

(July 1989)

(formerly 9-3310)

CONTACT
OFFICE FOR
OF COPIES REQUIRED
(Other instructions on
reverse side)

BLM Roswell District
Modified Form No.
NMO60-3160-2

UNITED STATES
DEPARTMENT OF THE INTERIOR

BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

5. LEASE DESIGNATION AND SERIAL NO.

NM-29228

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME

Benson "3" Federal

9. WELL NO.

6

10. FIELD AND POOL, OR WILDCAT

X Shugart (Y, SR, Q, GB)

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

Sec. 3, T19S, R30E

12. COUNTY OR PARISH

Eddy

13. STATE

NM

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. ✓

3a. AREA CODE & PHONE NO.

915-686-5600

3. ADDRESS OF OPERATOR

21 Desta Dr., Midland, TX 79705

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

At surface 480'
2310' FSL & 330' FELAt proposed prod. zone
Same

DEC 3 '90

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

11 miles southeast of Maljamar, NM

15. DISTANCE FROM PROPOSED*
LOCATION TO NEAREST
PROPERTY OR LEASE LINE, FT.
(Also to nearest drg. unit line, if any)

330'

16. NO. OF ACRES IN LEASE

320

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.

1320'

19. PROPOSED DEPTH

3500'

20. ROTARY OR CABLE TOOLS

Rotary

21. ELEVATIONS (Show Whether DF, RT, GR, ETC.)

3423' GR. 3451'

Capitan Controlled Water Basin

22. APPROX. DATE WORK WILL START*

15 November 1990

23. PROPOSED CASING AND CEMENTING PROGRAM

3-11-P Potash Secretary's Potash

HOLE SIZE	CASING SIZE	WEIGHT/FOOT	GRADE	THREAD TYPE	SETTING DEPTH	QUANTITY OF CEMENT
12-1/4"	8-5/8"	24	K-55	STC	500'	450 sx--Circulate
7-7/8"	5-1/2"	15.5	K-55	LTC	3500'	700 sx--Circulate

Drill 12-1/4" hole to 500'. Set 8-5/8" csg @500' and cmt w/450 sx--circulate.

Drill 7-7/8" hole to 3500'. Set 5-1/2" csg @3500' and cmt w/700 sx--circulate.

MUD PROGRAM: 0-500' fresh water gel and lime; 500'-3500' salt water; MW 9.8-10.2; no abnormal pressures or temperatures expected.

BOP PROGRAM: 10" 3M BOP stack to be installed on the 8-5/8" and left on for the remainder of the drilling.

The stack is to consist of an annular BOP, a blind ram BOP, and one pipe ram BOP. Test the BOP's using an independent tester after setting the 8-5/8" csg.

APPROVAL SUBJECT TO
GENERAL REQUIREMENTS AND
SPECIAL STIPULATIONS

FRACED

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. Specialist

DATE

16 October 1990

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

APPROVED BY

TITLE

DATE

11-30-90

CONDITIONS OF APPROVAL, IF ANY:

*See Instructions On Reverse Side

TITLE 18 U.S.C. SECTION 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

OIL CONSERVATION DIVISION

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

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

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 BENSON 3 FEDERAL		Well No. 6
Unit Letter	Section 3	Township 9 - SOUTH	Range 30 - EAST	County EDDY	NMPM
Actual Footage Location of Well:					
2310' feet from the SOUTH line and		480' feet from the EAST line			
Ground level Elev. 3451'	Producing Formation Y, Sk, Q, G		Pool SHUGART	Dedicated Acreage: 40 Acres	

- Outline the acreage dedicated to the subject well by colored pencil or hatchure marks on the plat below.
- If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
- If more than one lease of different ownership is dedicated to the well, have the interest of all owners been consolidated by communization, 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 communization, 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

Robert L. Bradshaw
Signature

ROBERT L. BRADSHAW

Printed Name

SR. STAFF ENV/REG SPEC.

Position

MERIDIAN OIL INC.

Company

NOVEMBER 20, 1990

Date

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
OCTOBER 31, 1990

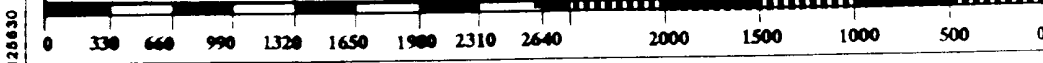
Signature & Seal of
V. LYNN BEZNER
Professional Surveyor

NO. 7920

REGISTERED LAND SURVEYOR

Certificate No.

V. LYNN BEZNER, R.L.S. #7920



128630

SURFACE USE PLAN

Meridian Oil Inc.

Benson "3" Federal #6
2310' FSL & 330' FEL
Sec. 3, T-19-S, R-30-E
Eddy County, New Mexico
NM-29228

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 Topographic Land Surveys plat showing the location of the proposed well as staked.

Directions to the well are as follows: From the junction of US 180 and Hwy. 360, 15 miles east of Carlsbad, go north 11.6 miles on Hwy. 360, thence northeast 1.9 miles on County Road 251, thence 1.5 miles on County Road 250, thence south 0.6 mile to a point 1100' west of the NE corner of Section 3.

2. Planned Access Road:

- a. An existing lease road will be used. An 1100' access road will be constructed to the well site per BLM standards.

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.

6. Source of Construction Material:

Caliche for surfacing access road and pad will be obtained from an existing pit located in the NE/4 SE/4 of Sec. 29, T18S, R31E.

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. All waste material will be regularly removed to an approved landfill.
- h. All trash and debris will be buried or 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 ready.

11. Land Use:

Grazing and hunting - Federal

Surface Lessee -
Snyder Ranch
c/o Mr. Larry Squires
P.O. Box 726
Lovington, NM 88260

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: 10/16/90

S.J. Van Howe
S.J. Van Howe
Drilling Engineer
Meridian Oil Inc.

RLB/bn

Meridian Oil Inc.

Benson "3" Federal #6
2310' FSL & 330' FEL
Sec. 3, T-19-S, R-30-E
Eddy County, New Mexico
NM-29228

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	2,050	Queen Sand	2,950'
Seven Rivers	2,325'	Grayburg	3,430'
 7. The estimated depths at which anticipated water, oil, gas, and mineral bearing strata are as follows:

Queen	2,950' - 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. 8 5/8" csg: Cement w/450 sx Cl. "C" cmt + 2% CaCl₂.
 - b. 5 1/2" csg: Cement w/450 sxs Cl "C" Lite and tail in w/250 sxs Cl "C".
- A caliper log will be run prior to setting 5 1/2' pipe to determine exact cement volumes required.
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 an annular BOP, a blind ram BOP, and one pipe ram BOP.

11. See Form 3160-3

12. A. DST Program: None

B. Core:

C. Mud Logging: 2000' to TD, one-man unit

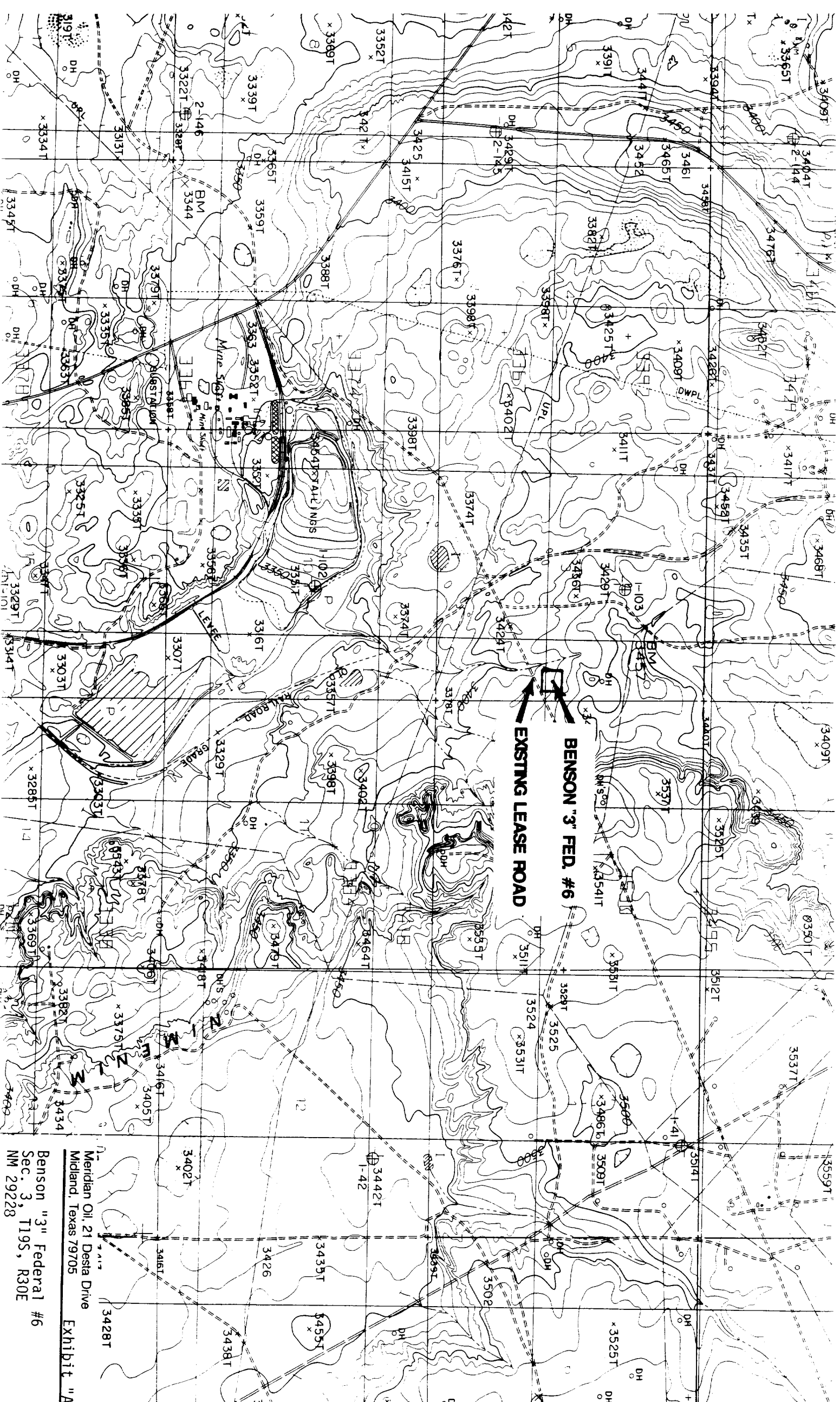
D. Wire Line Logs:

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

CNL/LDT	TD - 2000' (GR/CNL to surface)
DLL/RXO	TD - 2000'

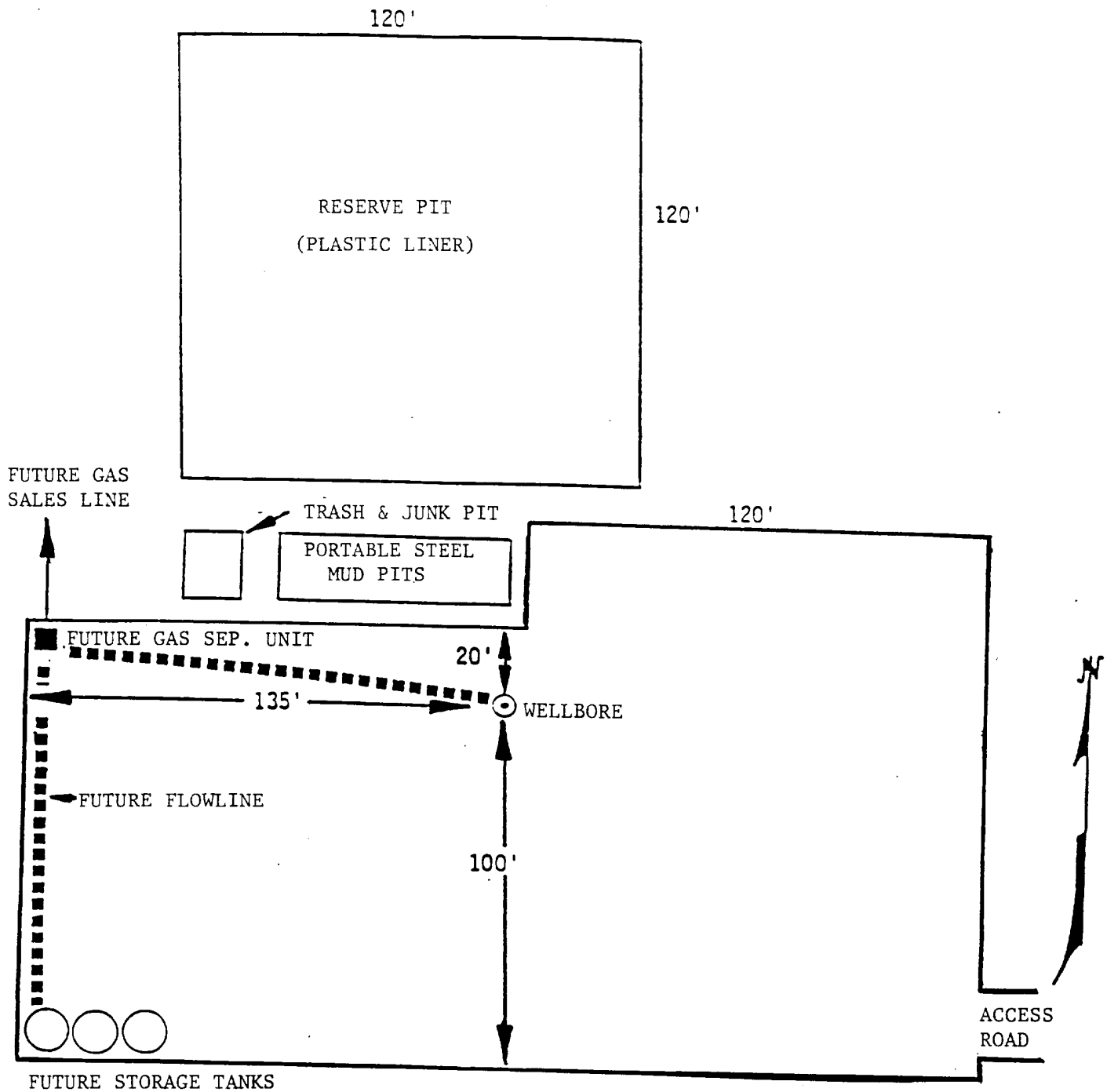
13. No abnormal pressures are anticipated. Bottom hole pressures at TD expected to be 1600 psi. Bottom hole temperature 100° F. No Hydrogen Sulfide expected in this known drilling area. No crooked hole or abnormal deviation problems.

14. Anticipated starting date to spud - on or before 11-15-90. Anticipated drilling time expected to be 10 days from surface to TD.



Benson "3" Federal #6
Sec. 3, T19S, R30E
NM 29228

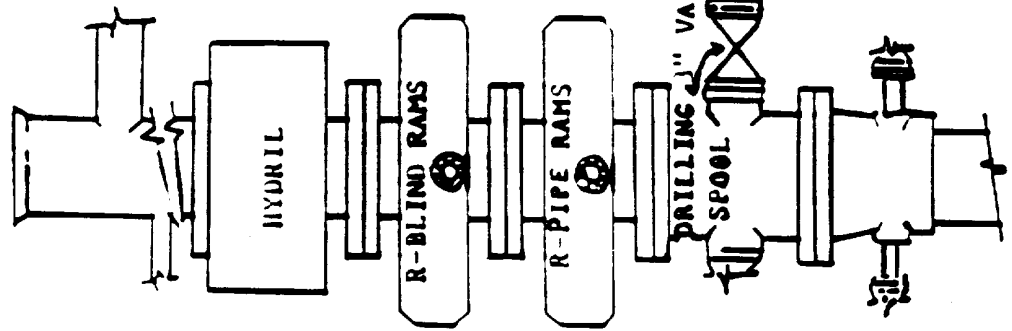
Meridian Oil, 21 Desta Drive
Midland, Texas 79705
Exhibit "A"



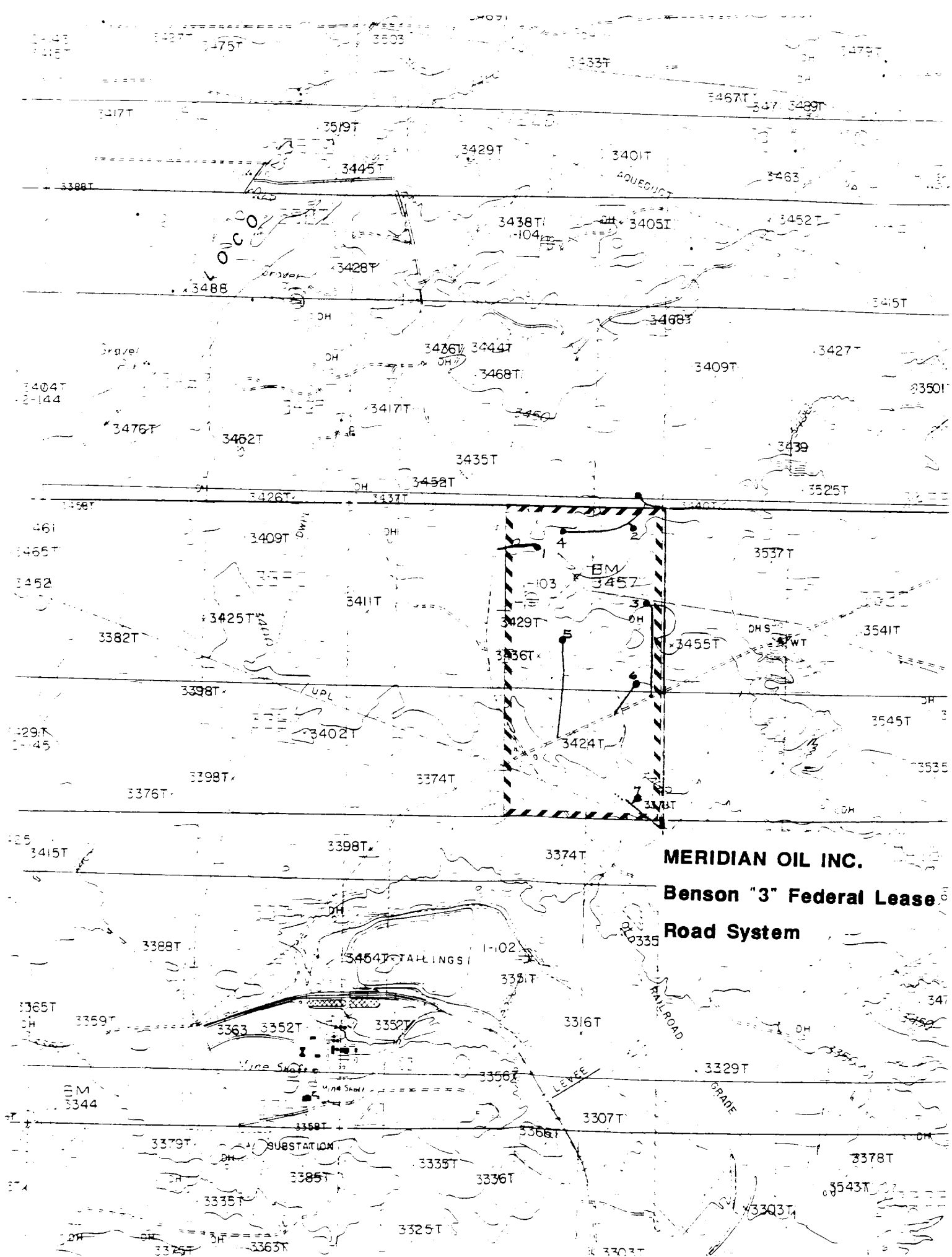
Meridian Oil, 21 Desta Drive
Midland, Texas 79705

Exhibit "C"

Benson "3" Federal #6
Sec. 3, T19S, R30E
NM 29228

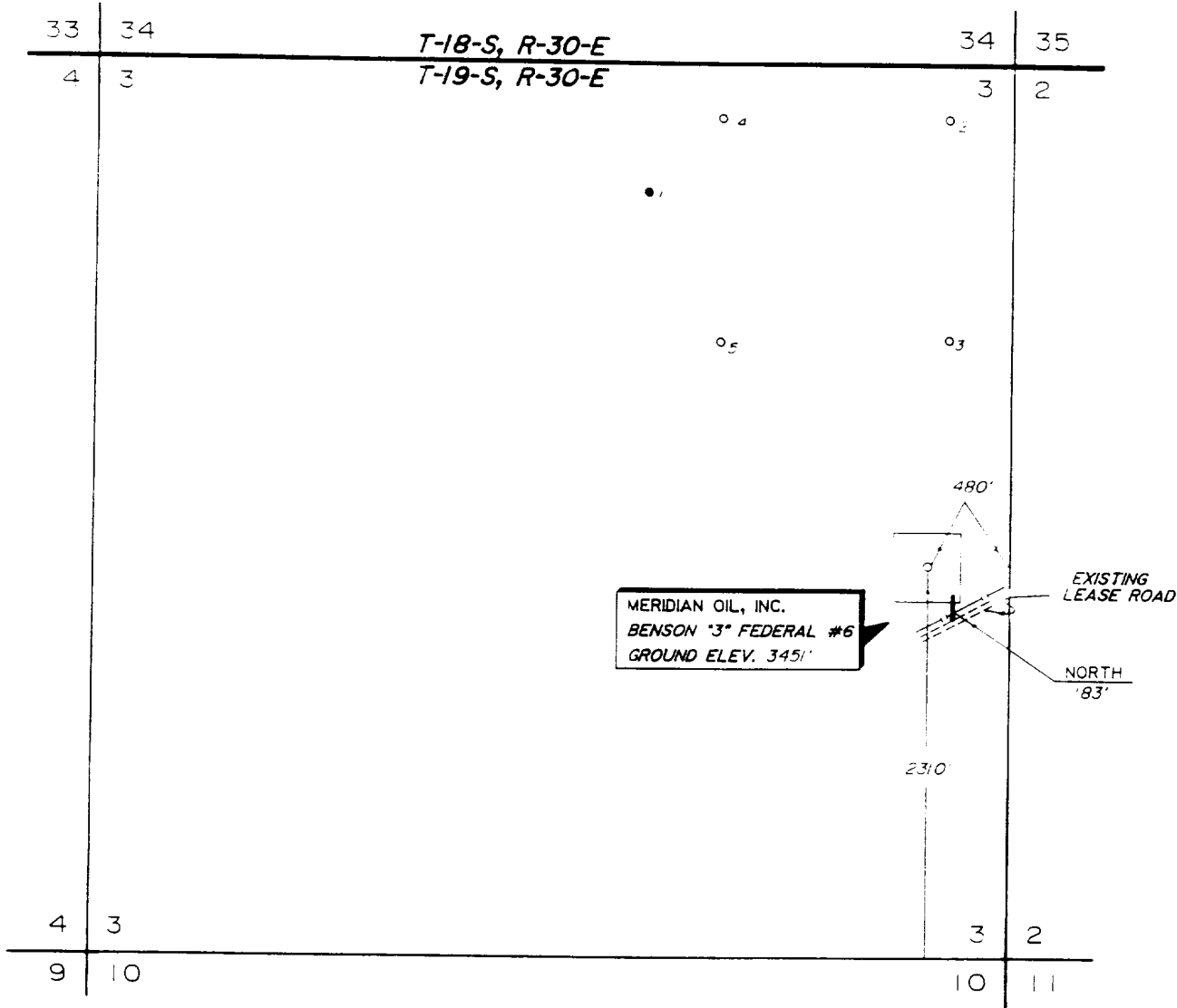


BLOW OUT PREVENTION EQUIPMENT
 10" 900s ALL FLANGED CONNECTIONS
 3,000# WORKING PRESSURE - 6,000# TEST

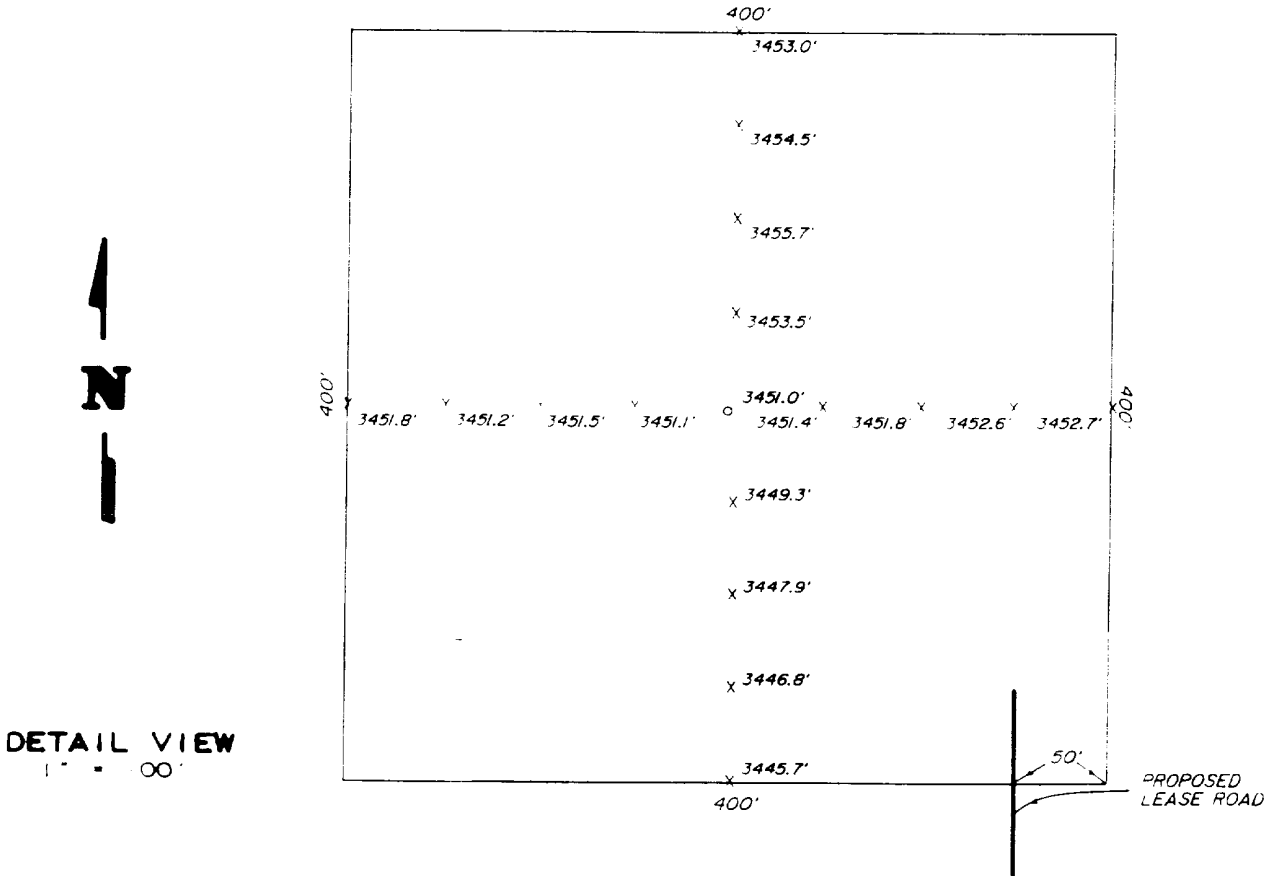


PLAT SHOWING PROPOSED
WELL LOCATION in
SECTION 3, T-19-S, R-30-E,
EDDY COUNTY, NEW MEXICO

FROM THE JCT. OF U.S. 180 & HWY 360, 1.5 MILES EAST OF
PALSAD, GO NORTH 11.4 MILES ON HWY 360, THENCE
NORTHEAST 1.8 MILES ON COUNTY ROAD 251, THENCE EAST
0.9 MILES ON COUNTY ROAD 250, THENCE SOUTHEAST 1
MILES, ON A LEASE ROAD, THENCE NORTHEAST 0.3 MILE
ON A LEASE ROAD TO THE SOUTHEAST CORNER OF PAI



PLAN VIEW
1" = 1000'



DETAIL VIEW
1" = 100'

MERIDIAN OIL INC.				SCALE : AS SHOWN	
MIDLAND, TEXAS				DATE : OCTOBER 31, 1990	
SURVEYING AND MAPPING BY				JOB NO. : 80712	
TOPOGRAPHIC LAND SURVEYORS				DRAWING NUMBER :	
MIDLAND, TEXAS				73 NW	
SURVEYED BY : G.B.				SHEET	
DRAWN BY : C.L.S.				OF	
APPROVED BY : D.R.K.					