



United States Department of the Interior

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



RECEIVED

NOV 30 '88

O. C. D.
ALBUQUERQUE OFFICE

NOV 29 1988

WM-54865 (PD)
3160.2 (065)

Meridian Oil Inc.
21 Besta Drive
Midland, Texas 79705

Gentlemen:

Your application for Permit to Drill well No. 1 Apache Federal in the NE1SE1 sec. 35, T. 14 S., R. 29 E., Eddy County, New Mexico, lease WM-54865, 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 enclosed 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:
NMOC - 2

RECEIVED

NOV 30 '88

O. C. D.
FEDERAL OFFICE

NOV 1 1988

Original Document

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK DRILL <input checked="" type="checkbox"/> DEEPEN <input type="checkbox"/> PLUG BACK <input type="checkbox"/>			5. LEASE DESIGNATION AND SERIAL NO. NM-54865		
b. TYPE OF WELL OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <input type="checkbox"/> SINGLE ZONE <input checked="" type="checkbox"/> MULTIPLE ZONE <input type="checkbox"/>			6. IF INDIAN, ALLOTTEE OR TRIBE NAME		
2. NAME OF OPERATOR Meridian Oil Inc.			7. UNIT AGREEMENT NAME		
3. ADDRESS OF OPERATOR 21 Desta Drive, Midland, Texas 79705			8. FARM OR LEASE NAME Apache Federal		
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)* At surface 1980' FSL & 990' FEL, Sec. 35, T-19-S, R-29-E At proposed prod. zone			9. WELL NO. 1		
14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE* 62 miles Northwest of Hobbs, NM			10. FIELD AND POOL, OR WILDCAT Parkway (Delaware)		
15. DISTANCE FROM PROPOSED LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any) 330'			11. SEC. T. R. M., OR BLK. AND SURVEY OR AREA Sec. 35, T-19-S, R-29-E		
18. DISTANCE FROM PROPOSED LOCATION TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT. NA			12. COUNTY OR PARISH Eddy		
16. NO. OF ACRES IN LEASE 40			13. STATE N.M.		
19. PROPOSED DEPTH 4500'			17. NO. OF ACRES ASSIGNED TO THIS WELL 40		
20. ROTARY OR CABLE TOOLS Rotary			21. APPROX. DATE WORK WILL START* 11-21-88		
22. ELEVATIONS (Show whether DF, RT, GR, etc.) 3331' GR			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'	350 sx., Circulate
12 1/4"	8 5/8"	24 & 28#	3200'	3000 sx., Circulate
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 Cl "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 Cl "C" w/2% CaCl2. Cement 2nd stage to circ to surf w/2000 sx. Cl "C" Lite & tail in w/100 sx Cl "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 Cathy Maher TITLE Operations Tech III DATE 10/19/88

(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-162
Supersedes C-128
Effective 1-1-65

All distances must be from the outer boundaries of the Section.

Operator MERIDIAN OIL COMPANY			Lease APACHE FEDERAL		Well No. 1
Unit Letter I	Section 35	Township 19-SOUTH	Range 29-EAST	County EDDY	
Actual Footage Location of Well:					
1980 feet from the SOUTH line and		990 feet from the EAST line			
Ground Level Elev. 3331'	Producing Formation Delaware	Pool UND. Parkway DELAWARE	Dedicated Acreage: 40 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 _____

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.

MERIDIAN OIL INC. 61582 o ³	E. WHITE 61582	E. WHITE 61582	
SANTA FE ENER 67102	SANTA FE ENER 67102	SANTA FE ENER 67102	MERIDIAN OIL INC. 54865 o ²
LINEHAN & STOLTENBERG 24160	MERIDIAN OIL 54865 <div style="display: flex; align-items: center; justify-content: center;"> <div style="border-left: 2px dashed black; width: 100px; height: 100px; position: relative;"> <div style="position: absolute; top: 0; right: 0;">990'</div> <div style="position: absolute; bottom: 0; right: 0;">1980'</div> </div> <div style="margin-left: 10px;">KGS</div> </div>		
U.S.			

CERTIFICATION	
I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.	
Name	Cathy Nokes
Position	Operations Tech III
Company	Meridian Oil Inc.
Date	10/19/88
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	OCTOBER 1988
Registered Professional Engineer and/or Land Surveyor	NO. 6689
Certificate No.	6689

MERIDIAN OIL INC.

Apache Federal No. 1
1980' FSL & 990' FEL
Sec. 35, T-19-S, R-29-E
Eddy County, New Mexico
NM-54865

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

8 5/8" casing installation: 11"-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: 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 138⁰ F. No Hydrogen Sulfide expected in this know drilling area. No crooked hole or abnormal deviation problems.

14. Anticipated starting date to spud - on or before 11-21-88. Anticipated drilling time expected to be 10 days from surface to TD.

C. Nokes
10/19/88

SURFACE USE PLAN

MERIDIAN OIL INC.

Apache Federal No. 1
1980' FSL & 990' FEL
Sec. 35, T-19-S, R-29-E
Eddy County, New Mexico
NM-54865

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 Topograph map showing the location of the proposed well as staked.

Directions to the well are as follows: Go 55 miles west of Hobbs on Hwy 62-180. Go 1.2 miles west of Junction 31 and 360. Turn right on Burton Flat Road or CR 238 and go north 7/10 mile on pavement. Turn north 5.4 miles. Turn right approximately 1.9 miles. Road ends at Osage Federal #1. Go east 990' to Apache Federal #1 location.

2. Planned Access Road:

- a. Temporary access road will be 12 feet wide and 1600 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 will be sent when it is received in this office.

12. Land Use:

Grazing and hunting - Federal

Surface Lessee - Snyder Ranch, Inc.
P. O. Box 726
Lovington, New Mexico 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

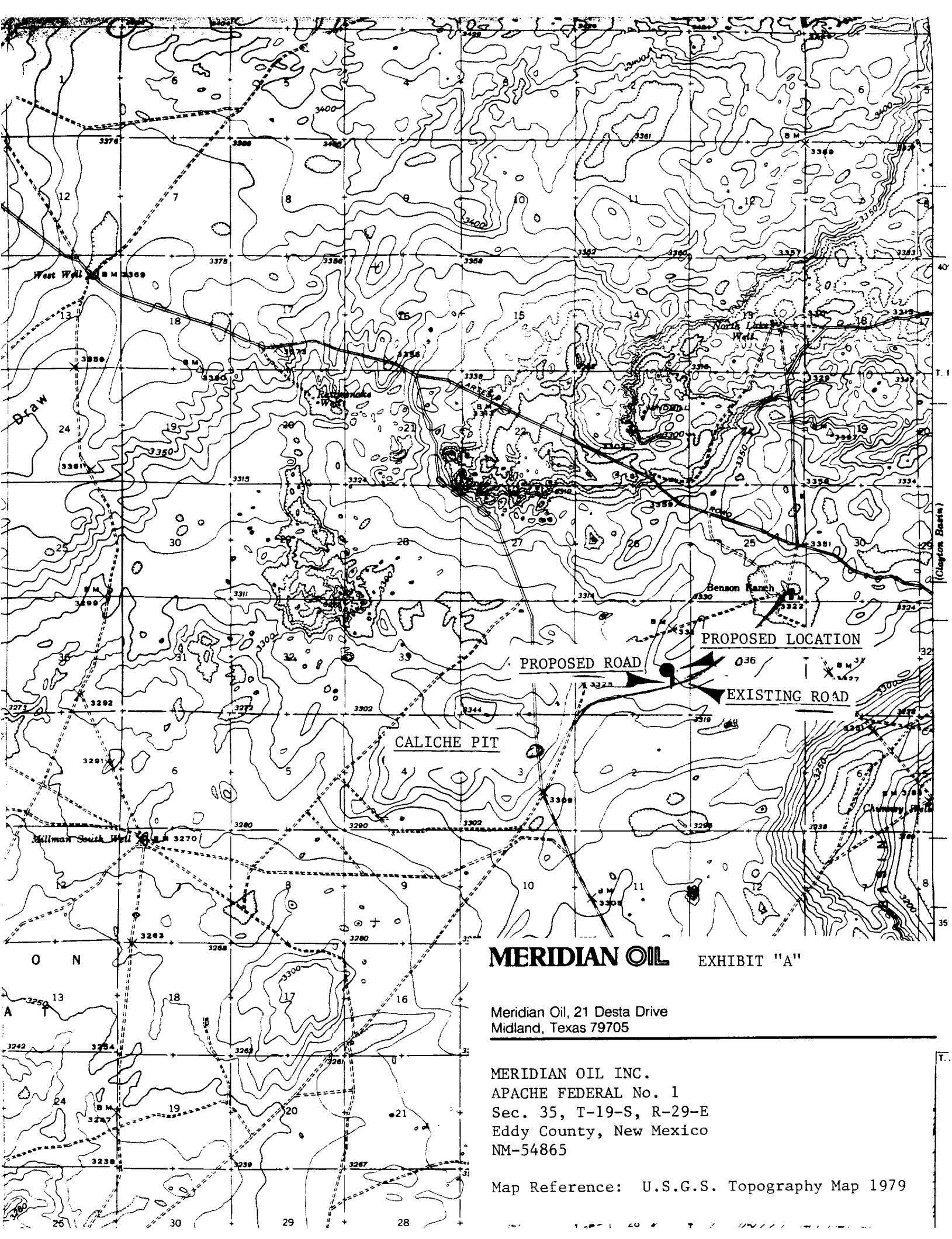
15. Certification:

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: 10/20/88

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

C. Nokes/
10/19/88

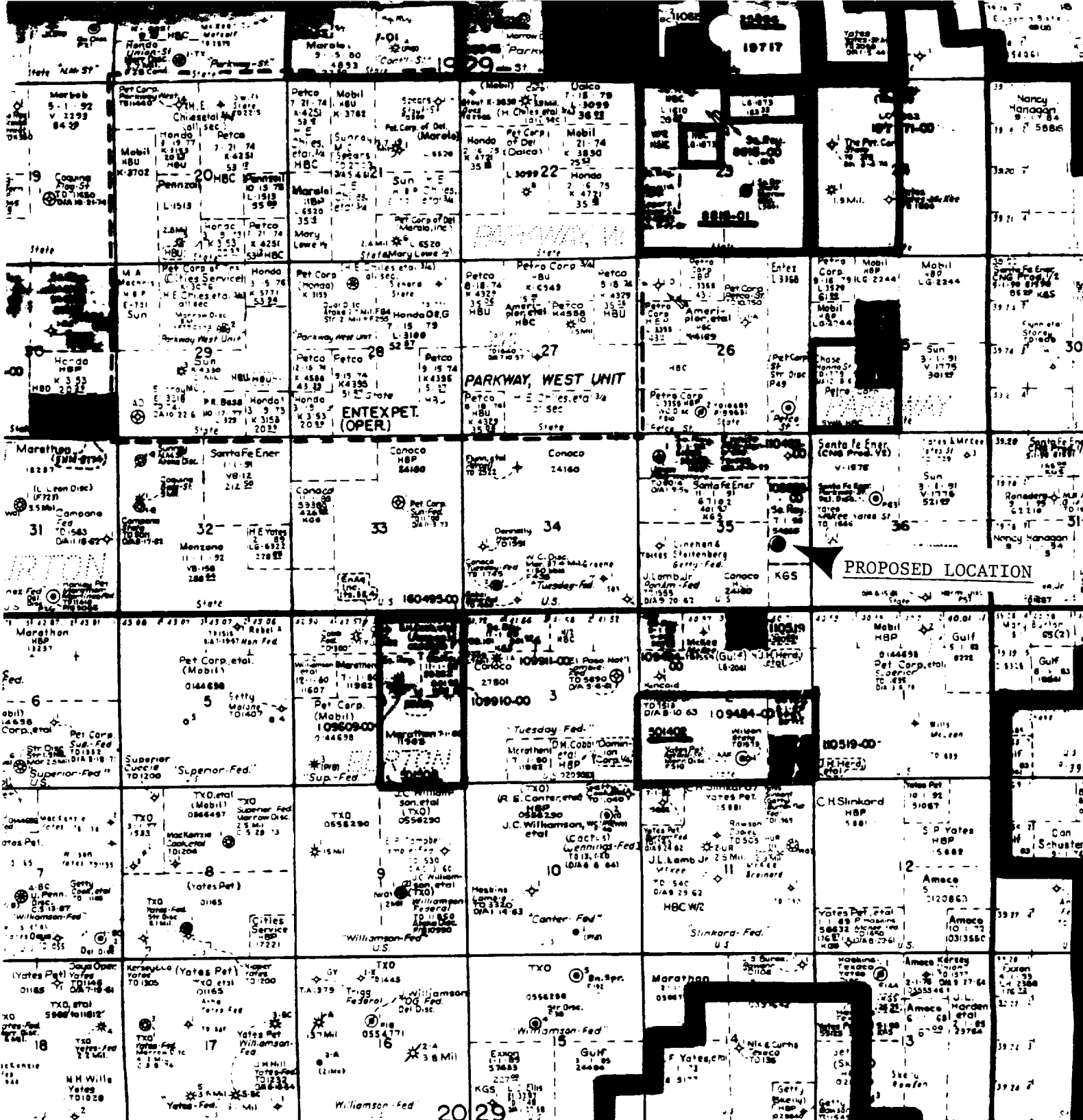


MERIDIAN OIL EXHIBIT "A"

Meridian Oil, 21 Desta Drive
Midland, Texas 79705

MERIDIAN OIL INC.
APACHE FEDERAL No. 1
Sec. 35, T-19-S, R-29-E
Eddy County, New Mexico
NM-54865

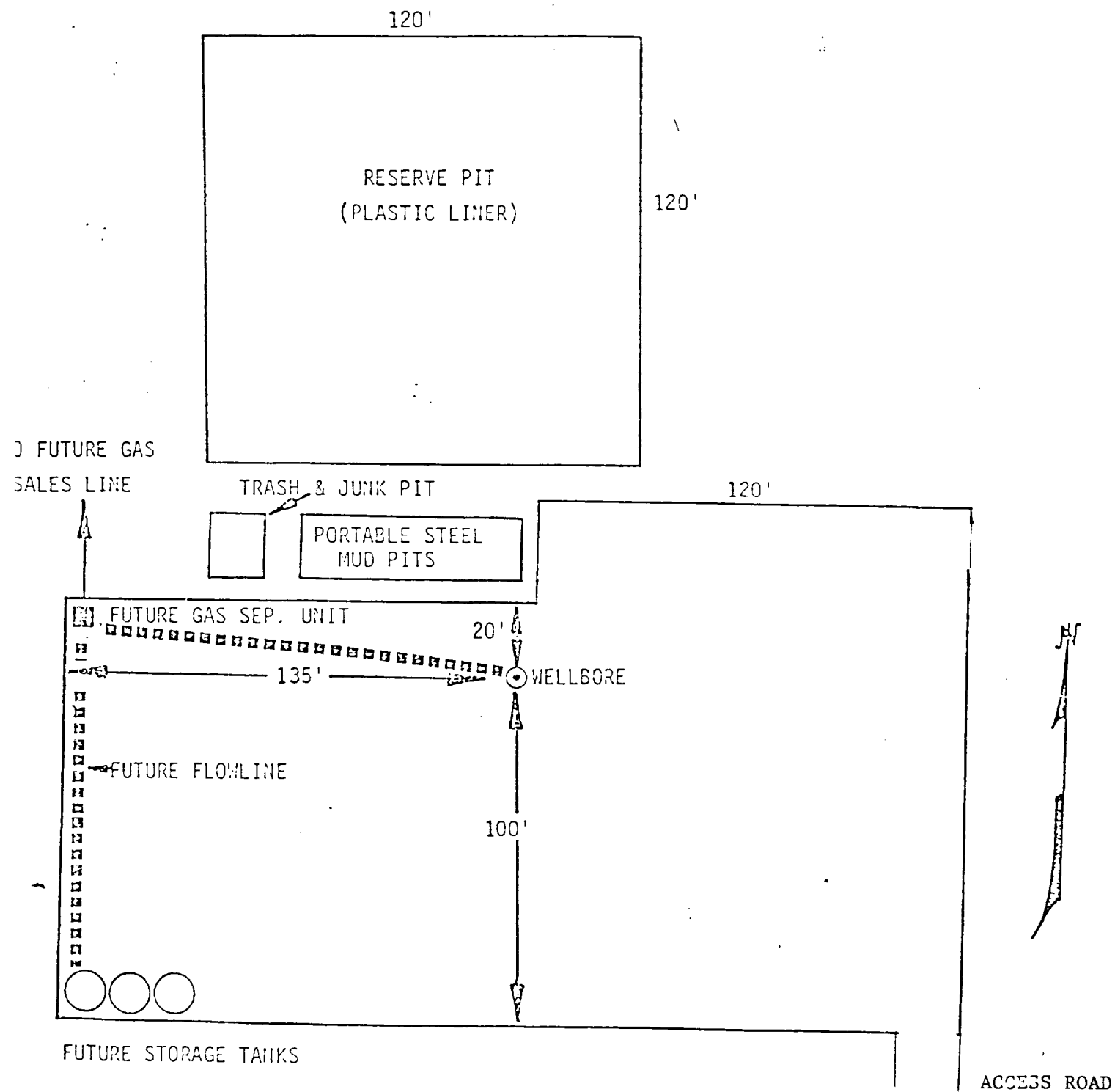
Map Reference: U.S.G.S. Topography Map 1979



MERIDIAN OIL EXHIBIT "B"

Meridian Oil, 21 Desta Drive
Midland, Texas 79705

MERIDIAN OIL INC.
APACHE FEDERAL No. 1
Sec. 35, T-19-S, R-29-E
Eddy County, New Mexico
NM-54865



MERIDIAN OIL EXHIBIT "C"

Meridian Oil, 21 Desta Drive
Midland, Texas 79705

MERIDIAN OIL INC.
APACHE FEDERAL No. 1
Sec. 35, T-19-S, R-29-E
Eddy County, New Mexico
NM-54865

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

