

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

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 BLDG/MIDLAND, TEXAS 79703-4493

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)
At surface 1650' FNL & 1980' FWL SE/NW 4
At proposed prod. zone SAME

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*
41 miles north of Roswell, New Mexico

15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any) 990'

16. NO. OF ACRES IN LEASE 640

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. 1320'

19. PROPOSED DEPTH 4200'

20. ROTARY OR CABLE TOOLS ROTARY

21. ELEVATIONS (Show whether DF, RT, GR, etc.) 3982.3' GR

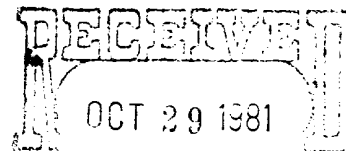
22. APPROX. DATE WORK WILL START* DECEMBER 21, 1981

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# | 900' | SURFACE |
| 11" | 8 5/8" | 24# | 1600' | ISOLATE WATER, OIL & GAS |
| 7 7/8" | 4 1/2" | 10.5# | 4200' | COVER ALL PAY |

Propose to drill 17 1/2" hole to approximately 900' to set 13 3/8" surface casing and cement to surface. Will reduce hole to 11" and drill to approximately 1600' to set 8 5/8" casing. Will nipple up RAM type BOPs, reduce hole to 7 7/8" and drill to total depth. Drilling medium will be air, foam, or mud as required.

Gas Sales are Dedicated.



U.S. GEOLOGICAL SURVEY
ROSWELL, NEW MEXICO

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

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. P. Muth TITLE REGULATORY COORDINATOR DATE 10-28-81

(This space for Federal or State office use)

PERMIT NO. _____ APPROVAL DATE _____

APPROVED BY NOV 13 1981 TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY JAMES A. GILLIAM
DISTRICT SUPERVISOR

*See Instructions On Reverse Side

WELL LOCATION AND ACREAGE DEDICATION

All distances must be from the outer boundaries of the Section

| | | | | | |
|--------------------|-------|--------------|---------|--------|--|
| Mesa Petroleum Co. | | Huggins Fed. | | Chaves | |
| F | 15 | 5 South | 24 East | | |
| 1650 | North | 1980 | West | | |
| 3982.3' | ABO | UNDESIGNATED | NW/4 | 160 | |

- Outline the acreage dedicated to the subject well by colored pencil or machine 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 (if so, 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.

10-28-81

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.

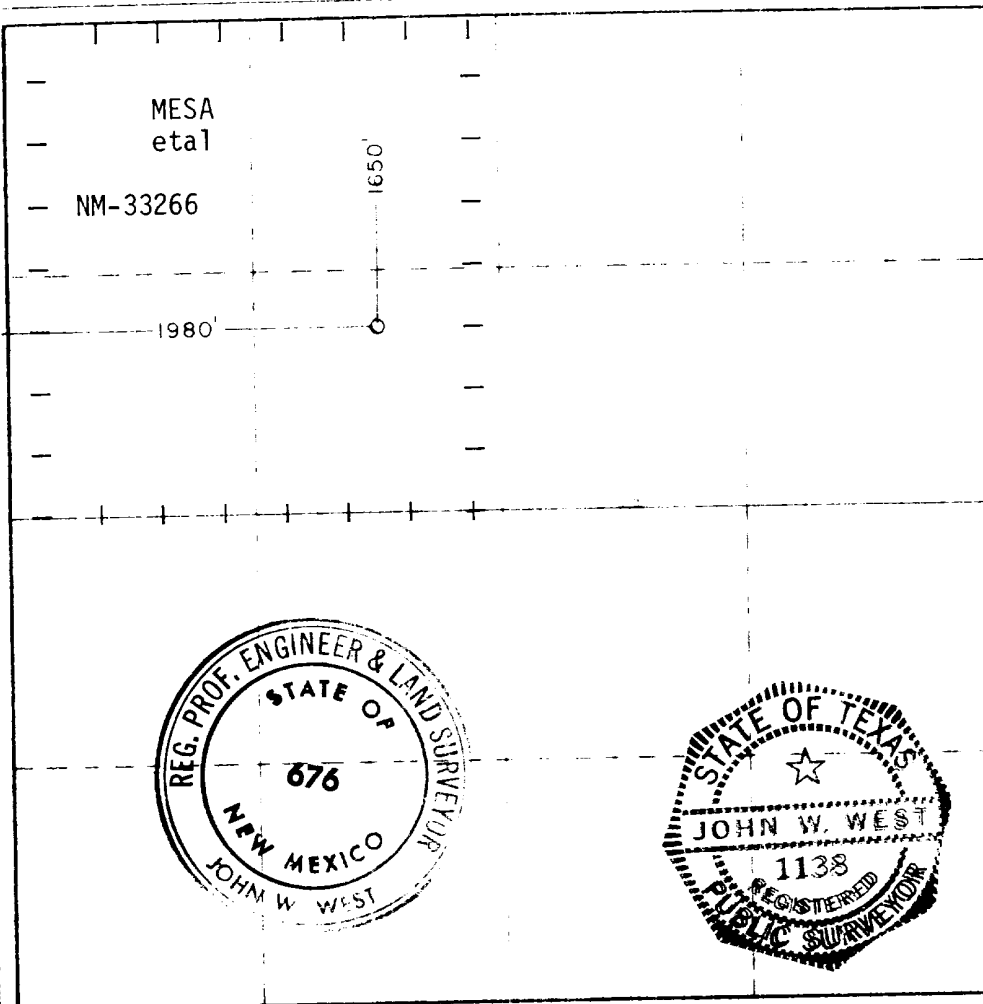
Date Surveyed:

Oct. 13, 1981

Registered Professional Engineer and Land Surveyor

John W. West

Certificate No. JOHN W. WEST 676
PATRICK A. ROMERO 6463
Ronald J. Eidson 3239



330 660 990 1320 1650 1980 2310 2640 2970 3300 3630 3960 4290

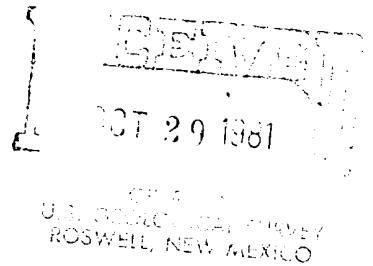
MESA PETROLEUM CO.
HUGGINS FEDERAL #3
1650' FNL & 1980' FWL, SEC 9, T5S, R24E
CHAVES COUNTY, NEW MEXICO
LEASE NO: NM-33266

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 | 594' |
| Glorieta | 1427' |
| Tubb | 2911' |
| Abo | 3542' |
3. Hydrocarbon bearing strata may occur in the ABO formation(s). No fresh water is expected to be encountered below 900'.
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 13 3/8" casing will be set at approximately 900' to protect any fresh water zones and cemented to the surface. The 8 5/8" casing will be set at approximately 1600' if water zones have been encountered or omitted if not and ram type preventers installed. 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. 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.
5. No drill stem tests 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 fifteen days with completion operations to follow as soon as a completion unit is available.

MESA PETROLEUM CO.
HUGGINS FEDERAL #3
1650' FNL & 1980' FWL, SEC 9, T5S, R24E
CHAVES COUNTY, NEW MEXICO
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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 41 miles north of Roswell, New Mexico.
- B. Directions: Travel north from Roswell on US Highway 285 for approximately 27 miles and turn east on county road 8 miles then northeast 3.5 miles then northwest 3/4 mile then north 1 mile (crossing Huggins Draw) then due west 1/4 mile to the location.

2. Planned Access Road:

- A. Length and width: The new access road will be 12' wide (20' ROW) and approximately 1/4 mile of new road.

(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: In order for the location to be level, approximately 5' will be moved from the west to the east for fill.

3. Location of Existing Wells:

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

Multi-Point Surface Use and Operation Plan

Page 2

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.

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: NE/4 SEC 22, T5S, R24E

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.

Multi-Point Surface Use and Operation Plan

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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 be un-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: See NMAS, Inc. Report
- B. Soil: The topsoil at the wellsite is sandy loam.
- C. Flora and Fauna: See NMAS, Inc. Archaeological Report for vegetative types.
- D. Ponds and Streams: Huggins Draw is 1/2 mile to the southeast.
- E. Residences and Other Structures: NONE

Multi-Point Surface Use and Operation Plan

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F. Land Use: Grazing.

G. Surface Ownership: The wellsite is on federal surface.

H. 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

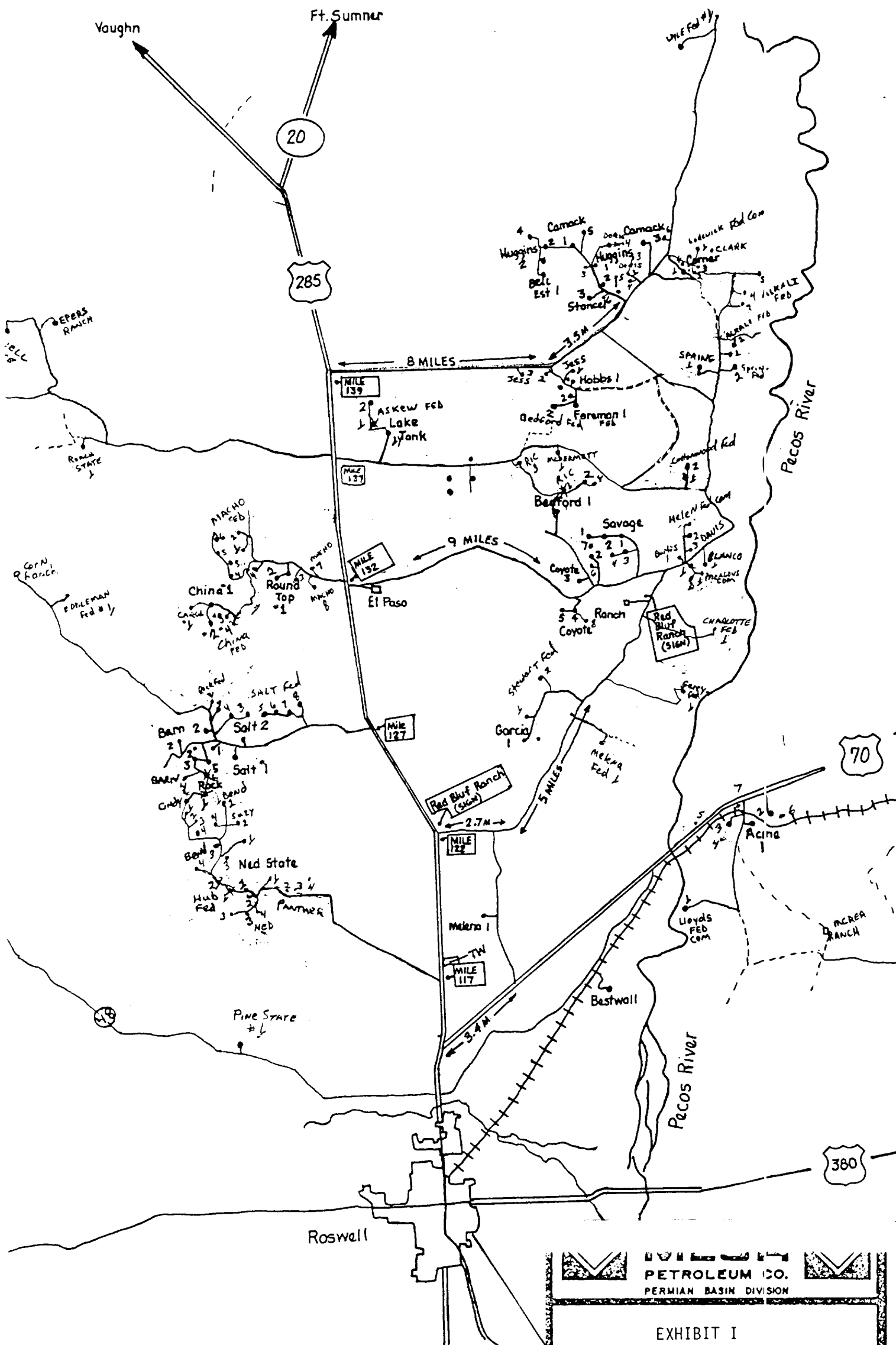
W. R. Miertschin
1000 Vaughn Building
Midland, Texas 79701
(915-683-5391) - Office
(915-682-6535) - Home



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.

Oct 28, 1981
DATE

Michael P. Houston
MICHAEL P. HOUSTON
OPERATIONS MANAGER



| | | |
|--|---------------------------------|---|
|  PETROLEUM CO. PERMIAN BASIN DIVISION | |  |
| EXHIBIT I AREA ROADWAYS FOR PROPOSED HUGGINS FEDERAL #3 | | |
| BY: _____ DATE: _____ | DRAWN BY: _____ SCALE: _____ | |