

STATE OF NEW MEXICO

ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION

IN THE MATTER OF THE HEARING CALLED BY )  
 THE OIL CONSERVATION DIVISION FOR THE )  
 PURPOSE OF CONSIDERING: )  
 )  
 APPLICATION OF MANZANO OIL CORPORATION ) CASE NOS. 12,515  
 FOR APPROVAL OF A UNIT AGREEMENT, LEA )  
 COUNTY, NEW MEXICO )  
 )  
 APPLICATION OF MANZANO OIL CORPORATION ) and 12,516  
 FOR DIRECTIONAL DRILLING AND AN )  
 UNORTHODOX WELL LOCATION, LEA COUNTY, )  
 NEW MEXICO )  
 ) (Consolidated)

REPORTER'S TRANSCRIPT OF PROCEEDINGS

EXAMINER HEARING

BEFORE: MARK ASHLEY, Hearing Examiner

November 16th, 2000

Santa Fe, New Mexico

ORIGINAL  
 OIL CONSERVATION DIV  
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This matter came on for hearing before the New Mexico Oil Conservation Division, MARK ASHLEY, Hearing Examiner, on Thursday, November 16th, 2000, at the New Mexico Energy, Minerals and Natural Resources Department, Porter Hall, 2040 South Pacheco, Santa Fe, New Mexico, Steven T. Brenner, Certified Court Reporter No. 7 for the State of New Mexico.

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## I N D E X

November 16th, 2000  
 Examiner Hearing  
 CASE NOS. 12,515 and 12,516 (Consolidated)

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APPLICANT'S WITNESS:	
<u>WILLIAM C. BAHLBURG</u> (Geologist)	
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## E X H I B I T S

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\* \* \*

## A P P E A R A N C E S

FOR THE DIVISION:

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 Attorney at Law  
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 2040 South Pacheco  
 Santa Fe, New Mexico 87505

FOR THE APPLICANT:

CAMPBELL, CARR, BERGE and SHERIDAN, P.A.  
 Suite 1 - 110 N. Guadalupe  
 P.O. Box 2208  
 Santa Fe, New Mexico 87504-2208  
 By: WILLIAM F. CARR

\* \* \*

1           WHEREUPON, the following proceedings were had at  
2   3:42 p.m.:

3

4

5           EXAMINER ASHLEY: The Division calls Case 12,515,  
6 Application of Manzano Oil Corporation for approval of a  
7 unit agreement, Lea County, New Mexico.

8           Call for appearances.

9           MR. CARR: May it please the Examiner, my name is  
10 William F. Carr with the Santa Fe law firm Campbell, Carr,  
11 Berge and Sheridan.

12           We represent Manzano Oil Corporation in this  
13 matter, and I have one witness.

14           I --

15           EXAMINER ASHLEY: Additional appearances? Excuse  
16 me.

17           MR. CARR: I would also request that the case be  
18 consolidated with the following case, Case 12,516. It is  
19 also an Application of Manzano Oil Corporation. They  
20 involve the same property and the same well.

21           EXAMINER ASHLEY: Case Number 12,516?

22           MR. CARR: Yes, sir.

23           EXAMINER ASHLEY: Okay. Additional appearances?

24           Will the witness please rise to be sworn in?

25           (Thereupon, the witness was sworn.)



1 which is the subject of this Application?

2 A. I have.

3 Q. And are you prepared to share the results of your  
4 work with Mr. Ashley?

5 A. Yes.

6 MR. CARR: Are the witness's qualifications  
7 acceptable?

8 EXAMINER ASHLEY: They are.

9 Q. (By Mr. Carr) Mr. Bahlburg, would you briefly  
10 state what it is Manzano seeks with this Application?

11 A. Manzano seeks to form an 80-acre unit for the  
12 purpose of re-entering and drilling a horizontal leg in a  
13 currently -- not abandoned but temporarily abandoned  
14 borehole in Lea County, New Mexico, in King field.

15 Q. This well and unit were previously approved by  
16 the Division and the State Land Office for the drilling of  
17 the subject well as a straight hole; is that correct?

18 A. That's correct.

19 Q. And the operator and applicant at the time of the  
20 prior hearings was Paladin Energy Corporation?

21 A. That's correct.

22 Q. Could you review the efforts of Paladin Energy  
23 Corporation to develop this acreage?

24 A. The subject 80 acres, acreage, was previously  
25 unitized under Division Case -- or Order Number 10,916.

1           The Paladin State C Number 3 well was the  
2 designated unit well and was drilled at a previously  
3 approved unorthodox surface location 1550 feet from the  
4 north line and 10 feet from the west line of Section 36,  
5 under Order Number R-10,917, issued November 6th, 1997.  
6 But it was unsuccessful or was a dry hole in the Devonian  
7 formation. Manzano has since acquired a portion of the  
8 interests of Paladin Energy Corporation.

9           The 3-D seismic data covering this field and  
10 reservoir has been reprocessed and reinterpreted, and now  
11 Manzano seeks to re-form the unit, since the well is so  
12 close to the section line and quarter-section line, and  
13 re-enter the Paladin well, now named the Manzano C Number 3  
14 well, and directionally drill the well in a southwesterly  
15 direction with the intent to complete the well in the  
16 Devonian formation within the King-Devonian Pool and an  
17 unorthodox oil well bottom location 2400 feet from the  
18 north line and 190 feet from the east line of Section 35 in  
19 Unit H.

20           Q.    Now, this re-entry will be the initial well on  
21 the new unit?

22           A.    Yes, it will, and it will most likely be the only  
23 well in the unit.

24           Q.    Let's go to what has been marked for  
25 identification as Manzano Exhibit Number 1, and I would ask

1 you to simply identify this exhibit and generally explain  
2 what it is.

3 A. Okay, this is the state/fee exploratory unit  
4 agreement that was provided by the State Land Office for  
5 purposes of forming the unit, and the State Land Office is  
6 treating this as a development unit but has directed  
7 Manzano to use this form of unit agreement until a  
8 development form is adopted by the State.

9 Q. What formations are being unitized in the King  
10 Exploratory Unit?

11 A. The Devonian formation only.

12 Q. And in what pool?

13 A. The King-Devonian Pool.

14 Q. Let's go to Exhibit Number 2, and I'd ask you to  
15 identify and review that for Mr. Ashley.

16 A. This is a plat showing the location of the  
17 proposed unit as outlined in red, that encompasses or is  
18 comprised of two 40-acre tracts, labeled Tract 1 and Tract  
19 2, Tract 1 coming from the southwest of the northwest of  
20 Section 36 and Tract 2 from the southeast of the northeast  
21 of Section 35.

22 It also shows the State C 3 well, which is  
23 located as a black dot immediately adjacent to the section  
24 line that is dividing the unit, the proposed unit.

25 It also shows all other wells that have been

1 drilled in the vicinity. It also shows the current  
2 producing status of those wells. The six-sided green  
3 outline identifies current Wolfcamp producing wells, and  
4 then the circular green outline outlines the only existing  
5 Devonian producer within the field.

6 Q. The Manzano acreage is shaded in yellow?

7 A. Yeah, the Manzano acreage is shaded in yellow,  
8 and then Yates Petroleum leasehold, which consists of the  
9 southwest quarter of Section 36, is kind of a slightly  
10 orange yellow color.

11 Q. Let's go to Exhibit Number 3. Would you identify  
12 that?

13 A. Exhibit Number 3 is a description and summary of  
14 the working interests, royalty interests and overriding  
15 royalty interests contained within the two 40-acre tracts  
16 that we propose to unitize.

17 If you'll look over -- Right in the middle of the  
18 column, right in the middle will show you who the lessee of  
19 record is. And then the column furthest to the right will  
20 show the current working interest owners and the percentage  
21 of each.

22 And then down at the bottom it's summarized in  
23 the lower right-hand corner as to the working interest  
24 percentage of each participant within the unit.

25 Q. What percentage of the working interest has been

1 committed to the unit?

2 A. One hundred percent.

3 Q. Is the royalty also committed?

4 A. Yes.

5 Q. Has the Commissioner of Public Lands given  
6 preliminary approval to this unit?

7 A. The Commissioner called Manzano on Wednesday and  
8 advised that they will give preliminary approval to the  
9 unit.

10 MR. CARR: Mr. Examiner, the Land Office is at  
11 the present time developing a new form unit agreement for  
12 development units. Previously they have excluded from  
13 exploratory units any tract on which there was a well that  
14 ever penetrated a unitized formation. They're changing  
15 that, and this is actually the first of the units to come  
16 before the Land Office that fall in the category  
17 "development unit".

18 They have advised us that they will be giving  
19 preliminary approval to the unit. We had expected to  
20 receive the preliminary approval letter yesterday, but they  
21 have delayed that while their attorneys review it one last  
22 time. So as soon as it is received, we will be providing  
23 the Division with a copy of that approval. We anticipate  
24 receiving it within the next couple of days.

25 EXAMINER ASHLEY: Okay.

1 Q. (By Mr. Carr) Does Manzano desire to be  
2 designated unit operator?

3 A. Yes.

4 Q. Does the unit agreement provide for periodic  
5 filing of plans of development?

6 A. Yes.

7 Q. Does it also require that these plans be filed  
8 with the Oil Conservation at the time it's filed with other  
9 agencies?

10 A. It does.

11 Q. Does it provide the time frame within which these  
12 plans will be filed?

13 A. For the unit agreement, the initial plan and six  
14 months after the completion of the unit well, and then  
15 subsequent plans annually thereafter.

16 Q. Let's look at the Devonian formation. Could you  
17 generally describe the formation in this area?

18 A. The Devonian formation in the King Field area  
19 consists of 800- to 1000-foot sequence of dolomite and  
20 dolomitic limestone, characterized by randomly distributed  
21 pockets of reservoir developed over a complexly vaulted  
22 structure. These reservoir pockets are interconnected to  
23 varying degrees through stratigraphic and/or fracture  
24 communication. In the erratic nature of this reservoir  
25 development in the Devonian, coupled with the complex

1 pattern of faulting as a result have been some isolated  
2 areas of the reservoir system that have not been drained by  
3 previous producing wells.

4 Q. Let's go to what has been marked Manzano Exhibit  
5 Number 5, your Devonian horizon time-structure map, and I'd  
6 ask you to review the information on this exhibit for Mr.  
7 Ashley.

8 A. Okay, Exhibit Number 5 is a time-structure map  
9 drawn from the 3-D seismic survey that we have over King  
10 Field. On this -- it's blown up to a rather large scale,  
11 one inch equals 500 feet -- you can see the proposed 80-  
12 acre unit outline in orange. You can also see the various  
13 wells in the vicinity of the unit outline, as well as the  
14 planned borehole trajectory of the State C 3 well. These  
15 are 4-millisecond contours, which in this particular area  
16 equate to roughly 30 to 35 feet of depth.

17 Also shown, of course, are the various wells that  
18 have produced from the Devonian in the immediate area, and  
19 those shown with an angular straight line through the well,  
20 green colored, are abandoned Devonian wells. And then  
21 again, the only producing Devonian well at this particular  
22 time is the Reed Number 2.

23 What this map shows is that we've got a very  
24 small upthrown structural closure that is literally  
25 centered right at the section line, and this map is similar

1 if not identical to the map that was shown prior to the  
2 approval under the pre-existing orders to drill the State C  
3 Paladin well.

4 Q. Has Manzano been able to estimate the oil that  
5 can be recovered from this lateral wellbore?

6 A. Yeah, we estimate that there is approximately  
7 250,000 to 350,000 barrels of recoverable oil from the  
8 proposed horizontal well. And we believe these reserves  
9 can only be commercially exploited through the drilling of  
10 the proposed horizontal borehole and that they're not  
11 available through vertical drilling in this area.

12 Q. Is Manzano Exhibit 6 a summary of the geological  
13 presentation?

14 A. It is.

15 Q. And what does your study tell you about the  
16 subject formation in this particular area?

17 A. Well, to kind of repeat myself, the reservoir is  
18 comprised of randomly distributed pockets of reservoir that  
19 are interconnected to varying degrees, and some of these  
20 reservoir pockets, as defined by the reprocessed 3-D  
21 seismic, are indicated to be undrained. And this is one  
22 area where we believe there is a significant number of  
23 reservoir pockets that have not been drained by offset  
24 wells.

25 And so what we want to do is -- Obviously, the

1 first well didn't find any. And we reprocessed the data  
2 subsequent to drilling the first well, and now what we want  
3 to do is utilize that borehole and drill a horizontal well  
4 along that path to interconnect several seismically defined  
5 reservoir pockets. That's the idea.

6 Q. All right, let's talk about the directional  
7 wellbore. Let's go to Exhibit Number 7. Would you  
8 identify this, please?

9 A. This is a Form C-102 that was filed prior to the  
10 drilling of the -- or with the drilling application, I  
11 should say, of the original Paladin Unit Number 1 well, or  
12 also known as the Paladin State C 3 well, showing the  
13 original surface location to be 1550 feet from the north  
14 line and 10 feet from the west line of Section 36.

15 Q. The project area for this directional wellbore  
16 would be the same as the unit boundary as shown on this  
17 exhibit in red?

18 A. That's correct.

19 Q. Okay, and then the second page?

20 A. The second page is essentially a photocopy of the  
21 same C-102 plat shown, but in addition we've drawn a  
22 producing area which is a standard 330-foot setback from  
23 the edge of the project area, showing the location of the  
24 producing area within the 80-acre unit.

25 And it also shows the intended bottomhole

1 location of the horizontal wellbore to be 190 feet from the  
2 east line of Section 35 and 2400 feet from the north line.

3 Q. And so how much closer to the southern boundary  
4 of the unit is the end of the lateral wellbore? How much  
5 closer than permitted by the general rules?

6 A. Ninety feet.

7 Q. And is the reason you're seeking approval of an  
8 unorthodox bottomhole well location?

9 A. That's correct.

10 Q. Who is the offsetting operator to the south?

11 A. The offsetting operator to the south is Yates  
12 Petroleum Corporation, as identified on the lease plat.  
13 They have the lease in the southwest quarter of Section 3.

14 Q. And then does Manzano operate all the remaining  
15 acreage to the south of this location?

16 A. They do.

17 Q. Would you identify what has been marked as  
18 Exhibit Number 8?

19 A. Exhibit Number 8 is a notification letter sent to  
20 Yates Petroleum Corporation, attention Randy Patterson,  
21 wherein they describe -- this letter describes our intent  
22 to drill the well and the fact that it is an unorthodox  
23 location.

24 Q. And has Mr. Patterson on the third page of this  
25 exhibit waived objection for Yates Petroleum Corporation?

1           A.    He has, he's executed a waiver.

2           Q.    Is Exhibit Number 9 an affidavit confirming that  
3 notice of today's hearing has been provided to Yates as the  
4 only affected offsetting operator in accordance with Oil  
5 Conservation Division rules?

6           A.    It is.

7           Q.    All right.  We've provided notice to whom?

8           A.    Pardon me?

9           Q.    To whom have we provided notice?

10          A.    Oh, we've also provided notice to -- For the  
11 unit, with regard to the unit, we have not provided any  
12 notice since the only lands subject to the unit agreement  
13 are those who have voluntarily joined the unit.

14                    And for the unorthodox location, we have provided  
15 notification to Yates Petroleum Corporation and Paladin  
16 Corporation, Paladin Energy Corporation.  Paladin Energy  
17 operates the producing well immediately to the north, which  
18 is in a standard 40-acre tract unit, and they're also  
19 participants, voluntary participants within the unit.

20          Q.    And that notice was provided merely as a matter  
21 of courtesy to Paladin?

22          A.    Correct.

23          Q.    Are there any other interest owners who are  
24 affected by this proposal?

25          A.    No.

1 Q. How soon does Manzano plan to re-enter and drill  
2 the lateral portion of the wellbore?

3 A. We intend to commence operations sometime during  
4 the first two weeks of December.

5 Q. Does Manzano request that the order be expedited  
6 to the fullest extent possible?

7 A. We do.

8 Q. In your opinion, will approval of this  
9 Application be in the best interest of conservation, the  
10 prevention of waste and the protection of correlative  
11 rights?

12 A. Yes, it will.

13 Q. Were Exhibits 1 through 3 and 5 through 9  
14 prepared by you or compiled under your direction?

15 A. They were.

16 MR. CARR: Mr. Examiner, we move the admission  
17 into evidence of Manzano Exhibits 1 through 3 and 5 through  
18 9.

19 EXAMINER ASHLEY: Exhibits 1 through 3 and 5  
20 through 9 will be admitted as evidence at this time.

21 MR. CARR: Exhibit 4 was to be the letter from  
22 the State Land Office --

23 EXAMINER ASHLEY: Okay.

24 MR. CARR: -- so that's why we have that break in  
25 the exhibit numbers.



1 will say that the southern acreage immediately to the south  
2 is also operated by Manzano, so we're encroaching on  
3 ourself there. And then the only lease that we're really  
4 encroaching on with regard to another operator is the Yates  
5 Pet acreage, in the southwest quarter of Section 36, and  
6 they've signed a waiver.

7           But to answer your question, I mean, we could  
8 have cut it short. It may not be drilled to that extent.  
9 In the event that we find what we're looking for and we  
10 deem it adequate, we'll stop, to be real honest with you,  
11 because it's just going to cost a ton of money to continue  
12 the operation. It's very expensive.

13           Q.    So you'll be 190 feet from the southern section  
14 line?

15           A.    Pardon me?

16           Q.    You'll be 190 feet from that quarter-section  
17 line --

18           A.    That's correct.

19           Q.    -- is that correct? From the southern quarter-  
20 section line, or from the --

21           A.    No, actually we'll be 240 feet from the southern  
22 boundary of the unit, and we'll be 190 feet from the  
23 eastern -- I should say from the section line, which is  
24 really the centerline of the unit.

25           Q.    Yeah.

1           A.    Yeah, so we're really kind of encroaching on the  
2 very northwesternmost corner of the Yates acreage.

3           Q.    Do they have any kind of stipulations of  
4 stipulations for their waiver?

5           MR. CARR:  No, they do not, none.

6           Q.    (By Examiner Ashley)  And what's the project  
7 name?  Will it be the same as what's in the original unit?

8           A.    I doubt it.  I think that Paladin named the  
9 original unit the Paladin unit.

10          Q.    Uh-huh.

11          A.    I don't believe that Manzano will name it the  
12 Paladin Unit.  I'm not --

13          MR. CARR:  It's going to be the Manzano King  
14 Unit.  We had originally proposed with the word  
15 "Exploratory", and the Land Office, I believe, is going to  
16 take that out.  So it would be the Manzano King Unit, King  
17 State Unit.

18          EXAMINER ASHLEY:  Mr. Carr, could you explain to  
19 me again what the Land Office is doing?

20          MR. CARR:  I can give you a short version or a  
21 long version.

22                Earlier this year the Land Office started  
23 excluding from voluntary units any tract on which there had  
24 previously been a well.  Anytime in the history of the  
25 acreage had a well penetrated a formation subject to the

1 unit agreement, the Land Office refused to approve it until  
2 that acreage was contracted out.

3 It initially was a unit involving a Yates  
4 proposal, a four-section unit, when they required that  
5 virtually the center of the unit be taken out, because in  
6 1954 one of the formations had been penetrated by a well,  
7 never tested in the interval, never produced, plugged and  
8 abandoned.

9 There were meetings between Yates and  
10 representatives of the Land Office concerning this, and at  
11 that time the Land Office decided they would come forward  
12 with what they called a development unit agreement. They  
13 have been working on that, but it isn't finished yet.

14 And so when we filed this one, they took the  
15 original wellbore, the wellbore that we want to re-enter,  
16 and they said, Well, this wellbore has penetrated the  
17 formation, therefore you can't re-form the unit.

18 We talked to them. They agreed this at least  
19 would qualify as a development unit, and they have agreed  
20 that they will approve it, instructed us to use the  
21 exploratory unit form, have told us that the preliminary  
22 approval we will receive will not add any requirements but  
23 may delete a paragraph or two from their exploratory form  
24 and that it will be approved.

25 So we've been going through this exercise with

1 the Land Office simply to re-approve this unit, because  
 2 there has previously been a well drilled to the Devonian,  
 3 even though it is the very well we're trying to re-enter.

4 So we've been through this with the Land Office,  
 5 but they -- Mr. Martinez called yesterday, confirmed the  
 6 letter was being prepared, that it was going to be reviewed  
 7 by their law department or their attorneys and that it  
 8 would be sent to us as soon as we had it in final form. We  
 9 were hopeful we would have it yesterday. We think we will  
 10 have it in the next couple of days.

11 EXAMINER ASHLEY: Will you submit a copy of that?

12 MR. CARR: I will send a copy to you as soon as  
 13 we receive it.

14 EXAMINER ASHLEY: Okay, I have nothing further.  
 15 Thank you, Mr. Bahlburg.

16 THE WITNESS: Thank you.

17 MR. CARR: And that concludes our presentation in  
 18 this matter.

19 EXAMINER ASHLEY: There being nothing further in  
 20 these cases, Cases 12,515 and 12,516 will be taken under  
 21 advisement.

22 (Thereupon, these proceedings were concluded at  
 23 4:06 p.m.)

I do hereby certify that the foregoing is  
 a complete record of the proceedings in  
 the Examiner hearing of Case No. 12515, 12516  
 heard by me on 11-16-00

*Mark Bahlburg*, Examiner  
 Oil Conservation Division

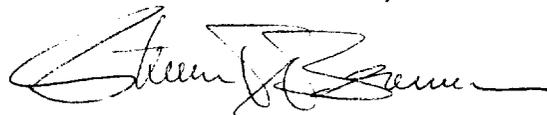
## CERTIFICATE OF REPORTER

STATE OF NEW MEXICO )  
 ) ss.  
 COUNTY OF SANTA FE )

I, Steven T. Brenner, Certified Court Reporter and Notary Public, HEREBY CERTIFY that the foregoing transcript of proceedings before the Oil Conservation Division was reported by me; that I transcribed my notes; and that the foregoing is a true and accurate record of the proceedings.

I FURTHER CERTIFY that I am not a relative or employee of any of the parties or attorneys involved in this matter and that I have no personal interest in the final disposition of this matter.

WITNESS MY HAND AND SEAL November 26th, 2000.




---

STEVEN T. BRENNER  
 CCR No. 7

My commission expires: October 14, 2002