

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

Mobil Oil Corporation

## 3. ADDRESS OF OPERATOR

Nine Greenway Plaza, Suite 2700; Houston, Texas 77046

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

At surface

1980' FEL & 660' FNL, Sec. 3, T26N, R18W  
At proposed prod. zone

Same as surface

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

## 15. DISTANCE FROM PROPOSED\*

LOCATION TO NEAREST  
PROPERTY OR LEASE LINE, FT.  
(Also to nearest drlg. unit line, if any)

660'

## 16. NO. OF ACRES IN LEASE

1440

17. NO. OF ACRES ASSIGNED  
TO THIS WELL

160

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

6404'

## 19. PROPOSED DEPTH

7000'

## 20. ROTARY OR CABLE TOOLS

Rotary

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

Ground - 5624'

## 22. APPROX. DATE WORK WILL START\*

As soon as possible

## 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"        | 48# H-40        | 0- 100'       | 1) Circulate to surface |
| 12 1/4"      | 8 5/8"         | 24# K-55        | 0-1600'       | 2) Circulate to surface |
| 7 7/8"       | 5 1/2"         | 14# K-55        | 0-5400'       | 3) Circulate to 1575'   |
|              |                | 15.5# K-55      | 5400-7000'    |                         |

1) Class H Neat with 2% CaCl<sub>2</sub>2) Class B with 8% gel & 2% CaCl<sub>2</sub> Tail in with 100 sx. Class B Neat w/2% CaCl<sub>2</sub>

3) Class H with 7% salt sx.

Blowout Preventer and Mud Programs Attached

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

*A. D. Bond*

A. D. Bond

TITLE

Regulatory

Engineering Coordinator II

DATE 2-7-79

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

APPROVED BY

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY:

*oh Erik*

\*See Instructions On Reverse Side

**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<br><b>Mobil Oil Corporation</b>   |   |                        | Lease<br><b>Navajo</b>                 |                           | Well No.<br><b>6</b> |
| Unit Letter<br><b>B</b>  | Section<br><b>3</b>                         | Township<br><b>26N</b> | Range<br><b>18W</b>                    | County<br><b>San Juan</b> |                      |
| Actual Footage Location of Well:<br><div style="display: flex; justify-content: space-between;"> <span>660 feet from the North line and</span> <span>1980' feet from the East line</span> </div> |   |                        |  |                           |                      |
| Ground Level Elev.<br><b>5624</b>  | Producing Formation<br><b>Pennsylvanian</b> |                        | Dedicated Acreage:<br><b>160</b> Acres |                           |                      |

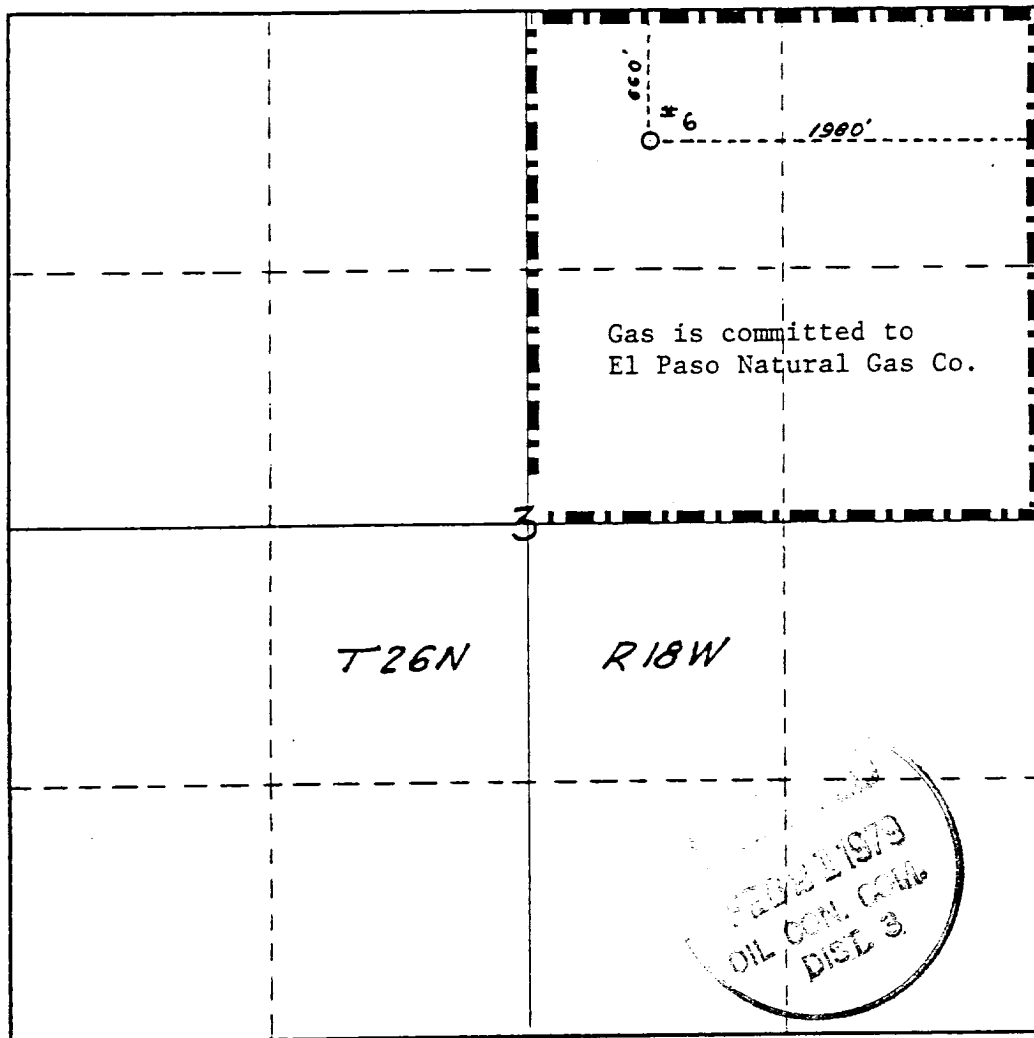
1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
3. If more than one lease of different ownership is 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.

East - 5288'



**CERTIFICATION**

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

Name  
**A. D. Bond**  
Position  
**Regulatory Engineering Coordinator II**  
Company  
**Mobil Oil Corporation**  
Date  
**February 7, 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  
**January 30, 1979**  
Registered Professional Engineer and/or Land Surveyor

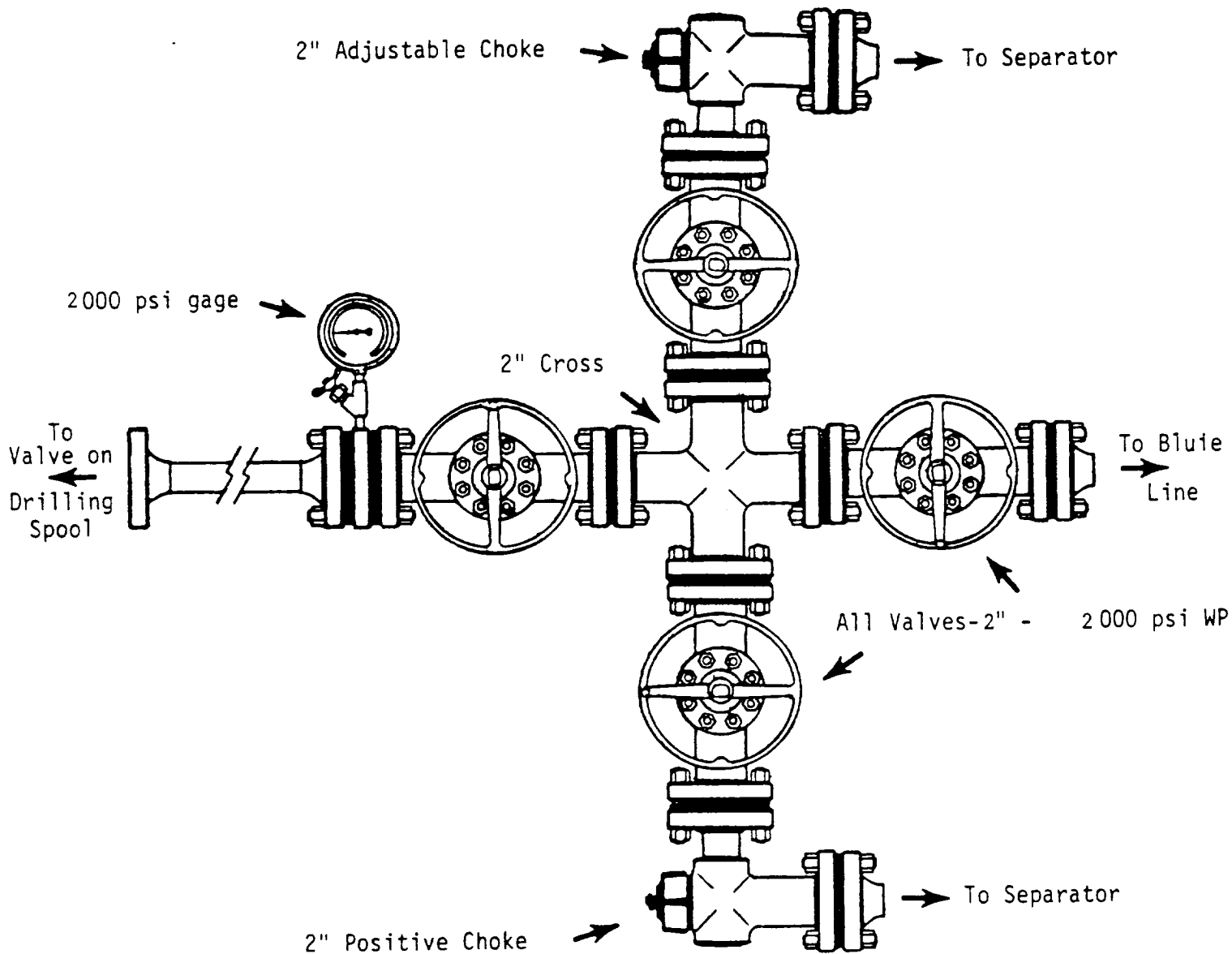
**Curtis A. Callaway**

Certificate No.

**3342**



PROPOSED CHOKE MANIFOLD  
(MINIMUM REQUIREMENTS)  
8-5/8 " CASING STRING



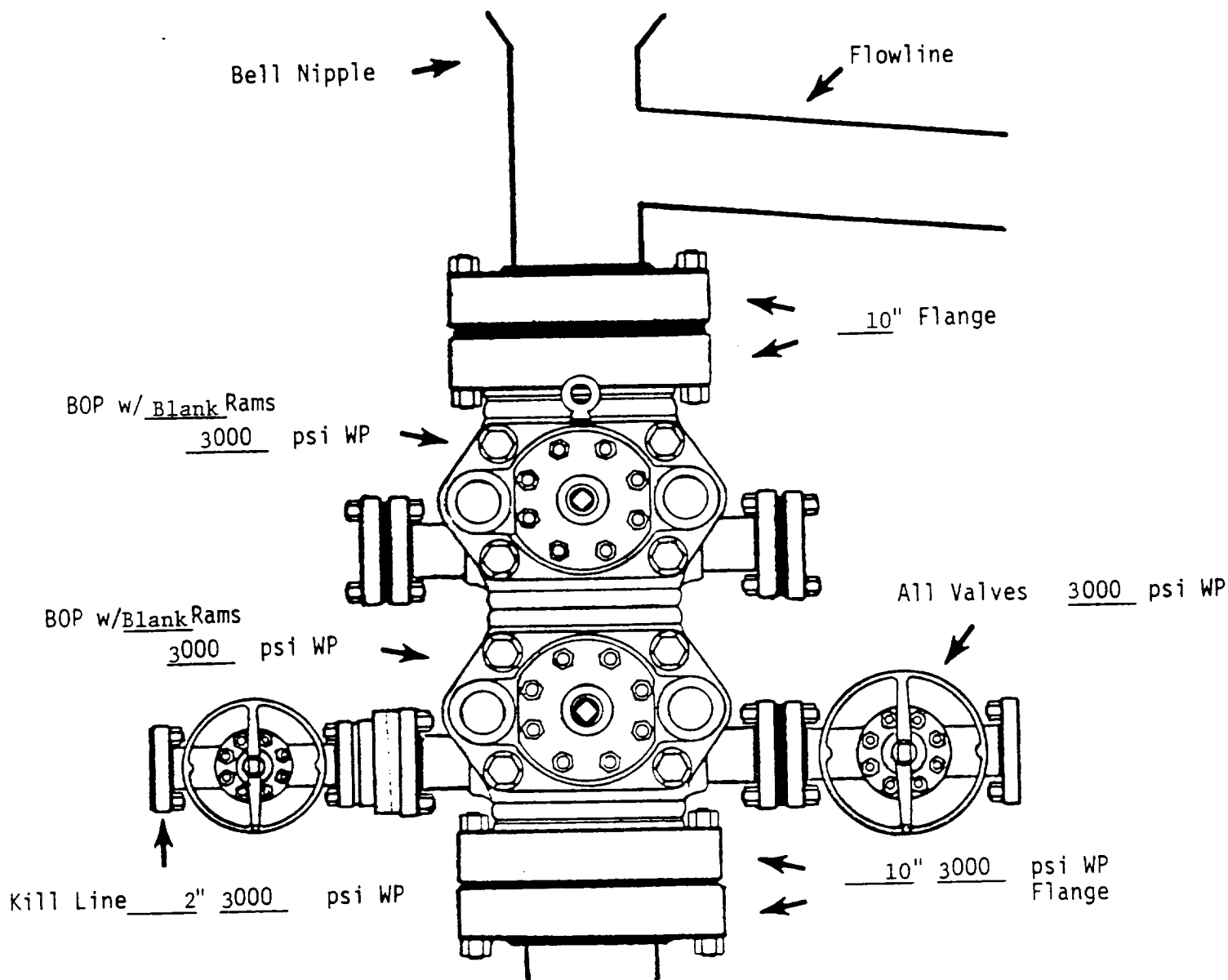
Mobil Oil Corporation  
Houston E&P Division

LEASE Navajo

WELL 6

COUNTY San Juan STATE NM

PROPOSED BOP STACK  
8-5/8" CASING



Mobil Oil Corporation  
Houston E&P Division

LEASE Navajo

WELL 6

COUNTY San Juan STATE NM

MOBIL OIL CORPORATION'S

NAVAJO, WELL #6  
 TOCITO DOME - PENNSYLVANIAN "D" ASSOCIATED POOL  
 SAN JUAN COUNTY, NEW MEXICO

MUD PROGRAM

Depth, Ft.

| <u>From</u> | <u>To</u> | <u>Type Mud</u>             | <u>Weight</u> | <u>Viscosity</u> | <u>pH</u> | <u>Water Loss</u> |
|-------------|-----------|-----------------------------|---------------|------------------|-----------|-------------------|
| 0           | 1600'     | Spud Mud                    | No Control    | -                | -         | -                 |
| 1600'       | T.D.      | Fresh water, low solids gel | 8.9-9.0       | 28-35            | 9         | 20 cc             |

CORING PROGRAM

| <u>Approx. Depth</u> | <u>Formation</u> | <u>Type</u> | <u>Size</u> | <u>Footage</u> |
|----------------------|------------------|-------------|-------------|----------------|
| None                 | --               | --          | --          | ---            |

LOGGING PROGRAM

| <u>Type or Kind</u> | <u>Depth (From-To)</u> |
|---------------------|------------------------|
| Induction - Sp      | Surface to T.D.        |
| SNP-Density - GR    | Surface to T.D.        |

FLUID PRODUCTION TEST PROGRAM

| <u>Type &amp; Formation</u> | <u>Expected Depth</u> |
|-----------------------------|-----------------------|
| None                        | ----                  |

MOBIL OIL CORPORATION  
SURFACE USE PLAN  
NAVAJO WELL #6  
660' FNL & 1980' FEL  
SECTION 3, T-26-N, R-18-W  
SAN JUAN COUNTY, NEW MEXICO

R. M. Hayhurst  
January 30, 1979

1. EXISTING ROADS (See Attached Map "A")

An existing 15' wide graded road will be utilized to reach the location. This road leaves U.S. Highway No. 666 at a point about 18.5 miles south of Shiprock, New Mexico. This road proceeds 1.7 miles to an existing ranch road proposed for improvement.

2. PLANNED ACCESS ROADS (See Attached Map "A")

The proposed ranch road to be improved to the location site will be 12' wide x 0.35 miles long with a 12" deep borrow ditch on each side. Native material will be graded, watered, and compacted for the new roadway surface. The area crossed by the road is presently used for sparse sheep and cattle grazing.

3. LOCATION OF EXISTING WELLS

For Location of existing wells, see attached Map "A"

4. LOCATION OF TANK BATTERIES & PRODUCTION FACILITIES  
(See Attached Map "A")

Production from the proposed well will be transported to a proposed satellite station containing two 500 barrel steel tanks, a high pressure separator and a centrifugal pump located about 200' south of well #6. From this satellite station a 3" gas gathering line paralld by a 3" flow line will carry production to the existing tank battery at Navajo Well #1.

5. WATER SUPPLY

Water for drilling purposes will be trucked from locations off-lease.

6. SOURCE OF CONSTRUCTION MATERIALS

No construction materials will be required for this project.

7. METHODS OF HANDLING WASTE DISPOSAL

All garbage and trash shall be burned when possible, and that portion that cannot be burned will be accumulated and buried with a minimum of 4' cover.

8. ANCILLARY FACILITIES

No ancillary facilities are planned at this time.

Mobil Oil Corporation  
Surface Use Plan  
Navajo Well #6

San Juan County, New Mexico

Page 2

9. WELL SITE LAYOUT

See Attached Plat "B"

10. PLANS FOR RESTORATION OF SURFACE

After well is completed and pits have sufficiently dried, they will be backfilled and shaped to original grade. All trash will be removed from the site or buried with a 4' minimum cover.

In the event well is abandoned, the location site and roads will be reshaped to original contour and re-seeded with seed mixture and soil additives as recommended by the Navajo Tribe. This restoration will begin within 90 days of date well is abandoned and will be completed within 30 days of that date.

11. OTHER INFORMATION

The location site is located in a semi-desert area of gently rolling hills and ridges capped with sandstone. This site is located in a sandy area on the peak of a low hill. The area is sandy with very sparse native grasses. The surface is owned by the Navajo Tribe and utilized for sparse grazing of goats, sheep and cattle. There are no occupied dwellings within one mile of the site, and no known archaeological, historical, or cultural sites are in the area.

12. LESSEE'S OR OPERATOR'S REPRESENTATIVE

Glen W. Barb  
Mobil Oil Corporation  
P. O. Box 633  
Midland, TX 79702 - Telephone 915-684-8211

13. CERTIFICATION

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drillsite and access route; that the statements made in this plan are, to the best of my knowledge



Mobil Oil Corporation  
Surface Use Plan  
Navajo Well #6

San Juan County, New Mexico

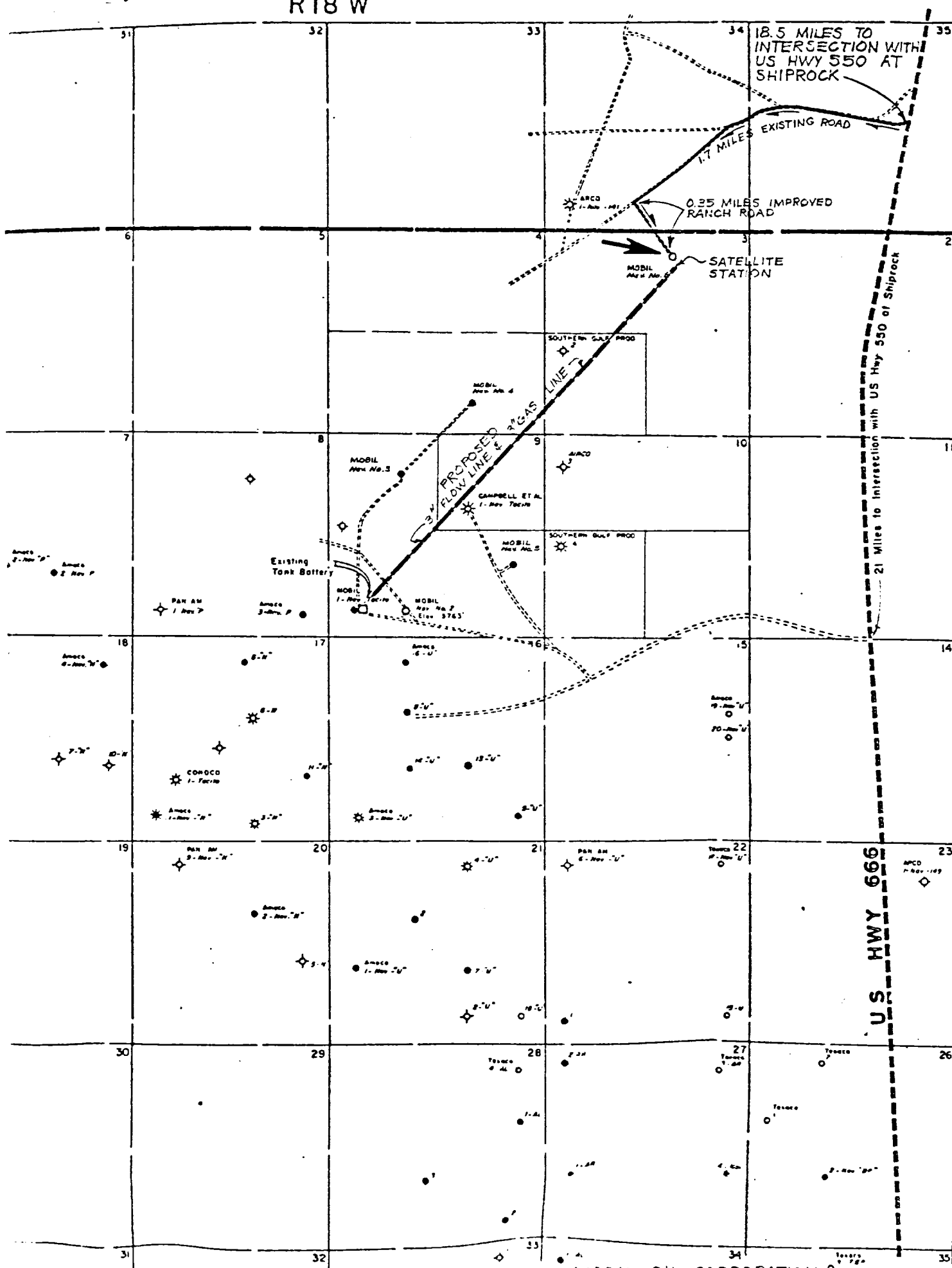
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true and correct; and that the work associated with the operations proposed herein will be performed by a reliable contractor in conformity with this plan and the terms and conditions under which it is approved.

*A. J. Monzingo for G. W. Barb*  
Glen W. Barb 2-15-79  
Producing Operations Manager

RMHayhurst/tb  
January 30, 1979

R18 W



T  
26  
N

U.S. HWY 666

MOBIL OIL CORPORATION  
TOCITO DOME PENN "D" POOL

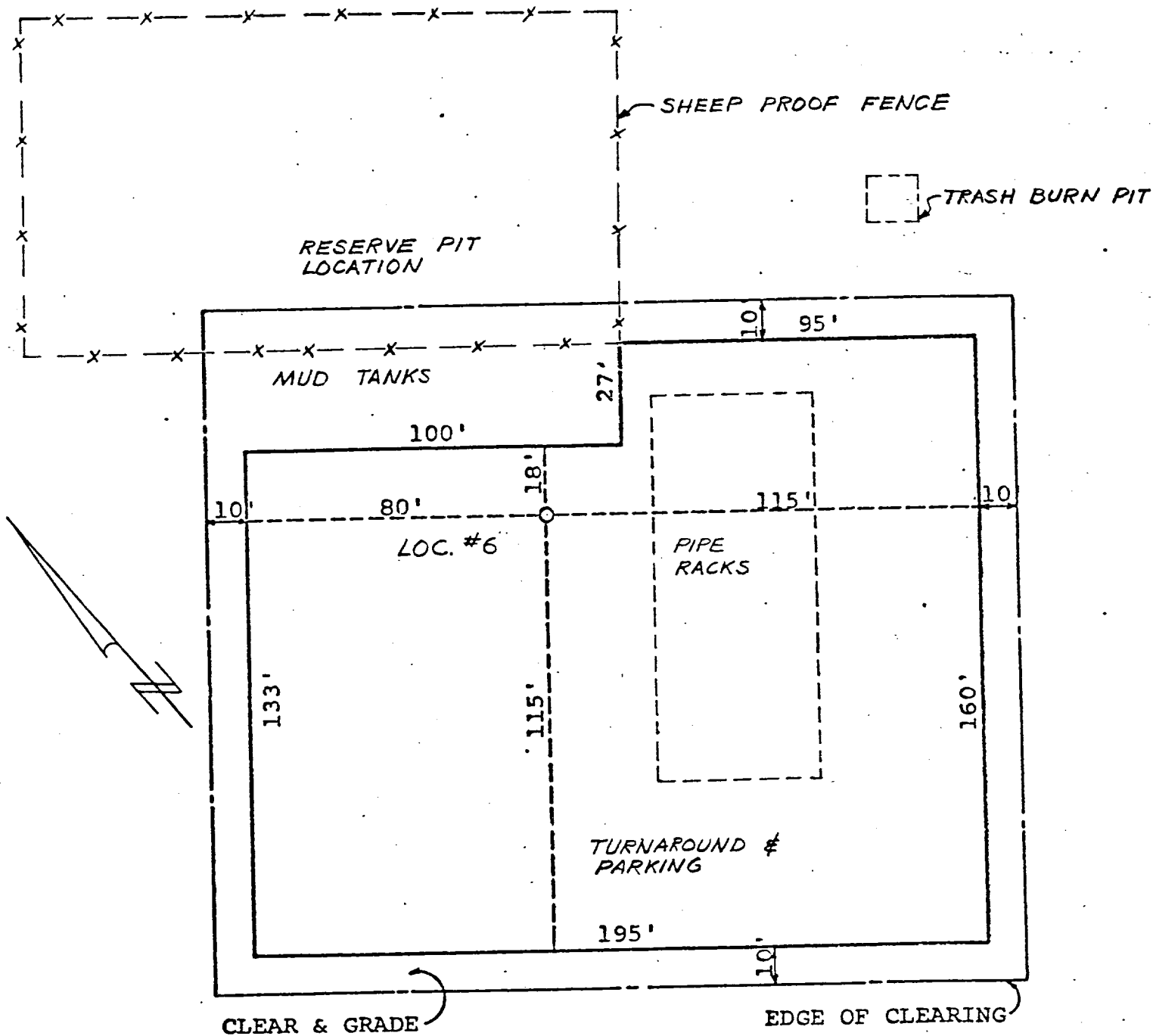
MAP "A"

RMH  
1/29/79

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C07227(11-5



PLAT "B"  
NAYAJO WELL #6

| NO.  | DATE | BY | ALTERATION |
|--|------|----|------------|
|  |      |    |            |
| STANDARD LOCATION PLAN<br>5000'-7000' DEEP WELLS<br>ON STABLE SOIL |      |    |            |
| MOBIL OIL CORPORATION<br>MIDLAND, TEXAS                            |      |    |            |

MOBIL OIL CORPORATION

LEASE: Navajo

WELL: 6

Undesignated & Tocito Dome -  
FIELD: Pennsylvanian "D" Associated

COUNTY: San Juan

STATE: New Mexico

TEN POINT WELL CONTROL & RESOURCE PROTECTION DATA

1. The geologic name of the surface formation Gallup.
2. The estimated tops of important geologic markers.

| <u>Formation Name</u>      | <u>Depth (Top)</u> |
|----------------------------|--------------------|
| <u>Dakota</u>              | <u>700'</u>        |
| <u>Entrada</u>             | <u>2070'</u>       |
| <u>Dechelly</u>            | <u>3655'</u>       |
| <u>Hermosa</u>             | <u>5464'</u>       |
| <u>Pennsylvanian ("D")</u> | <u>6300'</u>       |
| <u>Mississippian</u>       | <u>6750'</u>       |

3. The estimated depth at which anticipated water, oil, gas or other mineral-bearing formations are expected to be encountered.

| <u>Formation Name</u> | <u>Depth (Top)</u> | <u>Type of Mineral</u> |
|-----------------------|--------------------|------------------------|
| <u>Dakota</u>         | <u>700'</u>        | <u>Water</u>           |
| <u>Pennsylvanian</u>  | <u>6300'</u>       | <u>Oil &amp; Gas</u>   |
| <u>Mississippian</u>  | <u>6750'</u>       | <u>Oil &amp; Gas</u>   |
| <u> </u>              | <u> </u>           | <u> </u>               |

4. The proposed casing program, including the size, grade, and weight-per-foot of each string and whether new or used. (Shown on Form 9-331C)
5. The lessee's or operator's minimum specifications for pressure control equipment which is to be used, a schematic diagram thereof showing sizes, pressure ratings (or API series), and the testing procedures and testing frequency. (See attachment)
6. The type and characteristics of the proposed circulating medium or mediums to be employed for rotary drilling and the quantities and types of mud and weighting material to be maintained.

The proposed mud program is attached. A sufficient quantity of mud  
and chemicals will be maintained at the well site to meet anticipated  
conditions, recognizing the time required to replenish supplies from  
local sources.

7. The auxiliary equipment to be used, such as (1) kelly cocks, (2) floats at the bit, (3) monitoring equipment on the mud system, (4) a sub on the floor with a full opening valve to be stabbed into drill pipe when the kelly is not in the string.

A Kelly cock and a sub with a full opening valve will be used.

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8. The testing, logging, mud, and coring programs to be followed with provision made for required flexibility. (See attached sheet)

9. Any anticipated abnormal pressures or temperatures expected to be encountered or potential hazards such as hydrogen sulfide gas, along with plans for mitigating such hazards.

No abnormal pressures, temperatures, or hazardous gases are expected to  
be encountered; however, prudent drilling operations will be maintained  
to guard against such hazards.

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10. The anticipated starting date and duration of the operations.

Starting Date: March 1, 1979 Duration of Operations 40 Days.