

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

30-D25-32375
FORM APPROVED
OMB NO. 1004-0136
Expires: February 28, 1995
SUBMIT IN TRIPLICATE
(See instructions on reverse side)

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.

<26485>

3. ADDRESS AND TELEPHONE NO.

P.O. BOX 51810, MIDLAND, TX 79710

915-688-6906

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

At surface

M, 879' FSL & 403' FWL

At proposed prod. zone

5. LEASE DESIGNATION AND SERIAL NO.

NM-81633

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME

Checkerboard 23 Federal

9. WELL NO.

6

10. FIELD AND POOL, OR WILDCAT

Red Tank Bone Spring

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

23, T22S, R32E

12. COUNTY OR PARISH

Lea

13. STATE

NM

15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT.

403'

16. NO. OF ACRES IN LEASE

920

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.

1548'

19. PROPOSED DEPTH

10,150'

20. ROTARY OR CABLE TOOLS

rotary

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

3685' GR

Controlled Water Basin

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", H-40	48#	850'	735 sxs circd to surf.
12 1/4"	8 5/8", K-55	28# & 32#	4600'	2075 sxs circd to surf.
7 7/8"	5 1/2", K-55, N-80	17#	10,150'	1300 sxs-TOC 4400 +/-

2 stage job

Not in designated Potash area.

Lease Description: All of Sec. 23 except 80 acres in the E/2, SE/4 - (560 acres)
S/2 of Sec. 24 - (320 acres)
NE/4, NE/4 of Sec. 24 - (40 acres)
Total acres in lease (920 acres)

Contact person for 7 day letter of receipt of APD is: Maria L. Perez
Production Assistant
Production Services Department

Approval Subject to
General Requirements and
Special Stipulations
Attached

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

Maria L. Perez

TITLE

Production Assistant

DATE

12-1-93

(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 RICHARD L. MANUS

AREA MANAGER

JAN 04 1994

APPROVED BY

TITLE

DATE

*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.

INSTRUCTIONS

GENERAL: This form is designed for submitting proposals to perform certain well operations, as indicated, on all types of lands and leases for appropriate action by either a Federal or a State agency, or both, pursuant to applicable Federal and/or State laws and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local, area, or regional procedures and practices, either are shown below or will be issued by, or may be obtained from, the local Federal and/or State office.

ITEM 1: If the proposal is to redrill to the same reservoir at a different subsurface location or to a new reservoir, use this form with appropriate notations. Consult applicable State or Federal regulations concerning subsequent work proposals or reports on the well.

ITEM 4: If there are no applicable State requirements, locations on Federal or Indian land should be described in accordance with Federal requirements. Consult local State or Federal office for specific instructions.

ITEM 14: Needed only when location of well cannot readily be found by road from the land or lease description. A plat, or plats, separate or on this reverse side, showing the roads to, and the surveyed location of, the well, and any other required information, should be furnished when required by Federal or State agency offices.

ITEMS 15 AND 18: If well is to be, or has been directionally drilled, give distances for subsurface location of hole in any present or objective production zone.

ITEM 22: Consult applicable Federal or State regulations, or appropriate officials, concerning approval of the proposal before operations are started.

NOTICE

The Privacy Act of 1974 and the regulation in 43 CFR 2.48(d) provide that you be furnished the following information in connection with information required by this application.

AUTHORITY: 30 U.S.C. 181 et seq., 25 U.S.C. 396; 43 CFR Part 3160.

PRINCIPAL PURPOSE: The information is to be used to process and evaluate your application for permit to drill, deepen, or plug back an oil or gas well.

ROUTINE USES: (1) The analysis of the applicant's proposal to discover and extract the Federal or Indian resources encountered. (2) The review of procedures and equipment and the projected impact on the land involved. (3) The evaluation of the effects of proposed operation on surface and subsurface water and other environmental impacts. (4)(5) Information from the record and/or the record will be transferred to appropriate Federal, State, local or foreign agencies, when relevant to civil, criminal or regulatory investigations or prosecutions, as well as routine regulatory responsibility.

EFFECT OF NOT PROVIDING INFORMATION: Filing of this application and disclosure of the information is mandatory only if the lessee elects to initiate drilling operation on an oil and gas lease.

ALL INFORMATION CONTAINED
HEREIN IS UNCLASSIFIED
DATE 10/18/01 BY 1043
1043

The Paperwork Reduction Act of 1980 (44 U.S.C. 3501 et seq) requires us to inform you that:

This information is being collected to allow evaluation of the technical, safety, and environmental factors involved with drilling for oil and/or gas on Federal and Indian oil and gas leases.

This information will be used to analyze and approve applications.

Response to this request is mandatory only if the lessee elects to initiate drilling operations on an oil and gas lease.

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

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

DISTRICT II
P.O. Drawer DD, Artesia, NM 88210

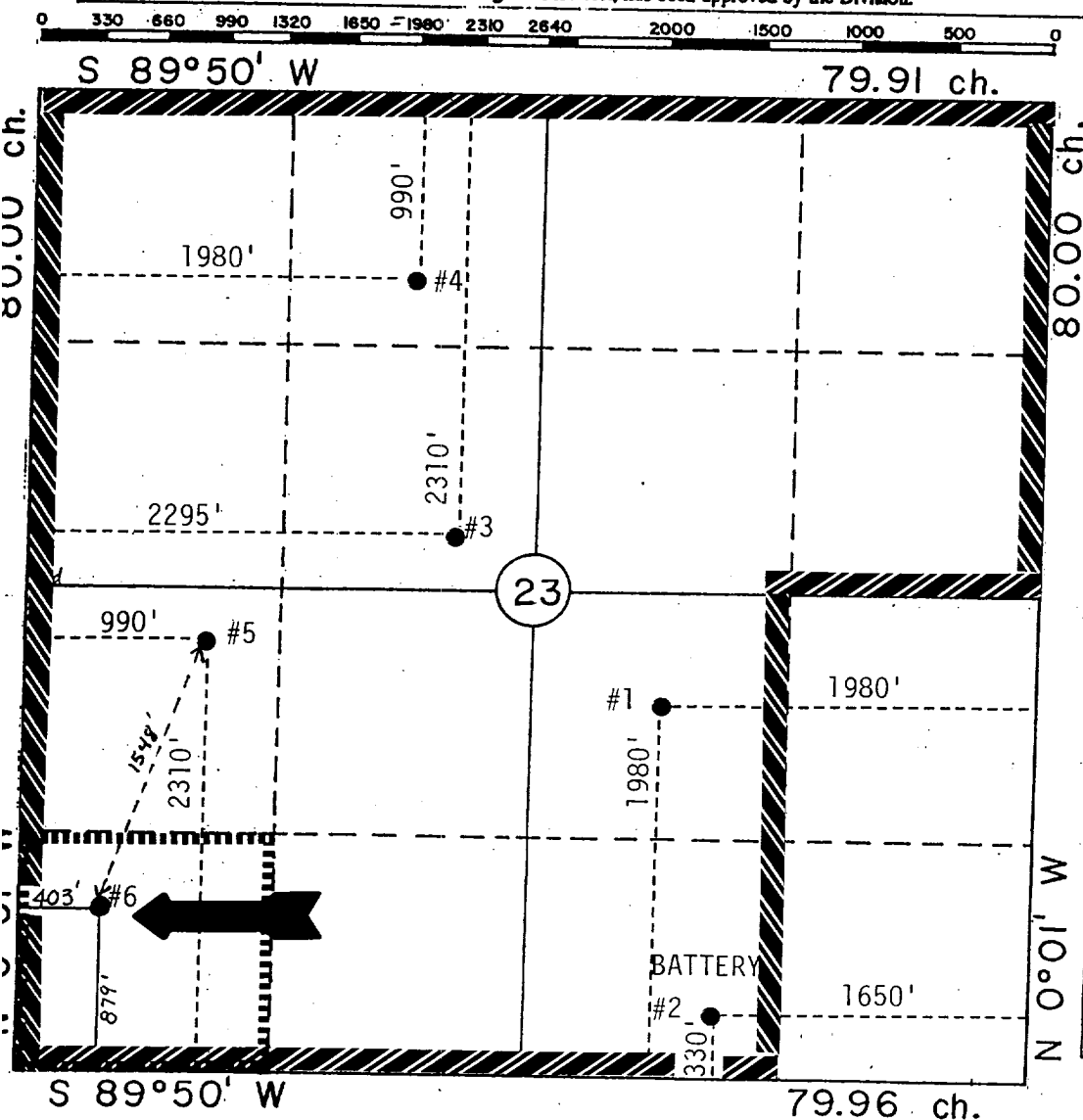
DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410

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

WELL LOCATION AND ACREAGE DEDICATION PLAT

All Distances must be from the outer boundaries of the section

Operator MERIDIAN OIL INC.			Lease CHECKERBOARD "23" FEDERAL		Well No. 6
Unit Letter M	Section 23	Township 22 SOUTH	Range 32 EAST	County LEA	
Actual Footage Location of Well: 879 feet from the SOUTH line and 403 feet from the WEST line					
Ground level Elev. 3685	Producing Formation BONE SPRING		Pool RED TANK BONE SPRING		Dedicated Acreage: 40 Acres
<p>1. Outline the acreage dedicated to the subject well by colored pencil or hatchure marks on the plat below.</p> <p>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).</p> <p>3. 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.? <input type="checkbox"/> Yes <input type="checkbox"/> No If answer is "yes" type of consolidation _____</p> <p>If answer is "no" list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.)</p> <p>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.</p>					



OPERATOR CERTIFICATION

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

Signature

Maria L. Perez

Printed Name

MARIA L. PEREZ

Position

PRODUCTION ASST.

Company

MERIDIAN OIL INC.

Date

11-16-93

SURVEYOR CERTIFICATION

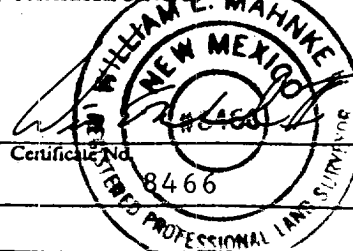
I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

11-3-93

Date Surveyed

WILLIAM E. MAHNKE II

Signature & Seal of
Professional Surveyor



OPERATORS NAME:	<u>Meridian Oil Inc.</u>
LEASE NAME AND WELL NO.:	<u>Checkerboard "23" Federal No. 6</u>
LOCATION:	<u>UL M, 879' FSL & 403' FWL, Sec. 23, T22S, R32E</u>
FIELD NAME:	<u>Red Tank Bone Spring</u>
COUNTY:	<u>Lea County, NM</u>
LEASE NUMBER:	<u>NM-81633</u>

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.

<u>FORMATION</u>	<u>DEPTH</u>
Rustler	970'
T/Salt	1100'
B/Salt	4500'
Delaware Sandstone	4850'
BoneSpring, LS/Sandstone	8730'

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.

Bone Springs	8730-10050' (Oil)
Delaware - Bell Canyon	4850-5010' (Oil)
Brushy Canyon - Delaware	8100-8550' (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 annualr BOP w/rotating head to be installed on the 13 3/8" casing. Tested to 750 psi before drilling the 13 3/8" casing shoe.

11" 3M BOP stack to be installed on the 8 5/8" casing. The BOP stack will consist of one blind ram BOP, one pipe ram BOP, and a rotating head. Tested to 3000 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.
 - 17½" hole, 13 3/8" H-40 48# STC csg set @ 850'.
 - 12¼" hole, 3200' 8 5/8" 28# K-55 BTC, 1400' 8 5/8" 32# K-55 LTC csg.set depth @4600'.
 - 7 7/8" hole, 8500' of 5½", 17# K-55 LTC csg. & 1650' of 5½" 17# N-80 LTC csg. setting depth @10,150'.
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/535sxs. Class "C" + 4% gel & 2% CaCl₂ + ¼ pps Flocele; tail w/ 200 sxs Class "C" +2% CaCl₂ +¼ pps Flocele. Circ. to surface.
 - b. 8 5/8" csg: Cmt w/
1st Stage: 800 sxs Class "C" Lite + 9 pps salt +5 pps Gilsonite + 1 pps Econolite + ¼ pps Flocele. Tail w/250 sxs Class 'C' + 2% CaCl₂.
2nd Stage: 825 sxs Class "C" Lite + 9 pps salt + ¼ pps Flocele. 200 sxs Class "C" Lite +2% CaCl₂. Circulate cement to surface. Stage collar @2500'.
 - c. 5½" csg: Cmt. w/
1st Stage: 600 sx Class 'H' 50/50 POZ +2% gel +.5% Halad-9, +3 pps KCL, +¼ pps Flocele displace to seal plug.
2nd Stage: 700 sx Class 'H' 50/50 POZ +2% gel +.5% Halad-9, +3 pps KCL, ¼ pps Flocele. Bring TOC to 4400'±. Stage collar @7500'.
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:

0-850' Fresh water, gel and lime system, MW 8.6 - 9.0, viscosity 32-34
850-4600' Brine, MW 10.0 - 10.1, (+ 160,000 cl-), viscosity 27-28
4600-TD Fresh water/Bentonite/Drispac, MW 8.4 - 9.0, viscosity 29-34

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 4600' to TD.

d. Logs to be run: CNL-LDT/GR/CAL: TD ICP (CNL/GR to surface).
DIL/SFL/GR:TD-ICP
BNC Sonic: TD-ICP
Sidewall cores

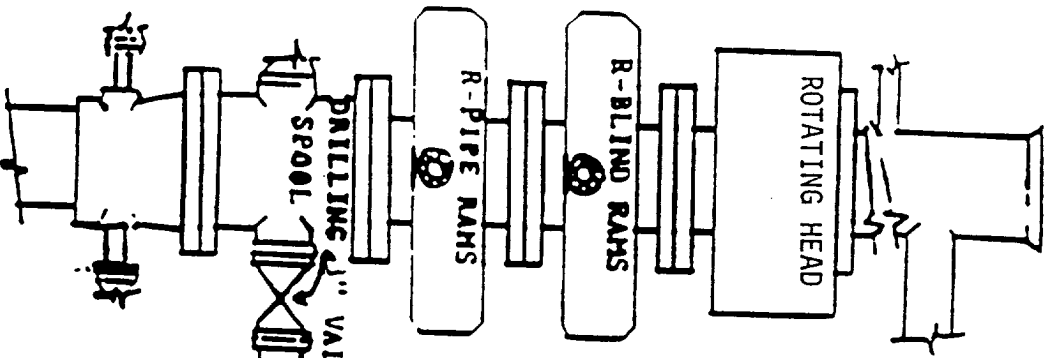
8. The expected bottom-hole pressure and any anticipated abnormal pressures, temperatures or potential hazards that are expected to be encountered, such as lost circulation zones and hydrogen sulfide. The operator's plans for mitigating such hazards shall be discussed. Should the potential to encounter 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 145° F. Attached is a H₂S contingency plan.

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 24 days from surface to TD.

DOUBLE RAM



BLOW OUT PREVENTION EQUIPMENT
 10" 900s ALL FLANGED CONNECTIONS
 3000# WORKING PRESSURE _ 6000# TEST

