

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK  
DRILL  
1b. TYPE OF WELL  
GAS

2. OPERATOR  
MERIDIAN OIL INC.

3. ADDRESS & PHONE NO. OF OPERATOR  
P O BOX 4289  
FARMINGTON, NM 87499

4. LOCATION OF WELL  
2540' FSL 1720' FWL

5. LEASE NUMBER  
SF-078772

6. IF INDIAN, ALL. OR TRIBE NAME

7. UNIT AGREEMENT NAME  
ROSA UNIT

8. FARM OR LEASE NAME  
ROSA UNIT

9. WELL NO.  
331

10. FIELD, POOL, OR WILDCAT  
BASIN FRUITLAND COAL

11. SEC. T. R. M OR BLK.  
SEC. 35 T32N R06W NMPM

14. DISTANCE IN MILES FROM NEAREST TOWN  
27 MILES NORTH GOBERNADOR

12. COUNTY  
RIO ARRIBA

13. STATE  
NM

15. DISTANCE FROM  
PROPOSED LOCATION 1720'  
TO NEAREST PROPERTY  
OR LEASE LINE.

16. ACRES IN LEASE  
252.00

17. ACRES ASSIGNED TO WELL  
12/320.00

18. DISTANCE FROM  
PROPOSED LOCATION  
TO NEAREST WELL DR. 3000'  
COMPL., OR APPLIED  
FOR ON THIS LEASE.

19. PROPOSED DEPTH  
3144'

20. ROTARY OR CABLE TOOLS  
ROTARY

This action is subject to technical and  
procedural review pursuant to 43 CFR 3165.3  
and appeal pursuant to 43 CFR 3165.4.

OPERATIONS AUTHORIZED ARE  
SUBJECT TO COMPLIANCE WITH ATTACHED  
"GENERAL REQUIREMENTS".

21. ELEVATIONS (DF, FT, GR, ETC.)  
6341' GL

22. APPROX. DATE WORK WILL START

23. PROPOSED CASING AND CEMENTING PROGRAM

\*SEE OPERATIONS PLAN

24. AUTHORIZED BY: [Signature]  
REG. DRILLING ENGR.

RECEIVED

AUG 13 1990

7/26/90  
DATE

OIL CON. DIV.]

DIST. 3

PERMIT NO. \_\_\_\_\_ APPROVAL DATE \_\_\_\_\_

APPROVED BY \_\_\_\_\_ TITLE \_\_\_\_\_ DATE \_\_\_\_\_

NOTE: THIS FORMAT IS ISSUED IN LIEU OF US BLM FORM 3160-3

NMOCD

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

P.O. Box 2088

Santa Fe, New Mexico 87504-2088

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

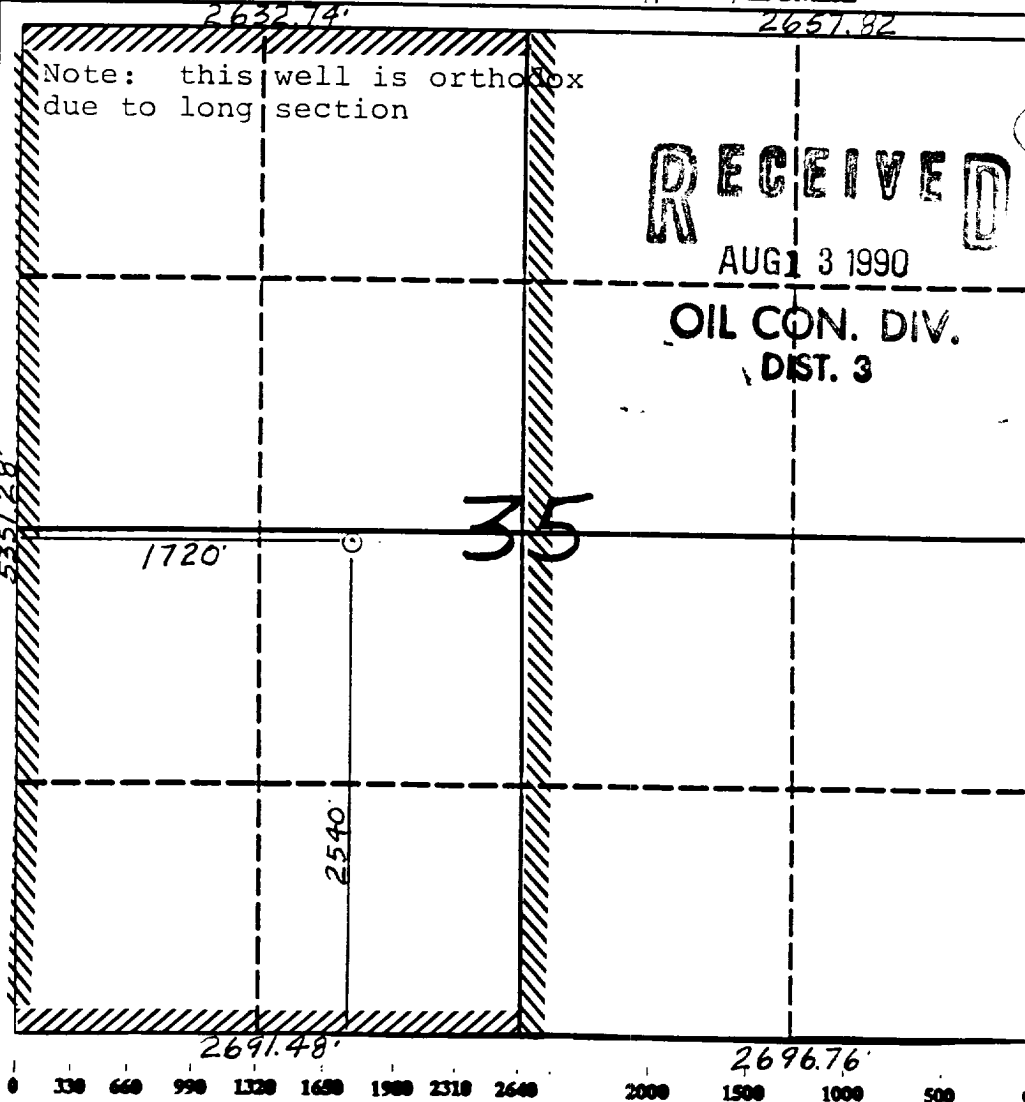
DISTRICT III  
1000 Rio Brazos Rd., Aztec, NM 87410

WELL LOCATION AND ACREAGE DEDICATION PLAT

All Distances must be from the outer boundaries of the section

Operator Meridian Oil Inc.			Lease Rosa Unit (SF-078772)		Well No. 331
Unit Letter K	Section 35	Township 32 North	Range 6 West	Country Rio Arriba	
Actual Footage Location of Well: 2540 feet from the South line and 1720 feet from the West line					
Ground level Elev. 6341'		Producing Formation Fruitland Coal		Pool Basin	
					Dedicated Acreage: 320 Acres

1. Outline the acreage dedicated to the subject well by colored pencil or ballpoint 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 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.

Signature  
Peggy Bradfield

Printed Name  
Regulatory Affairs

Position  
Meridian Oil Inc.

Company  
7-26-90

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.

Date Surveyed  
5-8-90

Signature  
Neale C. Edwards

Professional Surveyor  
NEW MEXICO  
6857  
6857

Certificate No.  
Neale C. Edwards

Well Name: 331 ROSA UNIT  
 Sec. 35 T32N R06W  
 BASIN FRUITLAND COAL

2540' FSL 1720' FWL  
 RIO ARriba NEW MEXICO  
 Elevation 6341' GL

Formation tops: Surface- SAN JOSE

Ojo Alamo- 2375

Kirtland- 2485

Fruitland- 2940

Fruitland Coal Top- 3000

Fruitland Coal Base- 3142

Pictured Cliffs- 3148

Intermediate TD- 2960

Total Depth- 3144

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 - 2960	Non-dispersed	8.4 - 9.1	30-60	no control
	2960 - 3144	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 - 2960	7"	20.0#	K-55
	6 1/4"	2910 - 3144	5 1/2"	15.5#	K-55
Tubing Program:		0 - 3144	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 @ 2485'. 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 428 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. 944 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.

MAP #1

ROSA UNIT # 331

NO NEW CONSTRUCTION

ROSA UNIT #331

T32N,R6W

Section 35

Rio Arriba Co., NM

ROSA UNIT # 331

