

30-045-2745

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

RECEIVED
MAIL ROOM

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK DRILL	5. LEASE NUMBER SF-077652
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 EAST
4. LOCATION OF WELL 810'S 1375'W	9. WELL NO. 104
14. DISTANCE IN MILES FROM NEAREST TOWN 5 miles from Aztec	10. FIELD, POOL, OR WILDCAT BASIN FRUITLAND COAL
15. DISTANCE FROM PROPOSED LOCATION TO NEAREST PROPERTY OR LEASE LINE. 810'	11. SEC. T. R. M OR BLK. N SEC. 23 T31N R12W NMPM
16. ACRES IN LEASE 256.0	12. COUNTY SAN JUAN
17. ACRES ASSIGNED TO WELL W/ 321.06	13. STATE NM
18. DISTANCE FROM PROPOSED LOCATION TO NEAREST WELL DR. 400' COMPL., OR APPLIED FOR ON THIS LEASE.	19. PROPOSED DEPTH 2535'
21. ELEVATIONS (DF, FT, GR, ETC.) 6084'GL	20. ROTARY OR CABLE TOOLS ROTARY
22. APPROX. DATE WORK WILL START	

This action is subject to technical and procedural review pursuant to 43 CFR 3105.3 and appeal pursuant to 43 CFR 3105.4.

23. PROPOSED CASING AND CEMENTING PROGRAM

*SEE OPERATIONS PLAN
DRILLING OPERATIONS AUTHORIZED ARE
SUBJECT TO COMPLIANCE WITH ATTACHED
"GENERAL REQUIREMENTS".

24. AUTHORIZED BY: [Signature] 8-23-89
REGULATORY AFFAIRS DATE

PERMIT NO. _____ APPROVAL DATE _____
APPROVED BY _____ TITLE _____ DATE _____

APPROVED
AS AMENDED
SEP 13 1989
[Signature]
AREA MANAGER

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

OK
[Signature]

NMOOD

Submit to Appropriate
District Office
State Lease - 4 copies
Fee Lease - 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 DD, Artesia, NM 88210

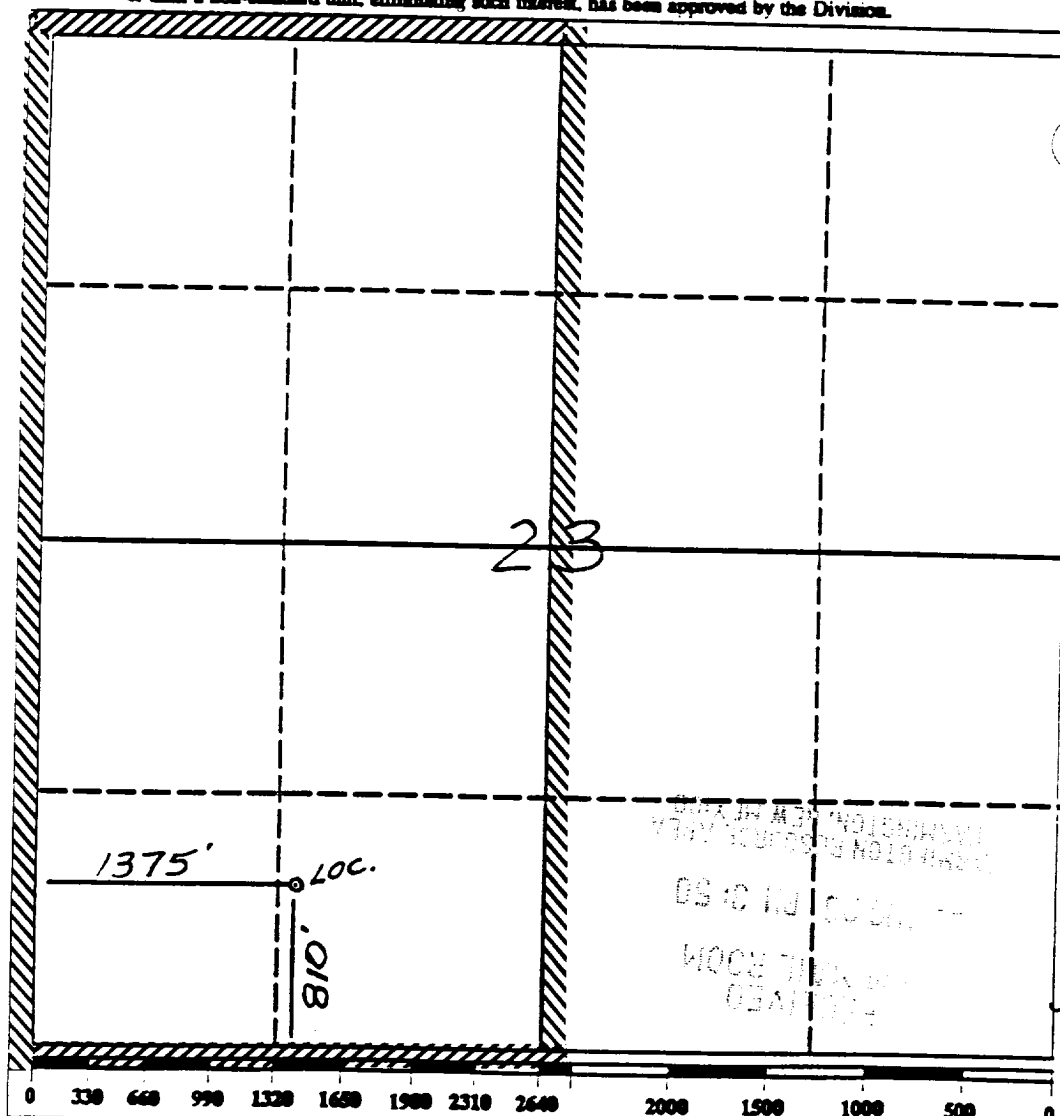
DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410

WELL LOCATION AND ACREAGE DEDICATION PLAT

All Distances must be from the outer boundaries of the section

Operator Southland Royalty Company			Lease East (SF-077652)		Well No. 104
Unit Letter H	Section 23	Township 31 North	Range 12 West	County San Juan	
Actual Footage Location of Well: 810 feet from the South line and 1375 feet from the West line					
Ground level Elev. 6084'	Producing Formation Fruitland Coal		Pool Basin	Dedicated Acreage 321.06 Acres	

- Outline the acreage dedicated to the subject well by colored pencil or machine marks 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 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, force-pooling, or otherwise) or until a non-standard unit, eliminating such interest, has been approved by the Division.



OPERATOR CERTIFICATION

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

Signature: *Peggy Bradfield*

Printed Name
Peggy Bradfield

Position
Regulatory Affairs

Company
Southland Royalty C

8-23-89

Date

SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes 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
Neale C. Edwards

Signature and Seal of Professional Surveyor

6857

Certificate No.

6857

Well Name: 104 EAST 810'S 1375'W
 Sec. 23 T31N R12W SAN JUAN NEW MEXICO
 BASIN FRUITLAND COAL Elevation 6084'GL

Formation tops: Surface- NACIMIENTO
 Ojo Alamo- 799
 Kirtland- 841
 Fruitland- 2171
 Fruitland Coal Top- 2265
 Fruitland Coal Base- 2525
 Total Depth- 2535
 Pictured Cliffs- 2565

Logging Program: Mud logs from 2171 to total depth.

Mud Program:	Interval	Type	Weight	Visc.	Fl. Loss
	0 - 200	Spud	8.4 - 8.9	40-50	no contro
	200 - 2535	Non-dispersed	8.4 - 9.5	30-60	no contro

Casing Program:	Hole Size	Depth Interval	Csg. Size	Weight	Grade
	12 1/4"	0 - 200	8 5/8"	24.0#	K-40
	7 7/8"	0 - 2535	5 1/2"	15.5#	K-55
Tubing Program:		0 - 2535	2 3/8"	4.7#	J-55

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

5 1/2" production casing - float shoe on bottom.

Three centralizers run every other joint above shoe.

Wellhead Equipment: 8 5/8" x 5 1/2" x 2 3/8" x 11" 3000 psi xmas tree assemb

Cementing:

8 5/8" surface casing - cement with 140 sacks of class "B" cement with 1/4# flocele/sack and 3% calcium chloride (165 cu ft. of slurry, 100% excess to circulate to surface). WOC 12 hours. Test casing to 600 psi for 30 minutes.

5 1/2" production casing - lead with 251 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. 602 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.

T-31-N
R-12-W
East 104

