

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK DRILL	5. LEASE NUMBER SF-079192
1b. TYPE OF WELL GAS	6. IF INDIAN, ALL. OR TRIBE NAME
2. OPERATOR EL PASO NATURAL GAS CO. <i>Meridian Oil Co.</i>	7. UNIT AGREEMENT NAME SAN JUAN 28-6 UNIT
3. ADDRESS & PHONE NO. OF OPERATOR P O BOX 4289 FARMINGTON, NM 87499	8. FARM OR LEASE NAME SAN JUAN 28-6 UNIT
4. LOCATION OF WELL 935'FNL 870'FEL	9. WELL NO. 448
14. DISTANCE IN MILES FROM NEAREST TOWN 10 MILES FROM GOBERNADOR	10. FIELD, POOL, OR WILDCAT BASIN FRUITLAND COAL
15. DISTANCE FROM PROPOSED LOCATION TO NEAREST PROPERTY OR LEASE LINE. 870'	11. SEC. T. R. M OR BLK. A SEC. 15 T28N R06W NMPM
16. ACRES IN LEASE 1920	12. COUNTY RIO ARRIBA
17. ACRES ASSIGNED TO WELL 320.00	13. STATE NM
18. DISTANCE FROM PROPOSED LOCATION TO NEAREST WELL DR. COMPL., OR APPLIED FOR ON THIS LEASE. 600'	20. ROTARY OR CABLE TOOLS ROTARY
19. PROPOSED DEPTH 3443'	<small>This action is subject to technical and procedural review pursuant to 43 CFR 3165.3 and appeal pursuant to 43 CFR 3165.4.</small>
21. ELEVATIONS (DF, FT, GR, ETC.) 6571'GL	22. APPROX. DATE WORK WILL START

23. PROPOSED CASING AND CEMENTING PROGRAM

*SEE OPERATIONS PERMIT

RECEIVED

24. AUTHORIZED BY: *St. Calmery* REG. DRILLING ENGR. **OIL CON. DIV. DIST. 3** AUG 20 1990 8/20/90 DATE

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

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

ek

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

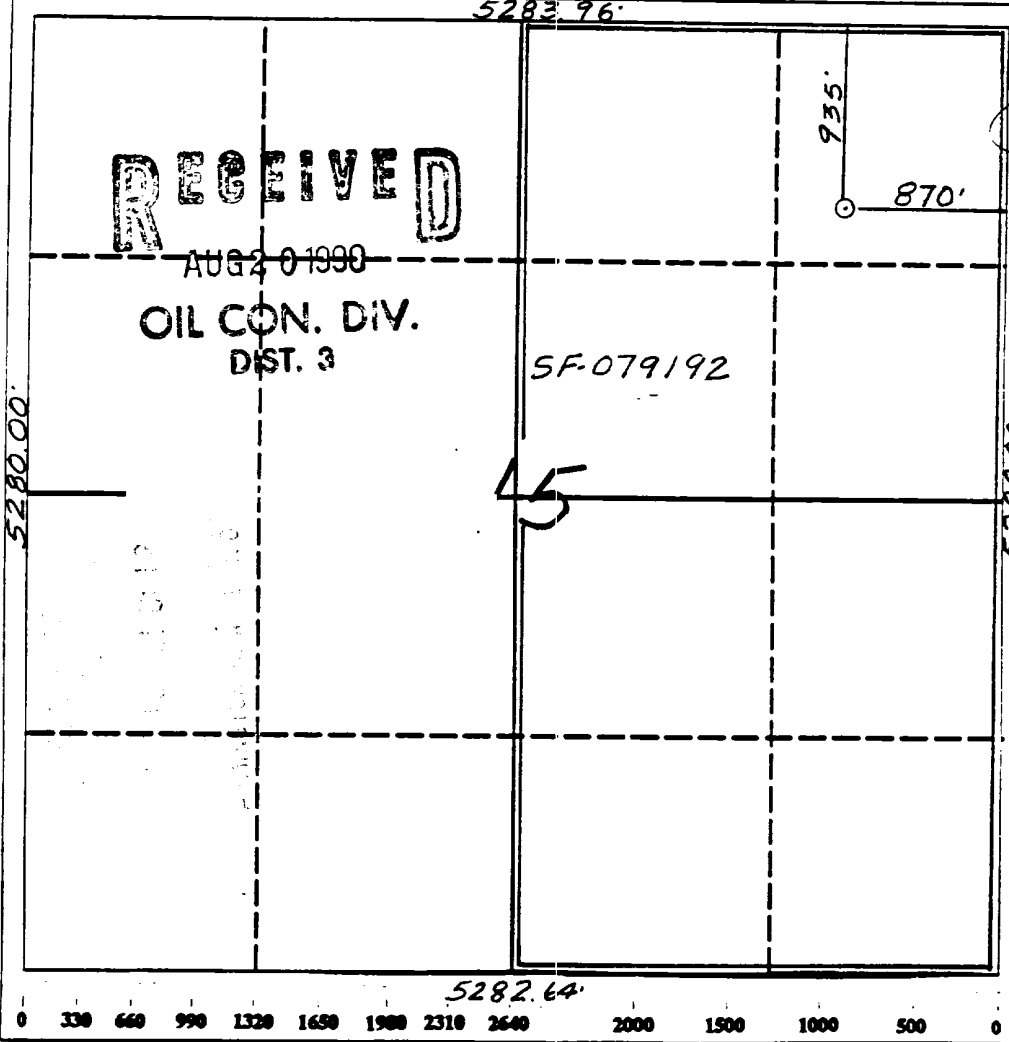
DISTRICT III
 1000 Rio Brazos Rd., Aztec, NM 87410

WELL LOCATION AND ACREAGE DEDICATION PLAT

All Distances must be from the outer boundaries of the section

Operator <i>Meridian Oil Co</i> El Paso Natural Gas		Lease (SF-079192) San Juan 28-6 Unit		Well No. 448
Unit Letter A	Section 15	Township 28 North	Range 6 West	County NMPM Rio Arriba
Actual Footage Location of Well: 935 feet from the North line and 870 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 hatchure 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, forced-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 Bradfield
 Signature
 Peggy Bradfield
 Printed Name
 Regulatory Affairs
 Position
 El Paso Natural Gas
 Company
 8-7-90
 Date

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.

6-26-90
 Date Surveyed

Neale C. Edwards
 Signature
 Professional Surveyor
 Seal of Professional Surveyor
 6857
 6857
 Certificate No.
 REGISTERED LAND SURVEYOR
 Neale C. Edwards

Well Name: 448 SAN JUAN 28--6 UNIT
 Sec. 15 T28N R06W
 BASIN FRUITLAND COAL

935'FNL 870'FEL
 RIO ARRIBA NEW MEXICO
 Elevation 6571'GL

Formation tops: Surface- SAN JOSE
 Ojo Alamo- 2601
 Kirtland- 2781
 Fruitland- 3147
 Fruitland Coal Top- 3247
 Fruitland Coal Base- 3438
 Pictured Cliffs- 3438

Total Depth- 3443

Logging Program: Mud logs from 3147 to total depth.

Mud Program:	Interval	Type	Weight	Visc.	Fl. Loss
	0 - 200	Spud	8.4 - 8.9	40-50	no contro.
	200 - 3443	Non-dispersed	8.4 - 9.5	30-60	no contro.

Casing Program:	Hole Size	Depth Interval	Csg. Size	Weight	Grade
	12 1/4"	0 - 200	8 5/8"	24.0#	K-40
	7 7/8"	0 - 3443	5 1/2"	15.5#	K-55
Tubing Program:		0 - 3443	2 3/8"	4.7#	J-55

Float Equipment: 8 5/8" surface casing - saw tooth guide shoe. Centralizers will be run in accordance with Onshore Order #2.

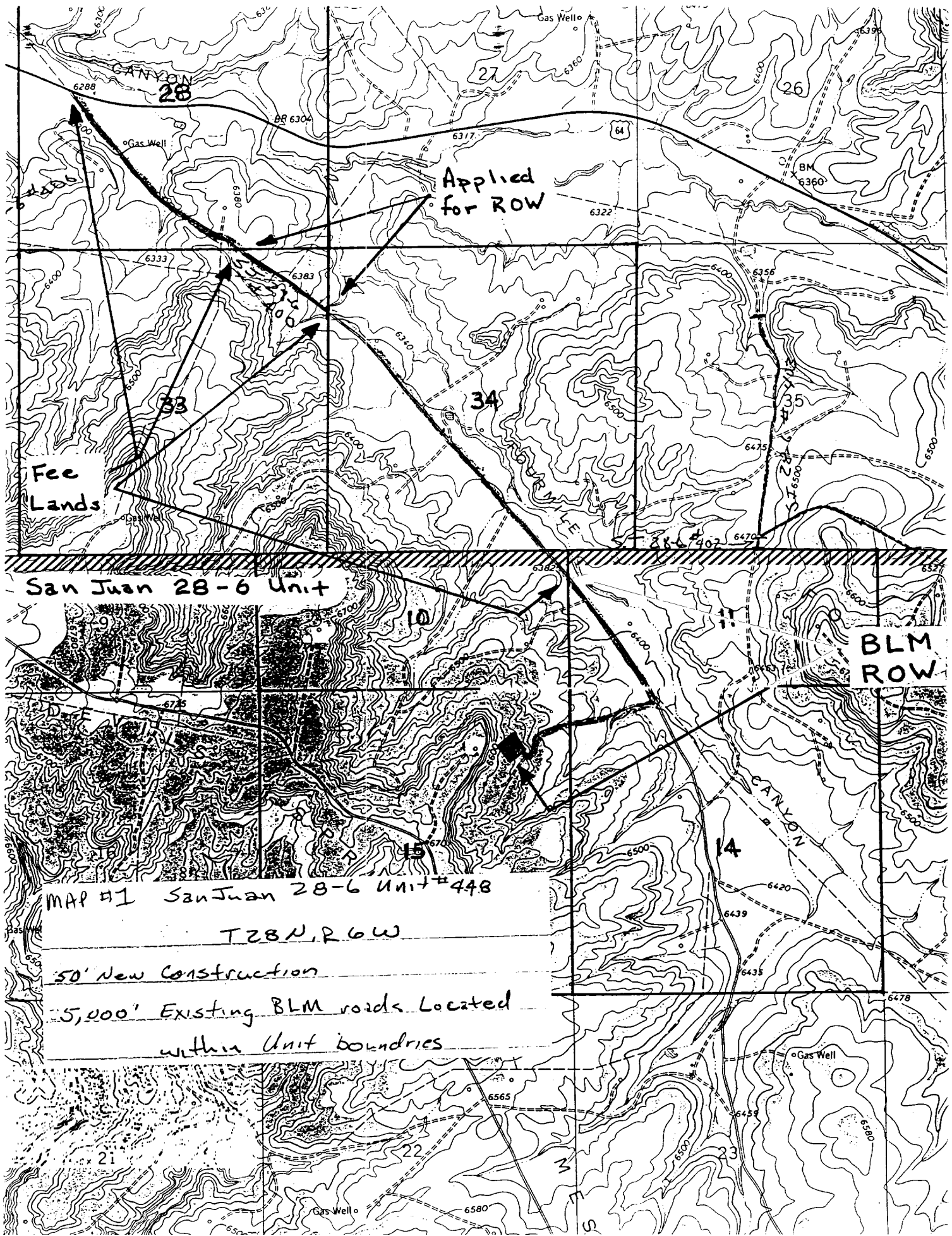
5 1/2" production casing - float shoe on bottom. Three centralizers run every other joint above shoe. Two turbolizing type centralizers - one below and one into the base of the Ojo Alamo @ 2781'. Standard centralizers thereafter every fourth joint up to the base of the surface pipe.

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

Cementing:

8 5/8" surface casing - cement with 211 sacks of class "B" cement with 1/4# flocele/sack and 3% calcium chloride (248 cu ft. of slurry, 200% excess to circulate to surface). WOC 12 hours. Test casing to 600 psi for 30 minutes.

5 1/2" production casing - lead with 561 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. 1201 cu ft. of slurry, 100% 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.



Applied for ROW

Fee Lands

San Juan 28-6 Unit

BLM ROW

MAP #1 San Juan 28-6 Unit #448

T28N, R6W

50' New Construction

5,000' Existing BLM roads Located within Unit boundaries