

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK DRILL <input checked="" type="checkbox"/> DEEPEN <input type="checkbox"/> PLUG BACK <input type="checkbox"/>			7. UNIT AGREEMENT NAME		
b. TYPE OF WELL OIL WELL <input type="checkbox"/> GAS WELL <input checked="" type="checkbox"/> OTHER <input type="checkbox"/> SINGLE ZONE <input checked="" type="checkbox"/> MULTIPLE ZONE <input type="checkbox"/>			8. FARM OR LEASE NAME		
2. NAME OF OPERATOR Mobil Oil Corporation			9. WELL NO. Nava jo		
3. ADDRESS OF OPERATOR 3 Greenway Plaza-East, Suite 800, Houston, Texas 77046			10. FIELD AND EGG. OR WILDCAT Tocito Dome North- Pennsylvanian Gas		
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)* At surface 800' FEL & 1840' FSL, Sec. 9, T26N, R18W			11. SEC., T., R., M., OR BLE. AND SURVEY OR AREA Sec. 9, T26N, R18W		
5. At proposed prod. zone Same as Surface			12. COUNTY OR PARISH San Juan		
6. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*			13. STATE N.M.		
15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any)		300'	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.		2764'	19. PROPOSED DEPTH 6450'		20. ROTARY OR CABLE TOOLS Rotary
21. ELEVATIONS (Show whether DF, RT, GR, etc.) Ground - 5724'					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
3 3/4"	7"	20# K-55	0-4500'	3) Circulate to Surface
		23# K-55	4500'-6450'	

- 1) Class H Neat with 2% CaCl₂
- 2) Class H with 8% gel & 2% CaCl₂ Tail in with 100 sx. Class H Neat w/2% CaCl₂
- 3) Class H with 7% salt sx.

Blowout Preventer & Mud Programs Attached



Gas is dedicated

14. 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.

15. SIGNED A. D. Bond TITLE Regulatory Engineering Coordinator DATE 2-27-78

(This space for Federal or State office use)

PERMIT NO. _____ APPROVAL DATE _____

APPROVED BY _____ TITLE _____ DATE RECEIVED

CONDITIONS OF APPROVAL, IF ANY:

Altal

MAR 1 1978

NEW MEXICO OIL CONSERVATION COMMISSION
WELL LOCATION AND ACREAGE DEDICATION PLAT

Form G-122
Supersedes G-128
Effective 1-1-65

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

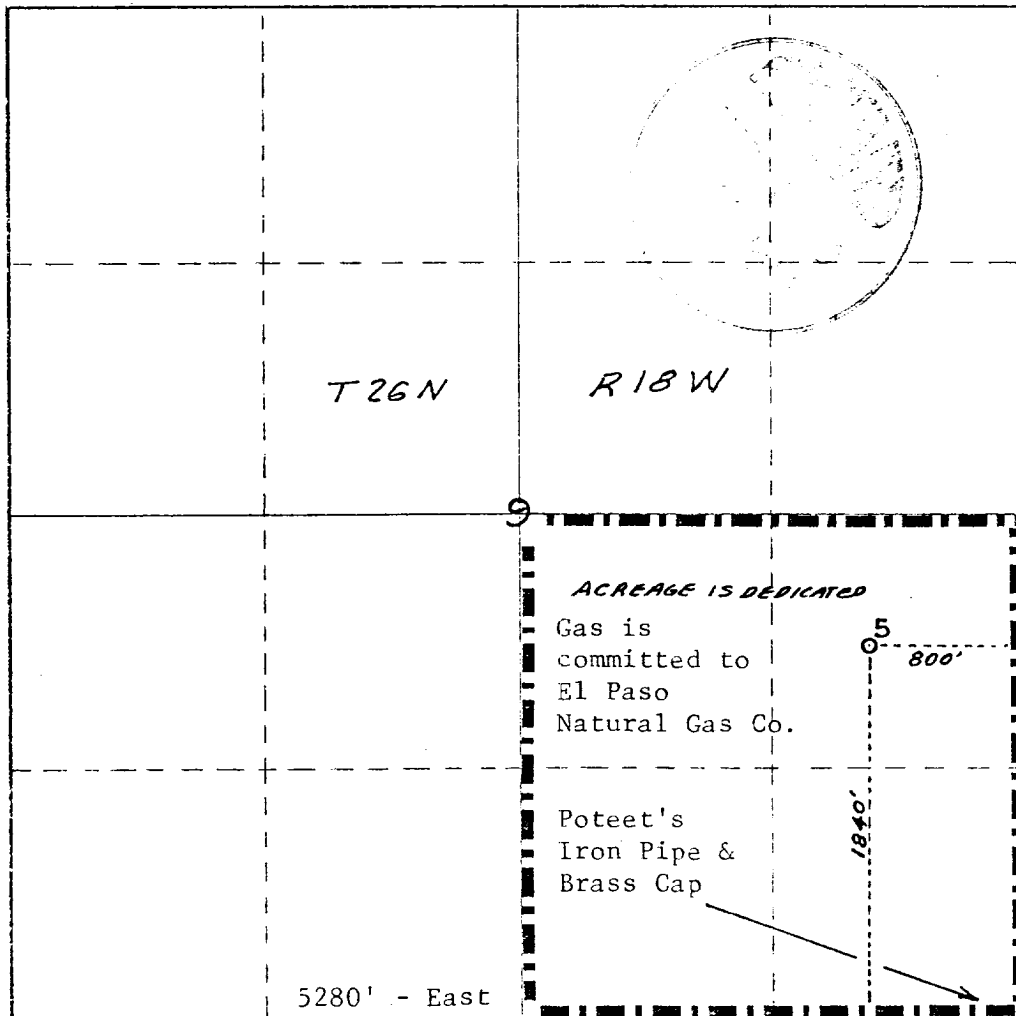
Lessee MOBIL OIL CORPORATION			Lease NAVAJO		Well No. 5
Section I	Section 9	Township 26N	Range 18W	County SAN JUAN	
Actual Postage Location of Well:					
1840 feet from the South line and		300 feet from the East line			
Drilling Log well 5724	Producing Formation Pennsylvanian	Pool Tocito Dome, North - Pennsylvanian Gas Pool		Net Acreage 160 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.

A. D. Bond

Name
A. D. Bond
Position **Regulatory Engineering Coordinator**

Company
Mobil Oil Corporation

Date
Feb. 27, 1978

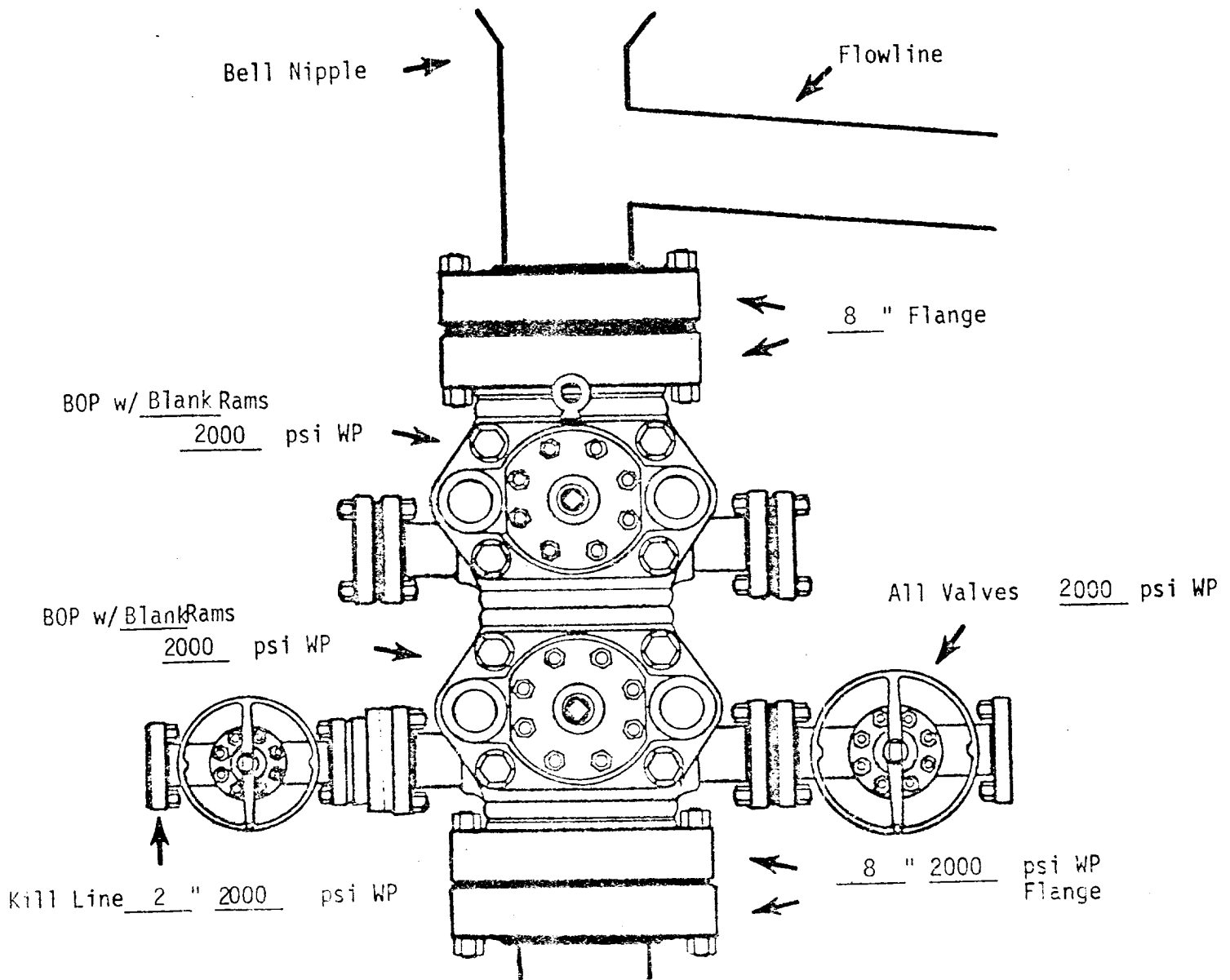
I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

J. F. Godfrey, Jr.
Date Surveyed
February 14, 1978

Registered Professional Engineer
and/or Land Surveyor

J. F. Godfrey, Jr.
Certificate No.
2653

PROPOSED BOP STACK
8-5/8 " CASING



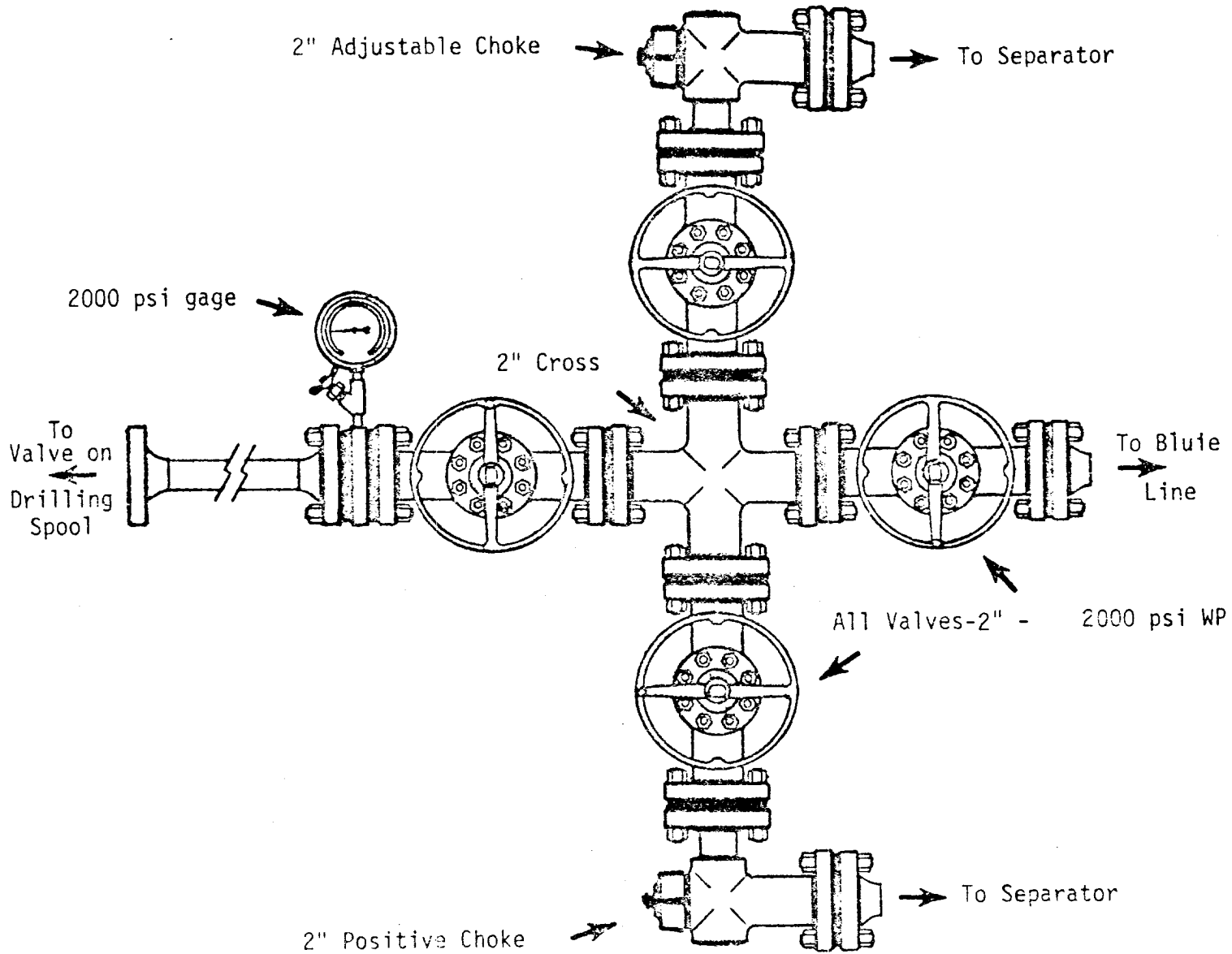
Mobil Oil Corporation
Houston E&P Division

LEASE Navajo

WELL 5

COUNTY San Juan STATE NM

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



Mobil Oil Corporation
Houston E&P Division

LEASE Navajo

WELL #5

COUNTY San Juan

STATE NM

MOBIL OIL CORPORATION'S
 NAVAJO, WELL #5
 TOCITO DOME, NORTH-PENNSYLVANIAN GAS POOL
 SAN JUAN COUNTY, NEW MEXICO

MUD PROGRAM

<u>Depth, Ft.</u> <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'	6000'	Fresh wtr. w/gel & L.C.M. as necessary		No Control	-	-
6000'	T.D.	Fresh wtr. low solids gel	8.8-9.2	33-40	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 & Formation</u>	<u>Expected Depth</u>
None	

MOBIL OIL CORPORATION
SURFACE USE PLAN
NAVAJO WELL #5
1840' FSL & 800' FEL
SECTION 9, T-26-N, R-18-W
SAN JUAN COUNTY, NEW MEXICO

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

An existing 18' wide graded road will be utilized to reach the location. This road leaves U.S. Highway No. 666 at a point about 21 miles south of Shiprock, New Mexico and about 2.3 miles from the proposed new access road. This road presently provides access to Mobil's Navajo Lease Wells #1, #2, #3 & #4.

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

The proposed access road to the location site will be 12' wide X 300' long with a 12" deep borrow ditch 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 Mobil's Navajo Tank Battery by a 3" steel flow line to be constructed to Well #2 and connected to an existing flow line for transportation to the Tank Battery.

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 #5

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 north slope 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

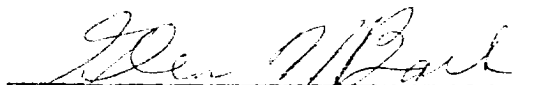
I hereby certify that I, or persons under my direct supervision, have inspected the proposed drillsite and access route; that the statements made in this plan are, to the best of my knowledge

Mobil Oil Corporation
Surface Use Plan
Navajo Well #5

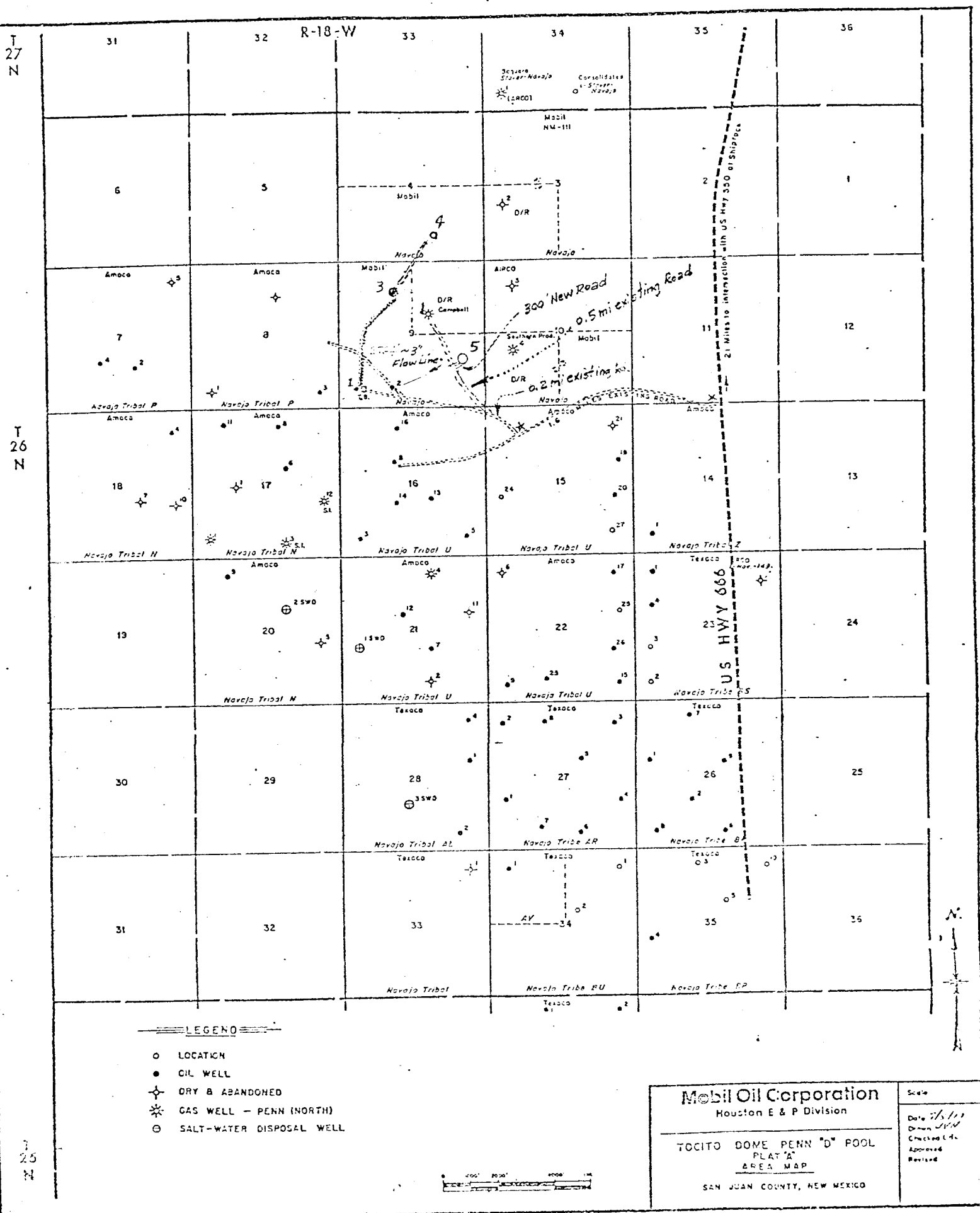
San Juan County, New Mexico

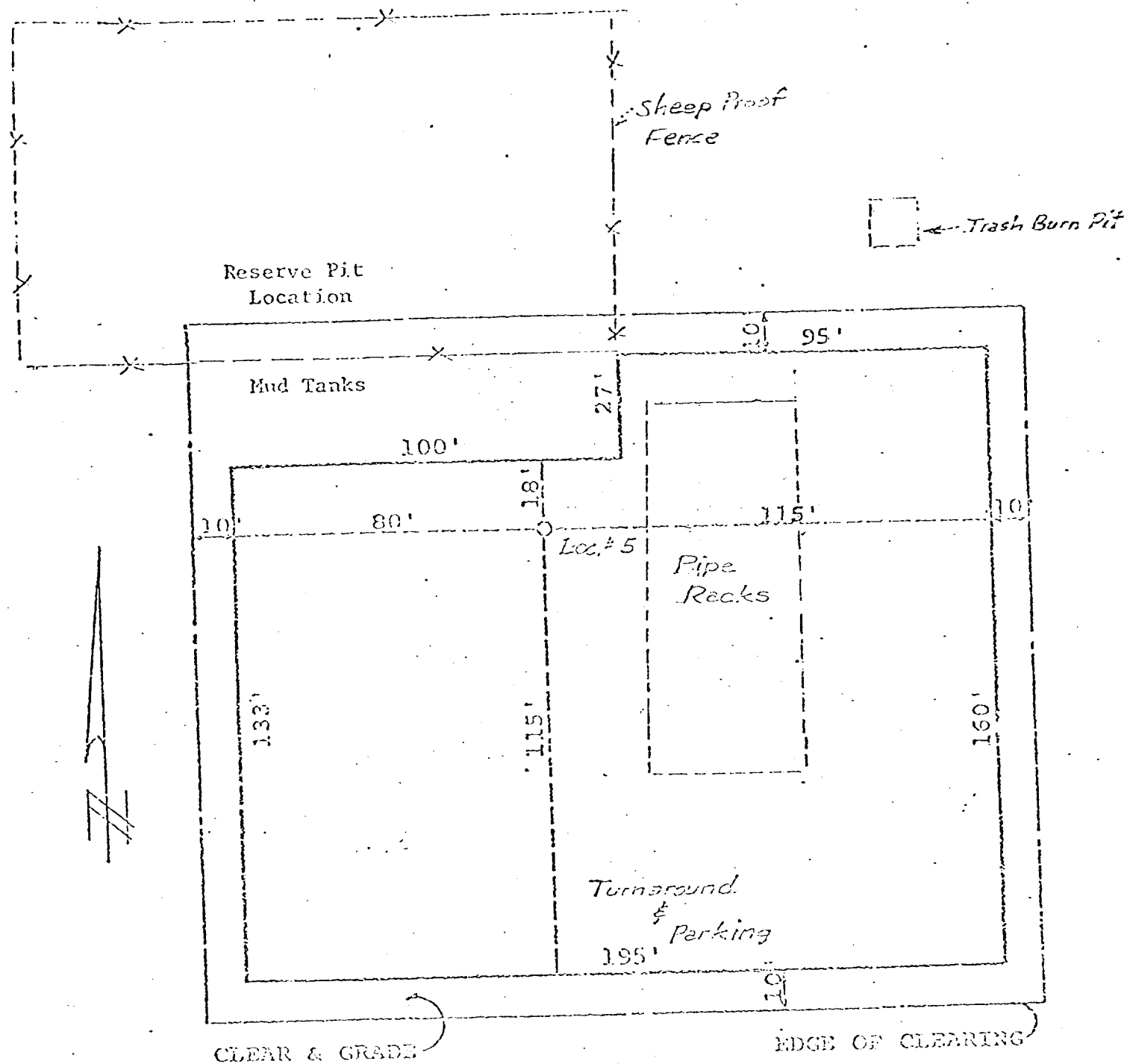
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true and correct; and that the work associated with the operations proposed herein will be performed by a reliable contractor in conformity with this plan and the terms and conditions under which it is approved.


Glen W. Barb
Producing Operations Manager

CACallaway/tb
February 23, 1978





PLAT "B"

Navejo Lease, Well # 5

NO.	DATE	BY	ATTENTION
STANDARD LOCATION PLAN			
5000'-7000' DEEP WELLS			
ON STABLE SOIL			
MOGIL OIL CORPORATION			
HIDLAND, TEXAS			

MOBIL OIL CORPORATION

LEASE: Navajo

WELL: 5

FIELD: Tocito Dome, North-Pennsylvanian Gas

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>Morrison</u>	<u>1600'</u>
<u>Entrada</u>	<u>2070'</u>
<u>Dechelly</u>	<u>3695'</u>
<u>Hermosa</u>	<u>5450'</u>
<u>Pennsylvanian (D)</u>	<u>6300'</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 & Gas</u>
<u> </u>	<u> </u>	<u> </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.

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.

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

Starting Date: March 6, 1978 Duration of Operations 25 Days.

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use Form 9-331-C for such proposals.)

1. oil ☐ gas ☒ other ☐2. NAME OF OPERATOR
Mobil Oil Corporation3. ADDRESS OF OPERATOR 77046
3 Greenway Plaza-E, Suite 800, Houston, TX4. LOCATION OF WELL (REPORT LOCATION CLEARLY. See space 17 below.)
AT SURFACE: 800' FEL & 1840' FSL Sec. 9
AT TOP PROD. INTERVAL:
AT TOTAL DEPTH:

16. CHECK APPROPRIATE BOX TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

REQUEST FOR APPROVAL TO:

TEST WATER SHUT-OFF ☐
FRACTURE TREAT ☐
SHOOT OR ACIDIZE ☐
REPAIR WELL ☐
PULL OR ALTER CASING ☒
MULTIPLE COMPLETE ☐
CHANGE ZONES ☐
ABANDON* ☐
(other) ☐

SUBSEQUENT REPORT OF:

☐
☐
☐
☐
☐
☐
☐
☐

5. LEASE

-- 14-20-603-5019

6. IF INDIAN, ALLOTTEE OR TRIBE NAME
Navajo

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME
Navajo9. WELL NO.
510. FIELD OR WILDCAT NAME
Tocito Dome North-Pennsylvanian Gas11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
Sec. 9, T26N, R18W12. COUNTY OR PARISH 13. STATE
San Juan New Mexico

14. API NO.

15. ELEVATIONS (SHOW DF, KDB, AND WD)
5724' Ground

(NOTE: Report results of multiple completion or zone change on Form 9-330.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

The production string of casing is being changed from 7" to 5-1/2" as follows:

HOLE SIZE	CASING SIZE	WEIGHT/FT & GRADE	SETTING DEPTH	QTY OF CEMENT
7-7/8"	5-1/2"	14# K-55	0-6450'	Circulate

Subsurface Safety Valve: Manu. and Type

18. I hereby certify that the foregoing is true and correct

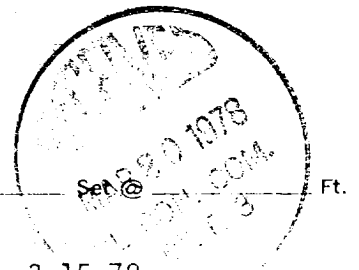
SIGNED A. D. Bond TITLE Reg. Engr. Coord. DATE 3-15-78

A. D. Bond

(This space for Federal or State office use)

APPROVED BY
CONDITIONS OF APPROVAL, IF ANY:

TITLE DATE



MAR 15 1978

U.S. Survey
Farmingington, N.M.