

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 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 COM
4. LOCATION OF WELL 1145'N 1245'E	9. WELL NO. 105
10. FIELD, POOL, OR WILDCAT BASIN FRUITLAND COAL	11. SEC. T. R. M OR BLK. A SEC. 24 T31N R12W NMPM
12. COUNTY SAN JUAN	13. STATE NM
14. DISTANCE IN MILES FROM NEAREST TOWN 5 MILES FROM AZTEC	15. DISTANCE FROM PROPOSED LOCATION TO NEAREST PROPERTY OR LEASE LINE. 1145'
16. ACRES IN LEASE 2560	17. ACRES ASSIGNED TO WELL E/ 320.00
18. DISTANCE FROM PROPOSED LOCATION TO NEAREST WELL DR. COMPL., OR APPLIED FOR ON THIS LEASE. 300'	19. PROPOSED DEPTH 2725'
20. ROTARY OR CABLE TOOLS ROTARY	21. ELEVATIONS (DF, FT, GR, ETC.) 6027'GL
22. APPROX. DATE WORK WILL START	23. PROPOSED CASING AND CEMENTING PROGRAM

*SEE OPERATIONS PLAN

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

10-6-89
DATE

APPROVED
AS AMENDED

PERMIT NO. _____ APPROVAL DATE _____

APPROVED BY _____ TITLE _____ DATE _____

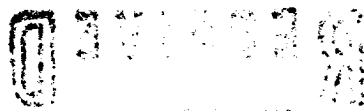
NOV 06 1989

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

AREA MANAGER

Hold C-104 FOR CA

NMCCD



POST OFFICE
NEW YORK, N.Y.
9 10 1964

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 Com (SF-077652)	Well No. 105
Unit Letter A	Section 24	Township 31 North	Range 12 West	County San Juan
Actual Footage Location of Well: 1145 feet from the North line and 1245 feet from the East line				
Ground level Elev. 6027'	Producing Formation Fruitland Coal	Pool Basin	Dedicated Acreage: 320 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 will be obtained (communitization agreement)
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 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
Regulatory Affairs

Position
Southland Royalty

Company
10-6-89

Date

SURVEYOR CERTIFICATION

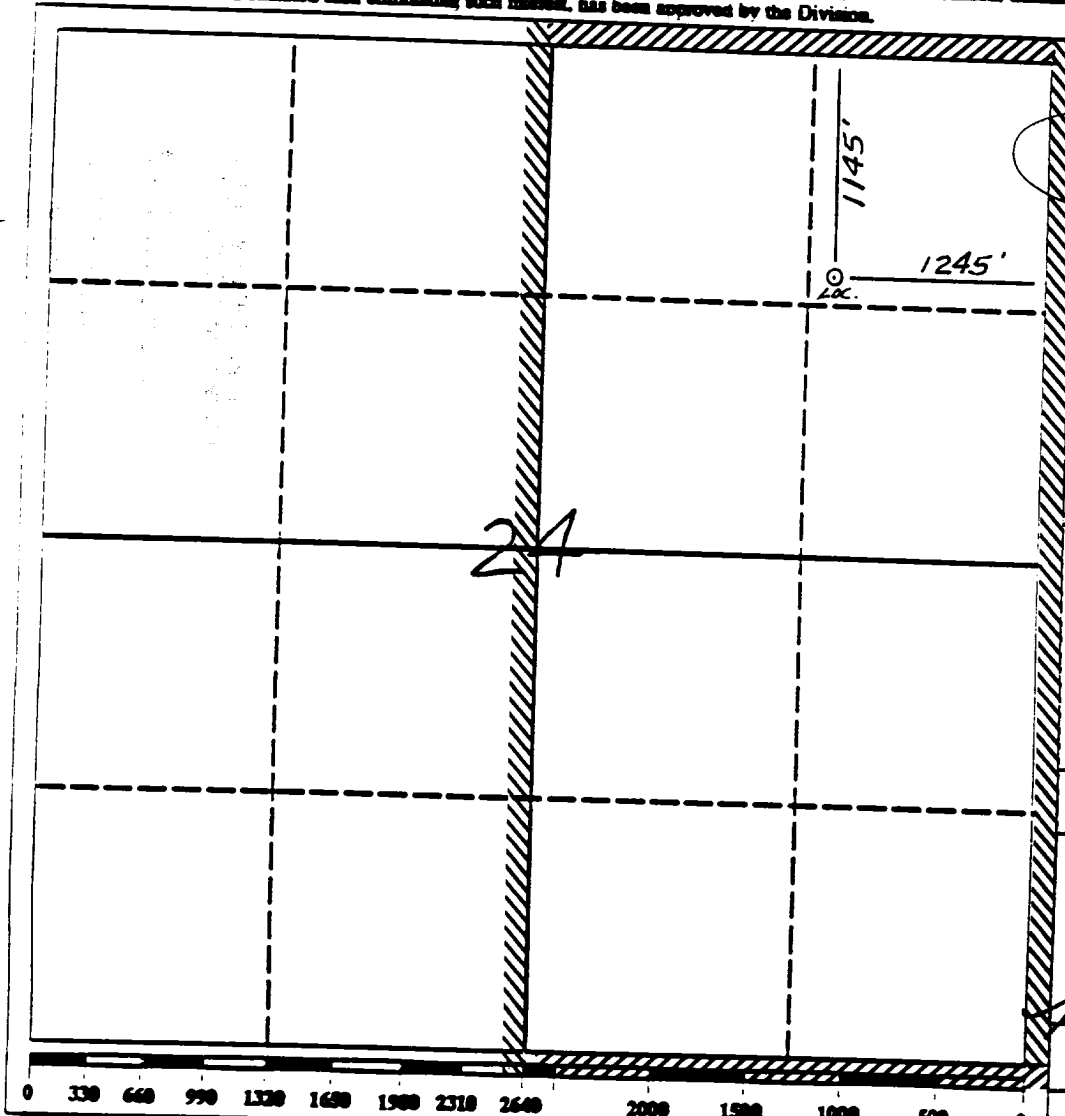
I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

Date Surveyed
NEALE C. EDWARDS

Signature of Surveyor
Professional Surveyor

REGISTERED LAND SURVEYOR
6857

Certificate No.
6857



Well Name: 105 EAST COM 1145'N 1245'E
 Sec. 24 T31N R12W SAN JUAN NEW MEXICO
 BASIN FRUITLAND COAL Elevation 6027'GL

Formation tops: Surface- SAN JOSE
 Ojo Alamo- 995
 Kirtland- 1020
 Fruitland- 2300
 Fruitland Coal Top- 2496
 Fruitland Coal Base- 2719
 Total Depth- 2725
 Pictured Cliffs- 2747

Logging Program: Mud logs from 2300 to total depth.

Mud Program:	Interval	Type	Weight	Visc.	Fl. Loss
	0 - 200	Spud	8.4 - 8.9	40-50	no control
	200 - 2725	Non-dispersed	8.4 - 9.5	30-60	no control

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 - 2725	5 1/2"	15.5#	K-55
Tubing Program:		0 - 2725	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 assembl

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 250 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. 600 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.

