

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

- 1a. TYPE OF WORK  
DRILL
- 1b. TYPE OF WELL  
GAS SINGLE ZONE
2. OPERATOR  
MERIDIAN OIL INC.
3. ADDRESS & PHONE NO. OF OPERATOR  
P O BOX 4289  
FARMINGTON, NM 87499
4. LOCATION OF WELL  
930'S 1490'W
5. LEASE NUMBER  
SF-077092C
6. IF INDIAN, ALL. OR TRIBE NAME
7. UNIT AGREEMENT NAME
8. FARM OR LEASE NAME  
LACKEY A COM
9. WELL NO.  
291
10. FIELD, POOL, OR WILDCAT  
BASIN FRUITLAND COAL
11. SEC. T. R. M OR BLK.  
SEC. 11 T29N R10W NMPM
12. COUNTY  
SAN JUAN
13. STATE  
NM
14. DISTANCE IN MILES FROM NEAREST TOWN  
1.5 MILES FROM BLANCO
15. DISTANCE FROM  
PROPOSED LOCATION 930'  
TO NEAREST PROPERTY  
OR LEASE LINE.
16. ACRES IN LEASE 159.09
17. ACRES ASSIGNED TO WELL  
S/313.55  
ALL OPERATIONS AND ACTIVITIES ARE  
SUBJECT TO COMPLETION WITH ATTACHED  
"GENERAL AGREEMENT".
18. DISTANCE FROM  
PROPOSED LOCATION  
TO NEAREST WELL DR. 300'  
COMPL., OR APPLIED  
FOR ON THIS LEASE.
19. PROPOSED DEPTH  
2157'
20. ROTARY OR CABLE TOOLS  
ROTARY
21. ELEVATIONS (DF, FT, GR, ETC.)  
5753'GL
22. APPROX. DATE WORK WILL START

23. PROPOSED CASING AND CEMENTING PROGRAM

\*SEE OPERATIONS PLAN

24. AUTHORIZED BY: *[Signature]*  
REGULATORY AFFAIRS

3-16-89  
DATE

RECEIVED  
APR 04 1989

APPROVED  
AS AMENDMENT

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

MAR 15 1989  
AREA

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

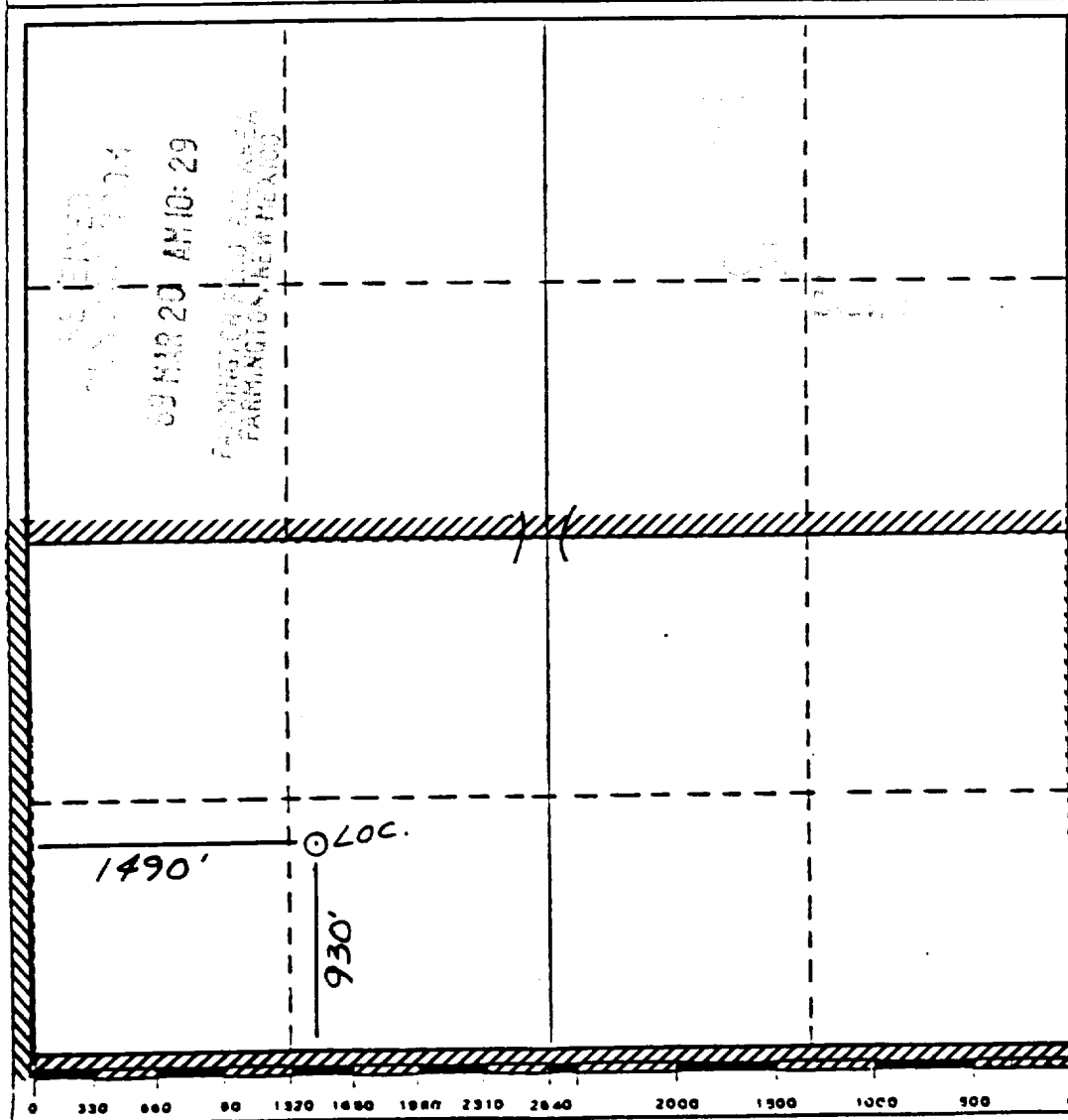
Operator <b>Meridian Oil Inc.</b>			Lease <b>Lackey A Com (SF-077092C)</b>		Well No. <b>291</b>
Unit Letter <b>N</b>	Section <b>11</b>	Township <b>29 North</b>	Range <b>10 West</b>	County <b>San Juan</b>	
Actual Footage Location of Wells <b>930</b> feet from the <b>South</b> line and <b>1490</b> feet from the <b>West</b> line					
Ground Level Elev. <b>5753</b>	Producing Formation <b>Fruitland Coal</b>		Pool <b>Basin</b>		Dedicated Acreage: <b>313.55</b>

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 work 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 communitization  
agreement being prepared

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 best of my knowledge and belief.

*Neale C. Edwards*  
Name  
Regulatory Affairs  
Position  
Meridian Oil Inc.  
Company  
3-16-89  
Date

I hereby certify that the well location shown on this plat was plotted from notes of actual surveys made by me under supervision, and that the same is true and correct to the best of my knowledge and belief.

*Neale C. Edwards*  
Date Surveyed  
12-29-88  
Registered Professional Engineer  
and/or Land Surveyor

**Neale C. Edwards**  
Certificate No.  
**6857**

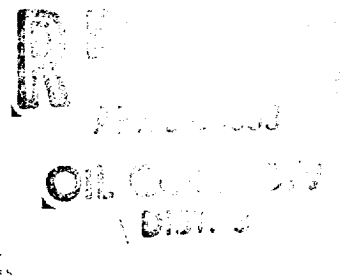
# OPERATIONS PLAN

DATE: MAR 14, 1985

Well Name: 291 LACKEY A COM  
 Sec. 11 T29N R10W  
 BASIN FRUITLAND COAL

930'S 1490'W  
 SAN JUAN NEW MEXICO  
 Elevation 5753'GL

Formation tops: Surface- NACIMIENTO  
 Ojo Alamo- 973  
 Kirtland- 1095  
 Fruitland- 1852  
 Fruitland Coal Top- 2039  
 Fruitland Coal Base- 2156  
 Intermediate TD- 2019  
 Total Depth- 2157  
 Pictured Cliffs- 2170



Logging Program: Mud logs from intermediate to total depth.

Mud Program: Low solid non-dispersed mud from surface to total depth.

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 - 2019	7"	20.0#	K-55
	6 1/4"	1969 - 2157	5 1/2"	15.5#	K-55
Tubing Program:		0 - 2157	2 7/8"	6.5#	J-55

Float Equipment: 9 5/8" surface casing - saw tooth guide shoe.

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.

5 1/2" production liner - 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 106 sacks of class "B" cement with 1/4# flocele/sack and 3% calcium chloride (125 cu ft. of slurry, 100% excess to circulate to surface). WOC 12 hours. Test casing to 600 psi for 30 minutes.

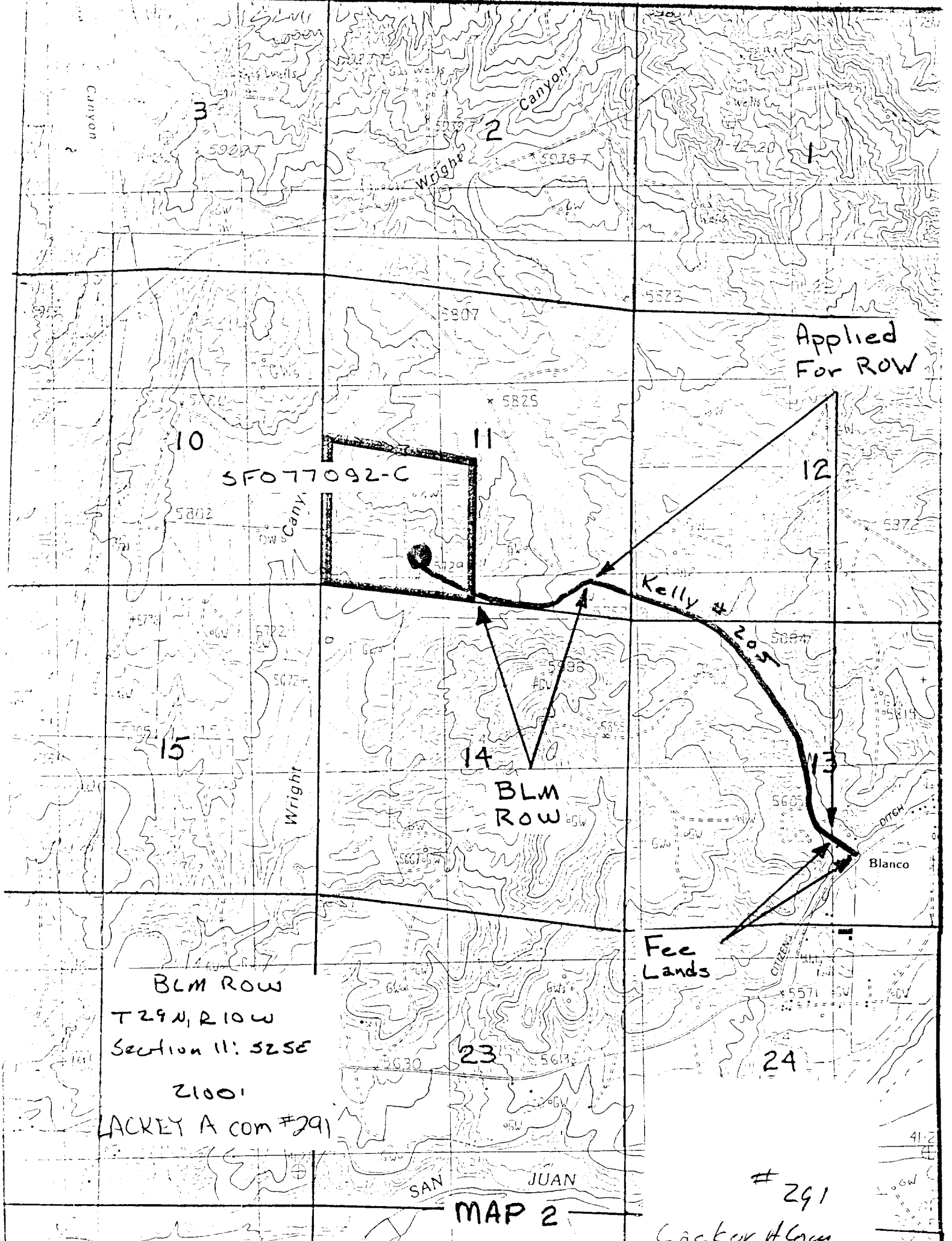
7" intermediate casing - lead with 102 sacks of 65/35 class "B" poz with 6% gel, 2% calcium chloride and 1/2 cu.ft. Perlite/sack (10.3 gallons of water/sack) tail with 100 sacks of class "B" with 2% calcium chloride. 314 cu ft. of slurry, 100% excess to cover the Ojo Alamo. Run temperature survey at 8 hours. WOC 12 hours. Test casing to 1500 psi for 30 minutes.

5 1/2" liner - do not cement.

The Fruitland coal formation will be completed.

A 3000 psi WP and 6000 psi test double gate preventer equipped with blind and pipe rams will be used for blow out prevention on this well. This gas is dedicated.

The S/2 of Section 11 is dedicated to this well.



Applied  
For ROW

SFO 77092-C

Kelly #

204

BLM  
ROW

Fee  
Lands

BLM ROW  
T29N, R10W  
Section 11: S2SE

21001

LACKY A com #291

MAP 2

# 291

Lackey A Com