August 2, 1993

Mr. Mike Stogner
New Mexico Oil Conservation Division
310 Old Santa Fe Trail
Santa Fe, New Mexico 87504

Re: ***Application of Mitchell Energy Corporation for Unorthodox Well Location***
Apache "24" Fed. Com. Well No. 2
Unit A, Section 24, Township 22 South, Range 30 East
Eddy County, New Mexico

Dear Mr. Stogner:

Mitchell Energy Corporation hereby requests administrative approval of an unorthodox location for the referenced well pursuant to Rule 104 F. The proposed location is 660 feet from the north and east lines of Section 24. The well will be drilled to a depth sufficient to test the Morrow formation, with a planned total depth of 14,550'. An unorthodox location is being requested due to potash restrictions, as the subject lease is in the vicinity of Western Ag Minerals Company's Nash Draw mine. By letter dated June 1, 1993 (copy attached) Western Ag advised Mitchell that it will not protest this location.

A plat showing the ownership of all tracts offsetting the spacing unit for this well is attached. A copy of this application has been sent to each of these parties. Also attached is a copy of the Application for Permit to Drill which was submitted to the Bureau of Land Management on July 26.

If you have any questions, please call me at 713-377-5818.

Sincerely,

MITCHELL ENERGY CORPORATION

Mark N. Stephenson
Manager
Production-Regulatory Affairs

MNS:mtb
apachecm.mns

cc: NMOCD - Artesia, NM
All Parties on Attached List - Via Certified Mail

enc.

MITCHELL ENERGY CORPORATION 2001 TIMBERLOCH PLACE
P.O. BOX 4000, THE WOODLANDS, TEXAS 77387-4000 713/377-5500
A subsidiary of Mitchell Energy & Development Corp.

SERVICE LIST

APPLICATION OF MITCHELL ENERGY CORPORATION
FOR UNORTHODOX WELL LOCATION
APACHE "24" FEDERAL COM. WELL NO. 2
EDDY COUNTY, NEW MEXICO

Arco Oil & Gas Company
Attn: John Lodge
P.O. Box 1610
Midland, Texas 79702

Perry R. Bass, Inc.
Lee M. Bass, Inc.
Sid R. Bass, Inc.
c/o Bass Enterprises Production Co.
Attn: Jens Hansen
201 Main Street
Ft. Worth, Texas 76102-3105

Dept. of Energy
Waste Isolation Pilot Project
P.O. Box 2078
Carlsbad, New Mexico 88221

Edward R. Hudson
1st National Building
Ft. Worth, Texas 76102

Francis Hudson
Delmar H. Lewis
616 Texas Street
Ft. Worth, Texas 76102

Phillips Petroleum Company
Attn: Paul Hall
4001 Penbrook
Odessa, Texas 79762

Kenneth Mark Smith,
William Creed Smith & Lora Nell Smith
P.O. Box 727
Lovington, New Mexico 88260

Green London, Indiv. & Georgia Lou London Bergsten,
Trustee of the Margaret S. London Test. Trust
2303 Inez Drive NE
Alberquerque, New Mexico 87101

WESTERN
AG-MINERALS
COMPANY

P.O. Box 511, Carlsbad, New Mexico 88220 • (505) 885-3175 • FAX (505) 885-1772

June 1, 1993

Mark Stephenson-MND-3S
Mitchell Energy Corporation
P.O. Box 4000
The Woodlands, Texas 77387-4000

Re: Apache "24" Federal Well No. 2
Eddy County, New Mexico

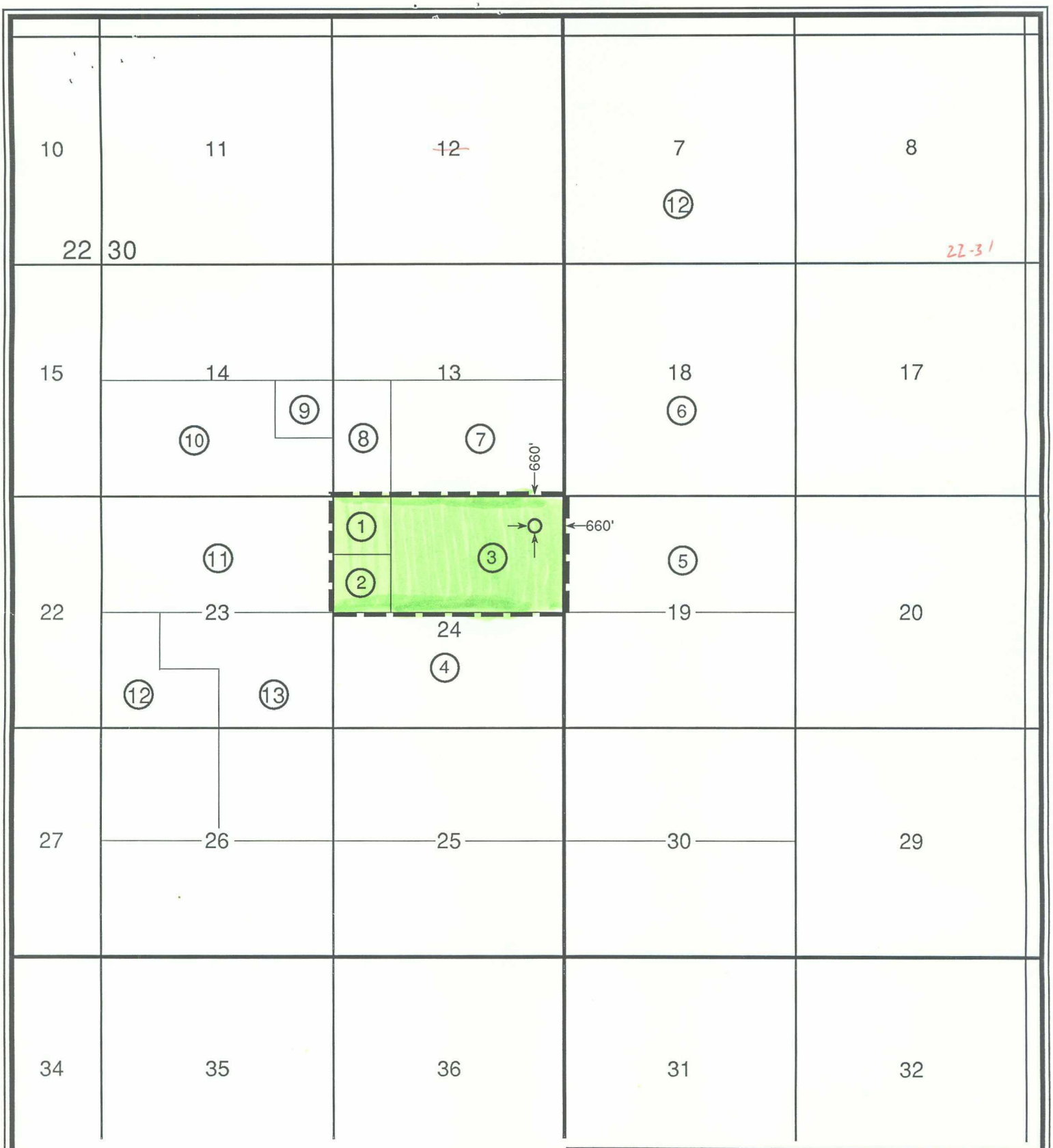
Dear Mr. Stephenson:

Western Ag-Minerals Company will not protest the location on Apache "24" Federal Well No.2. The well location, 660' FNL and 660' FEL, section 24, T22S R30E, does not interfere with the "Life of Mine Reserves" at Nash Draw and allows for the necessary half mile buffer for a well of this type.

Sincerely,

WESTERN AG-MINERALS COMPANY

Ben Zimmerly
Mining Engineer



LEGEND

Plat Tracts

1,8,11,13	Arco Oil & Gas Company
2	Keneth Mark Smith et al
3,4,7	Mitchell Energy Corporation
5,6	Department of Energy (WIPP)
1,8,11,12,13	Perry R. Bass, Inc. et al
9	Phillips Petroleum Company
10	Edward R. Hudson et al

Mitchell Energy Corporation
P.O. BOX 4000 ¥THE WOODLANDS, TEXAS 77387-4000

Offset Operators for Unorthodox Well Location
Apache "24" Fed Com Well No. 2
Sec. 24, T22S, R30E
Eddy County, New Mexico

DATE: 7-23-93

SCALE: 1"=3000'

VIA FEDERAL EXPRESS

July 27, 1993

United States Department of
the Interior
Bureau of Land Management
620 East Greene Street
Carlsbad, NM 88220

Re: APPLICATION FOR PERMIT TO DRILL
APACHE "24" FED. COM. NO. 2
Eddy County, New Mexico

Gentlemen:

Enclosed you will find an original and five (5) copies of Form 3160-3 and various other information to aid you in permitting the subject well.

Thank you in advance for your prompt attention to this matter and if I can be of any further help, kindly advise.

Very truly yours,

MITCHELL ENERGY CORPORATION

Kimberly M. O'Neal
Regulatory Assistant

KMO:mw
3gfed.lt

Enclosures

bcc: Mark Whitley - MND-4N
Ed Earles - Midland
Jack Stanley - Midland
George Tullos - Midland
Bennie Davis - 2002-5
Carol Osborne - MND-3N
Betty Porter - MND-1N
Susan Norman - OB3
Central Records - MND-2N

Form 3160-3
(December 1990)

SUBMIT IN TRIPLICATE*
(Other instructions on reverse side)

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

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

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, Texas 77387-4000

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*)
At surface
660' FNL and 660' FEL (NE/NE)
At proposed prod. zone
660' FNL and 660' FEL (NE/NE)

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*
23 miles east of Carlsbad, NM

5. LEASE DESIGNATION AND SERIAL NO.
NM 89051

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

7. UNIT AGREEMENT NAME
N/A

8. FARM OR LEASE NAME, WELL NO.
Apache "24" Fed Com No. 2

9. API WELL NO.

10. FIELD AND POOL, OR WILDCAT
Wildcat

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
Sec. 24, T22S, R30E

12. COUNTY OR PARISH: Eddy
13. STATE: NM

15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any)	660'	16. NO. OF ACRES IN LEASE	1,040
17. NO. OF ACRES ASSIGNED TO THIS WELL	320		
18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.	2100'	19. PROPOSED DEPTH	15,750
20. ROTARY OR CABLE TOOLS	Rotary		

21. ELEVATIONS (Show whether DF, RT, GR, etc.)
3380' GR

22. APPROX. DATE WORK WILL START*
10-01-93

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	GRADE, SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
17-1/2"	13-3/8", K	54.5#	600'	850 sx "C" to Surface
12-1/4"	9-5/8", K,N,S	40#	8100'	2375 sx Lite +500 sx "C"-TOC = Surf ~~DV @ 3800'~~
8-3/4"	7" N,S	26#	12300'	350 sx Lite + 300 sx "H"-TOC - 7800'
6"	4-1/2", S	13.5#	TD	600 sx "H" to TOL

The operator proposes to drill to a depth sufficient to test the Devonian formation for gas. If productive, 4½" 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 Equipment
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
Exhibit #7 - Cultural Resources Examination

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 TITLE George Mullen
Regulatory Affairs Specialist DATE 07-23-93

(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 jurisdiction.

DRILLING PROGRAM

Attached to Form 3160-3
Mitchell Energy Corporation
Apache "24" Fed Com No. 2
660' FNL & 660' FEL
NE/NE, Sec. 24, T22S, R30E
Eddy Co., New Mexico

1. Geologic Name of Surface Formation:

   Permian

2. Estimated Tops of Important Geologic Markers:

Permian	Surface	Strawn	12590'
Top Salt	630'	Atoka	12840'
Base Salt	3660'	Morrow	13090'
Delaware	3945'	Mississippian	14780'
Bone Spring	7760'	Woodford	15315'
Wolfcamp	11280'	Devonian	15475'
		Total Depth	15750'

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

Upper Permian Sands	to 100'	Fresh water
Delaware	4500'- 7500'	Oil
Wolfcamp	11,280'	Gas/Cond
Strawn	12,590'	Gas/Cond
Atoka "AC"	12,940'	Gas
Atoka Bank	13,020'	Gas
Morrow "B" SS	13,770'	Gas
Devonian	15,475'	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 13-3/8" casing at 600' and circulating cement back to surface. All wells on the Apache leases in Sec. 13 and 25 have experienced moderate to severe loss circulation in the Delaware/Upper Bone Spring interval from 4000' to 8000'. One well in Sec. 13 also experienced a high-pressure Wolfcamp gas zone requiring 13.7 ppg mud to control. Losses in the Delaware/Upper Bone Spring interval created a serious well control situation while dealing with this high-pressure Wolfcamp zone. In order to eliminate this problem while drilling this well, it is proposed to set the 9-5/8" casing at 8100' (instead of 3800') approximately 340' below the top of the Bone Spring. The loss zone and Delaware productive interval will be covered in the first stage of the cement job up to 3800'. The potash will be protected by placing a cementing stage tool at 3800' and circulating cement to surface in the second stage of the cement job. Any zones above TD which contain commercial quantities of oil and/or gas will have cement circulated across them behind the 7" intermediate casing or the 4-1/2" liner, which will be cemented on bottom.

4. Casing Program:

Hole Size	Interval	OD Casing	Weight, Grade, Jt, Cond, Type
26"	0-40'	20"	Conductor, 0.3" wall thickness
17-1/2"	Surf-600'	13-3/8"	54.5#, K-55, ST&C, New, R-3
12-1/4"	Surf-8100'	9-5/8"	40#, K-55, N-80, S-95, LT&C, New, R-3
8-3/4"	Surf-12300'	7"	26#, N-80, S-95, LT&C, New, R-3
6"	12000'-TD	4-1/2" (liner)	13.5#, S-95, FJ, New, R-3

Cement Program:

13-3/8" Surface Casing @ 600': Cemented to surface with 600 sacks of Class "C" + 4% gel + 2% $CaCl_2$ and 250 sx Class "C" + 2% $CaCl_2$.

9-5/8" Intermediate Casing @ 8100': Cemented to surface with DV at 3800'. First Stage: Cemented with 1375 sx 50/50 Poz/H + 3#/sx KCl + 0.7% FLA and 250 sx Class H + 3#/sx KCl + 0.7% FLA. Second Stage: Cemented with 1000 sx Lite + 15#/sx salt + 1/4#/sx CF and 250 sx Class C Neat.

7" Intermediate Casing @ 12,300': Cemented with 350 sacks Lite and 300 sx Class "H" + 3#/sx KCl + 0.7% FLA. TOC @ 7800'.

4-1/2" Liner @ TD: Cemented with 600 sacks Class H + 4% TF-4 + 0.6% CF-9 + 0.6% Flo-LOK-1 + 5#/sx KCl. Cemented to TOL.

5. Minimum Specifications for Pressure Control:

The blowout preventer equipment (BOP) shown in Exhibit #1 will consist of a double ram-type (5000 psi WP) preventer and a bag-type (hydril) preventer (5000 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" & 9-5/8" casing and used continuously until 12,300'. All BOP's and accessory equipment will be tested to 1000 psi before drilling out of surface casing. Before drilling out of 9-5/8" intermediate casing, the ram-type BOP and accessory equipment will be tested to 5000 psi and the hydril to 70% of rated working pressure (3500 psi).

After the 7" casing is cemented at 12,300', a 10,000 psi double ram-type preventer and a 5000 psi bag-type (hydril) preventer will then be used

continuously until TD is reached. All of this equipment and accessories will be tested to 10,000 psi before drilling out of 7" casing and after any use under pressure during the drilling of the well.

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 10,000 psi WP rating.

6. Types and Characteristics of the Proposed Mud System:

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

Depth	Type	Weight (ppg)	Viscosity (sec)	Waterloss (cc)
0- 600'	Freshwater (spud)	8.5	40-45	N.C.
600- 8100'	Brine Water	10.0	30	N.C.
8100-10500'	Cut Brine	8.8-9.2	30	N.C.
10500-12300'	Cut Brine/Polymer	9.2-10.0	32-34	40
12300-13600'	Brine/Polymer	10.5-11.0	34-38	5
13600-TD	Brine/Polymer/KCl	10.5-11.0	40-42	5

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. The 7" casing shoe will be tested to an EMW equal to the maximum expected mud weight required for drilling the Atoka formation.

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. An electronic pit-volume-totalizer system will be used continuously below 10,500' to monitor the mud and pump system. The drilling fluids system will also be visually monitored at all times.

D. A mud logging unit complete with H_2S detector will be continuously monitoring drilling penetration rate and hydrocarbon shows from 3800' to TD.

E. A rotating head, mud-gas separator and vacuum degasser will be operational at all times below 10,500' to facilitate handling a gas kick or gas cutting of the mud until the mud weight can be increased.

F. Drill pipe protectors will be used at all times while drilling inside the 7" casing, which will eventually become the production casing above the 4-1/2" liner top.

8. Logging, Testing and Coring Program:

A. Drillstem tests will be run on the basis of drilling shows. At least two tests are anticipated.

B. The electric logging program will consist of GR-Dual Laterolog-MSFL and GR-Sonic from TD to surface casing @ 600' and GR-Compensated Neutron-Density from TD to surface. Selected SW cores will be taken in zones of interest.

C. No conventional coring is anticipated.

D. Further testing procedures will be determined after the 4-1/2" production liner 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 200°F and estimated bottom-hole pressure (BHP) is 8000 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. All wells on the Apache leases in Sec. 13 and 25 have experienced moderate to severe loss circulation in the Delaware/Upper Bone Spring interval from 4000' to 8000'.

10. Anticipated Starting Date and Duration of Operations:

Road and location work will not begin until approval has been received from the BLM. The anticipated spud date is October 1, 1993. Once commenced, the drilling operation should be finished in approximately 60 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
Apache "24" Fed Com No. 2
660' FNL & 660' FEL
NE/NE, Sec. 24, T22S, R30E
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, New Mexico.

   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: From Loving, N.M., take Hwy 31 northeast for 8.0 miles. Turn east on Hwy 128 and go 8.2 miles. At MM 8+, turn north on Cimarron Road and go 2.7 miles. Turn east on lease road and El Paso Pipeline ROW and go 2.1 miles. Turn north and go 0.25 mile on lease road. Turn west on new road and go 380' to 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 380 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 3:1 slope and 4 feet 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 cattleguards, culverts, gates, low-water crossings, or fence cuts will be necessary.

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

F. The proposed access road as shown in Exhibit #3 has been centerline flagged by John Jacquess Consulting Engineers, Artesia, New Mexico.

3. Location of Existing Wells:

Exhibit #4 shows that there are no existing wells within a one-mile radius of this well.

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 proposed well. However, Apache "13" Fed No. 1 (0.8 mile north) is currently being completed and the Apache "24" Fed No. 1 (0.6 mile south) is currently drilling.

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 350' x 350' 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) No power will be required if the well is productive of gas. However, 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 back-filled 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.

D. In the event that gas production is established, plans for permanent gas lines will be submitted to the appropriate agencies for ROW approval.

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. Fresh water will be obtained from commercial water stations in the area and hauled to the location by transport truck over the existing access roads as shown in Exhibit #3. If a commercial fresh water source is nearby, fasline may be laid along existing road ROW's and fresh water pumped to the well. No water well will be drilled on the location.

6. Source of Construction Materials:

Any caliche required for construction of the drill pad and the proposed new access road (approximately 4800 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 Waste 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 earthen pit, approximately 150' x 150' 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 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 contained in a trash bin and properly disposed of in an approved dump site. 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 netted 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, pipe racks, turn-around and parking areas, and access road. No permanent living facilities are planned but 2 temporary foreman/toolpusher trailers may 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 and garbage will be 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 disturbed 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 drilling operations. At the time that the rig is removed, the reserve pit will be fenced on the rig (fourth) side and netted to prevent livestock or wildlife from being entrapped. The fencing and netting 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. Kenneth Smith, Carlsbad, N.M. has the Federal grazing lease on this 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 is no evidence of any archaeological, historical, or cultural sites in the vicinity of the location. The Cultural Resources Examination is included as Exhibit #7.

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 Corporation
400 W. Illinois, Suite 1000
Midland, Texas 79701
Phone: (915) 682-5396 (office)
(915) 687-3711 (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: July 26, 1993 Signed: Patrick J. Noyes

Patrick J. Noyes
Regional Engineering Manager

Attachment

3DRL24FC.GM

MINIMUM BLOWOUT PREVENTER REQUIREMENTS

10,000 psi Working Pressure

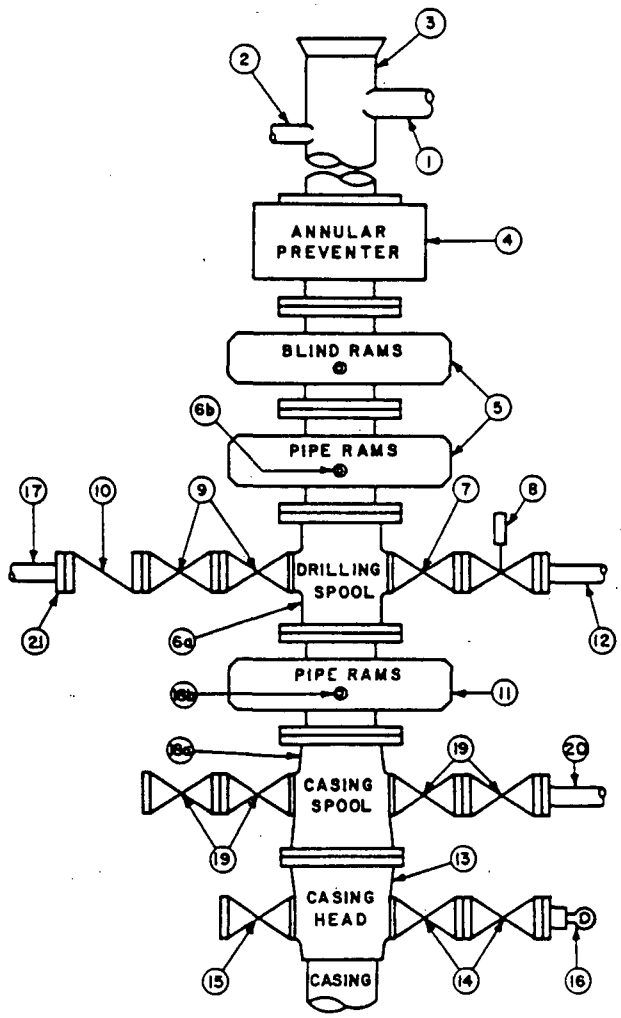
10 MWP

Exhibit #1
Apache "24" Fed. Com. No. 2
Eddy 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"min. kill line and 3" min. choke line outlets in ram. (Alternate to 6a above.)		
7	Gate valve	3-1/8"	
8	Gate valve—power operated	3-1/8"	
9	Gate valves	2-1/16"	
10	Check valve	2-1/16"	
11	Single hydraulically operated ram		
12	Line to choke manifold		3"
13	Casing head		
14	Gate valves	1-13/16"	
15	Gate Valve or Flanged Valve w/Control Plug	1-13/16"	
16	Pressure gauge with needle valve		
17	Kill line to rig mud pump manifold		2"

OPTIONAL			
18a	Casing spool with 2" outlet or		
18b	2" outlet in ram preventer		
19	Gate valves	2-1/16"	
20	Auxiliary choke line (emergency only)		2"
21	Roadside connection to kill line		2"
22	Shear ram blocks for blind rams		



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.

Attachment to Exhibit #1
NOTES REGARDING THE BLOWOUT PREVENTERS
Apache "24" Fed Com No. 2
Eddy County, New Mexico

1. Drilling nipple to be so constructed that is 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, 10,000 psi W.P. minimum below 7" casing point.

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 10,000 psi W.P. minimum below 7" casing point.

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.

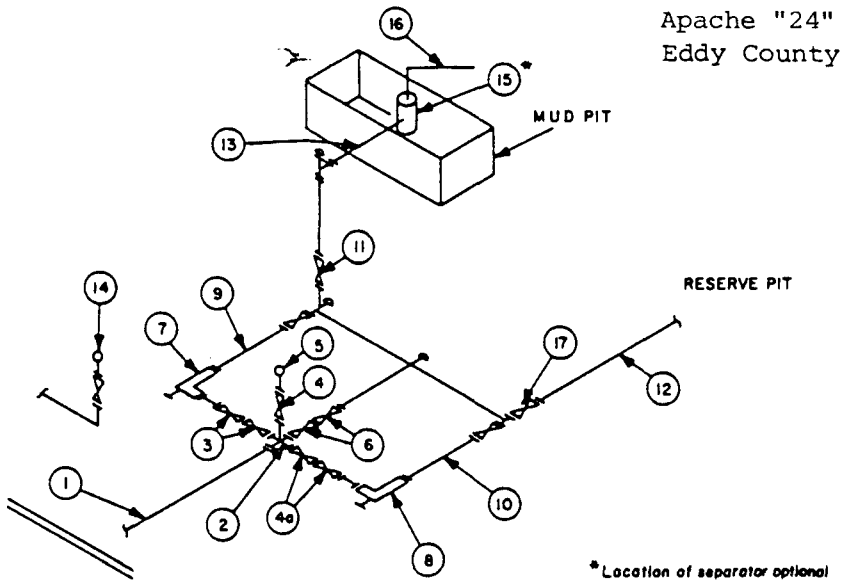
11. Blow out preventer closing equipment to include minimum 80 gallon accumulator, two independent sources of pump power on each closing unit installation, and meet all API specifications.

3DRL24FC.GM

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

3 MWP - 5 MWP - 10 MWP

EXHIBIT 1-A
Apache "24" Fed. Com. No. 2
Eddy County, New Mexico



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.

Exhibit #2
Apache "24" Fed. Com. No. 2
Eddy County, New Mexico

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

Form C-102
Revised 1-1-89

OIL CONSERVATION DIVISION

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

WELL LOCATION AND ACREAGE DEDICATION PLAT

All Distances must be from the outer boundaries of the section

Operator	Lease	Well No.
MITCHELL ENERGY Corporation	APACHE 24 FEDERAL COM	#2 - RELOCATE

Unit Letter	Section	Township	Range	County
A	24	22S	30E NMPM	LEA

Actual Footage Location of Well:
660 feet from the NORTH line and 660 feet from the EAST line

Ground level Elev.	Producing Formation	Pool	Dedicated Acreage:
3380	Devonian	Wildcat	320 Acres

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

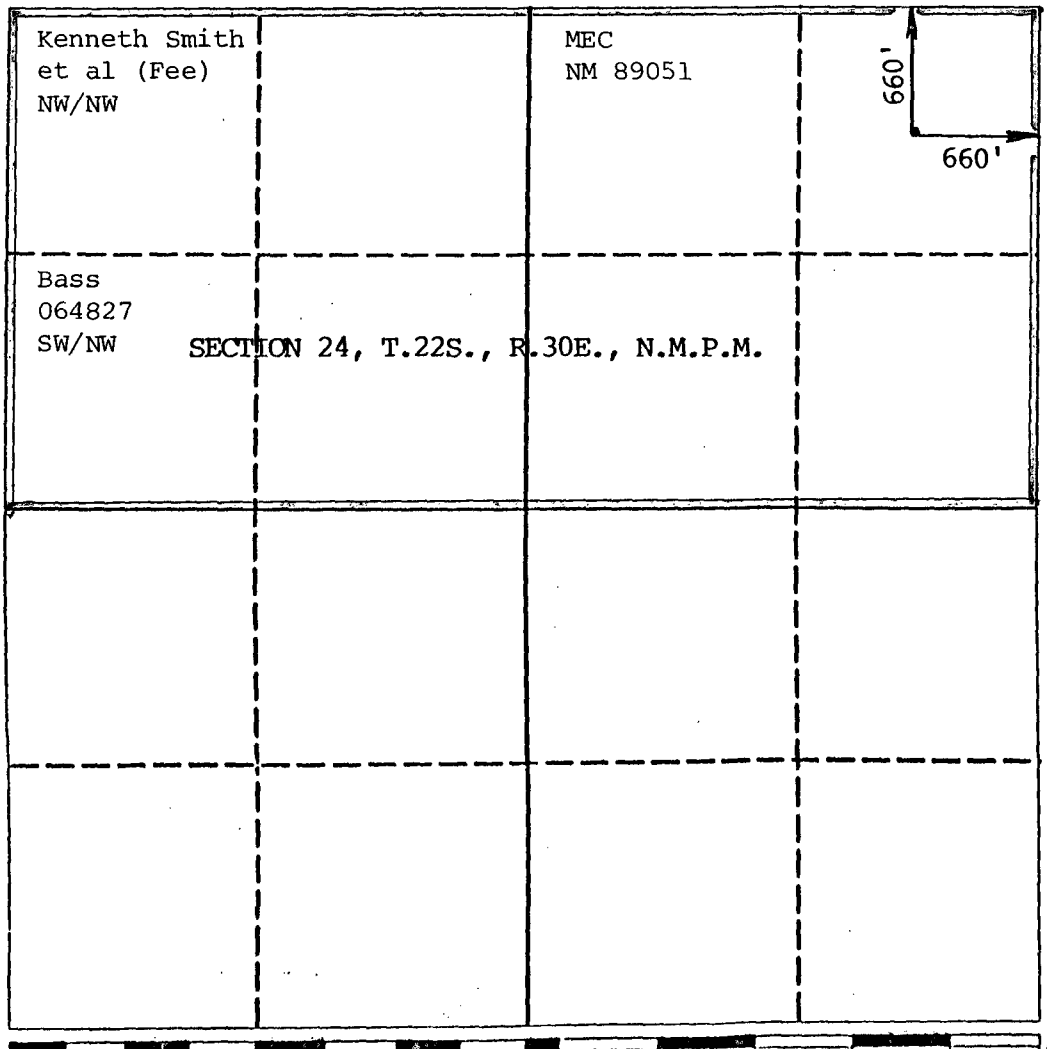
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).

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 _____

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
George Mullen
Printed Name
Regulatory Affairs Specialist
Position
Mitchell Energy Corporation
Company
July 23, 1993
Date

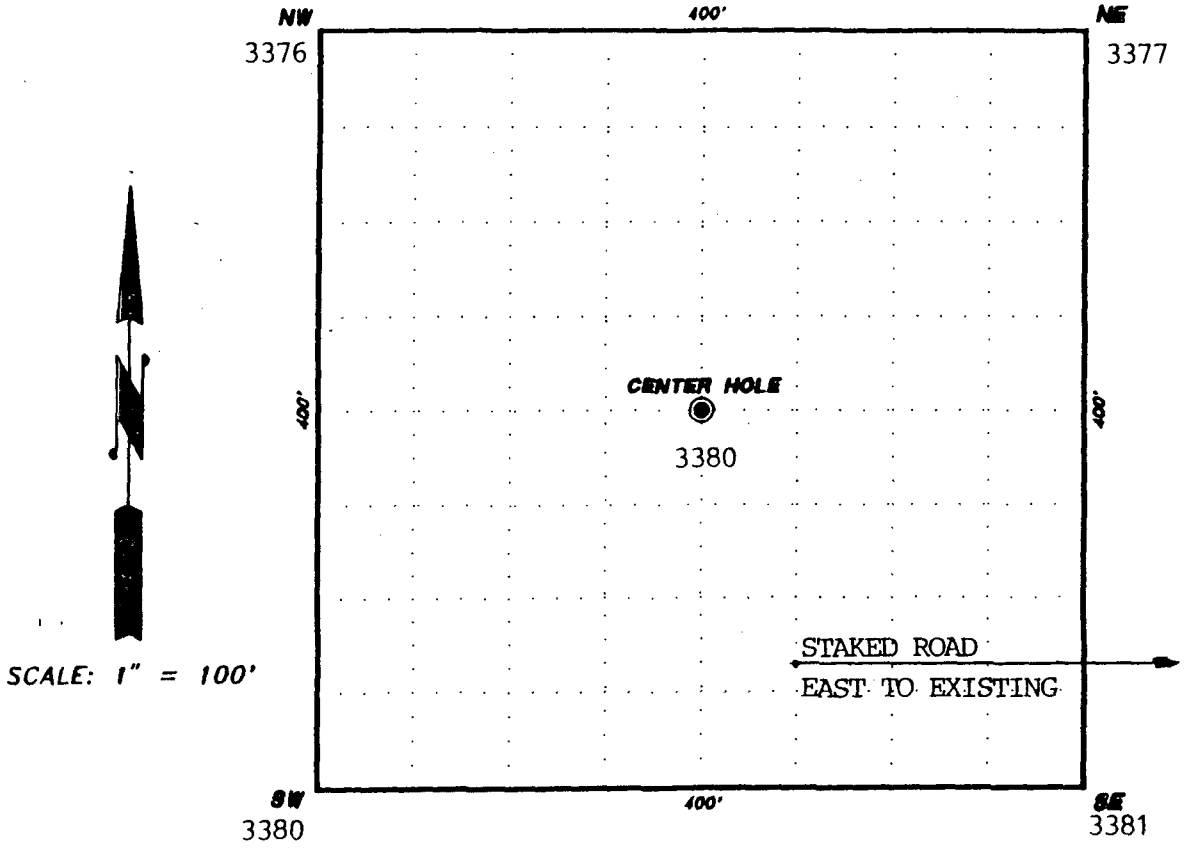
SURVEYOR CERTIFICATION

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
6/21/93
Signature & Seal of Professional Surveyor
6290
Certificate No.
6290
24APACHE

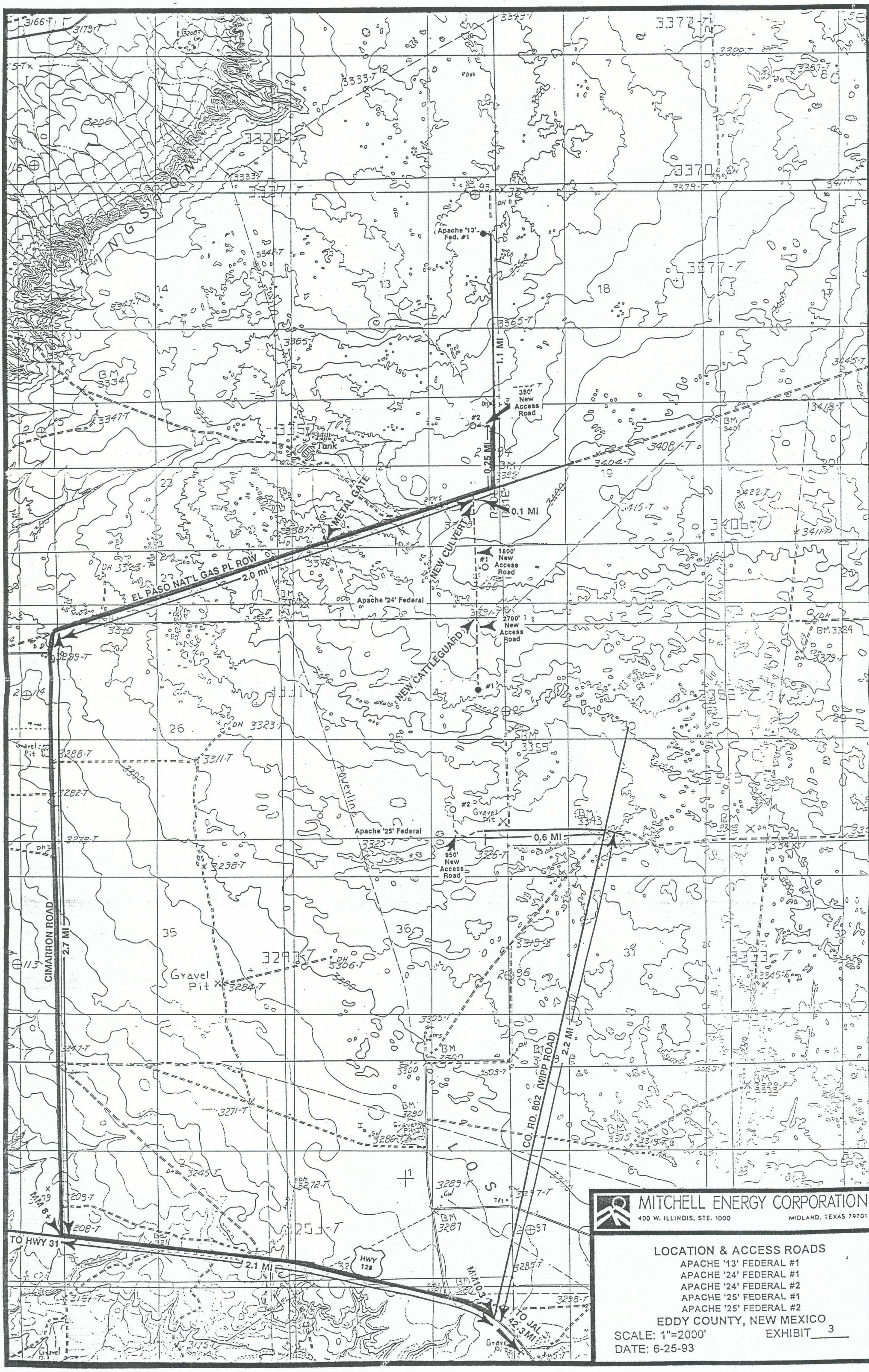
GRID ELEVATIONS

JOHN D. JAQUESS & ASSOCIATES
CONSULTING ENGINEERS



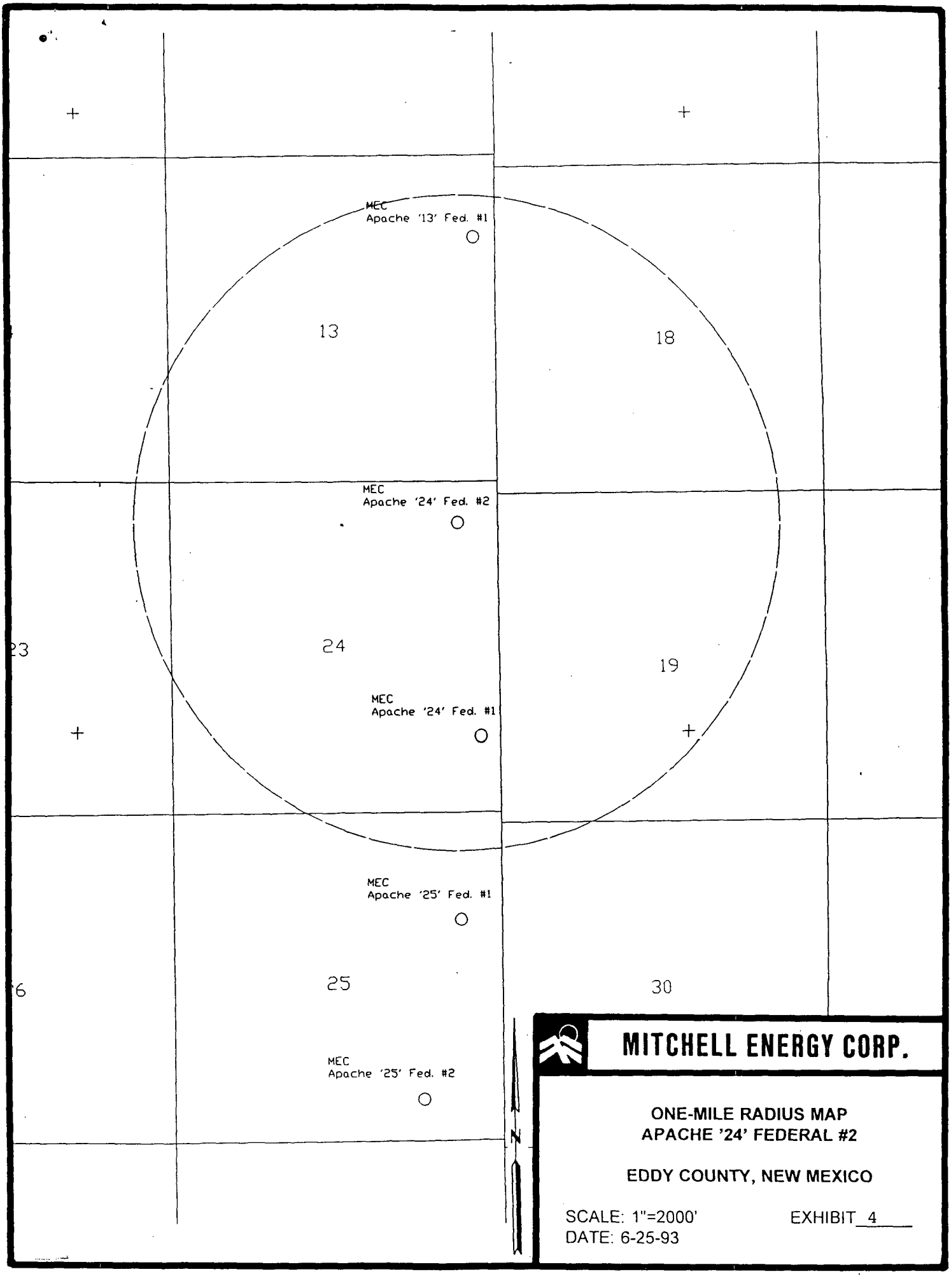
WELL INFORMATION

Attachment to Exhibit No. 2
APACHE 24 FEDERAL #2 (RELOCATE)
SECTION 24, T.22S., R.30E.
LEA COUNTY, NEW MEXICO



MITCHELL ENERGY CORPORATION
400 W. ILLINOIS, STE. 1000 MIDLAND, TEXAS 79701

LOCATION & ACCESS ROADS
APACHE '13' FEDERAL #1
APACHE '24' FEDERAL #1
APACHE '24' FEDERAL #2
APACHE '25' FEDERAL #1
APACHE '25' FEDERAL #2
EDDY COUNTY, NEW MEXICO
SCALE: 1"=2000' EXHIBIT 3
DATE: 6-25-93



MITCHELL ENERGY CORP.

ONE-MILE RADIUS MAP
APACHE '24' FEDERAL #2

EDDY COUNTY, NEW MEXICO

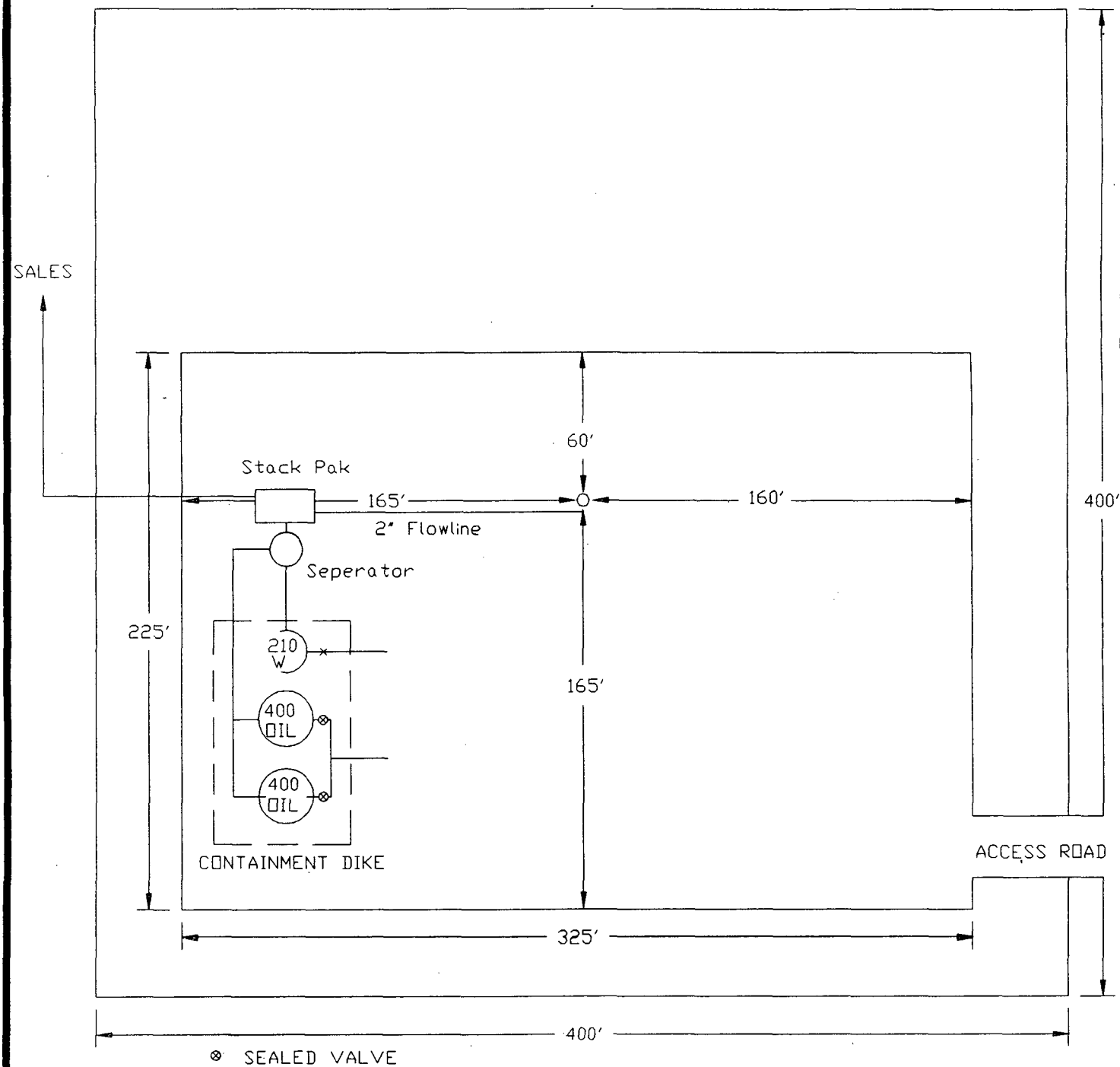
SCALE: 1"=2000'
DATE: 6-25-93

EXHIBIT 4

ATTACHMENT TO EXHIBIT # 4

STATUS OF WELLS WITHIN ONE-MILE RADIUS
Apache "24" Fed. Com. #2
Sec. 24-T20S-R30E
660' FNL & 660' FEL
Eddy County, New Mexico
June 1993

Sec. 13-T20S-R30E			
Mitchell Energy	#1 Apache "13" Fed.	(1330' FNL/330' FEL)	Drilling
Sec. 24-T20S-R30E			
Mitchell Energy	#1 Apache "24" Fed. Com.	(1200' FSL/330' FEL)	Proposed Location



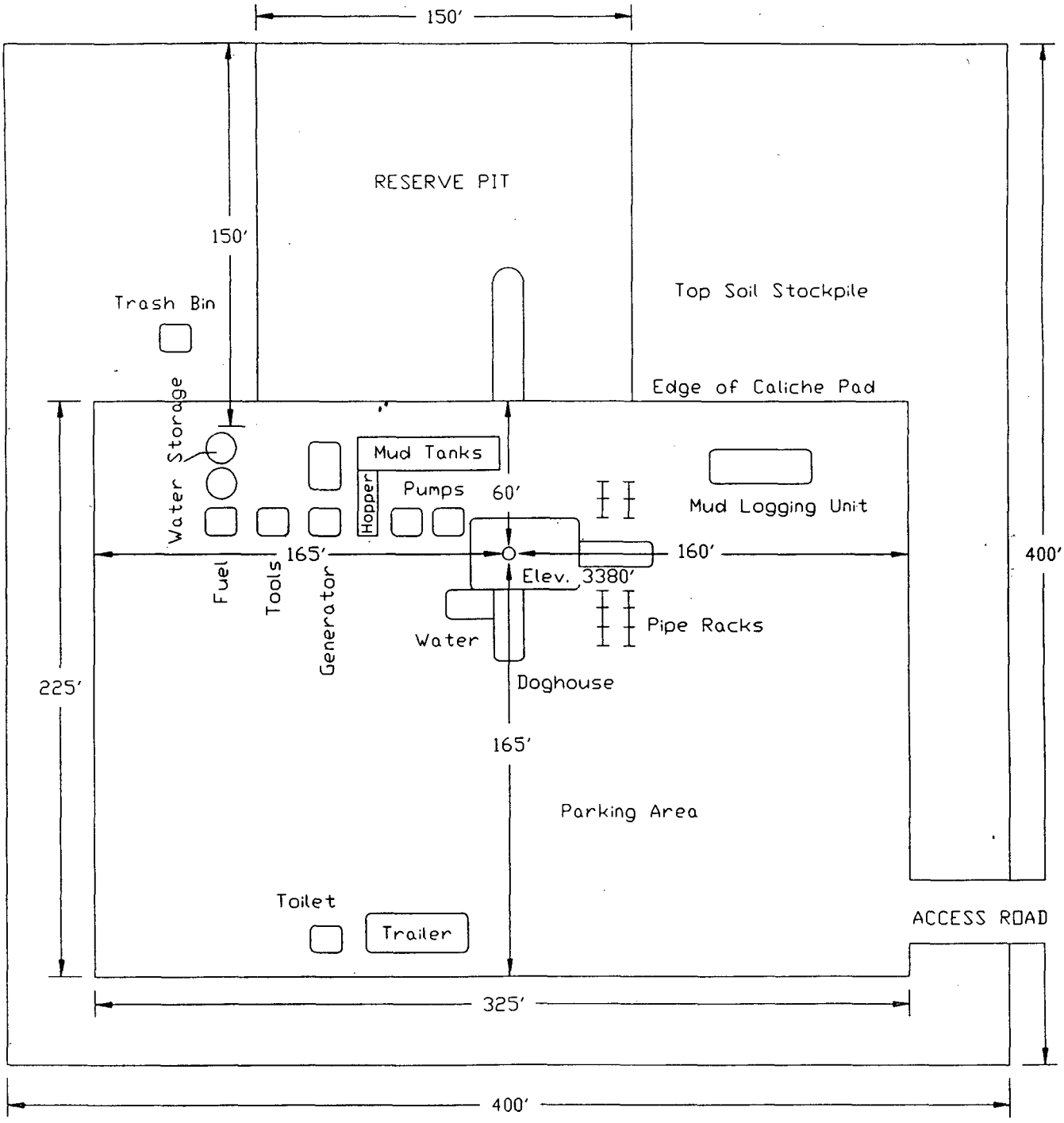
MITCHELL ENERGY CORP.

PRODUCTION FACILITIES LAYOUT FOR APACHE '24' FEDERAL #2

EDDY COUNTY, NEW MEXICO

SCALE: 1"=60'
DATE: 6-25-93

EXHIBIT 5



MITCHELL ENERGY CORP.

DRILLING RIG LAYOUT AND ELEVATIONS
APACHE '24' FEDERAL #2

EDDY COUNTY, NEW MEXICO

SCALE: 1"=60'
DATE: 6-25-93

EXHIBIT 6

Exhibit #7
Apache "24" Fed. Com. No. 2
Eddy County, New Mexico

ARCHAEOLOGICAL SURVEY CONSULTANTS
P.O. Drawer D
Roswell, New Mexico 88202
Phone: 505-623-5012

TO: Michael Kyte, Area Archaeologist, Carlsbad Resource Area, Roswell District, Bureau of Land Management.

FROM: J.V. Sciscenti, ARCHAEOLOGICAL SURVEY CONSULTANTS, P.O. Drawer D, Roswell, New Mexico 88202

SUBJECT: MITCHELL ENERGY CORPORATION APACHE 24 FEDERAL WELL NO. 2 RELOCATION and ACCESS ROAD R/W. T22S, R30E, SECTION 24, NE¼NE¼ [660 FNL, 660 FEL]. EDDY COUNTY, NEW MEXICO.

FEDERAL LAND SURFACE
[U.S.G.S. 7.5 minute series, LIVINGSTON RIDGE, NEW MEXICO, 1985]

ASC Report 93-153 (Preliminary)

1. **ABSTRACT: intensive** archaeological survey of the Mitchell Energy Corporation Apache 24 Federal Well No. 2 Relocation (400 ft. square, 3.67 acres), and access road R/W (360 ft. long x 100 ft. wide, with a 150 ft. sq. delta, 1.0 acres). A total **federal land surface of 4.67 acres**, was inspected for cultural remains.

The archaeological survey was conducted on June 21, 1993, with some 1.5 work hours spent on ground during the survey.

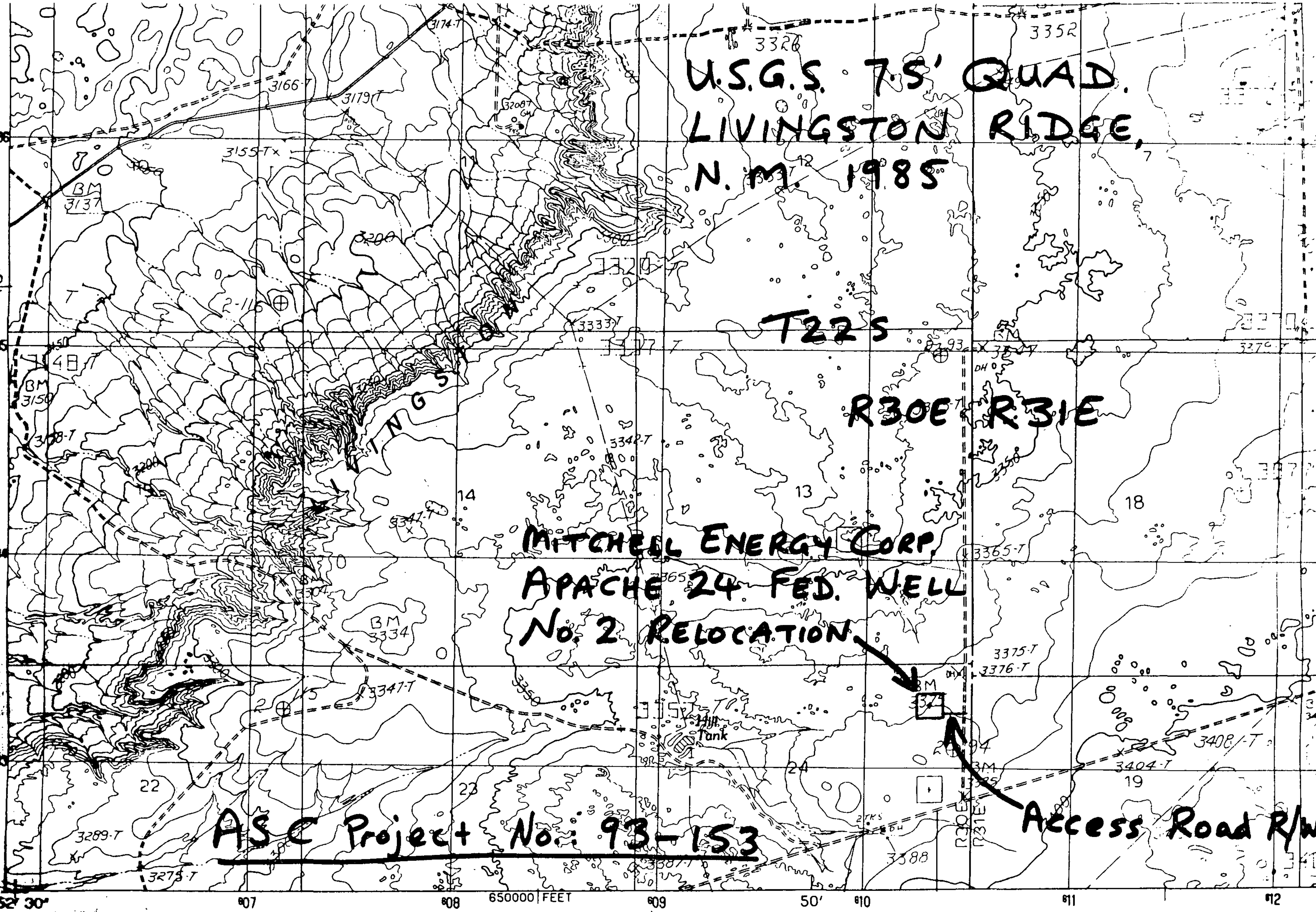
Archaeological survey of the Mitchell Energy Corporation Apache 24 Federal Well No. 2 Relocation and Access Road R/W **did not reveal** any cultural resources.

Therefore, archaeological **clearance** for the Mitchell Energy Corporation Apache 24 Federal Well No. 2 Relocation and access road R/W is **recommended**.

A final ASC Report 93-153 will be submitted at a later date.

Principal Investigator: _____

Date: June 24, 1993



PRODUCED BY THE UNITED STATES GEOLOGICAL SURVEY
CONTROL BY .... USGS, NOS/NOAA
COMPILED FROM AERIAL PHOTOGRAPHS TAKEN 1977
FIELD CHECKED .... 1978 MAP EDITED 1985
PROJECTION .... TRANSVERSE MERCATOR
GRID: 1000-METER UNIVERSAL TRANSVERSE MERCATOR .... ZONE 13
10,000-FOOT STATE GRID TICKS .... NEW MEXICO, EAST ZONE

SCALE 1:24 000

1 ½ 0 MILES
1000 0 1000 2000 3000 4000 5000 6000 FEET
1 .5 0 KILOMETERS 1