

30-045

ACB/SD

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UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

MAR 17 1994

Resource Planning Management  
Planning, Colorado

OIL CON. DIV.

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

30-045-29156

1a. Type of Work DRILL	5. Lease Number I-22-IND-2772
1b. Type of Well GAS	6. If Indian, All. or Tribe Ute Mt. Ute
2. Operator MERIDIAN OIL 14538	7. Unit Agreement Name
3. Address & Phone No. of Operator PO Box 4289, Farmington, NM 87499 (505) 326-9700	8. Farm or Lease Name 7618 Ute
4. Location of Well 1595' FNL, 1250' FWL Latitude 36° 58' 32", Longitude 108° 20' 08"	9. Well Number 24
10. Field, Pool, Wildcat Barker Creek Alkali Gulch	11. Sec., Twn, Rge, Mer. Sec 20, T-32-N, R-14-W, NMPM
12. County San Juan	13. State NM
14. Distance in Miles from Nearest Town 10 miles to LaPlata	15. Distance from Proposed Location to Nearest Property or Lease Line 1250'
16. Acres in Lease	17. Acres Assigned to Well 640
18. Distance from Proposed Location to Nearest Well, Drlg, Compl, or Applied for on this Lease 2400'	19. Proposed Depth 9450' TVD 9944' MD
20. Rotary or Cable Tools Rotary	21. Elevations (DF, FT, GR, Etc.) 6194' GR
22. Approx. Date Work will Start 2nd quarter 1994	23. Proposed Casing and Cementing Program See Operations Plan attached
24. Authorized by: <u>[Signature]</u> Regional Drilling Engineer	Date <u>2/28/94</u>

PERMIT NO. _____	APPROVAL DATE _____
APPROVED BY <u>[Signature]</u>	TITLE <u>Area Manager</u> DATE <u>5/6/94</u>

Archaeological Report to be submitted by LaPlata Archaeology  
Threatened and Endangered Species Report to be submitted  
NOTE: This format is issued in lieu of U.S. BLM Form 3160-3

OPERATOR'S COPY

Hold C-104 For NSL

Submit to A-2, 2nd floor  
District Office  
State Lease - 4 copies -  
Fee Lease - 3 copies -

State of New Mexico  
Energy, Minerals and Natural Resources Department

Form C-182-  
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 00, Arama, NM 88210

DISTRICT III  
1000 Rio Grande Rd., Alamogordo, NM 87410

WELL LOCATION AND ACREAGE DEDICATION PLAT

All Distances must be from the outer boundaries of the section

Operator Meridian Oil Inc.		Lease Ute		Well No. 24	
Unit Letter E	Section 20	Township 32 North	Range 14 West	County San Juan	
Actual Footage Location of Well: 1595 feet from the North line and 1250 feet from the West line -					
Ground Level Elev. 6194'		Producing Formation Alkali Gulch		Pool Barker Creek	
				Delimited Acreage 640 Acres	

1. Outline the acreage dedicated to the subject well by colored pencil or inkline marks on the plat below.

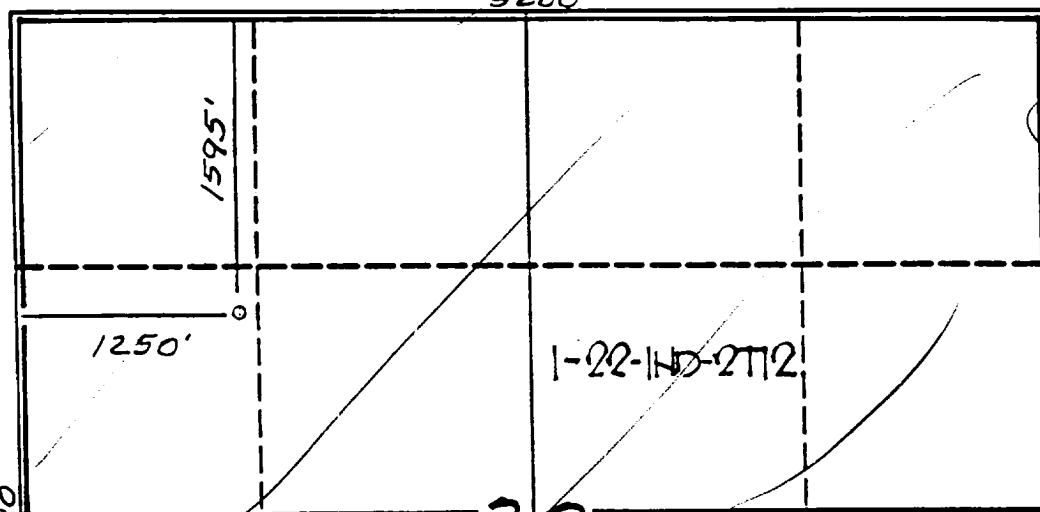
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).

3. If more than one lease of different ownership is dedicated to the well, have the interest of all owners been considered by communication, unconsent, force-pooling, etc.?

☐ Yes ☐ No If answer is "yes" type of consideration \_\_\_\_\_

If answer is "no" list the owners and their descriptions which have actually been considered. (Use reverse side of this form if necessary).

No allowable well be assigned to the well until all interests have been considered (by communication, unconsent, force-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.

*Peggy Bradfield*  
Signature

Peggy Bradfield

Printed Name

Regulatory Representative

Position

Meridian Oil Inc.

Company

2-11-94

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. 11-3-93

Date Surveyed

*C. Edwards*

Signature

Professional Surveyor

6857

*C. Edwards*

Signature

Professional Surveyor

6857

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OIL CON. DIV.  
DIST. 3

RECEIVED  
AUG 24 1994

OIL CON. DIV.  
DIST. 3

6857

February 11, 1994

OPERATIONS PLAN

**Well Name:** Ute #24  
**Location:** 1595'FNL, 1250'FWL Section 20, T-32-N, R-14-W  
San Juan County, New Mexico  
**Formation:** Barker Creek Alkali Gulch  
**Elevation:** 6194'GR

<b>Formation:</b>	<b>Top</b>	<b>Bottom</b>	<b>Contents</b>
Surface	Menefee	132'	
Point Lookout	132'	614'	fresh water
Mancos	614'	1720'	
Niobrara	1720'	2280'	
Greenhorn	2280'	2334'	
Graneros	2334'	2404'	
Dakota	2404'	2641'	gas
Morrison	2641'	3200'	fresh water
Junction Creek	3200'	3535'	salt water
Summerville	3535'	3625'	
Todilto	3625'	3635'	
Entrada	3635'	3738'	salt water
Chinle	3738'	4814'	
Shinarump	4814'	4933'	
Moenkopi	4933'	5202'	
Cutler	5202'	6844'	
Hermosa	6844'	7948'	
Upper Ismay	7948'	8014'	gas (potentially 100-500 ppm H <sub>2</sub> S)
Lower Ismay	8014'	8113'	gas (potentially 100-500 ppm H <sub>2</sub> S)
Desert Creek	8113'	8220'	gas (potentially 100-500 ppm H <sub>2</sub> S)
Akah	8220'	8407'	
Upper Barker Creek	8407'	8538'	
Lower Barker Creek	8538'		
Total Depth		<b>8810'</b>	

Logging Program:

Mud logs - 750' to Total Depth  
Wireline Logs - DIL/FDC-CNL/BHC/ML - 750' to Total Depth

Mud Program:

17 1/2" conductor hole - 0 - 200' - freshwater spud mud  
12 1/4" surface - 120 - 750' - freshwater spud mud  
7 7/8" production - 750 - 8810' - LSND

Pressure Control Program:

17 1/2" hole - diversion only

12 1/4" hole - a 3000 psi WP casinghead will be installed on the surface casing. A 5000 psi WP annulus preventer, a 5000 psi WP double gate preventer equipped with blind and pipe rams, and a 5000 psi x 3000 psi WP drilling spool with kill and choke lines will be nipped up on the casinghead.

Operations Plan  
Ute #24  
February 28, 1994

**Pressure Control Program (cont'd):**

7 7/8" hole - The annulus preventer will be tested to 2500 psi against casing. Pipe and blind rams, choke line, and manifold will be tested at 500 psi and 2500 psi against casing. Casing will be tested to 2500 psi prior to drilling the shoe.

Completion - a 5000 psi WP tubinghead will be installed on the production casing. A 5000 psi WP double gate preventer equipped with blind and pipe rams and a 5000 psi drilling spool equipped with kill and choke lines will be nipped up on the tubinghead. One 7" blooie line will be nipped up above the BOP's. A rotating head will be nipped up on top of the blooie line. Pipe and blind rams, choke line, and manifold will be tested at 500 psi and 4000 psi against casing. Casing will be tested to 4000 psi prior to completing the well.

BOP systems will be consistent with API RP 53. Pressure tests will be conducted before drilling out from under all casing strings which are set and cemented in place. Blow out preventer controls will be installed prior to drilling the surface casing plug and will remain in use until the well is completed or abandoned. All tests will be reported on the daily drilling report. Preventers will be tested before drilling casing cement plugs.

In the event that a kick is taken while drilling, the following procedure will be followed:

1. Pick up kelly and raise the tool joint above floor.
2. Shut down the mud pump.
3. Close the annular preventer.
4. Record standpipe pressure (SIDPP) after it stabilizes and pit gain.
5. Calculate Initial Circulating Pressure = Slow Circulating Pressure + SIDPP.
6. Calculate kill mud weight required.
7. Complete kill sheet.
8. Decide whether to raise mud weight or drill under-balanced.

**BOP Configuration:**

17 1/2" conductor hole - 0' - 200' - not applicable

**5000 psi system**

12 1/4" surface hole - 120' - 750' - Figures #1 & #3

**5000 psi system**

7 7/8" production hole - 750' - 8810' - Figures #2 & #3

Operations Plan  
Ute #24  
February 21, 1994

**Casing Program: (all casing will be new)**

<u>Hole Size</u>	<u>Depth Interval</u>	<u>Csg. Size</u>	<u>Wt.</u>	<u>Grade</u>
17 1/2"	0' - 200'	13 3/8"	48.0#	K-55 ST&C
12 1/4"	0' - 750'	8 5/8"	24.0#	K-55 LT&C
7 7/8"	0' - 8810'	5 1/2"	17.0#	N-80 LT&C

**Float Equipment:**

Conductor casing - guide shoe, centralizers every joint.  
Surface casing - guide shoe, float collar, centralizers every 4th joint.  
Production casing - float shoe, baffle, stage tools @ 2800' and 7800',  
centralizers every 4th joint.

**Wellhead Equipment (sour gas service):**

11" 3000 psi x 13 3/8" S. O. W. casinghead  
11" 3000 psi x 9" 5000 psi tubinghead  
9" 5000 psi x 3 1/8" 5000 psi adapter

Tree assembly for single completion gas service.

**Cementing:**

17 1/2" conductor - cement with 353 sx Class "B" w/2% calcium chloride (15.6#/gal. weight; 417 cu.ft. of slurry), 200% excess circulated to surface.

12 1/4" surface - cement with 283 sx Class "B" 65/35 Pozmix with 1/4# flocele/sx, 6% gel and 2% calcium chloride (12.4#/gal. weight) 232 cu.ft. of slurry). Tail with 100 sx Class "B" neat with 1/4# flocele/sx and 2% calcium chloride (15.6#/gal. weight; 118 cu.ft. of slurry), 100% excess circulated to surface.

7 7/8" production -

First stage - cement with 300 sx Class "B" with 1% fluid loss additive and 1/4# flocele/sx (15.8 gal.weight; 350 cu.ft. of slurry), 100% excess circulated to stage tool @ 7800'.

Second stage - cement with 823 sx Class "B" 65/35 Pozmix w/6% gel, 1/2% fluid loss additive, 1/4# flocele/sx and 2% calcium chloride (12.4#/gal. weight; 1457 cu.ft. of slurry). Tail with 50 sx Class "B" neat with 1% fluid loss additive and 1/4#/sx flocele (15.8#/gal.weight; 59 cu.ft. of slurry), 75% excess circulated to stage tool @ 2800'.

Third stage - cement with 446 sx Class "B" 65/35 Pozmix w/6% gel, 1/2% fluid loss additive, 1/4# flocele/sx and 2% calcium chloride (12.4#/gal. weight; 790 cu.ft. of slurry). Tail with 50 sx Class "B" neat with 1% fluid loss additive and 1/4#/sx flocele (15.8#/gal.weight; 59 cu.ft. of slurry), 75% excess circulated to surface.

NOTE: 4 hour circulation time between stages.

Operations Plan  
Ute #24  
February 10, 1994

**Drill Stem Test Program (potential):**

Hermosa 6844'

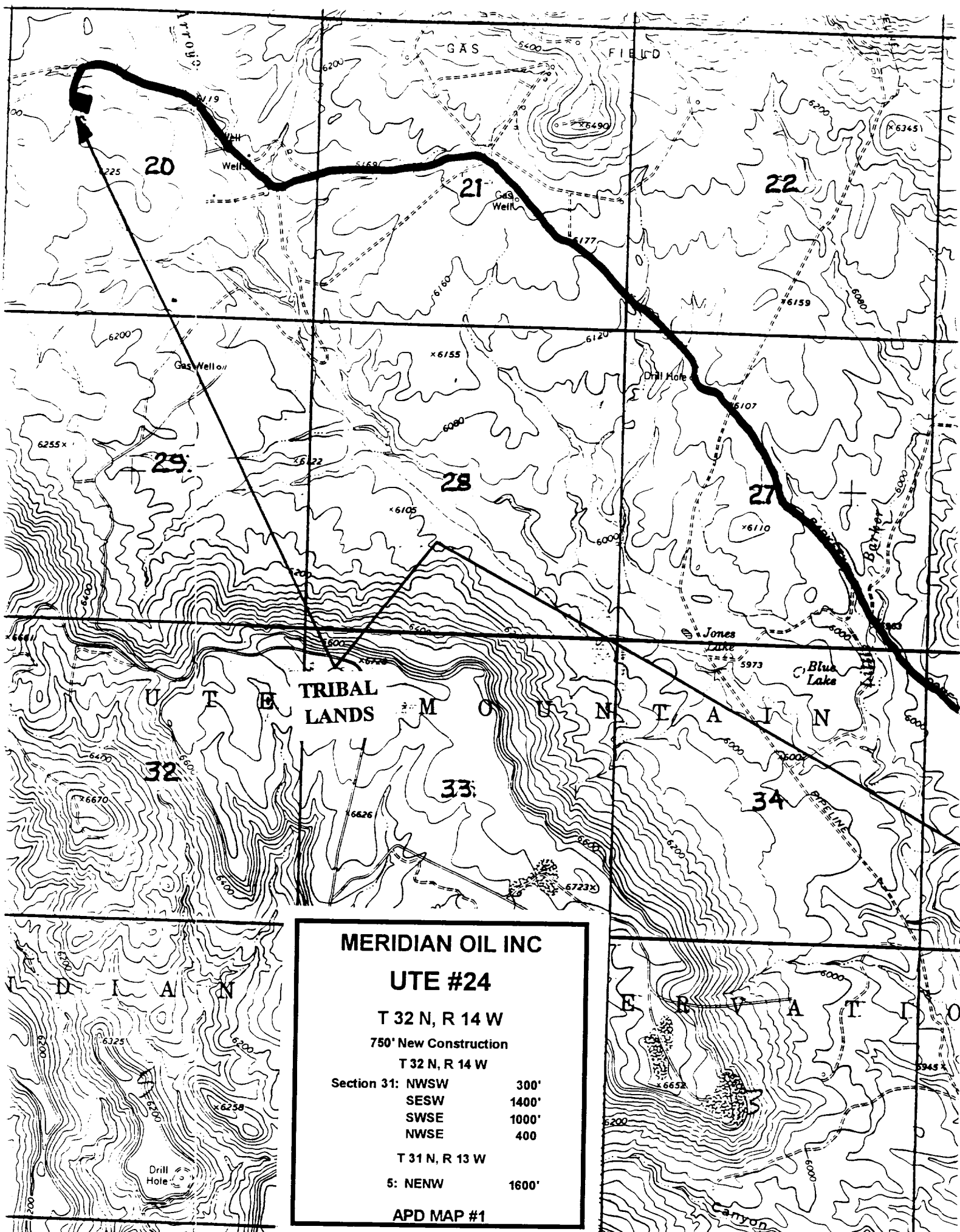
All drill stem tests on Meridian operated wells will be run in compliance with OSHA requirements.

1. Hold safety meeting with all personnel prior to DST to explain procedure and safe areas.
2. A safety joint, jars, bypass and pump out sub will be included in the test tool assembly. Additionally, one T.I.W. valve will be run 30' from the floor, and one T.I.W. valve will be run 120' from the floor.
3. BOP's, kill line, fill-up line, and Test line will be checked for proper working condition prior to going in hole.
4. Magna-flux inspection of all DST tools will be required prior to testing.
5. Smoking or open fires any place on location will not be permitted during test.
6. For all tests, the drill string will be reversed out before pulling out of hole, with the following as a procedural guide:
  - a. Release the packer and pull one stand only. Keep the hole full.
  - b. Drop the bar and open the reversing sub with pumps running. Reverse entire test to test tank.
7. All testing and reversing out will be performed during daylight hours only.

**Coring Program:**

Desert Creek (8720-8780')

**Anticipated abnormal pressures or temperatures:** none



**MERIDIAN OIL INC**

**UTE #24**

**T 32 N, R 14 W**

**750' New Construction**

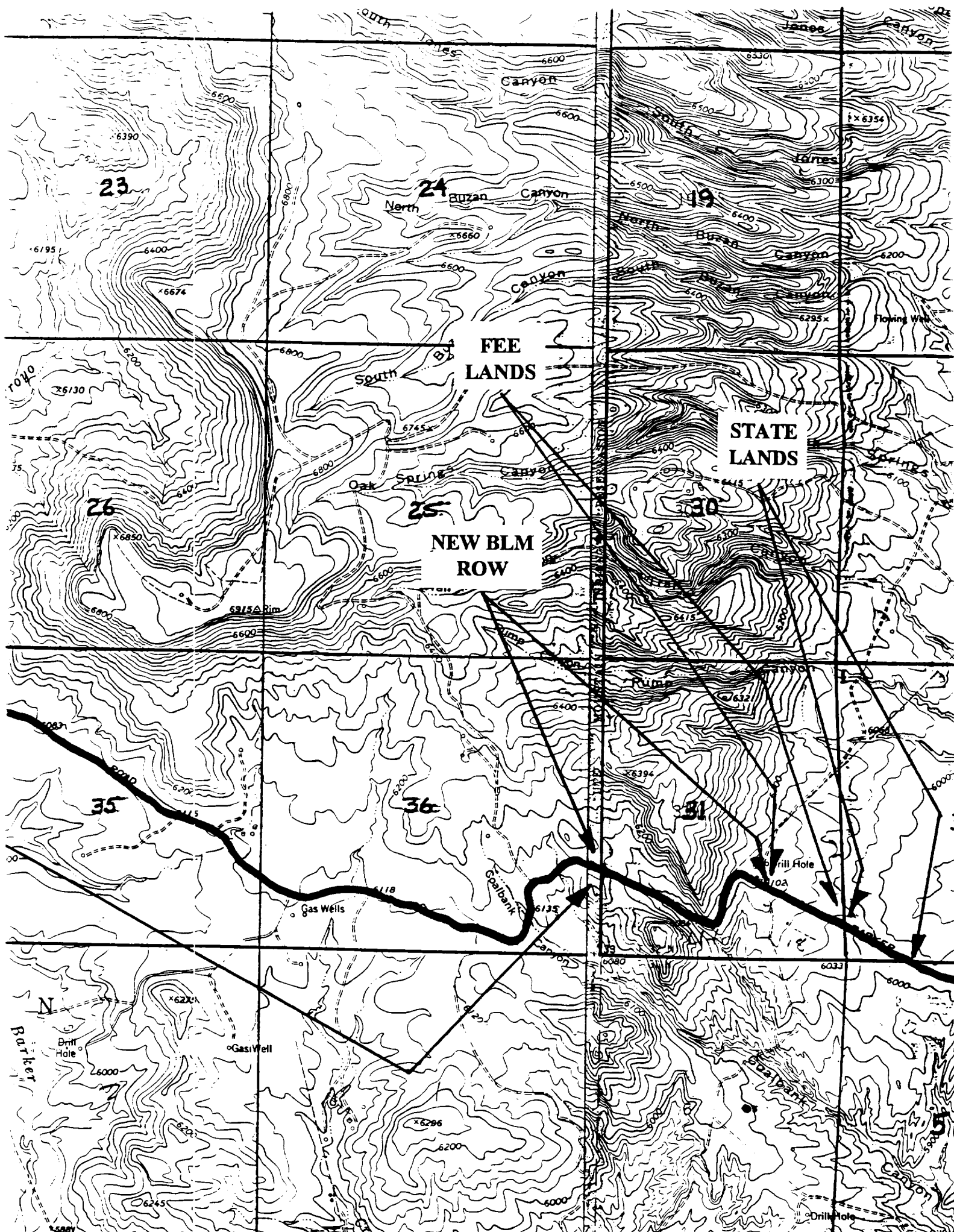
**T 32 N, R 14 W**

Section 31: NWSW	300'
SESW	1400'
SWSE	1000'
NWSE	400

**T 31 N, R 13 W**

5: NENW	1600'
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**APD MAP #1**









**LTR**



**Job separation sheet**

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

SUBMIT IN DUPLICATE\*

(See other instructions on reverse side)

FOR APPROVED  
OMB NO. 1004-0137  
Expires: December 31, 1991

WELL COMPLETION OR RECOMPLETION REPORT AND LOG \*

1. TYPE OF WELL: OIL WELL ☐ GAS WELL ☒ DRY ☐ Other AUG 24 1994  
2. TYPE OF COMPLETION: NEW WELL ☒ WINK OVER ☐ DEEP-EN ☐ PLUG BACK ☐ DIFF. CENVR. ☐ Bureau of Land Management

3. NAME OF OPERATOR: Meridian Oil Inc  
4. ADDRESS AND TELEPHONE NO.: PO Box 4289, Farmington, NM 87499 (505) 326-9700

5. LOCATION OF WELL (Report location clearly and in accordance with any State requirements):  
At surface 1595' FNL, 1250' FWL  
At top prod. interval: reported below  
At total depth

6. LEASE DESIGNATION AND SERIAL NO.

I-22-IND-2772

7. IF INDIAN, ALLOTTEE OR TRIBE NAME

Ute Mountain Ute

8. UNIT AGREEMENT NAME

9. FARM OR LEASE NAME, WELL NO.

Ute #24

10. API WELL NO.

11. FIELD AND POOL OR WILDCAT

Barker Creek Alkali Gulch

12. SEC., T., R., M., OR BLOCK AND SURVEY OR AREA

Sec. 20, T-32-N, R-14-W

13. COUNTY OR PARISH

San Juan

14. STATE

NM

15. DATE SPUDDED 5-31-94 16. DATE T.D. REACHED 6-22-94 17. DATE COMPL. (Ready to prod.) 7-30-94 18. ELEVATIONS (DP, RKB, RT, GR, ETC.)\* 6194 GR 19. ELEV. CASINGHEAD

20. TOTAL DEPTH, MD & TV 8810 21. PLUG BACK T.D., MD & TV 22. IF MULTIPLE COMPLETIONS, SHOW NAME 23. INTERVALS DRILLED BY 0-8810 24. ROTARY TOOLS 25. CABLE TOOLS

26. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TV) 8057-8116 27. WAS DIRECTIONAL SURVEY MADE

28. TYPE ELECTRIC AND OTHER LOGS RUN AIT, CNL, LDT, ML, DSS, SMI 29. WAS WELL CURED Yes

30. CARING RECORD (Log all strings set in well)

CASING SIZE/GRADE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	(TOP OF CEMENT, CEMENTING RECORD)	AMOUNT PULLED
13 3/8	48#	247	17 1/2	360 cu.ft.	
8 5/8	24#	742	12 1/4	649 cu.ft.	
5 1/2	17#	8809	7 7/8	3998 cu.ft.	

LINER RECORD					TUBING RECORD		
SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)
					2 7/8	8157	

31. PERFORATION RECORD (Interval, size and number) 32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.

INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
8360-8449	squd w/50 sx Class "B" Neat
8057-8116	8000# 100 mesh sd 80,000# 20/4 1950 bbl 40# x-link gel

33. PRODUCTION

DATE FIRST PRODUCTION		PRODUCTION METHOD (Flowing, gas lift, pumps—size and type of pump)					WELL STATUS (Producing or shut-in)	
8-30-94		Flowing					SI	
DATE OF TEST	HOURS TESTED	CHOKED SIZE	PROD'N. FOR TEST PERIOD	OIL—BBL.	GAS—MCF.	WATER—BBL.	GAS-OIL RATIO	
8-15-94	3	3/4	→					
FLOW, TUBING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE	OIL—BBL.	GAS—MCF.	WATER—BBL.	OIL GRAVITY-API (CORR.)		
	SI 2799	→		15,140				
TEST WITNESSED BY								

34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.) To be sold TEST WITNESSED BY

35. LIST OF ATTACHMENTS None

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records

SIGNED: Regulatory Affairs TITLE: Regulatory Affairs DATE: 8-25-94

\*(See instructions and spaces for Additional Data 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.

37. SUMMARY OF POROUS ZONES: (Show all important zones of porosity and contents thereof; cored laterals; and all drill-stem, tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures, and recoveries):

38.

GEOLOGIC MARKERS

FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.	NAME	TOP	
					MEAS. DEPTH	TRUE DEPTH
Mesa Verde	Surface 614'		Light gry, med-fine gr ss, carb sh & coal	Mesaverde	Surface	
Mancos	614' 1694'		Dark gry carb sh.	Mancos	614'	
Gallup	1694' 2254'		Lt gry to brn calc carb micac glauc silts & very fine gr gry ss w/irreg. interbed sh	Niobrara	1694'	
Greenhorn	2254' 2308'		Highly calc gry sh w/thin lmst.	Greenhorn	2254'	
Graneros	2308' 2378'		Dk gry shale, fossil & carb w/pyrite incl.	Graneros	2308'	
Dakota	2378' 2615'		Lt to dk gry foss carb sl calc sl silty	Dakota	2378'	
Morrison	2615' 3609'		ss w/pyrite incl thin sh bands clay & shale breaks	Morrison	2615'	
Entrada ss	3609' 5176'		Interbed grn, brn & red waxy sh & fine to coarse grn ss	Entrada	3609'	
Cutler	5176' 7922'		Orange, fn gr, rdd to sub rdd ss, tight	Cutler	5176'	
Ismay	7922' 8087'		Siltstone, orange to red, w/sandstones, orange fn grn	Ismay	7922'	
Desert Creek	8087' 8381'		Limestone, fossiliferous in part, shale dk-gray	Desert Creek	8087'	
Barker Creek	8381' 8611'		Limestone, fossiliferous in part, shale dk-gray	Barker Creek	8381'	
Alkali Gulch	8611' 8810'		Limestone, gray fossiliferous, dolomite lt brn-tan	Alkali Gulch	8611'	

Core #1: 8047-8075'  
Core #2: 8075-8082'  
Core #3: 8082-8114'

Cut & recovered 28'  
Cut & recovered 7'  
Cut 32', recovered 29.5'