

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

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BLM

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 17th STREET SUITE # 3500
DENVER, CO 80202

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)*
At surface

1345' FNL, 1935' FEL, Sec.5, T31N-R4W
At proposed prod. zone

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*

± 66 miles from Blanco, NM

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

1345'

16. NO. OF ACRES IN LEASE

2650'

17. NO. OF ACRES ASSIGNED
TO THIS WELL

320 E 326.46

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

none within 1 mile

19. PROPOSED DEPTH

4000'

20. ROTARY OR CABLE TOOLS

ROTARY

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

7125' GR

This section is subject to technical and
procedural review pursuant to 43 CFR 3165.3
and appeal pursuant to 43 CFR 3165.4.

22. APPROX. DATE WORK WILL START*

August, 30 1991

23. PROPOSED CASING AND CEMENTING PROGRAM

DRILLING OPERATIONS AUTHORIZED ARE
SUBJECT TO COMPLIANCE WITH ATTACHED

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	GENERAL REQUIREMENTS
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

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.

SIGNED

James C. Anderson

TITLE

Dist. Prod. Mgr.

DATE

7/18/91

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

APPROVED BY

TITLE

CONDITIONS OF APPROVAL, IF ANY:

See Well C-104 for operator change

NMOCD

*See Instructions On Reverse Side

RECEIVED

OCT 3 1991

OIL CON. DIV.

DIST. 3

DRILLING PROGRAM

Attached to Form 9-331C
Mitchell Energy Corporation
Rosa Unit No. 352
NWNE Sec. 5, T31N, R5W, N.M.P.M.
1345' FNL, 1935' FEL
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	3210'
Kirtland	3390'
Fruitland	3760'
Fruitland Coal	3790'
Picture Cliff	3940'

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

Ojo Alamo	3210'	Water
Fruitland Coal	3790'	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

PROPOSED CEMENTING 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. 352

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

RECEIVED EXHIBIT NO. 3
BLM PAGE 1 of 2

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

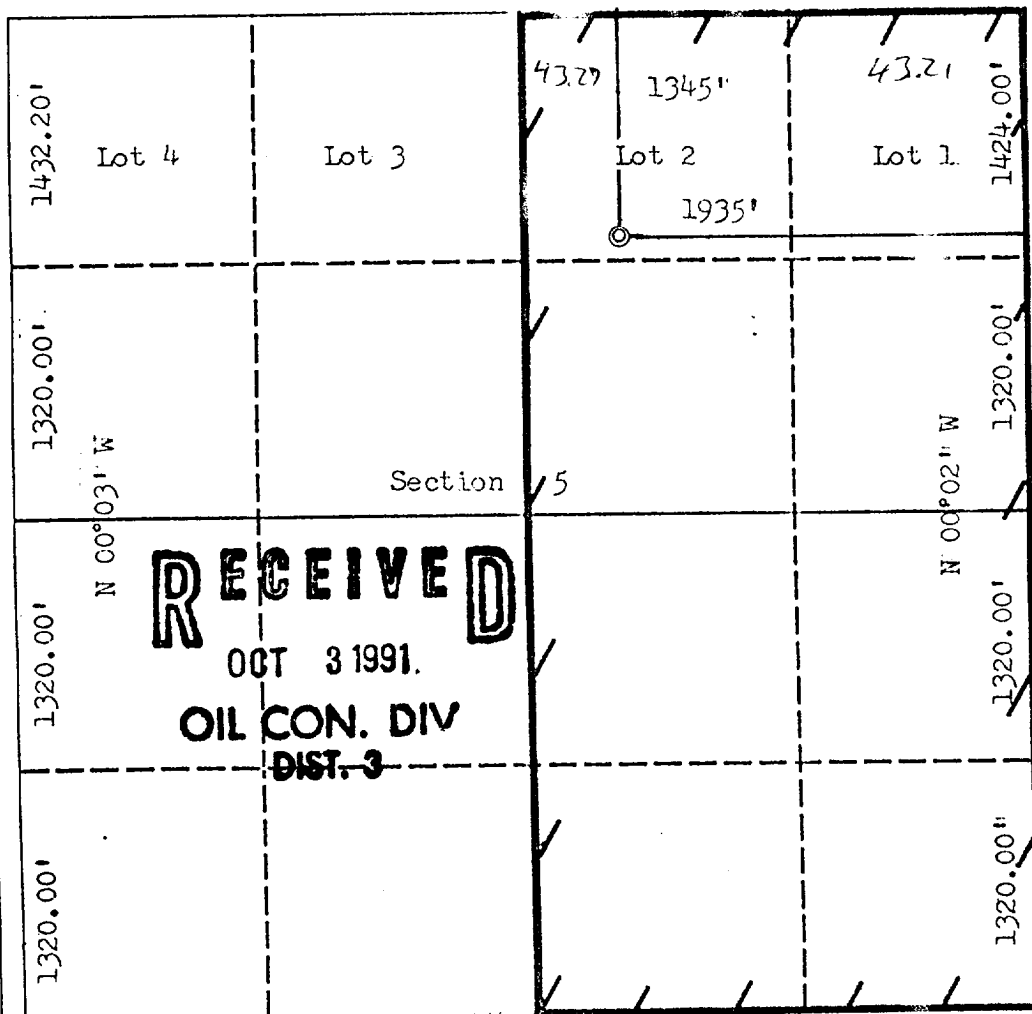
WELL LOCATION AND ACREAGE DEDICATION PLAT

All Distances must be from the outer boundaries of the section

MITCHELL ENERGY CORPORATION
91 JUL 24 PM 1:09
ROSA UNIT NO. 352
SANTA FE, N.M.

Operator Mitchell Energy Corporation			Lease Rosa Unit		Well No. 352
Unit Letter B	Section 5	Township 31 North	Range 4 West	County Rio Arriba	
Actual Footage Location of Well: 1345 feet from the North line and 1935 feet from the East line					
Ground level Elev. 7125	Producing Formation Fruitland		Basin Fruitland Coal		Dedicated Acreage: 320 326.48 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 to 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-stand unit, eliminating such interest, has been approved by the Division.



RECEIVED
OCT 3 1991.
OIL CON. DIV
DIST. 3

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
7/10/91

SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this was plotted from field notes of actual survey made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief. May 31, 1991

Date Surveyed
Signature and Seal of
Professional Surveyor
Frederick H. Reed

Certificate No.
NM 3795

Frederick H. Reed

EXHIBIT NO. 4

EXHIBIT NO. 4

- EXHIBIT NO. 4

