

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

1860 Lincoln St., Suite 1200, Denver, Colorado 80203

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

At surface

1475' FNL and 1500' FWL, Unit F

At proposed prod. zone

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

See Point 1 of Surface Use Plan

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

320

19. PROPOSED DEPTH

± 5655'

17. NO. OF ACRES ASSIGNED

TO THIS WELL

W/320

20. ROTARY OR CABLE TOOLS

Rotary

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

6386'

22. APPROX. DATE WORK WILL START*

2/26/77

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#	± 200'	Suff. to circulate to surface.
8-3/4"	7"	23#	± 3500'	Suff. to cement back to surface
6-1/8"	4-1/2"	10.5#	± 3200'-5655'	Suff. to cement back to 7" csq.

Plan to drill well as follows:

1. MIRURT, drill 12-1/4" hole to ± 200'.
2. Set and cement 9-5/8" casing to ± 200' & cement with suff. cement to circ. to surface
3. Drill out with 8-3/4" bit to ± 3500'.
4. Run 7" casing and cement back to surface casing.
5. Drill out of 7" using gas as the circulating fluid, do not drill more than 10' below the 7" casing shoe until the hole has dried up completely and is dusting.
6. Drill the hole to T. D., log the hole dry as requested by drillsite geologist.
7. Run 4-1/2" liner to T. D., load hole with mud and cement liner back to top of 4-1/2". Set liner hanger and POH w/drill pipe.
8. This well will be completed through casing perforations and stimulated as necessary to establish commercial production.
9. Clean up area.
10. Approximately 8 days will be required to drill this well.
11. The gas has been dedicated to Southern Union Gathering Co.

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

H. E. Brown

TITLE

Div. Drilling Engineer

DATE

11-4-76

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

APPROVED BY

TITLE

CONDITIONS OF APPROVAL, IF ANY:

Ok

U. S. GEOLOGICAL SURVEY

*See Instructions On Reverse Side

30-045-22275

5. LEASE DESIGNATION AND SERIAL NO.

SF-078580-A

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME

Moore

9. WELL NO.

#1A

10. FIELD AND POOL OR WILDCAT

Blanco Mesa Verde

11. SEC., T., R., M., OR BLK.
AND SURVEY OR AREA

Sec. 8, T30N, R8W

12. COUNTY OR PARISH

San Juan

13. STATE

New Mexico

NEW MEXICO OIL CONSERVATION COMMISSION

WELL LOCATION AND ACERAGE DEDICATION PLAT

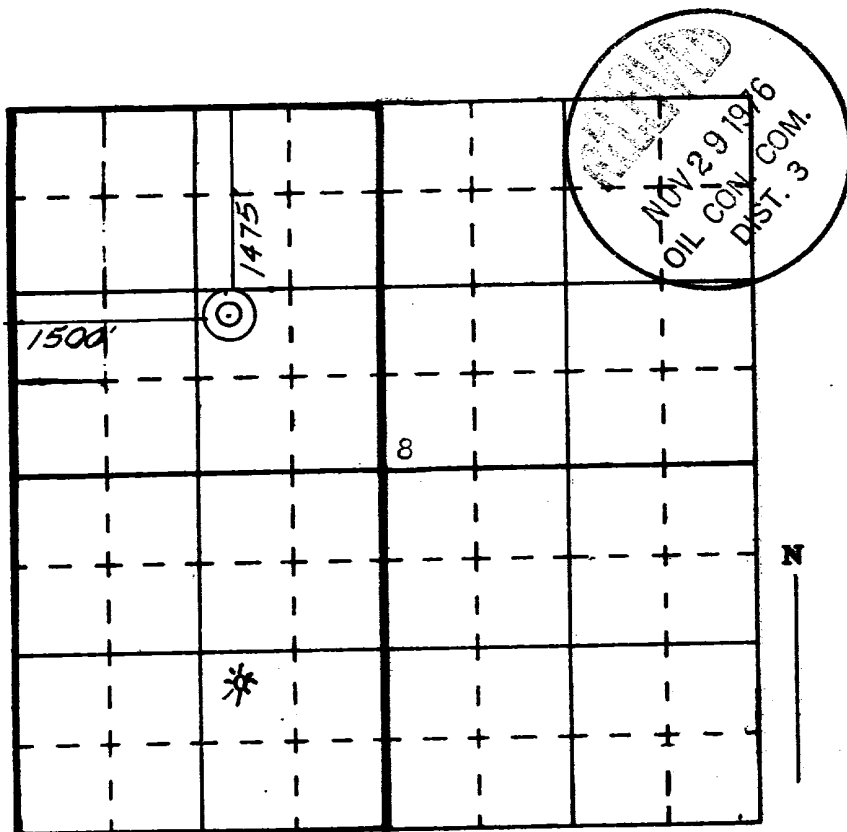
All distances must be from the outer boundaries of the Section

Operator TENNECO OIL COMPANY			Lease MOORE		Well No. 1-A
Unit Letter F	Section 8	Township 30 NORTH	Range 8 WEST	County SAN JUAN	
Actual Footage Location of Well: 1475 feet from the NORTH line and 1500 feet from the WEST line					
Ground Level Elev. 6386'	Producing Formation Blanco Mesa Verde		Pool Blanco Mesa Verde	Dedicated Acreage: W/320 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 One Lease.

If answer is "no," list the owners and tract descriptions which have actually 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.

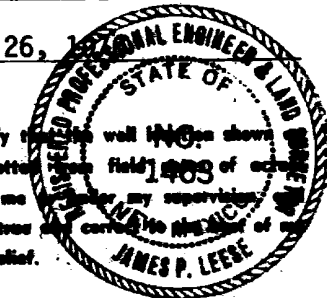


CERTIFICATION

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

Name Paul Z. Drury
 Position Production Clerk
 Company Tenneco Oil Company
 Date October 26, 1976

I hereby certify that the well location shown on this plat was plotted from field notes of accurate surveys made by me under my supervision and that the same is true and correct to the best of my knowledge and belief.



14 October 1976

Date Surveyed 14 October 1976
 Registered Professional Engineer
 and/or Land Surveyor James P. Leese

1463

Certificate No. 1463

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

(PAGE 2) for Moore 1A

12. SURFACE FORMATION IS San Jose (EOCENE)

13. FORMATION TOPS (Estimated)

Pictured Cliffs	± 3105'	possible oil or gas producer
Cliff House	± 4870'	possible oil or gas producer
Menefee	± 4965'	possible oil or gas producer
Point Lookout	± 5290'	possible oil or gas producer
Mancos Shale	- 5485'	

14. Mud program : see point 7 of 7 point well control plan

15. No coring or drill stem tests will be taken

16. Logs to be taken= Density
Gamma Ray
Caliper and temperature logs
Deviation surveys will also be taken

7 POINT WELL CONTROL PLAN

1. Surface casing: 9 5/8", 24#, approximately 200, grade K-55, new condition.
2. Casinghead will be 10", 900 Series, 3,000 psi rating.
3. Intermediate casing - 7", 20#, K-55, will be set at \pm 3500' and cemented to surface casing.
4. Blowout preventors: Hydraulic, double ram, 10". One set of rams will be provided for each size drill pipe in the hole. One set of blind rams at all times. Fill line will be 2", kill line will be 2", choke relief line will be 2" with variable choke.
5. Auxiliary equipment:
 - (1) Kelly cock will be in use at all times.
 - (2) Stabbing valve to fit drill pipe will be present on floor at all times.
 - (3) Mud monitoring will be visual, no abnormal pressures are anticipated in this area.
 - (4) Rotating head will be used when drilling with gas.
6. Anticipated bottom-hole pressure:

This is an area of known pressure. Maximum anticipated pressure at TD is 1200 psi. No abnormal pressure is anticipated.
7. Drilling Fluids:

0 - 200'	Spud mud
200- 3500'	Gel water - low solids as needed to maintain good conditions.
3500'- T.D.	Compressed gas

BLM SEEDING REQUIREMENTS
IN THE FARMINGTON RESOURCE AREA

1. SEED MIXTURE 1

2. TIME:

All seeding will take place between July 1 and September 15.

3. EQUIPMENT:

Seeding will be done with a disc-type drill with two boxes for various seed sizes. The drill rows will be eight to ten inches apart. The seed will be planted not less than one-half inch deep or more than one inch deep. The seeder will be followed with a drag, packer, or roller to insure uniform coverage of the seed, and adequate compaction. Drilling will be done on the contour where possible, not up and down the slope. Where slopes are too steep for contour drilling, a "cyclone" hand seeder or similar broadcast seeder will be used. Seed will then be covered to the depth described above by whatever means is practical.

4. SPECIES TO BE PLANTED IN POUNDS PURE-LIVE-SEED PER ACRE:

CRESTED WHEATGRASS (Agropyron desertorum) - $2\frac{1}{2}$ lbs.

SMOOTH BROME (Bromus inermis) - $2\frac{1}{2}$ lbs.

FOURWING SALTBUSH (dewinged) (Atriplex canescens) - $\frac{1}{2}$ lb.

NOMAD ALFALFA (Medicago sitiva) - 1 lb.

BLM COLOR REQUIREMENTS
IN THE FARMINGTON RESOURCE AREA

1. All equipment shall be painted green to match the surrounding area.

SURFACE USE PLAN

TENNECO OIL COMPANY'S
Moore #1A, NW/4 of Sec. 8, T30N, R8W,
Lease #SF 078580-A, San Juan County, New Mexico

This plan is to accompany "Application for Permit to Drill" for the above mentioned well.

The following is a discussion of pertinent information concerning possible effect which the proposed drilling of the well may have on the environment of the well and road sites and surrounding acreage. A copy will be posted on the derrick floor so that all contractors and subcontractors will be aware of all items of this plan.

1. AREAL ROAD MAP - Exhibit "A" is a portion of a USGS topographic map, San Juan County, New Mexico, showing existing black top roads. Approximately 14 miles east of Aztec, New Mexico on highway 173, turn north 3-1/2 miles on shortcut to 544.
2. LOCATION OF EXISTING WELLS - Several MV, Dak., and P.C. have been drilled in a two mile radius and are shown on Exhibit "B".
3. PROPOSED WELL MAT AND IMMEDIATE AREA - Refer to Exhibit "C" for direction orientation and road access.
 - a. Mat size - 130' x 300'
 - b. Surface - Will be native soil, bladed, watered and capped with clay only when necessary.
 - c. Reserve pit - 150' x 150' unlined pit, joining mat to the West.
 - d. Cut & Fill - 1' - 3' cut
 - e. Drill Site Layout - Exhibit "C" shows position of mat, reserve pits, burn pits, trash pits, and mudpits in relation to the well bore. Rig will be erected with the V-Door to the North.
 - f. Setting & Environment -
 - (1) Terrain - Low rolling hills of area. See Exhibit "A", topographic map
 - (2) Soil - Extremely sandy soil
 - (3) Vegetation - Sparse grass, predominately sagebrush. Site has been chained.
 - (4) Surface Use - Unknown, possibly used for grazing.

- (5) Other - Drill site, which is on top of Manzanarres Mesa, is in a low environmental risk area. The effect of drilling this well and other wells in this area, would be minimal.

g. Distances to:

- (1) Ponds and Streams - There are no surface waters within 1/2 mile.
- (2) Water Wells - No water well or windmill could be seen within 1/2 mile.
- (3) Residences and Buildings - There are no houses or buildings within 1/2 mile.
- (4) Arroyos, Canyons, etc. - See Exhibit "A".

h. Well Sign - Sign identifying and locating well will be maintained at drill site with the spudding of the well.

i. Open Pits - All pits containing mud or other liquids will be fenced.

4. ROADS

a. Existing roads - All existing roads within one mile of the location are shown on Exhibit "A" and Exhibit "D".

b. Planned roads - Plan to construct 1320' of new 14 foot wide road.

c. Fences, Gates and Cattleguards -

5. TANK BATTERY - This is expected to be a dry gas well, therefore, a tank battery will not be required.

6. LEASE PIPELINES

a. Existing - Not furnished by the Operator, to be connected by Southern Union Gathering Co.

b. Planned - If production is encountered, all lease lines are to be constructed on a well mat.

7. WASTE DISPOSAL - Well cuttings will be disposed in reserve pit. Barrel trash containers to be in accessible locations within drill site area during drilling and completion procedures. All detrimental waste will be hauled away, burned or buried with a minimum cover of 24" dirt. See Exhibit "C" for location of pits. If well is productive, maintenance waste will be placed in special trash cans and hauled away periodically. No produced water is anticipated.

8. WATER SUPPLY - Supply water will be hauled from the San Juan River or nearest wash.
9. ARCHAEOLOGICAL RESOURCES - Report has been furnished by Pat Zarnowski from Salamon Ruins, Bloomfield, New Mexico.
10. RESTORATION OF SURFACE - If well is productive, pits will be backfilled and leveled as soon as practical to original condition.
11. OPERATOR'S REPRESENTATIVE - Field personnel who can be contacted concerning compliance of this Surface Use Plan are as follows:

Production & Drilling

Darrell Brown
1860 Lincoln St., Suite 1200
Denver, Colorado 80203

Office Phone: (303) 292-9920 Ext. 254
Home Phone: (303) 771-8297

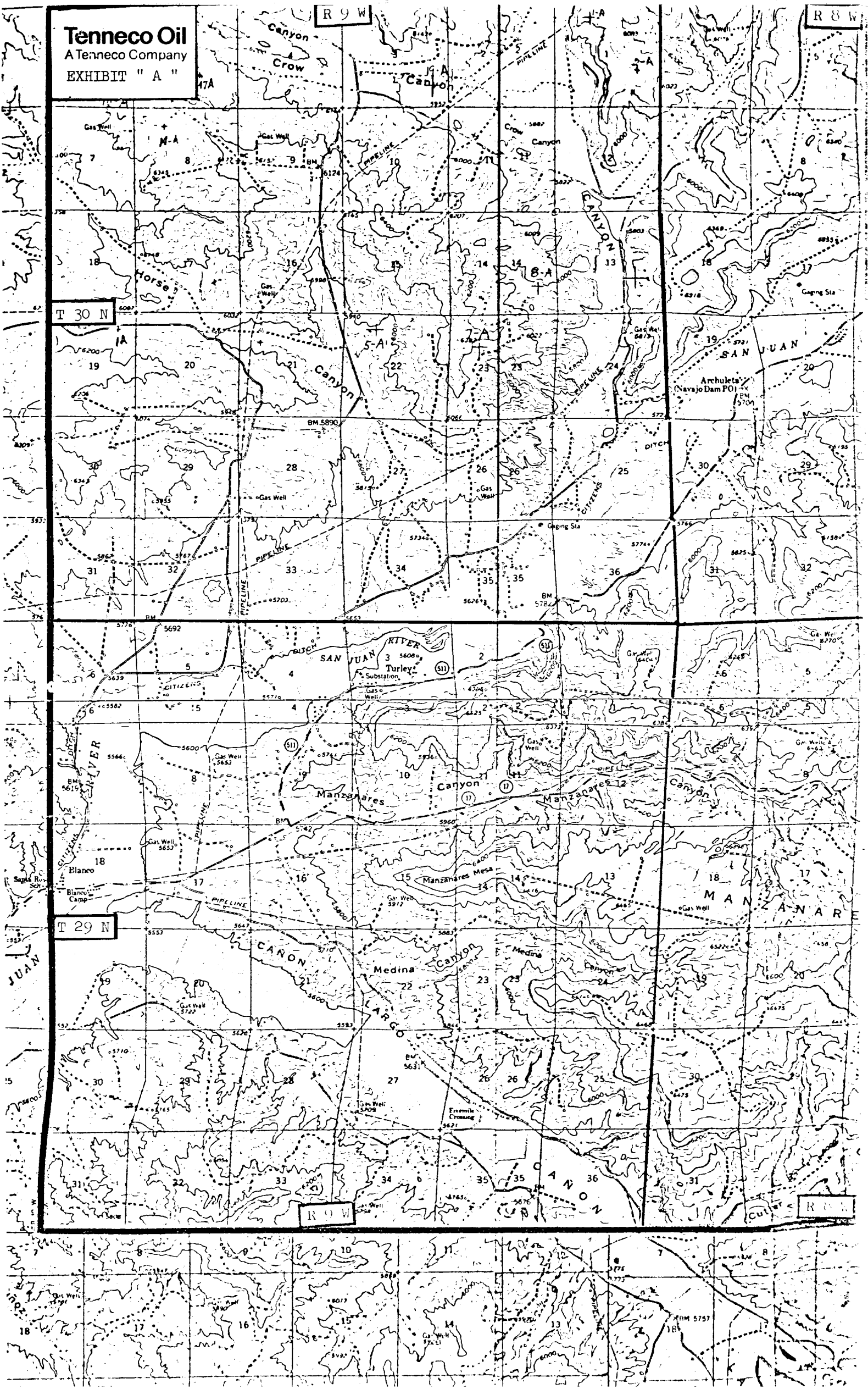
12. CERTIFICATION

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill site and access route; that I am familiar with the conditions as they actually exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and that the proposed work performed by Tenneco Oil Company and its contractors and sub-contractors will conform to this plan.

11-9-76
Date

D. E. Brown
D. E. Brown
Div. Drilling Engineer

Tenneco Oil
A Tenneco Company
EXHIBIT " A "



R 8 W

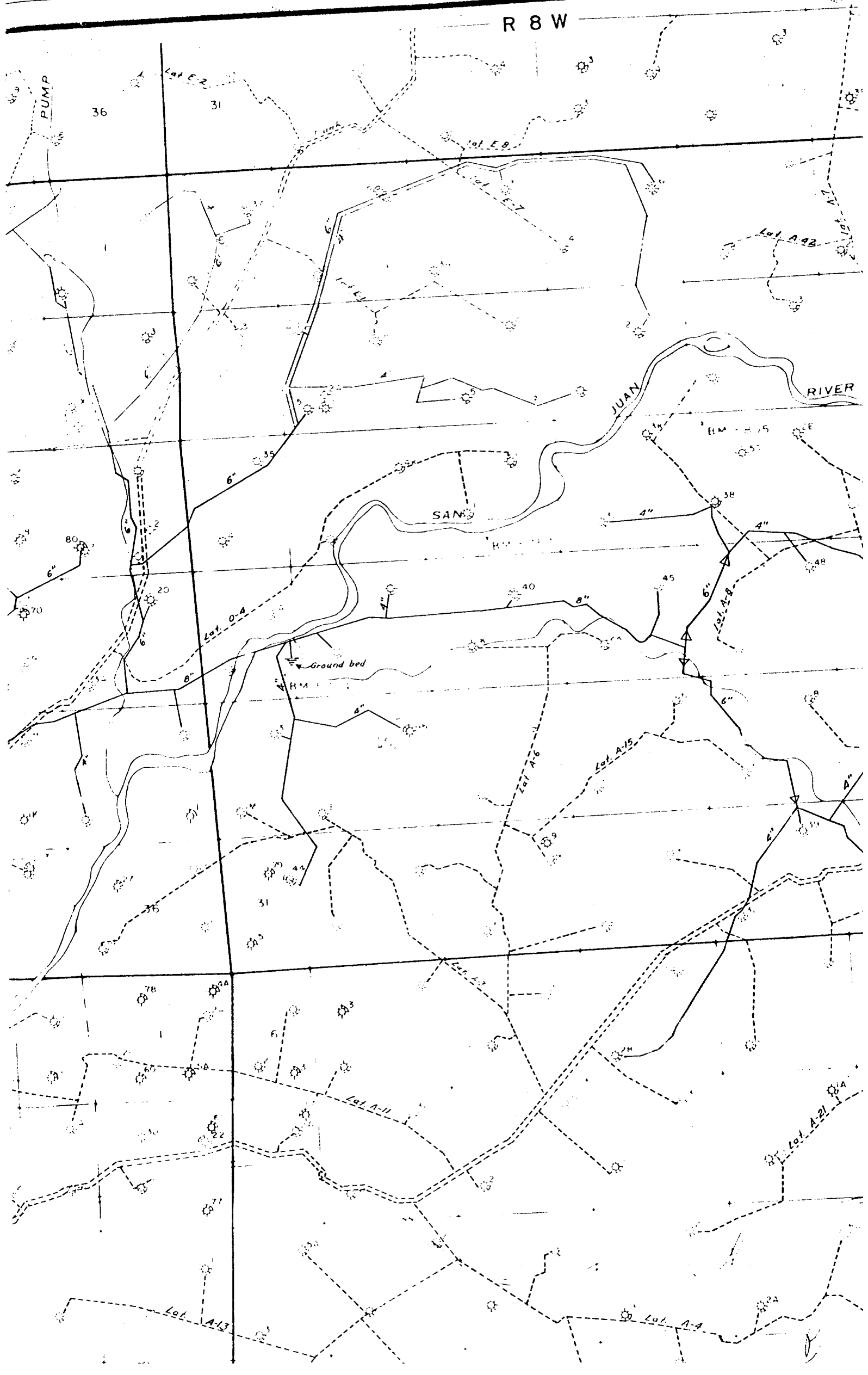
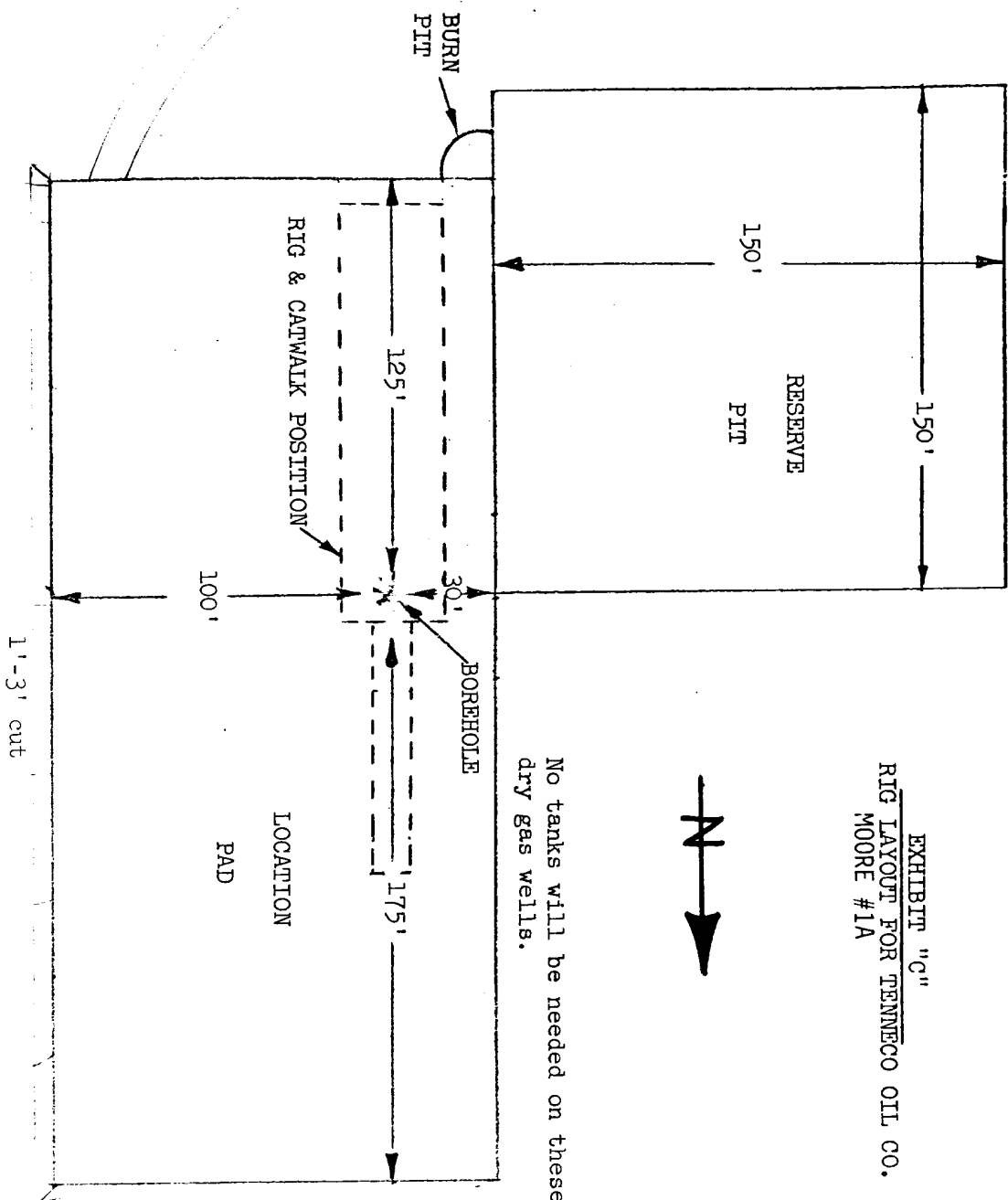


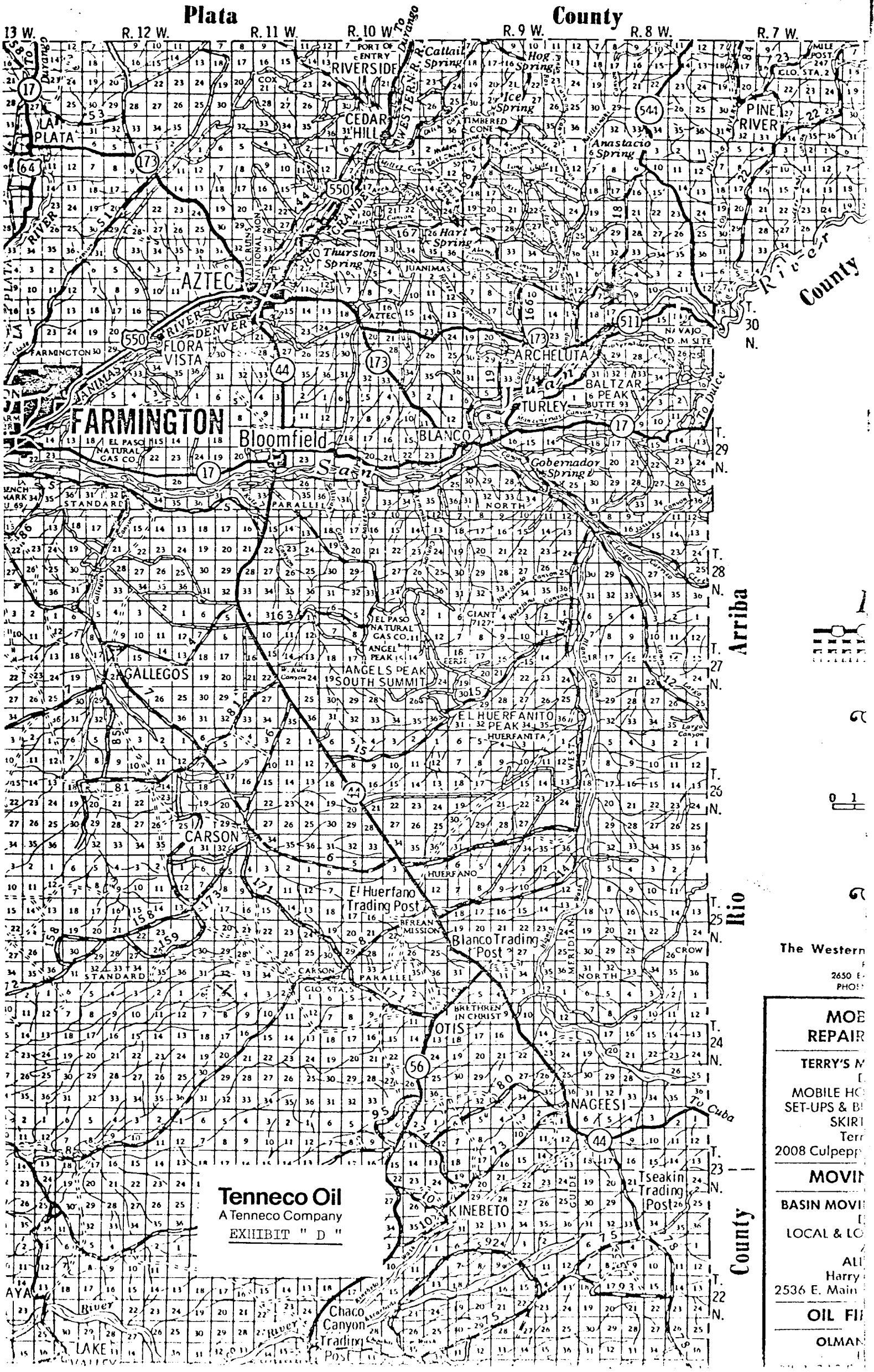
EXHIBIT "C"
RIG LAYOUT FOR TENNECO OIL CO.
MOORE #1A



No tanks will be needed on these
dry gas wells.



scale 1" = 50'



Tenneco Oil
A Tenneco Company
EXHIBIT " D "

Arriba

Rio

County

The Western
2650 E.
PHOS

MOB REPAIR

TERRY'S M
MOBILE HO
SET-UPS & B
SKIRI
Terr
2008 Culpepp

MOVIN

BASIN MOVIE
LOCAL & LO

ALL
Harry
2536 E. Main

OIL FI

OLMAN