

OPER. OGRID NO. 5073

PROPERTY NO. 3127

POOL CODE 62965

EFF. DATE 10/17/96

APINO. 30-025-33624

**UNITED  
DEPARTMENT OF  
BUREAU OF LAND**

**APPLICATION FOR PERM**

FORM APPROVED  
OMB NO. 1004-0136  
Expires: February 28, 1995

**1a. TYPE OF WORK**

DRILL ☒

DEEPEN ☐

**b. TYPE OF WELL**

OIL WELL ☒

GAS WELL ☐

OTHER ☐

SINGLE ZONE ☒

MULTIPLE ZONE ☐

**2. NAME OF OPERATOR**

Conoco, Inc.

(915) 686-6548

**3. ADDRESS AND TELEPHONE NO.**

10 Desta Dr. Ste 100W, Midland, TX 79705

**4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)**

At surface

1330' FSL & 1310' FEL UNORTH. LOC.

At proposed prod. zone 1330' FSL & 1310' FEL

Unit I  
By State

**14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE\***

By State

**15. DISTANCE FROM PROPOSED\***

LOCATION TO NEAREST  
PROPERTY OR LEASE LINE, FT.  
(Also to nearest drig. unit line, if any)

**16. NO. OF ACRES IN LEASE**

**17. NO. OF ACRES ASSIGNED  
TO THIS WELL**

40

**18. DISTANCE FROM PROPOSED LOCATION\*  
TO NEAREST WELL, DRILLING, COMPLETED,  
OR APPLIED FOR, ON THIS LEASE, FT.**

19. PROPOSED DEPTH  
6700'

20. ROTARY OR CABLE TOOLS  
Rotary

**21. ELEVATIONS (Show whether DF, RT, GR, etc.)**  
3505'

**22. APPROX. DATE WORK WILL START\***  
10/1/96

**23. PROPOSED CASING AND CEMENTING PROGRAM**

SIZE OF HOLE	GRADE SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12-1/4"	8-5/8" K-55	24#	1500'	835 circ.
7-7/8"	5-1/2" K-55	15.5#	6700'	1240 circ.

It is proposed to drill this wellbore as a vertical infill producer according to the drilling plan outlined in the following attachments:

1. Well Location & Acreage Dedication Plat (C-102)
2. Proposed Well Plan Outline
3. Cementing Program
4. Surface Use Plan
5. EXHIBIT A - Vicinity Map
6. EXHIBIT B - Topo & Lease Road Map
7. EXHIBIT C - Trailer-mounted Rig Layout
8. BOP and choke Manifold Specifications (2 diagrams)
9. H2S Drilling Operations Plan & Diagram

All lines and roads run completely on Fee surface and do not require BLM approval.

Even though this is normally an unorthodox location, as an infill location in a secondary recovery project it will automatically be approved as orthodox according to the recently revised NMOCD Rule 104.

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 Jerry W. Hood TITLE Sr. Conservation Coordinator DATE 9/10/96

(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 /s/ Gary Bowers TITLE Acting Area Manager DATE OCT 15 1996

\*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.



# PROPOSED WELL PLAN OUTLINE

WELL NAME  
LOCATION

**WARREN UNIT NO. 202**  
**1330' FSL & 1310' FEL, SEC. 33, T-20S, R-38E, LEA CO.**

TVD IN 1000'	MD	FORMATION TOPS & TYPE	DRILLING PROBLEMS	TYPE OF FORMATION EVALUATION	HOLE SIZE	CASING SIZE	DEPTH	FRAC GRAD	FORMATION PRESSURE GRADIENT	MUD WT	MUD TYPE	DAY
0			POSSIBLE HOLE ENLARGEMENT AND SLOUGHING		12-1/4"				NORMAL	8.4 - 9.5	FRESH	
1		RUSTLER 1430'	WASHOUTS IN SALT SECTION F/1400' - 2600'			8-5/8" 24#, K-55, ST&C 835 sx, circ cmt	1500'			10	BRINE	3
2		YATES 2716'										
3		SEVEN RIVERS 2974'			7-7/8"							
		QUEEN 3538' PENROSE 3680'		MUDLOGGERS ON @ 3500' H2S MONITOR ON @ 3500'								
4		GRAYBURG 3862' SAN ANDRES 4128'	POSSIBLE LOSSES AND SEEPAGE TO TOTAL DEPTH						LESS THAN 8.3			7
5		GLORIETA 5338'	CASES OF DIFFERENT STICKING THROUGH GLORIETA									
6		BLINEBRY MKR. 5794' TUBB 6368' DRINKARD 6670' TD @ 6700'		GR-CAL-DLL-MLL and FDC-CNL-PE-Spect GR 2700'-TD. Pull GR-CAL to surface casing. Only run SG across Blinebry-Tubb		5-1/2" 15.5#, K-55, LT&C 1240 sx, circ cmt	6700'		LESS THAN 8.3 BHP = 2650 psi	10	STARCH- GEL @ TD	17
7												
8												

DATE 30 JULY 1996

APPROVED Roger Williamson  
DRILLING ENGINEER

Joe Miller  
RESERVOIR ENGINEER

**Well Name** : Warren Unit #202

**Location** : 1330' FSL & 1310' FEL Sec 33, T-20S, R-38E, Lea County, New Mexico

**Casing Program** :

Surface 8 5/8" casing in 12 1/4" Hole at 1500 ft.

Production 5 1/2" casing in 7 7/8" Hole at 6700 ft.

**Cementing Program** :

**Surface**

Lead 610 sacks Class C Mixed at 12.7 ppg  
Additives 35:65:6 (Poz:Cem:Gel) + 2% CACL2  
+ 0.25 pps Cello-Flake

Tail 225 sacks Class C Mixed at 14.8 ppg  
Additives 2% A-7P

**Production**

Lead 585 sacks Class C Mixed at 12 ppg  
Additives 16% Gel + 3% Salt + 0.3% CD-32 + 0.3% SMS

Tail 655 sacks Class C Mixed at 14.8 ppg  
Additives 1.1% FL-62 + 2% BA-90 + 3% Salt + 0.3% CD-32  
+ 0.2% SMS

Free Water 0 % Fluid Loss 80 cc/30 min.

**SURFACE USE PLAN  
Conoco Inc.**

**Warren Unit No. 202**

The following is required information concerning the possible effect which the drilling of this well may have on the environment, existing road sites, and surrounding acreage. A copy will be posted on the derrick floor so all contractors and sub-contractors will be aware of all items of this plan.

1. Existing Roads

- A. The proposed well site is 1330' FSL & 1310' FEL, Sec. 33, T-20S, R-38E, Lea County, New Mexico.
- B. Exhibit "A" is a Vicinity road and well map. Directions to the location are as follows:  
  
From Hobbs go south 11 miles on Hwy. 18 to mile marker 38. Continue .2 miles south and then turn west for 1.3 miles. Turn north 1/8 mile, then east 1/8 mile to location.
- C. No improvement or maintenance is anticipated for the existing roads.

2. Planned Access Roads

- A. 441' of new access road will be required.
- B. One turnout will be required.
- C. No culverts will be required.
- D. No gates, cattleguards, or fences will be required.

3. Topographic Map and Well Location

A 7.5" quadrangle topo map of the area is included as Exhibit "B".

4. Additional Right-of-Ways

All roads and lines run completely on Fee surface and do not require BLM approval.

5. Water Supply

Fresh water will be secured from the City of Eunice and brine from McCasland's water station in Eunice. All water will be trucked from Eunice, north on highway 18. The route will go north 2/10 mile on highway 18 and then follow the above described route to location.

6. Source of Construction Materials

Caliche will come from the pit located in the SE/4 SE/4 Sec. 15, T-20S, R-38E.

7. Methods of Handling Waste Disposal

Waste Disposal: Well cuttings will be disposed in reserve pit. Barrel trash containers to be in accessible locations within drill site area during drilling and completion procedures. All detrimental waste will be hauled away. See Exhibit "C (rig layout) for location of pits. If well is productive, maintenance waste will be placed in special trash cans and hauled away periodically. Any produced water will be collected in tanks until hauled to an approved disposal system, or separate disposal applications will be submitted to survey for appropriate approval.

8. Ancillary Facilities

None.

9. Wellsite Layout

See Exhibit "C". The V-door faces East. The reserve pit will be lined with plastic and the pad and pits are staked. 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 to protect wildlife, if necessary.

10. Plans for Restoration of Surface

Pits will be backfilled and leveled to original condition when they are dry. Commencement of rehabilitation operations will immediately follow removal of drilling and completion equipment from location and rehabilitation of the surface is planned to be completed within 45 days from commencement.

11. Surface Ownership

Fee.

12. Other Information

Archaeological survey not required.

13. Operator's Representative and Certification

The person who can be contacted concerning compliance of this Surface Use Plan is:

**Jerry W. Hoover  
10 Desta Drive West  
Midland, Texas 79705  
(915) 686-6548**

*I hereby certify that I, or persons under my direct supervision, have inspected the proposed drilling site; 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 that the work associated with operations proposed herein will be performed by Conoco Inc. and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved. This statement is subject to the provisions of 18 U.S.C. 1001 for the filing of a false statement.*

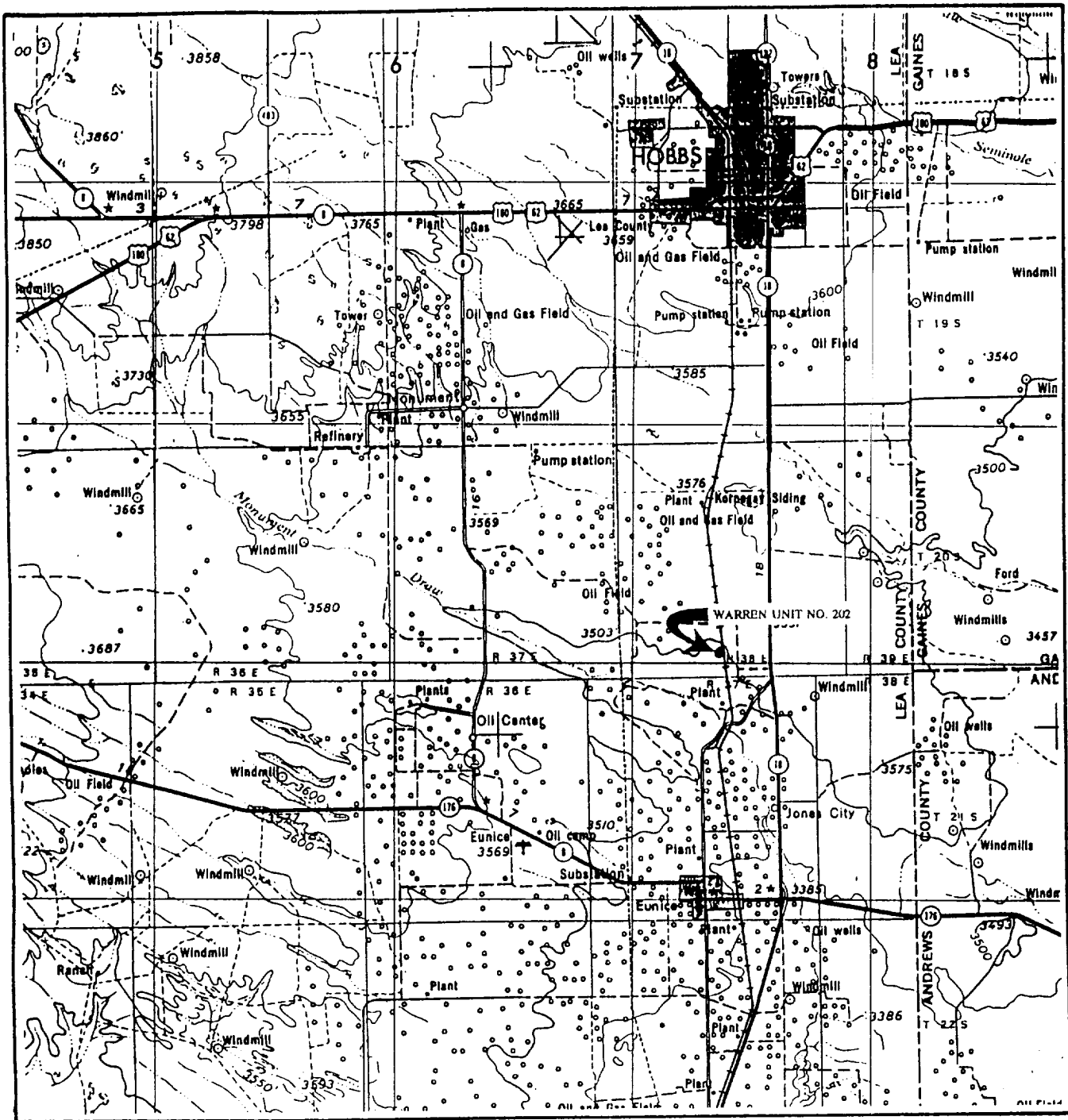
Roger Williamson

for Gary L. Smith,  
Drilling Manager

9/10/96

Date

# VICINITY MAP



SCALE: 1" = 4 MILES

SEC. 33 TWP. 20-S RGE. 38-E

SURVEY N.M.P.M.

COUNTY LEA STATE NM

DESCRIPTION 1330' FSL & 1310' FEL

ELEVATION 3505'

OPERATOR CONOCO, INC.

LEASE WARREN UNIT NO. 202

WEST TEXAS CONSULTANTS, INC.

ENGINEERS-PLANNERS-SURVEYORS

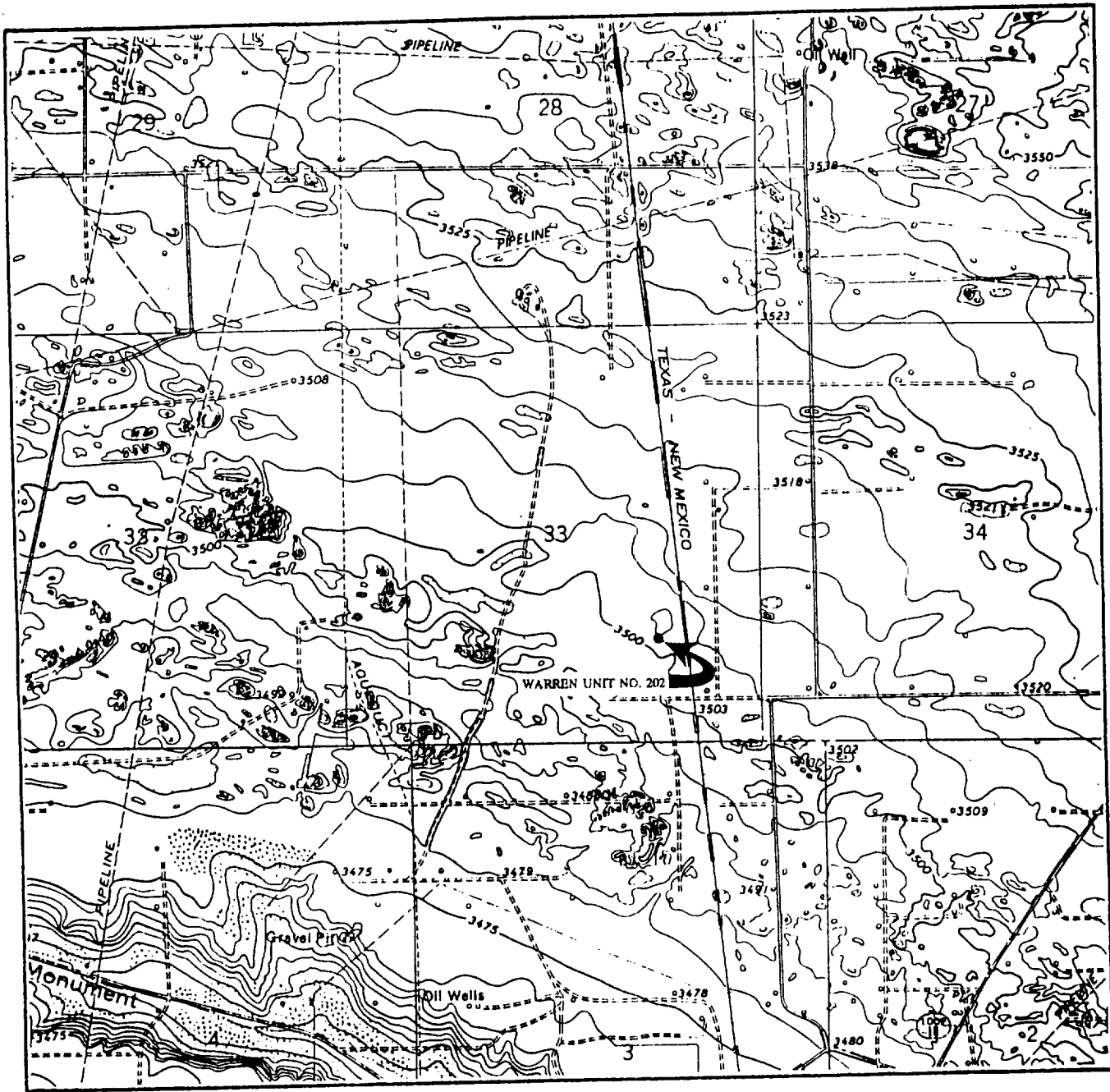
MIDLAND, TEXAS

915-685-3800

EXHIBIT A



# LOCATION VERIFICATION MAP



SCALE: 1" = 2000'

CONTOUR INTERVAL 5'

WTC 44071

SEC. 33 TWP. 20-S RGE. 38-E

SURVEY N.M.P.M.

COUNTY LEA STATE NM

DESCRIPTION 1330' FSL & 1310' FEL

ELEVATION 3505'

OPERATOR CONOCO, INC.

LEASE WARREN UNIT NO. 202

U.S.G.S. TOPOGRAPHIC MAP HOBBS, SW, NM

**WEST TEXAS CONSULTANTS, INC.**

ENGINEERS-PLANNERS-SURVEYORS

MIDLAND, TEXAS

915-685-3800

**EXHIBIT B**

# TRAILER - MOUNTED RIG LAYOUT

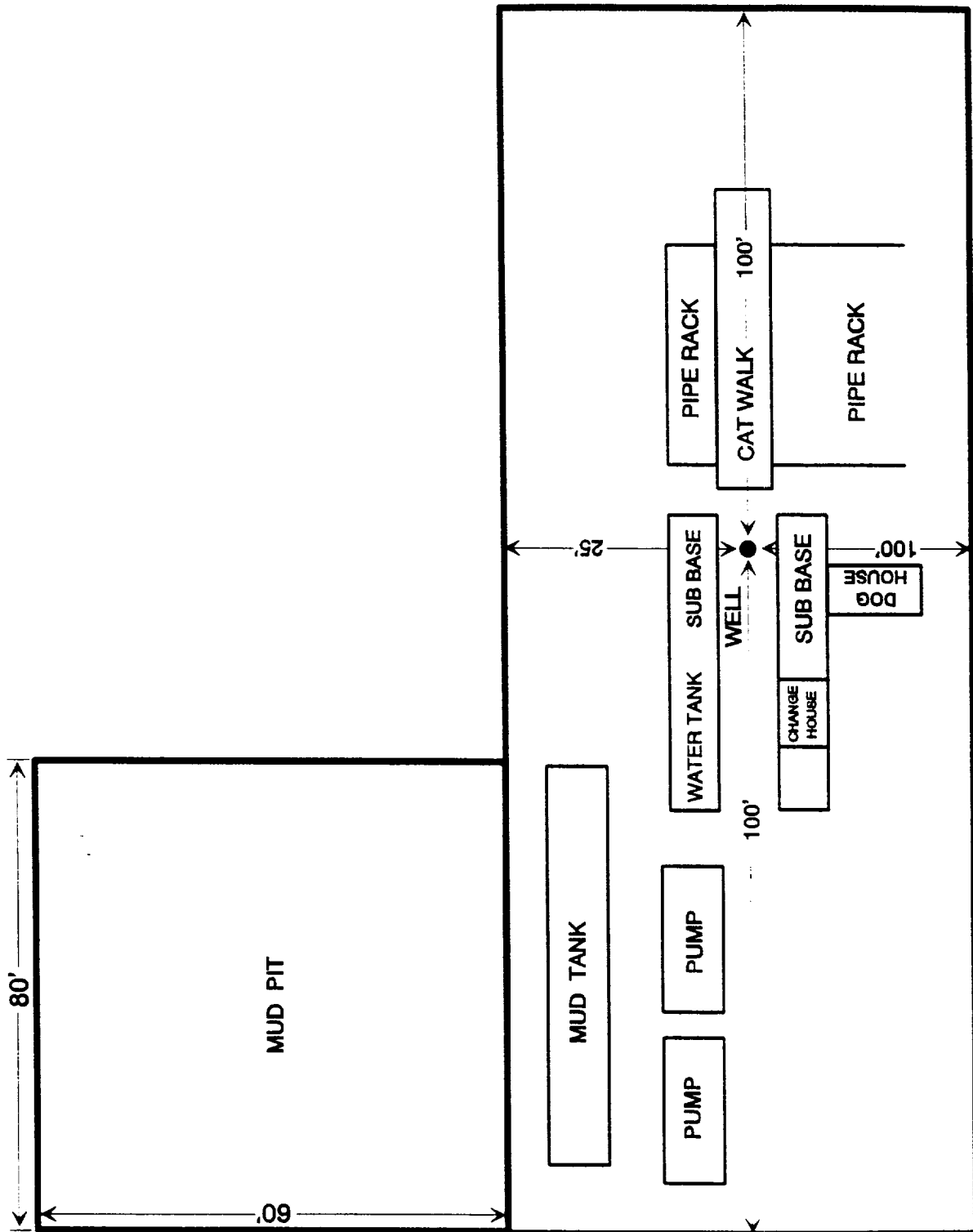
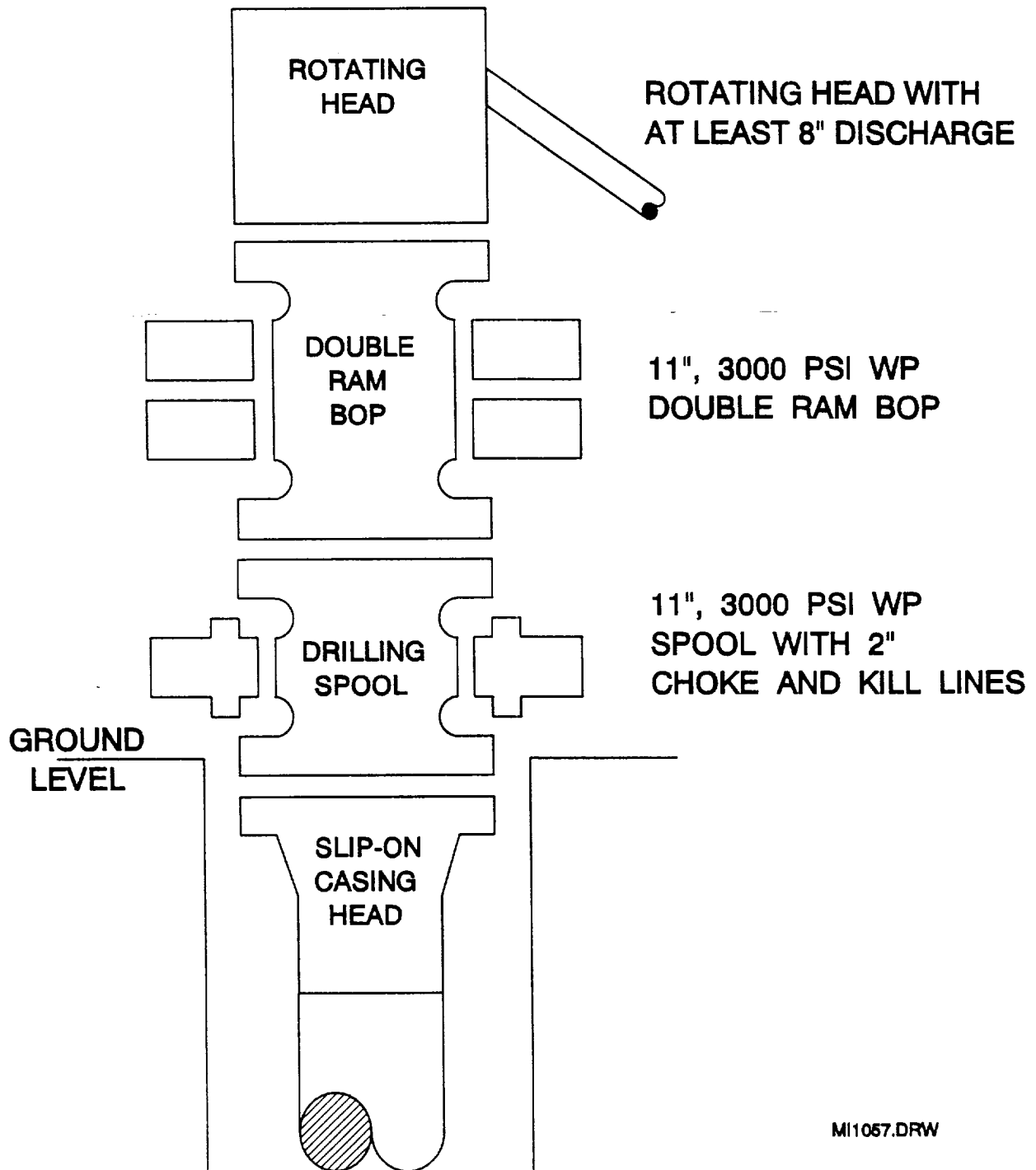
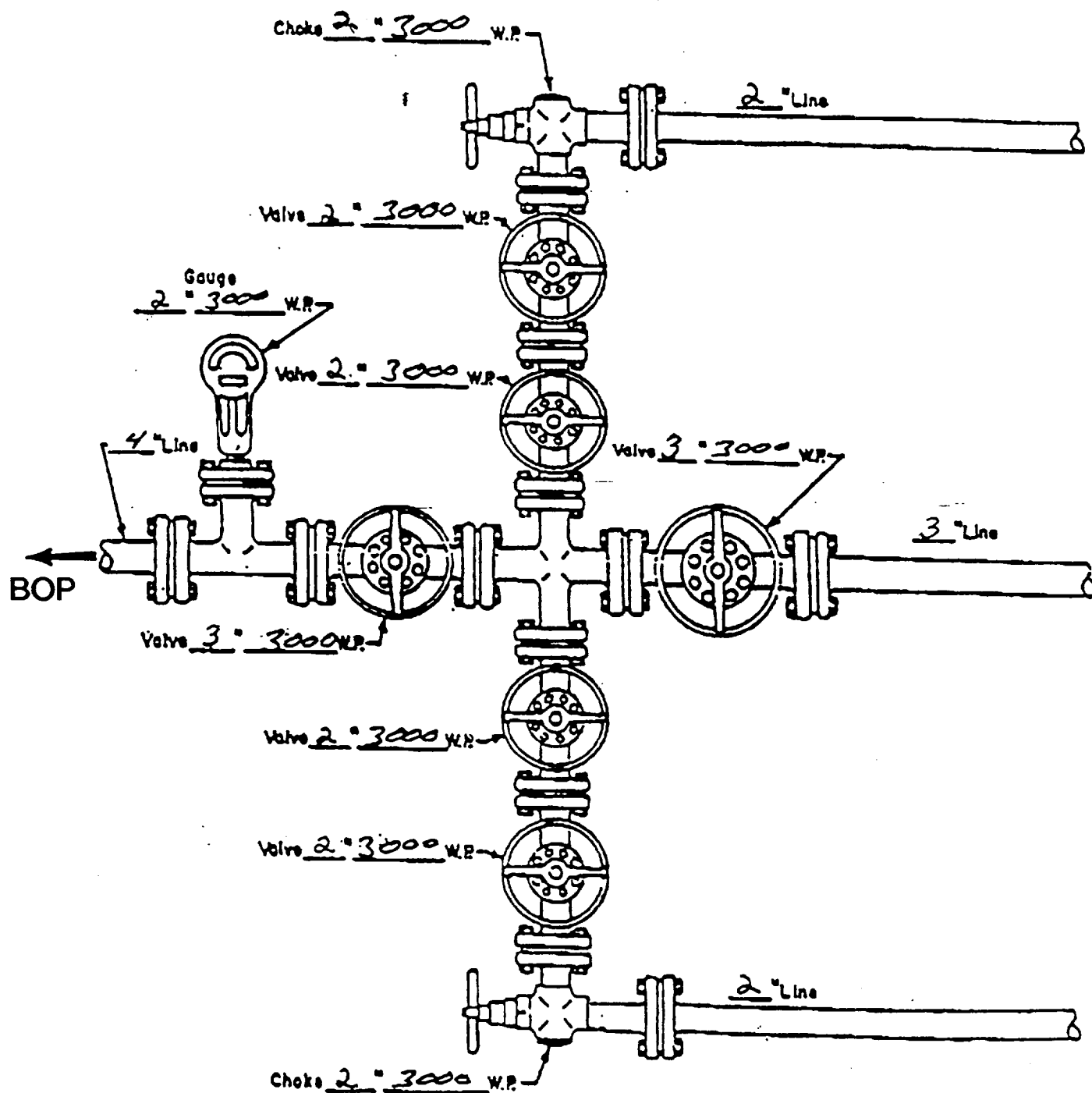


EXHIBIT C

# BOP SPECIFICATIONS



# CHOKE MANIFOLD DIAGRAM



MANIFOLD  
3000 #W.P.

- ☒ Manual
- ☐ Hydraulic

## **H2S DRILLING OPERATIONS PLAN**

### **I. Hydrogen Sulfide Training**

All contractors and subcontractors employed by Conoco will receive or have received training from a qualified instructor within the last twelve months in the following areas prior to commencing drilling operations on this well.

1. The hazards and characteristics of hydrogen sulfide (H<sub>2</sub>S)
2. Safety precautions
3. Operations of safety equipment and life support systems.

In addition, contractor supervisory personnel will be trained or prepared in the following areas:

1. The effect of H<sub>2</sub>S on metal components in the system, especially high tensile strength tubulars are to be used.
2. Corrective action and shut-down procedures when drilling or reworking a well, blowout prevention and well control procedures, if the nature of work performed involves these items.
3. The contents and requirements of the contingency plan when such plan is required.

All personnel will be required to carry documentation of the above training on their person.

### **II. H2S EQUIPMENT AND SYSTEMS**

#### **1. Safety Equipment**

The following safety equipment will be on location:

- A. Wind direction indicators as seen in attached diagram.
- B. Automatic H<sub>2</sub>S detection alarm equipment (both audio and visual).
- C. Clearly visible warning signs as seen on the attached diagram. Signs will use the words "POISON GAS" and "CAUTION" with a strong color contrast.
- D. Protective breathing equipment will be located in the dog house and at briefing areas as seen in the attached diagram.

## **2. Well Control Systems**

### **A. Blowout Prevention Equipment**

Equipment includes but is not limited to:

- a. pipe rams to accomodate all pipe sizes
- b. blind rams
- c. choke manifold
- d. closing unit
- e. flare line and means of ignition

### **B. Communication**

The rig contractor will be required to have two-way communication capability. Conoco will have either land-line or mobile telephone capabilities.

### **C. Mud Program**

The mud program has been designed to minimize the volume of H<sub>2</sub>S circulated to surface. Proper mud weight, safe drilling practices, and the use of H<sub>2</sub>S scavengers when appropriate will minimize hazards when penetrating H<sub>2</sub>S bearing zones.

### **D. Drill Stem Tests**

There are no drill stem tests proposed for this well.

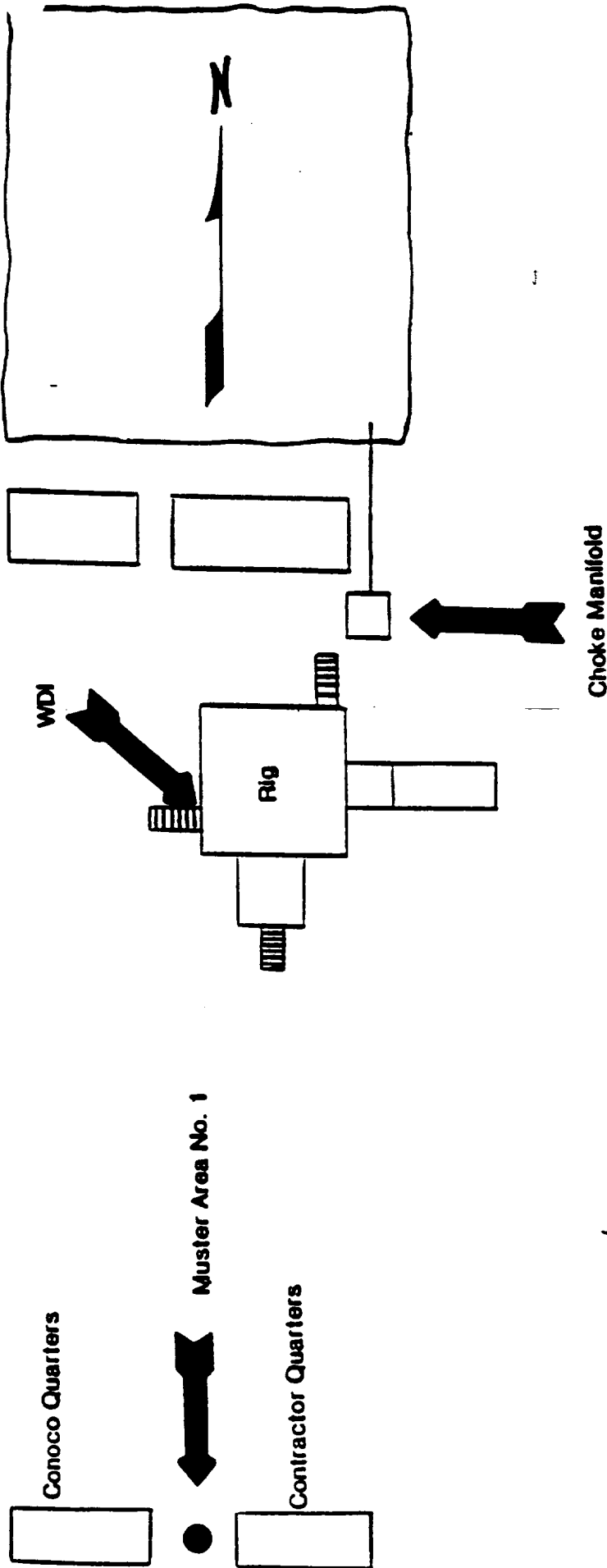
## **III. WELL SITE DIAGRAM**

A complete well site diagram including the following information is attached:

- 1. Rig orientation
- 2. Terrain
- 3. Briefing areas
- 4. Ingress and egress
- 5. Pits and flare lines
- 6. Caution and danger signs
- 7. Wind indicators and prevailing wind direction



Terrain is flat, and covered with native grasses  
Two of the three WDI (wind direction indicator) locations will be utilized  
(Prevailing winds are SW to NE)



Muster Area No. 2  
WDI





Troy L. Early  
Right of Way Agent  
Right of Way and Claims

Conoco Inc.  
Suite 430E  
10 Desta Drive  
Midland, Texas 79705  
(915) 686-5579

September 23, 1996

Bureau of Land Management  
620 East Greene  
Carlsbad, New Mexico 88220

Attn: Mr. Barry Hunt, Surface Protection Specialist

Re: Tentative Settlement  
for Well Location and Appurtenances  
**Warren Unit Well # 202**, Section 33,  
T-20-S, R-38-E, Lea County, New Mexico

Dear Mr. Hunt:

By this letter Conoco Inc. has tentatively made settlement, with the surface owner, for construction of the referenced location and appurtenances.

If you have any questions, please contact me at 915-686-5579.

Sincerely,

A handwritten signature in cursive script, reading "Troy L. Early".

Troy L. Early  
Right of Way Agent  
Right of Way & Claims