

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

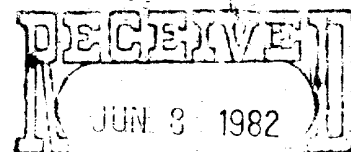
1a. TYPE OF WORK
DRILL ☒ DEEPEN ☐ **RECEIVED** ☐
b. TYPE OF WELL
OIL WELL ☐ GAS WELL ☒ OTHER ☐ SINGLE ZONE ☒ MULTIPLE ZONE ☐
2. NAME OF OPERATOR
MESA PETROLEUM CO.
3. ADDRESS OF OPERATOR
1000 VAUGHN BUILDING/MIDLAND, TEXAS 79701-4400
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)*
At surface 2200' FNL & 700' FEL SE 1/4 NE 1/4 H
At proposed prod. zone SAME
14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*
27 miles Northwest of Roswell, New Mexico
15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any) 1400'/760'
16. NO. OF ACRES IN LEASE 2441.2
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. 2500'
19. PROPOSED DEPTH 3400'
20. ROTARY OR CABLE TOOLS ROTARY
21. ELEVATIONS (Show whether DF, RT, GR, etc.) 4096' GR
22. APPROX. DATE WORK WILL START* JUNE 30, 1982

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# | 1400' | 700/300 SURFACE |
| 7 7/8" | 4 1/2" | 10.5# | 3400' | 300 COVER ALL PAY |

Propose to drill 12 1/4" hole to approximately 1400' 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.

Operator's Gas Sales are dedicated.



OIL & GAS
U.S. GEOLOGICAL SURVEY
ROSWELL, NEW MEXICO

XC: MMS (7), TLS, CEN RCDS, ACCTG, MEC, LAND, ROSWELL, REM, FILE, (PARTNERS)
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 [Signature] TITLE REGULATORY COORDINATOR DATE 6-7-82
(This space for Federal or State office use)
(Orig. Sgd.) GEORGE H. STEWART
PERMIT NO. JUN 23 1982 APPROVAL DATE
APPROVED BY JAMES A. CILLHAM DISTRICT SUPERVISOR TITLE APPROVAL REQUIRED DATE

OIL CONSERVATION DIVISION

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENTP. O. BOX 2088
SANTA FE, NEW MEXICO 87506Form C-102
Revised 10-1-78

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

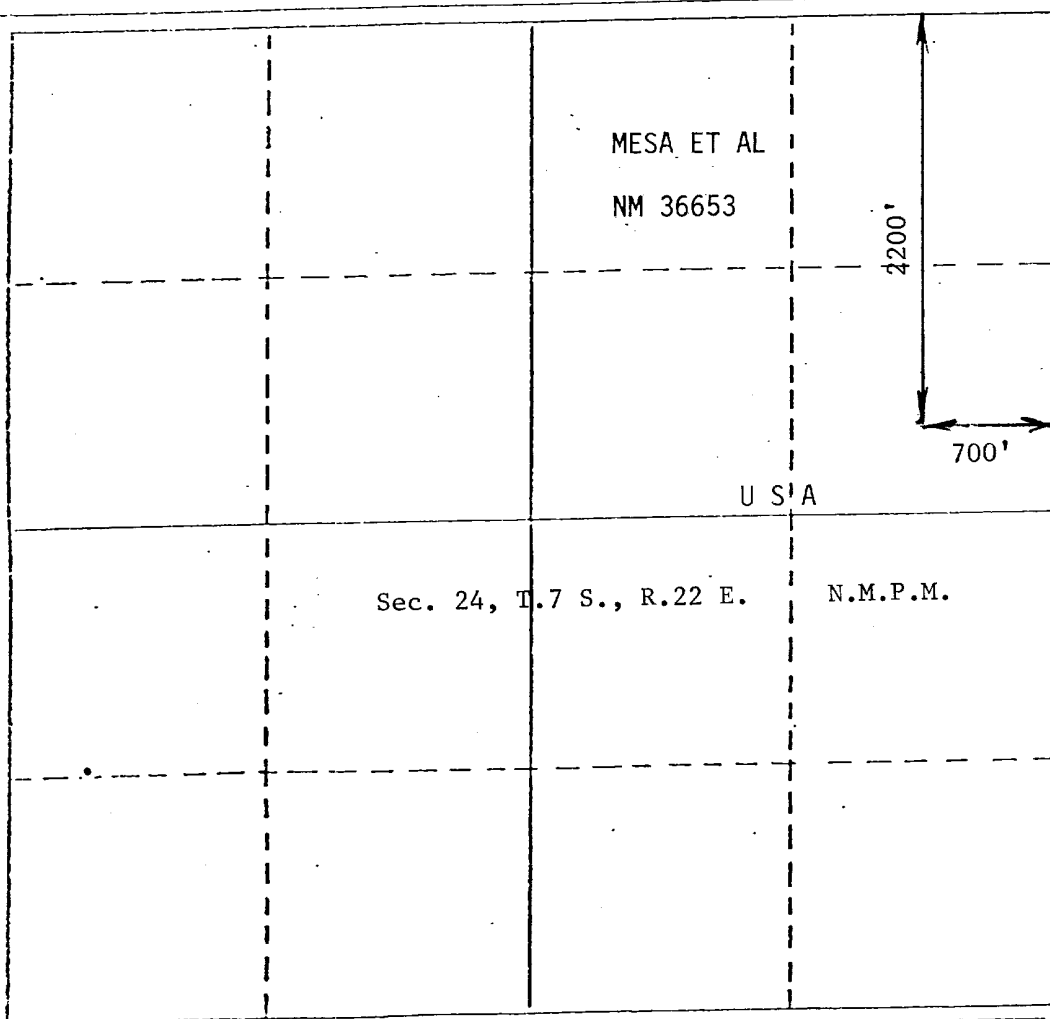
| | | | | | | | | |
|---|-----------------------------------|-------------------------|-------------------------------|-------------------------|---|----------------------|--|--|
| Operator Mesa Petroleum | | | Lease Carol Federal | | | Well No. 4 | | |
| Unit Letter H | Section 24 | Township 7 S. | Range 22 E. | County Chaves | | | | |
| Actual Postage Location of Well: 2200 feet from the North line and 700 feet from the East line | | | | | | | | |
| Ground Level Elev. 4096 | Producing Formation ABO | | Pool UNDESIGNATED | | Dedicated Acreage: NE/4 160 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 Division.



CERTIFICATION

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

Name

R. E. MATHIS

Position

REGULATORY COORDINATOR

Company

MESA PETROLEUM CO.

Date

JUNE 7, 1982

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

Registered Professional Engineer and/or Land Surveyor

John D. Jaquess, P.E., P.S.

Certificate No.

6490

APPLICATION FOR PERMIT TO DRILL

MESA PETROLEUM CO.
CAROL FEDERAL #4
2200' FNL & 700' FEL, SEC 24, T7S, R22E
CHAVES COUNTY, NEW MEXICO

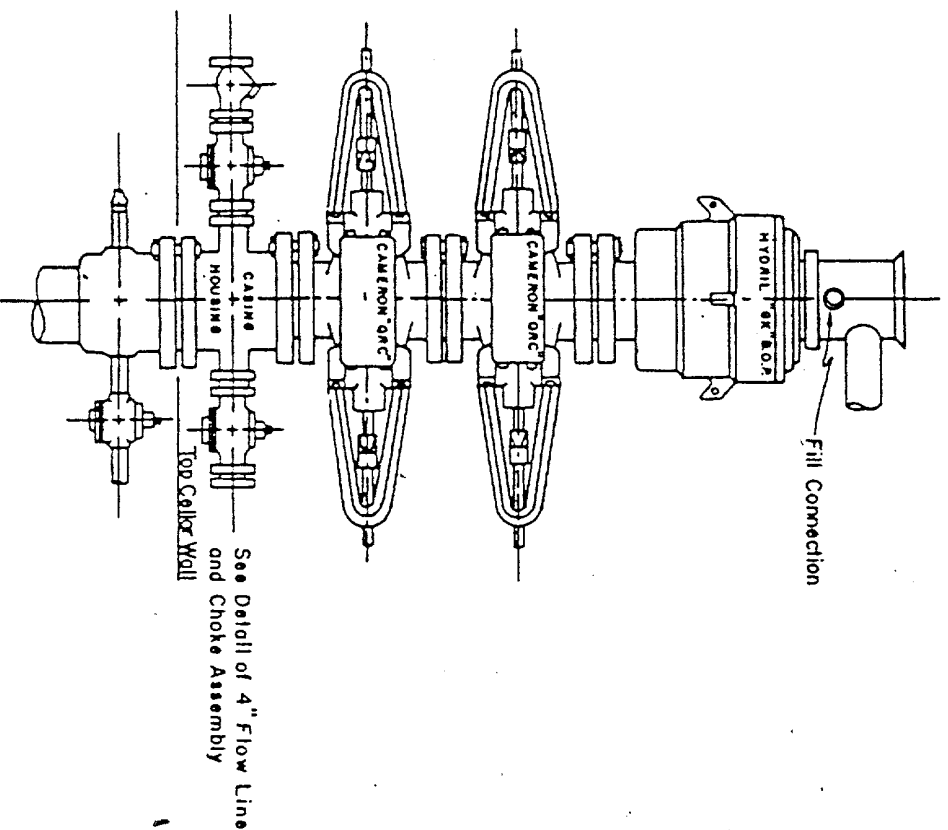
LEASE NO. NM-36653

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

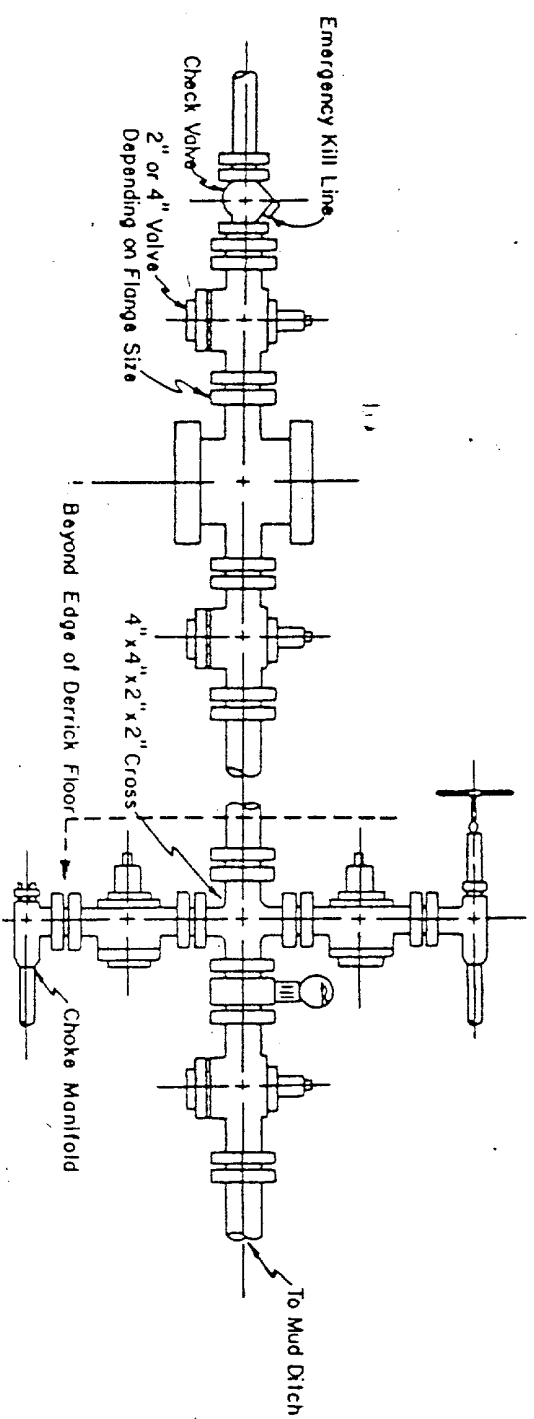
1. Applicable portions of the GENERAL REQUIREMENTS FOR OIL AND GAS OPERATIONS ON FEDERAL LEASES, Roswell District, Geological Survey of September 1, 1980 will be adhered to.
2. Geological markers are estimated as follows:

| | |
|--------------|---------|
| SEVEN RIVERS | Surface |
| SAN ANDRES | Surface |
| GLORIETA | 576 |
| TUBB | 2126 |
| ABO | 2867 |
3. Hydrocarbon bearing strata may occur in the Abo formation(s). No fresh water is expected to be encountered below 1400'.
4. The Casing and Blowout Preventer Program will be determined by hole conditions as encountered. See Exhibit VI. 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 1400' 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 test or coring program is planned. The logging program may consist of a GR-CNL from surface 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 a completion unit is available.

Blow-out Preventers hydril and choke manifold are all 900 Series



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

MESA
PETROLEUM CO.
PERMIAN BASIN DIVISION

E X H I B I T

V I

DATE: _____

SCALE: _____