

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 & 1980' FWL

At proposed prod. zone

SAME

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

14 MILES NORTH OF ROSWELL

15. DISTANCE FROM PROPOSED*

LOCATION TO NEAREST

PROPERTY OR LEASE LINE, FT.

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

660'/360'

18. DISTANCE FROM PROPOSED LOCATION*

TO NEAREST WELL, DRILLING, COMPLETED,
OR APPLIED FOR, ON THIS LEASE, FT.

3000'

16. NO. OF ACRES IN LEASE

1260

19. PROPOSED DEPTH

3300'

17. NO. OF ACRES ASSIGNED
TO THIS WELL

160

20. ROTARY OR CABLE TOOLS

ROTARY

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

3968.5' GR

22. APPROX. DATE WORK WILL START*

AUGUST-30, 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'	SUFFICIENT TO RAISE TO SURFACE
7 7/8"	4 1/2"	10.5#	3300'	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 reduce hole to 7 7/8", install ram type BOPs and drill to total depth. Drilling medium will be air, foam, or mud as required.

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. Martin

TITLE

REGULATORY COORDINATOR

DATE

JULY 22, 1981

(This space for Federal or State use)

PERMIT NO.

(Orig. Sgd.)

GEORGE H. STEWART

APPROVAL DATE

APPROVED BY

JUL 31 1981

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY:

JAMES A. GILLHAM
DISTRICT SUPERVISOR

*See Instructions On Reverse Side

NEW MEXICO OIL CONSERVATION COMMISSION
WELL LOCATION AND ACREAGE DEDICATION PLAT

Supervisor
State Engineer
County Engineer

All distances shall be from the latter boundaries of the Section.

Mesa Petroleum Co.

Cindy Federal

2

N

24

3South

42East

Chaves

1980

West

660

South

3968.5'

ABO

UNDESIGNATED

SW/4

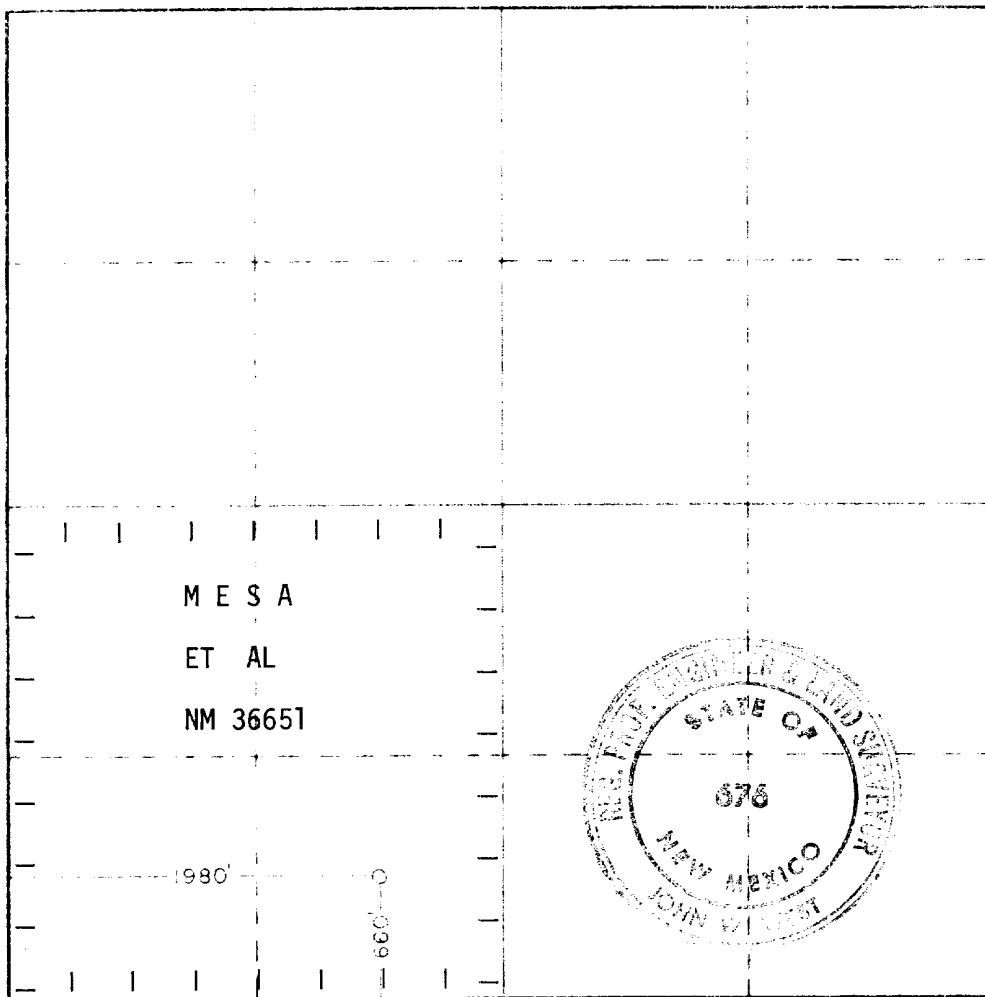
160

- 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

State

REGULATORY COORDINATOR

Company

MESA PETROLEUM CO.

Date

JULY 22, 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.

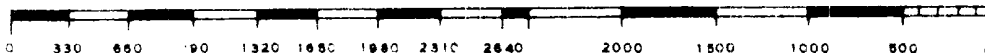
Date Surveyed

June 23, 1981

Registered Professional Engineer and/or Land Surveyor

John W. West

Certificate No. JOHN W. WEST 676
PATRICK A. ROMERO 6663
Ronald J. Eidson 3239



APPLICATION FOR DRILLING

MESA PETROLEUM CO.
CINDY FEDERAL #2
660' FSL & 1980' FWL, SEC 24, T8S, R22E
CHAVES COUNTY, NEW MEXICO

LEASE NO: 36651

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	449'
Yeso	634'
Tubb	2059'
Abo	2709'
Hueco	3209'
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 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 any 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.
CINDY FEDERAL #2
660' FSL & 1980' FWL, SEC 24, T8S, R22E
CHAVES COUNTY, NEW MEXICO

LEASE NO: NM 36651

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 14 miles North of Roswell, New Mexico.
- B. Directions: Travel North of Roswell on US Highway 285 until just before mile marker 117 and then turn West thru cattleguard. Travel Westerly on lease road for 8 miles (past the Ned State #1) then Northwest 2 miles then take the West fork and continue Westerly 1.3 miles then North 1 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 and 1 mile of upgraded ranch road.

(See Exhibit II)

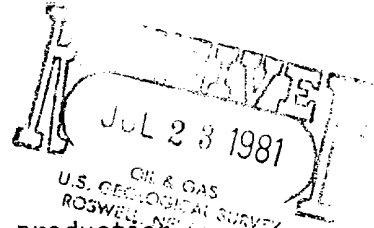
- B. Construction: The new road will be constructed by grading and topping with compacted caliche. The surface will be crowned, with drainage on both sides. (See Exhibit III)
- C. Culverts, Gates and Cattleguards: None.
- D. Cut and Fill: In order for the location to be level, approximately 3' to 8' will be moved to the edges 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 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.

Multi-Point Surface Use and Operation Plan

Page 3

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 characterized by limestone bluffs with typical arid erosion patterns.
- 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: Salt Creek is 3/4 mile to the north.
- E. Residences and Other Structures: None

Multi-Point Surface Use and Operation Plan

Page 4

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

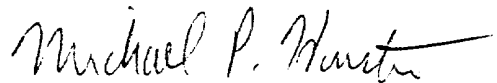
W. R. Miertschin
1000 Vaughn Building
Midland, Texas 79701
(915-683-5391) - Office
(915-682-6535) - Home

13. Certification:

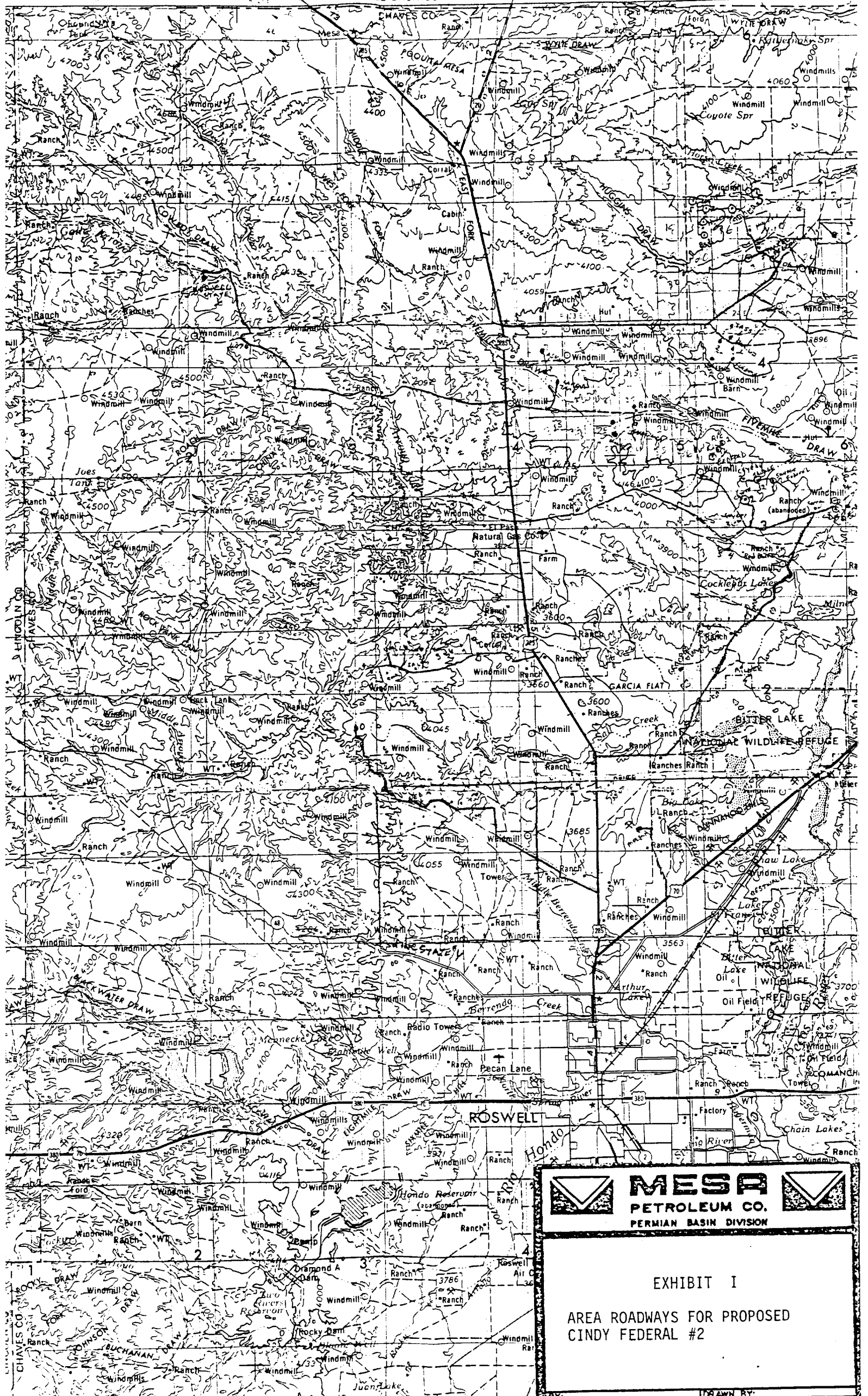
I hereby certify that I, or person under my direct supervision, have inspected the proposed drillsite and access route; that I am familiar with the conditions which presently exist; that the statements made in this plan are, to the best of my knowledge true and correct; and, that the work associated 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 22, 1981

DATE



MICHAEL P. HOUSTON
OPERATIONS MANAGER



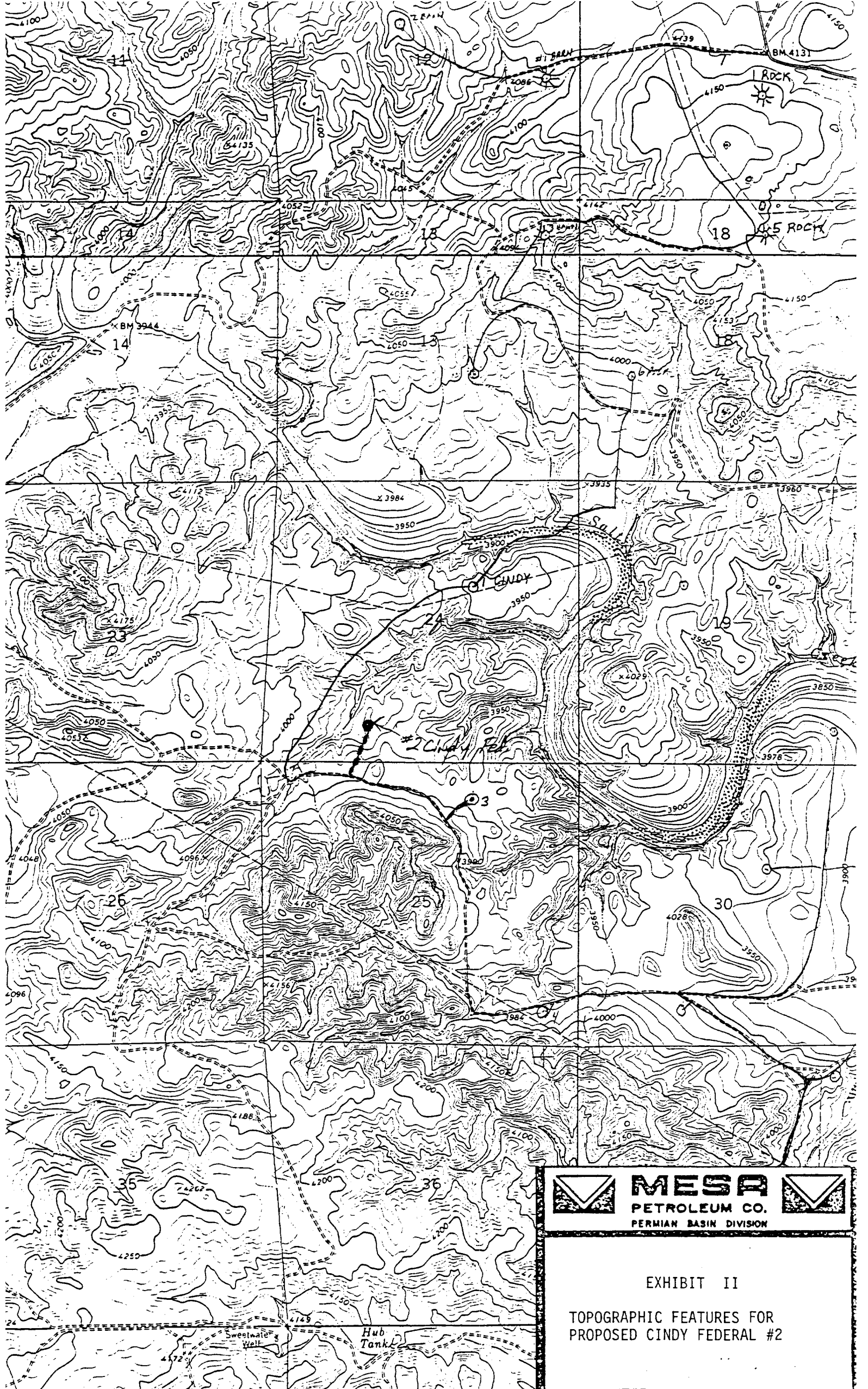
MESA
PETROLEUM CO.
PERMIAN BASIN DIVISION



EXHIBIT I

AREA ROADWAYS FOR PROPOSED
CINDY FEDERAL #2

DRAWN BY



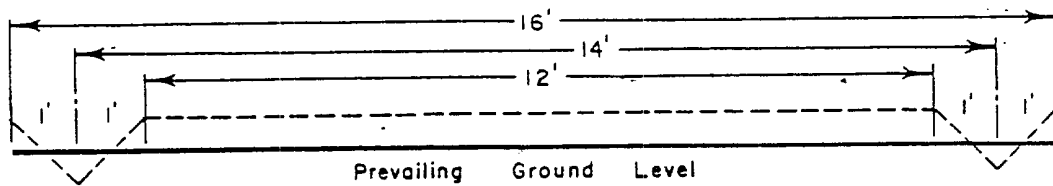
MESA
PETROLEUM CO.
PERMIAN BASIN DIVISION



EXHIBIT II

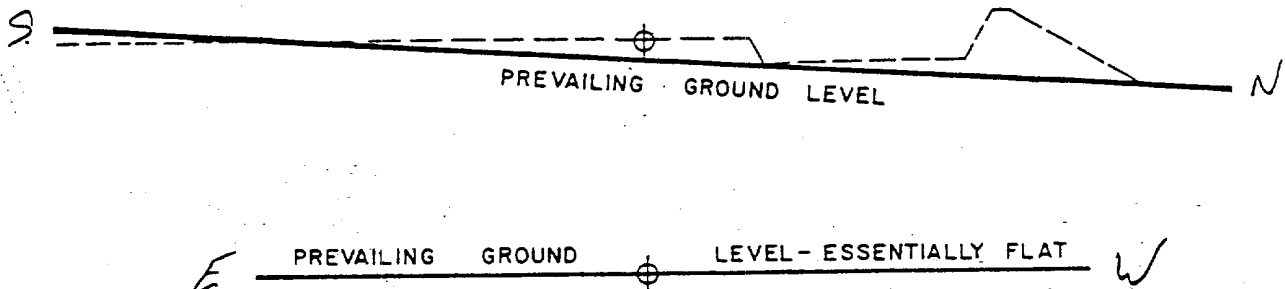
TOPOGRAPHIC FEATURES FOR
PROPOSED CINDY FEDERAL #2

R - O - W 16'



ROADWAY CROSS SECTION

Horizontal Scale 1" = 3'



LOCATION CROSS SECTION

Horizontal Scale 1" = 50'

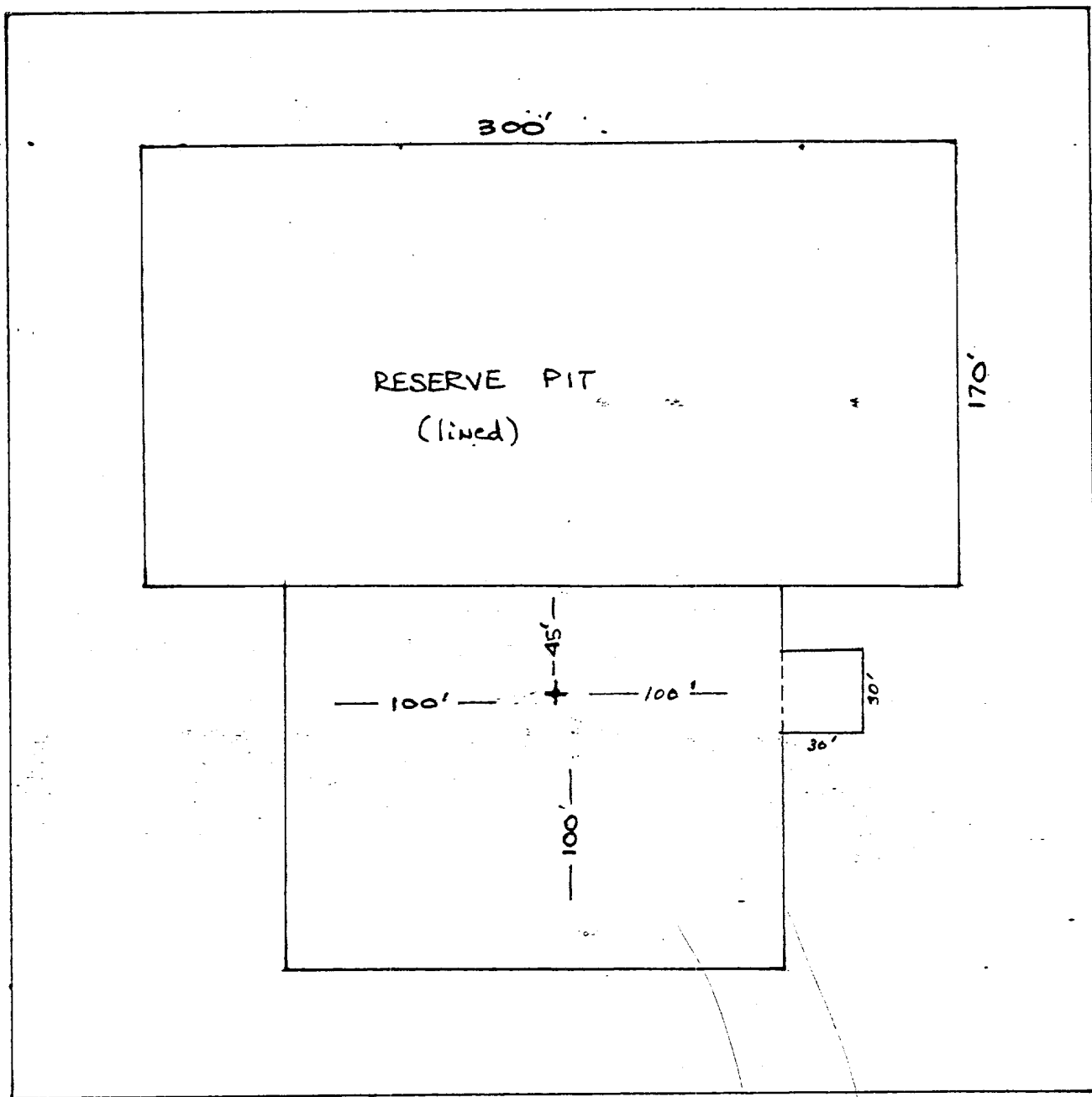


EXHIBIT III



LOCATION CONSTRUCTION

BY: REM
DATE: 3-5-60
DRAWN BY: MLP
SCALE: AS NOTED

34	35	36	31	32	33
U.S. 208/640	U.S. 208/640	State 208/640	U.S. 211.549/650.72	State	U.S.
Yates Pet 36721 NYZ	Mesa Pet. & Public Lds. Expl. 1-1-90 LG-7496 0072 0142	Mesa Pet. 1/2 Public Lds. Expl. 9-1-89 36682 0079	Mesa Pet. (Public Lds. Expl.) 36643 6 0083	Mesa Pet. 1/2 Public Lds. Expl. 1-1-89 36644 0013	Mesa Pet. 1/2 Public Lds. Expl. 1-1-89 36644 0013
3	2	159.84/319.68	325.83/651.65	5	4
U.S. .855	State 319.8/639.6	U.S.	U.S. "Rock-Federal"	U.S. 320.54/641.08	U.S. 320.44/640.88
Yates Pet 36721 NYZ	Mesa Pet. 1/2 Public Lds. Expl. 9-1-89 36708 0077	Mesa Pet. 1/2 (Public Lds. Expl.) 9-1-89 36682 0079	Mesa Pet. (Public Lds. Expl.) 0083 36643	Mesa Pet. 1/2 (Public Lds. Expl.) 1-1-89 36644 0013	Yates 7-1-89 18599
10	11	12	1	8	9
U.S.	U.S. 320/640	U.S. "Bern-Federal" 320/640	U.S. "Rock-Federal" 325.6/651.2	U.S. 320/640	U.S.
Yates Pet 36725 NYI	Mesa Pet. 1/2 Public Lds. Expl. 9-1-89 36708 0077	Mesa Pet. 1/2 Public Lds. Expl. 9-1-89 36682 0079	Mesa Pet. 1/2 (Public Lds. Expl.) 36643 6 0083	M.J. Harvey, Jr. 8-1-85 23758	Yates Pet. et al. 8-1-89 LG-7496 53 34
15	14	13	16	17	16
U.S.	U.S. 320/640	U.S. "Bern-Fed" 320/640	U.S. "Rock-Federal" 326.165/652.33	U.S.	State
Yates Pet 36725 NYI	Mesa Pet. 1/2 Public Lds. Expl. 9-1-89 36708 0077	Mesa Pet. 1/2 Public Lds. Expl. 9-1-89 36682 0079	Mesa Pet. 1/2 Public Lds. Expl. 9-1-89 36643 6 0083	M.J. Harvey, Jr. 8-1-85 23758	Yates et al. 8-1-89 LG-7496 53 34
22	23	24	19	20	21
U.S.	U.S. 320/640	U.S. 320/640	U.S. 327.09/654.182	U.S.	U.S.
M.C. Chambers 9-1-84 22059	M.C. Chambers 9-1-84 22059	MTS 1/2 Public Lds. Expl. 9-1-89 36682 0078	MTS 1/2 Public Lds. Expl. 9-1-89 36643 6 0083	MTS 1/2 Public Lds. Expl. 9-1-89 LG-6687 30 38 0028	Yates Pet. et al. 8-1-89 LG-7496 53 34
27	26	25	30	29	28
U.S.	U.S.	U.S. 208/640	State 213.2423/656.13	State 208/640	State
M.C. Chambers 9-1-84 22059	M.C. Chambers 9-1-84 22059	Katherine Harvey 11-1-90 LG-8999 102 10	MTS 1/2 Public Lds. Expl. 9-1-89 36643 6 0083	Yates 8-1-89 LG-6687 30 38	Yates 8-1-89 LG-6687 30 38
34	35	36	31	32	33
U.S.	U.S.	State	U.S. 213.7245/657.62	State	State
Public Lds. Expl. 1/2 9-1-89 25624 0198	ANR Prod. 2-12-91 LG-9450	J.W. Williams 30592 87	MTS 1/2 Public Lds. Expl. 1/2 9-1-89 LG-6687 30 38 0088	(MTS 1/2) (Public Lds. Expl.) 9-1-89 LG-6687 30 38 0031	MTS 1/2 Public Lds. Expl. 9-1-89 LG-6687 30 38 0030
10	11	12	6	7	8
U.S.	State	U.S.	U.S. 213.7883/657.81	U.S. 207.9415/639.82	State 207.922/639.76
D.A. Mastorakes 12-1-87 31528	MTS 1/2 Public Lds. Expl. 9-1-89 36682 0134	MTS 1/2 Public Lds. Expl. 9-1-89 36682 0134	MTS 1/2 Public Lds. Expl. 1/2 9-1-89 36643 6 0088	MTS 1/2 Public Lds. Expl. 9-1-89 LG-6687 30 38 0031	Yates Pet. et al. 8-1-89 LG-6687 30 38
10	11	12	7	8	9
U.S.	U.S. 208/640	U.S. 208/640	U.S. 213.8175/657.81	U.S.	U.S.
MTS 1/2 Public Lds. Expl. 9-1-89 36682 0134	MTS 1/2 Public Lds. Expl. 9-1-89 36682 0134	MTS 1/2 Public Lds. Expl. 9-1-89 36682 0134	MTS 1/2 Public Lds. Expl. 1/2 9-1-89 36643 6 0088	MTS 1/2 Public Lds. Expl. 9-1-89 LG-6687 30 38 0031	Yates Pet. et al. 8-1-89 LG-6687 30 38
15	14	13	18		
U.S.	U.S. 208/640	U.S. 208/640	U.S. 214.2595/657.81		
D.A. Mastorakes 12-1-87 31528	MTS 1/2 Public Lds. Expl. 9-1-89 36682 0134	MTS 1/2 Public Lds. Expl. 9-1-89 36682 0134	MTS 1/2 Public Lds. Expl. 1/2 9-1-89 36643 6 0088		



Access Road

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