

N. M. OIL CONS. COMMISSION
P. O. BOX 1980
HOBBS, NEW MEXICO 88240
UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

CONTACT RECEIVING
OFFICE FOR R
OF COPIES REQUIRED
(Other instructions on
reverse side)

30-005-21099

NM Roswell District
Modified Form No.
NMOG-3160-2

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

2. NAME OF OPERATOR
 Manzano Oil Corporation

3a. Area Code & Phone No.
 505/623-1996

3. ADDRESS OF OPERATOR
 P. O. Box 571 Roswell, NM 88202

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)
 At surface: 1980' FNL & 660' FEL Unit H
 At proposed prod. zone: Same

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*
 15 miles southwest of Kenna, NM

10. DISTANCE FROM PROPOSED LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to deepest drlg. unit line, if any) 660'

16. NO. OF ACRES IN LEASE 80

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. N/A

19. PROPOSED DEPTH 3650'

20. ROTARY OR CABLE TOOLS Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.) 4175'

22. APPROX. DATE WORK WILL START* June 1, 1991

5. LEASE DESIGNATION AND SERIAL NO.
 NM-83072

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME
 Cato Federal

9. WELL NO.
 1

10. FIELD AND POOL, OR WILDCAT
 Cato Field San Andres

11. SEC., T., R., M., OR BLE. AND SURVEY OR AREA
 Sec. 35-T7S-R30E

12. COUNTY OR PARISH
 Chaves

13. STATE
 New Mexico

PROPOSED CASING AND CEMENTING PROGRAM

MOLE SIZE	CASING SIZE	WEIGHT/FOOT	GRADE	THREAD TYPE	SETTING DEPTH	QUANTITY OF CEMENT
12 1/4"	8 5/8"	24#	J-55	STC	320'	Circ 300 sq
7 7/8"	5 1/2"	15.5#	J-55	STC	3650'	600 sq "C"

Mud Program:

0' - 320': Fresh water native mud: mud wt. 10 ppg, Vis. 28-32, No W/L control.
 320' - 2650': Brine mud: mud wt. 10 ppg, Vis. 28-32, No W/L control.
 2650' - 3650': Brine mud: mud wt. 10 ppg, Vis. 28-32, W/L 15cc.

BOP Program:

A 10" 3000 psi wp Shaffer Type "E" BOP will installed on the 11 3/4" casing. Casing and BOP will be tested before drilling out with 7 7/8". BOP will be used as a 2000 psi system and will be tested daily.

RECEIVED
 MAY 10 34 AM '91
 BUREAU OF LAND MGT
 ROSWELL RESOURCE
 AREA

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.

SIGNED George Smith TITLE Agent for: Manzano Oil Corp. DATE April 12, 1991

PERMIT NO. _____ APPROVAL DATE _____
 APPROVED BY /s/ Sandra L. Allen TITLE Area Manager DATE MAY 10 1991

*See Instructions On Reverse Side

to Appropriate
Office
Lease - 4 copies
Case - 3 copies

OIL CONSERVATION DIVISION
P.O. Box 2088
Santa Fe, New Mexico 87504-2088

RICLI
Box 1980, Hobbs, NM 88240

RICLII
Drawer DD, Artesia, NM 88210

RICLIII
Rio Brazos Rd., Aztec, NM 87410

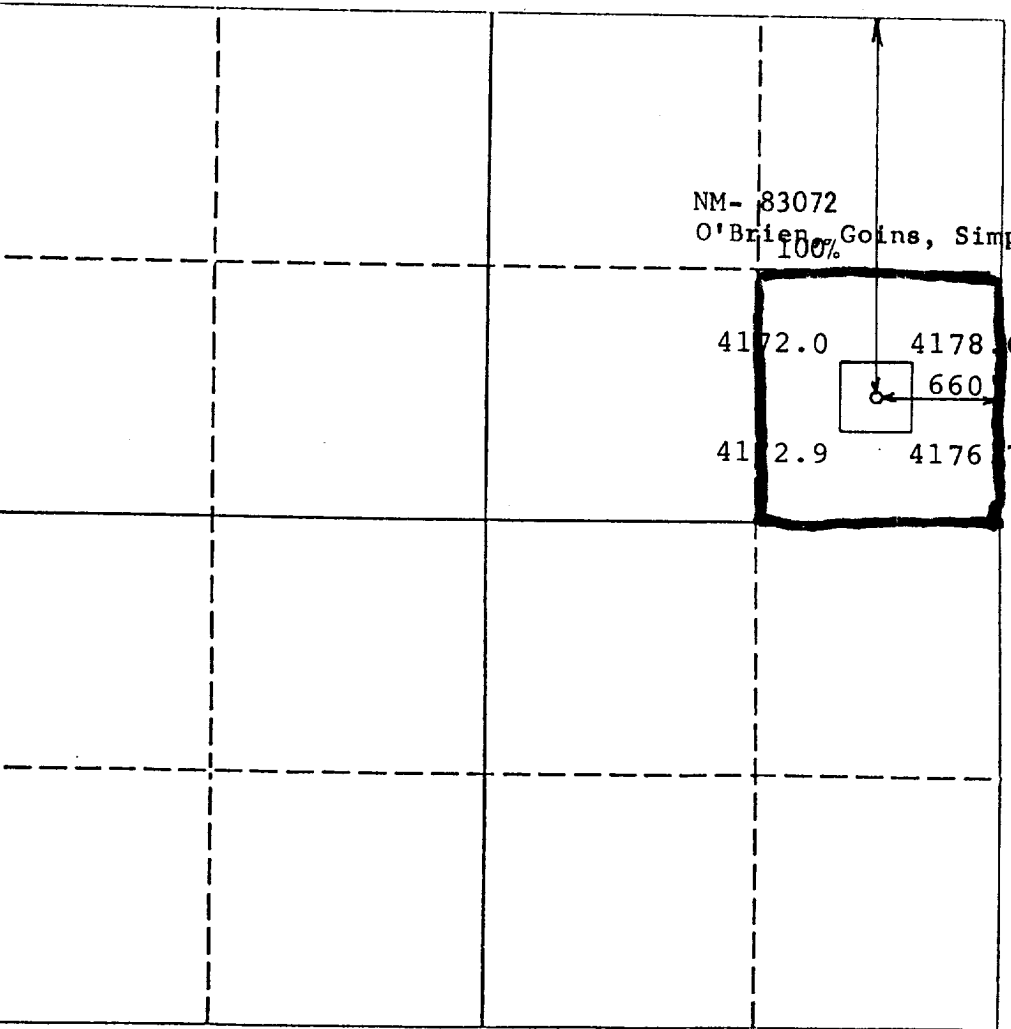
WELL LOCATION AND ACREAGE DEDICATION PLAT
All Distances must be from the outer boundaries of the section

Manzano Oil Corporation			Cato Federal		Well No. 1
Letter H	Section 35	Township 7 South	Range 30 East	County Chaves	

Footage Location of Well:
1980 feet from the North line and 660 feet from the East line

Well level Elev. 4175	Producing Formation San Andres	Pool Cato Field San Andres	Dedicated Acreage: 40 Acres
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- Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.
- If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
- 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.

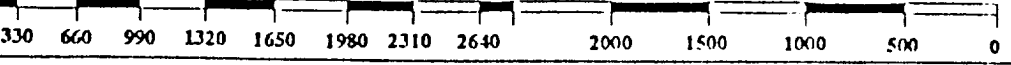
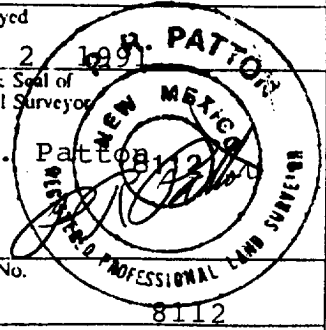


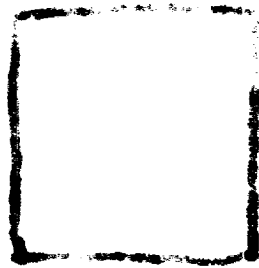
OPERATOR CERTIFICATION
I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

Signature: *George R. Smith*
Printed Name: George R. Smith
Position: Agent
Company: Manzano Oil Corporation
Date: April 12, 1991

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: April 2, 1991
Signature & Seal of Professional Surveyor: *P.R. Patton*
Certificate No. 8112





MAY 3 1981

APPLICATION FOR DRILLING

MANZANO OIL CORPORATION
Cato Federal, Well No. 1
1980' FNL & 660' FEL, Sec. 35-T7S-R30E
Chaves County, New Mexico
Lease No.: NM-83072
(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:

Anhydrite	1175'	Queen	2325'
Yates	1625'	San Andres	2740'
Seven Rivers	1725'	T. D.	3650'
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 San Adres below 3400'.
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: None planned.

Logging: Gamma Ray/Nuetron: Surf. 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.
10. Anticipated starting date: June 1, 1991.
Anticipated completion of drilling operations: Approximately 3 weeks.



KEN REYNOLDS—PRESIDENT
ARNIE NEWKIRK—VICE-PRESIDENT

DRILLING CO., INC. — OIL WELL DRILLING CONTRACTORS

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

RIG #3

BLOWOUT PREVENTOR ARRANGEMENT

2M SYSTEM

10" SHAFFER TYPE "E", 3000 psi WP
80 GALLON, 4 STATION KOOMEY ACCUMULATOR
3000 psi WP CHOKE MANIFOLD

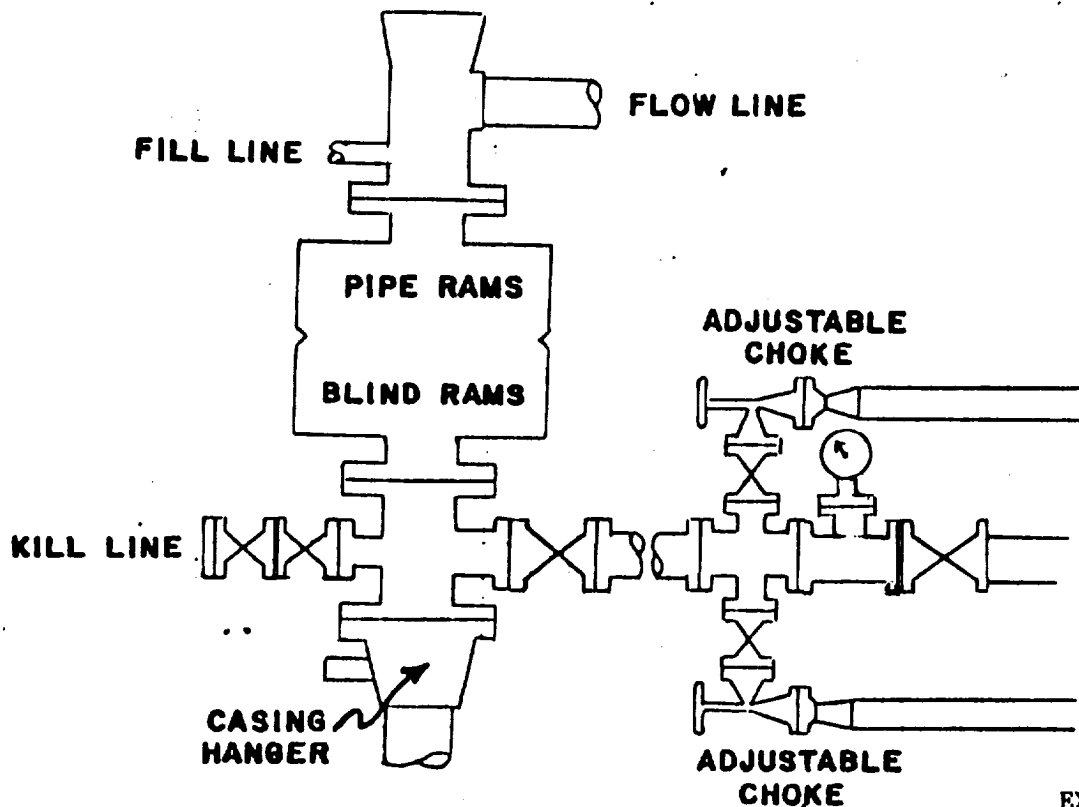


EXHIBIT "E"
MANZANO OIL CORPORATION
Cato Federal, Well No. 1
BOP Specifications