

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 surfaceF 1830' FNL, 1590' FWL
At proposed prod. zone

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

8.1 miles southeast of Bloomfield, NM

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

2240.00

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

19. PROPOSED DEPTH

6580'

17. NO. OF ACRES ASSIGNED
TO THIS WELL

N 320

20. ROTARY OR CABLE TOOLS

Rotary

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

5787 GR

22. APPROX. DATE WORK WILL START*

ASAP

23.

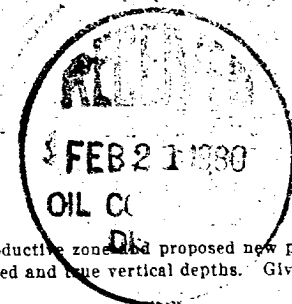
PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12 1/4"	9 5/8" new	36#, K-55	± 250'	Circulate to surface
8 3/4"	7" new	23#, K-55	± 3200'	Circulate to surface
6 1/2"	4 1/2" new	10.5#, K-55	± 6580'	Circulate to liner top

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. FREEMANTITLE Staff Production AnalystDATE February 1, 1980

(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

OIL CONSERVATION DIVISION

STATE OF NEW MEXICO
OIL AND MINERALS DEPARTMENTP. O. BOX 2088
SANTA FE, NEW MEXICO 87501Form C-107
Revised 10-1-78

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

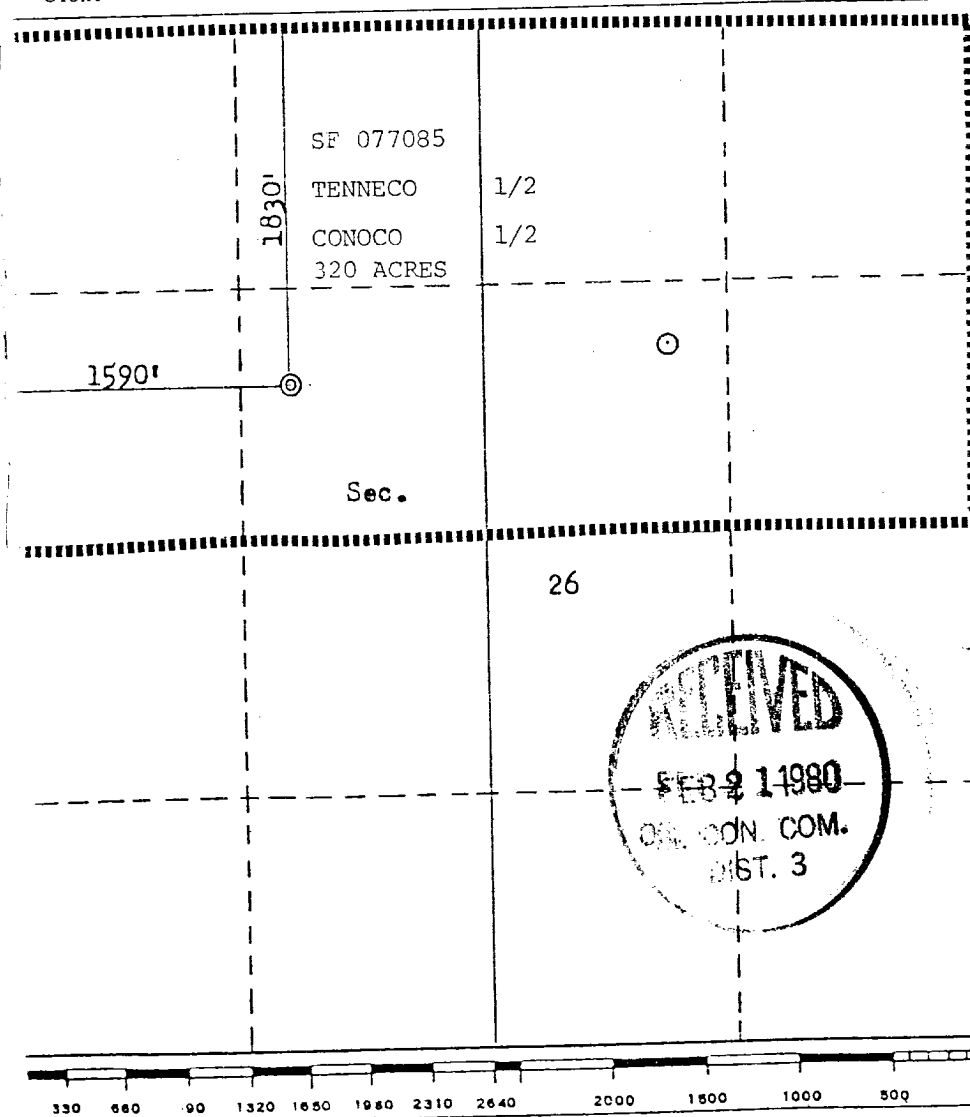
Operator TENNECO OIL COMPANY			Lease OMLER "A"		Well No. 1-E
Section Letter F	Section 26	Township 28N	Range 10W	County San Juan	
General Footage Location of Well:					
1830 feet from the North line and		1590 feet from the West line			
Land Level Elev. 5787	Producing Formation Dakota		Pool Basin Dakota	Dedicated Acreage: N 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 _____

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

February 1, 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 10, 1979

Registered Professional Engineer
and Land Surveyor

Fred B. Kerr Jr.

Certificate No.

3920 & KERR, JR.

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

DRILLING PROCEDURE

DATE: January 29, 1980

LEASE: Omler A

WELL NO.: 1-E

LOCATION: 1830' FNL, 1590' FWL
Sec. 26, T 28N, R 10W
San Juan County, New Mexico

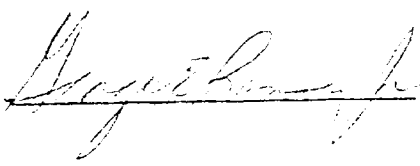
FIELD: Basin Dakota

ELEVATION: 5910 (D.F.)

TOTAL DEPTH: 6580'

PROJECTED HORIZON: Chacra-Dakota Dual

SUBMITTED BY: _____ DATE: _____

APPROVED BY:  DATE: 1/29/80
GER/ms

CC: Administration
DSB Well File
Field File

ESTIMATED FORMATION TOPS

SURFACE - NACIMIENTO

Ojo Alamo	950'	(Water)
Pictured Cliffs	1970'	
Lewis	2050'	(Gas)
Chacra	2920'	(Gas)
Cliffhouse	3530'	(Gas)
Menefee		
Point Lookout	4250'	(Gas)
Mancos	4590'	
Gallup	5460'	(Gas & Oil)
Greenhorn	6250'	
Dakota	6370'	(Gas)
T.D.	6580'	

DRILLING, CASING, AND CEMENT PROGRAM

1. Move in, rig up rotary tools.
2. Drill a 12 1/4" hole to 250' \pm .
3. Run 9 5/8", 36#, K-55, ST&C casing to 250'.
4. Cement with 250 sx of Class "B" with 2% CaCl₂.
5. Wait on cement a minimum of 12 hours. Nipple up BOP and manifold with relief lines. Pressure test to 600 psi for 1/2 hour. Test pipe and blind rams.
6. Drill an 8 3/4" hole to 3200'.
7. Run 7", 23#, K-55, ST&C casing to 3200'.
8. Cement with sufficient volume to circulate cement to surface. Cement with 50/50 pozmix and tail in with 150 sx of Class "B" cement.
9. Wait on cement a minimum of 12 hours. Pressure test to 1000 psi for 1/2 hour.
10. Pick up 4 3/4" drill collar and 3 1/2" drill pipe. Drill cement & guide shoe.
11. Reduce hole to 6 1/4" and mud drill to total depth.
12. Run open hole logs as per wellsite Geological Engineer.
13. If productive, run 4 1/2", 10.5#, K-55, ST&C casing liner to T.D. Run a minimum of 150' overlap in 7" casing.
14. Cement with sufficient volume to circulate cement to liner top.
15. Reverse out excess cement. Lay down 3 1/2" drill pipe. Install well head.
16. If non-productive, P & A according to USGS regulations.
17. MORT.

CASING PROGRAM

Surface:	250' of 9 5/8", K-55, ST&C casing.
Intermediate:	3200' of 7", 23#, K-55, ST&C casing.
Liner:	3530' of 4 1/2", 10.5#, K-55, ST&C casing.

MUD PROGRAM

- 0-250' Native solids, gel chemical. Have sufficient viscosity to clean hole and run casing.
- 250-3200' Low solids, gel chemical.
- 3200-T.D. Low solids. 15 cc WL. Use sufficient viscosity to clean hole.

EVALUATION

Cores and DST's: None.

Deviation Surveys:

1. Survey surface hole at 100' intervals. Maximum allowable deviation at surface is 10.
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 the IADC Drilling Report Sheet. Maximum allowable change in deviation is 1° per 100'.

Logs:

Cased hole TDT: Surface to 3200'.

GR/Induction/SP: 3200' to T.D.

GR/FDC: 3200' to T.D.

BLOWOUT EQUIPMENT

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

High pressure manifold with separate valves and discharge lines.

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.)
303-936-0704 (Home) Don Barnes, weekends and holidays.
2. George Ramsey (Home) 303-771-5154.
3. John Owen (Home) 303-795-0221.

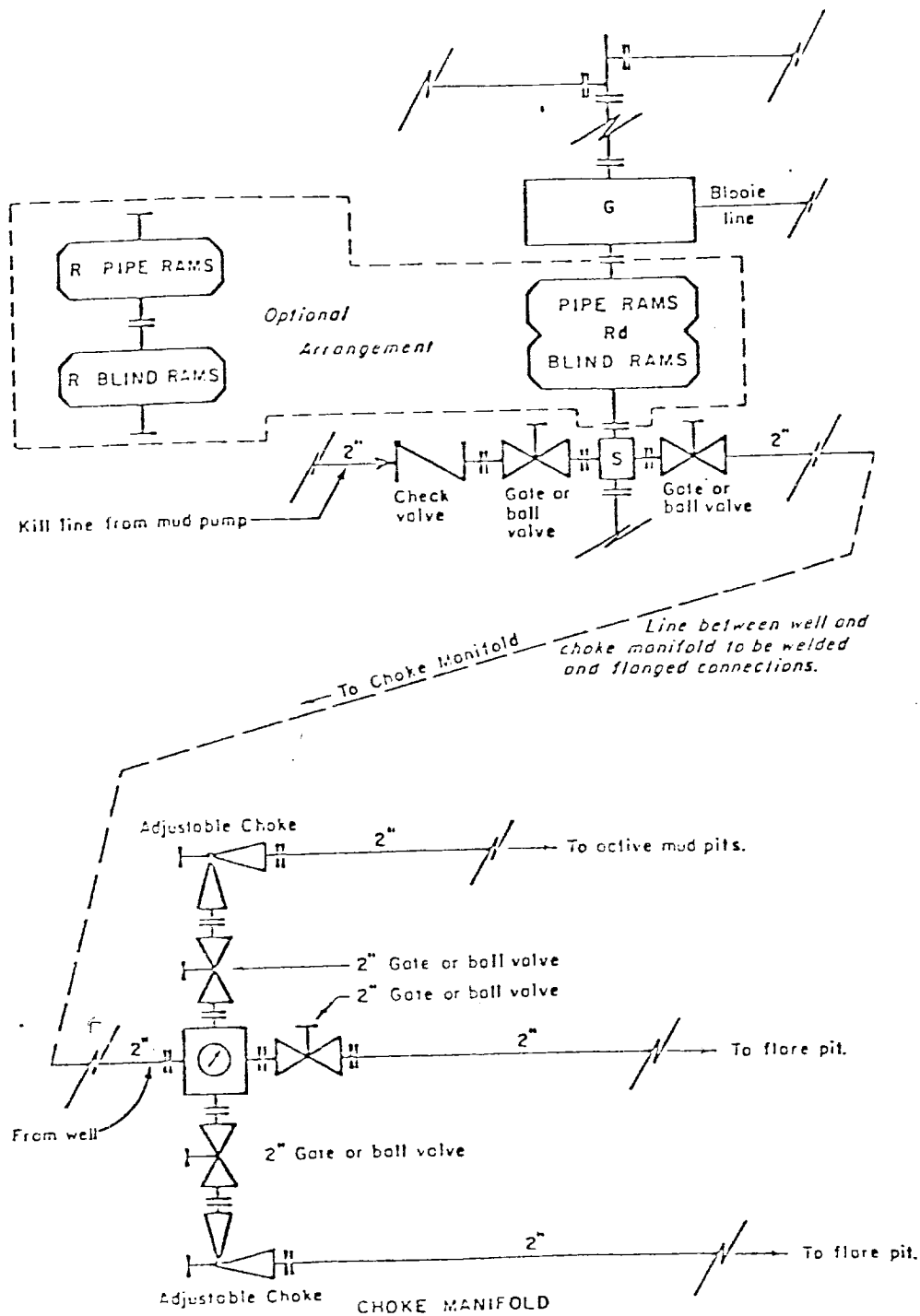
The yellow sheet of the IADC Report is to be filled out completely. The original copy of the drilling time recorder, and copies of any invoices from this well, signed and received for Tenneco Oil Company, will be mailed daily to:

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.
2. Mr. George E. Ramsey, Jr., Drilling Engineers Supervisor
3. Mr. John W. Owen, Project Drilling Engineer.
4. Mr. Mike Lacey, Division Production Manager (Home 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 reseeded operations to be carried out. Seed mixture as designated by the responsible government agency will be used. The reseeded 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 Amenta Canyon on rolling topography. The soil is sandy clay supporting sagebrush, greasewood, sparse juniper & native grasses. The minerals & surface 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 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

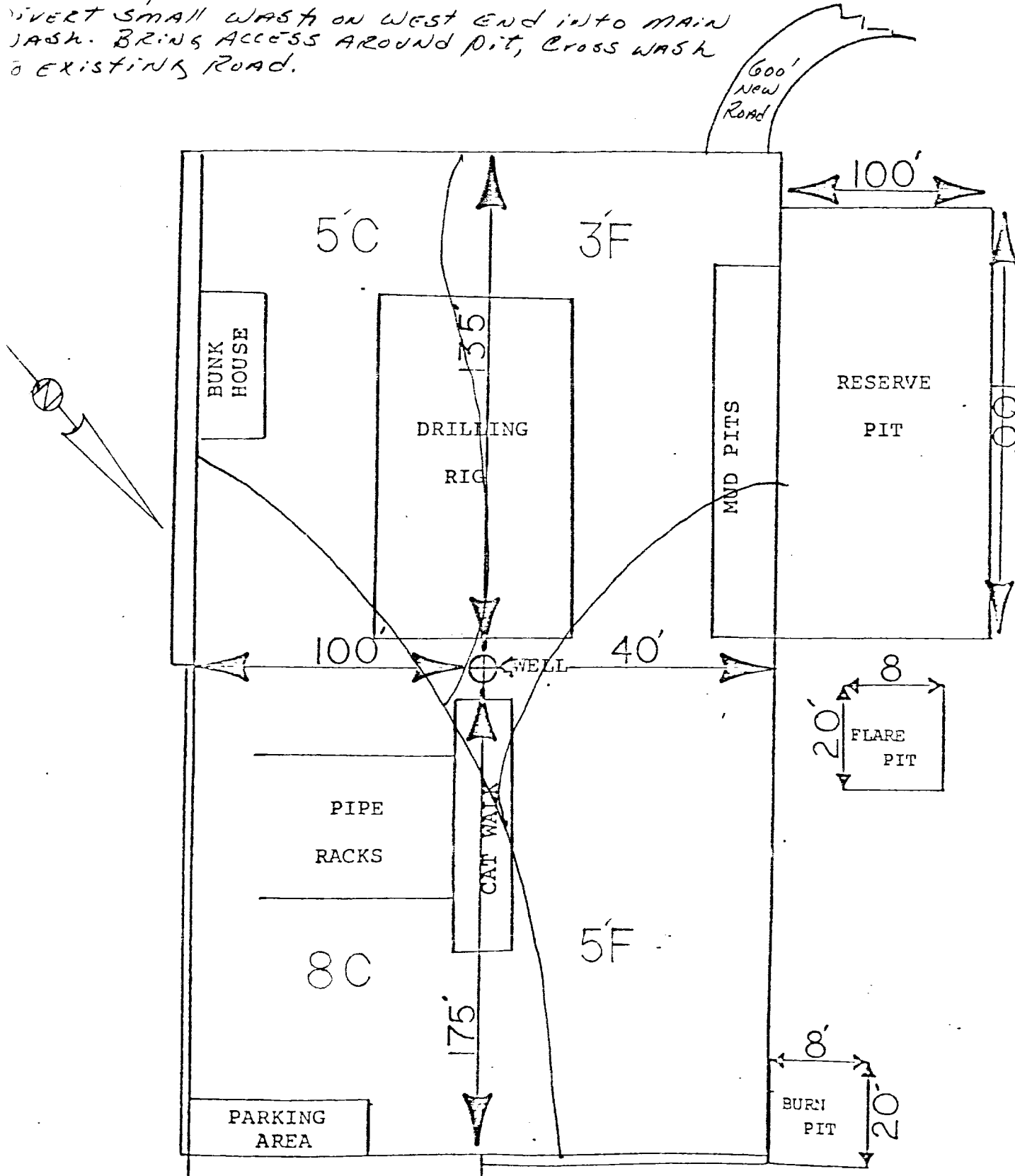
CALCULATION SHEET

EXHIBIT

ILLING WELL SITE LAYOUT 1 E OMIER A

830 FNL, 1590 FWL SEC 26 T28N R10W DATE 1-19-80

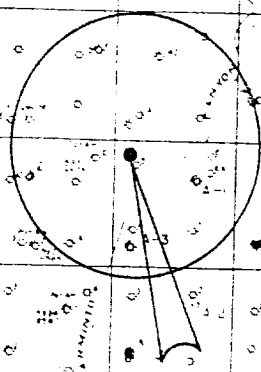
DIVERT SMALL WASH ON WEST END INTO MAIN WASH. BRING ACCESS AROUND PIT, CROSS WASH TO EXISTING ROAD.



600' New

Vicinity Map for
TENNECO OIL COMPANY #1-E OMLER "A"
1830'FNL 1590'FWL Sec. 26-T28N-R10W
SAN JUAN COUNTY, NEW MEXICO

RIOW



VERFAND UNIT

VERFAND