

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

30-005-60831

## 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 BUILDING/MIDLAND, TX 79701

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

At surface

1980' FSL &amp; 1980' FWL

At proposed prod. zone

SAME

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

38 MILES NORTH/NORTHEAST OF ROSWELL

## 15. DISTANCE FROM PROPOSED\*

LOCATION TO NEAREST

PROPERTY OR LEASE LINE, FT.

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

1980'

## 18. DISTANCE FROM PROPOSED LOCATION\*

TO NEAREST WELL, DRILLING COMPLETED,

OR APPLIED FOR, ON THIS LEASE, FT.

N/A

## 16. NO. OF ACRES IN LEASE

1480'

## 19. PROPOSED DEPTH

4350'

## 17. NO. OF ACRES ASSIGNED

TO THIS WELL

160

## 20. ROTARY OR CABLE TOOLS

ROTARY

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

3898.9' GR

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

NOVEMBER 4, 1980

## 23.

## 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#             | 600'          | 200"C/Sufficient to circulate |
| 11"          | 8 5/8"         | 24#             | 1500'         | 200"C"                        |
| 7 7/8"       | 4 1/2"         | 10.5#           | 4350'         | 460 HLW/300 POZ"C"            |

Propose to drill 17 1/2" hole to 600', cement 13 3/8" casing, reduce hole to 12 1/4" drill to 1500' without BOPs or wellhead. After cementing 8 5/8" casing @ 1500' and installing bradenhead, will nipple up 10" API 3000 psi BOPs and drill 7 7/8" hole to total depth of 4350'. (A 10" spool will be used even if no casing is run.) Drilling fluid will consist of fresh water gel and soda ash from surface to 1500' and fresh water with caustic soda (Ph 9.0 - 9.5) and chemicals for corrosion control to 3500' then mud up with starch and soda ash to total depth. After log evaluation, 4 1/2" casing may be run to total depth.

GAS NOT DEDICATED

DEC 5 1980

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. Mather

TITLE

Regulatory Coordinator

DATE 10-7-80

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

APPROVED BY

(Orig. Sgd.) PETER W. CHESTER

TITLE

ACTING DISTRICT ENGINEER

DATE

DEC 1 1980

CONDITIONS OF APPROVAL, IF ANY:

XC: USGS (6), TLS, JRW, CEN RCDS, ACCTG, MEC, JBH, PARTNERS, FILE

\*See Instructions On Reverse Side

NEW MEXICO OIL CONSERVATION COMMISSION  
WELL LOCATION AND ACREAGE DEDICATION PLAT

Form O-152  
Supersedes O-128  
Effective 1-1-65

All distances must be from the outer boundaries of the Section

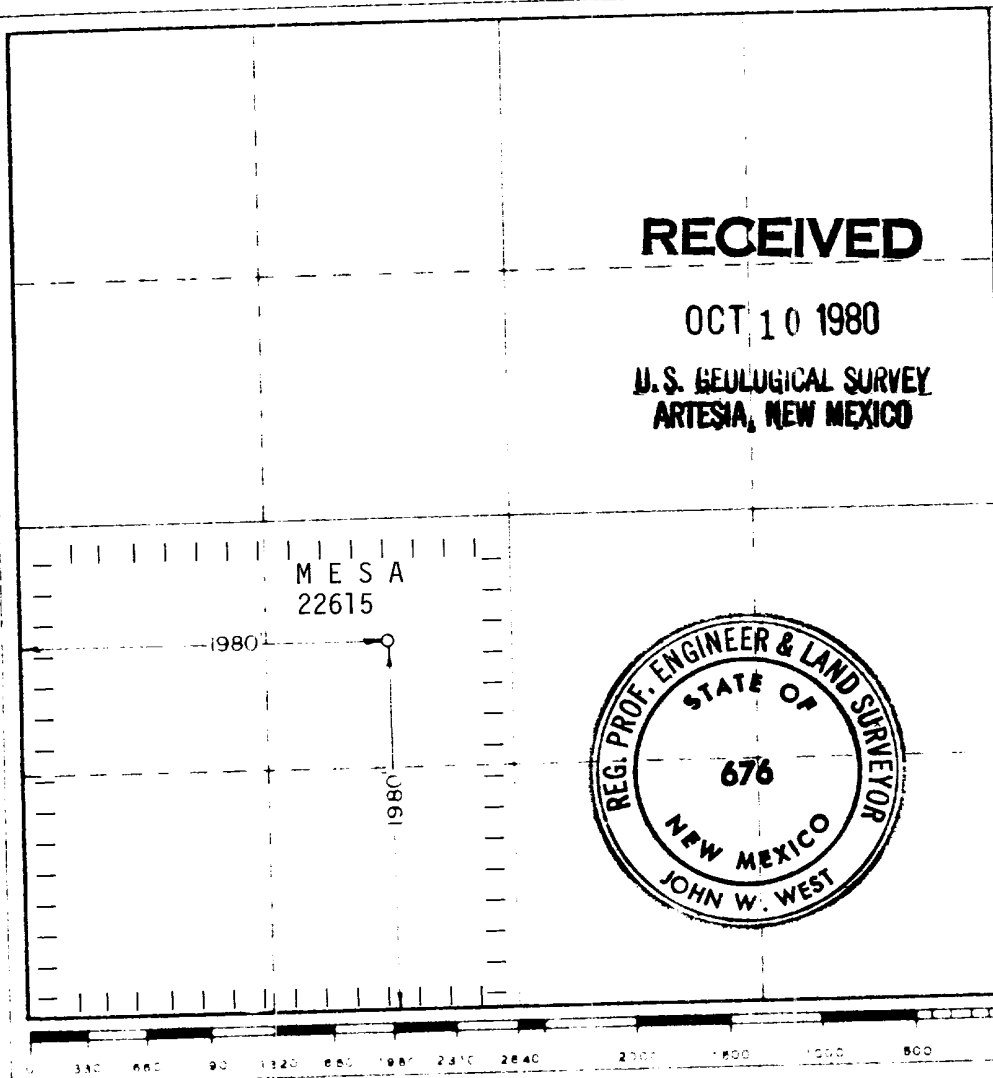
|                                       |                                   |  |                         |  |
|---------------------------------------|-----------------------------------|--|-------------------------|--|
| Operator<br><b>Mesa Petroleum Co.</b> |                                   | Lease<br><b>Camack Federal</b>             |                         | Well No.<br><b>3</b>                   |
| Section<br><b>K</b>                   | Section<br><b>12</b>              | Range<br><b>5 South</b>                    | Range<br><b>24 East</b> | County<br><b>Chaves</b>                |
| Acres in Section<br><b>1980</b>       |                                   | Acres in Section<br><b>1980</b>            |                         | Acres in Section<br><b>West</b>        |
| Ground Level Elev<br><b>3898.9</b>    | Producing Formation<br><b>ABO</b> | Producing Formation<br><b>UNDESIGNATED</b> |                         | Producing Formation<br><b>SW/4 160</b> |

- Outline the acreage dedicated to the subject well by colored pencil or hatchure marks on the plat below.
- If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
- 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*

R. E. MATHIS

REGULATORY COORDINATOR

MESA PETROLEUM CO

OCTOBER 7, 1980

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.

August 15, 1980

\_\_\_\_\_  
REGULATORY COORDINATOR

*John W. West*

Certified by: JOHN W. WEST 676  
PATRICK A. ROMERO 6863  
Ronald J. Eidson 3239

APPLICATION FOR DRILLING

MESA PETROLEUM CO

CAMACK FEDERAL #3  
CHAVES COUNTY, NEW MEXICO

LEASE: NM- 22615

In conjunction with Form 9-331 C, Application for Permit to Drill subject well, the following items of pertinent information are submitted in accordance with U.S.G.S. requirements:

1. The geologic surface formation is Seven Rivers.
2. Estimated tops of geological markers are as follows:

|            |       |
|------------|-------|
| San Andres | 565'  |
| Glorieta   | 1400' |
| Tubb       | 2900' |
| Abo        | 3530' |
| Huecc      | 4250' |

3. The estimated depths at which anticipated water, oil, or gas formations are expected to be encountered:

Water - San Andres at approximately 700' - brackish in this area.  
Gas - Abo at approximately 3800'

4. Casing and Blowout Preventer Program

Surface: 600' of 13 3/8", 48#, H40, ST&C casing cemented with 200 sx Class "C" + 2% CaCl around the casing shoe with sufficient additional cement to circulate to surface. Cement will be circulated using conventional methods and/or redimix down the annulus if necessary. Will install flowline, but no BOPs and drill out the cement inside the casing after WOC approximately 8 hours and testing casing to 600 psi for 30 minutes.

Intermediate: 1500' of 8 5/8", 24#, K55, ST&C casing cemented with 200 sx Class "C" + 2% CaCl.

NOTE: This string may be omitted if conditions are favorable. In any event, a 10" API 3000 psi spool with 2" API 2500 psi ball valve will be installed and then we will nipple up 10" API 3000 psi WP double BOP with pipe rams (bottom) and blind rams and test to 600 psi for 30 minutes. Drill 7 7/8" hole to total depth.

# Application for Permit to Drill

Page 2

Production: 4350' of 4 1/2", 10.5#, K55, ST&C casing cemented with types and volume sufficient to cover all pay intervals. Choke, kill, and fill lines are indicated on Exhibit I. BOPs will be tested prior to drilling below the 8 5/8" casing. A full opening safety valve, to fit the drill string in use, will be kept on the rig floor at all times. The kelly cock, safety valve, choke and kill lines will be tested at the same time that BOPs tests are run. Operational opening and closing checks on all BOPs will be run on each trip, with daily operational check of pipe rams.

## 5. Circulating medium and control equipment

- 0'-1100' Use fresh water spud mud with fresh water gel and soda ash or lime. Treat with lost circulation material as hole conditions dictate. If total loss of circulation occurs, mix 2 or 3 viscous slugs with LCM and attempt to regain circulation. If unsuccessful, consider drilling without returns to casing point and spot 150+ bbls viscous slug treated with LCM on bottom to run pipe.
- 1500'-3000' Drill out 8 5/8" casing (if set) with fresh water circulating reserve pit. Add caustic soda for pH 9.0 - 9.5 and chemicals for corrosion control. Mix paper as needed to control seepage or to sweep the hole.
- 3000'-4350' Maintain mud weight less than 10 ppg with additions of fresh water while keeping chloride-ion concentration of 40,000 - 50,000 + ppm and KCL 3.0%. At 3500 mud up with starch and soda ash to control API water loss to 20 - 25 cc to TD. Sea Mud or Salt Water Gel will be added to sweep hole or to raise viscosity of system sufficiently to clean hole to run logs and casing.

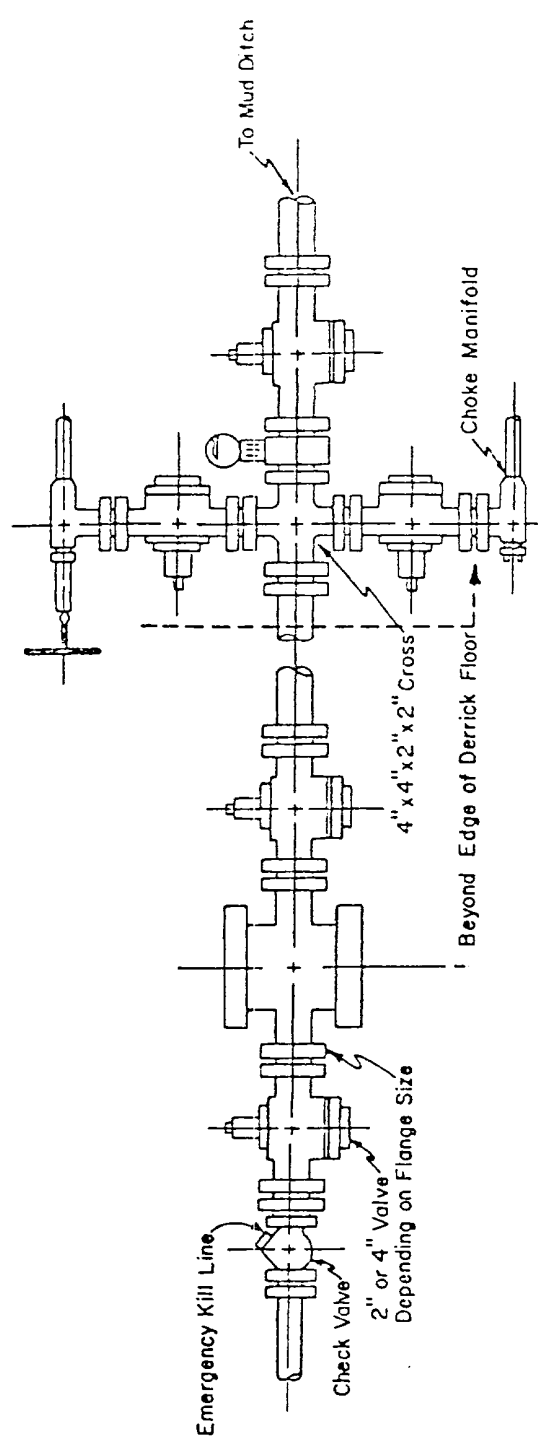
- 6. There is no coring program or drill stem tests planned for this well. The logging program may consist of a gamma ray log from total depth to surface, compensated neutron-density-caliper log and dual laterolog-micro spherically focused log run from 1500' to total depth.
- 7. Maximum anticipated bottom hole pressure is 1500 psi at 4400' based upon bottom hole pressure on other area wells. Mud weight required to offset this pressure is 9.0 ppg. It is probable that leaching of expected salt stringers could increase the mud weights to 10.0 - 10.2 ppg. Bottom hole temperature should not exceed 120°F. No sour gas is expected.

Application for Permit to Drill

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8. Anticipated spud date is November 4, 1980, with completion of drilling operations expected by November 12, 1980 . Completion operations (perforations and stimulation) will follow successful drilling operations as soon as a completion unit is available.

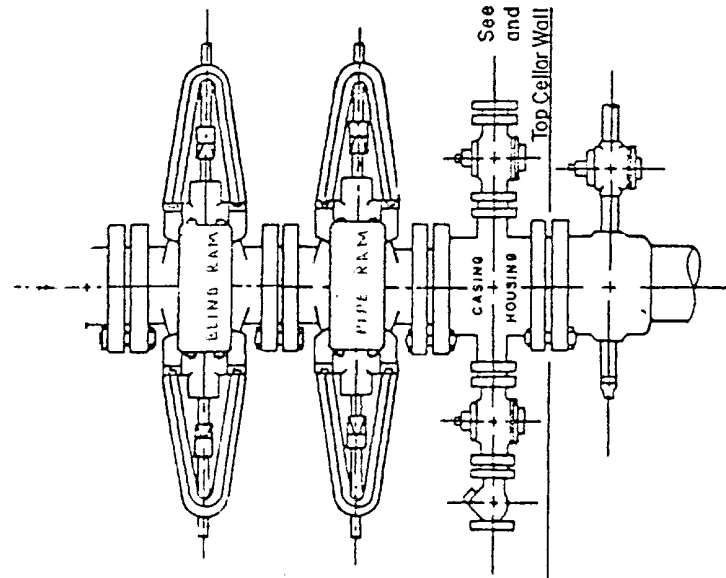
Blow-out Preventers and choke manifold are all 900 Series



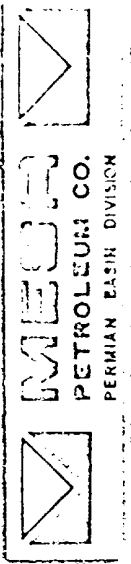
### 3,000 PSI WORKING PRESSURE KILL, CHOKES, AND FILL CONNECTIONS

DETAIL OF 4" FLOW LINE CHOKES ASSEMBLY

Minimum assembly for 3,000 PSI working pressure will consist of three preventers.  
The bottom and middle preventers may be Cameron.



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



E X H I B I T I

BLOWOUT PREVENTER SCHEMATIC FOR

# MULTI-POINT SURFACE USE AND OPERATION PLAN

MESA PETROLEUM CO

CAMACK FEDERAL #3  
1980' FSL & 1980' FWL, SEC 12, T5S, R24E  
CHAVES COUNTY, NEW MEXICO

LEASE: NM 22615

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 II is a portion of a highway map showing the location of the proposed well as staked. The proposed well is approximately 38 miles north/northeast of Roswell, New Mexico.
- B. Directions: Travel North on US Highway 285 24.4 miles as measured from the U.S. 70 overpass. Turn East on county dirtroad (just past mile 139 marker) and travel East for 8 miles then North for 4.5 miles (12.5 miles total) then turn North on road parallel to pipeline for 1 mile to the location.

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**OCT 10 1980**

**U.S. GEOLOGICAL SURVEY  
ARTESIA, NEW MEXICO**

## 2. Planned Access Road

- A. Length and width: The new access road will be 12' wide (16' ROW) and approximately 1 mile parallel to pipeline ROW and then 300' from pipeline ROW to drilling location pad.

(See Exhibit III for details)

- 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 IV)
- C. Culverts, Gates, and Cattleguards: One cattleguard will be installed.
- D. Cut and Fill: In order for the location to be level, approximately 3' of cut from the South side will be moved to the Northside for fill.

3. Location of Existing Wells

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

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 fresh water. The water will be obtained from commercial sources and will be trucked to the well site over the existing roads and the proposed access road shown on Exhibits II and III.

6. Source of Construction Materials

Caliche for surfacing the road and the wellsite pad will be obtained by the dirt contractor from the Federal Government or private sources. Top soil from the location will be stockpiled near the location for future rehabilitation use. No surface materials will be disturbed except for those necessary for the actual grading and leveling of the drillsite and access road.

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 finishing and/or completion operations.



8. Ancillary Facilities: None required.

9. Wellsite Layout:

- A. Exhibit VI 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 will be required. See Exhibit IV for additional details.
- C. The reserve pit will 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 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 North and West.
- B. Soil: The topsoil at the wellsite is sandy loam.
- C. Flora and Fauna: The vegetative cover consists of Tabosa and other prairie grasses, creosote bush, yucca, cactus, prairie flowers and other miscellaneous desert growth. Wildlife in the area probably includes those typical of semi-arid desert land. The area is used for cattle grazing.
- D. Ponds and Streams: There are no rivers, streams, lakes, or ponds in the area with the exception of Huggins Draw approximately 1/2 mile to the West.

- E. Residences and Other Structures: There are no residences or other structures in the vicinity of the proposed well.
- F. Land Use: Cattle grazing.
- G. Surface Ownership: The wellsite is on fee surface currently owned by Mr. J. P. Ewart.
- H. There is no evidence of any major archeological, historical, or cultural sites in the area. NMAS, Inc. has conducted an archeological 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. R. Wootten  
P. O. Box 1756  
Hobbs, New Mexico 88240  
(505-393-4425) - Office  
(505-393-6033) - Home

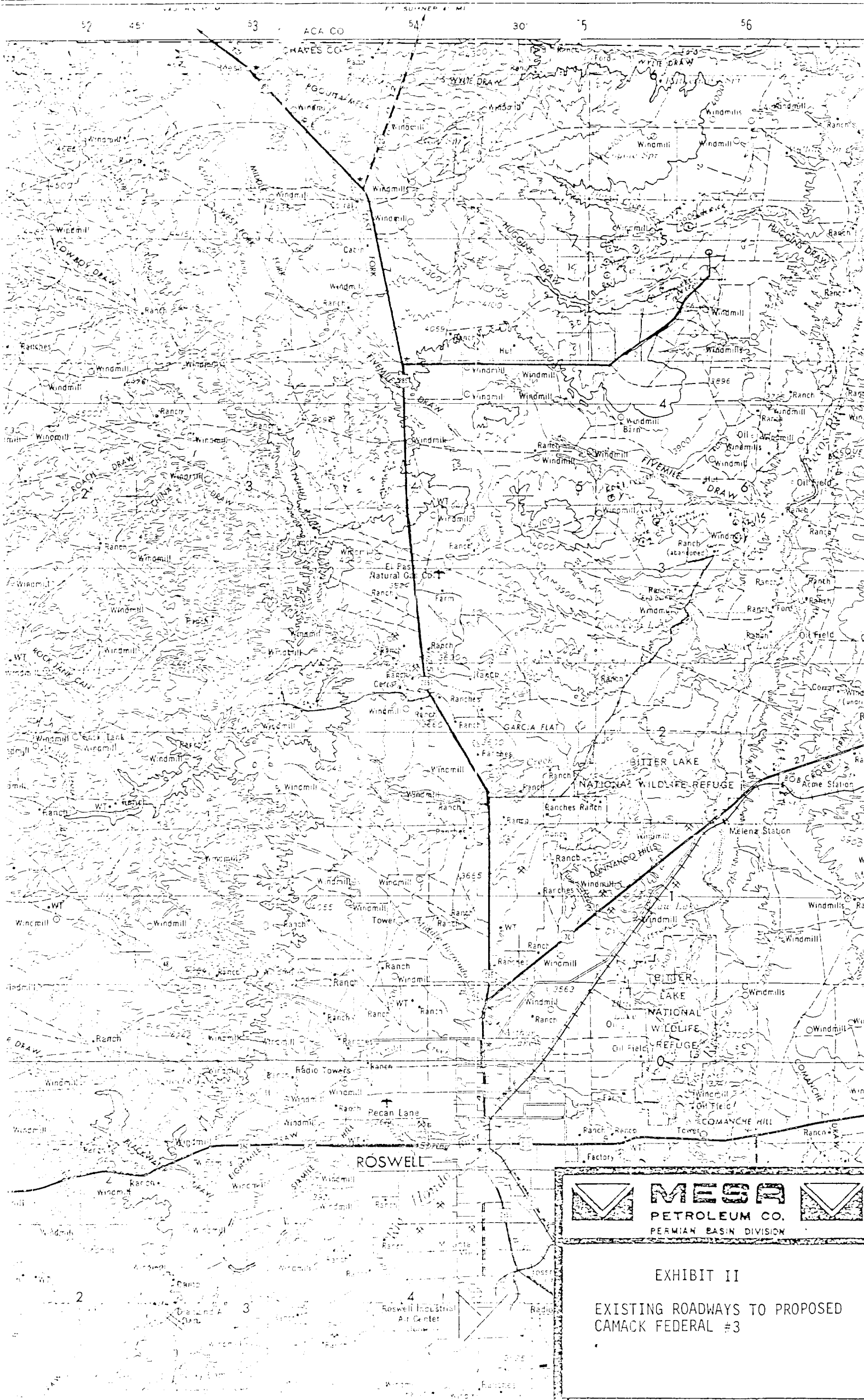
C. C. Wheeler  
1000 Vaughn Building  
Midland, Texas 79701  
(915-683-5391) - Office  
(915-683-6123) - Home

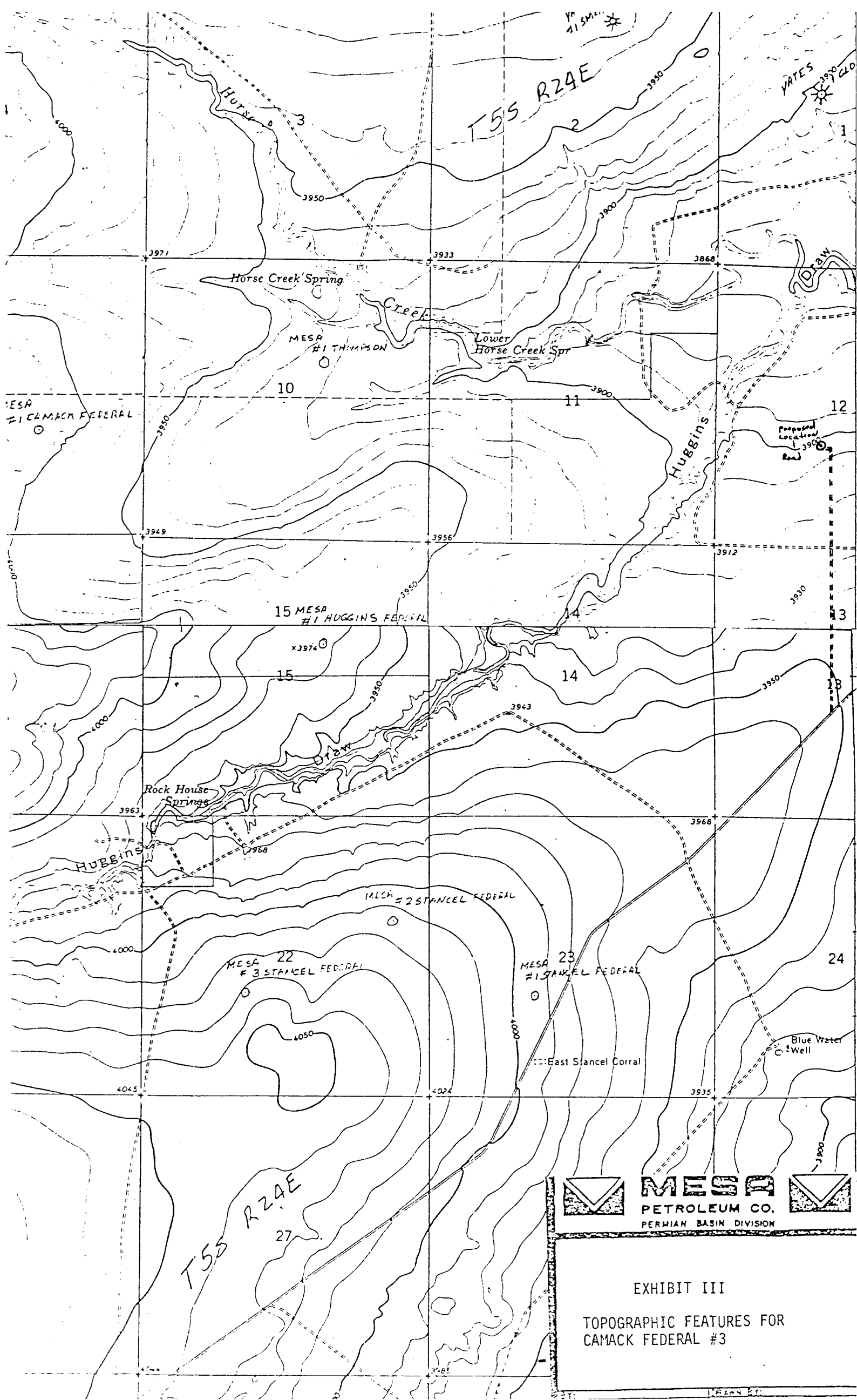
13. Certification

I hereby certify that I, or persons 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.

OCTOBER 7, 1980  
Date

Michael P. Houston  
Michael P. Houston  
Operations Manager





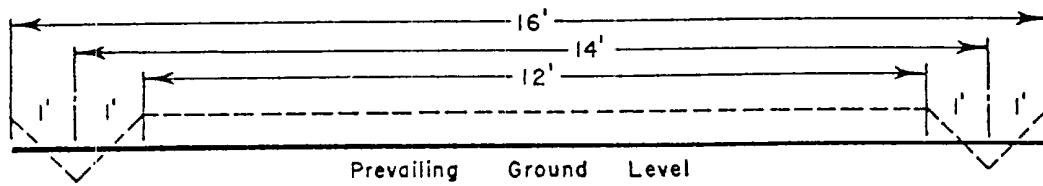
**MESA**  
PETROLEUM CO.  
PERMIAN BASIN DIVISION



EXHIBIT III

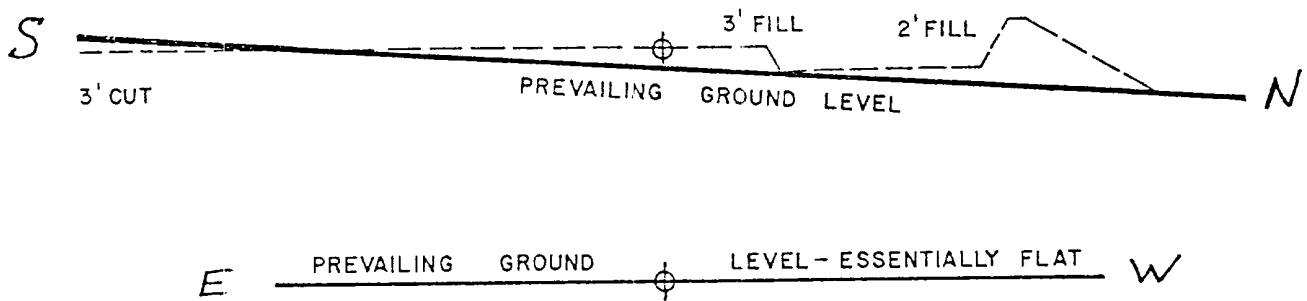
TOPOGRAPHIC FEATURES FOR  
CAMACK FEDERAL #3

R - O - W 16'





### ROADWAY CROSS SECTION

Horizontal Scale 1" = 3'



### LOCATION CROSS SECTION

Horizontal Scale 1" = 50'

|   |  |   |
|---|--|---|
|  | <b>MESA</b><br>PETROLEUM CO.<br>PERMIAN BASIN DIVISION |  |
| <b>EXHIBIT IV</b>   |  |   |
| LOCATION CONSTRUCTION   |  |   |
| REM<br>3-5-80   |  | MLP<br>AS NOTED   |

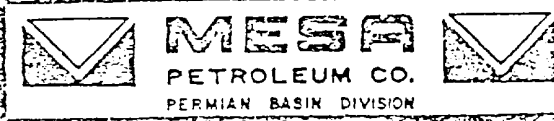
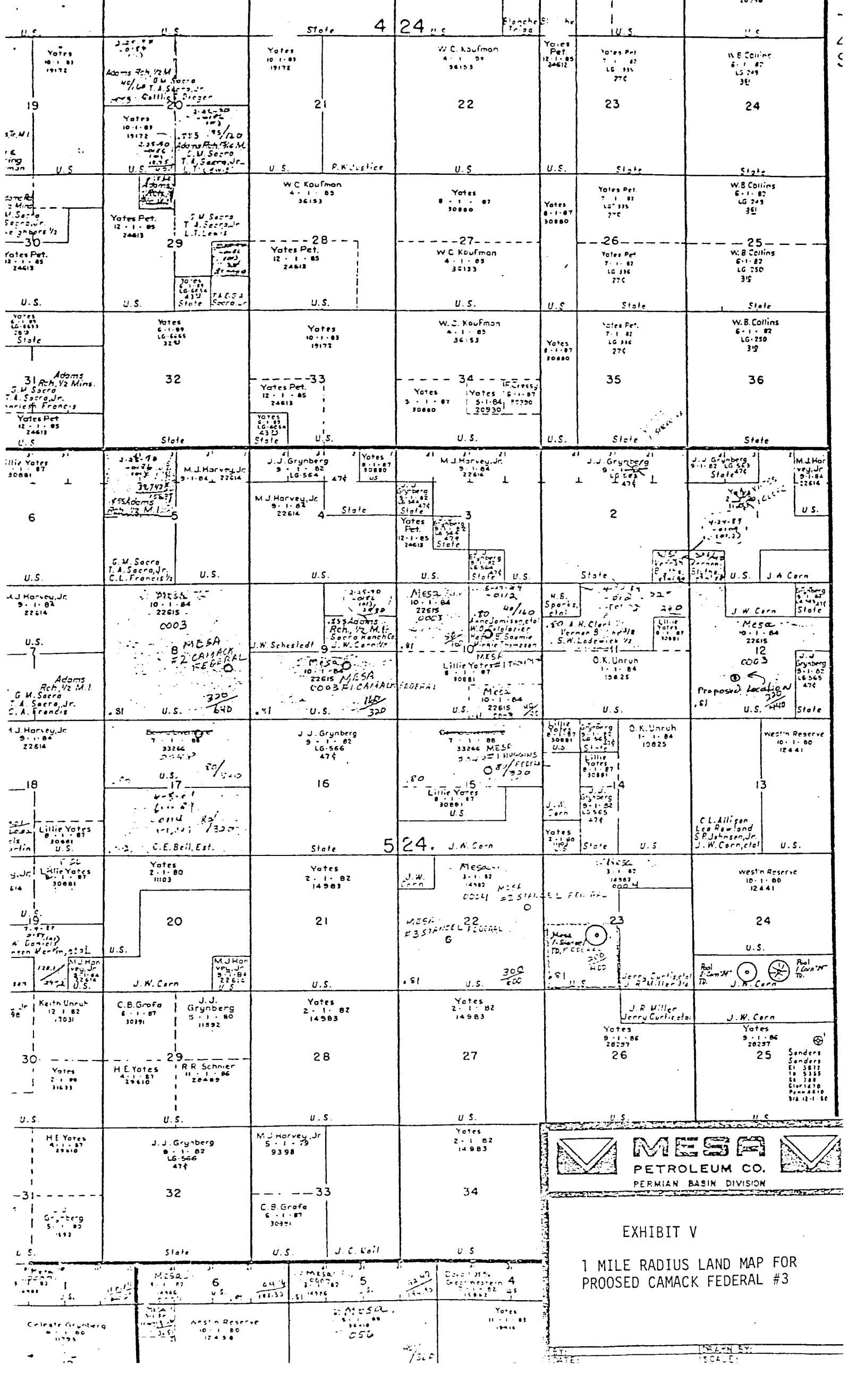
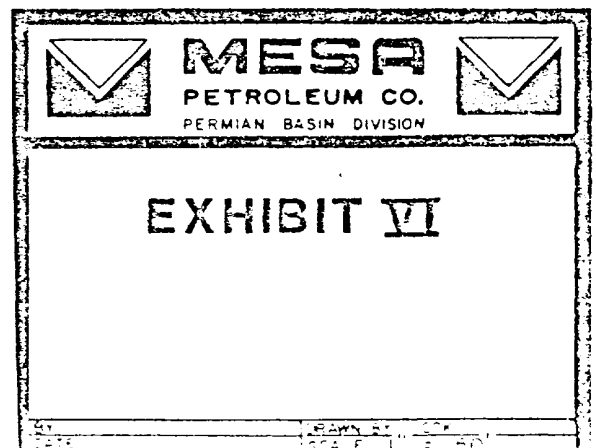
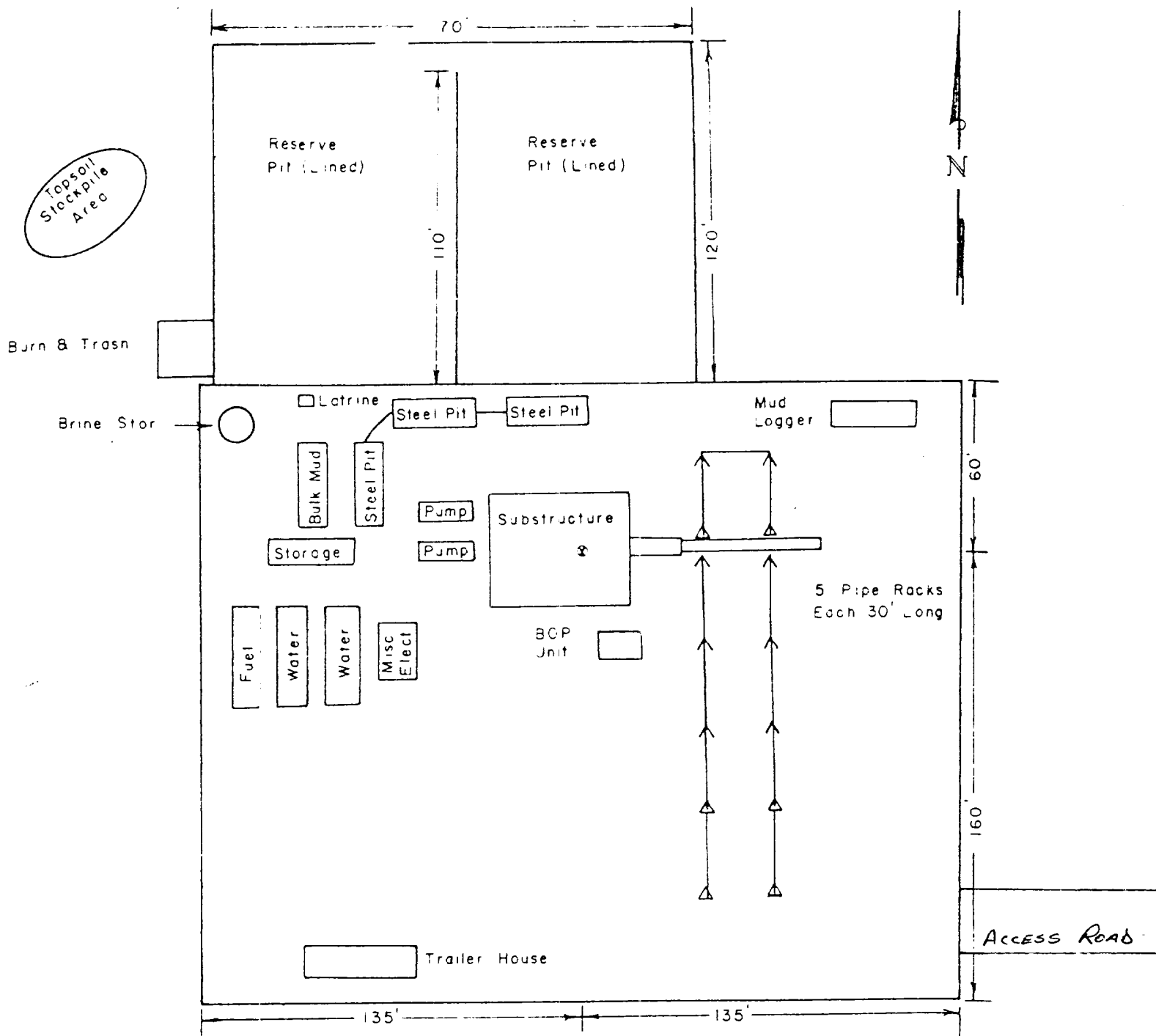


EXHIBIT V  
1 MILE RADIUS LAND MAP FOR  
PROPOSED CAMACK FEDERAL #3



*NAIICD*



November 26, 1980

U.S.G.S.  
P O Drawer U  
Artesia NM 88210

**RECEIVED**

**NOV 28 1980**

**U.S. GEOLOGICAL SURVEY  
ARTESIA, NEW MEXICO**

Gentlemen:

Please find attached a copy of the agreement between Mesa Petroleum Co. and Mr. James P. Ewart regarding surface use and restoration relative to the drilling of the Camack Federal #3 well, 1980' FSL & 1980' FWL, Sec 12, T5S, R24E, Chaves County, New Mexico, Lease No. NM-22615.

Sincerely,

R. E. Mathis  
Regulatory Coordinator

xc: USGS (6), BLM, TLS, MEC, EKD, FILE



DAMAGE RELEASE AND EASEMENT

STATE OF NEW MEXICO

X

KNOW ALL MEN BY THESE PRESENTS:

COUNTY OF CHAVES

X

THAT James P. Ewart of Chaves County, New Mexico, is the surface owner of the following described lands in Chaves County, New Mexico. To wit:

Section 12 and 13, Township 5 South, Range 24 East - NMPM

IN consideration of the sum of \$ , . . dollars paid to the undersigned James P. Ewart as road right-of-way and damages into the well location for the #3 Camack Well in section 12-5S-24E, Chaves County, New Mexico, during the drilling and operating of said well, to him this day in hand paid by Mesa Petroleum Co., receipt of which payment is hereby acknowledged, has released, acquitted and discharged, and by these presents does hereby release, acquit and discharge the said Mesa Petroleum Co., its employees, representatives, drilling contractors or sub-contractors of all liability and damages arising out of or based upon the non-negligent actions of the said Mesa Petroleum Co., its employees, representatives, drilling contractors or sub-contractors in building the roads, ingress and egress to the well location and other locations on adjacent lands.

IT is the intention of the undersigned James P. Ewart to allow Mesa Petroleum Co., its employees, representatives, drilling contractors and sub-contractors use of the roads across the above described lands during the time of drilling and operating of the said well and other wells in the area which neccessitate the use of this easement across said land, provided that Mesa Petroleum Co., shall conduct all operations in a prudent matter, respecting the rights of the surface owner.

ALL roads used or constructed shall be maintained and left in good usable condition following abandornent of operations neccessitating the use of this easement unless not wanted by the owner of the surface at that time, and then the surface will be restored to as near its original condition as is practicable within a reasonable time following abandonment.

\_\_\_\_\_  
James P. Ewart

STATE OF NEW MEXICO,  
County of Chaves

The foregoing instrument was acknowledged before me this \_\_\_\_\_ day of  
September, 1980, by \_\_\_\_\_

\_\_\_\_\_  
Notary Public

My Commission expires \_\_\_\_\_, 19\_\_\_\_.