

30-045-28366

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT


RECEIVED
NOV 06 1990
OIL CON. DIV.
DIST.

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 1450' FSL 1730' FWL	9. WELL NO. 102 ✓
14. DISTANCE IN MILES FROM NEAREST TOWN 3 MILES FROM CEDAR HILL	10. FIELD, POOL, OR WILDCAT BASIN FRUITLAND COAL ✓
15. DISTANCE FROM PROPOSED LOCATION 1450' TO NEAREST PROPERTY OR LEASE LINE.	11. SEC. T. R. M OR BLK. K SEC. 9 T31N R10W NMPM
16. ACRES IN LEASE 1255.18	12. COUNTY SAN JUAN
17. ACRES ASSIGNED TO WELL S/316.16	13. STATE NM
18. DISTANCE FROM PROPOSED LOCATION TO NEAREST WELL DR. 200' COMPL., OR APPLIED FOR ON THIS LEASE.	19. PROPOSED DEPTH 2945'
20. ROTARY OR CABLE TOOLS ROTARY	
21. ELEVATIONS (DF, FT, GR, ETC.) 6149' GL	
22. APPROX. DATE WORK WILL START	


23. PROPOSED CASING AND CEMENTING PROGRAM

*SEE OPERATIONS PLAN

24. AUTHORIZED BY: 
REG. DRILLING ENGR.

10/1/90
DATE

PERMIT NO. _____ APPROVAL DATE _____

APPROVED BY  TITLE _____ DATE _____

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

An APD for this location was approved 8-24-88. The original APD was rescinded 2-5-90.

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

Operator Meridian Oil Co.			Lease Lucerne "A" SF-078389			Well No. 102
Unit Letter K	Section 9	Township T31N	Range R10W	County San Juan County		
Actual Footage Location of Well: 1450 feet from the South line and 1730 feet from the West line						
Ground Level Elev. 6149	Producing Formation Fruitland Coal		Pool Basin		Dedicated Acreage 316.16	

1. Outline the acreage dedicated to the subject well by colored pencil or hachure 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 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 interests, has been approved by the Division.

	<p align="center">RECEIVED NOV 08 1990 OIL CON. DIV. DIST. 3</p>	<p align="center">CERTIFICATION</p> <p>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.</p> <p><i>Peggy Bradford</i> (Name) Peggy Bradford Position Regulatory Affairs Company Meridian Oil Inc. Date 10-1-90</p>
	<p>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.</p> <p align="center">REGISTERED PROFESSIONAL LAND SURVEYOR</p> <p align="center">Registered Professional Land Surveyor</p> <p>Date Surveyed July 12, 1988</p> <p>Registered Land Surveyor R. Howard Daggett <i>R. Howard Daggett</i> Certificate No. 9679</p>	

Well Name: 102 LUCERNE A
 Sec. 9 T31N R10W
 BASIN FRUITLAND COAL

1450' FSL 1730' FWL
 SAN JUAN NEW MEXICO
 Elevation 6149' GL

Formation tops: Surface- NACIMIENTO

Ojo Alamo-	1381		
Kirtland-	1413		
Fruitland-	2507		
Fruitland Coal Top-	2654	Intermediate TD-	2634
Fruitland Coal Base-	2944	Total Depth-	2945
Pictured Cliffs-	2947		

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 contro.
	200 - 2634	Non-dispersed	8.4 - 9.1	30-60	no contro.
	2634 - 2945	Formation Water	8.4		no contro.

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 - 2634	7"	20.0#	K-55
	6 1/4"	2584 - 2945	5 1/2"	15.5#	K-55
Tubing Program:		0 - 2945	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 @ 1413'. 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.

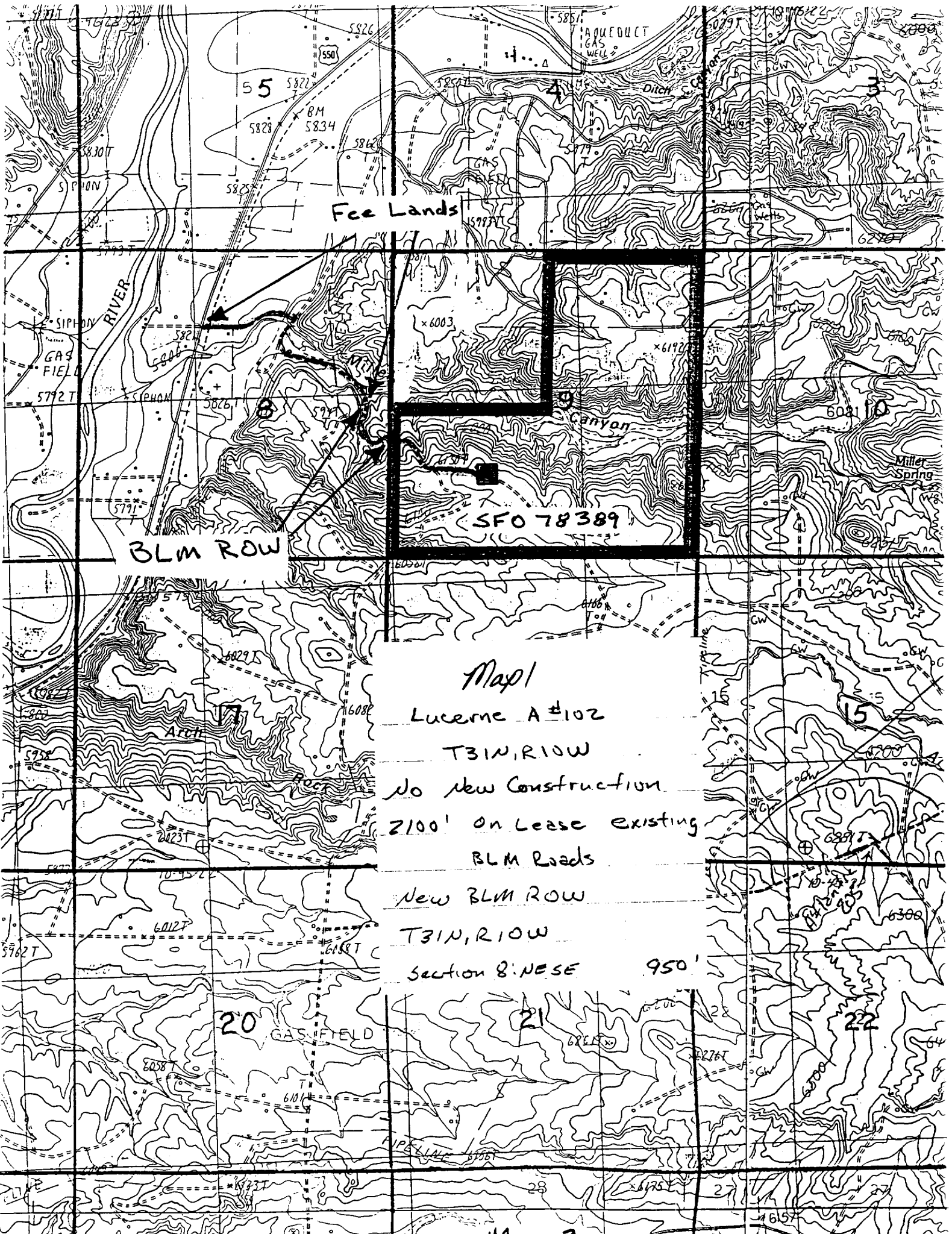
Wellhead Equipment: 9 5/8" x 7" x 2 7/8" x 11" 3000 psi xmas tree assembly.

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 374 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. 842 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.



Fee Lands

BLM ROW

SFO 78389

Map 1

Lucerne A #102

T31N, R10W

No New Construction

2100' on Lease existing

BLM Roads

New BLM ROW

T31N, R10W

Section 8: NESE

950'

20

21

22

GAS FIELD

PIPELINE