

NM OIL & GAS COMMISSION  
 Drawer 1  
 Artesia, NM 88210  
**UNITED STATES**  
**DEPARTMENT OF THE INTERIOR**  
**GEOLOGICAL SURVEY**

SUBMIT IN TR. ACATE\*  
 (Other instructions on reverse side)

Form approved.  
 Budget Bureau No. 42-R1425.

30-605-6673

**APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK**

1a. TYPE OF WORK  
 DRILL  DEEPEN  PLUG BACK   
 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 79701-4493 C. D.

4. LOCATION OF WELL (Report location clearly and in accordance with any State regulations)  
 At surface 660' FSL & 460' FWL SW/4 SW/4  
 At proposed prod. zone SAME

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE\*  
 26 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) 5000' / 460'

16. NO. OF ACRES IN LEASE 2209.13

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. 1210'

19. PROPOSED DEPTH 3500'

20. ROTARY OR CABLE TOOLS ROTARY

21. ELEVATIONS (Show whether DF, RT, GR, etc.) 4089.1' GR

22. APPROX. DATE WORK WILL START\* JULY 10, 1982

5. LEASE DESIGNATION AND SERIAL NO.  
 NM-36647

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME  
 MACHO FEDERAL

9. WELL NO.  
 12

10. FIELD AND POOL, OR WILDCAT  
 X UNDESIGNATED ABO

11. SEC. T., R., M., OR BLK. AND SURVEY OR AREA  
 SEC 5, T7S, R23E

12. COUNTY OR PARISH CHAVES

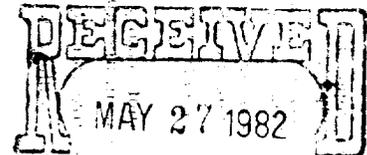
13. STATE NEW MEXICO

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#	3500'	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 R. E. Macho TITLE REGULATORY COORDINATOR DATE 5-26-82

(This space for Federal or State use)  
 APPROVED (Orig. Sgd.) GEORGE H. STEWART APPROVAL DATE JUN 22 1982

APPROVED BY JAMES A. GILLHAM TITLE DISTRICT SUPERVISOR DATE NSL-1530 (6-15-82)

CONDITIONS OF APPROVAL, IF ANY:

Parted ID-I  
 API 25-3

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

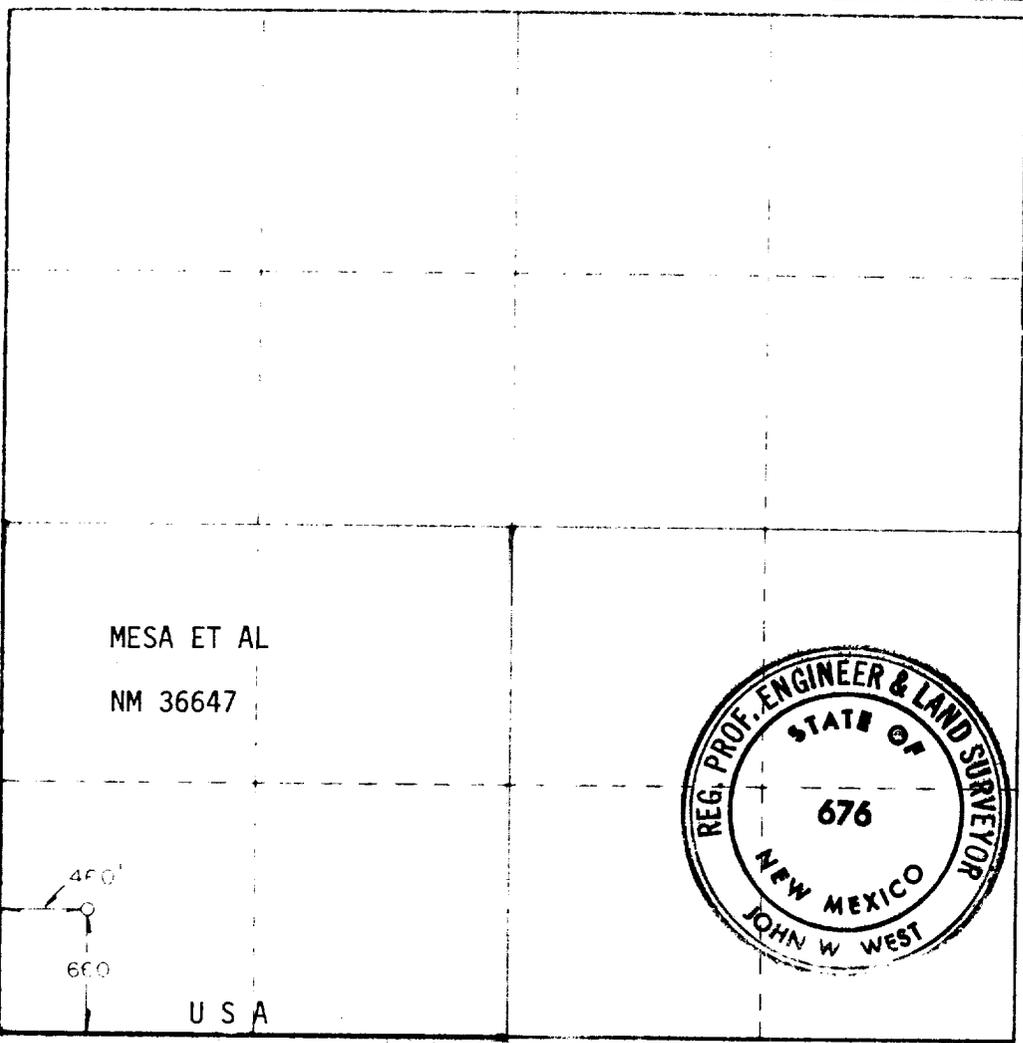
Mesa Petroleum Company			Lease Macho Federal			Well No. 12		
Section M	Section 5	Township 7 South	Range 23 East	County Chaves				
Section 660		south		line and 460		feet from the west		
Section 4089.1'		ABO		UNDESIGNATED <i>ABO</i>			Designated Acreage SW/4 160	

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 (if on reverse side of this form if necessary) \_\_\_\_\_

Unitization will be assigned to the well unit (all interests have been consolidated by communitization, unitization, force-pooling or otherwise) or unit 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*

R. E. MATHIS

REGULATORY COORDINATOR

MESA PETROLEUM CO.

MAY 24, 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  
5-15-82

Registered Professional Engineer and Land Surveyor

*John W. West*

Certificate No. JOHN W. WEST 676  
PATRICK A. ROMERO 6863  
Ronald J. Eidson 3239

APPLICATION FOR PERMIT TO DRILL

MESA PETROLEUM CO.  
MACHO FEDERAL #12  
660' FSL & 460' FWL, SEC 5, 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:

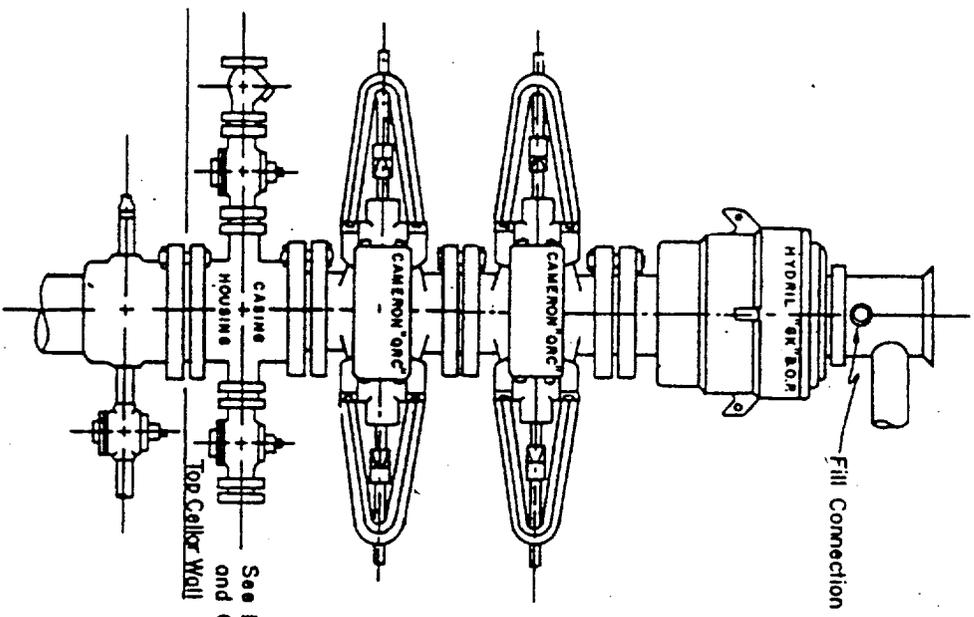
SEVEN RIVERS	Surface
SAN ANDRES	635
GLORIETA	813
TUBB	2161
ABO	2796

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.

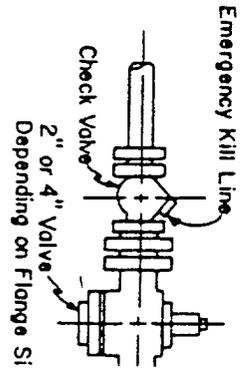
5. No drill stem test or coring program is planned. The logging program may consist of a GR-CNL from surface total depth and FDC from casing point to total depth.

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



See Detail of 4" Flow Line  
and Choke Assembly

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



NOTE: HYDRIL not in  
RAM type BOPs

Minimum assembly for 3,000  
The bottom and middle 1