Form 9-331 C
(May 1963)

N.M.O.C.D. COPY

SUBMIT IN TRIPLICATE*
(Other instructions on reverse s

Form approved.
Budget Bureau No. 42-R1425.

30-015-23654

C/SF
Jill 1

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

5. LEASE DESIGNATION AND SERIAL NO.: NM-11326

6. IF INDIAN, ALLOTTEE OR TRIBE NAME: NA

1a. TYPE OF WORK: DRILL [X] DEEPEN [ ] PLUG BACK [ ]

b. TYPE OF WELL: OIL WELL [ ] GAS WELL [X] OTHER — SINGLE ZONE [ ] MULTIPLE ZONE [ ]

7. UNIT AGREEMENT NAME: NA

8. FARM OR LEASE NAME: McMillian JN-33

9. WELL NO.: 1

2. NAME OF OPERATOR: Tenneco Oil Company

3. ADDRESS OF OPERATOR: 6800 Park Ten Blvd., Suite 200, San Antonio, Texas 78213

10. FIELD AND POOL, OR WILDCAT: Und East Atoka Morrow

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*)
At surface: 2040' FWL & 760' FNL Sec. 33, T18S, R27E
At proposed prod. zone: same as above.

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA: Ul C Sec. 33, T18S, R27E

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*: 8.6 miles Northeast of Lakewood, New Mexico

12. COUNTY OR PARISH: Eddy

13. STATE: New Mexico

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ROSWELL, NEW MEXICO

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FEB 05 1981
O. C. D.
ARTESIA, OFFICE

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	17. NO. OF ACRES ASSIGNED TO THIS WELL
760'	320	320 Ac.
18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.	**19. PROPOSED DEPTH**	**20. ROTARY OR CABLE TOOLS**
none	10,000'	Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.): 3380' GR and 3399' RKB

22. APPROX. DATE WORK WILL START*: 2-1-81

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
17-1/2"	13-3/8"	54.5#	350'	Cement is to circulate
11"	8-5/8"	32#	2000'	Cement is to circulate
7-7/8" 24"	5-1/2" 20"	17#	10,000' 40'	1000' above shallowest probable productive zone.

1. Set 40' of 20" conductor pipe. Cement w/RediMix.
2. MIRU Parker Rig # 34.
3. Drill 17-1/2" hole to 350' Set 13-3/8" casing Cement to surface.
4. Cut off Conductor and 13-3/8" casing. Weld on 13-3/8" X 12" 3M Rector SOW head. Test to 575 psi.
5. NU 13-5/8" 5M BOPE. Test to 900 psi w/rig pump and fresh water for 30 mins.
6. Drill 11" hole to 2000'. Set 8-5/8" casing. Cement to surface.
7. ND 13-5/8" BOPE. Cut off 13-3/8" X 12" 3M Rector head and 8-5/8" casing. Weld on 8-5/8" X 10" 3M CIW SOW casing head. Test weld to 1250 psi.
8. NU 10" 5M BOPE. Test BOPE and casing to 2000 psi for 30 mins. w/rig pump and and fresh water, prior to drilling FC.
9. Drill 7-7/8" hole to 10,000. Test BOPE to 5000 psi with and independent tester prior to drilling into the Wolfcamp @ 6400' ±. See Attachments. (OVER)

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.

GAS NOT DEDICATED.

24.

SIGNED [signature] TITLE Division Drilling Engineer DATE 1-12-81

(This space for Federal or State office use)

PERMIT NO. _____ APPROVAL DATE _____

APPROVED BY _____ TITLE ACTING DISTRICT ENGINEER DATE FEB 03 1981

CONDITIONS OF APPROVAL, IF ANY:

Instructions

General: This form is designed for submitting proposals to perform certain well operations, as indicated, on all types of lands and leases for appropriate action by either a Federal or a State agency, or both, pursuant to applicable Federal and/or State laws and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local, area, or regional procedures and practices, either are shown below or will be issued by, or may be obtained from, the local Federal and/or State office.

Item 1: If the proposal is to redrill to the same reservoir at a different subsurface location or to a new reservoir, use this form with appropriate notations. Consult applicable State or Federal regulations concerning subsequent work proposals or reports on the well.

Item 4: If there are no applicable State requirements, locations on Federal or Indian land should be described in accordance with Federal requirements. Consult local State or Federal office for specific instructions.

Item 14: Needed only when location of well cannot readily be found by road from the land or lease description. A plat, or plats, separate or on this reverse side, showing the roads to, and the surveyed location of, the well, and any other required information, should be furnished when required by Federal or State agency offices.

Items 15 and 18: If well is to be, or has been directionally drilled, give distances for subsurface location of hole in any present or objective production zone.

Item 22: Consult applicable Federal or State regulations, or appropriate officials, concerning approval of the proposal before operations are started.

☆ U.S. GOVERNMENT PRINTING OFFICE : 1963—O-711-396

10. Log & test as necessary. Run 5 1/2" casing if productive.

11. Perforate & stimulate as necessary.

NEW MEXICO OIL CONSERVATION COMMISSION
WELL LOCATION AND ACREAGE DEDICATION PLAT

Form C-102
Supersedes C-128
Effective 1-1-65

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

Operator	Lease	Well No.
Tenneco Oil Company	~~Lake~~ McMillian "Jn 33"	1

Unit Letter	Section	Township	Range	County
C	33	18 South	27 East	Eddy

Actual Footage Location of Well:
760 feet from the North line and 2040 feet from the West line

Ground Level Elev.	Producing Formation	Pool	Dedicated Acreage:
3378.9	MORROW	Und East Atoka Morrow ~~WILDCAT~~	320 Acres

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

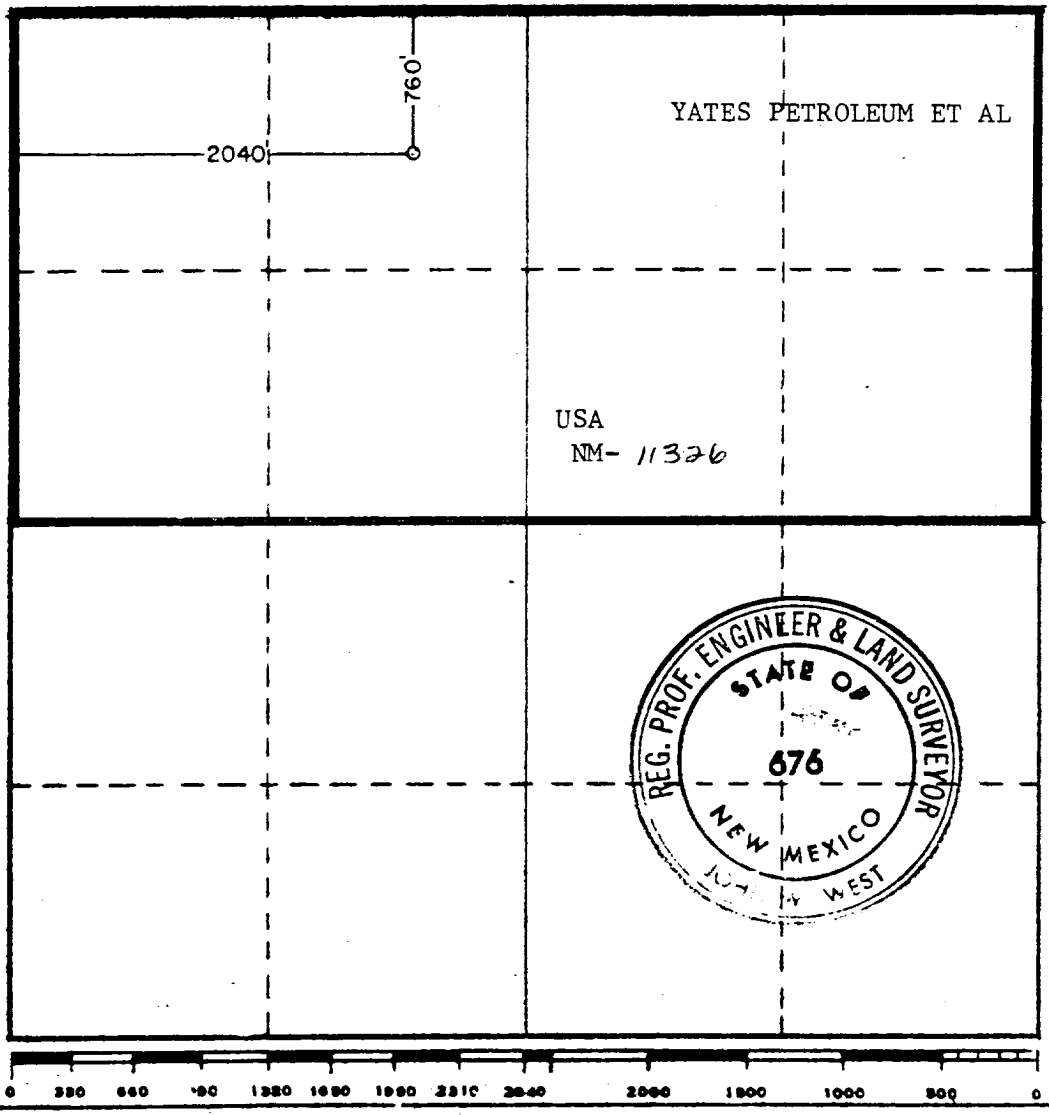
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).

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
Position
DIVISION DRILLING ENGINEER
Company
TENNECO OIL COMPANY
Date
1-15-81

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
January 9, 1981
Registered Professional Engineer and/or Land Surveyor

Certificate No. JOHN W. WEST 676
PATRICK A. ROMERO 6663
Ronald J. Eidson 3239

EXHIBIT "B"

13 - POINT COMPLIANCE PROGRAM

OF NTL-6 APPROVAL OF OPERATIONS

Attached to form 9-331C
Tenneco Oil Company
McMillian JN-33 Well #1
1980' FWL & 760' FNL
Sec. 33, T81S, R27E
Eddy County, New Mexico

1. The Geologic Surface Formation

The surface formation is Artesia Group of Permian Age

2. Estimated Tops of Important Geologic Markers

Queen	900
San Andres	1600
Glorieta	3250
Bone Spring	3950
Wolfcamp	6400
Strawn	8600
Atoka	9200
Morrow Clastics	9600
Chester	9975

3. Estimated Depths of Anticipated Water, Oil, Gas, or Minerals

Cisco	7900-8000	Oil
Morrow	9600-9975	Gas

4. The Proposed Casing Program

Casing Design

CASING STRING	HOLE SIZE	INTERVAL	SECTION LENGTH	SIZE (OD)	WEIGHT, GRADE & JOINT	NEW OR USED	MUD* WEIGHT	TENSILE SF t	COLLAPSE SF t	BURST SF t
Conductor	24	0-60'	40'	20"	------	--	--	--	--	--
Surface	17 1/2"	0-350'	350'	13-3/8"	54.5# K-55 ST&C	New	8.4	28.68	7.22	High
Intermediate	11"	0-2000'	2,000'	8-5/8"	32# K-55 ST&C	New	8.4	6.30	2.70	4.20
Production	7 7/8"	0-10,000'	10,000'	5-1/2"	17# N-80 LTC	New	9.0	2.04	4.98	1.84

*At casing setting

Cement Design

In setting 13-3/8 and 8-5/8, the cement will be circulated.
5-1/2" casing will be cemented from shoe to 1000' above shallowest pay.

5. The Operator's Minimum Specifications for Pressure Control

EXHIBIT "C" is a schematic diagram of the blowout preventor equipment. The BOP's will be hydraulically tested to 3000 psi. after nippling up and after any use under pressure. Pipe rams will be operationally checked each 24-hour period, as will blind rams and annual preventor each time pipe is pulled out of the hole. Such checks of BOP will be noted on daily drilling reports.

Accessories to BOP will include a kelly cock, floor safety valve, drill string BOP and choke manifold with pressure rating equivalent to the BOP stack.

6. The Type and Characteristics of the Proposed Circulating Muds

Mud system will be gel-chemical with adequate stocks of sorptive agents on site to handle possible spills of fuel and oil on the surface. Heavier muds will be on location to be added if pressure requires.

Interval	Mud Weight (ppg)	Viscosity (sec.)	Fluid Loss	Remarks
0-350'	8.4	33-35	NC	Spud Mud
350'- 2,000'	8.4	33-35	NC	Brine-Gel
2,000'-10,000'	9.0	33-35	10-15cc.	Fresh Water Mud

7. The Auxiliary Equipment to be Used

(a) A kelly cock will be kept in the string at all times.

(b) A float will not be used at the bit.

(c) Flow-show and PVT will be used in monitoring mud system.

(d) A stabbing valve will be on the floor to be stabbed into the drill pipe when kelly is not in the string.

8. Testing, Logging, and Coring Program

(a) DST's may be run in the Cisco and Morrow formations if shows are encountered.

(b) The logging program is scheduled to consist of a Dual Laterolog and Compensated Neutron-Compensated Density logs run from TD to surface pipe at 350 ft.

(c) A Two-man mudlogging unit will be in operation from the surface pipe point at 350 ft. to TD.

(d) No coring is anticipated.

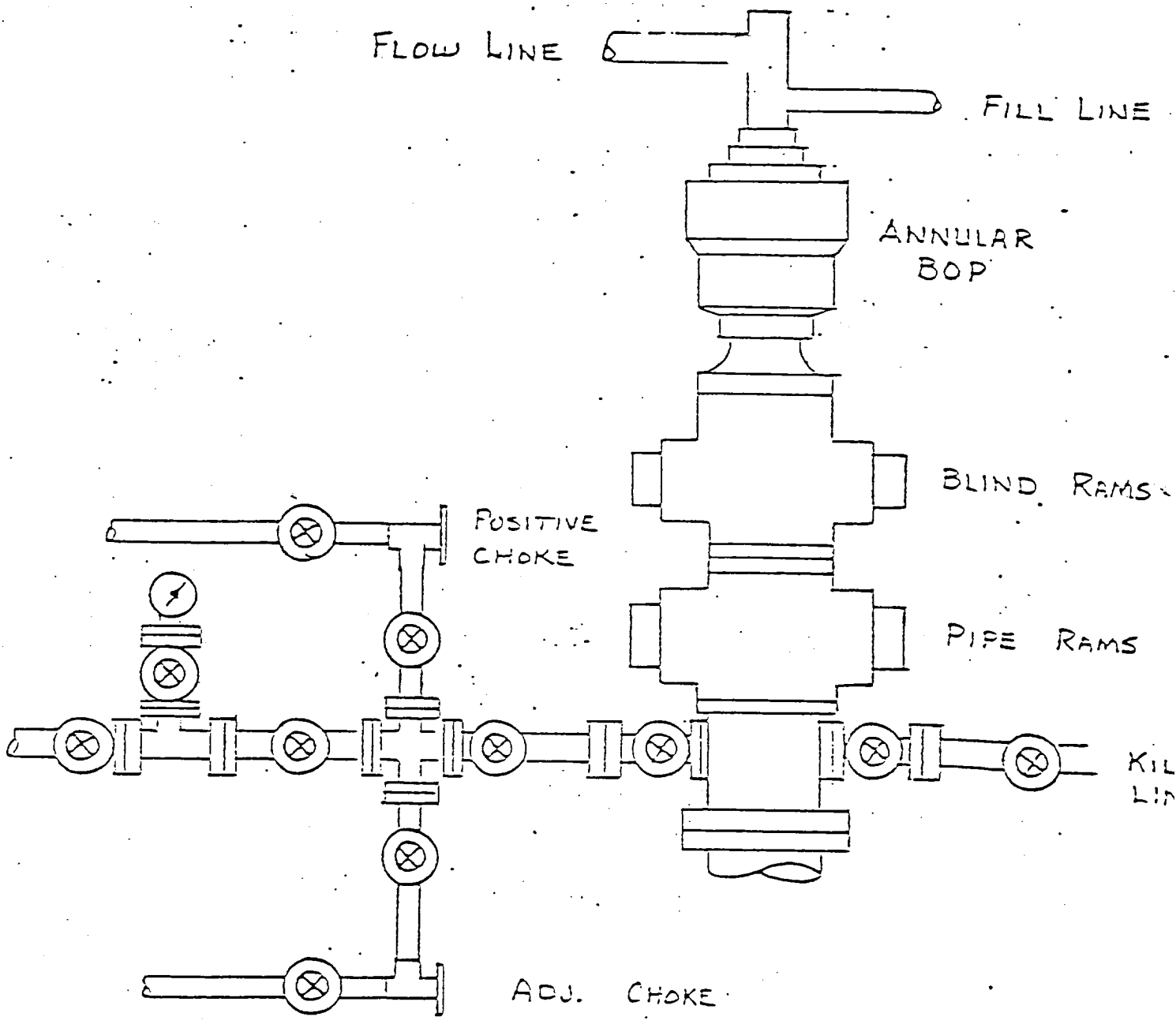
(e) Stimulation will consist of acidizing if indicated by log evaluation appropriate sundry notices will be filed.

9. Any Anticipated Abnormal Pressures or Temperatures

Possible high pressures are anticipated in undepleted Morrow Sands. These will be contained with heavy drilling fluid. Maximum bottom hole pressures anticipated should be 4950 psig.

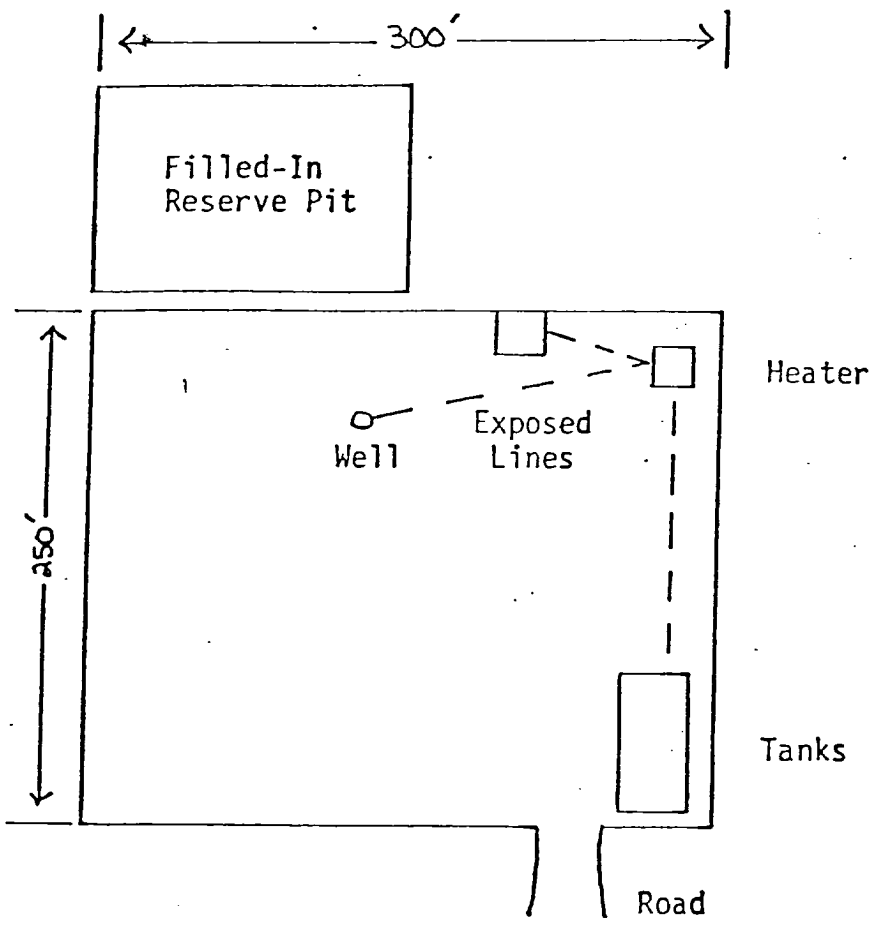
10. Anticipated Starting Date and Duration of the Operations

The anticipated starting date is set for January 26, 1981 or as soon as possible after examination and approval of drilling requirements. Operations should be completed within 48 days.



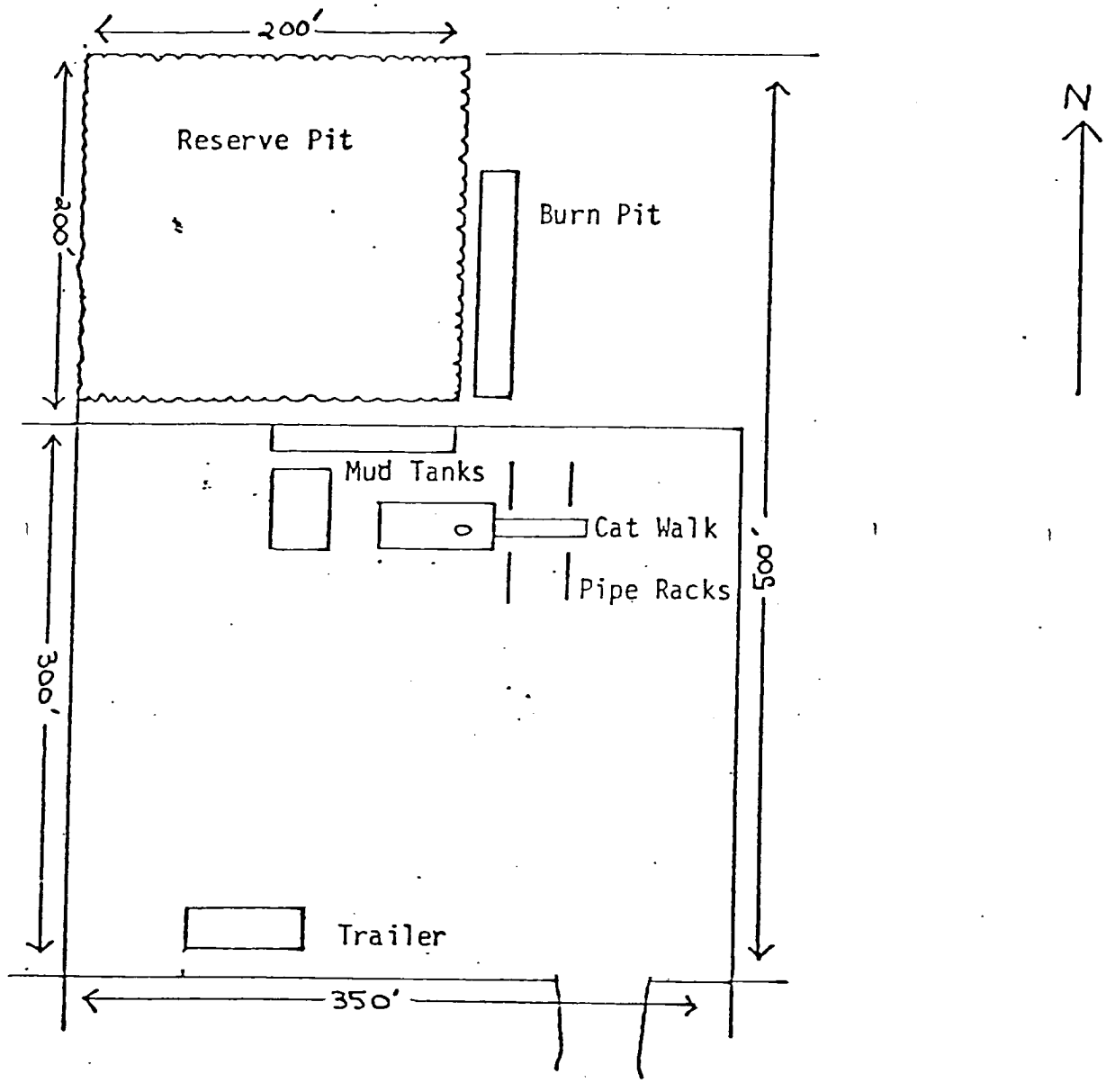
This is to be 3000 psi wp, which is adequate, that will be used on the 11" and 7 7/8" hole. This is the minimum possible BOP stack that will be used. Tenneco may choose to use more equipment and higher pressure.

MCMILLIAN JN-33 #1
EXHIBIT "C"



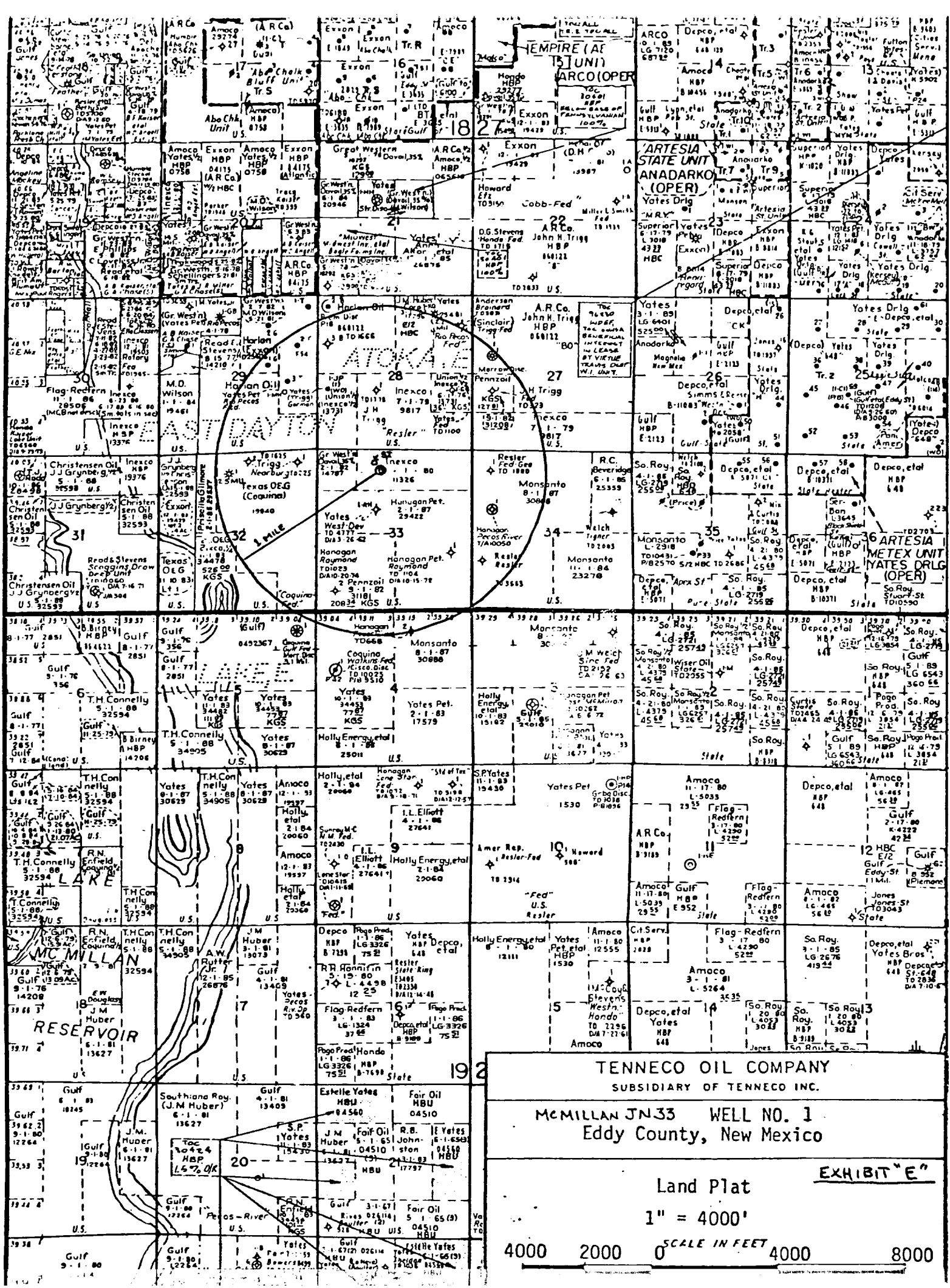
McMILLAN JN33 Well No. 1

Exhibit "F"
Production Lay-Out



MCMILLANJN33 Well No. 1

EXHIBIT "G"
Drilling Rig Lay-Out



TENNECO OIL COMPANY
SUBSIDIARY OF TENNECO INC.

McMILLAN JN33 WELL NO. 1
Eddy County, New Mexico

EXHIBIT "E"

Land Plat

1" = 4000'

4000 2000 0 SCALE IN FEET 4000 8000

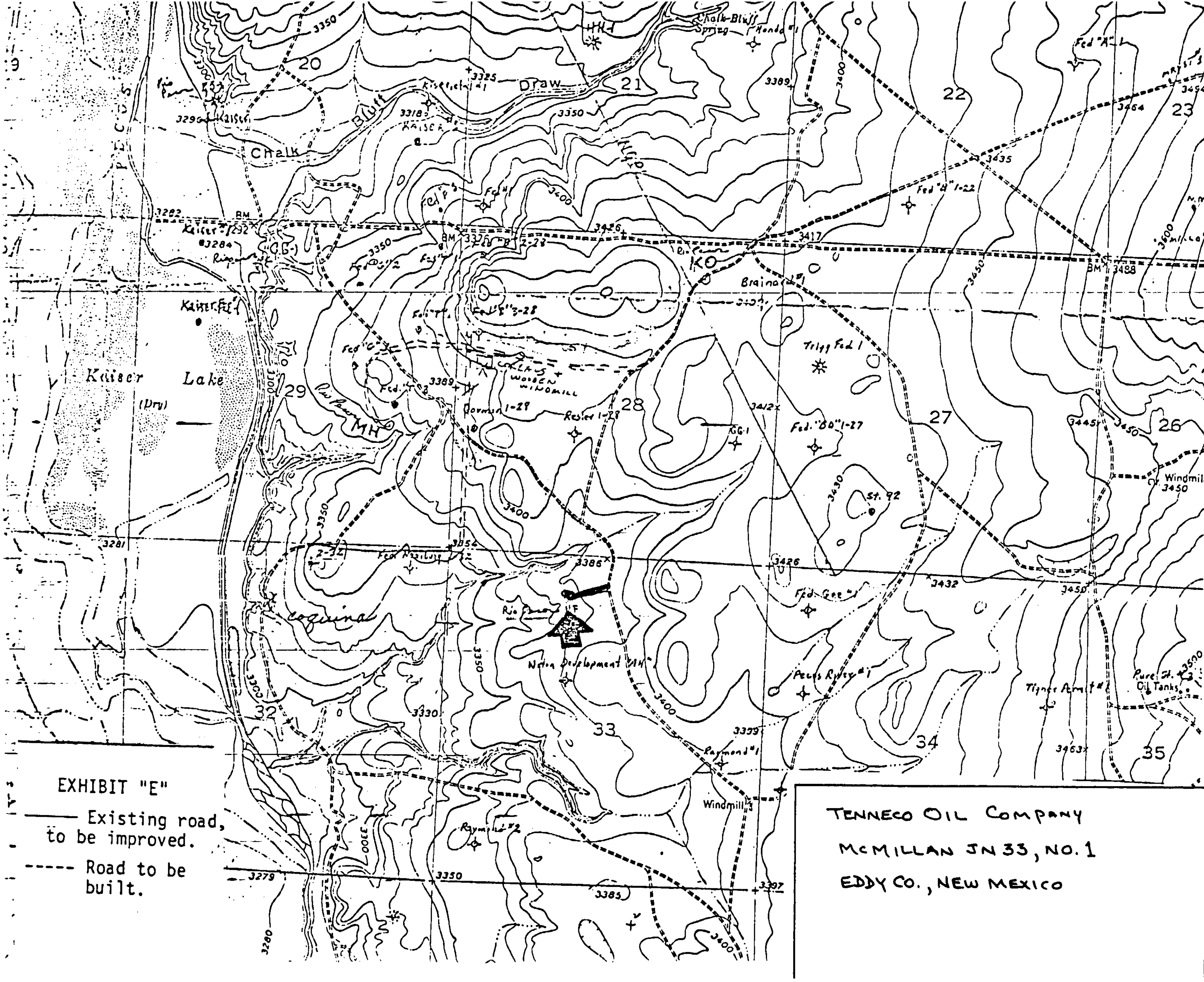


EXHIBIT "E"

——— Existing road, to be improved.

----- Road to be built.

TENNECO OIL COMPANY

McMILLAN JN 33, NO. 1

EDDY CO., NEW MEXICO