

NM OIL CONS. COMMISSION  
Drawer DD  
Artesia, NM UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

CONTACT RECF 7  
OFFICE FOR M. 2  
OF COPIES REQUIRED  
(Other instructions on reverse side)

30-015-26570  
BLM Roswell District  
Modified Form No.  
NMO60-3160-2

*JM*

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  
 Conoco Inc. ✓

3a. Area Code & Phone No.  
 (915) 686-6548

3. ADDRESS OF OPERATOR  
 10 Desta Drive West, Midland, TX 79705

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)\*  
 At surface 780' FSL & 730' FWL  
 At proposed prod. zone *W.M.*

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE\*  
 O.C.D.  
 ARTESIA, OFFICE

15. DISTANCE FROM PROPOSED\* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drilg. unit line, if any)

16. NO. OF ACRES IN LEASE

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.

19. PROPOSED DEPTH 8100'

20. ROTARY OR CABLE TOOLS Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.)  
 GR 3578'

22. APPROX. DATE WORK WILL START\*  
 1/15/90

5. LEASE DESIGNATION AND SERIAL NO.  
 NM 1372

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME  
 Barbara Federal

9. WELL NO.  
 10

10. FIELD AND POOL, OR WILDCAT  
 North Dagger Draw *u/p*

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA  
 Sec. 17, T-19S, R-25E

12. COUNTY OR PARISH  
 Eddy

13. STATE  
 NM

RECEIVED

DEC 5 '90

PROPOSED CASING AND CEMENTING PROGRAM

HOLE SIZE	CASING SIZE	WEIGHT/FOOT	GRADE	THREAD TYPE	SETTING DEPTH	QUANTITY OF CEMENT
14-3/4"	9-5/8"	36#	K-55	ST&C	1200'	2000 sx CIRCULATE
8-3/4"	7"	26#	K-55	LT&C	8100'	2700 sx CIRCULATE

This well is proposed to be drilled as a Cisco oil producer. Attached are:

- 1) Well Location and Acreage Dedication Plat.
- 2) Attachment to Form 3160-3.
- 3) Proposed Well Plan Outline.
- 4) Surface Use Plan.
- 5) EXHIBIT A - New Mexico road map.
- 6) EXHIBIT B - Lease road and facilities map.
- 7) EXHIBIT B.1 - Location facility plat.
- 8) EXHIBIT C - Rig Layout
- 9) BOP Specifications

APPROVAL SUBJECT TO  
 GENERAL REQUIREMENTS AND  
 SPECIAL STIPULATIONS  
 ATTACHED

*Part ID-1  
 12-14-90  
 New & API*

RECEIVED

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.

34. SIGNED *Jerry M Hoover* TITLE Regulatory Coordinator DATE 11-1-90  
 (This space for Federal or State office use)

PERMIT NO. \_\_\_\_\_ APPROVAL DATE \_\_\_\_\_

APPROVED BY \_\_\_\_\_ TITLE \_\_\_\_\_ DATE 12-4-90

CONDITIONS OF APPROVAL, IF ANY:

\*See Instructions On Reverse Side

Submit to Appropriate District Office  
 State Leases - 4 copies  
 Fee Leases - 3 copies

State of New Mexico  
 Energy, Minerals and Natural Resources Department

Form C-282  
 Revised 1-1-89

**OIL CONSERVATION DIVISION**  
 P.O. Box 2088  
 Santa Fe, New Mexico 87504-2088

DISTRICT I  
 P.O. Box 1900, Hobbs, NM 88240

DISTRICT II  
 P.O. Drawer DD, Artesia, NM 88210

DISTRICT III  
 1000 Rio Brazos Rd., Aztec, NM 87410

**WELL LOCATION AND ACREAGE DEDICATION PLAT**  
 All Distances must be from the outer boundaries of the section

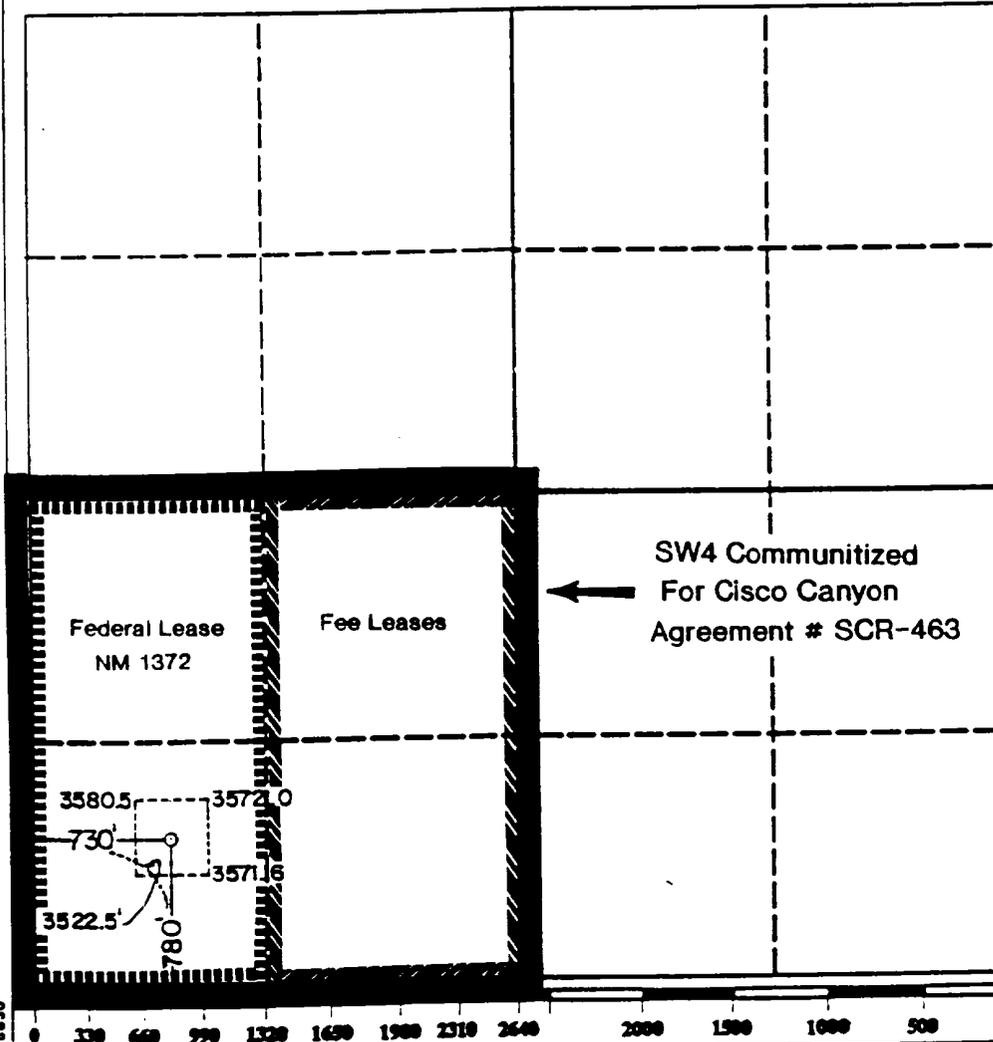
Operator <b>CONOCO, INC.</b>		Lease <b>Barbara Federal</b>		Well No. <b>10</b>
Unit Letter <b>M</b>	Section <b>17</b>	Township <b>19 South</b>	Range <b>25 East</b>	County <b>Eddy</b>
Actual Footage Location of Well: <b>780</b> feet from the <b>South</b> line and <b>730</b> feet from the <b>West</b> line				
Ground level Elev. <b>3578.0</b>	Producing Formation <b>Cisco</b>	Pool <b>North Dagger Draw Upper Penn.</b>		Dedicated Acreage: <b>160</b> Acres

- Outline the acreage dedicated to the subject well by colored pencil or ink on the plat below.
- If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
- If more than one lease of different ownership is dedicated to the well, have the interest of all owners been consolidated by communitization, unitization, force-pooling, etc.?
 

Yes     No    If answer is "yes" type of consolidation \_\_\_\_\_

If answer is "no" list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if 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 interest, has been approved by the Division.



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

Signature  
*Jerry W. Hoover*  
 Printed Name  
**Jerry W. Hoover**  
 Position  
**Regulatory Coordinator**  
 Company  
**Conoco Inc.**  
 Date  
**10/31/90**

**SURVEYOR CERTIFICATION**

I hereby certify that the well location shown on this plat was determined from field notes of actual survey (or from a reliable survey) and under my supervision, and that the same is true and correct to the best of my knowledge and belief.

Date Surveyed  
**August 23, 1990**  
 Signature of Seal of Professional Surveyor  
*John W. West*  
 Certificate No. **JOHN W. WEST, 676**  
**RONALD J. EIDSON, 3239**

126630

**ATTACHMENT TO FORM 3160-3  
APPLICATION FOR PERMIT TO DRILL**

**Conoco Inc.**

<b>Lease/Well:</b>	<b>Barbara Fed. No. 10</b>
<b>Location:</b>	<b>Sec. 17, T-19S, R-25E 780' FSL &amp; 730' FWL</b>
<b>County/State:</b>	<b>Eddy County, New Mexico</b>

1. The estimated tops of important geologic markers are shown on the attached Proposed Well Plan Outline.
2. The estimated depths at which anticipated water, oil, gas or other mineral-bearing formations to be encountered are shown on the attached Proposed Well Plan Outline.
3. A drawing of the Blowout Preventer Specification is attached. Pipe rams and blinds will be checked to the working pressure of the stack or 70% of the minimum internal yield strength of the casing whichever is less. BOPE will be checked when casing string is set.
4. The proposed casing program is as follows:  
  
    0'-1200': 9-5/8", 36#, K-55  
    1200'-8100': 7", 26#, K-55
5. The proposed mud program is as follows:  
  
    0'-1200': 8.3# Fresh Water  
    1200'-7300': 8.8-9.2# Brine  
    7300'-8100': 8.8-9.2# Salt Gel
6. Run open-hole logs from 1200'-TD. The log suite will include the following:  
    1) GR-CNL-LDT-CAL, 2) GR-DLL-MSFL. A temperature survey will be run to determine the top of cement on each casing string where cement is not circulated.
7. Special Drilling Problems:  
    a) Possible H<sub>2</sub>S.
8. The anticipated starting date is 1-15-91 with a duration of approximately 25 days.

PROPOSED WELL PLAN OUTLINE

WELL NAME: Barbara Federal No. 10 COUNTY: Eddy STATE: New Mexico  
 LOCATION: 780' FSL & 730' FWL EST. KB: 3593'  
Section 17, T19S, R25E EST. GL: 3578'

DEPTH	FORMATION TOPS & TYPE	DRILLING PROBLEMS	TYPE OF FORMATION EVALUATION	HOLE SIZE	CASING SIZE-DEPTH	FRAC GRAD	FORM PRESS GRAD	(PPG) MUD WT & TYPE	DAYS
	Surface water	Possible	0' -1200'						
	300'	waterflow	Deviation					Spud	
		to 900'	survey each					8.33	
1000			250' not to						
			exceed 3°						
		Known lost		14-3/4	9-5/8 @ 1200'		<8.33		4
		circulation	Install H2S		w/2000 sx			Cut	
	Glorieta	from 0-1100'	monitor @1200'		"lite" & "C"			Brine	
	1989'				(to protect			9.2	6
2000			Install a 2-		from surface				
		H2S poss.	man mudlogger		waterflows				
		to TD	1200' - TD		and severe				
	Yeso				lost circ.)				
	2145'		1200'-3000':						8
3000		Deviations	Deviation						
		from 4-6°	survey each						
		likely from	250' not to						
		3000'-6000'	exceed 5°						
		(Barb #8 &							
4000		Barb #9 )	3000'-6000':					pH >10	10
			Deviation					to TD	
	Abo		survey each						
	4198'		100'-150'						
5000			not to exceed		DV Tool above				
			5°		lower Abo LC				13
					zone (if nec.)				
	Wolfcamp				4500'				
	5100'								
6000			6000'-TD						17
			Deviation						
			survey each						
			250' not to						
			exceed 5°						
7000		H2S possible							
		in Cisco							
								Mud up	20
								with salt	
	Cisco							gel and	
	7600'							starch	
								@7500'	
8000	Target TD 8100'		GR-CNL-LDT-	8-3/4"	7" @8100'	>15	8.3		25
			DLL-MSFL-CAL		w/2100 sx		9.0		
			from 8100'-		"H" & "C" lite				
			1200'						
9000			Image Log						
			from						
			8100'-7600'						

**SURFACE USE PLAN  
Conoco Inc.**

**Barbara Federal No. 10**

The following is the required information concerning the possible effect which the proposed 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 780' FSL & 730' FWL, Section 17, T-19S, R-25E, Eddy County, New Mexico.
- B. Exhibit "A" is a portion of a New Mexico road map showing existing roads. Directions to the location are as follows:  
From the junction of U.S. 285 and 82, go south on 285 for 13.1 miles. Turn west on County Road 21, and go 7.1 miles to cattle guard. Turn north across the cattle guard and the location is on the right.
- C. Access roads are shown on Exhibit "B".
- D. No improvement or maintenance is anticipated for the existing roads.

2. Planned Access Roads

- A. 661' from existing lease road to location.
- B. No turnout will be required.
- C. No culverts, or fills will be required.
- D. No gates, cattleguards, or fences will be required.

3. Location of Existing Wells

See Exhibit "B".

4. Location of Proposed Facilities if Well is Productive

Existing producing facilities are shown on Exhibit "B".

5. Water Supply

Water will not be trucked in. Fresh water will be secured from the adjacent Barbara Fed. No. 8 well and transported to the location through a temporary line.

6. Source of Construction Materials

Caliche from pit located in NE4 NE4, Sec. 34, T-19S, R-25E

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, burned or buried with a minimum cover of 24" of dirt. See Exhibit "C" 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 reserve pit will be lined with plastic. The pad and pits are staked.

10. Plans for Restoration of Surface

Pits will be backfilled and leveled as soon as practical to original condition. 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

Federal

12. Other Information

An archaeological survey has been completed and filed by Pecos Archaeological Consultants.

13. Operator's Representative and Certification

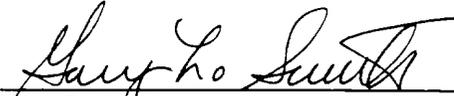
The person who can be contacted concerning compliance of this Surface Use Plan is:

**Gary L. Smith**  
**10 Desta Drive West**  
**Midland, Texas 79705**  
**(915)686-5471**

*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.*

*Nov. 2, 1990*

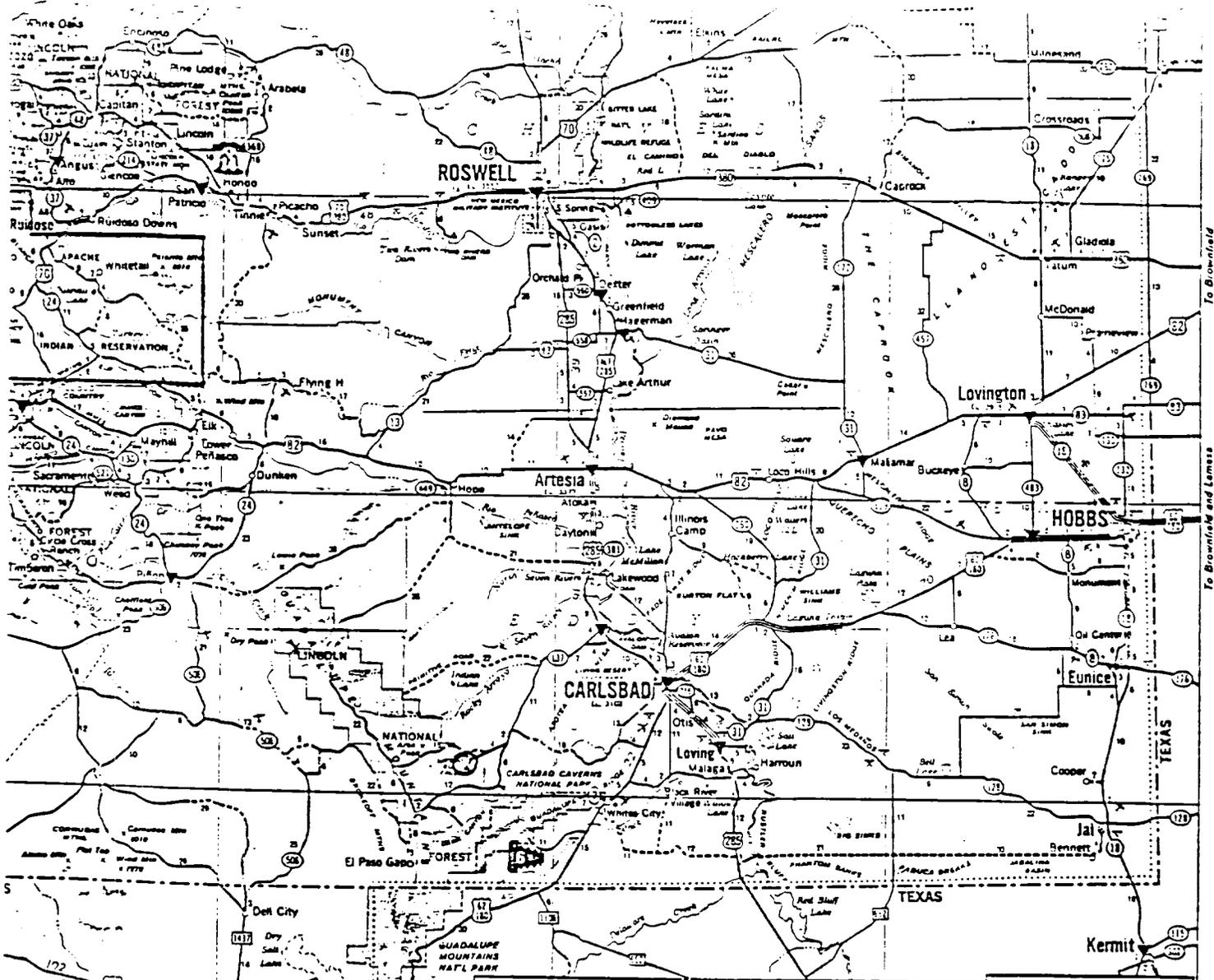
Date



Gary L. Smith

Drilling Superintendent

JWH/tm



**LOCATIONS WHERE CONOCO PRODUCTS ARE SOLD**

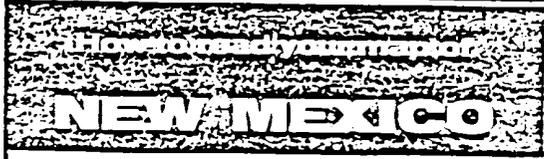
- ▼ Locations on Interstate Highways, toll roads or major limited access highways where CONOCO PRODUCTS are sold.
- ▼ Locations of CONOCO Travel Shoppes.
- ▼ Other CONOCO station locations.
- ▼ Locations where CONOCO DEALERS provide trailer travelers with Sanitary Dispensal Facilities. Look for this sign:



**TOURAIDE ATTRACTIONS**

- HISTORICAL
- SCENIC
- GENERAL

Attraction points described on reverse side



**SCALE IN MILES AND KILOMETERS**

ONE INCH 22 MILES 0 5 10 20 30

ONE INCH 35 KILOMETERS 0 5 10 20 30 40

**HIGHWAY MARKERS**

INTERSTATE (40) UNITED STATES (65) STATE (41) TEXAS FARM OR RANCH (129)

**ROAD CLASSIFICATIONS**

CONTROLLED ACCESS DIVIDED HIGHWAYS

OTHER DIVIDED HIGHWAYS

PRINCIPAL THROUGH HIGHWAYS

OTHER THROUGH HIGHWAYS

CONNECTING HIGHWAYS

LOCAL ROADS

**MILEAGES**

MILEAGE BETWEEN TOWNS AND JUNCTIONS

MILEAGE BETWEEN DOTS

ONE MILE EQUALS 1.6 KILOMETERS

ONE KILOMETER EQUALS .6 MILES

**SPECIAL FEATURES**

STATE PARKS

RECREATION AREAS

POINTS OF ENTRY

POINTS OF INTEREST

**POPULATION SYMBOLS**

State Capital

Under 1,000

1,000 to 2,500

2,500 to 5,000

5,000 to 10,000

10,000 to 25,000

25,000 to 50,000

50,000 to 100,000

100,000 and over

© THE W. M. GOSCHA COMPANY

# DAGGER DRAW ROAD MAP

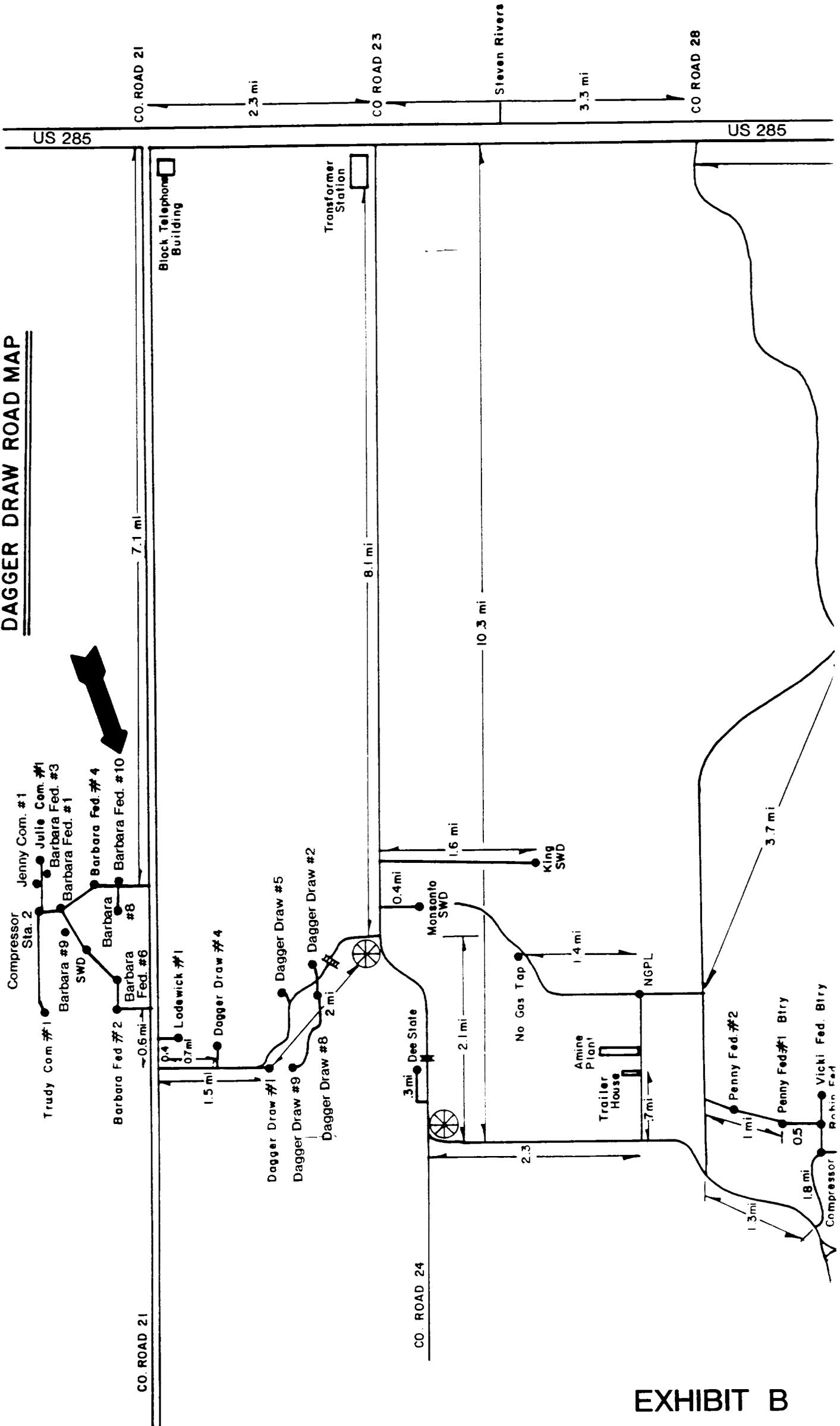
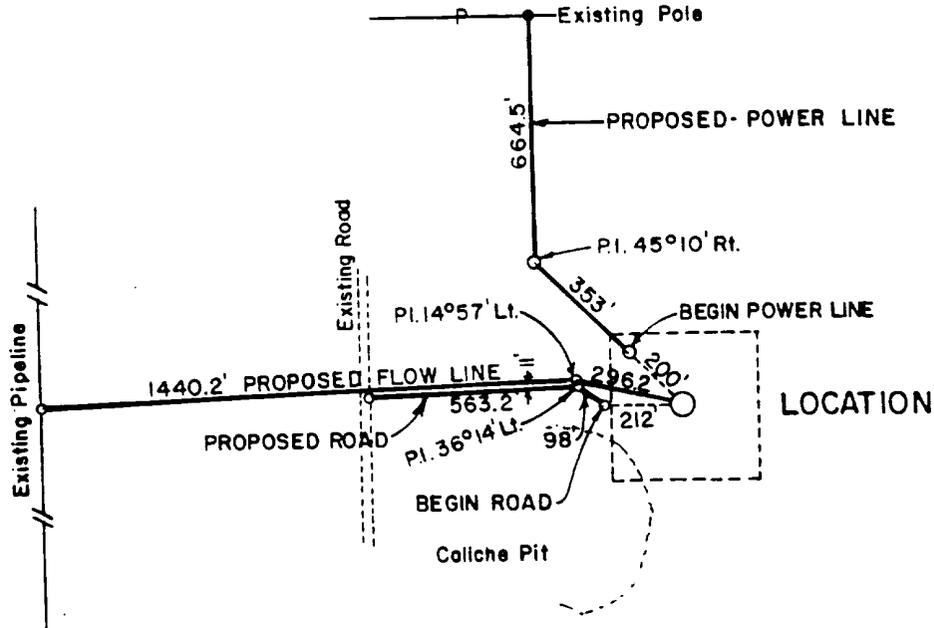


EXHIBIT B

SECTION 17, TOWNSHIP 19 SOUTH, RANGE 25 EAST, N.M.P.M.,  
EDDY COUNTY, NEW MEXICO

CONOCO, INC.  
Barbra Federal  
Well No. 10  
Gr. Elev. 3578.0

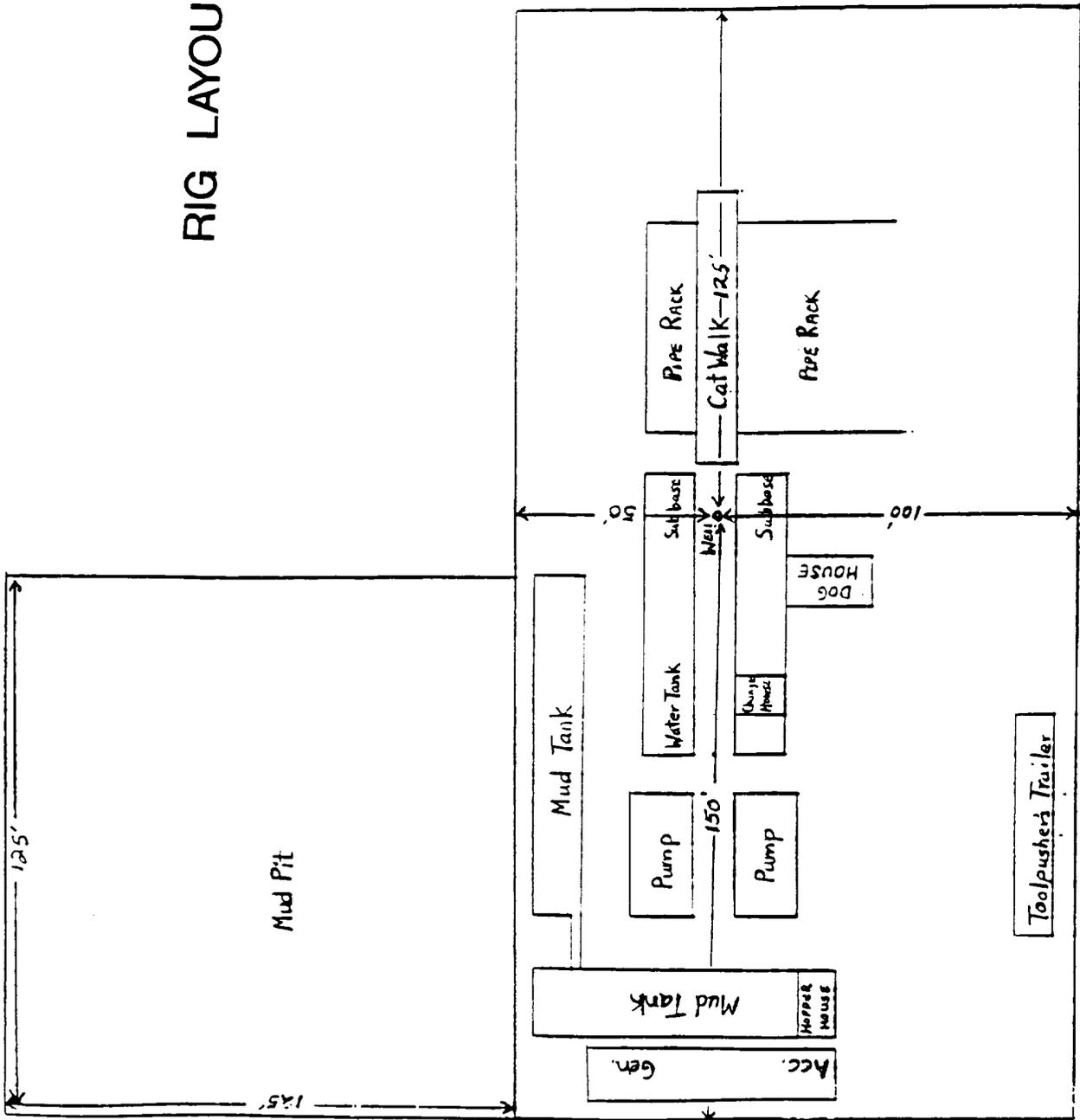


I HEREBY CERTIFY THAT THIS PLAT  
WAS MADE FROM NOTES TAKEN IN THE FIELD  
IN A BONA FIDE SURVEY MADE UNDER MY  
SUPERVISION, AND THAT THE SAME IS TRUE  
AND CORRECT TO THE BEST OF MY KNOWL-  
EDGE AND BELIEF.

*John W. West*  
 JOHN W. WEST, N.M. P.E. & L.S. No. 676  
 TEXAS R.P.S. No. 1138  
 RONALD J. EIDSON, N.M. L.S. No. 3239  
 TEXAS R.P.S. No. 1883

CONOCO, INC.			
Proposed Road, Power Line, And Flow Line to the CONOCO, INC., Barbra Federal. Well No. 11 located in Section 17, Township 19 South, Range 25 East, N.M.P.M., Eddy County, New Mexico.			
JOHN W. WEST ENGINEERING COMPANY		HOBBES, NEW MEXICO	
Scale: 1"=1000'		Drawn By: Presley	
Date: 8/24/90	Chk. <i>LJF</i>	Sheet 1 of 1	Sheets

# RIG LAYOUT



# BOP SPECIFICATIONS

