Form 3160-3
(November 1983)
(formerly 9-331C)

30-015-26625

SUBMIT IN PLICATE* (Other instructions on reverse side)

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

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

Drawer DD, Artesia, NM 88210

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

5. LEASE DESIGNATION AND SERIAL NO.: NM 83582

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

7. UNIT AGREEMENT NAME: N/A

8. FARM OR LEASE NAME: Angell Ranch Federal "6"

9. WELL NO.: 1

10. FIELD AND POOL, OR WILDCAT: Fadeaway Ridge-Delaware

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA: Sec. 6, T20S, R28E

12. COUNTY OR PARISH: Eddy

13. STATE: New Mexico

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

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

2. NAME OF OPERATOR: Mitchell Energy Corporation

3. ADDRESS OF OPERATOR: P.O. Box 4000, The Woodlands, TX 77387-4000

MAR 20 1991
O. C. D.
ARTESIA, OFFICE

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*)
At surface: 430' FNL & 1980' FEL (NW/NE) Unit B
At proposed prod. zone: 430' FNL & 1980' FEL (NW/NE)

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*: 12 miles north of Carlsbad, 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
430'	650.70	40
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	4,500	Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.): 3385 GL

22. APPROX. DATE WORK WILL START*: 3-15-91

23. PROPOSED CASING AND CEMENTING PROGRAM — Capitan Controlled Water Basin

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
17-1/2"	13-3/8"	54.5 #	400	445 sacks Class "C" CIRCULATE
12-1/4" (opt.)	8-5/8 "	24 #	2400	565 sacks lite + 250 sacks CIRCULATE
7-7/8"	5-1/2"	15.5 #	4500	250 sacks lite + 375 sacks "C"; See stips.

The operator proposes to drill to a depth sufficient to test the Delaware 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:

Part II-1
3-22-91
Number & API

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 TITLE Reg. Affairs Specialist DATE 2/21/91

(This space for Federal or State office use)

PERMIT NO. _____ APPROVAL DATE _____

APPROVED BY _____ TITLE _____ DATE 3-18-91

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.

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

Angell Ranch Fed. 6 #1
Eddy County, New Mexico

EXHIBIT 2

WELL LOCATION AND ACREAGE DEDICATION PLAT

All Distances must be from the outer boundaries of the section

Alternate

Operator	Lease	Well No.
Mitchell Energy	Angell Ranch Federal 6	#1

Unit Letter	Section	Township	Range	County
B	6	20S.	28E. NMPM	Eddy

Actual Footage Location of Well:
430 feet from the North line and 1980 feet from the East line

Ground level Elev.	Producing Formation	Pool	Dedicated Acreage:
3385	Delaware	Fadeaway Ridge	40 Acres

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

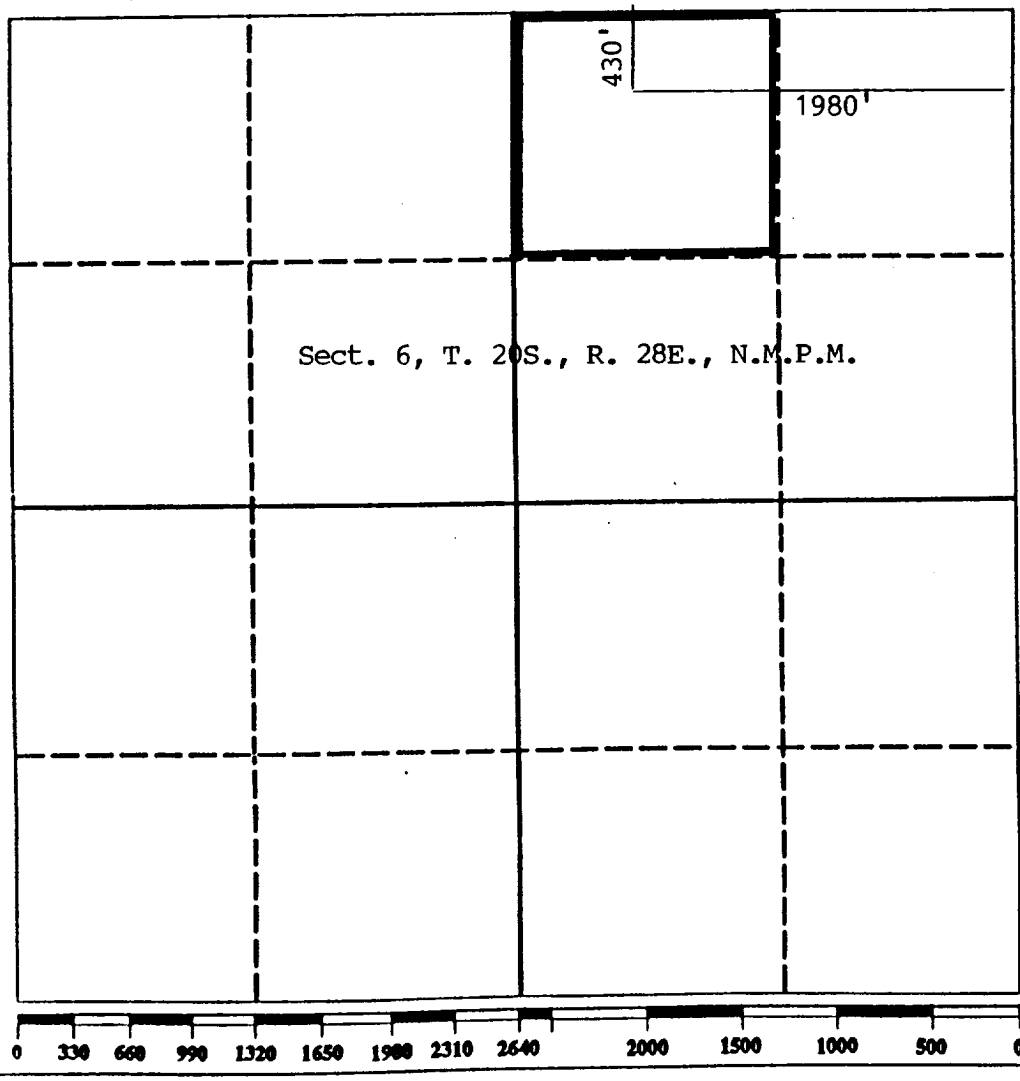
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).

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 _____

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.



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: 2/21/91

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

Date Surveyed: 12/19/90

Signature & Seal of Professional Surveyor: JOHN W. WEST NEW MEXICO 6290 REGISTERED LAND SURVEYOR PROFESSIONAL ENGINEER

Certificate No. 6290

Angell Ranch Fed. 6 #1
Eddy County, New Mexico

EXHIBIT #1

MINIMUM BLOWOUT PREVENTER REQUIREMENTS

3,000 psi Working Pressure

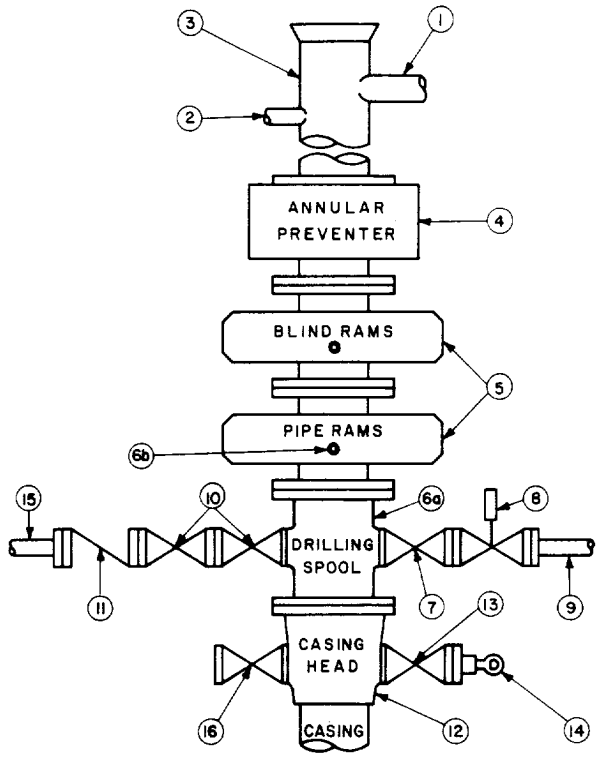
3 MWP

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" min. kill line and 3" min. choke line outlets in ram. (Alternate to 6a above.)		
7	Valve Gate ☐ Plug ☐	3-1/8"	
8	Gate valve—power operated	3-1/8"	
9	Line to choke manifold		3"
10	Valves Gate ☐ Plug ☐	2-1/16"	
11	Check valve	2-1/16"	
12	Casing head		
13	Valve Gate ☐ Plug ☐	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"	

CONFIGURATION A



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 prevventer 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.

Attachment to Exhibit #1
NOTES REGARDING THE BLOW OUT PREVENTERS

Angell Ranch Federal 6 #1
Sec. 6, T20S, R28E
Eddy County, New Mexico

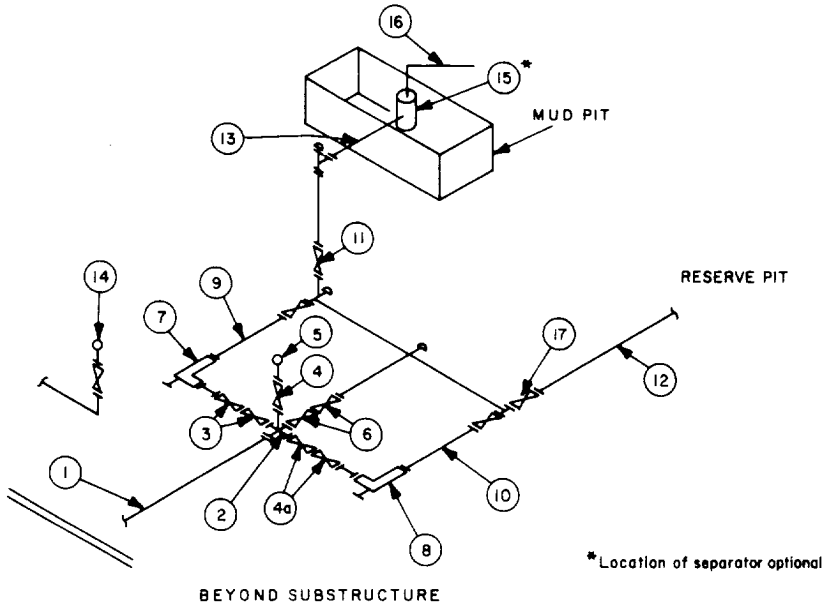
1. Drilling nipple to be so constructed that it can be removed without use of a welder through rotary table opening, with minimum I.D. equal to preventer bore.
2. Wear ring to be properly installed in head.
3. Blow out preventer and all fittings must be in good condition, 3000 psi W.P. minimum.
4. All fittings to be flanged.
5. Safety valve must be available on rig floor at all times with proper connections, valve to be full bore 3000 psi W.P. minimum.
6. All choke and fill lines to be securely anchored, especially ends of choke lines.
7. Equipment through which bit must pass shall be at least as large as the diameter of the casing being drilled through.
8. Kelly cock on kelly.
9. Extension wrenches and hand wheels to be properly installed.
10. Blow out preventer control to be located as close to driller's position as feasible.
11. Blow out preventer closing equipment to include minimum 40 gallon accumulator, two independent sources of pump power on each closing unit installation, and meet all API specifications.

Angell Ranch Fed. 6 #1
Eddy County, New Mexico

EXHIBIT #1A

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

3 MWP - 5 MWP - 10 MWP



BEYOND SUBSTRUCTURE

MINIMUM REQUIREMENTS										
		3,000 MWP			5,000 MWP			10,000 MWP		
No.		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.

DRILLING PROGRAM

Attached to Form 3160-3
Mitchell Energy Corporation
Angell Ranch Federal "6" #1
430' FNL & 1980' FEL
NW/NE Sec. 6, T20S, R28E
Eddy Co., NM

1. Geologic Name of Surface Formation:

   Permian

2. Estimated Tops of Important Geologic Markers:

Yates	1070'
Grayburg	2030'
San Andres	2560'
Delaware SS	2880'
Delaware SS Pay	3130'
Base Delaware SS	3699'
Bone Spring	4020'

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

Upper Permian Sands	100'	fresh water
Yates		oil
Delaware		oil

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 400' 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 behind the optional 8-5/8" csg or by cementing the 5-1/2" production csg back to surf.

4. Casing Program:

Hole Size	Interval	OD csg	Weight, Grade, Jt, Cond, Type
17-1/2"	0-400'	13-3/8"	54.5#, J-55, ST&C, New, R-3
12-1/4"	0-400'	8-5/8"	24# K-55,ST&C, New, R-3(opt.)
7-7/8"	0'-TD	5-1/2"	15.5# K-55, ST&C, New, R-3

Cement Program:

13-3/8" surface casing: Cemented to surface with 445 sx of Class "C" + 2% CaCl2 + 1/4#/sx Flocele.

8-5/8" intermediate casing (optional): Cemented to surface with 565 sx Class "C" Lite (35:65:6) + 10 #/sx salt + 1/4#/sx Flocele and 250 sx Class "C" + 2% CaCl2.

5-1/2" production casing: Cemented with 250 sx Class "C" Lite (35:65:6) + 2.4#/sx KC + 1/4#/sx Flocele and 375 sx Class "C" + 0.8% FL-20 + 0.2% FWC-2 + 1.6#/sx KCl + 1/4#/sx Flocele. This cement slurry is designed to bring TOC to surface.

5. Minimum Specifications for Pressure Control:

The blowout preventer equipment (BOP) shown in Exhibit #1 will consist of a double ram-type (3000 psi WP) preventer and a bag-type (hydril) preventer (3000 psi WP). Both units will be hydraulically operated and the ram-type preventer will be equipped with blind rams on top and 4-1/2" drill pipe rams on bottom. Both BOP's will be nippled up on the 13-3/8" surface csg and used continuously until TD is reached. All BOP's and accessory equipment will be tested to 1000 psi before drilling out of surface casing.

Pipe rams will be operationally checked each 24 hour period. Blind rams will be operationally checked on each trip out of the hole. These checks will be noted on the daily tour sheets. A 2" kill line and 3" choke line will be included in the drilling spool located below the ram-type BOP. Other accessories to the BOP equipment will include a kelly cock and floor safety valve (inside BOP) and choke lines and choke manifold with 3000 psi WP rating.

6. Types and Characteristics of the Proposed Mud System:

The well will be drilled to TD with a combination of brine, cut brine, and drispac/saltwater gel mud system. The applicable depths and properties of this system are as follows:

Depth	Type	Weight (ppg)	Viscosity (sec)	Waterloss (cc)
0-400'	Freshwater (spud)	8.5	40-45	N.C.
400-2400'	Brine Water	10.8	30	N.C.
2400-3000'	Brine Water	10.8	30	N.C.
3000-TD	Brine/Starch/Gel	10.2	34-38	10-15

Sufficient mud materials to maintain mud properties and meet minimum lost circulation and weight increase requirements will be kept at the wellsite at all times.

7. Auxiliary Well Control and Monitoring Equipment:

(A) A kelly cock will be kept in the drill string at all times.

(B) A full opening drill pipe stabbing valve (inside BOP) with proper drill pipe connections will be on the rig floor at all times.

(C) A mud logging unit complete with H2S detector will be continuously monitoring drilling penetration rate and hydrocarbon shows from 400' to TD.

8. Logging, Testing and Coring Program:

(A) Drillstem tests will be run on the basis of drilling shows. At least one test is anticipated.

(B) The electric logging program will consist of GR-Dual Laterolog-MSFL from TD to intermediate casing and GR-Compensated Neutron-Density from TD to surface. Sidewall cores on wireline will be taken as determined by shows.

(C) No conventional coring anticipated.

(D) Further testing procedures will be determined after the 5-1/2" production casing has been cemented at TD based on drill shows, log evaluation, and drill stem test results.

9. Abnormal Conditions, Pressures, Temperatures, & Potential Hazards:

No abnormal pressures or temperatures are anticipated. The estimated bottom hole temperature (BHT) at TD is 100°F and estimated bottom-hole pressure (BHP) is 1800 psig. No hydrogen sulfide or other hazardous gases or fluids have been encountered, reported or are known to exist at this depth in this area. Major loss circulation zones have been reported in offsetting wells in the Grayburg interval, hence the 8-5/8" optional csg. string is provided in the event losses become excessive.

10. Anticipated Starting Date and Duration of Operations:

Road location work will not begin until approval has been received from the BLM. The anticipated spud date is March 15, 1991. Once commenced, the drilling operation should be finished in approximately 10 days. If the well is productive, an additional 30 days will be required for completion and testing before a decision is made to install permanent facilities.

SURFACE USE AND OPERATING PLAN

Attached to Form 3160-3
Mitchell Energy Corporation
Angell Ranch Federal 6 #1
430' FNL & 1960' FEL
NW/NE, Sec. 6, T20S, R28E
Eddy Co., New Mexico

1. Existing Roads:

   A. The well site and elevation plat for the proposed well is shown in Exhibit #2. It was staked by John Jacquess Consulting Engineers, Artesia, N.M.

   B. All roads to the location are shown in Exhibit #3. The existing roads are illustrated in red and are adequate for travel during drilling and production operations. Upgrading of the road prior to drilling will be done where necessary as determined during the onsite inspection.

   C. Directions to Location: Go NE from Carlsbad NM on Hwy. 62/180 toward Hobbs. Turn right on North Loop (CR 604) and go 5.2 miles. Turn right on Illinois Camp Rd. (CR 206) and go 8.3 miles. Turn right (east) on Caliche road and go 0.7 miles to an old dry-hole location. Turn north and go 1500' to Angell Ranch Federal "6" #1 location.

   D. Routine grading and maintenance of existing roads will be conducted as necessary to maintain their condition as long as any operations continue on this lease.

2. Proposed Access Road:

   Exhibit #3 shows the 1,500 feet of new access road to be constructed and is illustrated in yellow. The road will be constructed as follows:

   A. The maximum width of the running surface will be 15'. The road will be crowned and ditched and constructed of 6" of rolled and compacted caliche. Ditches will be at a 3:1 slope and 4' wide. Water will be diverted where necessary to avoid ponding, prevent erosion, maintain good drainage, and to be consistent with local drainage patterns. BLM may specify any additions or changes during the onsite inspection.

B. The average grade will be less than 1%.

C. No turnouts are planned.

D. No culverts, cattleguard, gates, low-water crossings, or fence cuts are necessary.

E. Surfacing material will consist of native caliche obtained from a BLM approved caliche pit. Any additional materials that are required will be purchased from the dirt contractor.

3. Location of Existing Wells:

Exhibit #4 shows all existing wells within a one-mile radius of this well. As shown on this plat there are seventeen abandoned oil/gas wells and one Delaware oil well. A list of these wells is shown as the attachment to Exhibit 4. There are no disposal, drilling, SI, injection, or observation wells within a one-mile radius.

4. Location of Existing and/or Proposed Facilities:

A. There are no existing facilities or pipelines of any kind owned or controlled by Mitchell Energy on this lease or within a one-mile radius of the proposed well.

B. If the well is productive, contemplated facilities will be as follows:

(1) Production facilities are shown in Exhibit #5 and will be located on the caliche drilling pad and within the 250' x 200' area of the pad.

(2) The tank battery and facilities including all flowlines and piping will be installed according to API specifications.

(3) Any additional caliche which is required for firewalls, etc. will be obtained from a BLM-approved caliche pit. Any additional construction materials will be purchased from contractors.

(4) If productive of oil an electric, gas or LPG fueled, self-contained pumping unit may be required.

C. If the well is productive, rehabilitation plans are as follows:

(1) The reserve pit will be backfilled after the contents of the pit are dry (within 120 days after the well is completed).

(2) Caliche from unused portions of the drill pad will be removed. Topsoil removed from the drill site will be used to recontour the pit area and any unused portions of the drill pad to the original natural level, as nearly as possible, and reseeded as per BLM specifications.

5. Location and Type of Water Supply:

The well will be drilled with a combination brine and fresh water mud system as outlined in the drilling program. The brine water will be obtained from commercial water stations in the area and hauled to the location by transport truck over the existing and proposed access roads shown in Exhibit #3. No water well will be drilled on this lease. The fresh water will be obtained by transport truck from a water station in the area.

6. Source of Construction Materials:

All caliche required from construction of the drill pad and the proposed new access road (approximately 1500 cubic yards) will be obtained from a BLM - approved caliche pit. All roads and pads will be constructed of 6" of rolled and compacted caliche.

7. Methods of Handling Water Disposal:

A. Drill cuttings not retained for evaluation purposes will be disposed into the reserve pit.

B. Drilling fluids will be contained in steel mud tanks. The reserve pit will contain any excess drilling fluid or flow from the well during drilling, cementing, and completion operations. The reserve pit will be an eathen pit, approximately 120' x 100' x 6' deep and fenced on three sides prior to drilling. It will be fenced on the fourth side immediately following rig removal. The reserve pit will be plastic-lined (5-7 mil thickness) to minimize loss of drilling fluids and saturation of the ground with the brine water.

C. Water produced from the well during completion may be disposed into the reserve pit or a steel tank (depending on the rates). After the well is permanently placed on production, produced water will be collected in tanks (fiberglass or steel) until hauled by transport to an approved disposal system; produced oil will be collected in steel tanks until sold.

D. A portable chemical toilet will be provided on the location for human waste during the drilling and completion operations.

E. Garbage and trash produced during drilling or completion operations will be buried in a separate trash pit and covered with a minimum of 24 inches of dirt. All waste material will be contained to prevent scattering by the wind. All water and fluids will be disposed of into the reserve pit. Salts and other chemicals produced during drilling or testing will be disposed into the reserve pit. No toxic waste or hazardous chemicals will be produced by this operation.

F. After the rig is moved out and the well is either completed or abandoned, all waste materials will be cleaned-up within 30 days. No adverse materials will be left on the location. The reserve pit will be completely fenced and kept closed until it has dried. When the reserve pit is dry enough to breakout and fill and, as weather permits, the unused portion of the well site will be leveled and reseeded as per BLM specifications. Only that part of the pad required for production facilities will be kept in use. In the event of a dry hole, only a dry hole marker will remain.

8. Ancillary Facilities:

No airstrip, campsite, or other facilities will be built as a result of the operations on this well.

9. Well Site Layout:

A. The drill pad layout, with elevations staked by Jacquess Engineers, is shown in Exhibit #6. Dimensions of the pad and pits and location of major rig components are shown. Topsoil, if available, will be stockpiled per BLM specifications as determined at the on-site inspection. Because the pad is almost level, no major cuts will be required.

B. Exhibit #6 shows the planned orientation for the rig and associated drilling equipment, reserve pit, trash pit, pipe racks, turnaround and parking areas, and access road. No permanent living facilities are planned but a temporary foreman/toolpusher's trailer will be on location during the drilling operations.

C. The reserve pit will be lined with a high-quality plastic sheeting (5-7 mil thickness).

10. Plans for Restoration of the Surface:

A. Upon completion of the proposed operations, if the well is to be abandoned, the caliche will be removed from the location and road and returned to the pit from which it was taken. The pit area, after allowing to dry, will be broken out and leveled. The original top soil will be returned to the entire location which will be leveled and contoured to as nearly the original topography as possible. All trash, garbage and pit lining will be buried or hauled away in order to leave the location in an aesthetically pleasing condition. All pits will be filled and the location leveled within 120 days after abandonment.

B. The distributed area will be revegetated by reseeding during the proper growing season with a seed mixture of native grasses as recommended by the BLM.

C. Three sides of the reserve pit will be fenced prior to and during drilling operations. At the time that the rig is removed, the reserve pit will be fenced on the rig (fourth) side to prevent livestock or wildlife from being entrapped. The fencing will remain in place until the pit area is cleaned-up and leveled. No oil will be left on the surface of the fluid in the pit.

D. Upon completion of the proposed operations, if the well is completed, the reserve pit area will be treated as outlined above within the same prescribed time. The caliche from any area of the original drillsite not needed for production operations or facilities will be removed and used for construction of thicker pads or firewalls for the tank battery installation. Any additional caliche required for facilities will be obtained from a BLM - approved caliche pit. Topsoil removed from the drill site will be used to recontour the pit area and any unused portions of the drill pad to the original natural level and reseeded as per BLM specifications.

11. Surface Ownership:

The wellsite and lease is located entirely on Federal surface.

12. Other Information:

A. The area around the well site is grassland and the top soil is sandy. The vegetation is native scrub grasses with abundant oakbrush, sagebrush, yucca, and prickly pear.

B. There is no permanent or live water in the immediate area.

C. There are no houses or other permanent structures within a one-mile radius of the well site.

D. There is no evidence of any archaeological, historical, or cultural sites in the vicinity of the location.

13. Lessee's and Operator's Representative:

The Mitchell Energy Corporation representative responsible for assuring compliance with the surface use plan is as follows:

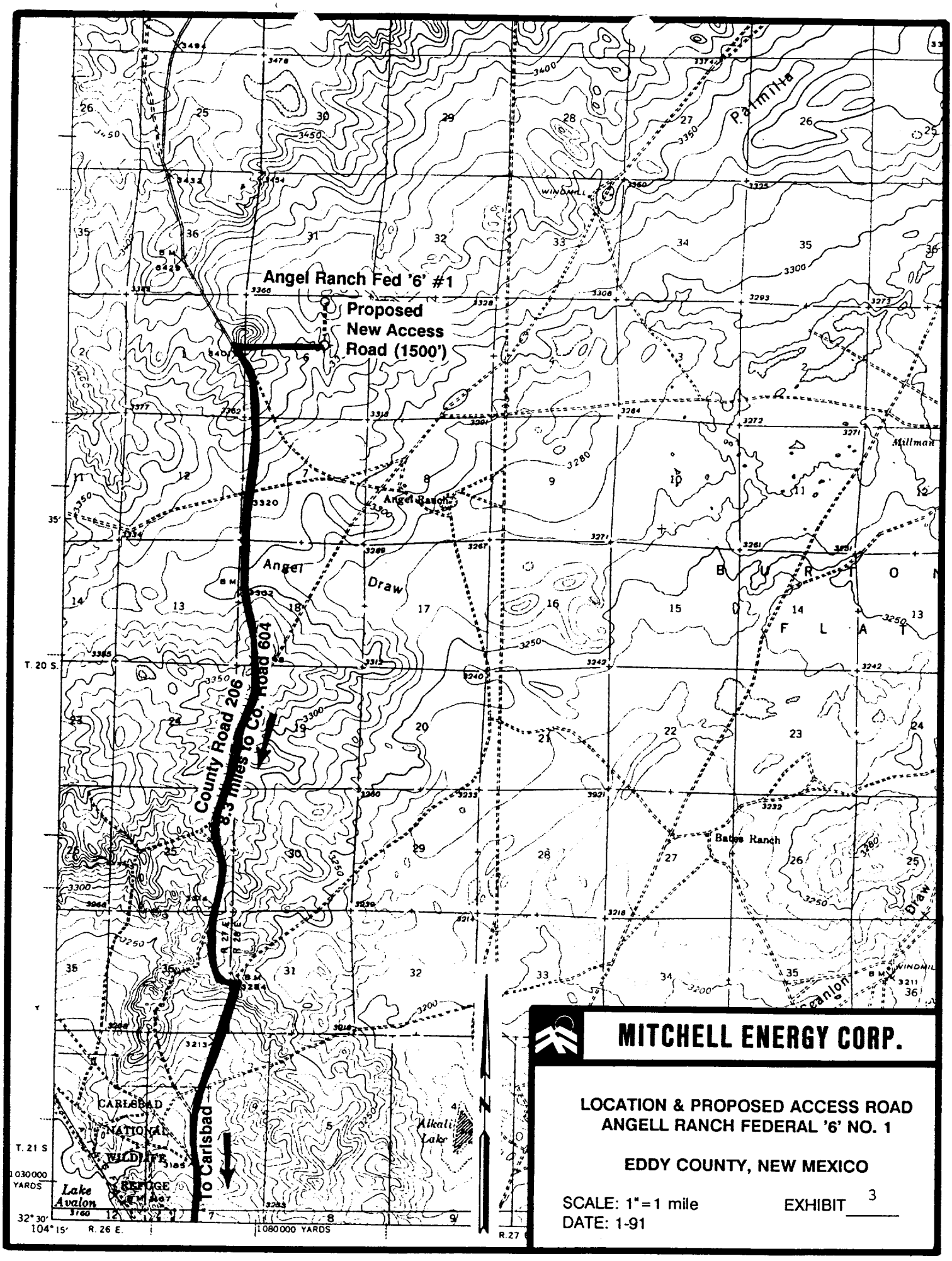
George W. Tullos, District Drilling Manager
Mitchell Energy Corp.
400 W. Illinois, Suite 1000
Midland, Texas 79701
Phone: 915/682-5396 (office)
915/683-9747 (home)

Certification:

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drillsite and access route; that I am familiar with the conditions which currently exist; that the statements made in this plan are to the best of my knowledge, true and correct; and the work associated with the operations proposed herein will be performed by Mitchell Energy Corporation and its contractors and subcontractors in conformity with this plan and the terms and conditions which it is approved. This statement is subject to the provisions of 18 U.S.C. 1001 for the filing of a false statement.

Date: 2/26/91

Signed: Joe A. Wanamaker
Vice President and
General Manager



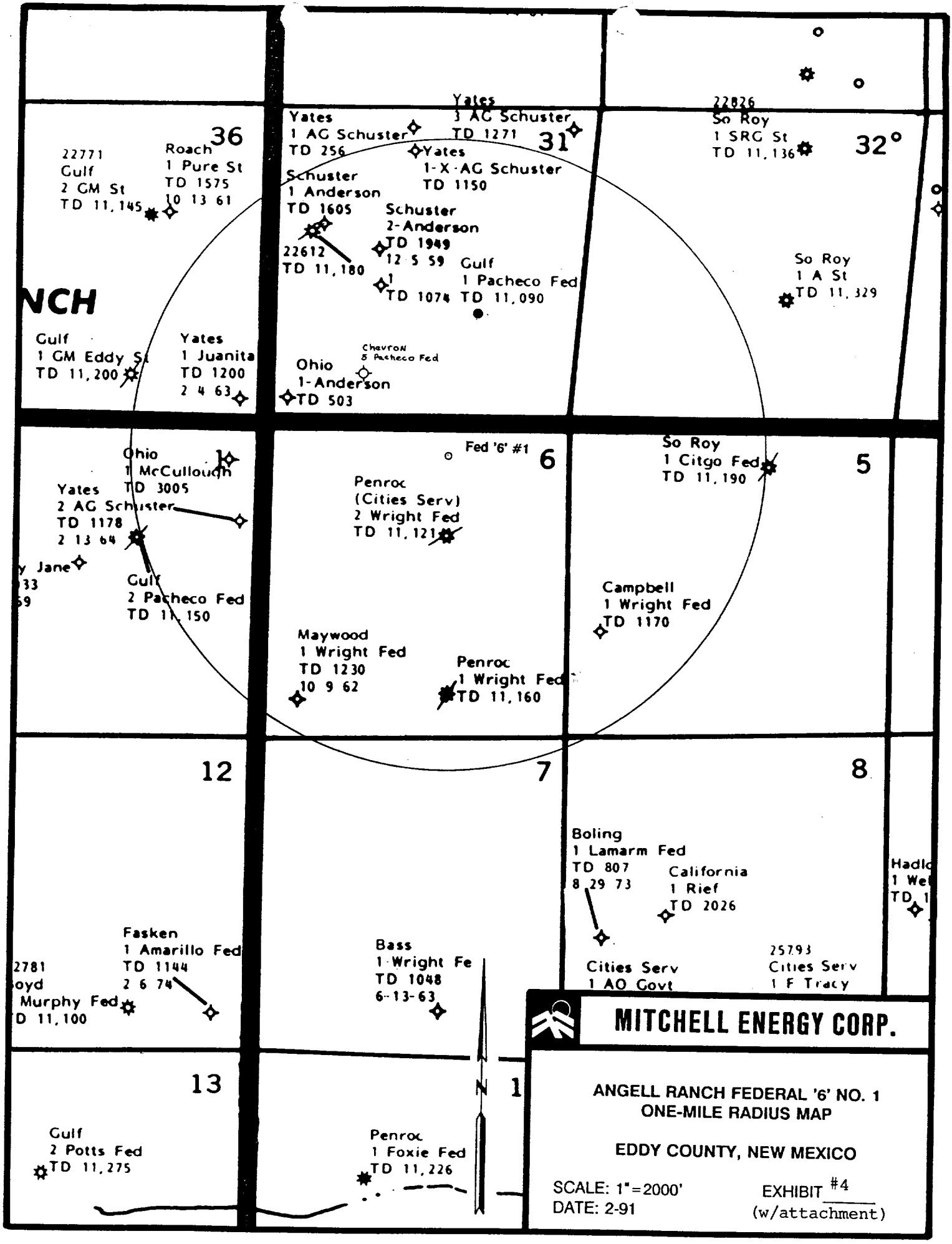
MITCHELL ENERGY CORP.

LOCATION & PROPOSED ACCESS ROAD
ANGELL RANCH FEDERAL '6' NO. 1

EDDY COUNTY, NEW MEXICO

SCALE: 1"=1 mile
DATE: 1-91

EXHIBIT 3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22771
Gulf
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TD 11,145
Roach
1 Pure St
TD 1575
10 13 61
NCH
Gulf
1 GM Eddy St
TD 11,200
Yates
1 Juanita
TD 1200
2 4 63
31
Yates
1 AG Schuster
TD 256
Yates
3 AG Schuster
TD 1271
Yates
1-X-AG Schuster
TD 1150
Schuster
1 Anderson
TD 1605
22612
TD 11,180
Schuster
2-Anderson
TD 1949
12 5 59
Gulf
1 Pacheco Fed
TD 11,090
TD 1074
Chevron
5 Pacheco Fed
Ohio
1-Anderson
TD 503
22826
So Roy
1 SRC St
TD 11,136
32°
So Roy
1 A St
TD 11,329
Ohio
1 McCullough
TD 3005
Yates
2 AG Schuster
TD 1178
2 13 64
Gulf
2 Pacheco Fed
TD 11,150
Fed '6' #1
6
Penroc
(Cities Serv)
2 Wright Fed
TD 11,121
Maywood
1 Wright Fed
TD 1230
10 9 62
Penroc
1 Wright Fed
TD 11,160
So Roy
1 Citgo Fed
TD 11,190
5
Campbell
1 Wright Fed
TD 1170
12
Fasken
1 Amarillo Fed
TD 1144
2 6 74
Murphy Fed
TD 11,100
7
Bass
1 Wright Fe
TD 1048
6-13-63
8
Boling
1 Lamarm Fed
TD 807
8 29 73
California
1 Rief
TD 2026
Cities Serv
1 AO Govt
25793
Cities Serv
1 F Tracy
13
Gulf
2 Potts Fed
TD 11,275
Penroc
1 Foxie Fed
TD 11,226
N
1
MITCHELL ENERGY CORP.
ANGELL RANCH FEDERAL '6' NO. 1
ONE-MILE RADIUS MAP
EDDY COUNTY, NEW MEXICO
SCALE: 1"=2000'
DATE: 2-91
EXHIBIT #4
(w/attachment)

Attachment to Exhibit #4

STATUS OF WELLS WITHIN ONE-MILE RADUIS

ANGEL RANCH fED. "6" #1
Sec. 6-20S-28E
Eddy County, New Mexico

Sec. 36-19S-27E

Gulf Oil Corp.	#1-Eddy "GM" St.	(660' FSL\1980' FEL)	Morrow Gas P&A
John A. Yates	#1-Francis Jaunita	(330' FSL\382' FEL)	D&A

Sec. 31-19s-28E

Gulf Oil Corp.	#3-Pacheco Fed.	(2280' FNL\ 660' FWL)	Morrow Gas P&A
Gulf Oil Corp.	#1-Pacheco Fed.	(1980' FSL\1980' FEL)	Delaware Oil
W. L. Lakey	#1-M. T. Anderson	(2310' FSL\3630' FEL)	D&A
Schuster & Schuster	#2-Anderson	(2310' FNL\1650' FWL)	D&A
Schuster & Wessinger	#1-Anderson	(1980' FNL\ 660' FWL)	D&A
Ohio	#1-Anderson	(330' FSL\ 330' FWL)	D&A
Chevron USA, Inc.	#5-Pacheco Fed.	(760' FSL\1580' FWL)	D&A

Sec. 1-20S-27E

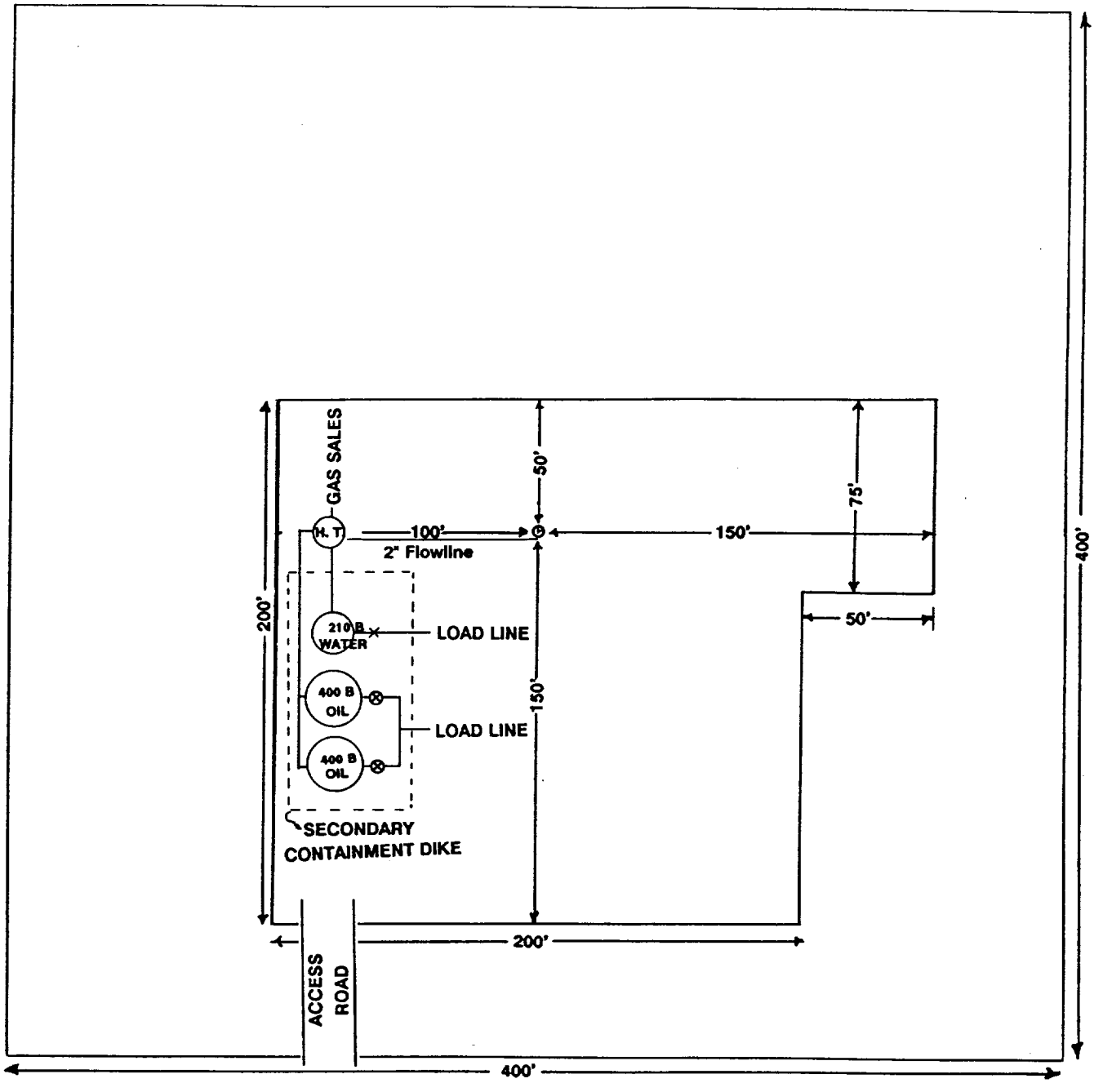
Gulf Oil Corp.	#2-Pacheco	(1980' FNL\1980' FEL)	Morrow Gas P&A
Yates Pet. Co.	#2- A.G Schuster	(660' FNL\ 330' FEL)	D&A
Ohio	#1-McCullough	(330' FNL\ 330' FEL)	D&A

Sec. 5-20S-28E

E.P. Campbell	#1-Wright Fed.	(1980' FSL\ 660' FWL)	D&A
Southland Royalty	#1-Citgo"5"	(2130' FEL\ 660' FNL)	Und. Strn Gas P&A Und. Wfmp Gas P&A

Sec. 6-20S-28E

Penroc Oil Corp.	#1-Wright Fed.	(660' FSL\1980' FEL)	Morrow Gas P&A
Penroc Oil Corp.	#2-Wright Fed.	(1980' FNL\1980' FEL)	Morrow Gas P&A
Maywood Oil Co.	#1-Wright Fed.	(660' FSL\ 660' FWL)	D&A



⊗ SEALED VALVE

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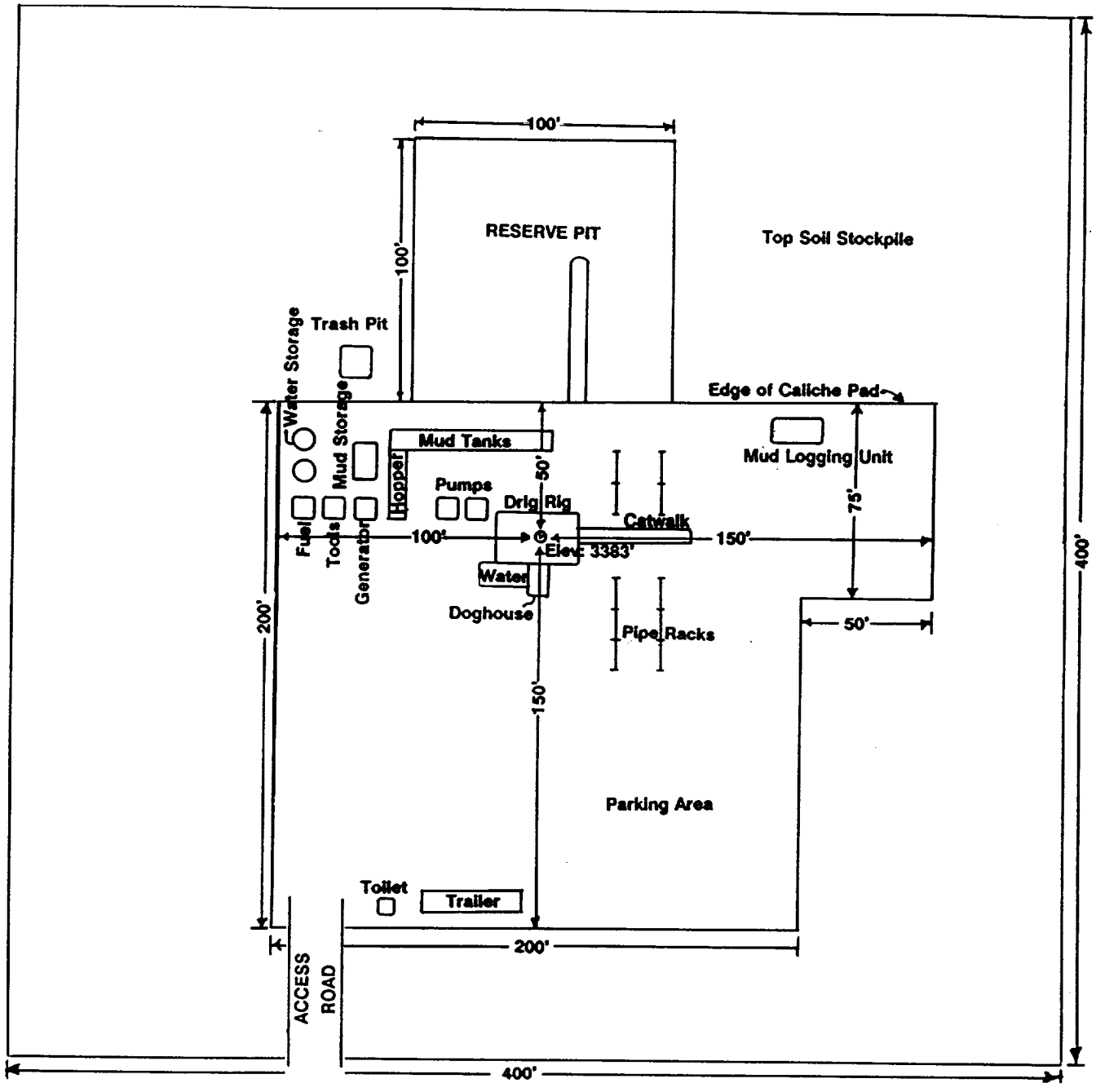
MITCHELL ENERGY CORPORATION

PRODUCTION FACILITIES LAYOUT FOR
ANGELL RANCH FEDERAL '6' NO. 1

EDDY COUNTY, NEW MEXICO

SCALE: 1"=60'
DATE: 1-91

EXHIBIT #5



MITCHELL ENERGY CORP.

DRILLING RIG LAYOUT AND ELEVATIONS
ANGELL RANCH FEDERAL '6' NO. 1

EDDY COUNTY, NEW MEXICO

SCALE: 1"=60'
DATE: 1-91

EXHIBIT #6