

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-078389	
1b. TYPE OF WELL GAS		6. IF INDIAN, ALL. OR TRIBE NAME	
2. OPERATOR MERIDIAN OIL INC.		7. UNIT AGREEMENT NAME	
3. ADDRESS & PHONE NO. OF OPERATOR P O BOX 4289 FARMINGTON, NM 87499		8. FARM OR LEASE NAME LUCERNE A	
4. LOCATION OF WELL 940' FSL 840' FWL		9. WELL NO. 100	
14. DISTANCE IN MILES FROM NEAREST TOWN 2 MILES FROM CEDAR HILL		10. FIELD, POOL, OR WILDCAT Cedar Hill, Fruitland Basal Coal	
15. DISTANCE FROM PROPOSED LOCATION 840' TO NEAREST PROPERTY OR LEASE LINE.		11. SEC. T. R. M OR BLK. SEC. 3 T31N R10W NMPM	
16. ACRES IN LEASE 1255.18		12. COUNTY SAN JUAN	
17. ACRES ASSIGNED TO WELL 308.84		13. STATE NM	
18. DISTANCE FROM PROPOSED LOCATION TO NEAREST WELL DR. 60' COMPL., OR APPLIED FOR ON THIS LEASE.		19. PROPOSED DEPTH 2980'	
20. ROTARY OR CABLE TOOLS ROTARY		21. ELEVATIONS (DF, FT, GR, ETC.) 6192' GL	
22. APPROX. DATE WORK WILL START		23. PROPOSED CASING AND CEMENTING PROGRAM	
*SEE OPERATIONS PLAN			
24. AUTHORIZED BY: <i>[Signature]</i> REG. DRILLING ENGR.		DATE 9/28/90	

PERMIT NO. _____ APPROVAL DATE _____

APPROVED BY _____ TITLE _____ DATE _____

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

NM000

OIL CONSERVATION DIVISION

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENTP. O. BOX 2088
SANTA FE, NEW MEXICO 87501Form C-102
Revised 10-1

All distances must be from the outer boundaries of the Section.

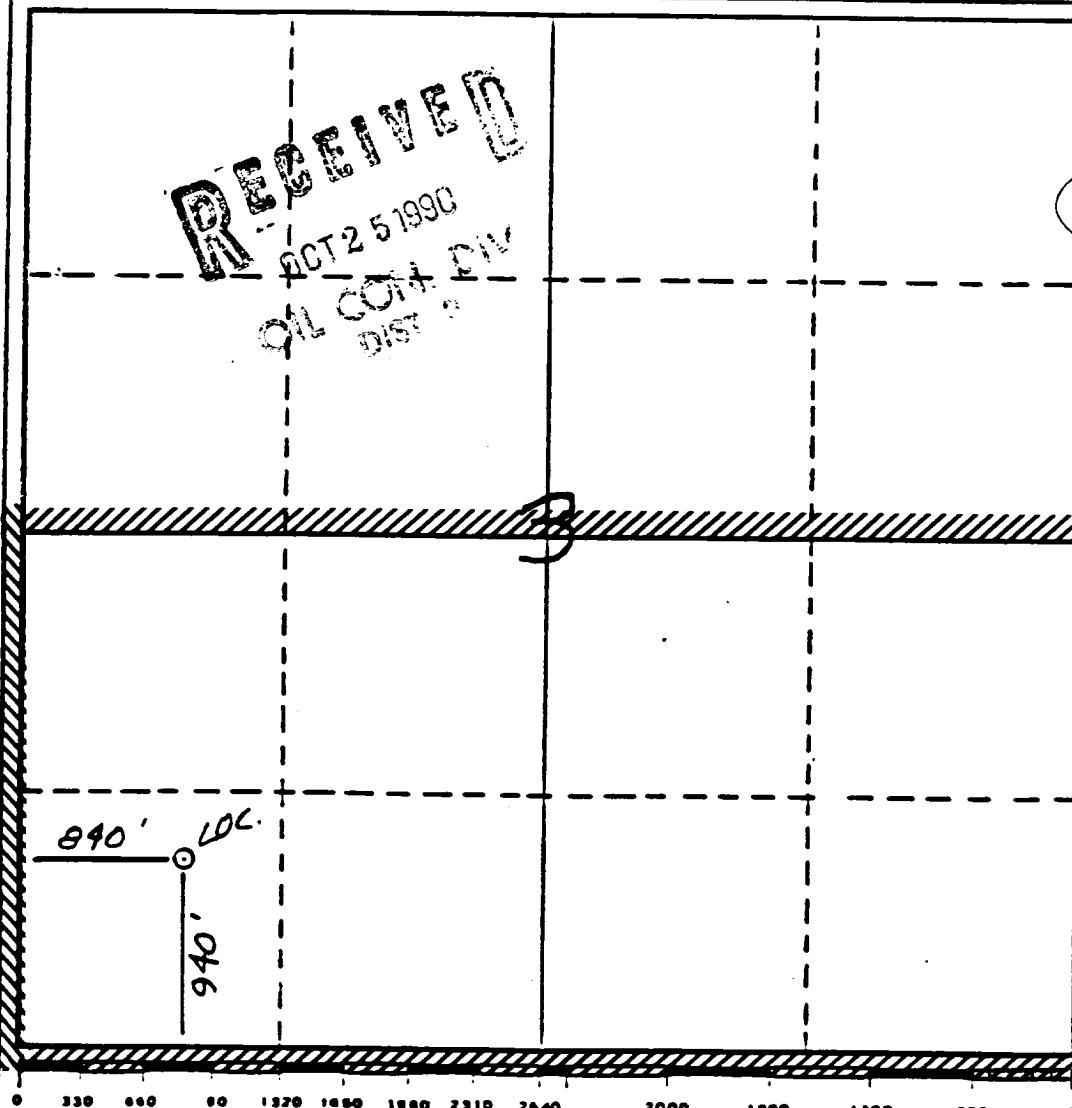
Operator Meridian Oil Inc.		Lease Lucerne A (SF-078389)		Well No. 100
Unit Letter H	Section 3	Township 31 North	Range 10 West	County San Juan
Actual Footage Location of Well: 940 feet from the South line and 840 feet from the West line				
Ground Level Elev. 6192'	Producing Formation Fruitland Basal Coal	Pool Cedar Hill	Dedicated Acreage: 308.84 Ac	

1. Outline the acreage dedicated to the subject well by colored pencil or hatchure marks on the plat below.
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 interests of all owners been consolidated by communitization, unitization, force-pooling, etc?

☐ Yes ☐ No If answer is "yes," type of consolidation _____

If answer is "no," list the owners and tract descriptions which have actually been consolidated. (Use reverse side 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 interests, has been approved by the Division.



CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

Name
Peggy Bradfield

Position
Regulatory Affairs

Company
Meridian Oil Inc.

Date
9-27-90

I hereby certify that the location shown on this plat was obtained 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.

Date Surveyed
8-20-88

Registered Professional Engineer and/or Land Surveyor

Neale C. Edwards

Certificate No.
6857

Well Name: 100 LUCERNE A 940'FSL 840'FWL
 Sec. 3 T31N R10W SAN JUAN NEW MEXICO
 CEDAR H FRUITLAND COAL Elevation 6192'GL

Formation tops: Surface- NACIMIENTO
 Ojo Alamo- 1380
 Kirtland- 1430
 Fruitland- 2541
 Fruitland Coal Top- 2722 Intermediate TD- 2702
 Fruitland Coal Base- 2979 Total Depth- 2980
 Pictured Cliffs- 2981

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 - 2702	Non-dispersed	8.4 - 9.1	30-60	no control
	2702 - 2980	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 - 2702	7"	20.0#	K-55
	6 1/4"	2652 - 2980	5 1/2"	15.5#	K-55
Tubing Program:		0 - 2980	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 @ 1430'. 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 386 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. 863 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.

