

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

Vice President - Geology 7/20/98
Title Date



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.

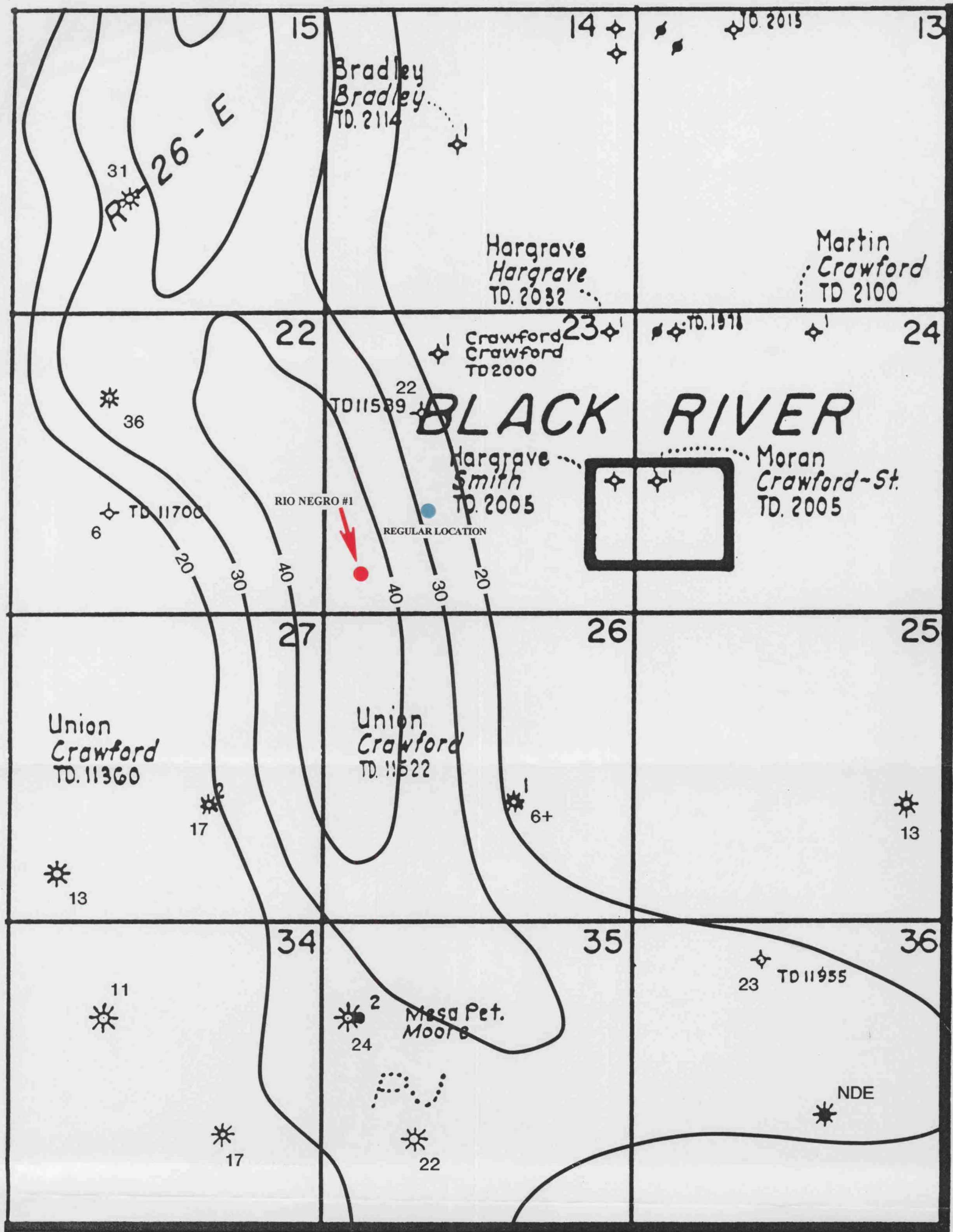
By separate letters (copies attached) Manzano has sent notification letters via certified return receipt mail to the affected parties. Your consideration to the Application is most appreciated. Should you have any questions, please feel free to call me at 505/623-1996.

Sincerely,

A handwritten signature in cursive script that reads "Mike Brown".

Mike Brown

Enclosures



MANZANO OIL CORPORATION

UNORTHODOX WELL APPLICATION

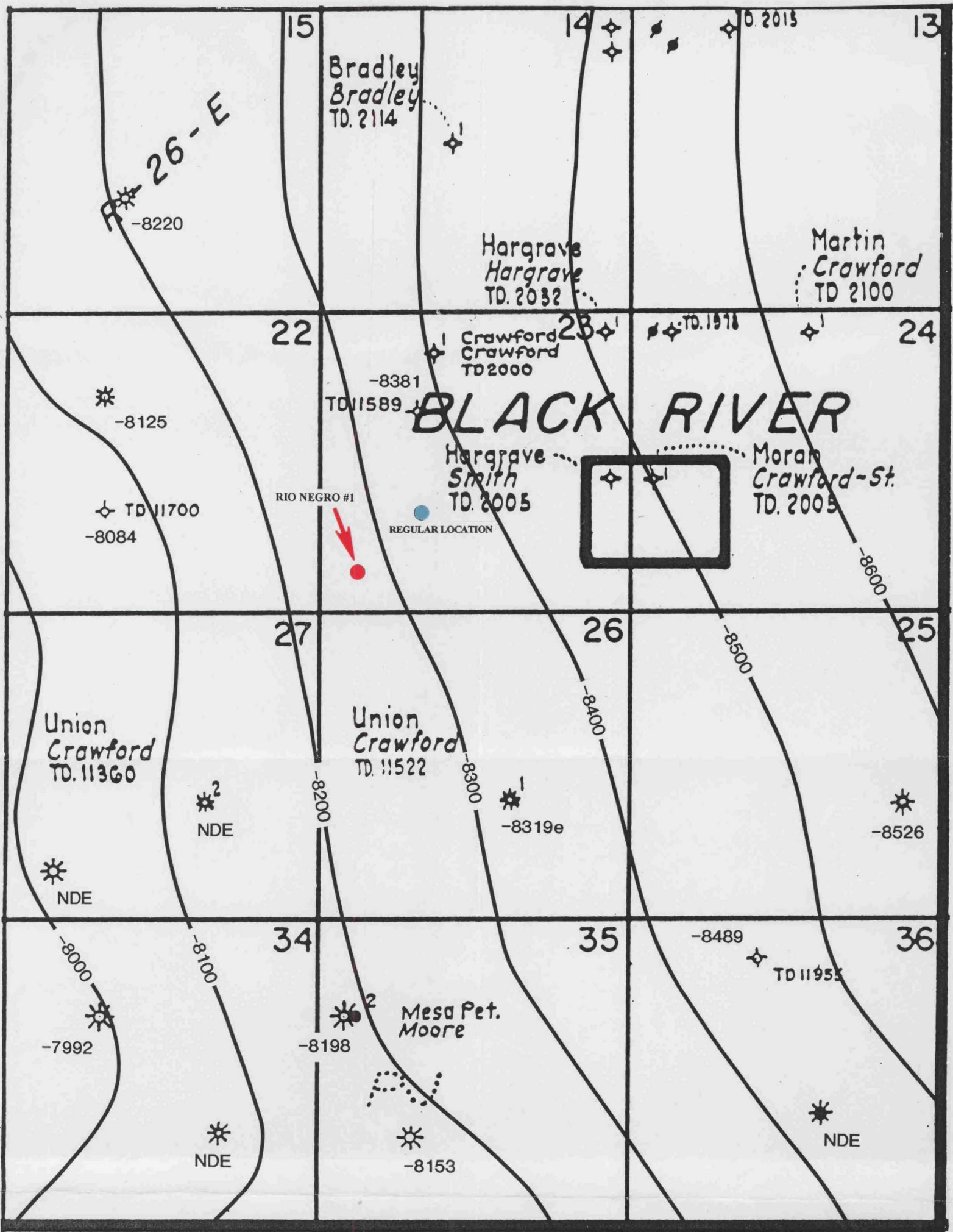
RIO NEGRO #1

660' FSL & 660' FWL, SEC. 23, T24S-R26E
EDDY COUNTY, NM

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

C.I. = 10 FT

CMB/LJL



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

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

⁷ 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

⁸ 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

⁹ Proposed Pool 1

¹⁰ Proposed Pool 2

¹¹ Work Type Code N	¹² Well Type Code G	¹³ Cable/Rotary Rotary	¹⁴ Lease Type Code P	¹⁵ Ground Level Elevation 3264'
¹⁶ Multiple No	¹⁷ Proposed Depth 11,900'	¹⁸ Formation Morrow	¹⁹ Contractor WEK Drlg	²⁰ Spud Date 10/1/98

²¹ 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

²² 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.

²³ I hereby certify that the information given above is true and complete to the best of my knowledge and belief.

Signature:

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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PO Box 2088
Santa Fe, NM 87504-2088

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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


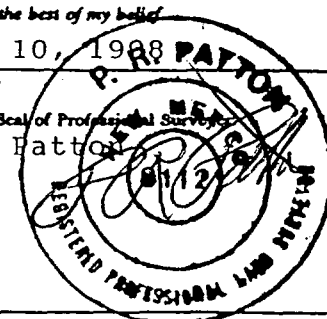
10 Surface Location

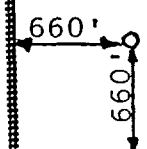
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
M	23	24s	26e		660	South	660	West	Eddy

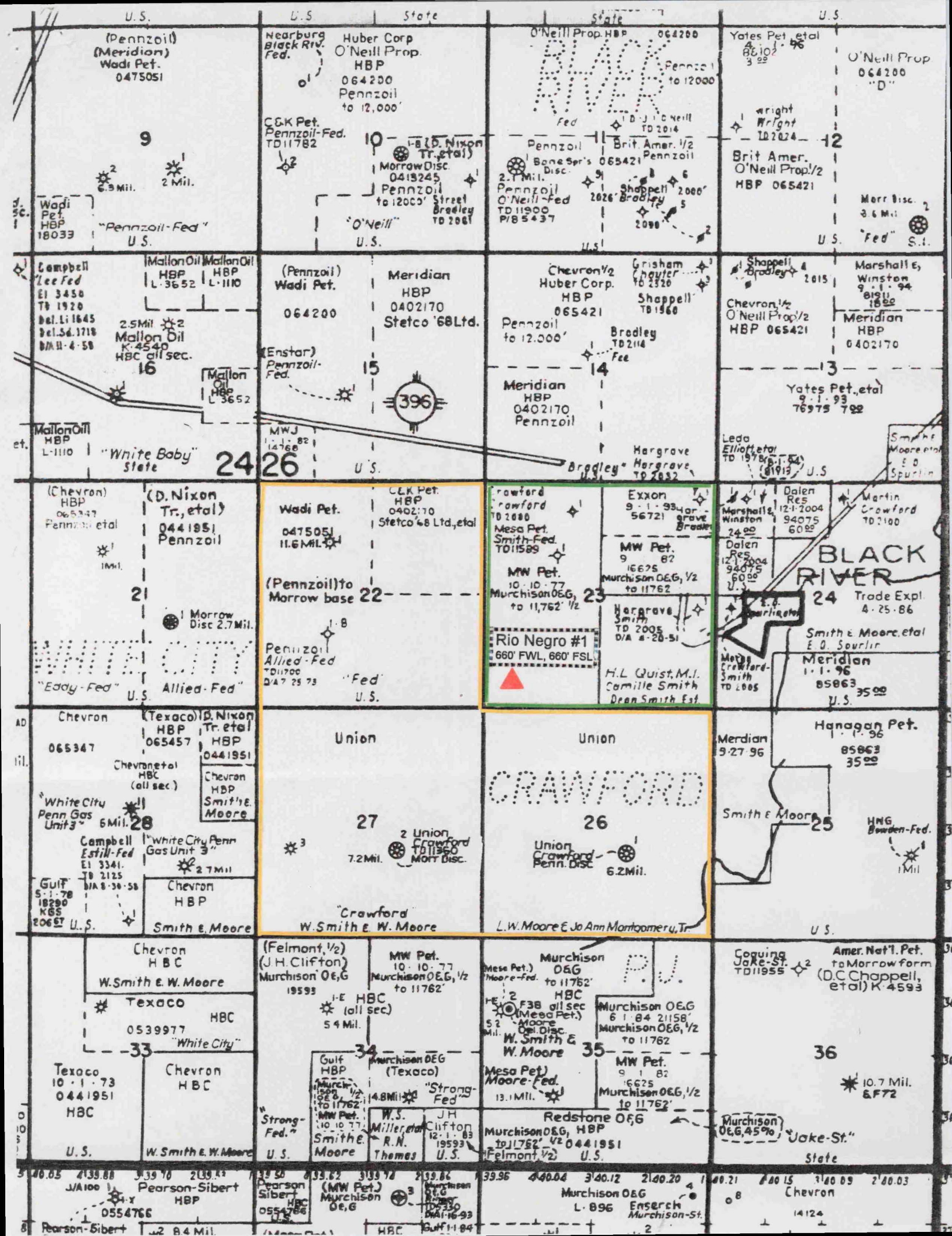
11 Bottom Hole Location If Different From Surface

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				17 OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief  Signature D.E. Brown Printed Name VP Engineering Title 7/20/98 Date	
					18 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 belief July 10, 1988 Date of Survey Signatures and Seal of Professional Surveyor P.R. Patton  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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Kenneth Barbe, Jr.

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By: _____

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