## UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

la.	TYPE OF WORK DRILL	5. LEASE NUMBER
1b.	TYPE OF WELL GAS	SF-078763 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 9. WELL NO. 336
4.	LOCATION OF WELL 915'FNL 2025'FEL	10. FIELD, POOL, OR WILDCAT BASIN FRUITLAND COAL 11. SEC. T. R. M OR BLK. SEC. 8 T31N R05W NMPM
14.	DISTANCE IN MILES FROM NEAREST TOWN 21 MILES FROM GOBERNADOR	12. COUNTY 13.STATE RIO ARRIBA NM
15.	DDODOGDD + 000+	S IN LEASE 17. ACRES ASSIGNED TO WELL  320.00
18.	DISTANCE FROM PROPOSED LOCATION TO NEAREST WELL DR. 200' COMPL., OR APPLIED to acide to a lead to touch a form on This LEASE. proceed to review a complete to 43 depends a promise to 43 depends a process and appends a promise to 43 depends a process and appends a promise to 43 depends a process and appends a process a process and appends a process and appends a process a process and appends a process a process a process and appends a process a process and appends a process a process and appends a process a process a process and appends a process a process a process and appends a process a p	POSED DEPTH 20. ROTARY OR CABLE TOOLS 3148' ROTARY  tollend to Green 31850 Mileston Control of the Carlot of the C
21.	ELEVATIONS (DF, FT, GR, ETC.) 6349'GL	22. APPROX. DATE WORK WILL START
23.	PROPOSED CASING AND	CEMENTING PROGRAM
24.	AUTHORIZED BY: The Delvals	OCT 1 1990  OIL CON. DIV.
PERM	IT NO APPROVA	
APPRO	OVED BYTITLE	DATE
NOTE:	THIS FORMAT IS ISSUED IN LIEU OF U	S BLM FORM 3160-3. John Skilling
	· <del></del>	

DATE: SEP 10,1990

Well Name: 336 ROSA UNIT

Sec. 8 T31N R05W RIO ARRIBA NEW MEXICO

BASIN FRUITLAND COAL Elevation 6349'GL

Formation tops: Surface- SAN JOSE

Ojo Alamo- 2435 Kirtland- 2535

Fruitland- 2790

Fruitland Coal Top- 2993 Intermediate TD- 2970 Fruitland Coal Base- 3146 Total Depth- 3148

Pictured Cliffs- 3150

Logging Program: Mud logs from intermediate to total depth.

Mud Program: Interval Type Weight Visc. Fl. Loss 0 - 200 200 - 2970Spud 8.4 - 8.940-50 no control Non-dispersed 8.4 - 9.1 30-60 no control 2970 - 3148 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-407" 8 3/4" 0 - 297020.0# K-55 6 1/4" 2920 - 3148 5 1/2" 15.5# K-55 Tubing Program: 0 - 31482 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 @ 2535'. 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 429 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. 948 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.

