

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK
DRILL

1b. TYPE OF WELL
GAS

2. OPERATOR
SOUTHLAND ROYALTY CO.

3. ADDRESS & PHONE NO. OF OPERATOR
P O BOX 4289
FARMINGTON, NM 87499

4. LOCATION OF WELL
1460'S 855'W

5. LEASE NUMBER
SF-077874

6. IF INDIAN, ALL. OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME
HANKS

9. WELL NO.
230

10. FIELD, POOL, OR WILDCAT
BASIN FRUITLAND COAL

11. SEC. T. R. M OR BLK.
L SEC. 7 T27N R09W NMPM

12. COUNTY
SAN JUAN

13. STATE
NM

14. DISTANCE IN MILES FROM NEAREST TOWN
10 MILES FROM BLOOMFIELD

15. DISTANCE FROM
PROPOSED LOCATION 855'
TO NEAREST PROPERTY
OR LEASE LINE.

16. ACRES IN LEASE
2104'

17. ACRES ASSIGNED TO WELL
323.36

18. DISTANCE FROM
PROPOSED LOCATION
TO NEAREST WELL DR.
COMPL., OR APPLIED
FOR ON THIS LEASE. 300'

19. PROPOSED DEPTH
2104'

20. ROTARY OR CABLE TOOLS
ROTARY

21. ELEVATIONS (DF, FT, GR, ETC.)
6190'GL

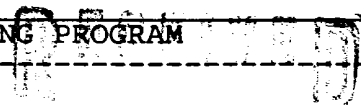
22. APPROX. DATE WORK WILL START

23. PROPOSED CASING AND CEMENTING PROGRAM

24. AUTHORIZED BY: *John Bradley*
REGULATORY AFFAIRS

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.



MAY 2 5 1989

OIL CON. DIV.

DIST. 3

5-6-89

DATE

PERMIT NO. _____ APPROVAL DATE _____

APPROVED BY _____ TITLE _____ DATE _____

APPROVED
AS AMENDED

MAY 22 1989

AREA MANAGER

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

NMOC

Well Name: 230 HANKS 1460'S 855'W
 Sec. 7 T27N R09W SAN JUAN NEW MEXICO
 BASIN FRUITLAND COAL Elevation 6190'GL

Formation tops: Surface- NACIMIENTO
 Ojo Alamo- 1168
 Kirtland- 1310
 Fruitland- 1855
 Fruitland Coal Top- 1988
 Fruitland Coal Base- 2102
 Intermediate TD- 1968
 Total Depth- 2104
 Pictured Cliffs- 2106

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 - 1968	Non-dispersed	8.4 - 9.1	30-60	no control
	1968 - 2104	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 - 1968	7"	20.0#	K-55
	6 1/4"	1918 - 2104	5 1/2"	15.5#	K-55
Tubing Program:		0 - 2104	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 63 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. 240 lu 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.

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

DISTRICT I
P.O. Box 1980, Hobbs, NM 88240

P.O. Box 2088

Santa Fe, New Mexico 87504-2088

DISTRICT II
P.O. Drawer DD, Artesia, NM 88210

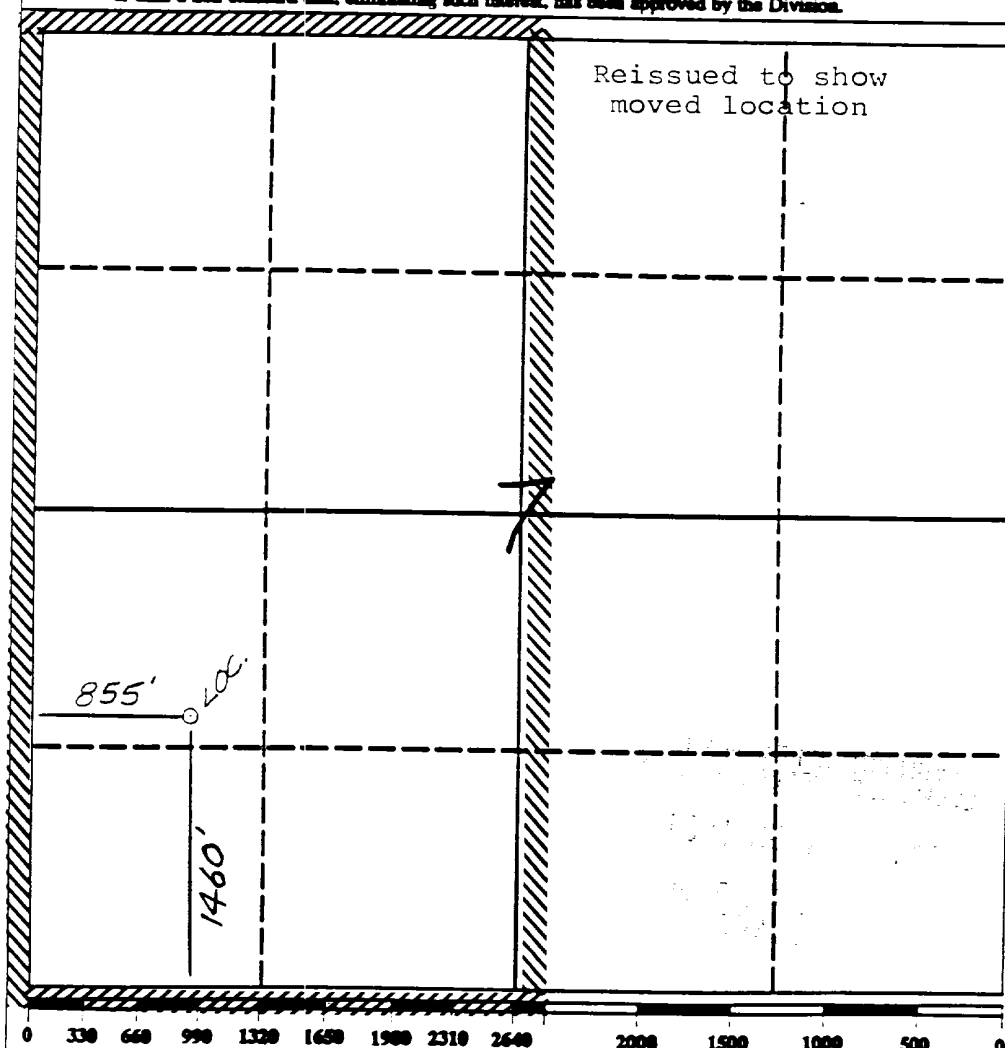
DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410

WELL LOCATION AND ACREAGE DEDICATION PLAT

All Distances must be from the outer boundaries of the section

Operator Southland Royalty Company			Lease Hanks (SF-077874)		Well No. 230
Unit Letter I	Section 7	Township 27 North	Range 9 West	County San Juan	
Actual Footage Location of Well: 1460 feet from the South line and 855 feet from the West line					
Ground level Elev. 6190'	Producing Formation Fruitland Coal		Pool Basin	Dedicated Acreage: 323.36 Acres	

1. Outline the acreage dedicated to the subject well by colored pencil or highlighter 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 the best of my knowledge and belief.

Peggy Bradfield
Signature

Peggy Bradfield

Printed Name

Southland Royalty Co

Position

Regulatory Affairs

Company

5-6-89

Date

SURVEYOR CERTIFICATION

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.

4-4-89

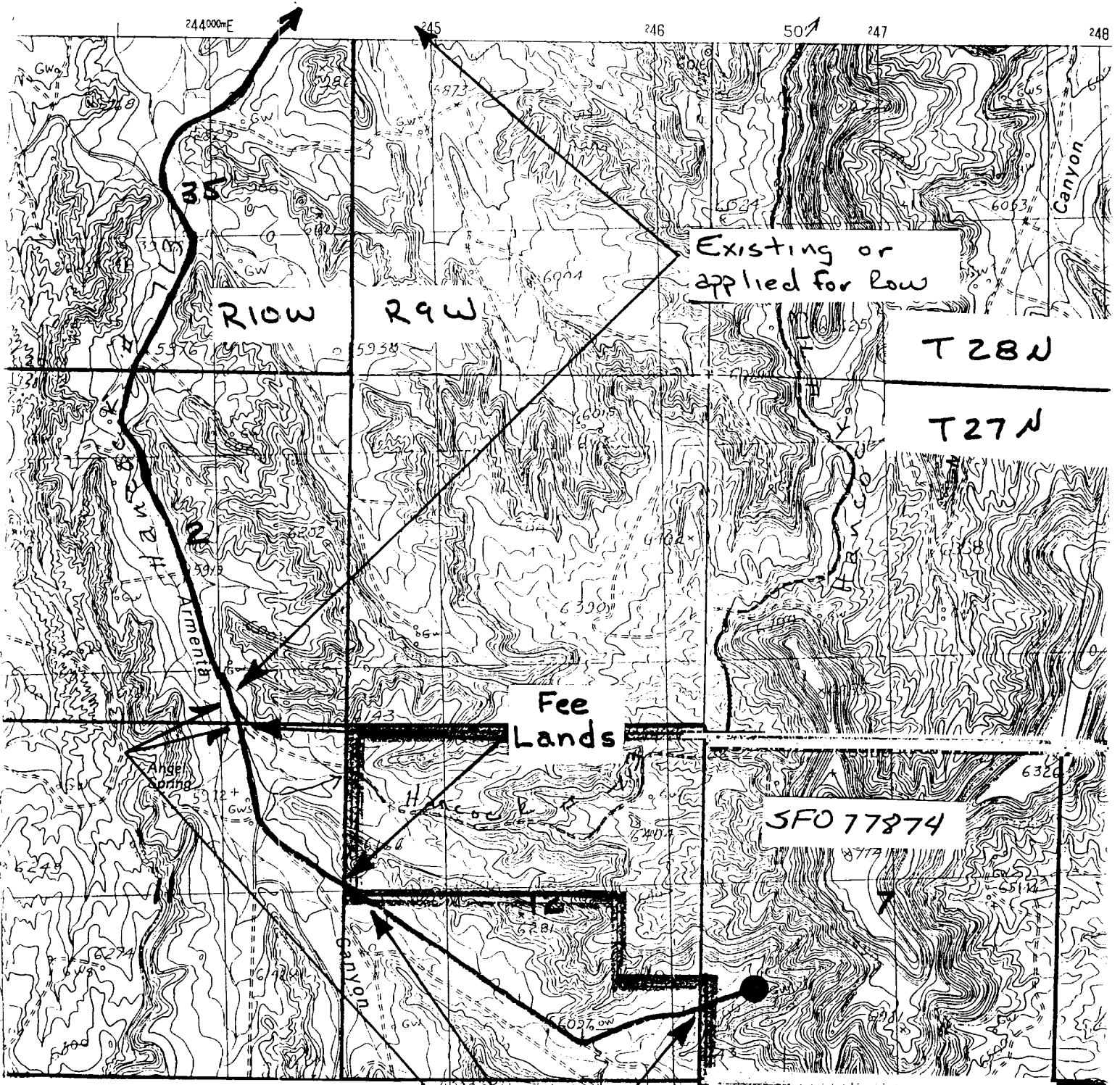
Date Surveyed

Neale C. Edwards

Signature of Professional Surveyor

NEW MEXICO
6857
CERTIFICATE OF SURVEY

LOGICAL SURVEY



BLM ROW

T27N, R10W

Section 12: S2S3 2900'
 S2SW 250'
 N2SW 2200'
 2: SWSE 350'

HANKS #230
 Map 2

BLM
 ROW