

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

RECEIVED
OCT 25 1990
OIL CON. DIV.
DIST. 3

1a. TYPE OF WORK DRILL	5. LEASE NUMBER SF-078766
1b. TYPE OF WELL GAS	16. IF INDIAN, ALL. OR TRIBE NAME
2. OPERATOR MERIDIAN OIL INC. 14538	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 1440
4. LOCATION OF WELL 1930' FSL 1850' FWL	9. WELL NO. 277 ✓
14. DISTANCE IN MILES FROM NEAREST TOWN 9 MILES SOUTH OF ALLISON	10. FIELD, POOL, OR WILDCAT BASIN FRUITLAND COAL 1440
15. DISTANCE FROM PROPOSED LOCATION 1850' TO NEAREST PROPERTY OR LEASE LINE.	11. SEC. T. R. M OR BLK. K SEC. 17 T31N R06W NMPM
16. ACRES IN LEASE 17. ACRES ASSIGNED TO WELL 2.7 320.00	12. COUNTY RIO ARriba
18. DISTANCE FROM PROPOSED LOCATION TO NEAREST WELL DR. 7920' COMPL., OR APPLIED FOR ON THIS LEASE.	13. STATE NM
19. PROPOSED DEPTH 3223'	20. ROTARY OR CABLE TOOLS ROTARY
21. ELEVATIONS (DF, FT, GR, ETC.) 6409' GL	22. APPROX. DATE WORK WILL START
23. PROPOSED CASING AND CEMENTING PROGRAM	
*SEE OPERATIONS PLAN	

24. AUTHORIZED BY: *McDonald*
REG. DRILLING ENGR.

9/11/90
DATE

PERMIT NO. _____ APPROVAL DATE _____
APPROVED BY _____ TITLE _____ DATE _____
APPROVED AS AMENDED

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

OCT 17 1990
John S. Kelly
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

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 DD, Artesia, NM 88210

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

WELL LOCATION AND ACREAGE DEDICATION PLAT

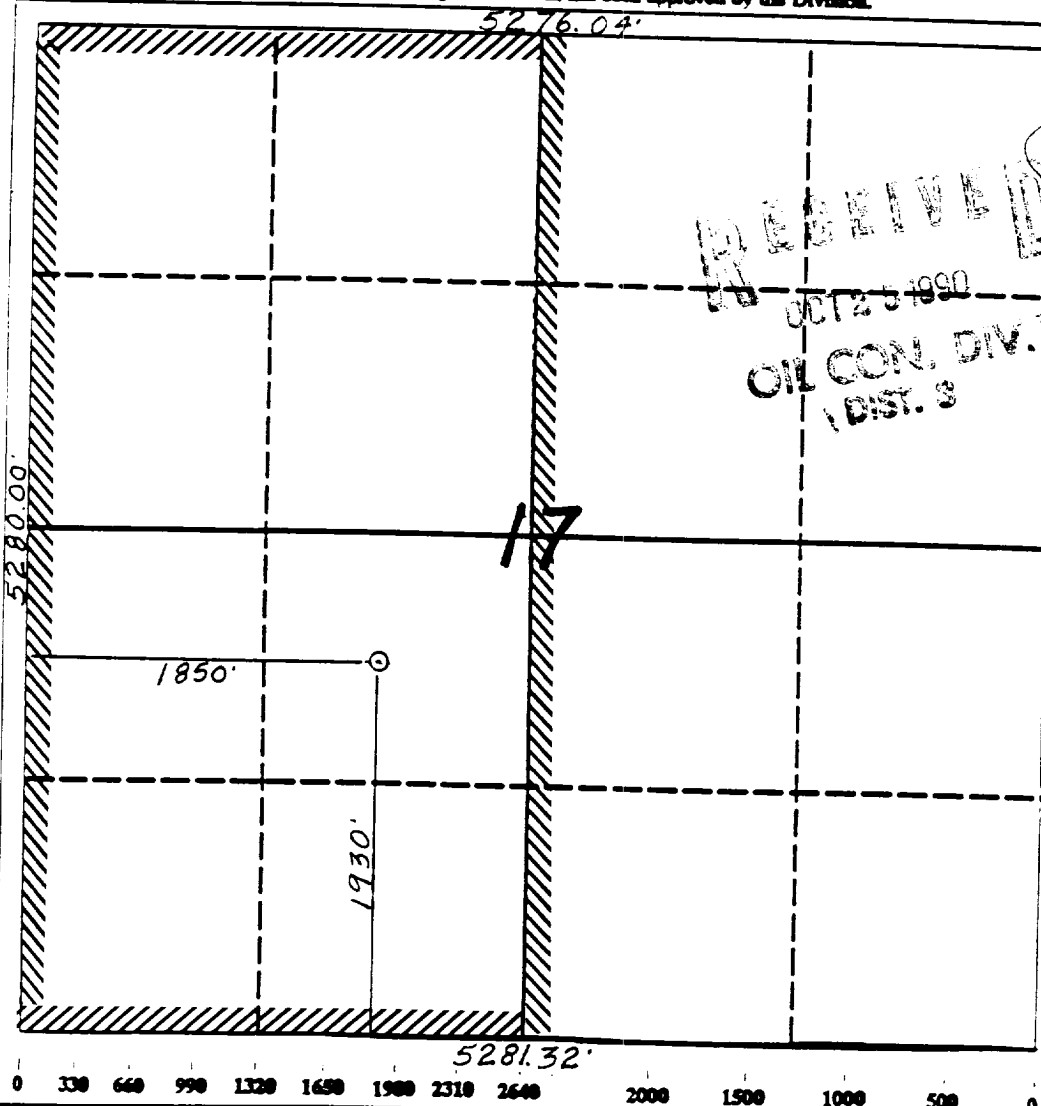
All Distances must be from the outer boundaries of the section

Operator Meridian Oil Inc.			Lease Rosa Unit (SF-078766)		Well No. 277
Unit Letter K	Section 17	Township 31 North	Range 6 West	County San Juan	
Actual Footage Location of Well: 1930 feet from the South line and 1850 feet from the West line					
Ground level Elev. 6409'	Producing Formation Fruitland Coal		Pool Basin	Dedicated Acreage: 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, 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
Regulatory Affairs

Position
Meridian Oil Inc.

Company
9-10-90

Date

SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes or 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
4-27-90

Signature
Professional Surveyor

NEALE C. EDWARDS
6857
6857
REGISTERED LAND SURVEYOR

Certificate No.
Neale C. Edwards

Well Name: 277 ROSA UNIT 1930'FSL 1850'FWL
 Sec. 17 T31N R06W RIO ARRIBA NEW MEXICO
 BASIN FRUITLAND COAL Elevation 6409'GL

Formation tops: Surface- SAN JOSE
 Ojo Alamo- 2370
 Kirtland- 2485
 Fruitland- 2989
 Fruitland Coal Top- 3020 Intermediate TD- 2990
 Fruitland Coal Base- 3222 Total Depth- 3223
 Pictured Cliffs- 3225

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 - 2990	Non-dispersed	8.4 - 9.1	30-60	no control
	2990 - 3223	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 - 2990	7"	20.0#	K-55
	6 1/4"	2940 - 3223	5 1/2"	15.5#	K-55
Tubing Program:		0 - 3223	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.

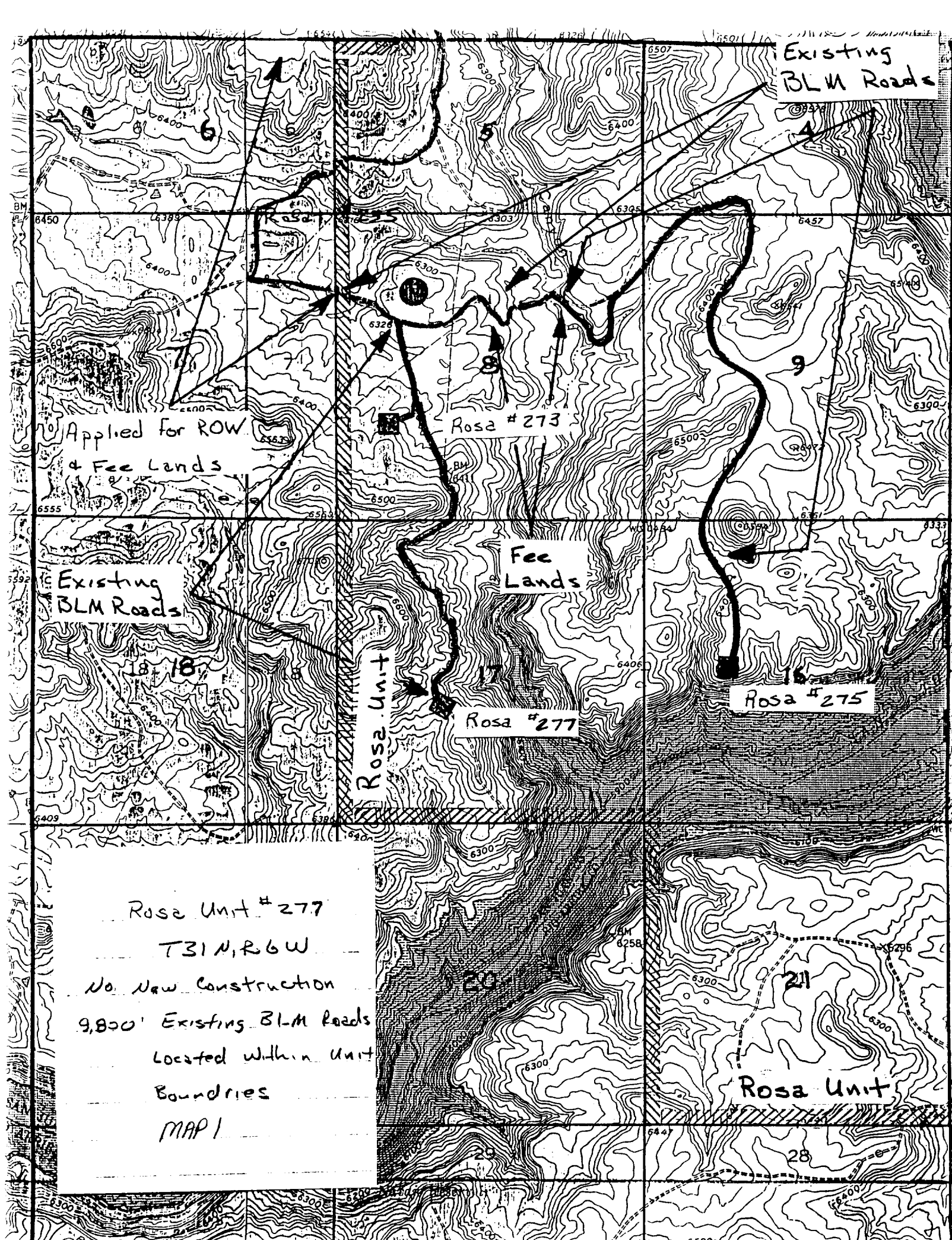
Wellhead Equipment: 9 5/8" x 7" x 2 7/8" x 11" 3000 psi xmas tree assembly.

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 433 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. 954 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.



Existing
BLM Roads

Applied for ROW
& Fee Lands

Existing
BLM Roads

Fee
Lands

Rosa Unit

Rosa #273

Rosa #277

Rosa #275

Rosa Unit #277

T31N, R6W

No New Construction

9,800' Existing BLM Roads

Located within Unit

Boundaries

MAP 1

Rosa Unit