

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR DEEPEN

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.

a. ADDRESS AND TELEPHONE NO

10 Desta Dr. Ste 100W, Midland, Tx. 79705-4500

(915) 886-6548

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

At surface

660' FNL & 660' FWL

At proposed prod. zone

660' FNL & 660' FWL

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

BRANDENBURG, 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

40

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

19. PROPOSED DEPTH

6900'

20. ROTARY OR CABLE TOOLS

Rotary

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

3566' GR

22. APPROX. DATE WORK WILL START*

5/15/97

23

PROPOSED CASING AND CEMENT

LEA COUNTY CONTROLLED WATER BASIN

| SIZE OF HOLE | GRADE, SIZE OF CASING | WEIGHT PER FOOT | SETTING DEPTH | QUANTITY OF CEMENT |
|--------------|-----------------------|-----------------|---------------|--------------------|
| 12-1/4" | 8-5/8" | #23 M-50 | 1500' | 660 sxs, WITNESS |
| 7-7/8" | K-55 5-1/2" | #15.5 K-55 | 6900' | 1,285 sxs, circ. |
| | | | | |

It is proposed to drill a vertical wellbore as a Tubbs producer according to the plan submitted in the follow attachments:

1. Well Location and Acreage Dedication Plat (C-102)
2. Proposed Well Plan Outline
3. Surface Use Plan
4. EXHIBIT A: Vicinity and Lease Road Map
5. EXHIBIT B: 7.5 " Quadrangle Topo Map.
6. EXHIBIT C.1-C.2: Pipeline plats
7. EXHIBIT D: Trailer-mounted rig layout
8. BOP & Choke Manifold Specifications
9. H2S Drilling Operations Plan.
10. Surface Owner Settlement Letter

An archeological survey will be submitted as soon as completed.

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.

Jerry W. Hoover

SIGNED

TITLE

Sr. Conservation Coordinator

DATE

4/9/97

(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:

APPROVED BY

TITLE

DATE

*See Instructions On Reverse Side

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

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

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

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

State of New Mexico
Energy, Minerals & Natural Resources Department

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

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

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

| | | | |
|-----------------------------|-------------------------------|---------------------|---------------------------------|
| *API Number 3D-025-33975 | | *Pool Code 87085 | *Pool Name Warren Tubb, East |
| *Property Code 003122 | *Property Name WARREN UNIT | | *Well Number 145 |
| *GRID No. 005073 | *Operator Name CONOCO INC. | | *Elevation 3566' |

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 |
|---------------|---------|----------|-------|---------|---------------|------------------|---------------|----------------|--------|
| D | 25 | 20-S | 38-E | | 660 | NORTH | 660 | WEST | LEA |

¹¹ Bottom Hole Location If Different From Surface

| UL or lot no. | Section | Township | Range | Lot Idn | Feet from the | North/South line | Feet from the | East/West line | County |
|---------------|---------|----------|-------|---------|---------------|------------------|---------------|----------------|--------|
| | | | | | | | | | |

| | | | |
|------------------------|------------------|---------------------|------------|
| *Dedicated Acres 40 | *Joint or Infill | *Consolidation Code | *Order No. |
|------------------------|------------------|---------------------|------------|

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

| | | | | |
|--|--|--|--|---|
| | | | | <p>¹⁷ OPERATOR CERTIFICATION</p> <p>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.</p> <p><i>[Signature]</i> Signature JERRY W. HOOVER Printed Name SR. CONSERVATION COORDINATOR Title 4/9/97 Date</p> |
| | | | | |
| | | | | |
| | | | | |
| | | | | <p>¹⁸ SURVEYOR CERTIFICATION</p> <p>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 best of my belief.</p> <p>MARCH 20, 1997 Date of Survey Signature and Seal of Professional Surveyor: <i>[Signature]</i> Certificate Number 8278</p> |
| | | | | |
| | | | | |
| | | | | |

PROPOSED WELL PLAN OUTLINE

WELL NAME
LOCATION

WARREN UNIT NO. 145
660' FNL & 660' FWL, SEC. 25, 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 | FORMAT ON PRESSURE GRADIENT | MUD WT | MUD TYPE | DAY |
|--------------------|----|---|--|--|--------------|--|-------|--------------|-----------------------------------|--------------|-------------------|-----|
| 0 | | | POSSIBLE HOLE ENLARGEMENT AND SLOUGHING | | 12-1/4" | | | | NORMAL | 8.4 - 9.5 | FRESH | |
| 1 | | RUSTLER 1500' | WASHOUTS IN SALT SECTION F/1400' - 2800' | | 7-7/8" | 8-5/8" 23#, M-50, ST&C 660 sx, circ cmt | 1500' | | | 10 | BRINE | 3 |
| 2 | | B/ SALT 2650' YATES 2880' | | | | | | | | | | |
| 3 | | SEVEN RIVERS 3135' QUEEN 3695' PENROSE 3850' | | H2S MONITOR ON @ 3500' | | | | | | | | |
| 4 | | GRAYBURG 4040' SAN ANDRES 4320' | POSSIBLE LOSSES AND SEEPAGE TO TOTAL DEPTH | | | | | | LESS THAN 8.3 | | | 6 |
| 5 | | GLORIETA 5550' | CASES OF DIFFERENT STICKING THROUGH GLORIETA | | | | | | | | | |
| 6 | | BLINEBRY MKR. 6020' TUBB 6510' DRINKARD 6825' | | | | | | | | | | |
| 7 | | TD @ 6900' | | GR-CAL-DLL-MLL and FDC-CNL-PE 2850'-TD. Pull GR-CAL-CNL to surface. | | 5-1/2" 15.5#, K-55, LT&C 1285 sx, circ cmt | 6900' | | LESS THAN 8.3 BHP = 2500 psi | 10 | STARCH- GEL@TD | 16 |
| 8 | | | | | | | | | | | | |

DATE 09 APR 1997

APPROVED Roger Williamson
DRILLING ENGINEER

Joe Miller
RESERVOIR ENGINEER

Well Name : Warren Unit #145

Location : 660 FNL, 660 FWL, SEC. 25, T-20S, R-38E, LEA CO.

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 6900 ft.

Cementing Program :

Surface

Lead 460 sacks Class C Mixed at 12.7 ppg
Additives 35:65:6 (Poz:Cem:Gel) + 2% CACL2
+ 0.25 pps Cello-Flake

Tail 200 sacks Class C Mixed at 14.8 ppg
Additives 2% A-7P

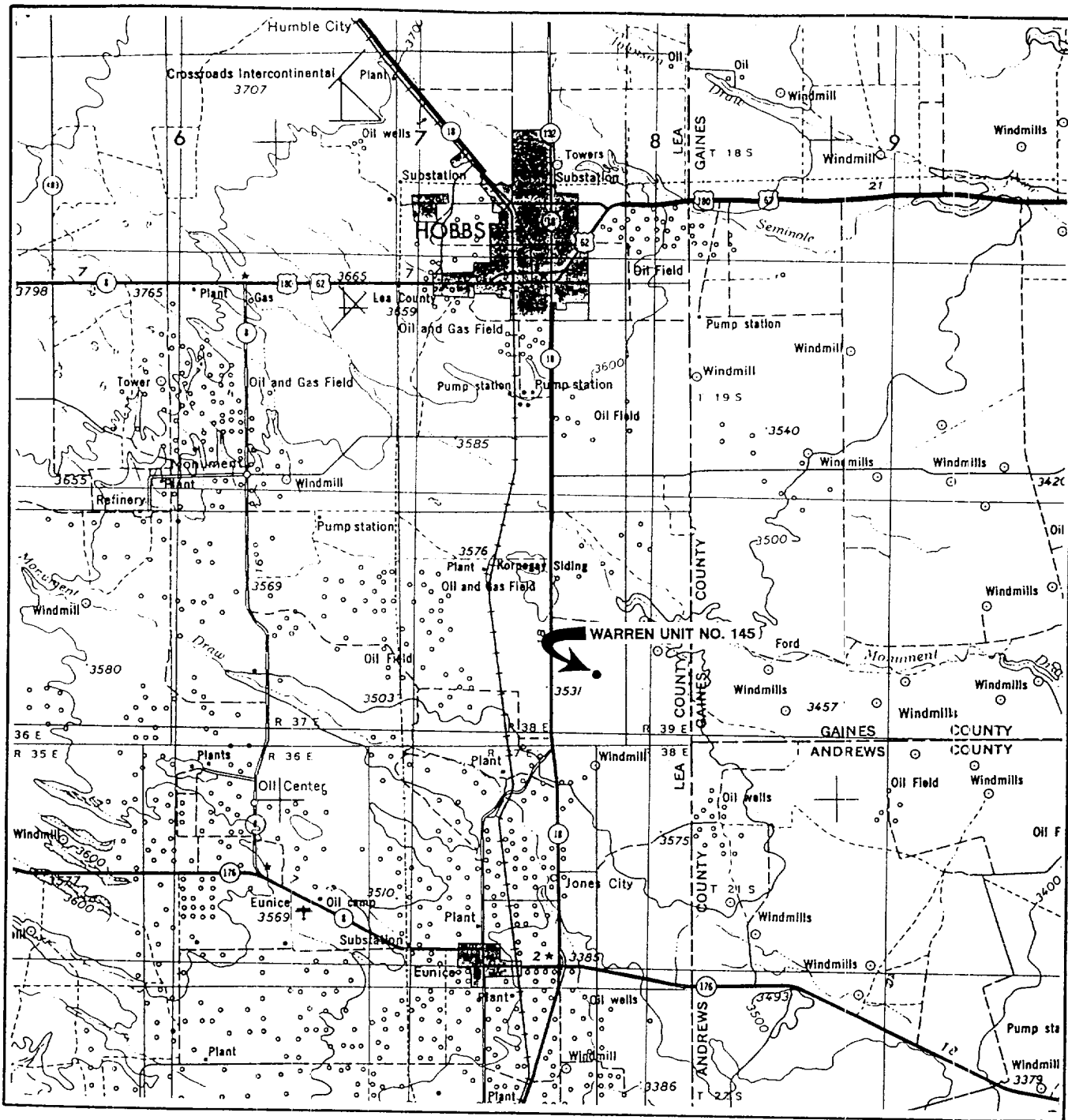
Production

Lead 585 sacks Class C Mixed at 12 ppg
Additives 16% Gel + 2% Salt + 0.3% CD-32 + 0.3% SMS

Tail 700 sacks Class C Mixed at 14.8 ppg
Additives 1.1% FL-62 + 1% BA-58 + 1.5% Salt + 0.3% CD-32
+ 0.2% SMS

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

VICINITY MAP



WTC 44820

SCALE: 1" = 4 MILES

SEC. 25 TWP. 20-S RGE. 38-E

SURVEY N.M.P.M.

COUNTY LEA STATE NM

DESCRIPTION 660' FNL & 660' FWL

ELEVATION 3566'

OPERATOR CONOCO INC.

LEASE WARREN UNIT NO. 145

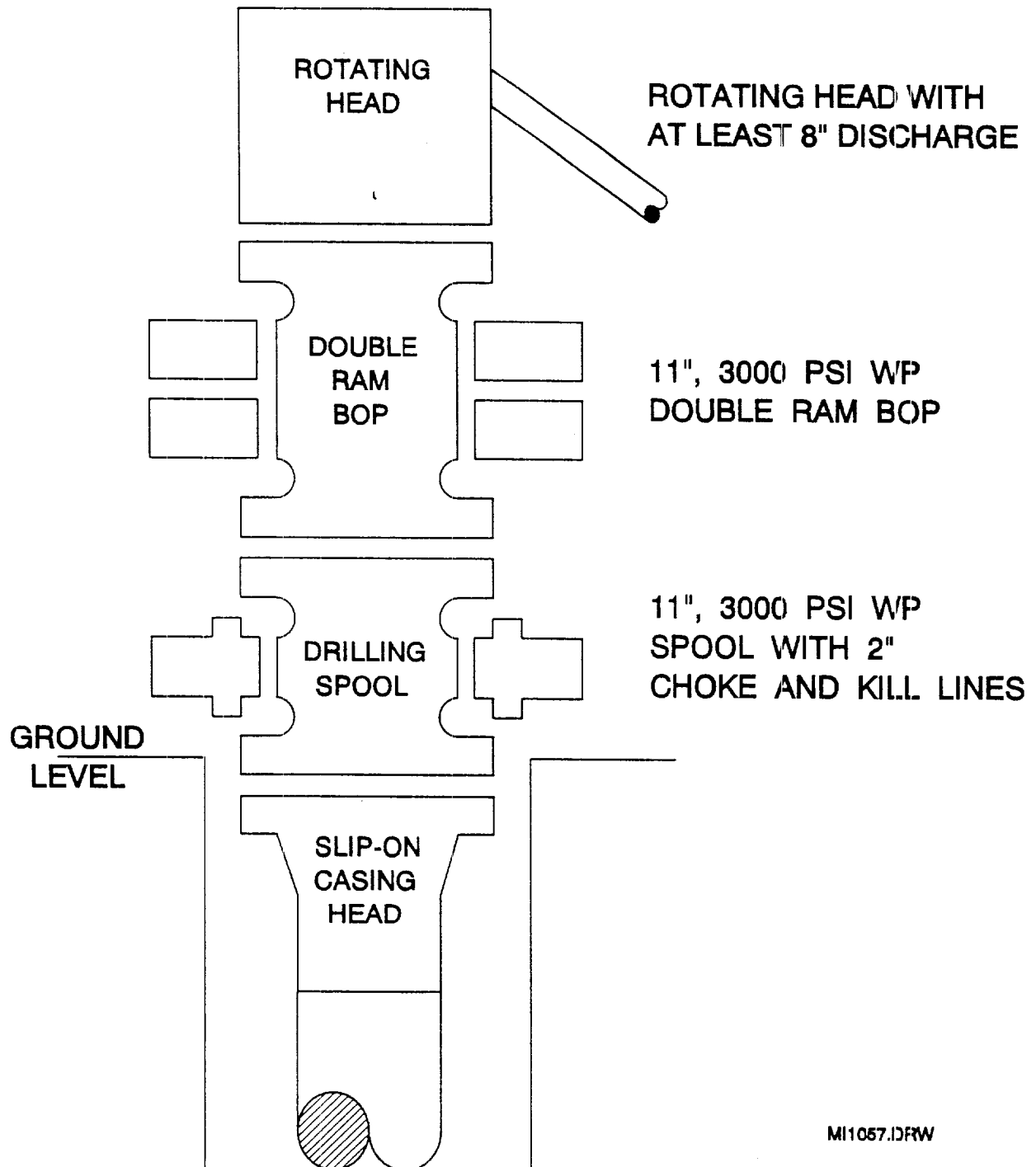
WEST TEXAS CONSULTANTS, INC.

ENGINEERS-PLANNERS-SURVEYORS

MIDLAND, TEXAS

EXHIBIT A

BOP SPECIFICATIONS



6/9/95
FBI