Form 9-331 C
(May 1963)

SUBMIT IN DUPLICATE* (Other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R1425.

30-015-22726

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Amended Location

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

5. LEASE DESIGNATION AND SERIAL NO.: NM 7066

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

1a. TYPE OF WORK: DRILL [X] DEEPEN [ ] PLUG BACK [ ]

7. UNIT AGREEMENT NAME:

b. TYPE OF WELL: OIL WELL [ ] GAS WELL [X] OTHER — SINGLE ZONE [X] MULTIPLE ZONE [ ]

8. FARM OR LEASE NAME: Wells Federal

2. NAME OF OPERATOR: Mesa Petroleum Co

9. WELL NO.: 1

3. ADDRESS OF OPERATOR: 1000 Vaughn Building/Midland, Texas 79701

10. FIELD AND POOL, OR WILDCAT: Undesignated

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*)
At surface: 1980' FNL and 1980' FWL

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

At proposed prod. zone: Same

Sec 11-T16S-R27E

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*: Approx 11-1/4 miles east & south of Lake Arthur, New Mexico

12. COUNTY OR PARISH: Eddy

13. STATE: New Mexico

15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any)	16. NO. OF ACRES IN LEASE	17. NO. OF ACRES ASSIGNED TO THIS WELL
1980'	920	320
18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.	**19. PROPOSED DEPTH**	**20. ROTARY OR CABLE TOOLS**
N/A	8800'	Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.): 3592.2 GR

22. APPROX. DATE WORK WILL START*: June 25, 1979

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# H-40 STC	350'	400 sx Class C/circ to surface
11"	8-5/8"	24# K-55 STC	1600'	650 sx LW-tail in w/200 sx Class C/ circulate
7-7/8"	4-1/2"	11.6 - 10.5# K-55,LTC/STC	8800'	750 sx Class H or sufficient to cover pay

Mud program: See attached "Application for Drilling".

BOP program: See attached "Application for Drilling and Exhibit VI".

Gas sales are dedicated to Northern Natural Gas Company.

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ARTESIA, 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 Michael P. Houston TITLE Division Engineer DATE May 21, 1979

(This space for Federal or State office use)

PERMIT NO. _____ APPROVAL DATE 6-11-79

APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:

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JUN 15 1979
O. C. C.

*See Instructions On Reverse Side

XC: JLF, MEC, JWH, JWJ, JBH, FILE, USGS

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	Lease	Well No.
Mesa Petroleum Co.	Wells Federal	1

Unit Letter	Section	Township	Range	County
F	11	16 South	27 East	Eddy

Actual Footage Location of Well:
1980 feet from the North line and 1980 feet from the West line

Ground Level Elev.	Producing Formation	Pool	Dedicated Acreage:
3592.2	~~Atoka~~ Morrow	Undesignated	N/2 320 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 N/A

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.

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MAY 21 1979
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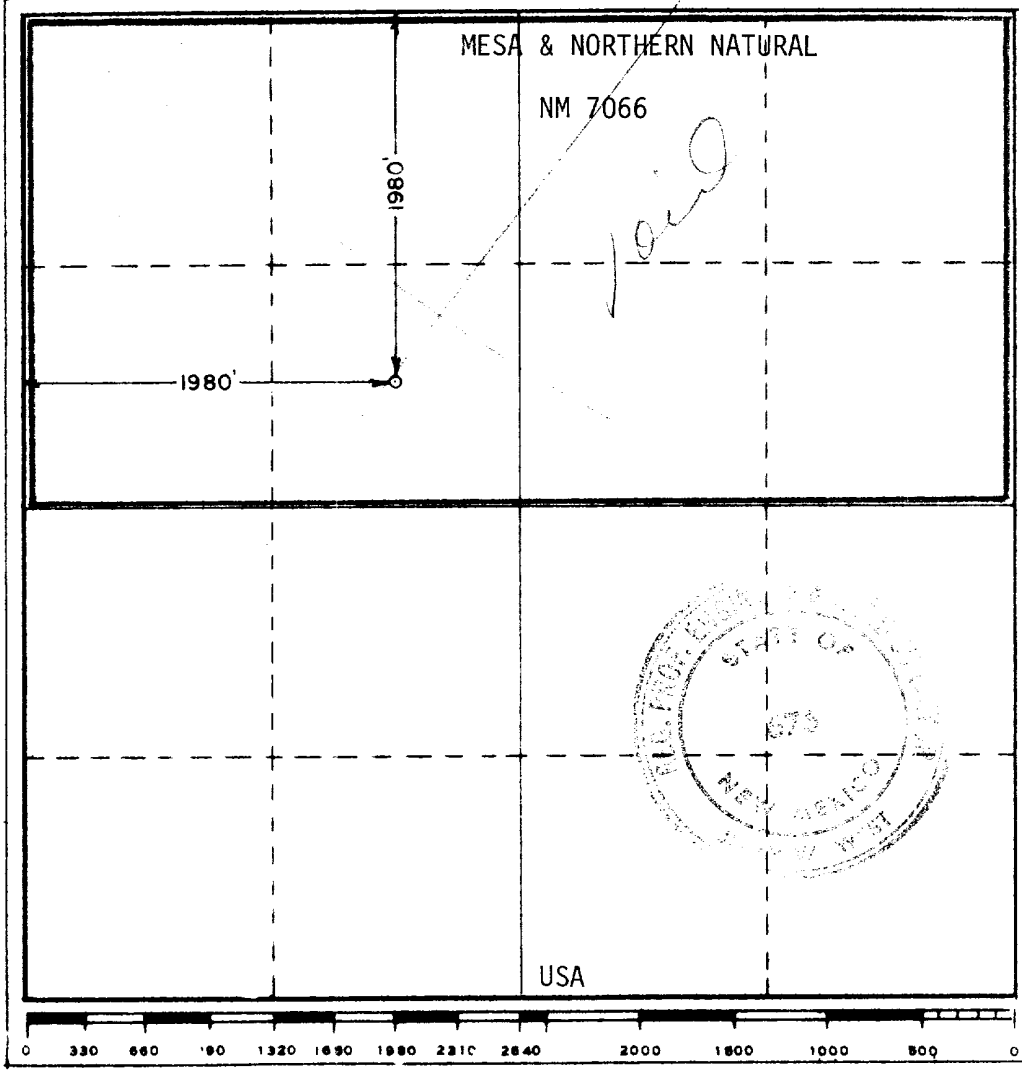
ARTESIA, NEW MEXICO

RECEIVED
JUN 15 1979
O. C. C.
ARTESIA, OFFICE



CERTIFICATION

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

Michael P. Houston

Name: Michael P. Houston

Position: Division Engineer

Company: Mesa Petroleum Co

Date: May 21, 1979

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: May 12, 1979

Registered Professional Engineer and/or Land Surveyor

John W West

Certificate No. John W. West 676
Ronald J. Eidson 3239

United States Department of the Interior

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

RECEIVED
JUN 15 1979
O. C. C.
ARTESIA, OFFICE

June 11, 1979

Mesa Petroleum Company
1000 Vaughn Company
Midland, Texas 79701

MESA PETROLEUM COMPANY Wells Federal No. 1 1980 FNL 1980 FWL Sec. 11 T. 16S R. 27E Eddy County Lease No. NM-7066
Above Data Required on Well Sign

Gentlemen:

Your APPLICATION FOR PERMIT TO DRILL the above-described well to a depth of 8800 feet to test the Morrow Formation 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 8-5/8" Intermediate 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 8-5/8" 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 13-3/8" and 8-5/8" 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,

Joe G. Lara
Acting District Engineer

APPLICATION FOR DRILLING

MESA PETROLEUM CO
WELLS FEDERAL WELL NO.1
Section 11-T16S-R27E
EDDY COUNTY, NEW MEXICO

In conjunction with Form 9-331C, Application for Permit to Drill subject well, Mesa Petroleum Co submits the following items of pertinent information in accordance with USGS requirements:

1. The geologic surface formation is Permian-Guadalupian Artesia Group.

2. The estimated tops of geologic markers are as follows:

FORMATION	DEPTH	SUB-SEA
Queen	836'	+ 2769'
San Andres	1536'	+ 2069'
Glorieta	2936'	+ 669'
Tubb	4296'	- 691'
Abo	5036'	- 1431'
Wolfcamp	6246'	- 2641'
Bursum	7026	- 3421'
Strawn	8046	- 4441'
Atoka	8446'	- 4841'
Morrow	8566'	- 4961'
Miss. Chester Sh.	8646'	- 5041'
Miss. Chester Ls.	8785'	- 5181'
TD	8816'	- 5211'

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

   Water: at approx 2835', 3335', and 4345'
   Gas and water: at approximately 7290' to 8030'
   Gas: at approximately 8310' to 8410' and approximately 8500'

4. Casing and Blowout Preventer Program:

   Surface: Drill a 17-1/2" hole to approximately 350'. Run deviation survey at 100', 200', and 350'. Limit deviation to 1°. Run 13-3/8" casing with guide shoe and insert float (one joint up) to total depth. Thread lock and tack weld bottom two joints. Run centralizer in the middle of joints 1, 3, and 5. Cement with 400 sacks Class "C" plus 2% CaCl with pipe on bottom. Cement must circulate. Pump down backside through 1" pipe if necessary. WOC 4 hours and commence cut off and nipple up. Install 13-3/8" slip-on 12" API 3000 psi bradenhead. Nipple up 12" API 3-00 psi WP double BOP with pipe rams (bottom) and blind rams. Install diverter line off of double BOP. WOC till it has reached a compressive strength of 500 psi. Test casing to 600 psi for 30 minutes.

Intermediate: Drill an 11" hole to approximately 1600' (into top of San Andres). Run deviation surveys every 300'. Limit deviation to 1°. Run 8-5/8" casing with guide shoe and insert float (2 joints up) to total depth. Thread lock and tack weld all connections through the top of insert float. Run centralizer in the middle of joints 1, 3, and 5. Cement with 650 sacks light weight + 5# gilsonite + 1/4# flocele + 2% CaCl. Tail in with 200 sacks Class "C" + 2% CaCl. Cement must circulate. Pump down backside through 1" pipe with Class "C" + 2% CaCl if necessary. WOC 6-8 hours, nipple down, and set slips with full weight of 8-5/8" casing. Cut off casing and install 12" API 3000 psi x 10" API 3000 psi casing spool. Nipple up 12" API 3000 psi WP double BOP & 10" API 3000 psi WP Hydril, same as previous. Hook up 3000 psi choke manifold. Test BOP stack and choke manifold to 1500 psi, Hydril to 1000 psi. WOC time should be determined by cementing company as the time required for the bottom 320' of cement to reach a compressive strength of 500 psi. Test casing to 1000 psi for 30 minutes with a maximum of 9.0#/gal fluid in the hole. Install pit level indicator, pit volume totalizer, and flow show prior to drilling into the Wolfcamp at approximately 6000'. Also, test BOP stack and choke manifold to working pressure by an independent testing company prior to drilling into the Wolfcamp.

Production: Drill 7-7/8" hole to total depth of approximately 8800'. Run deviation surveys every 500' or on dull bit less than 500'. Limit deviation to 5°. After evaluating logs, run 4-1/2" production casing with downjet float shoe and float collar (2 joints up) to total depth. Thread lock all connections through float collar. Run centralizer in the middle of joints 1,3,5,7, and 9. Also one centralizer per joint across any prospective pay zones. Pump 20 barrels KCL water and cement with 750 sacks Class "H" + 5/10% Halad 22 + 2/10% CFR-2 + 5# KCL. Displace top plug with 3% KCL water. Top of cement calculated at 6000' based on gauge hole plus 35% excess. Actual cement volume will be based on upon evaluating log as to uppermost zone to be completed and actual calipered hole size. Pick up BOP stack and set slips with full weight of 4-1/2" casing. Nipple up 10" API 3000 psi x 6" API 3000 psi tubing spool.

Blowout Prevention:

1. Operational opening and closing checks will be run on all BOPs each trip. Checks will be reported on IADC reports.
2. Valve on casing head will be utilized only for emergency. Kill line will not be used to fill up the hole. Inside BOP and safety valve will be readily available on rig floor. BOP drills will be conducted on a regular basis and reported on the IADC (International Assoc. of Drilling Contractors) report.

5. Circulating Medium.

0-350'	Spud with fresh water gal mud floculated with lime. Pretreat with 8# per bbl hulls, 3# per bbl fiber, 1# per bbl paper for possible loss zone from 100' to 200'. If necessary to blind drill to 350' TD, mix 150 bbls viscous mud with 12 to 15# per bbl LCM and spot on bottom before running casing.
350-1600'	Drill out with fresh water, through controlled section of reserve pit. Add paper and fiber for seepage as needed. When hole is completed, flush hole with 150 bbls viscous fluid with 4 to 6# LCM per bbl before running casing.
1600-7000'	Drill with fresh water. Use paper and sea mud as needed for seepage and hole sweep. Maintain 10 pH. Good possibility of encountering lost returns beginning at 2700'.
7000-8400'	Return to steel pits and mud up with 35 to 40 sec/1000 cc viscosity. Lower WL to 10 cc or less and add 3% KCL.
8400- TD	Maintain viscosity 35 to 40 sec/1000 cc, WL 6 cc or less, 3% KCL and 10 pH with caustic.

6. Testing, Coring, and Logging Programs:

   a. One set of washed samples with logged depth will be caught each 10' from bottom of 8-5/8" casing, tied in 100' bundles and stored in a clean, dry location at the rig.

   b. Possible drill stem test - Strawn 8000'-8400'.

   c. Mud logging from 6000' to TD.

   d. Logging: (1) GR Neutron, surface to TD
      (2) Density - approximately 1600' to TD
      (3) Dual LL/RXO - approximately 1600' to TD

7. Maximum anticipated bottom hole pressure is 3300 psi at approximately 8500' based on offset well data. Mud weight required to offset this pressure is 7.5 ppg. Bottom hole temperature approximately 130°F. No sour gas is expected.

8. Anticipated starting date: As soon as possible after approval, with completion of drilling operations approximately 30 days thereafter. Completion operations (perforating and stimulating) will immediately follow the drilling operations.

MULTI-POINT SURFACE USE AND OPERATIONS PLAN

MESA PETROLEUM CO
WELLS FEDERAL WELL NO. 1
1980' FNL and 1980' FWL, Section 11-T16S-R27E
EDDY COUNTY, NEW MEXICO
(DEVELOPMENT WELL)

This plan is submitted with Form 9-331C, Application for Permit to Drill, covering the above described well. The purpose of this plan is to describe the location of the proposed well, the proposed construction activities and operations plan, the magnitude of necessary surface disturbance involved, and the procedures to be followed in rehabilitating the surface after completion of the operations, so that a complete appraisal can be made of the environmental effects associated with the operations.

1. EXISTING ROADS

A. Existing roads in the vicinity of the proposed location are shown in yellow on Exhibit I, attached. As indicated, the drillsite is located at a driving distance of approximately 11-1/4 miles east and south of Lake Arthur, New Mexico, including 10.7 miles of existing roads to Bogle Stage Com Well #2 and approximately 0.7 miles of proposed new road to the location.

B. Travel east from Lake Arthur on highway 507, located at the northern edge of Lake Arthur. This road originates from alternate route 285 at a point recognizable by a former gasoline station, now a residence, painted white with green trim, on the west side of alternate route 285. The black top surface of the road changes to gravel after about 1.7 and, approximately 0.55 miles beyond this point, passes over a bridge across the Pecos River. Turn left after crossing the bridge and continue in a generally eastbound direction for about 2.05 miles. Take a right (southeast) turn at this point and continue for approximately 3.2 miles. Turn right (south) on a road adjacent to a doublewire high line and continue for approximately 2.9 miles, then turn right (west) for about 0.3 miles to the drilling pad of Bogle State Com Well #2, located at 1980' FSL and 1980' FEL, Sec 2-T16S, R27E. The proposed new access road to the location of Wells Federal Well #1 will originate from the southwestern edge of this pad.

2. PLANNED ACCESS ROAD

A. The new access road is indicated in red on Exhibits I and II. This road will originate from the well pad at Bogle State Com #2, as indicated above, and the route of the new road is clearly marked with surveyor ribbons. The total length of the new road will be about 0.7 miles, including approximately 0.4 miles on State-owned surface in Section 2 and approximately 0.3 miles on federally owned surface in Section 11. An application has been submitted to the New Mexico State Land Office in Santa Fe, New Mexico, for a right-of-way easement across the State-owned surface in Section 2.

B. The route of the new road will be in a generally northeast-to-southwest direction, and will meet the drillsite pad at the southeast corner of the pad.

The road will be constructed by grading and topping with compacted caliche. The driving surface of the road will be 12 feet in width (20' right-of-way width, as shown in Exhibit IV), with drainage on both sides of the road. One turnout will be constructed at the midpoint in the length of the road. No fences are involved and no cattleguards or culverts will be necessary.

C. The center line of the proposed new road has been staked and flagged, and is clearly visible.

3. LOCATION OF EXISTING WELLS

A. All wells within a one-mile radius of the proposed well are indicated in Exhibit III.

4. LOCATION OF EXISTING AND/OR PROPOSED FACILITIES

A. The nearest activity to this lease is Williamson Federal Com Well #1, located at 660' FNL and 1980' FWL of Section 12-T16S-R27E. This well has been completed and is presently awaiting pipeline connection. The Bogle State Com #2, located 1980' FSL and 1980' FEL of Sec 2, T16S, R27E, reached TD of 8803' on 10-12-78. Completion attempts have been unsuccessful.

B. No drilling activities have taken place on this lease. If the proposed well proves to be commercial, the necessary production facilities and battery will be installed on the drilling pad. Gas sales, if the well is productive, are dedicated to Northern Natural Gas Company which would construct the necessary pipelines leading from the location.

5. LOCATION AND TYPE OF WATER SUPPLY

A. It is planned to drill the proposed well with a fresh water system. The water will be obtained from privately owned or commercial sources and will be hauled to the location by truck over the existing and proposed new access roads shown in Exhibits I and II.

6. SOURCE OF CONSTRUCTION MATERIALS

A. 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. With the exception of the 6" compacted caliche top coat, all construction materials will be of local origin. Caliche required for construction will be obtained from an existing pit located on federally owned surface at Diamond Mound in Section 12-T16S-R27E.

7. METHODS OF HANDLING WASTE DISPOSAL

A. Drill cuttings will be disposed of in the reserve pits, which will be plastic lined.

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 U.S.G.S. for approval.

E. Oil produced during operations will be stored in tanks until sold.

F. Current laws and regulations pertaining to the disposal of human waste will be complied with.

G. 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.

H. All trash and debris will be buried or removed from the wellsite within 30 days after drilling and/or completion operations have been finished.

8. ANCILLARY FACILITIES/ None required

9. WELLSITE LAYOUT

A. Exhibit V shows the relative location and dimensions of the well pad, reserve pits, and major rig components.

B. Only minor leveling will be required to construct the location. The ground surface at the wellsite is relatively level, with only minor undulations and a gradual downward slope from southeast to northwest. It is estimated that a cut of approximately 2' will be necessary in the south portion of the drilling pad area. The access road route is also comparatively level, with only minor undulations in the surface. The road and pad surface will be covered with 6 inches of compacted caliche.

C. The reserve pits will be plastic-lined.

D. The pad and pit area has been staked and flagged.

10. PLANS FOR RESTORATION OF THE SURFACE

A. After drilling and/or completion operations have been finished, all equipment and other materials not needed for further operations will be removed. Pits will be filled and the location cleaned of all trash and junk, so as to leave the wellsite in as aesthetically pleasing a condition as possible.

B. Any unguarded pits containing fluids will be fenced until they have been filled.

C. If the proposed well is non-productive, all rehabilitation and/or vegetation requirements of the BLM and the U.S.G.S. will be complied with and will be accomplished as expeditiously as possible. All pits will be filled and leveled within 90 days after abandonment.

11. OTHER INFORMATION

A. Topography: The proposed wellsite is located in a relatively level area, with only minor surface undulations.

B. The topsoil at the wellsite is moderately soft sandy loam.

C. Flora and fauna: The vegetation cover at the wellsite is moderately heavy for semi-arid desert land, and consists of mesquite, broomweed, and miscellaneous prairie flowers and weeds. No wildlife was observered, but the area is inhibited by antelope, deer, rabbits, badgers, lizards, and other wildlife typical of semi-arid desert areas. The area is used for cattle grazing.

D. There are no ponds, lakes, or flowing streams or rivers in the immediate vicinity of the wellsite.

E. The nearest dwelling and windmill are located approximately two miles north of the proposed wellsite.

F. The wellsite is located on federally owned surface with federally owned minerals. A portion of the proposed new access road will cross State owned surface in Section 2 and, as indicated above in paragraph 2A, an application has been submitted to the New Mexico State Land Office for a right-of-way easement across the State owned surface.

G. An archaeological survey has been conducted by New Mexico Archaeological Services, Inc., P. O. Box 1341, Carlsbad, New Mexico, and their Archaeological Clearance Report will be submitted to all interested government agencies.

12. OPERATOR's REPRESENTATIVES

A. The Mesa Petroleum Co representatives responsible for assuring compliance with the approved surface use and operations plan are:

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

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

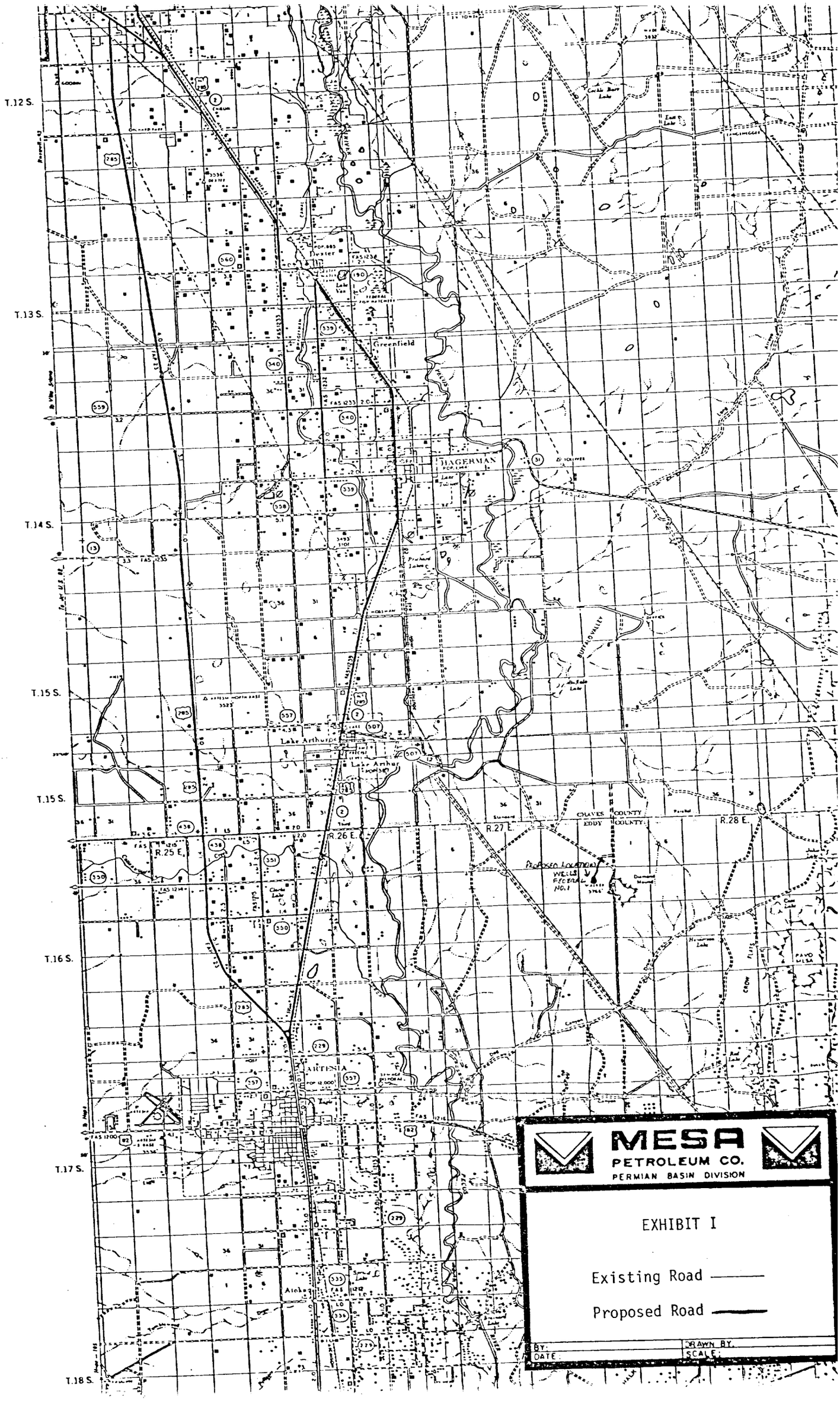
13. CERTIFICATION

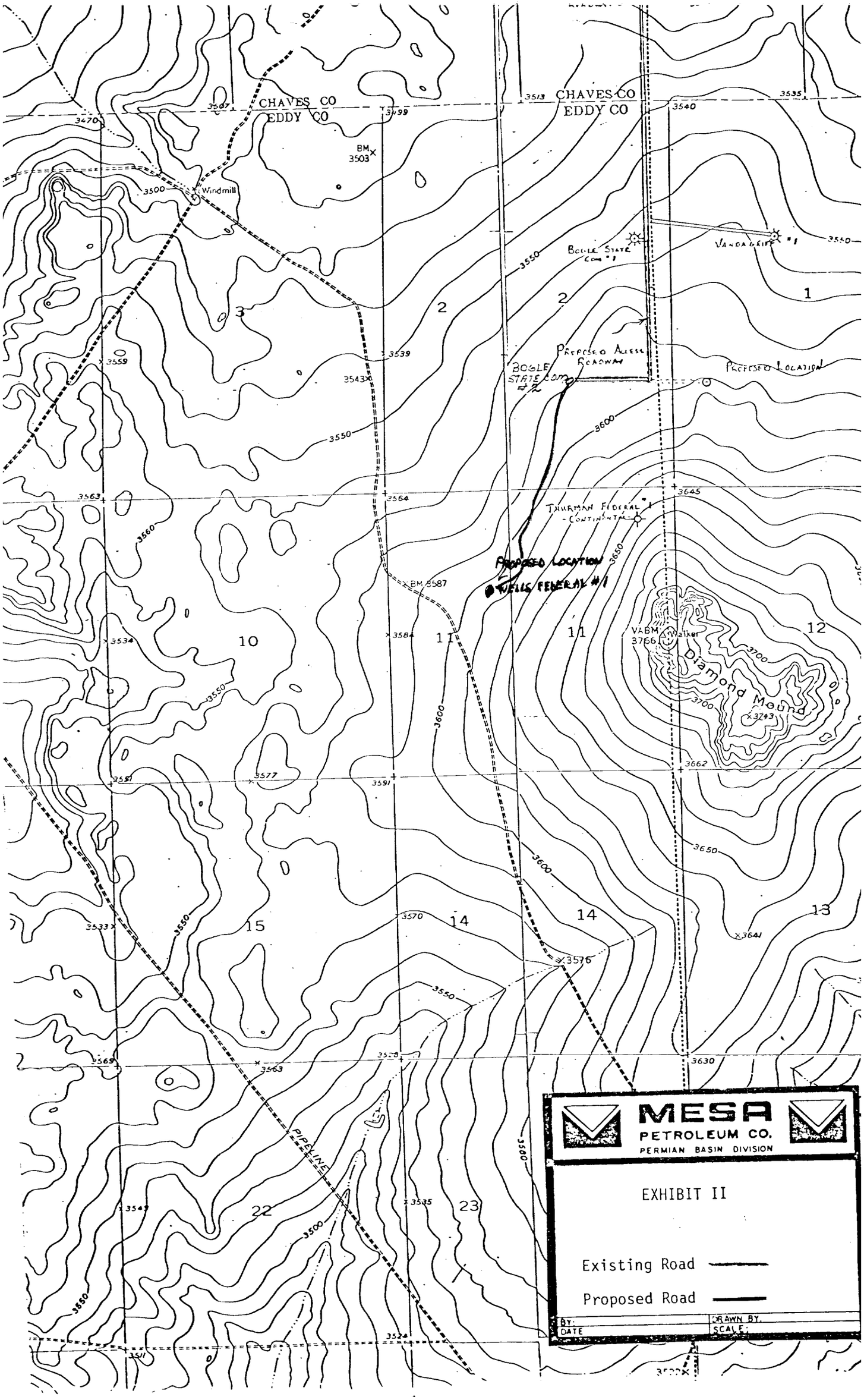
I hereby certify that I, or persons under my direct supervision, have inspected the proposed drillsite and access route; that I am familiar with the conditions which presently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and that the work associated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

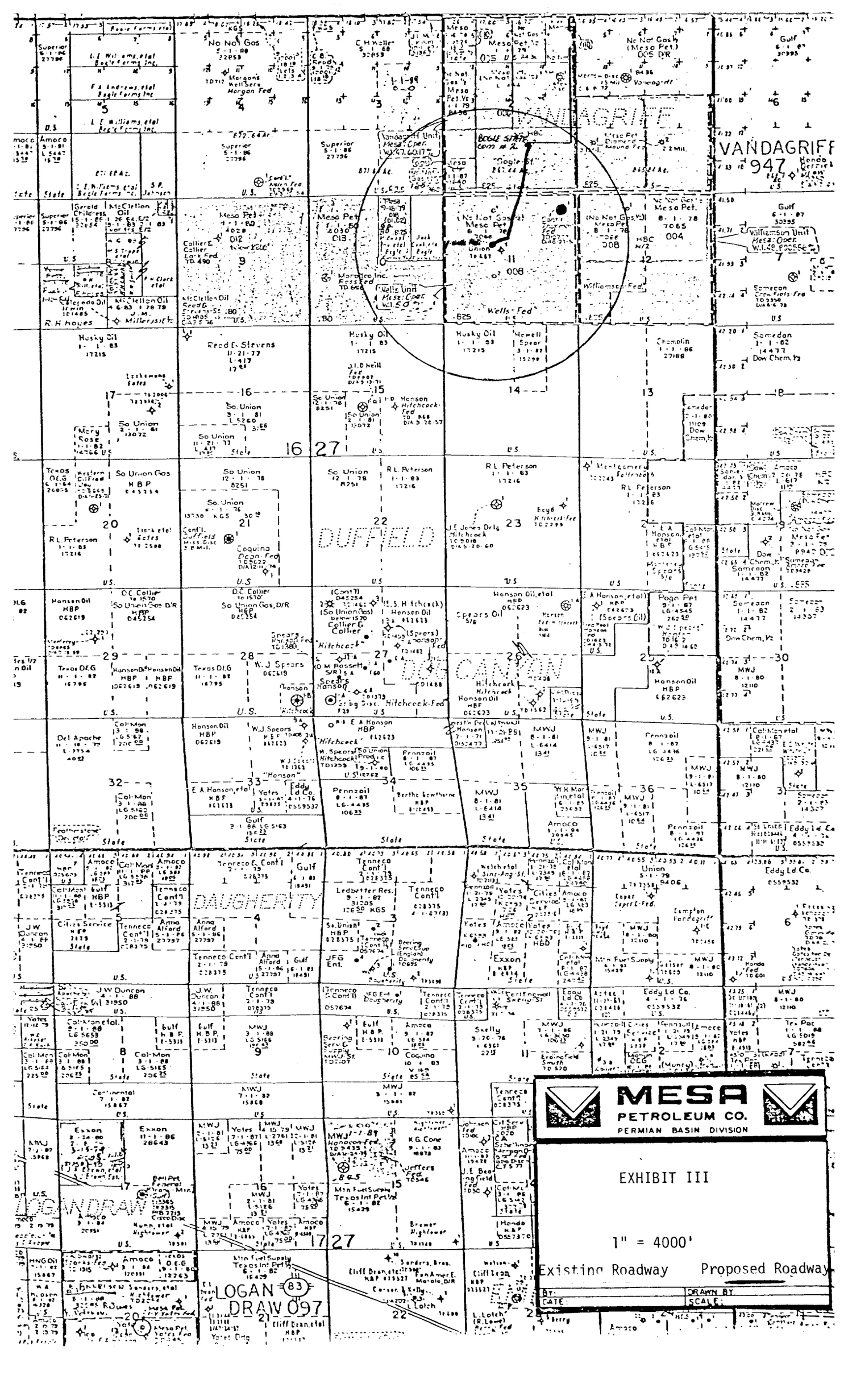
DATE 5-24-79

Michael P. Houston

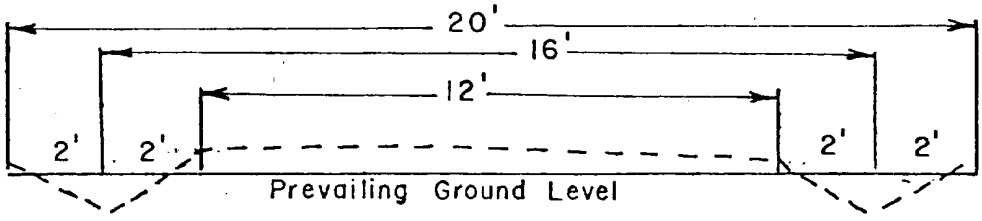
Michael P. Houston/Division Engineer


T.12 S.
T.13 S.
T.14 S.
T.15 S.
T.15 S.
T.16 S.
T.17 S.
T.18 S.
R.25 E.
R.26 E.
R.27 E.
R.28 E.
Greenfield
HAGERMAN
Lake Arthur
ARTESIA
CHAVES COUNTY
EDDY COUNTY
PROPOSED LOCATION
WELLS FEDERAL
NO. 1
MESA
PETROLEUM CO.
PERMIAN BASIN DIVISION
EXHIBIT I
Existing Road
Proposed Road
BY:
DATE:
DRAWN BY:
SCALE:


CHAVES CO
EDDY CO
CHAVES CO
EDDY CO
BM 3503
Windmill
BOGLE STATE Com #1
VANDA GRIFFIN #1
PROPOSED ACCESS ROADWAY
PROPOSED LOCATION
BOGLE STATE Com #2
THURMAN FEDERAL #1 - CONTINENTAL
PROPOSED LOCATION
WELLS FEDERAL #1
BM 3587
VABM 3766 Walker
Diamond Mound
3743
PIPELINE
MESA
PETROLEUM CO.
PERMIAN BASIN DIVISION
EXHIBIT II
Existing Road
Proposed Road
BY:
DRAWN BY:
DATE
SCALE:


VANDAGRIFF
DUFFIELD
DAUGHERTY
LOGAN DRAW
MESA
PETROLEUM CO.
PERMIAN BASIN DIVISION
EXHIBIT III
1" = 4000'
Existing Roadway
Proposed Roadway
BY:
DRAWN BY
DATE:
SCALE:

R O W 20



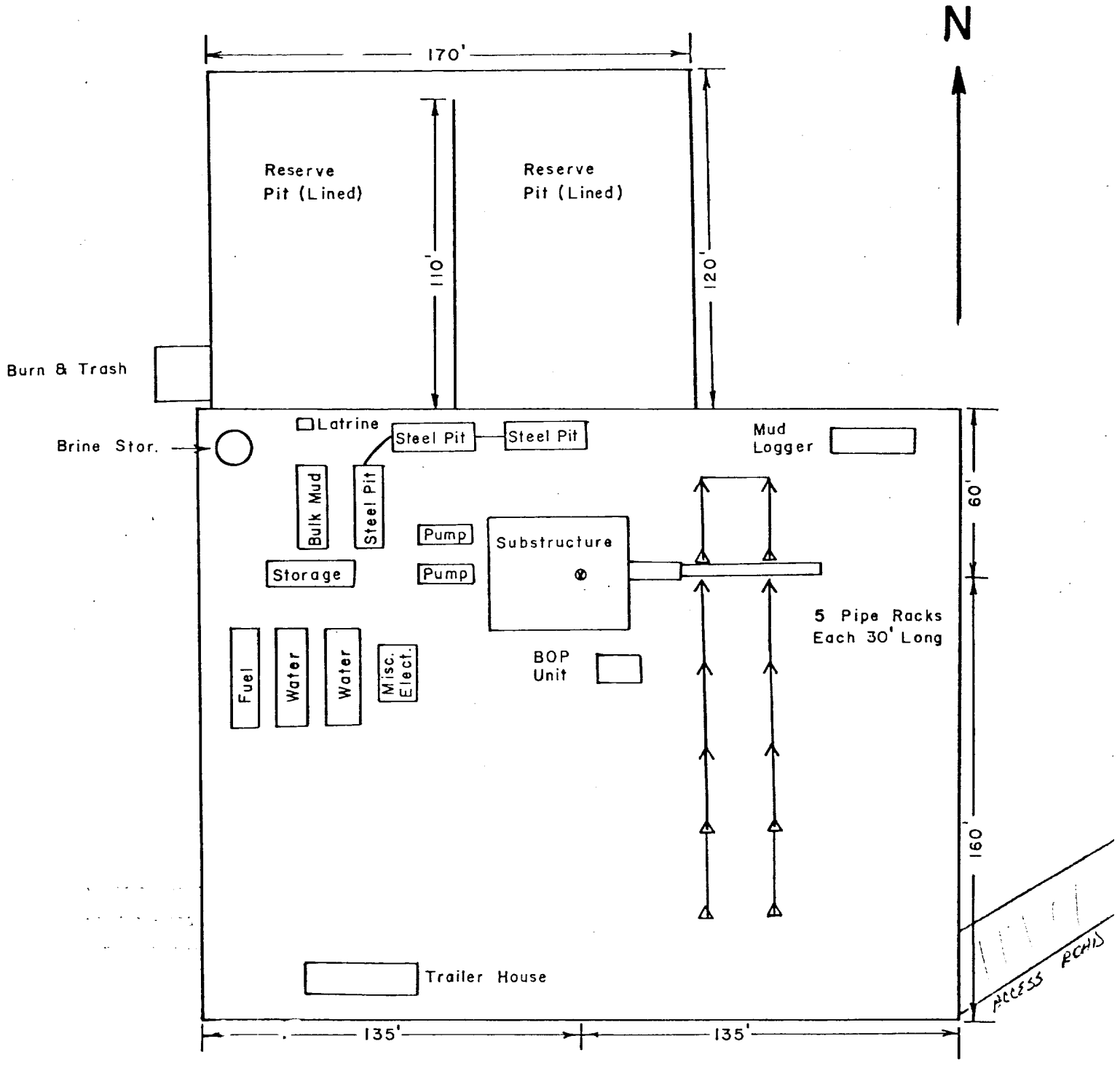
ROADWAY CROSS SECTION

Horizontal Scale 1" = 4'

MESA
PETROLEUM CO.
PERMIAN BASIN DIVISION

EXHIBIT IV

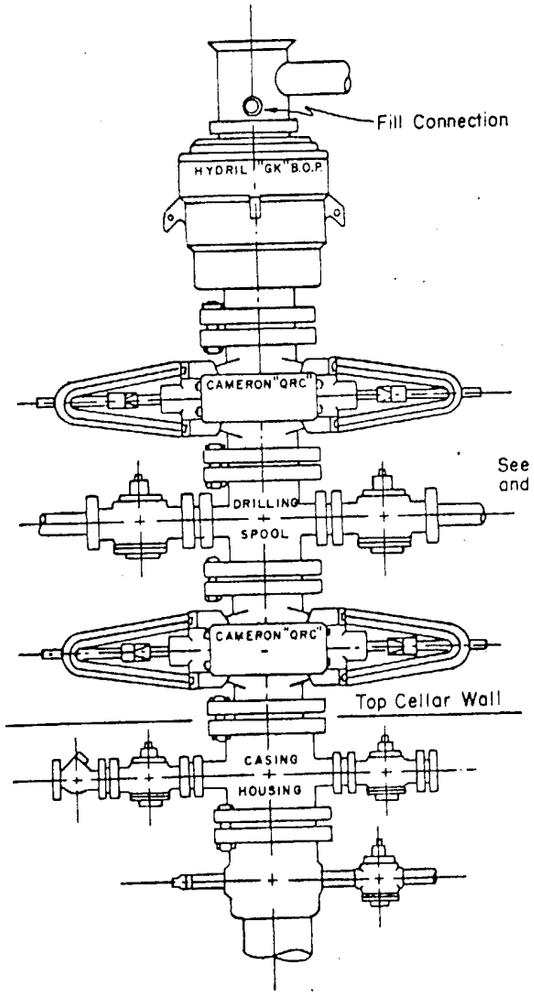
BY:
DATE
DRAWN BY:
SCALE:



MESA
PETROLEUM CO.
PERMIAN BASIN DIVISION

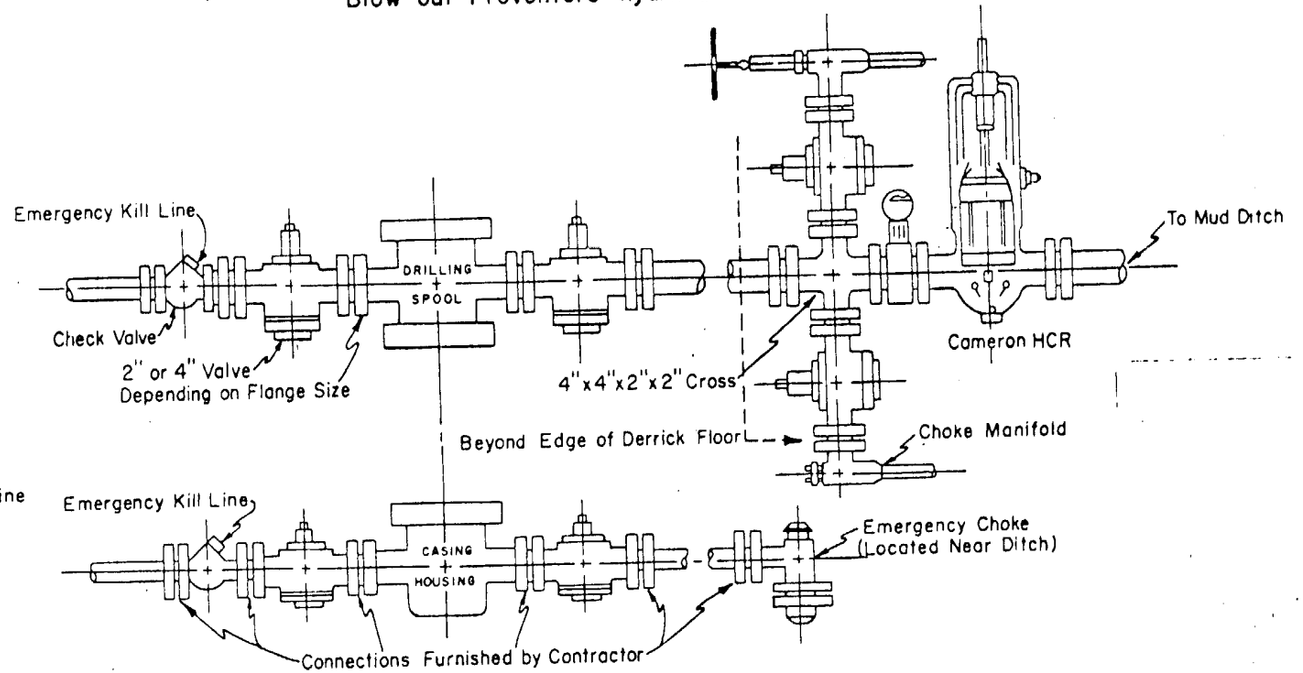
EXHIBIT V

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



See Detail of 4" Flow Line and Choke Assembly

3000 PSI WORKING PRESSURE
BLOW-OUT PREVENTER HOOK-UP



3000 PSI WORKING PRESSURE
KILL, CHOKE, AND FILL CONNECTIONS

DETAIL OF 4" FLOW LINE CHOKE ASSEMBLY

Minimum assembly for 3000 PSI working pressure will consist of three preventers.

MESA PETROLEUM CO.
PERMIAN BASIN DIVISION

EXHIBIT VI

BY:
DATE
DRAWN BY:
SCALE: