

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

NM OIL COM. COMMISSION  
Artesia, NM 88010

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  
Mesa Petroleum Co. ✓

3. ADDRESS OF OPERATOR  
P.O. Box 2009 / Amarillo, Texas 79189

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)  
At surface 660' FSL & 1980' FEL  
At proposed prod. zone

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE\*  
27 Miles Northwest from Roswell, New Mexico

10. DISTANCE FROM PROPOSED\* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest dril. unit line, if any) 660'/660'

18. DISTANCE FROM PROPOSED LOCATION\* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT. 3500'

21. ELEVATIONS (Show whether DF, RT, GR, etc.)  
4025' GR

23. PROPOSED CASING AND CEMENTING PROGRAM

| SIZE OF HOLE | SIZE OF CASING | WEIGHT PER FOOT | SETTING DEPTH | QUANTITY OF CEMENT |
|--------------|----------------|-----------------|---------------|--------------------|
| 12 1/4"      | 8 5/8"         | 24#             | 1200'         | 700/300 surface    |
| 7 7/8"       | 4 1/2"         | 10.5#           | 3500'         | 350 cover all pay  |

Propose to drill 12 1/4" hole to approximately 1200' to set 8 5/8" surface casing and cement to surface. Will nipple up ram type BOP's and reduce hole to 7 7/8" to drill to total depth. Drilling medium will be air, foam, or mud as required. After log evaluation, 4 1/2" casing may be run and cemented with sufficient kinds and amounts to isolate and seal off any fresh water, oil or gas zones encountered.

XC: BLM(0+6), CEN RCDS, ACCTG, OPS(FILE), MAT CONT, MIDLAND, ROSWELL, MANAGERS

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 depth. Give blowout preventer program, if any.

24. SIGNED R. E. Mathis TITLE REGULATORY COORDINATOR DATE APRIL 29, 1983

(This space for Federal or State office use)

PERMIT NO. \_\_\_\_\_ APPROVAL DATE \_\_\_\_\_

APPROVED BY A. C. Lopez TITLE \_\_\_\_\_ DATE 5/9/83

CONDITIONS OF APPROVAL, IF ANY:

\*See Instructions On Reverse Side

5. LEASE DESIGNATION AND SERIAL NO.  
NM-36647

6. IF INDIAN, ALLOTTED OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME  
Macho Federal

9. WELL NO.  
5

10. FIELD AND POOL, OR WILDCAT  
West Pecos Slope ABO

11. SEC., T., R., E., OR BLK. AND SURVEY OR AREA  
Sec 6, T7S, R23E

12. COUNTY OR PARISH  
Chaves

13. STATE  
NM

22. APPROX. DATE WORK WILL START\*  
May 15, 1983

Handwritten notes: 100' to 1200' BOP, 5-6-83

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

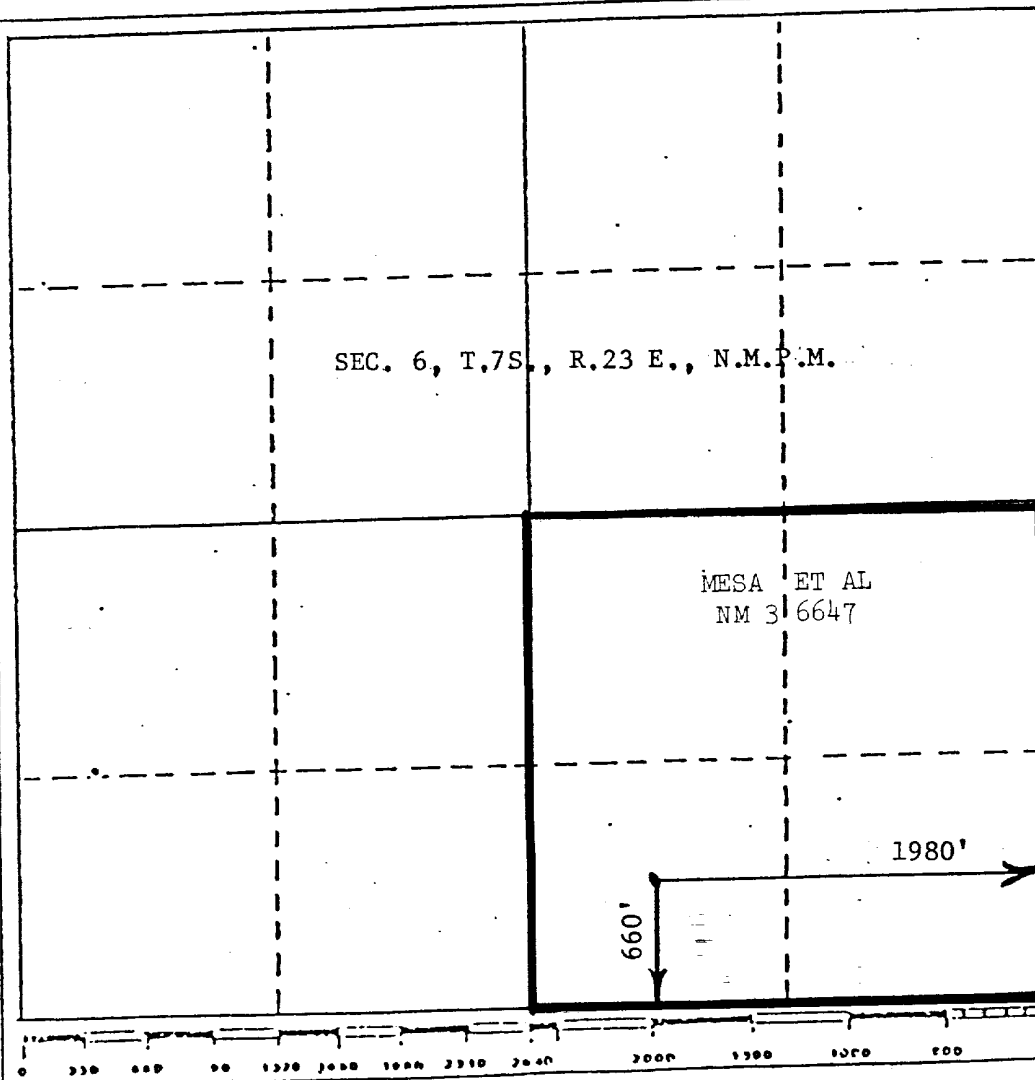
|                                                                                           |                                   |                                        |                      |                         |
|-------------------------------------------------------------------------------------------|-----------------------------------|----------------------------------------|----------------------|-------------------------|
| Operator<br><b>Mesa Petroleum</b>                                                         |                                   | Lease<br><b>Macho Fed.</b>             |                      | Well No.<br><b>#5</b>   |
| Unit Letter<br><b>0</b>                                                                   | Section<br><b>6</b>               | Township<br><b>7S</b>                  | Range<br><b>23 E</b> | County<br><b>Chaves</b> |
| Actual Postage Location of Well:                                                          |                                   |                                        |                      |                         |
| <b>660</b> feet from the <b>South</b> line and <b>1980</b> feet from the <b>East</b> line |                                   | Dedicated Acreage:<br><b>160</b> Acres |                      |                         |
| Ground Level Elev.<br><b>4025</b>                                                         | Producing Formation<br><b>ABO</b> | Pool Unit<br><b>West Pecos Slope</b>   |                      | SEAL                    |

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 communization, 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 communization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Division.



CERTIFICATION

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

Name  
**Lloyd Reed**  
Position  
**Regulatory Agent**  
Company  
**Mesa Petroleum Co.**  
Date  
**2 May 83**

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.

JOHN D. JAQUESS  
NEW MEXICO  
Date Surveyed  
**April 28 1983**  
Professional Engineer  
and/or Land Surveyor  
**6290**  
John D. Jaquess, P.E. & L.S.  
Certificate No. **6290**

APPLICATION FOR PERMIT TO DRILL

MESA PETROLEUM CO.  
MACHO FEDERAL #5  
660' FSL & 1980' FEL, Sec 6, T7S, R23E  
CHAVES COUNTY, NEW MEXICO

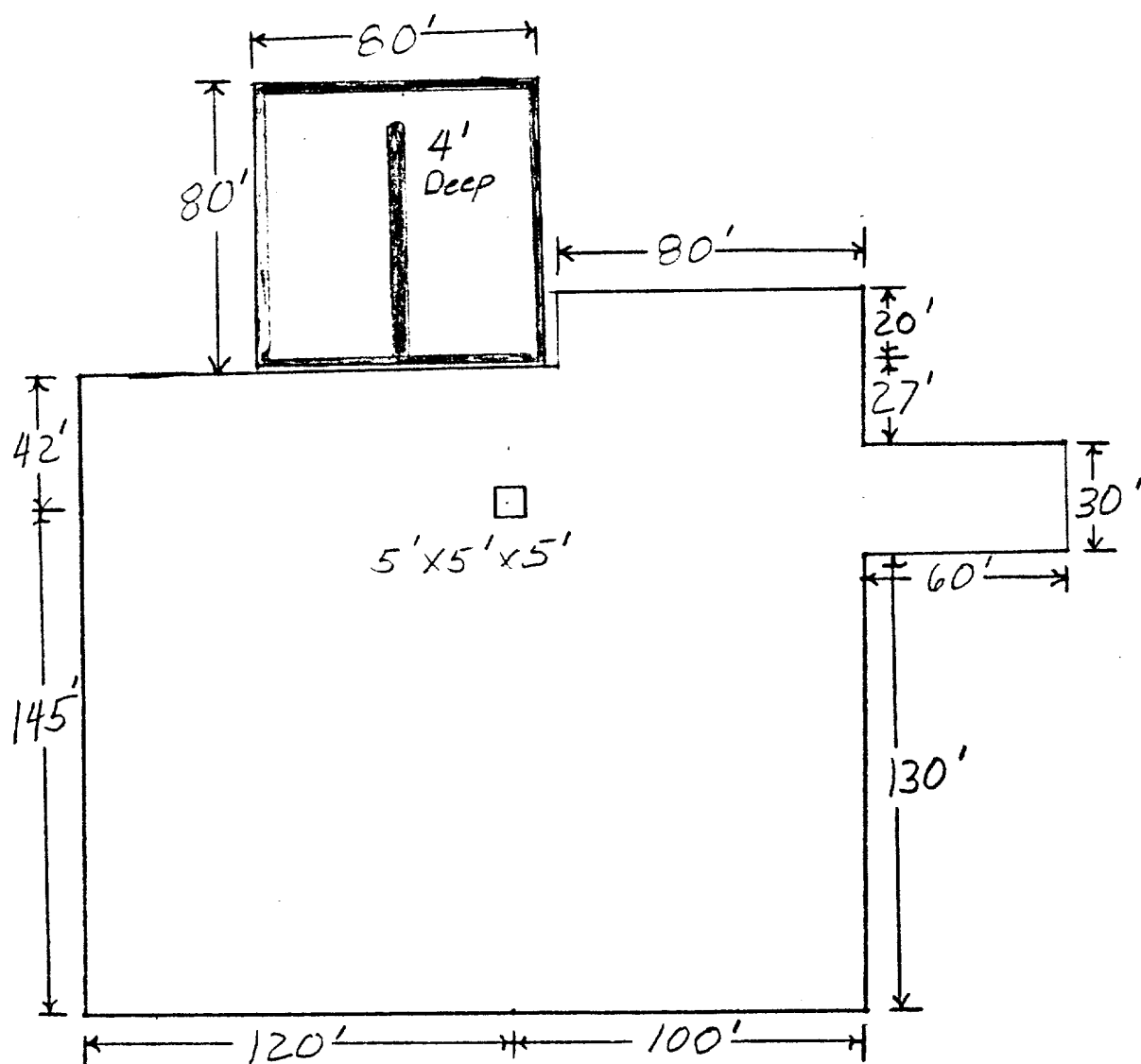
LEASE NO. NM-36647

In conjunction with Form 9331-C, Application For Permit to Drill subject well, the following additional information is provided:

1. Applicable portions of the GENERAL REQUIREMENTS FOR OIL AND GAS OPERATIONS ON FEDERAL LEASES, Roswell District, Geological Survey of September 1, 1980 will be adhered to.
2. Geological markers are estimated as follows:

|            |         |
|------------|---------|
| San Andres | Surface |
| Glorieta   | 690'    |
| Tubb       | 2215'   |
| ABO        | 2850'   |
3. Hydrocarbon bearing strata may occur in the ABO formations(s). No fresh water is expected to be encountered below 900'.
4. The Casing and Blowout Preventer Program will be determined by hole conditions as encountered. Anticipate drilling with air or foam using ram type preventer and rotating head for well control. The 8 5/8" casing will be set at approximately 1200' to protect any fresh water zones and cemented to the surface. The 4 1/2" production casing will be set at total depth or shallower depending upon the depth of the deepest commercial hydrocarbon bearing strata encountered. Sufficient amounts and kinds of cement would be used to ensure any water, gas, or oil zones encountered are isolated and shut off down to the casing point, if run.
5. No drill stem tests or coring program is planned. The logging program may consist of a GR-CNL from surface to total depth and FDC from casing point to total depth.
6. Anticipated drilling time is ten days with completion operations to follow as soon as completion unit is available.





MESA PETROLEUM CO./VAUGHN BUILDING/SUITE 1000/AC 915/683-5391/MIDLAND, TEXAS 79701



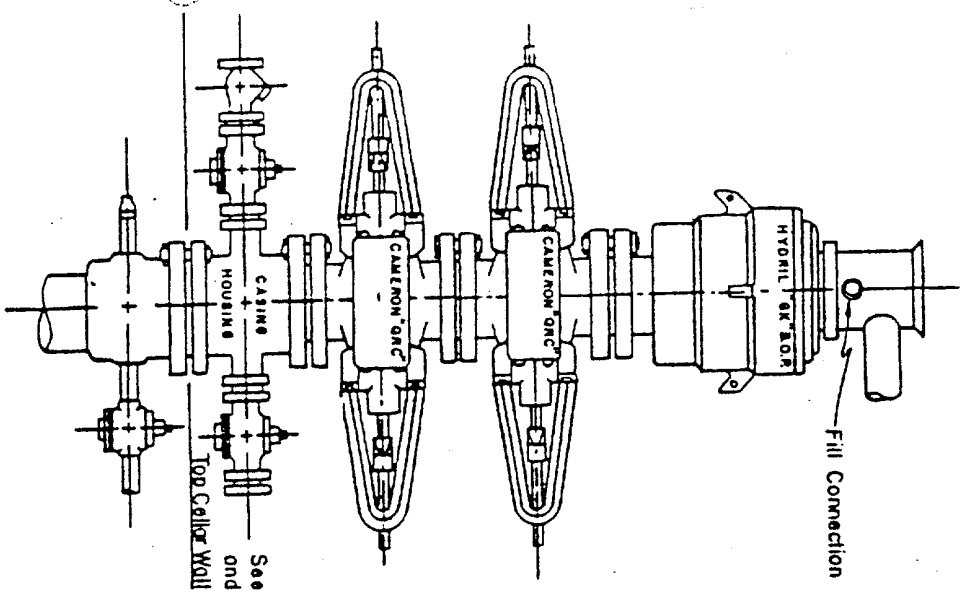


**MESA**  
 PETROLEUM CO.  
PERMIAN BASIN DIVISION



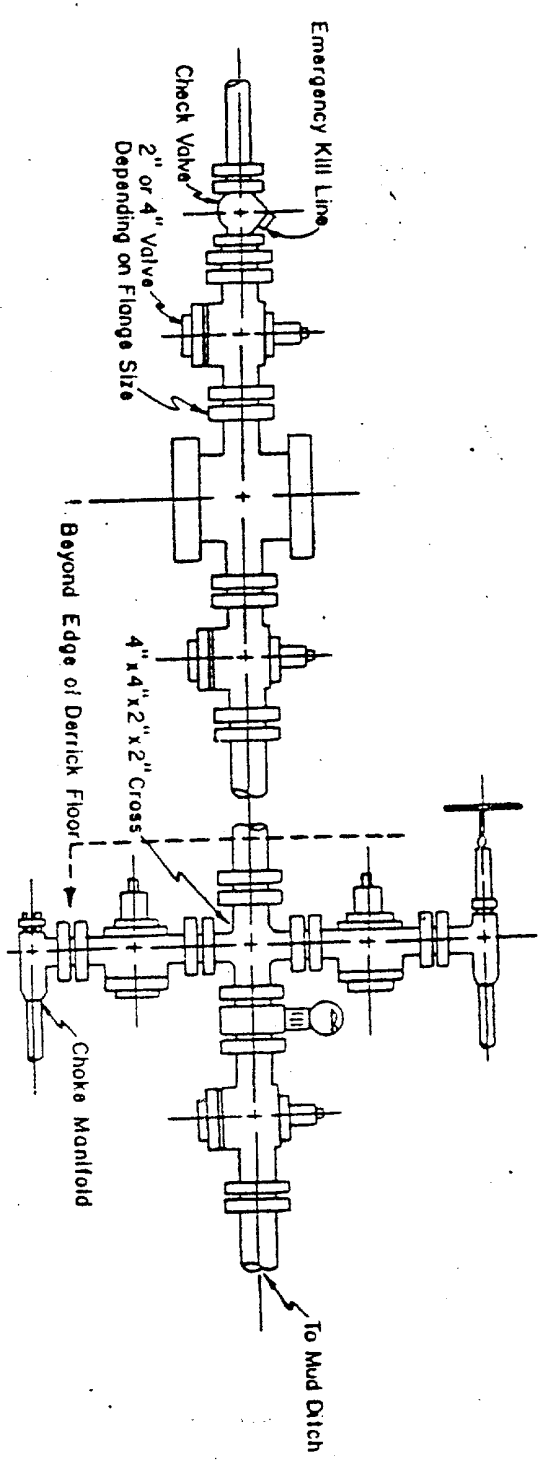
EXHIBIT V  
 FOR PROPOSED MACHO FEDERAL #5

Blow-out Preventers hydril and choke manifold are all 900 S.



See Detail of 4" Flow Line  
and Choke Assembly

3,000 PSI WORKING PRESSURE  
BLOW-OUT PREVENTER, HOOK-UP



3,000 PSI WORKING PRESSURE  
KILL, CHOKE, AND FILL CONNECTIONS

DETAIL OF 4" FLOW LINE CHOKE ASSEMBLY

Minimum assembly for 3,000 PSI working pressure will consist of three preventers.  
The bottom and middle preventers may be Cameron.

NOTE: HYDRIL not installed on shallow-low pressure wells.  
RAM type BOPs are API 10" X 3000 PSI.



E X H I B I T  
V I