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SEP 27 1990

OIL CON. DIV.
DIST. 3

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

30-039-24950
APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK DRILL	5. LEASE NUMBER SF-078770
1b. TYPE OF WELL GAS	6. 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 7440 ROSA UNIT
4. LOCATION OF WELL 1390'FNL 2460'FEL	9. WELL NO. 322
14. DISTANCE IN MILES FROM NEAREST TOWN 25 MILES FROM GOVERNADOR	10. FIELD, POOL, OR WILDCAT BASIN FRUITLAND COAL 71629
15. DISTANCE FROM PROPOSED LOCATION 1390' TO NEAREST PROPERTY OR LEASE LINE.	11. SEC. T. R. M OR BLK. 6 SEC. 23 T31N R05W NMPM
16. ACRES IN LEASE 2560	12. COUNTY RIO ARRIBA
17. ACRES ASSIGNED TO WELL N/ 320.00	13. STATE NM
18. DISTANCE FROM PROPOSED LOCATION TO NEAREST WELL DR. 4000' COMPL., OR APPLIED FOR ON THIS LEASE.	19. PROPOSED DEPTH 3403'
20. ROTARY OR CABLE TOOLS ROTARY	
21. ELEVATIONS (DF, FT, GR, ETC.) 6571'GL	
22. APPROX. DATE WORK WILL START	
23. PROPOSED CASING AND CEMENTING PROGRAM	
*SEE OPERATIONS PLAN	
24. AUTHORIZED BY:  REG. DRILLING ENGR.	

DRILLING OPERATIONS AUTHORIZED ARE
SUBJECT TO COMPLIANCE WITH ATTACHED
"GENERAL REQUIREMENTS".

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

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

QFC

NMOCD

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-078770)		Well No. 322
Unit Letter G	Section 23	Township 31 North	Range 5 West	County Rio Arriba	
Actual Footage Location of Well: 1390 feet from the North line and 2460 feet from the East line					
Ground level Elev. 6571'	Producing Formation Fruitland Coal		Pool Basin	Dedicated Acreage 320 Acres	

- Outline the acreage dedicated to the subject well by colored pencil or hectare 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.

Peggy Bradford
Signature

Peggy Bradford

Printed Name

Regulatory Affairs

Position

Meridian Oil Inc.

Company

Date

8-30-90

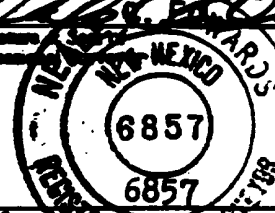
SURVEYOR CERTIFICATION

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.

6-6-90

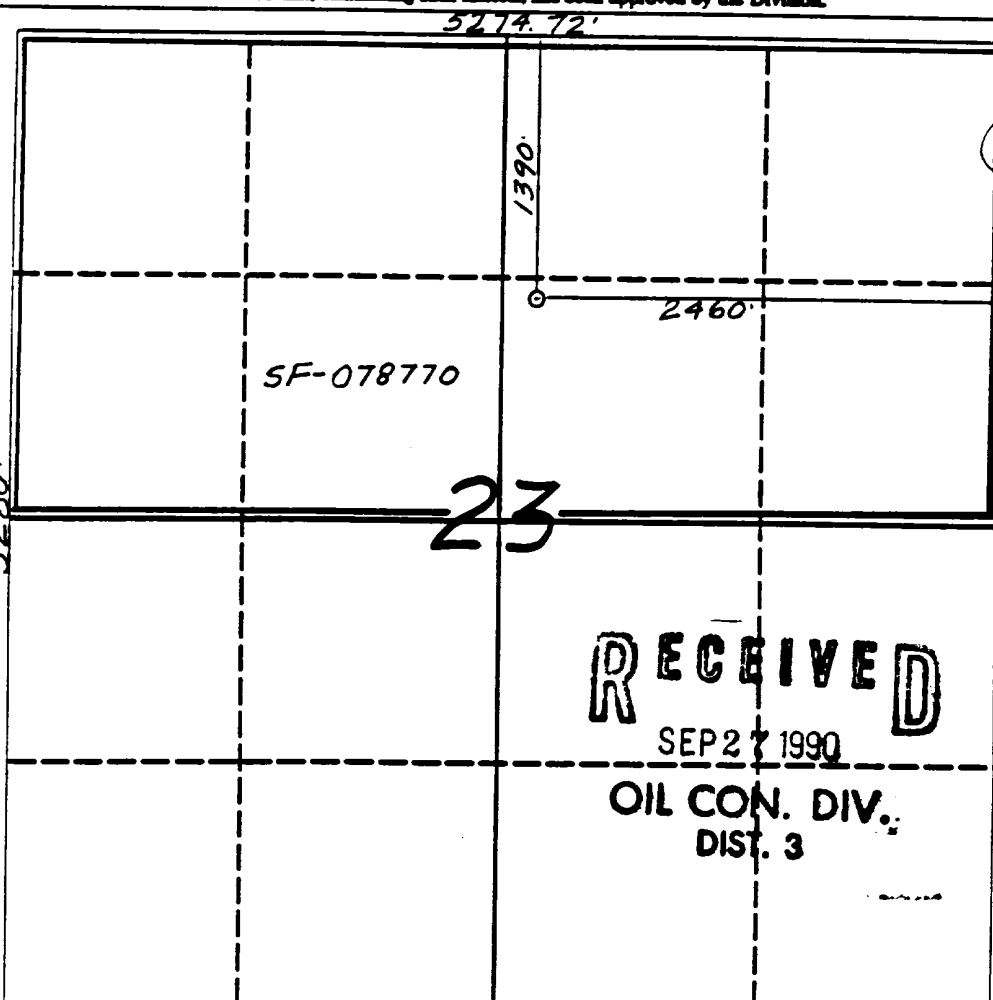
Date Surveyed

Neale Edwards
Signature
Professional



Certification

Neale Edwards



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DIST. 3

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 10230 10560 10890 11220 11550 11880 12210 12540 12870 13200 13530 13860 14190 14520 14850 15180 15510 15840 16170 16500 16830 17160 17490 17820 18150 18480 18810 19140 19470 19800 20130 20460 20790 21120 21450 21780 22110 22440 22770 23100 23430 23760 24090 24420 24750 25080 25410 25740 26070 26400 26730 27060 27390 27720 28050 28380 28710 29040 29370 29700 30030 30360 30690 31020 31350 31680 32010 32340 32670 33000 33330 33660 33990 34320 34650 34980 35310 35640 35970 36300 36630 36960 37290 37620 37950 38280 38610 38940 39270 39600 39930 40260 40590 40920 41250 41580 41910 42240 42570 42900 43230 43560 43890 44220 44550 44880 45210 45540 45870 46200 46530 46860 47190 47520 47850 48180 48510 48840 49170 49500 49830 50160 50490 50820 51150 51480 51810 52140 52470 52800 53130 53460 53790 54120 54450 54780 55110 55440 55770 56100 56430 56760 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Well Name: 322 ROSA UNIT
 Sec. 23 T31N R05W
 BASIN FRUITLAND COAL

1390'FNL 2460'FEL
 RIO ARRIBA NEW MEXICO
 Elevation 6571'GL

Formation tops: Surface- SAN JOSE

Ojo Alamo- 2575

Kirtland- 2685

Fruitland- 3213

Fruitland Coal Top- 3280

Fruitland Coal Base- 3402

Pictured Cliffs- 3405

Intermediate TD- 3240

Total Depth- 3403

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 - 3240	Non-dispersed	8.4 - 9.1	30-60	no control
	3240 - 3403	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 - 3240	7"	20.0#	K-55
	6 1/4"	3190 - 3403	5 1/2"	15.5#	K-55
Tubing Program:		0 - 3403	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 @ 2685'. 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 474 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. 1033 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.

Rosa # 322

T31N,R5W

5000' New Construction

43,500' Existing BLM Roads Located

within Unit Boundaries.

No Fee or State Roads

Off Unit roads - see Rosa #223

Map 1 Rosa #232

