

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

N. M. OIL CONS. COMMISSION
P. O. BOX 194
MORRIS, NEW MEXICO 88240
(Other instructions
reverse side)

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

APPLICATION FOR PERMIT TO DRILL OR DEEPEN		5. LEASE DESIGNATION AND SERIAL NO LC 031695B
1a. TYPE OF WORK DRILL <input checked="" type="checkbox"/> DEEPEN <input type="checkbox"/>		6 IF INDIAN, ALLOTTEE OR TRIBE NAME
b. TYPE OF WELL OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <input type="checkbox"/> SINGLE ZONE <input checked="" type="checkbox"/> MULTIPLE ZONE <input type="checkbox"/>		7 UNIT AGREEMENT NAME
2. NAME OF OPERATOR Conoco Inc.		8 FARM OR LEASE NAME WELL NO Warren Unit B-T #310
a. ADDRESS AND TELEPHONE NO 10 Desta Dr. Ste 430E, Midland, Tx. 79705-4500		9. API WELL NO 30-025-3437C
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements *) At surface 1330' FSL & 1260' FEL At proposed prod. zone I 1330' FSL & 1260' FEL		10. FIELD AND POOL, OR WILDCAT Warren Blinbry-Tubb Oil & Gas
14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*		11. SEC. T., R., M., OR BLK. AND SURVEY OR AREA Sec. 27, T20-S, R38-E
5. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if Any)	16 NO OF ACRES IN LEASE	17. NO. OF ACRES ASSIGNED TO THIS WELL 40
8. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.	19. PROPOSED DEPTH 6850'	20. ROTARY OR CABLE TOOLS Rotary
21. ELEVATIONS (Show whether DF, RT, GR, etc) 3544' GR		22. APPROX. DATE WORK WILL START* 3/31/98

23 PROPOSED CASING AND CEMENTING PROGRAM				
SIZE OF HOLE	GRADE, SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12-1/4"	M-50, 8-5/8"	23#	1400'	565 sxs, circ.
7-7/8"	K-55, 5-1/2"	17#	6850'	1280 sxs, circ.

It is proposed to drill a vertical wellbore as a Blinbry-Tubb Oil & Gas producer. NOS was filed 2/23/98. The well will be drilled and equipped according to the following additional attachments:

1. Well Location & Acreage Dedication Plat (C-102) along with other associated maps and plats.
- 2.. Proposed Well Plan Outline
3. Cementing Plan.
4. Surface Use Plan.
5. Trailer Mounted Rig Layout Drawing.
6. BOP & Choke Manifold Specifications.
7. H2S Drilling Operations Plan.
8. Surface owner communications.

This application includes ROW's for the well pad, electric line, access road and flowline.

The undersigned accepts all applicable terms, conditions, stipulations and restrictions concerning operations conducted on the leased land or portion thereof, as described above and as covered by BLM Bond File No. ES-0085.

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. Jo Ann Johnson SIGNED Jo Ann Johnson TITLE Property Analyst DATE 3-10-98
(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.

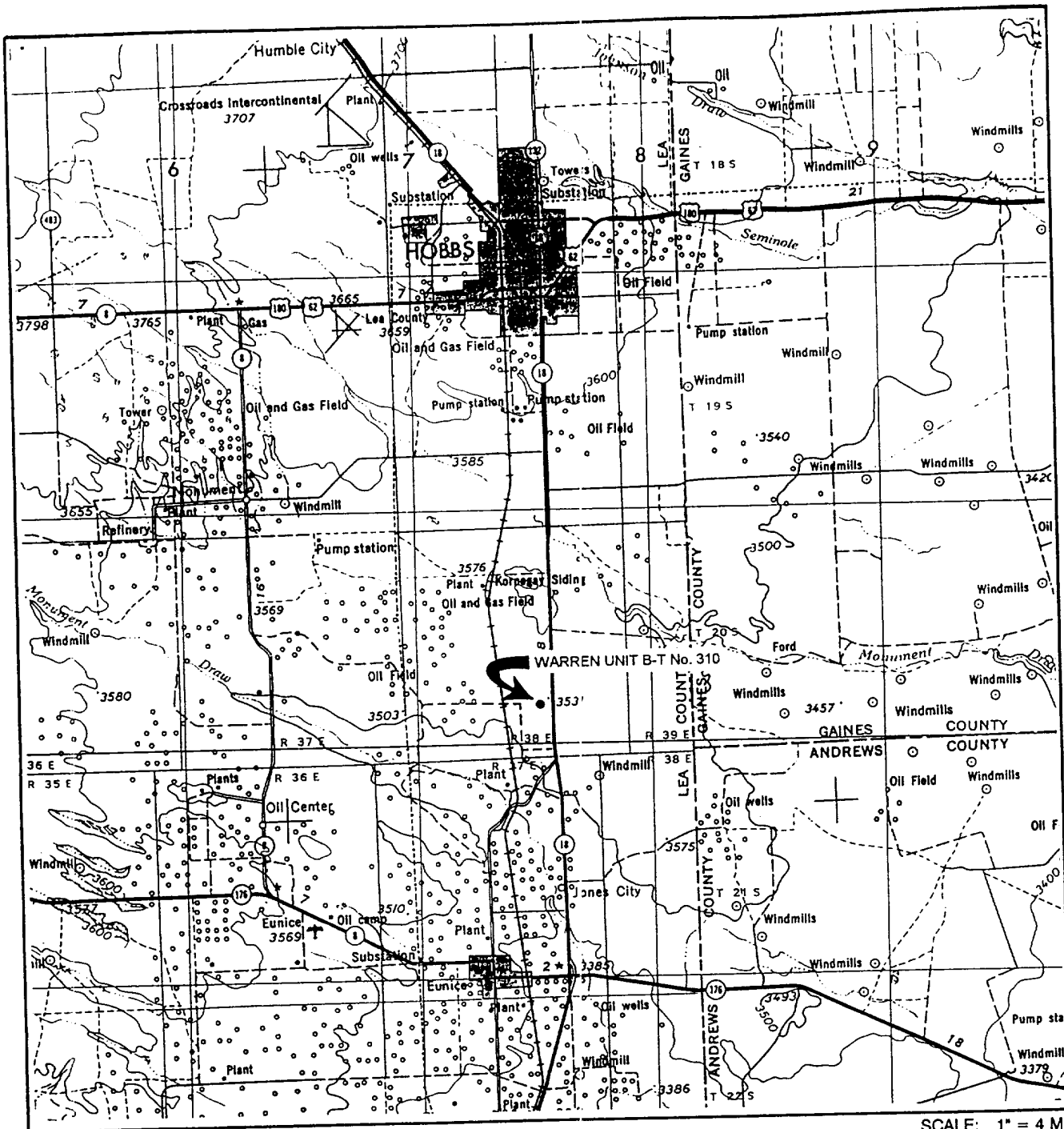
CONDITIONS OF APPROVAL, IF ANY:

APPROVED BY ADM, MINERALS TITLE ADM, MINERALS DATE 4.16.98

*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.

VICINITY MAP



SCALE: 1" = 4 MILES

WTC 45166

SEC. 27 TWP. 20-S RGE. 38-E

SURVEY N.M.P.M

COUNTY LEA STATE NM

DESCRIPTION 1330' FSL & 1260' FEL

ELEVATION 3544'

OPERATOR CONOCO INC.

LEASE WARREN UNIT B-T NO. 310

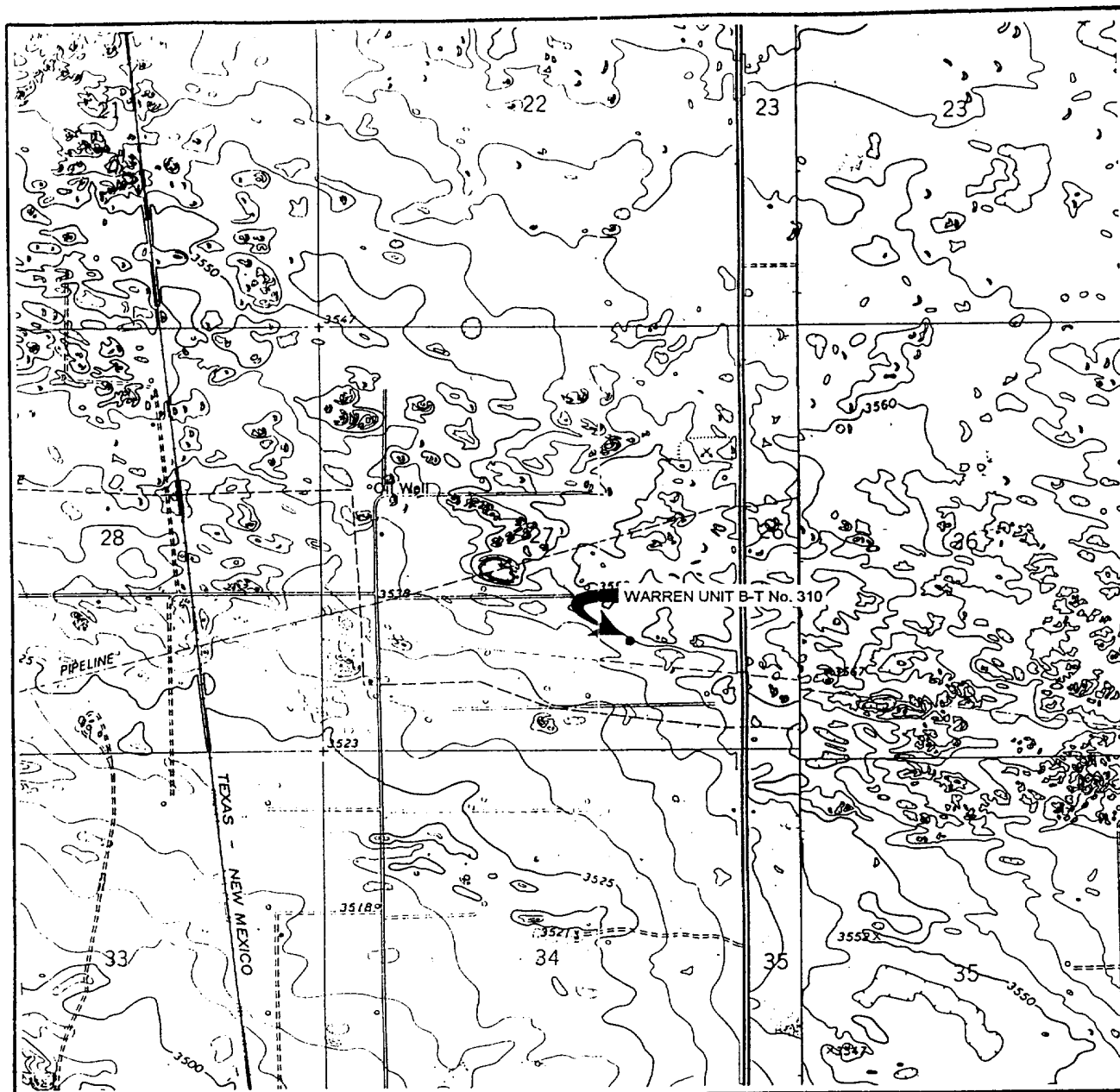
WEST TEXAS CONSULTANTS, INC.

ENGINEERS-PLANNERS-SURVEYORS

MIDLAND, TEXAS

915-685-3800

LOCATION VERIFICATION MAP



SCALE: 1" = 2000'

WTC 45166

CONTOUR INTERVAL 5'

SEC. 27 TWP. 20-S RGE. 38-E

SURVEY N.M.P.M.

COUNTY LEA STATE NM

DESCRIPTION 1330' FSL & 1260' FEL

ELEVATION 3544'

OPERATOR CONOCO INC.

LEASE WARREN UNIT B-T NO. 310

USGS TOPO MAP HOBBS SW, NEW MEXICO - HOBBS SE

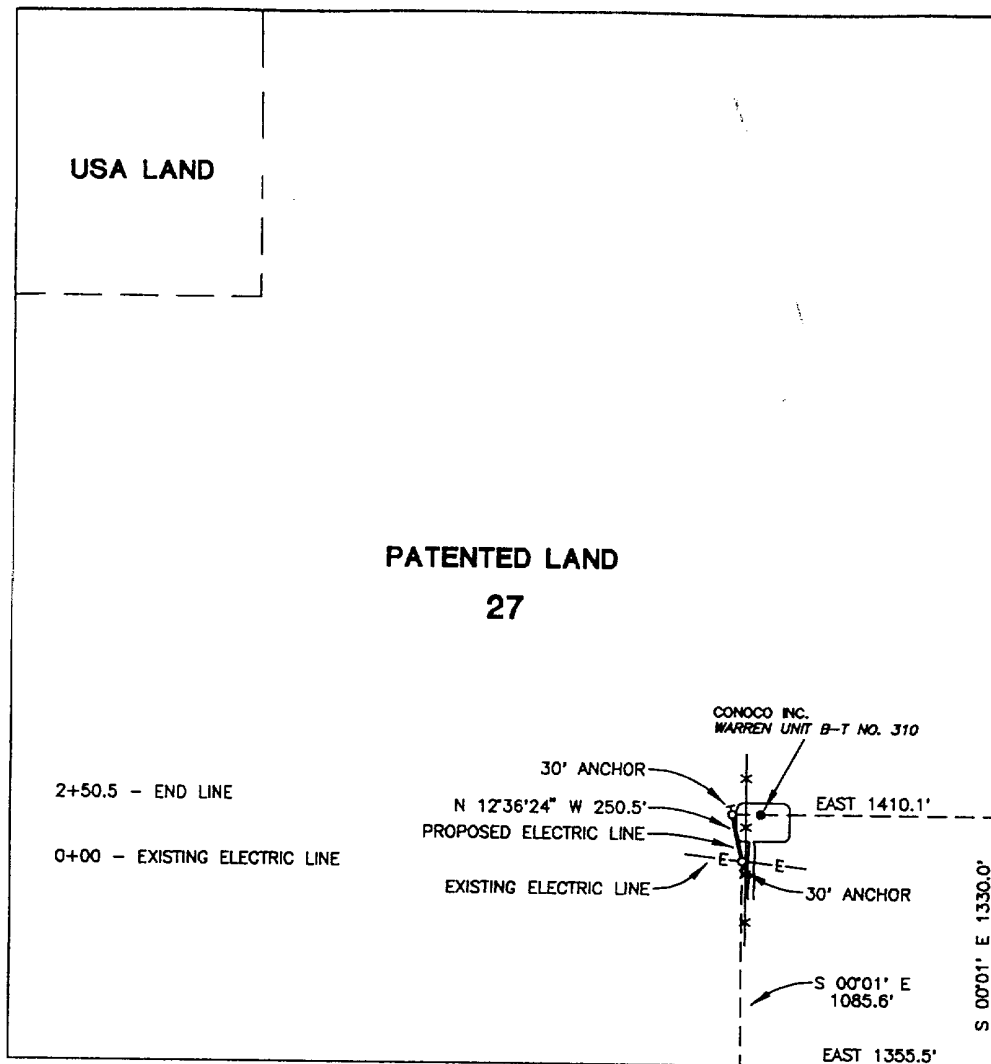
WEST TEXAS CONSULTANTS, INC.

ENGINEERS-PLANNERS-SURVEYORS

MIDLAND, TEXAS

915-685-3800

SECTION 27, TOWNSHIP 20 SOUTH, RANGE 38 EAST, N.M.P.M.
LEA COUNTY, NEW MEXICO

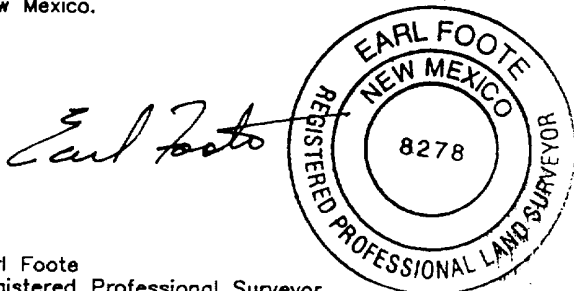


CENTERLINE DESCRIPTION OF A PROPOSED ELECTRIC LINE:

BEGINNING at a point in an existing electric line, from which point an anchor easement bears S 12° 36' 24" E, 30.0 feet, also from said beginning point the southeast corner of Section 27, T-20-S, R-38-E, N.M.P.M., Lea County, New Mexico bears S 00° 01' E, 1085.6 feet and East 1355.5 feet;

THENCE N 12° 36' 24" W, with the centerline of proposed electric line, 250.5 feet to a point for the end of this line, from which point an anchor easement bears N 12° 36' 24" W, 30.0 feet and the southeast corner of said Section 27 bears East 1410.1 feet and S 00° 01' E, 1330.0 feet.

I hereby certify that this plat was prepared from an actual survey made on the ground and meets or exceeds all requirements for land surveys as specified by the state of New Mexico.



Earl Foote
Registered Professional Surveyor
New Mexico Certificate No. 8278

PROPOSED ELECTRIC LINE TO SERVE
WARREN UNIT B-T WELL No. 310

CONOCO INC.

250.5 feet of proposed electric line in
Section 27, T-20-S, R-38-E, N.M.P.M.,
Lea County, New Mexico

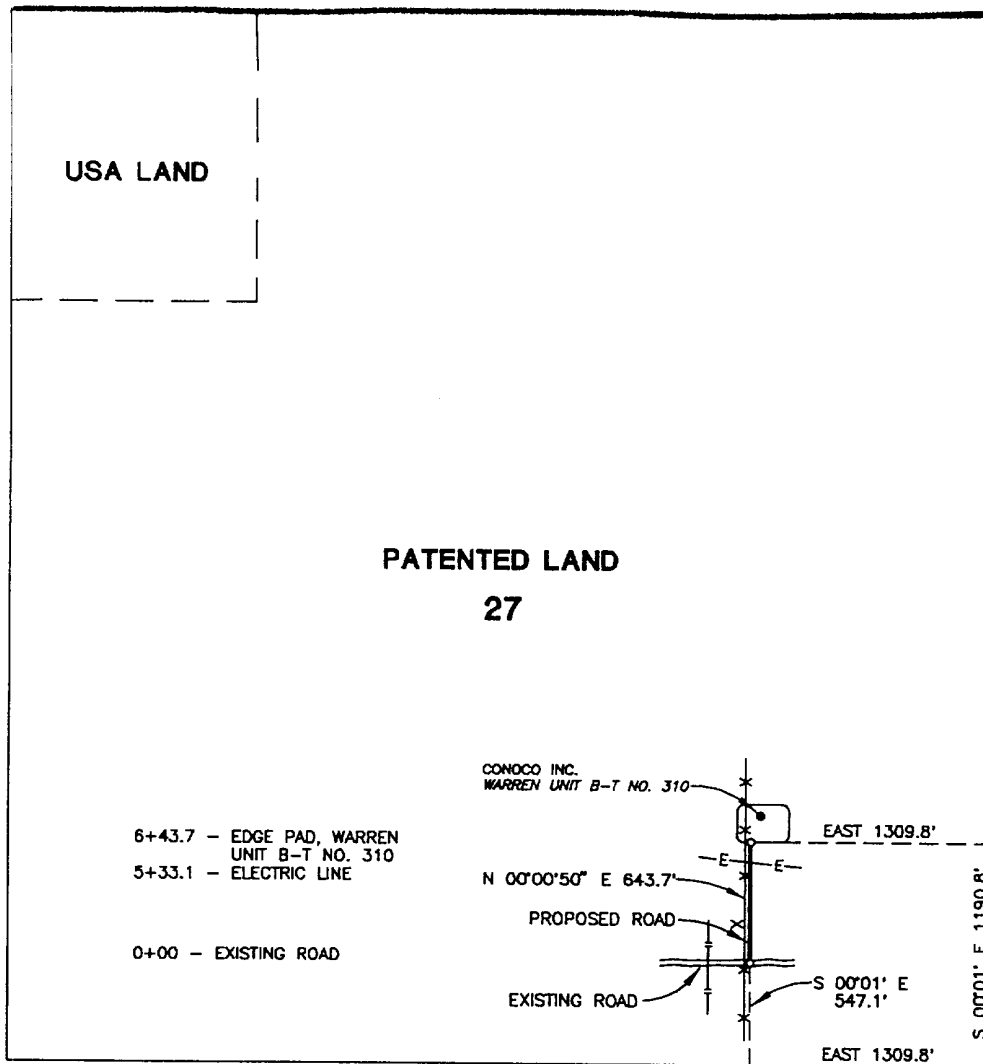
WEST TEXAS CONSULTANTS, INC.

ENGINEERS-PLANNERS-SURVEYORS

MIDLAND, TEXAS

Survey Date: 2-5-98	Date: 3-4-98	Scale: 1" = 1000'
WTC No. 45166	Drawn By: R.S.	Sheet 1 of 1

SECTION 27, TOWNSHIP 20 SOUTH, RANGE 38 EAST, N.M.P.M.
LEA COUNTY, NEW MEXICO



CENTERLINE DESCRIPTION OF A PROPOSED ROAD:

BEGINNING at a point in an existing road, from which point the southeast corner of Section 27, T-20-S, R-38-E, N.M.P.M., Lea County, New Mexico, bears S 00° 01' E, 547.1 feet and East 1309.8 feet;

THENCE N 00° 00' 50" E, with the centerline of proposed road, 643.7 feet to a point in the south edge of well pad for Conoco Inc. WARREN UNIT B-T WELL No. 310, for the end of this line, from which point the southeast corner of Section 27 bears East 1309.8 feet and S 00° 01' E, 1190.8 feet.

I hereby certify that this plat was prepared from an actual survey made on the ground and meets or exceeds all requirements for land surveys as specified by the state of New Mexico.

PROPOSED ROAD TO SERVE
WARREN UNIT B-T WELL No. 310

CONOCO INC.

643.7 feet of proposed road in
Section 27, T-20-S, R-38-E, N.M.P.M.,
Lea County, New Mexico

WEST TEXAS CONSULTANTS, INC.

ENGINEERS-PLANNERS-SURVEYORS

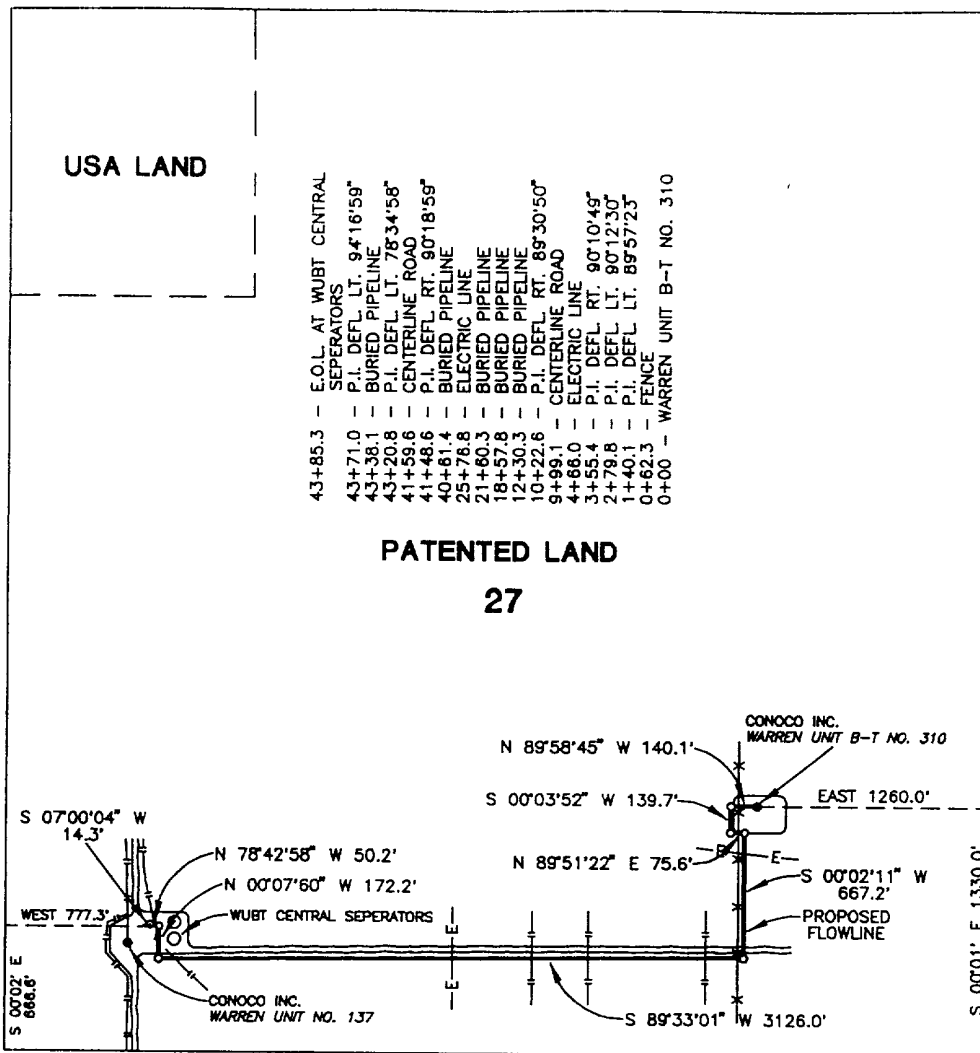
MIDLAND, TEXAS

Survey Date: 2-5-98	Date: 3-4-98	Scale: 1" = 1000'
WTC No. 45166	Drawn By: R.S.	Sheet 1 of 1

Earl Foote
Registered Professional Surveyor
New Mexico Certificate No. 8278



SECTION 27, TOWNSHIP 20 SOUTH, RANGE 38 EAST, N.M.P.M.
LEA COUNTY, NEW MEXICO



CENTERLINE DESCRIPTION OF A PROPOSED FLOWLINE:

BEGINNING at Conoco Inc. WARREN UNIT B-T WELL No. 310, from which point the southeast corner of Section 27, T-20-S, R-38-E, N.M.P.M., Lea County, New Mexico bears East 1260.0 feet and S 00° 01' E, 1330.0 feet;

THENCE with the centerline of proposed flowline as follows: N 89° 58' 45" W, 140.1 feet; S 00° 03' 52" W, 139.7 feet; N 89° 51' 22" E, 75.6 feet; S 00° 02' 11" W, 667.2 feet; S 89° 33' 01" W, 3126.0 feet; N 00° 07' 60" W, 172.2 feet; N 78° 42' 58" W, 50.2 feet and S 07° 00' 04" W, 14.3 feet to a point at WUBT CENTRAL SEPARATORS, for the end of this line, from which point the southwest corner of said Section 27 bears West 777.3 feet and S 00° 02' E, 666.6 feet.

I hereby certify that this plat was prepared from an actual survey made on the ground and meets or exceeds all requirements for land surveys as specified by the state of New Mexico.

PROPOSED FLOWLINE TO SERVE
WARREN UNIT B-T WELL No. 310

CONOCO INC.

4385.3 feet of proposed flowline in
Section 27, T-20-S, R-38-E, N.M.P.M.,
Lea County, New Mexico

WEST TEXAS CONSULTANTS, INC.

ENGINEERS-PLANNERS-SURVEYORS

MIDLAND, TEXAS

Survey Date: 2-5-98	Date: 3-4-98	Scale: 1" = 1000'
WTC No. 45166	Drawn By: R.S.	Sheet 1 of 1

Earl Foote
Registered Professional Surveyor
New Mexico Certificate No. 8278



PROPOSED WELL PLAN OUTLINE

WELL NAME **Warren Unit No. 310**
 LOCATION **1330' FSL & 1280' FEL S27-T209-R38E**

GL = 3544'

ALL DEPTHS ARE
 BELOW GROUND LEVEL

TVD	MD	FORMATION	DRILLING PROBLEMS & COMMENTS	FORMATION EVALUATION	HOLE SIZE	CASING PROGRAM	FRAC GRAD	FORMATION PRESSURE GRADIENT	MUD WEIGHT & TYPE	DAYS
			Possible hole enlargement and sloughing		12-1/4"			Less than 8.3	Spud	
1500	1000					8-5/8", 23#, M-50 ST&C @ 1400' 565 ex. Circulate Cement				1
		Rustler @ 1300' Top Salt @ 1400'	Washouts in Salt Section		7-7/8"				10 ppg Brine	2
2000	2000							Less than 8.4		
		Base Salt @ 2600' Yates @ 2798'	Possible Deviation							
3000	3000	7-Rivers @ 3057'								
		Queen @ 3614' Pervose @ 3768'		H2S Monitor on at 3500' No Mud Log						
4000	4000	Grayburg @ 3943'								
		San Andres @ 4213'	Possible losses and seepage to TD			Mud up with Gel-Starch if necessary to control losses.				
5000	5000									7
		Glorieta @ 5475'	Possible differential sticking through Glorieta							
6000	6000	Blinberry @ 5940'				Top Tail Cement @ 5700				
		Tubb Mkr @ 6437'								
7000	7000	Drinkard @ 6741' TD @ 6850'		GR-CAL-CNL-FDC-MLL-DLL-PE 2750'-TD		5-1/2", 17#, K-55, LT&C @ 6850' 1280 sx. Circulate Cement			Starch/salt gel	16
8000	8000									

Tim Tuten
 Tim Tuten, Drilling Engineer
 4-Mar-98

Tim Schmieder
 Tim Schmieder, Production Engineer
 4-Mar-98

Joe Miller
 Joe Miller, Reservoir Engineer
 4-Mar-98

Well Name : Warren Unit #310

Location : 1330' FSL & 1260' FEL Sec 27, T-20S, R-38E, Lea County, New Mexico

Casing Program :

Surface 8 5/8" casing in 12 1/4" Hole at 1400 ft.

Production 5 1/2" casing in 7 7/8" Hole at 6850 ft.

Cementing Program :

Surface

Lead 365 sacks Class C
Additives 35:65:6 (Poz:Cem:Gel) + 2% CACL2
+ 0.25 pps Cello-Flake
Mixed at 12.7 ppg **Yield** 1.87 cuft/sk

Tail 200 sacks Class C
Additives 2% A-7P
Mixed at 14.8 ppg **Yield** 1.34 cuft/sk

Production

Lead 1020 sacks Class C
Additives 16% Gel + 0.4% CD-32 + 0.2% SMS
Mixed at 12 ppg **Yield** 2.68 cuft/sk

Tail 260 sacks Class C
Additives 1.1% FL-62 + 1% BA-58 + 3% Salt + 0.3% CD-32
+ 0.2% SMS
Mixed at 14.8 ppg **Yield** 1.37 cuft/sk
Free Water 0 % **Fluid Loss** 45 cc/30 min.

SURFACE USE PLAN

Conoco Inc.

Warren Unit B-T #310

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 & 1260' FEL, Sec. 27, T20S, R38E, Lea County, New Mexico.

B. Directions to the location are as follows:

South of Hobbs on Hwy. 18 to Mile Marker #39; turn west and travel 1 mile; turn south and travel ½ mile; turn east and travel ½ mile; then turn north for ¼ mile.

C. No improvement or maintenance is anticipated for the existing roads.

2. Planned Access Roads

A. 643.7' of new access road will be required.

B. Turnouts as required by surface managing agency.

C. Culverts as required by surface managing agency.

D. Gates, cattleguards, or fences as required by surface managing agency.

3. Topographic Map and Well Location

A 7.5" quadrangle topo map was filed with the NOS.

4. Additional Rights-of-Way

Electric line, access road and flowline as shown on attached plats.

5. Water Supply

Fresh and brine water will be obtained from Goldstar's Water Station located 1 mile north of Eunice, NM, and will be trucked to location by the same directions for reaching the drilling site.

6. Source of Construction Materials

Construction materials will be obtained from the SE/4 NE/4, Sec. 4, T21S, R37E, Lea County, NM.

7. Methods of Handling Waste Disposal

- A. The drill cuttings, fluids and completion fluids will be placed in the reserve pit. The reserve pit will be fenced on three sides away from the pad during drilling and the fourth side fenced as soon as the rig moves out. The reserve pit will be allowed to dry, and materials remaining in the reserve pit buried. The reserve pit will be backfilled, leveled and contoured so as to prevent any materials being carried into the watershed. Upon completion, the pad will be leveled, contoured, and reseeded with the appropriate seed mixture as specified by the surface managing agency.
- B. All garbage and trash will be hauled away to designated landfill by Conoco.
- C. Chemical toilets will be provided and maintained during drilling operations.

8. Ancillary Facilities

No ancillary facilities are planned.

9. Wellsite Layout

See attached Wellsite Layout. 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 liquids will be fenced.

10. Plans for Restoration of Surface

Reserve pits will be rehabilitated once drilling fluids have been allowed to evaporate to the point the pits are dry enough for backfilling and leveling. In the event drilling fluids will not evaporate in a reasonable time period, the fluids will be removed and transported by tank truck to a state approved disposal facility. Backfilling and leveling of the location will be completed within a time period of one year upon cessation of drilling operations.

11. Surface Ownership

The surface ownership is Robert A. McCasland and Dallas McCasland.

12. Archeological Clearance

An archeological survey is being conducted and will be provided upon completion.

13. Operator's Representative and Certification

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

Mike L. Mankin
10 Desta Drive, Suite 430E
Midland, Texas 79705
(915) 686-5794

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.

Mike L. Mankin

Mike L. Mankin
Right-of-Way Agent

3-11-98

Date

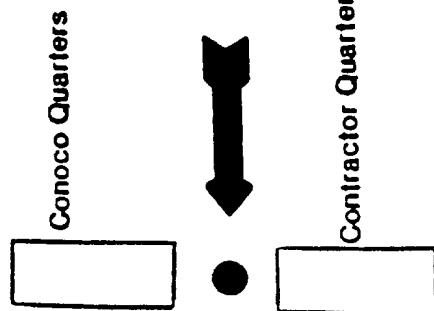


WDI



H2S Safety Contractor

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)

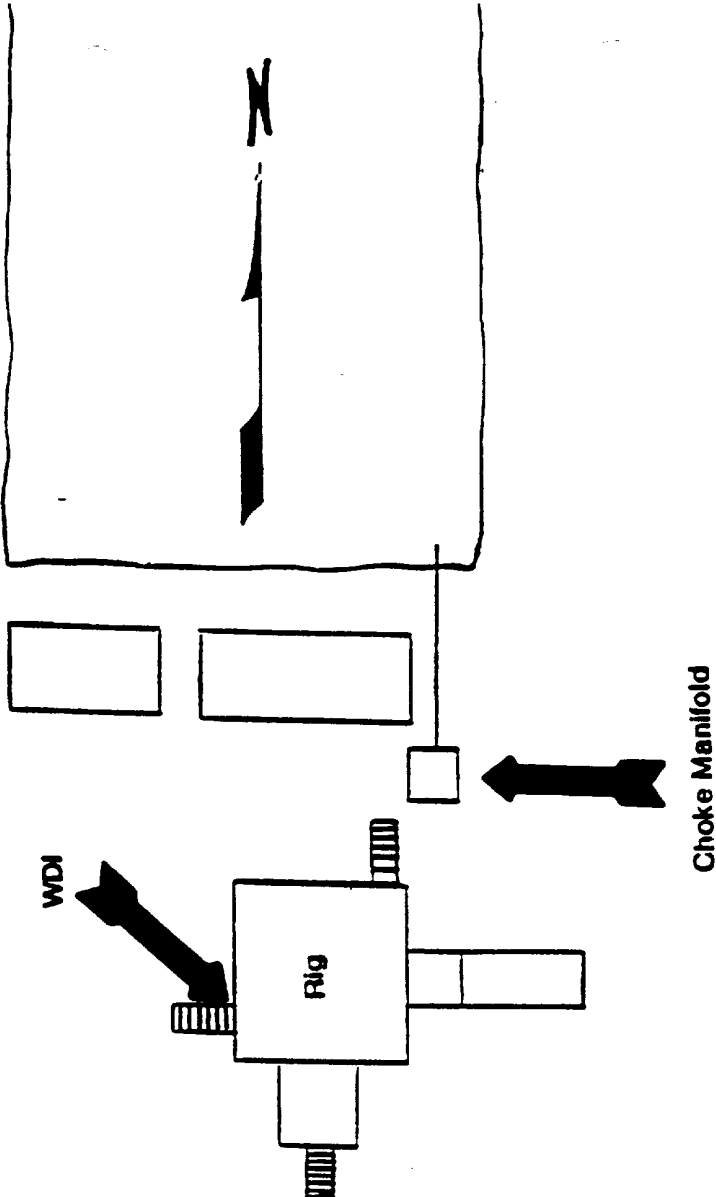


Conoco Quarters

Muster Area No. 1



Contractor Quarters



WDI

Rig

Choke Manifold

Muster Area No. 2
WDI



TRAILER - MOUNTED RIG LAYOUT

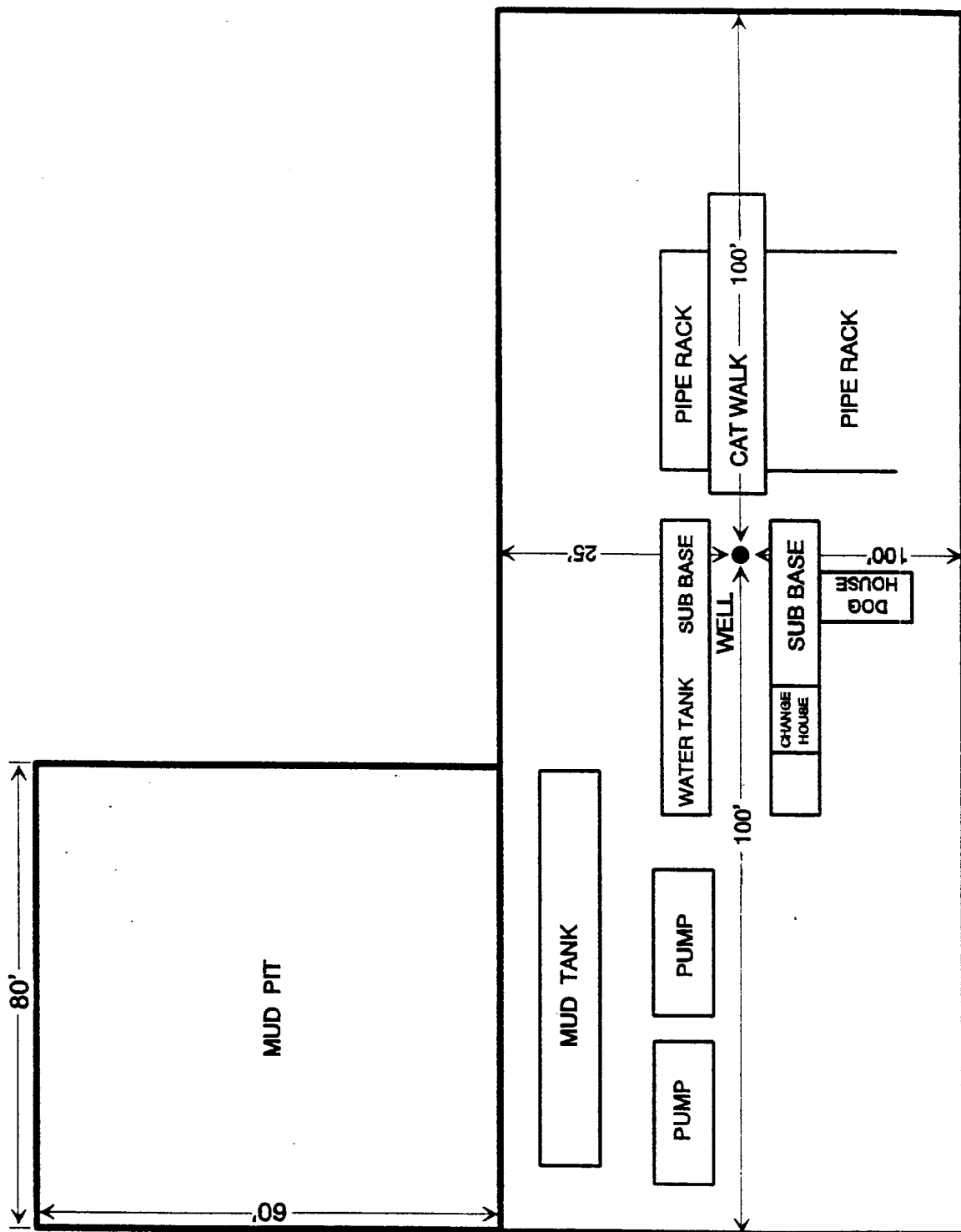
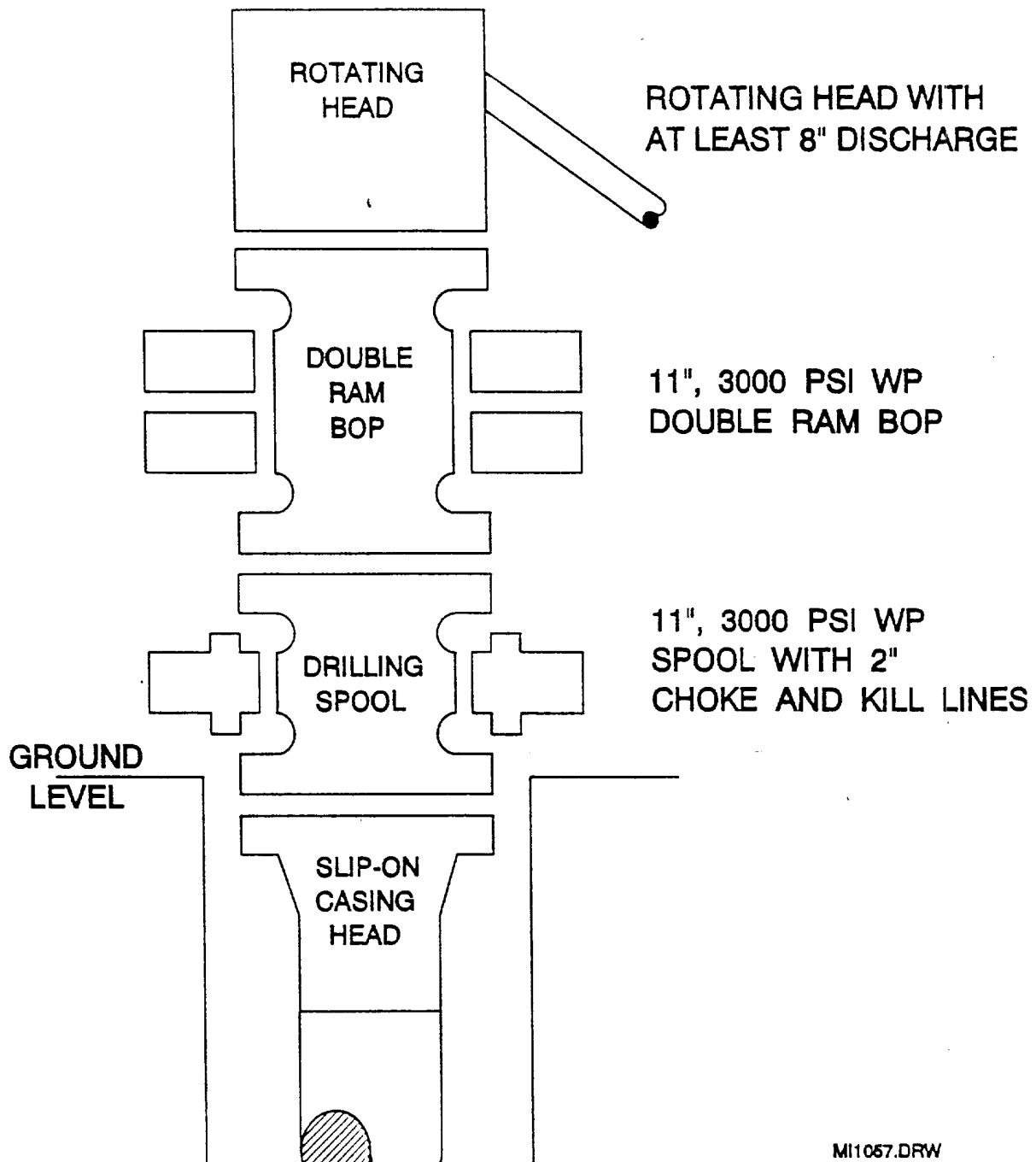
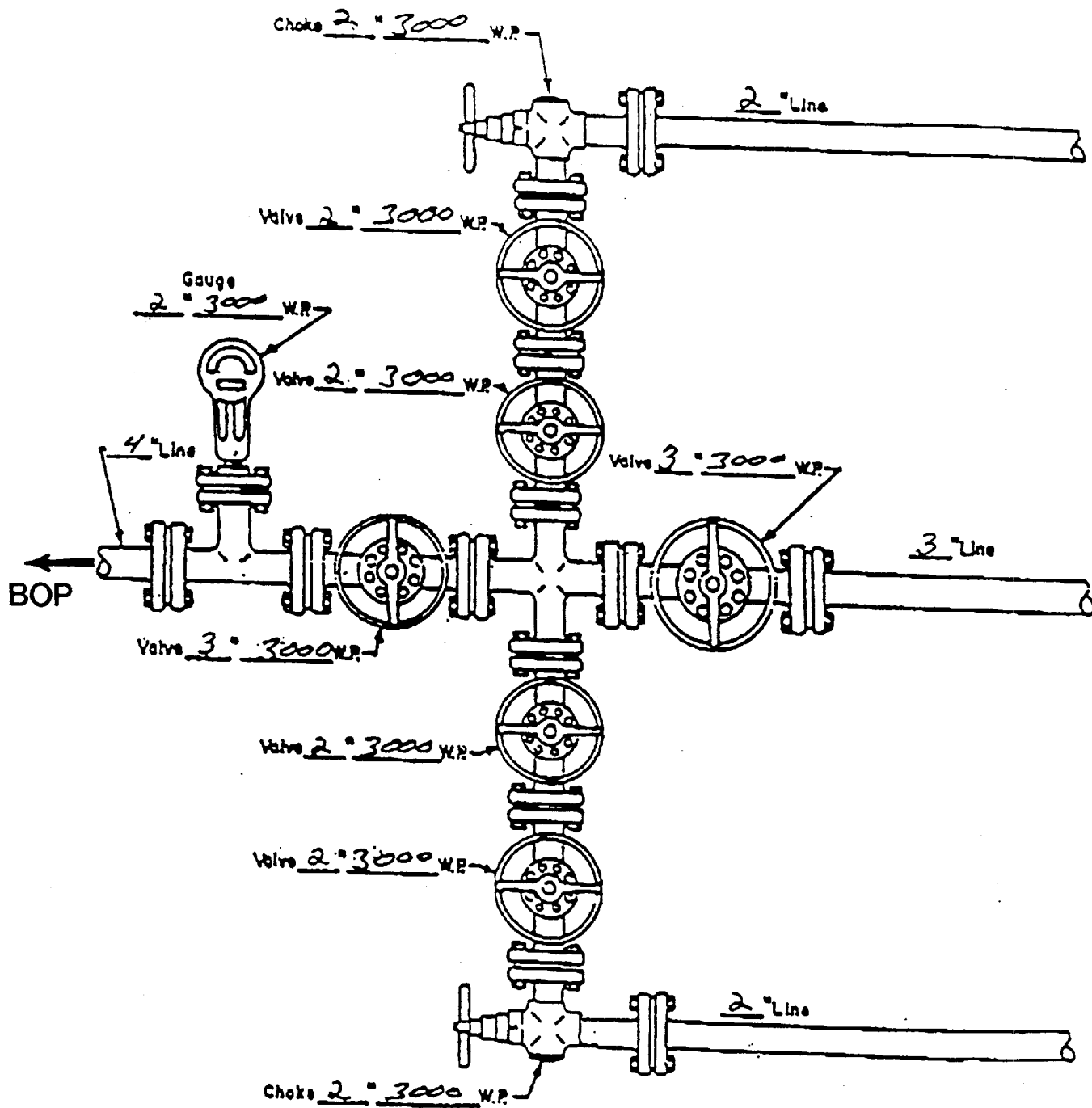


EXHIBIT D

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 (H₂S)
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 H₂S 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 H₂S 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 H₂S circulated to surface. Proper mud weight, safe drilling practices, and the use of H₂S scavengers when appropriate will minimize hazards when penetrating H₂S 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



Mike L. Mankin
Right of Way Agent
Right of Way and Claims

Conoco Inc.
10 Desta Drive, Suite 430E
Midland, Texas 79705
(915) 686-5794

February 19, 1998

Bureau of Land Management
620 E. Greene
Carlsbad, New Mexico 88221

Attn: Mr. Barry Hunt, Surface Protection Specialist

Re: Settlement for Well Location and Appurtenances
WARREN UNIT B-T, Well # 310
Section 27, T20S, R38E
Lea County, New Mexico

Dear Mr. Hunt:

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

If you have any questions, please contact me at 915-686-5794.

Sincerely,

A handwritten signature in cursive script, appearing to read "Mike L. Mankin".

Mike L. Mankin

A large, solid black rectangular redaction mark covering several lines of text at the bottom of the page.