

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK DRILL <input checked="" type="checkbox"/> DEEPEN <input type="checkbox"/> PLUG BACK <input type="checkbox"/>		5. LEASE DESIGNATION AND SERIAL NO. NM-67986
b. TYPE OF WELL OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <input type="checkbox"/> SINGLE ZONE <input type="checkbox"/> MULTIPLE ZONE <input type="checkbox"/>		6. IF INDIAN, ALLOTTEE OR TRIBE NAME
2. NAME OF OPERATOR Manzano Oil Corporation		7. UNIT AGREEMENT NAME
3. ADDRESS OF OPERATOR P. O. Box 2107 Roswell, NM 88202		8. FARM OR LEASE NAME Xion Federal
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.) At surface 2310' FNL & 330' FEL Unit H At proposed prod. zone Same		9. WELL NO. 2
14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE 8 miles SW of Maljamar, NM		10. FIELD AND POOL, OR WILDCAT Young Wolfcamp North
15. DISTANCE FROM PROPOSED LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drilg. unit line, if any) 330'	16. NO. OF ACRES IN LEASE 80	11. SEC., T., R., M., OR BLM, AND SURVEY OR AREA Sec. 18-T18S-R32E
18. DISTANCE FROM PROPOSED LOCATION TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT. 1683'	19. PROPOSED DEPTH 10200'	12. COUNTY OR PARISH Lea
21. ELEVATIONS (Show whether DF, RT, GR, etc.) 3751' GL		13. STATE New Mexico
22. APPROX. DATE WORK WILL START November 2, 1992		

23. PROPOSED CASING AND CEMENTING PROGRAM						
HOLE SIZE	CASING SIZE	WEIGHT/FOOT	GRADE	THREAD TYPE	SETTING DEPTH	QUANTITY OF CEMENT
17 1/2"	13 3/8"	54.5#	J-55	STC	350'	Circ. 300 sx
12 1/4"	8 5/8"	24 - 32#	J-55	STC	2900'	Circ 1200 sx
7 7/8"	5 1/2"	17 - 20#	N-80 & K-55	LTC	10,200'	350 sx "H" SEE STIPS.

Mud Program:

0' - 350': Fresh water native mud: mud wt. 8.4-9 ppg, Vis. 28, No W/L control.
350' - 9000': Cut brine mud w/starch: mud wt. 10-10.2 ppg, Vis. 28-30, No W/L control.
9000' - 10,200': Cut brine mud: mud wt. 10-10.2 ppg, Vis. 32-33, W/L 10-15cc.

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.

IN ABOVE SPACE DESCRIBE PROPOSED 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 preventer program, if any.

24. Agent for: Manzano Oil Corp. DATE: October 9, 1992
SIGNED: TITLE: (This space for Federal or State office use)

PERMIT NO. APPROVAL DATE

APPROVED BY TITLE DATE 11-9-92

CONDITIONS OF APPROVAL, IF ANY:

GENERAL REQUIREMENTS AND
SPECIAL STIPULATIONS

ATTACHED

*See Instructions On Reverse Side

C&L 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
600 Rio Brazos Rd., Aztec, NM 87410

WELL LOCATION AND ACREAGE DEDICATION PLAT

All Distances must be from the outer boundaries of the section

Operator Manzano Oil Corporation			Lease Xion Federal		Well No. 2
Unit Letter H	Section 18	Township 18 South	Range 32 East	County Lea	
Actual Footage Location of Well: 2310 feet from the North line and 330 feet from the East line					
Ground level Elev. 3751	Producing Formation Wolfcamp		Pool Young North Wolfcamp		Dedicated Acreage: 40 Acres

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

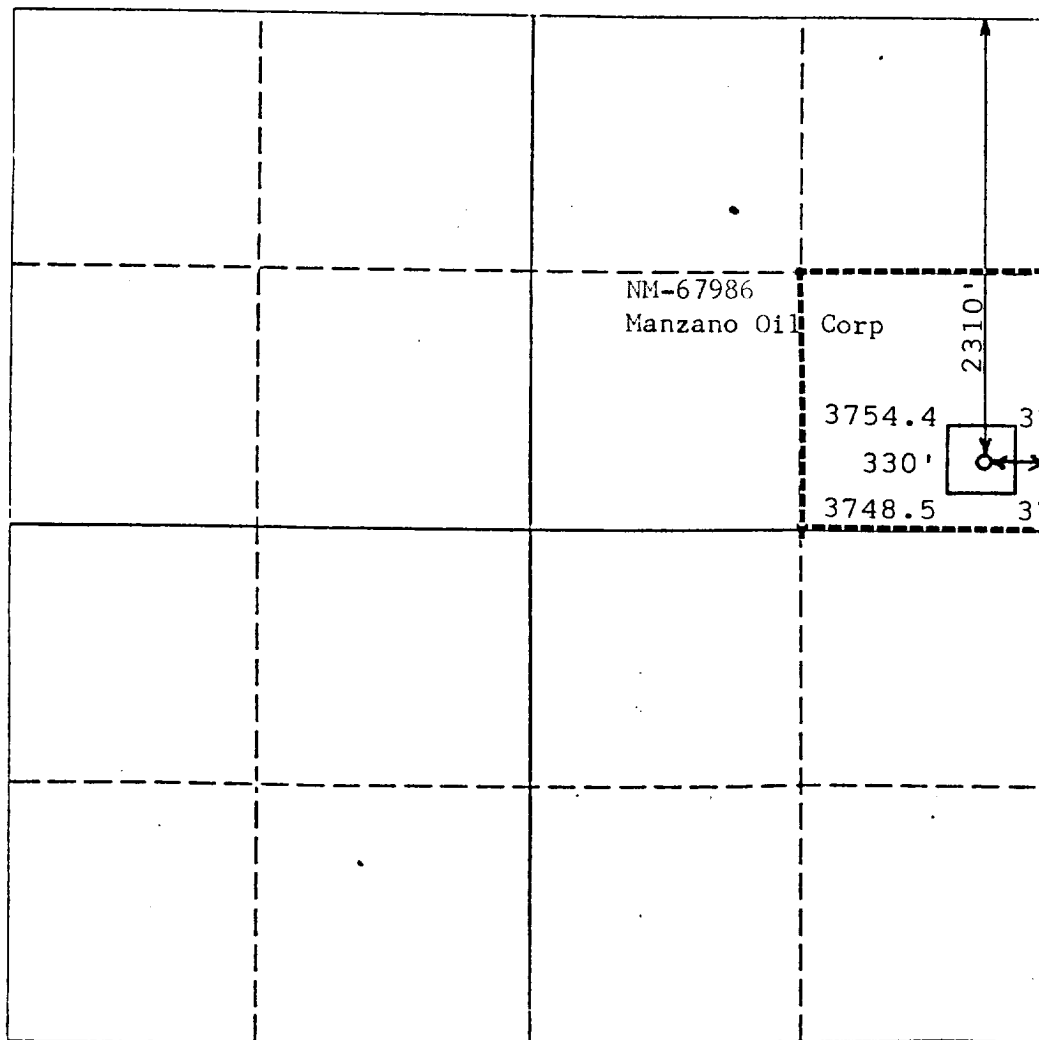
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).

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 the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.)

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



OPERATOR CERTIFICATION

I hereby certify that 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
October 9, 1992

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.

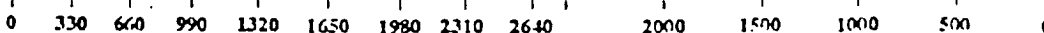
Date Surveyed

September 14, 1992
Signature & Seal of
Professional Surveyor

P. R. Patton

Certificate No.

8112



APPLICATION FOR DRILLING

MANZANO OIL CORPORATION
Xion Federal. Well No. 2
2310' FNL & 330' FEL, Sec. 18-T18S-R32E
Lea County, New Mexico
Lease No.: NM-67986
(Development 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:

Yates	2485'	Delaware	4442'
Seven Rivers	2868'	Bone Spring	6386'
Queen	3632'	1st Bone Spring	8000'
Penrose	3940'	3rd Bone Spring	9430'
Grayburg	3992'	Wolfcamp Dolomite	9850'
San Andres	4289'	T.D.	10,200'
3. The estimated depths at which water, oil or gas formations are anticipated to be encountered:

Water: Surface water between 100' - 350'.
Gas: None.
Oil: Possible in the Wolfcamp below 9850'.
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: One possible in the Wolfcamp.
Logging: Gamma Ray/Nuetron: T.D. to surface.
 CNL-LDC, DLL, MSFL T. D. to 8 5/8" casing.
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 = 2400 psi with temperature of 140°.
10. H₂S: None expected. None in previously drilled wells in area.
11. Anticipated starting date: November 2, 1992.
Anticipated completion of drilling operations: Approximately 5 weeks.



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
ROSWELL, NM
505/746-2719
ARTESIA, NM

RIG # 1

BLOWOUT PREVENTOR ARRANGEMENT

11" SHAFFER TYPE LWS, 5000 psi WP
11" GK HYDRIL, 5000 psi WP
80 GALLON, 4 STATION PAYNE ACCUMULATOR
3000 psi WP CHOKE MANIFOLD

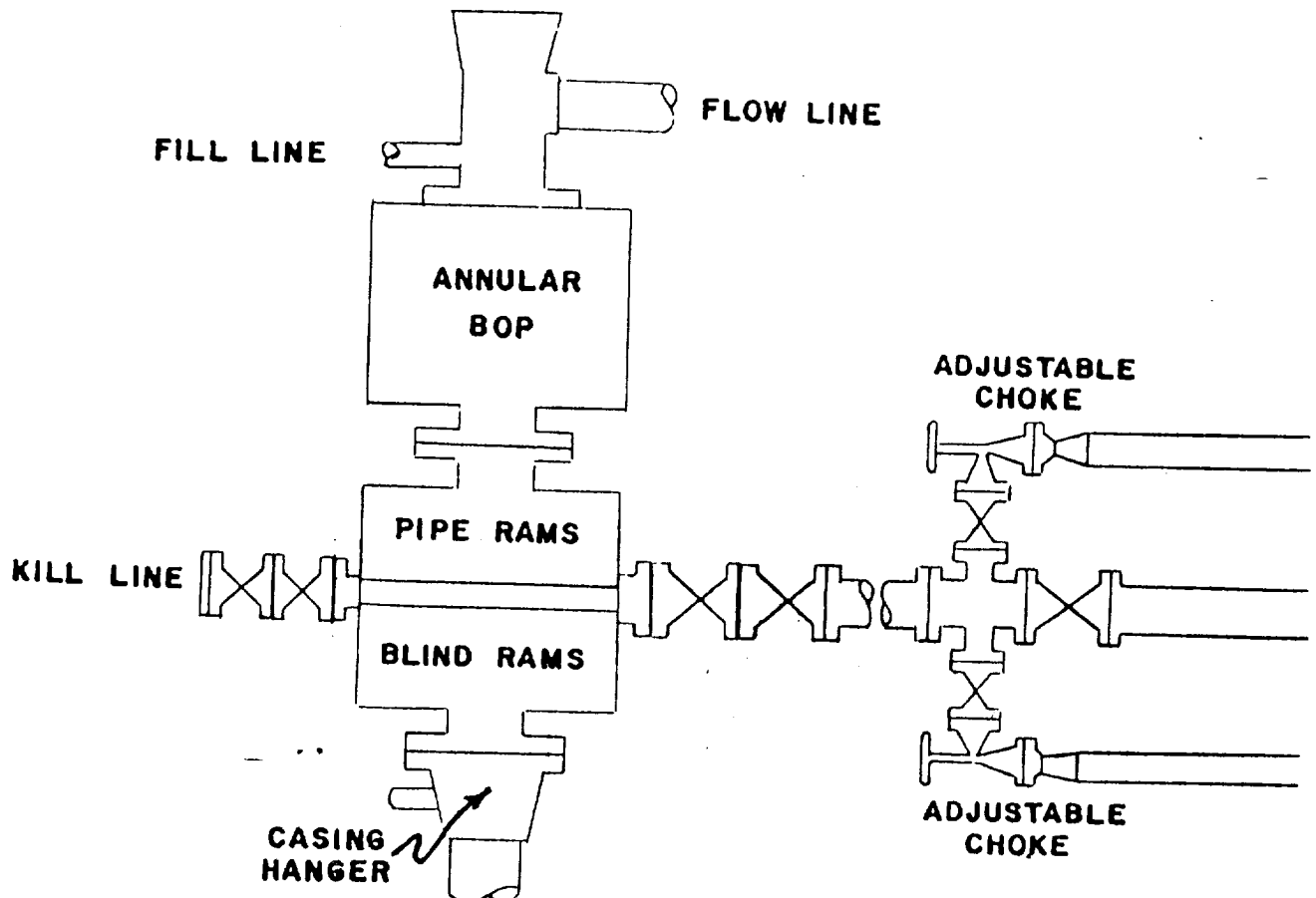


EXHIBIT "E"
MANZANO OIL CORPORATION
Xion Federal, Well No. 2
BOP Specifications

Ms. A. 9. 2. 43

RECEIVED

NOV 1 1992

U.S. DEPARTMENT OF JUSTICE