

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY  
Artesia, NM 88210NM OIL & GAS COMMISSION  
Drawer DD

30-005-61281

## 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

1000 VAUGHN BLDG./MIDLAND, TEXAS 79701-4493

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

At surface

660' FNL &amp; 1980' FWL

NE NW/4

At proposed prod. zone

SAME

DEC 15 1981

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

46 miles north of Roswell, New Mexico

O. C. D.

## 10. DISTANCE FROM PROPOSED\*

LOCATION TO NEAREST  
PROPERTY OR LEASE LINE, FT.

(Also to nearest drlg. unit line, if any)

660'

## 18. DISTANCE FROM PROPOSED LOCATION\*

TO NEAREST WELL, DRILLING, COMPLETED  
OR APPLIED FOR, ON THIS LEASE, FT.

2640'

## 16. NO. OF ACRES ASSIGNED

680

## 19. PROPOSED DEPTH

4200'

17. NO. OF ACRES ASSIGNED  
TO THIS WELL

160

## 20. ROTARY OR CABLE TOOLS

ROTARY

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

3857.2' GR

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

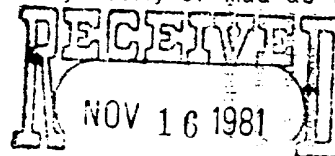
JANUARY 1, 1982

## 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#	900'	SURFACE
11"	8 5/8"	24#	1600'	ISOLATE WATER, OIL & GAS
7 7/8"	4 1/2"	10.5#	4200'	COVER ALL PAY

Propose to drill 17 1/2" hole to approximately 900' to set 13 3/8" surface casing and cement to surface. Will reduce hole to 11" and drill to approximately 1600' to set 8 5/8" casing. Will nipple up RAM type BOP's, reduce hole to 7 7/8" and drill to total depth. Drilling medium will be air, foam, or mud as required.

Gas Sales are Dedicated.

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

xc: USGS (6), TLS, CEN RCDS, ACCTG, MEC, PARNTERS, LAND, FILE, REM, ROSWELL

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

TITLE REGULATORY COORDINATOR

DATE 11-12-81

(This space for Federal or State office use)

PERMIT NO.

APPROVED

APPROVAL DATE

APPROVED BY

CONDITIONS OF APPROVAL, IF ANY:

TITLE

DATE

DEC 11 1981

JAMES A. GILLHAM  
DISTRICT SUPERVISOR

\*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 <b>Mesa Petroleum Company</b>			Lease <b>Ludewick Federal</b>		Well No. <b>2</b>
Unit Letter <b>C</b>	Section <b>17</b>	Township <b>5 South</b>	Range <b>25 East</b>	County <b>Chaves</b>	
Actual Point of Location of Well: <b>560</b> feet from the <b>north</b> line and <b>1980</b> feet from the <b>West</b> line					
Ground Level Elev. <b>3857.2</b>	Producing Formation <b>ABO</b>	Pool <b>UNDESIGNATED</b>		Dedicated Acreage: <b>NW/4 160</b> 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.

*R.E. Mathis*

Name

**R.E. MATHIS**

Position

**REGULATORY COORDINATOR**

Company

**MESA PETROLEUM CO.**

Date

**11-12-81**

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

**10-10-81**

Registered Professional Engineer and/or Land Surveyor

*John W. West*

Certificate No. **JOHN W. WEST 676**  
**PATRICK A. ROMERO 6663**

330 660 990 1320 1650 1980 2310 2640 2970 3300 3630 3960 4290 4620 4950 5280 5610 5940 6270 6600 6930 7260 7590 7920 8250 8580 8910 9240 9570 9900

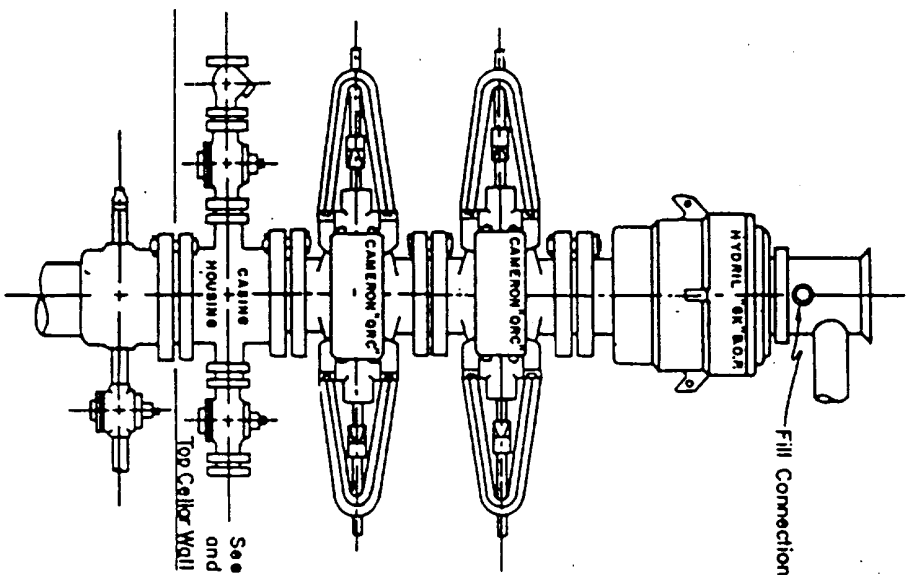
MESA PETROLEUM CO.  
LODEWICK FEDERAL #2  
660' FNL & 1980' FWL, SEC 17, T5S, R25E  
CHAVES COUNTY, NEW MEXICO

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

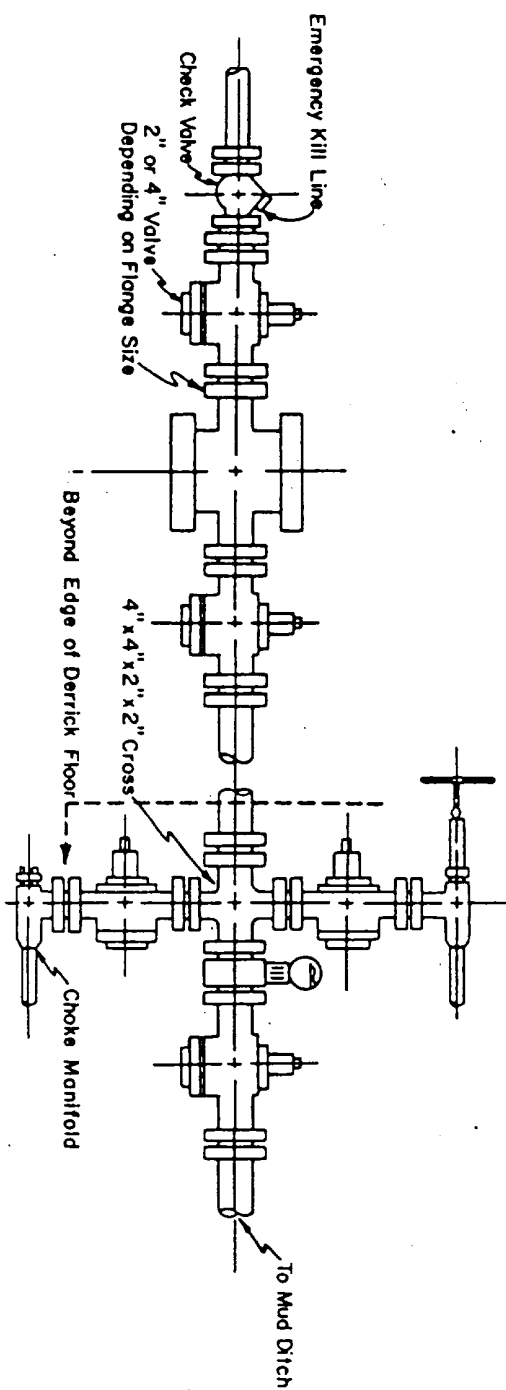
1. Applicable portions of the GENERAL REQUIREMENTS FOR OIL AND GAS OPERATIONS ON FEDERAL LEASES, Roswell District, Geological Survey of September 1, 1980 will be adhered to.
2. Geological markers are estimated as follows:

Seven Rivers	Surface
San Andres	643'
Glorieta	1538'
Tubb	2980'
Abo	3629'
3. Hydrocarbon bearing strata may occur in the ABO formation(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. (See Exhibit VI) Anticipate drilling with air or foam using ram type preventer and rotating head for well control. The 13 3/8" casing will be set at approximately 900' to protect any fresh water zones and cemented to the surface. The 8 5/8" casing will be set at approximately 1600' if water zones have been encountered or omitted if not and ram type preventers installed. 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. 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.
5. No drill stem tests 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 fifteen 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



E X H I B I T  
V I

DATE: \_\_\_\_\_ BY: \_\_\_\_\_  
SCALE: \_\_\_\_\_