

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

30-045-27247

RECEIVED  
BLM MAIL ROOM

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

89 MAR 15 AM 10:17

1a. TYPE OF WORK

DRILL

1b. TYPE OF WELL

GAS SINGLE ZONE

2. OPERATOR

SOUTHLAND ROYALTY CO.

3. ADDRESS & PHONE NO. OF OPERATOR

P O BOX 4289  
FARMINGTON, NM 87499

4. LOCATION OF WELL

1925'S 1830'W

5. LEASE NUMBER  
SF-078115

6. IF INDIAN, ALL. OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME  
GRENIER

9. WELL NO.  
101

10. FIELD, POOL, OR WILDCAT  
BASIN FRUITLAND COAL

11. SEC. T. R. M OR BLK.  
K SEC. 7 T31N R11W NMPM

14. DISTANCE IN MILES FROM NEAREST TOWN  
8 MILES FROM AZTEC

12. COUNTY 13. STATE  
SAN JUAN NM

15. DISTANCE FROM  
PROPOSED LOCATION  
TO NEAREST PROPERTY  
OR LEASE LINE.

1830'

16. ACRES IN LEASE 17. ACRES ASSIGNED TO WELL  
320.40

DRILLING COST \$10,000.00  
SUBSIDY \$10,000.00  
"GEM" \$10,000.00

W/31880

18. DISTANCE FROM  
PROPOSED LOCATION  
TO NEAREST WELL DR.  
COMPL., OR APPLIED  
FOR ON THIS LEASE.

700'

19. PROPOSED DEPTH 20. ROTARY OR CABLE TOOLS  
2800' ROTARY

THIS WELL IS TO BE DRILLED  
AND CEMENTED TO A DEPTH OF 2800.0  
AND CEMENTED TO A DEPTH OF 2800.0

21. ELEVATIONS (DF, FT, GR, ETC.)  
6218'GL

22. APPROX. DATE WORK WILL START

23. PROPOSED CASING AND CEMENTING PROGRAM

\*SEE OPERATIONS PLAN

24. AUTHORIZED BY:

REGULATORY AFFAIRS

RECEIVED

MAR 21 1989

OIL CON. DIV

3-15-89  
DATE

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

APPROVED  
AS AMENDED

MAR 17 1989

AREA MANAGER

OPERATIONS PLAN

DATE: MAR 14,1989

Well Name: 101 GRENIER  
 Sec. 7 T31N R11W  
 BASIN FRUITLAND COAL

1925'S 1830'W  
 SAN JUAN NEW MEXICO  
 Elevation 6218'GL

Formation tops: Surface- NACIMIENTO  
 Ojo Alamo- 1048  
 Kirtland- 1133  
 Fruitland- 2417  
 Fruitland Coal Top- 2561  
 Fruitland Coal Base- 2787  
 Intermediate TD- 2545  
 Total Depth- 2800  
 Pictured Cliffs- 2810

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 - 2545	7"	20.0#	K-55
	6 1/4"	2495 - 2800	5 1/2"	15.5#	K-55
Tubing Program:		0 - 2800	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 172 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.  
 450 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 W/2 of Section 7 is dedicated to this well.

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

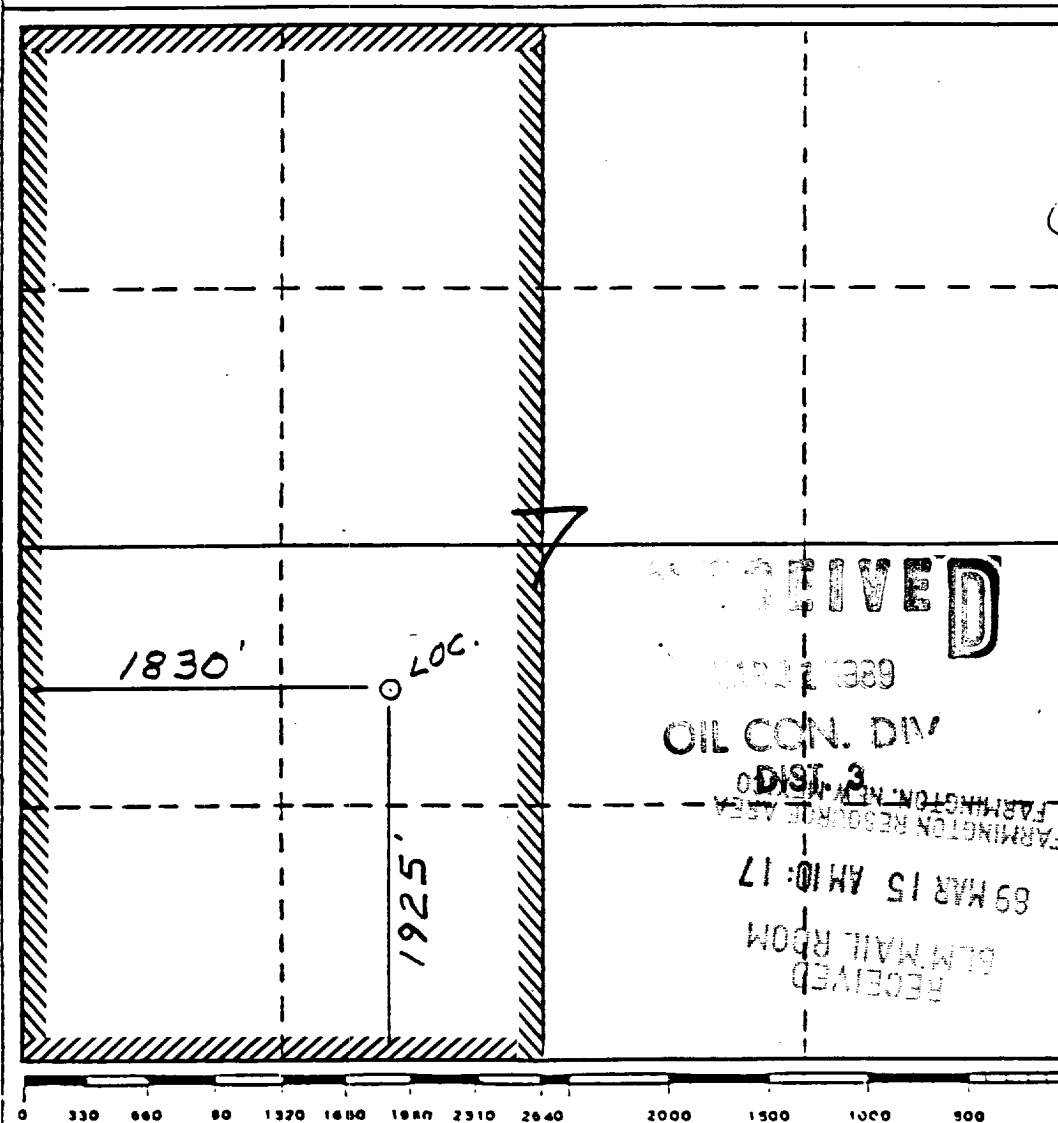
Operator <b>Southland Royalty Company</b>			Lease <b>Grenier (SF-078115)</b>		Well No. <b>101</b>
Unit Letter <b>K</b>	Section <b>7</b>	Township <b>31 North</b>	Range <b>11 West</b>	County <b>San Juan</b>	
Actual Footage Location of Well: <b>1925</b> feet from the <b>South</b> line and <b>1830</b> feet from the <b>West</b> line					
Ground Level Elev. <b>6218'</b>	Producing Formation <b>Fruitland Coal</b>		Pool <b>Basin</b>		Dedicated Acreage: <b>320.40</b> * Act

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 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 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.

*Neale C. Edwards*

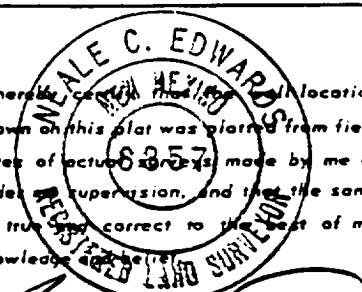
Name  
Regulatory Affairs

Position  
Southland Royalty C

Company  
3-15-89

Date

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



*Neale C. Edwards*  
Date Surveyed  
11-30-88

Registered Professional Engineer  
and/or Land Surveyor

Neale C. Edwards

Certificate No.  
6857

