

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

20-045-28849

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK

DRILL ☒

DEEPEN ☐

PLUG BACK ☐

b. TYPE OF WELL

OIL
WELL ☐

GAS
WELL ☒

OTHER

SINGLE
ZONE ☒

MULTIPLE
ZONE ☐

2. NAME OF OPERATOR

Meridian Oil Inc. 14538

3. ADDRESS OF OPERATOR

PO Box 4239, Farmington, NM 87499

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

At surface 1040' FNL, 1840' FEL

At proposed prod. zone

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

12 miles NE/Aztec

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

(Also to nearest drig. unit line, if any) 1040'

18. DISTANCE FROM PROPOSED LOCATION*
TO NEAREST WELL, DRILLING, COMPLETED,
OR APPLIED FOR, ON THIS LEASE, FT.

600'

16. NO. OF ACRES IN LEASE

1116.96

19. PROPOSED DEPTH

3022'

17. NO. OF ACRES ASSIGNED
TO THIS WELL

319.10 / 1000

20. ROTARY OR CABLE TOOLS

Rotary

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

6205' GL

This action is subject to technical and
procedural review pursuant to 43 CFR 3100.3
and appeal pursuant to 43 CFR 3100.4.

PROPOSED CASING AND CEMENTING PROGRAM

22. APPROX. DATE WORK WILL START*

23.

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	GENERAL QUANTITY OF CEMENT
* see operations plan				

RECEIVED

NOV 23 1992

OIL CON. DIV
DIST. 2

APD for this well location approved 11-19-90 and cancelled 4-28-90.

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, 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 Regional Drilling Engr DATE 11-13-92

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

APPROVED BY

TITLE

CONDITIONS OF APPROVAL, IF ANY:

nk7C

NMOOD

AREA MANAGER

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

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-102
Revised 1-1-89

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

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

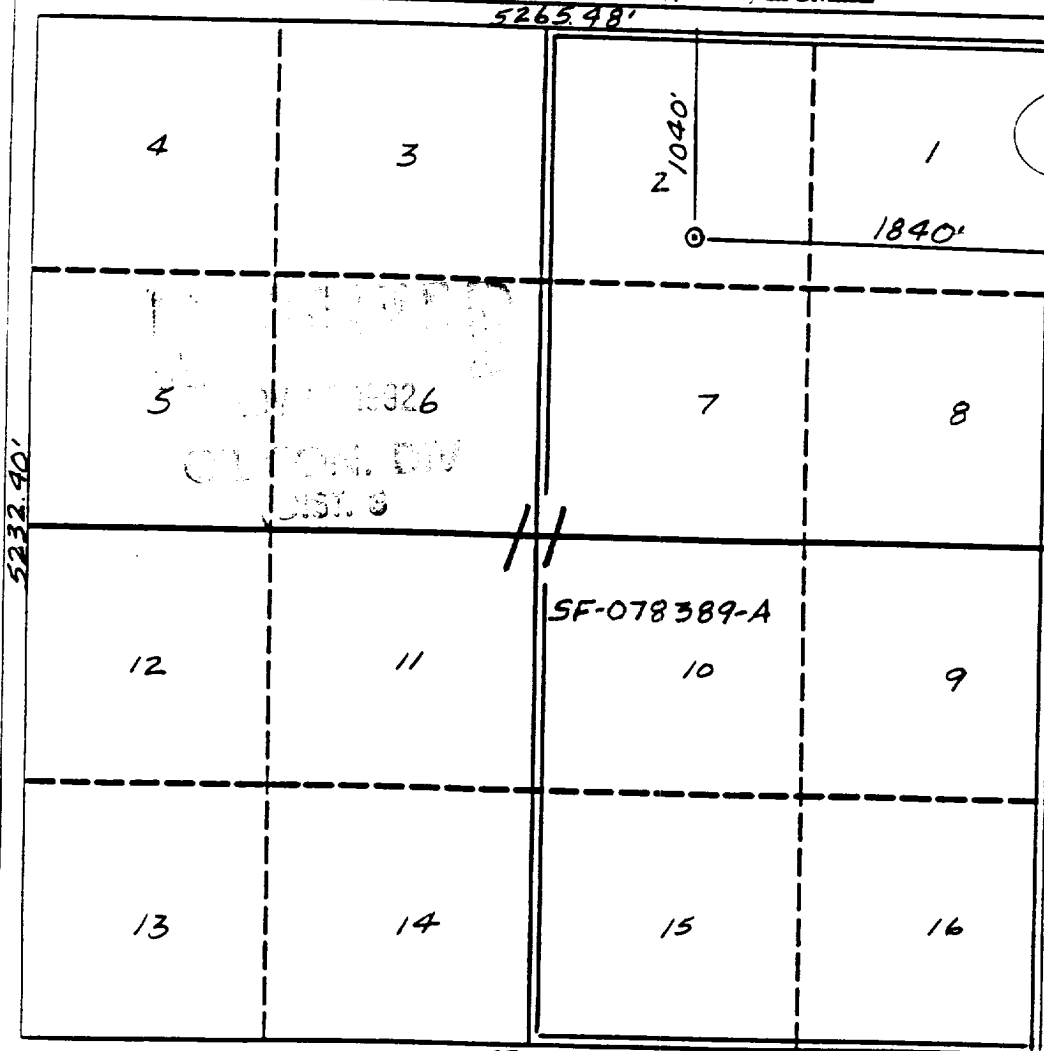
DISTRICT III
1000 Rio Breros Rd., Aztec, NM 87410

OIL CONSERVATION DIVISION
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

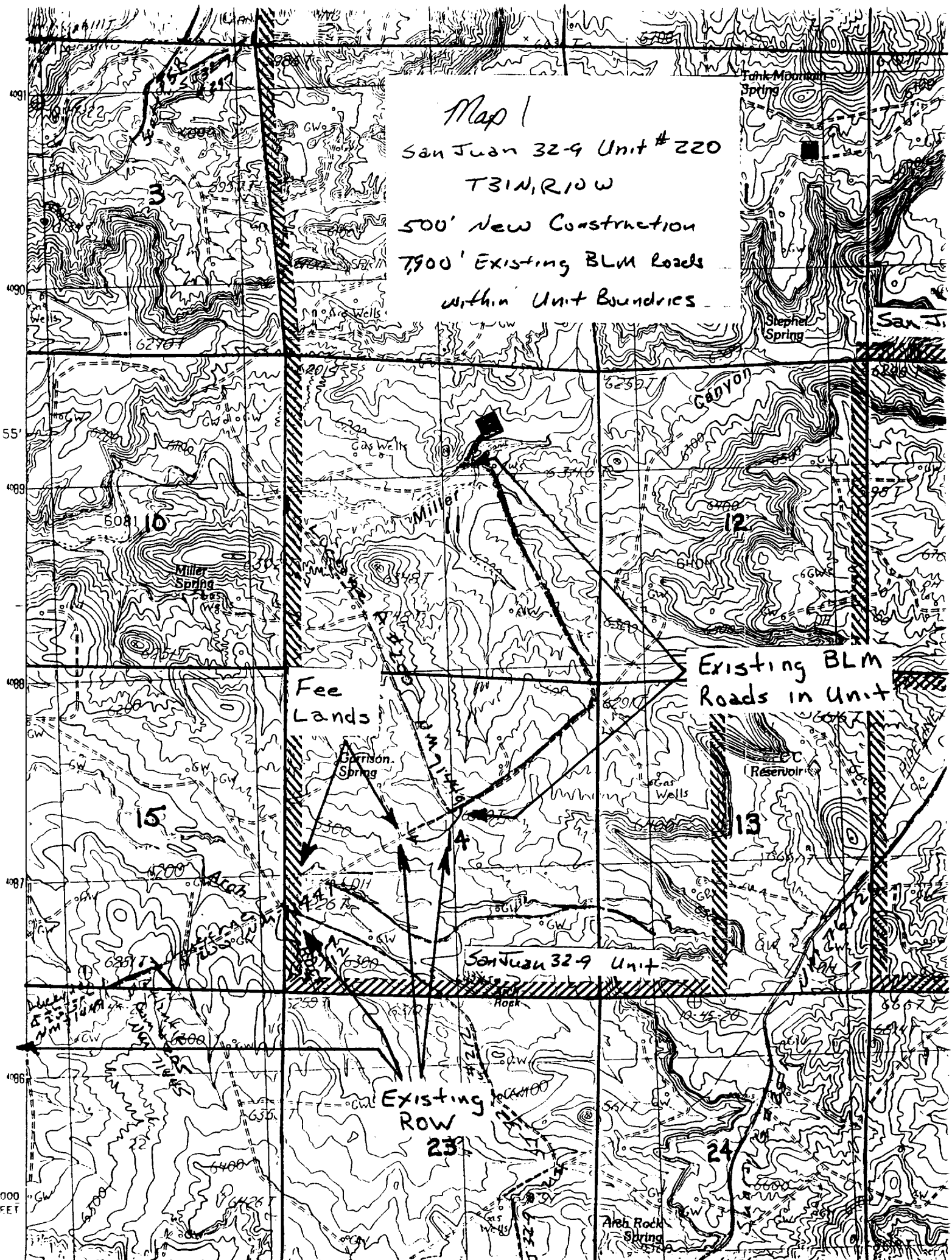
Operator Meridian Oil Inc.			Lease San Juan 32-9 Unit		Well No. 220
Unit Letter B	Section 11	Township 31 North	Range 10 West	County San Juan	
Actual Footage Location of Well: 1040 feet from the North line and 1840 feet from the East line					
Ground level Elev. 6205'		Producing Formation Fruitland Coal		Pool Basin <i>Fruitland Coal</i>	
				Dedicated Acreage 319.10 320 Acres	

- Outline the acreage dedicated to the subject well by colored pencil or hatchure marks on the plat below.
- If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
- 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 unitization
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.



OPERATOR CERTIFICATION	
I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.	
<i>Peggy Bradfield</i> Signature	
Peggy Bradfield Printed Name	
Regulatory Affairs Position	
Meridian Oil Inc. Company	
11-12-92 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.	
9-13-90 Date Surveyed	
<i>Neale Edwards</i> Signature	
Professional Neale Edwards	
6857 6857 REGISTERED LAND SURVEYOR	
Certificate No. 6857 Neale Edwards	

Map 1
San Juan 32-9 Unit #220
T31N, R10W
500' New Construction
7900' Existing BLM Roads
within Unit Boundaries



OPERATIONS PLAN

DATE:

Well Name: 220 SAN JUAN 32-9 UNIT
 Sec. 11 T31N R10W
 BASIN FRUITLAND COAL

1040'FNL 1840'FEL
 SAN JUAN NEW MEXICO
 Elevation 6205'GL

Formation tops: Surface- Nacimiento

Ojo Alamo- 1385

Kirtland- 1512

Fruitland- 2613

Fruitland Coal Top- 2820

Fruitland Coal Base- 3020

Pictured Cliffs- 3025

Intermediate TD- 2813

Total Depth- 3022

Logging Program: Mud logs from intermediate to total depth.

Mud Program:	Interval	Type	Weight	Visc.	Fl. Loss
	0 - 200	Spud	8.4 - 8.9	40-50	no control
	200 - 2813	Non-dispersed	8.4 - 9.1	30-60	no control
	2813 - 3022	Formation Water	8.4		no control

Casing Program:	Hole Size	Depth Interval	Csg. Size	Weight	Grade
	12 1/4"	0 - 200	9 5/8"	32.3#	H-40
	8 3/4"	0 - 2813	7"	20.0#	K-55
	6 1/4"	2763 - 3022	5 1/2"	15.5#	K-55
Tubing Program:		0 - 3022	2 7/8"	6.5#	J-55

Float Equipment: 9 5/8" surface casing - saw tooth guide shoe. Centralizers will be run in accordance with Onshore Order #2.

7" intermediate casing - guide shoe and self-fill insert float valve. Three centralizers run every other joint above shoe. Run insert float one joint above the guide shoe. Two turbolizing type centralizers - one below and one into the base of the Ojo Alamo @ 1512'. Standard centralizers thereafter every fourth joint up to the base of the surface pipe.

5 1/2" production casing - float shoe on bottom and a pre-drilled liner run to the 7" casing with a minimum 50' overlap. Liner hanger is a double slip grip type.

Wellhead Equipment: 9 5/8" x 7" x 2 7/8" x 11" 3000 psi xmas tree assembly.

Cementing:

9 5/8" surface casing - cement with 160 sacks of class "B" cement with 1/4# flocele/sack and 3% calcium chloride (189 cu ft. of slurry, 200% excess to circulate to surface). WOC 12 hours. Test casing to 600 psi for 30 minutes.

7" intermediate casing - lead with 404 sacks of 65/35 class "B" poz with 6% gel, 2% calcium chloride and 1/2 cu ft. Perlite/sack (10.3 gallons of water/sack) tail with 100 sacks of class "B" with 2% calcium chloride. 898 cu ft. of slurry, 110% excess to circulate to surface. If hole conditions permit, a 600 ft spacer will be run ahead of the cement slurry to avoid mud contamination of the cement. WOC 12 hours. If cement does not circulate to surface, a temperature log will be run after 8 hours to determine TOC.

5 1/2" liner - do not cement.

BOP and Tests:

Surface to intermediate TD - 11" 2000 psi(minimum) double gate BOP stack (Reference Figure #1). Prior to drilling out surface casing, test rams to 1000 psi for 30 minutes.

Intermediate TD to TD - 7 1/16" 2000 psi(minimum) double gate BOP stack (Reference Figure #2). Prior to drilling out intermediate casing, test blind rams and casing to 2500 psi for 30 minutes; all pipe rams and casing to 2500 psi for 30 minutes each.

From surface to TD - choke manifold (Reference Figure #3).

Pipe rams will be actuated at least once each day and blind rams actuated once each trip to test proper functioning. An upper kelly cock valve with handle and drill string safety valves to fit each drill string will be maintained and available on the rig floor.

Additional Information:

- * The Fruitland coal formation will be completed.
- * Anticipated Fruitland pore pressure is 371 psi.
- * This gas is dedicated.
- * The E/2 of Section 11 is dedicated to this well.
- * New casing will be utilized.
- * Cementing Contractor will provide the BLM with a chronological log including the pump rate and pressure, and the slurry density and volume for all cement jobs.
- * Pipe movement (either rotation or reciprocation) will be done if hole conditions permit.