

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 South Colorado Blvd., Denver, Colorado 80222

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

1040 FSL, 790 FEL

At proposed prod. zone

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

3 miles south east of Bloomfield, New Mexico

15. DISTANCE FROM PROPOSED*
LOCATION TO NEAREST
PROPERTY OR LEASE LINE, FT.
(Also to nearest drilg. unit line, if any)

16. NO. OF ACRES IN LEASE

1183.91

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

19. PROPOSED DEPTH

4500'

17. NO. OF ACRES ASSIGNED
TO THIS WELL

160

20. NOTARY OR CABLE TOOLS

Rotary

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

5562 GR

22. APPROX. DATE WORK WILL START*

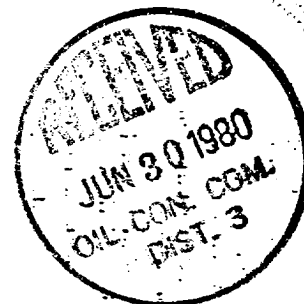
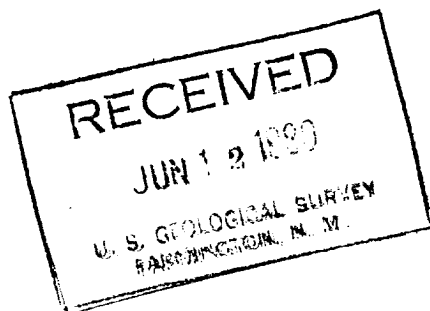
23.

PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
13 3/4"	9 5/8" new	36#	±250'	Circulate to surface
8 3/4"	7" new	23#	±3100'	Circulate to surface
6 1/4"	4 1/2" new	10.5#	±4500'	Circulate to liner top

See attached.

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. V. Freeman

TITLE

Staff Production Analyst

DATE

June 9, 1980

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

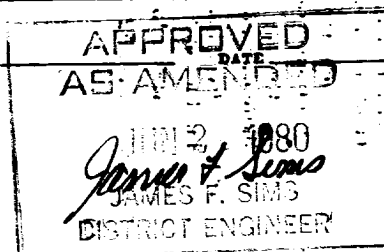
APPROVED BY

TITLE

CONDITIONS OF APPROVAL, IF ANY:

*See Instructions On Reverse Side

N11000



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

Operator TENNECO OIL COMPANY		Lease EATON COM "B"		Well No. 1
Unit Letter P	Section 25	Township 29N	Range 11W	County San Juan
Actual Footage Location of Well: 1040 feet from the South line and 790 feet from the East line				
Ground Level Elev. 5562	Producing Formation Chacra/Mesa Verde		Pool Chacra/Mesa Verde	Dedicated Acreage: 160 + 1/20 Acres

1. Outline the acreage dedicated to the subject well by colored pencil or hatchure marks on the plat below.

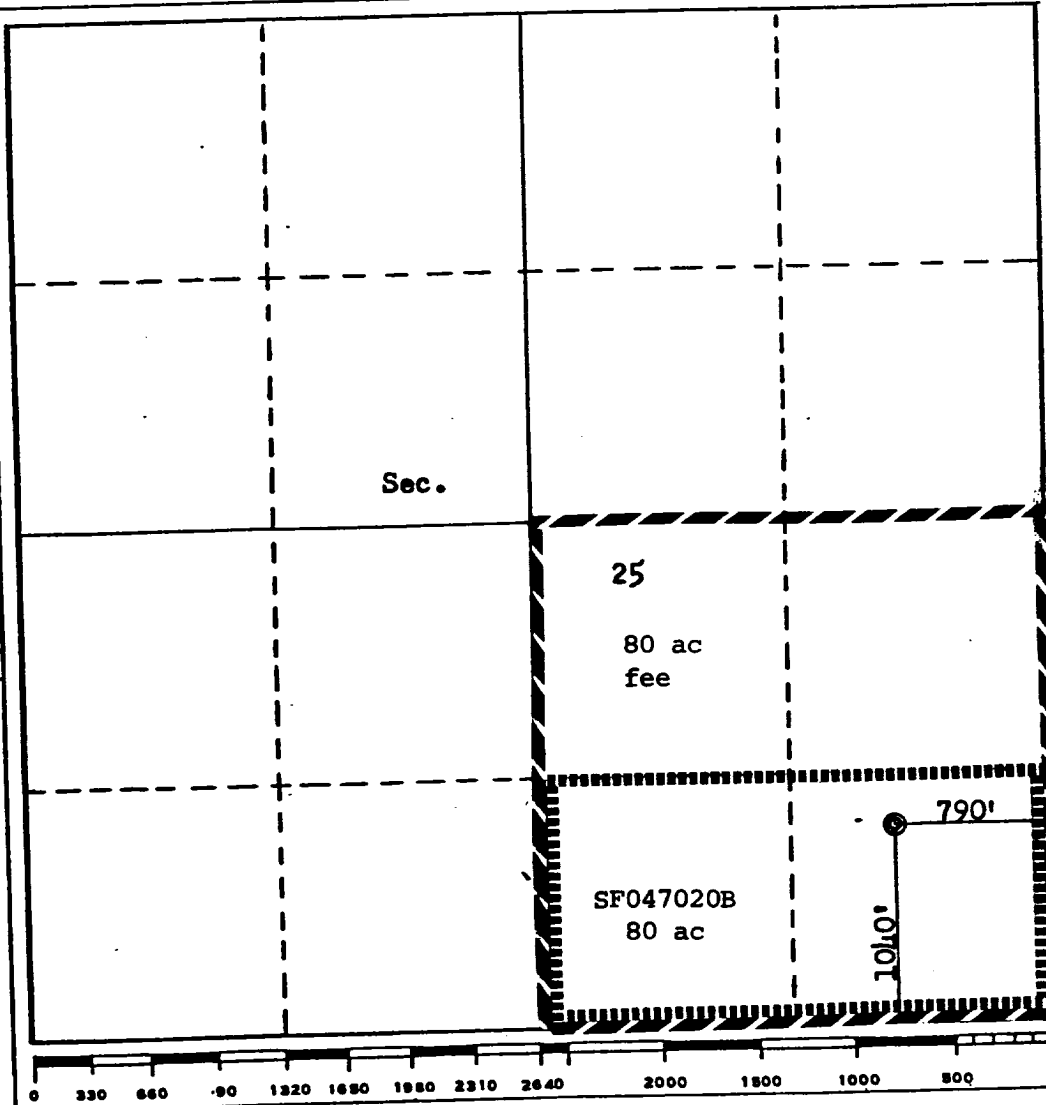
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).

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 Communitization in progress

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. L. Freeman
Position	Staff Production Analyst
Company	Tenneco Oil Company
Date	June 9, 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	November 14, 1979
Registered Professional Engineer and/or Land Surveyor	
Fred B. Kerr, Jr.	
Certificate No.	3950

TENNECO OIL COMPANY - 10 POINT PLAN

1. The geological name of the surface formation:
- 2 & 3. Estimated Formation Tops:

(See Attached Drilling Procedure)
4. Proposed Casing Program:

(See Attached Drilling Procedure)
5. Blowout Preventors:
Hydraulic double ram. One set of rams will be provided 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". BOP's, drills and tests will be recorded in the driller's log. BOP will be tested every 24 hours and recorded in IADC Log.
6. Mud Program: (Sufficient quantity of mud and weight material will be available on location).

(See Attached Drilling Procedure.)
7. Auxiliary Equipment:
 - a. Kelly cock will be in use at all times.
 - b. Stabbing valve to fit drill pipe will be present on floor at all times.
 - c. Mud monitoring will be visual. No abnormal pressures are anticipated.
 - d. Floats at bits.
 - e. Drill string safety valve(s) to fit all pipe in drill string will be maintained on the rig floor while drilling operations are in progress.
8. Coring, Logging, and Testing Program:

(See Attached Drilling Procedure)
9. No abnormal pressures, temperatures or potential hazards such as H₂S are expected to be encountered.
10. The drilling of this well will start approximately (June/July) and continue for 10 to 12 days.

Your office will be notified of spudding in sufficient time to witness cementing operations. Immediate notice will be given on blowouts, fires, spills, and accidents involving life threatening injuries or loss of life. Prior approval will be obtained before appreciably changing drilling program or commencing plugging operations, plug back work, casing repair work or corrective cementing operations.

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

DRILLING PROCEDURE

DATE: December 6, 1979

LEASE: Eaton Com

WELL NO.: B-1

LOCATION: 1040' FSL, 790' FEL
Sec. 25, T 29N, R 11W
San Juan County, New Mexico

FIELD: Blanco Mesaverde

ELEVATION: 5560' Est. G.L.

TOTAL DEPTH: 4500'

PROJECTED HORIZON: Chacra/Mesaverde

SUBMITTED BY:

DJ Karls

DATE:

12-10-79

APPROVED BY:

B. B. B.

DJK/ms

CC: Administration
Well file
Field File

ESTIMATED FORMATION TOPS

OJO	620'	Water
Farmington	1010'	Gas
Pictured Cliffs	1760'	Gas
Lewis Shale	1960'	
Chacra	2390'	Gas
Chacra A	2750'	Gas
Chacra B	2850'	Gas
Cliffhouse	3350'	Gas
Menefee	3500'	Gas
Point Lookout	4000'	Gas
T.D.	4500'	

DRILLING, CASING, AND CEMENT PROGRAM

1. Move in, rig up rotary tools.
2. Drill a 13 1/4" hole to \pm 250'.
3. Run 9 5/8", 36#, K-55, ST&C casing to T.D.
4. Cement with Class "B" with 2% CaCl₂ in sufficient volume to circulate to surface.
5. Wait on cement a minimum of 12 hours. Install 9 5/8" series-900 casing head.
6. Nipple up blowout preventers and manifold with relief lines. Pressure test choke manifold lines and valves to 1500 psi for 30 minutes. Pressure test blind rams to 1500 psi for 30 minutes.
7. Trip in hole with 8 3/4" bit, drill collars, and drill pipe. Test pipe rams to 1500 psi for 30 minutes. Record all tests on IADC Daily Report Form.
8. Drill 8 3/4" hole to 3100'. Log as per wellsite Geological Engineer.
9. Run 7", 23#, K-55, ST&C casing to 3100'.
10. Cement with 50/50 pozmix and 150 sx Class "B" with 2% CaCl₂ in sufficient volume to circulate to surface.
11. Wait on cement a minimum of 18 hours. Pressure test casing to 1000 psi for 30 minutes. Nipple up to gas drill.
12. Pick up 4 3/4" drill collars and 3 1/2" drill pipe with 6 1/4" drill bit. Drill cement guide shoe and 5' of open hole with water.
13. Displace water with nitrogen. Displace nitrogen with gas. Blow hole dry.
14. Drill a 6 1/4" hole with gas to T.D. Log as per wellsite Geological Engineer.
15. Run 4 1/2", 10.5#, K-55, LT&C casing liner to T.D. (4500') with a 150' minimum overlap of liner inside 7" casing.
16. Cement with 50/50 pozmix tailed by 150 sx Class "B" in sufficient volume to circulate cement to top of liner.
17. Reverse out excess cement. Lay down 3 1/2" drill pipe. Install well head.
18. If well is not productive, plug and abandon according to state requirements.
19. Move out rotary tools.

CASING PROGRAM

0-350'	9 5/8", 36#, K-55, ST&C
0-3100'	7", 23#, K-55, LT&C
2950'-T.D. 4500'	(1550') of 4 1/2", 10.5#, K-55, LT&C

MUD PROGRAM

- 0-250' Native solids. Run viscous sweeps as necessary to clean hole. Have sufficient viscosity to run casing.
- 250-3100' Benex and water. Sweeps as necessary. Have sufficient viscosity to log and run casing. Control WL for logging.
- 3100'-T.D. Gas.

EVALUATION

Cores and DST's:

None anticipated.

Deviation Surveys:

1. Survey surface hole at 100' intervals. Maximum allowable deviation a surface is 1°.
2. From Surface to total depth, deviation surveys must be taken every 500' or each trip, whichever is first. This may entail running the TOTCO on wireline. Record each survey on the IADC Drilling Report Sheet. Maximum allowable change in deviation is 1° per 100'. Maximum deviation is 5°.

Samples:

None.

Logs:

Induction/SN/SP/GR.

FDC/CNL/GR/CAL

- In two sets: 1. Intermediate T.D. to 1200'
2. Final T.D. to base of Intermediate casing.

BLOWOUT EQUIPMENT

900-series double ram hydraulic and rotating head with a minimum of 150 psi working pressure. Kill lines, choke lines and manifold to meet Tenneco Oil standards.

Preventors must be checked for operation every 24 hours, and the check must be recorded on the IADC Drilling Report Sheet.

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.

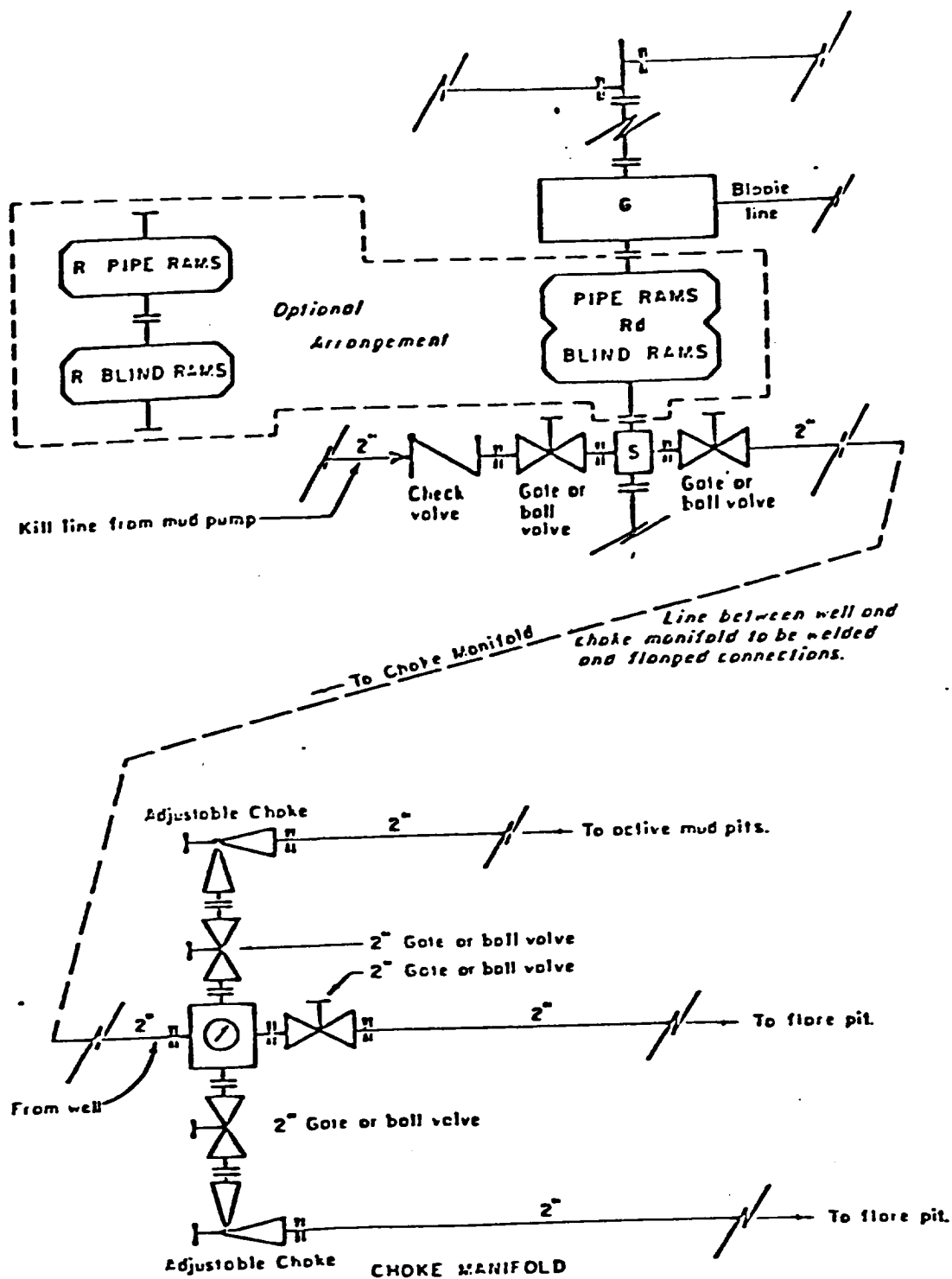
The yellow sheet of the IADC Report to be filled out completely, the original copy of the drilling time recorder, and copies of any invoices from this well, signed and received for Tenneco Oil Company will be mailed daily to:

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 .8 mile south of the San Juan River in an area of eroding clay hills. The principal vegetation types are sage, pinon, juniper, greasewood, snakeweed and 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 made 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 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

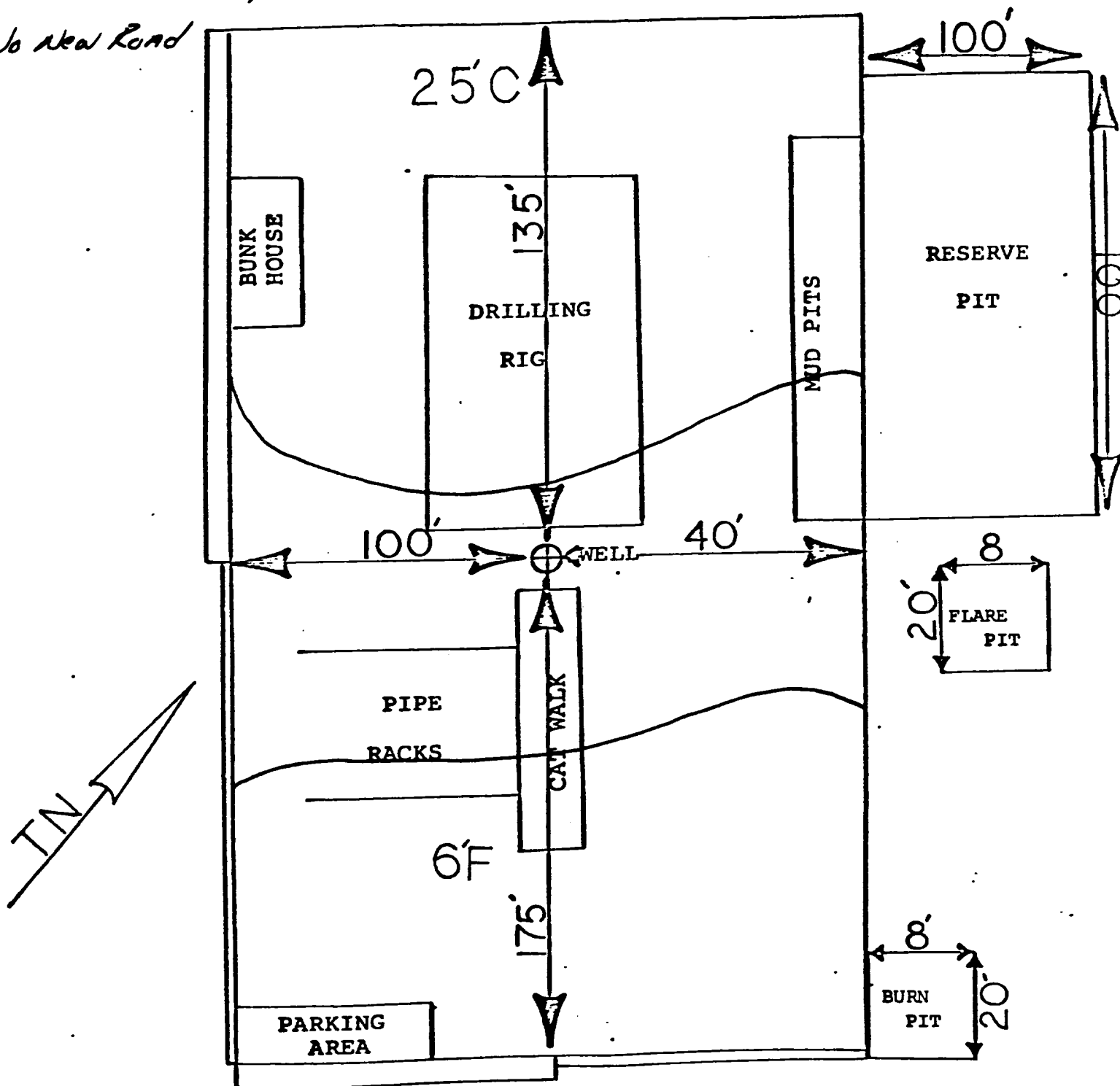
TENNECO OIL COMPANY

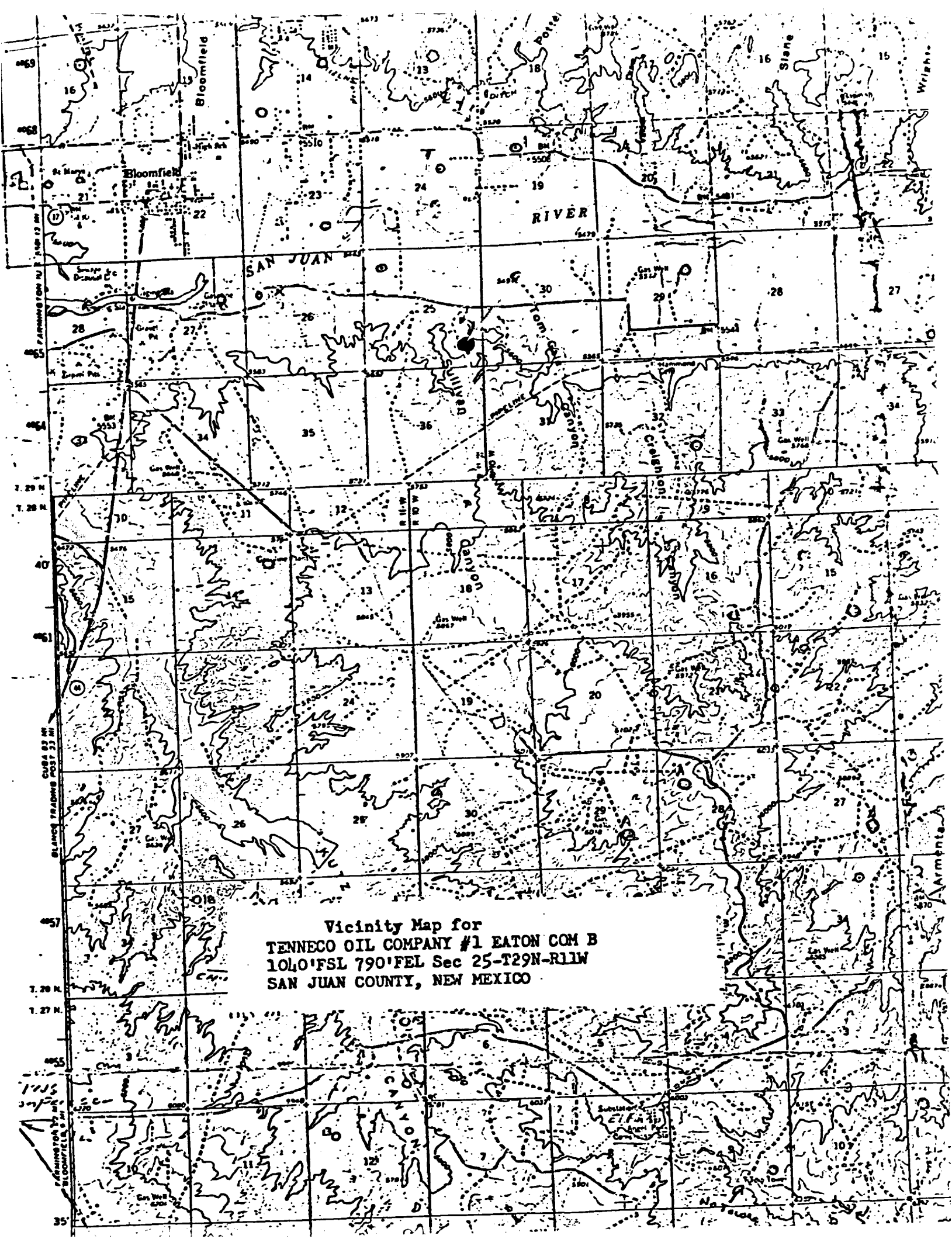
CALCULATION SHEET

EXHIBIT

DRILLING WELL SITE LAYOUT *Eaton Com B1**1040 FSL, 790 FEL Sec 25 T29N R11W* DATE *1-14-80*

*CLEAN AREA OF TRASH AND BURY IN PIT OR DURING
CLEAN UP.*

No New Road



Vicinity Map for
TENNECO OIL COMPANY #1 EATON COM B
1040' FSL 790' FEL Sec 25-T29N-R11W
SAN JUAN COUNTY, NEW MEXICO

