

UNITED STATES OF AMERICA
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 ☐

2. NAME OF OPERATOR
 MESA PETROLEUM CO.

3. ADDRESS OF OPERATOR
 1000 VAUGHN BUILDING/MIDLAND, TEXAS 79701-4

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)
 At surface 1980' FNL & 990' FWL SW $\frac{1}{4}$ NW $\frac{1}{4}$ E

At proposed prod. zone SAME

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE
 32 miles Northeast of Roswell, New Mexico

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

16. NO. OF ACRES IN LEASE 958

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. 2640'

19. PROPOSED DEPTH 5000'

20. ROTARY OR CABLE TOOLS ROTARY

21. ELEVATIONS (Show whether DF, RT, GR, etc.)
 3892' GR

22. APPROX. DATE WORK WILL START*
 SEPTEMBER 1, 1982

5. LEASE DESIGNATION AND SERIAL NO.
 NM-310633

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME
 HAYSTACK FEDERAL

9. WELL NO.
 2

10. FIELD AND POOL, OR WILDCAT
 UNDESIGNATED ABO

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
 SEC 31, T6S, R27E

12. COUNTY OR PARISH
 CHAVES

13. STATE
 NEW MEXICO

RECEIVED
SEP 27 1982

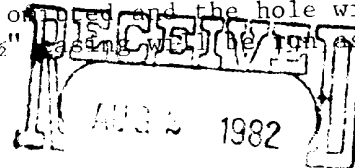
O. C. D.
ARTESIA, OFFICE

PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
14 3/4"	10 3/4"	40.5#	950'	700/300 SURFACE
9 1/2"	7 5/8"	26.4#	1600'	700/300 TIE BACK
6 1/2 or 7 7/8"	4 1/2"	10.5#	5000'	300 COVER ABO

Propose to drill 14 3/4" hole with mud or air to approximately 950' and run 10 3/4" casing. Will cement to surface and test casing with cementing head to 600 psi. Will reduce hole to 9 1/2" and drill on mud or air to approximately 1600' and run 7 5/8" casing if circulation has been lost and cement with sufficient amounts to tie-back to 10 3/4" casing. Will then reduce hole to 6 1/2" or 6 1/4", test BOP's and casing and drill to total depth. If hole conditions are favorable, the 7 5/8" casing will be on bottom and the hole will be reduced to 7 7/8" and drilled to total depth. Either 4 1/2" or 5 1/2" casing will be run as production casing depending upon hole size drilled to TD.

Operator's gas sales are dedicated.



OIL & GAS
U.S. GEOLOGICAL SURVEY
ROSWELL, NEW MEXICO

XC: MMS (7), TLS, CEN RCDS, ACCTG, MEC, LAND, ROSWELL, REM, FILE, (PARTNERS)
 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

(This space for Federal or State office use)

PERMIT NO.

APPROVED BY

CONDITIONS OF APPROVAL, IF ANY:

APPROVED
(Orig. Sgd.) GEORGE H. STEWART

SEP 23 1982

JAMES A. GILLHAM
DISTRICT SUPERVISOR

REGULATORY COORDINATOR

DATE 7-30-82

APPROVAL DATE

TITLE

DATE

All distances must be from the outer boundaries of the Section.

Mesa Petroleum Co.		Haystack Federal		Well No. #2
Section E	Section 31	Township 6 South	Range 27 East	County Chaves
Closest Postage Location of Well:				
1980	feet from the North	Line and	990	feet from the West
round Level Elev. 3892	Producing Formation ABO	Pool UNDESIGNATED	Dedicated Acreage: NW/4 160 Acres	

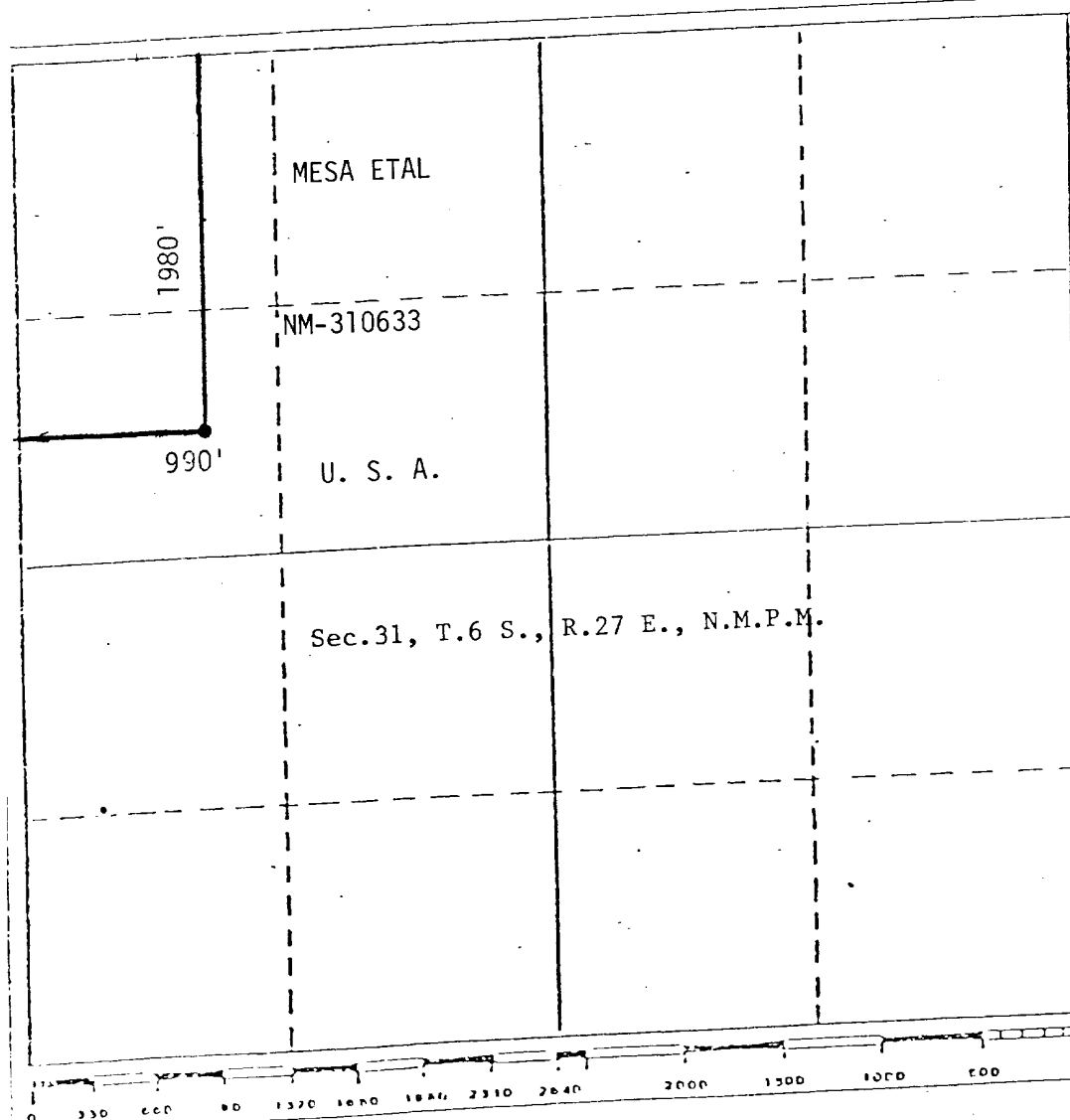
1. Outline the acreage dedicated to the subject well by colored pencil or hatchure marks on the plat below.

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 Division.



CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

M. P. Houston

Name
M. P. HOUSTON

Position
OPERATIONS MANAGER

Company
MESA PETROLEUM CO.

Date
JULY 30, 1982

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
July 13, 1982

Registered Professional Engineer
and/or Land Surveyor

John D. Jaquess
John D. Jaquess, P.E. & L.S.

Certificate No.
6290

APPLICATION FOR PERMIT TO DRILL

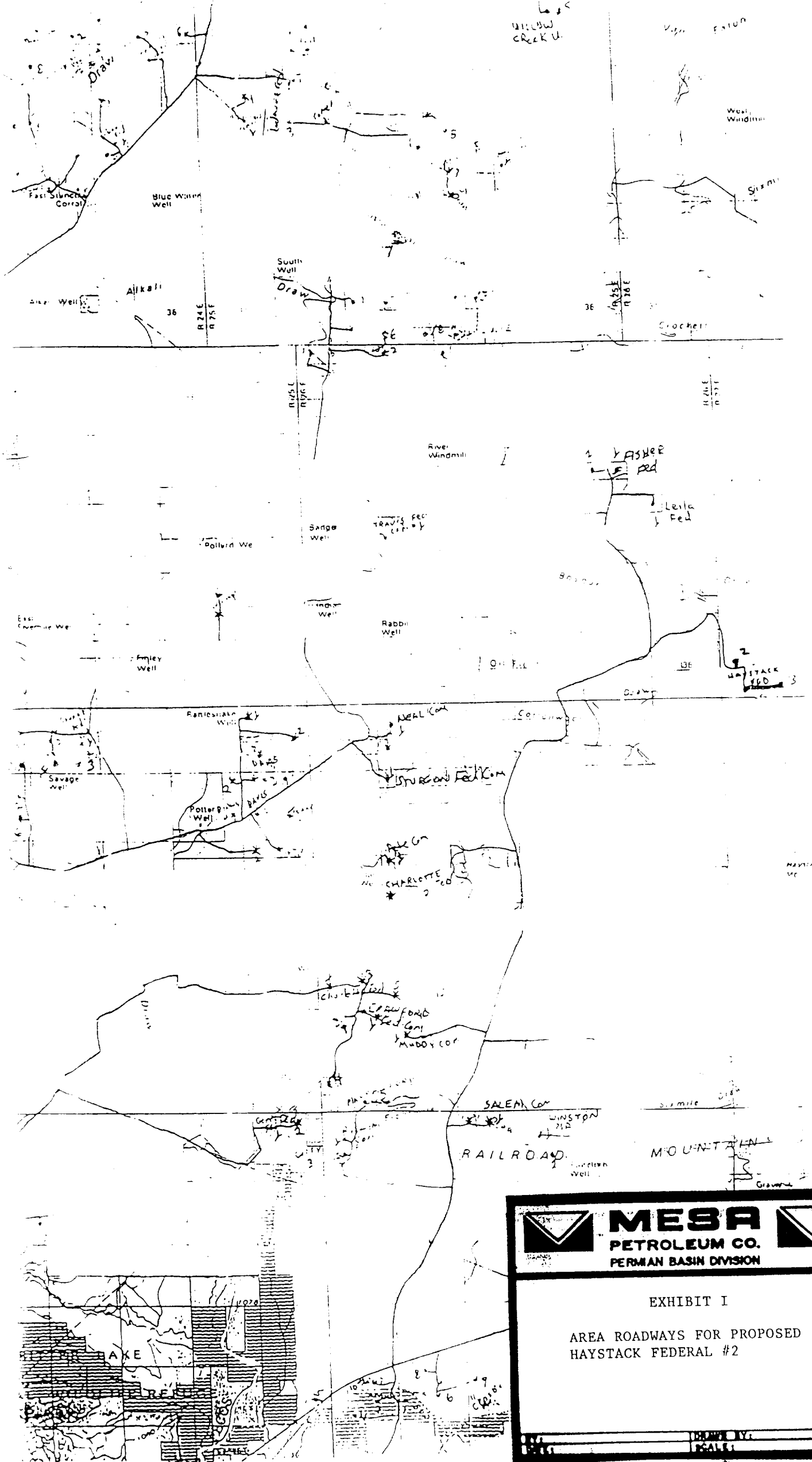
MESA PETROLEUM CO.
HAYSTACK FEDERAL #2
1980' FNL & 990' FWL, SEC 31, T6S, R27E
CHAVES COUNTY, NEW MEXICO



LEASE NO. NM-310633

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	1056
GLORIETA	2132
TUBB	3692
ABO	4350
3. Hydrocarbon bearing strata may occur in the Abo formation(s). No fresh water is expected to be encountered below 950'.
4. The Casing and Blowout Preventer Program will be determined by hole conditions as encountered. See Exhibit VI. Anticipate drilling with mud, air or foam using ram type preventer and rotating head for well control. The 10 3/4" casing will be set at approximately 950' to protect any fresh water zones and cemented to the surface. The 7 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 test 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 ten days with completion operations to follow as soon as a completion unit is available.



**MESA**

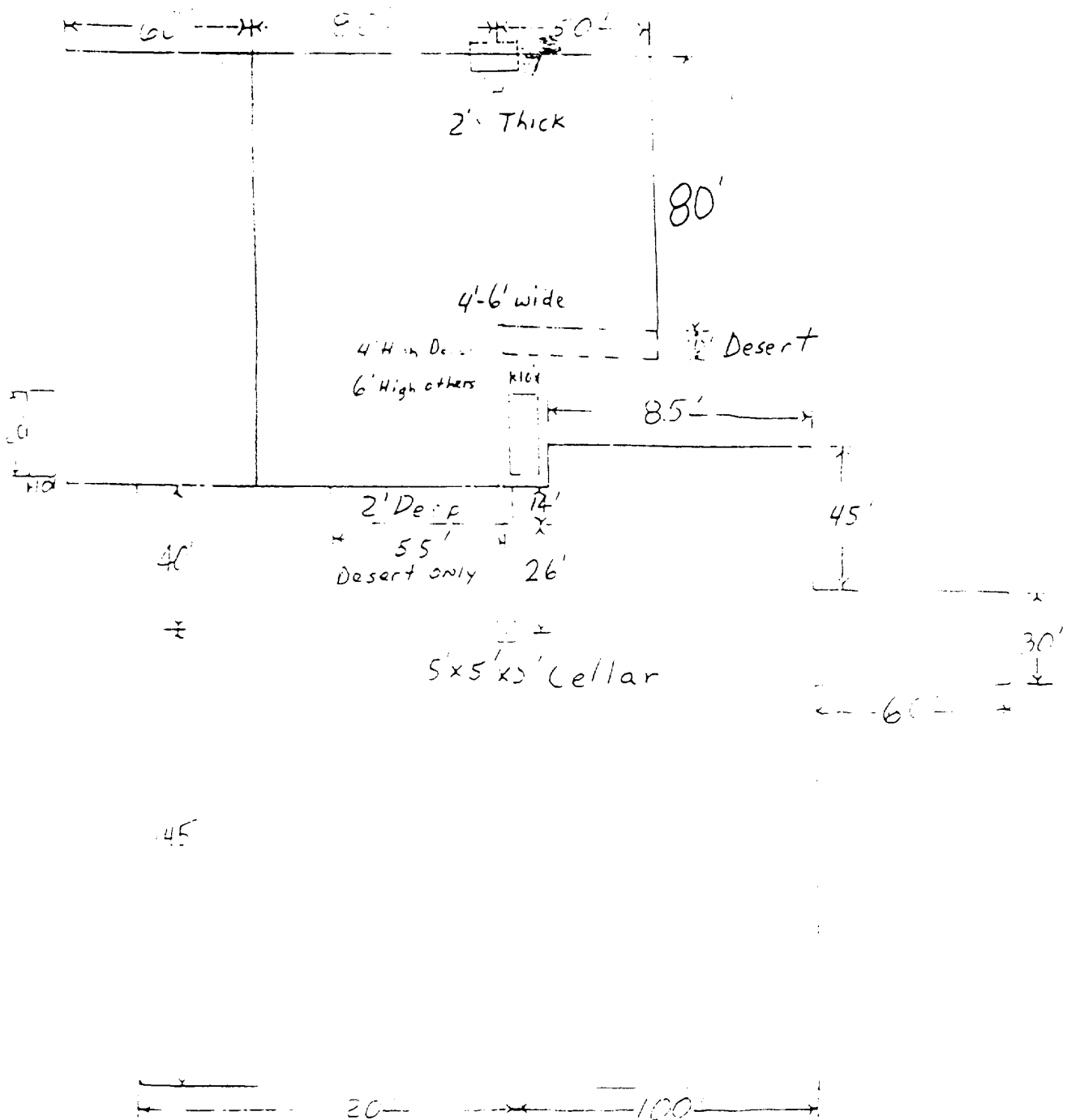
PETROLEUM CO.
PERMAN BASIN DIVISION

EXHIBIT I



AREA ROADWAYS FOR PROPOSED
HAYSTACK FEDERAL #2

1/2 MILE

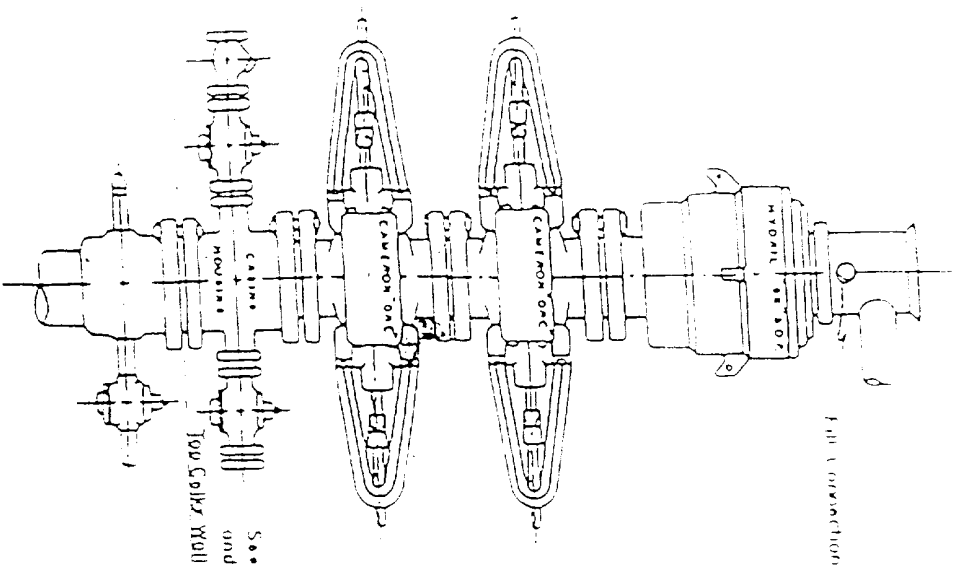
SCALE



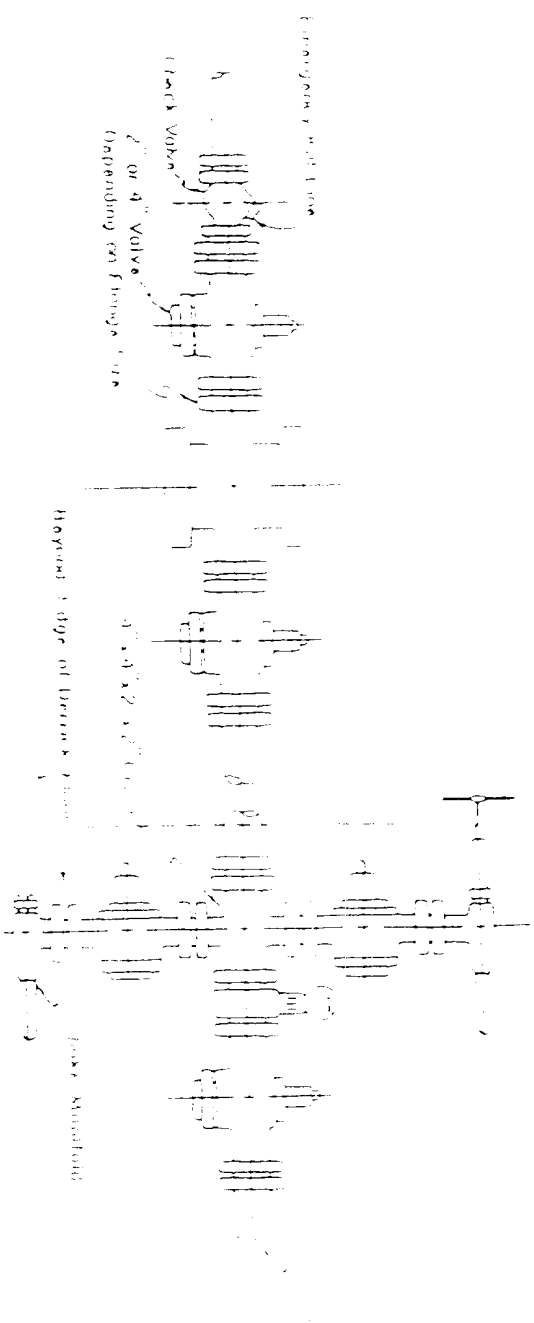
6"-8" Watered & Compacted Caliche
ON PAD & ROAD IF NEEDED

	MESA PETROLEUM CO. PERMAN BASIN DIVISION	
EXHIBIT V		
FOR PROPOSED HAYSTACK FEDERAL #2		
CITY:	DENVER, KY.	
STATE:	KENTUCKY	

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
KIT, CHOKER, AND FULL CONNECTION

DETAIL OF 9\"/>

NOTE: HYDRIL not installed on shallow low pressure wells.
RAM type BOPs are API 10\"/>

