Form 3160; (July 1989) (formerly 9-3;	110)	PARTMENT	D STATI OF THE	ES INTERIO	OFF OF (Othe	ice for Copies	FCF., , int; REQUIRED uctions on side)	RIM Rom Hodifie NH060-3	well Distri d Porm No. 160-2	
APPI IC	ATION	BUREAU OF L	AND MANA	AGEMENT				5. LEASE DES LC 031	695 R	BEBIAL NO.
In. TYPE OF WO		R PERMIT TO) DRILL,	DEEPEN,	OR PL	UG	BACK	G. IF INDIAN,	ALLOTTER OR	TRIBE NAME
b. TTPP. OF WE NELL X 2. NAME OF OF CONOCO I 3. ADDRESS OF C	DRILL] OTHER	DEEPEN		PLU	B BA		7. UNIT AGRE Warren I 8. Farm or Li 9. Well NO.	Jnit	
10 Desta	Drive Wes	t, Midland, I	X 79705		1			100		
At proposed ;	560' prod. zone E	ation clearly and in a 1980' FWL	kard		requirements	• 1		11. SEC., T., R., AND SURVE	Warren M., OR BLK. Y OR AREA	Drinkard
10. DISTANCE FR		CTION FROM NEAREST	TOWN OR POS	T OFFICE*				Sec. 28, 12. COUNTY OR Lea	T-205,	STATE
IS. DISTANCE FR	NEAREAT LEASE LINE, FT. Feet delg. unit lin M. TROPOSED LOC WELL, DRILLING, O. , ON THIS LEASE,	ATION*		16. NO. OF A	DEPTH	8r.	20. ROTAN	T ACRES ABSIGNE IS WELL 4(T OR CABLE TOOL)	
21. ELEVATIONS (S	how whether DF.	RT, GR, etc.)					Ro	22. APPROX. D		
23.								1		
HOLE SIZE	CARLING	PRO	POSED CASI	NG AND CEMP	ENTING PRO	GRAM	lea (ounly Cor	nollar	Welde Basta
12-1/4"	CASING SIZE			GRADE	THR	AD TI		ETTING PEPTH	QUANTITT (
8-3/4"	7"	<u>36#</u> 26#		<u>x-55</u>		7&C 7&C		1490' 7000'	1450	the second s
	This well is j	proposed to be dr	illled as a	Blinebry/Dri	 inkard dua	l proc	iucer.			
		Attachments 1) Well Locat 2) Attachmen 3) Proposed V 4) Surface Us	tion and A t to Form Well Plan (creage Dedi 3160-3.						

- 5) EXHIBIT A New Mexico road map.
- 6) EXHIBIT B Lease road map.
- 7) EXHIBIT B.1 Location facility plat.
 8) EHHIBIT C Rig layout plat.
- 9) BOP Specifications.
- 10) H2S Drilling Operations Plan

IN ABOVE SPACE DESCRIBE PROFOSED 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

24. 1		
(This apper for Fridewill or State office use)	Regulatory Coordinator	DATE1/9/91
PERMIT NO	APPROVAL DATE	
APPROVED BY	- 334 %	DATE 4- (G. 9)
A THE WALL RECEIVENTS AND STRUCTURE STRUCTURENTS		
	See Instructions On Reverse Side	

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

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DISTRICT I P.O. Box 1980, Hobbs, NM 88240

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

State of New Mexico Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION P.O. Box 2088

Santa Fe, New Mexico 87504-2088

WELL LOCATION AND ACREAGE DEDICATION PLAT

				from the outer i			Well No.	
erator				Lease				.00
	NOCO, INC.			· · · · · · · · · · · · · · · · · · ·	EN UNIT			
it Letter	Section	Township		Range	TA OF	Cou	LEA	
N	28	20	SOUTH		EAST	NMPM		
ual Footage Lo	ation of Well:						00117711	
1980	feet from the	WEST	line and	560		feet from the	SOUTH line	
und level Elev.		ng Formation		Pool	1.1			cialite.
3521.0	Blineb the acreage dedicate	ry/Drin		Blinebry		n Drinkare	6 40	Acres
3. If mo unitiz	ation, force-pooling, et Yes r is "no" list the owne	fferent ownership i c.? No If a	is dedicated to the nswer is "yes" ty	e well, have the in	nterest of all own	ers been consolidated	i by communitization,	
No allos	a if neccessary vable will be assigned a non-standard unit, eli	to the well until al iminating such inte	l interests have b rest, has been ap	een consolidated proved by the Div	(by communitiza vision.	tion, unitization, force	ed-pooling, or otherwise	:)
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	<u>)i</u>	26				Certif	icate No. JOHN W. RONALD J E	



ATTACHMENT TO FORM 3160-3 APPLICATION FOR PERMIT TO DRILL

Conoco Inc.

Warren Unit No. 100 Sec. 28, T-20S, R-38E Lea County, New Mexico

- 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 Blowout Preventer Specifications 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:

0-1490':	9-5/8",	36#	K-55
0-7000':	7",	26#	K-55

5. The proposed mud program is as follows:

0-1490': 8.4-8.6# Fresh Water 1490'-5800': 10.0# Brine 5800'-7000': 10.0# Salt Gel/Starch

- 6. Run open-hole logs from 2600'-7000'. The log suite will include the following:
 1) GR-CAL-DLL-MSFL, 2) GR-CAL-FDC-CNL-PE. 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 hole enlargement & sloughing, 0'-4500'.
 - b) Possible lost circulation 4500'-TD.
- 8. The anticipated starting date is 5-27-91 with a duration of approximately 17 days.

PROPOSED WELL PLAN OUTLINE

WELL NAME: WARREN UNIT NO 100	JELL	NAME:	WARREN	UNIT	NO	100
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COUNTY: LEA STATE: NM

LOCATION: 660' FSL & 1980' FWL EST. KB: 3541'

<u>Sec. 28, T-20S, R-38E</u> EST. GL: <u>3525'</u>

	FORMATION	DRILLING	TYPE OF FORMATION	HOLE	CASING	 FRAC	FORM	(PPG) MUD WT &	
EPTH	TOPS & TYPE	PROBLEMS	EVALUATION	_SIZE	SIZE-DEPTH	GRAD	GRAD	TYPE	DAYS
500	Redbeds	Possible Hole Enlargement & Sloughing	Deviation survey every 200′ ≤ 3°					Fresh gel & lime 8.3 pp	
000	Rustler 1435'		Deviation survey every 500' ≤ 3° ⊥		9 %. "@1490				 2
000			below surf. casing	8-3/4"				10.0 ppg brine	
500	Base Salt 2550 Yates 2695' 7 Rivers 2970'		Two Man Mud Loggers 2600-TD						
000 500			Install H ₂ S monitors @ 4000'					Pre-	
000	San Andres 412	5, 1					<8.3	treat mud w/ LCM pi @ 4500	i1
500 5000	Ī	Possible lost circ. or seepage W.U. #35 had stuck pipe due to						Mud-up	 1]
500	Glorieta 5360'	differential sticking while drlg. thru Gloriet			DV Tool @ Top of Glorieta (as needed)	13.5- 15.5		in Glorie only if hole cond.	
000		Possible Seepage from Blinebry to TD.						warrant	cs 14
500			GR-CAL			13-15			-
7000	TD 7000'		GR-CAL-DLL-MS GR-CAL-DLL-MS GR-LDT-CNL-PE 5000'-TD		7"@7000'	19-20	<8.3		17

JFM:tk WU100.WPO



BOP SPECIFICATIONS



RECEIVED

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APR 2 2 1991

ore Hobbe office