

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

30-015-25870

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK

DRILL ☒DEEPEN ☐PLUG BACK ☐

b. TYPE OF WELL

OIL
WELL ☒GAS
WELL ☐OTHER ☐SINGLE
ZONE ☐MULTIPLE
ZONE ☐

2. NAME OF OPERATOR

Manzano Oil Corporation ✓

3. ADDRESS OF OPERATOR

P. O. Box 2107 Roswell, NM 88202

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

At surface

990' FSL & 800' FWL

At proposed prod. zone

same

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

5 miles southeast of Loco Hills, NM

15. DISTANCE FROM PROPOSED*

LOCATION TO NEAREST
PROPERTY OR LEASE LINE, FT.

(Also to nearest drilg. unit line, if any)

330'

18. DISTANCE FROM PROPOSED LOCATION*

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

790'

16. NO. OF ACRES IN LEASE

68.67

19. PROPOSED DEPTH

8800'

17. NO. OF ACRES ASSIGNED
TO THIS WELL

40 (34.34)

20. ROTARY OR CABLE TOOLS

Rotary

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

3579 GL

22. APPROX. DATE WORK WILL START*

January 21, 1988

23.

PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
17 1/2"	13 3/8"	54.5#	600'	500 Sx "C" <u>circulated</u>
12 1/4"	8 5/8"	32.0#	2200'	1100 Sx "C" <u>circulated</u>
7 7/8"	5 1/2"	17 & 20#	8800'	350 Sx 50/50 Poz

Mud Program:

- 0' - 600' Spud mud with native mud.
600' - 2200' Brine water native mud, 9-9.5 ppg, Vis. 30-35, no W/L control.
2200' - 7000' Fresh water mud, 9-9.5 ppg, Vis. 30-35, no W/L control.
7000' - 8800' Cut brine water mud, 9-9.5 ppg, Vis. 30-35, W/L 20 cc or less.

BOP Program:

A 3000 psi 900 Series Shaffer double hydraulic operated BOP will be used
and tested daily. See Exhibit "E".

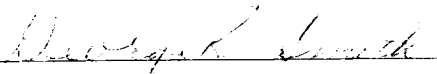
POST 10#1
NL & API
2-12-88

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:

SIGNED



TITLE

Manzano Oil Corporation

DATE

December 29, 1987

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

APPROVED BY

TITLE

DATE

2-5-88

CONDITIONS OF APPROVAL, IF ANY:

All distances must be from the outer boundaries of the Section.

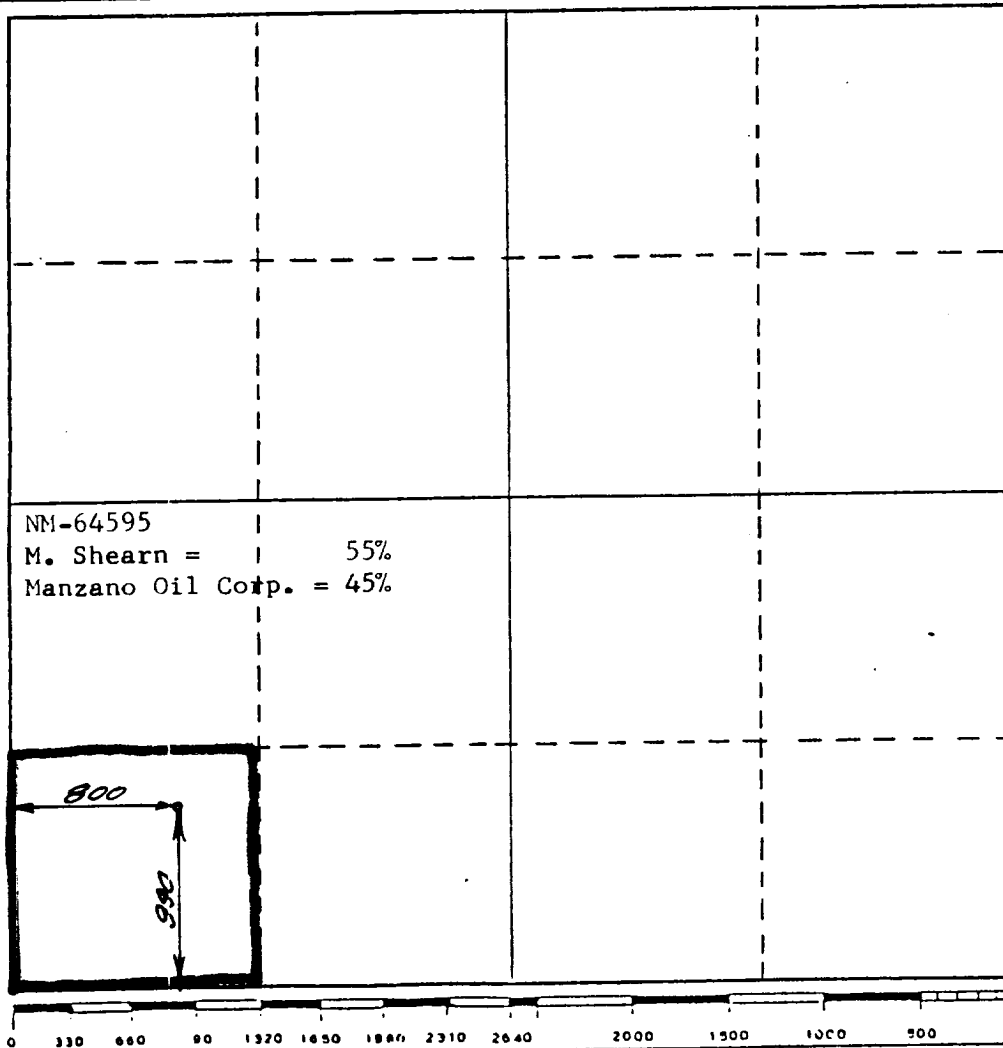
Operator Manzano Oil Corporation			Lease P.B.I.C. Federal		Well No. 2
Unit Letter M	Section 7	Township 18 South	Range 31 East	County Eddy	
Actual Footage Location of Well: 990 feet from the South line and 800 feet from the West line					
Ground Level Elev. 3579	Producing Formation Bone Spring		Pool Undesignated Bone Spring	Dedicated Acreage: 40 (34.34) 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 interests 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 interests, has been approved by the Division.



CERTIFICATION

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

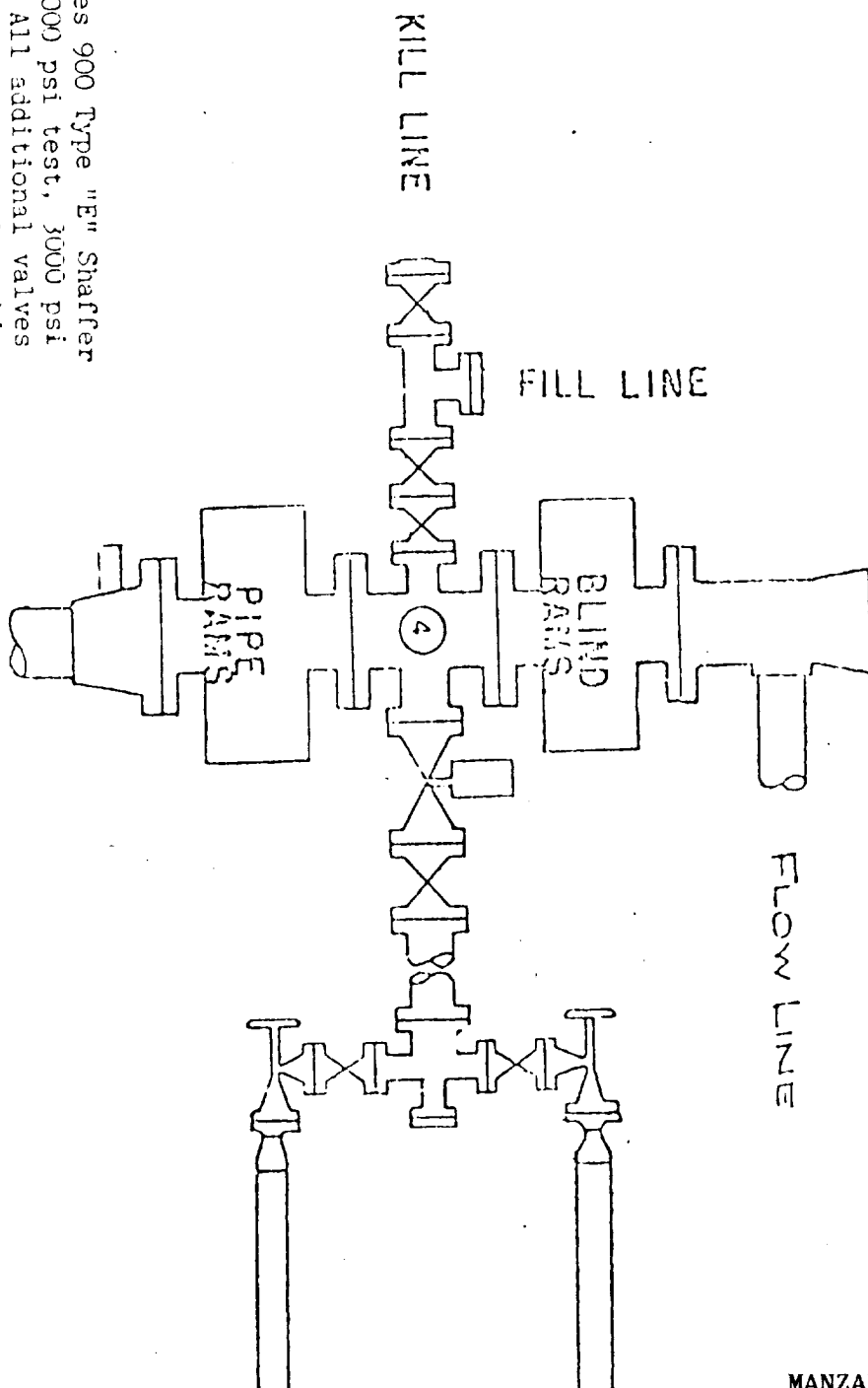
George R. Smith
Name
George R. Smith
Position
Agent for:
Company
Manzano Oil Corporation
Date
December 29, 1987

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.

23 December 1987

Date Surveyed:
P.R. Patton
Registered Land Surveyor
8112
Certificate No. **PROFESSIONAL LAND SURVEYOR**

WEK DRILLING CO., INC. - Rig 1 & 3
BLOWOUT PREVENTER SPECIFICATION



BOP's are 10" Series 900 Type "E" Shaffer Double Hydraulic 6000 psi test, 3000 psi working pressure. All additional valves & connections are the same test & working pressures.

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

APPLICATION FOR DRILLING
MANZANO OIL CORPORATION
PBIC Federal, Well No. 2
990' FSL & 800' FWL, Sec. 7-T18S-R31E
Eddy County, New Mexico
Lease No.: NM-64595
(Development Well)

In conjunction with Form 9-331C, 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 Anhyd.	445'	Delaware sand	3545'
Base of Salt	1590'	Top Bone Spring	5045'
Yates	1870'	1st Bone Spring	7172'
Queen	2880'	2nd Bone Spring	7768'
Grayburg	3430'	T.D.	8800'

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

Water: Fresh water from 100 to 300 feet.

Gas: Possible in Bone Spring.

Oil: Possible in Bone Springs: 7175' - 7275'
7770' - 7870'

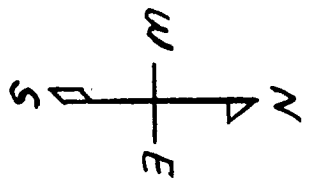
4. Proposed Casing Program: See Form 9-331C.
5. Proposed Control Equipment: See form 9-331C and Exhibit "E".
6. Mud Program: See Form 9-331C.
7. Auxiliary Equipment: Blowout preventer, gas detector, kelly cock, pit level monitor, flow sensors and stabbing valve.
8. Testing, Logging and Coring Program:

Drill Stem Tests: One possible in the Bone Spring formation.

Logging: Surface to T.D.: Gamma Ray.
Inter. Casing to T.D.: DLL, CNL-FDC, MSFL

Coring: None.

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.
10. Anticipated starting date: January 21, 1988.
Anticipated completion of drilling operations: Approximately 3 weeks.



CELLAR TO BE 5'X5'X5'
IF REQUIRED

1-18-83

ACCESS
ROAD

BURN PIT

SUCTION PIT

SHALE PIT

RESERVE
PITS

← STINGER

EXHIBIT "D"
MANZANO OIL CORPORATION
PBIC Federal, Well No. 2
Rig Layout

PLAT LAYOUT RIG 1
WELL DRILLING

