

30-045-27650

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

RECEIVED

FEB 10 1990

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK DRILL	5. LEASE NUMBER SF-079037
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 HALE
4. LOCATION OF WELL 945'N 825'E	9. WELL NO. 352
14. DISTANCE IN MILES FROM NEAREST TOWN 5 MILES NE OF ABE'S STORE	10. FIELD, POOL, OR WILDCAT BASIN FRUITLAND COAL
15. DISTANCE FROM PROPOSED LOCATION 825' TO NEAREST PROPERTY OR LEASE LINE.	11. SEC. T. R. M OR BLK. A SEC. 27 T31N R08W NMPM
16. ACRES IN LEASE 1280	12. COUNTY SAN JUAN
17. ACRES ASSIGNED TO WELL E / 320.00	13. STATE NM
18. DISTANCE FROM PROPOSED LOCATION TO NEAREST WELL DR. COMPL., OR APPLIED FOR ON THIS LEASE. 200'	19. PROPOSED DEPTH 3175'
20. ROTARY OR CABLE TOOLS ROTARY	21. ELEVATIONS (DF, FT, GR, ETC.) 6278'GL
22. APPROX. DATE WORK WILL START	

DRILLING OPERATIONS AUTHORIZED ARE
SUBJECT TO COMPLIANCE WITH ATTACHED
GENERAL REQUIREMENTS.

This action is subject to technical and
procedural review pursuant to 43 CFR 3165.3
and appeal pursuant to 43 CFR 3165.4.

23. PROPOSED CASING AND CEMENTING PROGRAM

*SEE OPERATIONS PLAN

NOTE: an APD was filed 4-19-88, approved 5-18-88, and rescinded 1-5-90.
Archaeological Report No. 88-SJC-012 was filed April 88 for this wellsite.

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

2/15/90
DATE

PERMIT NO. MAR 16 1990

APPROVAL DATE

APPROVED BY OIL CON. DIV. TITLE
DIST. 3

DATE APPROVED AS AMENDED

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

MAR 13 1990
AREA MANAGER

OIL CONSERVATION DIVISION

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENTP. O. BOX 2088
SANTA FE, NEW MEXICO 37501Form C-102
Revised 10-1-78

All distances must be from the outer boundaries of the Section.

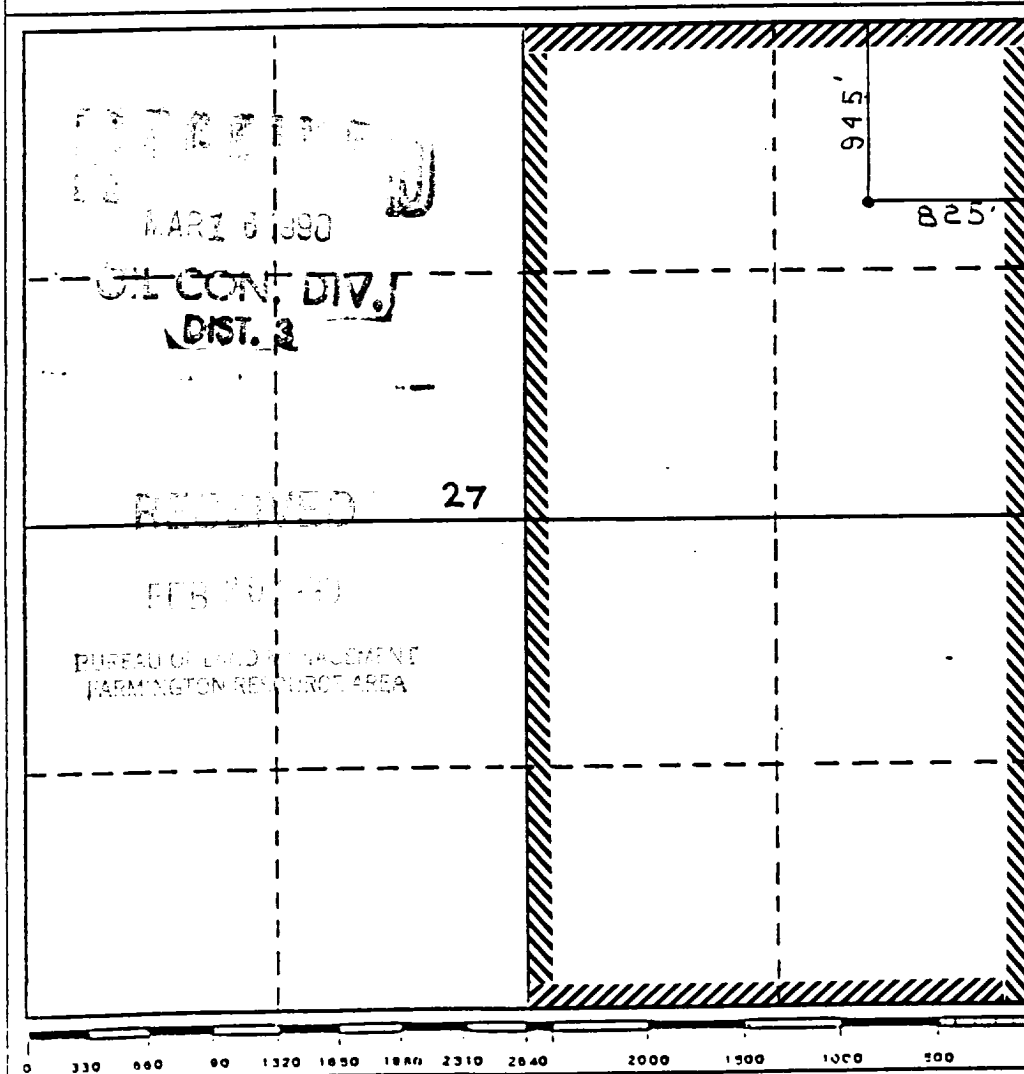
Operator Southland Royalty Co.			Lease Hale (SF-079037)		Well No. 352
Unit Letter A	Section 27	Township T31N	Range R8W	County San Juan	
Actual Footage Location of Well: 945 feet from the North line and 825 feet from the East line					
Ground Level Elev. 6278	Producing Formation Fruitland COAL		Pool BASIN		Dedicated Acreage 320 Acres

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 working interest and royalty).
3. If more than one lease of different ownership is dedicated to the well, have the interests 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 interests, has been approved by the Division.



CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

Peggy Bradfield
Name

Peggy Bradfield

Position

Regulatory Affairs

Company

Southland Royalty

Date

2-14-90

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.

Registered Professional
Land Surveyor

Date Surveyed

April 11, 1988

Registered Land Surveyor

R. Howard Daggett

R. Howard Daggett
Certificate No.

9679

Well Name: 352 HALE
 Sec. 27 T31N R08W
 BASIN FRUITLAND COAL

945'N 825'E
 SAN JUAN NEW MEXICO
 Elevation 6278'GL

Formation tops: Surface- SAN JOSE
 Ojo Alamo- 1992
 Kirtland- 2113
 Fruitland- 2834
 Fruitland Coal Top- 2996
 Fruitland Coal Base- 3171
 Intermediate TD- 2985
 Total Depth- 3175
 Pictured Cliffs- 3180

Logging Program: Mud logs from intermediate to total depth.

Mud Program:	Interval	Type	Weight	Visc.	Fl. Loss
	0 - 500	Spud	8.4 - 8.9	40-50	no control
	500 - 2985	Non-dispersed	8.4 - 9.1	30-60	no control
	2985 - 3175	Formation Water	8.4		no control

Casing Program:	Hole Size	Depth Interval	Csg. Size	Weight	Grade
	12 1/4"	0 - 500	9 5/8"	32.3#	H-40
	8 3/4"	0 - 2985	7"	20.0#	K-55
	6 1/4"	2935 - 3175	5 1/2"	15.5#	K-55
Tubing Program:		0 - 3175	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 399 sacks of class "B" cement with 1/4# flocele/sack and 3% calcium chloride (471 cu ft. of slurry, 200% excess to circulate to surface). WOC 12 hours. Test casing to 600 psi for 30 minutes.

7" intermediate casing - lead with 440 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. 968 cu ft. of slurry, 110% excess to circulate to surface. Run temperature survey at 8 hours. WOC 12 hours.

5 1/2" liner - do not cement.

100% New Construction

