

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

30-039-25122

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
915' FSL, 600' FEL, Sec. 13, T31N-R5W
At proposed prod. zone

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*
± 62 miles from Blanco, NM

15. DISTANCE FROM PROPOSED*
LOCATION TO NEAREST
PROPERTY OR LEASE LINE, FT.
(Also to nearest drlg. unit line, if any) 915'

16. NO. OF ACRES IN LEASE
2560'

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

19. PROPOSED DEPTH
4000'

21. ELEVATIONS (Show whether DF, RT, GR, etc.)
6613' GR/

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

23.

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH
12-1/4"	8-5/8"	24# K-55	500'
7-7/8"	5-1/2"	15.5# K-55	4000'

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

DRILLING OPERATIONS AUTHORIZED ARE
SUBJECT TO COMPLIANCE WITH ATTACHED
"GENERAL REQUIREMENTS":
350 sxs - circ to surface
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. SIGNATURE James C. Anderson TITLE Dist. Prod. Mgr DATE 7/19/91

(This space for Federal or State official use)

PERMIT NO. RECEIVED APPROVAL DATE APPROVED AS AMENDED

APPROVED BY OCT 3 1991 TITLE OCT 02 1991

CONDITIONS OF APPROVAL, IF ANY:

OIL CON. DIV.
DIST. 3

AREA MANAGER

*See Instructions On Reverse Side

INSTRUCTIONS

GENERAL: This form is designed for submitting proposals to perform certain well operations, as indicated, on all types of lands and leases for appropriate action by either a Federal or a State agency, or both, pursuant to applicable Federal and/or State laws and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local, area, or regional procedures and practices, either are shown below or will be issued by, or may be obtained from, the local Federal and/or State office.

ITEM 1: If the proposal is to redrill to the same reservoir at a different subsurface location or to a new reservoir, use this form with appropriate notations. Consult applicable State or Federal regulations concerning subsequent work proposals or reports on the well.

ITEM 4: If there are no applicable State requirements, locations on Federal or Indian land should be described in accordance with Federal requirements. Consult local State or Federal office for specific instructions.

ITEM 14: Needed only when location of well cannot readily be found by road from the land or lease description. A plat, or plats, separate or on this reverse side, showing the roads to, and the surveyed location of, the well, and any other required information, should be furnished when required by Federal or State agency offices.

ITEMS 15 AND 18: If well is to be, or has been directionally drilled, give distances for subsurface location of hole in any present or objective production zone.

ITEM 22: Consult applicable Federal or State regulations, or appropriate officials, concerning approval of the proposal before operations are started.

NOTICE

The Privacy Act of 1974 and the regulation in 43 CFR 2.48(d) provide that you be furnished the following information in connection with information required by this application.

AUTHORITY: 30 U.S.C. 181 et seq., 25 U.S.C. 396; 43 CFR Part 3160.

PRINCIPAL PURPOSE: The information is to be used to process and evaluate your application for permit to drill, deepen, or plug back an oil or gas well.

ROUTINE USES: (1) The analysis of the applicant's proposal to discover and extract the Federal or Indian resources encountered. (2) The review of procedures and equipment and the projected impact on the land involved. (3) The evaluation of the effects of proposed operation on surface and subsurface water and other environmental impacts. (4)(5) Information from the record and/or the record will be transferred to appropriate Federal, State, local or foreign agencies, when relevant to civil, criminal or regulatory investigations or prosecutions, as well as routine regulatory responsibility.

EFFECT OF NOT PROVIDING INFORMATION: Filing of this application and disclosure of the information is mandatory only if the lessee elects to initiate drilling operation on an oil and gas lease.

The Paperwork Reduction Act of 1980 (44 U.S.C. 3501 et seq) requires us to inform you that:

This information is being collected to allow evaluation of the technical, safety, and environmental factors involved with drilling for oil and/or gas on Federal and Indian oil and gas leases.

This information will be used to analyze and approve applications.

Response to this request is mandatory only if the lessee elects to initiate drilling operations on an oil and gas lease.

DRILLING PROGRAM

Attached to Form 9-331C
Mitchell Energy Corporation
Rosa Unit No. 358
SESE Sec. 13, T31N-R5W, N.M.P.M.
915' FSL, 600' 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	2810'
Kirtland	2910'
Fruitland	3145'
Fruitland Coal	3390'
Picture Cliff	3420'

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

Ojo Alamo	2810'	Water
Fruitland Coal	3390'	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.

5. 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. 358

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.

OIL CONSERVATION DIVISION

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

RECEIVED
BLM

EXHIBIT NO. 3
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

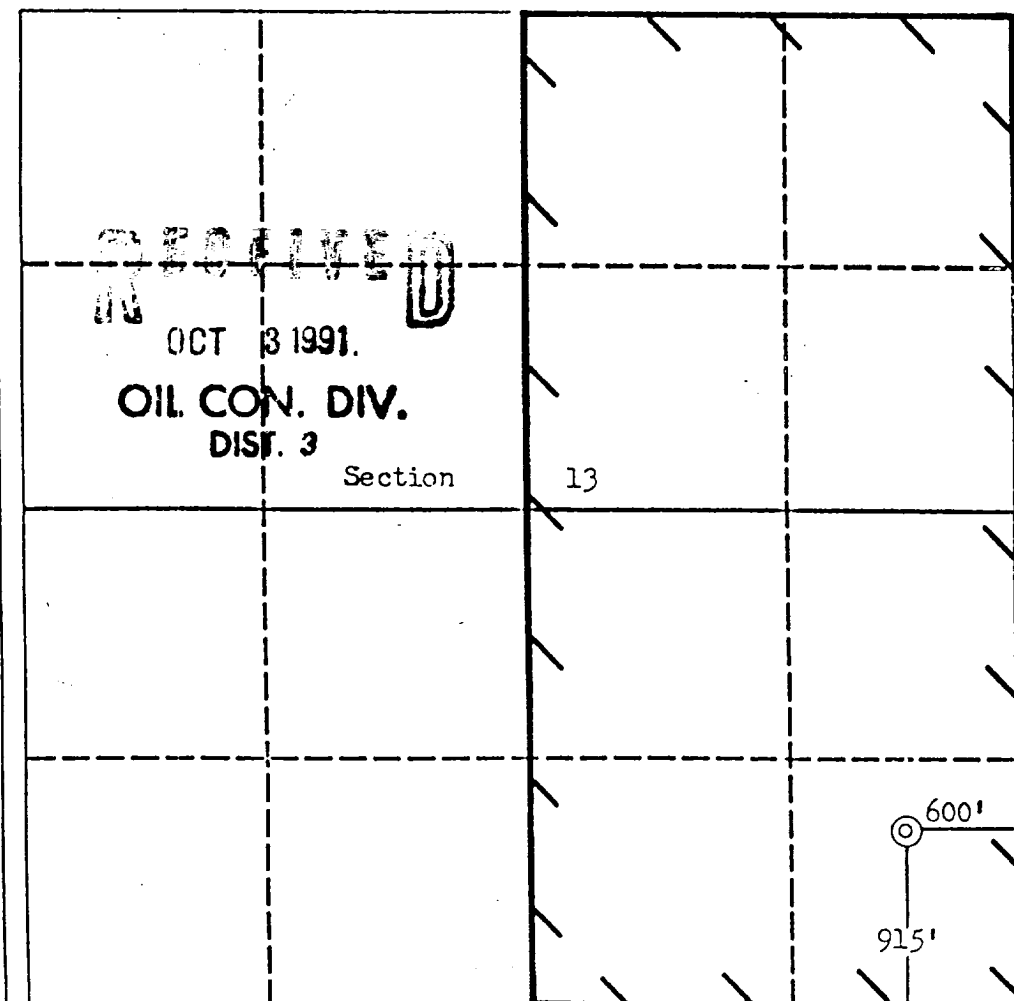
WELL LOCATION AND ACREAGE DEDICATION PLAT

All Distances must be from the outer boundaries of the section

MITCHELL ENERGY CORPORATION
MCCOY, N.M. ROSA UNIT NO. 358

Operator Mitchell Energy Corporation			Lease Rosa Unit		Well No. 358
Unit Letter P	Section 13	Township 31 North	Range 5 West	County NMPM Rio Arriba	
Actual Footage Location of Well: 915 feet from the South line and 600 feet from the East line					
Ground level Elev. 6613	Producing Formation Fruitland		Basin Fruitland Coal		Dedicated Acreage: 320 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 in 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 communalization, 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 communalization, 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
James C. Anderson
Printed Name
James C. Anderson
Position
Dist. Prod. Mgr.
Company
Mitchell Energy Corp.
Date
7/19/91

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.

June 20, 1991

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

Certificate No.
3795

Frederick H. Reed

MITCHELL ENERGY-ROSA UNIT #358
T31N, R5W, Sec. 13; SE¼
915 FSL 500 FEL
Rio Arriba County, NM

KEY:

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

EXHIBIT NO. 4

