

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

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30-045-2856791 JUN 19 PM 3:51
APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK DRILL	5. LEASE NUMBER SF-077317
1b. TYPE OF WELL GAS	6. IF INDIAN, ALL. OR TRIBE NAME
2. OPERATOR SOUTHLAND ROYALTY CO. ✓ 21281	7. UNIT AGREEMENT NAME
3. ADDRESS & PHONE NO. OF OPERATOR P O BOX 4289 FARMINGTON, NM 87499	8. FARM OR LEASE NAME 10462 COOPER ✓
4. LOCATION OF WELL 1140' FSL 1450' FWL	9. WELL NO. 11 ✓
14. DISTANCE IN MILES FROM NEAREST TOWN 3 1/2 MILES NW BLOOMFIELD	10. FIELD, POOL, OR WILDCAT 7568 CROUCH MESA MESA VERDE EXT
15. DISTANCE FROM PROPOSED LOCATION 1140' TO NEAREST PROPERTY OR LEASE LINE.	11. SEC. T. R. M OR BLK. SEC. 6 T29N R11W NMPM
16. ACRES IN LEASE 689.930	12. COUNTY SAN JUAN
17. ACRES ASSIGNED TO WELL 147.12 ✓	13. STATE NM
18. DISTANCE FROM PROPOSED LOCATION TO NEAREST WELL DR. 300' COMPL., OR APPLIED FOR ON THIS LEASE.	20. ROTARY OR CABLE TOOLS ROTARY
21. ELEVATIONS (DF, FT, GR, ETC.) 5755' GL	22. APPROX. DATE WORK WILL START
23. PROPOSED CASING AND CEMENTING PROGRAM *SEE OPERATIONS PLAN	
24. AUTHORIZED BY: <u>SID Clark/SWC</u> REG. DRILLING ENGR.	

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JUL 15 1991

OIL CON. DIV.
DIST 2 6/18/91
DATE

PERMIT NO. _____ APPROVAL DATE _____
APPROVED BY _____ TITLE _____ DATE _____

APPROVED
AS AMENDED

NOTE: THIS FORMAT IS ISSUED IN LIEU OF US BLM FORM 3160-13.

NMCOO

Submit to Appropriate
District Office
State Leases - 4 copies
Fee Leases - 3 copies

State of New Mexico
Energy, Minerals and Natural Resources Department

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Form C-102
Revised 1-1-89

OIL CONSERVATION DIVISION

P.O. Box 2088

Santa Fe, New Mexico 87504-2088

91 JUN 19 PM 3:51

019 FARMINGTON, N.M.

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

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 Cooper		Well No. 11
Unit Letter N	Section 6	Township 29 North	Range 11 West	County NMPM San Juan	
Actual Footage Location of Well: 1140 feet from the South line and 1450 feet from the West line					
Ground level Elev. 5755'		Producing Formation Mesa Verde Ext.	Pool Crouch Mesa	Dedicated Acreage: 147.12 Acres	

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 _____
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.

Signature *Peggy Bradford*

Printed Name *Peggy Bradford*

Position *Regulatory Affairs*

Company *Southland Royalty Co*

Date *6-18-91*

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.

Date Surveyed *5-14-91*

Signature *Neale C. Edwards*

Professional Seal of *NEALE C. EDWARDS*

Certificate No. *6857*

REGISTERED LAND SURVEYOR

Neale C. Edwards

5200.14

5097.84

0 330 660 990 1320 1650 1980 2310 2640 2970 3300 3630 3960 4290 4620 4950 5280 5610 5940 6270 6600 6930 7260 7590 7920 8250 8580 8910 9240 9570 9900

OPERATIONS PLAN

DATE: JUN 20,1991

Well Name: 11 COOPER
 Sec. 6 T29N R11W
 CROUCH MESA MESA VERDE

1140'FSL 1450'FWL
 SAN JUAN NEW MEXICO
 Elevation 5755'GL

Formation tops: Surface- NACIMIENTO
 Ojo Alamo- 663 Huer. Bent.- 2330 Mass. Cl.H.- 3600
 Kirtland- 719 N.C. Chacra- 2620 Menefee- 3643
 Fruitland- 1723 Otera Chacra- 3049 Mass. P.L.- 4261
 Pictured Cliffs- 1920 Upper Cl.H.- 3518 Lower. P.L.- 4372
 Lewis- 2037 Total Depth- 4760
 Longstring

Logging Program: CNL/LDT,TEMP., DIL/GR

Mud Program:	Interval	Type	Weight	Visc.	Fl. Loss
	0 - 200	Spud	8.4 - 8.9	40-50	no control
	200 - 4760	Non-dispersed	8.4 - 9.5	30-60	no control

Casing Program:	Hole Size	Depth Interval	Csg. Size	Weight	Grade
	12 1/4"	0 - 200	8 5/8"	24.0#	K-55
	7 7/8"	0 - 4760	4 1/2"	10.5#	K-55
Tubing Program:		0 - 4760	2 3/8"	4.7#	J-55

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

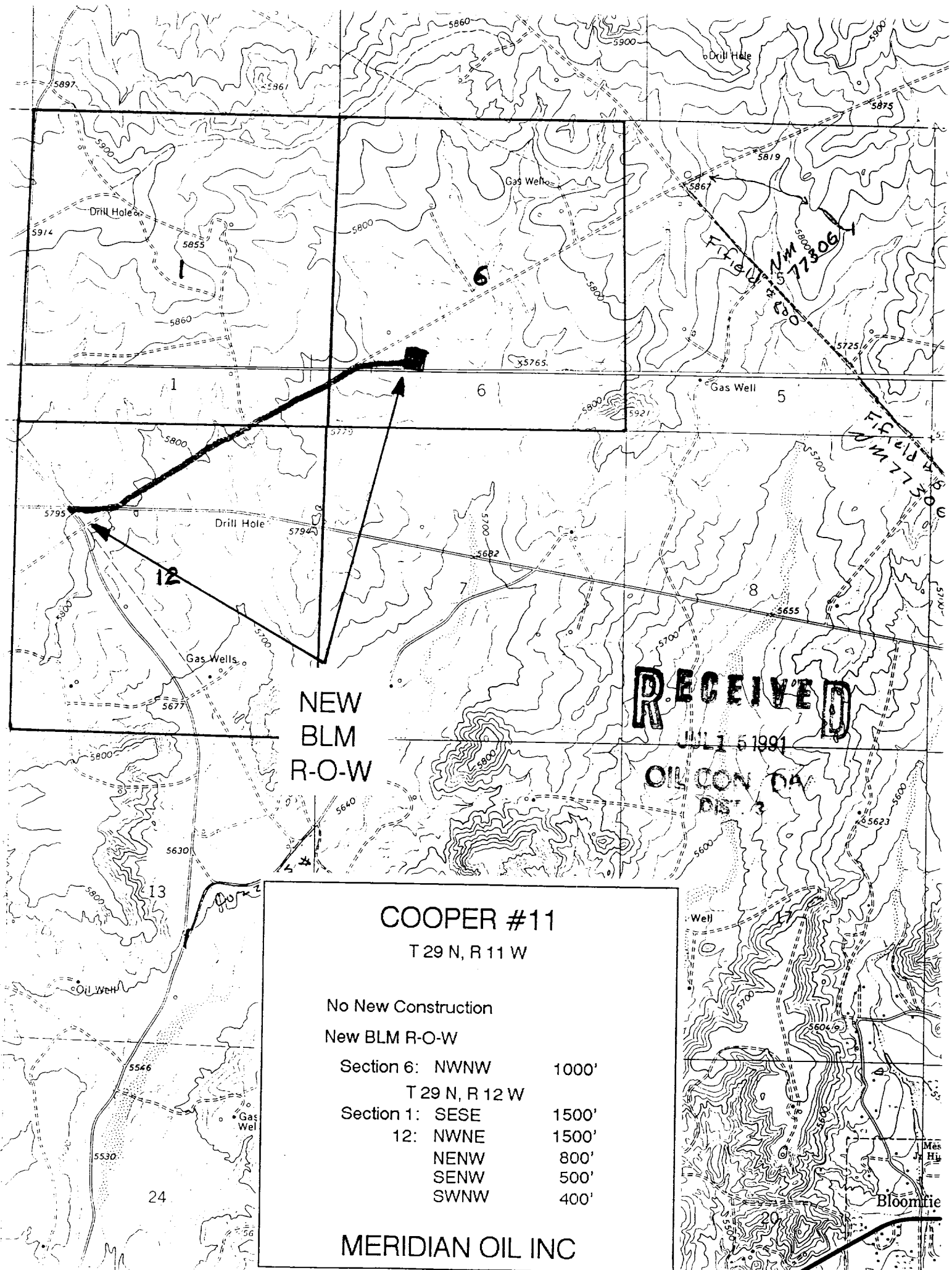
4 1/2" production casing - float shoe on bottom. Three centralizers run every other joint above shoe. Two turbolizing type centralizers - one below and one into the base of the Ojo Alamo @ 719'. Standard centralizers thereafter every fourth joint up to the base of the surface pipe.

Wellhead Equipment: 8 5/8" x 4 1/2" x 2 3/8" x 11" 3000 psi xmas tree assembly

Cementing:

8 5/8" surface casing - cement with 211 sacks of class "B" cement with 1/4# flocele/sack and 3% calcium chloride (248 cu ft. of slurry, 200% excess to circulate to surface). WOC 12 hours. Test casing to 600 psi for 30 minutes.

4 1/2" production casing - First stage: Lead with 316 sacks of 65/35 Class "B" pozmix with 6% gel, 2% CaCl₂, 5#/sack gilsonite, and 1/4#/sack Flocele. Tail with 474 sacks of Class "B" cement with 2% CaCl₂, (1120 cu. ft., 100% excess to circulate stage tool @ 2300'). Second stage: lead with 298 sacks of 65/35 Class "B" pozmix with 6% gel, 2% CaCl₂, 5#/sk gilsonite, and 1/4#/sk Flocele. Tail with 446 sacks of Class "B" cement with 2% CaCl₂, (1052 cu. ft., 100% excess to circulate to surface).



NEW
BLM
R-O-W

RECEIVED

JUL 15 1991

OIL CON DA
DIST 3

COOPER #11

T 29 N, R 11 W

No New Construction

New BLM R-O-W

Section 6: NWNW 1000'

T 29 N, R 12 W

Section 1: SESE 1500'

12: NWNE 1500'

NENW 800'

SENE 500'

SWNW 400'

MERIDIAN OIL INC