

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

30-005-60953

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, TEXAS 79701

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

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE\*  
 40 MILES NORTH/NORTHEAST OF ROSWELL, NEW MEXICO

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

18. DISTANCE FROM PROPOSED LOCATION\* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.  
 N/A

21. ELEVATIONS (Show whether DF, RT, GR, etc.)  
 3777.4' GR

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#	800'	CIRCULATE TO SURFACE
11"	8 5/8"	24#	1600'	SUFFICIENT TO ISOLATE WTR, O&G
7 7/8"	4 1/2"	10.5#	4350'	SUFFICIENT TO COVER ALL PAY

Propose to drill 17 1/2" hole on air or foam to 800' or deeper to set 13 3/8" surface casing. Will cement to surface then reduce hole to 11" and drill to 1600'. Will set 8 5/8" casing if water zones have been encountered or omit if not. Will reduce hole to 7 7/8", install ram type BOPs and drill to total depth using 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.

Gas Sales are not dedicated.

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 MARCH 16, 1981

(This space for Federal or State office use)

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

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

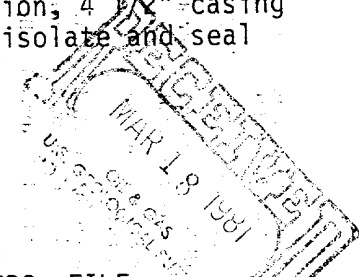
CONDITIONS OF APPROVAL, IF ANY:  
APR 28 1981  
 FOR  
JAMES A. GILHAM  
 DISTRICT SUPERVISOR

\*See Instructions On Reverse Side

need NSF

5. LEASE DESIGNATION AND SERIAL NO.  
 NM 32167  
 6. IF INDIAN, ALLOTTEE OR TRIBE NAME  
 7. UNIT AGREEMENT NAME  
 8. FARM OR LEASE NAME  
 SPRING FEDERAL  
 9. WELL NO.  
 1  
 10. FIELD AND POOL, OR WILDCAT  
 UNDESIGNATED ABO  
 11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA  
 U-1-M  
 SEC 6, T6S, R26E  
 12. COUNTY OR PARISH  
 CHAVES  
 13. STATE  
 NEW MEXICO

16. NO. OF ACRES IN LEASE  
 464.12  
 17. NO. OF ACRES ASSIGNED TO THIS WELL  
 166  
 19. PROPOSED DEPTH  
 4400'  
 20. ROTARY OR CABLE TOOLS  
 ROTARY  
 22. APPROX. DATE WORK WILL START\*  
 MAY 27, 1981



**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.

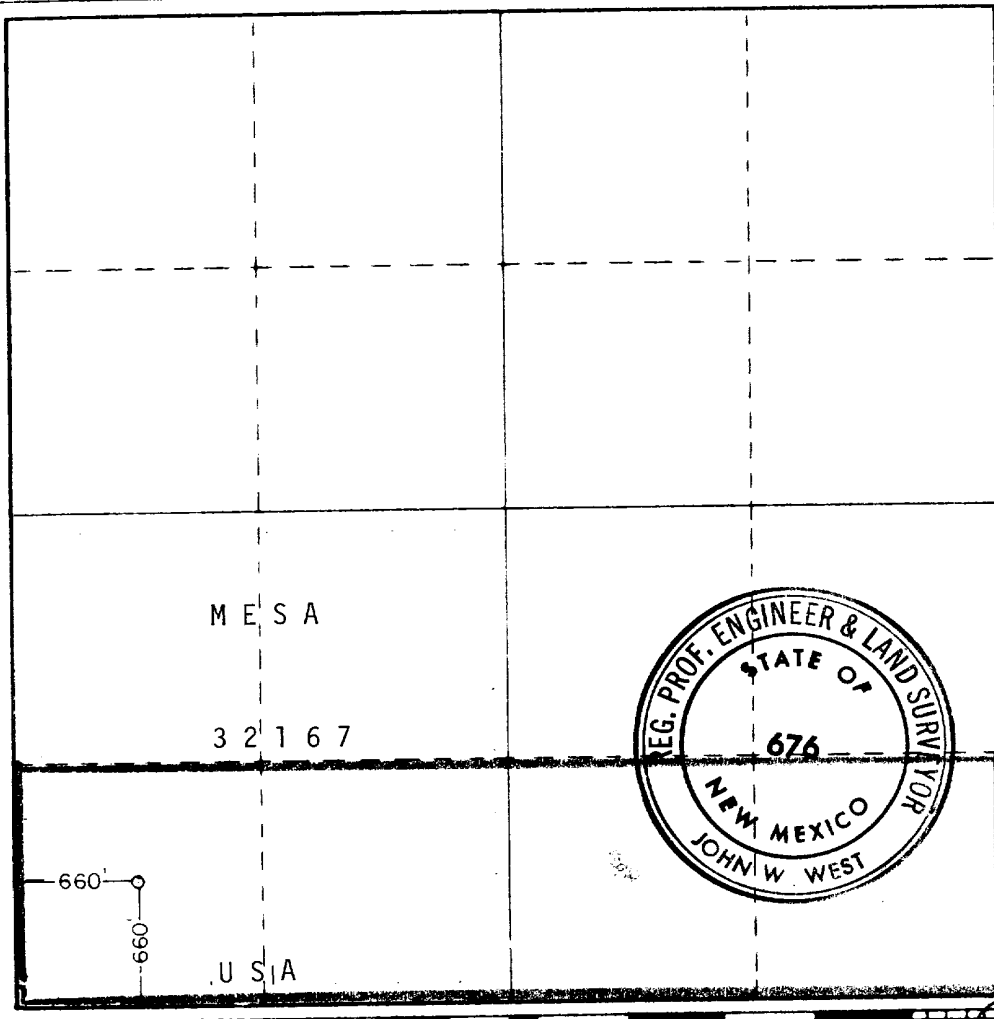
Operator <b>Mesa Petroleum Co.</b>		Lease <b>Spring Federal</b>		Well No. <b>1</b>
Map Letter <b>M</b>	Section <b>6</b>	Township <b>6 South</b>	Range <b>26 East</b>	County <b>Chaves</b>
Actual Encroachment Location of Well: <b>660</b> feet from the <b>south</b> line and <b>660</b> feet from the <b>west</b> line				
Ground Level Elev. <b>3777.4</b>	Producing Formation <b>ABO</b>	Pool <b>UNDESIGNATED</b>	Dedicated Acreage: <b>ALL 166</b> Acres	

1. Outline the acreage dedicated to the subject well by colored pencil or hachure 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 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*

Name  
**R. E. MATHIS**

Position  
**REGULATORY COORDINATOR**

Company  
**MESA PETROLEUM CO.**

Date  
**MARCH 16, 1981**

*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  
**3-5-81**

Registered Professional Engineer and/or Land Surveyor

*John W. West*

Certificate No. **JOHN W. WEST 676**  
**PATRICK A. ROMERO 6668**  
**Ronald J. Eidson 3239**

APPLICATION FOR DRILLING

MESA PETROLEUM CO.  
SPRING FEDERAL #1  
660' FSL & 660' FWL, SEC 6, T6S, R26E  
CHAVES COUNTY, NEW MEXICO

LEASE NO: NM - 32167

In conjunction with Form 9-331C, 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:

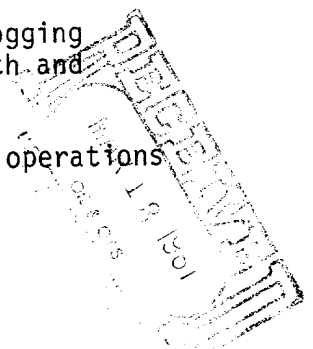
SEVEN RIVERS	SURFACE
SAN ANDRES	630'
GLORIETTA	1540'
TUBB	3045'
ABO	3690'
HUECO	4370'

3. Hydrocarbon bearing strata may occur in the Abo formation. No fresh water is expected to be encountered below 800'.

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 13 3/8" casing will be set at approximately 800' 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 to 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.



MULTI-POINT SURFACE USE AND OPERATION PLAN

MESA PETROLEUM CO.  
SPRING FEDERAL #1  
660' FSL & 660' FWL, SEC 6, T6S, R26E  
CHAVES COUNTY, NEW MEXICO

LEASE NO: NM - 32167

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 40 miles north of Roswell, New Mexico.
- B. Directions: Travel north of Roswell on US Highway 285 to mile marker 139, turn east on county road for 8 miles then northeast one mile, turn east on Yates Pipeline road for 4 miles then northwest 1/2 mile to the location.

2. Planned Access Road

- A. Length and width: The new access road will be 12' wide (16' ROW) and approximately 3000' of new road & 200' of upgraded ranch road on private surface and 600' of new road on Federal surface.

(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 required.
- D. Cut and Fill: Location is essentially flat.

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 water is needed, it will be obtained from commercial sources and will be trucked to the wellsite over the existing roads and the proposed access road shown on Exhibits I and II or piped in by temporary line from a nearby source.

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. Probable pit is located: SE/4 Sec 22, T5S, R24E, Chaves County, New Mexico.

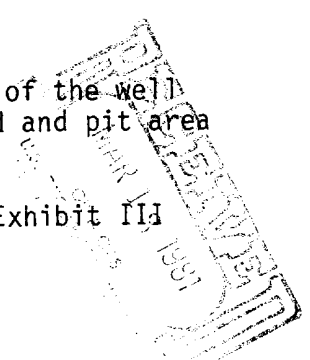
7. Methods of Handling Waste Disposal

- 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 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 grazing.
- D. Ponds and Streams: Pecos River is approximately 2 miles to the west and the Alkalai Draw is approximately 3/4 mile to the northwest.
- E. Residences and Other Structures: There are no residences or other structures in the vicinity of the proposed well.
- F. Land Use: Grazing.
- G. Surface Ownership: The wellsite is on Federal surface.
- 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. Wooten  
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.

March 16, 1981

\_\_\_\_\_  
DATE

*Michael P. Houston*

\_\_\_\_\_  
Michael P. Houston  
Operations Manager

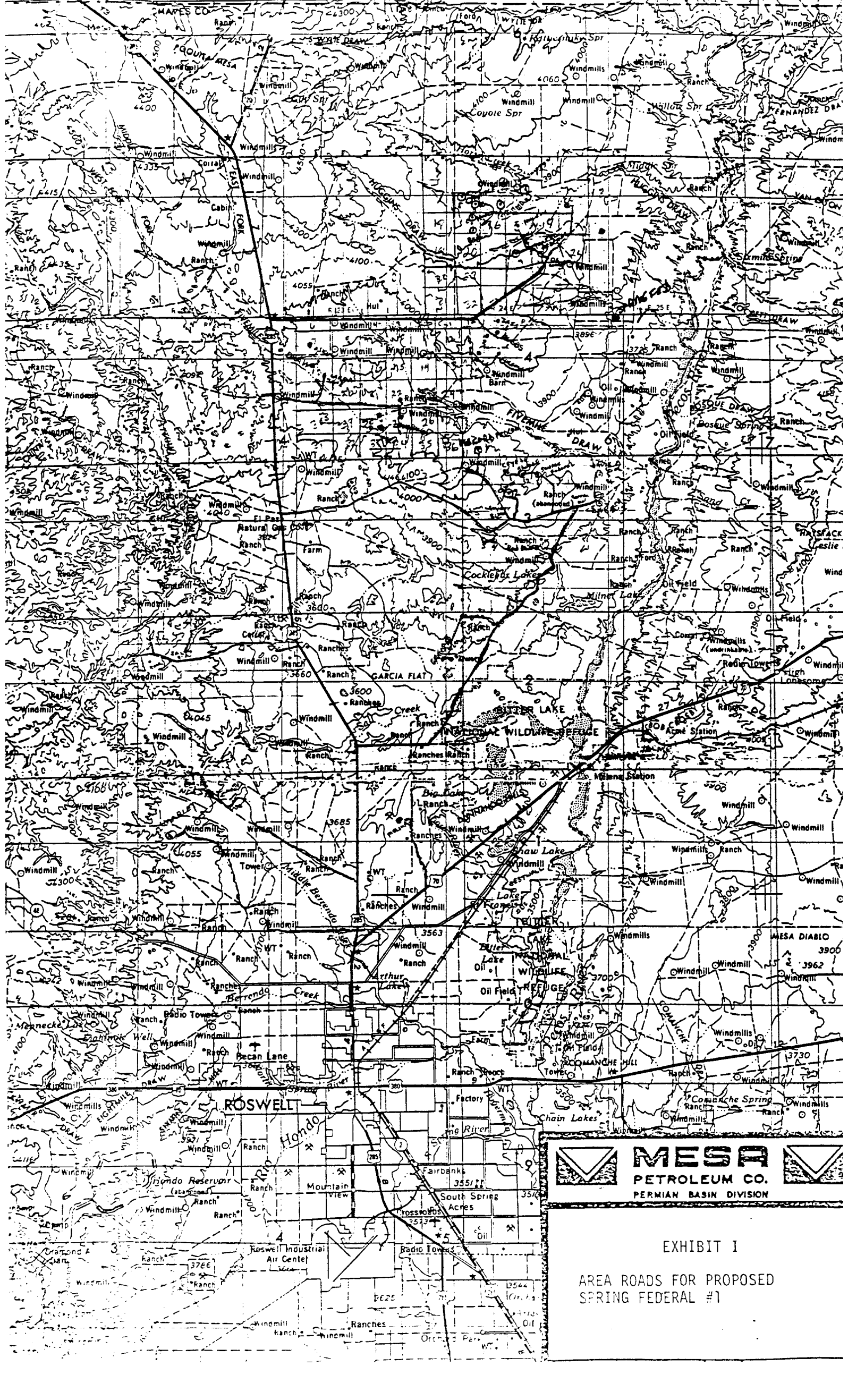


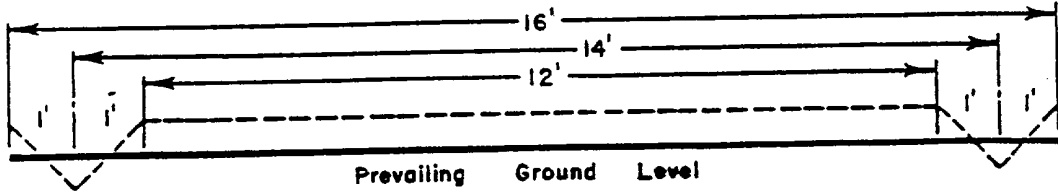
EXHIBIT I

AREA ROADS FOR PROPOSED  
SPRING FEDERAL #1



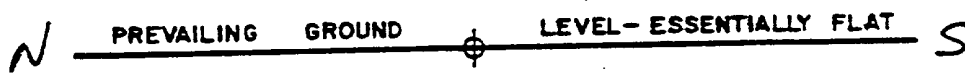
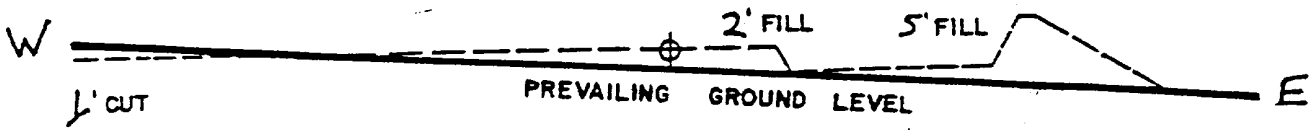


R - O - W 16'



**ROADWAY CROSS SECTION**

Horizontal Scale 1" = 3'



**LOCATION CROSS SECTION**

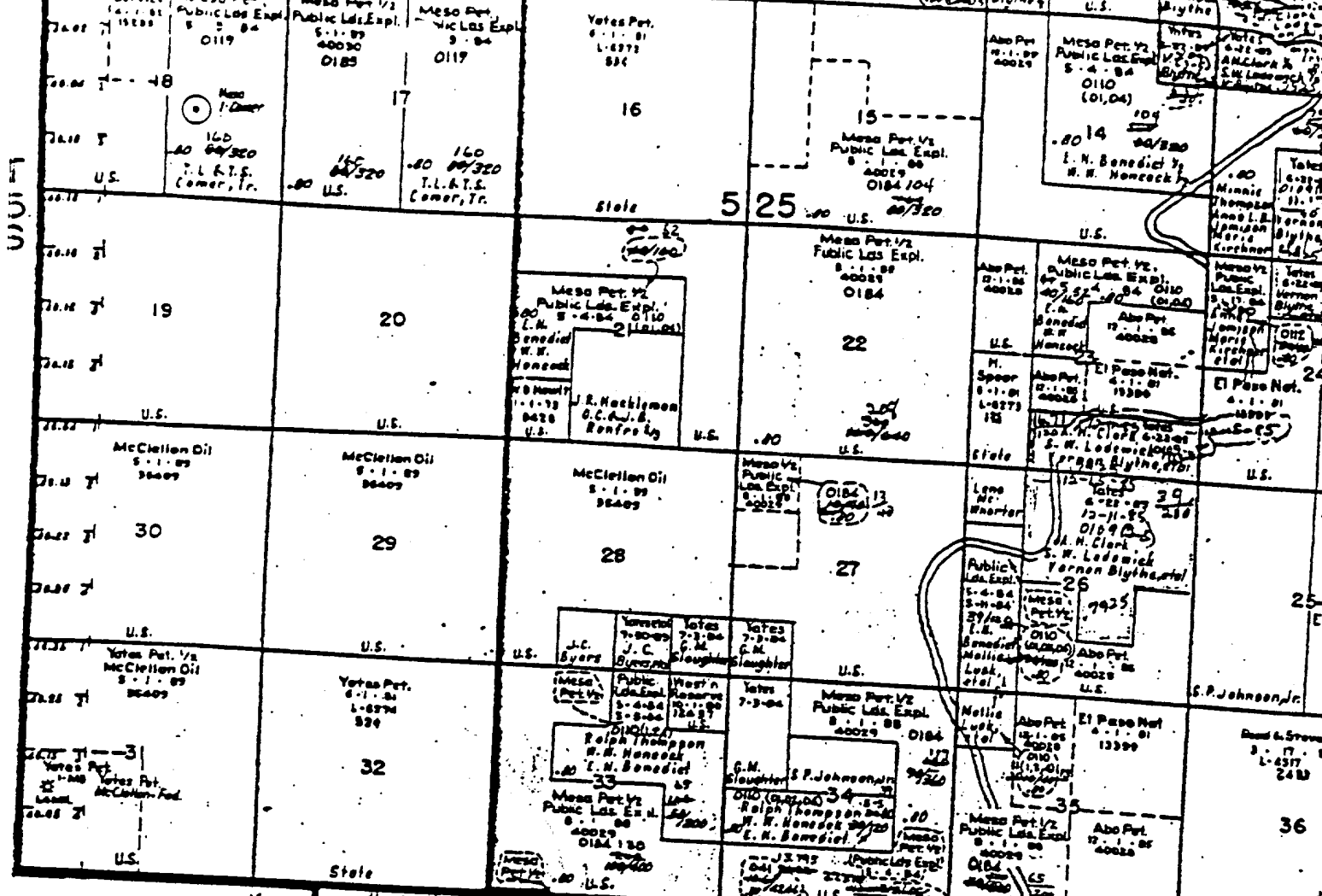
Horizontal Scale 1" = 50'



**EXHIBIT III**  
**LOCATION CONSTRUCTION**

SPRING FEDERAL #1

BY: REM DRAWN BY: MLP  
DATE: 3-5-66 SCALE: AS NOTED



#1 SPRINGS FEDERAL

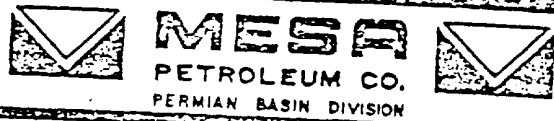
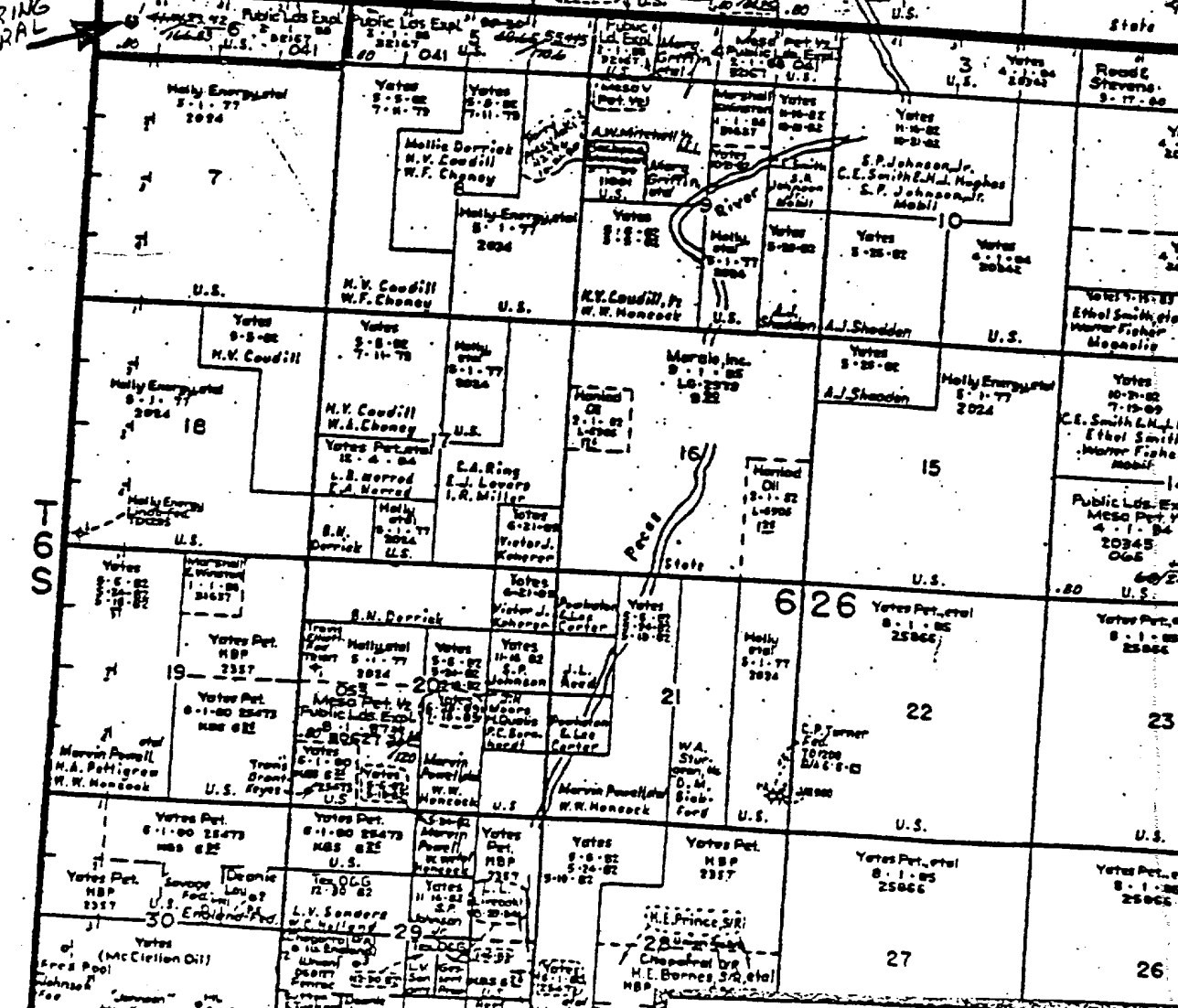
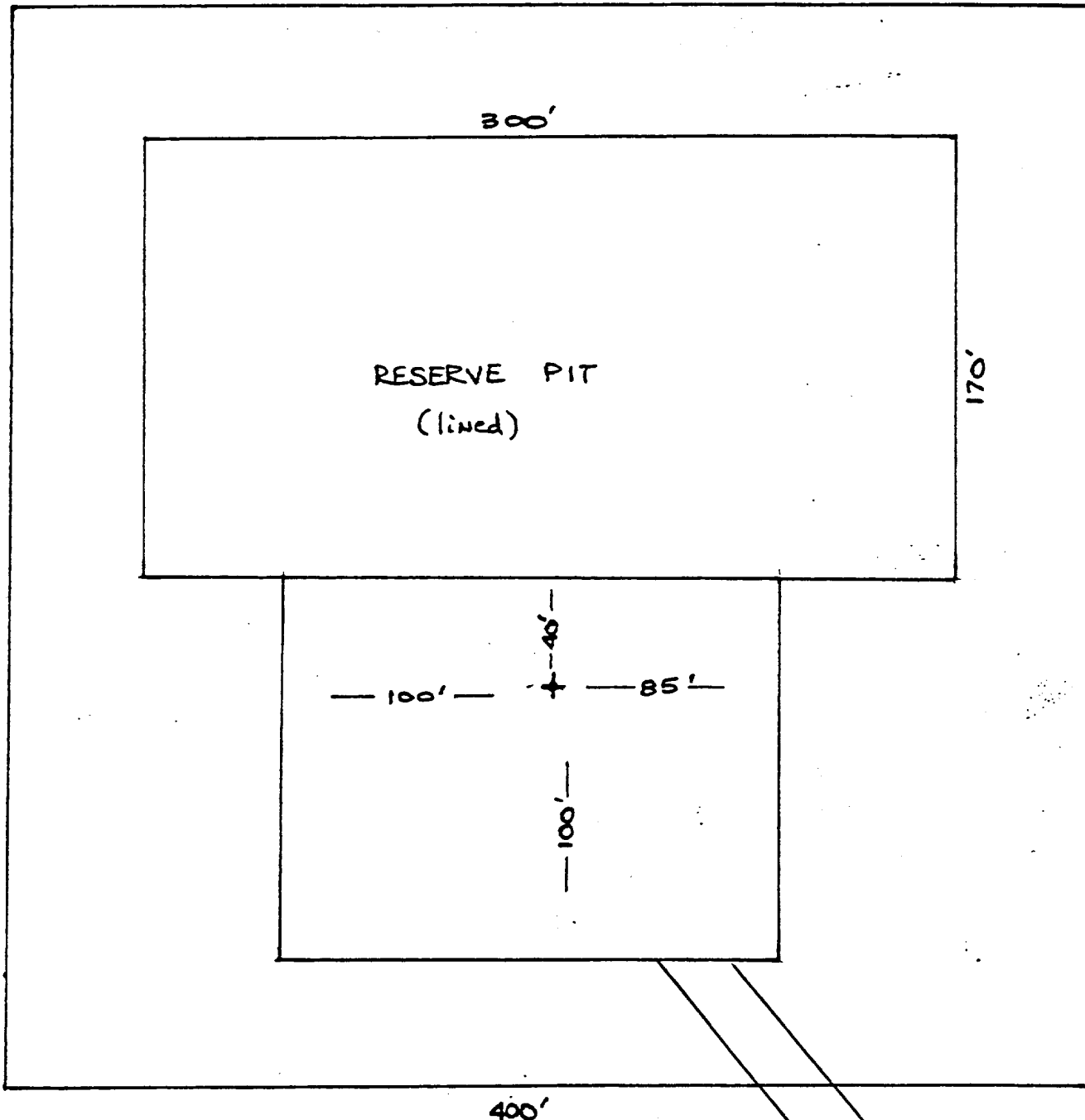
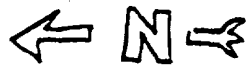




EXHIBIT IV  
ONE-MILE RADIUS LAND MAP FOR  
PROPOSED SPRINGS FEDERAL #1



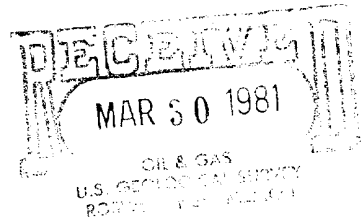
	<b>MESA</b> PETROLEUM CO. PERMIAN BASIN DIVISION	
EXHIBIT V		
SPRING FEDERAL #1		

N.M.O.C.D. COPY



March 27, 1981

USGS  
P O DRAWER 1857  
Roswell, New Mexico 88201



Gentlemen:

Subject: Mesa Petroleum Co.  
Spring Federal #1  
660' FSL & 660' FWL  
Sec 6, T6S, R26E  
Chaves County, New Mexico

Please find attached amended Exhibit II reflecting the revised proposed access road to subject well. The BLM advises that this route utilizes a county listed road thus obviating the necessity for using the "private" road marked in yellow on the exhibit.

Thank you,

A handwritten signature in cursive script, appearing to read 'R. E. Mathis', followed by a horizontal line.

R. E. Mathis  
Regulatory Coordinator  
Permian Basin Division  
Midland, Texas

/pm

XC: USGS (6), TLS, ROSWELL, MEC, LAND, FILE, NMAS, BLM

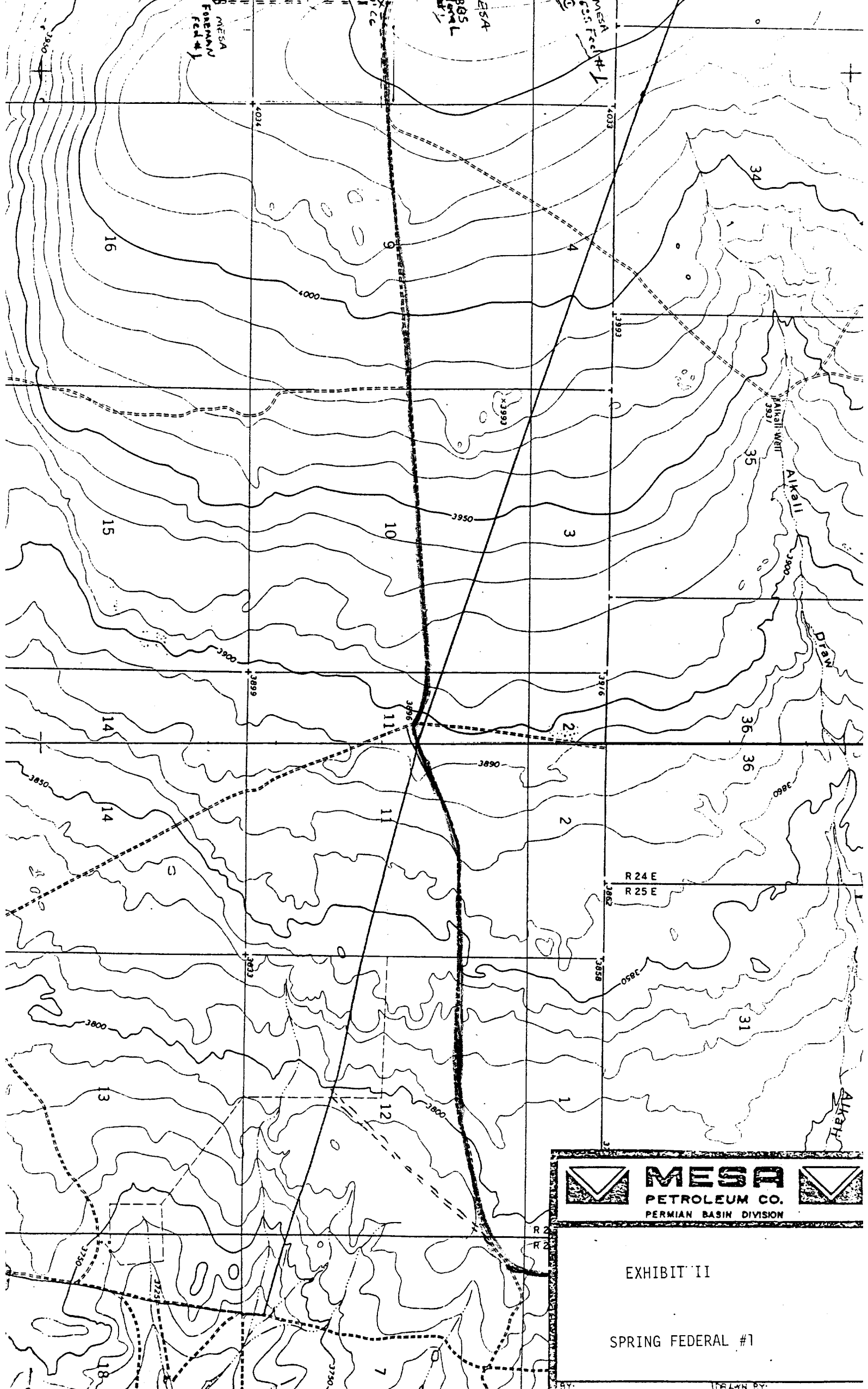


EXHIBIT II  
SPRING FEDERAL #1

BY: DATE: DRAWN BY: DATE: