

UNITED STATES
 DEPARTMENT OF THE INTERIOR
 BUREAU OF LAND MANAGEMENT

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APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK
 DRILL DEEPEN PLUG BACK

b. TYPE OF WELL
 OIL WELL GAS WELL OTHER SINGLE ZONE MULTIPLE ZONE

2. NAME OF OPERATOR
 MITCHELL ENERGY CORPORATION

3. ADDRESS OF OPERATOR
 555 Seventeenth Street Suite #3500
 Denver, CO 80202

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*)
 At surface 1570' FSL, 1270' FWL, T31N-R5W, Sec. 25 SW 1/4
 At proposed prod. zone same

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*
 ± 62 MILES FROM BLANCO, NEW MEXICO

15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any)
 2800'

16. NO. OF ACRES IN LEASE
 2560

17. NO. OF ACRES ASSIGNED TO THIS WELL
 W 320

18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.
 4000'

20. ROTARY OR CABLE TOOLS
 ROTARY

21. ELEVATIONS (Show whether DF, RT, GR, etc.)
 6446' GR

22. APPROX. DATE WORK WILL START*
 August 30, 1991

23. PROPOSED CASING AND CEMENTING PROGRAM
 This action is subject to technical and procedural review pursuant to 43 CFR 3165.3 and appeal pursuant to 43 CFR 3165.4

5. LEASE DESIGNATION AND SERIAL NO.
 SF 078768

6. IF INDIAN, ALLOTTEE OR TRIBE NAME
 N/A

7. UNIT AGREEMENT NAME
 EA ROSA Unit

8. FARM OR LEASE NAME
 N/A

9. WELL NO.
 #326

10. FIELD AND POOL, OR WILDCAT
 BASIN FRUITLAND COAL ✓

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
 T31N-R5W ✓
 Sec. 25: SW 1/4

12. COUNTY OR PARISH
 RIO ARRIBA

13. STATE
 NM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12-1/4"	8-5/8"	24# K-55	500'	350 sxs - circ to surface
7-7/8"	5-1/2"	15.5# K-55	4000'	700 sxs - circ to surface

The operator proposes to drill to depth sufficient to test the Fruitland Formation. If productive, 5-1/2" casing will be run and set at +4000'. If non-productive, the well will be plugged and abandoned consistent with Federal Regulations. Any zones above the Fruitland may be tested for productivity prior to Abandonment.

- EXHIBITS ATTACHED**
- Ten Point Compliance Program
 - Surface Use and Operating Plan
 - Exhibit No. 1 Proposed Cementing Program
 - Exhibit No. 2 Blowout Preventer Schematic
 - Exhibit No. 3 Location Elevation Plat (Form C-102)
 - Exhibit No. 4 One Mile Radius Map (includes existing & planned roads, sites, pipelines, and other facilities)
 - Exhibit No. 5 Production Facilities Layout
 - Exhibit No. 6 Drilling Rig Layout

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OIL CON. DIV.
 DIST. 3

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

24. SIGNATURE James C. Anderson TITLE Dist. Prod. Mgr. DATE 7/3/91

(This space for Federal or State office use)

PERMIT NO. _____ APPROVAL DATE _____

APPROVED BY _____ TITLE _____

CONDITIONS OF APPROVAL, IF ANY: _____

APPROVED
 AS AMENDED

OCT 02 1991
 AREA MANAGER

NMCCD -

*See Instructions On Reverse Side

DRILLING PROGRAM

Attached to Form 9-331C
Mitchell Energy Corporation
Rosa Unit No. 326
NWSW Sec. 25, T31N-R5W, N.M.P.M.
1570' FSL, 1270' FWL
Rio Arriba County, New Mexico

1. **GEOLOGIC NAME OF SURFACE FORMATION**

The surface formation is Tertiary Rock.

2. **ESTIMATED TOPS OF IMPORTANT GEOLOGIC MARKERS:**

Tertiary Rock	Surface
Ojo Alamo	2536'
Kirtland	2666'
Fruitland	3066'
Fruitland Coal	3146'
Picture Cliffs	3286'

3. **ESTIMATED DEPTHS OF ANTICIPATED WATER, OIL, GAS, OR MINERALS:**

Ojo Alamo	2536'	Water
Fruitland Coal	3146'	Gas & Minerals

No other formations are expected to give up oil, gas, or water in measurable quantities.

4. **CASING PROGRAMS**

<u>Hole Size</u>	<u>Interval</u>	<u>Section Length</u>	<u>Size (OD)</u>	<u>Weight, Grade and Joint</u>	<u>Condition</u>
12-1/4"	0-500'	500'	8 5/8"	24# K-55 ST&C	New
7-7/8"	0-4000'	4000'	5 1/2"	15.5# K-55 LT&C	New

CEMENT PROGRAM

Refer to Exhibit #1 for description of proposed cementing program.

2. **MINIMUM SPECIFICATIONS FOR PRESSURE CONTROL:**

Refer to the descriptive layout of the blowout preventer and accompanying notes given in Exhibit #2.

**EXHIBIT NO. 1
PROPOSED CEMENTING PROGRAM
ROSA UNIT NO. 326**

SURFACE CASING

Hole Size: 12-1/4" Casing O.D.: 8-5/8" Depth: 500'

STAGE NO.	AMOUNT AND TYPE OF CEMENT	CEMENTING TOOLS	LOCATION	PROJECTED CEMENT TOP
1	412 Cu. Ft. (350 sxs) Class B + 46% water + 2% CaCl ₂ + 0.25 pps cello-seal	Float Collar Guide Shoe	460 Ft. 500 Ft.	Surface

PRODUCTION CASING

Hole Size: 7-7/8" Casing O.D.: 5-1/2" Depth: 4000'

STAGE NO.	AMOUNT AND TYPE OF CEMENT	CEMENTING TOOLS	LOCATION	PROJECTED CEMENT INTERVAL
1	795 Cu. Ft. (305 sxs) 65:35 poz (Base B) + 150% water + 12% gel (Bentonite) + 0.25 pps cello-seal			Surface to to 3192 Ft.
2	140 Cu. Ft. (100 sxs) 50:50 poz (Base B) + 60% water + 2% gel (Bentonite) + 0.25 pps cello-seal + 6.25 pps Gilsonite	Float Collar Guide Shoe	3880 Ft. 4000 Ft.	3192 Ft. to 4000 Ft.

Note: This is the proposed cementing program for all Mitchell Rosa Unit wells. Actual volumes/depths will vary for each individual well.

WATER PROTECTION METHODS

1. An adequate number of casing centralizers will be run through usable water zones to ensure that casing is centralized through these zones. The adequate number of centralizers to be used will be determined by API standards.
2. Centralizers will impart a swirling action around the casing (such as turbulators) will be installed just below and into the base of the lowest usable water zone (Ojo Alamo). These devices will assist mud displacement, increase cement bonding potential, and create an effectively hydraulic seal.

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 1-1-89

OIL CONSERVATION DIVISION

P.O. Box 2088
 Santa Fe, New Mexico 87504-2088

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EXHIBIT NO. 3
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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

AREA
 ENRICO

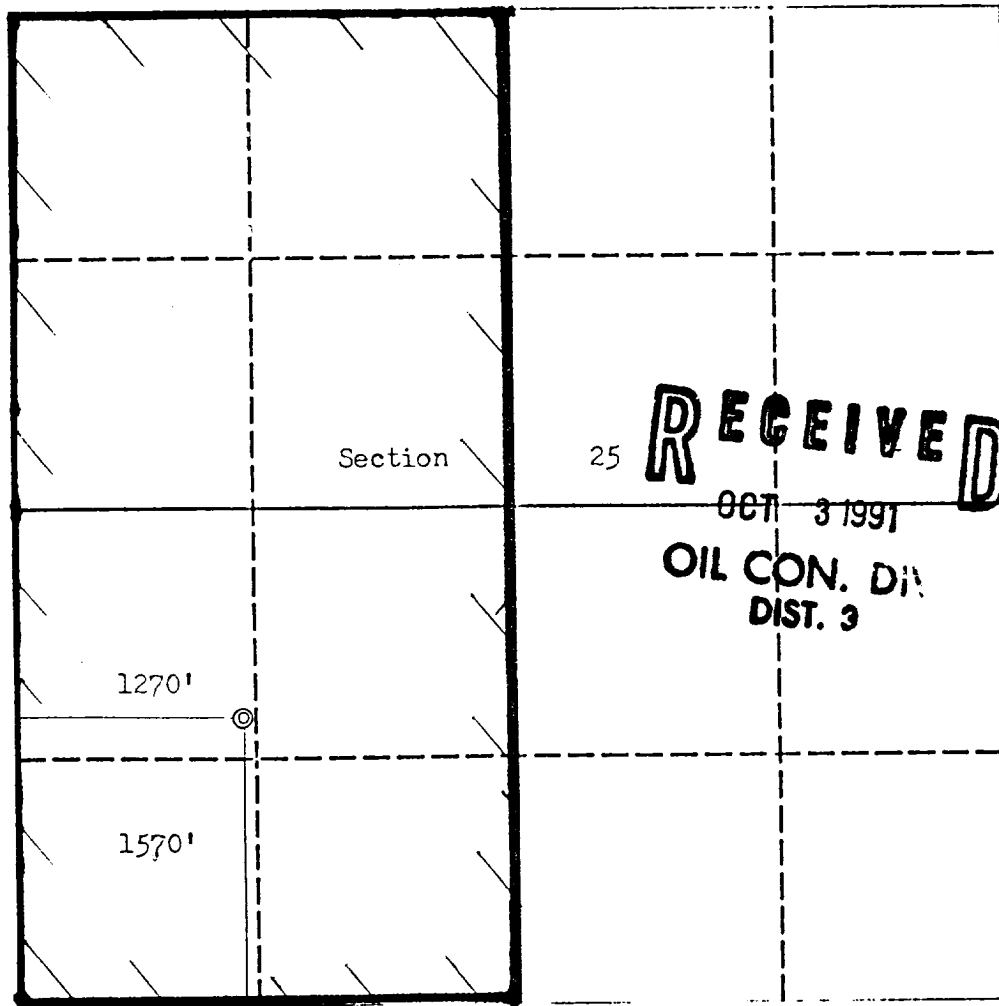
Operator Mitchell Energy Corporation			Lease Rosa Unit		Well No. 326
Unit Letter L	Section 25	Township 31 North	Range 5 West	County NMPM Rio Arriba	
Actual Footage Location of Well: 1570 feet from the South line and 1270 feet from the West line					
Ground level Elev. 6446	Producing Formation Fruitland		Pool Basin Fruitland Coal		Dedicated Acreage: 320 Acres

- Outline the acreage dedicated to the subject well by colored pencil or hatchure marks on the plat below.
- If more than one lease is dedicated in the well, outline each and identify the ownership thereof (both as to working interest and royalty).
- 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.



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OPERATOR CERTIFICATION

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

Signature: *James C. Anderson*
 Printed Name: James C. Anderson
 Position: Dist. Prod. Mgr.
 Company: Mitchell Energy Corp
 Date: 5/20/91

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: May 16, 1991
 Signature & Seal of Professional Surveyor: *Richard L. Sinkiewicz*
 Registered Professional Surveyor 11225
 Certificate No. 11225

Richard L. Sinkiewicz

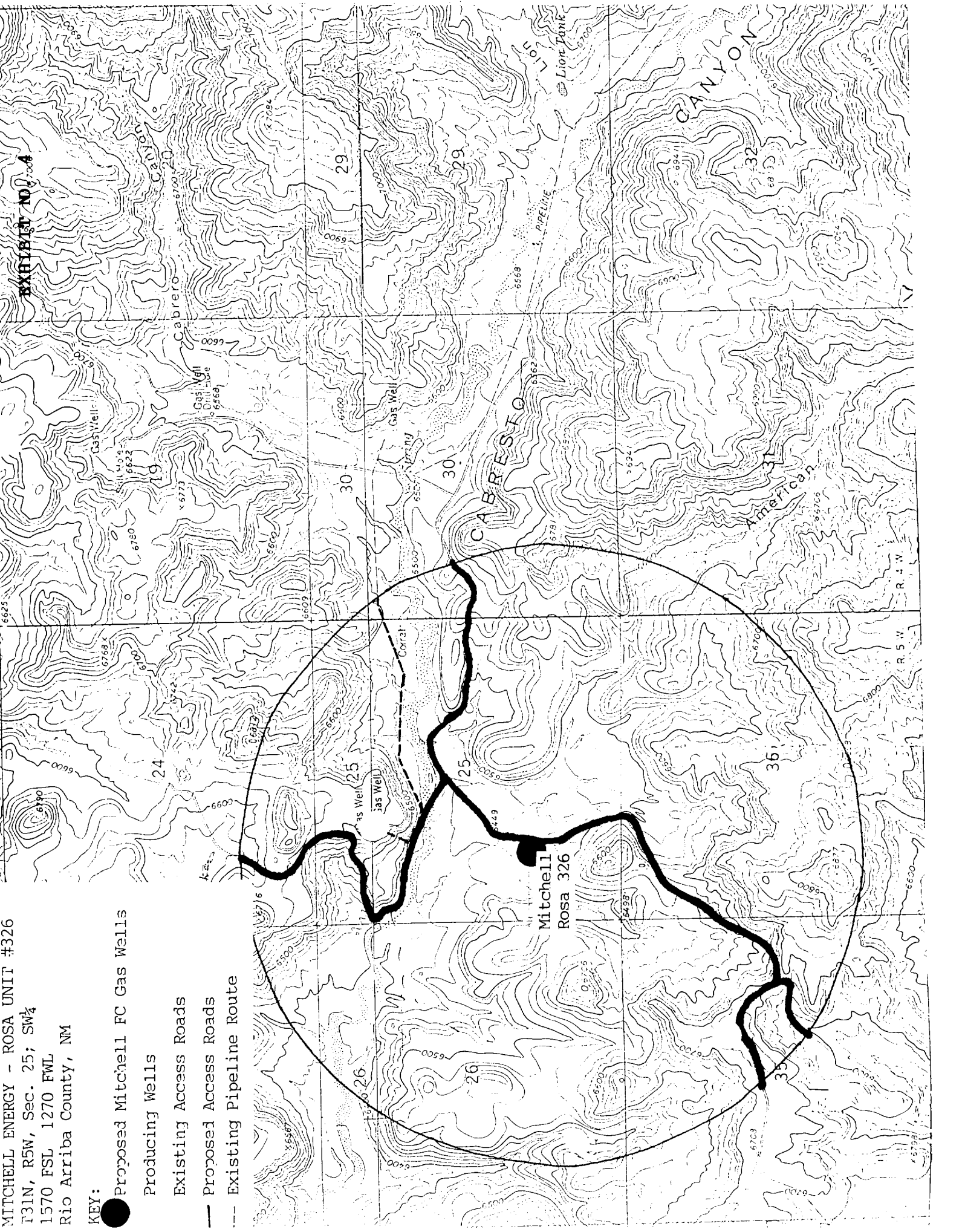


EXHIBIT NO. 4

MITCHELL ENERGY - ROSA UNIT #326
T31N, R5W, Sec. 25; SW $\frac{1}{4}$
1570 FSL 1270 FWL
Rio Arriba County, NM

- KEY:
- Proposed Mitchell FC Gas Wells
 - Producing Wells
 - Existing Access Roads
 - Proposed Access Roads
 - Existing Pipeline Route

Mitchell
Rosa 326

