

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. 11,127
)
APPLICATION OF MANZANO OIL)
CORPORATION)
_____)

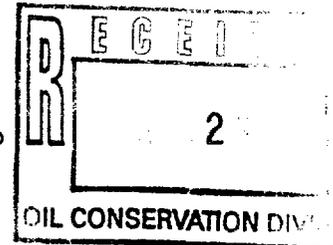
ORIGINAL

REPORTER'S TRANSCRIPT OF PROCEEDINGS

EXAMINER HEARING

BEFORE: MICHAEL E. STOGNER, Hearing Examiner

October 27th, 1994
Santa Fe, New Mexico



This matter came on for hearing before the Oil Conservation Division on Thursday, October 27th, 1994, at Morgan Hall, State Land Office Building, 310 Old Santa Fe Trail, Santa Fe, New Mexico, before Steven T. Brenner, Certified Court Reporter No. 7 for the State of New Mexico.

* * *

STEVEN T. BRENNER, CCR
(505) 989-9317

I N D E X

October 27th, 1994
 Examiner Hearing
 CASE NO. 11,127

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A P P E A R A N C E S

FOR THE DIVISION:

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FOR THE APPLICANT:

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P.O. Box 2208
Santa Fe, New Mexico 87504-2208
By: WILLIAM F. CARR

* * *

1 WHEREUPON, the following proceedings were had at
2 9:46 a.m.:

3 EXAMINER STOGNER: Call next case, Number 11,127.

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

7 EXAMINER STOGNER: 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 in this case, and I have one
12 witness.

13 EXAMINER STOGNER: Are there any other
14 appearances? There appear to be none.

15 Will the witness please stand to be sworn?

16 (Thereupon, the witness was sworn.)

17 EXAMINER STOGNER: Mr. Carr?

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

21 DIRECT EXAMINATION

22 BY MR CARR:

23 Q. Will you state your name for the record, please?

24 A. Mike Brown.

25 Q. And where do you reside?

1 A. Roswell, New Mexico.

2 Q. Mr. Brown, by whom are you employed?

3 A. Manzano Oil Corporation.

4 Q. And what is your current position with Manzano
5 Oil Corporation?

6 A. Geologist.

7 Q. Have you previously testified before this
8 Division?

9 A. Yes, I have.

10 Q. At the time of that prior testimony, were your
11 credentials as a petroleum geologist accepted and made a
12 matter of record?

13 A. Yes, they were.

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

16 A. I am.

17 Q. And are you familiar with the proposed Sun Valley
18 Sundown State Number 1 well?

19 A. Yes, I am.

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

22 EXAMINER STOGNER: They are.

23 Q. (By Mr. Carr) Mr. Brown, could you briefly
24 summarize for the Examiner what Manzano Oil Corporation
25 seeks with this Application?

1 A. We are seeking approval of an unorthodox oil well
2 location for our proposed SV Sundown State Well Number 1.
3 This well is to be drilled 477 feet from the south line,
4 191 feet from the west line of Section 14, Township 10
5 South, Range 37 East, Lea County, New Mexico.

6 Q. Into what formation do you propose to drill?

7 A. The Devonian.

8 Q. Are there secondary objectives?

9 A. We will also look at the San Andres, the Abo and
10 the Pennsylvanian.

11 Q. Your primary objective is in what pool?

12 A. It will be in the Undesignated North Echol-
13 Devonian Pool.

14 Q. And what are the spacing and well-location
15 requirements for wells in that well?

16 A. 40-acre spacing, 330-foot setback from lease
17 lines.

18 Q. Could you just summarize why Manzano is proposing
19 to drill at this particular unorthodox location?

20 A. The geologic and seismic evidence dictate that
21 this location is required.

22 Q. All right, let's go to what has been marked
23 Manzano Oil Corporation Exhibit Number 1. Identify this
24 and review it for Mr. Stogner.

25 A. This is a lease map of the area surrounding the

1 Sundown State well. We're in 10 South, 37 East.

2 I'm showing in color the Manzano-held acreage.
3 The largest part is Section 14. Manzano holds four tracts,
4 160-acre tracts.

5 I have a green dot showing where the SV Sundown
6 State Number 1 well is to be located, and that is once
7 again 477 feet from the south line and 191 feet from the
8 west line.

9 We will be encroaching to the west on the
10 southeast corner of Section 15. That quarter section is
11 also held by Manzano Oil.

12 Q. Mr. Brown, when you say "held", you mean they are
13 actually operated by Manzano Oil?

14 A. They're operated, we have the lease.

15 Q. And you're only therefore encroaching on
16 properties which you in fact operate yourself?

17 A. That is correct.

18 Q. You're 477 feet from the south line?

19 A. That is correct.

20 Q. So you're 150 feet, approximately, farther back
21 from the properties to the south than required by the rules
22 that govern this pool?

23 A. Yes.

24 Q. Okay, let's go now to what has been marked as
25 Manzano Exhibit Number 2. Identify and review this,

1 please.

2 A. This is a Devonian-time map, and it's constructed
3 from a 7-1/2-mile 3-D survey that Manzano completed earlier
4 this year.

5 What it first shows, it's -- This map is on a
6 1-to-500 scale, so this is a very small Devonian feature,
7 is what we're showing. It has a lot of vertical relief,
8 but it's a very small areal extent.

9 I'm showing the four corners of Section 14, 15,
10 Section 22 and 23. Once again, our scale is one inch to
11 500 feet. The contour interval is five milliseconds, which
12 is approximately 35 feet.

13 I'm showing three locations. The green location
14 is the proposed location.

15 The red is a location if we were to step off 330
16 feet from the proposed location.

17 And the blue is an alternative legal location.

18 I've also indicated the five seismic lines that
19 I've brought to show you today.

20 Q. All right. Let's go to Exhibit Number 3, your
21 seismic line 36.

22 First, using Exhibit 2, could you identify the
23 location of that line, then go to Exhibit 3 and explain
24 what is shown?

25 A. Okay, the first line is line 36, and it's the

1 east-west line running approximately in the center of
2 Exhibit 2. It's the red line. It will run through our
3 proposed location. It will also show you where a 330-from-
4 the-west-line location would fall on the seismic line.

5 Q. Okay, let's go to the seismic line itself.

6 A. Okay, I have the top of the Mississippian, which
7 is shown in blue, and the top of the Devonian, which is
8 shown in orange or red. The line that's within the peak on
9 each of those is the depth that is used to construct the
10 Exhibit 2.

11 I've noted in red the location and where that
12 wellbore would intercept the Devonian.

13 Q. And that's the proposed unorthodox location?

14 A. Proposed unorthodox location?

15 Q. This is not color-coordinated in terms of the
16 lines with Exhibit 2?

17 A. Well, it was till we color-copied it.

18 Q. All right. So the red line is the proposed
19 location on Exhibit 3; is that right?

20 A. That is correct.

21 Q. Okay. And then the green line on Exhibit 3 would
22 be the 330 location?

23 A. That is correct.

24 Q. All right. Basically what does this show in the
25 Devonian?

1 A. On our proposed location, we are intersecting
2 what's a very small but very high-relief feature in the
3 Devonian.

4 The entire feature itself is only five to six
5 traces wide here, which is somewhere in the neighborhood of
6 1000 feet maximum, so we're shooting at a very small
7 target.

8 The proposed location will give us the best
9 structural position in Section 14. It will also keep us in
10 the portion of the feature that we have the most confidence
11 in.

12 If we were to move just over to the 330 location,
13 we show that we're going to lose up to 8 milliseconds of
14 structure, which is 50 feet. And there's also something
15 going on right there, right in the vicinity of this, which
16 is either a fault or a very steep face, so a much more
17 risky location.

18 Q. And that's the -- that fault perhaps is that
19 break in the dark line at the top of the Devonian?

20 A. That is correct.

21 Q. All right. Are you ready to go to Exhibit Number
22 4?

23 A. I am.

24 Q. All right, let's first identify the location of
25 this seismic line.

1 A. This seismic line is the north-south line that
2 runs -- it's the blue on Exhibit 2 -- that runs through the
3 proposed location.

4 And this was just to illustrate, just to give you
5 a look on the north-south direction, dip direction.

6 Once again, I've noted the same color codes for
7 the Mississippian and Devonian, and I show the location of
8 our proposed well as it intersects the Devonian.

9 Q. Let's move to Exhibit Number 5.

10 A. Okay.

11 Q. This is line A?

12 A. This is arbitrary line A. It's a purple --
13 indicated in purple on Exhibit 2. It's running northwest-
14 southeast across our survey.

15 And I've intersected the proposed location within
16 the 330 location, which is the blue. And if you'll look at
17 the line, our proposed location intersects the Devonian in
18 a good structural position.

19 If we move over to the 330 location, once again
20 we're right in or around where a fault occurs, or some
21 feature, either the fault or the steep face.

22 Q. So moving to the location shown on Exhibit 2 or
23 indicated with a blue spot again would put you perhaps on
24 the fault?

25 A. That is correct.

1 Q. Let's go now to Manzano Exhibit Number 6.

2 A. This is arbitrary line B. It's shown in orange
3 on Exhibit 2. It's running southwest to northeast across
4 the proposed location.

5 I'm showing this line to once again illustrate
6 how small this feature is and how risky in some ways this
7 whole feature is on an areal extent. It's very small.

8 Q. Okay, now let's go to Exhibit Number 7.

9 A. This line is shown in green on Exhibit 2.

10 Q. And that's line C?

11 A. Line C. It runs northwest to southeast across
12 our survey. This will run through the proposed location,
13 and then it also runs through the alternative legal
14 location that Manzano has.

15 If you'll once again look where the location will
16 intersect the Devonian, it's in a good location, it gives
17 us a little room for error.

18 If we move over to the alternative location, once
19 again we're on the edge, within one trace of either a fault
20 or a steep face.

21 And also, the proposed location is two
22 milliseconds higher than the alternative location, which is
23 approximately 15 feet.

24 Q. Mr. Brown, your interpretation of the Devonian in
25 this area is based on this seismic information?

1 A. That is correct.

2 Q. You're not basing this on well control?

3 A. There is no well control in this area.

4 Q. Based on your interpretation, is the proposed
5 unorthodox location necessary if you are to effectively
6 complete a well in this portion of the Devonian formation?

7 A. Yes, it is.

8 Q. Will approval of this Application and drilling of
9 this well in your opinion result in the recovery of
10 hydrocarbons that otherwise would be left in the ground?

11 A. That is correct.

12 Q. And that would thereby prevent waste?

13 A. That is correct.

14 Q. Will the correlative rights of any interest owner
15 be impaired by moving to the unorthodox location?

16 A. No, it will not.

17 Q. In fact, you're only encroaching on properties
18 operated by Manzano?

19 A. That is correct.

20 Q. And so there was no one to whom notice was
21 required of this Application?

22 A. That is correct.

23 Q. Were Exhibits 1 through 7 either prepared by you
24 or compiled under your supervision?

25 A. They were.

1 MR. CARR: At this time, Mr. Stogner, we move the
2 admission of Manzano Exhibits 1 through 7.

3 EXAMINER STOGNER: Exhibits 1 through 7 will be
4 admitted into evidence.

5 MR. CARR: And that concludes my direct
6 examination of Mr. Brown.

7 EXAMINATION

8 BY EXAMINER STOGNER:

9 Q. Mr. Brown, looking at Exhibit Number 1, this is
10 your land plat --

11 A. Yes, sir.

12 Q. -- it looks like Section 14 is split up in four
13 different state leases. I see at least four different
14 numbers; is that correct?

15 A. That is correct, uh-huh.

16 Q. How about the southeast corner of 15? Is that a
17 separate lease from --

18 A. That is --

19 Q. -- the ones in 14, or is it the same as the one
20 in the southwest of 14?

21 A. That is a separate lease.

22 Q. You wouldn't happen to know who the beneficiary
23 is for 15 as opposed to 14 in that particular lease, with
24 the State Land Office?

25 A. I'm not following the question.

1 MR. CARR: Mr. Stogner, we can certainly confirm
2 with the State Land Office who the beneficiary under each
3 of those leases is for you, provide that information to
4 you.

5 EXAMINER STOGNER: Yeah, if you would.

6 MR. CARR: And if you would like, we'll also
7 request a waiver of objection from the Commission.

8 EXAMINER STOGNER: I would like that --

9 MR. CARR: All right.

10 EXAMINER STOGNER: -- because that's what I
11 was --

12 MR. CARR: Yes, I understand, and that's
13 something we will do.

14 Q. (By Examiner Stogner) You had mentioned that the
15 secondary zones were San Andres, Abo and Pennsylvanian. On
16 your exhibits, your seismic, you show the Mississippian and
17 the Devonian. Were these other formations, were they
18 mapped or traced on the seismic?

19 A. Yes, sir, the Abo, if you go to the first -- like
20 line 36, Exhibit 3, there's a blue horizon right below 1.2
21 seconds at the top. That's the Abo, and that was
22 extensively mapped. And there's a nice little closure
23 here. It's right at the top, about 1.23 milliseconds.

24 Q. Now, is the Abo -- is it productive in this area?

25 A. Only where you have dolomite. The fact that you

1 have a structure is inconclusive. You have to have some
2 reservoir, but we'll look at it.

3 Q. Are there some producing Abo wells around, say,
4 within a mile or two of this well?

5 A. No, no.

6 Q. How about Pennsylvanian or --

7 A. Pennsylvanian, yes, you have the Sawyer fields to
8 the northeast, and it is a structurally controlled and with
9 stratigraphic overlay features through there. You want to
10 be on a structure, but you have to have a little bit of
11 porosity.

12 Q. Going back to your Exhibit Number 1, I show the
13 closest wells, at least to your map, are down in Section
14 22, and they both look to be T-and-A'd; is that correct?

15 A. That's correct. There is a producer in Section
16 27, northwest corner. That's the last producing in North
17 Echols. It's in the southwest of the northwest.

18 Q. And that's a North Echol-Devonian?

19 A. Devonian, yes, sir.

20 Q. Which is your area of interest, right?

21 A. That is correct.

22 Q. As far as going back to those wells in Section
23 22, did those penetrate the Devonian?

24 A. The well in -- the northeast of the southeast
25 did. The one that's in the northeast of the northwest did

1 not.

2 Q. As far as that one in the northeast of the
3 southeast, were you able to make any determinations or at
4 least map back on your seismic information from well logs
5 on that well?

6 A. Yes, we were.

7 That particular well is on the downthrown side of
8 a major fault that runs just on the north side of Section
9 27 and going across 26, and it was on the downthrown side
10 of that, and it was significantly downdip of the wells that
11 we're proposing.

12 Q. Is the Devonian highly -- how would you say? --
13 fractured out here in this area? Well, I'm sorry, not
14 fractured, but a lot of faults in the Devonian in this
15 particular area?

16 Because you have alluded to the fault between 22
17 and 27, and then possible faulting within the zone of
18 interest shown on your seismic data.

19 A. The features out here are of very small areal
20 extent, but very tall, so you have some severe structuring
21 through here.

22 The North Echols field has three wells that's
23 made 1.2 million barrels, and they're within maybe 200
24 acres, maximum, on the surface, so they're very small
25 features.

1 Q. Has Manzano been very successful with your
2 seismic exploration as you have indicated today in the
3 Devonian out here?

4 A. We've shot seven features so far.

5 This will be the first that we have drilled in
6 this area.

7 Maralo has drilled some, but this particular area
8 of Lea County has not been drilled much on 3-D yet, but I
9 think you'll see some wells here pretty soon.

10 Q. So this is somewhat of a stepout and somewhat of
11 a rank wildcat?

12 A. Yes, sir. Yes, sir.

13 Q. And the only reason it's in that pool is because
14 it's within a mile?

15 A. Right.

16 Q. Just very -- Just barely within a mile?

17 A. Right.

18 EXAMINER STOGNER: Okay, I have no further
19 questions of Mr. Brown.

20 MR. CARR: We have nothing further in this case,
21 Mr. Stogner.

22 EXAMINER STOGNER: If you will give me that
23 information --

24 MR. CARR: We will, we will.

25 EXAMINER STOGNER: -- with the land office --

1 MR. CARR: Yes, sir.

2 EXAMINER STOGNER: -- I would appreciate it.

3 And subsequent to the delivery of that
4 information, I'll take this case under advisement.

5 (Thereupon, these proceedings were concluded at
6 9:05 a.m.)

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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.

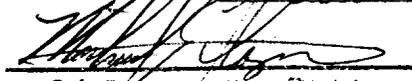
WITNESS MY HAND AND SEAL, October 27th, 1994.



STEVEN T. BRENNER
CCR No. 7

My commission expires: October 14, 1998

I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of Case No. 11137 heard by me on 27 October 1994.



, Examiner
Oil Conservation Division