

ABOVE THIS LINE FOR DIVISION USE ONLY

NEW MEXICO OIL CONSERVATION DIVISION  
- Engineering Bureau -

**ADMINISTRATIVE APPLICATION COVER SHEET**

THIS COVERSHEET IS MANDATORY FOR ALL ADMINISTRATIVE APPLICATIONS FOR EXCEPTIONS TO DIVISION RULES AND REGULATIONS

**Application Acronyms:**

- [NSP-Non-Standard Proration Unit] [NSL-Non-Standard Location]
- [DD-Directional Drilling] [SD-Simultaneous Dedication]
- [DHC-Downhole Commingling] [CTB-Lease Commingling] [PLC-Pool/Lease Commingling]
- [PC-Pool Commingling] [OLS - Off-Lease Storage] [OLM-Off-Lease Measurement]
- [WFX-Waterflood Expansion] [PMX-Pressure Maintenance Expansion]
- [SWD-Salt Water Disposal] [IPI-Injection Pressure Increase]
- [EOR-Qualified Enhanced Oil Recovery Certification] [PPR-Positive Production Response]

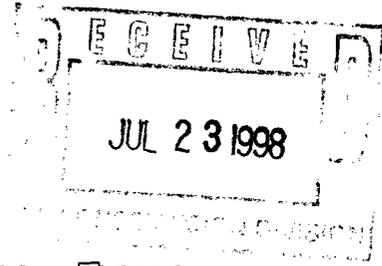
[1] **TYPE OF APPLICATION** - Check Those Which Apply for [A]

- [A] Location - Spacing Unit - Directional Drilling  
 NSL     NSP     DD     SD

Check One Only for [B] and [C]

- [B] Commingling - Storage - Measurement  
 DHC     CTB     PLC     PC     OLS     OLM

- [C] Injection - Disposal - Pressure Increase - Enhanced Oil Recovery  
 WFX     PMX     SWD     IPI     EOR     PPR



[2] **NOTIFICATION REQUIRED TO:** - Check Those Which Apply, or  Does Not Apply

- [A]  Working, Royalty or Overriding Royalty Interest Owners
- [B]  Offset Operators, Leaseholders or Surface Owner
- [C]  Application is One Which Requires Published Legal Notice
- [D]  Notification and/or Concurrent Approval by BLM or SLO  
U.S. Bureau of Land Management - Commissioner of Public Lands, State Land Office
- [E]  For all of the above, Proof of Notification or Publication is Attached, and/or,
- [F]  Waivers are Attached

[3] **INFORMATION / DATA SUBMITTED IS COMPLETE** - Statement of Understanding

I hereby certify that I, or personnel under my supervision, have read and complied with all applicable Rules and Regulations of the Oil Conservation Division. Further, I assert that the attached application for administrative approval is accurate and complete to the best of my knowledge and where applicable, verify that all interest (WI, RI, ORRI) is common. I understand that any omission of data (including API numbers, pool codes, etc.), pertinent information and any required notification is cause to have the application package returned with no action taken.

Note: Statement must be completed by an individual with supervisory capacity.

C. Michael Brown                      C. Michael Brown                      Vice President - Geology    7/20/98  
 Print or Type Name                      Signature                      Title                      Date



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Manzano Oil Corporation

P.O. Box 2107  
Roswell, New Mexico 88202-2107  
(505) 623-1996  
FAX (505) 625-2620

July 20, 1998

Mr. Michael L. Stogner  
Oil Conservation Division  
Department of Energy  
Minerals and Natural Resources  
2040 South Pacheco Street  
Santa Fe, New Mexico 87505

Re: Application for Administrative Approval  
of Unorthodox Well Location  
Rio Negro #1  
Eddy County, NM

Dear Mr. Stogner:

Manzano Oil Corporation hereby seeks administrative approval pursuant to the provisions of Division Rule 104 for the drilling of Manzano's Rio Negro #1 as a Morrow well located 660' FSL and 660' FWL, Section 23, T-24-S, R-26-E, Eddy County, New Mexico.

Manzano Oil Corporation is seeking approval for an unorthodox location in the White City Penn area of Eddy County, based on geological reasons. The proposed unorthodox location for the Rio Negro #1 will target the Morrow B sand as the primary objective and the Morrow C sand as a secondary objective. The Morrow B sand interval consists of a series of thin sand lenses along established channel trends. Some Morrow B sand is nearly always present within the White City Penn area, however sand thickness, porosity and permeability vary significantly. The sands with the greatest net sand, porosity, permeability and productivity are found along the axis of the channel trends. The Mesa Petroleum Company Smith Federal Com. #1 (1700' FNL & 1650' FWL, Sec. 23) illustrates the extreme risk of drilling on the flanks of one of these channels. As shown on the Morrow B net sand isopach map, this well encountered 22 feet of net Morrow B sand. In July 1977, Mesa drillstem tested the Morrow B and C intervals together recovering GTS 1" TSTM and 240' salt water cut mud with FP 221#, ISIP 1473#, FSIP 4855#. The results of this drillstem test indicate that the reservoir contains gas and water but is too tight to produce economically. A regular location for the Rio Negro #1 would be only 1930 feet south of this well and most likely would not encounter significantly different sand quality. The Morrow B net sand map indicates that moving the Rio Negro #1 to the proposed unorthodox location would dramatically improve the likelihood of encountering sand thickness and quality enough to make a commercial producer within the Morrow B. Also, the presence of formation water on the drillstem test of the Smith Federal Com. #1 would indicate the necessity of moving up structure in order to get out of the water column

and thus make a commercial well. As shown on the T/Morrow A(B/Morrow B) structure map, a well at an orthodox location would not gain adequate structure to the Smith Federal Com. #1 to reduce the risk of a wet reservoir. Moving to the proposed location should result in gaining 75-100 feet of structure and should be sufficiently high to allow a water free completion. In addition to the above noted geological concerns, it should be noted that all the productive wells in the contiguous proration units have been producing for 21 to 31 years with most producing at or near their economic limits. Granting this unorthodox location will help to protect the correlative rights under section 23 and prevent waste of the remaining reserves.

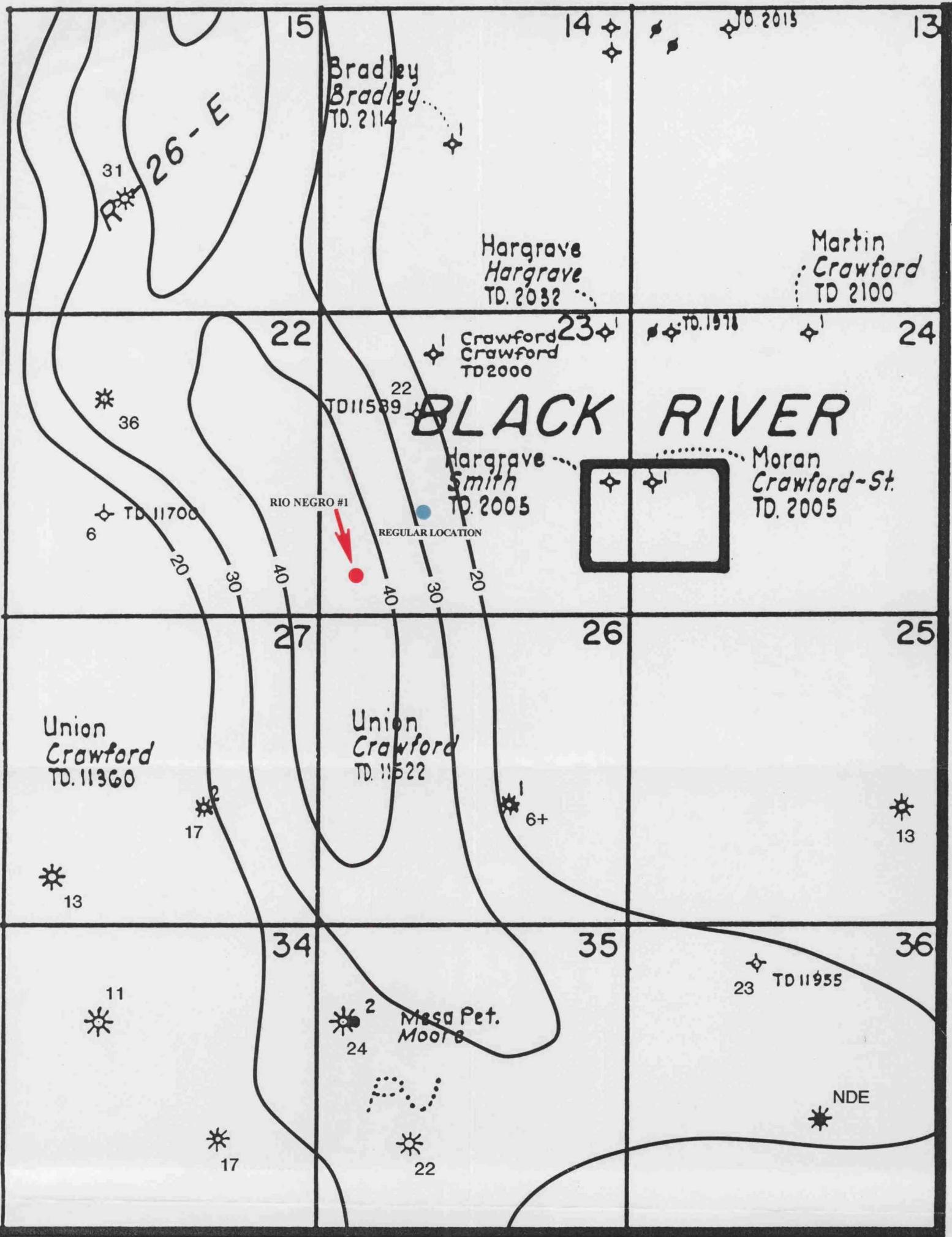
By separate letters (copies attached) Manzano has sent notification letters via certified return receipt mail to the affected parties. Your consideration to the Application is most appreciated. Should you have any questions, please feel free to call me at 505/623-1996.

Sincerely,

*Mike Brown*

Mike Brown

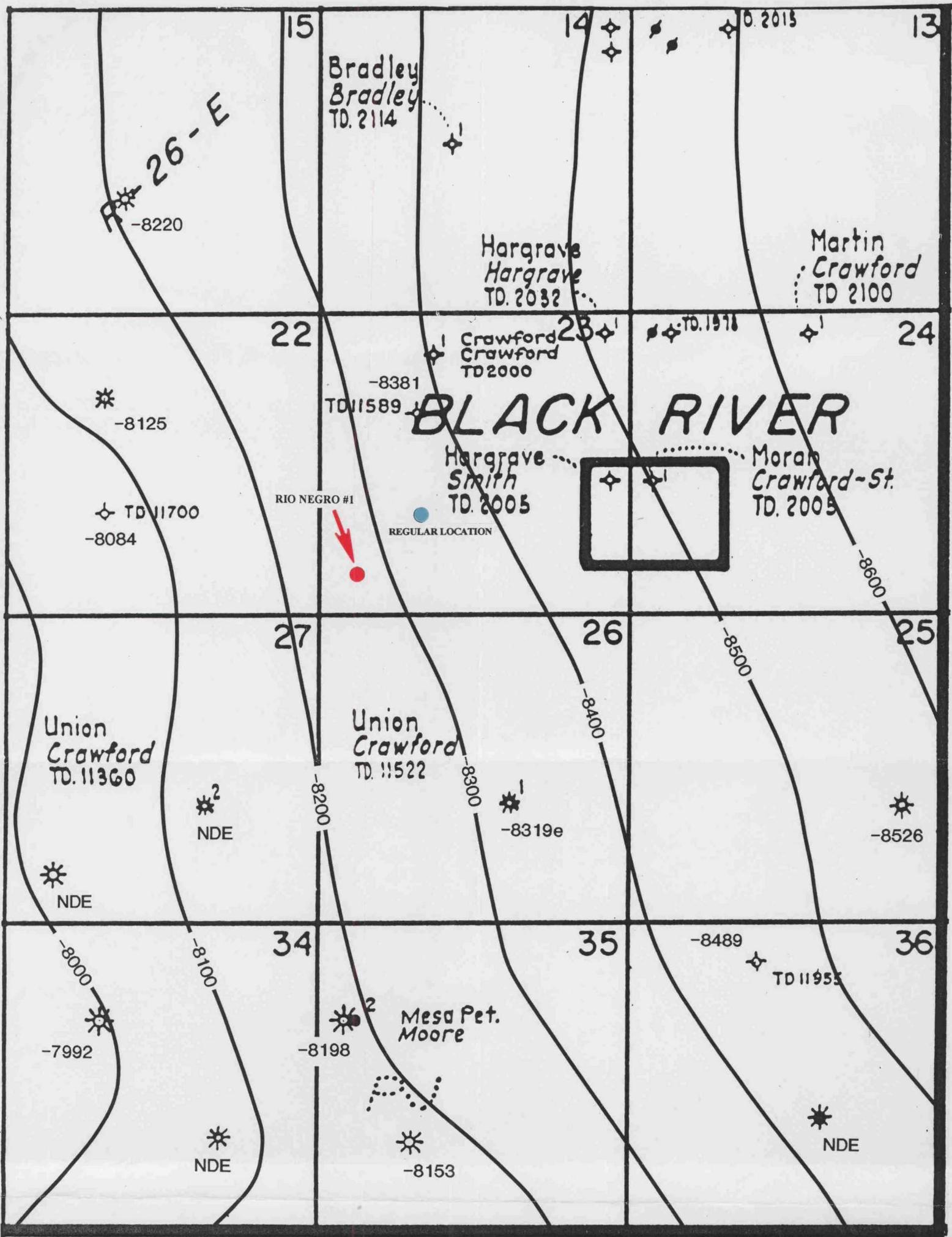
Enclosures



**MANZANO OIL CORPORATION**

UNORTHODOX WELL APPLICATION  
 RIO NEGRO #1  
 660' FSL & 660' FWL, SEC. 23, T24S-R26E  
 EDDY COUNTY, NM

**MORROW "B" NET SAND ISOPACH  
 POROSITY GREATER THAN 6%**



MANZANO OIL CORPORATION

UNORTHODOX WELL APPLICATION  
 RIO NEGRO #1  
 660' FSL & 660' FWL, SEC. 23, T24S-R26E  
 EDDY COUNTY, NM

STRUCTURE MAP  
 T/MORROW "A"

C.I. = 100 FT

CMB/LJL

District I  
PO Box 1980, Hobbs, NM 88241-1980  
District II  
PO Drawer DD, Artesia, NM 88211-0719  
District III  
1000 Rio Brazos Rd., Aztec, NM 87410  
District IV  
PO Box 2088, Santa Fe, NM 87504-2088

State of New Mexico  
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION  
PO Box 2088  
Santa Fe, NM 87504-2088

Form C-101  
Revised February 10, 1994  
Instructions on back  
Submit to Appropriate District Office  
State Lease - 6 Copies  
Fee Lease - 5 Copies

AMENDED REPORT

APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE

Operator Name and Address: Manzano Oil Corporation P.O. Box 2107 Roswell, NM 88202-2107		OGRID Number 013954
		API Number 30 - 0
Property Code	Property Name Rio Negro	Well No. 1

Surface Location

UL or lot no.	Section	Township	Range	Lot Ida	Feet from the	North/South line	Feet from the	East/West line	County
M	23	24S	26E		660	South	660	West	Eddy

Proposed Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Ida	Feet from the	North/South line	Feet from the	East/West line	County
M	23	24S	26E		660	South	660	West	Eddy
Proposed Pool 1					Proposed Pool 2				

Work Type Code N	Well Type Code G	Cable/Rotary Rotary	Lease Type Code P	Ground Level Elevation 3264'
Multiple No	Proposed Depth 11,900'	Formation Morrow	Contractor WEK Drlg	Spud Date 10/1/98

Proposed Casing and Cement Program

Hole Size	Casing Size	Casing weight/foot	Setting Depth	Sacks of Cement	Estimated TOC
17-1/2"	13-3/8"	54.5#	400'	400	Circl
11"	8-5/8"	32#	5,600'	1400	300'
7-7/8"	5-1/2"	17 & 20#	11,900'	To be designed	Above upper most pay

Describe the proposed program. If this application is to DEEPEN or PLUG BACK give the data on the present productive zone and proposed new productive zone. Describe the blowout prevention program, if any. Use additional sheets if necessary.

Drill hole to approximately 11,800' to test the Morrow formation. DST any zones of interest along the way. At TD run open hole logs. If any zones are commercial, run production casing.

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

Signature:

*Donnie Brown*

Printed name:

Donnie Brown

Title:

VP Engineering

Date:

7/20/98

Phone:

(505) 623-1996

OIL CONSERVATION DIVISION

Approved by:

Title:

Approval Date:

Expiration Date:

Conditions of Approval:

Attached

District I  
 PO Box 1980, Hobbs, NM 88241-1980  
 District II  
 PO Drawer DD, Artesia, NM 88211-0719  
 District III  
 1000 Rio Brazos Rd., Aztec, NM 87410  
 District IV  
 PO Box 2088, Santa Fe, NM 87504-2088

State of New Mexico  
 Energy, Minerals & Natural Resources Department

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 Santa Fe, NM 87504-2088

Form C-102  
 Revised February 10, 1994  
 Instructions on back  
 Submit to Appropriate District Office  
 State Lease - 4 Copies  
 Fee Lease - 3 Copies

AMENDED REPORT

**WELL LOCATION AND ACREAGE DEDICATION PLAT**

1 AFI Number		2 Pool Code		3 Pool Name	
4 Property Code		5 Property Name			6 Well Number
		Rio Negro			1
7 OGRID No.		8 Operator Name			9 Elevation
013954		Manzano Oil Corporation			3264

**10 Surface Location**

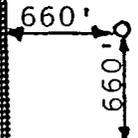
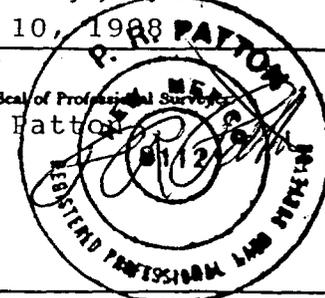
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
M	23	24s	26e		660	South	660	West	Eddy

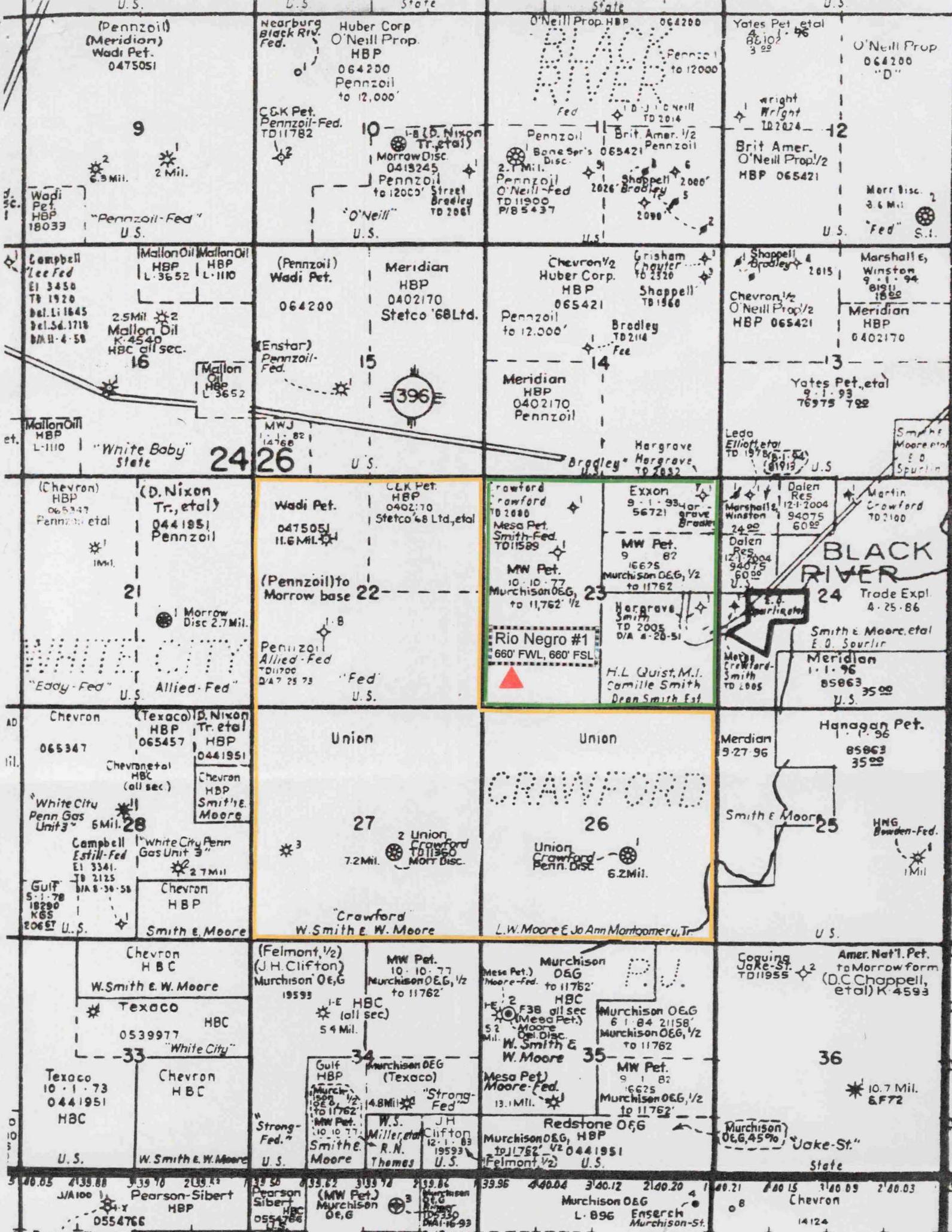
**11 Bottom Hole Location If Different From Surface**

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County

12 Dedicated Acres	13 Joint or Infill	14 Consolidation Code	15 Order No.
640			

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

16          	<b>17 OPERATOR CERTIFICATION</b> <i>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief</i>   Signature D.E. Brown Printed Name VP Engineering Title 7/20/98 Date			
	<b>18 SURVEYOR CERTIFICATION</b> <i>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 belief</i>  July 10, 1988 Date of Survey P.R. Patton Signature and Seal of Professional Surveyor 			
	Certificate Number 8112			



# MANZANO OIL CORPORATION

RIO NEGRO #1  
660' FWL & 660' FSL of Section 23, T-24-S, R-26-E  
Eddy County, New Mexico

## UNORTHODOX LOCATION - AFFECTED PARTIES

**Section 22:** Wadi Petroleum, Inc. (Operator)  
1010 Tower II  
Corpus Christi, TX 78478

Well: Federal "22" #1 (located in NW/4)  
Spacing: 640 acres (White City - Penn.)

**Section 26:** Matador Operating (Operator)  
415 W. Wall, Suite 1101  
Midland, TX 79701

Well: Crawford 26 #1 (located in SE/4)  
Spacing: 640 acres (White City - Penn.)

**Section 27:** Matador Operating (Operator)  
Same as above

Wells: Crawford 27 #2 (located in SE/4)  
Crawford 27 #3 (located in SW/4)  
Spacing: 640 acres (White City - Penn.)



Manzano Oil Corporation

P.O. Box 2107  
Roswell, New Mexico 88202-2107  
(505) 623-1996  
FAX (505) 625-2620

July 20, 1998

Matador Operating  
415 W. Wall, Suite 1101  
Midland, TX 79701

RE: Rio Negro #1  
Section 23, T-24-S, R-26-E  
Eddy County, New Mexico

Gentlemen:

Manzano Oil Corporation has filed a permit to drill the Rio Negro #1 well with the New Mexico Oil Conservation Division (OCD). The well will be drilled to a sub-surface depth of 11,760 feet to test the Pennsylvanian Morrow Formation and is within one (1) mile proximity of the OCD designated White City Pennsylvanian Gas Pool. The field rules provide for a 640 acre spacing unit and require that each well shall be no nearer than 1,650 feet to the boundary of the spacing unit. Our proposed location of 660' FWL and 660' FSL of Section 23, T-24-S, R-26-E, which is unorthodox, must be granted an exception to the spacing rules. Under Rule 104.F(2) the OCD may grant administrative approval if the operators, lessees or unleased mineral owners of the offsetting leases, to which the well will encroach, waive objection to the proposed location.

A positive response from you will eliminate the necessity to conduct a full OCD hearing on this matter thereby expediting our effort. However, if you object to the proposed location, your written expression of opposition must be filed with the OCD within twenty (20) days from the date this notice was mailed. Therefore, we request you waive objection to the drilling of the Rio Negro #1 well at the proposed location and evidence your acceptance by executing and returning a copy of this letter to my attention at the above address.

Very truly yours,

Kenneth Barbe, Jr.

AGREED to and ACCEPTED this \_\_\_\_\_ day of \_\_\_\_\_, 1998.

Matador Operating

By: \_\_\_\_\_

enc: APD C-101, OCD Application and Land Plat & List of Affected Parties



Manzano Oil Corporation

P.O. Box 2107  
Roswell, New Mexico 88202-2107  
(505) 623-1996  
FAX (505) 625-2620

July 20, 1998

WADI Petroleum, Inc.  
1010 Tower II  
Corpus Christi, TX 78478

RE: Rio Negro #1  
Section 23, T-24-S, R-26-E  
Eddy County, New Mexico

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Very truly yours,

Kenneth Barbe, Jr.

AGREED to and ACCEPTED this \_\_\_\_\_ day of \_\_\_\_\_, 1998.

WADI Petroleum, Inc.

By: \_\_\_\_\_

enc: APD C-101, OCD Application and Land Plat & List of Affected Parties