

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

(Other actions on  
rev side)

AMENDED

Budget Bureau No. 4-R1425

5. LEASE DESIGNATION AND SERIAL NO.

NM-36653

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME

CAROL FEDERAL

9. WELL NO.

4

10. FIELD AND POOL, OR WILDCAT

UNDESIGNATED ABO

11. SEC., T., R., M., OR BLK.  
AND SURVEY OR AREA

SEC 24, T7S, R22E

12. COUNTY OR PARISH

CHAVES

13. STATE

NEW MEXICO

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 BUILDING/MIDLAND, TEXAS 79701-4490

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

At surface 990' FNL & 890' FEL NE 1/4 NE 1/4 A

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

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.)

4129' GR

22. APPROX. DATE WORK WILL START\*

JUNE 30, 1982

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

Propose to drill 14 3/4" hole with mud or air to approximately 950' and run 10 3/4" casing. Will cement to surface and test casing with cementing head to 600 psi. Will reduce hole to 9 1/2" and drill on mud or air to approximately 1600' and run 7 5/8" casing if circulation has been lost and cement with sufficient amounts to tie-back to 10 3/4" casing. Will then reduce hole to 6 1/2" or 6 3/4", test BOP's and casing and drill to total depth. If hole conditions are favorable, the 7 5/8" casing will be omitted and the hole will be reduced to 7 7/8" and drilled to total depth. Either 4 1/2" or 5 1/2" casing will be run as production casing depending upon hole size drilled to TD.

Operator's gas sales are dedicated.

NOTE: Location moved due to geology.

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

(This space for Federal or State office use)

PERMIT NO.

APPROVED BY

CONDITIONS OF APPROVAL, IF ANY:

JAMES A. CILHAM  
DISTRICT SUPERVISOR

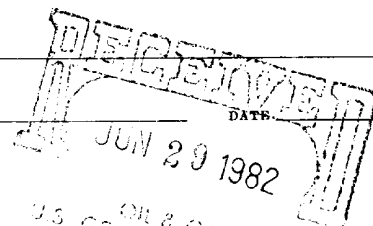
REGULATORY COORDINATOR

DATE 6-25-82

TITLE

APPROVAL DATE

TITLE



\*See Instructions On Reverse Side

OIL & GAS  
GEOLOGICAL SURVEY  
ROSWELL, NEW MEXICO

NSH-1553

Quoted I.D.-I  
Amended Loc.  
7-9-82

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

Operator <b>Mesa Petroleum Co.</b>		Lease <b>Carol Federal</b>		Well No. <b>4</b>
Well Letter <b>A</b>	Section <b>24</b>	Township <b>7 S.</b>	Range <b>22 E.</b>	County <b>Chaves</b>
Actual Postage Location of Well: <b>990</b> feet from the <b>North</b> line and <b>890</b> feet from the <b>East</b> line				
Ground Level Elev., <b>4129</b>	Producing Formation <b>ABO</b>	Pool <b>UNDESIGNATED</b>	Dedicated Acreage: <b>NE/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 Division.

MESA ETAL  
NM-36653  
Sec. 24, T.7 S. R. 22 E., N.M.P.M.  
U. S. A.

## 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 25, 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  
**6-23-82**  
Registered Professional Engineer and/or Surveyor  
**JOHN D. JACQUES**  
Certificate No.  
**6290**

APPLICATION FOR PERMIT TO DRILL

MESA PETROLEUM CO.  
CAROL FEDERAL #4  
990' FNL & 890' 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

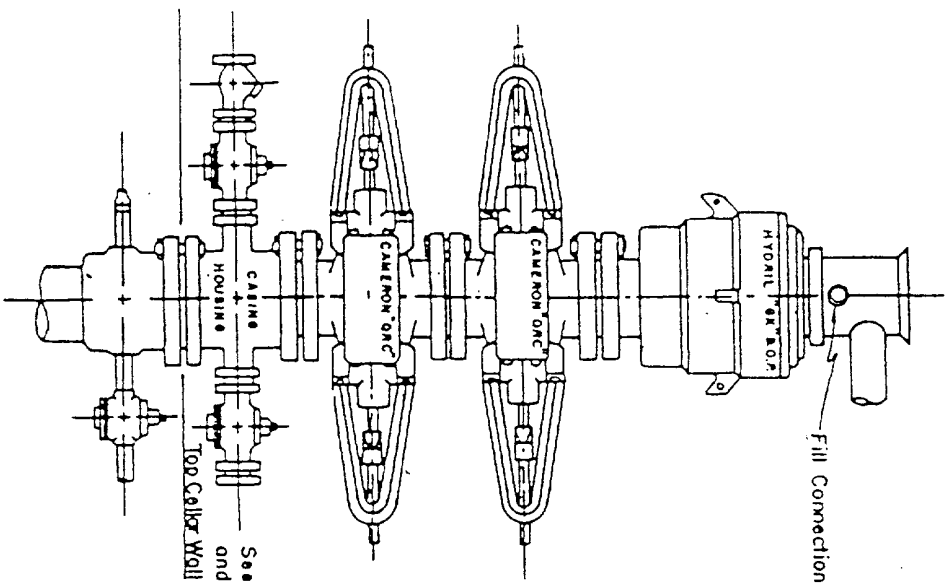
3. Hydrocarbon bearing strata may occur in the Abo formation(s). No fresh water is expected to be encountered below 1400'.

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.

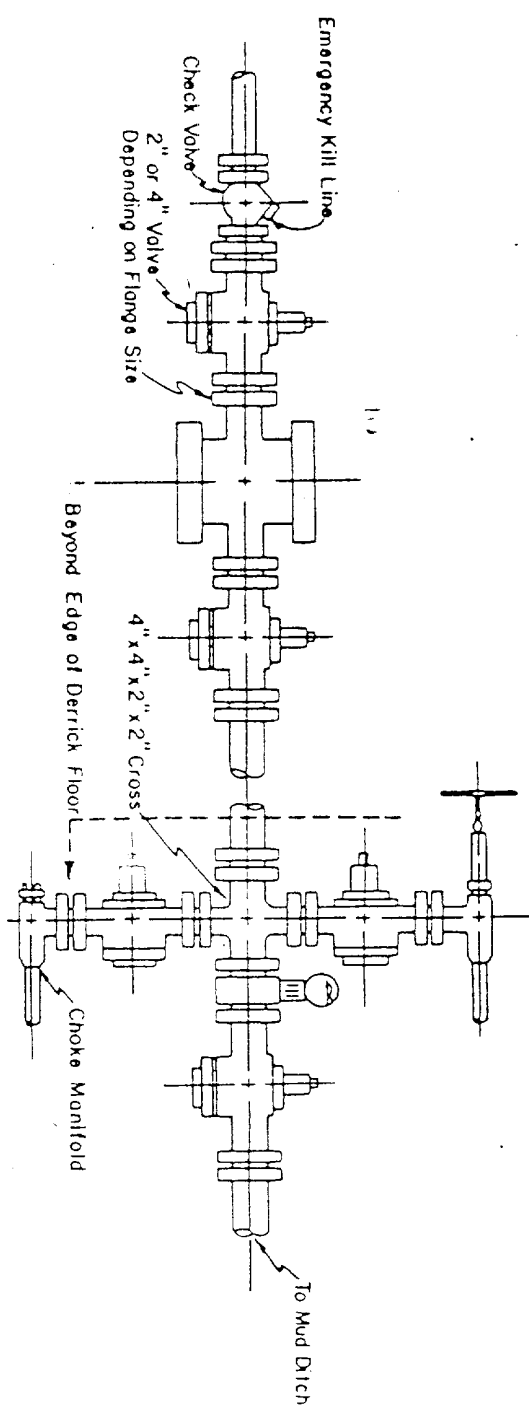
6. Anticipated drilling time is ten days with completion operations to follow as soon as a completion unit is available.

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



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.  
RPM type BOPs are API 10" X 3000 PSI



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