

**UNITED STATES**  
**DEPARTMENT OF THE INTERIOR**  
**GEOLOGICAL SURVEY**

**N.M.O.C.D. COPY**

SUBMIT IN TRIPlicate  
(Other instructions on  
reverse side)

Form approved.  
Budget Bureau No. 42-R1424.

5. LEASE DESIGNATION AND SERIAL NO.

NM 36643

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME

Rock Federal

9. WELL NO.

1

10. FIELD AND POOL, OR WILDCAT

Wildcat

11. SEC., T., R., M., OR BLK. AND  
SURVEY OR AREA

Sec 7, T8S, R23E

12. COUNTY OR PARISH 13. STATE

Chaves

N. Mexico

**SUNDRY NOTICES AND REPORTS ON WELLS**

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir.  
Use "APPLICATION FOR PERMIT--" for such proposals.)

**RECEIVED**

OIL WELL ☐ GAS WELL ☒ OTHER ☐

2. NAME OF OPERATOR

Mesa Petroleum Co

3. ADDRESS OF OPERATOR

1000 Vaughn Building / Midland, Texas 79701

**NOV 2 1979**

**O. C. C.**

**ARTESIA, OFFICE**

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

See also space 17 below.)  
At surface

1980' FSL & 1980' FEL

14. PERMIT NO.

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

4154' GR

16.

**Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data**

NOTICE OF INTENTION TO:

SUBSEQUENT REPORT OF:

TEST WATER SHUT-OFF ☐

PULL OR ALTER CASING ☐

WATER SHUT-OFF ☐

REPAIRING WELL ☐

FRACTURE TREAT ☐

MULTIPLE COMPLETE ☐

FRACTURE TREATMENT ☐

ALTERING CASING ☐

SHOOT OR ACIDIZE ☐

ABANDON\* ☐

SHOOTING OR ACIDIZING ☐

ABANDONMENT\* ☐

REPAIR WELL ☐

CHANGE PLANS ☐

(Other) ☐

4-1/2" Casing

☒

(NOTE: Report results of multiple completion on Well  
Completion or Recompletion Report and Log form.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)\*

Drilled 8-3/4" hole to TD of 4088' on 10-26-79. Ran 100 jts 4-1/2", 10.5#, K55, ST&C casing on 10-27-79 for a total of 4087.87' with float collar and float shoe for 2.35' and an overall length of 4091.67' set at 4087' RKB. FC at 4003. Centralizers on joints 1, 3, 5, 7, 9, 27, and 29. Circulated through the casing and then cemented with 1850 sx BJ Lite + 1/4# celloflakes + 7# gilsonite + 10# salt. Tailed in with 200 sx 50/50 Poz + 2% gel + 8# salt + 1/4# celloflakes + 3/10% CFR-2. PD at 5:15 AM on 10-28-79. Circulated 75 sx of cement to surface. BP with 500 psi above displacement pressure. Good circulation throughout job. Released rig at 10:00 AM on 10-28-79. WOCU, estimated to arrive 11-7-79.

**RECEIVED**

**OCT 31 1979**

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

18. I hereby certify that the foregoing is true and correct

SIGNED

*R. E. Stewart*

TITLE

Regulatory Coordinator

DATE October 30, 1979

(This space for Federal or State office use)

(Orig. Sgd.) **GEORGE H. STEWART**

APPROVED BY

TITLE

ACTING DISTRICT ENGINEER

DATE

CONDITIONS OF APPROVAL, IF ANY:

\*See Instructions on Reverse Side

XC: MEC, JWH, TLS, FILE, USGS

UNIT STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEYSUBMIT IN TRIPLICATE  
(Other instructions on  
reverse side)Form approved  
Budget Bureau No. 42-R1424.

5. LEASE DESIGNATION AND SERIAL NO.

NM-36643

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

## SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir.  
Use "APPLICATION FOR PERMIT—" for such proposals.)

OCT 26 1979

1.

OIL WELL ☐ GAS WELL ☒ OTHER

2. NAME OF OPERATOR

Mesa Petroleum Co.

O. C. C.  
ARTESIA, OFFICE

3. ADDRESS OF OPERATOR

1000 Vaughn Building / Midland, Texas 79701

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.\*  
See also space 17 below.)

At surface

1980' FSL &amp; 1980' FEL

14. PERMIT NO.

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

4154' GR

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME

Rock Federal

9. WELL NO.

1

10. FIELD AND POOL, OR WILDCAT

Wildcat *W. C. C.*  
11. SEC., T., R., M., OR BLM. AND  
SURVEY OR AREA

Sec 7, T18S, R23E

12. COUNTY OR PARISH 13. STATE

Chaves

NM

16.

Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

## NOTICE OF INTENTION TO:

TEST WATER SHUT-OFF ☐FRACTURE TREAT ☐SHOOT OR ACIDIZE ☐REPAIR WELL ☐

(Other)

PULL OR ALTER CASING ☐MULTIPLE COMPLETE ☐ABANDON\* ☐CHANGE PLANS ☐

## SUBSEQUENT REPORT OF:

WATER SHUT-OFF ☐FRACTURE TREATMENT ☐SHOOTING OR ACIDIZING ☐(Other) Spudding & 9-5/8" casing ☒REPAIRING WELL ☐ALTERING CASING ☐ABANDONMENT\* ☐

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)\*

Spudded well with 12-1/4" hole on 10-16-79. Drilled to TD of 714' on 10-17-79. Ran 23 jts 9-5/8", 36#, K55, ST&C casing (716.28'), FC (1.60'), and guide shoe (1.10') for total length of 718.98'. FC at 658.79', centralizers on jts 1, 3, 13, and 14, and cement baskets at 284' and 314'. Cemented with 200 sx thickset + 1/2# Flocele + 5# gilsonite. Followed with 185 sx Lite Wt + 1/4# Flocele + 2% CaCl. Tailed in with 100 sx Class "C" + 2% CaCl. PD at 10 P.M. on 10-17-79. Float held ok. Cement did not circulate. Job witnessed by Mr. Coke and Mr. White of the USGS. Ran temperature survey on 10-18-79. Top of cement at 400'. Cemented to surface with 1" pipe in 3 stages using 150 sx thickset + 1/4# Flocele + 5# Gilsonte + 2% CaCl. Third stage JC at 4:45 P.M. on 10-18-79. Circulated 10 sx of good cement to surface. WOC 11-1/4 hrs (total of 31 hours). Tested casing and BOP's to 1500 psi - ok. Hydril tested to 1000 psi - ok. Reduced hole to 8-3/4" and drilled ahead on 10-19-79.

OCT 26 1979

U.S. GEOLOGICAL SURVEY  
ARTESIA, NEW MEXICO

18. I hereby certify that the foregoing is true and correct

SIGNED

*R. P. Markham*

TITLE

Regulatory Coordinator

DATE

10-22-79

(This space for Federal or State office use)

APPROVED BY

TITLE

ACTING DISTRICT ENGINEER

DATE

OCT 26 1979

CONDITIONS OF APPROVAL, IF ANY:

XC: TLS, JWH, MEC, USGS ARTESIA (5), W.I. OWNERS, FILE

\*See Instructions on Reverse Side

M.O.C.D. COPY

SUBMIT IN 'PLICATE'  
(Other instructions on  
reverse side)Form approved.  
Budget Bureau No. 42-R1425.UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

30-005-60600

## 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

1980' FSL &amp; 1980' FEL

At proposed prod. zone

Same as above

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

19 miles NW 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\*  
TO NEAREST WELL, DRILLING, COMPLETED,  
OR APPLIED FOR, ON THIS LEASE, FT.

N/A

## 16. NO. OF ACRES IN LEASE

2115.38

## 19. PROPOSED DEPTH

4200'

17. NO. OF ACRES ASSIGNED  
TO THIS WELL

320

## 20. ROTARY OR CABLE TOOLS

Rotary

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

4154' GR

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

October 5, 1979

## 23.

## PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12-1/4	9-5/8	36	700	185 sx LW + 100 sx C
8-3/4	4-1/2	10.5	4200	775 sx LW + 200 sx 50/50 Poz

Propose to drill surface hole to 700' without BOPs. After cementing 9-5/8" casing at 700' and installing bradenhead, will nipple up 10" API 3000 psi BOPs and drill 8-5/8" hole to total depth of 4200'. Drilling fluid will consist of fresh water and fresh water additions, however, mud weight may increase from 8.8 ppg to as high as 10.2 - 10.3 ppg due to leaching of salt stringers. After log evaluation, 4-1/2" casing may be run to total depth and cemented (with cement being raised to surface pipe or surface).

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. Mader*

TITLE

Regulatory Coordinator

DATE

9-21-79

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

APPROVED BY

TITLE

CONDITIONS OF APPROVAL, IF ANY:

RECEIVED

DATE

OCT 12 1979

\*See Instructions On Reverse Side

XC: TLS, MEC, JBH, FILE, JWH, PLE, USGS

O. C. C.  
ARTESIA, OFFICE

NEW MEXICO OIL CONSERVATION COMMISSION  
WELL LOCATION AND ACREAGE DEDICATION PLAT

Form O-102  
Supersedes O-128  
Effective 1-1-65

All distances must be from the outer boundaries of the Section

Operator <b>MESA PETROLEUM CO</b>			Lease <b>ROCK FEDERAL</b>		Well No. <b>1</b>
Grid Letter <b>J</b>	Section <b>7</b>	Township <b>8 SOUTH</b>	Range <b>23 EAST</b>	County <b>CHAVES</b>	
Actual Footage Location of Well: <b>1980</b> feet from the <b>SOUTH</b> line and <b>1980</b> feet from the <b>EAST</b> line					
Ground Level Elev. <b>4154.1</b>	Producing Formation <b>WOLFCAMP</b>		Pool <b>WILDCAT</b>	Dedicated Acreage: <b>E/2 320 Acres</b>	

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 them by title or by owner 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?

**OCT 12 1979**

**O. C. C.**  
**ARTESIA, OFFICE**

☐ 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.

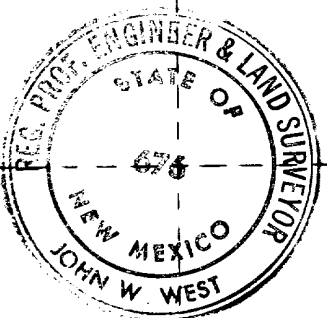
**RECEIVED**

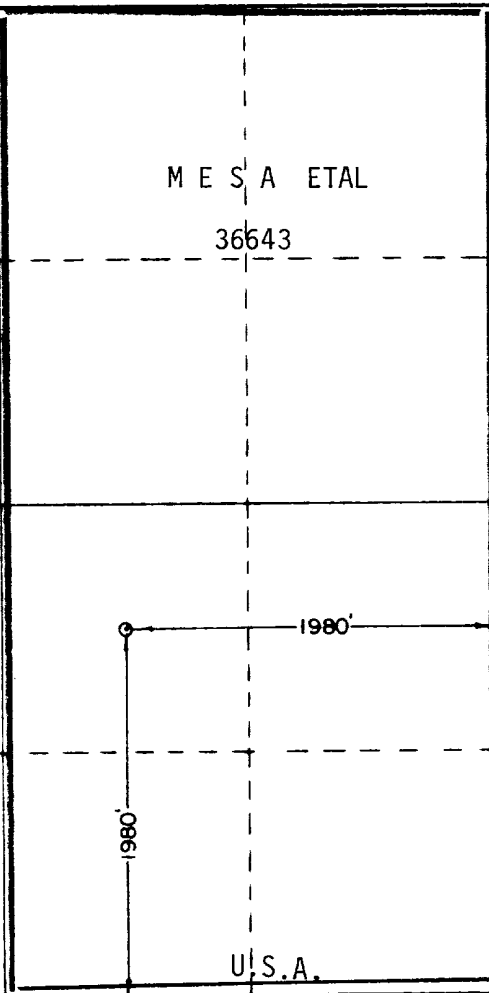
**SEP 24 1979**


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

**MESA ETAL**

**36643**







CERTIFICATION	
I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.	
Name <b>R. E. Mathis</b>	
Position <b>REGULATORY COORDINATOR</b>	
Operator <b>MESA PETROLEUM CO.</b>	
Date <b>September 22, 1979</b>	
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 <b>SEPTEMBER 13TH, 1979</b>	
Registered Professional Engineer and/or Land Surveyor <b>John W. West</b>	
Certificate No. <b>John W. West 676</b>	<b>Ronald J. Eidson 3239</b>



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United States Department of the Interior

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GEOLOGICAL SURVEY  
P. O. Drawer U  
Artesia, New Mexico 88210

OCT 12 1979

O. C. C.  
ARTESIA, OFFICE

October 10, 1979

Mesa Petroleum Company  
1000 Vaughn Building  
Midland, Texas 79701

MESA PETROLEUM COMPANY  
Rock Federal Well No. 1  
1980 FSL 1980 FEL Sec. 7 T.8S R.23E  
Chaves County Lease No. NM 36643

Gentlemen:

Above Data Required on Well Sign

Your APPLICATION FOR PERMIT TO DRILL the above-described well to a depth of 4,200 feet to test the Wolfcamp is hereby approved subject to compliance with the OIL AND GAS OPERATING REGULATIONS (30 CFR 221) and the following conditions:

1. Drilling operations authorized are subject to compliance with the attached General Requirements for Oil and Gas Operations on Federal Leases, dated July 1, 1978.
2. Prior to commencing construction of road, pad, or other associated developments, operator will provide the dirt contractor with a copy of the Surface Use Plan and these Conditions of Approval including the attached General Requirements.
3. Submit a Daily Report of Operations from spud date until the well is completed and the Well Completion Report (form 9-330) is filed. The report should not be less than 8" x 5" in size and each page should identify the well.
4. All permanent above-ground structures and equipment shall be painted in accordance with the attached Painting Guidelines. The color used should simulate Sandstone Brown (Federal Standard No. 595A, color 20318 or 30318).
5. Before drilling below the 9-5/8" casing, the blowout preventer assembly will consist of a minimum of one annular type and two ram type preventers.
6. A kelly cock will be installed and maintained in operable condition.



7. After setting the 9-5/8" casing string and before drilling into the Wolfcamp formation, the blowout preventers and related control equipment shall be pressure tested to rated working pressures by an independent service company. Any equipment failing to test satisfactorily shall be repaired or replaced. This office should be notified in sufficient time for a representative to witness the tests and shall be furnished a copy of the pressure test report.
8. Mud system monitoring equipment, with derrick floor indicators and visual and audio alarms, shall be installed and operating before drilling into the Wolfcamp formation and used until production casing is run and cemented. Monitoring equipment shall consist of the following:
  - (1) A recording pit level indicator to determine pit volume gains and losses.
  - (2) A mud volume measuring device for accurately determining mud volume necessary to fill the hole on trips.
  - (3) A flow sensor on the flow-line to warn of any abnormal mud returns from the well.
9. Cement behind the 9-5/8" casing must be circulated.
10. Please have anyone contacting the Survey in regard to this well to identify the well with all of the information required above for the well sign.

Sincerely yours,

George H. Stewart  
Acting District Engineer

# APPLICATION FOR DRILLING

MESA PETROLEUM CO  
ROCK FEDERAL WELL NO. 1  
1980' FSL and 1980' FEL of Sec 7, T8S, R23E  
CHAVES COUNTY, NEW MEXICO

LEASE: NM 36643  
September 21, 1979

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 San Andres.
2. Estimate tops of geologic markers are as follows:

Glorietta	656
Yeso	844
Tubb	2276
Abo	2916
Wolfcamp (Hueco)	3566
Granite	4166

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

Water	- San Andres at approximately 500'
Gas	- Yeso at approximately 1100'
Gas	- Abo at approximately 3300'
Gas	- Wolfcamp (Hueco) at approximately 4000'

4. Casing and Blowout Preventer Program

Surface: 700' of 9-5/8" 36# K-55 ST&C new casing cemented with 185 sx LW + 100 sx "C" or volume sufficient to circulate cement to surface. Will nipple up 10" API 3000 WP bradenhead and install 10" API 3000 psi WP BOP stack (consisting of 1 pipe ram, 1 blind ram, and 1 bag type BOP) to drill 8-3/4" hole to total depth.

Production: 4200' of 4-1/2" 10.5#, K-55, ST&C new casing cemented with 775 sx LW + 200 sx 50/50 Poz or volume sufficient to raise top of cement to at least 700' (or base of surface casing). In the event that severe loss circulation problems occur below the surface pipe, a string of 7" 23# K-55 casing may be set as an intermediate string to correct these problems. However, it is not anticipated that an intermediate string will be required.

Choke, kill and fill lines are indicated on Exhibit I. BOPs will be tested prior to drilling below the 9-5/8" 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 - 700'      Use fresh water spud mud with fresh water gel and soda ash or lime treated with lost circulation material (cottonseed hulls, fiber and paper) as hole conditions dictate. If total loss of returns 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.
  - 700 - 2800'    Drill out 9-5/8" casing with fresh water circulating reserve pit with additions of caustic soda for pH = 9.0 - 9.5 and chemicals for corrosion control. Mix paper, as needed, to control seepage and/or to sweep hole.
  - 2800 - T.D.    Go through steel pits utilizing above fluid with fine screen shaker and desilter to control solids. Maintain mud weight less than 10 lb/gal with additions of fresh water while keeping chloride - ion concentration of 40,000-50,000 + ppm and KCL = 3.0%. At 2800' mud-up with starch and soda ash to control API water loss to 20-25 cc to T.D. Sea mud and 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 planned for this well. It is possible that a drillstem test will be run in the Yeso (850'-1200'), Abo (3000'-3500') and/or Wolfcamp Hueco (3600'-4100'). The logging program will consist of a gamma ray log from total depth to surface. Compensated neutron-density-caliper log and dual laterolog-micro spherically focused log will be run from 700' to total depth.
7. Maximum anticipated bottom hole pressure is less than 1700 psi at a depth of 3800' based upon normal gradient. Mud weight required to offset this pressure is 8.5 ppg. It is probable that leaching of expected salt stringers could increase the mud weight to 10.0 - 10.2 ppg. Bottom hole temperature should not exceed 115°F. No sour gas is expected.
8. Anticipated spud date is October 5, 1979, with completion of drilling operations expected by October 19, 1979. Completion operations (perforations and stimulation) will immediately follow successful drilling operations.



MULTI-POINT SURFACE USE AND OPERATION PLAN

MESA PETROLEUM CO  
ROCK FEDERAL WELL NO. 1  
1980' FSL and 1980' FEL, Sec 7, T8S, R23E  
CHAVES COUNTY, NEW MEXICO

RECEIVED

SEP 24 1979

LEASE: 36643  
September 22, 1979

U.S. GEOLOGICAL SURVEY  
ARTESIA, NEW MEXICO

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 19 miles northwest of Roswell, New Mexico.
- B. Directions: Travel northwest of Roswell on Highway 285 for 16.6 miles. Turn west through cattleguard and travel approximately 5.7 miles on an improved existing gravel road. The proposed access road will commence at this point. The proposed access road will be constructed south for approximately 700' to the southeast corner of the proposed drilling location pad.

2. Planned Access Road

- A. Length and Width: The new access road will be 12' wide (20' ROW) and approximately 700' long from the existing gravel road to the edge of the drilling 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: None required.
- D. Cut and Fill: In order for the location pad to be level, approximately 3' of cut from the south side will be moved to the north side for fill.

3. Location of Existing Wells

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

4. Location of Existing and/or Proposed Facilities

- A. There are no production facilities on this lease at the present time.
- B. 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

- A. 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 wellsite over the existing roads and the proposed access road shown on Exhibits II and III.

6. Source of Construction Materials

- A. Caliche for surfacing the road and the wellsite pad will be obtained from an existing pit in the SE1/4, W, Sec 12, T8S, R22E, and will be purchased by the dirt contractor from the Federal Government. 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.

9. Wellsite Layout cont.

- 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 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 north.
- 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. Jackrabbits were observed in the area and other wildlife in the area probably includes those typical of semi-arid desert land. The area is used for sheep grazing.
- D. Ponds and Streams: There are no rivers, streams, lakes, or ponds in the area.
- E. Residences and Other Structures: There are not residences or other structures in the vicinity of the proposed well.
- F. Land Use: Sheep 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. One minor isolated manifestation was detected by NMAS, but due to its solitary nature, clearance was recommended.

12. Operator's Representatives:

- A. The field representatives responsible for assuring compliance with the approved surface use and operations plan are as follows:

J. W. Hart  
P. O. Box 1756  
Hobbs, New Mexico 88240  
(505/393-4425) - office  
(505/393-4317) - home

M. P. Houston  
1000 Vaughn Building  
Midland, Texas 79701  
(915/683-5391) - office  
(915/694-3442) - home

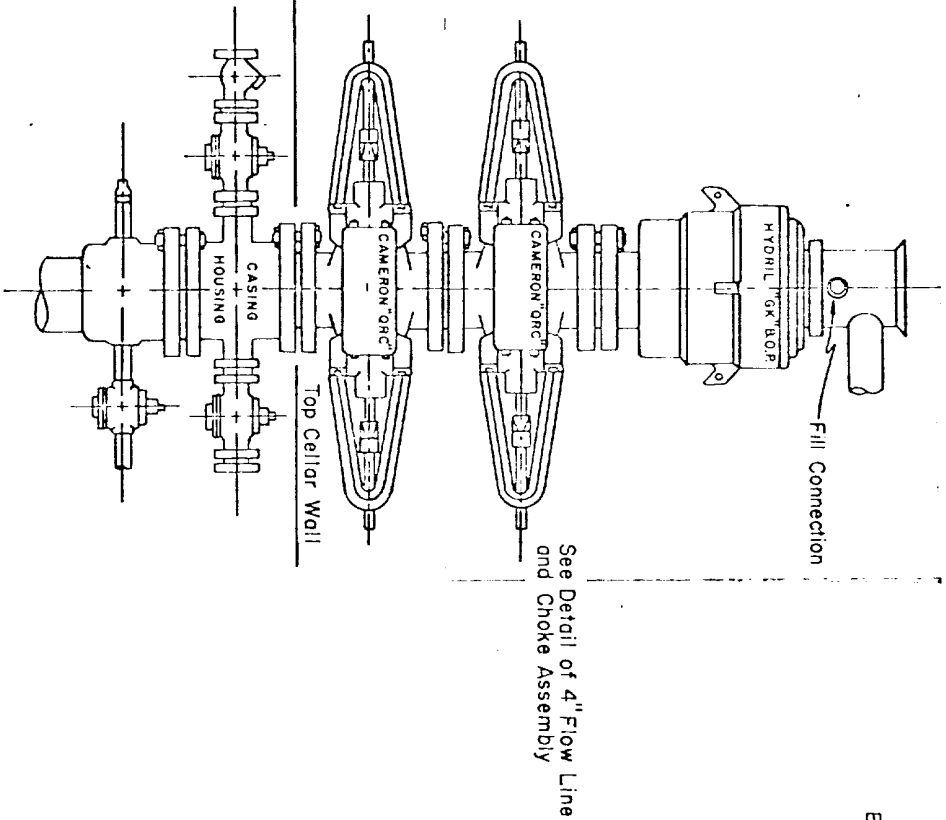
13. Certification

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.

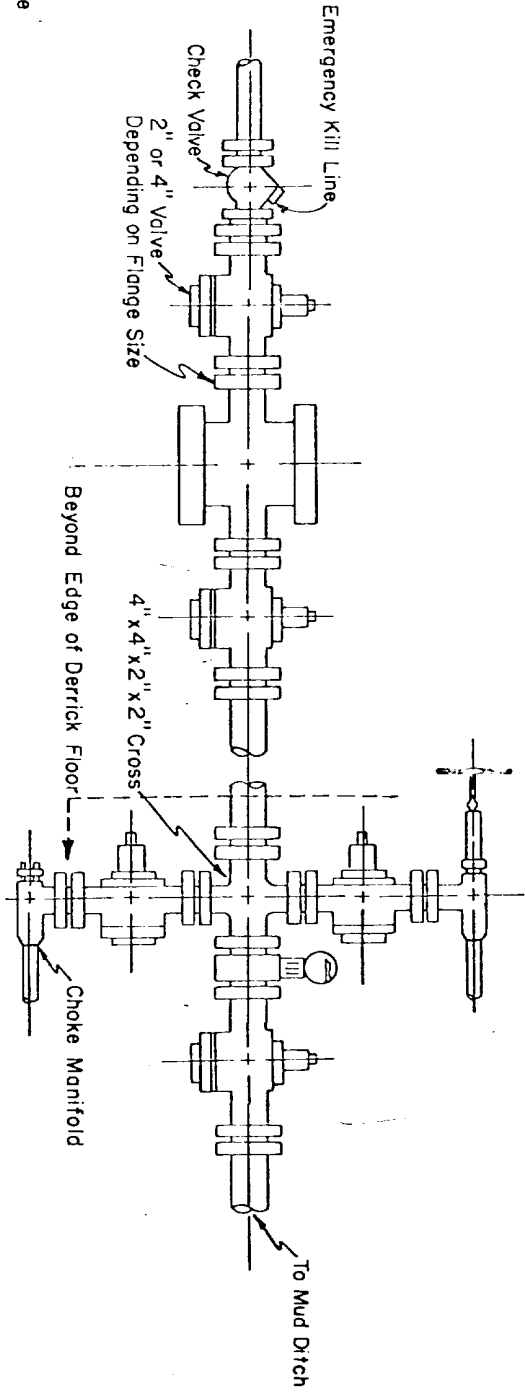
Sept 22, 1979  
Date

Michael P. Houston  
Michael P. Houston  
Operations Manager

Blow-out Preventers hydril and choke manifold are all 900 Series





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



3,000 PSI WORKING PRESSURE  
KILL, CHOKE, AND FILL CONNECTIONS

DETAIL OF 4" FLOW LINE CHOKE ASSEMBLY

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



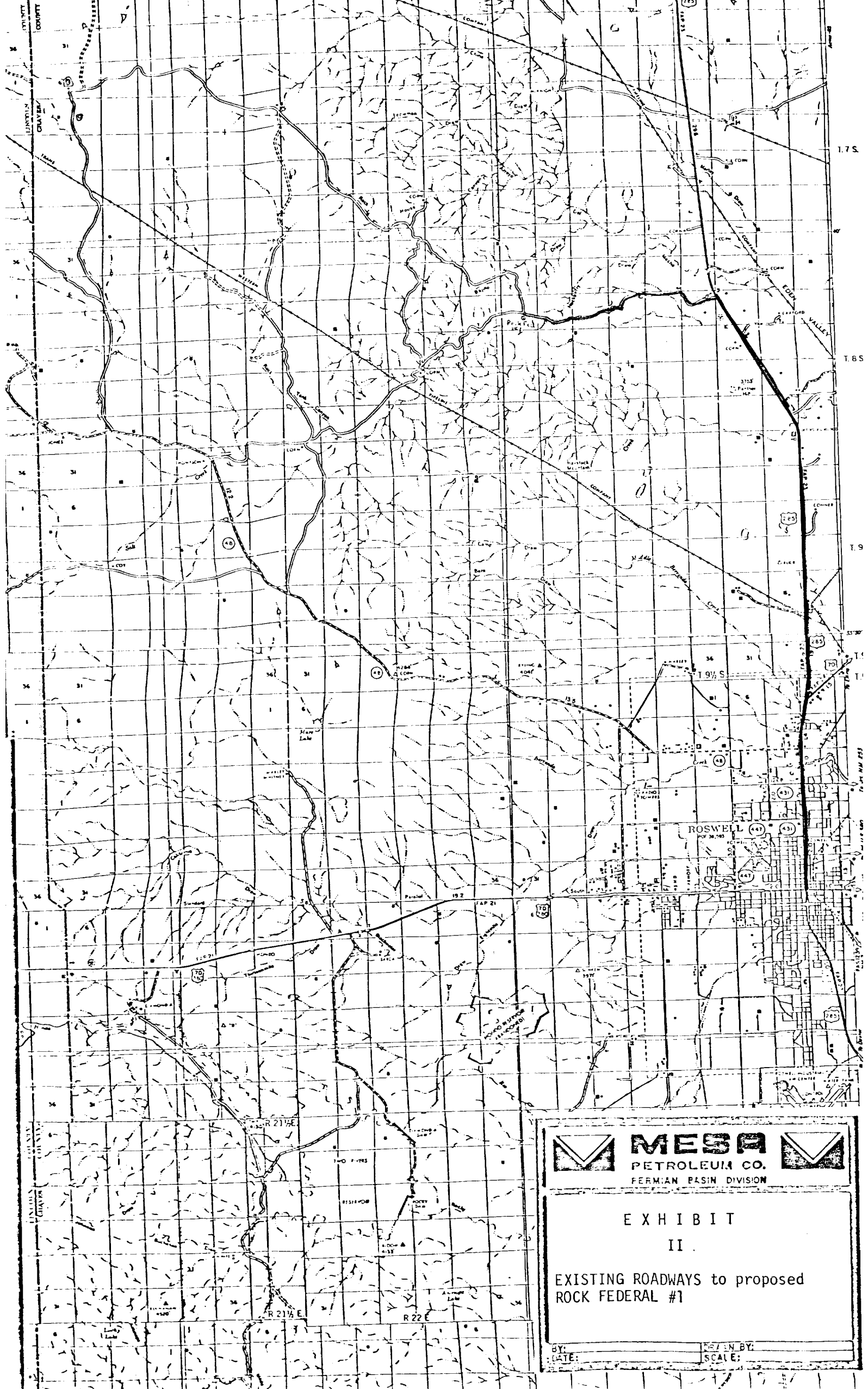
**MESA**  
PETROLEUM CO.  
PERMIAN BASIN DIVISION

**EXHIBIT**  
I

**BLOWOUT PREVENTER SCHEMATIC**  
for proposed ROCK FEDERAL #1

DATE: \_\_\_\_\_  
SCALE: \_\_\_\_\_

BY: \_\_\_\_\_  
SCALE: \_\_\_\_\_





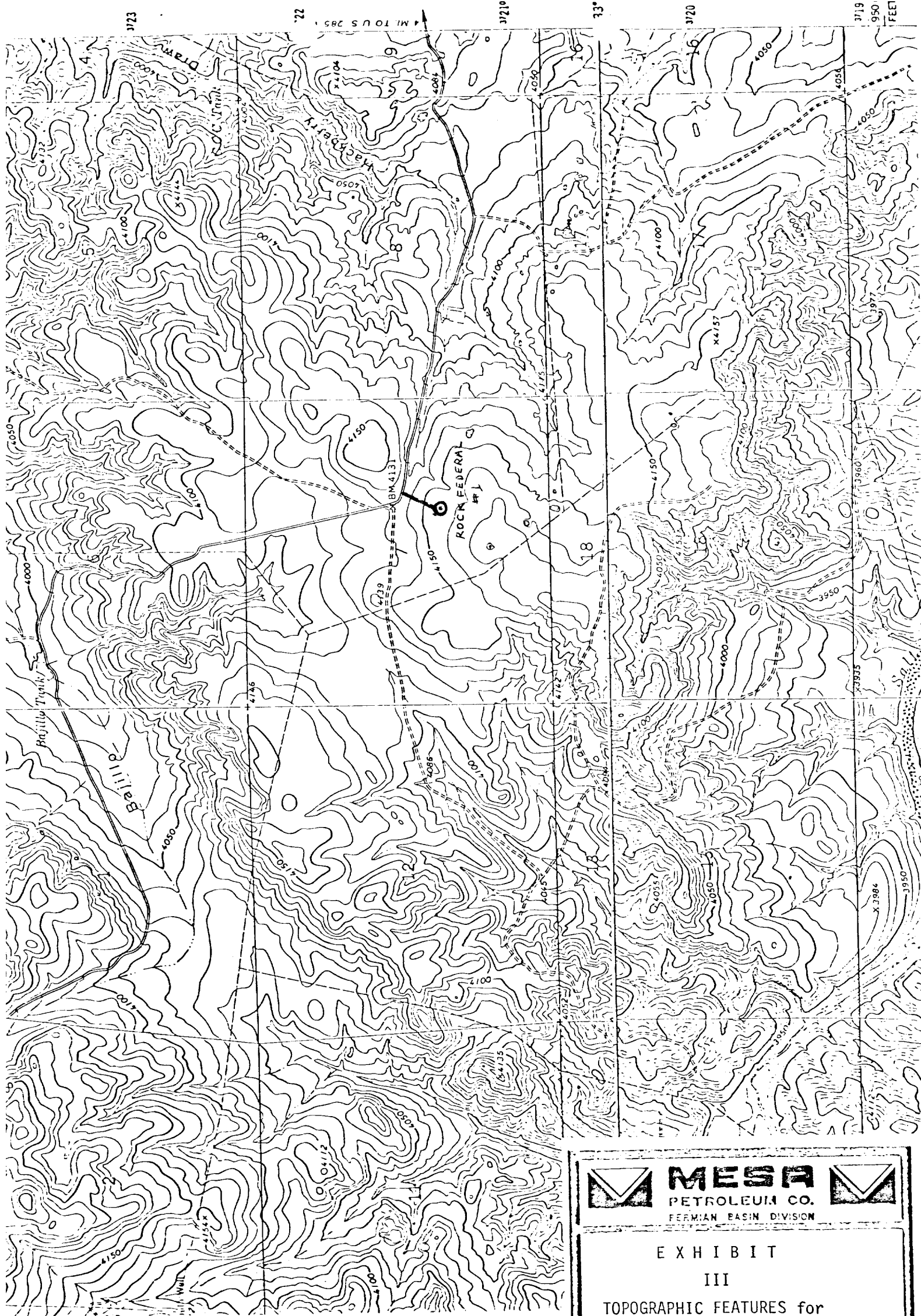
**MESA**  
PETROLEUM CO.  
PERMIAN BASIN DIVISION

EXHIBIT  
II  
EXISTING ROADWAYS to proposed  
ROCK FEDERAL #1

BY: \_\_\_\_\_  
DATE: \_\_\_\_\_

DRAWN BY: \_\_\_\_\_  
SCALE: \_\_\_\_\_



**MESA**  
PETROLEUM CO.  
PERMIAN BASIN DIVISION



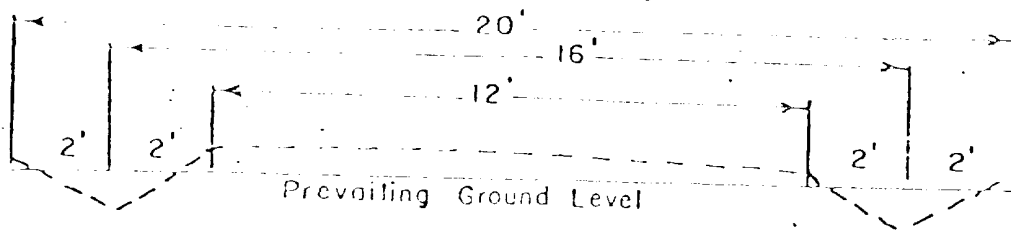
EXHIBIT

III

TOPOGRAPHIC FEATURES for  
proposed ROCK FEDERAL #1

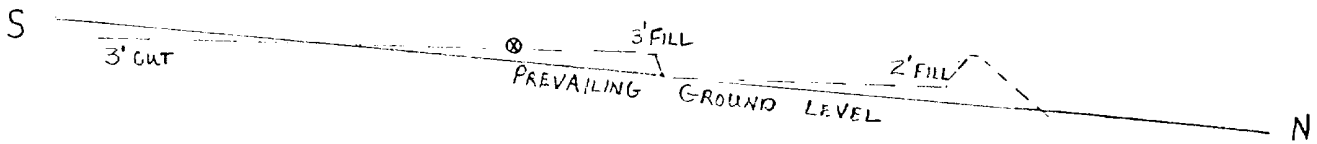
BY:  
DATE:

DRAWN BY:  
SCALE:



# ROADWAY CROSS SECTION



Horizontal Scale 1" = 4'



W PREVAILING GROUND & LEVEL - ESSENTIALLY FLAT E

# LOCATION CROSS SECTION

Horizontal Scale 1" = 50'

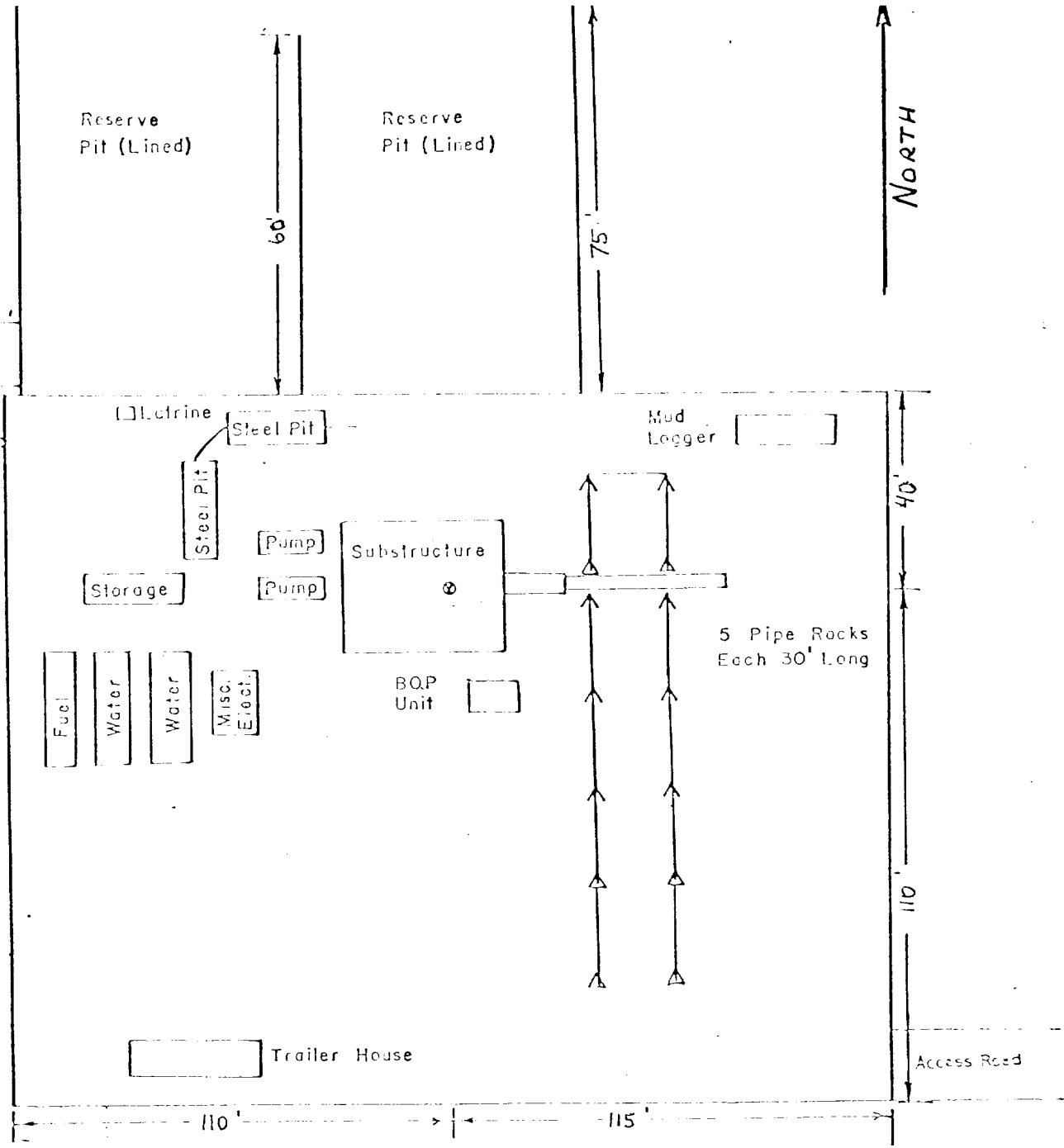
 <b>MESA</b> PETROLEUM CO. PERMIAN BASIN DIVISION		
<p>EXHIBIT IV</p> <p>LOCATION CONSTRUCTION</p>		
<p>Scale : As Noted</p>		
BY <u>W. H. H. H. H. H.</u> DATE <u>9-17-79</u>	CHECKED BY <u>SCALE</u>	





Topsoil  
Stockpile  
Area

Grn & Trash



**MESA**

PETROLEUM CO.

PERMIAN BASIN DIVISION

EXHIBIT VI

DRILL SITE ORIENTATION

DATE

DESIGNED BY

SCALE