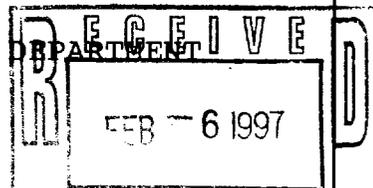


STATE OF NEW MEXICO

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)
FOR COMPULSORY POOLING AND AN UNORTHODOX)
WELL LOCATION, LEA COUNTY, NEW MEXICO)

OIL CONSERVATION DIVISION
CASE NO. 11,688

ORIGINAL

REPORTER'S TRANSCRIPT OF PROCEEDINGS

EXAMINER HEARING

BEFORE: DAVID R. CATANACH, Hearing Examiner

January 23rd, 1997

Santa Fe, New Mexico

This matter came on for hearing before the New Mexico Oil Conservation Division, DAVID R. CATANACH, Hearing Examiner, on Thursday, January 23rd, 1997, 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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January 23rd, 1997
Examiner Hearing
CASE NO. 11,688

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A P P E A R A N C E S

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 11:55 a.m.:

3 EXAMINER CATANACH: At this time we'll call Case
4 Number 11,688, which is the Application of Manzano Oil
5 Corporation for compulsory pooling and an unorthodox well
6 location, Lea County, New Mexico.

7 Call for appearances.

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

11 We represent Manzano Oil Corporation in this
12 matter, and I have two witnesses.

13 EXAMINER CATANACH: Any additional appearances?
14 Will the witnesses please stand to be sworn in?
15 (Thereupon, the witnesses were sworn.)

16 KENNETH BARBE, JR.,

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

19 DIRECT EXAMINATION

20 BY MR. CARR:

21 Q. Would you state your name for the record, please?

22 A. My name is Kenneth Barbe, Jr.

23 Q. Where do you reside?

24 A. Roswell, New Mexico.

25 Q. By whom are you employed?

1 A. Manzano Oil Corporation.

2 Q. What is your position with Manzano?

3 A. I'm the vice president and co-founder.

4 Q. Mr. Barbe, have you previously testified before
5 this Division?

6 A. Yes, I have.

7 Q. At the time of that testimony, were your
8 credentials accepted and made a matter of record?

9 A. Yes, they ere.

10 Q. And were you qualified at that time as an expert
11 in petroleum land matters?

12 A. Yes, I was.

13 Q. Are you familiar with the application filed in
14 this case on behalf of Manzano Oil Corporation?

15 A. Yes, I am.

16 Q. Are you familiar with the status of the lands in
17 the subject area?

18 A. Yes, I am.

19 MR. CARR: Are the witness's qualifications
20 acceptable?

21 EXAMINER CATANACH: They are.

22 Q. (By Mr. Carr) Could you briefly state for Mr.
23 Catanach what it is that Manzano Oil Corporation seeks with
24 this Application?

25 A. Yes, Manzano seeks pooling from the surface to

1 the base of the Atoka formation, which underlies the south
2 half of the southwest quarter of Section 11, Township 16
3 South, Range 36 East.

4 It also attempts to get approval of its -- for
5 drilling its "SV" Chipshot Well Number 2, to be drilled at
6 an unorthodox location 966 feet from the south line and 481
7 feet from the west line, which would be in Unit Letter M.

8 Q. Now, this footage location differs slightly from
9 the advertised location of 1000 feet from the south line
10 and 467 from the west; is that right?

11 A. That's correct.

12 Q. In fact, you have moved the well back toward a
13 standard location; is that not correct?

14 A. That's correct.

15 Q. Could you identify the units that you seek to be
16 pooled with this Application?

17 A. Yes, we seek to pool all 80-acre units covering
18 the south half of the southwest quarter and all 40-acre
19 units covering the southwest quarter of the southwest
20 quarter of Section 11.

21 Q. What is the primary objective in the well?

22 A. The primary objective in the well would be the
23 Strawn and the Wolfcamp formations.

24 Q. And that's the 80-acre spacing that you're
25 seeking to pool for?

1 A. That's correct.

2 Q. Is there San Andres potential that might possibly
3 be developed on the 40-acre spacing?

4 A. That's possible, as a secondary objective.

5 Q. But a very secondary?

6 A. Very secondary, yes.

7 Q. Have you prepared certain exhibits for
8 presentation here today?

9 A. Yes, I have.

10 Q. Let's go to what has been marked Manzano Oil
11 Corporation Exhibit Number 1, and I'd ask you to review
12 that for Mr. Catanach.

13 A. Okay, this is a land map that shows our subject
14 proration unit, which would cover the south half of the
15 southwest quarter of Section 11. It shows the -- The red
16 arrow there points to our proposed well location, which is
17 an unorthodox location which is located at 966 from the
18 south line and 481 from the west line. This map also shows
19 the ownership in the immediate area.

20 Q. Who owns the offsetting ownership toward whom
21 you're moving the well?

22 A. To the west it's owned by Chesapeake and Two
23 Rivers.

24 Q. Have you been in negotiations with Chesapeake
25 concerning sharing of data on this well?

1 A. Yes, we have.

2 Q. And have you agreed to share data on the well
3 with Chesapeake?

4 A. Yes, we have.

5 Q. What is the status of the acreage in the south
6 half of the southwest quarter of Section 11?

7 A. It is 100-percent fee acreage with approximately
8 65 owners.

9 Q. And let's go to your next exhibit, Exhibit Number
10 2, and could you briefly review the breakdown of the
11 ownership in that acreage?

12 A. The ownership breakdown -- As I stated, we have
13 leased approximately 84 percent of the total south half of
14 the southwest quarter, and there's about 16 percent that we
15 have not been able to come to agreement with.

16 Q. And Exhibit Number 2 breaks out each of the
17 interest owners in the south half --

18 A. That's correct.

19 Q. -- of the southwest?

20 Can you just generally review for Mr. Catanach
21 the efforts that you have made to try and locate all the
22 interest owners in the southwest quarter of the section?

23 A. Yes, we have employed approximately three
24 contract landmen, and also our in-house staff has been
25 trying to locate everyone there by use of tax rolls,

1 abstract companies, probate records. And like I said
2 before, there's about 65 -- There's 65 total owners, of
3 which we have located all but 13.

4 Q. Was one of the landmen that you have employed to
5 assist you with locating and getting voluntary joinder from
6 all the interest owners in the southwest corner of Section
7 11 Mr. David Lynch?

8 A. Yes, it was.

9 Q. And you understand that he has recently acquired
10 certain interests in this acreage?

11 A. That's correct.

12 Q. He had already previously leased some acreage to
13 Manzano, had he not?

14 A. Yes, a very small interest.

15 Q. As to this well and his interest in the
16 southwest, he will be given an opportunity to participate
17 with that interest in the well, will he not?

18 A. That is correct.

19 Q. In your opinion, have you made a good-faith
20 effort to identify all interest owners in this tract and
21 obtain their voluntary participation in the well?

22 A. Yes, we have.

23 Q. Let's go to what has been marked as Manzano Oil
24 Corporation Exhibit Number 3. Could you identify that and
25 review it for Mr. Catanach?

1 A. Yes, that is the AFE that we have prepared for
2 the well, which shows the estimated costs that we expect to
3 incur. The dryhole costs expected are \$485,300 and the
4 completed well costs are projected at \$728,000.

5 Q. Are these costs in line with the costs you have
6 experienced in drilling similar wells in the area?

7 A. Yes, they are.

8 Q. In fact, are they in line with the costs incurred
9 for the "SV" Chipshot Number 1 in the offsetting 80-acre
10 tract?

11 A. Yes, they are.

12 Q. Could you refer to what has been marked as
13 Manzano Exhibit Number 4 and review for Mr. Catanach your
14 efforts to obtain voluntary joinder of the noncommitted
15 interest owners in this well?

16 A. Yes, we have sent out notices offering to allow
17 them to join in the drilling of the well. We've also sent
18 out notices attempting to lease all of the interests that
19 we were able to locate.

20 Q. And as to those interest owners you have been
21 able to locate, who have you not been able to get voluntary
22 participation from?

23 A. There's only been one individual that we were
24 able to locate that we could not obtain a voluntary.

25 Q. And who was that?

1 A. That was Wayne Mahan.

2 Q. And is that the individual you solicited the
3 services of David Lynch to try and get Mr. Mahan's
4 participation?

5 A. That's correct, as well as several other landmen
6 also. We tried to --

7 Q. And the others who are not in are those that you
8 have been unable to locate; is that right?

9 A. That's correct.

10 Q. Is Exhibit Number 5 an affidavit confirming that
11 notice of today's hearing has been provided in accordance
12 with OCD rules and regulations to those affected interest
13 owners?

14 A. That is correct.

15 MR. CARR: Mr. Catanach, I have the originals.
16 As you'll note, there are a number of letters, and if you
17 would like those now or at any time, I have them in my
18 files. But this affidavit identifies each individual and
19 provides a copy of the letter that we sent to them,
20 advising them of today's hearing.

21 Q. (By Mr. Carr) Mr. Barbe, have you made an
22 estimate of the overhead and administrative costs to be
23 incurred while drilling this well and while producing it
24 if, in fact, it is successful?

25 A. Yes, I have.

1 Q. And what are those figures?

2 A. \$5000 for a drilling well rate and \$500 a month
3 for a producing well rate.

4 Q. Are these costs that were approved by the
5 Division for the Chipshot Number 1 in the north half of the
6 southwest quarter?

7 A. Yes, they are.

8 Q. And are these also consistent with the figures
9 set forth in the 1995 Ernst and Young survey?

10 A. Yes, they are.

11 Q. Do you recommend that these figures be
12 incorporated into any order which results from today's
13 hearing?

14 A. Yes, I do.

15 Q. Does Manzano Oil Corporation seek to be
16 designated operator of the proposed well?

17 A. Yes, it does.

18 Q. Were Exhibits 1 through 5 compiled by you or
19 compiled under your direction and supervision?

20 A. That is correct.

21 MR. CARR: At this time, Mr. Catanach, we would
22 move the admission into evidence of Manzano Oil Corporation
23 Exhibits 1 through 5.

24 EXAMINER CATANACH: Exhibits 1 through 5 will be
25 admitted as evidence.

1 MR. CARR: That concludes my direct examination
2 of Mr. Barbe.

3 EXAMINATION

4 BY EXAMINER CATANACH:

5 Q. Mr. Barbe, approximately how many interest owners
6 were unlocatable?

7 A. There were approximately 13 that were
8 unlocatable, and they comprised roughly 12.9 net mineral
9 acres.

10 Q. Was Mr. Lynch employed by you in this case to try
11 and find the interest owners?

12 A. Yes, he was. We had -- Just to give you a brief
13 history there, we had attempted ourselves to make a deal
14 with Mr. Mahan, and then we had also employed two contract
15 landmen in Roswell to try to make a deal with him, and we
16 were not successful in any of those cases.

17 So then we thought, Well, if we could get a local
18 landman there in Lovington that might know Mr. Mahan, which
19 indicated he did, and he went through Mr. Mahan's son,
20 Larry Mahan, and attempted to make a deal with him, and he
21 was not successful.

22 Q. Mr. Lynch's interest in this unit, how did he
23 arrive at that?

24 A. His original interest, I think it was one
25 thousand over -- one over three thousand two hundred and

1 sixty-fourths, and it was some minerals he had purchased
2 several years ago, I believe, in there.

3 EXAMINER CATANACH: Okay. I have nothing
4 further.

5 MR. CARR: At this time, we call Mr. Mike Brown.

6 CHARLES MICHAEL BROWN,

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

9 DIRECT EXAMINATION

10 BY MR. CARR:

11 Q. Would you state your name for the record, please?

12 A. My name is Charles Michael Brown.

13 Q. Where do you reside?

14 A. Roswell, New Mexico.

15 Q. By whom are you employed?

16 A. Manzano Oil Corporation.

17 Q. What is your current position with Manzano?

18 A. I'm a geologist.

19 Q. Mr. Brown, have you previously testified before
20 this Division?

21 A. I have.

22 Q. At the time of that testimony, were your
23 credentials as an expert in petroleum geology accepted and
24 made a matter of record?

25 A. They were.

1 Q. Have you made a geological study of the area that
2 is involved in this case?

3 A. I have.

4 Q. Are you prepared to share the results of that
5 study with Mr. Catanach?

6 A. Yes, I am.

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

9 EXAMINER CATANACH: They are.

10 Q. (By Mr. Carr) Initially, Mr. Brown, has Manzano
11 drilled other Strawn and Wolfcamp wells in this immediate
12 area?

13 A. Yes, we've drilled four to date. We have drilled
14 the Brownfield Trust well and the Kim Harris Number 2.
15 Both were dry holes. We drilled the Chipshot Number 1,
16 "SV" Chipshot Number 1, and the "SV" Double Eagle Number 1
17 as producers.

18 Q. And those producing wells are both in this
19 section?

20 A. Yes, they are.

21 Q. Let's go to what has been marked as Manzano Oil
22 Corporation Exhibit Number 6. Would you identify and
23 review that?

24 A. This is a land plat of the area encompassing the
25 "SV" Chipshot Number 2. I've noted the proposed location

1 of this well as a fluorescent orange dot. That well will
2 be located at 966 feet from the south line, 481 feet from
3 the west line.

4 I noted in red a regular location where it would
5 be located, and I'm showing the 80-acre proration unit that
6 will be included in the Chipshot Number 2.

7 Q. Let's go to Exhibit Number 7. What is this?

8 A. Also on Exhibit Number 6, I show the orientation
9 of the seismic lines that I'm going to show, and A-A' will
10 be the first.

11 Q. And that's Exhibit 7?

12 A. And that is Exhibit 7, and it runs roughly
13 southwest to northeast across our acreage. What I'm trying
14 to show here is the variable nature of the Strawn and what
15 we try to do with our 3-D seismic.

16 First, I would like you to look at the right side
17 of the exhibit and find the Hodgens Number 1 well and
18 follow it down to the peak that is labeled "strn", which is
19 our Strawn peak. The Hodgens well was a dry hole in the
20 Strawn. It was a very thin section of Strawn with no
21 porosity, and its seismic reflection is a single strong
22 peak.

23 As you move westward towards the Chipshot Number
24 1, you'll see that this peak bifurcates into a peak-trough-
25 peak character, and that is the character that has been

1 found to be productive in the Lovington area for the
2 Strawn. And in fact, in the Chipshot we gained 90 feet of
3 porosity in the Strawn and made a well that was capable of
4 flowing 100 barrels of oil a day and 268 barrels of water.

5 The Chipshot Number 2 will be updip from the
6 Chipshot Number 1, and on the very edge, we feel, of this
7 Strawn anomaly it hopefully will be updip and a water-free
8 producer in the Strawn.

9 Q. Let's go to Exhibit Number 8. Will you identify
10 that, please?

11 A. Exhibit 8 runs north-south through the proposed
12 location for the Chipshot Number 2, which is shown in blue,
13 and also through a regular location, which is a 660
14 setback.

15 As you'll see, the Strawn anomaly here is not
16 real pronounced, but you're on the updip edge. We're kind
17 of running at a funny angle through here. It's not as
18 pronounced as what you saw in the previous exhibit.

19 But you'll see in the Chipshot Number 2 location,
20 we do have a peak and a trough and a peak, but we are
21 pushing the updip edge of this feature. As you move to the
22 regular location, you no longer see the peak-trough-peak
23 character, so we feel it would be tight in the regular
24 location and that the Chipshot 2 is the absolute farthest
25 updip on this feature that we can go.

1 Q. What is Exhibit Number 9?

2 A. Exhibit Number 9 is a -- It's a map view of the
3 anomaly that you see on Exhibit Number 8. It shows the
4 location of the Chipshot Number 1, and that was by far and
5 away the thickest part of the Strawn amplitude that we saw.
6 However, it is downdip and has a considerable amount of
7 water.

8 As you move to the Chipshot Number 2 location,
9 the quality of the amplitude decreases, but you have a
10 little, small area that is shown in the green. It has a
11 little better amplitude than what you see directly
12 surrounding it. And in the regular location shown in red,
13 you're completely out of the amplitude anomaly.

14 So once again, we're pushing the edge of this
15 amplitude anomaly in an updip direction.

16 Q. All right, let's go now to Exhibit Number 10.
17 Would you review that?

18 A. Exhibit Number 10 runs roughly northwest-
19 southeast through the Chipshot Number 2 location shown in
20 blue and a regular location shown in red, and this is on
21 the Wolfcamp.

22 What I'm showing is the W-2 marker, which is a
23 marker about 150 feet above the top of the beta reef, and
24 then a marker here on the side called the beta shale. The
25 character that we know is unproductive is -- the W-2 marker

1 is a peak with a trough, and then just back into the beta
2 shale, with no disruption of a peak-trough-peak.

3 We have learned that we have to get behind the
4 termination of the beta shale, and we also like to see a
5 reflection on our W-2 pattern -- or our W-2 marker. And if
6 you'll look at the Chipshot Number 2 location, you'll see
7 that you see a nice little rollover on the W-2. That, we
8 feel, is indicating a core, reef core, below us somewhere.
9 You cannot see the top of the reef itself.

10 So we have a very -- It's a very difficult
11 horizon to see on the seismic, but we do know that we like
12 to see a disruption of the peak-trough-peak, which you do
13 see in the Chipshot 2 location. And we also like to see a
14 slight structural reflection.

15 And the difference between the Chipshot Number 2
16 -- You can see we have pushed the far southeast side of the
17 little structural reflection, and if you move towards the
18 regular location, you come out of that -- you go back into
19 this peak-trough-peak character that we know is
20 unproductive.

21 So we feel that if we move to the regular
22 location, that our chances of finding Wolfcamp is
23 significantly decreased.

24 Q. Mr. Brown, are you prepared to make a
25 recommendation to the Examiner as to the risk penalty that

1 should be assessed against any interest owner who does not
2 voluntarily join in the well?

3 A. Yes, I am. We are recommending 200-percent
4 penalty.

5 Q. Basically, what are you basing that
6 recommendation on?

7 A. This location has considerable geologic risk.
8 The Wolfcamp, as you can see, is very difficult on the 3-D.
9 We see some indications of porosity development, but the
10 main thing that we depend upon to get a reservoir in this
11 Wolfcamp is dolomitization, and we absolutely cannot see
12 that at all on the 3-D.

13 The Strawn, we are pushing the updip limits of
14 the Strawn anomaly, and we are hoping that we find porosity
15 in that location.

16 So on both horizons, we feel that there's
17 considerable geologic risk.

18 Q. Do you believe there's a chance at this location
19 you could drill a well that would not be a commercial
20 success?

21 A. Yes, I do. I think there's a significant chance
22 of that.

23 Q. In your opinion, will the granting of this
24 Application and the drilling of the proposed well be in the
25 best interests of conservation, the prevention of waste and

1 the protection of correlative rights?

2 A. Yes, I do.

3 Q. How soon does Manzano plan to spud this well?

4 A. It will be sometime next month.

5 Q. Were Exhibits 6 through 10 either prepared by you
6 or compiled under your direction?

7 A. Yes, they were.

8 MR. CARR: At this time, Mr. Catanach, we would
9 move the admission into evidence of Manzano Oil Corporation
10 Exhibits 6 through 10.

11 EXAMINER CATANACH: Exhibits 6 through 10 will be
12 admitted as evidence.

13 MR. CARR: And that concludes my direct
14 examination of Mr. Brown.

15 EXAMINATION

16 BY EXAMINER CATANACH:

17 Q. Mr. Brown, did you use the seismic data to drill
18 the Number 1 Chipshot and the Double Eagle one?

19 A. Yes, we did.

20 Q. Okay. How about the other two wells? Did you
21 have --

22 A. We had 2-D seismic on those.

23 Q. Okay. So you think you've got a pretty good
24 handle on what the seismic is telling you?

25 A. On the Wolfcamp we know where not to drill.

1 That's about the best we have come on it. There's the
2 fore-reef shale termination. We know we have to be
3 backwards of that to get into the core. So that has been a
4 major help.

5 The Strawn, the amplitude anomalies have proven
6 to be very successful as far as looking -- exploring for
7 Strawn.

8 Q. As far as the Strawn goes, you feel like at a
9 regular standard location you're going to be in the tight
10 portion with no permeability?

11 A. That is correct, that is correct.

12 Q. And in the Wolfcamp -- Is it the same kind of
13 situation in the Wolfcamp? You're going to get into the
14 tighter area?

15 A. If you move to the southeast, you're moving onto
16 the fore-reef shale and moving out of the fairway that we
17 have noticed on the core, the reef -- reef core itself.

18 Q. And that Wolfcamp-productive fairway, is that --
19 Which way does that trend, generally?

20 A. It is trending -- Right in this area it's
21 northwest -- or northeast-southwest.

22 Q. Okay. Does Manzano have any other plans to drill
23 any other wells in this area?

24 A. Yes, we do. We will drill a well north of the
25 Chipshot Number 1. We'll drill it with Chesapeake. We

1 also have other locations that we've identified for both
 2 Strawn and Wolfcamp. But an immediate one will be the one
 3 north of the Chipshot Number 1.

4 Q. Is there anything planned for the north half of
 5 the northeast quarter, Section 11?

6 A. The north half of the --

7 Q. -- northeast.

8 A. -- northeast quarter? Not at this time.

9 Q. Okay.

10 A. But it is possible.

11 EXAMINER CATANACH: Okay, I have nothing further,
 12 Mr. Carr.

13 MR. CARR: Mr. Catanach, that concludes our
 14 presentation in this case.

15 EXAMINER CATANACH: Okay, there being nothing
 16 further in this case, Case 11,688 will be taken under
 17 advisement.

18 (Thereupon, these proceedings were concluded at
 19 12:19 p.m.)

20 * * *

21 I do hereby certify that the foregoing is
 22 a complete record of the proceedings in
 23 the Examiner hearing of Case No. 11688,
 24 heard by me on January 23 1987.

25 David R. Catanach, 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 January 27th, 1997.



 STEVEN T. BRENNER
 CCR No. 7

My commission expires: October 14, 1998