

UNITED
DEPARTMENT OF
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT

1a. TYPE OF WORK

DRILL ☒

b. TYPE OF WELL

OIL WELL ☒

GAS WELL ☐

OTHER ☐

SINGLE ZONE ☒

MULTIPLE ZONE ☐

2. NAME OF OPERATOR

Conoco Inc.

3. ADDRESS AND TELEPHONE NO

10 Desta Dr. Ste 430E, Midland, Tx. 79705-4500

915-686-5794

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

At surface

330' FNL & 1650' FEL SEC. 29 Unit B

At proposed prod. zone

1710' FSL & 365' FEL SEC. 20 Unit I

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

5. LEASE DESIGNATION AND SERIAL NO

LC-051640-B
LC 031695B

6 IF INDIAN, ALLOTTEE OR TRIBE NAME

7 UNIT AGREEMENT NAME

8 FARM OR LEASE NAME WELL NO

Warren McKee

9. API WELL NO

128

10. FIELD AND POOL, OR WILDCAT

Warren McKee

11. SEC. T. R. M., OR BLK. AND SURVEY OR AREA

Sec. 29, T20S, R38E

12 COUNTY OR PARISH

Lea

13. STATE

NM

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

80

8. DISTANCE FROM PROPOSED LOCATION*

TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.

19. PROPOSED DEPTH

8930' TVD/10,785 MD

20. ROTARY OR CABLE TOOLS

Rotary

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

3539' GR

22. APPROX. DATE WORK WILL START*

10/15/97

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PROPOSED CASING AND CEMENT

SIZE OF HOLE	GRADE, SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
17-1/2"	H-40, 13-3/8"	48#	400'	440 sxs.
12-1/4"	K-55, 10-3/4"	40.5#	3000'	580 sxs, circ.
9-7/8"	K-55, 7-5/8"	29.7#	8930'	1555 sxs

It is proposed to drill a horizontal Warren McKee producer according to the plan submitted in the following attachments:

1. Well Location and Acreage Dedication Plat (C-102)
2. Proposed Well Plan Outline
3. Surface Use Plan
4. EXHIBIT A: Vicinity Map
5. EXHIBIT B: Location Verification Map
6. EXHIBIT C.1-C.4: Road, Flow Line and Electric Line Plats
7. EXHIBIT D: Standard Rig Layout
8. BOP & Choke Manifold Specifications
9. H2S Drilling Operations Plan
10. An archeological survey will be submitted as soon as completed

APPROVAL SUBJECT TO
GENERAL REQUIREMENTS AND
SPECIAL STIPULATIONS
ATTACHED

RECEIVED
1997 SEP - 4 P 2:21
BUREAU OF LAND MANAGEMENT
HOSWELL OFFICE

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

SIGNED

Mike L. Mankin

TITLE

Mike L. Mankin
Right-of-Way Agent

DATE

9-2-97

(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:

(ORIG. SGD.) TONY L. FERGUSON

ADM, MINERALS

APPROVED BY

TITLE

DATE

OCT 03 1997

*See Instructions On Reverse Side

Title 13 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.

District I
PO Box 1980, Hobbs, NM 88241-1980

District II
PO Drawer DD, Artesia, NM 88211-0719

District III
1000 Rio Brazos Rd., Artesia, NM 87410

District IV
PO Box 2088, Santa Fe, NM 87504-2088

State of New Mexico
Energy, Minerals & Natural Resources Department

Form C-102
Revised February 21, 1994
Instructions on back
o Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

OIL CONSERVATION DIVISION
PO Box 2088
Santa Fe, NM 87504-2088

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-025-34158		² Pool Code 63270	³ Pool Name WARREN MCKEE	
⁴ Property Code 003122 3128	⁵ Property Name WARREN MCKEE		⁶ Well Number 128	
⁷ OSRID No. 005073	⁸ Operator Name CONOCO INC.		⁹ Elevation 3539	

10 Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
B	29	20-S	38-E		330	NORTH	1650	EAST	LEA

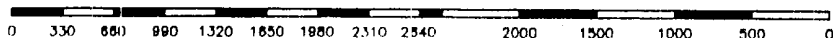
11	Bottom Hole Location If Different From Surface
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UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
P/I	20	20-S	38-E		1710	SOUTH	365	EAST	LEA

¹² Dedicated Acres	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
80			

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

16		17 OPERATOR CERTIFICATION	
		I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.	
		Signature <u>Mike L. Mankin</u>	
		Printed Name <u>MIKE L. MANKIN</u>	
		Title <u>RIGHT OF WAY AGENT</u>	
		Date <u>8-29-97</u>	
		18 SURVEYOR CERTIFICATION	
		I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.	
		Date of Survey <u>JULY 24, 1997</u>	
		Signature and Seal of Professional Surveyor <u>Earl Foote</u>	
		Certificate Number <u>8278</u>	
Sec. 20		330'	
Sec. 29		1650'	
LAT. = 32°33'02"		32°12'25"E	
LONG. = 103°10'03"		2410.98'	
		(TRUE BEARING)	
		1710'	
		365'	



PROPOSED WELL PLAN C TLINE

GL = 3539'
Est KB = 3551

WELL NAME **Warren McKee No. 128**
LOCATION **330' FNL & 1850' FEL S29-T20S-R38E**

TVD	MD	FORMATION	DRILLING PROBLEMS & COMMENTS	FORMATION EVALUATION	HOLE SIZE	CASING PROGRAM	FRAC GRAD	FORMATION PRESSURE GRADIENT	MUD WEIGHT & TYPE	DAYS
0					17-1/2"	13-3/8", 48#, H-40 ST&C @ 400' Circulate Cement			SPUD	2.25
1000		Rustler @ 1393 Top Salt @ 1476	Washouts in Salt Section		12-1/4"			Less than 8.3	10 PPG BRINE	
2000		Base Salt @ 2526 Yates @ 2718	Possible Deviation to KOP			10-3/4", 40.5#, K-55 STC @ 3000' Circulate Cement		Less than 8.4		
3000		7-Rivers @ 2950			9-7/8"				FRESH WATER	6.5
4000		Queen @ 3521 Grayburg @ 3858 San Andres @ 4108	H2S Monitor on prior to drilling out Closest Injector is the No. 40 Grayburg in Section 19 Offset wells had 20 - 170 BPH losses beginning in the San Andrs while drilling with water							
5000		Glorieta @ 5385								
6000		Blinebry Mkr @ 5882								
7000		Tubb Mkr @ 6383 Drinkard @ 6678 Abo @ 6968		Mud Log Top Drinkard to 7" casing point GR-CAL-CNL-FDC-DIL-PE Top Drinkard thru Simpson (Depth limited by hole angle)					POLYMER @ 7150' WL 10 - 12 cc	
8000	8005	Devonian @ 7738 Fusselman @ 8118 Montoya @ 8352 Simps. Lime @ 8531 Simps. Sand @ 8633 Top McKee @ 8857 Main McKee @ 8942	KOP @ 7,680'. Build 5"/100' Sail Angle: 84.1" Hole cleaning below KOP Possible severe losses from Devonian to casing point	MWD - GR Directional Survey every 30 - 90'						15.5
9000	10,203		84.1" Sail Angle at 9477' MD Hole cleaning & washouts Hole stability	MWD - GR Survey every 30 - 90'	6-3/4"	7-5/8", 29.7#, K-55 LT&C @ 8930' TVD, 9,758' MD DV Tool @ 7600' TOC @ 2000' Open Hole		Closest offsets are 4.7 ppg Possible 8.7 ppg	Polymer 10.0 - 10.5 ppg WL 8 - 12 cc	29.5
9,035	10,785	TD								35.25

Jim Tietema, Staff Engineer 12-Aug-97

Ray Hinchcliff, Staff Engineer 12-Aug-97

Joe Huck, Geophysical Advisor 12-Aug-97

Joe Miller, Reservoir Engineer 12-Aug-97

NOTES: 1) From surface casing point to KOP, run single shot surveys every 500'.
2) At KOP run MWD surveys every 30 to 90'.
3) All depths are Below Ground Level.

Well Name : Warren Mckee #128

Location : 330' FNL, 1650' FEL, Sec 29, T20S, R38E, Lea County, New Mexico

Casing Program :

Surface 13 3/8" casing in 17 1/2" Hole at 400 ft.
Intermediate 10 3/4" casing in 12 1/4" Hole at 3000 ft.
Production 7 5/8" casing in 9 7/8" Hole at 8,930 ft. TVD
9,758 ft. MD
Open Hole 6 ^{3/4} ~~5/8~~" Hole at 10,785 ft.

Cementing Program :

Surface

Tail 440 sacks Class C Mixed at 14.8 ppg
Additives 2% A-7P

Intermediate

Lead 475 sacks Class C Mixed at 12.71 ppg
Additives 35:65:6 + 10 lb/sk Salt + 0.25 lb/sk Cello Flake

Tail 105 sacks Class C Mixed at 14.8 ppg
Additives 2% A-7P

Production

1st Stage

Lead 355 sacks Class C Mixed at 12.6 ppg
Additives 35:65:6 + 5% Salt + 0.5% FL-52 + 0.3% SM
+ 0.2% CD-32 + 0.5 lb/sk Cello-Flake

Tail 185 sacks Class H Mixed at 15.8 ppg
Additives 1.1% FL-62 + 1% BA-58 + 2% KCL + 0.15% CD-32
+ 0.2% SMS
Free Water 0 % Fluid Loss 34 cc/30 min.

2nd Stage

Lead 915 sacks Class C Mixed at 12 ppg
Additives 16% Gel + 2% Salt + 0.3% CD-32 + 0.3% SMS

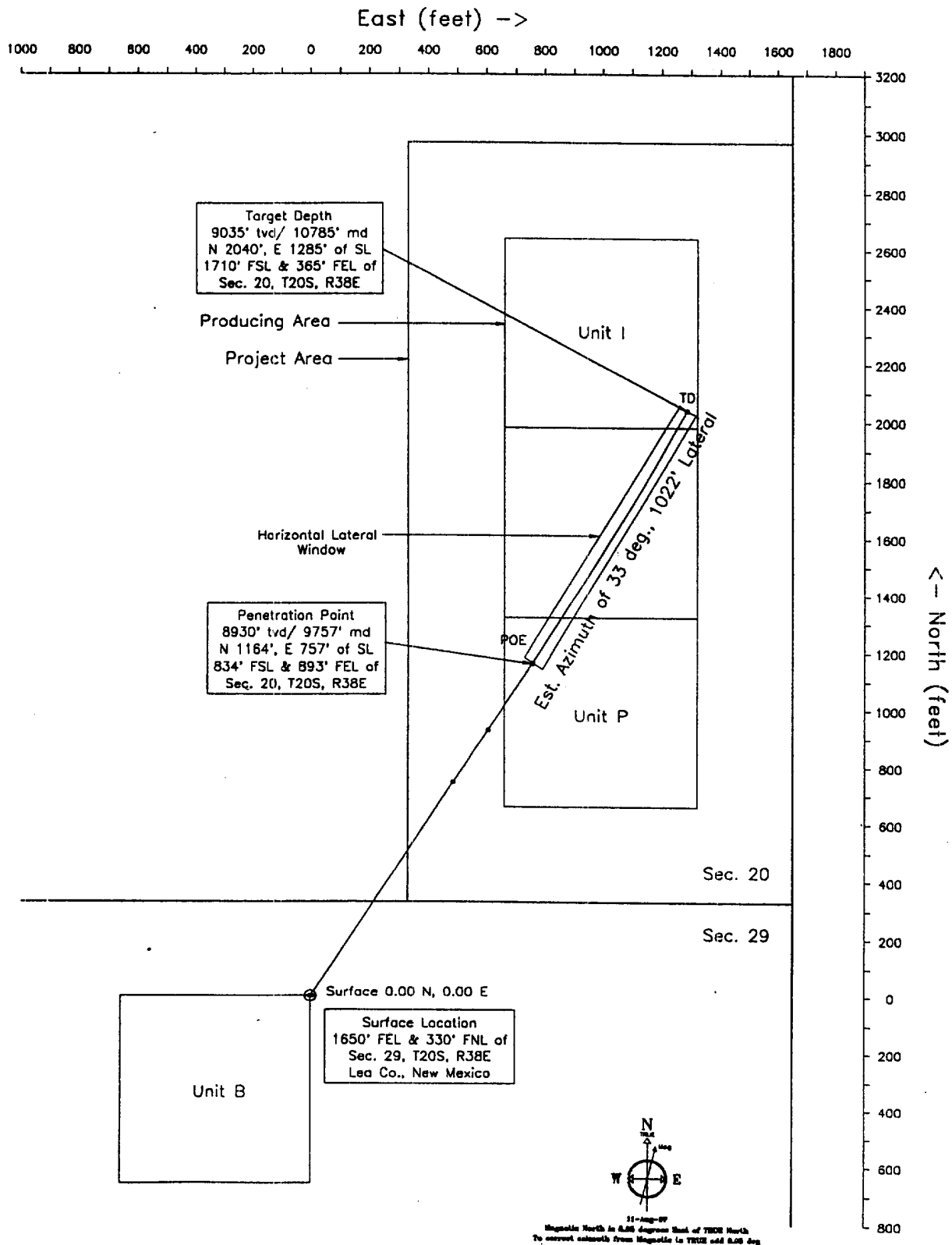
Tail 100 sacks Class C Mixed at 14.8 ppg
Additives 0.8% FL-62 + 0.2% CD-32 + 0.2% SMS

CONOCO, INC.

Structure : WARREN MCKEE NO. 128

Field : WARREN MCKEE

Location : LEA COUNTY, NEW MEXICO

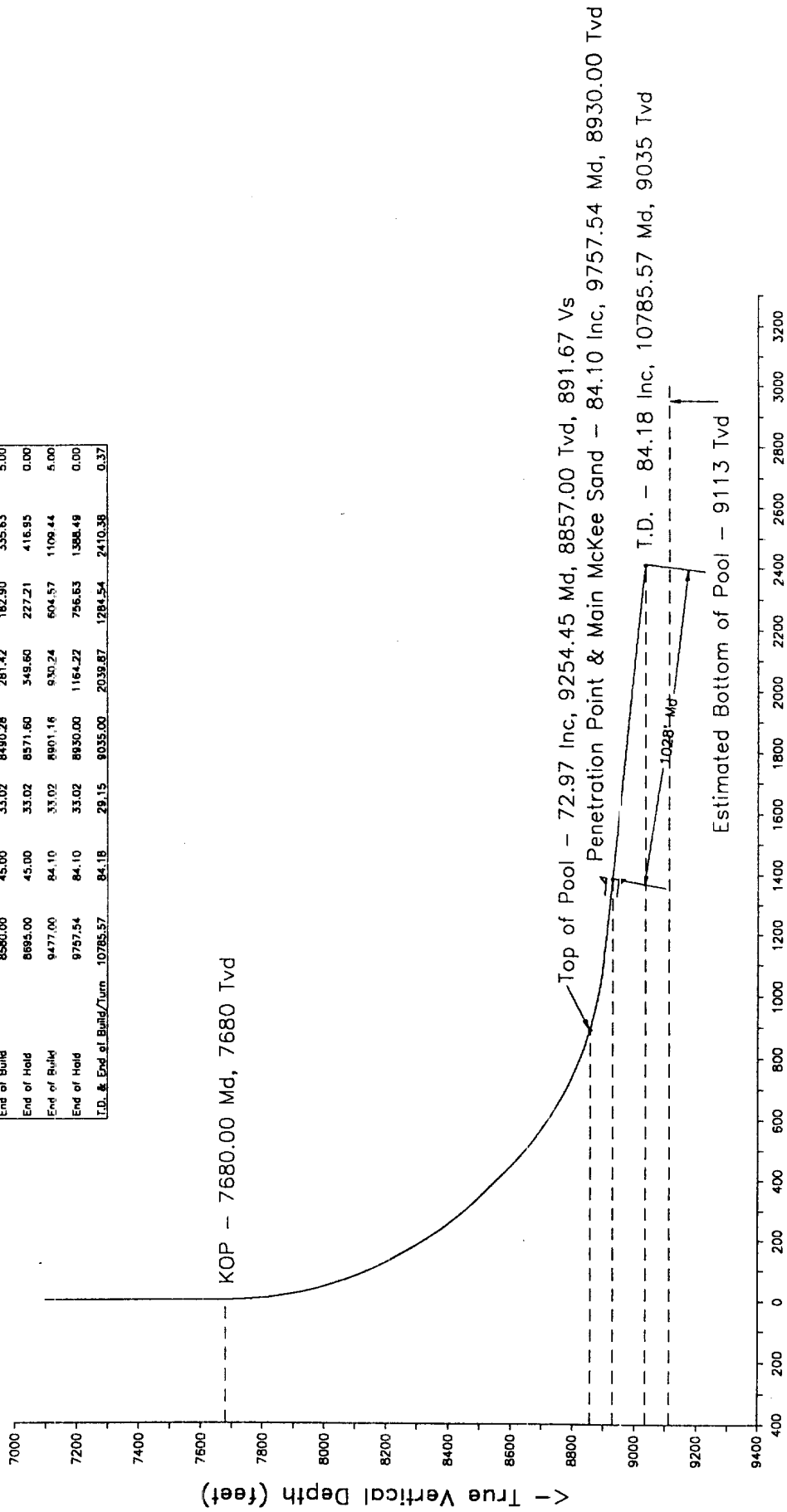


CONOCO, INC.



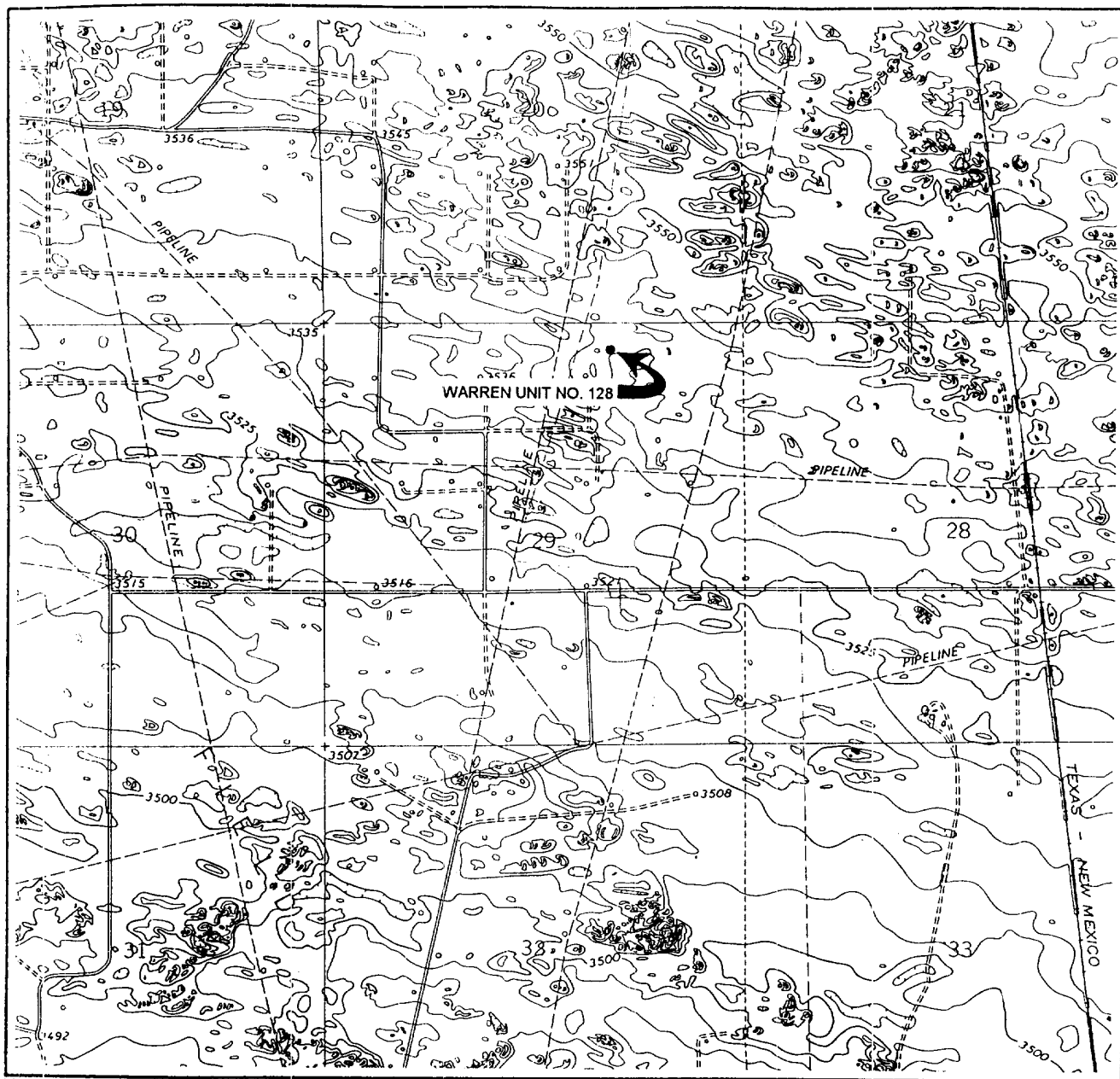
Structure : WARREN MCKEE NO. 128
Field : WARREN MCKEE Location : LEA COUNTY, NEW MEXICO

WELL PROFILE DATA									
Point	MD	Inc	Dir	TVD	North	East	V. Sect	Deg/100	
Top of Pool	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
End of Turn	7680.00	0.00	33.02	7680.00	0.00	0.00	0.00	0.00	
End of Build	8560.00	45.00	33.02	8490.28	281.42	182.90	335.63	5.00	
End of Hold	8685.00	45.00	33.02	8571.80	349.60	227.21	416.95	0.00	
End of Build	9477.00	84.10	33.02	8901.16	930.24	604.57	1109.44	5.00	
End of Hold	9757.54	84.10	33.02	8930.00	1164.22	756.63	1388.49	0.00	
T.D. & End of Build/Turn	10785.57	84.18	29.15	9035.00	2039.87	1284.54	2410.38	0.37	



LOCATION VERIFICATION MAP

Exhibit "B"



SCALE: 1" = 2000'

WTC 44962

CONTOUR INTERVAL 5'

SEC. 29 TWP. 20-S RGE. 38-E

SURVEY N.M.P.M.

COUNTY LEA STATE NM

DESCRIPTION 330' FNL & 1650' FEL

ELEVATION 3539'

OPERATOR CONOCO INC.

LEASE WARREN UNIT NO. 128

USGS TOPO MAP HOBBS SW, NEW MEXICO

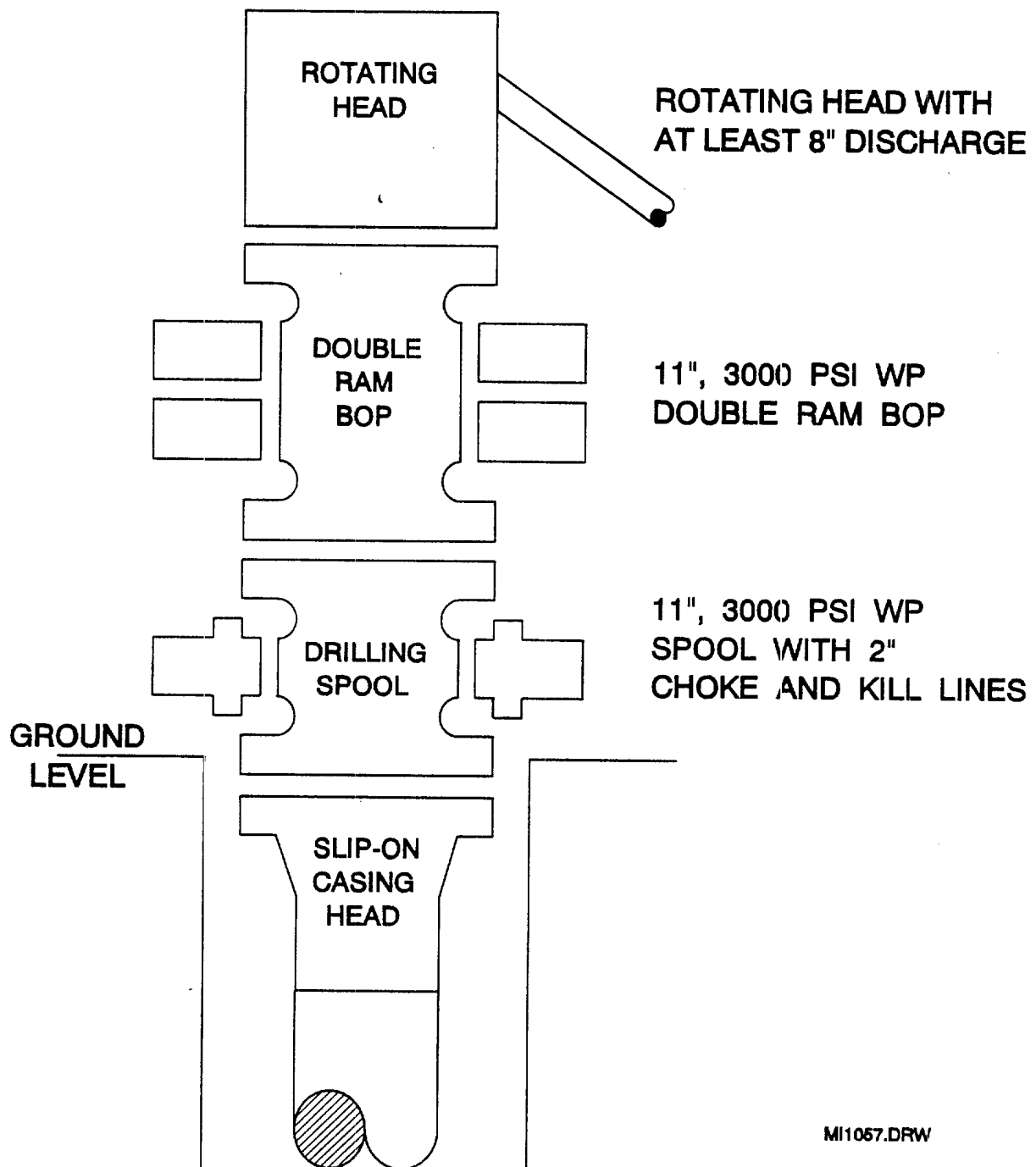
WEST TEXAS CONSULTANTS, INC.

ENGINEERS-PLANNERS-SURVEYORS

MIDLAND, TEXAS

915-685-3800

BOP SPECIFICATIONS



MI1057.DRW

Sh/D/21

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