

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 NM-2991
1b. TYPE OF WELL GAS	6. IF INDIAN, ALL. OR TRIBE NAME
2. OPERATOR SOUTHLAND ROYALTY CO.	7. UNIT AGREEMENT NAME
3. ADDRESS & PHONE NO. OF OPERATOR P O BOX 4289 FARMINGTON, NM 87499	8. FARM OR LEASE NAME LABACA
	9. WELL NO. 100
4. LOCATION OF WELL 795'N 820'E	10. FIELD, POOL, OR WILDCAT BASIN FRUITLAND COAL
	11. SEC. T. R. M OR BLK. A SEC. 1 T29N R05W NMPM
14. DISTANCE IN MILES FROM NEAREST TOWN 16 MILES FROM GOBERNADOR	12. COUNTY RIO ARRIBA
	13. STATE NM
15. DISTANCE FROM PROPOSED LOCATION 795' TO NEAREST PROPERTY OR LEASE LINE.	16. ACRES IN LEASE 17. ACRES ASSIGNED TO WELL 581.02 281.65
	Taken from BLM Form 3160-3, 10/1/88. If the proposed well is to be drilled on a lease, the lease must be in compliance with the terms and conditions of the lease and appeal pursuant to 43 CFR 3165.4.
18. DISTANCE FROM PROPOSED LOCATION TO NEAREST WELL DR. 25' COMPL., OR APPLIED FOR ON THIS LEASE.	19. PROPOSED DEPTH 20. ROTARY OR CABLE TOOLS 4288' ROTARY
21. ELEVATIONS (DF, FT, GR, ETC.) 7600'GL	22. APPROX. DATE WORK WILL START

23. PROPOSED CASING AND CEMENTING PROGRAM

*SEE OPERATIONS PLAN

RECEIVED

JUL 2 1989

24. AUTHORIZED BY: *Walter Bradley* CON. DIV. 6-29-89
REGULATORY AFFAIRS DIST. 3 DATE

PERMIT NO. _____ APPROVAL DATE _____

APPROVED BY _____ TITLE _____ DATE _____

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

Hold c-104 for ~~PA~~ Cancellation of PB Sundry

STATE OF NEW MEXICO
DISTRICT OFFICE
STATE LEASES - 4 copies
FOR LEASES - 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 100, Arama, NM 88210

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

WELL LOCATION AND ACREAGE DEDICATION PLAT

All Distances must be from the outer boundaries of the section

Operator Southland Royalty Company				La Baca (NM-2991)		Well No. 100
Unit Lease A	Section 1	Township 39 North	Range 5 West	County Rio Arriba		
Actual Footage Location of Well: 795 feet from the North line and 820 feet from the East line						
Grounds owner alias. 7600'		Producing formation Fruitland Coal		Pool Basin		Dedicated Acreage 281.65 Acres

- Outline the acreage dedicated to the subject well by contour points or section corners 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 commutation, 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 allowance will be attached to the well until all interests have been consolidated (by commutation, unitization, force-pooling, or otherwise) or until a non-standard unit, alternative such interest, has been approved by the Division.

Reissued to show
moved location 6-20-89

795'
Loc. 820'

OPERATOR CERTIFICATION

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

Signature
Peggy Bradfield

Printed Name
Peggy Bradfield

Printed Name
Regulatory Affairs

Position
Southland Royalty Co

Company
6-29-89

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.

Date Surveyed
6-8-89

Signature
N. C. Edwards

Printed Name
N. C. Edwards

6857

Well Name: 100 LABACA 795'N 820'E
 Sec. 1 T29N R05W RIO ARriba NEW MEXICO
 BASIN FRUITLAND COAL Elevation 7600'GL

Formation tops: Surface- SAN JOSE
 Ojo Alamo- 3738
 Kirtland- 3860
 Fruitland- 4070
 Fruitland Coal Top- 4212
 Fruitland Coal Base- 4287
 Intermediate TD- 4192
 Total Depth- 4288
 Pictured Cliffs- 4291

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 - 4192	Non-dispersed	8.4 - 9.1	30-60	no control
	4192 - 4288	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 - 4192	7"	20.0#	K-55
	6 1/4"	4142 - 4288	5 1/2"	15.5#	K-55
Tubing Program:		0 - 4288	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 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 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 10 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. 136 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.

