

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY  
AUG 02 1983

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

1a. TYPE OF WORK DRILL <input checked="" type="checkbox"/> DEEPEN <input type="checkbox"/> PLUG BACK <input type="checkbox"/>			5. LEASE DESIGNATION AND SERIAL NO. NM 36647		
b. TYPE OF WELL OIL WELL <input type="checkbox"/> GAS WELL <input checked="" type="checkbox"/> OTHER <input type="checkbox"/>			6. IF INDIAN, ALLOTTEE OR TRIBE NAME		
2. NAME OF OPERATOR Mesa Petroleum Co. ✓			7. UNIT AGREEMENT NAME		
3. ADDRESS OF OPERATOR P. O. Box 2009 / Amarillo, Texas 79189			8. FARM OR LEASE NAME Macho Federal		
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.) At surface 1946' FNL & 2255' FEL SW1/4 NE1/4 At proposed prod. zone Same			9. WELL NO. 6		
14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE* 28 miles north of Roswell			10. FIELD AND POOL, OR WILDCAT West Pecos Slope Abo		
15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any) 1946' / 385'			11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA Sec 6, T7S, R23E		
16. NO. OF ACRES IN LEASE 2209.13			12. COUNTY OR PARISH Chaves		
17. NO. OF ACRES ASSIGNED TO THIS WELL 160			13. STATE New Mexico		
18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT. 1045'			20. ROTARY OR CABLE TOOLS Rotary		
21. ELEVATIONS (Show whether DF, RT, GR, etc.) 4042' GR			22. APPROX. DATE WORK WILL START* September 1, 1983		

## 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'	Surface <b>CIRCULATE</b>
7 7/8"	4 1/2"	10.5#	3400'	Isolate wtr, o & g

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.

Operator's gas sales are dedicated.

XC: BLM-R (O+6), MAT CON, CEN RCDS, ACTG, OPS(FILE), ROSWELL, MIDLAND, 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. Mathis TITLE Regulatory Coordinator DATE 7-22-83

(This space for Federal or State office use)

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

APPROVED BY 7/29/83 TITLE \_\_\_\_\_ DATE 08/01/83

CONDITIONS OF APPROVAL, IF ANY:

\*See Instructions On Reverse Side

## OIL CONSERVATION DIVISION

STATE OF NEW MEXICO  
ENERGY AND MINERALS DEPARTMENTP. O. BOX 2088  
SANTA FE, NEW MEXICO 87501Form C-102  
Revised 10-1-78

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

Operator Mesa Petroleum Co..		Lease Macho Federal		Well No. #6	
Unit Letter G	Section 6	Township 7 South	Range 23 East	County Chaves	
Actual Postage Location of Well: 1946 feet from the North line and 2255 feet from the East line					
Ground Level Elev. 4042	Producing Formation Abo		Pool U.S.A. West Pecos Slope Abo		Dedicated Acreage: NE1/4 160 Acres

1. Outline the acreage dedicated to the subject well by colored pencil or hatchure marks on the plat below.

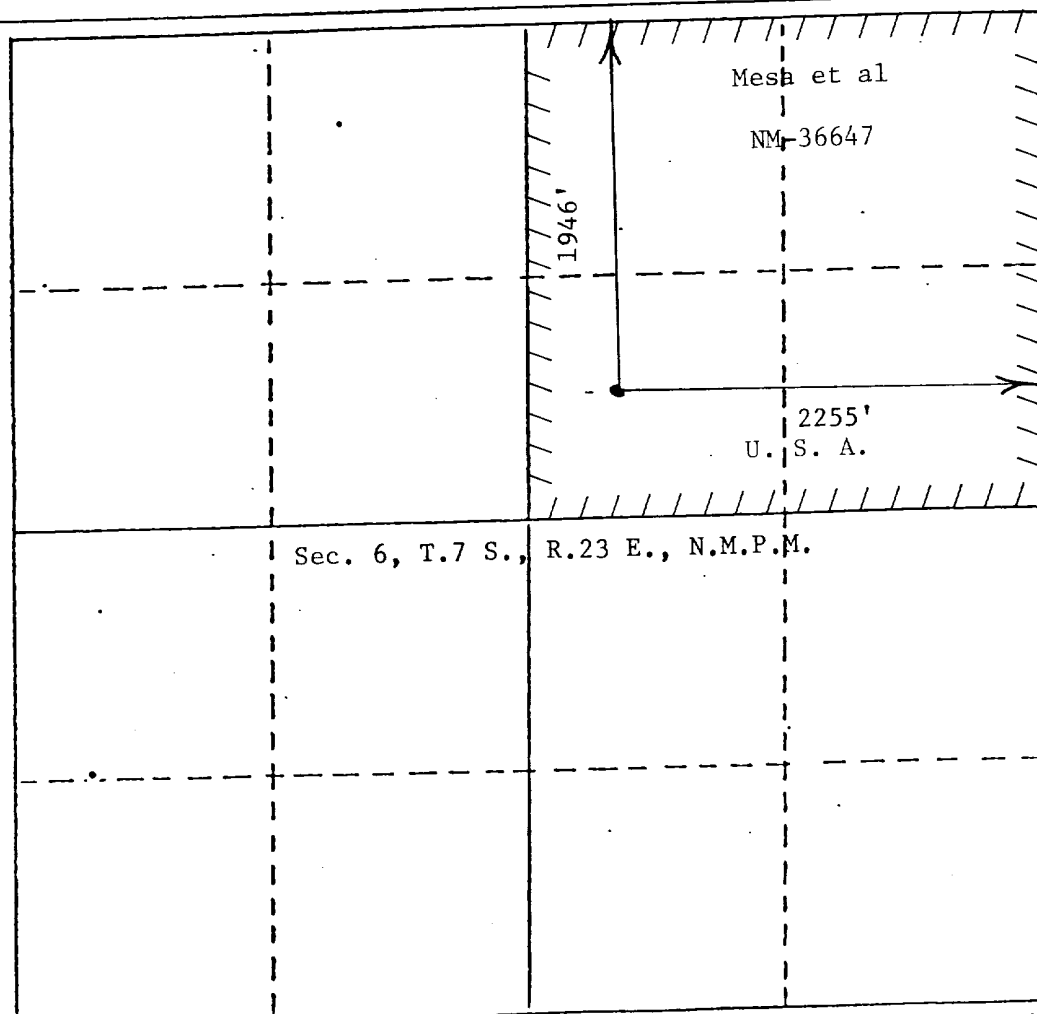
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).

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.

*R. E. Mathis*

Name

R. E. Mathis

Position

Regulatory Coordinator

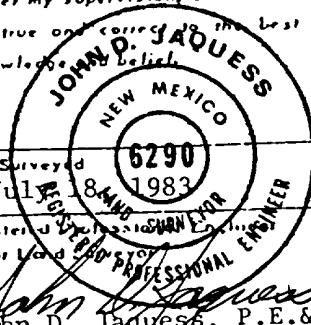
Company

Mesa Petroleum Co.

Date

7-22-83

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.



Date Surveyed

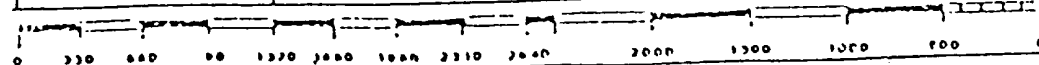
July 18, 1983

Registered Professional Engineer and/or Land Surveyor

John D. Jaquess, P.E. &amp; L.S.

Certificate No.

6290



APPLICATION FOR DRILLING

MESA PETROLEUM CO.  
MACHO FEDERAL #6  
1946' FNL & 2255' FEL, SEC 6, T7S, R23E  
CHAVES COUNTY, NEW MEXICO

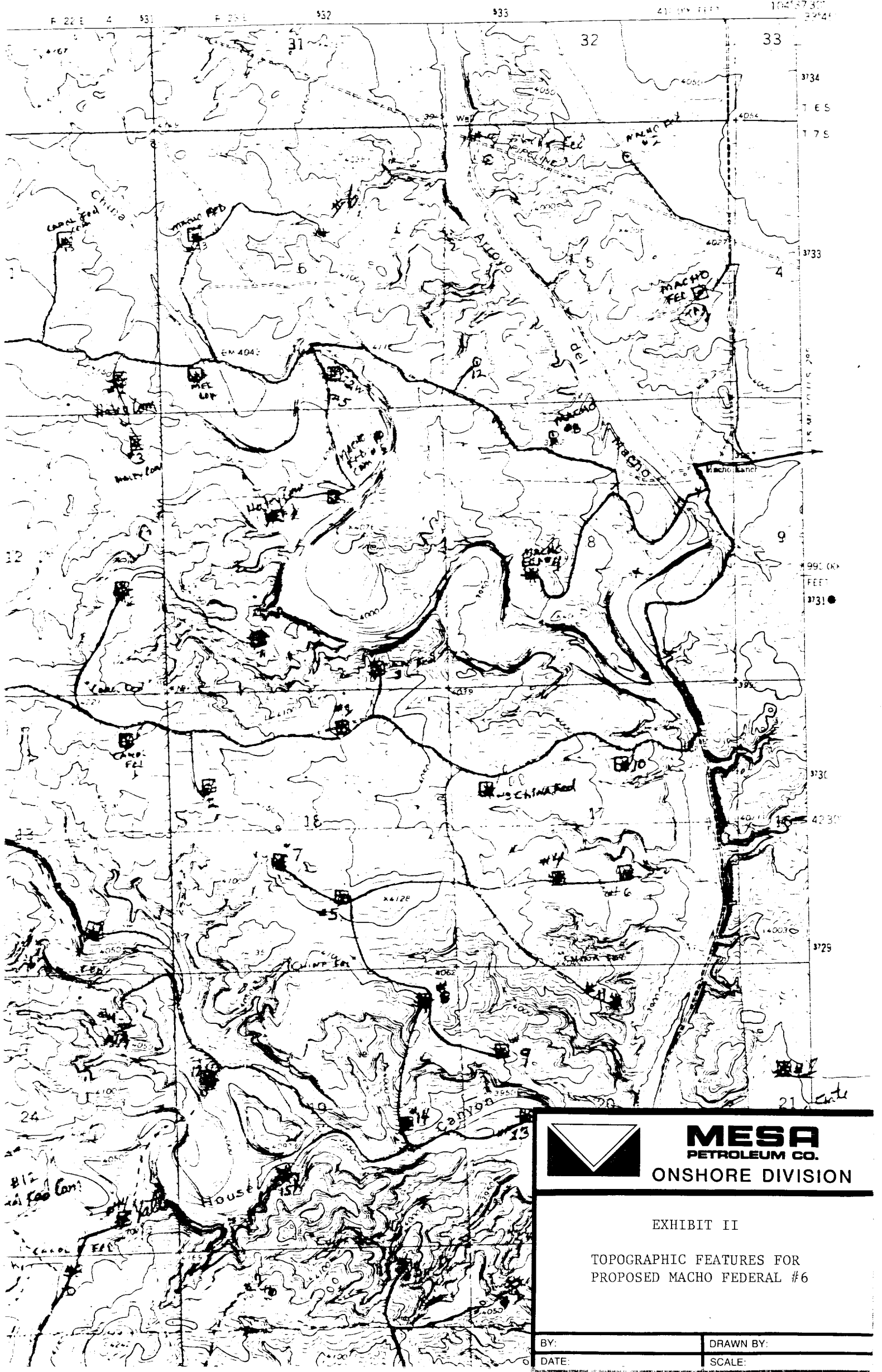
LEASE NO: NM 36647

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	636'
YESO	814'
TUBB	2162'
ABO	2797'
3. Hydrocarbon bearing strata may occur in the Abo formation(s). No fresh water is expected to be encountered below 1000'.
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 1200' to protect any fresh water zones and cemented to the surface. The 4 1/4" 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 a completion unit is available.

ROCK HOUSE CANYON QUADRANGLE  
 NEW MEXICO-CHAVES CO  
 7.5 MINUTE SERIES (TOPOGRAPHIC)

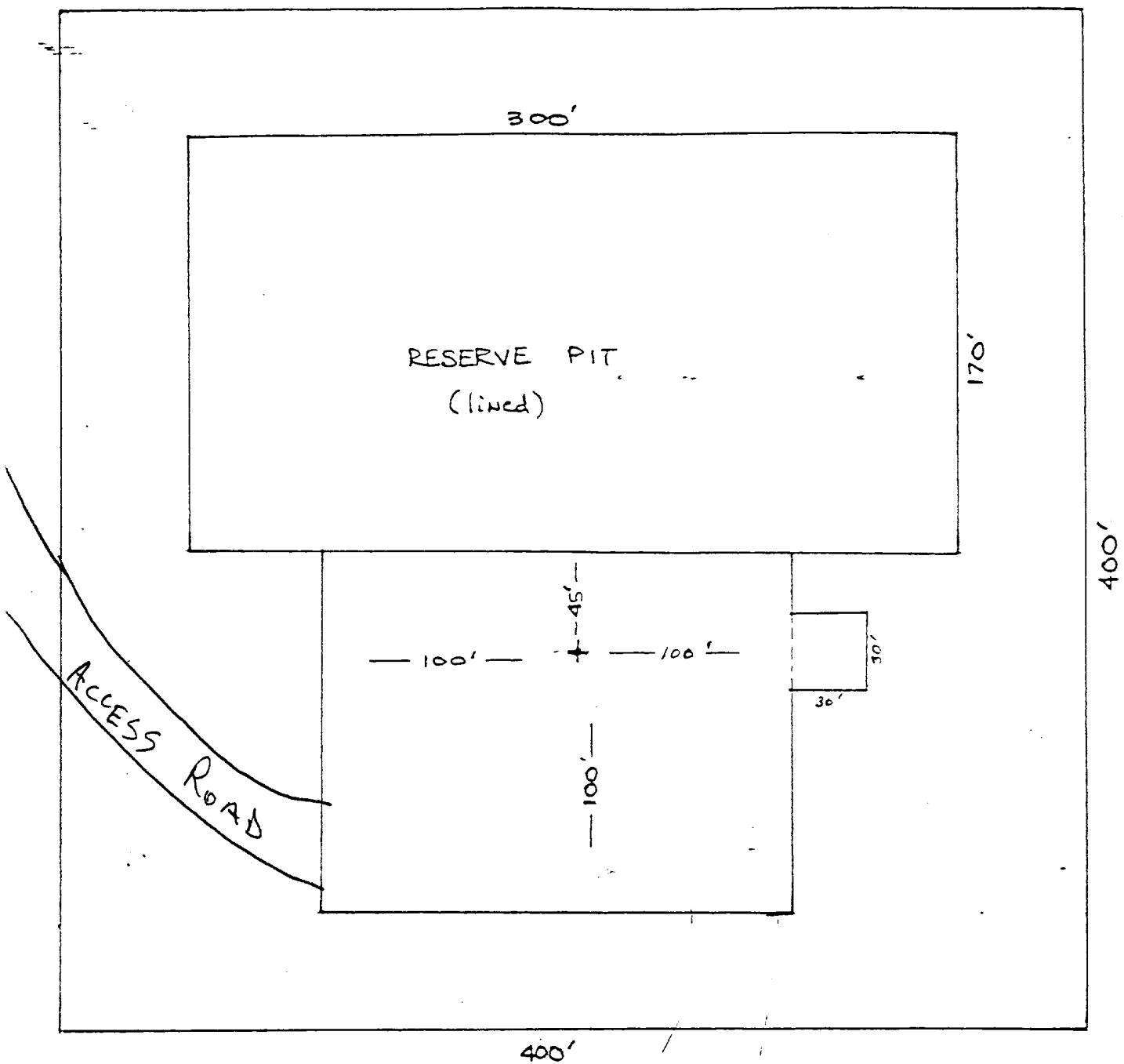


**MESA**  
 PETROLEUM CO.  
 ONSHORE DIVISION

EXHIBIT II

TOPOGRAPHIC FEATURES FOR  
 PROPOSED MACHO FEDERAL #6

BY:	DRAWN BY:
DATE:	SCALE:



**MESA**  
PETROLEUM CO.  
ONSHORE DIVISION

EXHIBIT V  
FOR PROPOSED MACHO FEDERAL #6

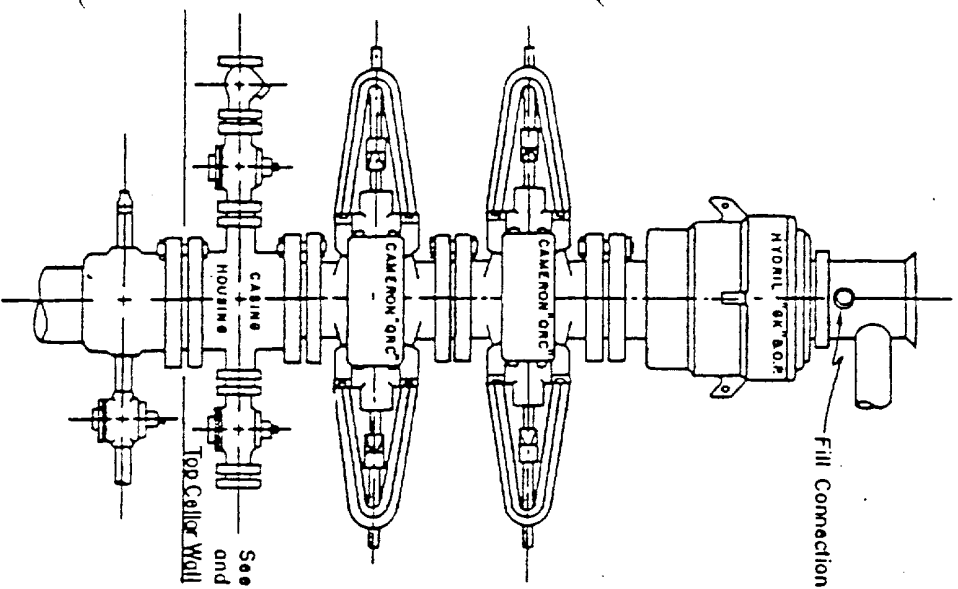
BY:

DRAWN BY:

DATE:

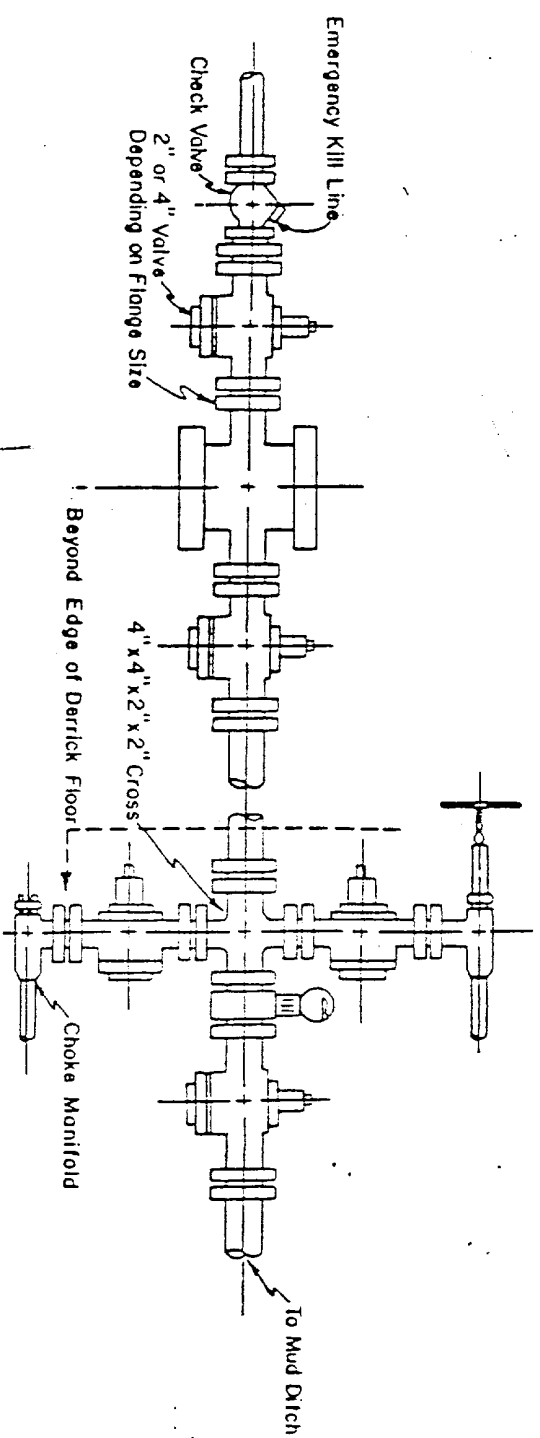
SCALE:

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.



**MESA**  
PETROLEUM CO.  
ONSHORE DIVISION

EXHIBIT VI

BY:	DRAWN BY:
DATE:	SCALE: