30-025-31895

OFFICIAL FILE COPY

-3160(067)
NM-57280
CRC - 12-14-92
T. O'Brien 1-22-93
Cli. Lopez 1/22/93
R.D. 1/20/93

JAN 27 1993

CERTIFIED--RETURN RECEIPT REQUESTED
P 864 873 168

L McCone 1/22/93

Mitchell Energy Corporation
Attention: George Mullen
P.O. Box 4000
The Woodlands, TX 77387-4000

RE: Tomahawk "28" Federal Well No. 1
NM-57280
1650' FNL & 1980' FWL, Sec. 28, T20S, R33E
Lea County, New Mexico

Dear Mr. Mullen:

On November 23, 1992, Mitchell Energy Corporation filed an Application for Permit to Drill (APD) at the above referenced location. I am pleased to approve your APD at the present location. Your copy of the APD, with attached stipulations, is enclosed.

Through our analysis of the APD, we have determined that the well site is located a sufficient distance from the ore zones that potash resources should not be impacted.

If you need any additional information, please contact Tony Herrell in the Carlsbad Resource Area at (505) 887-6544.

Sincerely,

Larry L. Woodard

Larry L. Woodard
State Director

1 Enclosure

bcc:
NM (910, L. Woodard)
NM (920, R. Smith)
NM (060, A. Lopez)
NM (060, L. Cone)
NM (067, T. Herrell)

067:CCranston:rh:11/24/92:A:\28Tomah1.AL

Form 3160-3
(December 1990)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SUBMIT IN TRIPLICATE* (Other instructions on reverse side)

Form approved.
Budget Bureau No. 1004-0136
Expires: December 31, 1991

APPLICATION FOR PERMIT TO DRILL OR DEEPEN

1a. TYPE OF WORK: DRILL [X] DEEPEN [ ]

b. TYPE OF WELL: OIL WELL [ ] GAS WELL [X] OTHER — SINGLE ZONE [X] MULTIPLE ZONE [ ]

2. NAME OF OPERATOR
Mitchell Energy Corporation

3. ADDRESS AND TELEPHONE NO.
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
1,980' FWL and 1,650' FNL (SE/NW) Unit F
At proposed prod. zone
1,980' FWL and 1,650' FNL (SE/NW)

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*
22 miles SE of Maljamar, NM

5. LEASE DESIGNATION AND SERIAL NO.: NM 57280
6. IF INDIAN, ALLOTTEE OR TRIBE NAME: N/A
7. UNIT AGREEMENT NAME: N/A
8. FARM OR LEASE NAME, WELL NO.: Tomahawk "28" Federal Com. #1
9. API WELL NO.: 30-025-31895 SDS
10. FIELD AND POOL, OR WILDCAT: South Salt Lake - Morrow
11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA: Sec. 28, T20S., R33E
12. COUNTY OR PARISH: Lea
13. STATE: NM

15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any)	16. NO. OF ACRES IN LEASE	17. NO. OF ACRES ASSIGNED TO THIS WELL
660	1,161.34	320
18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.	**19. PROPOSED DEPTH**	**20. ROTARY OR CABLE TOOLS**
N/A	14,500	Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.): 3,595 GR

22. APPROX. DATE WORK WILL START*: 12-15-92

23. PROPOSED CASING AND CEMENTING PROGRAM Secretary's Potash / R-111-P Potash

SIZE OF HOLE	GRADE, SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
26"	20"	94#	500'	TOC = Surface
17-1/2"	13-3/8"	68#	2550'	TOC = Surface
12-1/4"	8-5/8"	32#	5600'	TOC = 2,000' ✓
7-7/8"	5-1/2"	17 & 20#	TD	TOC = 10,000' ✓

The operator proposes to drill to a depth sufficient to test the Morrow formation for gas. 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

APPROVAL SUBJECT TO GENERAL REQUIREMENTS AND SPECIAL STIPULATIONS ATTACHED, and to OCD's R111P, as applicable.

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen, 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 Regulatory Affairs Specialist DATE 11-20-92

(This space for Federal or State office use)

PERMIT NO. _____ APPROVAL DATE _____

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

CONDITIONS OF APPROVAL, IF ANY:

APPROVED BY _____ TITLE _____ DATE _____

*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

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 or deepen 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 operator elects to initiate drilling operation on an oil and gas lease.

BURDEN HOURS STATEMENT

Public reporting burden for this form is estimated to average 30 minutes per response, including the time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding the burden estimate or any other aspect of this form to U.S. Department of the Interior, Bureau of Land Management, (Alternate) Bureau Clearance Officer, (WO-771), 1849 C Street, N.W., Washington, D.C. 20240, and the Office of Management and Budget, Paperwork Reduction Project (1004-0136), Washington, D.C. 20503.

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 operator elects to initiate drilling operations on an oil and gas lease.

*U.S. GPO: 1991-573-016/26050

DRILLING PROGRAM

Attached to Form 3160-3
Mitchell Energy Corporation
Tomahawk "28" Federal No. 1
1980' FWL & 1650' FNL
SE/NW, Sec. 28, T20S, R33E
Lea County, New Mexico

1. Geologic Name of Surface Formation:

   Permian

2. Estimated Tops of Important Geologic Markers:

Permian	Surface	Wolfcamp	10750'
Rustler	1450'	Strawn	12725'
Base Salt	2400'	Atoka	12900'
Yates	3210'	Morrow	13180'
Delaware	5610'	Total Depth	14500'
Bone Spring	8500'		

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

Upper Permian Sands	to 100'	Fresh Water
1st Bone Spring SS	9470'	Oil
Wolfcamp	10750'	Oil
Atoka	12900'	Gas
Morrow SS	13650'	Gas

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 20" casing at 500' and circulating cement back to surface. The potash zone will be protected by setting 13 3/8" casing at 2550' and circulating cement back to surface. Any zones above TD which contain commercial quantities of oil and/or gas will have cement circulated across them behind the 8 5/8" casing or by inserting a cementing stage tool into the 5-1/2" production casing which will be run at TD.

4. Casing Program:

Hole Size	Interval	OD Casing	Weight, Grade, Jt, Cond, Type
36"	0-40'	30"	Conductor, 0.3" wall thickness
26"	Surf-500'	20"	94#, K-55 St&C, New, R-3
17-1/2"	Surf-2550'	13-3/8"	68#, K-55, St&C, New, R-3
12-1/4"	Surf-5600'	8-5/8"	32#, K-55, LT&C, New, R-3
7-7/8"	Surf-TD	5-1/2"	17 & 20#, N-80, LT&C, New, R-3

MINIMUM BLOWOUT PREVENTER REQUIREMENTS

5,000 psi Working Pressure

5 MWP

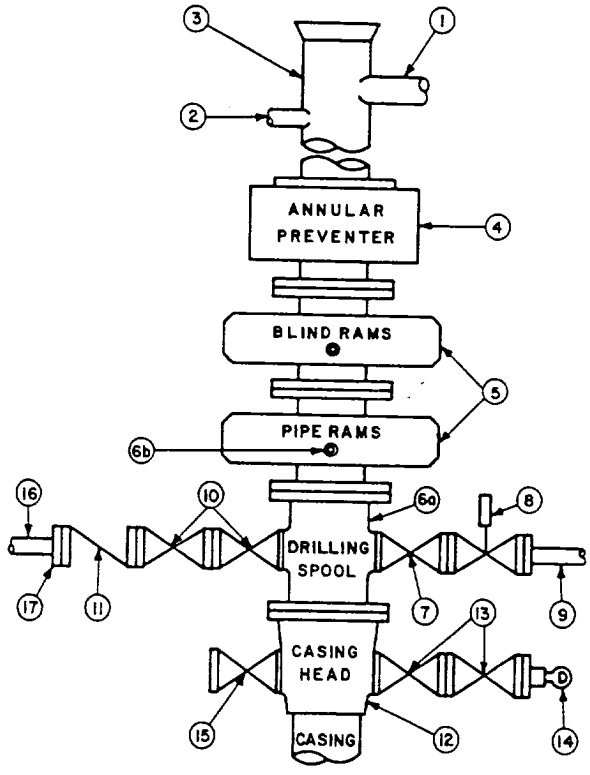
EXHIBIT 1
Tomahawk "28" Federal No. 1
Lea County, New Mexico

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 or		
6b	2" minimum kill line and 3" minimum choke line outlets in ram. (Alternate to 6a above.)		
7	Gate valve	3-1/8"	
8	Gate valve — power operated	3-1/8"	
9	Line to choke manifold		3"
10	Gate valves	2-1/16"	
11	Check valve	2-1/16"	
12	Casing head		
13	Gate valves	1-13/16"	
14	Pressure gauge with needle valve		
15	Gate Valve or Flanged Valve w/Control Plug	1-13/16"	
16	Kill line to rig mud pump manifold		2"

OPTIONAL			
17	Roadside connection to kill line		2"

CONFIGURATION A



CONTRACTOR'S OPTION TO FURNISH:

1. All equipment and connections above bradenhead or casinghead.
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, including control for hydraulically operated wing valve, to be located near drillers position with remote controls located away from rig floor.
4. Kelly equipped with Kelly cock and Hydril Kelly valve, or its approved equivalent.
5. Hydril Kelly valve or its approved equivalent and approved inside blow-out preventer to fit drill pipe in use on derrick floor at all times.
6. Kelly saver-sub equipped with rubber casing protector at all times.
7. Extra set of pipe rams to fit pipe being used on location.
8. Plug type blowout preventer tester.
9. Type RX ring gaskets in place of Type R.
10. Outlet for Halliburton on kill line.

MEC TO FURNISH:

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

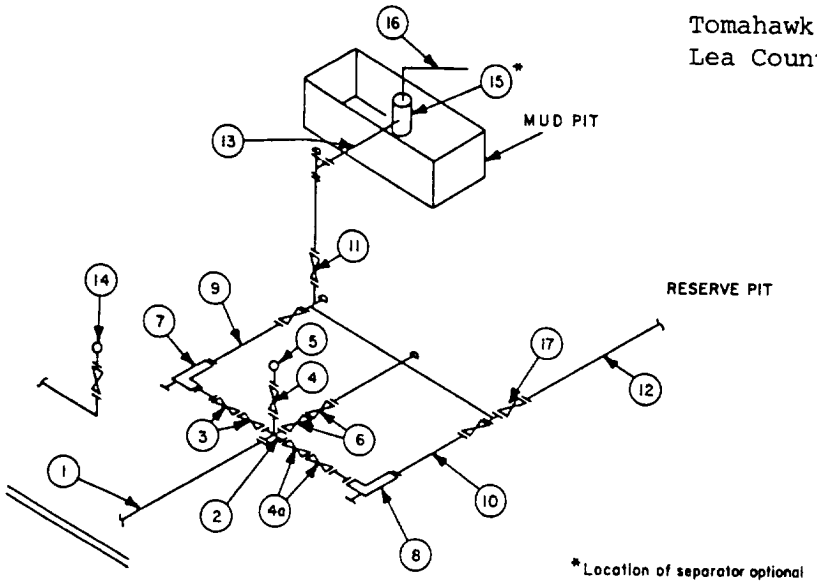
GENERAL NOTES:

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. 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. Approved 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.
12. Rig pumps ready for hook-up to BOP control manifold for emergency use only.

MINIMUM CHOKE MANIFOLD
3,000, 5,000 and 10,000 PSI Working Pressure

3 MWP - 5 MWP - 10 MWP

EXHIBIT 1-A
Tomahawk "28" Federal No. 1
Lea County, New Mexico



No.		MINIMUM REQUIREMENTS								
		3,000 MWP			5,000 MWP			10,000 MWP		
		I.D.	NOMINAL	RATING	I.D.	NOMINAL	RATING	I.D.	NOMINAL	RATING
1	Line from drilling spool		3"	3,000		3"	5,000		3"	10,000
2	Cross 3"x3"x3"x2"			3,000			5,000			
	Cross 3"x3"x3"x3"									10,000
3	Valves(1) Gate ☐ Plug ☐(2)	3-1/8"		3,000	3-1/8"		5,000	3-1/8"		10,000
4	Valve Gate ☐ Plug ☐(2)	1-13/16"		3,000	1-13/16"		5,000	1-13/16"		10,000
4a	Valves(1)	2-1/16"		3,000	2-1/16"		5,000	3-1/8"		10,000
5	Pressure Gauge			3,000			5,000			10,000
6	Valves Gate ☐ Plug ☐(2)	3-1/8"		3,000	3-1/8"		5,000	3-1/8"		10,000
7	Adjustable Choke(3)	2"		3,000	2"		5,000	2"		10,000
8	Adjustable Choke	1"		3,000	1"		5,000	2"		10,000
9	Line		3"	3,000		3"	5,000		3"	10,000
10	Line		2"	3,000		2"	5,000		3"	10,000
11	Valves Gate ☐ Plug ☐(2)	3-1/8"		3,000	3-1/8"		5,000	3-1/8"		10,000
12	Lines		3"	1,000		3"	1,000		3"	2,000
13	Lines		3"	1,000		3"	1,000		3"	2,000
14	Remote reading compound standpipe pressure gauge			3,000			5,000			10,000
15	Gas Separator		2'x5'			2'x5'			2'x5'	
16	Line		4"	1,000		4"	1,000		4"	2,000
17	Valves Gate ☐ Plug ☐(2)	3-1/8"		3,000	3-1/8"		5,000	3-1/8"		10,000

(1) Only one required in Class 3M.

(2) Gate valves only shall be used for Class 10M.

(3) Remote operated hydraulic choke required on 5,000 psi and 10,000 psi for drilling.

EQUIPMENT SPECIFICATIONS AND INSTALLATION INSTRUCTIONS

1. All connections in choke manifold **shall** be welded, studded, flanged or Cameron clamp of comparable rating.
2. All flanges **shall** be API 6B or 6BX and ring gaskets **shall** be API RX or BX. Use only BX for 10 MWP.
3. All lines **shall** be securely anchored.
4. Chokes **shall** be equipped with tungsten carbide seats and needles, and replacements **shall** be available.
5. Choke manifold pressure and standpipe pressure gauges **shall** be available at the choke manifold to assist in regulating chokes. As an alternate with automatic chokes, a choke manifold pressure gauge **shall** be located on the rig floor in conjunction with the standpipe pressure gauge.
6. Line from drilling spool to choke manifold should be as straight as possible. Lines downstream from chokes **shall** make turns by large bends or 90° bends using bull plugged tees.
7. Discharge lines from chokes, choke bypass and from top of gas separator should vent as far as practical from the well.

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
1000 Rio Brazos Rd., Aztec, NM 87410

State of New Mexico
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION

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

Form C-102
Revised 1-1-89

EXHIBIT 2
Tomahawk "28" Federal No.1
Lea County, New Mexico

WELL LOCATION AND ACREAGE DEDICATION PLAT

All Distances must be from the outer boundaries of the section

Operator			Lease		Well No.
MITCHELL ENERGY Corporation			TOMAHAWK 28 FEDERAL		#1
Unit Letter	Section	Township	Range		County
F	28	20S.	33E.	NMPM	LEA

Actual Footage Location of Well:
1650 feet from the NORTH line and 1980 feet from the WEST line

Ground level Elev.	Producing Formation	Pool	Dedicated Acreage:
3595	Morrow	South Salt Lake-Morrow	320 Acres

1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.

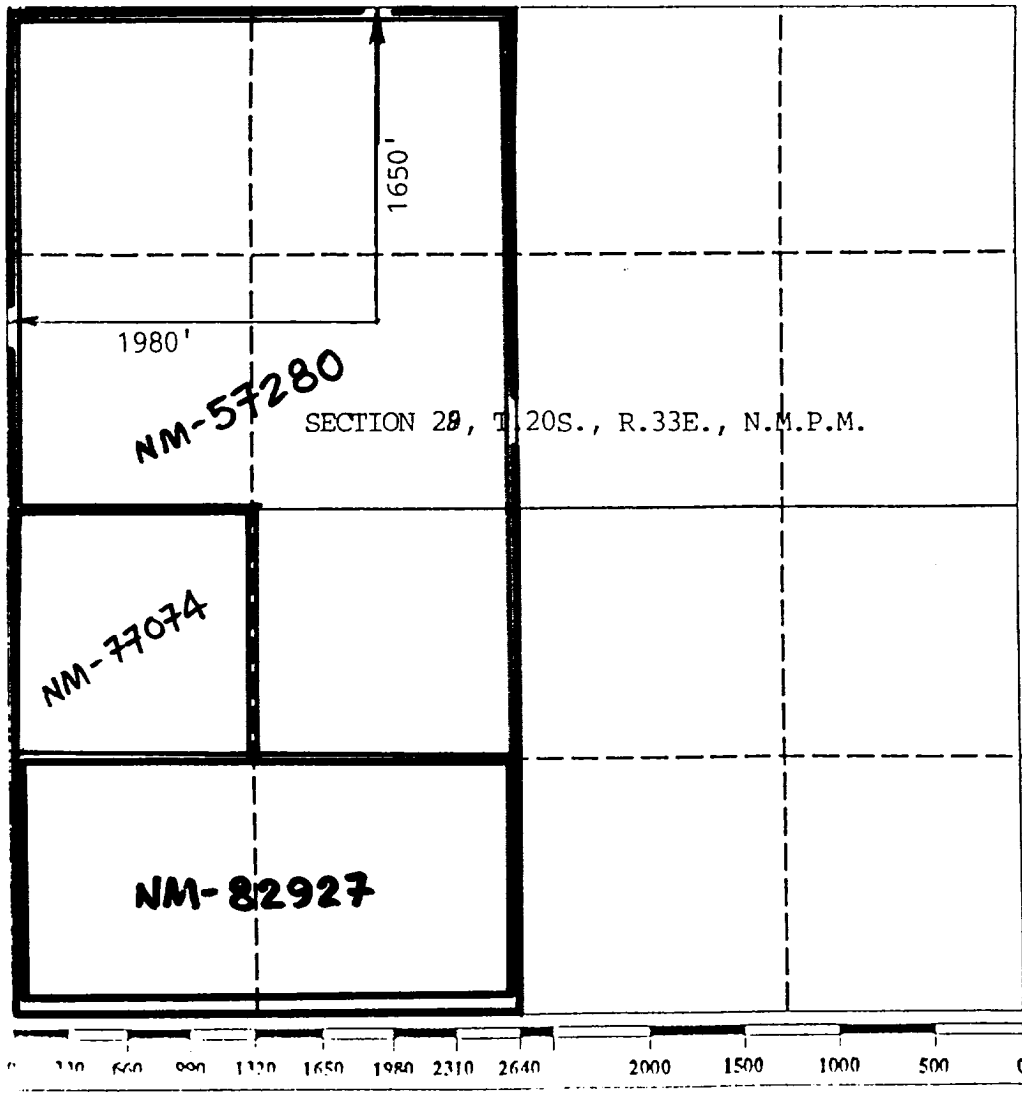
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).

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 pending OCD hearing on 1/21/92 (SJS)

If answer is "no" list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if neccessary. _____

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.



OPERATOR CERTIFICATION

I hereby certify that the information contained herein in 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: November 4, 1992

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 supervison, and that the same is true and correct to the best of my knowledge and belief.

Date Surveyed: 10/15/92
Signature & Seal of Professional Surveyor: GARY D. JACQUES, NEW MEXICO, 6290, REGISTERED PROFESSIONAL LAND SURVEYOR
Certificate No. 6290
ME282033