Form 3160-3 June (November 1983) (formerly 9-331C) 759				SUBMIT IN (Other insta- reverse) R		5. LEASE DESIGNATION AND SERIAL NO. NM 02295 0 22.95		
APPLICATIO	N FOR PERMIT T	O DRILL,	DEEPEN,	OR PLUG	BACK	6. IF INDIAN, ALLOTTEE OR TRIBE NAME		
1a. TYPE OF WORK	ILL 🕾	DEEPEN		PLUG BA		7. UNIT AGREEMENT NAME		
2. NAME OF OPERATOR		/	SINGLE Zone	ZONE		8. FABM OB LEASE NAME Gallo Federal		
AADRESS OF OPERATOR	Corporation V			MAR 20	1991	9. WELL NO. 1		
	07, Roswell, N.	м. 88202-	2107	0. C. D).	10. FIELD AND POOL, OR WILDCAT		
990 FNL and At proposed prod. zon As a 14. DISTANCE IN MILES	ne	wt. C		requi帮随情说。 ^{\$} 1 * *		X Wildcat, Delaware 11. SEC., T., B., M., OB BLE. AND BUEVEY OB AREA Section 11, T20S, R27E 12. COUNTY OB PARISH 13. STATE Eddy, N.M.		
15. DISTANCE FROM PROPOSED [®] LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to Derrest drig, unit line, if any) 990' 320				17. NO. OF ACRES ASSIGNED TO THIS WELL 40				
19. DISTANCE FROM PROPOSED LOCATION* 19. PROPOSED TO NEAREST WELL, DRILLING, COMPLETED, 08 AFPLIED FOR, ON THIS LEABE, PT. 4100'						RT OR CABLE TOULS		
21. ELEVATIONS (Show whether DF, RT, GR, etc.) 3360' g.l.					22. APPROX. DATE WORK WILL START* 3/10/91			
23.		PROPOSED CAS	ING AND CE	MENTING PROGRA	M			
SIZE OF HOLE	BIZE OF CABING	WEIGHT PER P	00 T	SETTING DEPTH		QUANTITY OF CEMENT		
12 1/4"	8 5/8''	24#	5	00 ' 350'	suff	ifficient to circulate		
7 7/8''	<u>7 7/8'' 5 1/2'' 15.5# 4100' suf</u>			suff	ticient 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/106c 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 #D-1 3-22-91 New Loc + HRI

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 sone 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.

SHENER LUNAME Cou	VLITLE VP, Engineer	ring & Acquis. DATE 2/25/91
(This space for Federal or State office use)		
PERMIT NO.	APPROVAL DATE	
PERMIT NO	АРРВОУАЦ ДАТ'Я 	

*See Instructions On Reverse Side

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

TABLE OF CONTENTS

Attached to and made a part thereof:

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

- 1) Exhibit NMOCD form C-102, Section plat
- 2) Hole Prognosis
- 3) Exhibit "E" Well Site Layout
- 4) Surface Use Plan
- 5) Exhibit "B" Map showing existing and proposed roads
- 6) Exhibit "C" Topo map showing existing and proposed roads
- 7) Exhibit "D" Map showing location of surrounding wells
- 8) Exhibit "A" BOP Diagram

Submu to Appropriate District Office State Lease - 4 copies Fer Lease - 3 copies			ind Natural Resources Depart		Revised 1-1-89
DISTRICT I P.O. Box 1980, Hobbs	NM 85240		RVATION DIVISI P.O. Box 2088	ON	
DISTRICT II P.O. Drawer DD, Arte		Santa Fe, N	lew Mexico 87504-2088		
DISTRICT III 1000 Rio Brazos Rd.,	Aziec, NM 87410		ND ACREAGE DEDICATIOn the from the outer boundaries of the		
Operator Manzana Oj	l Componatio	n	Gallo Federal		Well No.
Unit Letter	l Corporatio	Township	Range		sinty
C Actual Foctage Locat	11	20 South	27 East	NMPM	Eddy
	feet from the NO	rth line and	1650	feet from the	West line
Ground level Elev. 3360	Producing Delaw	g Formation	Pool Wildcat		Dedicated Acreage:
			icil or hachure marks on the plat belo		Acres
2. If more	than one lease is ded	icated to the well, outline each and	identify the ownership thereof (both	as to working it	nterest and royalty).
			well, have the interest of all owners		
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If answer i		No If answer is "yes" ty s and tract descriptions which have	pe of consolidation actually been consolidated. (Use re	verse side of	
	f neocessary. He will be assigned t	o the well uptil all interests have b	con consolidated (by communitizatio	n unitization fo	med-mooling or otherwise)
		ninating such interest, has been ap			
	3354.8	3360.4		contr best	OPERATOR CERTIFICATION 1 hereby certify that the information ained herein in true and complete to the of my knowledge and belief.
1650'				Sign	ouns Bous
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				Posit	^{tion} ice President, Engineering
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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.

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Manata Di Chiengo and An

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SURFACE USE PLAN

AFPLICATION FOR PERMIT TO DRILL

Manzano Oil Corporation Gallo Federal #1 990' FNL & 1650' FWL Sec. 11, T205, F27E

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. Cil 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.
- 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 Restauction Flan:
 - 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 30 days after abandonment.
- :1. 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: Grazing
 - 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 The Date: <u>February 25, 1991</u> By: Donnie E. Brown < Vice President, Engineering & Acquisition



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All equipment should be at least 3,000 psi WP or higher unless otherwise specified. Bell nipple. 2. Hydril bag type preventer 3. Ram type pressure operated blowout preventer with blind rams. Flanged spool with one 3-inch and one 2-inch (minimum) outlet. 4. 5. 2-inch (minimum) flanged plug or gate valve. 2-inch by 2-inch by 2-inch (minimum) flanged tee. ó. 7. 3-inch gate valve. Ram type pressure operated blowout preventer with pipe rams. 3. 9. Flanged type casing head with one side outlet.). 2-inch threaded (or flanged) plug or gate valve. Flanged on 5000# WP, threaded on 3000# WP or less. 3-inch flanged spacer spool. L . ?. 3-inch by 2-inch by 2-inch by 2-inch flanged cross. 2-inch flanged plug or gate valve. 3. . 2-inch flanged adjustable choke. ۶. 2-inch threaded flange. 5. 2-inch XXH nipple. 7. 2-inch forged steel 90'Ell. 3. Cameron (or equal.) threaded pressure gage.). Threaded flange.). 2-inch flanged tee. 2-inch flanged plug or gate valve. . .)... 21-inch pipe, 300' to pit, anchored. 21-inch SE valve. 1. $2\frac{1}{2}$ -inch line to steel pit or separator. .

OTES:

- . Items 3, 4 and 8 may be replaced with double ram type preventer with side outlets between the rams.
- The two valves next to the stack on the fill and kill line to be closed unless drill string is being pulled.
- . Kill line is for emergency use only. This connection shall not be used for filling.
- . Replacement pipe rams and blind rams shall be on location at all times.
- . Only type U, LSW and QRC ram type preventers with secondary seals are acceptable for 5000 psi WP and higher BOP stacks.
- . Type E ram-type BOP's with factory modified side outlets may be used on 3000 psi or lower WP BOP stacks.

EXHIBIT "A" Page 2