UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK 5. LEASE NUMBER ARMINGTON NEW MEXICO la. TYPE OF WORK DRILL lb. TYPE OF WELL 6. IF INDIAN, ALL. OR TRIBE NAME GAS SINGLE ZONE OPERATOR 7. UNIT AGREEMENT NAME SOUTHLAND ROYALTY CO. ADDRESS & PHONE NO. OF OPERATOR 8. FARM OR LEASE NAME P O BOX 4289 REID A COM FARMINGTON, NM 87499 9. WELL NO. 290 LOCATION OF WELL 10. FIELD, POOL, OR WILDCAT 845'N 895'E BASIN FRUITLAND COAL 11. SEC. T. R. M OR BLK. A SEC. 13 T29N R10W NMPM DISTANCE IN MILES FROM NEAREST TOWN 12. COUNTY 13. STATE 3 MILES FROM BLANCO SAN JUAN NM DISTANCE FROM 16. ACRES IN LEASE 17. ACRES ASSIGNED TO WELL PROPOSED LOCATION 2337.48 845' TO NEAREST PROPERTY DRILLING OPERATIONS AUTHORIZED ARE OR LEASE LINE. SUBJECT TO COMPLIANCE WITH ATTACHED "GENERAL REQUIREMENTS" DISTANCE FROM 19. PROPOSED DEPTH 20. ROTARY OR CABLE TOOLS 18. PROPOSED LOCATION 2235' ROTARY TO NEAREST WELL DR. 300' COMPL., OR APPLIED This action is subject to technical and procedural review pursuant to 40 OFR 3165.3 FOR ON THIS LEASE. and appeal pursuant to 43 CFR 3165.4. ELEVATIONS (DF, FT, GR, ETC.) 22. APPROX. DATE WORK WILL START 5813'GL PROPOSED CASING AND CEMENTING PROGRAM ______

24. AUTHORIZED BY

REGULATORY AFFAIRS

*SEE OPERATIONS PLAN

OIL CON. DIV 3-051,29 MEPROVED AS AMENDED

MAR 2 8 1989

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

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P. O. BOX 2088 STATE OF NEW MEXICO SANTA FE. NEW MEXICO 87501 EMERGY MO MINERALS DEPARTMENT All destances must be from the outer boundaries of the Section (NM-01772A) Com 290 <u>Southland</u> Unit Letter 29 North <u>San Juan</u> Actual Fastage Locatio 845 895 feet from the North feet from the mast Ground Level Elev. Producing Formation Dedicated Acresos 5813 Fruitland Coal 1. Outline the acreage dedicated to the subject well by colored pencil or hachure 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 work interest and royalty). 3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been condated by communitization, unitization, force-pooling. etc? Communitization agreement being If answer is "yes," type of consolidation _ X No prepared If answer is "no," list the owners and tract descriptions which have actually been consolidated. (Use reverse sic this form if necessary.). No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitizat forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Divi CERTIFICATION I hamby certify that the information Regulatory Affairs Position Southland Rovalty Co. Company EDIN MAR 2 8 1989 en stered Protossional Engineer end/or Land Surveyor Neale C. Edward

DATE: MAR 14,1989

Well Name: 290 REID A COM

Sec. 13 T29N R10W

845'N 895'E

SAN JUAN NEW MEXICO

BASIN FRUITLAND COAL

Elevation 5813'GL

Formation tops: Surface- NACIMIENTO

Ojo Alamo- 1134

Kirtland- 1202

Fruitland- 1960

Fruitland Coal Top- 2098

Fruitland Coal Base- 2233

Intermediate TD- 2080

Total Depth- 2235

Pictured Cliffs- 2249

Logging Program: Mud logs from intermediate to total depth.

Mud Program: Low solid non-dispersed mud from surface to total depth.

Casing Program:	Hole Size 12 1/4"	Depth Interval 0 - 200	Csg. Size 9 5/8"	Weight 32.3#	Grade H-40
	8 3/4"	0 - 2080	7"	20.0#	K-55
	6 1/4"	2030 - 2235	5 1/2"	15.5#	K-55
Tubing Program:		0 - 2235	2 7/8"	6.5#	T-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 liner - 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 86 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. 284 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.

The Fruitland coal formation will be completed.

A 3000 psi WP and 6000 psi test double gate preventer equipped with blind and pipe rams will be used for blow out prevention This gas is dedicated. The E/2 of Section 13 is dedicated to this well.

