

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

30-139-25259 ✓
APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK DRILL	5. LEASE NUMBER SF-080516
1b. TYPE OF WELL GAS	6. IF INDIAN, ALL. OR TRIBE NAME
2. OPERATOR MERIDIAN OIL INC. ✓ 14526	7. UNIT AGREEMENT NAME
3. ADDRESS & PHONE NO. OF OPERATOR P O BOX 4289 FARMINGTON, NM 87499	8. FARM OR LEASE NAME 7400 SAN JUAN 28-5 UNIT
4. LOCATION OF WELL 790' FSL 1125' FWL	9. WELL NO. 233 ✓
14. DISTANCE IN MILES FROM NEAREST TOWN 3 MI OF GOBERNADOR	10. FIELD, POOL, OR WILDCAT 72439 BASIN FT COAL/S. BLANCO PIC. CLIFFS
15. DISTANCE FROM PROPOSED LOCATION 790' TO NEAREST PROPERTY OR LEASE LINE.	11. SEC. T. R. M OR BLK. M SEC. 14 T28N R05W NMPM ✓
16. ACRES IN LEASE 640	12. COUNTY RIO ARRIBA
17. ACRES ASSIGNED TO WELL 3/320.00 / 160.00	13. STATE NM
18. DISTANCE FROM PROPOSED LOCATION TO NEAREST WELL DR. 325' COMPL., OR APPLIED FOR ON THIS LEASE.	20. ROTARY OR CABLE TOOLS ROTARY
19. PROPOSED DEPTH 4040'	22. APPROX. DATE WORK WILL START
21. ELEVATIONS (DF, FT, GR, ETC.) 6874' GL	
23. PROPOSED CASING AND CEMENTING PROGRAM	

*SEE OPERATIONS PLAN

24. AUTHORIZED BY: 
REG. DRILLING ENGR.

1-14-93
DATE

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

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

APPROVED
AS AMENDED

MAR 15 1993

DISTRICT MANAGER

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, Artes, NM 88210

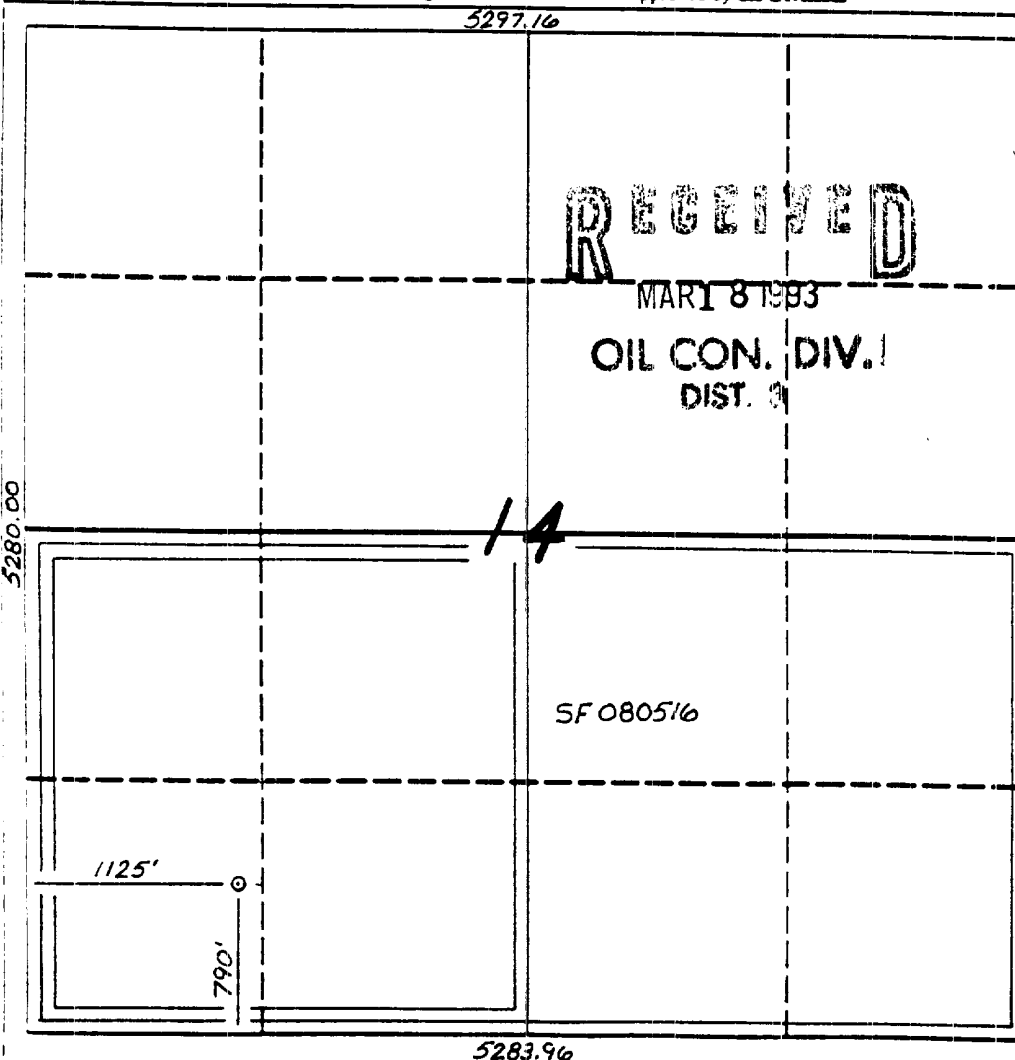
DISTRICT III
1000 Rio Bonito Rd., Aztec, NM 87410

WELL LOCATION AND ACREAGE DEDICATION PLAT

All Distances must be from the outer boundaries of the section

Operator Meridian Oil Inc.		Lease San Juan 28-5 Unit		Well No. 238
Unit Letter M	Section 14	Township 28 North	Range 5 West	County Rio Arriba
Actual Footage Location of Well: 790 feet from the South line and 1125 feet from the West line				
Ground level Elev. 6874'	Producing Formation Fruitland Coal/Pic. Cliffs	Pool Basin/S. Blanco	Dedicated Acreage: 320/160 Acres	

- Outline the acreage dedicated to the subject well by colored pencil or section 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
Peggy Bradfield

Regulatory Affairs
Position

Meridian Oil Inc.
Company

Date
1-11-93

SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes of 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. 11-28-92

Date Surveyed
11-28-92

Signature
W. Edwards

Professional Surveyor
6857

6857

6857

OPERATIONS PLAN

Well Name: San Juan 28-5 Unit #233
Location: 790'FSL, 1125'FWL, Section 14, T-28-N, R-5-W
 Rio Arriba County, New Mexico
Formation: Basin Fruitland Coal/South Blanco Pictured Cliffs
Elevation: 6874'GL

Formation Tops:	Top	Bottom	Contents
Surface	San Jose	3170'	
Ojo Alamo	3170'	3300'	aquifer
Kirtland	3300'	3530'	
Fruitland	3530'	3660'	
Fruitland Coal Top	3660'		gas
Pictured Cliffs	3818'	4040'	gas
Total Depth	4040'		

Logging Program: Mud logs from 3530' to Total Depth.
 IND, DENS, NEUT, GR, ML

Mud Program:

Interval	Type	Weight	Vis.	Fluid Loss
0- 200'	Spud	8.4-8.9	40-50	no control
200-4040'	Non-dispersed	8.4-9.1	30-60	no control

Casing Program:

Hole Size	Depth Interval	Csg.Size	Wt.	Grade
12 1/4"	0' - 200'	8 5/8"	24.0#	K-40
7 7/8"	0' - 4040'	4 1/2"	10.5#	K-55

Tubing Program:

0' - 4040'	2 3/8"	4.7#	J-55
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Float Equipment: 8 5/8" surface casing - saw tooth guide shoe.
 Centralizers will be run in accordance with Onshore Order #2.

4 1/2" production casing - float shoe on bottom. Three (3) centralizers run every other joint above shoe. Two (2) turbolizing type centralizers - one below and one into the base of the Ojo Alamo @ 3300'. Standard centralizers thereafter every fourth joint up to the base of the surface pipe.

Wellhead Equipment: 8 5/8" x 4 1/2" x 2 3/8" x 11" 3000 psi xmas tree assembly.

Cementing:

8 5/8" surface casing - cement with 210 sx Class "B" cement with 1/4# flocele/sx and 3% calcium chloride (250 cu.ft. of slurry, 100% excess to circulate to surface). WOC 12 hrs. Test casing to 600 psi/30 minutes.

4 1/2" production casing -

First stage - cement with 260 sx Class "B" cement with 2% calcium chloride, 6.25# gilsonite/sx and 1/4# flocele/sx (306 cu.ft. of slurry, 110% excess to circulate stage tool @ 3400').

Second stage - lead w/910 sx of 65/35 Class "B" pcz w/6% gel, 2% calcium chloride, 5# gilsonite/sx and 1/4# flocele/sx. Tail w/25 sx Class "B" w/2% calcium chloride (1640 cu.ft. of slurry, 100% excess to circulate to surface). WOC 12 hrs. If cement does not circulate to surface, a temperature log will be run after 8 hours to determine TOC. Test casing to 1500 psi/minutes.

BOP and tests:

Surface to TD - 11" 2000 psi (minimum) double gate BOP stack (Reference Figure #1 and #2). Prior to drilling out surface casing, test rams to 600 psi/30 min.

Completion - 6" 3000 psi (minimum) double gate BOP stack (Reference Figure #2). Prior to completion operations, test rams to 3000 psi/15 min.

From surface to TD - choke manifold (Reference Figure #3).

Pipe rams will be actuated at least once each day and blind rams actuated once each trip to test proper functioning. An upper kelly cock valve with handle and drill string safety valves to fit each drill string will be maintained and available on the rig floor.

Additional information:

- * The Fruitland Coal and Pictured Cliffs formations will be completed and commingled per New Mexico Oil Conservation Division order.
- * Anticipated pore pressure for the Fruitland is 1150 psi and for the Pictured Cliffs is 1150 psi.
- * This gas is dedicated.
- * The South half of the section is dedicated to the Fruitland Coal and the South-West quarter of the section is dedicated to the Pictured Cliffs.
- * New casing will be utilized.
- * Pipe movement (either rotation or reciprocation) will be done if hole conditions permit.