

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

30-239-24964
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
2065'FSL 1610'FWL

5. LEASE NUMBER
SF-078773
6. IF INDIAN, ALL. OR TRIBE NAME

7. UNIT AGREEMENT NAME
ROSA UNIT

8. FARM OR LEASE NAME
ROSA UNIT
9. WELL NO.
270

10. FIELD, POOL, OR WILDCAT
BASIN FRUITLAND COAL
11. SEC. T. R. M OR BLK.
K SEC. 34 T31N R05W NMPM

12. COUNTY
RIO ARRIBA
13. STATE
NM

14. DISTANCE IN MILES FROM NEAREST TOWN
16 MI. FROM NAVAJO DAM PO

15. DISTANCE FROM
PROPOSED LOCATION 1610'
TO NEAREST PROPERTY
OR LEASE LINE.

16. ACRES IN LEASE
1420
17. ACRES ASSIGNED TO WELL
w/320.00

18. DISTANCE FROM
PROPOSED LOCATION
TO NEAREST WELL DR. 4300'
COMPL., OR APPLIED
FOR ON THIS LEASE.

19. PROPOSED DEPTH
3572'

20. ROTARY OR CABLE TOOLS
ROTARY

21. ELEVATIONS (DF, FT, GR, ETC.)
6727'GL

22. APPROX. DATE WORK WILL START

23. PROPOSED CASING AND CEMENTING PROGRAM

*SEE OPERATIONS PLAN

24. AUTHORIZED BY: Charles Adams for JWC
REG. DRILLING ENGR.

RECEIVED

OCT 9 1990

OIL CON. DIV.
DIST. 3

8/13/90
DATE

PERMIT NO. _____ APPROVAL DATE _____

APPROVED BY _____ TITLE _____ DATE _____

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

NMOCD,

801 04 1990
AREA MANAGER

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 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-078773)		Well No. 270
Unit Letter K	Section 34	Township 31 North	Range 5 West	County Rio Arriba	
Actual Footage Location of Well: 2065 feet from the South line and 1610 feet from the West line					
Ground level Elev. 6727'		Producing Formation Fruitland Coal		Pool Basin	Dedicated Acreage: 320.00 Acres

1. Outline the acreage dedicated to the subject well by colored pencil or hectare 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 best of my knowledge and belief.

Signature Peggy Bradfield

Printed Name Peggy Bradfield

Position Regulatory Affairs

Company Meridian Oil Inc.

Date 8-13-90

Date

SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes 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 5-6-90

Signature Neale C. Edwards

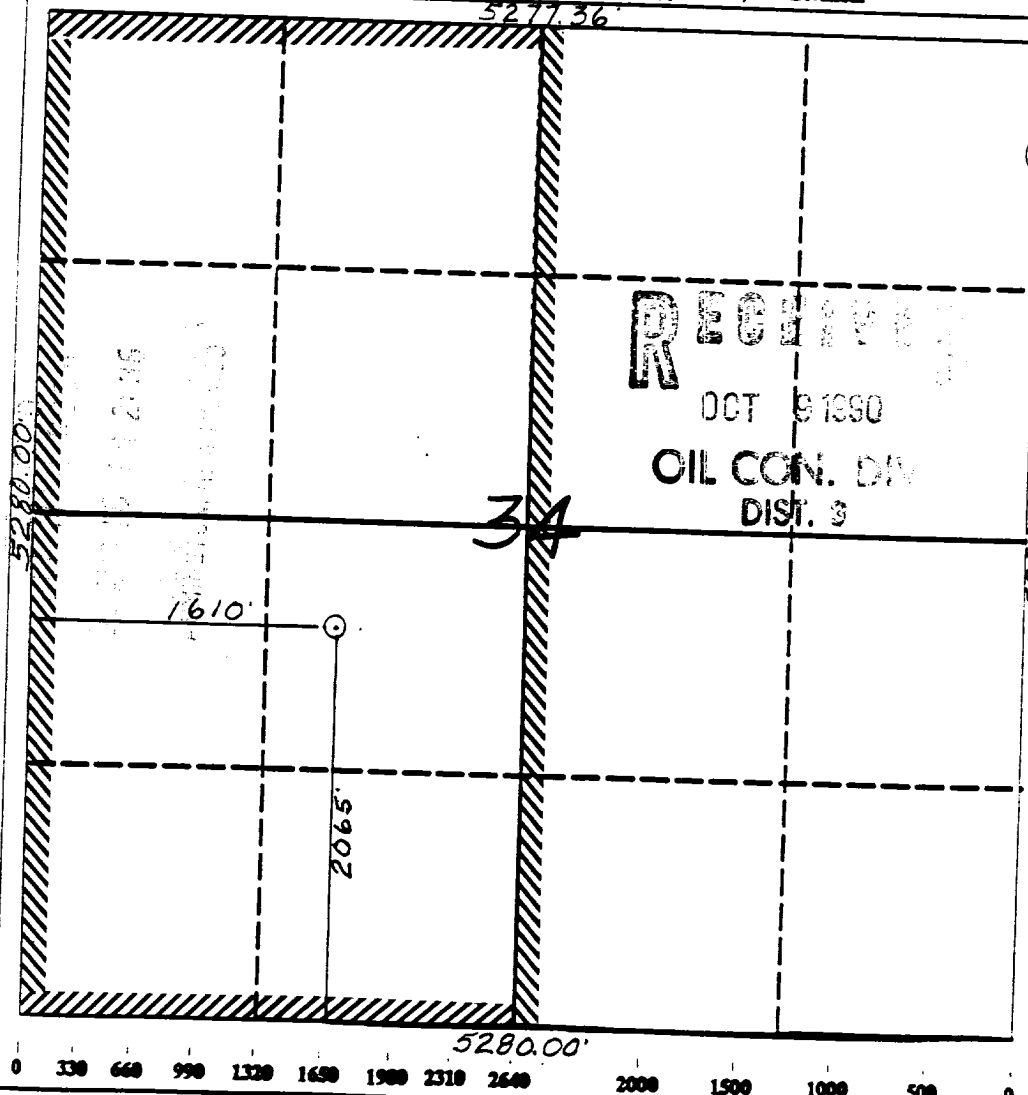
Professional Surveyor

NEW MEXICO
6857

REGISTERED LAND SURVEYOR

Certificate No. 6857

Neale C. Edwards



Well Name: 270 ROSA UNIT
 Sec. 34 T31N R05W
 BASIN FRUITLAND COAL

2065'FSL 1610'FWL
 RIO ARRIBA NEW MEXICO
 Elevation 6727'GL

Formation tops: Surface- SAN JOSE

Ojo Alamo- 2830

Kirtland- 3010

Fruitland- 3365

Fruitland Coal Top- 3464

Fruitland Coal Base- 3570

Pictured Cliffs- 3574

Intermediate TD- 3414

Total Depth- 3572

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 - 3414	Non-dispersed	8.4 - 9.1	30-60	no control
	3414 - 3572	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 - 3414	7"	20.0#	K-55
	6 1/4"	3364 - 3572	5 1/2"	15.5#	K-55
Tubing Program:		0 - 3572	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 @ 3010'. 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 502 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. 1088 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.

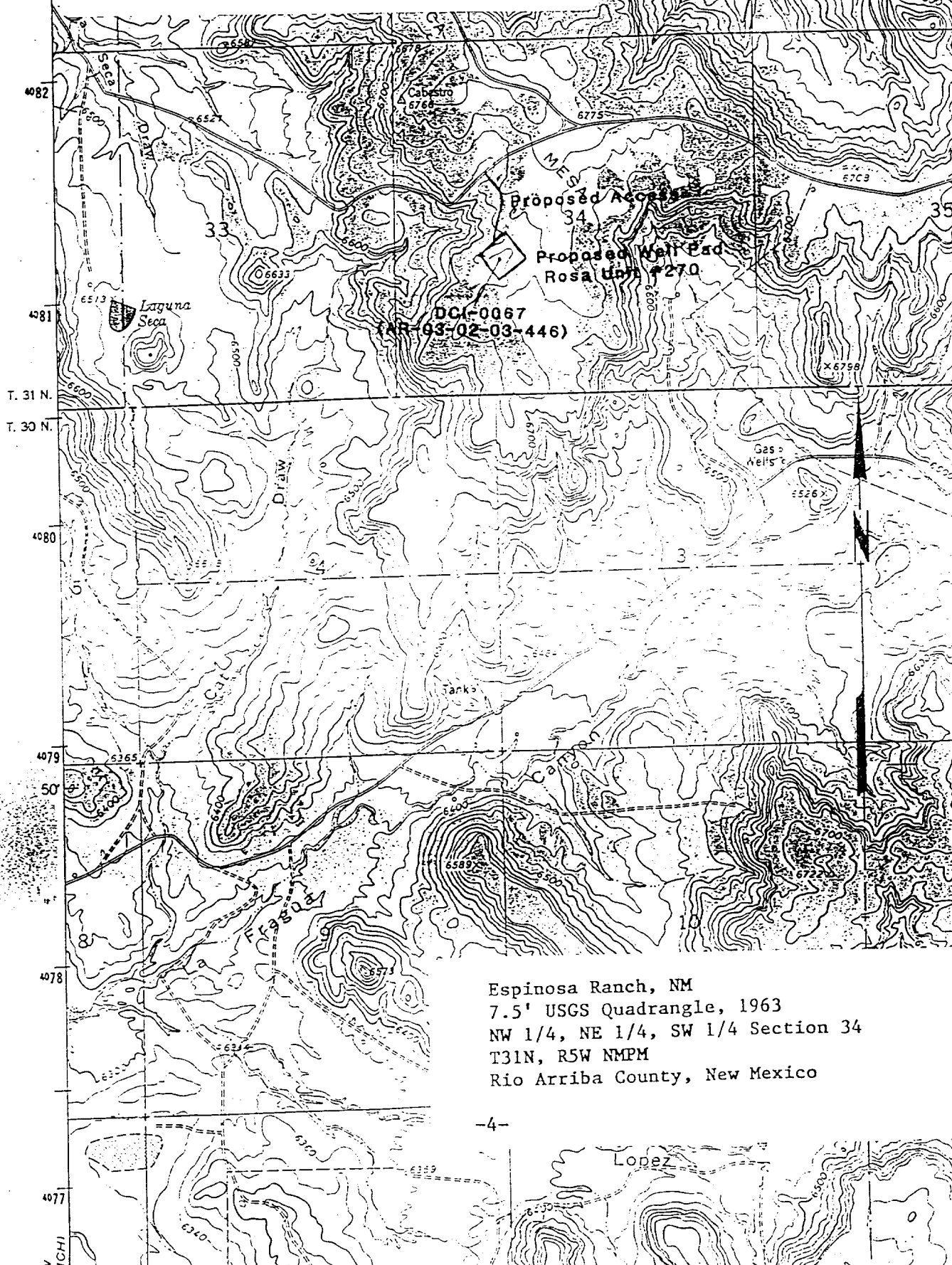
5 1/2" liner - do not cement.

4083000m. N.

Figure 1: Vicinity map for the proposed
Rosa Unit No. 270, access
road and pipeline. (90-DCI-042)

OFFICIAL USE ONLY

Disclosure of site locations is
prohibited (36 CFR 296.18)



Espinosa Ranch, NM
7.5' USGS Quadrangle, 1963
NW 1/4, NE 1/4, SW 1/4 Section 34
T31N, R5W NMPM
Rio Arriba County, New Mexico