

SF/jw

UNITED STATES DEPARTMENT OF THE INTERIOR GEOLOGICAL SURVEY

(See other instructions on reverse side)

Form approved. Budget Bureau No. 42-R355.5.

RECEIVED

WELL COMPLETION OR RECOMPLETION REPORT AND LOG*

1a. TYPE OF WELL: OIL WELL GAS WELL DRY Other JUL 1 1982

b. TYPE OF COMPLETION: NEW WELL WORK OVER DEEP-EN PLUG BACK DIF. RESVR. Other R.A.C.D.

2. NAME OF OPERATOR MESA PETROLEUM CO.

3. ADDRESS OF OPERATOR 1000 VAUGHN BUILDING/MIDLAND, TX 79701-4493

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)*
At surface 660' FSL & 2080' FEL
At top prod. interval reported below SAME
At total depth SAME

14. PERMIT NO. 300 505 141 DATE ISSUED 5-5-82

5. LEASE DESIGNATION AND SERIAL NO. NM-17793

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME CRAWFORD FEDERAL

9. WELL NO. 2

10. FIELD AND POOL OR WILDCAT UNDESIGNATED ABO

11. SEC. T. R. M., OR BLOCK AND SURVEY OR AREA SEC 31, T7S, R26E

12. COUNTY OR PARISH CHAVES

13. STATE NEW MEXICO

15. DATE SPUNDED 5-11-82 16. DATE T.D. REACHED 5-17-82 17. DATE COMPL. (Ready to prod.) 5-18-82 P&A 18. ELEVATIONS (DF, RKB, RT, OR, ETC.)* 3555' GR 19. ELEV. CASING HEAD

20. TOTAL DEPTH, MD & TVD 4200' 21. PLUG, BACK T.D., MD & TVD SURFACE 22. IF MULTIPLE COMPL., HOW MANY* - 23. INTERVALS DRILLED BY ROTARY TOOLS

24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)* N/A 25. WAS DIRECTIONAL SURVEY MADE NO

26. TYPE ELECTRIC AND OTHER LOGS RUN GR-CCL/GR-CNL-FDC 27. WAS WELL CORKED NO

28. CASING RECORD (Report all strings set in well)

CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
<u>10 3/4"</u>	<u>40.5#</u>	<u>902'</u>	<u>14 3/4"</u>	<u>700/200</u>	

29. LINER RECORD

SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)
<u>ACCEPTED FOR RECORD</u>				

30. TUBING RECORD

SIZE	DEPTH SET (MD)	PACKER SET (MD)

31. PREPARATION RECORD (Interval, size and number) NONE

32. ACID, SHOT, FRACTURE, CEMENT, SQUEEZE, ETC.

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED

JUL 30 1982
U.S. GEOLOGICAL SURVEY
ROSWELL, NEW MEXICO

33.* PRODUCTION

DATE FIRST PRODUCTION _____ PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump) B & A WELL STATUS (Producing or shut-in) B & A

DATE OF TEST	HOURS TESTED	CHOKE SIZE	PROD'N. FOR TEST PERIOD	OIL—BBL.	GAS—MCF.	WATER—BBL.	GAS-OIL RATIO

FLOW, TUBING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE	OIL—BBL.	GAS—MCF.	WATER—BBL.	OIL GRAVITY-API (CORR.)

34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.) _____ TEST WITNESSED BY _____

35. LIST OF ATTACHMENTS RECORD OF INCLINATION

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records.

SIGNED R. G. Moul TITLE REGULATORY COORDINATOR DATE 5-29-82

*(See Instructions and Spaces for Additional Data on Reverse Side)

XC: MMS (7), TLS, CEN RCDS, ACCTG, MEC, MAH, D&M, MTS (3), LMC, CTY, ROSWELL, EEB, REM, K, TW, FILE, (PARTNERS)

14212102102

INSTRUCTIONS

General: This form is designed for submitting a complete and correct well completion report and log on all types of lands, and leases to either a Federal agency or a State agency, or both, pursuant to applicable Federal and/or State laws and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local, area, or regional procedures and practices, either as shown below or will be issued by, or may be obtained from, the local Federal and/or State office. See instructions on items 22 and 24, and 33, below regarding separate reports for separate completions.

If not filed prior to the time this summary record is submitted, copies of all currently available logs (drillers, geologists, sample and core analysis, all types electric, etc.), formation and pressure tests, and directional surveys, should be attached hereto, to the extent required by applicable Federal and/or State laws and regulations. All attachments should be listed on this form, see item 35.

Item 4: If there are no applicable State requirements, locations on Federal or Indian land should be described in accordance with Federal requirements. Consult local State or Federal office for specific instructions.

Item 18: Indicate which elevation is used as reference (where not otherwise shown) for depth measurements given in other spaces on this form and in any attachments.

Items 22 and 24: If this well is completed for separate production from more than one interval zone (multiple completion), so state in item 22, and in item 24 show the producing interval, or intervals, top(s), bottom(s) and name(s) (if any) for only the interval reported in item 33. Submit a separate report (page) in this form, adequately identified, for each additional interval to be separately produced, showing the additional data pertinent to such interval.

Item 23: *Sacks Cement*: Attached supplemental records for this well should show the details of any multiple stage cementing and the location of the cementing tool.

Item 33: Submit a separate completion report on this form for each interval to be separately produced. (See instruction for items 22 and 24 above.)

GENERAL INFORMATION		LOGGING DATA		LOGGING TESTS		LOGGING RESULTS	
DATE	WELL NO.	DEPTH	MEASUREMENT	TEST TYPE	RESULTS	TEST TYPE	RESULTS
2-11-82	438'	438'	438'	LOGGING TEST	...	LOGGING TEST	...
2-17-82	1476'	1476'	1476'	LOGGING TEST	...	LOGGING TEST	...
2-18-82	2976'	2976'	2976'	LOGGING TEST	...	LOGGING TEST	...
2-17-82	3696'	3696'	3696'	LOGGING TEST	...	LOGGING TEST	...

LOGGING TESTS		LOGGING RESULTS	
TEST TYPE	RESULTS	TEST TYPE	RESULTS
LOGGING TEST	...	LOGGING TEST	...
LOGGING TEST	...	LOGGING TEST	...

LOGGING DATA		LOGGING TESTS	
DEPTH	MEASUREMENT	TEST TYPE	RESULTS
438'	438'	LOGGING TEST	...
1476'	1476'	LOGGING TEST	...
2976'	2976'	LOGGING TEST	...
3696'	3696'	LOGGING TEST	...

SIGNED: _____ TITLE: _____

(See instructions and spaces for Additional Data on Reverse Side)

MESA PETROLEUM CO.
CRAWFORD FEDERAL #2
660' FSL & 2080' FEL, SEC 31, T7S, R26E
CHAVES COUNTY, NEW MEXICO

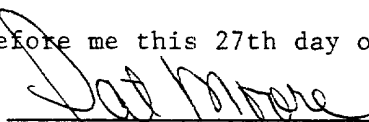
RECORD OF INCLINATION

<u>DEPTH</u>	<u>DEVIATIONS</u>
416'	½°
902'	¾°
1420'	1°
1949'	1°
2445'	1°
2942'	1°
3496'	1°
3990'	1½°
4200'	1½°



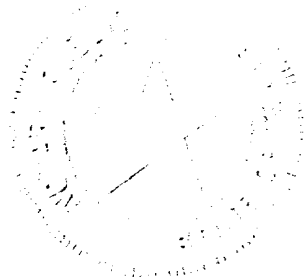
R. E. MATHIS, REGULATORY COORDINATOR

Subscribed and sworn to before me this 27th day of May, 1982.



Notary Public in and for Midland
County, Texas.

Commission Expires: JUNE 26, 1985



45F

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Drawer DD
Artesia, NM 88210

LEASE NM-17793
6. IF INDIAN, ALLOTTEE OR TRIBE NAME
7. UNIT AGREEMENT NAME
8. FARM OR LEASE NAME CRAWFORD FEDERAL
9. WELL NO. 2
10. FIELD OR WILDCAT NAME UNDESIGNATED-ABO <i>Rec. - Artesia</i>
11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA SEC 31, T7S, R26E
12. COUNTY OR PARISH CHAVES
13. STATE NEW MEXICO
14. API NO.
15. ELEVATIONS (SHOW DF, KDB, AND WD) 3555'

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 Form 9-331-C for such proposals.)

RECEIVED
JUN 1 1982

1. oil well gas well other

2. NAME OF OPERATOR
MESA PETROLEUM CO. *O. C. D.*

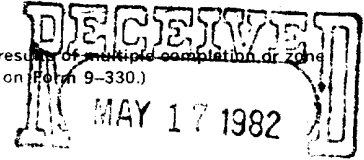
3. ADDRESS OF OPERATOR
ARTESIA, OFFICE

4. LOCATION OF WELL (REPORT LOCATION CLEARLY. See space 17 below.)
1000 VAUGHN BUILDING/MIDLAND TX 79701-4493
AT SURFACE: 660' FSL & 2080' FEL
AT TOP PROD. INTERVAL:
AT TOTAL DEPTH: SAME

16. CHECK APPROPRIATE BOX TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

REQUEST FOR APPROVAL TO:	SUBSEQUENT REPORT OF:
TEST WATER SHUT-OFF <input type="checkbox"/>	<input type="checkbox"/>
FRACTURE TREAT <input type="checkbox"/>	<input type="checkbox"/>
SHOOT OR ACIDIZE <input type="checkbox"/>	<input type="checkbox"/>
REPAIR WELL <input type="checkbox"/>	<input type="checkbox"/>
PULL OR ALTER CASING <input type="checkbox"/>	<input type="checkbox"/>
MULTIPLE COMPLETE <input type="checkbox"/>	<input type="checkbox"/>
CHANGE ZONES <input type="checkbox"/>	<input type="checkbox"/>
ABANDON* <input type="checkbox"/>	<input type="checkbox"/>
(other) Spud, 10 3/4" csg & cmt	

(NOTE: Report results of multiple completion or zone change on Form 9-330.)



OIL & GAS
U.S. GEOLOGICAL SURVEY

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 14 3/4" hole on 5-11-82. Drilled on mud to 902' and ran 22 jts 10 3/4", 40.5#, K-55 casing set at 902'. Cemented with 700 sxs Thixalite + 1/4#/sx flocele + 4% CaCl and tailed-in with 200 sxs Class "C" + 2% CaCl. PD at 10:00 AM, 5-13-82. Circulated 150 sxs. Tested BOP's and casing to 600 psi for 30 mins - OK. Reduced hole to 7 7/8" and drilled ahead. WOC total of 18 hours.

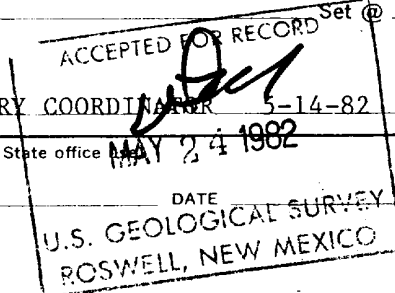
XC: MMS (7), TLS, CEN RCDS, ACCTG, MEC, ROSWELL, REM, FILE, (PARTNERS)
Subsurface Safety Valve: Manu. and Type _____ Set @ _____ Ft.

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

SIGNED *R. T. Moore* TITLE REGULATORY COORDINATOR 5-14-82

(This space for Federal or State office)

APPROVED BY _____ TITLE _____ DATE _____
CONDITIONS OF APPROVAL, IF ANY:



30-005-61587

DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

C/SF

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK
DRILL DEEPEN PLUG BACK

5. LEASE DESIGNATION AND SERIAL NO.
NM-17793
6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME
Crawford 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, T7S, R26E

12. COUNTY OR PARISH
Chaves
13. STATE
New Mexico

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 79701-4493

RECEIVED

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)*
At surface 660' FSL & 2080' FEL
At proposed prod. zone same

MAY - 7 1982

O. C. D.

ARTESIA, OFFICE

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*
21 miles East/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'

16. NO. OF ACRES IN LEASE
430.85

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.
6000'

19. PROPOSED DEPTH
4450'

20. ROTARY OR CABLE TOOLS
Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.)
3553.6' GR

22. APPROX. DATE WORK WILL START*
April 9, 1982

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'	SURFACE
11" or 12 1/4"	8 5/8"	24#	1600'	ISOLATE WATER, OIL & GAS
7 7/8"	4 1/2"	10.5#	4450'	COVER ALL PAY

Proposed to drill 17 1/2" hole to approximately 900' to set 13 3/8" surface casing and cement to surface. Will reduce hole to 11" or 12 1/4" and drill approximately 1600' to set 8 5/8" casing. Will nipple up RAM type BOPs, reduce hole to 7 7/8" and drill to total depth. Drilling medium will be air, foam, or mud as required.

Gas Sales Are Dedicated.

Location moved to protect natural sand levi per BLM request.

RECEIVED
JAN 29 1982

NSK-1484
3-1-82

XC: USGS (6), TLS, CEN RCDS, ACCTG, ROSWELL, MEC, LAND, PARTNERS, NEW MEXICO

OIL & GAS
U.S. GEOLOGICAL SURVEY
NEW MEXICO

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. P. Mathis TITLE REGULATORY COORDINATOR DATE 1-27-92

APPROVED
(Orig. & 1) GEORGE H. STEVART
MAY 5 1982
APPROVED BY
JAMES A. GILLHAM
DISTRICT SUPERVISOR

NEW MEXICO OIL CONSERVATION COMMISSION
WELL LOCATION AND ACREAGE DEDICATION PLAT

Form O-112
Supersedes O-128
Effective 1-1-65

All distances must be from the outer boundaries of the Section

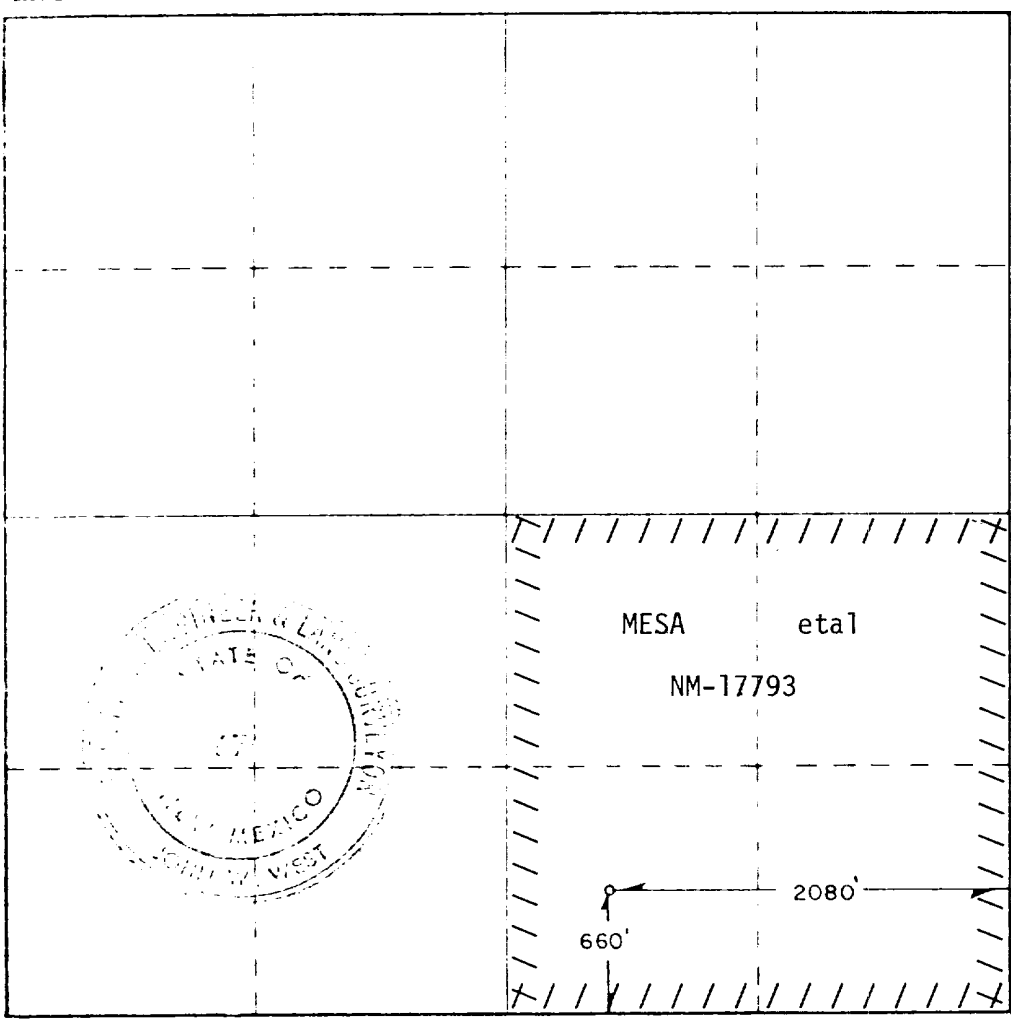
MESA PETROLEUM CO.		CRAWFORD FEDERAL		2
0	31	7 South	26 East	Chaves
2080	East line and		660	South line
3555.0	ABO	UNDESIGNATED	Also	SE/4 160

- Outline the acreage dedicated to the subject well by colored pencil or hachure 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, force-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: 1-27-82

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: Dec. 15, 1981

Registered Professional Engineer and/or Land Surveyor:
John W. West

Certificate No. JOHN W. WEST 676
PATRICK A. ROMERO 6868
Ronald J. Eidson 3239

330 660 990 1320 1650 1980 2310 2640 2970 3300 3630 3960 4290

APPLICATION FOR PERMIT TO DRILL

MESA PETROLEUM CO.
CRAWFORD FEDERAL #2
660' FSL & 1980' FEL, SEC 31, T7S, R26E,
CHAVES COUNTY, NEW MEXICO

LEASE NO. NM-17793

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	416'
GLORIETA	1378'
TUBB	2962'
ABO	3673'

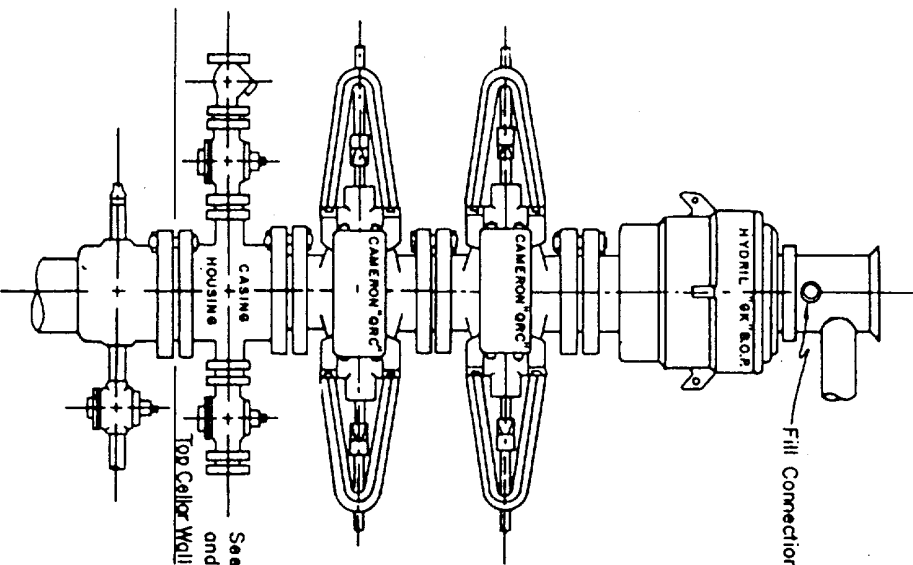
3. Hydrocarbon bearing strata may occur in the ABO formation(s). No fresh water is expected to be encountered below 900'.

4. The Casing and Blowout Preventer Program will be determined by hole conditions as encountered. See Exhibit VI. 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 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 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.

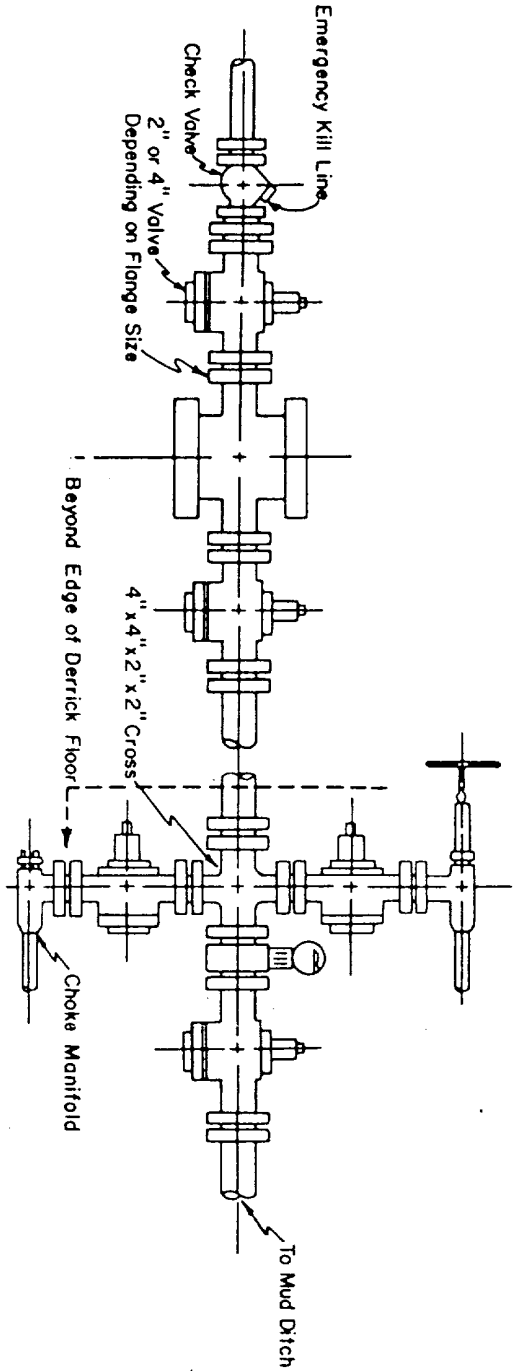
6. Anticipated drilling time is ten days with completion operations to follow as soon as a completion unit is available.

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



See Detail of 4" Flow Line and Choke Assembly

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.

NOTE: HYDRIL not installed on shallow-low pressure wells.
RAM type BOPs are API 10" X 3000 PSI.

MESA
PETROLEUM CO.
PERMIAN BASIN DIVISION

E X H I B I T

V I

REV. DATE

ISSUE NO.

SCALE