

~~AMENDED~~

SUBMIT 1. APPLICATION
(Other instructions on
reverse side)

30-025-31315
Form approved.
Budget Bureau No. 1004-0136
Expires August 31, 1985

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

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

P.O. Box 4000, The Woodlands, TX 77387-4000

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

At surface

1980' FNL and 1980' FWL (SE/NW)

At proposed prod. zone

1980' FNL & 1980' FWL (SE/NW)

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

32 miles SW of Hobbs, NM

15. DISTANCE FROM PROPOSED*

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

1980'

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

1320'

16. NO. OF ACRES IN LEASE

321.72

19. PROPOSED DEPTH

10,600

17. NO. OF ACRES ASSIGNED
TO THIS WELL

40

20. ROTARY OR CABLE TOOLS

Rotary

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

3577' GL

R-111-P Potash Secretary's Potash

22. APPROX. DATE WORK WILL START*

5-25-91

23.

PROPOSED CASING AND CEMENTING PROGRAM

Capitan Controlled Water Basin

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
25"	20"	0.3 wall	40'	Redi-mix to Surface
17-1/2"	13-3/8"	54.5#	500'	525 sx of Class C CIRCULATE
12-1/4"	8-5/8"	32#	2900' CIRCULATE	1800 sx Lite + 300 sx Class C
7-7/8"	5-1/2"	17 & 20#	TD	700 sx Class H/POZ - SEE STIPS.

The operator proposes to drill to a depth sufficient to test the Bone Springs formation for oil. If productive, 5-1/2" casing will be cemented at TD. If non-productive, the well will be plugged and abandoned in a manner consistent with federal regulations. Specific programs as per Onshore Oil & Gas Order #1 are outlined in the following attachments:

Drilling Program

Surface Use & Operating Plan

Exhibit #1 & 1A - Blowout Preventer Equip.

Exhibit #2 - Location & Elevation Plat

Exhibit #3 - Planned Access Roads

Exhibit #4 - One-mile Radius Map

Exhibit #5 - Production Facilities

Layout

Exhibit #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

George Mullen

George Mullen

TITLE Reg. Affairs Specialist

DATE 5-31-91

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

APPROVED BY

One signed by

TITLE

AREA MANAGER

CARLEAD RESOURCES

DATE

6-24-91

CONDITIONS OF APPROVAL, IF ANY:

APPROVAL SUBJECT TO

GENERAL REQUIREMENTS AND

SPECIAL STIPULATIONS

ATTACHED

*See Instructions On Reverse Side

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

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.

State of New Mexico
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION

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

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

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

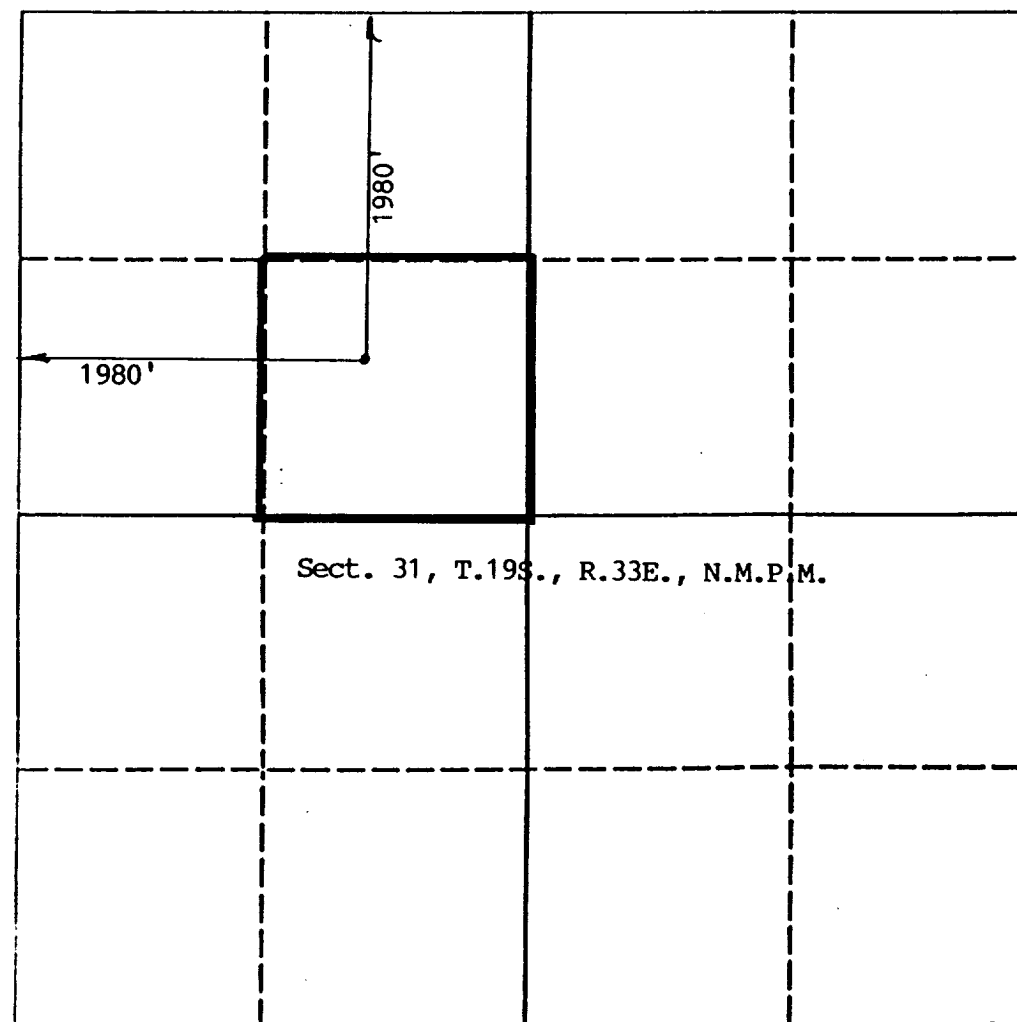
DISTRICT II
P.O. Drawer DD, Artesia, NM 88210

DISTRICT III
P.O. Rio Brazos Rd., Aztec, NM 87410

WELL LOCATION AND ACREAGE DEDICATION PLAT

All Distances must be from the outer boundaries of the section

Operator Mitchell Energy Corporation			Lease Geronimo Federal		Well No. #4
Unit Letter F	Section 31	Township 19S.	Range 33E.	County Lea	
Actual Footage Location of Well: 1980 feet from the North line and 1980 feet from the West line					
Ground level Elev. 3577	Producing Formation Bone Springs		Pool Gem-Bone Springs		Dedicated Acreage: 40 Acres
<p>1. Outline the acreage dedicated to the subject well by colored pencil or hatchure marks on the plat below.</p> <p>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).</p> <p>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.? <input type="checkbox"/> Yes <input type="checkbox"/> No If answer is "yes" type of consolidation _____</p> <p>If answer is "no" list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.) _____</p> <p>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.</p>					



OPERATOR CERTIFICATION

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

Signature

George Mullen

Printed Name

George Mullen

Position

Reg. Affairs Specialist

Company

Mitchell Energy Corp.

Date

5-9-91

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

4/19/91

Signature & Seal
Professional Surveyor

JAQUES
NEW MEXICO
6290
PROFESSIONAL ENGINEER

DRILLING PROGRAM

Attached to Form 3160-3
Mitchell Energy Corporation
Geronimo Federal No. 4
1980' FNL & 1980' FWL
SE/NW Sec. 31, T19S, R33E
Lea Co., N.M.

1. Geologic Name of Surface Formation:

Permian

2. Estimated Tops of Important Geologic Markers:

Permian	Surface
Base of Salt	2750'
Yates	2980'
Delaware	5220'
Bone Spring	7850'
1st Bone Spring SS	8920'
2nd Bone Spring SS	9700'
3rd Bone Spring Carb.	10,350'
Total Depth	10,600'

3. Estimated Depths of Anticipated Fresh Water, Oil or Gas:

Upper Permian Sands	100'	fresh water
Yates	2980'	oil
Delaware	5220'	oil
Delaware (Brushy Canyon)	6100'	oil
1st Bone Spring SS	8,920'	oil
2nd Bone Spring SS	9700'	oil
3rd Bone Spring Carb.	10,350'	

No other formations are expected to give up oil, gas, or fresh water in measurable quantities. The surface fresh water sands will be protected by setting 13-3/8" csg at 500' and circulating cement back to surface. Potash will be protected by setting 8-5/8" csg at 3350' and circulating cement back to surface. Any shallower zones above TD which contain commercial quantities of oil and/or gas will have cement circulated across them by inserting a cementing stage tool into the 5-1/2" production csg which will be run at TD.

MINIMUM BLOWOUT PREVENTER REQUIREMENTS

3,000 psi Working Pressure

3 MWP

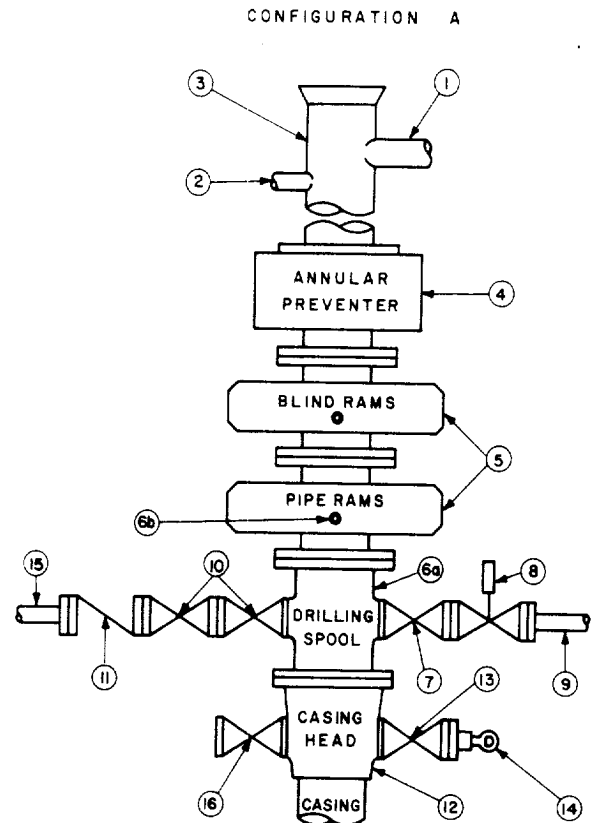
GERONIMO FEDERAL NO. 4
EXHIBIT #1

STACK REQUIREMENTS

No.	Item	Min. I.D.	Min. Nominal
1	Flowline		
2	Fill up line		2"
3	Drilling nipple		
4	Annular preventer		
5	Two single or one dual hydraulically operated rams		
6a	Drilling spool with 2" min. kill line and 3" min choke line outlets		
6b	2" min. kill line and 3" min. choke line outlets in ram. (Alternate to 6a above.)		
7	Valve Gate <input type="checkbox"/> Plug <input type="checkbox"/>	3-1/8"	
8	Gate valve—power operated	3-1/8"	
9	Line to choke manifold		3"
10	Valves Gate <input type="checkbox"/> Plug <input type="checkbox"/>	2-1/16"	
11	Check valve	2-1/16"	
12	Casing head		
13	Valve Gate <input type="checkbox"/> Plug <input type="checkbox"/>	1-13/16"	
14	Pressure gauge with needle valve		
15	Kill line to rig mud pump manifold		2"

OPTIONAL

16	Flanged valve	1-13/16"	
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CONTRACTOR'S OPTION TO FURNISH:

1. All equipment and connections above bradenhead or casinghead. Working pressure of preventers to be 3,000 psi, minimum.
2. Automatic accumulator (80 gallon, minimum) capable of closing BOP in 30 seconds or less and, holding them closed against full rated working pressure.
3. BOP controls, to be located near drillers position.
4. Kelly equipped with Kelly cock.
5. Inside blowout preventer or its equivalent on derrick floor at all times with proper threads to fit pipe being used.
6. Kelly saver-sub equipped with rubber casing protector at all times.
7. Plug type blowout preventer tester.
8. Extra set pipe rams to fit drill pipe in use on location at all times.
9. Type RX ring gaskets in place of Type R.

MEC TO FURNISH:

1. Bradenhead or casinghead and side valves.
2. Wear bushing, if required.

GENERAL NOTES:

1. Deviations from this drawing may be made only with the express permission of MEC's Drilling Manager.
2. All connections, valves, fittings, piping, etc., subject to well or pump pressure must be flanged (suitable clamp connections acceptable) and have minimum working pressure equal to rated working pressure of preventers up through choke. Valves must be full opening and suitable for high pressure mud service.
3. Controls to be of standard design and each marked, showing opening and closing position.
4. Chokes will be positioned so as not to hamper or delay changing of choke beans. Replaceable parts for adjustable choke, other bean sizes, retainers, and choke wrenches to be conveniently located for immediate use.
5. All valves to be equipped with handwheels or handles ready for immediate use.
6. Choke lines must be suitably anchored.

7. Handwheels and extensions to be connected and ready for use.
8. Valves adjacent to drilling spool to be kept open. Use outside valves except for emergency.
9. All seamless steel control piping (3000 psi working pressure) to have flexible joints to avoid stress. Hoses will be permitted.
10. Casinghead connections shall not be used except in case of emergency.
11. Do not use kill line for routine fill-up operations.

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