Form 9-331C
(May 1963)

OCC COPY

SUBMIT IN TRIPLICATE*
(Other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R1425.

30-015-22561

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

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

b. TYPE OF WELL: OIL WELL [ ] GAS WELL [X] OTHER ____ SINGLE ZONE [X] 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' FNL and 660' FWL
At proposed prod. zone: Same

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ARTESIA, OFFICE

5. LEASE DESIGNATION AND SERIAL NO.: NM 6018
6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
7. UNIT AGREEMENT NAME:
8. FARM OR LEASE NAME: Runyan Federal Com.
9. WELL NO.: 1
10. FIELD AND POOL, OR WILDCAT: Wildcat Abo
11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA: Section 17-T19S-R23E
12. COUNTY OR PARISH: Eddy
13. STATE: New Mexico

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*: Approximately 13.2 miles (driving distance) south of Hope, N.M.

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'	908.48	160
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**
None	4800'	Rotary (possibly cable)

21. ELEVATIONS (Show whether DF, RT, GR, etc.): 4061.5'GR
22. APPROX. DATE WORK WILL START*: May 29, 1978

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
17½"	13-3/8"	48#	200'	400 sx (sufficient to circulate)
12¼"	8-5/8"	24#	1750'	1000 sx (sufficient to circulate)
7-7/8"	4½"	10.5# - 11.6#	4800'	300 sx

Propose to drill surface hole with water and possible addition of lost circulation material. Will install bradenhead (13-3/8" x 12" API 3000 psi W.P.) on 13-3/8" casing and drill 12¼" hole to approximately 1750' using fresh water and lost circulation material. BOP system will consist of hydraulic pipe and blind rams (12" API 3000 psi). After setting 8-5/8" casing to approximately 1750' and cementing, will then install 12" API 3000 psi x 10" API 3000 psi casinghead spool and nipple up BOP's same as before. Will drill to total depth using fresh water system but lowering fluid loss at approximately 4000'. Maximum expected mud weight is 8.3 - 8.4 PPG.

Gas is not dedicated to any purchaser.

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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 Edward N. Lucking TITLE Agent for Mesa Petroleum Co. DATE 5/8/78
Edward N. Lucking

(This space for Federal or State office use)

PERMIT NO. ____ APPROVAL DATE MAY 24 1978

APPROVED BY Joe D. Lara TITLE ACTING DISTRICT ENGINEER DATE MAY 24 1978
CONDITIONS OF APPROVAL, IF ANY:

THIS APPROVAL IS RESCINDED IF OPERATIONS ARE NOT COMMENCED WITHIN 3 MONTHS.
EXPIRES AUG 24 1978

*See Instructions On Reverse Side

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	European Federal Com	1

Unit Letter	Section	Township	Range	County
E	17	19 South	23 East	Eddy

Actual Footage Location of Well: 1980 feet from the North line and 660 feet from the West line

Ground Level Elev.	Producing Formation	Pool	Dedicated Acreage:
4051.5	Abo	Wildcat	NW/4 160 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 been consolidated by communitization, unitization, forced-pooling, etc?

[X] Yes [ ] No If answer is "yes," type of consolidation Communitization pending

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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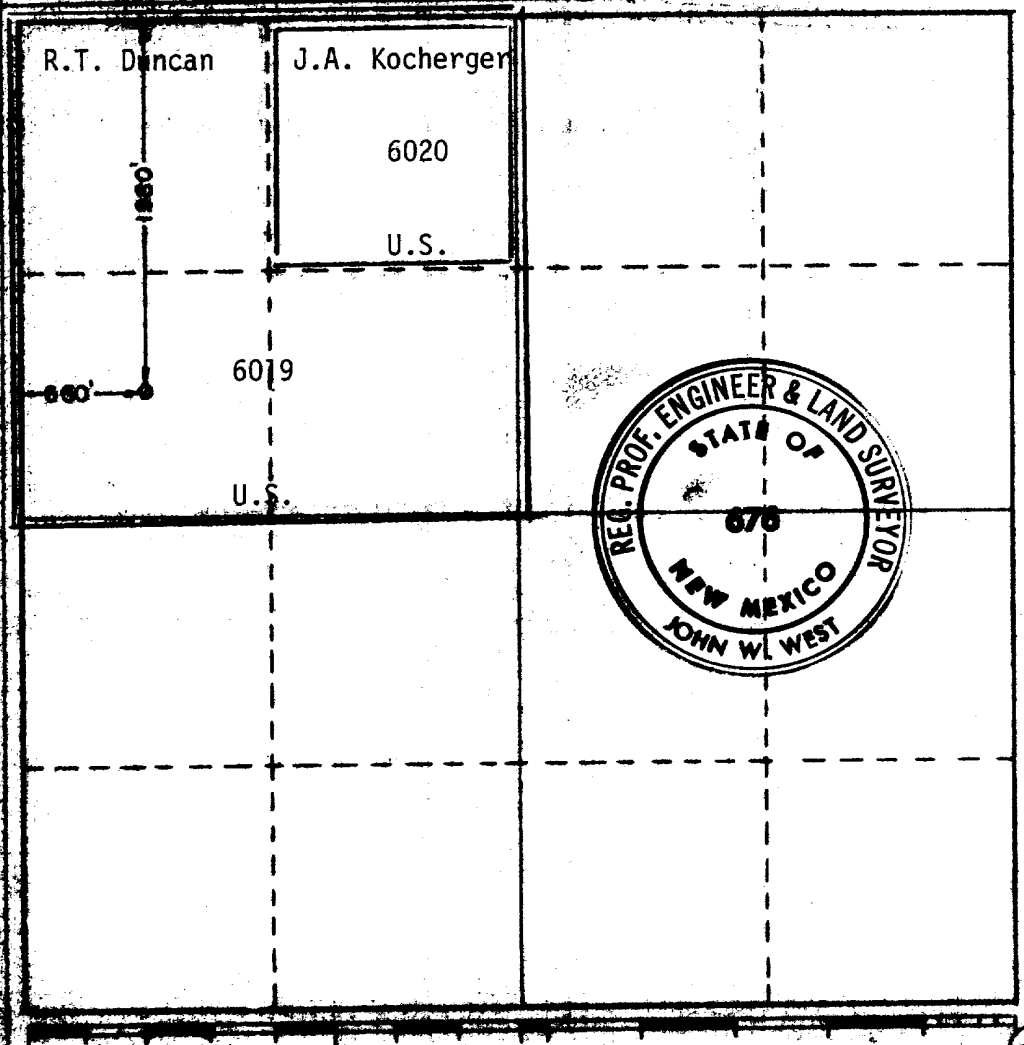


CERTIFICATION

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 1, 1978

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.

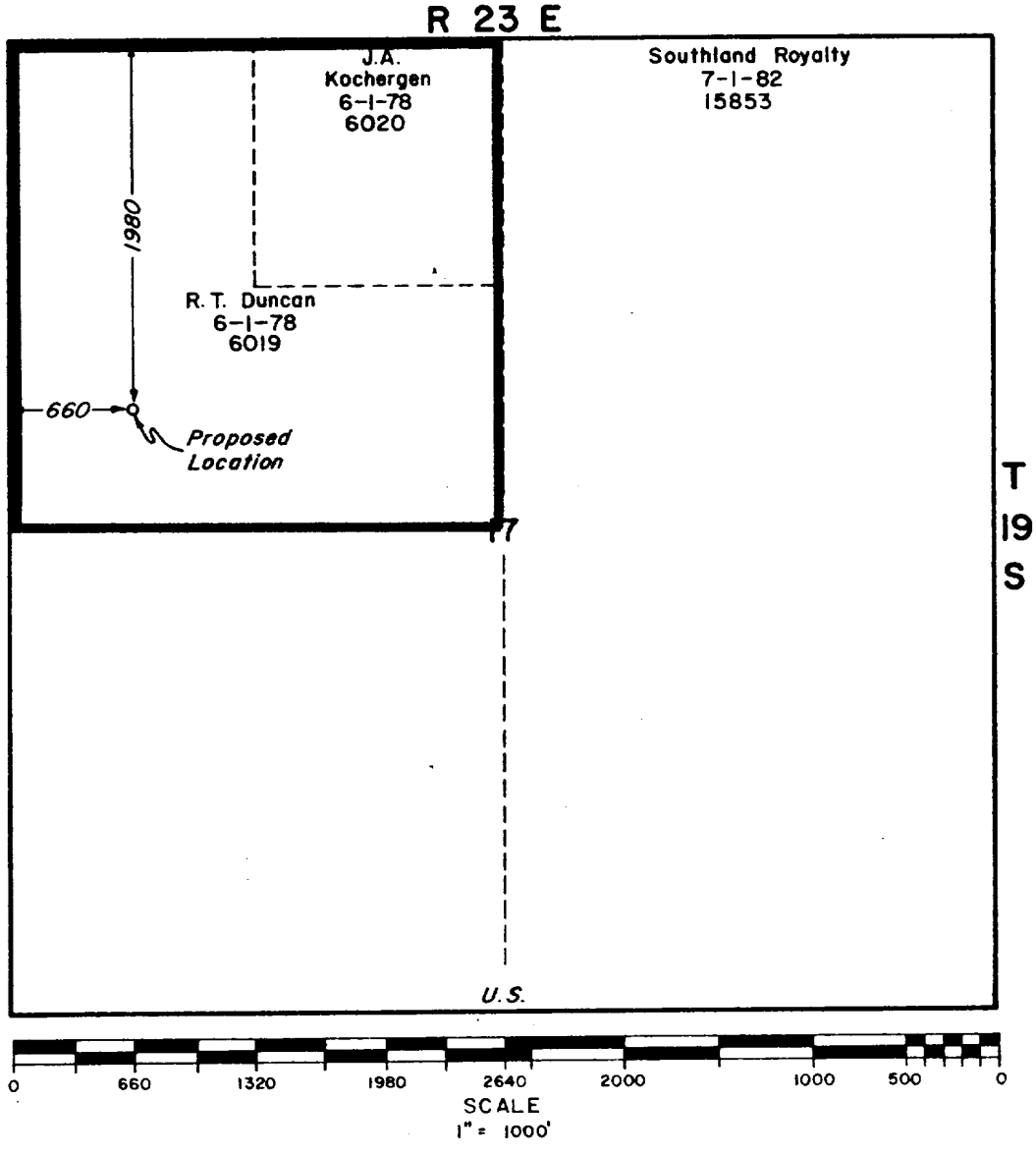
Date Surveyed: April 28, 1978

Registered Professional Engineer and/or Land Surveyor

John W. West

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

MESA PETROLEUM CO.
NO. 1 - RUNYAN FED. COM.



Eddy County, New Mexico

APPLICATION FOR DRILLING

Mesa Petroleum Co.
Runyan Federal Com. Well No. 1
Eddy County, New Mexico

In conjunction with Form 9-331C, Application for Permit to Drill subject well in Section 17, Township 19 South, Range 23 East, Eddy County, New Mexico, Mesa Petroleum Co. submits the following items of pertinent information in accordance with USGS requirements:

1. The geologic surface formation is Permian - San Andres Limestone.

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

Glorieta	1438'
Yeso	1538'
Tubb	2770'
Abo	3432'
Wolfcamp	4552'

3. The estimated depths at which anticipated water, oil or gas formations are expected to be encountered are:
   Water: Approximately 250' to 300'
   Oil or gas: Abo - approximately 3432' to 4552'
   Wolfcamp - approximately 4552' to 4800'

4. Proposed casing program: See Form 9-331C.

5. Pressure control equipment: See Form 9-331C and Exhibit E.

6. Mud program: See Form 9-331C.

7. Auxiliary equipment: Blowout preventer, Inside blowout preventer, Kelly cock.

8. Testing, logging and coring programs: None.

9. No abnormal pressures or temperatures are anticipated.

10. Anticipated starting date: May 29, 1978.
    Anticipated completion of drilling operations: July 1, 1978.
    Completion operations will immediately follow the drilling operations.

MULTI-POINT SURFACE USE AND OPERATIONS PLAN

Mesa Petroleum Co.
Runyan Federal Com. Well No. 1
1980' FNL and 660' FWL
Section 17-T19S-R23E
Eddy County, New Mexico
(Exploratory Well)

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ARTESIA, NEW MEXICO

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. Exhibit A is a portion of a map of the area surrounding the proposed wellsite, on a scale of approximately 1 inch to 3 miles, showing in red the route of existing access roads to the location from Hope, New Mexico. The location is situated at a driving distance of approximately 13.2 miles south of Hope and can be reached as follows:

(1) Proceed south on an existing blacktop road which leaves Hope at the western edge of the village. This road begins immediately west of a Shell gasoline station on the south side of U. S. Highway 82, in Hope.

(2) At a point approximately 6.5 miles south of Hope, the road forks to the left. Continue beyond this point for a total additional distance of approximately 4.6 miles. During the course of this 4.6 mile distance, the road changes from blacktop to gravel after 1.5 miles, and there are caliche pits on both sides of the road approximately 2.1 miles after the road surface becomes gravel. Approximately 1.0 mile past the caliche pits, there is a fence on the right (west), leaving the road at approximately a right angle, and there is a ranch trail road along the north side of the fence line. Turn right onto this ranch trail road.

(3) Continue on the ranch road in a generally westbound direction for approximately 1.5 miles, at which point a new access road will be constructed northward toward the location. This point is marked by red ribbons on the fence, and the stakes and flags indicating the route of the proposed new road are clearly visible.

B. The 1.5 mile ranch road mentioned above is little more than a primitive trail, and it will be necessary to install a compacted caliche surface for virtually the entire length of the road. At one point, the road crosses a small draw and a low water crossing, approximately 40' across, will be constructed at this point.

C. It is planned to construct three turnouts, approximately 10' in width and 100' in length, along the route of the existing ranch road. No culverts or cattleguards will be necessary.

D. The driving surface of the existing ranch road will be widened to a width of 12 feet. The center of the road will be crowned, with drainage on both sides.

2. PLANNED ACCESS ROAD.

A. The newly constructed road is indicated in blue in Exhibit B. This road will originate from the existing ranch road at the point referred to, in paragraph 1.A.(3) above. It will be constructed in a south-to-north direction for approximately 2100 feet, then in a west-to-east direction for approximately 600 feet, at which point it will meet the southwest edge of the drilling pad as indicated in Exhibit D.

B. The route of the new road crosses a shallow draw, approximately a quarter of a mile in width. Two low water crossings will be constructed in this distance, one about 60' across and the other, about 30' across.

C. The new road will have a driving width of 12 feet and the surface will be topped with compacted caliche. The center of the road will be crowned, with drainage on both sides. It is not planned to construct any turnouts, and no culverts of cattleguards will be necessary.

D. The entrance to the new road, at the point of departure from the existing ranch trail road, will be widened in a "half Y" to provide enough width for trucks and heavy equipment to enter the new road. Similarly, the point at which the new road makes a right angle turn from north to east will also be widened by construction of a "half Y."

E. The starting point of the new road is marked by red ribbons on the adjacent fence, and the route of the new road is flagged and clearly visible.

3. LOCATION OF EXISTING WELLS.

A. There is no production within two miles of the proposed location. There have been several dry holes drilled in this area, as shown in Exhibit C.

4. LOCATION OF EXISTING AND/OR PROPOSED FACILITIES.

A. There are no production facilities on this lease or elsewhere on the dedicated acreage, at the present time.

B. In the event that the well is productive, the necessary production facilities will be installed on the drilling pad. If the well is productive of oil, a gas or diesel self-contained unit will be used to provide the necessary power. No power will be required if the well is productive of gas.

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 roads shown in Exhibits A and B.

6. SOURCE OF CONSTRUCTION MATERIALS.

A. Surface material removed in leveling the drilling pad will be used to fill low areas at the pad location. No surface materials will be disturbed except those necessary for the actual grading and leveling of the drillsite and the access road.

B. Caliche required for road and drilling pad surfaces will be obtained from a privately owned pit on fee surface in Section 9-T19S-R23E, and will be transported to the construction site over the existing and proposed roads shown in Exhibits A and B.

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 a separate disposal application will be submitted to the USGS 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 finishing drilling and/or completion operations.

8. ANCILLARY FACILITIES

A. None required.

9. WELLSITE LAYOUT.

A. Exhibit D shows the relative location and dimensions of the well pad and the reserve pits.

B. The ground surface at the wellsite slopes gently upward, from south to north. It is estimated that cuts of approximately 3' (NW corner of the pad) and 2' (NE corner of the pad) will be required, and that fill of approximately 2' (SW corner of the pad) and 3' (SE corner of the pad) will be required. The reserve pit area will require a cut of approximately 4' adjacent to the drilling pad and a cut of approximately 6' at the northern edge of the reserve pit. The drilling 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 finishing drilling and/or completion operations, all equipment and other material 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 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.

11. OTHER INFORMATION.

A. The proposed wellsite is located in an area of gentle, low undulations, interspersed over a generally flat area.

B. The topsoil at the wellsite is relatively soft sand, with frequent areas containing small stones or gravel on the surface.

C. Flora and Fauna: The vegetation cover at the location is moderately sparse, consisting of greasewood, miscellaneous weeds and grass, a few cactus and yucca plants, and various prairie flowers. The only wildlife observed was one jackrabbit, but there were evidences of deer in the area and it is likely that other typical semi-arid desert wildlife inhabit the area surrounding the location. 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 is about two miles northwest of the location and the nearest windmill is about 1½ miles northeast of the location.

F. The wellsite is on federally owned surface. A substantial portion of the access route is on privately owned surface. An agreement has been reached between Mesa Petroleum Co. and the surface owner concerning Mesa's use of this private surface to obtain access to the drillsite.

G. There is no evidence of any archeological, historical or cultural sites in the area of the wellsite.

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
1000 Vaughn Building
Midland, Texas 79701
(915) 683-5391 (office)
(915) 694-3442 (residence)

13. CERTIFICATION.

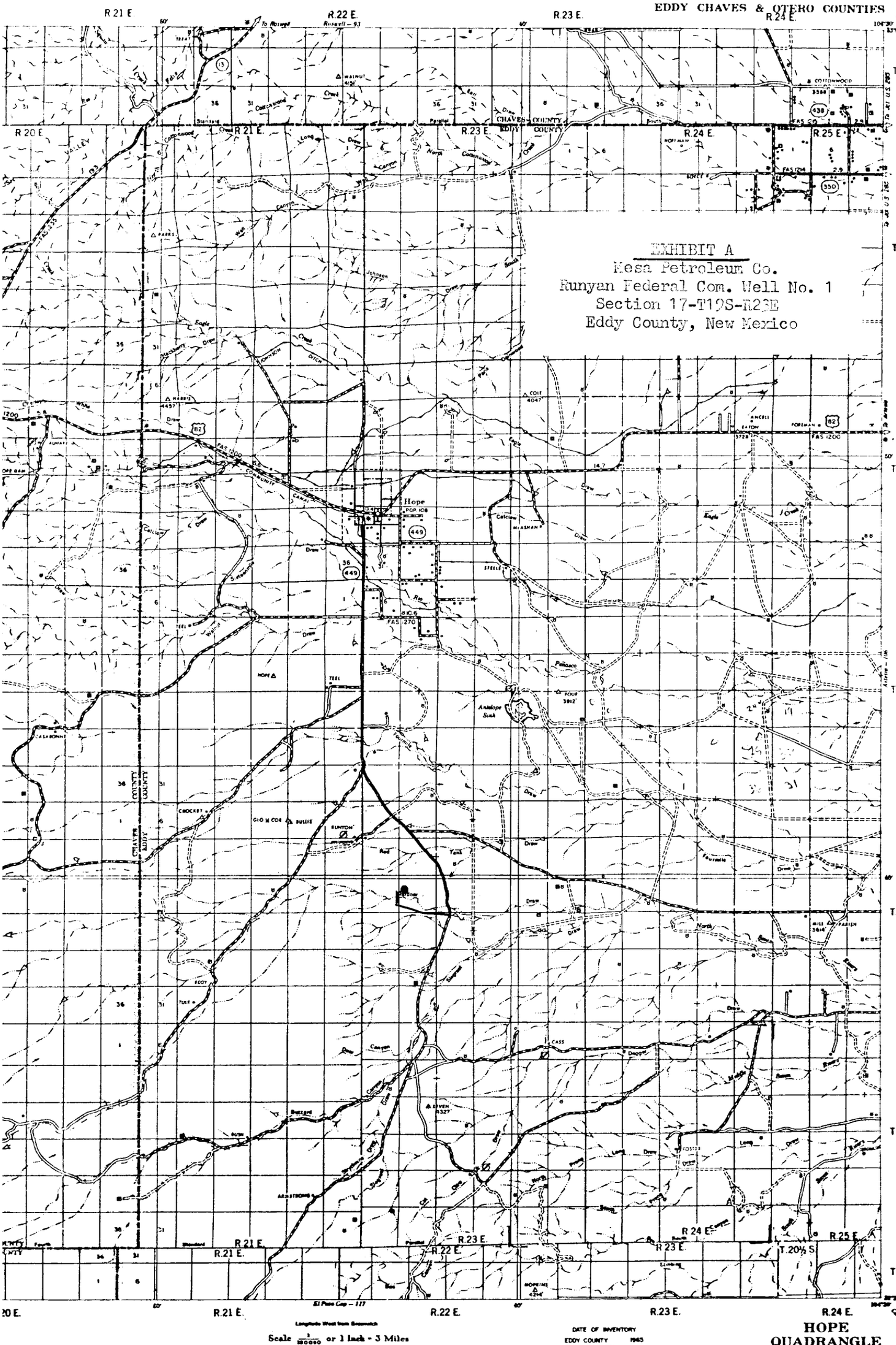
I hereby certify that I, or persons under my direct supervision, have inspected the proposed drillsite and access route; that I am familiar with the conditions which presently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and that the work associated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

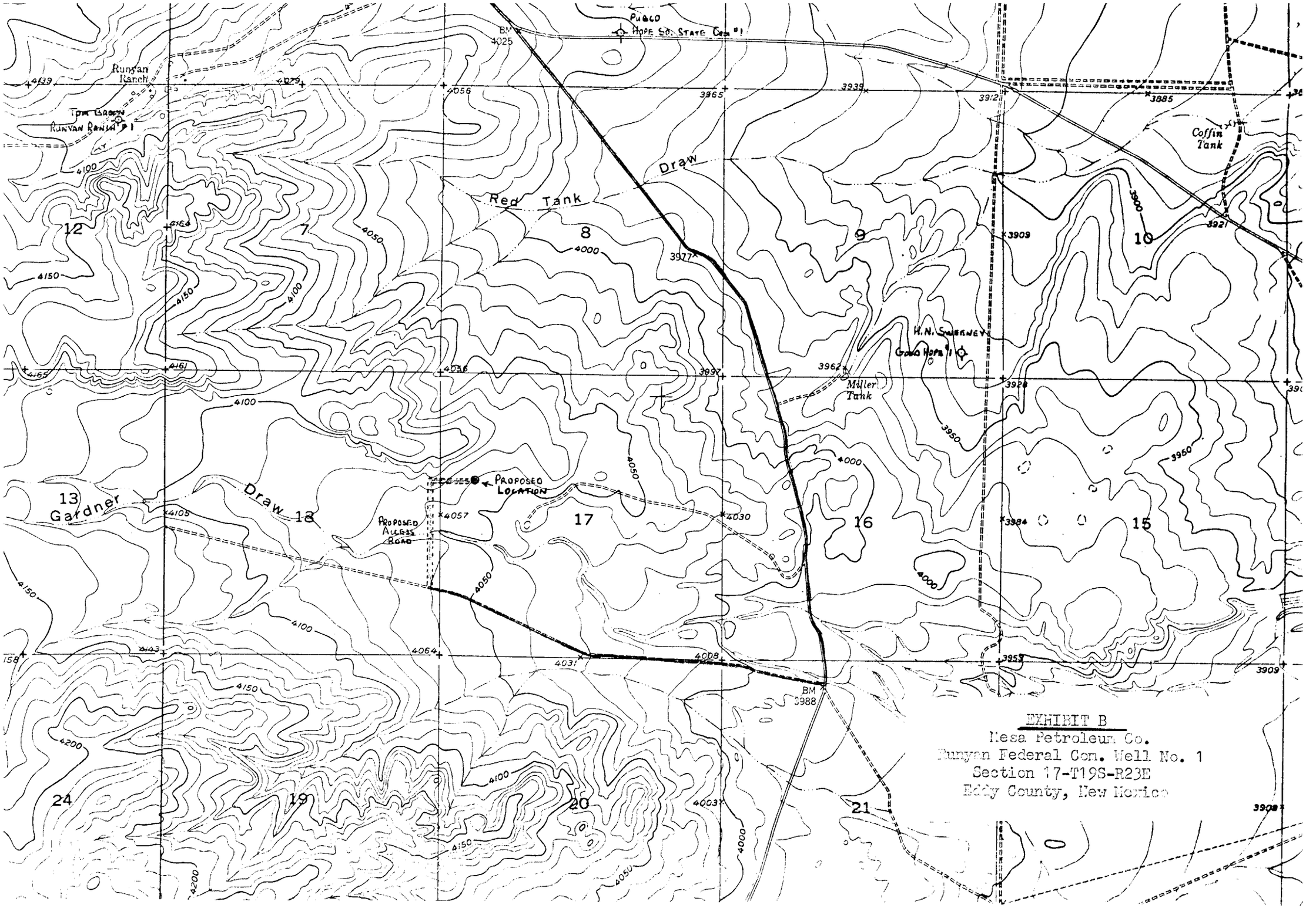
May 8, 1978

Edward N. Lucking
Agent for Mesa Petroleum Co.

EPARTMENT -
IVISION

HOPE QUADRANGLE-105
EDDY CHAVES & OTERO COUNTIES




Pubco
Hope St. State Com #1
BM 4025
Runyan Ranch
Tom Green
Runyan Ranch #1
Red Tank Draw
Coffin Tank
H.N. Swerney
Good Hope #1
Miller Tank
Proposed Location
Proposed Access Road
Gardner Draw
BM 3988
12
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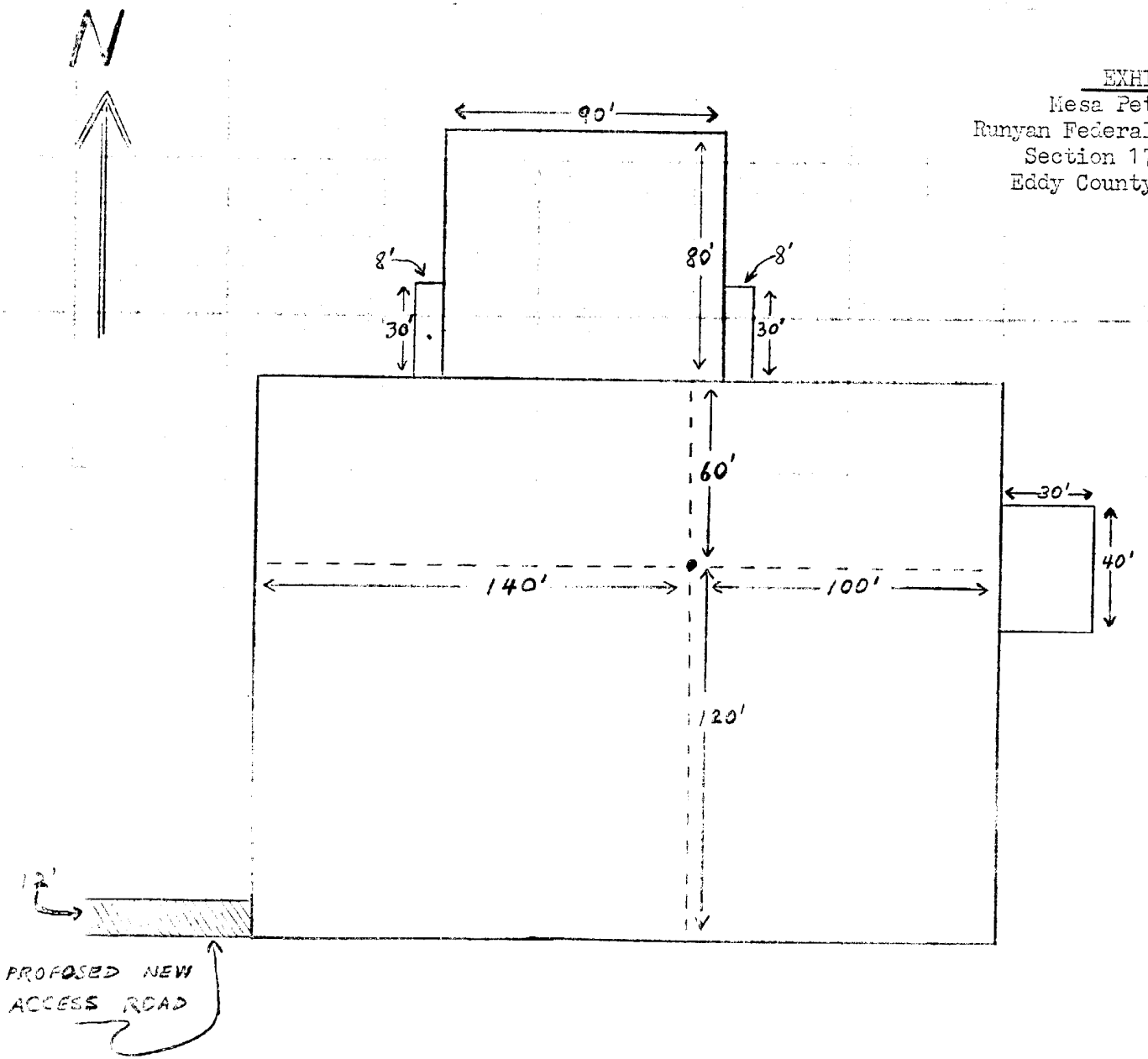
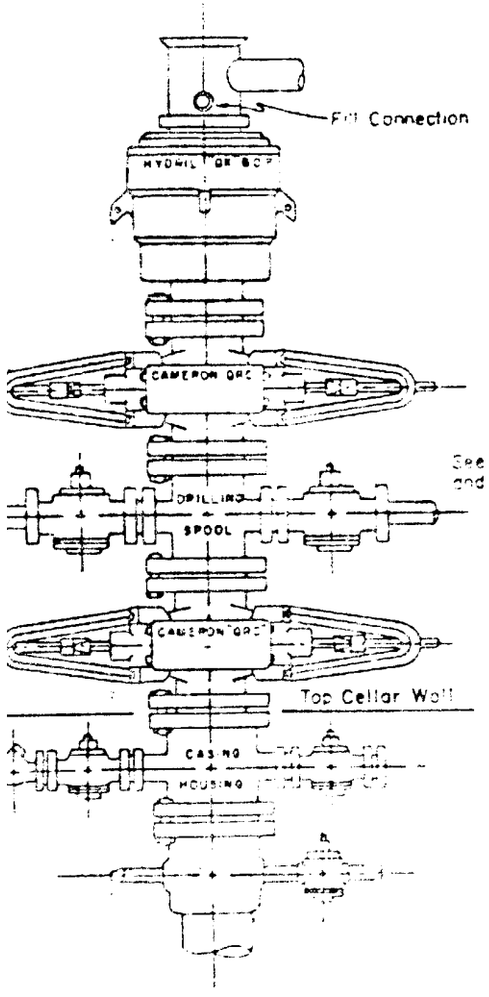
21
EXHIBIT B
Mesa Petroleum Co.
Runyan Federal Com. Well No. 1
Section 17-T19S-R23E
Eddy County, New Mexico

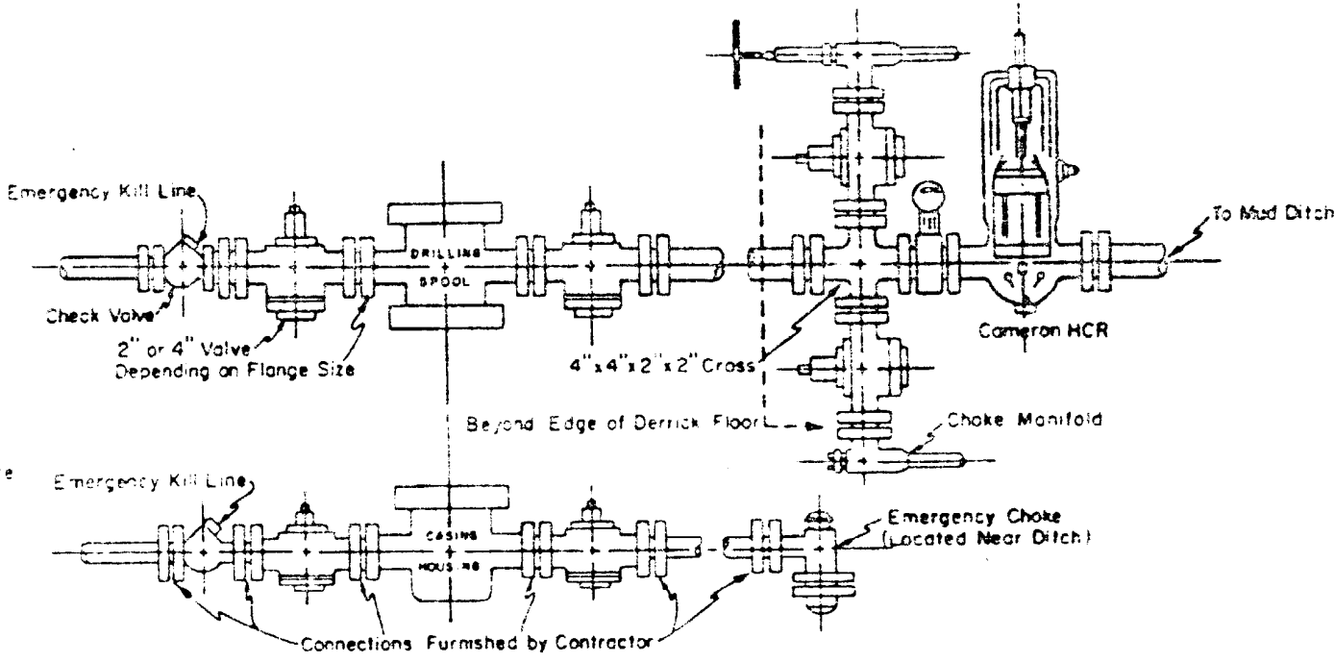
EXHIBIT D
Mesa Petroleum Co.
Runyan Federal Com. Well No. 1
Section 17-T19S-R23E
Eddy County, New Mexico



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



000 PSI WORKING PRESSURE
.OW-OUT PREVENTER HOOK-UP



3000 PSI WORKING PRESSURE
KILL, CHOKE, AND FILL CONNECTIONS

DETAIL OF 4" FLOW LINE CHOKE ASSEMBLY

Choke assembly for 3000 PSI working pressure will consist of three preventers

MESA PETROLEUM CO.
PERMIAN BASIN DIVISION

EXHIBIT E
Mesa Petroleum Co.
Runyan Federal Com. Well No. 1
Section 17-T19S-R23E
Eddy County, New Mexico