

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK DRILL	5. LEASE NUMBER SF-078766
1b. TYPE OF WELL GAS	6. IF INDIAN, ALL. OR TRIBE NAME
2. OPERATOR MERIDIAN OIL INC.	7. UNIT AGREEMENT NAME ROSA UNIT
3. ADDRESS & PHONE NO. OF OPERATOR P O BOX 4289 FARMINGTON, NM 87499	8. FARM OR LEASE NAME ROSA UNIT
4. LOCATION OF WELL 790' FNL 2415' FEL	9. WELL NO. 274
14. DISTANCE IN MILES FROM NEAREST TOWN 13 MILES N. OF GOVERNADOR	10. FIELD, POOL, OR WILDCAT BASIN FRUITLAND COAL
15. DISTANCE FROM PROPOSED LOCATION 790' TO NEAREST PROPERTY OR LEASE LINE.	11. SEC. T. R. M OR BLK. SEC. 16 T31N R06W NMPM
16. ACRES IN LEASE 2552.710	12. COUNTY RIO ARRIBA
17. ACRES ASSIGNED TO WELL N/294.50	13. STATE NM
18. DISTANCE FROM PROPOSED LOCATION TO NEAREST WELL DR. 6000' COMPL., OR APPLIED FOR ON THIS LEASE.	19. PROPOSED DEPTH 3195'
20. ROTARY OR CABLE TOOLS ROTARY	21. ELEVATIONS (DF, FT, GR, ETC.) 6352' GL
22. APPROX. DATE WORK WILL START	23. PROPOSED CASING AND CEMENTING PROGRAM

*SEE OPERATIONS

RECEIVED

JUL 6 1990

24. AUTHORIZED BY:

REG. DRILLING ENGR.

OIL CON. DIV.
DIST. 3

DATE

PERMIT NO.

APPROVAL DATE

APPROVED BY

TITLE

DATE

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

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 OD, 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-078766)		Well No. 274
Unit Letter B	Section 16	Township 31 North	Range 6 West	County San Juan	
Actual Footage Location of Well: 790 feet from the North line and 2415 feet from the East line					
Ground level Elev. 6352'		Producing Formation Fruitland Coal		Pool Basin	Dedicated Acreage: 294.50 Acres

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

Signature Peggy Bradfield

Printed Name
Peggy Bradfield

Position
Regulatory Affairs

Company
Meridian Oil Inc.

Date
5-29-90

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 3-23-90

Signature of Seal NEALE C. EDWARDS

Professional Surveyor 857

REGISTERED LAND SURVEYOR

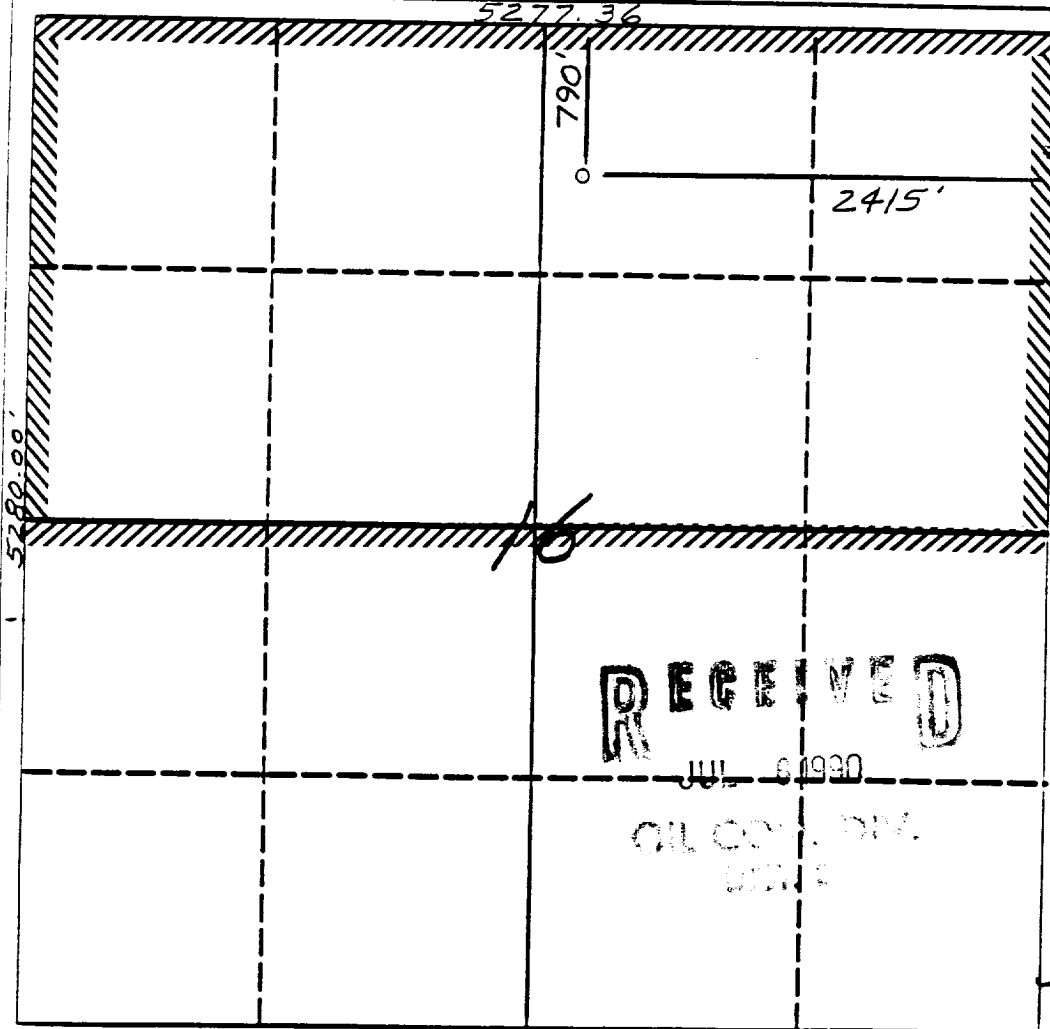
Certificate No. 6857

RECEIVED

JUL 6 1990

OIL CONSERVATION DIV.

SANTA FE, N.M.



0 330 660 990 1320 1650 1980 2310 2640 2970 3300 3630 3960 4290 4620 4950 5280 5610 5940 6270 6600 6930 7260 7590 7920 8250 8580 8910 9240 9570 9900

Well Name: 274 ROSA UNIT
 Sec. 16 T31N R06W
 BASIN FRUITLAND COAL

790'FNL 2415'FEL
 RIO ARriba NEW MEXICO
 Elevation 6352'GL

Formation tops: Surface- SAN JOSE

Ojo Alamo- 2345

Kirtland- 2455

Fruitland- 2950

Fruitland Coal Top- 3026

Fruitland Coal Base- 3194

Pictured Cliffs- 3196

Intermediate TD- 2930

Total Depth- 3195

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 - 2930	Non-dispersed	8.4 - 9.1	30-60	no control
	2930 - 3195	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 - 2930	7"	20.0#	K-55
	6 1/4"	2880 - 3195	5 1/2"	15.5#	K-55
Tubing Program:		0 - 3195	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 @ 2455'. 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.

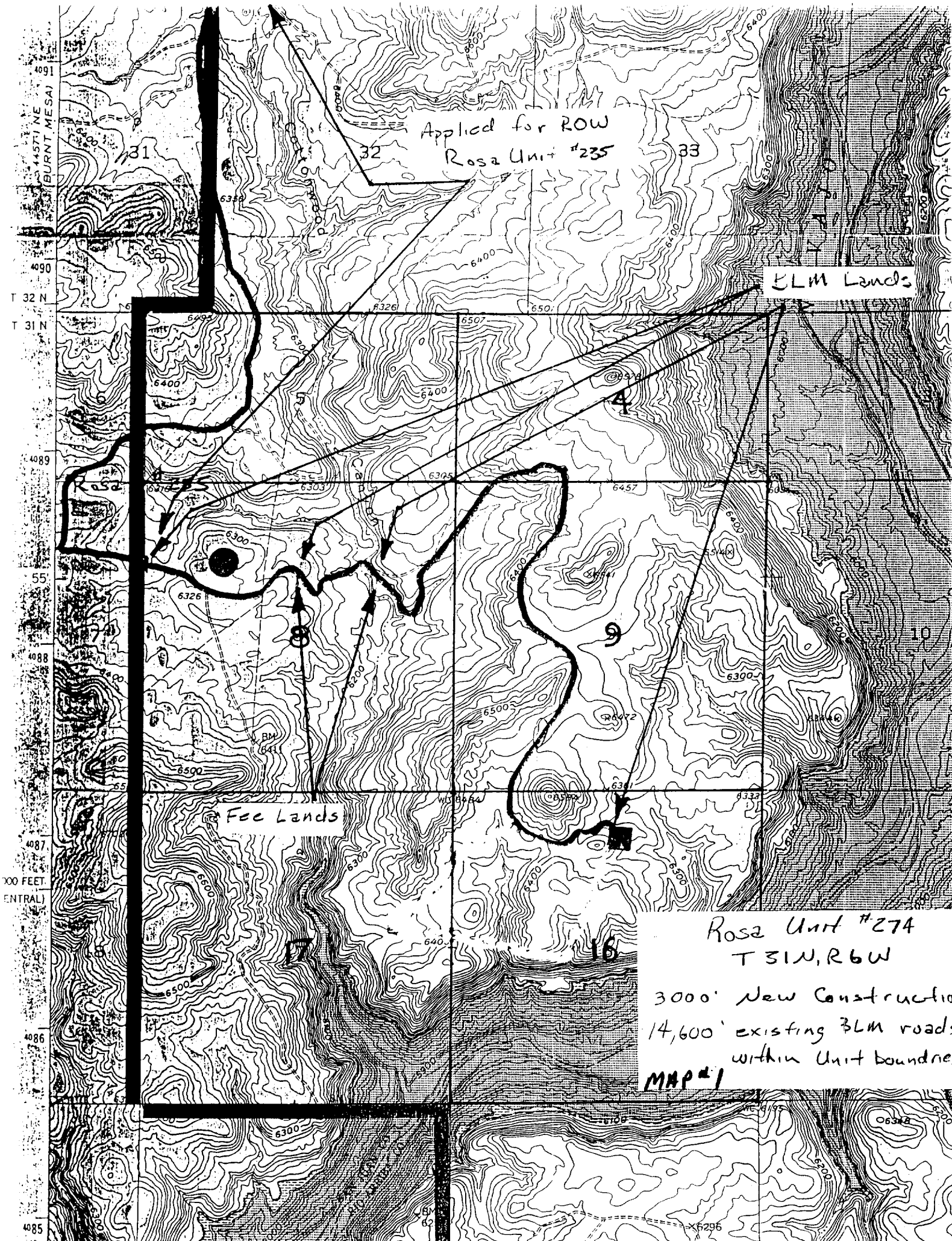
Wellhead Equipment: 9 5/8" x 7" x 2 7/8" x 11" 3000 psi xmas tree assembly.

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 423 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. 935 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.



Applied for ROW
Rosa Unit #235

ELM Lands

Fee Lands

Rosa Unit #274
T 31N, R 6W

3000' New Construction
14,600' existing 3LM roads
within Unit boundaries

MAP #1