# UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT



APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK la. TYPE OF WORK 5. LEASE NUMBER DRILL SF-077648 1b. TYPE OF WELL 6. IF INDIAN, ALL. OR TRIBE NAME GAS 2. OPERATOR 7. UNIT AGREEMENT NAME SOUTHLAND ROYALTY CO. DAVIS ADDRESS & PHONE NO. OF OPERATOR 8. FARM OR LEASE NAME P O BOX 4289 DAVIS FARMINGTON, NM 87499 9. WELL NO. 504 LOCATION OF WELL 10. FIELD, POOL, OR WILDCAT 1065'N 1475'E BASIN FRUITLAND COAL 11. SEC. T. R. M OR BLK. B SEC. 11 T31N R12W NMPM DISTANCE IN MILES FROM NEAREST TOWN 12. COUNTY 13. STATE 7 MILES FROM AZTEC SAN JUAN 15. DISTANCE FROM 16. ACRES IN LEASE 17. ACRES ASSIGNED TO WELL PROPOSED LOCATION 1065' =/305.96TO NEAREST PROPERTY OR LEASE LINE. DISTANCE FROM PROPOSED LOCATION 19. PROPOSED DEPTH 20. ROTARY OR CABLE TOOLS 2860' TO NEAREST WELL DR. 300' COMPL., OR APPLIED DRILLING OPERATIONS AUTHORIZED ARE FOR ON THIS LEASE. SUBJECT TO COMPLIANCE WITH A TRACHED "GENERAL REQUIREMENTS". ELEVATIONS (DF, FT, GR, ETC.) 22. APPROX. DATE WORK WILL START 6320'GL PROPOSED CASING AND CEMENTING PROGRAM \*SEE OPERATIONS PROBLEM & SEE JUL 0 3 1989 24. AUTHORIZED BY. MOIL CON. TO DIST. PERMIT NO. APPROVAL DATE APPROVED BY TITLE THIS FORMAT IS ISSUED IN LIEU OF US BLM FORM 3160-AREA MANAGER NOTE:

Submit to Appropriate District Office State Lease - 4 copies For Lease - 3 comes

## State of New Mexico Energy, Minerais and Natural Resources Department

Form C-102 Reviews 1-1-29

<u>DISTRICT I</u> P.O. Box 1980, Hobbs, NM 88240

### OIL CONSERVATION DIVISION P.O. Box 2088

P.O. Drawer DD, Artesia, NM 88210

Santa Fe. New Mexico 87504-2088

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

## WELL LOCATION AND ACREAGE DEDICATION PLAT

All Distances must be from the outer boundaries of the section Well No. (SF-077648)Southland Royalty Company Davis Unit Letter 504 Township Resea County Б 77 31 North 12 West NMPM San Juan Actual Footnes Location of Well: 1065 he Morth
Producing Formation feet from the line and 1475 feet from the Ground level Elev. Rest line 6320 F Fruitland Coal Basin 305.96 1. Outline the acreege dedicated to the subject well by colored peacel or hackers marks on the plat below. Acres 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 tense of different ownership is dedicated to the well, have the interest of all owners been connected by communitization. unitization, force-pooling, etc.? Yes ☐ No If answer is "yes" type of consolidation If sasswer is "no" list the owners and tract descriptions which have actually been consolidated. (Use reverse ade of this form of 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 Divinion. OPERATOR CERTIFICATION I hereby certify that the informati 5 0 JUN ! 4 19 Sider 1475' BITTER CONTRACTOR Peggy Bradfield EASMING YOU DON'T TO LOC. Regulatory Affairs Position Southland Company Date SURVEYOR CERTIFICATION I hereby certify that the well location show on this plat was plotted from field notes i actual surveys made by me or under n supervison, and that the same is true an correct to the best of my knowledge an Near C. Edwards Ceffificate No. 6857 330 440 990 1320 1650 1900 2310 2640

2000

1500

1000

500

#### OPERATIONS PLAN

DATE: JUN 12,1989

Well Name: 504 DAVIS

Sec. 11 T31N R12W

1065'N 1475'E

SAN JUAN NEW MEXICO

BASIN FRUITLAND COAL

Elevation 6320'GL

Formation tops: Surface- NACIMIENTO

Ojo Alamo- 1950 Kirtland- 2025

Fruitland- 2475

Fruitland Coal Top- 2660 Fruitland Coal Base- 2845

Intermediate TD- 2640

Total Depth- 2860

Pictured Cliffs- 2878

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 - 2640	Non-dispersed	8.4 - 9.1	30-60	no control
	2640 - 2860	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	- 2640	7"	20.0#	K-55
	6 1/4"	2590	- 2860	5 1/2"	15.5#	K-55
Tubing Program:		0	- 2860	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 46 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. 207 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.

DATE: JUN 12,1989

#### BOP and Tests:

Surface to intermediate TD-11" 3000 psi double gate BOP stack (Reference Figure #1). Prior to drilling out surface casing, test rams to 600 psi for 30 minutes.

Intermediate TD to TD - 7 1/16" 3000 psi double gate BOP stack (Reference Figure #2). Prior to drilling out intermediate casing, test rams to 2500 psi for 30 minutes.

Pipe rams will be actuated at least once each day and blind rams actuated once each trip to test proper functioning.

#### Addition Information:

The Fruitland coal formation will be completed. This gas is dedicated. The E/2 of Section 11 is dedicated to this well.

