

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  
Manzano Oil Corporation 505/623-1996

3. ADDRESS AND TELEPHONE NO.  
P. O. Box 2107 Roswell, NM 88202

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)  
At surface 660' FNL & 1650' FNL, New Mexico  
At proposed prod. zone Same Unit B

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE\*  
17 miles NW of Eunice, NM

15. DISTANCE FROM PROPOSED\* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drig. unit line, if any)  
660'

16. NO. OF ACRES IN LEASE  
320

17. NO. OF ACRES ASSIGNED TO THIS WELL  
40

18. DISTANCE FROM PROPOSED LOCATION\* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.  
2721'

19. PROPOSED DEPTH  
12,400'

20. ROTARY OR CABLE TOOLS  
Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.)  
3662.1' GL

22. APPROX. DATE WORK WILL START\*  
May 24, 1993

PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	GRADE, SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
17 1/2"	13 3/8" J-55	54.5#	400'	Circ. 400 sx "C"
11"	8 5/8" J-55	24 & 32#	4,000'	Circ 1500 sx lite + 300 "C"
7 7/8"	5 1/2" J-55 LN-80	17 & 20#	12,400'	425 sx "C" to above stream Wolfcamp

Mud Program:

	Mud Wt.	Vis.	W/L Control
0' - 400': Fresh water Gel/lime:	8.5- 8.8 ppg	32 - 34	No W/L control.
400' - 4,000': Cut brine mud w/starch:	10.0-10.1 ppg	28 - 29	No W/L control.
4,000' - 8,000': Fresh Water:	8.4- 8.6 ppg	28 - 29	No W/L control.
8,000' - 11,000': Cut Brine (50-90k):	9.5-10.0 ppg	28 - 29	No W/L control.
11,000' - TD : Cut Brine (90-100k):	9.9-10.2 ppg	33 - 35	W/L control 15cc.

BOP Program:

An 11" 5000 psi wp Shaffer Type "LWS" BOP will be installed on the 8 5/8" casing. Casing and BOP will be tested before drilling out with 7 7/8". BOP will be used as a 3000 psi wp system and will be tested daily.

APPROVAL SUBJECT TO  
GENERAL REQUIREMENTS AND  
SPECIAL STIPULATIONS

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. Agent for:  
SIGNED Richard L. Manus TITLE Manzano Oil Corp. DATE April 20, 1993

(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) RICHARD L. MANUS  
APPROVED BY \_\_\_\_\_ TITLE \_\_\_\_\_ DATE 5/7/93

\*See Instructions On Reverse Side

# OIL CONSERVATION DIVISION

P.O. Box 2088

Santa Fe, New Mexico 87504-2088

## DISTRICT I

P.O. Box 1980, 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

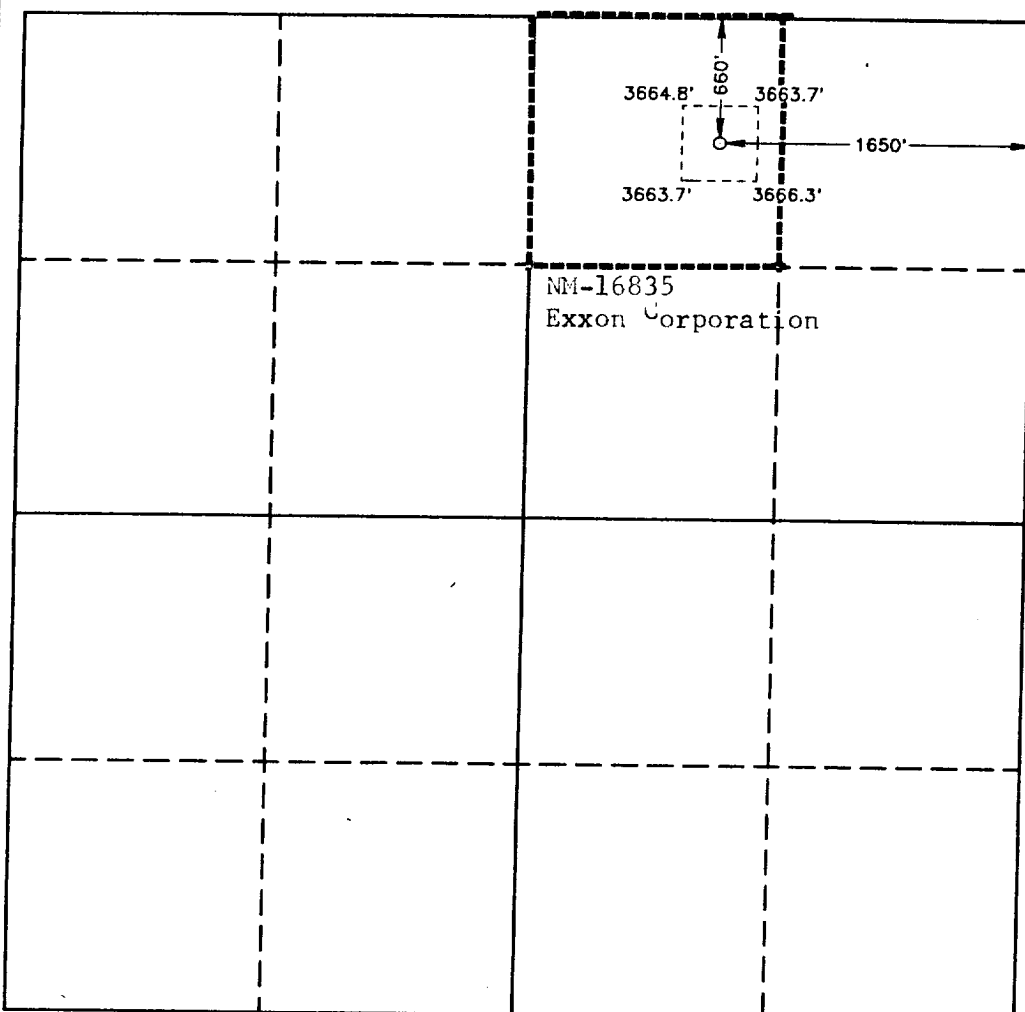
Operator <b>MANZANO OIL CORPORATION</b>			Lease <b>NEUHAUS "14" FEDERAL</b>		Well No. <b>2</b>
Unit Letter <b>B</b>	Section <b>14</b>	Township <b>20 SOUTH</b>	Range <b>35 EAST</b>	County <b>LEA</b>	
Actual Footage Location of Well: <b>660</b> feet from the <b>NORTH</b> line and <b>1650</b> feet from the <b>EAST</b> line					
Ground Level Elev. <b>3662.1'</b>	Producing Formation <b>Strawn</b>	Pool <b>Wildcat</b>			Dedicated Acreage: <b>40</b> Acres

1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
3. 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 of owners and tract descriptions which have actually been consolidated. (Use reverse side of this form necessary.)

No allowable will be assigned to the well unit all interests have been consolidated (by communitization, unitization, forced-pooling, otherwise) or until a non-standard unit, eliminating such interest, has been approved by the Division.



### OPERATOR CERTIFICATION

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

Signature

Printed Name  
**George R. Smith**

Position

Agent for:

Company

**Manzano Oil Corporation**

Date

**April 20, 1993**

### 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 knowledge and belief.

Date Surveyed

**MARCH 24, 1993**

Signature & Seal of  
Professional Surveyor

**JOHN W. WEST** 676  
**RONALD W. EDSON** 3239  
**CARL L. JONES** 7977

93-11-0467

# APPLICATION FOR DRILLING

MANZANO OIL CORPORATION  
Neuhaus "14" Federal. Well No. 2  
660' FNL & 1650' FEL. Sec. 14-T20S-R35E  
Lea County, New Mexico  
Lease No.: NM-16835  
(Exploratory Well)

In conjunction with Form 3160-3, Application for Permit to Drill subject well, Manzano Oil Corporation submits the following items of pertinent information in accordance with BLM requirements:

1. The geologic surface formation is recent Permian with quaternary alluvium and other surficial deposits.

2. The estimated tops of geologic markers are as follows:

Rustler	2035'	Bone Spring	8070'
Base/Salt	3600'	Wolfcamp	11,150'
Yates	3735'	Wolfcamp Pay	11,300'
Queen	4700'	Strawn	12,000'
San Andres	5160'	T.D.	12,100'
Delaware	6055'		

3. The estimated depths at which water, oil or gas formations are anticipated to be encountered:

Water: Surface water between 100' - 350'.

Oil: Possible in the Yates, San Andres, Wolfcamp and Strawn.

Gas: None expected

4. Proposed Casing Program: See Form 3160-3.
5. Proposed Control Equipment: See Form 3160-3 and Exhibit "E".
6. Mud Program: See Form 3160-3.
7. Auxiliary Equipment: Blowout Preventer, gas detector, Kelly cock, pit level monitor, flow sensors and stabbing valve.

8. Testing, Logging, and Coring Program:

Drill Stem Tests: Possible in the Strawn and Wolfcamp.

Logging: Gamma Ray:

CNL-LDT, DLL-MFL

Surf. Csg. to T.D.

Below 8 5/8" to T.D.

Coring: None planned.

9. No abnormal pressures or temperatures are anticipated. In the event abnormal pressures are encountered the proposed mud program will be modified to increase the mud weight. Estimated BHP = 5400 psi (Exc. Hole), Temp. = 150°.
- 9a. H<sub>2</sub>S: None expected, based on wells drilled in the area.
10. Anticipated starting date: May 20, 1993.  
Anticipated completion of drilling operations: Approximately 6 weeks.

7/19/93



KEN REYNOLDS—PRESIDENT  
ARNIE NEWKIRK—VICE-PRESIDENT

DRILLING CO., INC. — OIL WELL DRILLING CONTRACTORS

P. O. Box 1498 ROSWELL, NEW MEXICO 88202-1498  
505/623-5070 505/746-2719  
ROSWELL, NM ARTERIA, NM

RIG #2

## BLOWOUT PREVENTOR ARRANGEMENT

11" SHAFFER TYPE LWS, 5000 psi WP  
11" CAMERON SPHERICAL, 5000 psi WP  
120 GALLON, 5 STATION KOOMEY ACCUMULATOR  
5000 psi WP CHOKE MANIFOLD

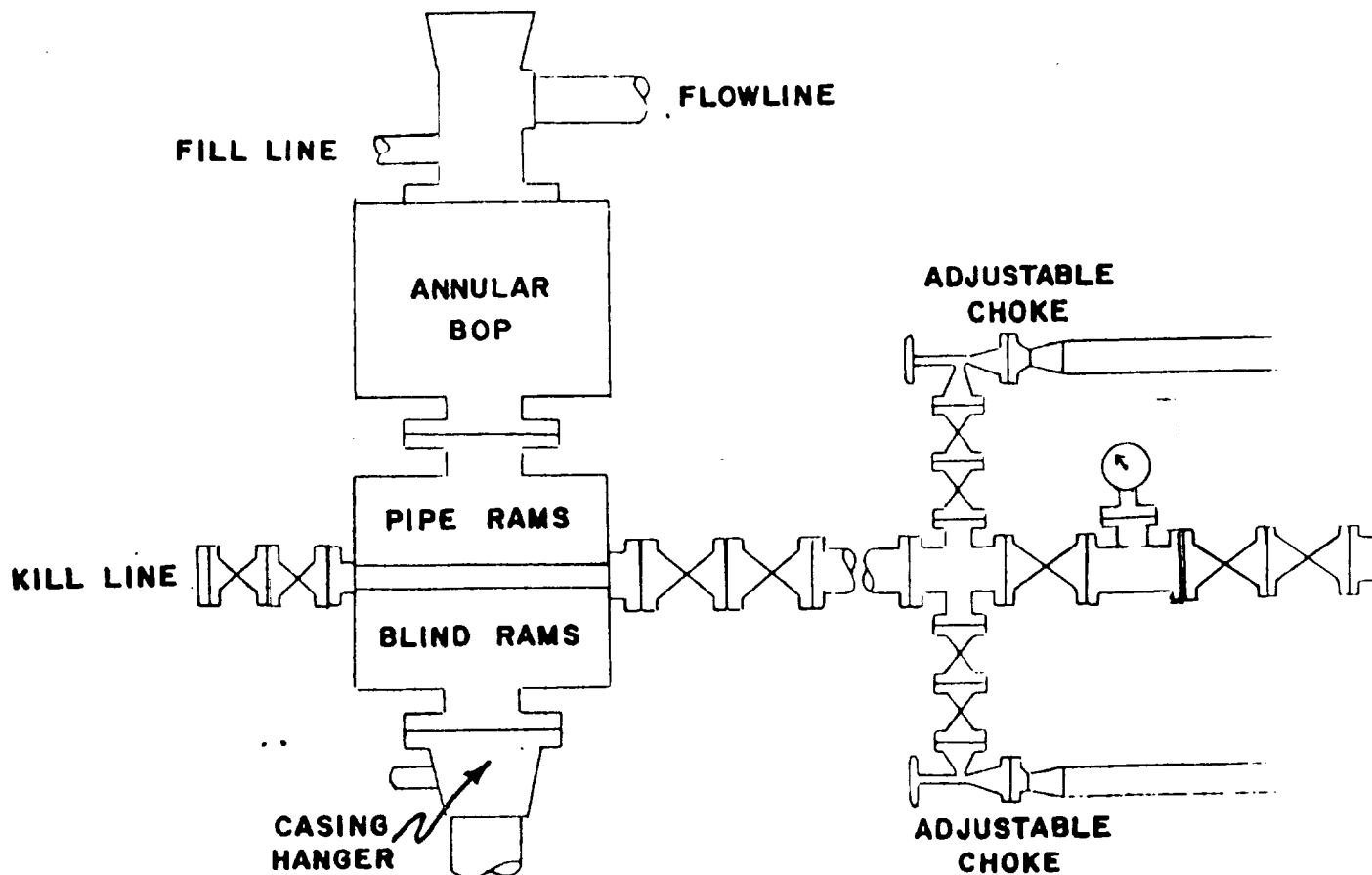


EXHIBIT "E"  
MANZANO OIL CORPORATION  
Neabous "11" Federal Well No. 2  
BOP Specifications