

NSL 4/2/98

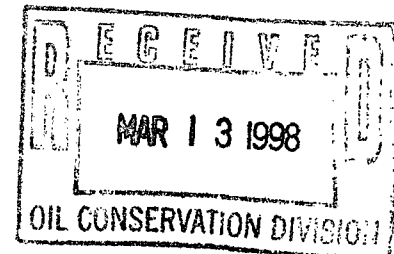


Manzano Oil Corporation

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

March 11, 1998

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



Re: Application of Manzano Oil Corporation
for Administrative Approval of an
Unorthodox Well - State "3" #1

Dear Mr. Stogner:

Enclosed please find the Application of Manzano Oil Corporation for administrative approval of an Unorthodox Location for the State "3" #1 well located 2144' FNL and 2,087' FEL of Section 12, Township 16 South, Range 36 East, N.M.P.M., Lea County, New Mexico.

By separate letter (copy attached) Manzano has sent notification via certified return receipt mail to the affected parties by submitting a copy of this application and a plat required by OCD rules.

Your due consideration to this Application is most appreciated. Should you have any questions, please feel free to me at 505/623-1996.

Sincerely,

Michael Brown

Michael Brown
Geologist

Enclosures



Manzano Oil Corporation

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

March 11, 1998

Matador Petroleum Corporation
8340 Meadow Road #158
Dallas, TX 75231

Attn: Mona Ables

Re: State "3" #1
Lea County, New Mexico

Dear Mona:

Manzano Oil Corporation has filed an Application for Administrative Approval for unorthodox location for our State "3" No. 1 well which is located 2144' FNL and 2087' FEL of Section 12, Township 16 South, Range 36 East, N.M.P.M., Lea County, New Mexico. Manzano has drilled and completed this well at the above location which is 45.82 feet unorthodox but was not discovered to be unorthodox by Manzano or the OCD until last week.

Enclosed is a copy of the Application for Administrative Approval, Geologic Discussion, Geologic Exhibits and Plat. By this letter Matador Petroleum Corporation will have 20 days from date of this letter to file a protest with the OCD. Manzano respectfully requests a waiver to this unorthodox location by signing below.

If you should have any questions or concerns regarding this matter, please give me a call.

Sincerely,

Michael Brown

Michael Brown
Geologist

Enclosures

WAIVER TO PROTEST

AGREED TO AND ACCEPTED this _____ day of March, 1998.

By: _____
Title: _____

DATE IN	SUSPENSE	ENGINEER	LOGGED BY	TYPE
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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.

Michael Brown
Print or Type Name

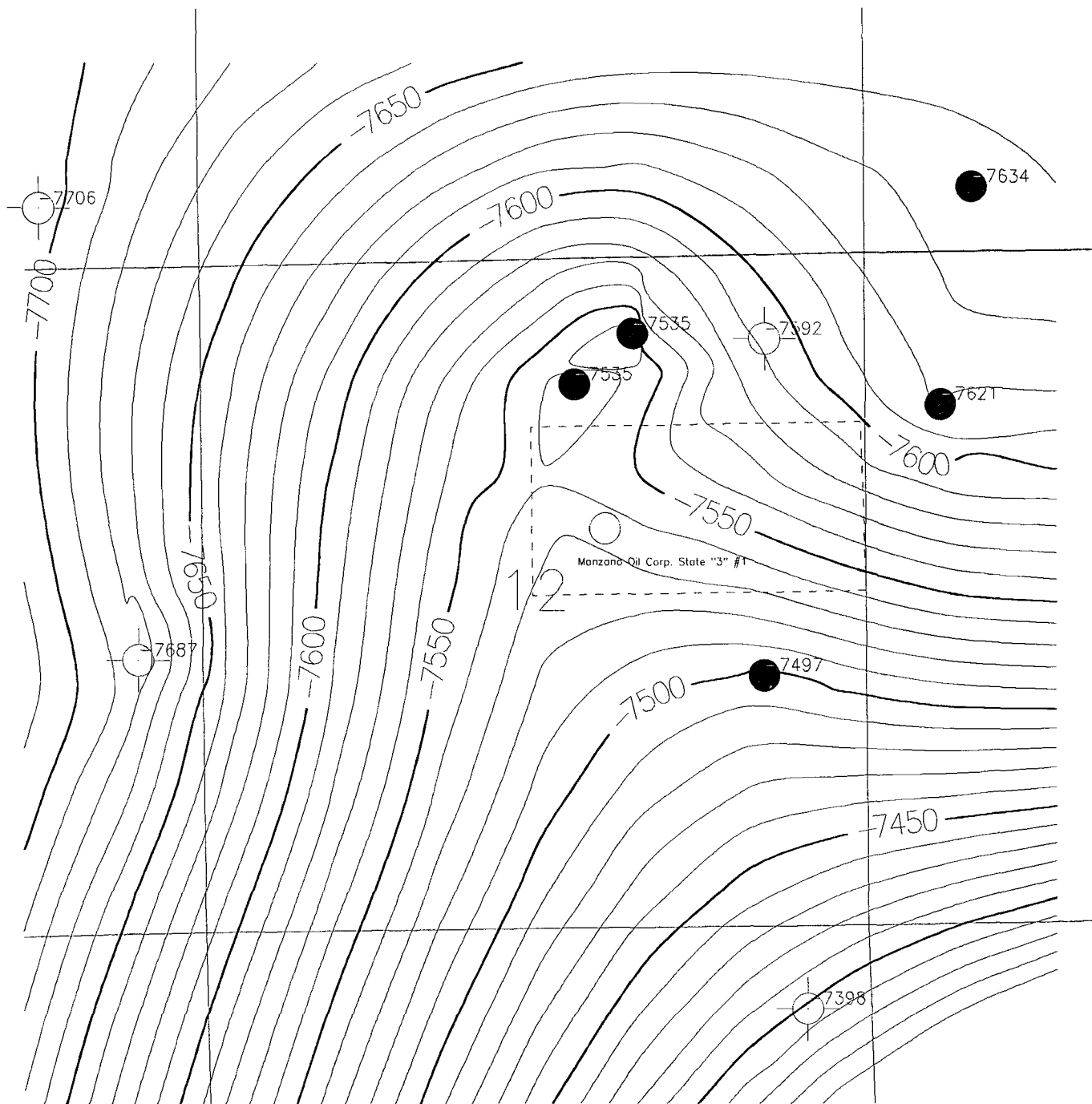
Michael Brown
Signature

Geologist
Title

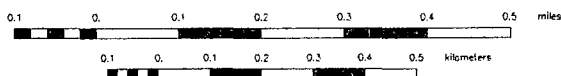
3/11/98
Date

GEOLOGICAL DISCUSSION

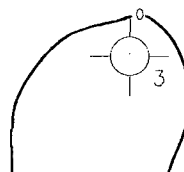
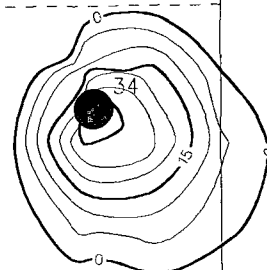
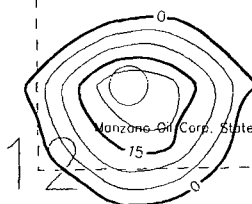
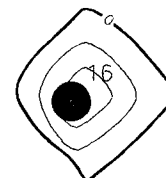
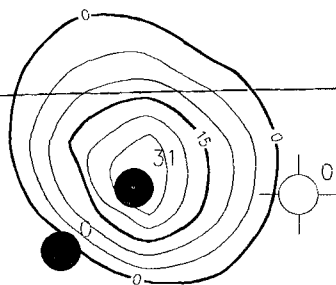
The Manzano Oil Corporation State "3" #1 was drilled and completed as a producer in the Strawn formation on February 14, 1998. Prior to permitting this well as a Strawn test in the NE Lovington Penn pool, the subsurface location was determined using 3-D seismic. The 3-D seismic shows a strong north and northeast structural dip on the top of the Strawn coming off the Lovington high (see Structure Map - Top of Strawn). In addition to a strong structural component, the porosity distribution in the Strawn consists of small algal mounds where porosity and permeability change and terminate rapidly in all directions (see Map of Strawn Porosity greater than 6%). The geophysist working this project was instructed to determine the most advantageous structural and stratigraphic position in the Strawn at an orthodox location for the NE Lovington Penn pool (wells are to be no greater than 150 feet from the center of a governmental quarter/quarter section). Using the 3-D seismic X-Y section coordinate grid, provided by Western Geophysical surveyors, a location less than 150' from the center of a quarter/quarter section was chosen and the line and trace designations were sent to be staked. Due to a discrepancy in the X-Y coordinates of the north boundary of Section 12, which underlies the Lovington-Denver City Highway (but surveyed off the road approximately 50 feet), the surface location for the Manzano Oil State "3" #1 was located 195.82 feet southwest of the center of the quarter/quarter section, instead of 150 feet southwest of center, making it 45.82 feet unorthodox for a well in this pool. Since the location was previously determined to be orthodox, this discrepancy in surface/3-D locations and the change from orthodox to unorthodox was not discovered by either Manzano or the OCD until last week. Using both structure and porosity mapping of the Strawn, the current location of 2,144' FNL and 2,087' FEL provides the best near-orthodox location for exploiting the reserves of this small isolated Strawn algal mound. Moving the location 45.82 feet northeast to an orthodox location would result in a loss of structure, a loss of porosity and a potential loss of reserves. Granting Manzano's request for an unorthodox location for the Manzano Oil Corporation State "3" #1 will allow Manzano to establish production capable of preventing waste and protecting correlative rights.



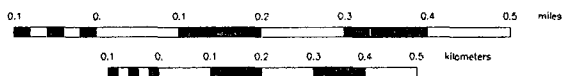
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MANZANO OIL CORPORATION		
STATE "3" #1 - UNORTHODOX Sec. 12, T16S, R36E STRUCTURE MAP - TOP OF STRAWN		
Mike Brown		3/11/98
C.I. - 10 FT.	Scale 1:14706.85	



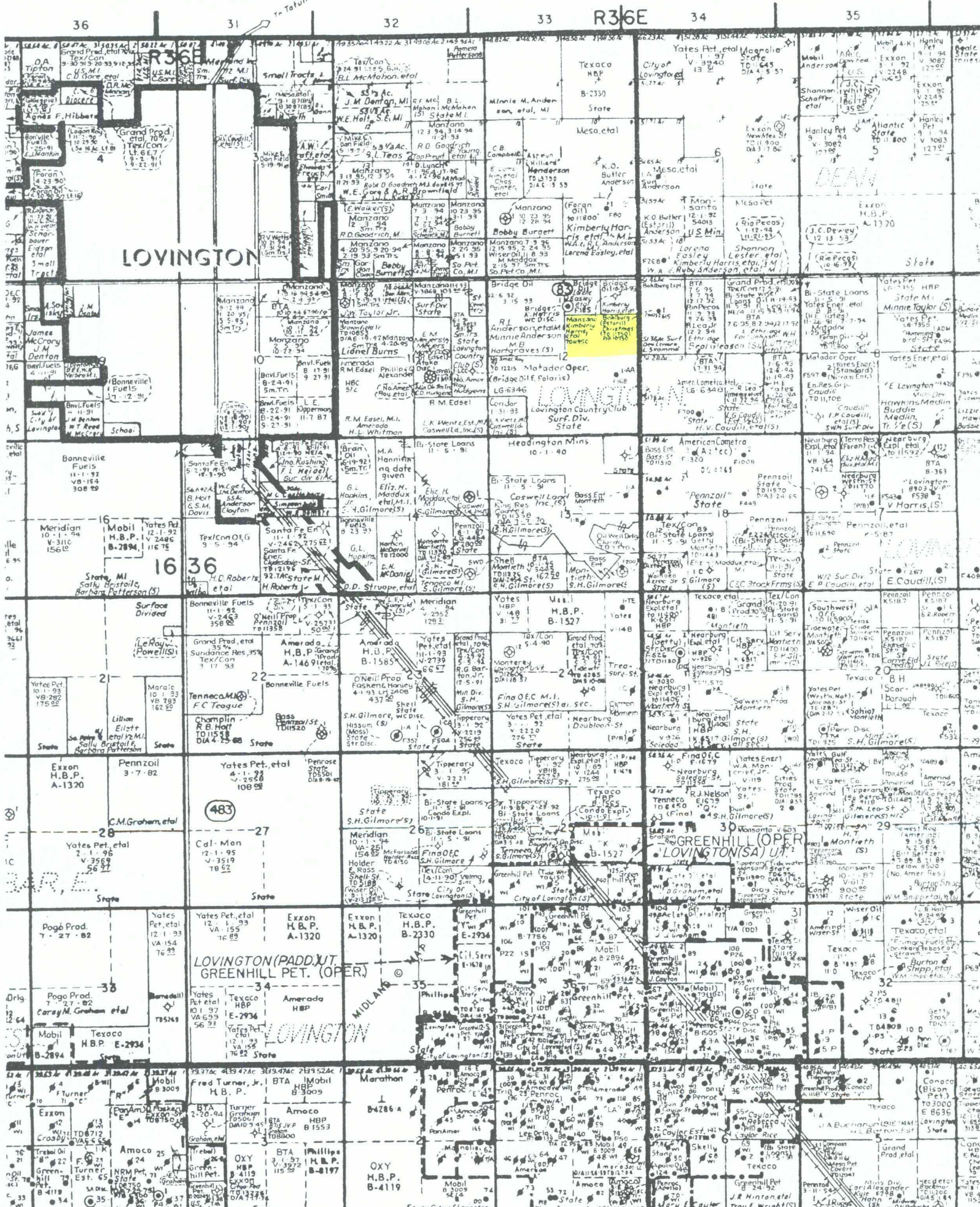
Scale 1:14706.85



MANZANO OIL CORPORATION

STATE "3" #1 - UNORTHODOX
Sec. 12, T16S, R36E
STRAWN POROSITY >6%

Mike Brown		3/11/98
C.I. = 5 FT	Scale 1:14706.85	



Submit 3 Copies
to Appropriate
District Office

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-103
Revised 1-1-89

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

OIL CONSERVATION DIVISION

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

WELL API NO.

30-025-34238

5. Indicate Type of Lease

STATE ☒

FEE ☐

6. State Oil & Gas Lease No.

LG-6346

7. Lease Name or Unit Agreement Name

State 3

8. Well No.

1

9. Pool name or Willard

Northeast Lovington Penn

SUNDRY NOTICES AND REPORTS ON WELLS

(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A
DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT"
(FORM C-101) FOR SUCH PROPOSALS.)

1. Type of Well:

OIL
WELL ☒

GAS
WELL ☐

OTHER

2. Name of Operator

Manzano Oil Corporation 505/623-1996

3. Address of Operator

P.O. Box 2107/Roswell, NM 88202-2107

4. Well Location

Unit Letter G : 2144 Feet From The North Line and 2087 Feet From The East Line

Section 12 Township 16 South Range 36 East NMPM Lea County

10. Elevation (Show whether DF, RKB, RT, GR, etc.)

3875.47' GL

11. Check Appropriate Box to Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:

PERFORM REMEDIAL WORK ☐

PLUG AND ABANDON ☐

TEMPORARILY ABANDON ☐

CHANGE PLANS ☐

PULL OR ALTER CASING ☐

OTHER: ☐

SUBSEQUENT REPORT OF:

REMEDIAL WORK ☐

ALTERING CASING ☐

COMMENCE DRILLING OPNS. ☐

PLUG AND ABANDONMENT ☐

CASING TEST AND CEMENT JOB ☒

OTHER: ☐

12. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work) SEE RULE 1103.

1/13/98 Run 104 jts 8-5/8" csg w/guide shoe, float collar & 6 centrizers. Set @ 4371'. Cement w/800 sx Lite + 8#/sk salt + 1/4# cello-flake. Tail in w/200 sx C1 C + 2% CaCl. Est top of cement 300'.

1/28/98 DST #1: Wolfcamp 10,560-10,617' = 57' interval. Formation wet.

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

SIGNATURE

Allison Hernandez

TITLE

Engineering Technician

DATE

1/28/98

TYPE OR PRINT NAME

Allison Hernandez

TELEPHONE NO. 623-1996

(This space for State Use)

DISTRICT 1 SUPERVISOR

APPROVED BY

Chris Williams

TITLE

DATE

Feb 19 1998

CONDITIONS OF APPROVAL, IF ANY:

Submit 3 Copies
to Appropriate
District Office

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-103
Revised 1-1-89

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

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

WELL API NO. 30-025-34238
5. Indicate Type of Lease STATE <input checked="" type="checkbox"/> FEE <input type="checkbox"/>
6. State Oil & Gas Lease No. LG-6346
7. Lease Name or Unit Agreement Name State 3
8. Well No. 1
9. Pool name or Wildcat Northeast Lovington Penn

SUNDRY NOTICES AND REPORTS ON WELLS (DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)	
1. Type of Well: OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <input type="checkbox"/>	
2. Name of Operator Manzano Oil Corporation 505/623-1996	
3. Address of Operator P.O. Box 2107/Roswell, NM 88202-2107	
4. Well Location Unit Letter <u>G</u> : <u>2144</u> Feet From The <u>North</u> Line and <u>2087</u> Feet From The <u>East</u> Line Section <u>12</u> Township <u>16 South</u> Range <u>36 East</u> NMPM Lea County	
10. Elevation (Show whether DF, RKB, RT, GR, etc.) 3875.47' GL	

11. Check Appropriate Box to Indicate Nature of Notice, Report, or Other Data	
NOTICE OF INTENTION TO:	SUBSEQUENT REPORT OF:
PERFORM REMEDIAL WORK <input type="checkbox"/>	REMEDIAL WORK <input type="checkbox"/>
TEMPORARILY ABANDON <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
PULL OR ALTER CASING <input type="checkbox"/>	COMMENCE DRILLING OPNS. <input checked="" type="checkbox"/>
OTHER: <input type="checkbox"/>	PLUG AND ABANDONMENT <input type="checkbox"/>
	CASING TEST AND CEMENT JOB <input type="checkbox"/>
	OTHER: <input type="checkbox"/>

12. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work) SEE RULE 1103.

1/05/98 Spud @ 7:00 p.m. 1/04/98.
1/06/98 Ran 11 jts (402.88') of 13-3/8" J55 54.5# Butt csg. Set @ 400'KB. Cemented with 455 sks Class C. Circl 15 sks to pit.

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

SIGNATURE Allison Hernandez TITLE Engineering Technician DATE 1/8/98
TYPE OR PRINT NAME Allison Hernandez TELEPHONE NO. 623-1996

(This space for State Use)

APPROVED BY Chris Williams DISTRICT SUPERVISOR TITLE _____ DATE _____
CONDITIONS OF APPROVAL, IF ANY:

JAN 12 1998

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 - 025 - 34238
Property Code 2217	Property Name State 3	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
G	12	16S	36E		2144	North	2087	East	Lea

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

Proposed Pool 1 Northeast Lovington Penn	Proposed Pool 2
---------------------------------------------	-----------------

Work Type Code N	Well Type Code O	Cable/Rotary R	Lease Type Code S	Ground Level Elevation 3875.47' GL
Multiple No	Proposed Depth 11,800'	Formation Strawn	Contractor WEK Drilling Co.	Spud Date 12/29/97

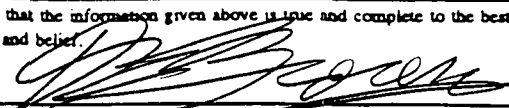
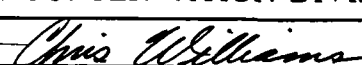
21 Proposed Casing and Cement Program


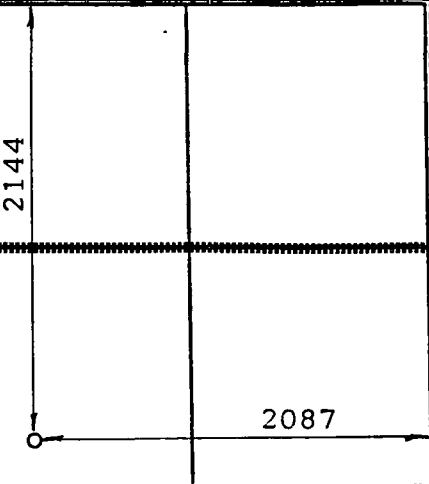
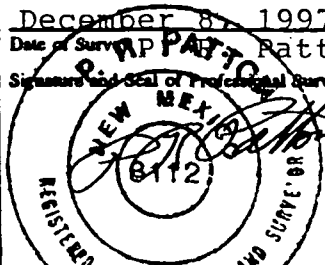
Hole Size	Casing Size	Casing weight/foot	Setting Depth	Sacks of Cement	Estimated TOC
17-1/2"	13-3/8"	54.5#	400'	350	Circl
11"	8-5/8"	32#	4,400'	1000	400'
7-7/8"	5-1/2"	17 & 20#	11,800'	To be designed	600' above
				uppermost pay.	

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.

Set surface casing @ 400'. Circl cement to surface. Set inter csg @ approx 4400'. Cement. Install BOP's. Tsg to 100 psi. Drill 7-7/8" hole to 11,800'. DST any prospective pays. Run open hole log. Run 5-1/2" production casing through Strawn if justified.

Permit Expires 1 Year From Approval
Date Unless Drilling Underway

I hereby certify that the information given above is true and complete to the best of my knowledge and belief. Signature: 		OIL CONSERVATION DIVISION	
Printed name: D.E. Brown		Approved by: 	
Title: VP Engineering		Title: DISTRICT 1 SUPERVISOR	
Date: 12/12/97		Approval: APR 18 1997	
Phone: (505) 623-1996		Expiration Date:	
Conditions of Approval Attached <input type="checkbox"/>			

16				17 OPERATOR CERTIFICATION <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 December 12, 1997 _____ Date
		2144  2087		18 SURVEYOR CERTIFICATION <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> December 8, 1997 _____ Date of Survey R. Patton _____ Signature and Seal of Professional Surveyor:  _____ Certificate Number

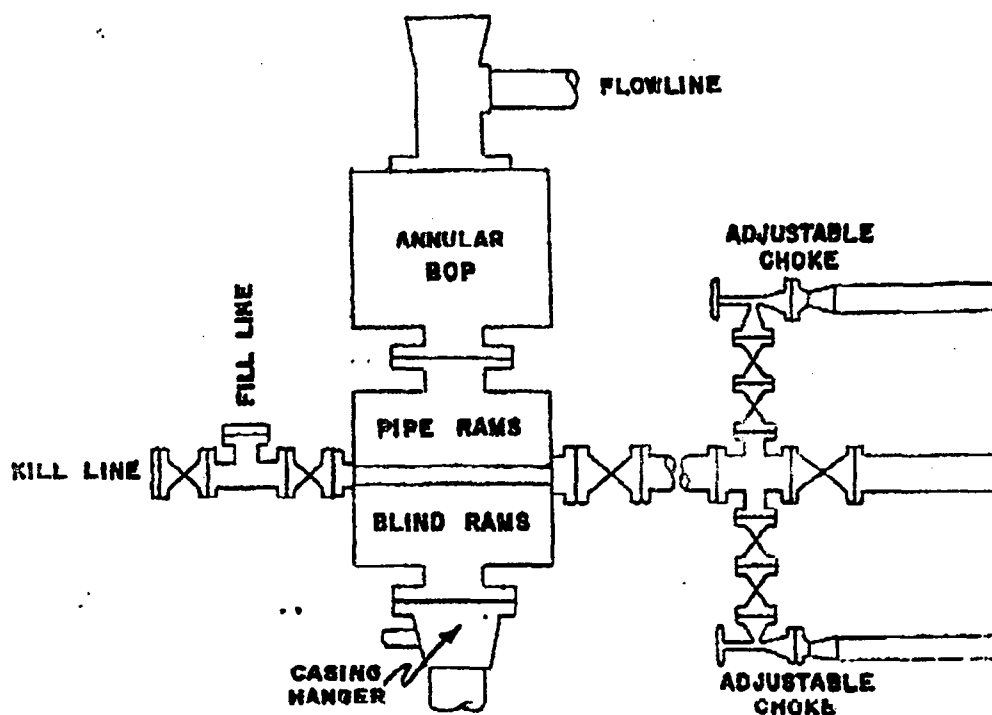
WEK**DRILLING CO., INC. - OIL WELL DRILLING CONTRACTORS**

P. O. BOX 1498 ROSWELL, NEW MEXICO 88202-1498
505/625-6070
ROSWELL, NM

505/746-2719
ARTEZIA, NM

RIG #4**BLOWOUT PREVENTOR ARRANGEMENT**

11" SHAFFER TYPE LWS, 5000 psi WP
11" CAMERON SPHERICAL, 5000 psi WP
120 GALLON, 3 STATION KOOMEY ACCUMULATOR
5000 psi WP CHOKE MANIFOLD



Manzano Oil Corporation's
State 3 #1
2144' FNL & 2087' FEL
Sec 12, T16S, R36E
Lea County, New Mexico