N.M.O.C.D. COPY

Form 9-331 C
(May 1963)

SUBMIT IN TRIPLICATE*
(Other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R1425.

30-005-61092

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK: DRILL [X] DEEPEN [ ] PLUG BACK [ ]

b. TYPE OF WELL: OIL WELL [ ] GAS WELL [X] OTHER — SINGLE ZONE [X] MULTIPLE ZONE [ ]

2. NAME OF OPERATOR: MESA PETROLEUM CO.

3. ADDRESS OF OPERATOR: 1000 VAUGHN BUILDING/MIDLAND, TEXAS 79701

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*)
At surface: 1980' FNL & 660' FWL
At proposed prod. zone: SAME

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.: 8

10. FIELD AND POOL, OR WILDCAT: UNDESIGNATED ABO

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA: Ut E SEC 14, T7S, R23E

12. COUNTY OR PARISH: CHAVES

13. STATE: NEW MEXICO

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*: 23 MILES NORTH OF ROSWELL

15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any): 660'/1980'

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.: 4000'

19. PROPOSED DEPTH: 3450'

20. ROTARY OR CABLE TOOLS: ROTARY

21. ELEVATIONS (Show whether DF, RT, GR, etc.): 3862.7' GR

22. APPROX. DATE WORK WILL START*: AUGUST 25, 1981

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'	SURFACE
7 7/8"	4 1/2"	10.5#	3450'	SUFFICIENT TO ISOLATE WTR;O&G

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 isolate and seal off any fresh water, oil, or gas zones encountered.

Gas Sales Are Dedicated.

RECEIVED
JUL 20 1981
OIL & GAS
U.S. GEOLOGICAL SURVEY
ROSWELL, NEW MEXICO

Posted APD
NL Book
8-25-81

XC: USGS (6), TLS, CEN RCDS, ACCTG, ROSWELL, MEC, LAND, PARTNERS, FILE

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 JULY 17, 1981

(This space for Federal or State office use)

PERMIT NO. APPROVED APPROVAL DATE

APPROVED BY (Orig. Sgd.) GEORGE H. STEWART TITLE DATE

CONDITIONS OF APPROVAL, IF ANY:

AUG 7 1981

FOR
JAMES A. GILLHAM
DISTRICT SUPERVISOR

*See Instructions On Reverse Side

NEW MEXICO OIL CONSERVATION COMMISSION
WELL LOCATION AND ACREAGE DEDICATION PLAT

Macho Federal 6

23East Chaves

660

ABO UNDESIGNATED Abo NW/4 160

M E S A ET AL

NM 36647

R. E. MATHIS

REGULATORY COORDINATOR

MESA PETROLEUM CO.

JULY 17, 1981

July 21, 1981

APPLICATION FOR DRILLING

MESA PETROLEUM CO.
MACHO FEDERAL #8
1980' FNL & 660' FWL, SEC 14, 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	669'
Yeso	847'
Tubb	2195'
Abo	2830'
Hueco	3409'

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. 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 andy 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.

MULTI-POINT SURFACE USE AND OPERATION PLAN

MESA PETROLEUM CO.
MACHO FEDERAL #8
1980' FNL & 660' FWL, SEC 14, T7S, R23E
CHAVES COUNTY, NEW MEXICO

LEASE NO: NM 36647

This plan is submitted with the Application for Permit to Drill the above described well. The purpose of this plan is to describe the location of the proposed well, the proposed construction activities and operational plan in both the actual and post drilling completion operations.

1. Existing Roads:

A. Exhibit I is a portion of a highway map showing the location of the proposed well as staked. The proposed well is approximately 23 miles north of Roswell.

B. Directions: Travel North of Roswell on US Highway 285 to just past mile marker 132 then turn West through cattleguard 1.6 miles then turn south (after cattleguard at electric fence) 7/10 mile to the location.

2. Planned Access Road:

A. Length and width: The new access road will be 12' wide (20' ROW) and approximately one mile long.

(See Exhibit II)

B. Construction: The new road will be constructed by grading and topping with compacted caliche. The surface will be crowned, with drainage on both sides. (See Exhibit III)

C. Culverts, Gates and Cattleguards: None

D. Cut and Fill: None

3. Location of Existing Wells:

Existing wells within a one-mile radius are depicted by Exhibit IV.

4. Location of Existing and/or Proposed Facilities:

If the well proves to be commercial, the necessary production facilities, gas separation process equipment and tank battery, will be installed on the drilling pad.

5. Location and Type of Water Supply:

It is planned to drill the proposed well with air. If needed, water will be obtained from commercial sources and will be trucked to the wellsite over the existing roads and proposed access road shown on Exhibits I and II or piped in from a nearby source.

6. Source of Construction Materials:

Caliche for surfacing the road and wellsite pad will be obtained by the dirt contractor from an approved pit. Probable pit is located: Unknown.

7. Methods of Handling Waste Disposal:

A. Drill cuttings will be disposed of in the reserve pits.

B. Drilling fluids will be allowed to evaporate in the reserve pits until the pits are dry.

C. All pits will be fenced with normal fencing material to prevent livestock from entering the area.

D. Water produced during operations will be collected in tanks until hauled to an approved disposal system, or separate disposal application will be submitted to the USGS for approval.

E. Current laws and regulations pertaining to the disposal of human waste will be complied with.

F. Trash, waste paper, garbage and junk will be buried in a separate trash pit and covered with a minimum of 24 inches of dirt. All waste material will be contained to prevent scattering by the wind.

G. All trash and debris will be buried or removed from the wellsite within 30 days after finished and/or completion operations.

8. Ancillary Facilities: None required.

9. Wellsite Layout:

A. Exhibit V shows the relative location and dimensions of the well pad, reserve pits, and major rig components. The pad and pit area has been staked and flagged.

B. Some leveling of the wellsite may be required. See Exhibit III for additional details.

C. The reserve pit will not be plastic lined.

10. Plans for Restoration of the Surface:

A. After completion of drilling and/or completion operations all equipment and other material not needed for operations will be removed. Pits will be filled and location cleaned of all trash and junk to leave the wellsite in an aesthetically pleasing a condition as possible.

B. Any unguarded pits containing fluids will be fenced until they are filled.

C. If the proposed well is non-productive, all rehabilitation and/or vegetation requirements of the Bureau of Land Management and the United States Geological Survey will be complied with and will be accomplished as expeditiously as possible. All pits will be filled and leveled within 90 days after abandonment, if drying conditions permit.

11. Other Information:

A. Topography: The land surface in the vicinity of the wellsite is gently sloping to the south.

B. Soil: The topsoil at the wellsite is sandy loam.

C. Flora and Fauna: See the Archaeological Report filed by NMAS, Inc. for a description of vegetative types.

D. Ponds and Streams: Small pond 1/4 mile to the North.

E. Residences and Other Structures: None.

F. Land Use: Grazing.

G. Surface Ownership: The wellsite is on private surface (Bronson Corn).

H. There is no evidence of any major archaeological, historical, or cultural sites in the area. NMAS, Inc. has conducted an archaeological study of this site and provides this report to interested parties.

12. Operator's Representatives:

A. The field representatives responsible for assuring compliance with the approved surface use and operations plan are as follows:

J. James
P. O. Box 298
Roswell, New Mexico
(505-622-0992) - Office
(505-622-0234) - Home

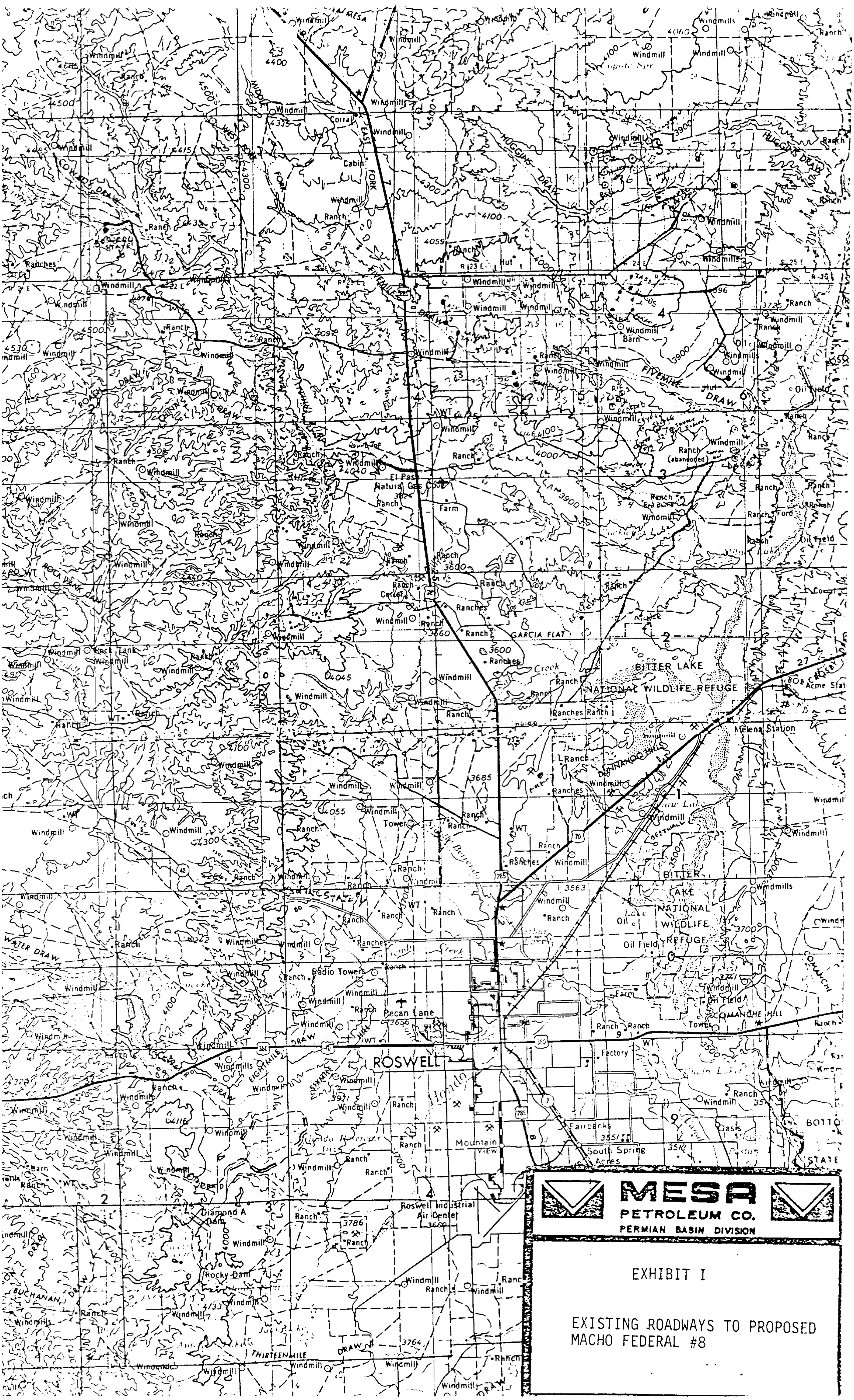
W. R. Miertschin
1000 Vaughn Building
Midland, Texas 79701
(915-683-5391) - Office
(915-682-6535) - Home

13. Certification:

I hereby certify that I, or person under my direct supervision, have inspected the proposed drillsite and access route; that I am familiar with the conditions which presently exist; that the statements made in this plan are, to the best of my knowledge true and correct; and, that the work associated with the operations proposed herein will be performed by Mesa Petroleum Co. and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved.

JULY 17, 1981
DATE

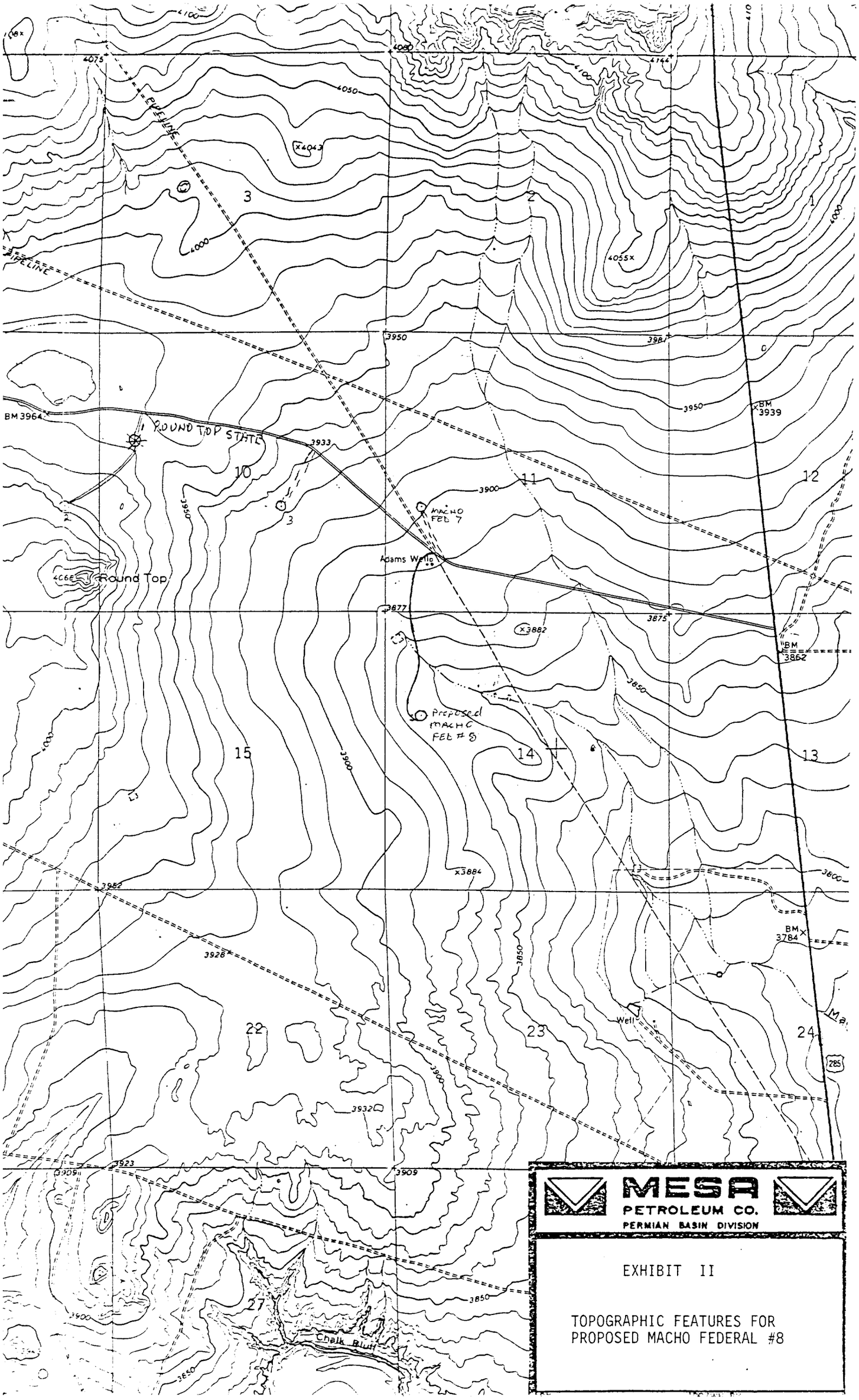
Michael P. Houston
MICHAEL P. HOUSTON
OPERATIONS MANAGER



MESA
PETROLEUM CO.
PERMIAN BASIN DIVISION

EXHIBIT I

EXISTING ROADWAYS TO PROPOSED
MACHO FEDERAL #8

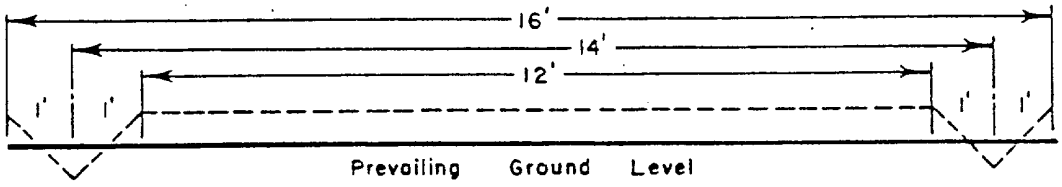


MESA
PETROLEUM CO.
PERMIAN BASIN DIVISION

EXHIBIT II

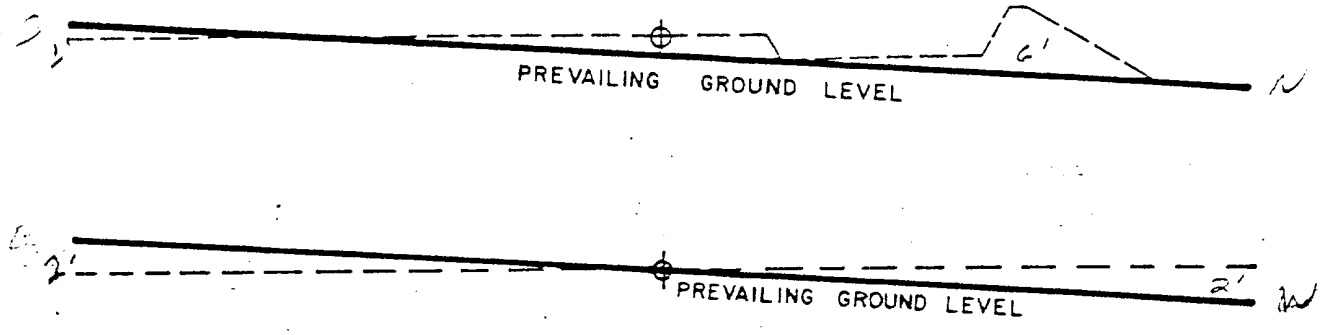
TOPOGRAPHIC FEATURES FOR
PROPOSED MACHO FEDERAL #8

R - O - W 16'



ROADWAY CROSS SECTION

Horizontal Scale 1" = 3'



LOCATION CROSS SECTION

Horizontal Scale 1" = 50'

MESA PETROLEUM CO.
PERMIAN BASIN DIVISION

EXHIBIT III

LOCATION CONSTRUCTION

BY: REM	DRAWN BY: MLP
DATE: 3-5-80	SCALE: AS NOTED

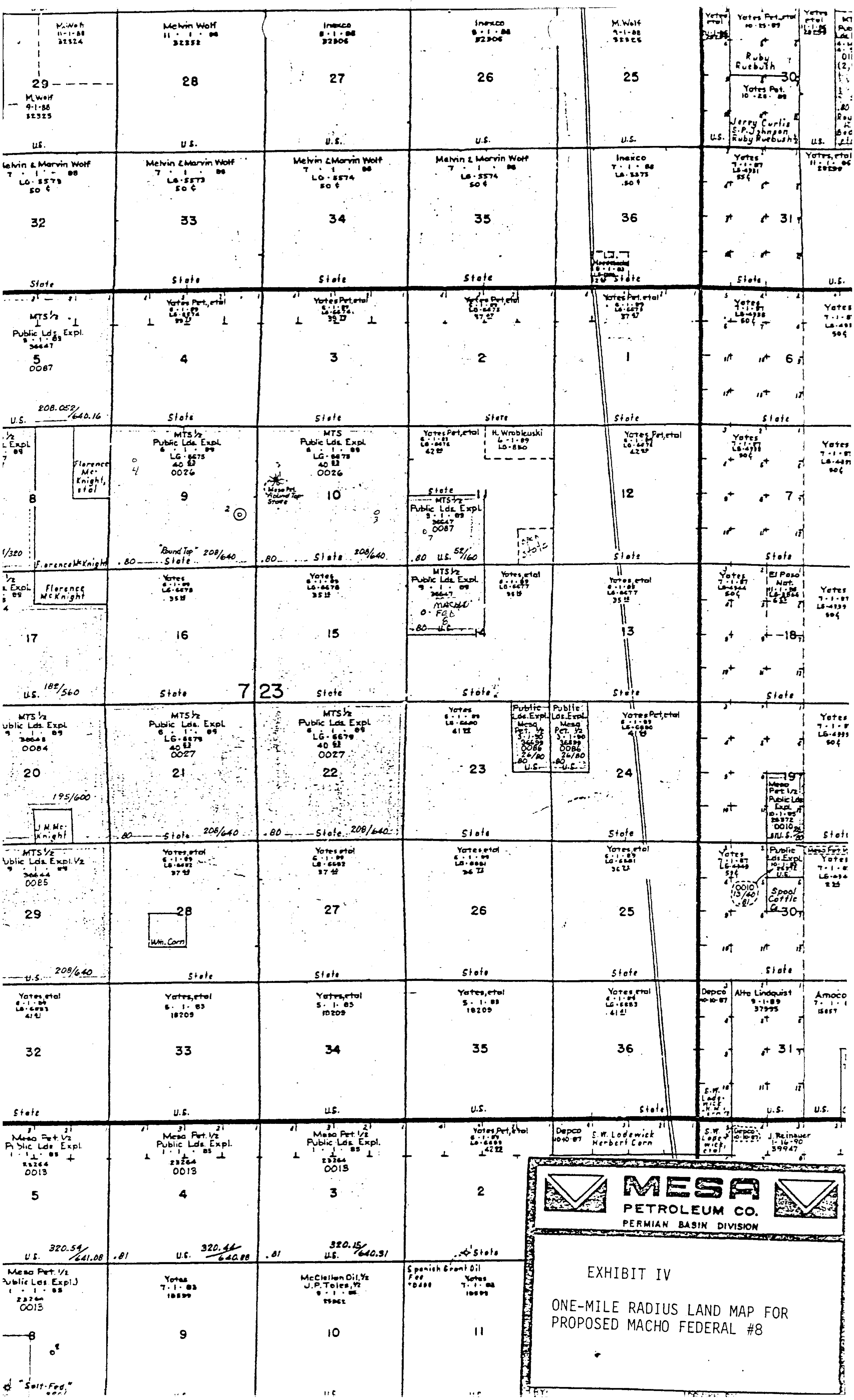
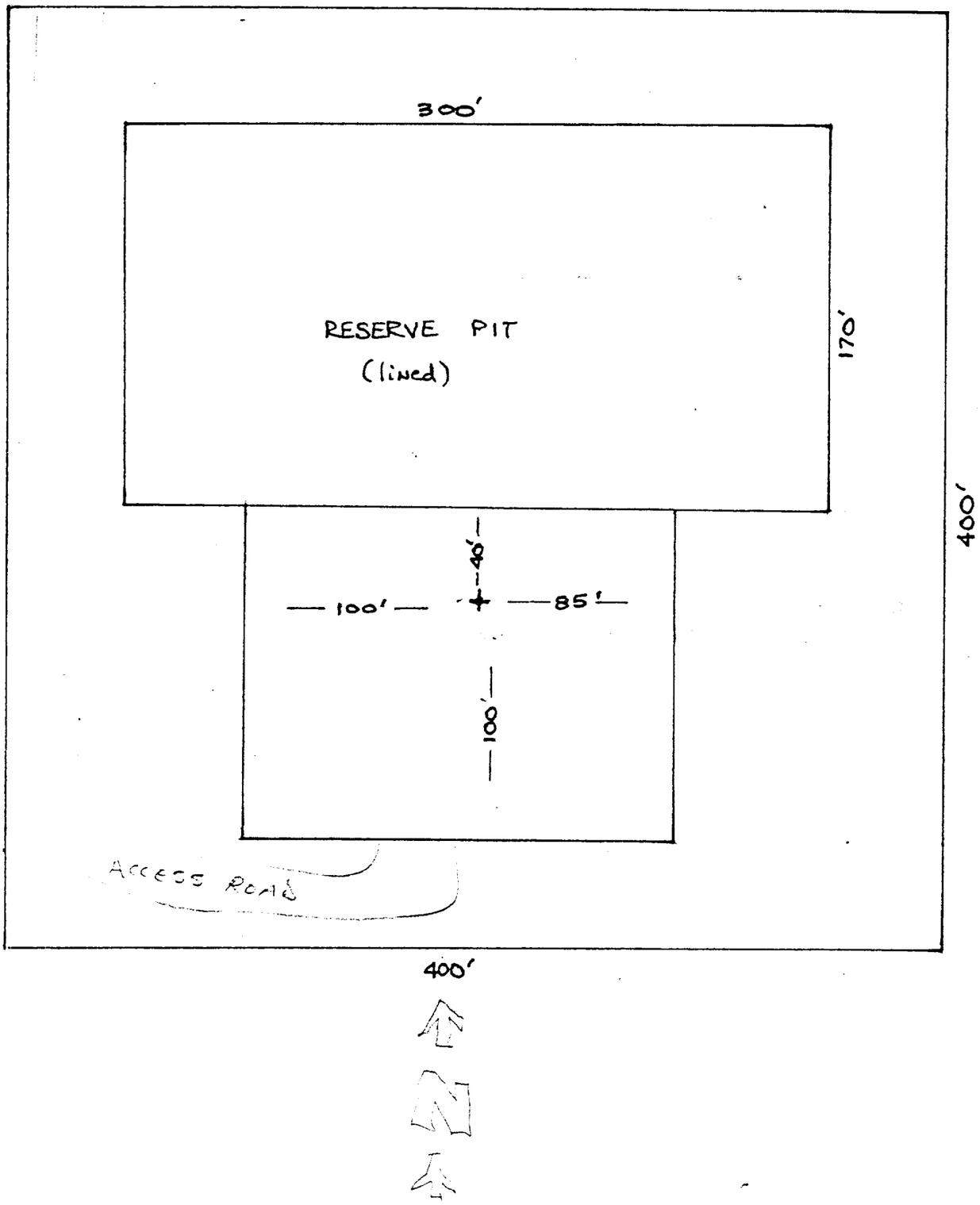


EXHIBIT IV

ONE-MILE RADIUS LAND MAP FOR PROPOSED MACHO FEDERAL #8



MESA PETROLEUM CO.
PERMIAN BASIN DIVISION

EXHIBIT V

REV.

DRAWN BY: