

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

30-045-28279
APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK DRILL	5. LEASE NUMBER SF-078119-B
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 MADDOX COM
4. LOCATION OF WELL 1850' FSL 2450' FWL	9. WELL NO. 100
14. DISTANCE IN MILES FROM NEAREST TOWN 8 MILES N/W OF CEDAR HILL	10. FIELD, POOL, OR WILDCAT BASIN FRUITLAND COAL
	11. SEC. T. R. M OR BLK. K SEC. 10 T32N R11W NMPM
15. DISTANCE FROM PROPOSED LOCATION 1850' TO NEAREST PROPERTY OR LEASE LINE.	12. COUNTY SAN JUAN
16. ACRES IN LEASE 17. ACRES ASSIGNED TO WELL 5/ 335.60	13. STATE NM
18. DISTANCE FROM PROPOSED LOCATION TO NEAREST WELL DR. 800' COMPL., OR APPLIED FOR ON THIS LEASE.	19. PROPOSED DEPTH 3120'
	20. ROTARY OR CABLE TOOLS ROTARY
21. ELEVATIONS (DF, FT, GR, ETC.) 6417' GL	22. APPROX. DATE WORK WILL START

23. PROPOSED CASING AND CEMENTING PROGRAM

*SEE OPERATIONS PLAN

RECEIVED

SEP 24 1990

24. AUTHORIZED BY: *St. Caldwell*
REG. DRILLING ENGR.

OIL CON. DIV.
DIST. 3

9/7/90
DATE

PERMIT NO. _____ APPROVAL DATE _____

APPROVED BY _____ TITLE _____ DATE _____

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

Hold copy for [unclear]

[Signature]

Submit to Assessor
District Office
State Lease - 4 copies
Fee Lease - 3 copies

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-1
Revised 1

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, Arama, NM 88210

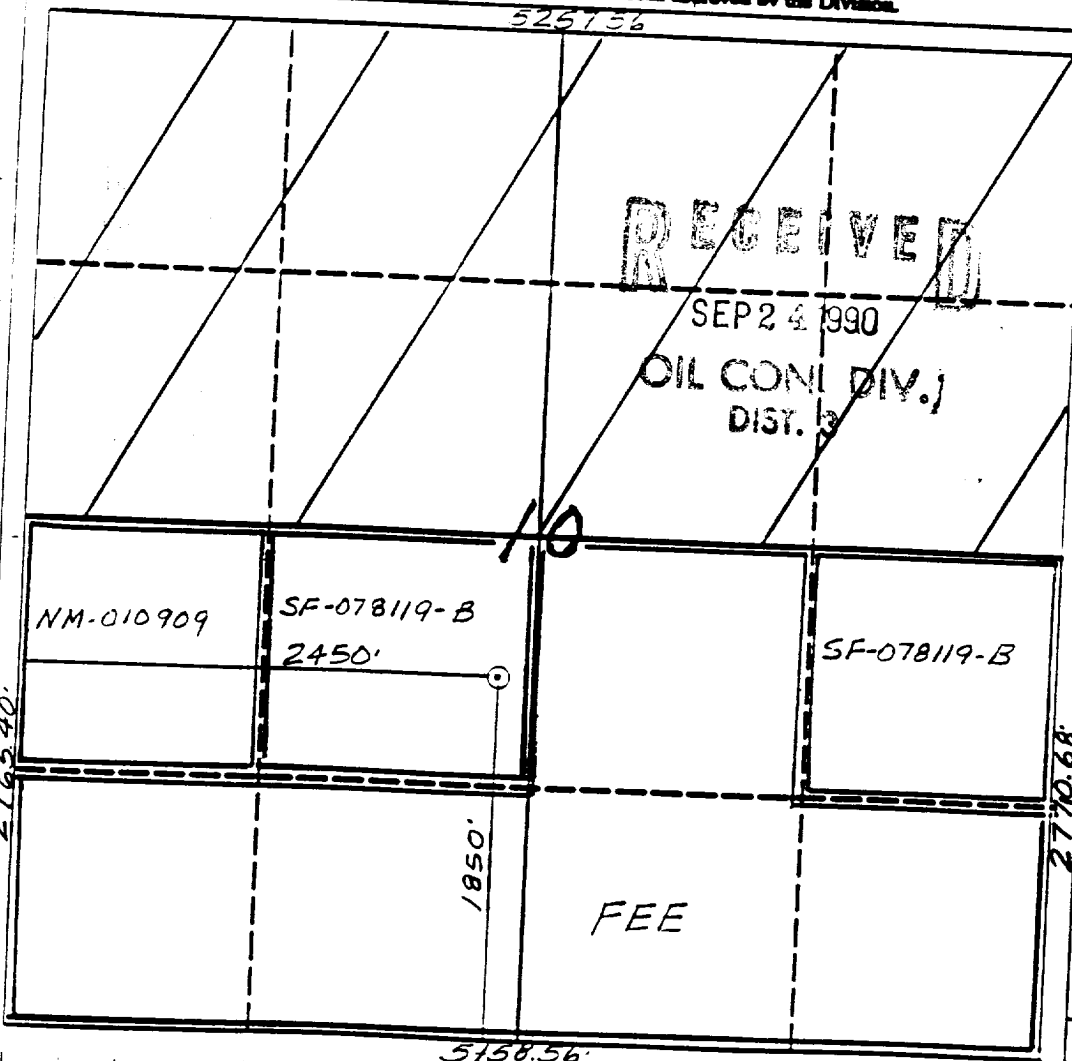
DISTRICT III
1000 Rio Grande Rd., Aztec, NM 87410

WELL LOCATION AND ACREAGE DEDICATION PLAT

All Distances must be from the outer boundaries of the section

Operator Southland Royalty Co.				Lease Maddox Com (SF-078119B)	Well No. 100
Unit Letter K	Section 10	Township 32 North	Range 11 West	County San Juan	
Actual Footage Location of Well: 1850 feet from the South line and 2450 feet from the West line					
Ground level Elev. 6417'		Producing Formation Fruitland Coal Basin		Dedicated Acreage: 335.60	

1. Outline the acreage dedicated to the subject well by colored pencil or machine 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, communitization, etc., has been approved by the Division.



OPERATOR CERTIFICATE

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

Signature *Peggy Bradfield*

Printed Name
Peggy Bradfield

Position
Regulatory Affairs

Company
Southland Royalty

Date
9-7-90

Date Surveyed

SURVEYOR CERTIFICATE

I hereby certify that the well location on this plat was plotted from field notes, actual surveys made by me or under supervision, and that the same is true correct to the best of my knowledge and belief.

Date Surveyed
7-18-90

Signature *[Signature]*

Professional Seal
NEW MEXICO
6857
6857
REGISTERED LAND SURVEYOR

Certificate No.

Neale

Well Name: 100 MADDOX COM
 Sec. 10 T32N R11W
 BASIN FRUITLAND COAL

1850' FSL 2450' FWL
 SAN JUAN NEW MEXICO
 Elevation 6417' GL

Formation tops: Surface- Nacimiento

Ojo Alamo- 1172

Kirtland- 1190

Fruitland- 2708

Fruitland Coal Top- 2894

Fruitland Coal Base- 3120

Pictured Cliffs- 3127

Intermediate TD- 2878

Total Depth- 3120

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 - 2878	Non-dispersed	8.4 - 9.1	30-60	no control
	2878 - 3120	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 - 2878	7"	20.0#	K-55
	6 1/4"	2828 - 3120	5 1/2"	15.5#	K-55
Tubing Program:		0 - 3120	2 7/8"	6.5#	J-55

Float Equipment: 9 5/8" surface casing - saw tooth guide shoe. Centralizers will be run in accordance with Onshore Order #2.

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. Two turbolizing type centralizers - one below and one into the base of the Ojo Alamo @ 1190'. Standard centralizers thereafter every fourth joint up to the base of the surface pipe.

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 160 sacks of class "B" cement with 1/4# flocele/sack and 3% calcium chloride (189 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 414 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. 919 cu ft. of slurry, 110% excess to circulate to surface. If hole conditions permit, a 600 ft spacer will be run ahead of the cement slurry to avoid mud contamination of the cement. WOC 12 hours. If cement does not circulate to surface, a temperature log will be run after 8 hours to determine TOC.

5 1/2" liner - do not cement.

GEOLOGICAL SURVEY

