

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

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

Meridian Oil Inc.

3. ADDRESS OF OPERATOR

21 Desta Drive, Midland, Texas 79705

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

At surface 1650' FNL & 330' FWL, Sec. 13, T18S, R32E

At proposed prod. zone

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

11 miles South Southeast of Maljamar, NM

15. DISTANCE FROM PROPOSED*

LOCATION TO NEAREST
PROPERTY OR LEASE LINE, FT.
(Also to nearest drlg. unit line, if any)

330'

16. NO. OF ACRES IN LEASE

80

17. NO. OF ACRES ASSIGNED
TO THIS WELL

40

18. DISTANCE FROM PROPOSED LOCATION*
TO NEAREST WELL, DRILLING, COMPLETED,
OR APPLIED FOR, ON THIS LEASE, FT.

+2250'

19. PROPOSED DEPTH

8700'

20. ROTARY OR CABLE TOOLS

Rotary

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

3838' GR

22. APPROX. DATE WORK WILL START*

1-01-90

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	350'	370 sx. circulate
12 1/4"	8 5/8"	24	2900'	700 sx. circulate
7 7/8"	5 1/2"	17	8700'	850 sx.

L.H.S./AMS
MUD PROGRAM: 0' - 350' FWL
350' - 2900' BRINE
2900' - 8000' SALT BASE MUD
8000' - T.D. (Cut Brine/Driscap System)

BOP PROGRAM: 10" - 3M BOP stack to be installed on 8 5/8" and left on for remainder of drilling. Stack to consist of blind ram BOP and one pipe ram BOP. Test BOP's after setting 8 5/8" csg. with independent tester.

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

[Signature]

TITLE Sr. Staff Env./Reg. Spec.

DATE 11/22/89

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

AREA MANAGER

APPROVED BY *[Signature]*

TITLE

CARLSBAD RESOURCES

DATE 12-2-89

CONDITIONS OF APPROVAL, IF ANY:

*See Instructions On Reverse Side

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Submit to Appropriate
District Office
State Lease - 4 copies
Fee Lease - 3 copies

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-102
Revised 1-1-89

OIL CONSERVATION DIVISION

P.O. Box 2088
Santa Fe, New Mexico 87504-2088

DISTRICT I
P.O. Box 1980, Hobbs, NM 88240

DISTRICT II
P.O. Drawer DD, Artesia, NM 88210

DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410

WELL LOCATION AND ACREAGE DEDICATION PLAT

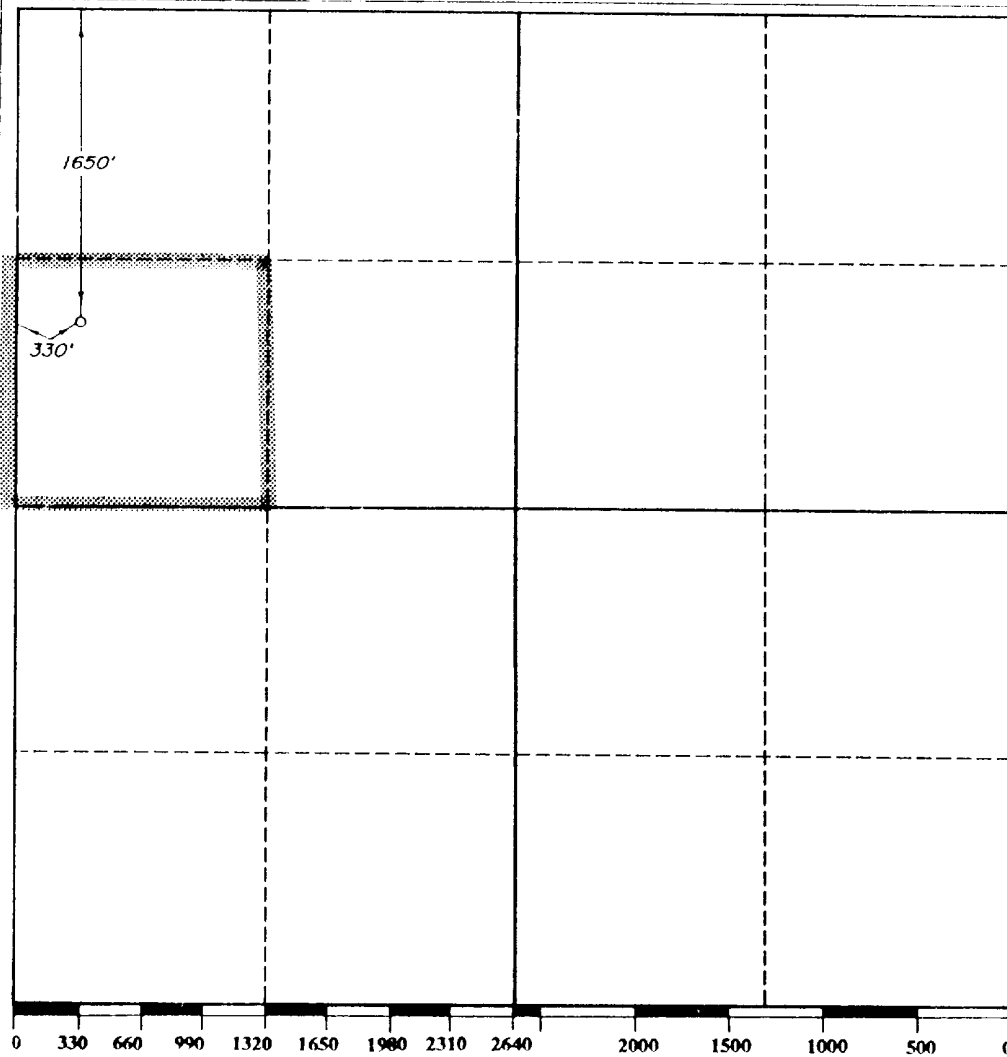
All Distances must be from the outer boundaries of the section

Operator MERIDIAN OIL, INC.			Lease SHINNERY FEDERAL		Well No. 3
Unit Letter E	Section 13	Township 18-SOUTH	Range 32-EAST	County LEA	

Actual Footage Location of Well:

1650 feet from the NORTH line and		330 feet from the WEST line	
Ground level Elev. 3838'	Producing Formation Querecho Pl. (Bone Spring)	Pool Querecho Pl. (Bone Spring)	Dedicated Acreage: 40 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 interest 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 interest, has been approved by the Division.



OPERATOR CERTIFICATION

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

Signature *Robert L. Bradshaw*

Printed Name **Robert L. Bradshaw**

Position **Sr. Staff Env./Reg. Spec.**

Company **Meridian Oil Inc.**

Date **November 22, 1989**

SURVEYOR CERTIFICATION

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 **NOVEMBER 16, 1989**

Signature & Seal of Professional Surveyor

V. L. B. Z. n. e. n.
Certificate No. **7920**

MERIDIAN OIL INC.

Shinnery Federal No. 3
1650' FNL & 330' FWL
Sec. 13, T-18-S, R-32-E
Lea County, New Mexico
NM-5516

To supplement USGC Form 3160-3 Application to Drill the following additional information is submitted concerning questions on Page 5 of NTL-6:

1. See Form 3160-3
2. See Form 3160-3
3. The geological name of surface formation is: Ochoa
4. See Form 3160-3
5. See Form 3160-3
6. The estimated tops of important geological markers are:

Yates	2,840'	Bone Spring LS	6,800'
Queen	3,980'	1st Bone Spring Sand	8,310'
San Andres	4,610'	2nd Bone Spring Carb.	8,600'
Delaware	6,000'		
7. The estimated depths at which anticipated water, oil, gas, and mineral bearing strata are as follows:

Delaware	6,000' - Oil	Bone Spring	6,800' - Oil
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8. See Form 3160-3. All casing will be new.
9. See Form 3160-3 for depths of strings. Cement volumes and additions as follows:
 - a. 13 5/8" csg: Cement w/370 sx Cl. "C" + 2% CaCl₂. Circulate.
 - b. 8 5/8" csg: Cement w/450 sx Lite and tail-in w/ 250 sx Cl. "C" w/2% CaCl₂. Circulate.
 - c. 5 1/2" csg: Cement w/ lead: 600 sx Lite "C"; tail in w/ 250 sx Cl. "H" + FLA.
10. The pressure control diagram is attached to Form 3160-3. The following additional information is as follows:

8 5/8" casing installation: 10" - 3M BOP stack to be installed and tested by an independent tester to 3,000 psi before drilling the 8 5/8" casing shoe. The BOP stack to consist of a blind ram BOP, and one pipe ram BOP.
11. See Form 3160-3
12.
 - A. DST Program: None
 - B. Core: None
 - C. Mud Logging: Two (2) man unit from intermediate casing seat to TD.
 - D. Wire Line Logs:

The following suite of logs will be run in both of the listed intervals:

GR/CNL/LDT	TD-2900' (GR/CNL to surf)
GR-DLL-MSFL	TD-2900'
13. No abnormal pressures are anticipated. Bottom hole pressures at TD expected to be 3100 psi. Bottom hole temperature 135° F. No Hydrogen Sulfide expected in this known drilling area. No crooked hole or abnormal deviation problems.
14. Anticipated starting date to spud - on or before 1-01-90. Anticipated drilling time expected to be 20 days from surface to TD.

SURFACE USE PLAN

MERIDIAN OIL INC.

Shinnery Federal No. 3
1650' FNL & 330' FWL
Sec. 13, T-18-S, R-32-E
Lea County, New Mexico
NM-5516

This plan is submitted with Application to Drill on above described well. The minerals are federal and the surface is leased for grazing (See below for surface lessee). The purpose of this plan is to describe the location, proposed construction activities and operations plans, magnitude of necessary surface disturbance and procedures to be followed in rehabilitating the surface after completion of the operation so that complete appraisal can be made of the environmental effects associated with the operations.

1. Existing Roads:

Exhibit "A" is a portion of a USGS Topographic map showing the location of the proposed well as staked.

Directions to the well are as follows: From the junction of US 529 and Hwy. 33, 4.6 miles south of Maljamar, go SSW 1.7 miles on Co. Rd. 126, thence SE 3.0 miles, thence east 1.5 miles, thence north 0.5 mile, thence east 0.3 mile, thence north 0.4 mile to a point $\pm 2000'$ east of the SW^C of Section 13.

2. Planned Access Road:

- a. The temporary access road will be $\pm 1500'$ long and 12' wide and will extend from an existing lease road northwest to the proposed site. The center line has been staked and flagged.
- b. Surfacing material: 6" of caliche, watered, compacted and graded.

3. Location of Existing Wells in Area:

See Exhibit "B"

4. Location of Proposed Facilities:

Location of proposed well site and tank battery is shown on Exhibit "C". The battery will be located on proposed well pad, no additional surface disturbance will be necessary.

5. Water Supply:

No available surface or sub-surface fresh water exists in the vicinity of the proposed well. Drilling water will be transported or pumped to the drill site from the nearest commercial source.

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6. Source of Construction Material:

Caliche for surfacing access road and pad will be obtained from existing pit located in the SW SE Sec. 15, T-18-S, R-32-E. There has been an Archaeological Report filed on this pit.

7. Handling Waste Disposal:

- a. Drill cuttings - disposed into drilling pits.
- b. Drill fluids - allowed to evaporate in drill pits until pits dry.
- c. Produced water during testing - drill pits.
- d. Produced oil during testing - storage tank until sold.
- e. Current laws and regulations pertaining to disposal of human waste will be observed.
- f. Reserve pit will be plastic lined.
- g. Waste paper, garbage, and junk will be disposed of into a special trash bin on location and disposed of at an approved landfill site. All waste material will be contained to prevent scattering by wind.
- h. All trash and debris will be removed from well site within 30 days after drilling and/or completion operations are finished.

8. Ancillary Facilities:

None

9. Plans for Restoration of Surface:

- a. After completion of drilling and/or completion of operations, all equipment and other material not needed for operations will be removed. Pits will be filled and locations cleaned of trash and junk to leave well in as aesthetically pleasing a condition as possible.
- b. Any unguarded pits containing fluids will be fenced until filled.
- c. After abandonment of well, surface restoration will be in accordance with the Bureau of Land Management Surface Requirements.

10. Topography and Soil:

New Mexico Archaeological Services, Inc. Report by Dr. J. Loring Haskell will be submitted when available. The field work has been completed.

11. Land Use:

Grazing and hunting - Federal

Surface Lessee - Caviness Cattle Company
c/o Mr. Gary Caviness
East Star Route
Maljamar, New Mexico 88264

12. Surface Ownership:

Bureau of Land Management (Federal)

13. Operators Representatives:

Field representatives (Responsible for compliance with approved surface use and operations plan):

Meridian Oil Inc.
P. O. Box 837
Hobbs, New Mexico 88240
Office: 505-393-5844


Mr. Johnny Ellis, Drilling Foreman, or a consultant
Hobbs, New Mexico
Home: 505-393-8150

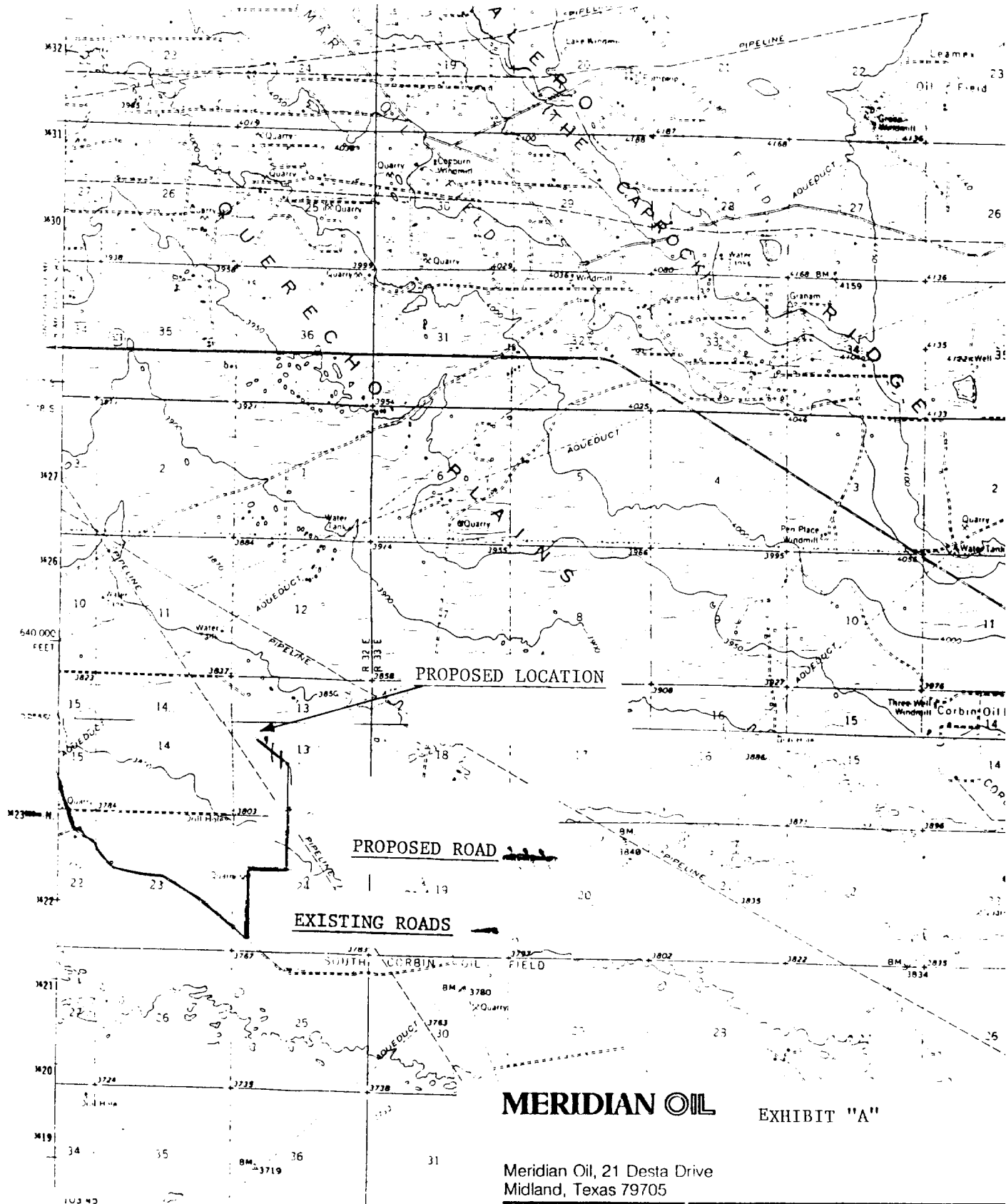
Mr. Bill Dawson, Drilling Superintendent
Midland, Texas Office: 915-686-5600
Home: 915-682-9037

14. Certification:

I hereby certify that I, or persons under my supervision, have inspected the proposed drill site and access route; that I am familiar with conditions which presently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and the work associated with the operations proposed herein will be performed by Meridian Oil Inc. and its contractors and sub-contractors in uniformity with this plan and the terms and conditions under which it is approved.

Date: 11-22-89


L. H. Sinclair
Senior Drilling Engineer
Meridian Oil Inc.



MERIDIAN OIL EXHIBIT "A"

Meridian Oil, 21 Desta Drive
Midland, Texas 79705

MERIDIAN OIL INC.
SHINNERY FEDERAL NO. 3
1650' FNL & 330' FWL
Sec. 13, T-18-S, R-32-E
Lea County, New Mexico
NM- 5516

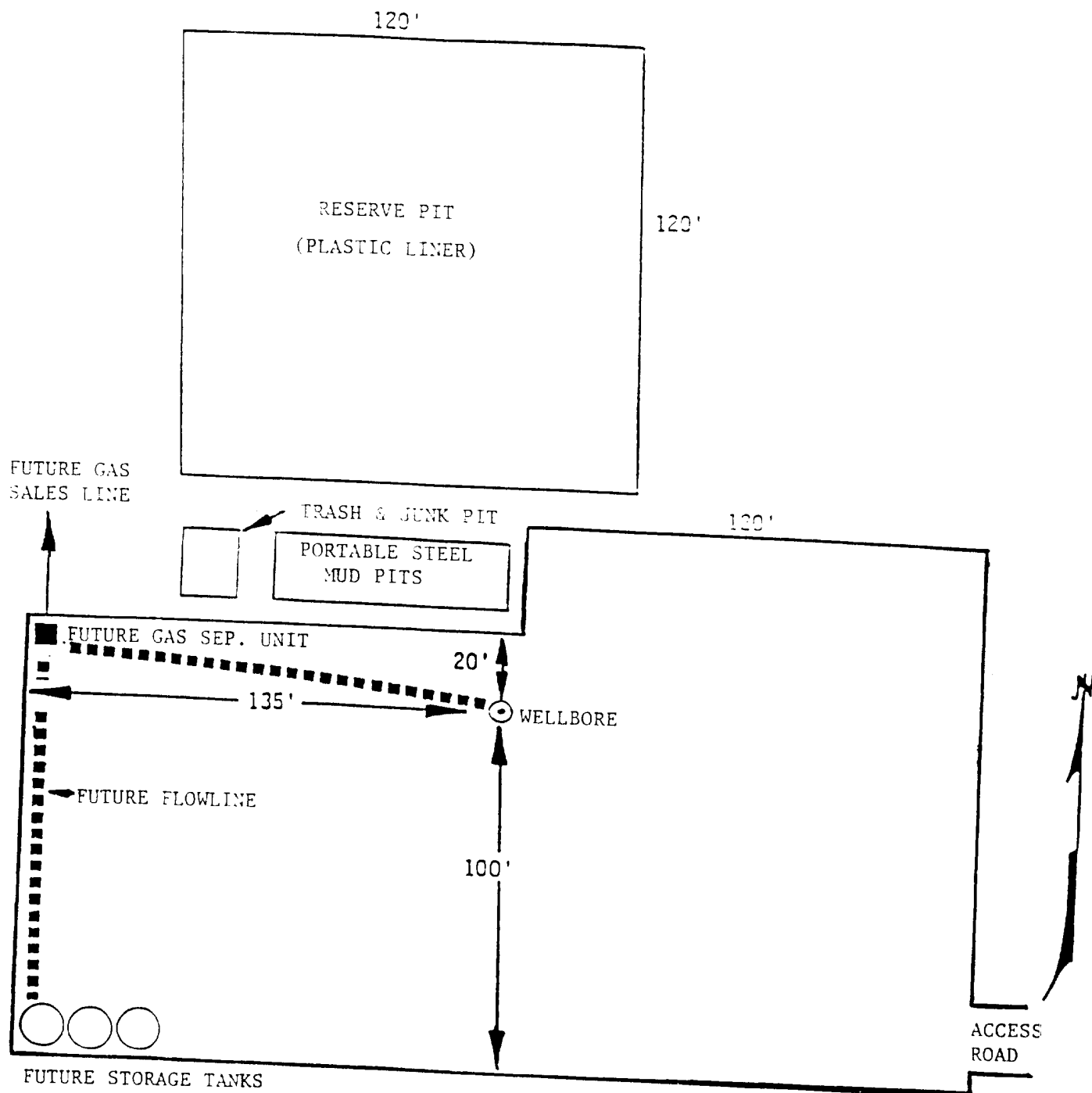
Mapped, edited, and published by the Geological Survey
Control by USGS and USC&GS
Planimetry by photogrammetric methods from aerial photographs
taken 1957 Topography by planetable surveys 1962
Polyconic projection 1927 North American datum
10 000 foot grid based on New Mexico coordinate system east zone
1000 meter Universal Transverse Mercator grid ticks
zone 13 shown in blue
Fine red dashed lines indicate selected fence lines

CLAYTON BASIN
5249111

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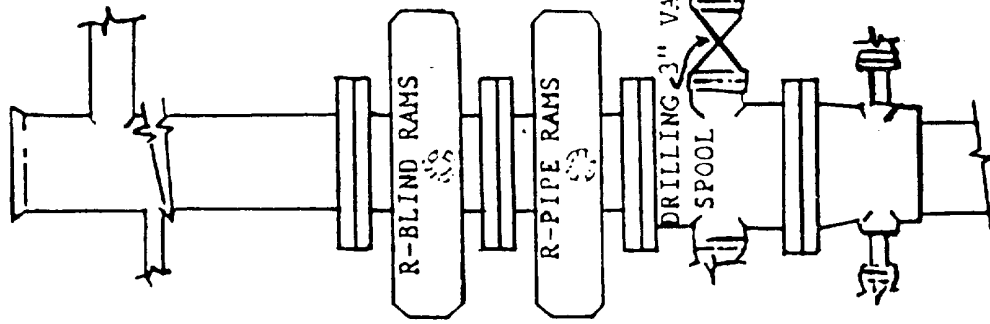


MERIDIAN OIL

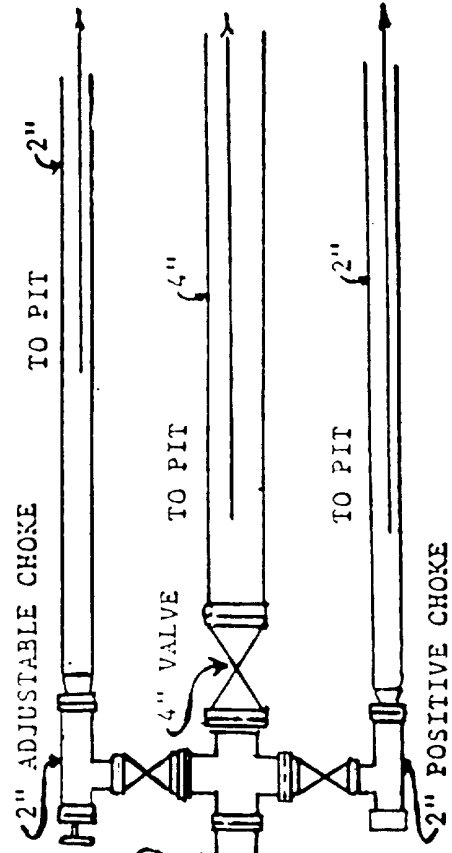
Meridian Oil, 21 Desta Drive
Midland, Texas 79705

EXHIBIT "A"

MERIDIAN OIL INC.
Shinnery Federal # 3
Sec. 13 T18S R32E
NM-5516



BLOW OUT PREVENTION EQUIPMENT
 10" 900s ALL FLANGED CONNECTIONS
 3,000# WORKING PRESSURE - 6,000# TEST



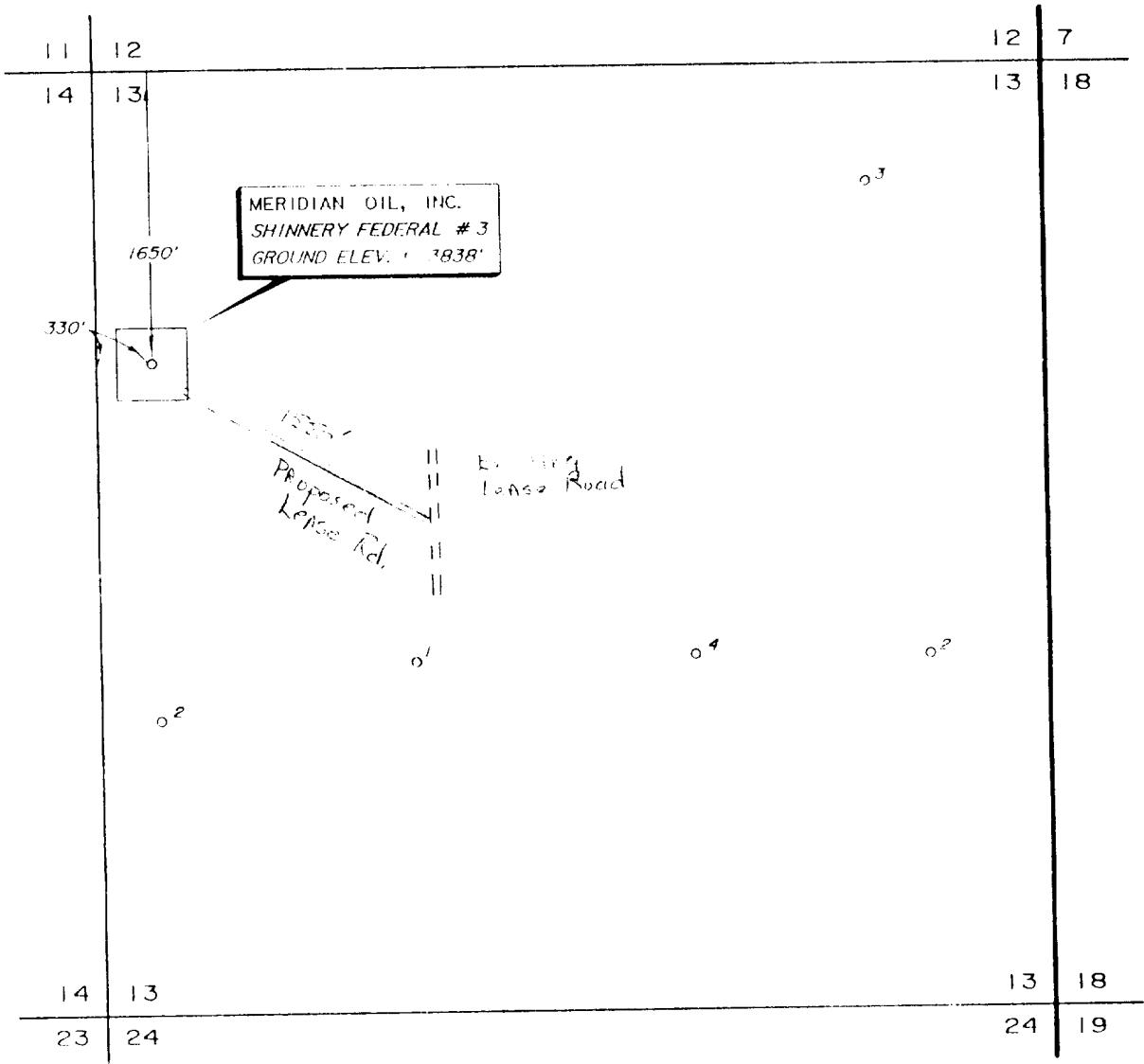
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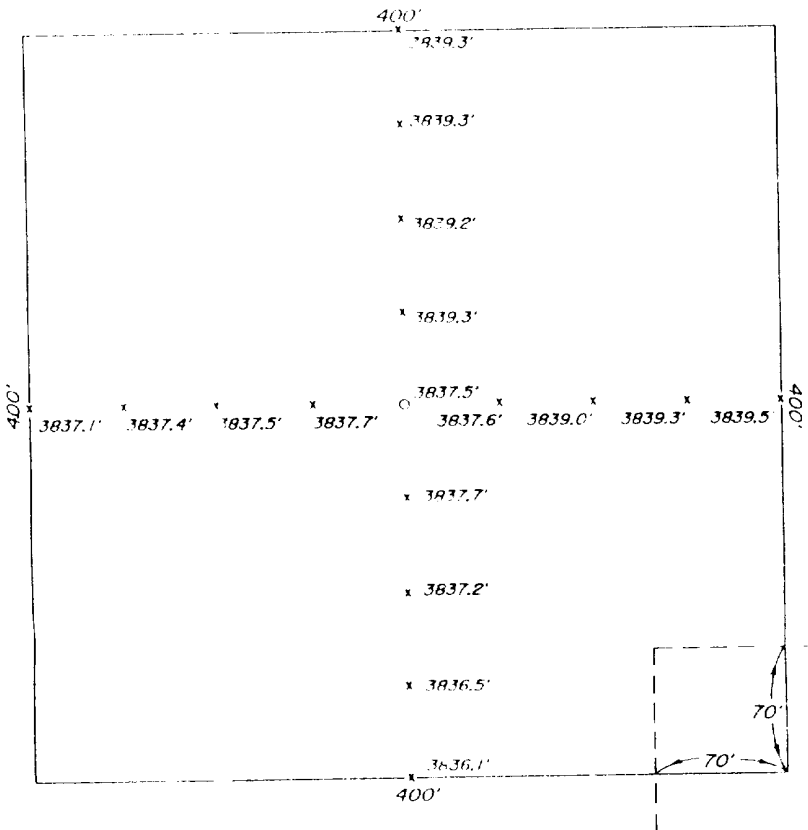
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PLAT SHOWING a PROPOSED
WELL LOCATION and LEASE ROAD in
SECTION 13, T-18-S, R-32-E,
LEA COUNTY, NEW MEXICO

FROM THE JCT. OF HWY 529 & HWY 33, 4.6 MILES SOUTH OF
MALJAMAR, GO SOUTH, SOUTHWEST 1.7 MILES ON
COUNTY ROAD 126, THENCE SOUTHEAST 3.0 MILES,
THENCE EAST 1.5 MILES, THENCE NORTH 0.5 MILE,
THENCE EAST 0.3 MILE, THENCE NORTH 0.4 MILE
TO A POINT ± 2000' EAST OF THE SW^c OF SECTION 13



PLAN VIEW
1" = 1000'



PROPOSED PAD AREA
SHINNERY FED. # 4

DETAIL VIEW
1" = 100'

NO.				MERIDIAN OIL, INC.				SCALE • AS SHOWN	
REVISION				MIDLAND, TEXAS				DATE • NOVEMBER 16, 1989	
DATE				SURVEYING AND MAPPING BY				JOB NO. • 74171	
BY				TOPOGRAPHIC LAND SURVEYORS				DRAWING NUMBER •	
SURVEYED BY • M.C.				MIDLAND, TEXAS				72 NW	
DRAWN BY • P.D.								SHEET	
APPROVED BY • D.K.									