P.O. BOX
HOBBS, I... SUBMIT IN ... IGATE* (Other instructions on reverse side)

Form 3160-3
(December 1990)

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

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR DEEPEN

5. LEASE DESIGNATION AND SERIAL NO.: NM ~~77064~~ 90412

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7. UNIT AGREEMENT NAME:

8. FARM OR LEASE NAME, WELL NO.: NAFTA '5' Federal # 1

9. API WELL NO.:

10. FIELD AND POOL, OR WILDCAT: ~~South Sand Dunes/Wildcat~~ Mesa Verde Delaware

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA: 5, T24S, R32E

12. COUNTY OR PARISH: Lea

13. STATE: NM

1a. TYPE OF WORK: DRILL [XX] DEEPEN [ ]

b. TYPE OF WELL: OIL WELL [X] GAS WELL [ ] OTHER SINGLE ZONE [ ] MULTIPLE ZONE [ ]

2. NAME OF OPERATOR: Meridian Oil Inc.

3. ADDRESS AND TELEPHONE NO.: P.O. Box 51810 Midland, Tx 79710-1810

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*)
At surface: 1980' FNL & 1980' FEL Unit G
At proposed prod. zone

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)	1980'	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.	n/a 1st well	19. PROPOSED DEPTH: 10,200'	20. ROTARY OR CABLE TOOLS: rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.): 3606

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 back)
7 7/8"	5 1/2"	17#	10,200'	1450 sxs (tie back)

OPER. OGRID NO. 14049
PROPERTY NO. 17929
POOL CODE 96191
EFF. DATE 11-15-95
API NO. 30-025-33180

Not in Designated Potash Area
Not in Hydrogen Sulfide Area
Not in Prairie Chicken Area

Contact Person: Donna Williams, 915-688-6943

BUREAU OF LAND MANAGEMENT RECEIVED OCT 02 1995

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 9/29/95

(This space for Federal or State office use)

PERMIT NO. _____ APPROVAL DATE _____

APPROVAL SUBJECT TO GENERAL REQUIREMENTS AND SPECIAL STIPULATIONS ATTACHED

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 conduct operations thereon.

CONDITIONS OF APPROVAL, IF ANY:

APPROVED BY _____ TITLE _____ DATE 11-13-95

*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.

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

DISTRICT IV
PO BOX 2088, SANTA FE, NM 87504-2088

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-102
Revised February 10, 1994
Instruction on back
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

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

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code	Pool Name
		South Sand Dunes

Property Code	Property Name	Well Number
	NAFTA FEDERAL "5"	1

OGRID No.	Operator Name	Elevation
26485	MERIDIAN OIL, INC.	3606

Surface Location

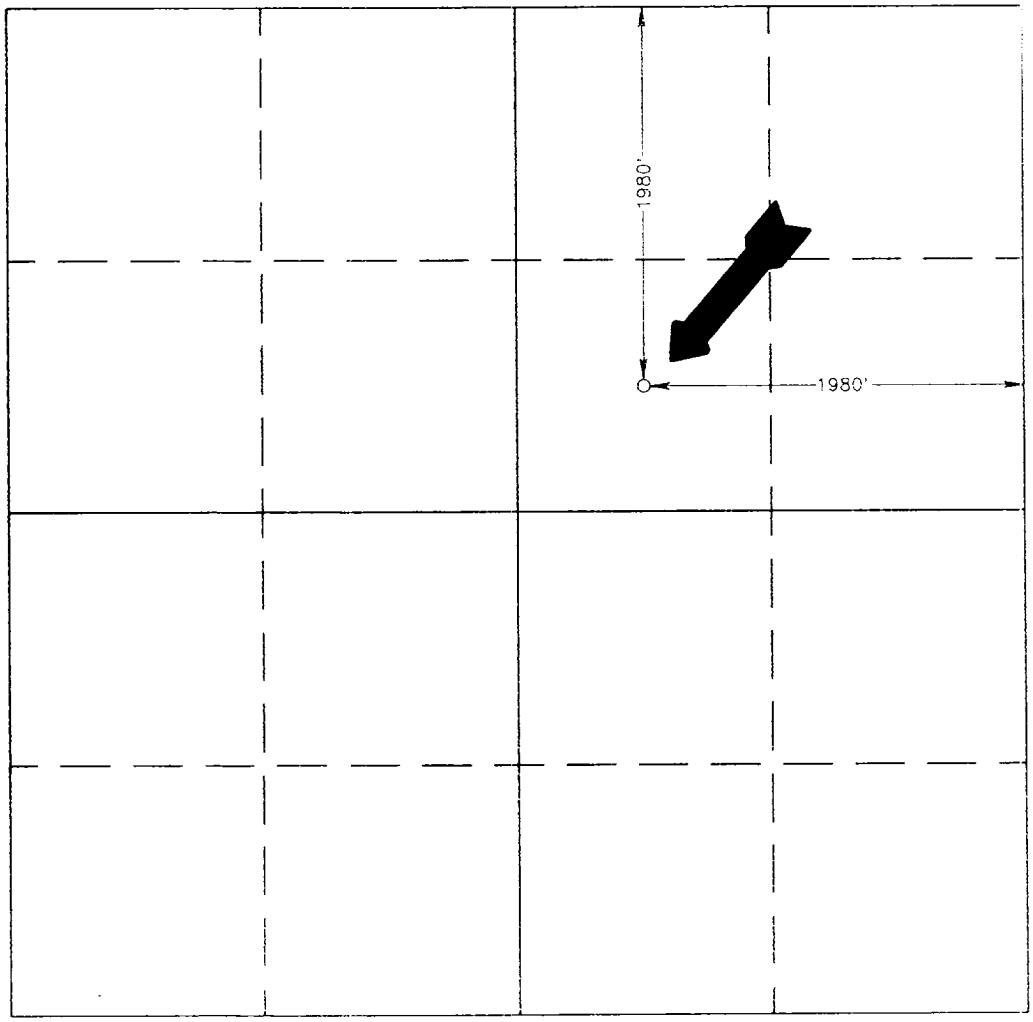
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
G	5	24 S	32 E		1980	NORTH	1980	EAST	LEA

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

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
40			

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



OPERATOR CERTIFICATION

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

Signature
Donna Williams

Printed Name
Regulatory Compliance

Title
10/19/95

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 supervison, and that the same is true and correct to the best of my belief.

AUGUST 26, 1995

Date Surveyed SJA

Signature & Seal of Professional Surveyor

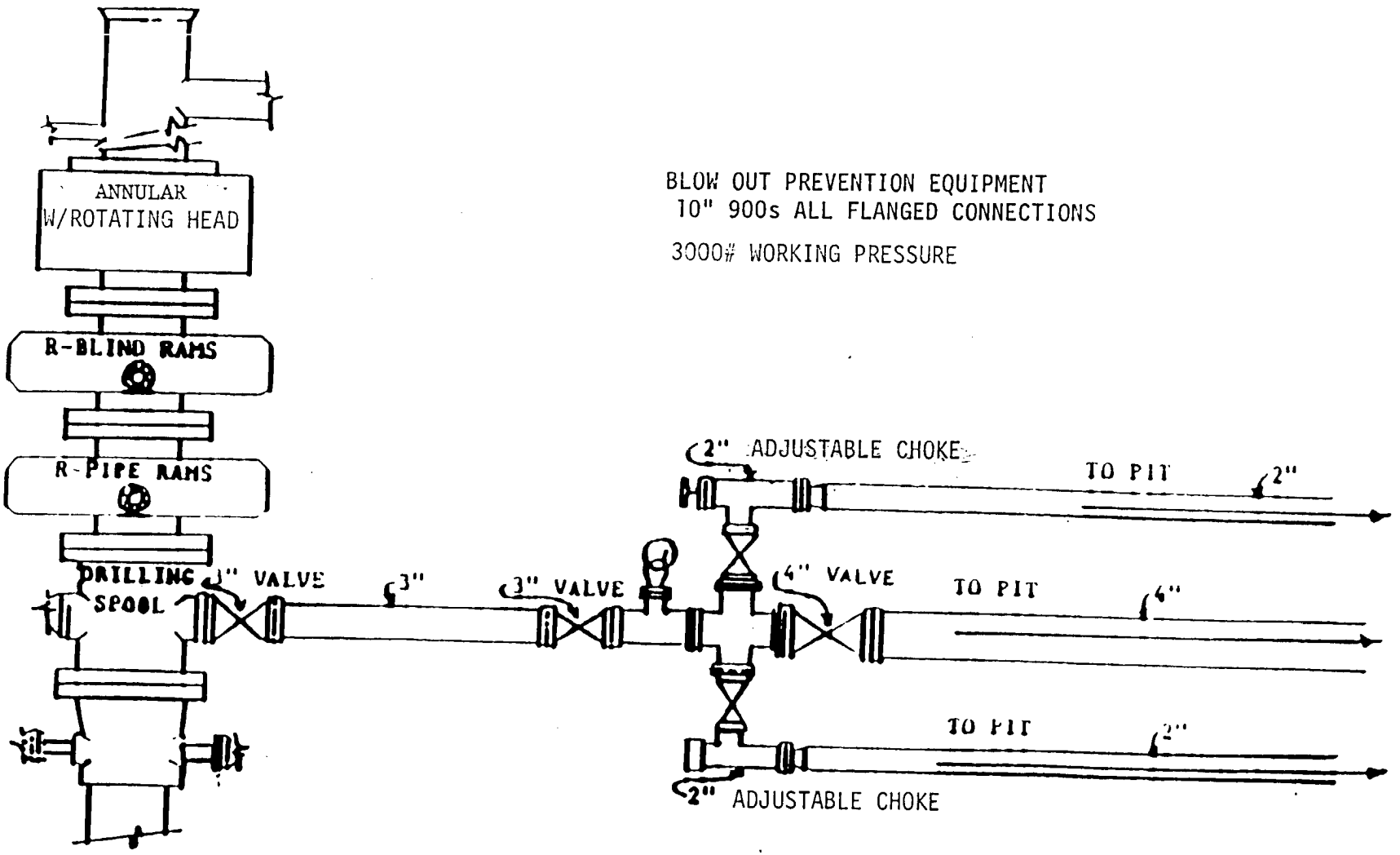
RONALD J. EIDSON
NEW MEXICO
REGISTERED PROFESSIONAL SURVEYOR

9-22-95

Certificate No. RONALD J. EIDSON 3239
GARY L. JONES 7977
JOHN W. WEST 676

DOUBLE RAM

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



OPERATORS NAME:	**Meridian Oil Inc.**
LEASE NAME AND WELL NO.:	**NAFTA '5' Federal # 1**
LOCATION:	**1980'FNL & 1980' FEL, Sec. 5, T24S, R32E**
FIELD NAME:	**South Sand Dunes**
COUNTY:	**Lea County, NM**
LEASE NUMBER:	**NM 77064**

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.

FORMATION	DEPTH
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.