

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, CO 80222

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

At surface

890 FNL 1060 FWL

At proposed prod. zone

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

11 miles South SouthEast of Blanco, N.M.

15. DISTANCE FROM PROPOSED*

LOCATION TO NEAREST
PROPERTY OR LEASE LINE, FT.
(Also to nearest drig. 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

1121.95
-481.33

19. PROPOSED DEPTH

6700'

17. NO. OF ACRES ASSIGNED
TO THIS WELL

w/ 321.33

20. ROTARY OR CABLE TOOLS

Rotary

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

5918 GR

22. APPROX. DATE WORK WILL START*

ASAP

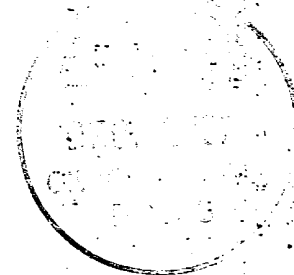
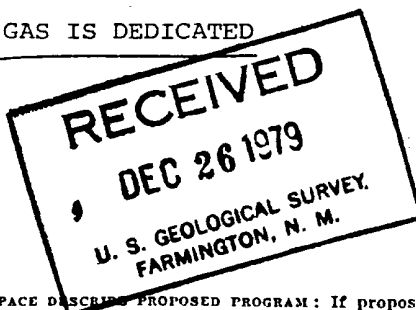
23.

PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12 3/4"	9 5/8" new	36#, K-55	± 200'	Circulate to surface
8 3/4"	7" new	23#, K-55	± 4850'	Circulate to surface
6 1/2"	4 1/2" new	10.5#, 11.6#	± 6700'	Circulate through liner hanger

No abnormal temperatures, pressures or geologic hazards are 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

TITLE

Staff Production Analyst

DATE

December 19, 1979

(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

INMOCC

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

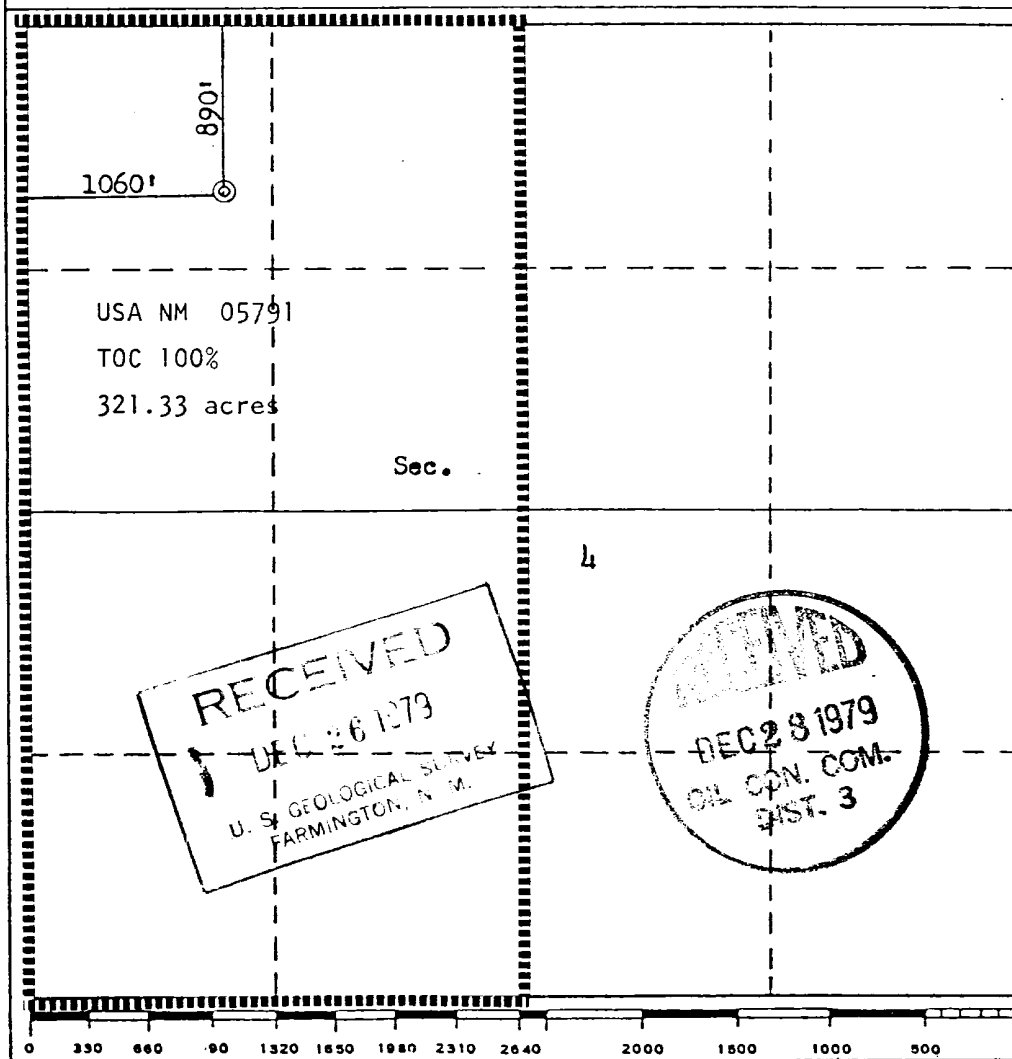
Operator TENNECO OIL COMPANY			Lease DAWSON "A"		Well No. 1M
Unit Letter D	Section 4	Township 27N	Range 8W	County San Juan	
Actual Footage Location of Well: 890 feet from the North line and 1060 feet from the West line					
Ground Level Elev. 5918	Producing Formation Mesa Verde/Dakota		Pool Blanco Mesa Verde Basin Dakota		Dedicated Acreage: 321.33 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 _____

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. L. Freeman
Name

M. L. Freeman

Position
Staff Production Analyst

Company
Tenneco Oil Company

Date
December 19, 1979

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

November 21, 1979

Registered Professional Engineer and/or Land Surveyor

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

Certificate No. 3950
FRED B. KERR, JR.

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

DRILLING PROCEDURE

DATE: December 6, 1979

LEASE: Dawson A

WELL NO.: 1-M

LOCATION: 89-0' FNL, 1060' FWL
Sec. 4, T 27N, R 8W
San Juan County, New Mexico

FIELD: Basin Dakota
Blanco Mesaverde

ELEVATION: 5935' Est. G.L.

TOTAL DEPTH: 6700'

PROJECTED HORIZON: Mesaverde/Dakota Dual

SUBMITTED BY: Dale Kardash DATE: _____

APPROVED BY: *Dame*

DJK/ms

CC: Administration
Well file
Field File

ESTIMATED FORMATION TOPS

OJO Alamo	1225' Water
Pictured Cliffs	2120' Gas
Lewis Shale	2275'
Chacra	3090' Gas
Cliffhouse	3805' Gas
Menefee	3855' Gas
Point Lookout	4395' Gas
B/Point Lookout	4655' Gas
Mancos	---
Gallup	5570' Gas
Greenhorn	6345'
Dakota	6515' Gas
T.D.	6700'

DRILLING, CASING, AND CEMENT PROGRAM

1. MIRURT.
2. Drill a 12 3/4" 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_2 .
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 and 8 3/4" hole 150-200' into the Mancos Shale. Treat mud system for possible lost circulation before penetrating the Mesaverde.
7. RU and run 7", 23#, K-55, ST&C casing to 4850'.
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_2 . 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_2 and soap. Drill shoe and 5' of formation. Blow hole with gas until dusting.
10. Drill a 6 1/4" hole to 6700'.
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 in non-productive, plug and abandon as per state requirements.
16. MORT.

CASING PROGRAM

0-200'	9 5/8", 36#, K-55, ST&C
0-4850'	7", 23#, K-55, ST&C
4700'-6700'	(3000') 4 1/2", 10.5#, K-55, LT&C

MUD PROGRAM

- 0-200 Native solids. Have sufficient viscosity to clean hole and run casing.
- 200-4850' Benex and water. Have sufficient viscosity to run casing. Treat for possible lost circulation in Mesaverde.
- 4850'-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:

Insure we have penetrated Mancos Shale 300'.

Logs:

GR/IND: T.D. to Intermediate.

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

TDT 300' below PC to surface.

BLOWOUT EQUIPMENT

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

10", 150 psi, rotating head and 7" blooie 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.

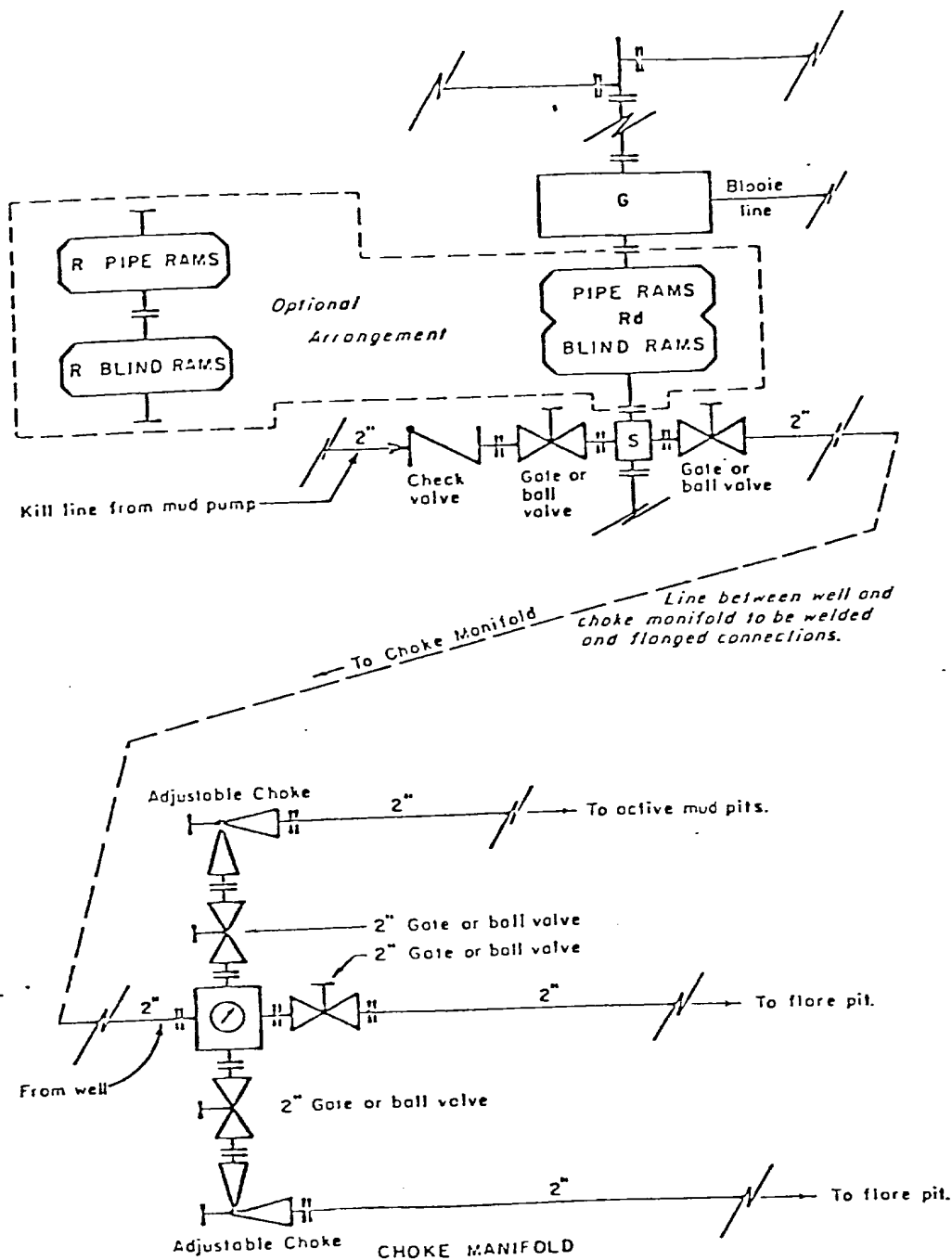
The yellow sheet of the IADC Report to be filled out completely, the original copy of the drilling time recorder, and copies of any invoices from this well, signed and received for Tenneco Oil Company will be mailed daily to:

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 in the alluvial deposits of Fresno Canyon approximately $1\frac{1}{2}$ miles below Hollis Pass. The soil is sandy supporting primary vegetation types of pinon, juniper and various grasses
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

LF/gh

TENNECO OIL COMPANY

CALCULATION SHEET

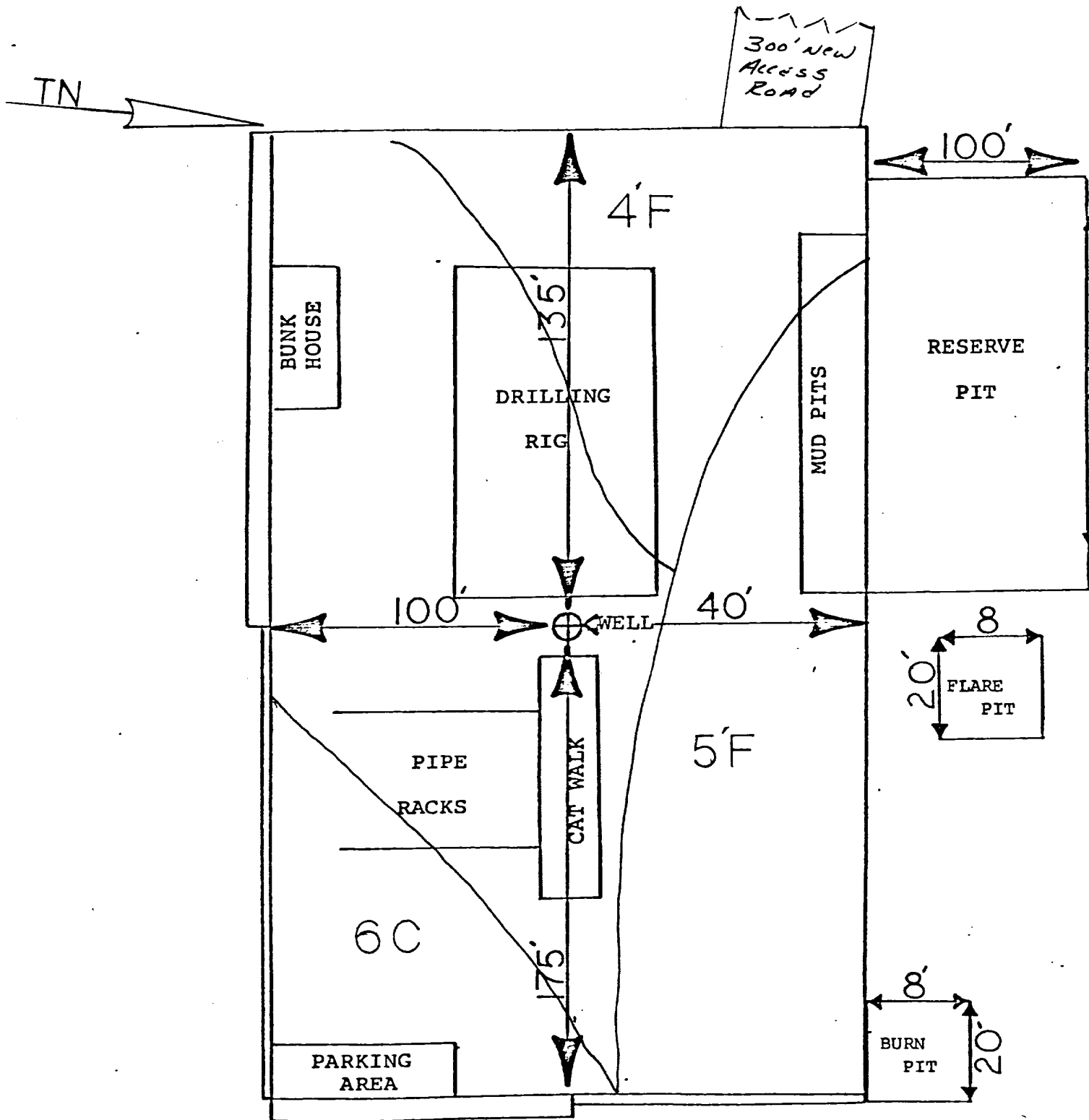
EXHIBIT

ANY

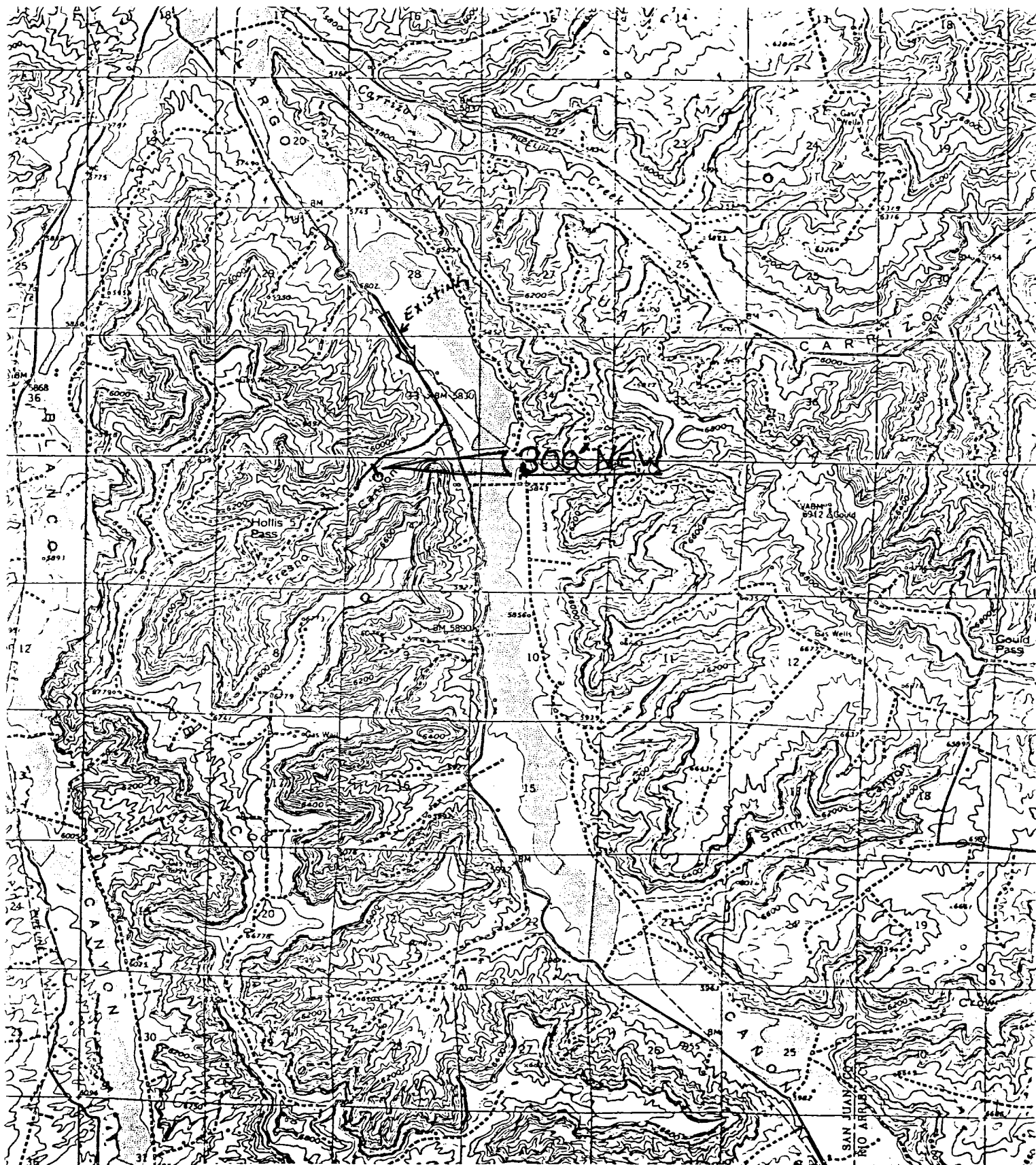
CT DRILLING WELL SITE LAYOUT *DAWSON "A" 1M*

TION *890FNL 1060FW SEC 9 T27N R8W*

DATE *12/19/79*



The Access will cross FRESNO CANYON FROM THE NORTH WITH A LOW WATER CROSSING.



Vicinity Map for
TENNECO OIL COMPANY #17 DAWSON "A"
890'FNL 1060'FWL Sec 4-T27N-R8W
SAN JUAN COUNTY, NEW MEXICO

