## ATTACHMENT TO FORM 3160-3 MINIS 2 FEDERAL #1 3,630' FSL AND 660' FEL SECTION 2, T21S, R32E LEA COUNTY, NEW MEXICO

#### **DRILLING PROGRAM**

## 1. GEOLOGIC NAME OF SURFACE FORMATION

Quatemary

## 2. ESTIMATED TOPS OF IMPORTANT GEOLOGIC MARKERS

| Delaware    | 5,530'  | Morrow | 13,440' |
|-------------|---------|--------|---------|
| Bone Spring | 8,740'  | TD     | 14,300' |
| Wolfcamp    | 11,600' |        | ,       |
| Penn Shale  | 12,200' |        |         |
| Strawn      | 12,800' |        |         |
| Atoka       | 13,100' |        |         |

## 3. ESTIMATED DEPTHS OF ANTICIPATED FRESH WATER, OIL, OR GAS

| Isolated Delaware Sands | Oil |
|-------------------------|-----|
| Atoka                   | Gas |
| Morrow                  | Gas |

#### 4. CASING AND CEMENTING PROGRAM

| Setting From |                  |        |       |              |
|--------------|------------------|--------|-------|--------------|
| Casing Size  | <u>From To</u>   | Weight | Grade | <u>Joint</u> |
| 13-3/8"      | 0' - 500'        | 48#    | H-40  | ST&C         |
| 8-5/8"       | 0'-2,000'        | 24#    | K-55  | ST&C         |
|              | 2,000' - 4,000'  | 32#    | K-55  | ST&C         |
|              | 4,400' - 5,500'  | 32#    | K-55  | ST&C         |
| 5-1/2"       | 0'-4,200'        | 20#    | N-80  | LT&C         |
|              | 4,200' - 8,400'  | 17#    | N-80  | LT&C         |
|              | 8,400' – 14,300' | 20#    | N-80  | LT&C         |

We plan to drill a 17-1/2" hole to equal 500'. 13-3/8" casing will be cemented with 500 sacks or volume to cement to surface.

12-1/4" hole will be drilled to 5,500" and 8-5/8" casing will be cemented with 2,500 sx or volume necessary to bring cement back to surface.

7-7/8" hole will be drilled and 5-1/2" production casing will be cemented with approximately 500 sx of Class "H" 50/50 POZ.

## 5. MINIMUM SPECIFICATIONS FOR PRESSURE CONTROL

The BOP stack will consist of a 5,000 psi working pressure, dual ram type preventer and annular.

A BOP sketch is attached.

# 6. TYPES AND CHARACTERISTICS OF THE PROPOSED MUD SYSTEM

Spud and drill to 500' with fresh water mud for surface string. The intermediate section will be drilled with 10 ppg brine to 5,200'. The production section from 5,200' to 10,800' will be cut brine at 8.6 ppg, from 10,800' to 12,400' with 9 ppg cut brine, from 12,400' to 14,300' with Brine/Poly Pac/XCD system with mud weight sufficient to control formation pressures.

# 7. AUXILLARY WELL CONTROL AND MONITORING EQUIPMENT

None required.

## 8. LOGGING, TESTING, AND CORING PROGRAM

DLL/CNL/LDT/CAL/GR logging is planned. Drill stem tests, cores and sidewall cores are possible.

## 9. <u>ABNORMAL CONDITIONS, PRESSURES, TEMPERATURES & POTENTIAL</u> <u>HAZARDS</u>

Anticipated bottom hole pressure: 5,000 psi. Abnormal pressure is not anticipated.

# 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 June 15, 1998. Once commenced, the drilling operation should be finished in approximately 45 days.

# VICINITY MAP



SCALE: 1'' = 2 MILES

SEC. 2 TWP.21-S\_RGE.32-E SURVEY N.M.P.M. COUNTY LEA DESCRIPTION 3630' FSL & 660' FEL ELEVATION 3465' OPERATOR NEARBURG PRODUCING COMPANY LEASE MINIS 2 FEDERAL

# JOHN WEST ENGINEERING HOBBS, NEW MEXICO

(505) 393-3117

Exhibit D Topographic & Location Verification Map DISTRICT I P.O. Box 1980, Hobbs, NM 88241-1980

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DISTRICT II

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P.O. Drawer DD, Artesia, NM 88211-0719 DISTRICT III

1000 Rio Brazos Rd., Aztec, NM 87410

DISTRICT IV p.o. box 2088, santa pe, n.m. 87504-2089

### State of New Mexico

Energy, Minerals and Natural Resources Department

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Form C-102 Revised February 10, 1994 Submit to Appropriate District Office State Lease - 4 Copies Fee Lease - 3 Copies

### OIL CONSERVATION DIVISION P.O. Box 2088

Santa Fe, New Mexico 87504-2088

C AMENDED REPORT

#### WELL LOCATION AND ACREAGE DEDICATION PLAT

| API Number       | Pool Code<br>78240 | Pool Name<br>Hat Mesa Morrow |             |  |
|------------------|--------------------|------------------------------|-------------|--|
| Property Code    | Property Name      |                              | Well Number |  |
| 22946-23485      | VINIS 2 FEDERAL    |                              | 1           |  |
| <b>OGRID</b> No. | operato            |                              | Elevation   |  |
| 15742            | NEARBURG PROD      |                              | 3739'       |  |

#### Surface Location

| UL or lot No. | Section | Township | Range | Lot Idn | Feet from the | North/South line | Feet from the | East/West line | County |
|---------------|---------|----------|-------|---------|---------------|------------------|---------------|----------------|--------|
| Ρ.            | 2       | 21 S     | 32 E  |         | 3630          | SCUTH            | 660           | EAST           | LEA    |

#### Bottom Hole Location If Different From Surface

| UL or lot No.   | Section  | Township     | Range         | Lot Idn | Feet from the | North/South line | Feet from the | East/West line | County |
|-----------------|----------|--------------|---------------|---------|---------------|------------------|---------------|----------------|--------|
|                 |          |              |               |         |               |                  |               |                |        |
| Dedicated Acres | Joint of | r Infill Cor | nsolidation ( | Code Or | der No.       | i                | L             | i              |        |
| 317.95          | N        |              |               |         |               |                  |               |                |        |

#### NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

|            |                       |   | OPERATOR CERTIFICATION  |
|------------|-----------------------|---|---|
| [          |                       | 1///                                      | I hereby certify the the information<br>contained herein is true and complete to the<br>best of my knowledge and belief.        |
| 4<br>39.26 | AC. 39.15 AC. 39.03 A | 38.92 AC                                  | A. Dott funds and   |
|            | 6 7                   | 8   | Signature<br>5. SCOTT KIMBROU6H   |
|            | AC. 40.00 AC 40.00 A  |   | E. SCOTT KIMBROUGH<br>Printed Name<br>MANAGER OF DRUG PROB<br>Itile   |
| 40.00      |                       | 1 S<br>1 S<br>2 1 40.00 AC                | 3/16/93<br>Date   |
|            |                       | 37 <sup>3</sup> 5                         | SURVEYOR CERTIFICATION  |
| 40.00      | AC. 40.00 AC.         | 6. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. | on this plat was plotted from field notes a<br>actual surveys made by me or under m<br>supervisor, and that the same is true as |
|            |                       |   | correct to the best of my belief.   |
|            |                       |   | Date Suffered<br>Signature & Seal-of<br>Professional Surveyor   |
|            |                       |   | Ronald Collow 3-12-90   |
| L          | SCALE: (" = 10)       |   | Certificate \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\  |

ELF DT. Ð

WILL BE RELEASED CONFIDENTIAL LOGS ABOVE DATE DOES NOT INDICATE WHEN

V.,

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