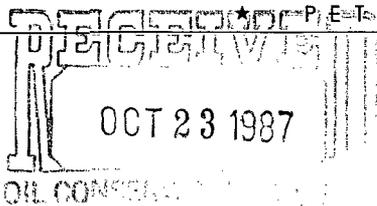


Release Date  
Oct 23, 1987  
All waivers in

By DRC

# MWJ PRODUCING COMPANY



PETROLEUM PRODUCERS ★

400 WEST ILLINOIS SUITE 1100  
MIDLAND, TEXAS 79701  
TELEPHONE (915) 682-5216

October 20, 1987

*USL-2422  
RULE-104 F(2)*

*Vada Pennsylvanian Pool  
160 Acre dedication  
NW1/4 Sect 34*

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

Attn: David Catanach

RE: MWJ-"34" Federal #1.  
660' FNL & 1340' FWL  
Sec 34, T-8S, R-36E  
Roosevelt County, New Mexico

Gentlemen:

The captioned well has been permitted as a Pennsylvanian test in the Vada (Penn) field, and MWJ requests the approval of an unorthodox location for the MWJ "34" Federal #1. A plugged producer, located 660' FNL and 660' FWL of Section 34, has caused the location to move to the west with the consideration of possible drainage from the old hole.

All offset operators to the MWJ "34" Federal #1 have been notified of our request, and waivers of their objections to the unorthodox location have been obtained.

Your consideration of our request for the approval of the unorthodox location of the MWJ "34" Federal #1 is greatly appreciated.

Very truly yours,

MWJ PRODUCING COMPANY

Stan Venable

SV:pd

1100

OCT 1 4 1987

MWJ

# MWJ PRODUCING COMPANY

★ PETROLEUM PRODUCERS ★

400 WEST ILLINOIS SUITE 1100  
MIDLAND, TEXAS 79701  
TELEPHONE (915) 682-5216

October 2, 1987

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

RE: MWJ Federal 34 #1  
Sec 34, T-8S, R-36E  
Roosevelt County, New Mexico

Gentlemen:

AMERICAN PETROFINA COMPANY OF TEXAS, as an offset operator, hereby waives any objections to the drilling of the MWJ Federal 34 #1 located 1340' FWL and 660' FNL of Section 34, Township 8S, Range 36E, Roosevelt County, New Mexico.

Very truly yours,

AMERICAN PETROFINA COMPANY OF TEXAS

By Ronald F. Smalley  
Fina Oil and Chemical Company

Title District Production mgr.

Date 10-8-87

# MWJ PRODUCING COMPANY

★ PETROLEUM PRODUCERS ★

400 WEST ILLINOIS SUITE 1100  
MIDLAND, TEXAS 79701  
TELEPHONE (915) 682-5216

October 2, 1987

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

RE: MWJ Federal 34 #1  
Sec 34, T-8S, R-36E  
Roosevelt County, New Mexico

Gentlemen:

MOBIL PRODUCING TEXAS AND NEW MEXICO, INC., as an offset operator, hereby waives any objections to the drilling of the MWJ Federal 34 #1 located 1340' FWL and 660' FNL of Section 34, Township 8S, Range 36E, Roosevelt County, New Mexico.

Very truly yours,

MOBIL PRODUCING TEXAS AND NEW MEXICO, INC.

By *Helen Wilson Lee*  
M. E. Sweeney  
Title Environmental & Regulatory Manager

Date 10/07/87

*Received*  
**OCT 14 1987**  
**M W J**

# MWJ PRODUCING COMPANY

★ PETROLEUM PRODUCERS ★

400 WEST ILLINOIS SUITE 1100  
MIDLAND, TEXAS 79701  
TELEPHONE (915) 682-5216  
October 2, 1987

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

RE: MWJ Federal 34 #1  
Sec 34, T-8S, R-36E  
Roosevelt County, New Mexico

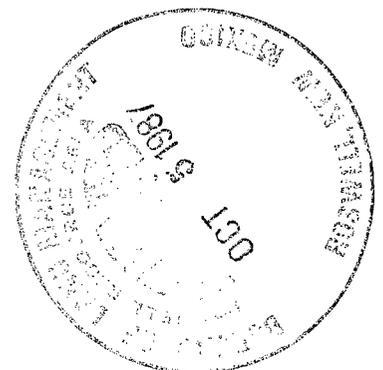
Gentlemen:

THE UNITED STATES DEPARTMENT OF THE INTERIOR-BUREAU OF LAND MANAGEMENT, as an offset operator, hereby waives any objections to the drilling of the MWJ Federal 34 #1 located 1340' FWL and 660' FNL of Section 34, Township 8S, Range 36E, Roosevelt County, New Mexico.

Very truly yours,

THE UNITED STATES DEPARTMENT OF  
THE INTERIOR-BUREAU OF LAND  
MANAGEMENT

By *Joe A. Luna*  
Title *ADM - Minerals*  
Date *10/13/87*



# MWJ PRODUCING COMPANY

★ PETROLEUM PRODUCERS ★

400 WEST ILLINOIS SUITE 1100  
MIDLAND, TEXAS 79701  
TELEPHONE (915) 682-5216

October 2, 1987

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

RE: MWJ Federal 34 #1  
Sec 34, T-8S, R-36E  
Roosevelt County, New Mexico

Gentlemen:

THE UNITED STATES DEPARTMENT OF THE INTERIOR-BUREAU OF LAND MANAGEMENT, as an offset operator, hereby waives any objections to the drilling of the MWJ Federal 34 #1 located 1340' FWL and 660' FNL of Section 34, Township 8S, Range 36E, Roosevelt County, New Mexico.

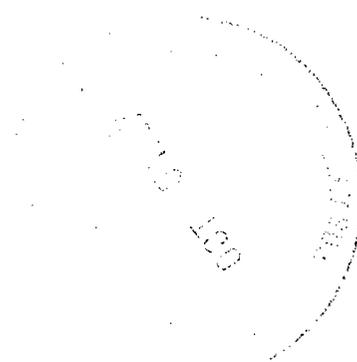
Very truly yours,

THE UNITED STATES DEPARTMENT OF  
THE INTERIOR-BUREAU OF LAND  
MANAGEMENT

By Joe A. Lora

Title ADM - Minerals

Date 10/13/87



# MWJ PRODUCING COMPANY

★ PETROLEUM PRODUCERS ★

400 WEST ILLINOIS SUITE 1100  
MIDLAND, TEXAS 79701  
TELEPHONE (915) 682-5216  
October 2, 1987

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

RE: MWJ Federal 34 #1  
Sec 34, T-8S, R-36E  
Roosevelt County, New Mexico

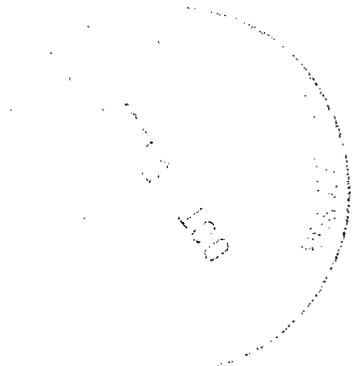
Gentlemen:

THE UNITED STATES DEPARTMENT OF THE INTERIOR-BUREAU OF LAND MANAGEMENT, as an offset operator, hereby waives any objections to the drilling of the MWJ Federal 34 #1 located 1340' FWL and 660' FNL of Section 34, Township 8S, Range 36E, Roosevelt County, New Mexico.

Very truly yours,

THE UNITED STATES DEPARTMENT OF  
THE INTERIOR-BUREAU OF LAND  
MANAGEMENT

By Joe A. Lora  
Title ADM - Minerals  
Date 10/13/87



# MWJ PRODUCING COMPANY

★ PETROLEUM PRODUCERS ★

400 WEST ILLINOIS SUITE 1100  
MIDLAND, TEXAS 79701  
TELEPHONE (915) 682-5216

October 2, 1987

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

RE: MWJ Federal 34 #1  
Sec 34, T-8S, R-36E  
Roosevelt County, New Mexico

Gentlemen:

EP OPERATING COMPANY, as an offset operator, hereby waives any objections to the drilling of the MWJ Federal 34 #1 located 1340' FWL and 660' FNL of Section 34, Township 8S, Range 36E, Roosevelt County, New Mexico.

Very truly yours,

EP OPERATING COMPANY

By *Jim Swedo*

Title *District Engineer*

Agent \_\_\_\_\_

# MWJ PRODUCING COMPANY

★ P E T R O L E U M P R O D U C E R S ★

400 WEST ILLINOIS SUITE 1100  
MIDLAND, TEXAS 79701  
TELEPHONE (915) 682-5216

October 2, 1987

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

RE: MWJ Federal 34 #1  
Sec 34, T-8S, R-36E  
Roosevelt County, New Mexico

Gentlemen:

EP OPERATING COMPANY, as an offset operator, hereby waives any objections to the drilling of the MWJ Federal 34 #1 located 1340' FWL and 660' FNL of Section 34, Township 8S, Range 36E, Roosevelt County, New Mexico.

Very truly yours,

EP OPERATING COMPANY

By

Title

Agent

*Luis Sereado*  
*District Engineer*

# MWJ PRODUCING COMPANY

★ PETROLEUM PRODUCERS ★

400 WEST ILLINOIS SUITE 1100  
MIDLAND, TEXAS 79701  
TELEPHONE (915) 682-5216

October 2, 1987

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

RE: MWJ Federal 34 #1  
Sec 34, T-8S, R-36E  
Roosevelt County, New Mexico

Gentlemen:

EP OPERATING COMPANY, as an offset operator, hereby waives any objections to the drilling of the MWJ Federal 34 #1 located 1340' FWL and 660' FNL of Section 34, Township 8S, Range 36E, Roosevelt County, New Mexico.

Very truly yours,

EP OPERATING COMPANY

By *Lawrence*

Title *District Engineer*

Agent \_\_\_\_\_

ROSWELL RESOURCE AREA  
SPECIAL DRILLING STIPULATIONS

OCT 19 1987

THE FOLLOWING DATA IS REQUIRED ON THE WELL SIGN

OPERATORS NAME MWJ Producing Co. WELL NO. & NAME #1-MWJ 34 Federal  
LOCATION 660' F N L & 1340' F W L SEC. 34, T. 8S., R. 36E.  
LEASE NO. NM - 57710 COUNTY Roosevelt

The special stipulations check marked below are applicable to the above described well and approval of this application to drill is conditioned upon compliance with such stipulations in addition to the General Requirements. The permittee should be familiar with the General Requirements, a copy of which is available from a Bureau of Land Management office. EACH PERMITTEE HAS THE RIGHT OF ADMINISTRATIVE APPEAL TO THESE STIPULATIONS PURSUANT TO TITLE 43 CFR 3165.3 and 3165.4.

I. SPECIAL ENVIRONMENT REQUIREMENTS

- Lesser Prairie Chicken (Stips attached)     San Simon Swale (Stips attached)  
 Floodplain (Stips attached)                     Other \_\_\_\_\_

II. ON LEASE - SURFACE REQUIREMENTS PRIOR TO DRILLING

The BLM will monitor construction of this drill site. Notify the Roswell Resource Area Office, BLM at least \_\_\_\_\_ working days prior to commencing construction at (505) 624-1790.

The drill pad for this well must be surfaced with \_\_\_\_\_ inches of compacted \_\_\_\_\_.

All topsoil and vegetation encountered during the construction of the drill site area will be stockpiled and made available for resurfacing of the disturbed area after completion of the drilling operation. Topsoil on the subject location is approximately \_\_\_\_\_ inches in depth. Approximately \_\_\_\_\_ cubic yards of topsoil material will be stockpiled for reclamation.

The access road authorized by this APD will conform to the attached "STANDARD STIPULATIONS FOR ROAD RIGHTS-OF-WAY IN THE ROSWELL DISTRICT, BLM."

Other

III. DRILLING OPERATIONS REQUIREMENTS

The Bureau of Land Management office is to be notified at (505) 624-1790, in sufficient time for a representative to witness:

1. Spudding             2. Cement casing 13 3/8 inch 8 5/8 inch 5 1/2 inch  
 3. BOP tests             Other

IV. CASING

8 5/8 inch surface casing should be set 400 ft. and cement circulated to the surface. If cement does not circulate to the surface this BLM office will be notified and a temperature survey or cement bond log will be run to verify the top of the cement. Remedial cementing will be done prior to drilling out of that string.

Minimum required fill of cement behind the 8 5/8 inch intermediate casing is \_\_\_\_\_ to circulate to surface \_\_\_\_\_.

Minimum required fill of cement behind the 5 1/2 inch production casing is \_\_\_\_\_ to isolate all water, oil and gas \_\_\_\_\_.

Other

V. PRESSURE CONTROL

Before drilling below the 8 5/8 inch casing, the blowout preventer assembly will consist of a minimum of:

One Annular Preventer     Two RAM-Type Preventers     Other minimum 3000 psi w.p.

After setting the 8 5/8 inch casing string, and before drilling into the Wolfcamp Formation, the blowout preventers and related control equipment shall be pressure-tested as described in General Requirements. Any equipment failing to test satisfactorily will be repaired or replaced.

- The test will be conducted by an independent service company.
- The results of the test will be reported to the appropriate BLM office.
- The Bureau of Land Management office is to be notified in sufficient time for a representative to witness the test.

Mud system monitoring equipment, with derrick floor indicators and visual and audio alarms, will be installed and operating before drilling into the \_\_\_\_\_ Formation, and will be used until production casing is run and cemented. Monitoring equipment will consist of the following:

- 1. A recording pit level indicator to determine pit volume gains and losses.
- 2. A mud-volume measuring device for accurately determining mud volume necessary to fill the hole on trips.
- 3. A flow-sensor on the flow-line to warn of any abnormal mud returns from the well.

A Hydrogen Sulfide Contingency Plan will be approved by this BLM office before drilling below the \_\_\_\_\_ Formation. A copy of the plan will be posted at the drilling site.

Other

VI. WELL COMPLETION REQUIREMENTS

A Communitization Agreement covering the acreage dedicated to the well must be filed for approval with the Bureau of Land Management. The effective date of the agreement must be prior to any sales.

Surface Restoration: If the well is a producer, the reserve pit(s) will be backfilled when dry, and cut-and-fill slopes will be reduced to a slope of 3:1 or less. All areas of the pad not necessary for production must be re-contoured to resemble the original contours of the surrounding terrain, and topsoil must be re-distributed and re-seeded with a drill equipped with a depth indicator (set at a depth of 1/2 inch) with the following seed mixture, in pounds of Pure Live Seed (PLS), per acre.

- |  |  |
|--|--|
| <input type="checkbox"/> A. Seed Mixture 1 (Loamy Sites)<br>Lehmanns Lovegrass ( <u>Eragrostis lehmanniana</u> ) 1.0<br>Side Oats Grama ( <u>Bouteloua curtipendula</u> ) 5.0<br>Sand Dropseed ( <u>Sporobolus cryptandrus</u> ) 1.0 | <input type="checkbox"/> B. Seed Mixture 2 (Sandy Sites)<br>Sand Dropseed ( <u>Sporobolus cryptandrus</u> ) 1.0<br>Sand Lovegrass ( <u>Eragrostis trichodes</u> ) 1.0<br>Plains Bristlegrass ( <u>Setaria Magrostachya</u> ) 2.0 |
| <input type="checkbox"/> C. Seed Mixture 3 (Shallow Sites)<br>Sideoats Grama ( <u>Boute curtipendula</u> ) 1.0<br>Lehmann's Lovegrass ( <u>Eragrostis lehmanniana</u> ) 1.0<br>or Boer Lovegrass ( <u>E. chloromelas</u> )           | <input type="checkbox"/> D. Seed Mixture 4 ("Gyp" Sites)<br>Alkali Sacaton ( <u>Sporobolus airoides</u> ) 1.0<br>Four-Wing Saltbush ( <u>Atriplex canescens</u> ) 5.0  |

Seeding should be done either late in the fall (September 15 - November 15, before freeze up) or early as possible the following spring to take advantage of available ground moisture.

Other - 1.) Approval needed from NMOCD for an unorthodox location. 2.) Surface reclamation will be in compliance with the surface landowner-operator agreement.

## LESSER PRAIRIE CHICKEN STIPULATIONS

1. There shall be no earthmoving, exploratory or developmental drilling, completion, plugging and abandonment activities within the Lesser Prairie Chicken Habitat Management Plan (HMP) Area between April 1 and May 31; any work in progress shall be completed prior to April 1. Activities resulting in minimal disturbance for a short period of time shall be allowed after 9 AM during the prairie chicken booming season. Any deviation from this stipulation must be approved by the Area Manager or appropriate authorized officer.
2. All gas or diesel combustion engines required for production of this well shall be required to have appropriate mufflers installed to effectively reduce the impact of excessive noise levels within this Lesser Prairie Chicken HMP Area.
3. In the event an authorized pit is utilized in conjunction with production or is required in an emergency situation for the purpose of collecting waste crude oil or caustic fluids for over a 48 hour period, a fine mesh netting shall be required to cover the pit to protect wildlife in this Lesser Prairie Chicken HMP Area until the pit is no longer a threat to wildlife.

**OPERATIONS DIVISION**  
**UNITED STATES**  
**DEPARTMENT OF THE INTERIOR**  
**BUREAU OF LAND MANAGEMENT**

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

**APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK**

1a. TYPE OF WORK  
 DRILL       DEEPEN       PLUG BACK

b. TYPE OF WELL  
 OIL WELL       GAS WELL       OTHER

2. NAME OF OPERATOR (Mr. John Schlagal)  
 MWJ PRODUCING COMPANY (Ph. 915-682-5216)

3. ADDRESS OF OPERATOR  
 400 W. Illinois Ave., Suite 1100, Midland TX 79701

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)\*  
 At surface 660' FNL & 1340' FWL of Section 34  
 At proposed prod. zone (Unit C)  
 same (NE 1/4 NW 1/4)

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE\*  
 7 air miles southeast of Milnesand, New Mexico

10. 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 160  
 17. NO. OF ACRES ASSIGNED TO THIS WELL 160

18. DISTANCE FROM PROPOSED LOCATION\* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT. NA  
 19. PROPOSED DEPTH 9950' Bough C  
 20. ROTARY OR CABLE TOOLS Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.)  
 G. L. 4084'

22. APPROX. DATE WORK WILL START\*  
 October 15, 1987

5. LEASE DESIGNATION AND SERIAL NO.  
 NM-57710

6. IF INDIAN, ALLOTTEE OR TRIBE NAME  
 --

7. UNIT AGREEMENT NAME  
 --

8. FARM OR LEASE NAME  
 MWJ 34 FEDERAL

9. WELL NO.  
 1

10. FIELD AND POOL, OR WILDCAT  
 Vada - Pennsylvanian

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA  
 Sec. 34-8S-36E

12. COUNTY OR PARISH  
 Roosevelt

13. STATE  
 NM

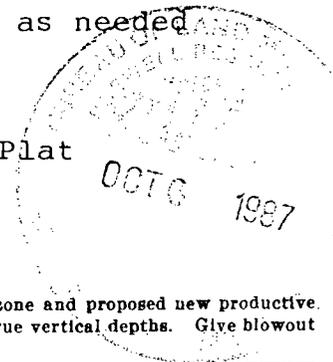
**PROPOSED CASING AND CEMENTING PROGRAM**

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
17 1/2"	13 3/8"	48#	400'	Sufficient to circulate
11"	8 5/8"	24# & 32#	4100'	Sufficient to circulate
7 7/8"	5 1/2"	17#	9950'	900 sacks (2 stages)

Application for approval of the unorthodox well location is being made to the New Mexico Oil Conservation Division.

Pay zone will be selectively perforated and stimulated as needed for optimum production.

- Attached are: 1. Well Location & Acreage Dedication Plat  
 2. Supplemental Drilling Data  
 3. Surface Use Plan



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 James A. Knauf TITLE Agent DATE Oct. 5, 1987  
 (This space for Federal or State office use)

PERMIT NO. \_\_\_\_\_ APPROVAL DATE \_\_\_\_\_  
 APPROVED BY Phil Burk TITLE Area Mgr. DATE 10/16/87  
 CONDITIONS OF APPROVAL, IF ANY:

**APPROVAL OF THIS APPLICATION 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.**

NEW MEXICO OIL CONSERVATION COMMISSION  
WELL LOCATION AND ACREAGE DEDICATION PLAT

Form C-102  
Supersedes C-128  
Effective 1-1-65

All distances must be from the outer boundaries of the Section.

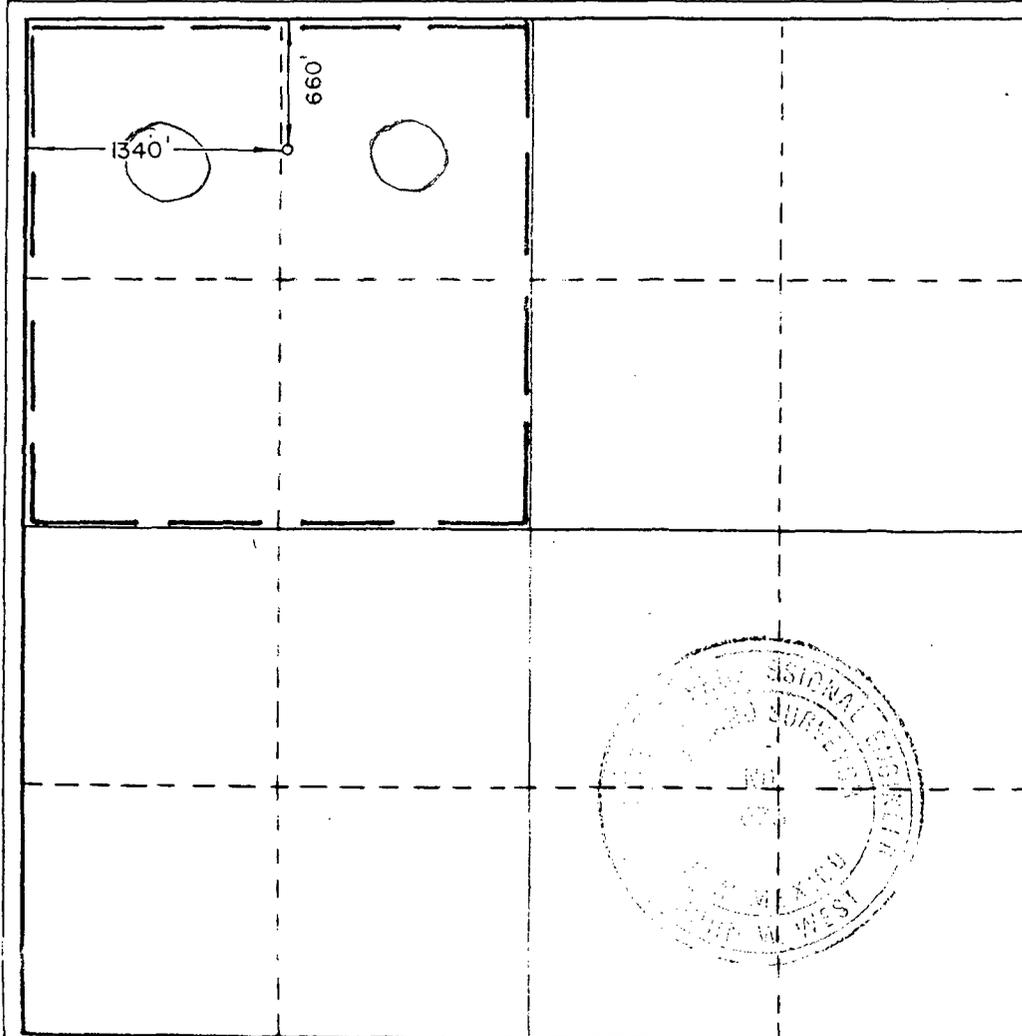
Operator <b>MWJ PRODUCING COMPANY</b>		Lease <b>MWJ FEDERAL 34</b>		Well No. <b>1</b>
Unit Letter <b>C</b>	Section <b>34</b>	Township <b>8 SOUTH</b>	Range <b>36 EAST</b>	County <b>ROOSEVELT</b>
Actual Footage Location of Well: <b>660</b> feet from the <b>NORTH</b> line and <b>1340</b> feet from the <b>WEST</b> line				
Ground Level Elev. <b>4084.0</b>	Producing Formation <b>Bough C</b>	Pool <b>Vada - Pennsylvanian</b>	Dedicated Acreage: <b>160</b> 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). **Federal Oil & Gas lease NM-57710 is only lease involved.**
3. If more than one lease of different ownership is dedicated to the well, have the interests 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 interests, has been approved by the Commission.



**CERTIFICATION**

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

*James A. Knauf*

Name  
**James A. Knauf**

Position  
**Agent**

Company  
**MWJ PRODUCING CO.**

Date  
**October 5, 1987**

*I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.*

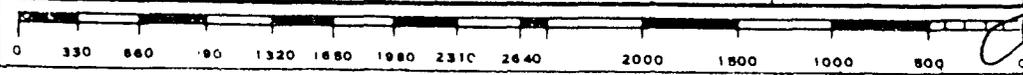
Date Surveyed  
**OCTOBER 2, 1987**

Registered Professional Engineer and/or Land Surveyor

*Ronald J. Eidson*

Certificate No. **JOHN W WEST, 676**  
**RONALD J. EIDSON, 3239**

96580



SUPPLEMENTAL DRILLING DATA

MWJ PRODUCING COMPANY  
WELL #1 MWJ 34 FEDERAL  
NE $\frac{1}{2}$ NW $\frac{1}{2}$  SEC. 34-8S-36E  
ROOSEVELT COUNTY, NEW MEXICO

1. SURFACE FORMATION: Sandy soils of Tertiary Age  
(G.L. Elev. 4084').

2. ESTIMATED TOPS OF GEOLOGIC MARKERS:

Anhydrite	2270'	Tubb	6955'
Yates	2810'	Abo	7740'
San Andres	4075'	Wolfcamp	9050'
Glorieta	5530'	Bough "C"	9770'

3. ANTICIPATED POROSITY ZONES:

Water: Down to 250'  
Oil: Bough "C"

4. CASING DESIGN:

<u>Size</u>	<u>Interval</u>	<u>Weight</u>	<u>Grade</u>	<u>Joint</u>
13 3/8"	0 - 400'	48#	H-40	STC
8 5/8"	0 - 1400'	24#	K-55	STC
	1400 - 4100'	32#	K-55	STC
5 1/2"	0 - 1700'	17#	N-80	LTC
	1700 - 8250'	17#	K-55	LTC
	8250 - 9950'	17#	N-80	LTC

5. PRESSURE CONTROL EQUIPMENT: Two ram-type preventers.  
BOP Sketch is attached.

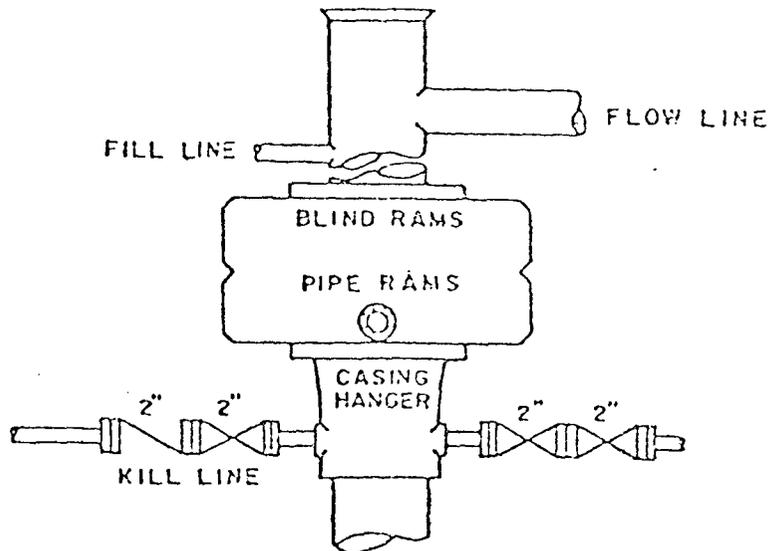
6. CIRCULATING MEDIUM:

0 - 400' Fresh spud mud.  
400 - 4100' Native mud with additives, as needed.  
4100 - 9950' Fresh water conditioned as necessary  
for control of viscosity and water-loss.

7. AUXILIARY EQUIPMENT: Drill string stabbing valves will be maintained on the rig floor in the "open" position while drilling operations are in progress.
8. LOGGING PROGRAM: Electric logs will include a CNL/FDC/GR log.
9. ABNORMAL PRESSURES, TEMPERATURES: None anticipated.
10. ANTICIPATED STARTING DATE: It is planned that operations will commence about October 15, 1987. Duration of drilling, testing and completion operations should be 7 to 12 weeks.

BLOWOUT PREVENTER SKETCH

MWJ Producing Company  
Well #1 MWJ 34 Federal  
NE $\frac{1}{4}$ NW $\frac{1}{4}$  Sec. 34-8S-36E



900 Series

SURFACE USE PLAN  
FOR  
DRILLING, COMPLETING AND PRODUCING

MWJ PRODUCING COMPANY  
WELL #1 MWJ 34 FEDERAL  
660' FNL & 1340' FWL SEC. 34-8S-36E  
ROOSEVELT COUNTY, NEW MEXICO

LOCATED: 7 air miles southeast of Milnesand, NM.

LAND OWNERSHIP: The drillsite is on mineral reserve land which has been acquired by the New Mexico Game & Fish Department.

OIL & GAS LEASE: Competitive lease NM-57710 was issued 12-1-83 for a primary term of 5 years.

RECORD LESSEE: Martin, Williams & Judson

OPERATOR'S AUTHORITY: Designation of Operator

BOND COVERAGE: Lessees \$25,000 statewide bond

ACRES IN LEASE: 160 acres

POOL: Vada - Pennsylvanian Oil Pool

WELL SPACING: 160 acres

EXHIBITS:

- A. Area Road Map
- B. Topographic Map
- C. Oil & Gas Map
- D. Sketch of Well Pad

ROAD LOG FROM STATE HIGHWAY #18 TO MWJ 34 FEDERAL WELL

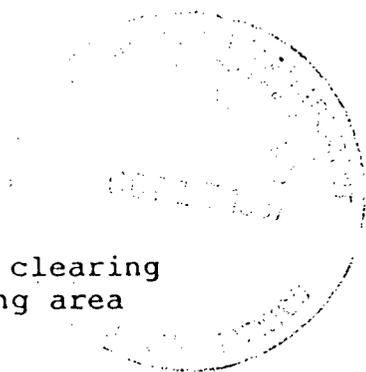
STARTING POINT is at the intersections of State Highway #18 and State Highway #508 at Crossroads, Lea County, New Mexico.

- 0.00 Proceed to the east from intersection along State Highway #508 in an easterly direction for a distance of 2.80 miles.
- 2.85 Exit State Highway #508 to the northeast and proceed in a northeasterly direction for a distance of 3.75 miles.
- 6.60 Turn left (north) and proceed in a northerly direction for a distance of 2.80 miles.
- 9.40 Turn left (west) and proceed in a westerly direction for a distance of 0.49 mile. (a cattleguard will need to be installed in the N-S fence at mileage 9.41)
- 9.89 New road starts at this point. continue in a westerly direction for a distance of 0.25 mile to the SE corner of the proposed well pad.
- 10.14 Drillsite. (NE-NW 34-85-36E)

THIRTEEN POINT PROGRAM

- 1. EXISTING ROADS: Existing roads, which lead to the proposed drillsite, are shown on Exhibits "A" and "B".
- 2. PROPOSED NEW ROAD: Proposed new access road will be 0.25 mile in length. Exhibit "B" shows proposed route which will originate at mileage-9.89 on the road log and will terminate at the southeast corner of the proposed drill pad. The center of the proposed new road has been staked and flagged.
  - A. Width: 15 feet with 24-foot R-O-W.
  - B. Surfacing Material: Caliche.





- C. Maximum Grade: Less than 1%.
- D. Road Design: New road will be constructed by clearing and grading the R-O-W and surfacing the driving area with caliche.
- E. Culverts: None necessary.
- F. Gates, Cattleguards: A cattleguard will be required in the N-S fence at mileage- 9.41 on the road log.

3. LOCATION OF EXISTING WELLS: Existing wells in the vicinity of the proposed drillsite are shown on Exhibit "C".

4. LOCATION OF EXISTING AND/OR PROPOSED FACILITIES:

- A. This is a non-producing lease and there are no production facilities on the leasehold.
- B. If the well is productive, production and storage facilities will be located on the well pad.

5. LOCATION AND TYPE OF WATER SUPPLY: It is not planned to drill a water supply well. Water for leasehold operations will be purchased from a commercial water hauler.

6. SOURCE OF CONSTRUCTION MATERIALS: Materials needed for construction of the proposed new road and well pad probably will be obtained from an existing pit in the NW-NE 1-9S-35E or from an existing pit in the NW-NE 34-8S-36E.

7. METHODS OF HANDLING WASTE DISPOSAL:

- A. Drill cuttings will be disposed of in the drilling pits.
- B. Drilling fluids will be allowed to evaporate in the drilling pits until the pits are dry.
- C. Water produced during tests will be disposed of in the drilling pits.
- D. Oil produced during tests will be stored in test tanks until sold.
- E. Trash, waste paper, garbage, and junk will be buried in a trash pit and covered with a minimum of 24 inches of

dirt. All waste material will be contained to prevent scattering by the wind. Location of the trash pit is shown on Exhibit "D".

F. All trash and debris will be buried or removed from the wellsite within 45 days after finishing drilling and/or completion operations.

8. ANCILLARY FACILITIES: None anticipated.

9. WELLSITE LAYOUT:

- A. The wellsite has been surveyed and a 400' x 400' area has been staked and flagged.
- B. The dimensions and relative location of the drill pad, mud pit, and trash pit with respect to the well bore are shown on Exhibit "D".
- C. The well pad will be surfaced with caliche.
- D. The location is relatively flat and will not require any cut or fill.

10. PLANS FOR RESTORATION OF THE SURFACE:

- A. After completion of drilling and/or completion operations, all equipment and other material not needed for operations will be removed. Pits will be filled and the location cleaned of all trash and junk to leave the wellsite in as aesthetically pleasing condition as possible.
- B. Any unguarded pits containing fluids will be fenced until they are filled.
- C. After abandonment, all equipment, trash and junk will be removed and the location cleaned.

11. OTHER INFORMATION:

- A. Topography: The undisturbed wellsite is at an elevation of 4084 feet and is situated on a nearly flat sandy plain of the Llano Estacado. Drainage in the area is internal owing to the high permeability of the sandy soil.

- B. Soil: Top soil at the wellsite is sand.
  - C. Land Type & Use: The vicinity surrounding the drillsite is semi-arid land and its primary use is for the production of oil and gas and for grazing and wildlife.
  - D. Flora: Vegetative cover is moderately sparse. Flora consists primarily of shinnery and broom snakeweed interspersed with yucca, sandbur, sand muhly, sand sage, and other desert plants.
  - E. Fauna: No wildlife was observed, however fauna for this type of habitat usually consists of lizards, snakes, rabbits, rodents, coyotes, skunks, prairie chicken, quail, dove and other small birds.
  - F. Ponds & Streams: None.
  - G. Water Wells: Nearest water well is 1½ miles to the west-southwest.
  - H. Residences & Other Structures: Nearest occupied dwelling is 3 miles to the northeast. The Bluit Gasoline Plant is 3 miles to the north.
  - I. Archaeological, Historical & Cultural Sites: Pecos Archaeological Consultants of Carlsbad, NM made an archaeological survey of the proposed drillsite and new road areas on 10-2-87. No sites were found and they are recommending to the BLM that the proposed surface work be approved.
12. OPERATOR'S REPRESENTATIVE: Representative responsible for assuring compliance with the approved Surface Use Plan:

John L. Schlagal  
400 W. Illinois Ave., Suite 1100  
Midland, Texas 79701  
Phone 915-682-5216



13. CERTIFICATION:

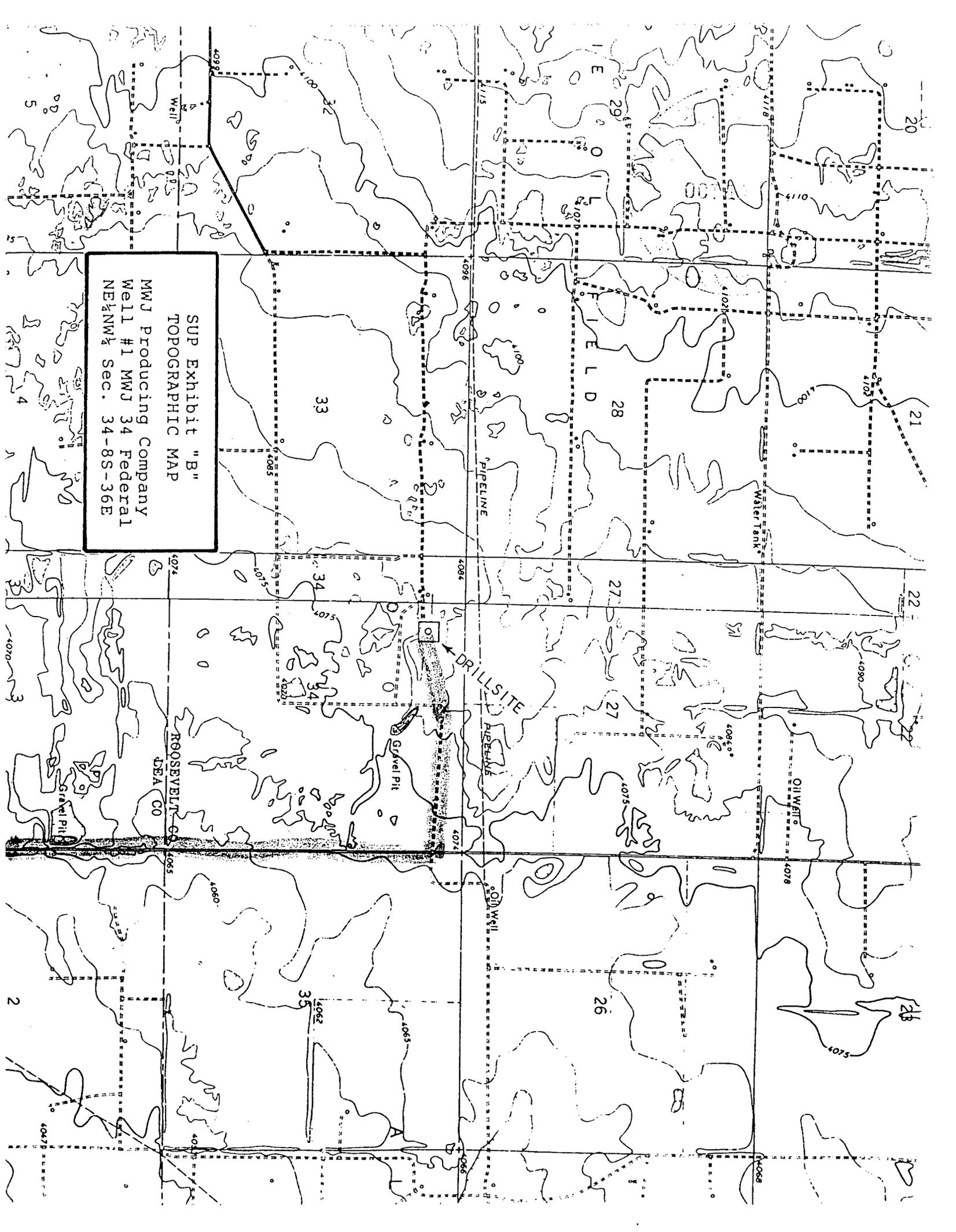
I hereby certify that I, or persons under my direct supervision, have inspected the proposed drillsite and access route; that I am familiar with the conditions which presently exist; that the statements made in this plan are, to the best of my knowledge true and correct; and, that the work associated with the operations proposed herein will be performed by MWJ PRODUCING COMPANY and its sub-contractors in conformity with this plan and the terms and conditions under which it is approved.

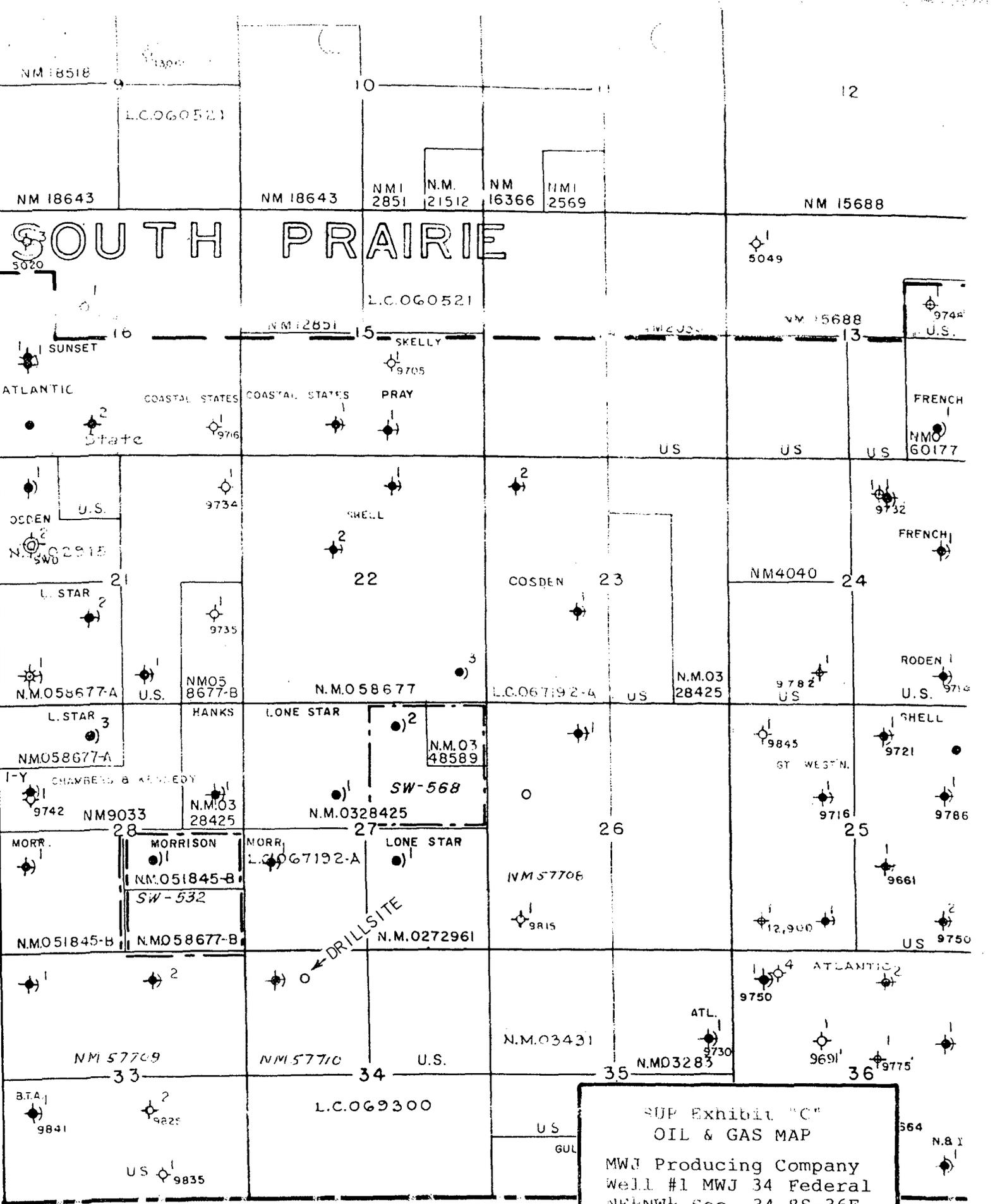
October 3, 1987

James A. Knauf, Agent  
MWJ PRODUCING COMPANY



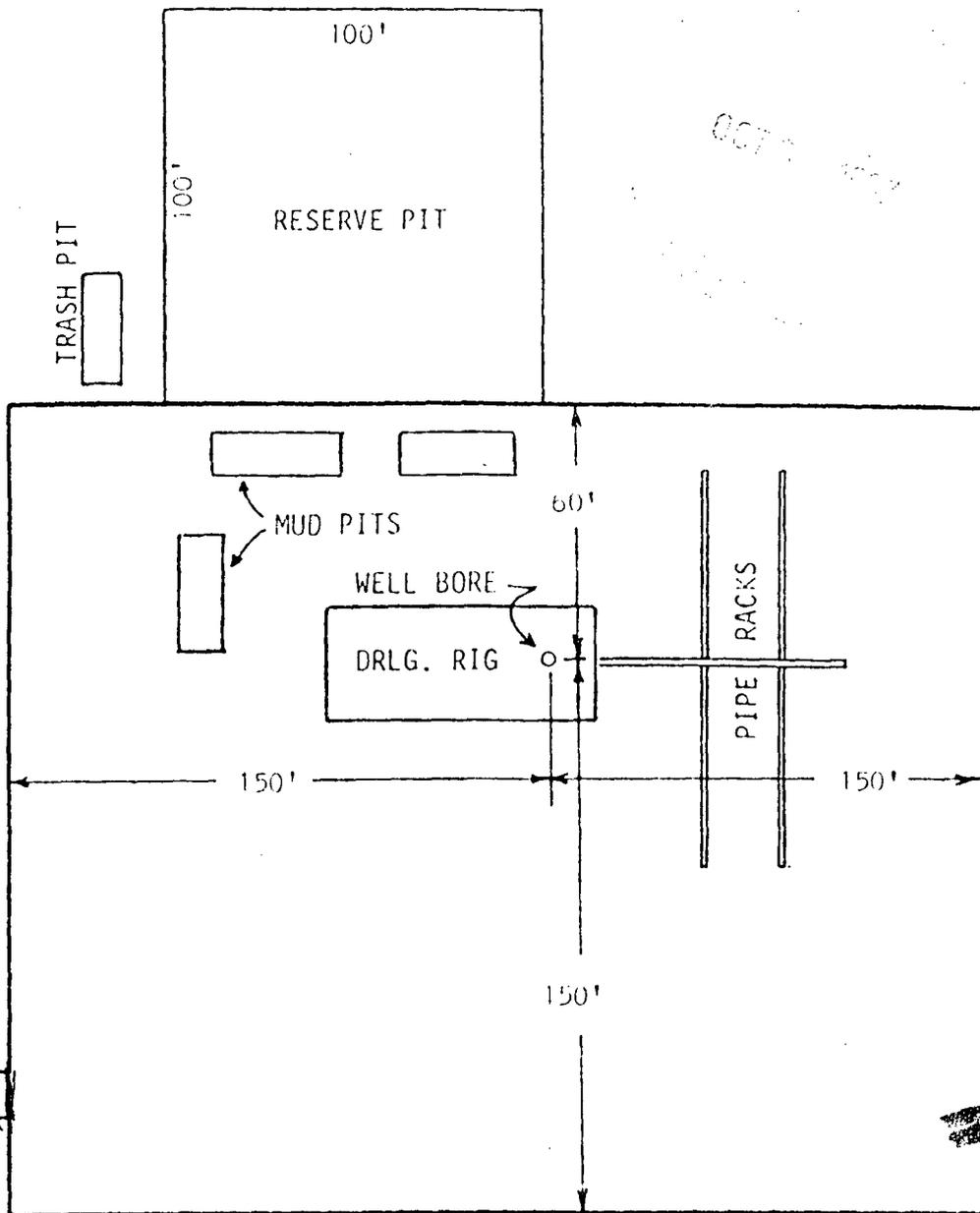
SUP Exhibit "B"  
TOPOGRAPHIC MAP  
MWJ Producing Company  
Well #1 MWJ 34 Federal  
NE¼NW¼ Sec. 34-8S-36E





SUP Exhibit "C"  
 OIL & GAS MAP  
 MWJ Producing Company  
 Well #1 MWJ 34 Federal  
 NE 1/4 NW 1/4 Sec. 34-8S-36E

R. 36 E.



SUP Exhibit "D"  
 SKETCH OF WELL PAD  
 MWJ Producing Company  
 Well #1 MWJ 34 Federal  
 NE $\frac{1}{4}$ NW $\frac{1}{4}$  Sec. 34-8S-36E

GENERAL REQUIREMENTS  
FOR  
OIL AND GAS OPERATIONS ON FEDERAL LEASES

The General Requirements apply universally to all oil and gas operations on Federal leases in the Roswell District.

Special Stipulations are in addition to the General Requirements and apply specifically to an individual well.

GENERAL

1. A complete copy of the approved Application for Permit to Drill and the accompanying Surface Use and Operations Plan along with any conditions of approval, will be made available to authorized government personnel at the drillsite whenever active construction or drilling operations are underway.
2. Full compliance is required with all applicable laws and regulations: with Federal Regulations at 43 CFR 3160, the lease terms, the approved Permit to Drill, the approved Surface Use and Operations Plan, the Special Drilling Stipulations, Onshore Oil and Gas Orders, NTL's and with other orders and instructions of the authorized officer.
3. Prior approval is required for variance from the approved Surface Use Plan or drilling program. Similar approval is also required for addition to, or alteration of, facilities and before commencing plugging operations, plug-back work, casing repair work, corrective cementing operations, or suspending drilling operations indefinitely. Emergency approval may be obtained orally; but such approval does not waive the written report requirements.

For changes to the Surface Use Plan, contact the Supervisory Mineral Resources Specialist.

For changes to the drilling plan, contact the Petroleum Engineer:

Roswell Resource Area: (505) 624-1790  
Carlsbad Resource Area: (505) 887-6544

4. **Drilling Deadline:** This permit is valid for a period of one year from the date of approval, or until lease expiration, whichever is shorter. If the permit terminates, any surface disturbance created under the application must be rehabilitated in accordance with an approved plan. If construction does not commence within 90 days from the date of approval, the operator must contact the Surface Management Agency prior to beginning construction.
5. Well area and lease premises will be maintained in a workmanlike manner, with due regard to safety, conservation, and appearance. All waste associated with drilling operation will be contained in a separate netted trash pit and buried in place or removed and deposited in an approved sanitary landfill. All garbage (metal containers will be crushed) and debris that is left on-site will be buried at least four feet deep. No hazardous wastes may be buried in place. All trash and debris will be buried or removed from the site within 30 days after drilling operations have ceased. The wellsite will be kept clean and in an aesthetically satisfactory condition for the life of the well.

6. Lessees and/or operators are fully accountable for the actions of their contractors and subcontractors.

7. No construction activities such as roads, well sites, tank battery sites, pits, or other work involving surface disturbance will be commenced until a Surface Use and Operations Plan is submitted, and approval is obtained in writing.

8. Payment for Federal mineral materials used for construction is due within 60 days following construction of the pad and access road.

ON LEASE SURFACE REQUIREMENTS PRIOR TO DRILLING

1. Prior to commencing construction of road, pad, or other associated developments the operator will provide the dirt contractor with a copy of the Surface Use Plan and the attached conditions of approval.

2. Access Roads:

(RESERVED)

3. Archeological or Historical Sites:

The lessee/operator shall comply with all cultural resource laws and policies. The lessee/operator shall immediately report the discovery of any cultural or paleontological resources encountered during dirt work and shall

immediately cease operations until advised to recommence work by the authorized officer. Further, the company shall be held responsible for the conduct of its employees and subcontractors while on lease. Any unauthorized collection or disturbance of cultural or paleontological resources by these persons may result in a shutdown order by the authorized officer.

4. Cave Stipulations:

A. No discarded materials or chemicals will be placed, or disposed of, in sinkholes or cave entrances.

B. If, during any construction activities any sinkholes or cave openings are discovered, all construction activities will cease immediately, and the BLM office will be notified.

5. Palaeontology Stipulations:

Fossils or vertebrate animals discovered during any phase of the operation will be left undisturbed, and the BLM office will be immediately notified.

DRILLING OPERATION REQUIREMENTS

1. Each well will have a well sign in legible condition from spud date to final abandonment. The sign will show the operator's name, lease or unit name, well number, location of the well and the lease serial number.

2. Drilling Pits:

A. Mud pits will be constructed so as not to leak, break, or allow discharge of liquids. Pits are not to be located in natural drainage. If plastic material is used to line pits, the plastic must be removed to below ground level before the pits are covered.

B. All unguarded pits containing liquids will be fenced; and any unguarded pit containing oil and/or toxic liquids will be covered with a fine mesh netting, if necessary, to protect wildlife.

C. Liquids in pits will be allowed to evaporate, or be properly disposed of otherwise, before pits are broken. Under no circumstances will pits be cut to be drained.

3. After cementing, but before commencing any test, the casing string will stand cemented under pressure until the cement has reached a compressive strength of at least 500 psi at the shoe, except that in no case will tests be initiated until cement has been in place at least 8 hours. WOC time will be recorded in the driller's log.

4. All casing strings (except the conductor casing) will be pressure-tested (0.2 psi/foot or 1,000 psi, whichever is greater) prior to drilling the plug after cementing; test pressures must not exceed the internal yield pressure of the casing. If the pressure declines more than 10 percent in 30 minutes, or if there is other indication of a leak, corrective measures must be taken. A successful pressure test must be obtained before proceeding to the next step of the drilling program. Test data shall be entered into the daily drillers log.

5. Ram-type preventers and related control equipment must be tested to the rated working pressure of the stack assembly, or to 70 percent of the minimum internal yield pressure of the casing, whichever is less; or to such pressure as the authorized officer may otherwise prescribe. After installation, annular-type preventers must be tested to 50 percent of the rated working pressure; or to such pressure as the authorized officer may otherwise prescribe. Test data will be entered into the daily driller's log.
6. While drill pipe is in use, ram-type blowout preventers shall be actuated to test proper functioning once each trip, but in no event less than once each day. The annular-type blowout preventer shall be actuated on the drill pipe at least once each week.
7. Blowout preventers are to have proper rams for the operations being performed. Casing rams are required when running casing.
8. Blowout preventers are to have handwheels installed where applicable.
9. A choke line and a kill line are to be installed and maintained in good working order. The kill line is not to be used as a fill-up line.
10. The accumulator system will have a pressure capacity to provide for repeated operation of hydraulic preventers.
11. Immediate notice is required of all blowouts, fires, spills, and accidents involving life-threatening injuries or loss of life. (See NTL-3)
12. On rotary rigs, a drill string safety valve (or valves) must be maintained in the open position on the rig floor at all times while drilling operations are conducted. Separate valves are required when drilling with a mixed string.
13. On rotary rigs, a kelly cock will be installed and maintained in operable condition.
14. Blowout prevention drills are to be conducted as necessary to assure that equipment is operational and that each crew is properly trained to carry out emergency duties. All BOP tests and drills are to be recorded in the driller's log.
15. The maximum pressure allowed on blowout preventers during well control operations is to be posted for each casing string.
16. Quantities of mud materials sufficient to insure well control will be maintained, readily accessible for use at all times.
17. When coming out of the hole with drill pipe, the mud level in the hole will be maintained within 100 feet of the surface. The volume of mud required to fill the hole will be watched; and at any time at which there is an indication of swabbing, or an influx of formation fluids, proper blowout prevention precautions must be taken. The mud will not be circulated and conditioned except on or near bottom, unless well conditions prevent the running of pipe to bottom.

18. From the time operations are initiated until drilling operations are completed, a member of the drilling crew or the toolpusher will maintain rig floor surveillance at all times, unless the well is secured with blowout preventers or cement plugs.

19. Drill-Stem Tests:

Test intervals and estimated amount of oil and gas recovered and/or produced during drill-stem tests are to be shown in the driller's log and Sundry Report Form 3160.5.

20. Driller's Log:

A. The following shall be entered in the daily driller's log:

- (1) Blowout-preventer pressure tests, including test pressures and results.
- (2) Blowout-preventer tests for proper functioning.
- (3) Blowout-prevention drills conducted.
- (4) Casing run, including size, grade, weight, and depth set.
- (5) How pipe was cemented, including amount of cement, type, whether cement circulated, location of cementing tools, etc.
- (6) Waiting on cement time for each casing string.
- (7) Casing-pressure tests after cementing, including test pressure and results.

21. Safety:

- A. New employees are to be advised of safety procedures.
- B. Safety drills will be conducted on a regular schedule.
- C. Hard hats shall be utilized.
- D. Rig lighting will be vapor-or explosion-proof.
- E. Rig-safety lines will be installed.

22. Removal of Drilling Rig:

Unless a well has been properly cased and cemented, or properly plugged, the drilling rig must not be moved from the drill-site without prior approval from the BLM.

23. Reports:

A. The following reports are to be filed with the appropriate area office within 15 days after the work is completed: original and five copies of Sundry Notice, Form 3160-5, giving complete information concerning:

- (1) Setting of each string of casing. Show size, grade and weight of casing set, size hole, depth set, amount and type of cement used, whether cement was circulated, top of cement behind casing if determined, depth of cementing tools used, casing test methods and results, and date work was done. Show spud date on first report submitted.
- (2) Intervals tested, perforated, acidized, or fractured, and the results obtained. Show the date work was done.
- (3) All undesirable events must be reported to the BLM within 24 hours.

WELL COMPLETION

1. 5-Day Production Start-Up Notification:

Section 102(b)(3) of the Federal Oil and Gas Royalty Management Act of 1982, as implemented by the applicable provisions of the operating regulations at Title 43 CFR 3162.4-1(c), requires that "not later than the 5th business day after any well begins production on which royalty is due anywhere on a lease site or allocated to a lease site, or resumes production in the case of a well which has been off production for more than 90 days, the operator shall notify the authorized officer by letter or Sundry Notice, Form 3160-5, or orally to be followed by a letter or Sundry Notice, of the date on which such production has begun or resumed."

The date on which production is commenced or resumed will be construed for oil wells as the date on which liquid hydrocarbons are first sold or shipped from a temporary storage facility, such as a test tank, and for which a run ticket is required to be generated or, the date on which liquid hydrocarbons are first produced into a permanent storage facility, whichever first occurs; and, for gas wells as the date on which associated liquid hydrocarbons are first sold or shipped from a temporary storage facility, such as a test tank, and for which a run ticket is required to be generated or, the date on which gas is first measured through permanent metering facilities, whichever first occurs.

2. Original and six copies of Well Completion Report, Form 3160-4, will be sent within 30 days of well completion, even when the well is a dry hole. Show formation tops, drill stem test information, completion data, and production tests. Show all oil and gas zones and important water sands under item 37. Data on water sands should include rate of water inflow or hydrostatic level.

3. Two copies of each electrical and radioactivity log run.

4. Water Disposal and Pits:

An application for approval of the disposal method for water production and/or pits must be filed with the appropriate BLM area office pursuant to NTL-2B.

5. Gas Flaring or Venting:

An application for flaring or venting of gas must comply with NTL-4A. Short-term venting and flaring of gas is allowed without prior approval pursuant to NTL-4A, Part III.

6. Painting Stipulations:

All above-ground permanent facilities, including, but not limited to, tanks, separators, heater treaters, and piping 4-inches in diameter or greater shall be painted Carlsbad Canyon, Munsell Soil, Color-25Y 6/2 (Formerly-Sandstone Brown) within 60 days of installation (unless contrary to state and Federal safety requirements). Any deviations must be authorized in advanced by the BLM. Deviations from this color may be required by the authorized officer to fit special situations.

7. A Monthly Report of Operations must be filed monthly for each lease, communitized or unitized area or for each participating area beginning with the month in which operations were first initiated. Such report must include all wells that are not approved as permanently plugged and abandoned. Wells must be identified by Federal or Indian lease number or by State or fee indentification as appropriate. Separate lines should be used where necessary to identify leases, participating area, etc.

Subsequent Well Operations

Approval for and subsequent report of subsequent well operations is needed as per code of Federal Regulations 43 CFR 3160.3-2.

ABANDONMENT

1. If the well is dry and is to be plugged, approval of the proposed plugging program may be obtained orally. However, oral approval must be confirmed in writing by immediately filing an original and six copies of the Notice of Intention to abandon on Form 3160-5 with the appropriate BLM area office. The report should show the total depth reached, the reason for plugging, and the proposed intervals, by depths, where plugs are to be placed, type of plug, type of plugging mud, etc.

2. Plugging Procedures:

A. Plugging equipment used is to have separate mixing and displacement pumps and a calibrated tank to assure proper displacement of plugs.

B. A proper tank or pit will be used to contain all fluids pumped from the well during plugging operations.

C. All cement plugs are to be placed through tubing (or drill pipe) and shall be a minimum of 25 sacks or 100 feet in length, whichever is greater. The minimum length of plugs for deeper wells is 150 feet in length for depths 5,000' - 10,000' and 200 feet in length for depths below 10,000'.

D. Any cement plug placed when the well is not full of fluid, or when the well may be taking fluid, will be touched after cement has set to verify the proper location.

E. Mud must be placed between plugs. Minimum consistency of plugging mud must be that obtained by mixing at the rate of 25 sacks (50 lbs each) of gel per 100 barrels of water.

3. Upon completion of approved plugging, erect a regulation well marker which should not be less than 4 inches in diameter and extend at least 4 feet above general ground level. The top of the marker must be closed or capped. The following minimum information shall be permanently placed on the marker with a plate, cap, or welded bead:

- A. Operator
- B. Well number and name
- C. Section - Township - Range
- D. 1/4 1/4 section or footage location from section lines
- E. Lease No.

If approval is obtained to omit the dry hole marker, casings are to be cut off four feet below ground level.

4. Following receipt of "Notice of Intent to Abandon", final BLM requirements for surface reclamation will be specified by the approving BLM office.

5. Within 15 days after the plugging operation have been completed Subsequent Report will be filed; Sundry Notice Form 3160-5, an original and six copies. The Subsequent Report of Abandonment will contain; the dates of the plugging operations, the plug types depth, cement volumes, and other details of the plugging operation.

6. If the well is not drilled, please notify the BLM so that an official release can be approved.

MWJ FEDERAL 34 #1

OFFSET OPERATORS:

American Petrofina Company of Texas  
P. O. Box 2990  
Midland, Texas 79702

Mobil Producing Texas & New Mexico, Inc.  
P. O. Box 633  
Midland, Texas 79702

EP Operating Company  
P. O. Box 4815  
Midland, Texas 79702

United States Department of the Interior  
Bureau of Land Management  
P. O. Drawer 1857  
Roswell, New Mexico 88202-1857

