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. 11,616

APPLICATION OF MANZANO OIL CORPORATION FOR COMPULSORY POOLING AND UNORTHODOX WELL LOCATION, LEA COUNTY, NEW MEXICO

ORIGINAL

REPORTER'S TRANSCRIPT OF PROCEEDINGS

EXAMINER HEARING

BEFORE: DAVID R. CATANACH, Hearing Examiner

September 26th, 1996

Santa Fe, New Mexico

This matter came on for hearing before the New Mexico Oil Conservation Division, DAVID R. CATANACH,
Hearing Examiner, on Thursday, September 26th, 1996, 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.

* * *

I N D E X

September 26th, 1996 Examiner Hearing CASE NO. 11,616

	PAGE
APPEARANCES	3
APPLICANT'S WITNESSES:	
<pre>LARRY HUNNICUTT (Landman; President, Sun Valley Energy Corporation)</pre>	
Direct Examination by Ms. Trujillo	7
Examination by Examiner Catanach	18
MIKE BROWN (Geologist)	
Direct Examination by Ms. Trujillo	22
Examination by Examiner Catanach	29
REPORTER'S CERTIFICATE	32

EXHIBITS

Applicant's	Identified	Admitted
Exhibit 1	8	16
Exhibit 2	10	16
Exhibit 3	12	16
Exhibit 4	14	16
Exhibit 5	15	16
Exhibit 6	23	29

Exhibit 7 25 29 Exhibit 8 29 26

Exhibit 9 27 29

* * *

APPEARANCES

FOR THE DIVISION:

RAND L. CARROLL
Attorney at Law
Legal Counsel to the Division
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: TANYA M. TRUJILLO

FOR IRENE MAERTENS and DEENA ALLEN MAERTENS:

GEORGE R. THOMPSON
Business Manager
and
MARTIN G. BEISEL
Trustee
Dena B. Allen Trust
Asset Management
148 North Brookshire Ave.
Ventura, California 93003

* * *

```
WHEREUPON, the following proceedings were had at
1
2
     10:07 a.m.:
3
               EXAMINER CATANACH: At this time we'll call Case
     11,616.
 4
 5
               MR. CARROLL: Application of Manzano Oil
 6
     Corporation for compulsory pooling and unorthodox well
7
     location, Lea County, New Mexico.
8
               EXAMINER CATANACH: Are there appearances in this
     case?
9
10
               MS. TRUJILLO: Yes, Mr. Examiner.
                                                   I'm Tanya
11
     Trujillo from Campbell, Carr, Berge and Sheridan in Santa
12
     Fe, here today on behalf of the Applicant, Manzano Oil
     Corporation.
13
14
               We will have two witnesses to present this
15
     morning.
               EXAMINER CATANACH: Okay, any additional
16
17
     appearances at this time?
18
               MR. THOMPSON: Yeah, my name is George Thompson.
19
     I represent Irene Maertens and Deena Allen Maertens, who
     apparently have some property in this area, and we received
20
     a letter from attorney Carr on the 12th suggesting that
21
22
     everything had been done and Manzano had tried to contact
23
     us and work out some kind of an arrangement, and we hadn't
24
     received any contact.
25
               And basically all we're here to do is to make
```

sure that something doesn't happen that precludes our being 2 able to negotiate on behalf of my clients. I mean, we 3 really don't know what's happened. But we weren't contacted, so under Section 4 of the Application I have a 4 problem with that part. 5 6 EXAMINER CATANACH: Okay, Mr. Thompson, let's 7 hear some of the evidence that the Applicant puts on, and we'll see what the situation is. 8 9 MR. THOMPSON: Yeah, okay. 10 MR. CARROLL: Mr. Thompson, we received a letter 11 from you, and you had a motion to continue? Are you --12 MR. THOMPSON: Well, the reason I filed a motion 13 to continue was simply because I felt that if some ruling was going to take place today, because of our not being 14 contacted and not being advised what the options were, I 15 certainly didn't want to see some ruling take place that 16 would lock us into a course of action that we would have to 17 take because we weren't contacted. So ... 18 19 MR. CARROLL: I guess my question is, are you 20 withdrawing your motion to continue, or do you want us to consider --21 MR. THOMPSON: Not at this time. 2.2 MR. CARROLL: Okay. You're not at this time 23 24 withdrawing your motion? MR. THOMPSON: The reason that I wanted to 25 No.

1 continue it was, I wanted to continue it until such time as 2 Manzano sat down with us at the table and explained to us what the option is and why our land is involved in this. 3 4 MR. CARROLL: I guess my question is, do you have 5 an objection with us hearing the case today? 6 MR. THOMPSON: I don't have an objection with you 7 hearing the case. The only objection I have is making any 8 ruling that would tie my clients to the compulsory pooling. 9 MR. CARROLL: Well, that's the purpose of the 10 hearing. 11 MR. THOMPSON: Well, yeah, but I gather --12 EXAMINER CATANACH: Let me -- What I would 13 suggest is that we hear the case, and if we deem it 14 necessary that you need further time to conduct 15 negotiations with the Applicant or if no negotiations have 16 taken place, we can continue the case after we've heard the evidence. 17 18 MR. THOMPSON: Well, I just want to make you 19 aware of the fact that they haven't contacted us. It may 20 just be an oversight. I'm not here to really cause any problems. By the same token, I don't want to give away any 21 22 advantage that we might have either. 23 MR. BEISEL: We just need an explanation. 24 MR. CARROLL: Okay, we've been made aware of it, 25 and hopefully Manzano can explain it.

1 EXAMINER CATANACH: Let's go ahead and hear the evidence, and then we'll decide what we need to do. 2 MS. TRUJILLO: Thank you. Mr. Examiner, our 3 first witness will be Mr. Hunnicutt, to present the land testimony, portion of the case. 5 The witnesses were previously sworn. 6 EXAMINER CATANACH: Okay, the record shall 7 reflect that these witnesses have previously been sworn in 8 and are still under oath. 9 10 LARRY HUNNICUTT, the witness herein, having been previously duly sworn upon 11 his oath, was examined and testified as follows: 12 DIRECT EXAMINATION 13 BY MS. TRUJILLO: 14 15 Mr. Hunnicutt, could you please, for the record, Q. 16 state your name and place of residence? 17 Α. My name is Larry Hunnicutt. I live in Roswell, New Mexico. 18 19 And by whom are you employed and in what 20 capacity? By Sun Valley Energy Corporation, as President, 21 2.2 since 1992. 23 And have you previously testified before the 24 Division or one of its Examiners and had your credentials accepted and made a part of the record? 25

1 Α. Yes, I have. Are you familiar with the Application filed in 2 this case? 3 Α. Yes, ma'am, I am. 4 5 Q. And are you familiar with the subject matter of this case? 6 7 Α. I am. 8 MS. TRUJILLO: Mr. Examiner, are the witness's 9 qualifications acceptable? 10 EXAMINER CATANACH: Yes, they are. 11 0. (By Ms. Trujillo) Mr. Hunnicutt, could you briefly explain what Manzano seeks with this Application? 12 13 We're seeking a compulsory pooling from the surface to the base of the Strawn formation, underlying the 14 15 southwest quarter of the northeast quarter of Section 11, 16 South, 36 East, and are requesting that the Double Eagle 16 Well Number 1 to be drilled at an unorthodox location 1500 17 feet from the north line and 2148 feet from the east line. 1.8 0. Have you prepared exhibits for introduction in 19 this case? 20 Α. I have. 21 Could you move to what we have marked as Exhibit 22 Q. Number 1? 23 24 Α. Yes, it's a standard county ownership map denoting the leasehold land and some of the mineral 25

ownership in and around Lovington.

You will notice Section 11 to the east, and you will see a yellow block there which indicates the southwest of the northeast quarter, and a dot along with an arrow for the proposed unorthodox location for the Double Eagle Number 1.

- Q. And this is a request for an unorthodox location, so you are required to give notice to any offsetting operators. Were there any offsetting operators that you needed to give notice to?
- A. We actually did. We provided notification to those in the northwest quarter, the only one being Chesapeake Operating Company, of Oklahoma City, and our company, Sun Valley, and obviously Manzano. And those are the only ones.
 - Q. And your ownership is where?
- A. Well, our ownership in -- in the northeast quarter?
 - Q. Yes.
 - A. Our ownership is all the north half of the northeast quarter, all of the southeast of the northeast quarter, and we own 38.07 mineral acres under lease in the southwest quarter of the northeast quarter, which leaves only 1.95 acres in the southwest of the northeast quarter that we're seeking compulsory pooling.

1 Q. Okay. And in the northwest quarter, what's the ownership in the south half of the northwest quarter? 2 3 We own approximately 30 acres. Chesapeake has leases on 40 acres. There are -- We have five acres 4 currently pending where we are waiting for the lease to 5 come into the bank. And the balance of it is unleased. 6 7 Q. Okay. Mr. Hunnicutt, what is the primary 8 objective of your proposed well? 9 Α. Our proposed primary objective is the Strawn formation at approximately 11,500 feet. Our secondary 10 11 objective is the Wolfcamp at approximately 10,500 feet. 12 Q. Okay. Could we move to what we have marked as 13 Exhibit Number 2, please, and describe this for the Examiner? 14 15 Α. This is a mineral leasehold takeoff prepared by a landman retained by our company, with a gentleman that's 16 17 done a lot of work over the years in these complicated titles. 18 19 EXAMINER CATANACH: Excuse me, Tanya, do you have 20 an extra set of exhibits that we could provide to Mr. Thompson? 21 MS. TRUJILLO: Oh, uh... 22 23 THE WITNESS: You'll note that it's of Section 24 11, covers the southwest quarter of the northeast quarter, 25 which is undivided common ownership in that 40-acres, and

the mineral owners are listed on the left.

Their net acres -- that's determined by an examination of the record title -- appears in the middle column.

And the lease status, you'll notice that Manzano Oil Corporation is the sole lessee. When you move to page 3 of this -- of the ownership summary, you will see that we have, starting with C.S. Longscope, seven unleased mineral interests.

- Q. (By Ms. Trujillo) And what was their percentage of -- What was their percentage in this unit?
- A. The unleased -- Well, leased, we now control 95.125 percent leasehold.

The unleased interest is .04875 [sic] percent of the total 40 acres. So it's less than half a percent.

- Q. And of the people who you have not leased with, what efforts have you made to locate them or to contact them?
- A. Well, we actually have sent them all letters indicating our willingness to develop the tract, and I've extended an offer. Most of this was done -- has been done over the last six months, more intently in the last couple of months due to the fact that we were successful in the Chipshot Number 1. And we made an offer for them to grant us a lease for a three-year term at the prevailing rate and

a 3/16 royalty, or, in the alternative, they could participate in the drilling of the well.

- Q. So currently only the six parties with less than a half-percent interest are the subject of this pooling case; is that correct?
 - A. Yes, and it's actually seven, if you'll --
 - Q. Oh, okay.
 - A. I had misspoken to you --
- Q. Okay.

A. -- when I counted these previously, and I apologize, but there are seven.

There is, on our Exhibit 3, a listing of those individuals, and we sent -- Our last letter dated April -- or excuse me, August 30th, was certified, and you can see the results of that letter.

We received return receipts from River Oaks and Nova Marley, were unable to arrive at any type of a lease, consummate any kind of a trade at all.

And then the other parties, the letters were returned, so obviously the addresses are inadequate. We consider them lost, even though we're now making another effort to see if we can't run through some of these counties in Texas, for instance, Brownwood, Terry County. We've got a -- We're looking through the records there to see if we can find something. But at this point that's the

last known address we have.

- Q. Do you feel you've made a good-faith effort to locate these remaining seven parties?
- A. Yes, I believe we have. And like I say, we've examined the lease records, the deed records, probate lien records, tax rolls, and we've been unable to go any further than this.
- Q. Now, Mr. Hunnicutt, Mr. Thompson's clients are not the parties whom you are pooling; is that correct?
- A. That's correct. You know, I apologize to Mr. Thompson. I didn't know that he was here. I had heard that he had contacted Manzano.

We show that they own a mineral interest actually in the north half of the northwest quarter of Section 11, which is actually a town lot, and I believe that -- I don't have the particular description of that town lot with me, but I believe that the -- Mr. Thompson's client owns a 75-percent working interest -- excuse me, a 75-percent mineral interest under that lot, a quarter of the minerals having been reserved by the person that platted it and dedicated it. That's what I remember, without having that in front of me.

So indeed the reason we have not negotiated with Mr. Thompson's client is, we are not seeking to buy leases in the northwest quarter, and we're not seeking to drill a

well there at this time.

The notification that they received was from your office, Campbell and Carr, in compliance with ODC [sic] regulations, to notify those of an unorthodox location and possible encroachment to that direction.

- Q. Thank you. Could you describe what we have marked as Exhibit Number 4, please, which is the AFE?
- A. Yes, I'm sorry, it's an AFE dated August 27, 1996, signed by Donnie Brown, who is the vice president of engineering for Manzano, conducts all of their drilling and producing operations.
- Q. And what are the totals as set forth in this exhibit?
- A. This exhibit for the "SV" Double Eagle Number 1 represents actually three columns: a dryhole column, a completion column, and a total column, which represents the total cost of the well.

The dryhole here is estimated to be \$459,300, the completion is estimated to run \$253,600, for a total well cost of \$712,900.

- Q. Are these costs in line with what has been charged by Manzano or other operators in the area?
- A. They are, and actually these are -- having reviewed these with Donnie, these are actually based on some actual costs that we had for drilling the first well,

the Chipshot Number 1, along with the actual bids that he's had for mud programs and drilling contractors.

- Q. And Mr. Hunnicutt, Exhibit Number 5 is an affidavit prepared, indicating which notice was given in the case; is that correct?
 - A. That is correct.

- Q. Has Manzano made an estimate of what the overhead and administrative costs will be while drilling and while producing this well if it is successful?
 - A. Yes, we have.
 - Q. What are those estimates?
- A. We estimate a drilling well rate at \$5000 a month and \$500 a month for a monthly producing rate.
 - Q. And what are those based on?
- A. Those are based on the annual survey of drilling and producing well rates that are conducted by Ernst and Young.

There is a joint operating agreement that currently covers these lands, in addition to the lands that cover the Chipshot, and that operating agreement names

Manzano as operator and sets out these rates and has been executed by all the parties.

Q. So these costs would be in line with what is being charged by, in fact, Manzano and other operators in the area --

1	A. Yes.
2	Q is that correct?
3	Mr. Hunnicutt, do you recommend that these
4	figures be incorporated into the order that results from
5	this hearing?
6	A. Yes, we would.
7	Q. And Manzano seeks to be designated operator; is
8	that correct?
9	A. That is correct.
10	Q. Were Exhibits 1 through 5 prepared by you or
11	compiled under your direction?
12	A. They were.
13	MS. TRUJILLO: Mr. Examiner, I offer Exhibits 1
14	through 5 into evidence, and I have no further questions at
15	this time.
16	EXAMINER CATANACH: Exhibits 1 through 5 will be
17	admitted as evidence.
18	Mr. Thompson, does that explanation satisfy you?
19	MR. THOMPSON: Right, if I understand what you're
20	saying correctly, my clients' piece of land isn't involved
21	in this compulsory pooling.
22	THE WITNESS: That's correct.
23	EXAMINER CATANACH: That's my understanding of
24	what the witness
25	MR. THOMPSON: If that's true, then I don't know

1	why we got the letter, but I don't have any reason to stand
2	in the way of this proceeding at all.
3	EXAMINER CATANACH: The OCD has rules where if a
4	company drills in an unorthodox location, they have to
5	provide notice to interest owners or
6	MR. THOMPSON: Okay.
7	EXAMINER CATANACH: at least That's
8	probably why you got the letter, according to
9	THE WITNESS: That's correct.
10	MR. CARROLL: Yeah, so the well is being drilled
11	closer to your property than our rules allow, and they're
12	coming in to get an exception from us. And because of the
13	possibility of drainage of your property, that's why we
14	require notification.
15	THE WITNESS: Mr. Examiner, could we address the
16	continuance request at this point?
17	MR. CARROLL: Mr. Thompson do you want to drop
18	the motion for continuance?
19	MR. THOMPSON: Oh, I think so, yeah.
20	MR. CARROLL: Okay, thank you.
21	THE WITNESS: Thank you.
22	EXAMINER CATANACH: Okay, we'll go ahead and
23	dismiss that motion for continuance.
24	Do you have any further questions, Mr. Thompson?
25	MR. THOMPSON: No.

	10
1	EXAMINER CATANACH: Okay.
2	EXAMINATION
3	BY EXAMINER CATANACH:
4	Q. Mr. Hunnicutt, what is the well location?
5	A. The well location is 1550 feet from the north
6	line
7	Q. I'm sorry, 1550 feet?
8	A. Correct. Let me make sure I'm reading the
9	MS. TRUJILLO: Are you looking at the AFE?
10	THE WITNESS: I am.
11	And 2200 feet from the east line.
12	Q. (By Examiner Catanach) I've got several versions
13	here.
14	A. Mike
15	Q. I think in your earlier testimony
16	A. Mike
17	Q you testified it was 2148 feet from the east
18	line. The advertisement for the case says 2250 feet from
19	the east line. Just want to make sure we've got it right.
20	A. I'm sorry, I apologize. That is correct. I
21	apologize. I'm reading from the AFE, and I think there's
22	been a transposition error.
23	The unorthodox location that we seek is 1500 feet
24	from the north line and 2148 feet from the east line.
25	I might clarify that, why there's a little bit of

- moving around. Once we shoot the survey, we have Western

 Geophysical stake that shot that point for us. And then we

 have it surveyed, and typically it will move it a little

 bit, because we're trying to drill on a shot point instead

 of a survey point.
 - Q. Okay, 1500 feet from the north, 2148 feet from the east line --
- 8 A. Right.

6

7

9

19

20

- Q. -- that's your location?
- 10 A. Right.
- Q. I believe you testified that you had control of in excess of 95 percent of the interest in the 40 acres?
- 13 A. That's correct.
- Q. And there was an outstanding 0.4875 percent which was unleased?
- 16 A. That is correct.
- Q. What's the status of the remaining? Is that the interest that was not locatable or --
 - A. Well, actually that adds up to 100 percent, I believe, Mr. Examiner.
- Q. Okay, I believe you testified that that was .04875 percent. Less than half a percent, you said.
 - A. Oh, I'm sorry --
- 24 Q. That is --
- 25 A. -- I looked at my numbers wrong.

Q. Okay.

- A. But it is 4.875 percent. I'm sorry.
- Q. These well costs are based upon -- You just finished drilling a well in this area to this depth; are they based upon that?
- A. Yes, sir. The Chipshot, which is the southwest quarter of the same section, of course, we just now have just completed it within the last couple of weeks, but this AFE actually is a little more than the Chipshot, based on the actual costs that we incurred in completing those zones.
- Q. Mr. Hunnicutt, if the Division approves your proposed 80-acre spacing, are you going to have to come back in and amend this Application?
- A. Well, what we seek to do is to compulsory pool the 40, but we have also filed with the State Land Office a communitization agreement that would communitize the south half of the northeast quarter, as to the Strawn and Wolfcamp formations, as we will be drilling -- we will be drilling over the expiration date of the primary term of the leases, the balance of the leases that own in the northeast quarter. So we have yesterday filed with the State Land Office this communitization agreement.
- Q. Are you in control of that whole other quarterquarter section?

A. That's correct.

- Q. You don't feel like you'd have to come in and do anything else with this Application?
- A. Not at this time. But I might ask my Counsel's advice on that, if you would --
- Q. We may have to address that in an order issued in the case.
- MS. TRUJILLO: It's definitely related to the previous case we presented. If a pool is established and temporary rules are provided for 80-acre spacing, we would comply with those -- with that order.
- Q. (By Examiner Catanach) But by -- Wouldn't you change the interest ownership by including the additional 40? I mean, you change the percentage of the interest in the spacing unit?
- A. In terms of the royalty?
- 17 Q. Right.
 - A. Certainly the royalty under both tracts would be proportionately reduced.
 - Q. Well, and also in terms of the -- Yeah, the mineral interest ownership, it changes their interest ownership within the spacing unit, doesn't it?
 - A. That would be correct. Our leases -- The fee leases that we have in the southeast quarter of the northeast quarter grant us the right to pool the lease.

Now obviously the unleased interest which we seek 1 here to pool, we don't have the ability to do that. And 2 3 certainly the State has the ability through their statutory form to combine a state lease with fee leases, through 4 their com agreement. 5 And if indeed, as Tanya said, we are successful 6 7 with the establishment of 80-acre spacings, then the 80-8 acre spacing here would be appropriate for the drilling of the Double Eagle. 9 10 EXAMINER CATANACH: I have no further questions 11 of the witness at this time. MS. TRUJILLO: Thank you, Mr. Examiner. 12 13 We have Mr. Brown again to present the geological 14 portion of the case. 15 MIKE BROWN, the witness herein, having been previously duly sworn upon 16 17 his oath, was examined and testified as follows: 18 DIRECT EXAMINATION BY MS. TRUJILLO: 19 20 Could you state your name, please, and place of Q. residence for the record? 21 My name is Mike Brown, and I live in Roswell, New Α. 22 Mexico. 23 Q. By whom are you employed and in what capacity? 24 25 Α. I'm employed by Manzano Oil Corporation, and I'm

a geologist.

- Q. Have you previously testified before the Division or one of its Examiners?
- A. Yes, I have.
- Q. Have your credentials as a petroleum geologist been accepted and made a matter of the record?
 - A. They have.
- Q. Are you familiar with the Application filed in the case?
- 10 A. Yes, I am.
- Q. And are you familiar with the subject area of this Application?
- 13 A. Yes, I am.
- MS. TRUJILLO: Mr. Examiner, are the witness's qualifications acceptable?
- 16 EXAMINER CATANACH: Yes, they are.
- Q. (By Ms. Trujillo) Mr. Brown, have you prepared exhibits for presentation today?
- 19 A. I have.
- Q. Could you describe what we have marked as Exhibit
 Number 6, please?
- A. Exhibit 6 is just a -- essentially a land plat,
 in a way, just showing the area immediately surrounding the
 Double Eagle location and the general well -- where wells
 are located.

I've got the 40-acre proration unit that we're attempting to pool today shown in yellow. The Double Eagle location is shown with the pink dot. A regular location based on 80-acre spacing, which -- with a 660 setback, is shown in red.

In Section 11, the area of interest, the Chipshot well, Manzano's most recent well, is shown in the southwest quarter of Section 11. We have a dry hole drilled by Manzano in the northwest quarter of 11. There is a plugged well, called the Hudgens, that's in the northwest of the southeast corner. It was an Atoka producer. And then a well -- a dryhole that was drilled in the northeast of the southeast of Section 11.

There are five Strawn producers, current producers, shown on the map. The first one is in the southeast corner of Section 1. There's another producer in the southeast quarter of Section 12, and then two producers in the east half of the east half of Section 13.

The well that's in the northwest quarter of the southeast quarter of 13 is an abandoned Strawn. And then the Kim Harris well, shown in the north half of the northeast of 12, is an abandoned Wolfcamp well.

And the only other Strawn producer shown on the map is the PG&E Smith well. It's a new producer. It's in the Diamond-Strawn field.

Q. Could we turn to what you have marked as Exhibit Number 7, please, and describe that for the Examiner?

2.0

A. Okay. What Exhibit 7 does is show the validity of the 3-D survey that we shot, and show why we wish to drill the Double Eagle where we're proposing. This arbitrary line from the 3-D runs through the Chipshot Number 1 well that we currently drilled, through the Hudgens well in the northwest of the southeast of 11, and then through the LCC State Number 1 in the northeast of the southeast. So it's a straight west-to-east section.

And this arbitrary line was presented in our May 16th hearing on the Chipshot Number 1, and at that point we had said that this line proved the existence of a Strawn anomaly in the southwest quarter of Section 11.

If you'll go to the far right side of the exhibit, where the LL [sic] State Number 1 is shown, you'll see a marking, "strn". It's right below the green line. That is the Strawn peak, and that -- Both the Hudgens and the LCC State had a very thin and extremely tight Strawn section. Both were noneconomic. There was no porosity development whatsoever in either well. You can see here, there was just one Strawn peak.

As you move to the west, what we saw on our survey was that you had a bifurcation of that peak into two peaks separated by a trough. That's the characteristic

amplitude anomalies that has been used in the Diamond field and the Lovington-Penn Northeast, other Strawn fields in the area, to identify porosity development.

And the blue marking is where we drilled the Chipshot location, the Chipshot well, and we did, in fact, find productive Strawn. We gained 30 feet of additional section plus over 60 feet of additional porosity from the well, so it was extremely successful. The 3-D did, in fact, tell us what we need to know and was very accurate in this case.

- Q. And Exhibit Number 8 --
- A. Exhibit Number --

- Q. -- what does that describe?
- A. Exhibit Number 8 is a northwest-to-southeast arbitrary line that runs through the proposed location of the Double Eagle, which is 1500 feet from the north line, 2148 feet from the west line of Section 11, and it runs through the regular location on 80-acre spacing, and that's shown in red.

And what you'll see in the right-hand side of the exhibit is the notation "STRAWN", again, and then our green Strawn line. And if you'll note, at the regular location you have no bifurcation of the peak. It's an extremely strong peak, and based on what we've seen with the other wells in the survey, I would interpret that that would be a

thin, tight Strawn, unproductive Strawn location.

As you move to the Double Eagle location, it's not as pronounced as what we saw in the Chipshot, but you do see a double peak separated by a trough, and we believe that that will be -- that that's an indication of porosity and will make us a productive Strawn well.

O. And Exhibit Number 9?

A. Exhibit Number 9 is a map view of the amplitude anomaly, and what it shows is that we are dealing with a much smaller feature than what we saw in the Chipshot.

However, we do have a nice anomaly. It's centered right on where we have our Double Eagle location. As you move south, as we saw on the arbitrary line, you lose the anomaly quite quickly.

And this map, to me, indicates that the only way we -- only place we could move the well at all would be in a westerly direction, which is -- would be more irregular. So we've moved it as far south and as far east as is prudent to do.

- Q. Mr. Brown are you prepared to make a recommendation regarding the risk penalty that should be assessed to the nonconsenting interest owners?
- A. Yes, I am. I'm recommending the 200-percent penalty.
- 25 Q. And upon what do you base that 200-percent

penalty?

- A. Two main factors. One is, on the stratigraphic side, on geology, the feature we're trying to hit is very thin. It's very -- It's only 700 feet at its widest.
- It also -- There's also a strong possibility, based on the high water cut in the Chipshot, that this location, since it's downstructure slightly, could also be wet.
 - Q. And do you believe there's a chance you could drill a dryhole or a well that is -- would not be a commercial success?
- A. Very easily, we could. We could both lose the porosity, and we could also be wet. So yes, very strong possibility.
 - Q. In your opinion, will granting this Application be in the best interests of conservation, the prevention of waste and the protection of correlative rights?
 - A. Yes, in my opinion it would be.
 - Q. How soon does Manzano plan to spud this well?
- A. We plan to spud this well in mid-October to late October.
 - Q. And what are the -- You've alluded to them earlier, but what are the future plans that Manzano has for this area?
 - A. We will continue to develop as we fine-tune the

3-D, that we have at least one other well plan, the 1 Chipshot Number 2, and we have other locations that we've 2 identified as potential. 3 Were Exhibits 6 through 9 prepared by you? 4 0. Α. Yes, they were. 5 MS. TRUJILLO: Mr. Examiner, I offer Exhibits 6 6 7 through 9, and I have no further questions for this witness. 8 9 EXAMINER CATANACH: Exhibits 6 through 9 will be admitted as evidence. 10 11 EXAMINATION BY EXAMINER CATANACH: 12 13 Q. Mr. Brown, the unorthodox location is based upon Strawn considerations, not Wolfcamp, right? 14 15 Α. Right. 16 Is your Strawn anomaly -- do you believe it's 17 connected in any shape or form to the anomaly down by the Chipshot wells? 18 I think that over time that you'll see a pressure 19 Α. communication between them. What was discovered in the 20 Lovington northeast -- I've heard people say it's one 21 field, but it's a series of pods, and they are connected in 22

some -- in a pressure standpoint, but since you have

structural differences between the pods, that you can't

drain two pods from one location. You really have to have

23

24

two wells.

So yes, I do believe they should be part of the same field, although I'm not sure how much they'll compete against each other when we start producing.

- Q. The location is based upon your trying to hit the highest point in the structure; is that correct?
- A. That is correct. And also, it's a thickening of the Strawn on top of a very tight base, and what happens in your productive wells is that you go from a similar thickness of tight rock, and then you build on top of it.

So not only do you create structure, but you also create more porosity, so you want to be on the top.

- Q. Any move towards the south, you would lose structure?
- A. You gain structure, but you lose -- you lose the porosity altogether.

And you probably will lose some structure on the top of the Strawn when you first start moving off. But regional dip is to the southeast -- or south- -- yeah, southeast.

- Q. So you said you would lose permeability or --
- A. You would lose the porosity in the Strawn.

EXAMINER CATANACH: I see.

I have nothing further of this witness. You may be excused.

```
Anything further?
 1
                  MS. TRUJILLO: No.
 2
                  EXAMINER CATANACH: There being nothing further
 3
 4
      in this case, Case 11,616 will be taken under advisement.
 5
                  (Thereupon, these proceedings were concluded at
 6
      10:48 a.m.)
 7
 8
 9
10
11
12
13
14
15
16
17
18
19
20
21
                                    1 \ \mbox{discharge} have by cartify that the foregoing is
                                    Common or a sale of the progressions in
22
23
24
                                      OH Concervation Process
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 October 6th, 1996.

STEVEN T. BRENNER CCR No. 7

My commission expires: October 14, 1998