UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRII	LL, DEEPEN, OR PLUG BACK
la. TYPE OF WORK DRILL lb. TYPE OF WELL GAS	5. LEASE NUMBER SF-078773 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. 271
4. LOCATION OF WELL 1810'FNL 1850'FEL	10. FIELD, POOL, OR WILDCAT BASIN FRUITLAND COAL 11. SEC. T. R. M OR BLK. SEC. 35 T31N R05W NMPM
14. DISTANCE IN MILES FROM NEAREST TOWN 17 MI. FROM NAVAJO DAM PO	12. COUNTY 13.STATE RIO ARRIBA NM
15. DISTANCE FROM PROPOSED LOCATION 1810' TO NEAREST PROPERTY OR LEASE LINE.	S IN LEASE 17. ACRES ASSIGNED TO WELL $E/320.00$
TO NEAREST WELL DR. 8000' COMPL., OR APPLIED action is subject to technical FOR ON THIS LEASE procedural review purposes to 43 cm at	OSED DEPTH 20. ROTARY OR CABLE TOOLS' 8562' ROTARY and DRILLING GREATINGS AUTHORIZED ARE UFFR 3165.3 SUBJECT TO COMMERCE ALLER ATTACHED
21. ELEVATIONS (DF, FT, GR, ETC.) 6726'GL	22. APPROX. DATE WORK WILL START
PROPOSED CASING AND C	EMENTING PROGRAM
*SEE OPERATIONS	TECEIVEM
REG. DRILLING ENGR.	SEP1 3 1990 SEP1 3 1990 SI/15/90 DATE
	DIST. 3 APPROVA
APPROVED BYTITLE	DATESEP 0.7 1996
NOTE: THIS FORMAT IS ISSUED IN LIEU OF US	BLM FORM 3160-3 AREA MANAGE

mit to . District Office State Lease - 4 cor Fee Lane - 3 copees

State of New Mexico Energy, Minerais and Natural Resources Department

Form C-102 Review 1-1-89

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Neal

DISTRICT I P.O. Box 1980, Hobbs, NM 88240

OIL CONSERVATION DIVISION P.O. Box 2088

DISTRICT II
P.O. Drawer DD, Artesia, NIM \$8210

Santa Fe, New Mexico 87504-2088

1000 Rio Brazos Rd., Aztec, NM 87410

DIST. 3

330 660 990 1320 1650 1900 2310 2640

WELL LOCATION AND ACREAGE DEDICATION PLAT

All Distances must be from the outer boundaries of the section Operator Meridian Oil Inc. Vell No. Rosa Unit (SF-078773) Unit Letter Section 271 Township Range County 35 31 North 5 West Actual Footage Location of Well: Rio Arriba **NMPM** 1810 North feet from the 1850 Ground level Fley East Producing Formation foot from the Pool 6726 Fruitland Coal Basin 1. Outline the acreege dedicated to the subject well by colored peacel or heckure marks on the pist below. 320 Acres 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. 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 swerse side of unitization No allowable will be assigned to the well until all interests have been consolidated (by com or until a non-standard unit, eliminating such interest, has been approved by the Division. unitization, unitization, forced-pooling, or otherwise) 5281.3Z OPERATOR CERTIFICATION I hereby certify that the inform riedge and belief. 6 Ø Peggy Bradfield Printed Name Regulatory Affairs Meridian Oil Inc. /850' Date SURVEYOR CERTIFICATION 00 I hereby certify that the well location she 5F-078773 on this plat was plotted from field notes of actual surveys made by me or under my supervison, and that the same is true and correct to the best of my knowledge and belief. SEP1 3 1990 WE I'CO OIL CON. DIV

2000

1500

1000

500

DATE: AUG 10,1990

Well Name: 271 ROSA UNIT

Sec. 35 T31N R05W

1810'FNL 1850'FEL RIO ARRIBA NEW MEXICO

BASIN FRUITLAND COAL

Elevation 6726'GL

Formation tops: Surface- SAN JOSE

Ojo Alamo- 2880 Kirtland- 3070

Fruitland- 3370

Fruitland Coal Top- 3460 Fruitland Coal Base- 3561

Intermediate TD-3410 Total Depth-3562

Pictured Cliffs- 3564

Logging Program: Mud logs from intermediate to total depth.

		- P				
Mud Program:	$ \begin{array}{r} 0 - 200 \\ 200 - 3410 \\ 3410 - 3562 \end{array} $	Type Spud Non-dispersed Formation Water	Weight 8.4 - 8.9 8.4 - 9.1 8.4	Visc. 40-50 30-60	F1. Loss no control no control no control	

Casing Program:	77 - 7 4				
casing Program:	12 1/4" 8 3/4"	Depth Interval 0 - 200 0 - 3410	Csg. Size 9 5/8" 7"	Weight 32.3# 20.0#	Grade H-40 K-55
Tubing Program:	6 1/4"	3360 - 3562 0 - 3562	5 1/2" 2 7/8"	15.5# 6.5#	K-55 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 @ 3070' . 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 501 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. 1087 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