

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 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

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

660'/660'

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

5000'

16. NO. OF ACRES IN LEASE

464.12

19. PROPOSED DEPTH

4400'

17. NO. OF ACRES ASSIGNED
TO THIS WELL

160

20. ROTARY OR CABLE TOOLS.

ROTARY

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

3710.0' GR

22. APPROX. DATE WORK WILL START*

SEPTEMBER 1, 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' 800'	CIRCULATE TO SURFACE
11"	8 5/8"	24#	1600'	SUFFICIENT TO ISOLATE WTR. & 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 Dedicated.

XC: USGS (6), TLS, CEN RCDS, ACCTG, MEC, LAND, ROSWELL, 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. Madhu

TITLE

REGULATORY COORDINATOR

DATE JULY 20, 1981

(This space for Federal or State office use)

PERMIT NO.

(Reg. Sec.) GEORGE H. STEWART

APPROVAL DATE

APPROVED BY

CONDITIONS OF APPROVAL, IF ANY:

FOR

JAMES A. GILLHAM
DISTRICT SUPERVISOR

TITLE

DATE

*See Instructions On Reverse Side

NEW 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.

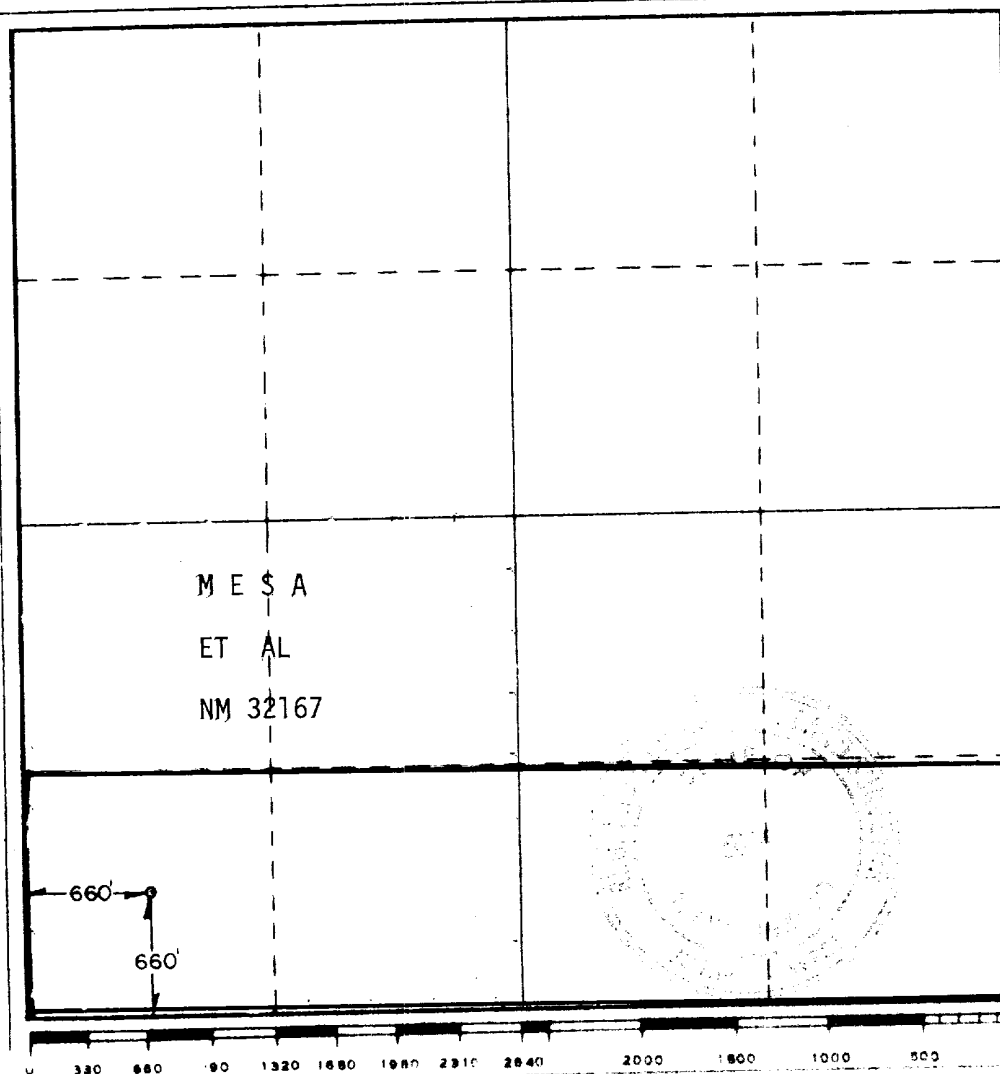
Operator MESA PETROLEUM COMPANY			Lease SPRING FEDERAL		Well No. 2
Unit Letter M	Section 5	Township 6 South	Range 26 East	County Chaves	
Actual Footage Location of Well: 660 feet from the South line and 660 feet from the West line					
Ground Level Elev. 3710.0'	Producing Formation ABO	Pool UNDESIGNATED		Dedicated Acreage: SW 1/4 160 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
JULY 20, 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
6/25/81

Registered Professional Engineer and/or Land Surveyor

John W. West

Certificate No. **JOHN W. WEST 676**
PATRICK A. ROMERO 6863
Ronald J. Eidson 3239

APPLICATION FOR DRILLING

MESA PETROLEUM CO.
SPRING FEDERAL #2
660' FSL & 660' FWL, SEC 5, T6S, R26E
CHAVES COUNTY, NEW MEXICO

LEASE NO: NM 32167

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	583'
Glorieta	1558'
Tubb	3043'
Abo	3676'
Hueco	4350'
3. Hydrocarbon bearing strata may occur in the Abo formation(s). 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'~~^{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.

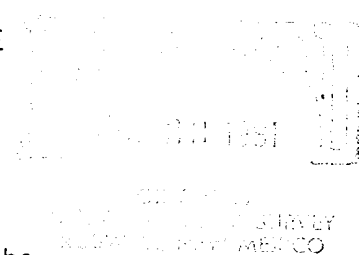
MULTI-POINT SURFACE USE AND OPERATION PLAN

MESA PETROLEUM CO.

SPRING FEDERAL #2

660' FSL & 660' FWL, SEC 5, 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/Northeast 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 along MAPCO pipeline for 5 miles to junction with county road then turn north 7/10 mile then east on lease road for 7/10 mile to location.

2. Planned Access Road:

- A. Length and width: The new access road will be 12' wide (20' ROW) and approximately 7/10 mile of new road and 1/4 mile of upgraded county 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: None.

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: along the county road in SEC 7, T6S, R26E, 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.

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 not be 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 east.
- 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: Alkalai draw is 7/10 mile to the east.
- 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.

July 20, 1981

DATE

Michael P. Houston

MICHAEL P. HOUSTON
OPERATIONS MANAGER

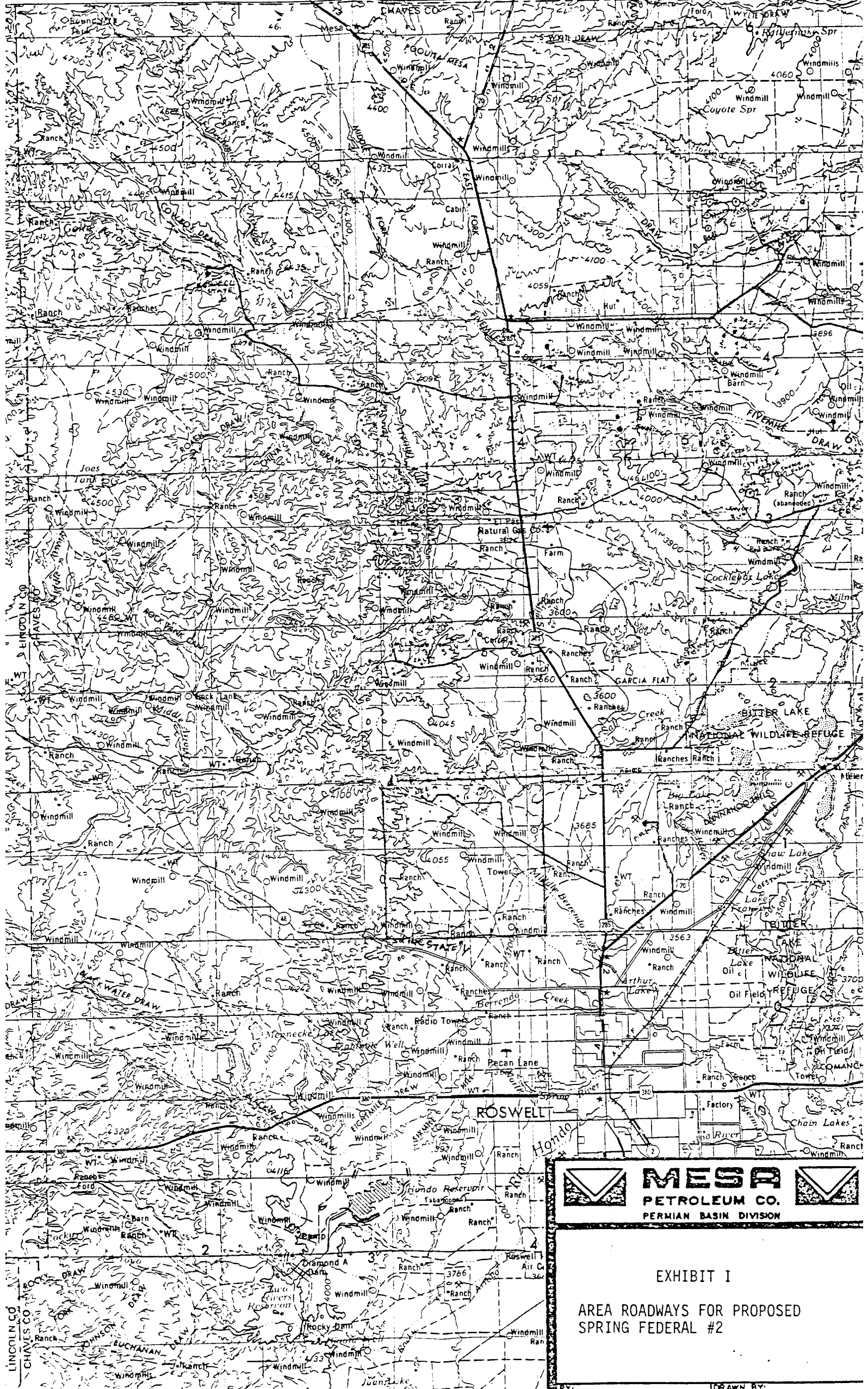
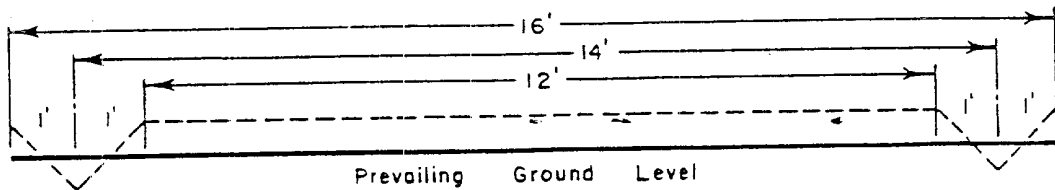


EXHIBIT I
AREA ROADWAYS FOR PROPOSED
SPRING FEDERAL #2

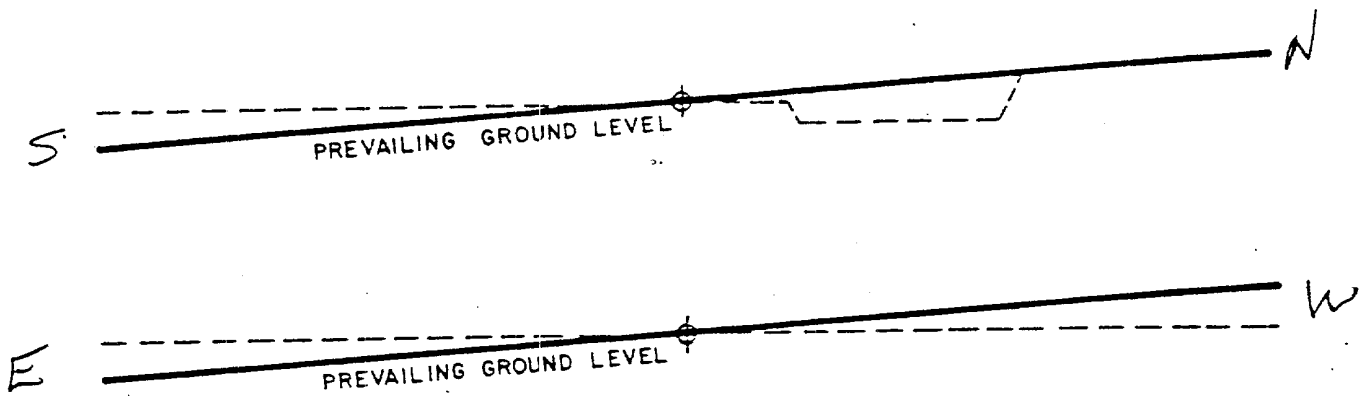
DATE: DRAWN BY:

R - O - W 16'



ROADWAY CROSS SECTION

Horizontal Scale 1" = 3'



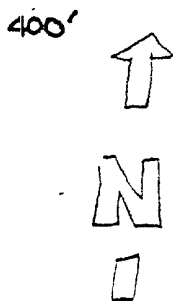
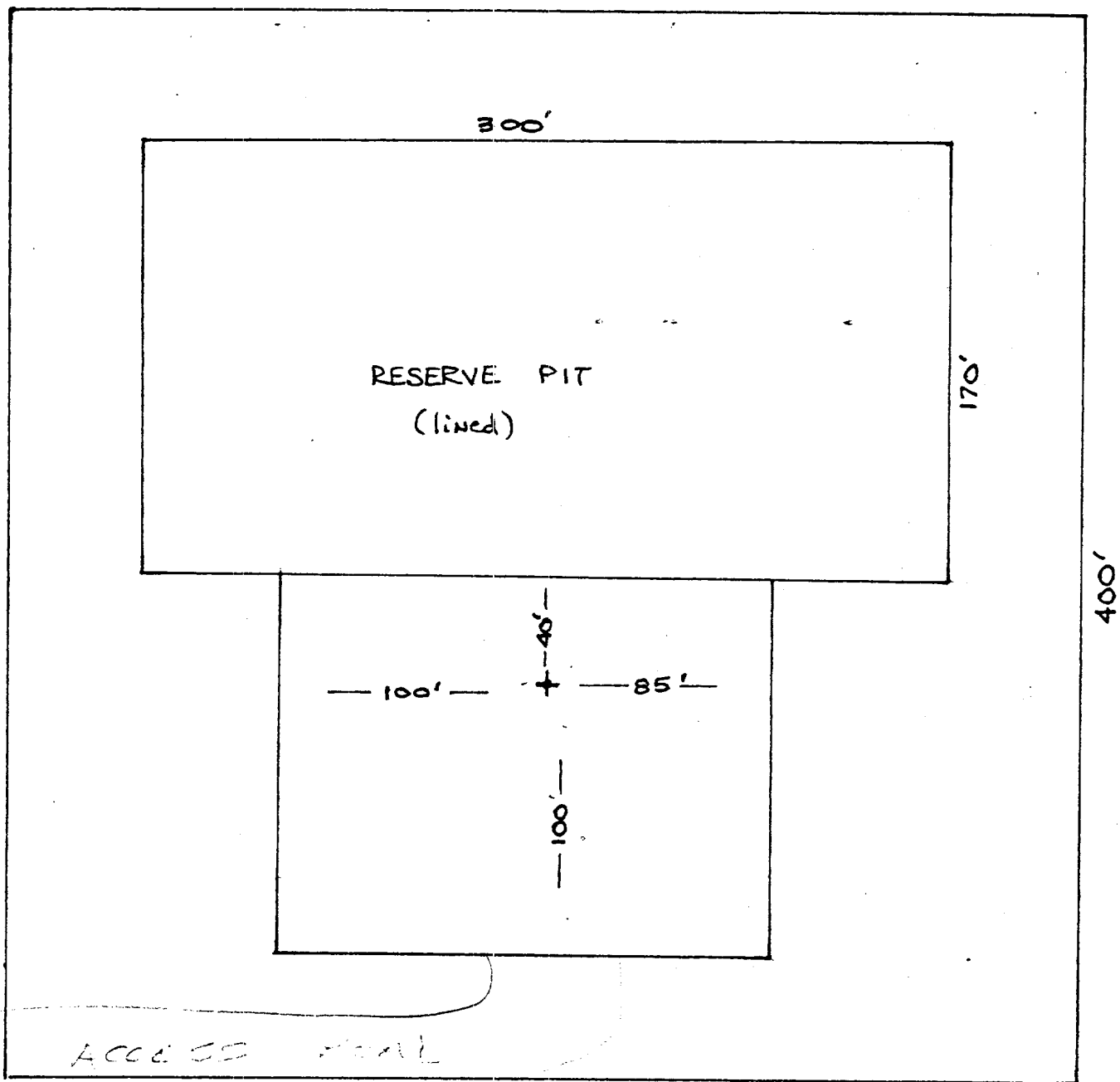
LOCATION CROSS SECTION



Horizontal Scale 1" = 50'



EXHIBIT III
LOCATION CONSTRUCTION

BY REM
DATE 3-5-80
DRAWN BY M.L.P.
SCALE: AS NOTED



	MESA PETROLEUM CO. PERMIAN BASIN DIVISION	
EXHIBIT V		
PROPOSED SPRING FEDERAL #2		
BY:	DRAWN BY:	

