b>	Range <b>8W</b>	County <b>San Juan</b>	
Actual Footage Location of Well: <b>990</b> feet from the <b>South</b> line and <b>990</b> feet from the <b>East</b> line					
Ground Level Elev. <b>5751</b>	Producing Formation <b>Dakota</b>		Pool <b>Basin Dakota</b>		Dedicated Acreage: <b>E 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.

*M. Lee Freeman*  
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  
December 7, 1979

Registered Professional Engineer and/or Land Surveyor

*Fred B. Kerr Jr.*  
Fred B. Kerr Jr.

Certificate No.  
3950

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

DRILLING PROCEDURE

DATE: December 6, 1979

LEASE: Tapp Com

WELL NO.: 5

LOCATION: 990' FSL, 990' FEL  
Sec. 17, T 28N, R 8W  
San Juan County, New Mexico

FIELD: Basin Dakota

ELEVATION: 5800' Est. G.L.

TOTAL DEPTH: 6670'

PROJECTED HORIZON: Dakota

SUBMITTED BY: Dale Kardesh DATE: 12/7/79

APPROVED BY: DeBame

DJK/ms

CC: Administration  
Well file  
Field File

ESTIMATED FORMATION TOPS

OJO Alamo	1150'	Water
Pictured cliffs	3130'	Gas
Lewis Shale	3280'	
Cliffhouse	3840'	Gas
Menefee	3970'	Gas
Point Lookout	4440'	Gas
Mancos	4620'	
Gallup	5610'	Gas
Greenhorn	6360'	
Dakota A	6480'	Gas
T.D.	6670'	

## DRILLING, CASING, AND CEMENT PROGRAM

1. MIRURT.
2. Drill a 12 1/4" hole to  $\pm$  200'.
3. RU and run 9 5/8", 36#, K-55, ST&C casing.
4. Cement with 150 sx Class "B" + 2% CaCl<sub>2</sub>.
5. WOC a minimum of 12 hours. Nipple up BOP's, choke manifold, and kill line. Pressure test rams, lines, and casing to 600 psi for 30 minutes. Record test on IADC Drilling Report.
6. Drill an 8 3/4" hole  $\pm$  500' into the Lewis Shale to 3800'. - 3800'
7. RU and run 7", 23#, K-55, ST&C casing to 3800'. - 3800'
8. Cement with sufficient volume to circulate cement to surface using 50/50 pozmix, 4% gel tailed by 150 sx of Class "B" + 2% CaCl<sub>2</sub>. Precede cement with a chemical preflush.
9. WOC a minimum of 18 hours. Pick up 3 1/2" drill string and drill to within 5' of shoe. Displace water with N<sub>2</sub> and soap. Drill shoe and 5' of formation.
10. Drill a 6 1/4" hole to T.D. 6670'
11. Log open hole as directed by G. E. Department.
12. RU and run 4 1/2", 10.5#/11.6#, K-55, LT&C liner to T.D. leaving 150' of overlap.
13. Set liner and cement with 50/50 pozmix, 2% gel tailed by 100 sx Class "B". Use a chemical preflush ahead of cement.
14. Reverse out excess cement, LDDP and install X-mas tree.
15. If well is non-productive, plug and abandon as per state requirements.
16. MORT.

## CASING PROGRAM

0-200'	9 5/8", 36#, K-55, ST&C
0-3800'	7", 23#, K-55, ST&C
3650'-6670'	(3020') 4 1/2", 10.5#, K-55, LT&C

## MUD PROGRAM

0-200 Native solids. Have sufficient viscosity to clean hole and run casing.  
200-3800 Benex and water. Have sufficient viscosity to run casing.  
3800-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:

10' samples 3200'-3800'. Insure we have penetrated Lewis Shale 500'.

### 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.)
2. 303-936-0704 (home) Don Barnes, weekends and holidays.
3. 303-795-0221 (home) John Owen, if Don Barnes is not available.

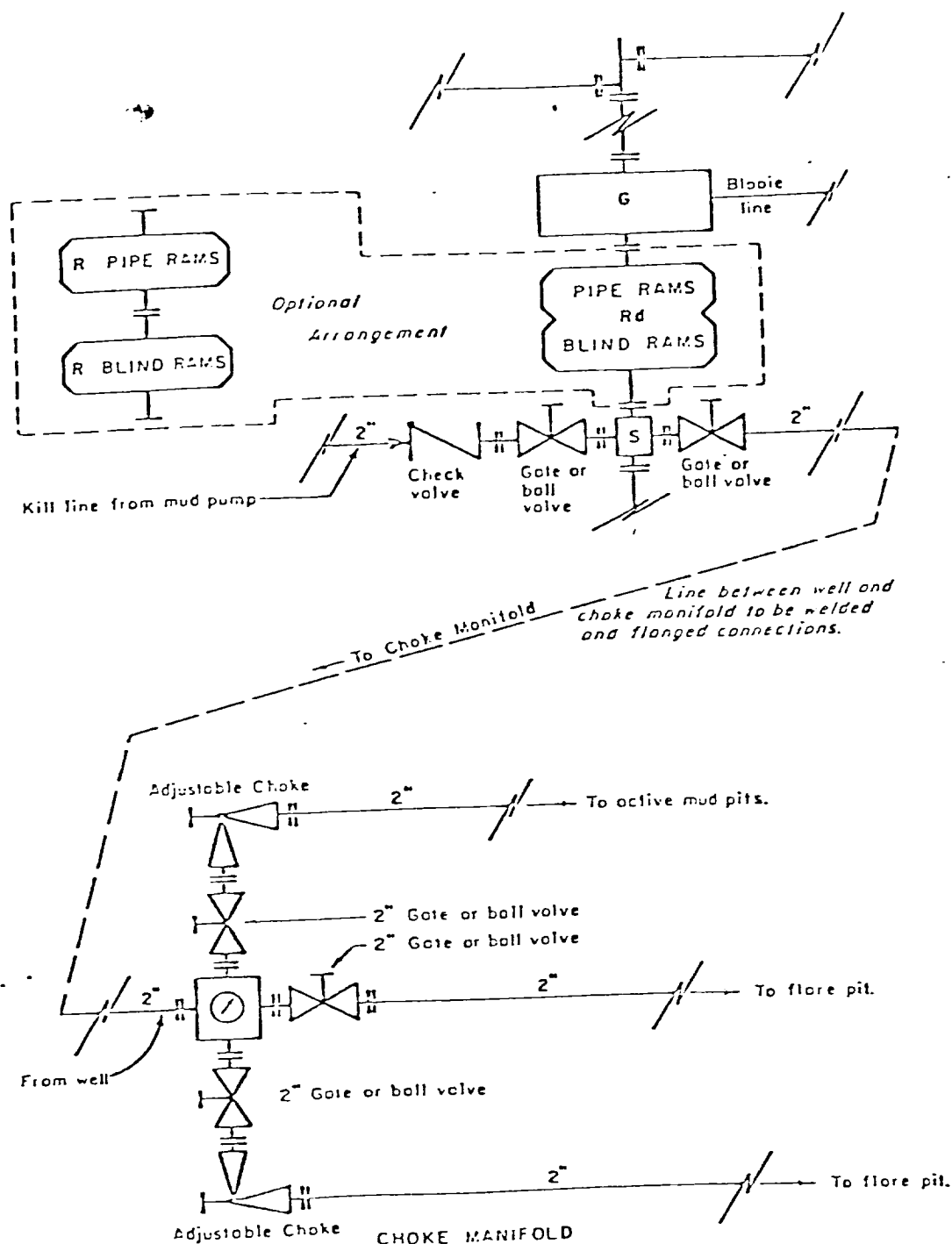
The yellow sheet of the IADC Report to be filled out completely, the original copy of the drilling time recorder, and copies of any invoices from this well, signed and received for Tenneco Oil Company will be mailed daily to:

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 - 303-936-0704
2. Mr. John Owen, Project Drilling Engineer - 303-795-0221
3. Mr. Mike Lacey, Division Production Manager - 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

J. MAGILL 10-26-70 EVI

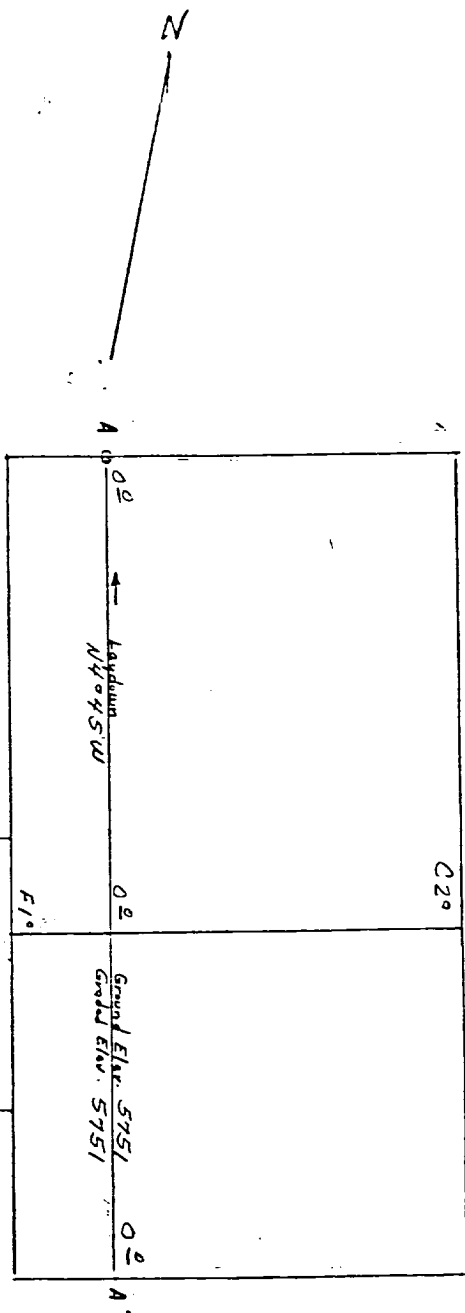


1. Existing Road - Please refer to Map No. 1 which shows the existing roads. New roads which will be required have been marked on this map. All existing and new roads will be properly maintained during the duration of this project.
2. Planned Access Roads - Please refer to Map No. 1. The grade of the 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 at the junction of Canyon Largo and Carrizo Creek. The topography is level with sandy soil. 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 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

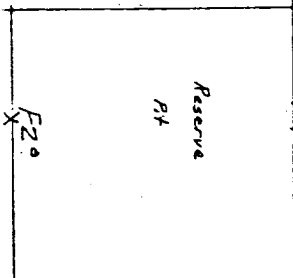


Vert. 1"=40'      A-A'      Horiz. 1"=100'

5750					
5740					

B-B'      E

5750					
5740					



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


D-D'      E


KERR LAND SURVEYING  
Date: December 7, 1979

# TENNECO OIL COMPANY

## CALCULATION SHEET

EXHIBIT

RILLING WELL SITE LAYOUT *TAPP Com 5*

*990 FSL, 990 FEL SEC 17, T28N, R8W*

DATE *1-17-80*

*Minimal Cuts; Fill, No New Road, Adjacent to AN Existing Location.*

