

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SUBMIT IN DUPLICATE
(Other instructions on reverse side)

Form approved.
Budget Bureau No. 1004-0136
Expires: December 31, 1991

APPLICATION FOR PERMIT TO DRILL OR DEEPEN

1a. TYPE OF WORK

DRILL ☒

DEEPEN ☐

b. TYPE OF WELL

OIL WELL ☒

GAS WELL ☐

OTHER

SINGLE ZONE ☐

MULTIPLE ZONE ☐

2. NAME OF OPERATOR

Meridian Oil Inc.

3. ADDRESS AND TELEPHONE NO.

P.O. Box 51810 Midland, Texas 79710-1810

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

At surface

1730' FNL & 481' FEL

At proposed prod. zone

1650' 330'

(535)

Unit A

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

32 1/2 miles west of Jal, NM

15. DISTANCE FROM PROPOSED*

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

481'

16. NO. OF ACRES IN LEASE

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.

1499'

19. PROPOSED DEPTH

10,200'

20. ROTARY OR CABLE TOOLS

rotary

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

3626'

22. APPROX. DATE WORK WILL START*
Upon Approval

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	GRADE, SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
17 1/2"	13 3/8"	48#	650'	600 SXS CIRCULATE
12 1/4"	8 5/8"	28/32#	4650'	1850 SXS [TIE]
7 7/8"	5 1/2"	17#	10,200	1450 SXS [BACK]

Not in Designated Potash Area

Not in Hydrogen Sulfide Area

Not in Prairie Chicken Area

Contact Person: Donna Williams, 915-688-6943

OPER. OGRID NO. 26425
PROPERTY NO. 17929
POOL CODE 9691
EFF DATE 12/11/95
API NO. 30-225-33221

Oct 11 10 56 AM '95
RECEIVED

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen, 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

TITLE

Regulatory Compliance

DATE

10/6/95

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to recover thereon. CONDITIONS OF APPROVAL, IF ANY:

APPROVED BY

TITLE

DATE

*See Instructions On Reverse Side

District I
PO Box 1980, Hobbs, NM 88241-1980
District II
PO Drawer DD, Artesia, NM 88211-0719
District III
1000 Rio Brazos Rd., Aztec, NM 87410
District IV
PO Box 2088, Santa Fe, NM 87504-2088

State of New Mexico
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION
PO Box 2088
Santa Fe, NM 87504-2088

Form C-102
Revised February 21, 1994
Instructions on back
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

1 API Number 3D-025-33221		2 Pool Code 96191		3 Pool Name mesa Verde Delavere South Sand Dunes	
4 Property Code 17929		5 Property Name NAFTA "5" FEDERAL			6 Well Number 2
7 OGRID No. 26485		8 Operator Name MERIDIAN OIL INC.			9 Elevation 3626

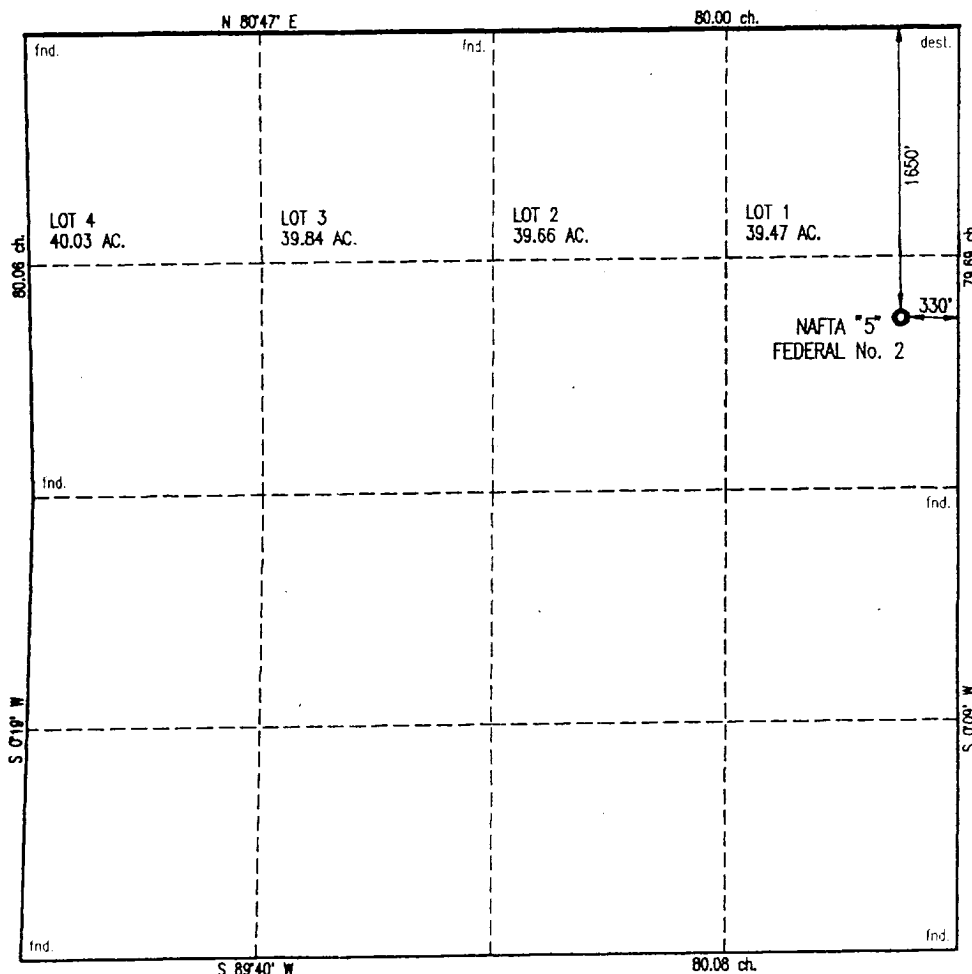
10 Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
H	5	26 S	32 E		1650	NORTH	330	EAST	LEA

11 Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
12 Dedicated Acres 40		13 Joint or Infill		14 Consolidation Code		15 Order No.			

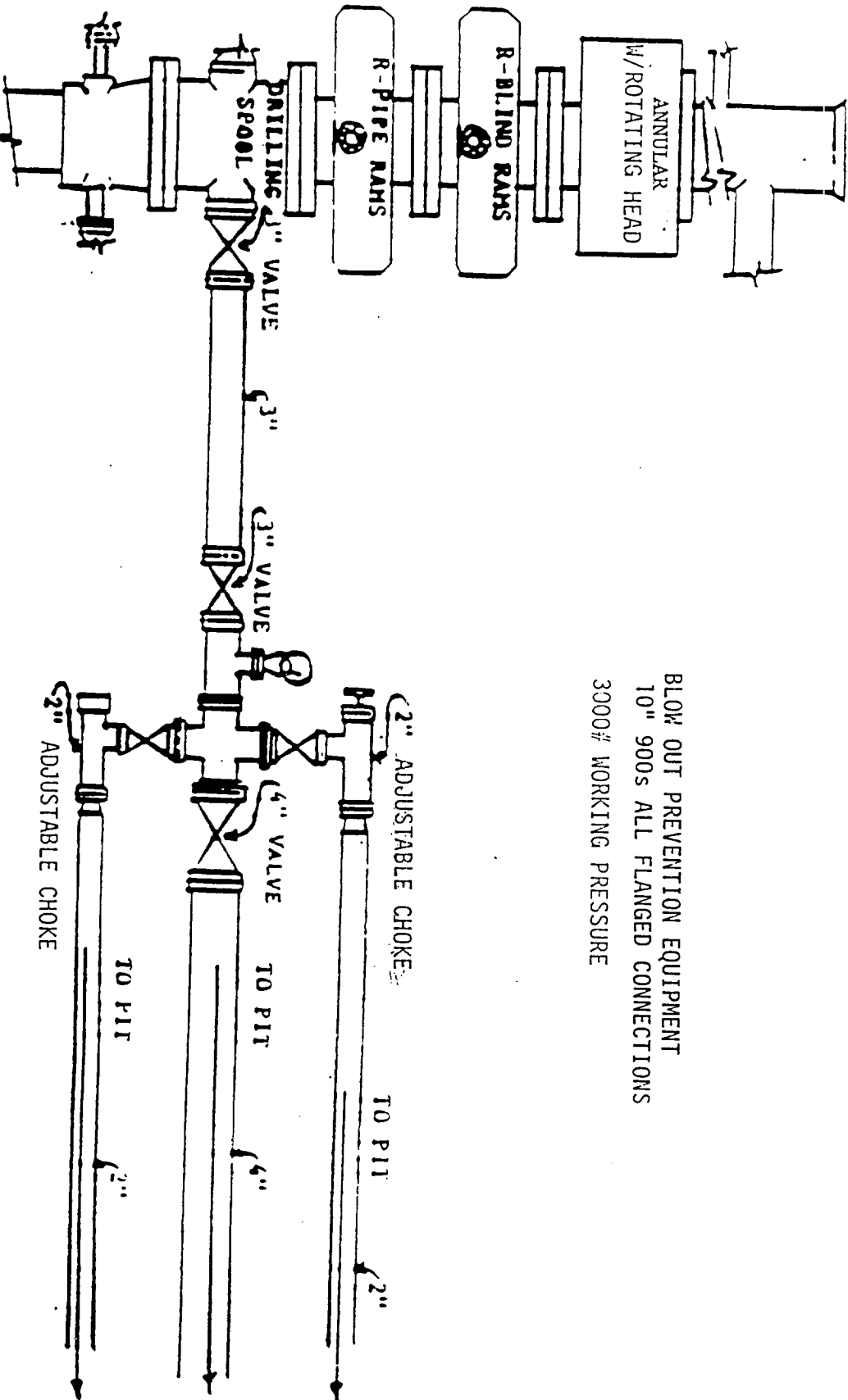
NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION



17 OPERATOR CERTIFICATION	
I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.	
Signature	
Donna Williams	
Printed Name	
Regulatory Compliance	
Title	
October 19, 1995	
Date	
18 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 belief.	
OCTOBER 13, 1995	
Date of Survey	
Signature and Seal of Professional Surveyor	
William E. Mahinke II	
Certificate Number 8466	

NOTE - REVISED 10-17-05:
MOVED LOCATION

DOUBLE RAM



BLOW OUT PREVENTION EQUIPMENT
 10" 900s ALL FLANGED CONNECTIONS
 3000# WORKING PRESSURE

OPERATORS NAME:	<u>Meridian Oil Inc.</u>
LEASE NAME AND WELL NO.:	<u>NAFTA '5' Federal # 2</u>
LOCATION:	<u>1650' 1790' FNL & 48' FEL, Sec. 5, T24S, R32E</u>
FIELD NAME:	<u>South Sand Dunes 330'</u>
COUNTY:	<u>Lea County, NM</u>
LEASE NUMBER:	<u>NM 77064 90812</u>

(535)

The following information is to supplement BLM form 3160-3 Application for permit to drill in accordance with Onshore Oil and Gas Order No. 1:

9 - POINT DRILLING PLAN

1. Name and estimated tops of important geologic formation/marker horizons.

<u>FORMATION</u>	<u>DEPTH</u>
Rustler	800'
Salado	1100'
Delaware	4600'

2. Estimated depths at which the top and bottom of formations potentially containing usable water, oil, gas, or prospectively valuable deposits of other minerals are expected to be encountered and the operator's plans for protecting such resources.

Delaware	4600' (Oil)
----------	-------------

3. The operator's minimum specifications for Blowout Preventer (BOP) and related equipment to be used and schematic diagrams thereof showing sizes, pressure ratings, and the testing procedures and testing frequency. BOP and BOP - related equipment (BOPE) schematics shall include schematics of choke manifold equipment. Accumulator systems and remote controls shall be utilized.

13 5/8" 1.5M psi WP BOP w/rotating head to be installed on the 13 3/8" csg. Test to 750 psi before drilling the 13 3/8" csg. shoe.

11" 3M BOP stack to be installed on the 8 5/8" csg. The BOP stack will consist of one blind ram BOP, one pipe ram BOP, and a rotating head. Tested to 1500 psi before drilling the 8 5/8" casing shoe.

4. The proposed casing program including size, grade, weights, type of thread and coupling, and the setting depth of each string and its condition (new or acceptably reconditioned). For exploratory wells, or for wells as otherwise specified by the authorized officer, the operator shall include the minimum design factors for tensions, burst, and collapse that are incorporated into the casing design. In cases where tapered casing strings are utilized, the operator shall also include and/or setting depths of each portion.

17 1/2" hole, 13 3/8" H-40 48# csg set @ 650'

12 1/4" hole, 8 5/8" 28# K-55, 28#/32# csg set @ 4650' *****

7 7/8" hole, 5 1/2" 17# K-55 csg set @ 10,200'

*****SPECS: 8 5/8" K-55 BTC - ID=8.017", Drift=7.892", Burst =3390 psi, Collapse=1800 psi, and Tension=43,700 lbs

5. The amount and type(s) of cement, including anticipated additives to be used in setting each casing string, shall be described. If stage cementing techniques are to be employed, the setting depth of the stage collars and amount and type of cement, including additives, and preflush amounts to be used in each stage, shall be given. The expected linear fill-up of each cemented string, or each stage when utilizing stage-cementing techniques, shall also be given.

- a. 13 3/8" csg: Cmt w/400 sxs Class 'C' + 4% gel + 2% CaCl₂ + 1/4 pps flocele, tail w/200 sxs Class 'C' + 2% CaCl₂ + 1/4 pps flocele.
- b. 8 5/8" csg: Cmt (2 Stages) Stage 1: Lead w/600 sxs Class 'C' + 9 pps salt + 5 pps Gilsonite + 1 pps econolite + 1/4 pps flocele, tail w/250 sxs Class 'C' + 2% CaCl₂. Stage 2: Lead w/500 sxs Class 'C' Lite + 9 pps salt + 1/4 pps flocele, tail w/200 sxs Class 'C' + 2% CaCl₂. Circ. to surface.

- c. 5 1/2" csg: Cmt (2 Stages) Stage 1" Cmt w/600 sxs Class 'H' 50/50 Poz + 2% gel + .6% Halad-9 + 3 pps KCL + 1/4 pps flocele. Stage 2: Cmt w/500 sxs Class 'H' Lite + .4% Halad-9. Tail w/100 sxs Class 'H' neat. Bring TOC to +/-4400'.

6. The anticipated characteristics, additives, use, and testing of drilling mud to be employed, along with the types and quantities of mud products to be maintained, shall be given. When air or gas drilling is proposed, the operator shall submit the following specific information:

Mud Program:

0-650' fresh water, gel and lime system
650'-4600' Brine, MW 10.0-10.1 ppg
4600'-9900' Fresh water, MW 8.3-8.5
9900'-10,200' FW/Bentonite/Drispac, MW 8.4-8.6

7. The anticipated testing, logging, and coring procedures to be used, including drill stem testing procedures, equipment, and safety measures.

a. DST Program: None

b. Core: None

c. Mud Logging: Two-man unit 4000' to TD.

d. Logs to be run: CN-FDC/GR/CAL: TD SCP (CNL/GR to surface &
DDL/MSFL/GR: TD-SCP

8. The expected bottom-hole pressure and any anticipated abnormal pressures, temperatures or potential hazards that are expected to be encountered, such as lost circulation zones and hydrogen sulfide. The operator's plans for mitigating such hazards shall be discussed. Should the potential to encounter hydrogen sulfide exist, the mitigation procedures shall comply with the provisions of Onshore Oil and Gas Order No. 6.

No abnormal pressures are anticipated. Bottom hole pressures at TD expected to be 4300 psi. Bottom hole temperature 140 F. There is no anticipated Hydrogen Sulfide in this known drilling area

9. Any other facets of the proposed operation which the operator wishes for BLM to consider in reviewing the application.

Anticipated drilling time expected to be 20 days from surface to TD.