

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

RECEIVED
SEP 15 1989
OIL CON. DIV.
DIST. 3

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
1340'S 1490'W
5. LEASE NUMBER
SF-077652
6. IF INDIAN, ALL. OR TRIBE NAME
7. UNIT AGREEMENT NAME
8. FARM OR LEASE NAME
EAST
9. WELL NO.
103
10. FIELD, POOL, OR WILDCAT
BASIN FRUITLAND COAL
11. SEC. T. R. M OR BLK.
K SEC. 14 T31N R12W NMPM
12. COUNTY
SAN JUAN
13. STATE
NM
14. DISTANCE IN MILES FROM NEAREST TOWN
7 miles from Aztec
15. DISTANCE FROM
PROPOSED LOCATION 1340'
TO NEAREST PROPERTY
OR LEASE LINE.
16. ACRES IN LEASE
256.0
17. ACRES ASSIGNED TO WELL
280.06
18. DISTANCE FROM
PROPOSED LOCATION
TO NEAREST WELL DR. 300'
COMPL., OR APPLIED
FOR ON THIS LEASE.
19. PROPOSED DEPTH
2768'
20. ROTARY OR CABLE TOOLS
ROTARY
21. ELEVATIONS (DF, FT, GR, ETC.)
6296'GL
22. APPROX. DATE WORK WILL START
8-22-89

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

24. AUTHORIZED BY: *[Signature]*
REGULATORY AFFAIRS

DATE

PERMIT NO. _____ APPROVAL DATE _____

APPROVED
AS AMENDED

APPROVED BY _____ TITLE _____ DATE _____

SEP 13 1989

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

AREA MANAGER

NMOCD

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

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-102
Revised 1-1-85

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, Artesia, NM 88210

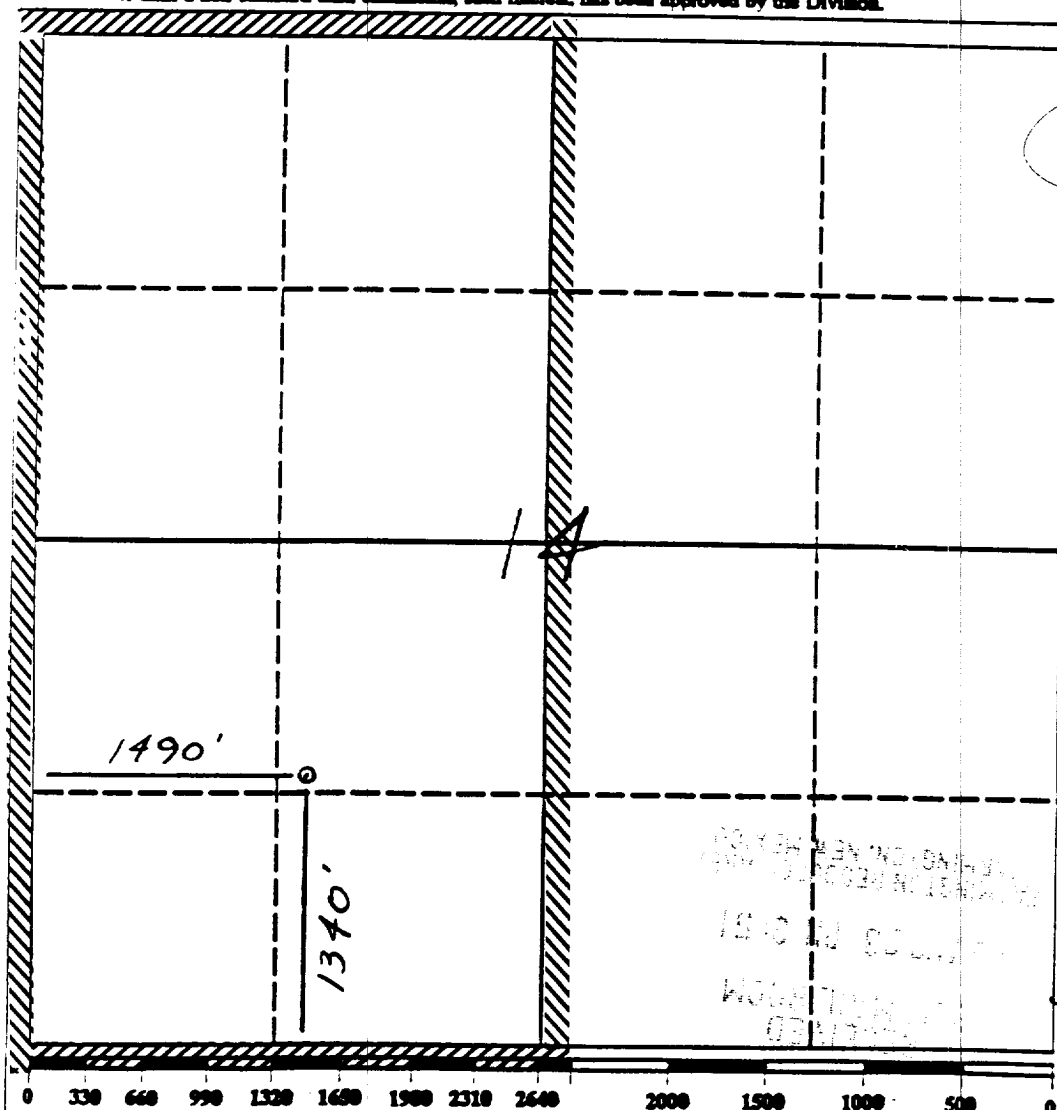
DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410

WELL LOCATION AND ACREAGE DEDICATION PLAT

All Distances must be from the outer boundaries of the section

Operator Southland Royalty Company			Lease East (SF-077652)		Well No. 103
Unit Letter K	Section 14	Township 31 North	Range 12 West	County NMNM San Juan	
Actual Footage Location of Well: 1340 feet from the South line and 1490 feet from the West line					
Ground level Elev. 6296'	Producing Formation Fruitland Coal		Pool Basin	Dedicated Acreage: 280.06 Acres	

1. Outline the acreage dedicated to the subject well by colored pencil or hatchure 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, force-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 Bradfield

Printed Name
Regulatory Affairs

Position
Southland Royalty Co

Company
8-22-89

Date

SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes 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
NEALE C. EDWARDS

Signature and Seal
Professional Surveyor

REGISTERED LAND SURVEYOR
Certificate No.
6857

Well Name: 103 EAST 1340'S 1490'W
Sec. 14 T31N R12W SAN JUAN NEW MEXICO
BASIN FRUITLAND COAL Elevation 6296'GL

Formation tops: Surface- ANIMAS
Ojo Alamo- 1048
Kirtland- 1090
Fruitland- 2386
Fruitland Coal Top- 2519
Fruitland Coal Base- 2765
Total Depth- 2768
Pictured Cliffs- 2792

Logging Program: Mud logs from 2386 to total depth.

Mud Program:	Interval	Type	Weight	Visc.	Fl. Loss
	0 - 200	Spud	8.4 - 8.9	40-50	no control
	200 - 2768	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-40
	7 7/8"	0 - 2768	5 1/2"	15.5#	K-55
Tubing Program:		0 - 2768	2 3/8"	4.7#	J-55

Float Equipment: 8 5/8" surface casing - saw tooth guide shoe.

5 1/2" production casing - float shoe on bottom.

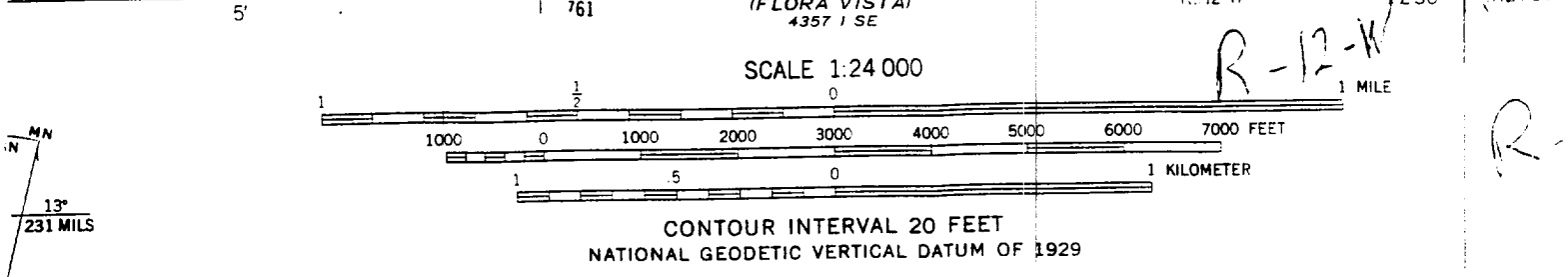
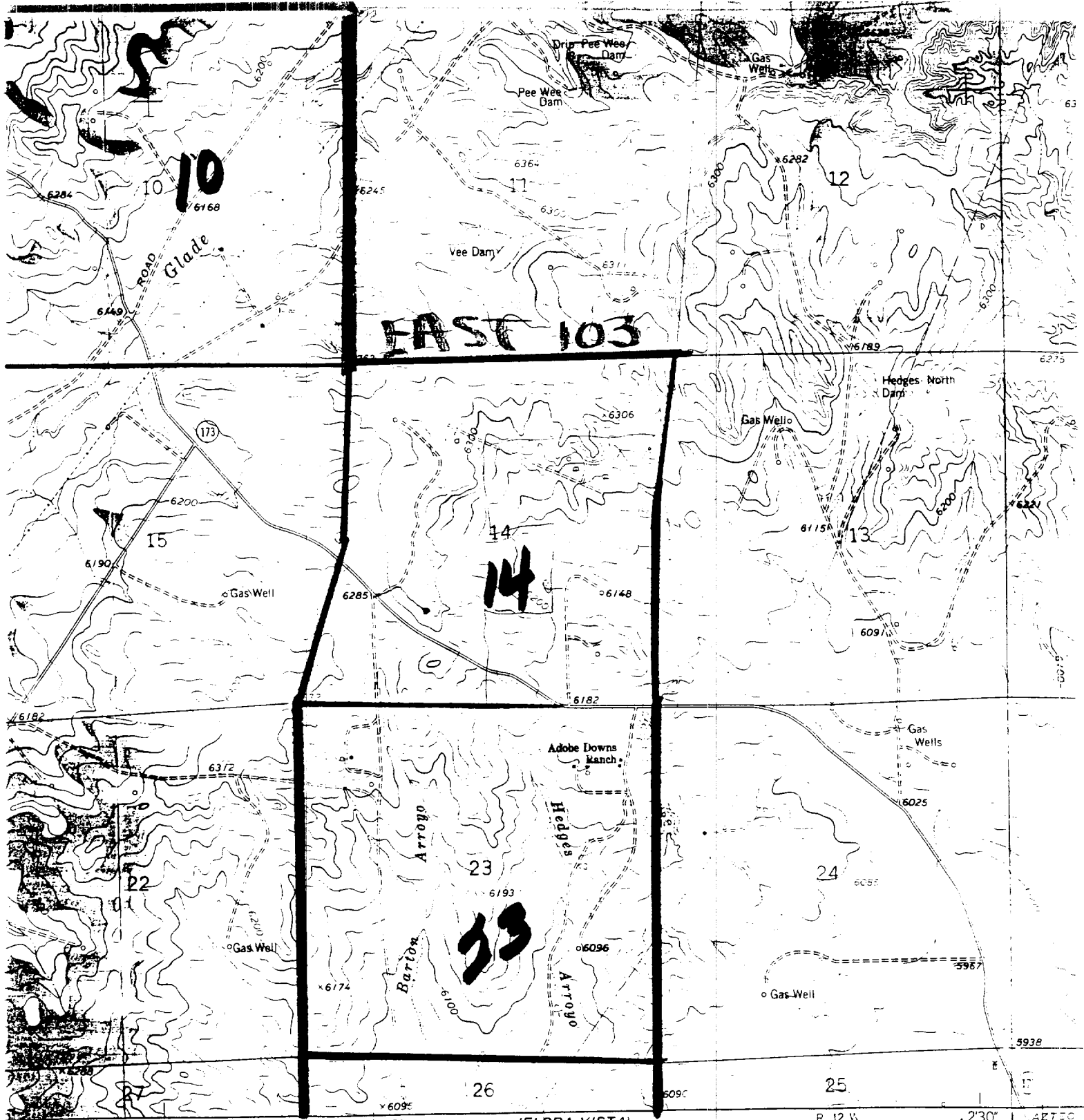
Three centralizers run every other joint above shoe.

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

Cementing:

8 5/8" surface casing - cement with 140 sacks of class "B" cement with 1/4# flocele/sack and 3% calcium chloride (165 cu ft. of slurry, 100% excess to circulate to surface). WOC 12 hours. Test casing to 600 psi for 30 minutes.

5 1/2" production casing - lead with 248 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. 596 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.



THIS MAP COMPLIES WITH NATIONAL MAP ACCURACY STANDARDS
 FOR SALE BY U. S. GEOLOGICAL SURVEY, DENVER, COLORADO 80225, OR RESTON, VIRGINIA 22092
 A FOLDER DESCRIBING TOPOGRAPHIC MAPS AND SYMBOLS IS AVAILABLE ON REQUEST