

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

650 FNL

1820 FWL

At proposed prod. zone

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

3.6 miles East South East of Blanco, N.M.

10. 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

944.77

19. PROPOSED DEPTH

6610

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.)

5607 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#K55	± 200'	150 SX Class B+2%CaCl ₂
8 3/4"	7" new	23#K55	± 4700'	circulate to surface
6 1/4"	4 1/2 New	10.5#-11.6#	± 6610'	50/50 pozmix, 2% Gel tailed by 100 SX Class B

See Attached

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

M. L. Freeman

TITLE

Staff Production Analyst

DATE

December 20, 1979

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

APPROVED BY

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY:

DRILLING OPERATIONS AUTHORIZED ARE
SUBJECT TO COMPLIANCE WITH ATTACHED
"GENERAL REQUIREMENTS"

*See Instructions On Reverse Side

MMOCC

All distances must be from the outer boundaries of the Section

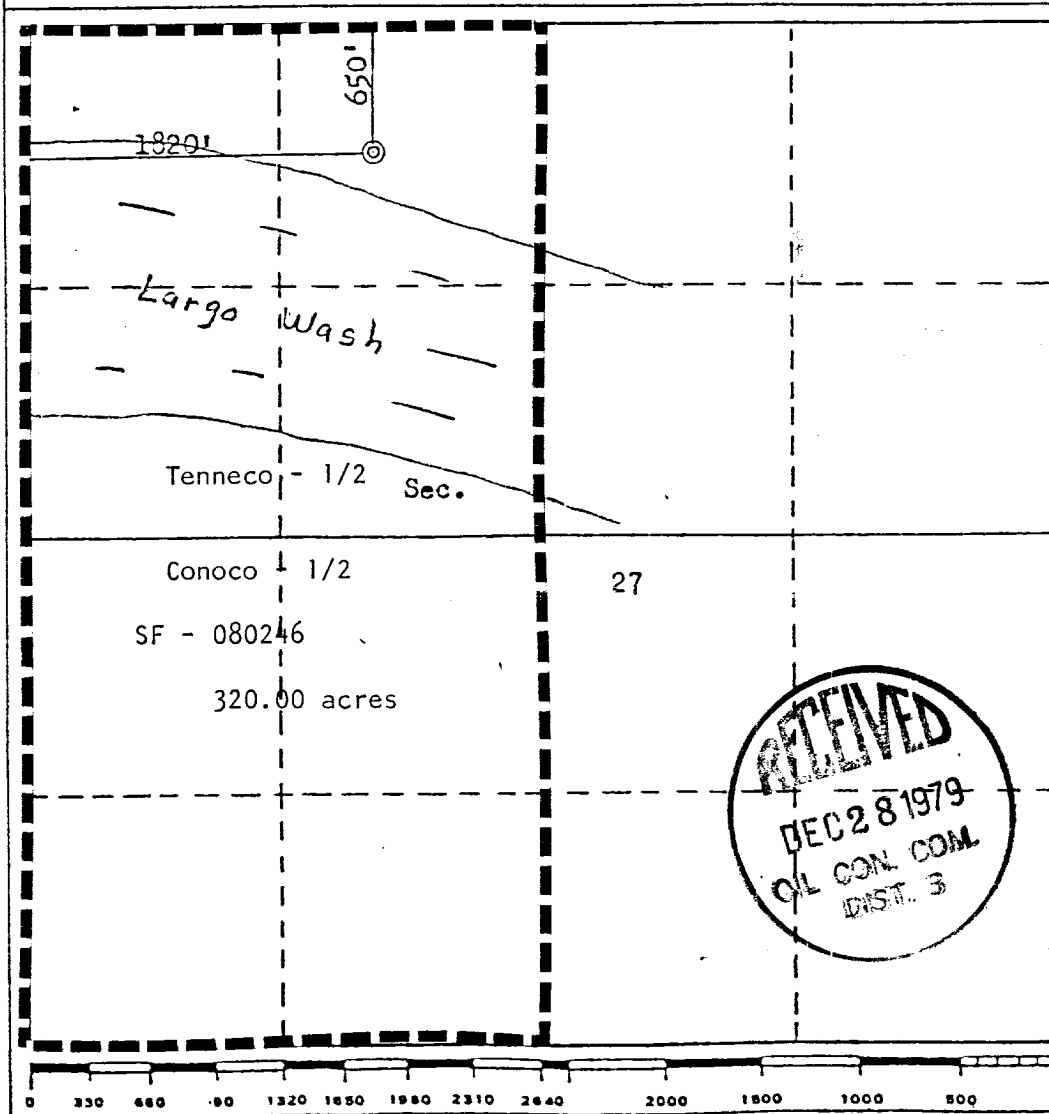
Operator TENNECO OIL COMPANY			Lease FLORANCE		Well No. 124
Unit Letter C	Section 27	Township 29N	Range 9W	County San Juan	
Actual Footage Location of Well: 650 feet from the North line and 1820 feet from the West line					
Ground Level Elev. 5607	Producing Formation Dakota		Pool Basin Dakota		Dedicated Acreage: 320.00 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. Lee Freeman

Name

M. Lee Freeman

Position

Staff Production Analyst

Company

Tenneco Oil Company

Date

December 20, 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 1, 1979

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 PROCEDURE

DATE: November 19, 1979

LEASE: Florance

WELL NO.: 124

LOCATION: 650' ± FNL, 1820' FWL
Sec. 27, T 29N, R 9W
San Juan County, New Mexico

FIELD: Basin Dakota

ELEVATION: 5620' Est. G.L. - 5731' Est. K.B.

TOTAL DEPTH: 6610'

PROJECTED HORIZON: Dakota/Mesaverde

SUBMITTED BY:

D. Kardash

APPROVED BY:

John W. Allen

DK/ms

1st Rev.

ESTIMATED FORMATION TOPS

OJO Alamo	1015 (Water)
Pictured cliffs	2080 (Gas)
Lewis Shale	2130
Cliffhouse	3735 (Gas)
Menefee	3790 (Gas)
Point Lookout	4310 (Gas)
Mancos	4494
Gallup	5505 (Oil)
Greenhorn	6250
Dakota	6358 (Gas)
T.D.	6610

Surface Formation: Nacimiento

No abnormal temperatures or pressures are expected.

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% CaCl₂.
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 150-200' into the Mancos Shale. Treat mud system for possible lost circulation before penetrating the Mesa Verde.
7. RU and run 7", 23#, K-55, ST&C casing to 4700'±
8. Cement in two stages with sufficient volume to circulate cement to surface. Use 50/50 pozmix, 4% gel tailed by 150 sx of Class B + 2% CaCl₂. Precede cement with a chemical preflush. Place DV at top of MV and use cement baskets in first stage.
9. WOC a minimum of 18 hours. Pick up 3 1/2" drill string and drill to within 5' of shoe. Displace water with N₂ and soap. Drill shoe and 5' of formation. Blow hole with gas until dusting.
10. Drill a 6 1/4" hole to T.D.
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 3. Use a chemical preflush ahead of cement.
14. Reverse out excess cement, LDDP and install X-mas tree.
15. MORT.
16. If well is non-productive, plug and abandon as per regulatory agency specification.

CASING PROGRAM

0-200	9 5/8", 36#, K-55 ST&C
0-4700	7", 23#, K-55, ST&C
4550-6610	(2060') 4 1/2", 10.5#, K-55, LT&C

MUD PROGRAM

0-200	Native solids. Have sufficient viscosity to clean hole and run casing.
200-4700	Benex and water. Have sufficient viscosity to run casing.
4550-6610	Pretreat for lost circulation in Mesa Verde. 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', on 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:

Logs: Two logging runs.

1. GR/INC: T.D. to surface; Comp Neutron Density through MV only.
2. GR/IND: T.D. to intermediate; Comp Density with GR, T.D. to B/Pt Lookout.

BLOWOUT EQUIPMENT

10", 3000 psi, double ram hydraulic operated with closing unit and 40 gallon accumulator.

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

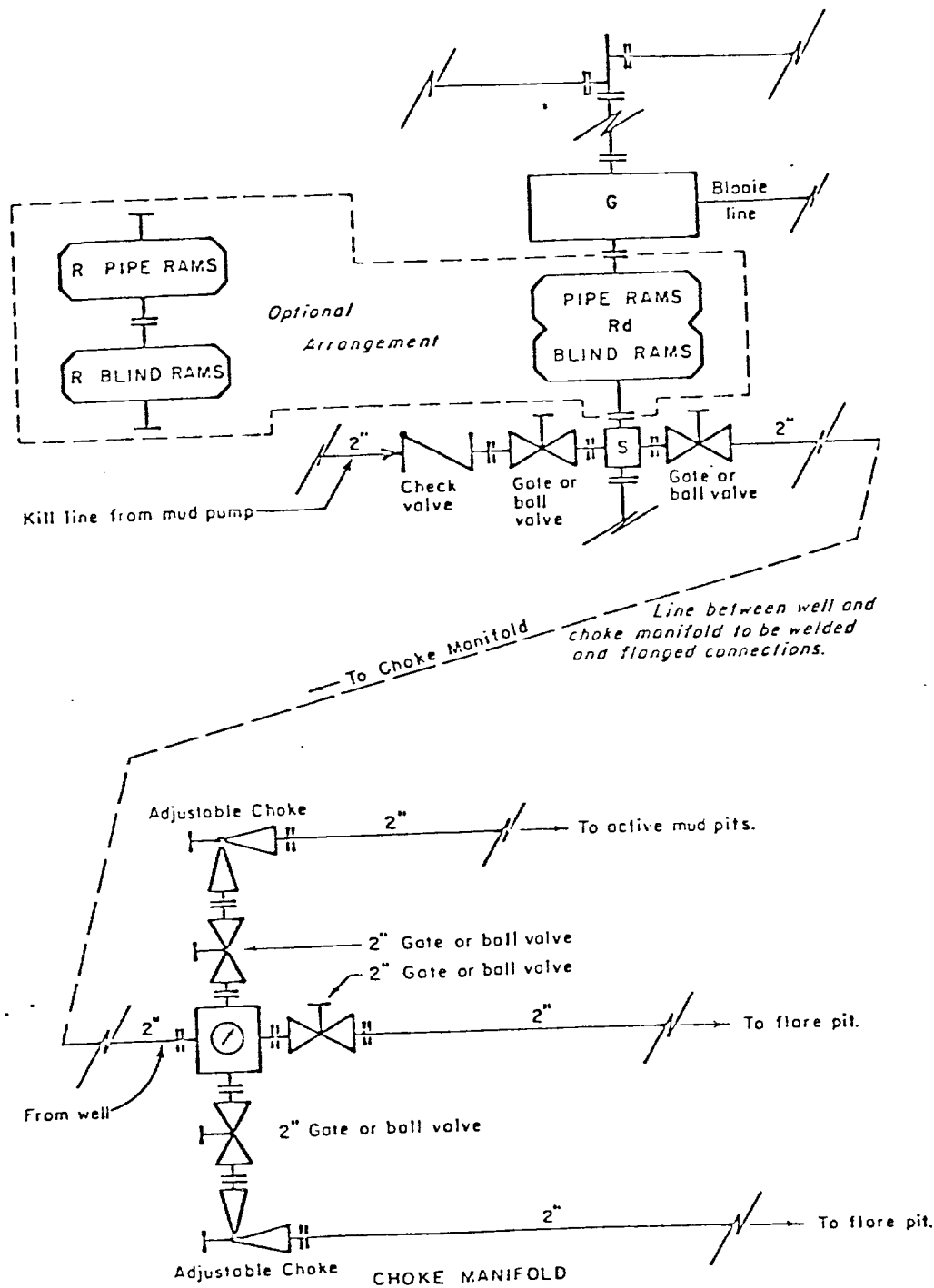
The yellow sheet of the IADC Report to be filled out completely, the original copy of the drilling time recorder, and copies of any invoices from this well, signed and received for Tenneco Oil Company will be mailed daily to:

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.

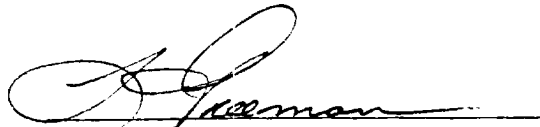
- Rd Double ram type preventer with two sets of rams.
- R Single ram type preventer with one set of rams.
- S Drilling spool with side outlet connections for choke and kill lines.
- G Rotating head 150 psi working pressure minimum

ARRANGEMENT C

TENNECO OIL COMPANY
ROCKY MOUNTAIN DIVISION
REQUIRED MINIMUM
BLOWOUT PREVENTER AND
CHOKE MANIFOLD

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 flood plain of Largo Wash. The site is on the north side of the dry wash bed with the channel on the south side. The soil is sandy, sandy silt. The principal vegetation is native 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

TENNECO OIL COMPANY

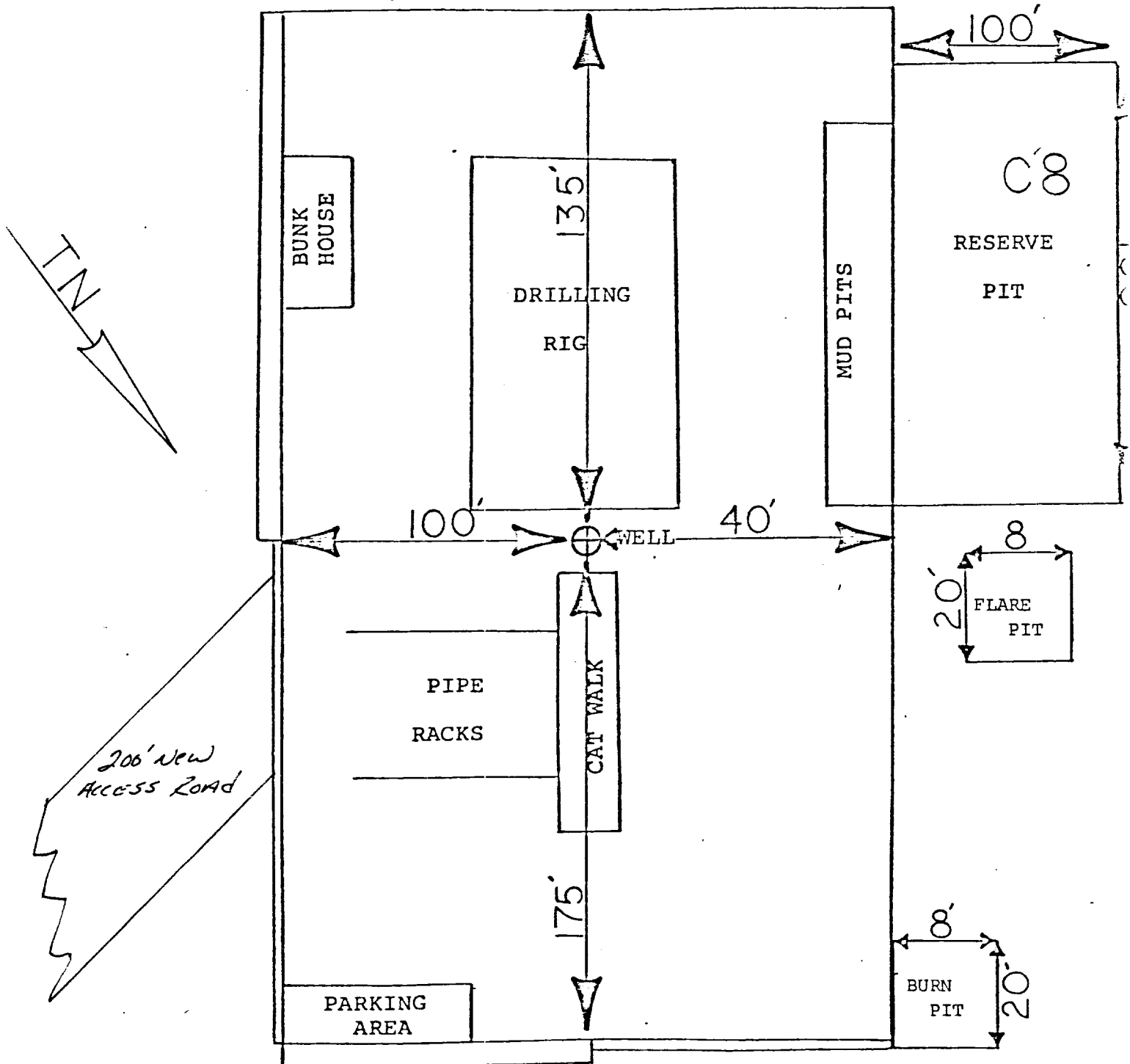
CALCULATION SHEET

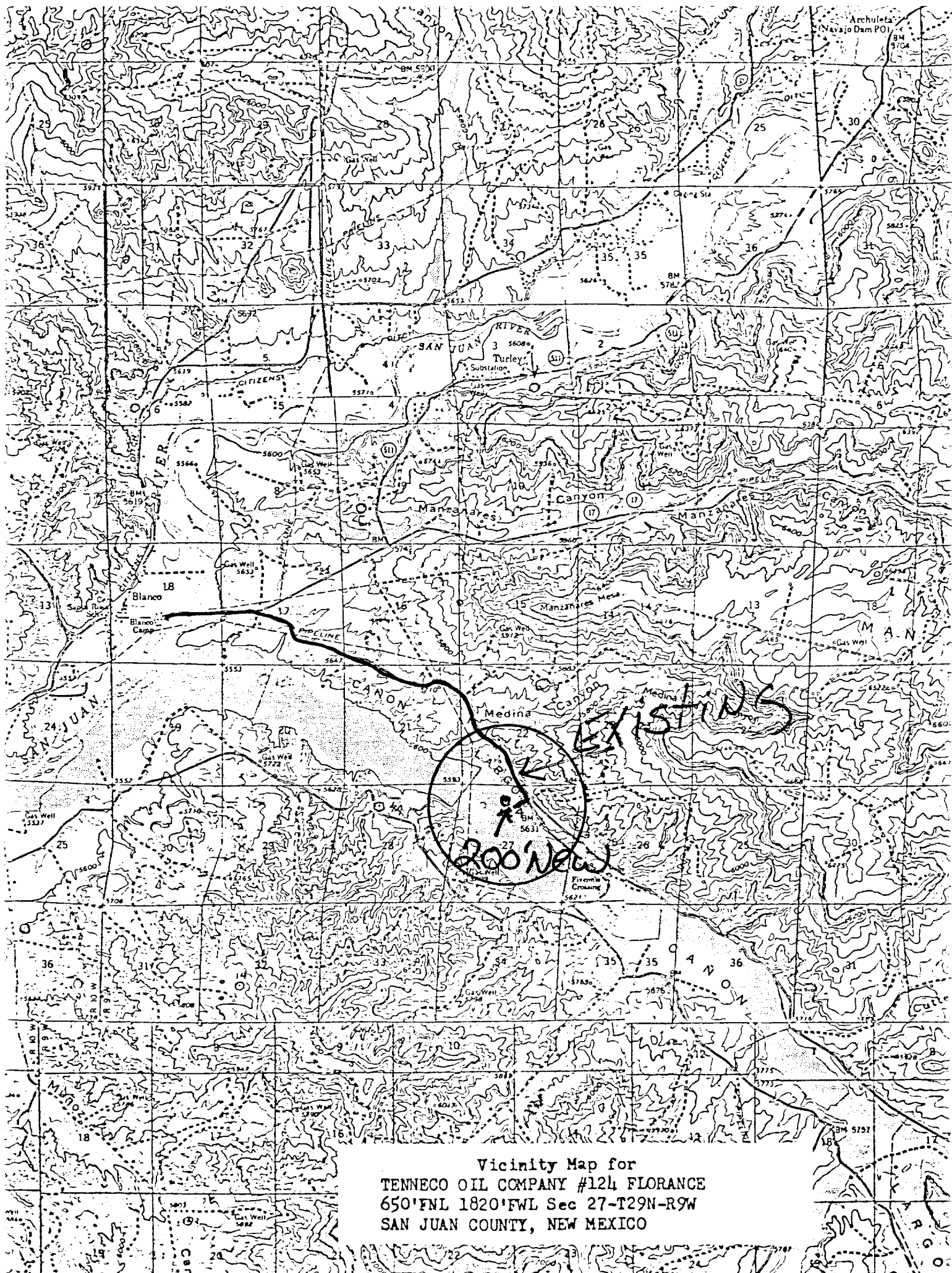
EXHIBIT

ANY

CT DRILLING WELL SITE LAYOUT *Florange 124*TION *C650FNL 18/20FWL SEC 27, T29N, R9W*DATE *12/20/79*

*DUE TO LEVEL TOPOGRAPHY MINIMAL
DIRT WORK REQUIRED. IF WELL IS A
PRODUCER CONSTRUCT A DIKE AROUND TANK TO
CONTAIN POSSIBLE SPILL*





Vicinity Map for
TENNECO OIL COMPANY #124 FLORANCE
650'FNL 1820'FWL Sec 27-T29N-R9W
SAN JUAN COUNTY, NEW MEXICO

