

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: ) CASE NO. 12,425  
)  
APPLICATION OF MANZANO OIL CORPORATION )  
FOR AN UNORTHODOX SUBSURFACE OIL WELL )  
LOCATION, LEA COUNTY, NEW MEXICO )

ORIGINAL

REPORTER'S TRANSCRIPT OF PROCEEDINGS

EXAMINER HEARING

BEFORE: MARK ASHLEY, Hearing Examiner

June 1st, 2000

Santa Fe, New Mexico

This matter came on for hearing before the New Mexico Oil Conservation Division, MARK ASHLEY, Hearing Examiner, on Thursday, June 1st, 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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June 1st, 2000  
Examiner Hearing  
CASE NO. 12,425

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

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1 WHEREUPON, the following proceedings were had at  
2 12:05 p.m.:

3 EXAMINER ASHLEY: The Division calls Case 12,425.

4 MS. HEBERT: Application of Manzano Oil  
5 Corporation for an unorthodox subsurface oil well location,  
6 Lea County, New Mexico.

7 EXAMINER ASHLEY: Call for appearances.

8 MR. BRUCE: Mr. Examiner, Jim Bruce of Santa Fe,  
9 representing the Applicant. I have two witnesses to be  
10 sworn.

11 EXAMINER ASHLEY: Additional appearances?  
12 Will the witnesses please rise to be sworn in?  
13 (Thereupon, the witnesses were sworn.)

14 MIKE BROWN,  
15 the witness herein, after having been first duly sworn upon  
16 his oath, was examined and testified as follows:

17 DIRECT EXAMINATION

18 BY MR. BRUCE:

19 Q. Will you please state your name and city of  
20 residence?

21 A. My name is Mike Brown, from Roswell, New Mexico.

22 Q. Who do you work for and in what capacity?

23 A. I'm employed by Manzano Oil Corporation as their  
24 geologist.

25 Q. Have you previously testified before the Division

1 as a geologist?

2 A. I have.

3 Q. And were your credentials as an expert accepted  
4 as a matter of record?

5 A. They were.

6 Q. And are you familiar with the geologic matters  
7 involved in this case?

8 A. Yes, I am.

9 MR. BRUCE: Mr. Examiner, I'd tender Mr. Brown as  
10 an expert petroleum geologist.

11 EXAMINER ASHLEY: Mr. Brown is so qualified.

12 Q. (By Mr. Bruce) What does Manzano seek in this  
13 case?

14 A. We seek approval for an unorthodox oil well  
15 location for the Manzano Oil Corporation Cayuma Well Number  
16 1. It's located in Lots 12 and 13 of Section 1, Township  
17 16 South, Range 36 East, Lea County, New Mexico.

18 Q. This well has already been drilled, has it not?

19 A. Yes, it has.

20 Q. What is Exhibit 1?

21 A. Exhibit 1 is a land plat showing the -- in  
22 yellow, the 80-acre proration unit that we want to dedicate  
23 to the Cayuma Number 1. This well was completed or is  
24 completed in the Northeast Lovington-Penn Pool, which is  
25 spaced on 80-acre spacing, with wells to be within 150 feet

1 of the center of a quarter quarter government section.

2 Q. What is the history of this well?

3 A. Basically, this well consists of three wellbores,  
4 the first of which was drilled by Concho Resources as the  
5 Cayuma Number 1. It was drilled in April of 1999. Manzano  
6 Oil had a very small interest in this well. It was drilled  
7 from a surface location of 3580 from the south line, 990  
8 from the west line, and that surface location was dictated  
9 by housing and other cultural concerns.

10 The well was kicked to an orthodox by Concho, and  
11 that bottomhole location was 3169 from the south line and  
12 636 feet from the west line.

13 The well was dry and was abandoned, at which  
14 point Concho Resources decided that it no longer wanted to  
15 be involved in this proration unit and sold their interest  
16 to Manzano, et al., and that was in August of 1999.

17 Manzano applied for an unorthodox location to  
18 drill -- or actually to drill a vertical well from the  
19 surface location. That order was approved. It's  
20 Administrative Order NSL-4417.

21 Manzano then re-entered the Concho well and  
22 drilled a vertical well. That location, as we'll see in a  
23 moment, was also very tight. It was a slight improvement  
24 over the Concho well, but we deemed it uneconomic, although  
25 we had some encouragement.

1           At that point, Manzano was ready to go ahead and  
2 plug and abandon the well. However, we had some working  
3 interest owners and a geophysicist that believed that if we  
4 could move just 250 feet from the bottomhole location, that  
5 we would get in a better part of the mound and we might  
6 could make a commercial completion.

7           So we went ahead and did the kick to -- in a  
8 directional hole, and we drilled to a location of 3807 feet  
9 from the south line and 1180 feet from the west line, and  
10 we did that February 16th of this year.

11           The new third location, while tight, it did  
12 appear to be marginally economic, so we did recommend to  
13 complete the well, which we did.

14           Q. And the next witness will give more information  
15 on the well completion and well chronology, will he not?

16           A. Yes, he will.

17           Q. Let's move on to your Exhibit 2, and could you  
18 discuss the geology in this particular area, the Strawn  
19 geology?

20           A. Right. This exhibit is the Strawn -- middle  
21 Strawn horizons. It's an isochron map generated from our  
22 3-D survey which Manzano, et al., shot a few years ago.

23           This map was submitted to the OCD when we  
24 applied, when Manzano applied, for the unorthodox location  
25 on the vertical wellbore.

1           On the map you see noted the Concho Cayuma Number  
2   1 bottomhole location and then the proposed location for  
3   the vertical wellbore that we were applying for.

4           The Concho well, as you can kind of see, it's off  
5   the mound, and that's exactly what they found. It was just  
6   tight. We believed at the time that if we could drill the  
7   vertical location, while it wasn't the best location on the  
8   mound, we thought it would be sufficient to give us enough  
9   porosity and perm to make an economic well. As we said, we  
10  drilled it, and it was tight and uneconomic.

11           We then chose the best location on the 3-D, and  
12  that was a location 250 feet away to the northeast, and it  
13  had the best amplitude, it was the thickest on isochron and  
14  would be the only location, or the best location that we  
15  could drill to exploit this mound.

16           Q.   Why don't you move on to your Exhibit 3 and  
17  discuss what you actually found in each of the three  
18  wellbores?

19           A.   Okay. Exhibit 3 is a cross-section that  
20  basically runs in chronological order from left to right.  
21  I've hung the logs on the top of the Strawn, I've noted the  
22  base of the Strawn pay; they're in blue. And the Concho  
23  well on the left, if you'll look, I've colored in the  
24  neutron porosity that's greater than zero, and I've colored  
25  that in the orange.



1           Basically what this well had was neutron porosity  
2   at 2 or less percent. It was extremely tight.

3           Now, the density curve appears to have some  
4   porosity, but it's not real; it's caused by washout and  
5   borehole rugosity. And I've shown the density-correction  
6   curve, kind of outlined it in red, and you can see it is  
7   much greater than the 2 Division cutoff that we normally  
8   use. So the density curve is not showing us real porosity;  
9   the neutron curve is.

10           The drill stem test was run over the interval and  
11   basically confirmed what we see here. It was extremely  
12   tight. The final shut-in pressure only got to 1246 pounds,  
13   which is very, very tight, and no indications of oil and  
14   gas at all.

15           The middle well is the Manzano Oil Cayuma 1  
16   vertical hole, and as you can see looking at the neutron  
17   porosity, there is a little bit more porosity development.  
18   As a matter of fact, we have maybe three feet of pay. The  
19   well overall is a little bit cleaner, and it does appear  
20   like we've got 10 or 15 feet more of the mound facies. But  
21   this well was drill stem tested and had .44 barrels of free  
22   oil. Pressures weren't too bad at 3995 on the pressure,  
23   but the buildups were very slow and appeared to be  
24   extremely tight.

25           And at this point Manzano was not willing to set

1 pipe, because we felt it would be a very low producing  
2 well, if it produced at all.

3 We moved to the directional hole, which is the  
4 well on the right, and this is, by 3-D, the thickest, most  
5 well developed part of the mound. And as you see, it's not  
6 very thick, nor is it very well developed. We have a  
7 little bit more neutron porosity and a little bit more pay.  
8 I'm calling it about six feet of total pay, as opposed to  
9 three feet on the other well.

10 We drill stem tested this well and had 1.19  
11 barrels of free oil. Pressure was 4000 pounds. But once  
12 again, it indicated extremely tight reservoir conditions.  
13 However, it was -- the results of the test were just  
14 slightly better. And at this point, while we had our  
15 reservations, we did decide to attempt to complete the  
16 well.

17 We perforated from 11,631 to -678 and acidized  
18 with 23,000 gallons of gelled acid. Had an initial  
19 production of 90 barrels of oil per day, but as the  
20 engineering witness will show in a minute, within two weeks  
21 we're down to 45, and no sign of leveling out.

22 So the DSTs and the logs were telling us what we  
23 suspected; it's a very tight reservoir. And we've drilled  
24 the best part of the mound, so my interpretation is that  
25 the entire mound is just tight.

1 Q. In your opinion, is the unorthodox in the third  
2 well, if you will, the only reasonable opportunity to  
3 complete a producing well in the Strawn in this well unit?

4 A. Yes, I do.

5 Q. In looking -- Let's go back to your Exhibit 2 for  
6 a minute, as far as the offsetting acreage. You drilled  
7 into the best part of the mound. Would you recommend any  
8 well be drilled in the unit to the east, Lots 11 and 14?

9 A. No, I wouldn't. We have two wells, basically,  
10 the vertical well and the directional well that's within  
11 the best contour, supposedly, of the mound, based on  
12 amplitude. There is no pay within that -- on the east  
13 offsetting lease, and given the results of our two wells I  
14 don't think there's an economic well to be drilled over  
15 there.

16 Q. And even if there is a little bit of the mound  
17 over there, it's really too tight to even drill it?

18 A. That's correct.

19 Q. In hindsight, would you have drilled this well,  
20 looking at it now?

21 A. No, I would not.

22 Q. Now, finally, the offset acreage, as far as  
23 notice to interest owners, are Lots 11 and 14, are they  
24 not, Mr. Brown?

25 A. Yes, they are.

1 Q. Are Bristol Resources and Mark Chapman the only  
2 other offset working interest owners?

3 A. They are.

4 Q. And were they given notice of this hearing?

5 A. Yes, they were.

6 Q. And is my affidavit of notice submitted as  
7 Exhibit 11?

8 A. Yes, it is.

9 Q. In your opinion, is the granting of Manzano's  
10 Application in the interest of conservation and the  
11 prevention of waste?

12 A. Yes, it is.

13 Q. And were Exhibits 1 through 3 and 11 prepared by  
14 you or under your supervision or compiled from company  
15 business records?

16 A. They were.

17 MR. BRUCE: Mr. Examiner, I'd move the admission  
18 of Manzano's Exhibits 1 through 3 and 11.

19 EXAMINER ASHLEY: Exhibits 1 through 3 and 11  
20 will be admitted as evidence.

21 EXAMINATION

22 BY EXAMINER ASHLEY:

23 Q. Mr. Brown, in Lots 11 and 14 does Manzano have an  
24 interest in those?

25 A. Yes, we have a controlling interest in it. I'm

1 not sure of the exact number, but we would be operator of  
2 the well in those tracts.

3 Q. And the parties that you notified, this Bristol  
4 Resources, do they have any interest in Lots 12 and 13?

5 A. In the current ones?

6 Q. Uh-huh. They're just in 11 and 14?

7 A. I think they're only in 11 and 14.

8 Q. And you received no objection from them?

9 A. No, we did not.

10 Q. On Exhibit 11, does Mark Chapman represent all of  
11 the Bristol interests? Is that --

12 MR. BRUCE: He is a separate interest owner,  
13 yeah.

14 EXAMINER ASHLEY: Okay, have you received  
15 anything, any return receipt from Bristol Resources?

16 MR. BRUCE: No, I haven't, Mr. Examiner, but I  
17 will check my file again. I do know that they were  
18 notified -- that the original application was applied for  
19 administratively, the vertical well, and then the  
20 subsequent directional well was applied for  
21 administratively, and Mr. Stogner set it for hearing. But  
22 Bristol was notified each of those two times, and I do have  
23 certified return receipts from them.

24 I went through my files last week and I -- you  
25 know, sometimes these companies don't pick them up. But I

1 did get two other green cards back from them, and if I find  
2 it I will submit it to you, but I don't think I ever  
3 received them back.

4 Q. (By Examiner Ashley) Mr. Brown, Administrative  
5 Order NSL-4417 allowed you to re-enter this well and drill  
6 vertically?

7 A. Yes, that's correct.

8 Q. But once you drilled vertically, you then chose  
9 to drill directionally to the current bottomhole location?

10 A. That's correct.

11 Q. Did you seek a directional drilling approval from  
12 the District for drilling this as a directional well?

13 A. That, I guess, would have to be addressed by the  
14 engineer. I did not personally --

15 Q. Okay.

16 A. -- was not involved in that. I do now that our  
17 option at that point was, if we released the rig, it would  
18 not return, we wouldn't drill the directional well. The  
19 only thing that made it even considerable, something to  
20 consider, was the rig was already there and available, and  
21 we could just quickly check 250 feet away. But if we  
22 released the rig, we would never have brought it back; it  
23 would be too expensive.

24 EXAMINER ASHLEY: I have nothing further, thank  
25 you.

1 THE WITNESS: All right.

2 DONNIE E. BROWN,

3 the witness herein, after having been first duly sworn upon  
4 his oath, was examined and testified as follows:

5 DIRECT EXAMINATION

6 BY MR. BRUCE:

7 Q. Would you please state your name and city of  
8 residence?

9 A. My name is Donnie Brown, and I reside in Roswell,  
10 New Mexico.

11 Q. Who do you work for and in what capacity?

12 A. I work for Manzano Oil Corporation as a petroleum  
13 engineer.

14 Q. Have you previously testified before the  
15 Division?

16 A. Yes, I have.

17 Q. And were your credentials as an expert engineer  
18 accepted as a matter of record?

19 A. Yes, they were.

20 Q. And are you familiar with the engineering and  
21 with the drilling of this well?

22 A. Yes, I am.

23 EXAMINER ASHLEY: Mr. Examiner, I'd tender Mr.  
24 Brown as an expert engineer.

25 EXAMINER ASHLEY: Mr. Brown is so qualified.

1           Q.     (By Mr. Bruce) Mr. Brown, would you identify  
2 Exhibit 4 for the Examiner?

3           A.     Yes, Exhibit 4 is the original well drilled by  
4 Concho Resources -- it's the Cayuma Number 1 -- from the  
5 surface down to their kickoff point, 9330, the surface  
6 being the zero point on the X-Y axis, and it depicts the  
7 surface location away from the well as it penetrates to  
8 9330.

9                     At 9330, their kickoff point, they were 56 feet  
10 north of the surface location and 31 feet west of the  
11 surface location.

12                    The second page of this Exhibit 4 outlines what  
13 their intent was, their plan to deviate to the southwest,  
14 with the hole in, as indicated by the little X to the  
15 northwest of the zero-zero surface location. They intended  
16 to kick off and drill to the southwest, approximately 600  
17 foot south of the surface location and a little over 400  
18 foot west of the surface location, or some 705 feet from  
19 the surface location.

20                    The third page of this exhibit indicates what  
21 they actually did, the surveys. They did kick off at 9330  
22 feet, and they TD'd the hole at 11,840 feet. They were  
23 some 411 feet south of the surface location, 354 feet west  
24 of the surface location, at which time they DST'd their  
25 Strawn and decided it was a dry hole.



1 Q. Okay.

2 A. I'll go into these DSTs a little later on in the  
3 exhibit.

4 Q. Okay. Mr. Brown, let's move on to your Exhibit  
5 5, and maybe your exhibits -- at this point, your Exhibits  
6 5, 6 and 7 together, and could you give a chronology of the  
7 well and what occurred?

8 A. Yes. On January the 21st, 2000, we re-entered  
9 the well. On the 23rd we set a 125-sack cement plug from  
10 9402 back up to 9178, dressed it off at -- to 9257, and at  
11 that point we kicked off of our cement plug.

12 If you refer to Exhibit 6, we tied in essentially  
13 at the point where Concho had kicked off. We tied in some  
14 at the tie-in point, as indicated on the first page,  
15 Exhibit 1, to the northwest of the surface hole. The  
16 surface hole is indicated by zero-zero, the little dot to  
17 the southwest of that plat.

18 If you'll refer to page 3 of this exhibit, we  
19 kicked off at 9257. We were in a straight hole, some 57  
20 feet from the north of the hole and 28 foot west. We  
21 drilled to a total depth of 11,666, we DST'd the Strawn, we  
22 got a little gas and oil recovery. I'll go into the  
23 details of that later. Then we finished drilling down to  
24 11,860 and logged.

25 At that point, we were some 66 feet north of the

1 surface location and five feet east. And if you'll look on  
2 page 3, our maximum inclination or deviation from a  
3 straight hole was never more than one degree -- or there  
4 was one point -- one degree.

5 Q. On this Exhibit 6, Mr. Brown, per the original  
6 administrative unorthodox location order, the well was  
7 drilled to this straight hole?

8 A. That's correct.

9 Q. And you mentioned the difference north and east  
10 of the surface location. That was just a result of the  
11 natural drift of the well?

12 A. That's true.

13 Q. Okay. Go ahead with the rest of your testimony,  
14 please.

15 A. At that point, we decided to set another cement  
16 plug and kick off again and drill directionally to the  
17 northeast for reasons that the geologist explained. We  
18 thought we could get into a porosity zone with a vertical  
19 hole without using directional tools and a downhole motor,  
20 but that didn't prove the case, so we thought we'd give it  
21 our best shot and go to a maximum anomaly, as indicated by  
22 3-D.

23 We set a 245-sack cement plug at 10,700 feet,  
24 back to 10,376 feet. We dressed it off at 10,500 and at  
25 that point kicked off and drilled directionally to the

1 northeast.

2 We drilled to 11,677 -- I'm sorry, we drilled to  
3 11,770 and DST'd the Strawn again. We got better results,  
4 more recovery, still indicated tight. There was a big  
5 question about whether it was still commercial or not, but  
6 they decided to run pipe, so we drilled down to 11,770 and  
7 ran our logs and ran pipe.

8 Exhibit 7 is the history of our directional hole,  
9 third hole, drilling towards the northeast. As you can see  
10 on page 2, we had dressed it off to 10,500. At that point  
11 we were basically straight at 1.8-degree deviation. We  
12 were some 69 foot north of the surface location and about  
13 eight foot west. We drilled to a TD of 11,770, on page 3,  
14 had an inclination of 3.6 degrees [sic]. At that point we  
15 were 227 feet north of the surface and 189 feet east of the  
16 surface location.

17 Q. Now, Mr. Brown, you mentioned these footage  
18 figures, 226 feet north and 189 feet east of the surface  
19 location. That is at total depth, correct?

20 A. That's correct.

21 Q. What -- Approximately, could you point out on  
22 this exhibit where the location is at the producing  
23 interval?

24 A. Let's see, the producing interval -- looking at  
25 the -- I believe you called it Exhibit 3.

1 Q. Yes.

2 A. The top perforations was 11,610. That would put  
3 us probably 205 feet north and about 164 feet east --

4 Q. Okay.

5 A. -- of the surface location.

6 Q. Okay.

7 A. Now, when we drilled the vertical hole -- this is  
8 not in my notes; I'm ad libbing here -- it was on a Sunday  
9 and I called the OCD. I can't swear to it, but I believe I  
10 did. I called the OCD and asked for Gary Wink, because  
11 he's the only guy I ever talk to when it comes to setting  
12 plugs or P-and-A'ing a well or operational problems.

13 I really didn't call him with the intent to ask  
14 permission to drill a directional hole, unorthodox  
15 directional hole. It was my understanding that this was an  
16 unorthodox-approved well, and I really didn't know you had  
17 to ask permission to drill an unorthodox hole in a well  
18 that was already in an orthodox.

19 What I called for was, we were going to set a  
20 plug at 10,700 feet, about 1000 feet above TD, and I  
21 remember telling -- asking him, did we have to set a  
22 bottomhole plug? Could we consider this our first plug,  
23 since we were on a kickoff, and drill directionally? And I  
24 was allowed to go ahead and set that plug without setting a  
25 bottomhole plug. You know, I told him we were going to

1 kick off directionally, but I really didn't ask permission.  
2 I was mostly concerned with setting the bottomhole plug.  
3 Since I didn't take notes, I can't document this. And  
4 according to the Commission, Gary doesn't remember the  
5 call. So that's about all I can say about that.

6 Q. The geologist stated that if the rig had had to  
7 move off, this wouldn't have been done. If you had had to  
8 stop drilling while getting permission, what was the cost  
9 of the rig?

10 A. Day work was \$6000 a day. That wouldn't have  
11 been a problem if you could have had an answer that day.  
12 But rig mobilization in and out, plus rig-up and time, was  
13 about \$40,000. It was \$29,000 for mobilization and two  
14 days rig up and rig down, about \$12,000, so that would be  
15 close to \$40,000 if you had to move off and then move back,  
16 plus all the trucking for directional tools and what have  
17 you. I don't believe the working interest owners would  
18 have elected to drill a hole if they had to go through that  
19 extra expense.

20 Q. Let's move on to your next exhibit, Number 8, and  
21 could you briefly go over the data on that? And I think  
22 the first witness might have discussed certain of the  
23 items.

24 A. Yes, Number 8 is the three DSTs from the Concho  
25 well, which was to the southwest of the surface location,

1 the vertical hole at the surface location, and the  
2 directional well drilled to the northeast, the third hole.

3 As you can -- On their test, it correlates with  
4 their neutron porosity log with -- only had two percent.  
5 They had very little buildup in flow time during their  
6 initial flow periods. It was their shut-in time, over an  
7 hour and a half on their first shut in and second shut in,  
8 it was so tight they got very little buildup from their  
9 initial flow. You could not establish what we call a P\*,  
10 which is the true static reservoir pressure. They didn't  
11 have enough perm to establish that.

12 And in their pipe recovery, they had 2407 feet of  
13 total recovery, all of which was mud or water cushion, no  
14 signs of oil, and in their sample recovery they had 2000  
15 cc's, consisting only of drilling mud.

16 When we DST'd the same interval in our straight  
17 hole, we picked up about two or three feet of porosity, but  
18 it was enough to establish a true reservoir pressure of  
19 4100, which we know is normal in the area, because we  
20 produced several Strawn wells in that area, and they're all  
21 in that 4100 range.

22 We did get gas to surface 30 minutes after the  
23 initial shut-in, and we got 551 feet of total pipe  
24 recovery, of which that 90 feet was free oil. And we did  
25 recover 800 cc's of 42-gravity oil in our sample. And we

1 got some little encouragement that this was -- we were  
2 improving as far as gaining in porosity and reservoir  
3 quality, but it was just too tight to be economical to  
4 produce. And that's where we made the point, we'd rather  
5 drill a directional hole, rather than try to complete in  
6 this hole.

7           And when we drilled our directional hole, we did  
8 pick three or four extra feet of porosity. We got enough  
9 porosity to establish the same reservoir characteristics as  
10 far as static reservoir pressure. We had about the same  
11 flowing pressure, which indicated it was tight, low  
12 productivity. We got about a third more pipe recovery, 871  
13 feet of total recovery. 83 feet of that was free oil, and  
14 in the sampler we got 1150 cc's of oil as compared to 800  
15 cc's in the straight hole.

16           Our analysis of the pressure buildup indicated  
17 that in our first hole we had a transmissibility of 5; in  
18 our second, directional, hole we had a transmissibility of  
19 42. So as far as the ability to produce the wellbore, we  
20 had an improvement of eight times, but it was still a  
21 question of whether you could make a commercial well out of  
22 it.

23           Our model analysis indicated that if we could  
24 stimulate this hole and improve the *in situ* permeability by  
25 a factor of five, we could get a small flowing well. And

1 that was strictly theory, but it was enough for people to  
2 spend their money on and then go for a completion, which is  
3 what we did.

4 Q. Okay. Now, your next exhibit, Exhibit 9, is  
5 simply the acreage dedication plat for the well as  
6 completed?

7 A. That's correct. It simply shows the surface  
8 location versus the bottomhole location. I had sent the  
9 directional survey to the OCD showing the two holes, but  
10 they said they weren't used to looking at that, they would  
11 prefer one of these. So as an afterthought, this is what I  
12 sent to the OCD in Hobbs.

13 Q. Okay. Finally, could you identify Exhibit 10 and  
14 discuss for the Examiner production from the well?

15 A. Yes, but continuing with my discussion, we did  
16 run pipe, and we perforated 11,631 to -677. That was an  
17 interval of 46 feet. We had a total of 14 foot of that  
18 actually perforated.

19 We initially acidized with 3000 gallons at 3 1/2  
20 barrels a minute at 6700 pounds, just to make sure it would  
21 accept acid before we went to the bigger acid job. As you  
22 can tell, it acidized extremely tight, but we were able to  
23 pump it away.

24 We swabbed our load back and then we swabbed  
25 recovered oil for the first couple hours of each day, and



1     thereafter we had no recovery. It was strictly  
2     noncommercial at that point, with 3000 of acid.

3             So we proceed with our plans to try to increase  
4     the permeability of the *in situ* by a factor of five with  
5     the 23,000 gallons of 20-percent gel acid, and we pumped  
6     that away at 13.8 barrels a minute at 6800. After we  
7     cleaned up our log and produced it, the first day of  
8     production we flowed 90 barrels of oil and 118 MCF of gas  
9     with a GOR of 1311, which was a normal GOR for the Strawn  
10    reservoir in that area.

11            Exhibit 10 shows our production history from that  
12    initial 90 barrels of oil when it went on line on May the  
13    17th, started out at a flowing pressure of 490 barrels of  
14    oil, and within 15 days, May 31st, is flowing by head from  
15    -- various, from 300 to 250 pounds. It's down to 45  
16    barrels of oil per day and 76 MCF of gas per day, a decline  
17    of some 50 percent, 15 days.

18            Q.    What would be your estimate of future production  
19    life from this well?

20            A.    I believe this will flow until it produces the  
21    stimulated area of the 23,000 gallons of acid, which is  
22    probably no more than 100 feet. At that point it will  
23    probably load up and die. We'll have to make efforts to  
24    pump it. It will pump inefficiently, because we'll have to  
25    pump it above the directional hole. And I doubt if the

1 reserves will be enough to pay for the well.

2 So basically, it's -- We're flowing now, but it's  
3 an uneconomical well.

4 Q. One final question on Exhibit 10: Did Manzano  
5 receive approval from the Director of the Hobbs Office to  
6 produce the well pending this hearing?

7 A. That's correct, we did.

8 Q. Were Exhibits 4 through 10 prepared by you or  
9 under your direction or compiled from company business  
10 records?

11 A. They were compiled by me.

12 Q. And in your opinion is the granting of Manzano's  
13 Application in the interest of conservation and the  
14 prevention of waste?

15 A. Yes, it is.

16 MR. BRUCE: Mr. Examiner, I'd move the admission  
17 of Manzano's Exhibits 4 through 10.

18 EXAMINER ASHLEY: Exhibits 4 through 10 will be  
19 admitted as evidence.

20 EXAMINATION

21 BY EXAMINER ASHLEY:

22 Q. Mr. Brown, you mentioned that this is a tight  
23 formation. Do you have any kind of estimate of what the  
24 drainage radius could be?

25 A. Less than 100 feet.

1           Q.    At what point did the District Office know that  
2 this was a directional well that you guys had kicked off?

3           A.    Kicked off -- I assumed they knew when I called  
4 and asked, that I hadn't set a bottomhole plug. Evidently,  
5 they did not.

6                   I had sent -- On the completion, I had sent this  
7 Exhibit 7 and Exhibit 6, but they were superimposed on one  
8 curve. And evidently that was confusing, and they didn't  
9 know we if ever drilled a straight hole. They thought we  
10 just went in there and went directional to begin with.

11          Q.    And then what happened?

12          A.    That's when they refused to give us an allowable  
13 pending this hearing. And I tried to call Chris Williams  
14 several times, and he never returned my call, just to tell  
15 him that, you know, it was a straight hole, and we went  
16 directionally, and I thought I had called the OCD and asked  
17 for permission not to set that bottom plug, and they knew  
18 it was going to be directional then, and nobody threw up a  
19 red flag that you can't do this. But he never returned my  
20 call.

21          Q.    So you say you did talk to somebody, you told  
22 them you did set a plug -- that you wanted to set a plug  
23 and that you were going to go directionally at that point?

24          A.    I can't swear to it, I don't have any documents.  
25 But I thought I talked to Gary Wink, that that's what we

1 were going to do. And according to correspondence between  
2 the OCD and the counsel, he doesn't recall the  
3 conversation.

4 MR. BRUCE: Mr. Examiner, in the Division's well  
5 file there is a C-103 that was dated March 16th by Manzano,  
6 and it was signed by Mr. Williams in the Hobbs office on  
7 March -- I can't tell the date. I think it's March 20th.

8 EXAMINER ASHLEY: And what does that say?

9 MR. BRUCE: I'll give you my copy, Mr. Examiner.  
10 It does refer to the drilling of the well. And shortly  
11 thereafter, we did file the request for administrative  
12 approval of the new well location with the Santa Fe office  
13 of the Division.

14 Q. (By Examiner Ashley) Okay, was this filed before  
15 you talked to the District, Mr. Brown? Was this C-103  
16 dated March -- I can't -- 20-something -- I can't tell  
17 exactly what it says.

18 A. No, because we kicked off February the 6th, when  
19 we set our second plug.

20 Q. I guess you're aware of the rule, the directional  
21 drilling rule that we have, Rule 111?

22 A. Yes. As I say, I had been told that the  
23 Application for an unorthodox location had been approved  
24 with no objection, so we were drilling a hole in an  
25 unorthodox location that had been approved, and we were

1 going directionally.

2 And when I called for the plug, I told them we  
3 were going directionally to the northeast, because that  
4 vertical hole was dry. And no objection was raised at that  
5 point. And nobody really said, Well, you've got to go back  
6 and get another unorthodox location.

7 EXAMINER ASHLEY: Okay, thank you. I have  
8 nothing further.

9 THE WITNESS: Thank you.

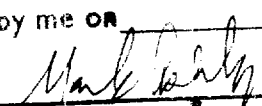
10 EXAMINER ASHLEY: There being nothing further in  
11 this case, Case 12,425 will be taken under advisement.

12 And this concludes today's hearing.

13 (Thereupon, these proceedings were concluded at  
14 12:52 p.m.)

15 \* \* \*

16  
17  
18  
19 I do hereby certify that the foregoing is  
20 a complete record of the proceedings of  
the Examiner hearing of Case No. 12425,  
heard by me on 6-1-2000.

21  
22   
23 Conservation Division  
24  
25

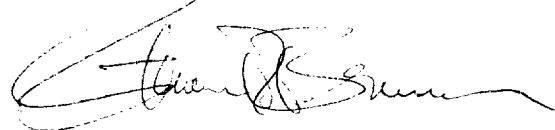
CERTIFICATE OF REPORTER

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 June 12th, 2000.




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STEVEN T. BRENNER  
 CCR No. 7

My commission expires: October 14, 2002