30-015-26676

Form 3160-3
(November 1983)
(formerly 9-331C)

SUBMIT IN TRIPLICATE*
(Other instructions on reverse side)

Form approved.
Budget Bureau No. 1004-0136
Expires August 31, 1985

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

5. LEASE DESIGNATION AND SERIAL NO.: NM ~~02295~~ 02295

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7. UNIT AGREEMENT NAME:

1a. TYPE OF WORK: DRILL [XX] DEEPEN [ ] PLUG BACK [ ]

b. TYPE OF WELL: OIL WELL [XX] GAS WELL [ ] OTHER — SINGLE ZONE [ ] MULTIPLE ZONE [ ]

8. FARM OR LEASE NAME: Gallo Federal

2. NAME OF OPERATOR: Manzano Oil Corporation ✓

MAR 20 1991

9. WELL NO.: 1

3. ADDRESS OF OPERATOR: P.O. Box 2107, Roswell, N.M. 88202-2107

O. C. D.
ARTESIA, OFFICE

10. FIELD AND POOL, OR WILDCAT: X Wildcat, Delaware

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*)
At surface: 990 FNL and 1650 FWL, Unit C
At proposed prod. zone: As above

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA: Section 11, T20S, R27E

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*: 8 mile NE of Lakewood

12. COUNTY OR PARISH: Eddy, N.M. | 13. STATE: N.M.

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
990'	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**
	4100'	Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.): 3360' g.l.

22. APPROX. DATE WORK WILL START*: 3/10/91

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12 1/4"	8 5/8"	24#	~~500~~ 350'	sufficient to circulate
7 7/8"	5 1/2"	15.5#	4100'	sufficient to tie back to 8 5/8"

1: Drill 12 1/4" hole to 500' with native mud. Set 8 5/8" casing and circulate cmt to surface.
2: Drill 7 7/8" hole to 4100', maintaining a brine system @ 100,000 ppm cl to TD w/10cc WL from 2550' to TD. Run CNL-FDC, DLL and sidewall cores.. If necessary set 5 1/2" casing to TD and circulate cement to surface casing.
3: See BOP diagram, hole prognosis and surface use plan enclosed.

Post FD-1
3-22-91
New Loc + NSL

APPROVAL SUBJECT TO
GENERAL REQUIREMENTS AND
SPECIAL STIPULATIONS
ATTACHED

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.

SIGNED Tommie Brown TITLE VP, Engineering & Acquis. DATE 2/25/91

(This space for Federal or State office use)

PERMIT NO. _____ APPROVAL DATE _____

APPROVED BY _____ TITLE _____ DATE 3-18-91

CONDITIONS OF APPROVAL, IF ANY:

*See Instructions On Reverse Side

TABLE OF CONTENTS

Attached to and made a part thereof:

Manzano Oil Corporation
Form 3160-3, Application for Permit to Drill.

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

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

Energy, Minerals and Natural Resources Department

Revised 1-1-89

OIL CONSERVATION DIVISION

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

WELL LOCATION AND ACREAGE DEDICATION PLAT

All Distances must be from the outer boundaries of the section

Operator	Lease	Well No.
Manzano Oil Corporation	Gallo Federal	1

Unit Letter	Section	Township	Range	County
C	11	20 South	27 East NMPM	Eddy

Actual Footage Location of Well:
990 feet from the North line and 1650 feet from the West line

Ground level Elev.	Producing Formation	Pool	Dedicated Acreage:
3360	Delaware	Wildcat	Acres

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

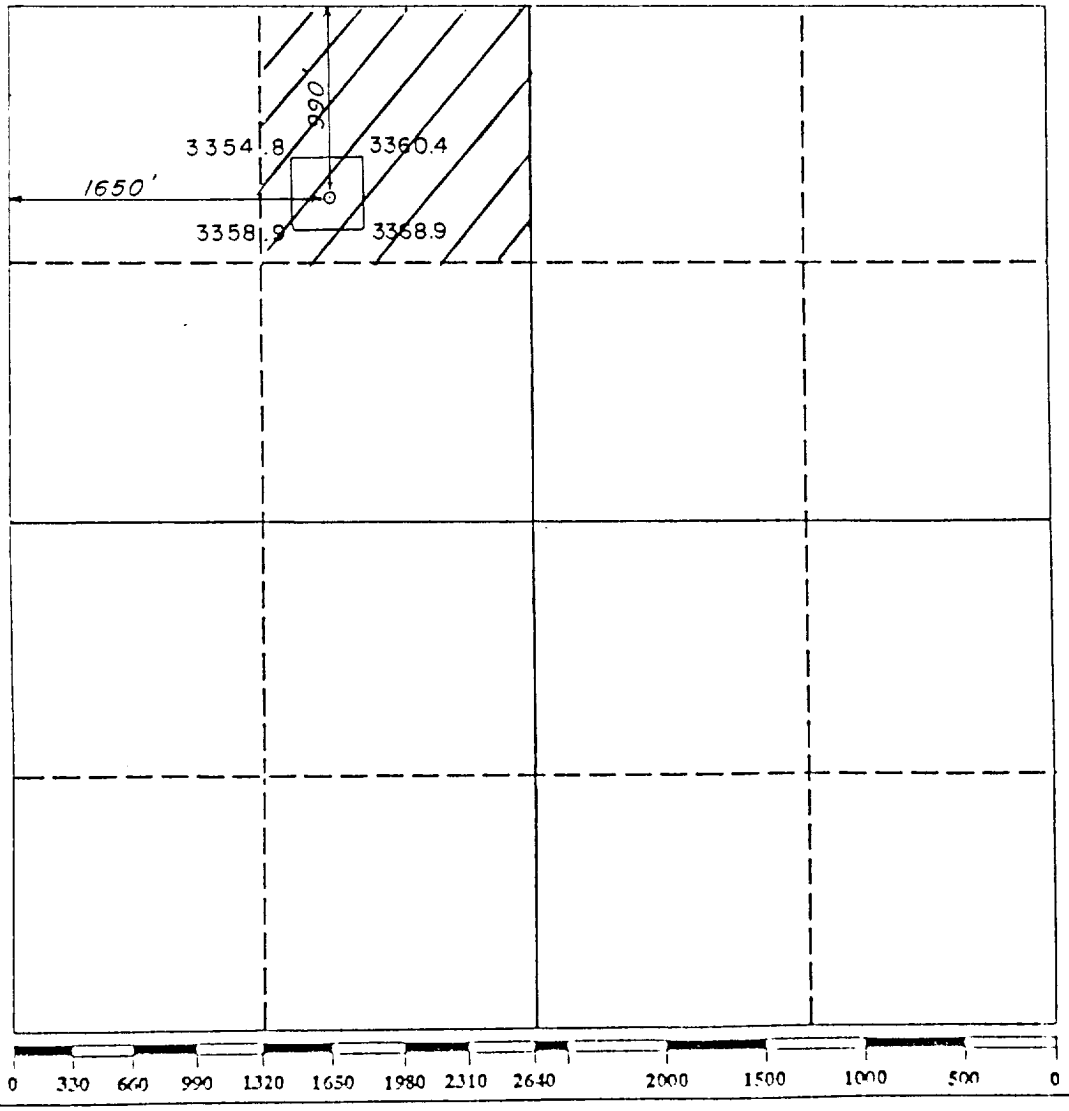
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).

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 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 in true and complete to the best of my knowledge and belief.

Signature: Donnie E. Brown

Printed Name: Donnie E. Brown

Position: Vice President, Engineering

Company: Manzano Oil Corporation

Date: February 25, 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 supervison, and that the same is true and correct to the best of my knowledge and belief.

Date Surveyed: February 21, 1991

Signature & Seal of Professional Surveyor: P. R. Patton

NEW MEXICO 8112 REGISTERED PROFESSIONAL LAND SURVEYOR

Certificate No. 8112

HOLE PROGNOSIS

APPLICATION FOR PERMIT TO DRILL
Manzano Oil Corporation
Gallop Federal #1
990' FNL & 1650' FWL
Sec 11, T20S, R27E

In conjunction with form 3160-3, Application to Drill, Deepen, or Plug Back, Manzano Oil Corporation submits the following items or pertinent information in accordance with Onshore Oil and Gas Order Nos. 1 & 2, and with all other applicable federal and state regulations.

1. The Geologic surface formation is sandy loam.

2. Estimated geologic markers are as follows:

Tansill	285'	Premier	1690'
Yates	490'	Grayburg	1948'
7 Rivers	947'	Delaware	2550'
Queen	1385'		

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

Water	None
Oil	Delaware @ 2550' - Td

4. Casing Program: (See Form 3160-3)

   Manzano proposes to run 8-5/8" casing at 500' and cement with enough casing to circulate to surface.

   If a completion is attempted on this well, 5-1/2" casing will be run to TD and cemented back to surface casing.

5. Pressure Control Equipment: See Exhibit "B", BOP diagram.

6. Mud Program: Cut Brine with starch and gel to maintain adequate water loss control and viscosity.

7. Auxiliary Equipment: None required.

8. Testing, Logging, and Coring Program:

   Gamma Ray, CNL-FDC, DLL-MSFL

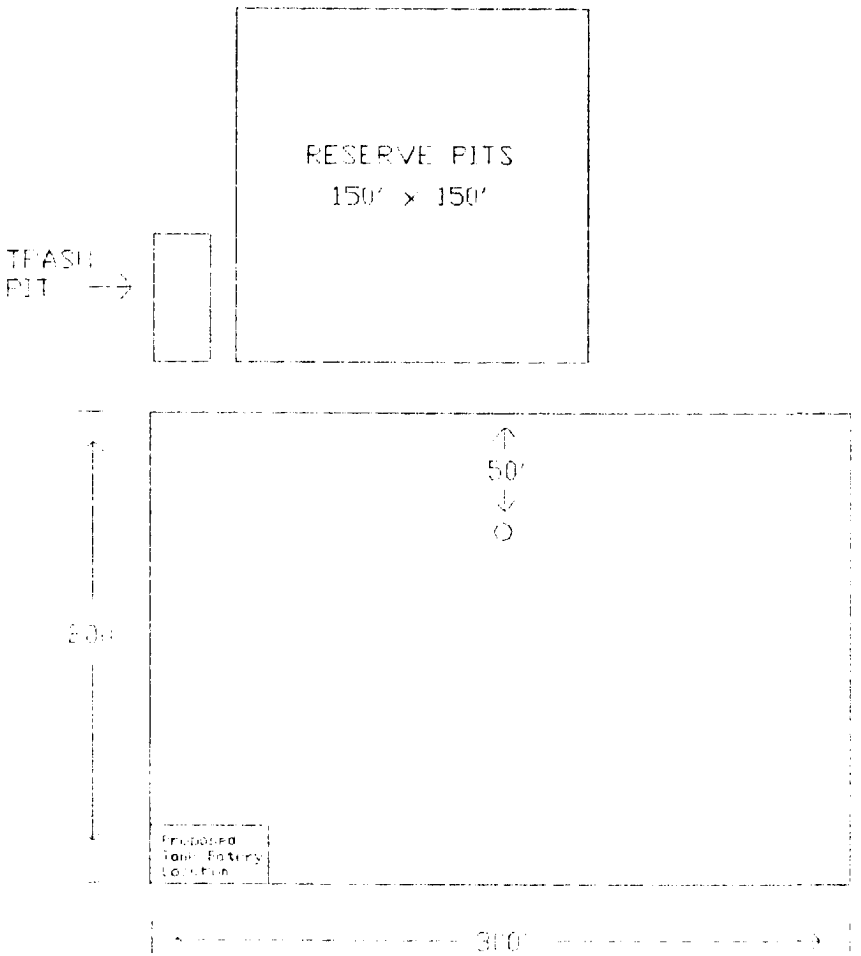
9. Abnormal Pressures, Temperatures, or other Hazards:

   None expected.

10. Anticipated starting date: March 10, 1991
Expected duration of operations:
Drilling 15 days.
Completion 10 days.

EXHIBIT E

Well Pad Layout



SURFACE USE PLAN

APPLICATION FOR PERMIT TO DRILL

Manzano Oil Corporation
Gallo Federal #1
990' FNL & 1650' FWL
Sec. 11, T20S, R27E

This plan is submitted with Form 3160-3, Application For Permit to Drill, covering the above captioned well. The purpose of this plan is to describe the location, the proposed construction activities and operations plan, the surface disturbance involved, and the rehabilitation of the surface after completion of the well so that an appraisal can be made of the environment effected by this well.

1. Existing Roads:

   A. Exhibit "B" is a map showing the existing and proposed roads to the location.

   B. Directions: Go east out of Artesia on 82 approximately 14.5 miles then south off of 82 on Illinois Camp Road. Travel south on Illinois Camp approximately 9 miles. Turn right (west) on the Angel Ranch turnoff and travel approximately 1 mile to four way intersection. Turn right (north) and travel approximately 3/4 mile and turn left on new road to location.

2. Planned access roads:

   A. Exhibit "C" shows the proposed road which goes west off of the existing road, a detailed map showing the proposed access road is included in the Archaeological survey. The new road will be approximately 1/2 mile long. If necessary, the existing roads may be upgraded as needed to meet BLM standards.

   B. Construction: Gradient on all roads will be less than 5% if needed roads will be surfaced with a minimum of 4" of caliche. Caliche will be obtained from a local source.

   C. No turnouts will be necessary.

   D. No Culverts are required.

   E. No Cuts or Fills will be required.

F. No Gates or Cattle guards will be required.

3. Location of existing wells:

Location of existing wells within a two mile radius of the location are shown on Exhibit "D", Land Status Map.

4. Location of Existing and/or Proposed Facilities:

A. If the well proves to be commercial, the produced fluids will be stored in a tank battery located at the southwest corner of the location.

5. Location and type of water supply:

A. Drilling water will be obtained from private or commercial sources and will be transported over the existing and proposed access roads.

6. Source of Construction Materials:

A. If needed, caliche for surfacing the road and location will be obtained from the nearest source.

7. Methods of Handling Waste Disposal:

A. Drill cuttings will be disposed of in the reserve pits.

B. Drilling fluids will be allowed to evaporate in the reserve pits until the pits are dry.

C. All pits will be fenced with normal fencing materials to prevent livestock from entering the area.

D. Water produced during operations will be collected in tanks until hauled to an approved disposal system, or a separate disposal application will be submitted to BLM for approval.

E. Current laws and regulations pertaining to the disposal of human waste will be complied with.

F. Oil produced during operations will be stored in tanks until sold.

G. Trash, waste paper, garbage and junk will be buried in a separate trash pit and covered with a minimum of 24 inches of dirt. All waste materials will be contained to prevent scattering by the wind.

H. All trash and debris will be buried or removed from the wellsite within 30 days after finishing drilling and/or completion operations.

8. Ancillary Facilities:

A. None required.

9. Wellsite Layout:

A. Exhibit "E" shows the dimension of the well pad, reserve pits and prosed location of the tank battery.

10. Surface Restoration Plan.

A. After completion of drilling and/or completion operations all equipment and other materials not needed for operations will be removed. Pits will be filled and the location cleaned of all trash and junk to leave the wellsite in an aesthetically pleasing a condition as possible.

B. Any unguarded pits containing fluids will be fenced until they are filled.

C. If the proposed well is non-productive, all rehabilitation and/or vegetation requirements of the BLM will be accomplished as expeditiously as possible. All pits will be filled and leveled within 90 days after abandonment.

11. Other Information:

A. The topography is sandy and undulating.

B. Soil: The topsoil in the area is sandy loam.

C. Flora and Fauna: The vegetation cover consists of prairie grasses and flowers. Wildlife in the area probably includes those typical of semi-arid desert land.

D. Ponds and Streams: None

E. Residences and Other Structures: None

F. Land Use: Graning

G. Surface Ownership: Federal Government

H. An archaeological survey for this location has been submitted to the BLM.

12. Operators Representative:

Carroll Bellah
P.O. Drawer I
Artesia, NM 88210
Phone: (505) 396-5278 home
(505) 624-0259 od 02204 mobile

13. Certification:

I hereby certify that I, or persons under my direct supervision have inspected the proposed drill site which currently exists: that the statements made in this plan are to the best of my knowledge, true and correct, and that the work associated with the operations proposed herein will be performed by Manzano Oil Corporation and its contractors/subcontractors in conformity with this plan and the terms and conditions under which it is approved. This statement is subject to the provisions of 18 USC 1001 for the filing of a false statement.

Manzano Oil Corporation

By: Donnie E. Brown Date: February 25, 1991
Donnie E. Brown
Vice President, Engineering & Acquisition

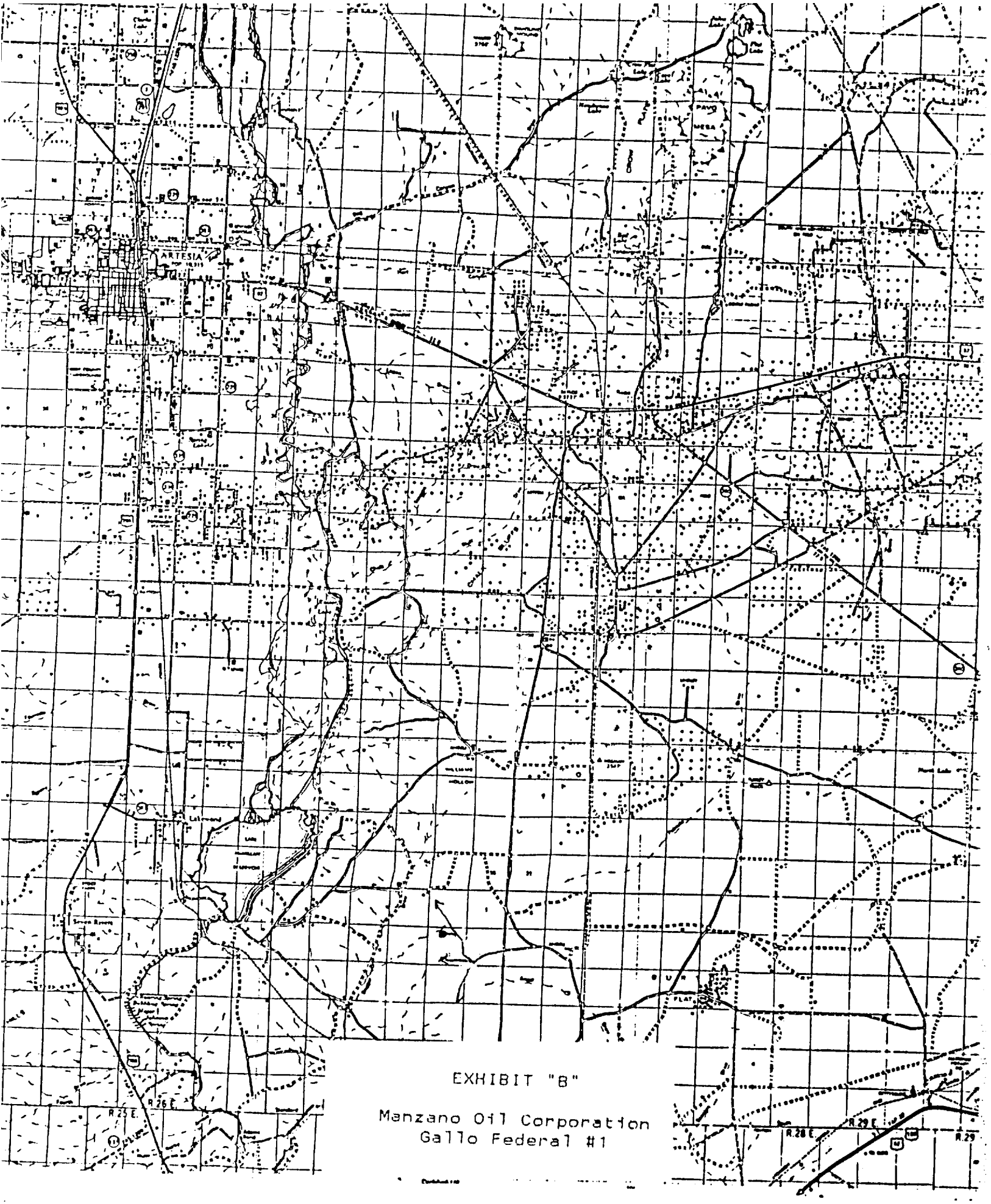
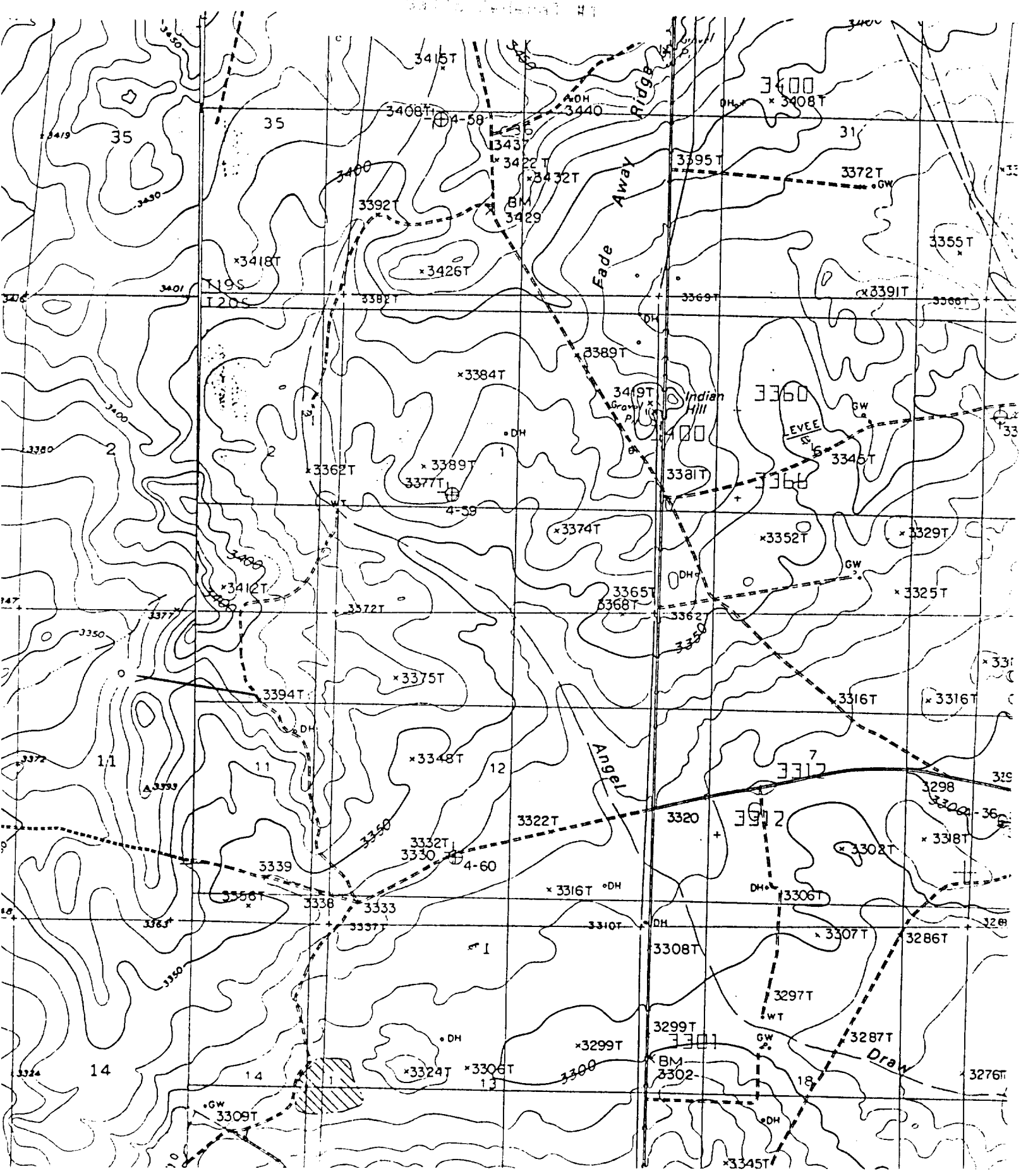


EXHIBIT "B"

Manzano Oil Corporation
Gallo Federal #1

EXHIBIT "C"

Topo Map



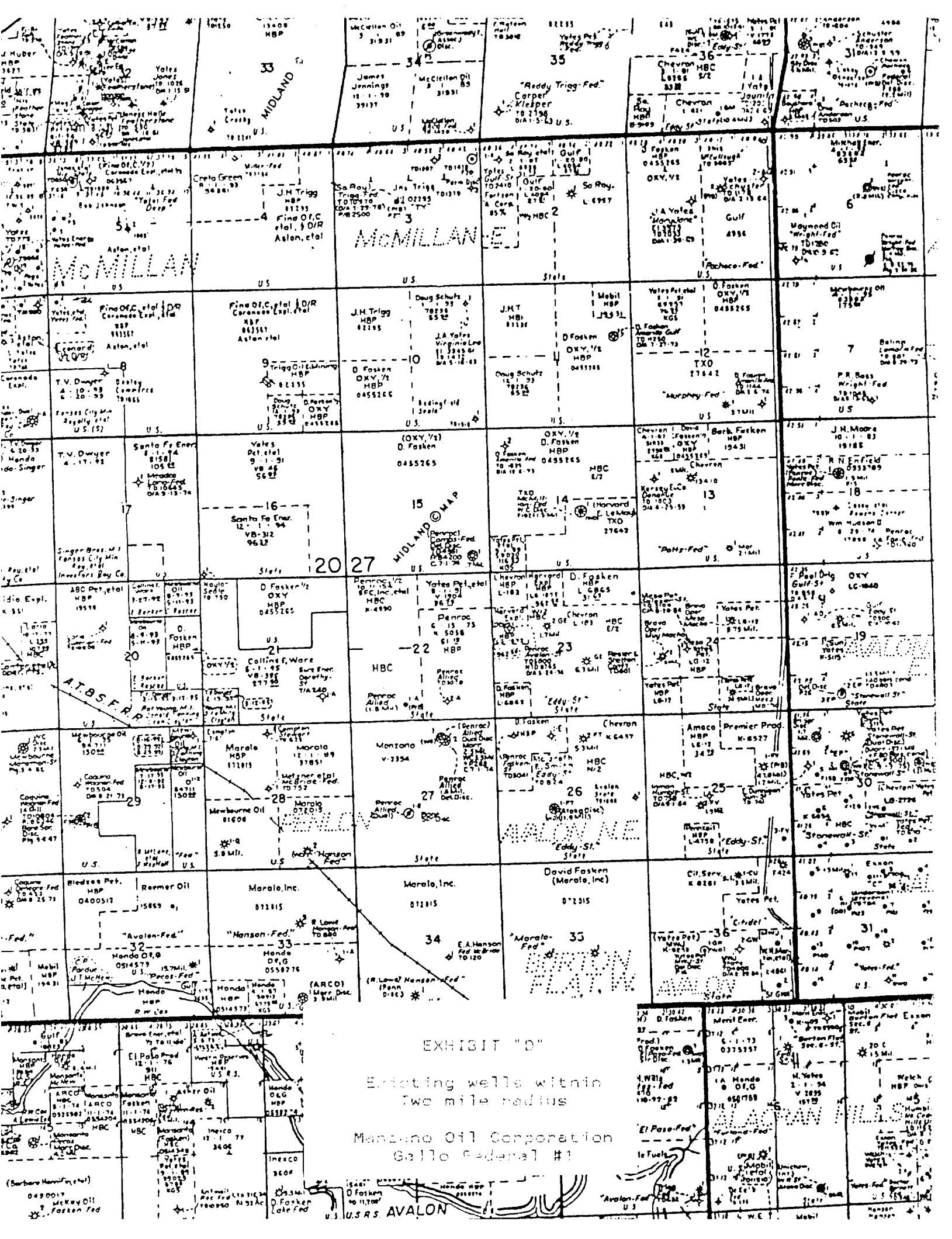


EXHIBIT "D"
Existing wells within
two mile radius
Manzano Oil Corporation
Gallo Federal #1
MIDLAND
McMILLAN
MALONE
AVALON
A.T.&S.F.R.R.
U.S.R.S.
MIDLAND © MAP

BLOWOUT PREVENTER SPECIFICATION

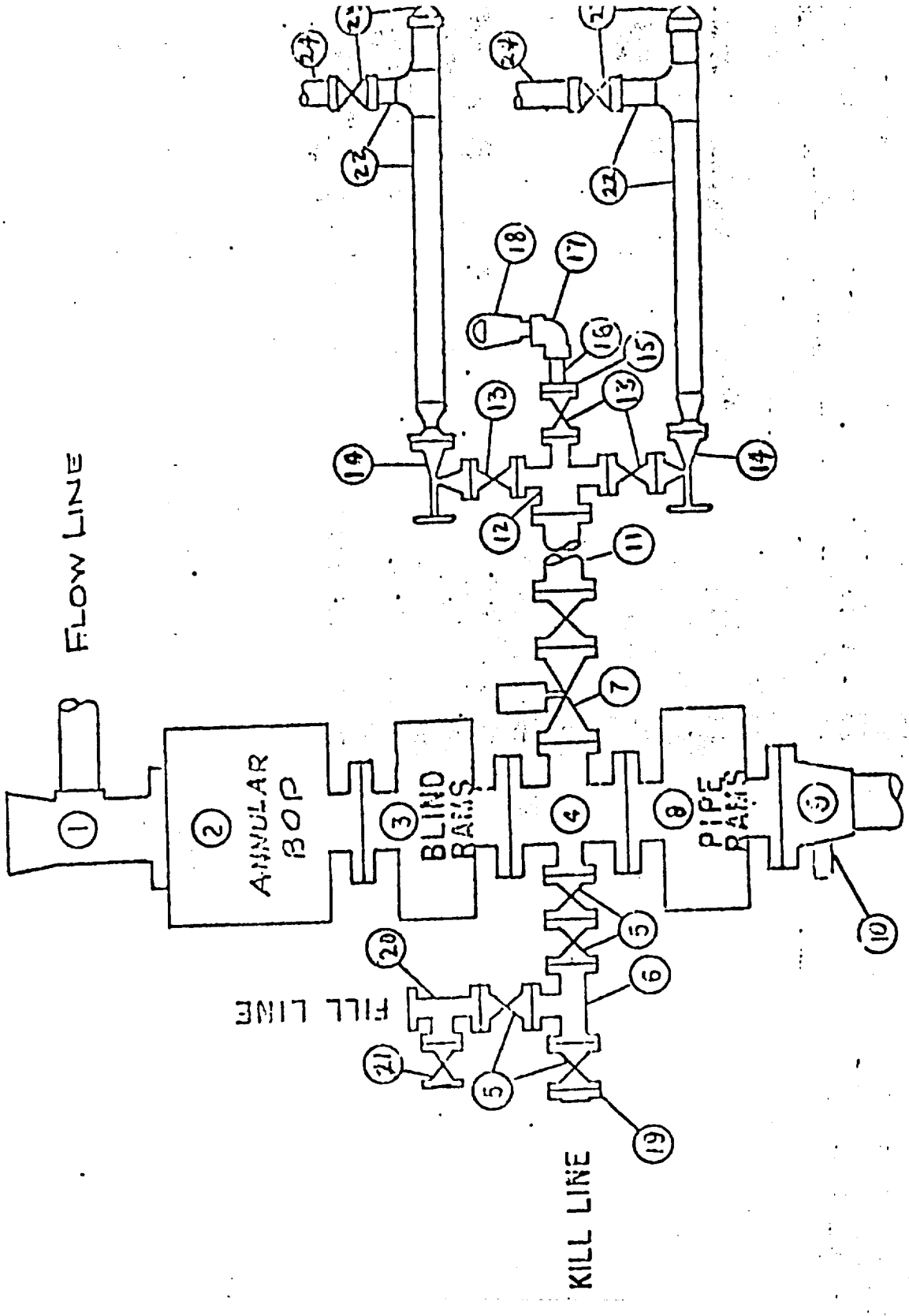


EXHIBIT "A"

BOP Diagram

Manzano Oil Corporation
Gallo Federal #1

EQUIPMENT DESCRIPTION

All equipment should be at least 3,000 psi WP or higher unless otherwise specified.

1. Bell nipple.
2. Hydril bag type preventer
3. Ram type pressure operated blowout preventer with blind rams.
4. Flanged spool with one 3-inch and one 2-inch (minimum) outlet.
5. 2-inch (minimum) flanged plug or gate valve.
6. 2-inch by 2-inch by 2-inch (minimum) flanged tee.
7. 3-inch gate valve.
8. Ram type pressure operated blowout preventer with pipe rams.
9. Flanged type casing head with one side outlet.
10. 2-inch threaded (or flanged) plug or gate valve.
    Flanged on 5000# WP, threaded on 3000# WP or less.
11. 3-inch flanged spacer spool.
12. 3-inch by 2-inch by 2-inch by 2-inch flanged cross.
13. 2-inch flanged plug or gate valve.
14. 2-inch flanged adjustable choke.
15. 2-inch threaded flange.
16. 2-inch XXH nipple.
17. 2-inch forged steel 90° Ell.
18. Cameron (or equal.) threaded pressure gage.
19. Threaded flange.
20. 2-inch flanged tee.
21. 2-inch flanged plug or gate valve.
22. 2½-inch pipe, 300' to pit, anchored.
23. 2½-inch SE valve.
24. 2½-inch line to steel pit or separator.

NOTES:

1. Items 3, 4 and 8 may be replaced with double ram type preventer with side outlets between the rams.

2. The two valves next to the stack on the fill and kill line to be closed unless drill string is being pulled.

3. Kill line is for emergency use only. This connection shall not be used for filling.

4. Replacement pipe rams and blind rams shall be on location at all times.

5. Only type U, LSW and QRC ram type preventers with secondary seals are acceptable for 5000 psi WP and higher BOP stacks.

6. Type E ram-type BOP's with factory modified side outlets may be used on 3000 psi or lower WP BOP stacks.