Form 3160-3
(December 1990)

SUBMIT IN TRIPLICATE*
(Other instructions on reverse side)

Form approved.
Budget Bureau No. 1004-0136
Expires: December 31, 1991

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR DEEPEN

RECEIVED
APR 21 1993
OIL CON. DIV.
DIST. 3

5. LEASE DESIGNATION AND SERIAL NO.: NM-16835
6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
7. UNIT AGREEMENT NAME:

1a. TYPE OF WORK: DRILL [X] DEEPEN [ ]
b. TYPE OF WELL: OIL WELL [X] GAS WELL [ ] OTHER SINGLE ZONE [ ] MULTIPLE ZONE [ ]
8. FARM OR LEASE NAME, WELL NO.: Neuhaus "14" Federa
2. NAME OF OPERATOR: Manzano Oil Corporation 505/623-1996
9. API WELL NO.: 2
3. ADDRESS AND TELEPHONE NO.: P. O. Box 2107 Roswell, NM 88202
10. FIELD AND POOL, OR WILDCAT: Wildcat
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*)
At surface: 660' FNL & 1650' FEL, Unit B
At proposed prod. zone: Same
11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA: Sec. 14-T20S-R35E
14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*: 17 miles NW of Eunice, NM
12. COUNTY OR PARISH: Lea
13. STATE: New Mexi

15. 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
660'	320	40
18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.	**19. PROPOSED DEPTH**	**20. ROTARY OR CABLE TOOLS**
2721'	12,400'	Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.): 3662.1' GL
22. APPROX. DATE WORK WILL START*: May 24, 1993

23. 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
7 7/8"	5 1/2" J-55 LN-80	17 & 20#	12,400'	425 sx "H" to above ~~Strawn~~ 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 15

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.

SPECIAL STIPULATIONS
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.
SIGNED [signature] TITLE Agent for: Manzano Oil Corp. DATE April 20, 1993

(This space for Federal or State office use)

BEFORE EXAMINER CATANACH
OIL CONSERVATION DIVISION
EXHIBIT NO. 1-C
CASE NO. 10796

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 5/7/93

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

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-102
Revised 1-1-

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	Lease	Well No.
MANZANO OIL CORPORATION	NEUHAUS "14" FEDERAL	2

Unit Letter	Section	Township	Range	County
B	14	20 SOUTH	35 EAST NMPM	LEA

Actual Footage Location of Well:
660 feet from the NORTH line and 1650 feet from the EAST line

Ground Level Elev.	Producing Formation	Pool	Dedicated Acreage:
3662.1'	Strawn	Wildcat	40 Acres

1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.

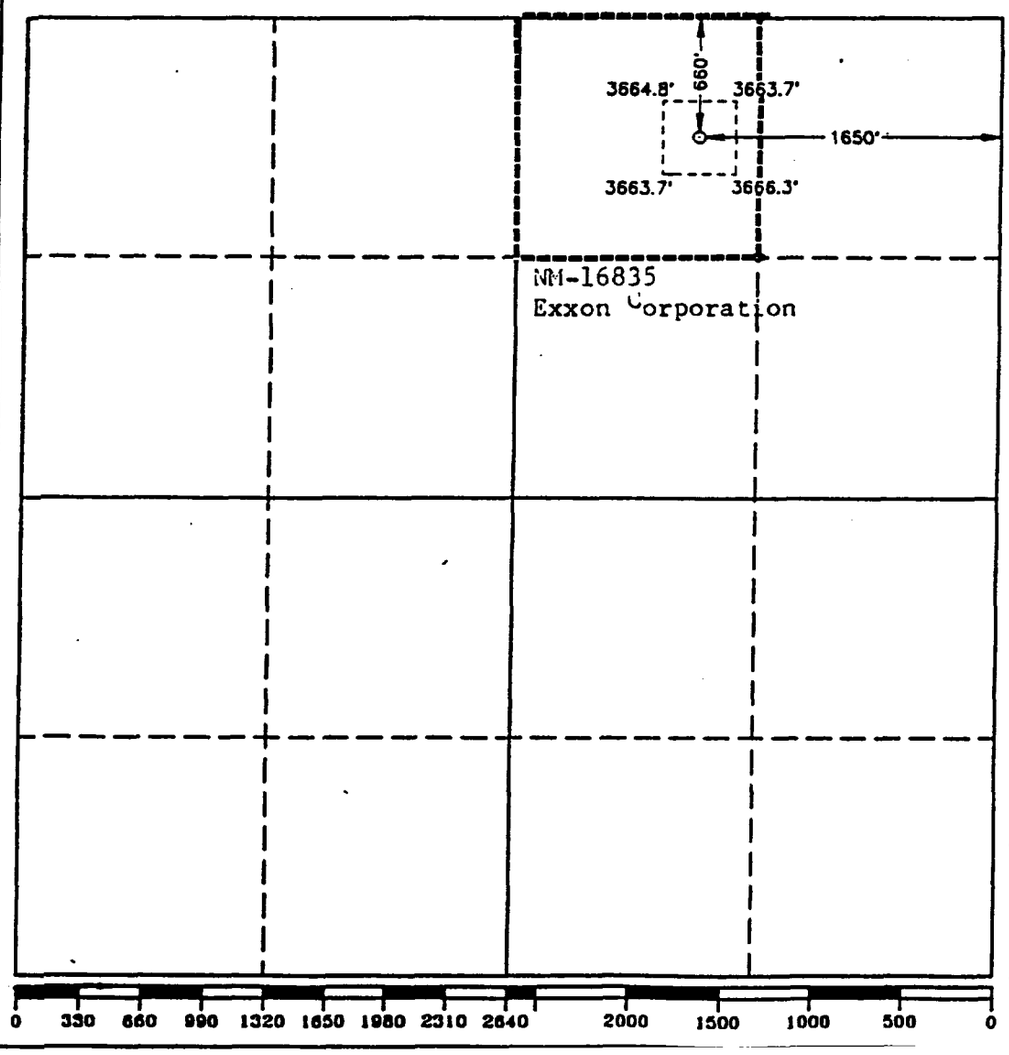
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).

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: George R. Smith

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 supervison, 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: GARY L. JONES NEW MEXICO 7977

Certificate No. JOHN W. WEST 676
RONALD J. EIDSON 3239
GARY 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: Surf. Csg. to T.D.
   CNL-LDT, DLL-MFL 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_2S: None expected, based on wells drilled in the area.

10. Anticipated starting date: May 20, 1993.
    Anticipated completion of drilling operations: Approximately 6 weeks.