



United States Department of the Interior

BUREAU OF LAND MANAGEMENT
ROSWELL DISTRICT OFFICE
P.O. BOX 1397
ROSWELL, NEW MEXICO 88201



RECEIVED

NM-61582-PD
3162.4 (065)

MAR 15 '89

O. C. D.
ARTESIA, OFFICE

Meridian Oil, Inc.
21 Desta Drive
Midland, Texas 79705

MAR 10 1989

Gentlemen:

Your application for Permit to Drill well No. 2 Apache "A" Federal in the NWNE¹ sec. 35, T. 19 S., R. 29 E., Eddy County, New Mexico, lease NM-61582, to a depth of 4,500 feet to test the Delaware formation in the oil-potash area, is hereby approved as amended by stipulations attached to the application.

One copy of the application is returned herewith. Please notify the Bureau of Land Management Office checked on the attached special stipulation in sufficient time for a representative to witness all cementing operations.

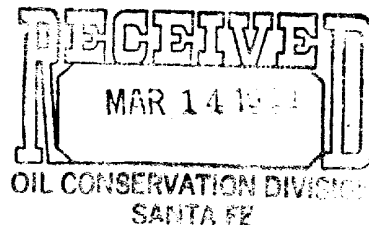
Sincerely,

Orig. Sgd. Francis R. Cherry, Jr.

Francis R. Cherry, Jr.
District Manager

1 Enclosure

cc:
NMOCD - 2



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

MAR 15 '89

SINGLE
ZONE ☒

MULTIPLE
ZONE ☐

2. NAME OF OPERATOR

Meridian Oil Inc.

O. C. D.

3. ADDRESS OF OPERATOR

ARTESIA, OFFICE

21 Desta Drive, Midland, Texas 79705

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

At surface

990' FNL & 1980' FEL

At proposed prod. zone

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

18 miles northeast of Carlsbad

15. DISTANCE FROM PROPOSED

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

330'

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

1000'

16. NO. OF ACRES IN LEASE

120

17. NO. OF ACRES ASSIGNED
TO THIS WELL

40

19. PROPOSED DEPTH

4500'

20. ROTARY OR CABLE TOOLS

Rotary

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

3314 G.L.

22. APPROX. DATE WORK WILL START

04/05/89

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'	350 sx., Circulate WITNESS
12 1/4"	8 5/8"	24 & 28#	3200'	3000 sx., Circulate WITNESS
7 7/8"	5 1/2"	15.5#	4500'	500 sx. TOC @ Surface

Drill 17 1/2" hole to 350'. Set 13 3/8" csg @ 350'. Cmt w/350 sx C1 "C". Circ. Drill 12 1/4" hole to 3200'. Set 8 5/8" csg @ 3200'. With stage collar @ +1600', cement 1st stage w/1000 sx C1 "C" w/2% CaCl2. Cement 2nd stage to circ to surf w/2000 sx. C1 "C" Lite & tail in w/100 sx C1 "C". Drill to TD to test Delaware. If commercial, run 5 1/2" csg to 4500'. Cmt w/sufficient volume to bring above all prospective zones. Est TOC @ surface. Perf & stimulate Delaware for production.

MUD PROGRAM: 0-350' spud mud; 350-3200' brine & sweeps; 3200-TD cut brine & Drispac. MW 9-9.2, VIS 32-36 (solids must be less than 5%).

BOP PROGRAM: 11"-3M stack to be installed on 8 5/8" & left on for remainder of drlg. Stack to consist of Double ram type BOP & choke manifold. Will test to rated working pressure w/independent tester on initial NU & prior to drlg into Delaware.

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

Robert L. Bradshaw

TITLE Sr. Staff Env./Reg. Spec.

DATE 07 Feb. 1989

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

APPROVED BY

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY:

*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 MERIDIAN OIL, INC.			Lease APACHE FEDERAL			Well No. 2
Unit Letter B	Section 35	Township 19-SOUTH	Range 29-EAST	County EDDY		

Actual Footage Location of Well:

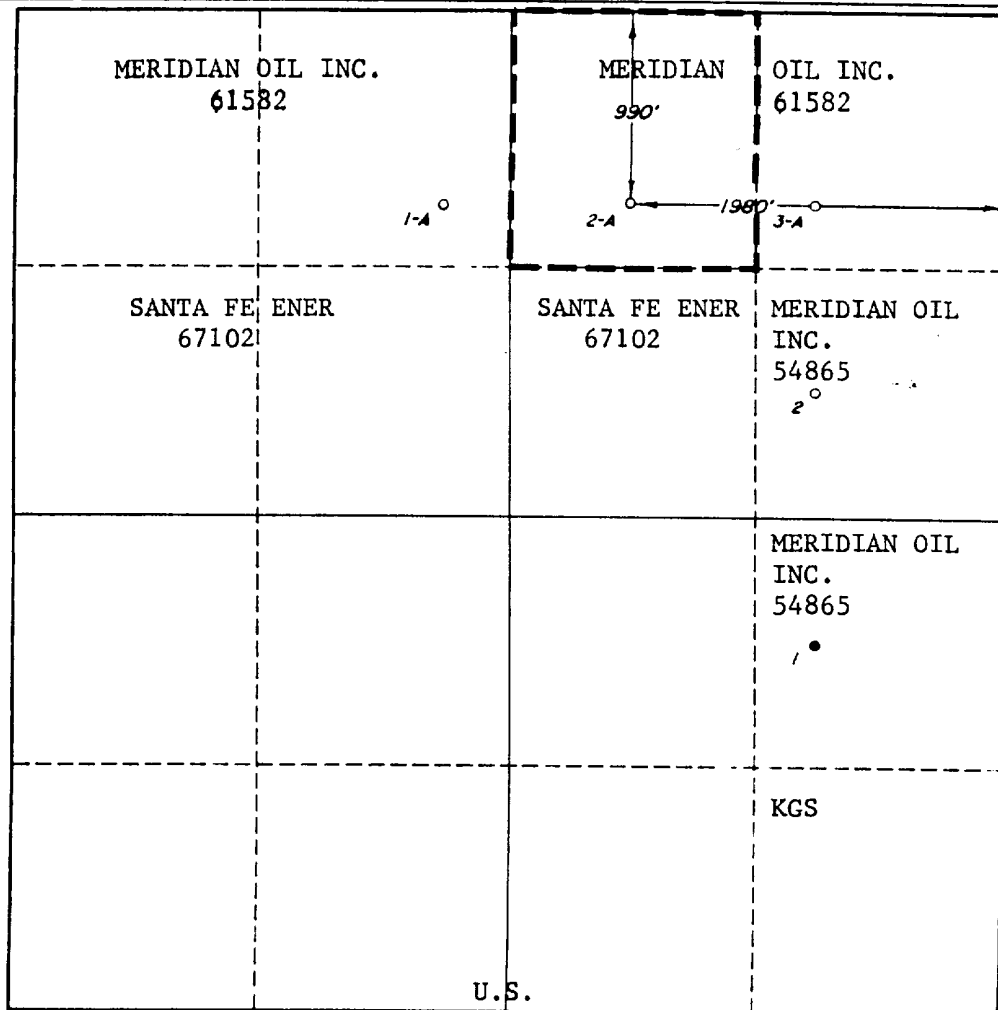
990 feet from the NORTH line and	1980 feet from the EAST line
Ground Level Elev. 3314'	Producing Formation PARKWAY
Pool DELAWARE	Dedicated Acreage: 40 Acres

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 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 Commission.



CERTIFICATION

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

Robert L. Bradshaw

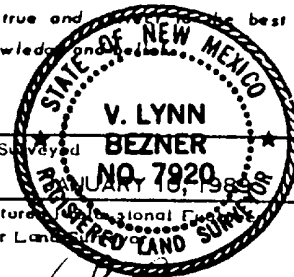
Name
Sr. Staff Eng./Reg. Spec.

Position
Meridian Oil Inc.

Company
07 February 1989

Date

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
3 JANUARY 18, 1989

Registered Professional Engineer and/or Land Surveyor

V. L. Bezner

Certificate No.
7920

MERIDIAN OIL INC.

Apache Federal No. 2A
990' FNL & 1980' FEL
Sec. 35, T-19-S, R-29-E
Eddy County, New Mexico
NM-61582

To supplement USGS 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:

Rustler	350'	Capitan Reef	1825'
Yates	1570'	Delaware Sand	3750'

7. The estimated depths at which anticipated water, oil, gas and mineral bearing strata are as follows:

Yates	1570' - Oil
Delaware Sand	3750' - Oil

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 3/8" csg: Cement w/350 sx Lite "C" cmt. Circ to surface.
 - b. 8 5/8" csg: With stage collar @ $\pm 1600'$, cement 1st stage w/1000 sx C1 "C" w/2% CaCl₂. Cement 2nd stage to circ to surface w/2000 sx C1 "C" Lite & tail in w/100 sx C1 "C".
 - c. 5 1/2" csg: Cement w/ ± 500 sx C1 "C". TOC @ Surface.

A caliper log will be run prior to setting 5 1/2" pipe to determine exact cement volumes required, and a fluid caliper will be run prior to setting 8 5/8" casing to determine same.

10. The pressure control diagram is attached to Form 3160-3. The following additional information is provided:

8 5/8" casing installation: 11"-3M BOP stack to be installed and tested by an independent tester to 3000 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: 3200 to TD, Two-man unit

D. Wire Line Logs:

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

DLL/MSFL/CNL/LDT/GR/Cal TD-3200' (GR/CNL to surf)

13. No abnormal pressures are anticipated. Bottom hole pressures at TD expected to be 2000 psi. Bottom hole temperature 138° F. No Hydrogen Sulfide expected in this drilling area. No crooked hole or abnormal deviation problems.

14. Anticipated starting date to spud - on or before 04-05-89. Anticipated drilling time expected to be 10 days from surface to TD.

R. L. Bradshaw/msd
02/07/89

SURFACE USE PLAN

MERIDIAN OIL INC.

Apache Federal No. 2A
990' FNL & 1980' FEL
Sec. 35, T-19-S, R-29-E
Eddy County, New Mexico
NM-61582

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: Go 13.6 miles northwest of Carlsbad on Hwy 62-180. Turn north on Burton Flat Road (CR 238) and go north 0.7 mile on pavement. Turn north 5.4 miles. Turn right approximately 2.1 miles to the lease road. Turn left approximately 200 ft. to Apache Federal #3-A. From here go west about 1/4 mile to location.

2. Planned Access Road:

- a. Temporary access road will be 12 feet wide and 600 feet long. The center line of the proposed temporary road from the beginning to the well site has been staked and flagged with the stakes being visible from any one to the next.
- 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:

- a. 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.

6. Source of Construction Material:

Caliche for surfacing access road and pad will be obtained from existing pit located in the SW/4 NE/4 of Sec. 3, T-20-S, R-29-E. This pit has been cleared by BLM.

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, junk disposed of into special trash container on location and hauled off upon completion of the well or as required. All waste material will be contained to prevent scattering by wind.
8. All trash and debris will be removed from well site within 30 days after drilling and/or completion operations are finished.

9. Ancillary Facilities:

None

10. 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.

11. Topography and Soil:

New Mexico Archaeological Services, Inc. Report by Dr. J. Loring Haskell is attached.

12. Land Use:

Grazing and hunting - Federal

Surface Lessee - Snyder Ranch, Inc.
P. O. Box 726
Lovington, NM 88260

13. Surface Ownership:

Bureau of Land Management (Federal)

14. Operators Representatives:

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

Meridian Oil Inc.
416 E. Main
Artesia, New Mexico
Office: 505/748-1321

Mr. Wayne Grubbs, Drilling Foreman
Artesia, New Mexico
Home: 505/746-6057

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

15. Certification:

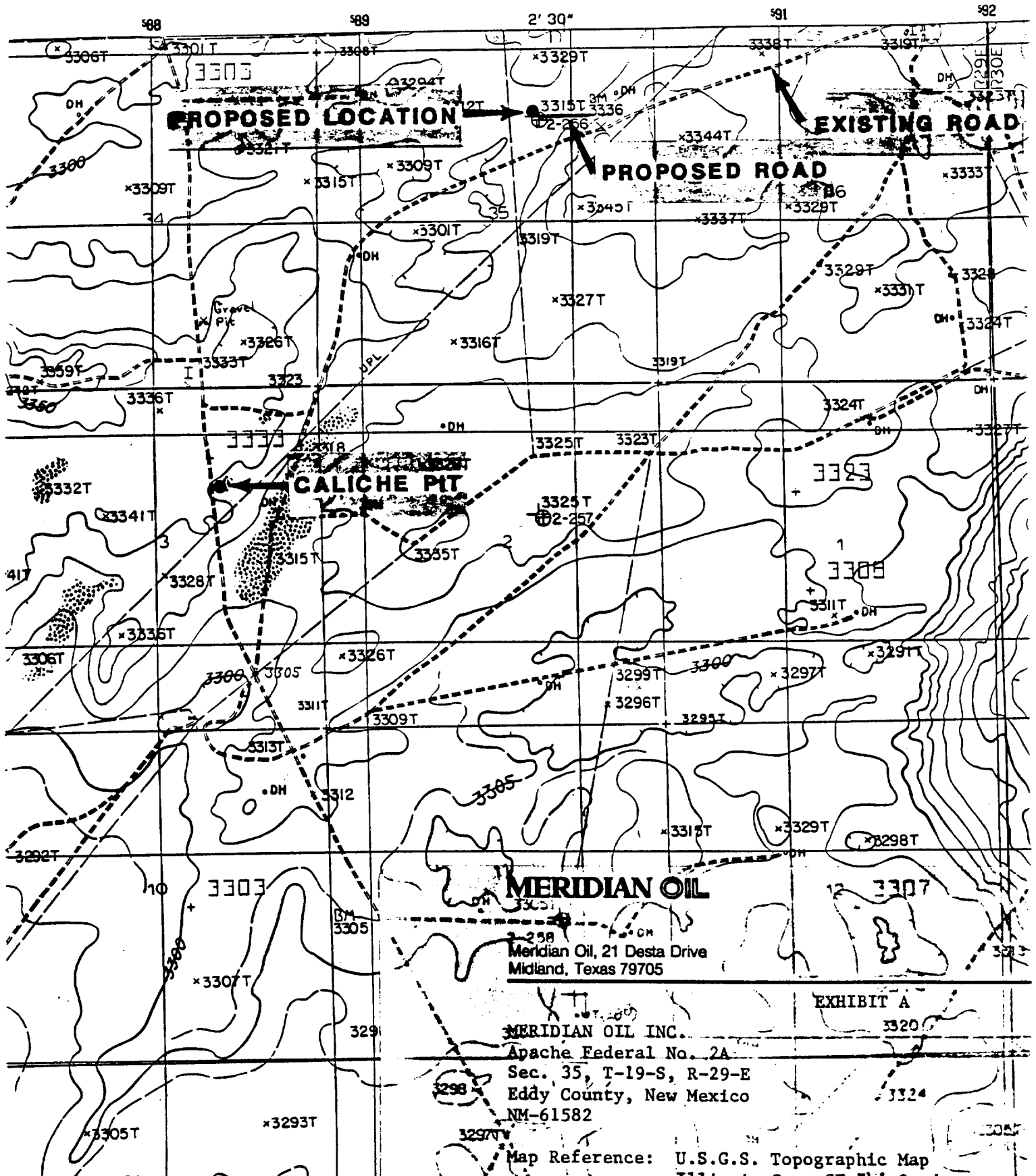
I hereby certify that I, or persons under my supervision, have inspected the proposed drill site and access route; that I am familiar with conditions which presently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and the work associated with the operations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

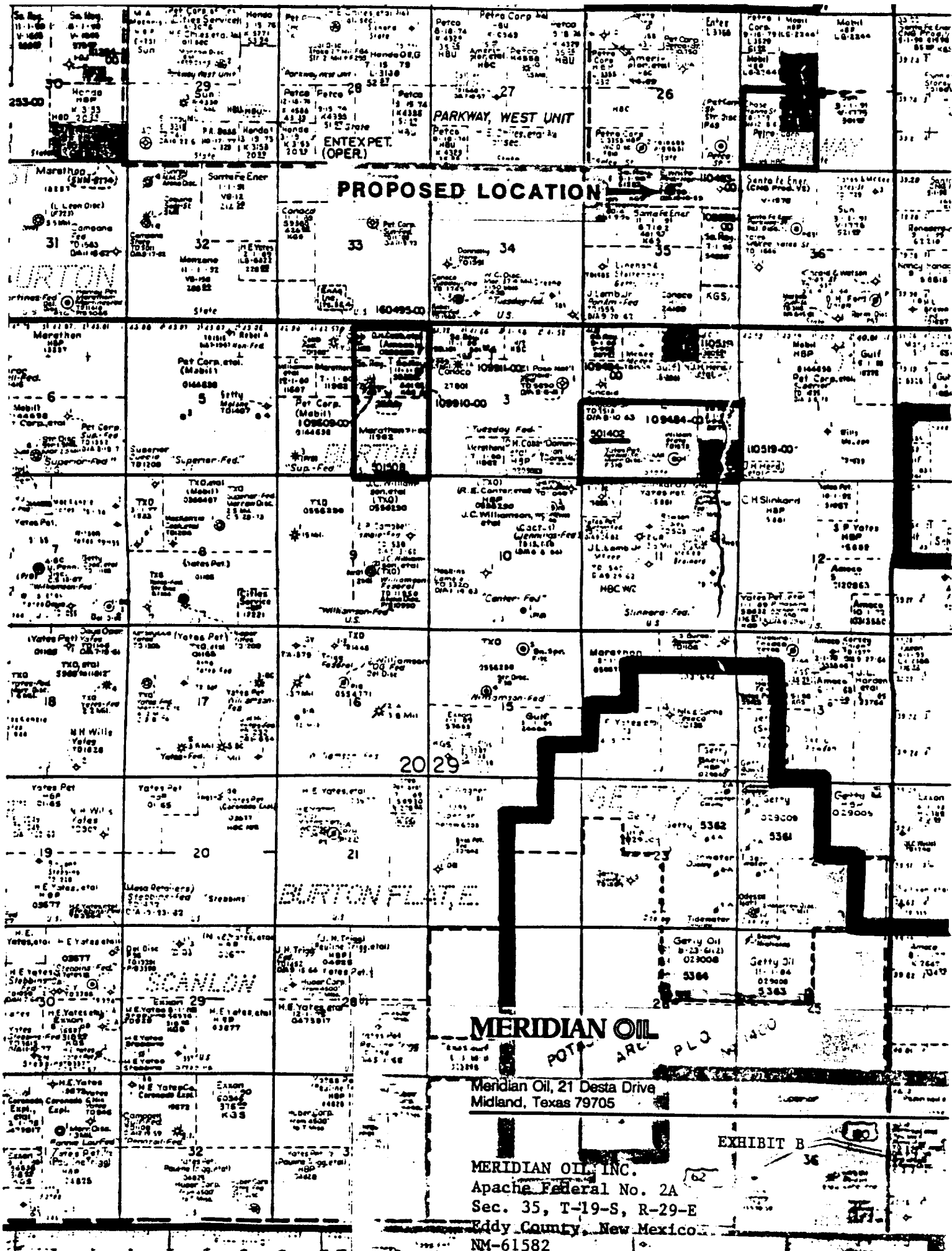
Date: 2/7/89

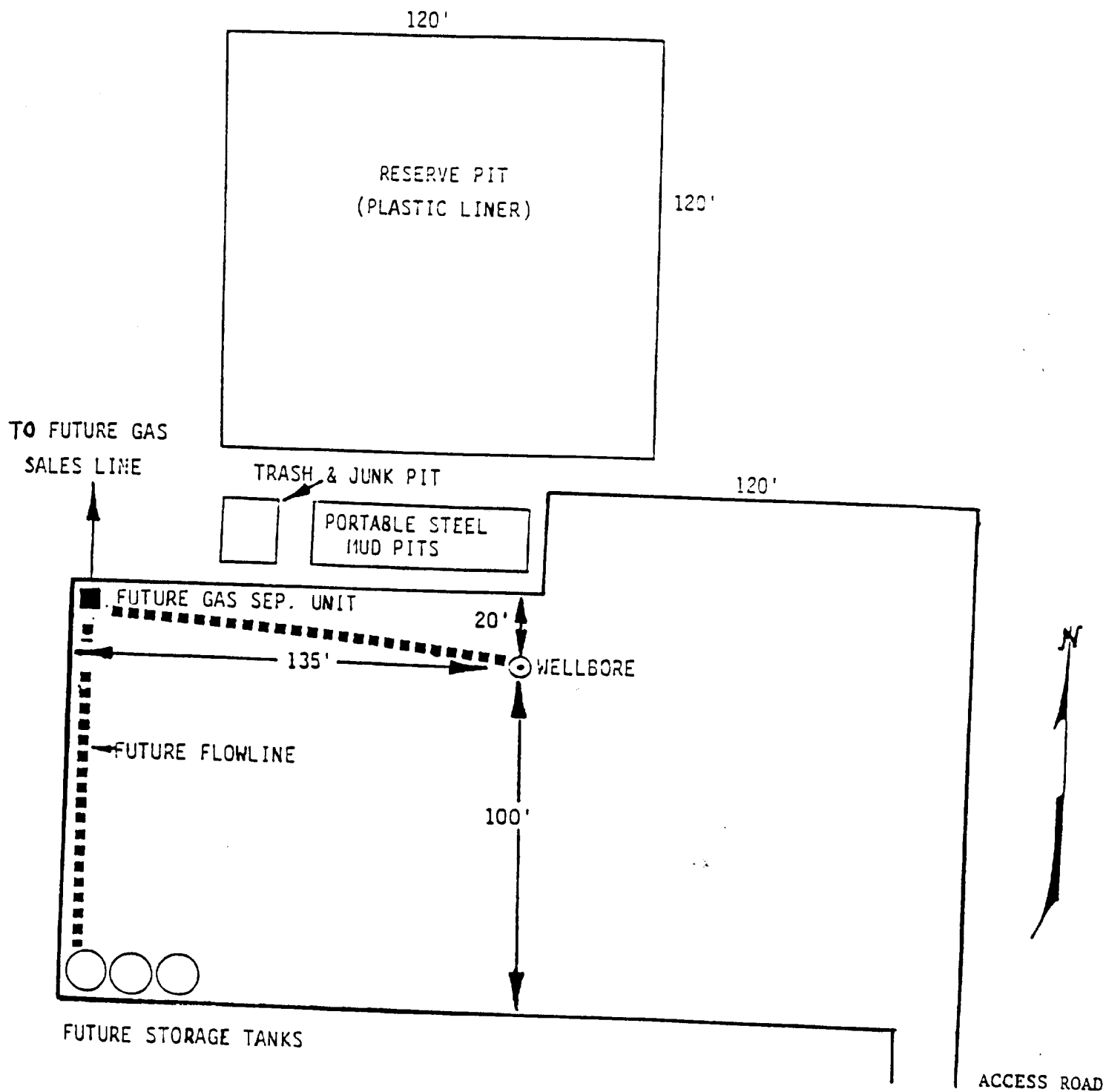
Darrell D. Roberts
Darrell D. Roberts
Senior Drilling Engineer
Meridian Oil Inc.

WPP566/RLB:msd

02-07-89





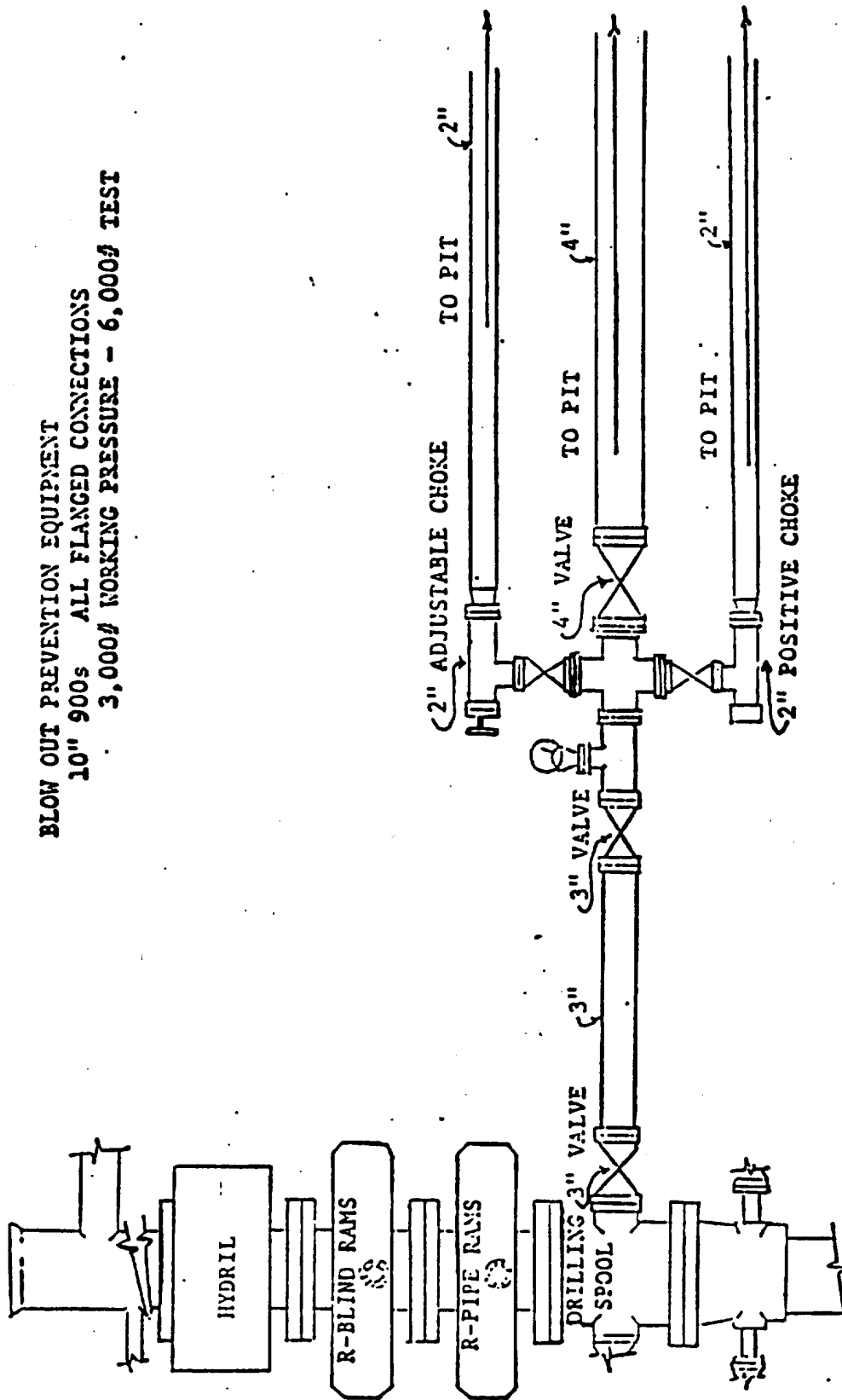


MERIDIAN OIL

Meridian Oil, 21 Desta Drive
Midland, Texas 79705

MERIDIAN OIL INC.
Apache Federal No. 2A
Sec. 35, T-19-S, R-29-E
Eddy County, New Mexico
NM-61582

EXHIBIT C



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

ATTACHMENT TO FORM C-101

CROSS SECTION MAP

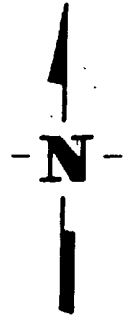
OPERATOR MERIDIAN OIL, INC.
LEASE NAME APACHE FEDERAL WELL NO. 2-A
SECTION 35 TOWNSHIP 19-S RANGE 29-E
DESCRIPTION 990' FNL & 1980' FEL
COUNTY EDDY STATE N. MEX.

x 33/8.1'

x 33/6.5'

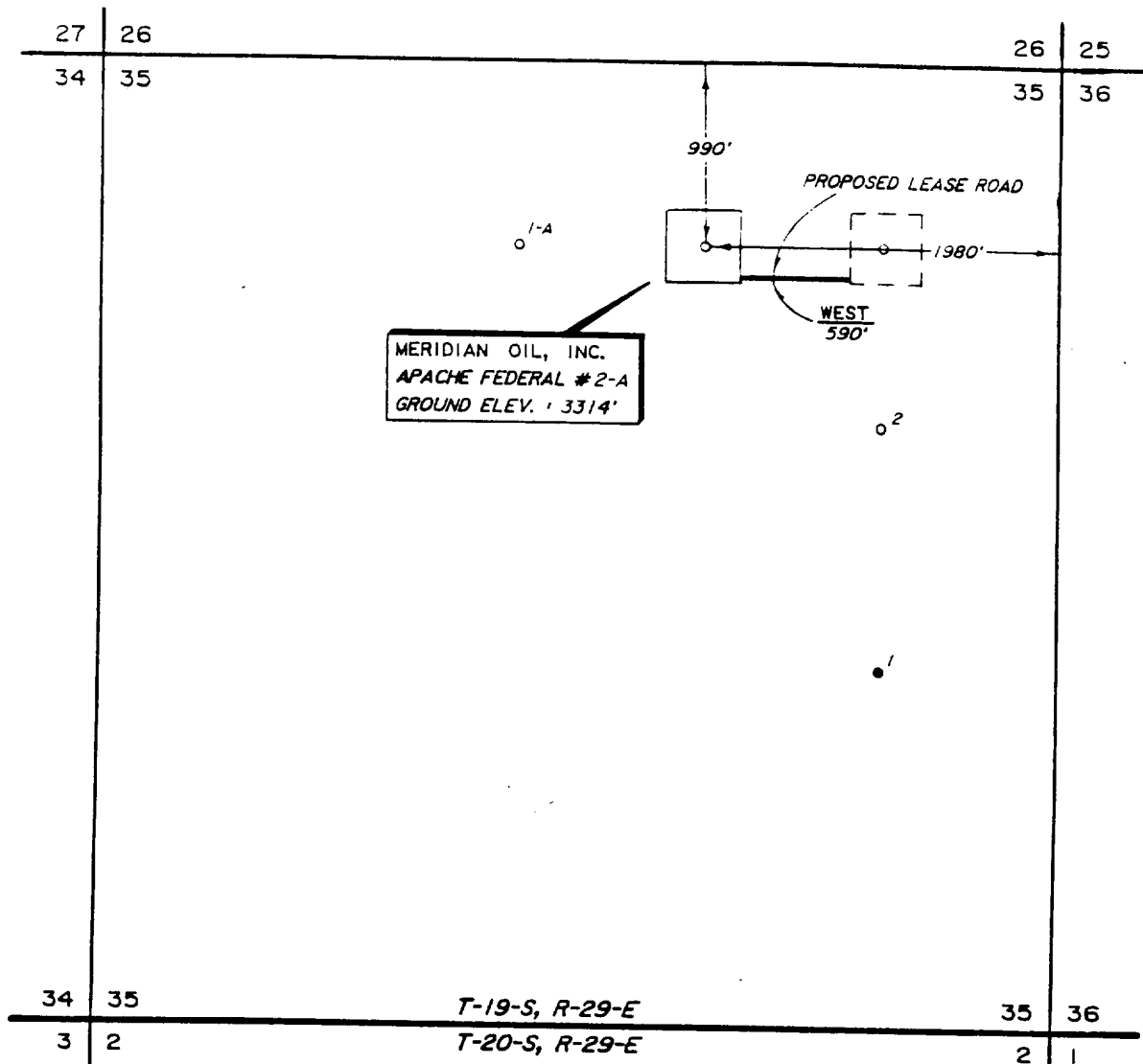
x 33/5.5'

x 33/4.2'

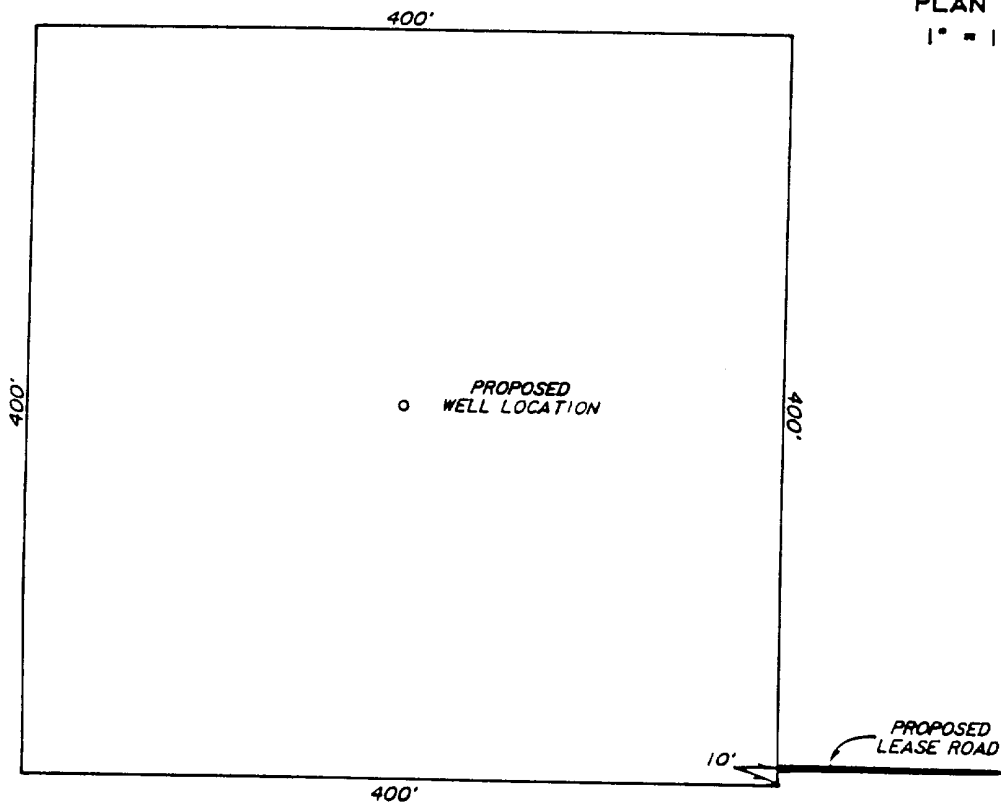


SCALE: 1" = 50'

PLAT SHOWING PROPOSED
WELL LOCATION and LEASE ROAD in
SECTION 35, T-19-S, R-29-E,
EDDY COUNTY, NEW MEXICO



PLAN VIEW
1" = 1000'



DETAIL VIEW
1" = 100'

NO.	REVISION	DATE	BY
SURVEYED BY :		J.D.S.	
DRAWN BY :		P.A.D.	
APPROVED BY :		D.R.K.	

MERIDIAN OIL, INC.
MIDLAND, TEXAS

**SURVEYING AND MAPPING BY
TOPOGRAPHIC LAND SURVEYORS
MIDLAND, TEXAS**

SCALE : AS SHOWN

DATE : JANUARY 10, 1989

JOB NO. : 68785

DRAWING NUMBER :

74 SE

SHEET