

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

30-045-27865

RECEIVED
BLM MAIL ROOM

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK DRILL	5. LEASE NUMBER SF-077651
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 RICHARDSON
4. LOCATION OF WELL 865' FSL 1815' FWL	9. WELL NO. 102
14. DISTANCE IN MILES FROM NEAREST TOWN 8 MILES FROM AZTEC	10. FIELD, POOL, OR WILDCAT BASIN FRUITLAND COAL
15. DISTANCE FROM PROPOSED LOCATION TO NEAREST PROPERTY OR LEASE LINE. 865'	11. SEC. T. R. M OR BLK. N SEC. 10 T31N R12W NMPM
16. ACRES IN LEASE 2400	12. COUNTY SAN JUAN
17. ACRES ASSIGNED TO WELL W/ 320.00	13. STATE NM
18. DISTANCE FROM PROPOSED LOCATION TO NEAREST WELL DR. COMPL., OR APPLIED FOR ON THIS LEASE. 600'	19. PROPOSED DEPTH 2580'
20. ROTARY OR CABLE TOOLS ROTARY	21. ELEVATIONS (DF, FT, GR, ETC.) 6158' GL
22. APPROX. DATE WORK WILL START	23. PROPOSED CASING AND CEMENTING PROGRAM

*SEE OPERATIONS

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JUN 19 1990

24. AUTHORIZED BY: *[Signature]*
REG. DRILLING ENGR.

OIL CON. DIV.,
DIST. 3

5/4/90
DATE

PERMIT NO. _____ APPROVAL DATE _____

APPROVED BY _____ TITLE _____ DATE _____

APPROVED

JUN 11 1990

FOR Ken Townsend
AREA MANAGER

NOTE: THIS FORMAT IS ISSUED IN LIEU OF US BLM FORM 3160-3
* APD was originally submitted 08-22-89 and was approved 09-13-89.
APD was rescinded 03-19-90.

NMOCD

Oil to Appropriate
net Office
the Lease - 4 copies
the 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

RECEIVED
MAIL ROOM

JUN 19 1990

ADMINISTRATIVE SERVICES
CARRINGTON, NEW MEXICO

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

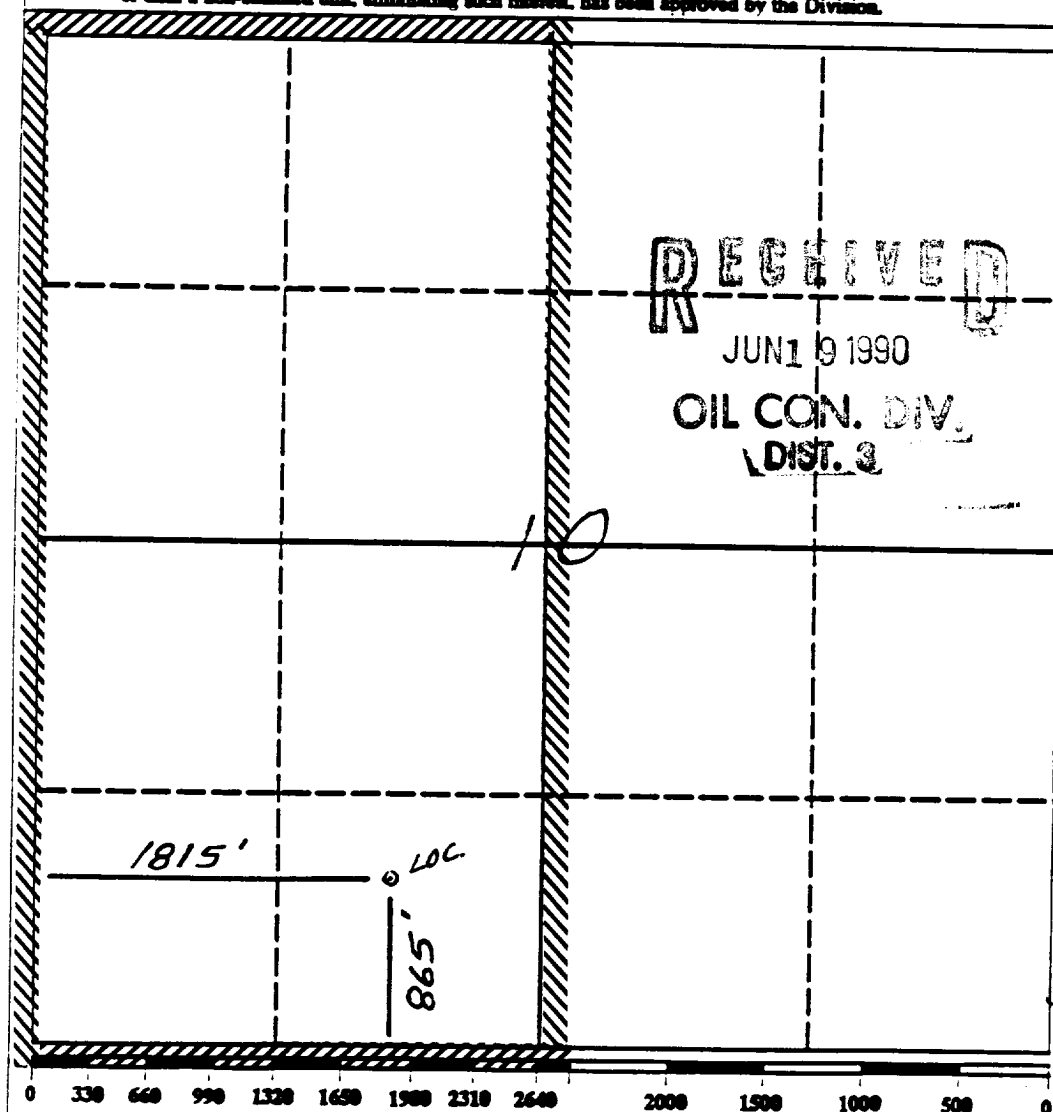
All Distances must be from the outer boundaries of the section

Operator Southland Royalty Company			Lease Richardson (SF-077651)		Well No. 102
Unit Letter N	Section 10	Township 31 North	Range 12 West	County NMPM	San Juan
Actual Footage Location of Well: 865 feet from the South line and 1815 feet from the West line					
Ground level Elev. 6158'	Producing Formation Fruitland Coal		Pool Basin	Dedicated Acreage: 320.0 Acres	

1. Outline the acreage dedicated to the subject well by colored pencil or hectare 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 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, 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.

Peggy Bradfield
Signature

Peggy Bradfield
Printed Name

Regulatory Affairs
Position

Southland Royalty
Company

5-4-90
Date

Signature of Sealer
Professional Surveyor

857
Certificate No.

6857

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.

NEALE C. EDWARDS
Date Surveyed

857
Signature of Sealer

Professional Surveyor

REGISTERED LAND SURVEYOR

6857
Certificate No.

Well Name: 102 RICHARDSON
 Sec. 10 T31N R12W
 BASIN FRUITLAND COAL

865'FSL 1815'FWL
 SAN JUAN NEW MEXICO
 Elevation 6158'GL

Formation tops: Surface- NACIMIENTO
 Ojo Alamo- 802
 Kirtland- 881
 Fruitland- 2255
 Fruitland Coal Top- 2361
 Fruitland Coal Base- 2570
 Total Depth- 2580
 Pictured Cliffs- 2591

Logging Program: Mud logs from 2255 to total depth.

Mud Program:	Interval	Type	Weight	Visc.	Fl. Loss
	0 - 200	Spud	8.4 - 8.9	40-50	no control
	200 - 2580	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 - 2580	5 1/2"	15.5#	K-55
Tubing Program:		0 - 2580	2 3/8"	4.7#	J-55

Float Equipment: 8 5/8" surface casing - saw tooth guide shoe. Centralizers will be run in accordance with Onshore Order #2.

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

Three centralizers run every other joint above shoe and four centralizers run every other joint across Ojo Alamo.

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

Cementing:

8 5/8" surface casing - cement with 211 sacks of class "B" cement with 1/4# flocele/sack and 3% calcium chloride (248 cu ft. of slurry, 200% excess to circulate to surface). WOC 12 hours. Test casing to 600 psi for 30 minutes.

5 1/2" production casing - lead with 406 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. 902 cu ft. of slurry, 100% excess to circulate to surface. WOC 12 hours.

RICHARDSON 102
865' FSL 1815' FWL
Sec. 10 T31N R12W
SAN JUAN, NM

MAP #1

