

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR DEEPEN

1a. TYPE OF WORK <b>DRILL <input checked="" type="checkbox"/></b> <b>DEEPEN <input type="checkbox"/></b>			5. LEASE DESIGNATION AND SERIAL NO. NM-55953	
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 AND TELEPHONE NO. P.O. Box 51810, Midland, TX 79710-1810			8. FARM OR LEASE NAME, WELL NO. Jack Tank "8" Fed. #1	
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)* At surface D, 660' FNL & 660' FWL At proposed prod. zone			9. API WELL NO. 30-025-32128	
14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE* 32½ miles West of Jal			10. FIELD AND POOL, OR WILDCAT Wildcat (Delaware)	
15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drig. unit line, if any) 660'			11. SEC., T., R., M., OR BLM. AND SURVEY OR AREA 8, T24S, R32E	
16. NO. OF ACRES IN LEASE 1,080			12. COUNTY OR PARISH Lea	
17. NO. OF ACRES ASSIGNED TO THIS WELL 40			13. STATE NM	
18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT. 1st well			20. ROTARY OR CABLE TOOLS Rotary	
19. PROPOSED DEPTH 8850'			22. APPROX. DATE WORK WILL START* 6-20-93	
21. ELEVATIONS (Show whether DF, ET, GR, etc.) 3581'				

PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	GRADE, SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
17½	13 3/8" H-40	48	600	650 SXS / (Cement)
12½	8 5/8" K-55	28 & 32	4400	2100 SXS? SEE
7 7/8	5½" K-55	17	8750	1100 SXS ) STIPS.

RECEIVED  
JUL 1 11:11 AM '93

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 [Signature] TITLE Production Assistant DATE 915-688-6943

(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 conduct operations thereon.  
CONDITIONS OF APPROVAL, IF ANY:

APPROVED BY (ORIG. SGD.) RICHARD L. MANUS TITLE AREA MANAGER DATE JUL 14 1993

\*See Instructions On Reverse Side

Submit to Appropriate  
District Office  
State Lease - 4 copies  
Fee Lease - 3 copies

State of New Mexico  
Energy, Minerals and Natural Resources Department

Form C-102  
Revised 1-1-89

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

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

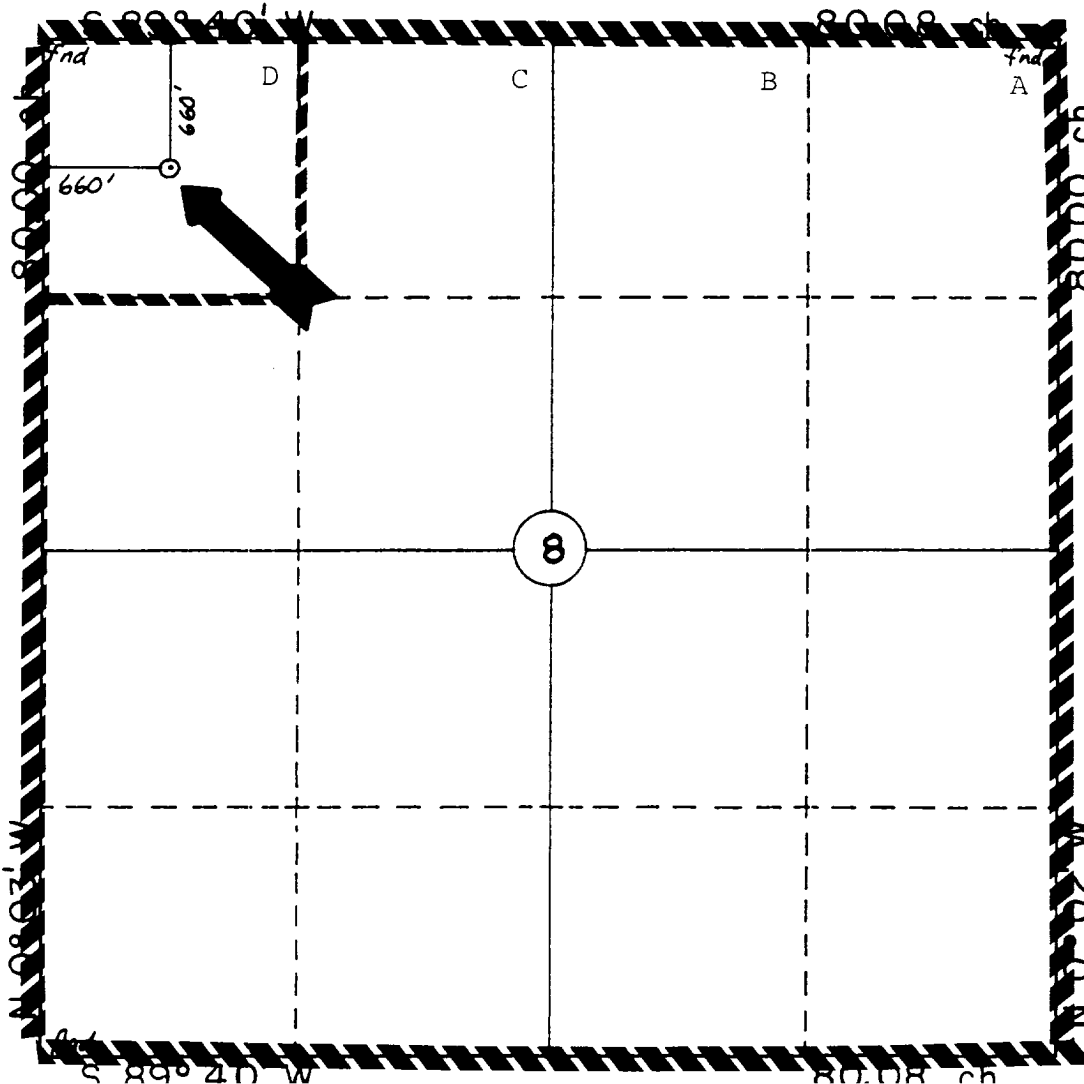
WELL LOCATION AND ACREAGE DEDICATION PLAT

All Distances must be from the outer boundaries of the section

Operator MERIDIAN OIL INC.			Lease JACK TANK "8" FEDERAL		Well No. 1
Unit Letter D	Section 8	Township 24 South	Range 32 East	County NMPM LEA	
Actual Footage Location of Well: 660 feet from the North line and 660 feet from the West line					
Ground level Elev. 3581	Producing Formation Delaware		Pool Wildcat	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 interest 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 interest, has been approved by the Division.

0 330 660 990 1320 1650 1980 2310 2640 2000 1500 1000 500 0



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  
Production Assistant  
Position  
Meridian Oil Inc.  
Company  
3/3/93  
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.

4-14-93

Date Surveyed  
William E. Mahnke II

Signature & Seal of  
Professional Surveyor  
WILLIAM E. MAHNKE II  
NEW MEXICO  
18466  
Certificate No. 8466  
PROFESSIONAL LAND SURVEYOR

<b>OPERATORS NAME:</b>	<b>Meridian Oil Inc.</b>
<b>LEASE NAME AND WELL NO.:</b>	<b>Jack Tank 8 Federal #1</b>
<b>LOCATION:</b>	<b>D, Sec. 8 T34S, R32E, 660' FNL &amp; 660' FWL</b>
<b>FIELD NAME:</b>	<b>Wildcat (Delaware)</b>
<b>COUNTY:</b>	<b>Lea County, NM</b>
<b>LEASE NUMBER:</b>	<b>NM-55953</b>

The following information is to supplement BLM form 3160-3 Application for permit to deepen 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.

Rustler	800'	Delaware	4600'
Salado	1100'		

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	4700' - TD	(Oil)
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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.

10" - 3M BOP stack to be installed on the 13 3/8" csg. & left for the remainder of drlg. Tested to 1500 psi before drlg. the 8 5/8" csg shoe. The BOP stack will consist of one blind ram BOP, one pipe ram BOP, and an annular BOP.

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.

- a. 17½" 13 3/8", H-40, 48# csg. set @ 600"
  - b. 12¼" 8 5/8", K-55, 28#, 32# csg. set @ 4400'
  - c. 7 7/8" 5½", K-55, 17# csg. set @ 8750'
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/650 sxs.
  - b. 8 5/8" csg: Cmt w/2100 sxs.
  - c. 5½" csg.: Cmt w/1100 sxs.
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:
 

0-600' fresh water gel & lime  
 600'-4400' Brine MW - 10-10.1 #/gal.  
 4400' - 6600' fresh water MW 8.5- 8.7 #/gal.  
 6600' - 8750' fresh water & polymer 8.6-8.9 #/gal.

  - (a.) Length and location of blowie line, including the automatic igniter or continuous pilot light.  
  
Not applicable
  - (b.) Location of compressor equipment, including safety devices, and the distance from the wellbore.  
  
Not Applicable
  - (c.) Schematics showing dedustor equipment and rotating head.  
  
Not Applicable
  - (d.) Amounts, types, and characteristics of stand-by mud and associated circulating equipment.

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Not Applicable

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 4500' to TD
- d. Logs to be run: CNL-SLD/CAL/GR - TD - 4400'  
DIL/GR - TD - 4400'  
CNL/GR - 4400' - surface)

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.

No hydrogen sulfide is expected in known drilling area.

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

Anticipated start date is 6-1-93. Anticipated drilling time expected to be 23 days from surface to TD.

BLOWOUT PREVENTION EQUIPMENT  
 10" 900S ALL FLANGED EQUIPMENT  
 5,000# WORKING PRESSURE - 10,000# TEST

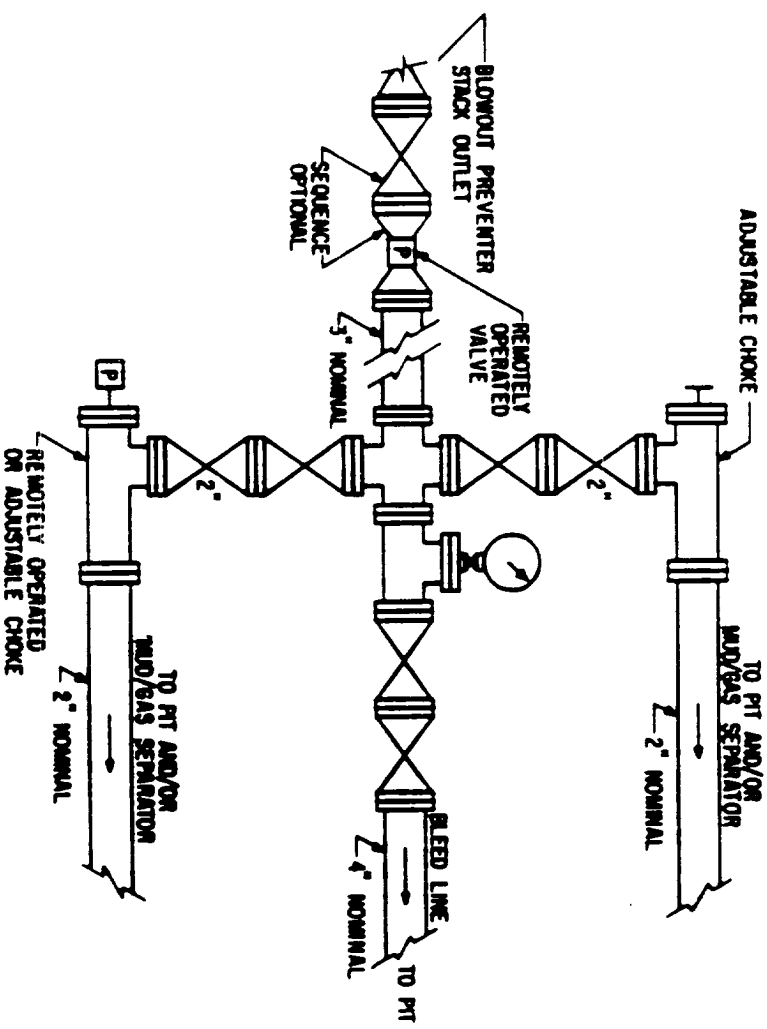
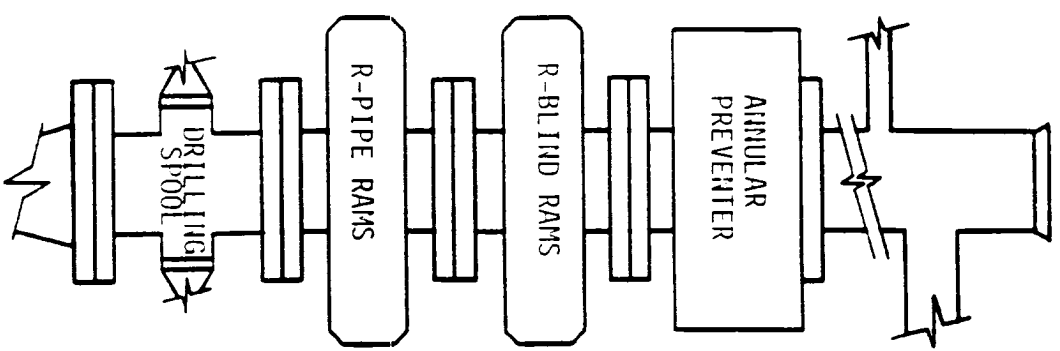


FIG. 3.A.2

TYPICAL CHOKE MANIFOLD ASSEMBLY FOR 5M  
 RATED WORKING PRESSURE SERVICE -  
 SURFACE INSTALLATION