

30-045-27655

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-076465
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 CORNELL
4. LOCATION OF WELL 1095'S 1310'W	9. WELL NO. 500
14. DISTANCE IN MILES FROM NEAREST TOWN 6 MILES E. OF FARMINGTON	10. FIELD, POOL, OR WILDCAT BASIN FRUITLAND COAL
15. DISTANCE FROM PROPOSED LOCATION 1095' TO NEAREST PROPERTY OR LEASE LINE.	11. SEC. T. R. M OR BLK. SEC. 2 T29N R12W NMPM
16. ACRES IN LEASE 400	12. COUNTY SAN JUAN
17. ACRES ASSIGNED TO WELL w/ 320.71	13. STATE NM
18. DISTANCE FROM PROPOSED LOCATION TO NEAREST WELL DR. COMPL., OR APPLIED FOR ON THIS LEASE. 900'	19. PROPOSED DEPTH 1879'
20. ROTARY OR CABLE TOOLS ROTARY	21. ELEVATIONS (DF, FT, GR, ETC.) 5765'GL
22. APPROX. DATE WORK WILL START	23. PROPOSED CASING AND CEMENTING PROGRAM
*SEE OPERATIONS PLAN	
24. AUTHORIZED BY:  REG. DRILLING ENGR.	RECEIVED MAR 07 1990 OIL CON. DIV. DIST. 3 2/10/90 DATE

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

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

Hold C-104 FOR CA

NMOCD

Submit to Appropriate
District Office
State Leases - 4 copies
Fee 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 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 Co.			Lease Cornell		Well No. 500
Unit Letter M	Section 2	Township 29 North	Range 12 West	County San Juan	
Actual Footage Location of Well: 1095 feet from the South line and 1310 feet from the West line					
Ground level Elev. 5765'	Producing Formation Fruitland Coal		Pool Basin Fruitland Coal	Dedicated Acreage: 320.71 Acres	

1. Outline the acreage dedicated to the subject well by colored pencil or hatchure 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 communitization agreement will be

obtained
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 the best of my knowledge and belief.

Signature

Peggy Bradfield

Printed Name

Position

Regulatory Affairs

Company

Southland Royalty

Date

1-10-90

SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes or 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

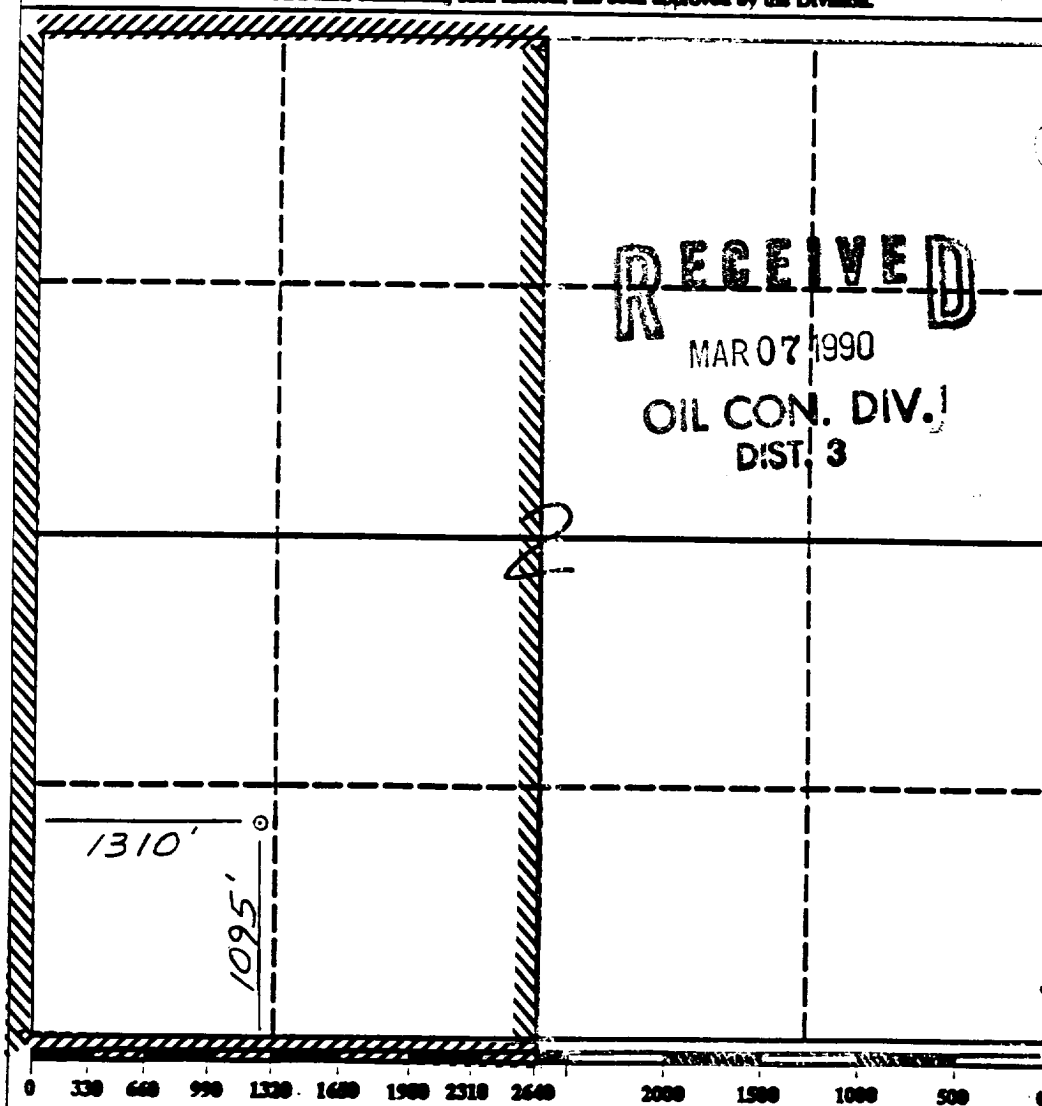
NEALE C. EDWARDS

Signature of Section Professional Surveyor

REGISTERED LAND SURVEYOR

Certificate No.

6857



Well Name: 500 CORNELL
 Sec. 2 T29N R12W
 BASIN FRUITLAND COAL

1095'S 1310'W
 SAN JUAN NEW MEXICO
 Elevation 5765'GL

Formation tops: Surface- NACIMIENTO
 Ojo Alamo- 440
 Kirtland- 630
 Fruitland- 1625
 Fruitland Coal Top- 1660
 Fruitland Coal Base- 1877
 Total Depth- 1879
 Pictured Cliffs- 1888

Logging Program: Mud logs from 1625 to total depth.

Mud Program:	Interval	Type	Weight	Visc.	Fl. Loss
	0 - 200	Spud	8.4 - 8.9	40-50	no control
	200 - 1879	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 - 1879	5 1/2"	15.5#	K-55
Tubing Program:		0 - 1879	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 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 280 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. 658 cu ft. of slurry, 100% excess to circulate to surface. Run temperature survey at 8 hours. WOC 12 hours.

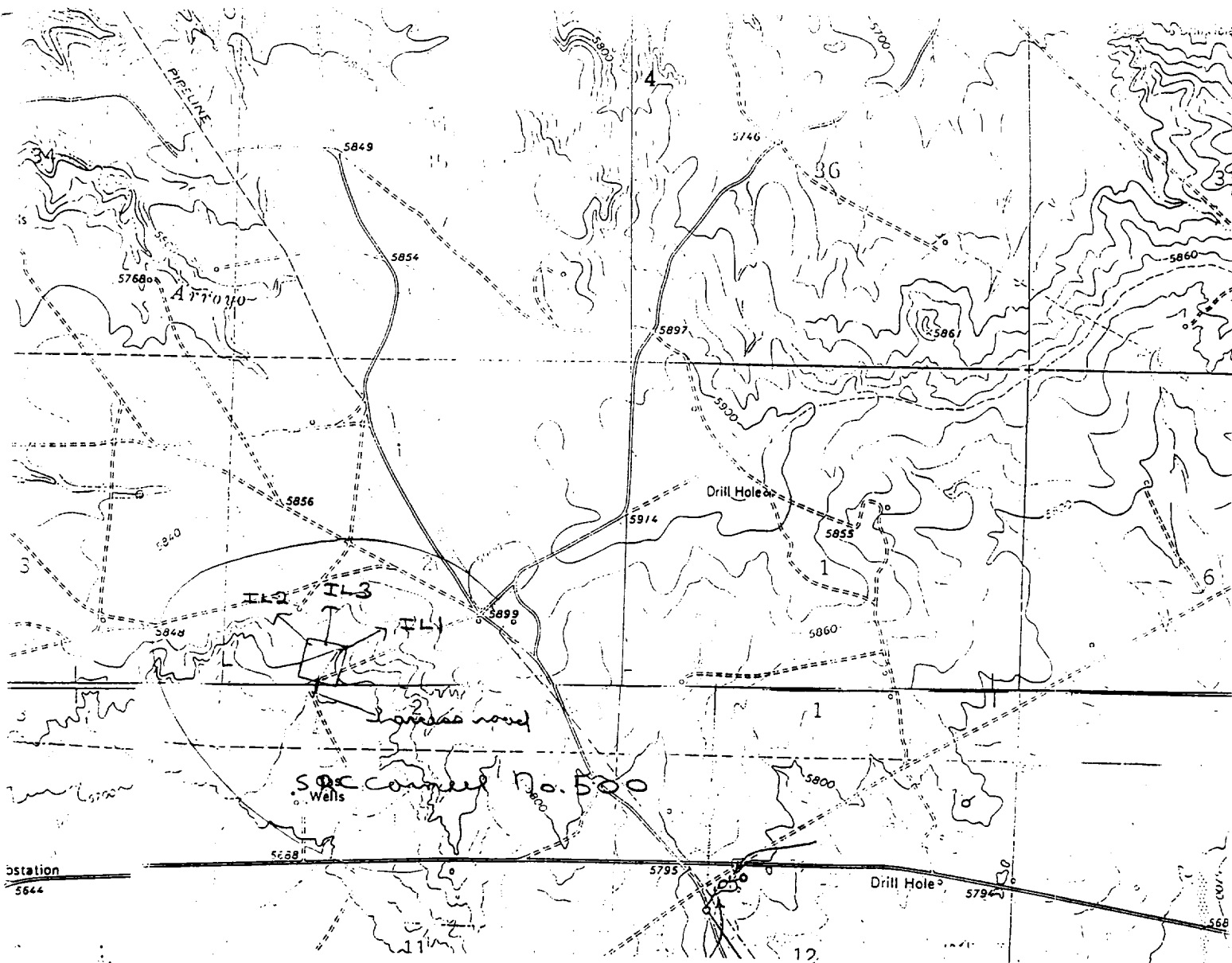


FIGURE 1
Proposed well pad and access road to SRC
Cornell No. 500 on USGS 7.5' Flora Vista,
N. Mex. 1963 (photorevised 1979) and USGS 7.5'
Horn Canyon, N. Mex., 1963 (photorevised 1979)
N.M.P.M., San Juan County, New Mexico.

