

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 MATADOR PETROLEUM)
CORPORATION FOR COMPULSORY POOLING,)
LEA COUNTY, NEW MEXICO)

CASE NO. 12,063

ORIGINAL

REPORTER'S TRANSCRIPT OF PROCEEDINGS

EXAMINER HEARING

BEFORE: MARK ASHLEY, Hearing Examiner

November 19th, 1998

Santa Fe, New Mexico

OIL CONSERVATION DIV
98 DEC -4 AM 8:48

This matter came on for hearing before the New Mexico Oil Conservation Division, MARK ASHLEY, Hearing Examiner, on Thursday, November 19th, 1998, 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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November 19th, 1998
Examiner Hearing
CASE NO. 12,063

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* * *

A P P E A R A N C E S

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By: PAUL R. OWEN

* * *

1 WHEREUPON, the following proceedings were had at
2 10:25 a.m.:

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5
6 EXAMINER ASHLEY: At this time the Division calls
7 Case 12,063.

8 MR. CARROLL: Application of Matador Petroleum
9 Corporation for compulsory pooling, Lea County, New Mexico.

10 EXAMINER ASHLEY: Call for appearances.

11 MR. KELLAHIN: Mr. Examiner, I'm Tom Kellahin of
12 the Santa Fe law firm of Kellahin and Kellahin, appearing
13 on behalf of the Applicant, and I have two witnesses to be
14 sworn.

15 MR. CARR: Mr. Examiner, I'm Paul Owen with the
16 Santa Fe law firm of Campbell, Carr, Berge and Sheridan,
17 appearing on behalf of Penwell Energy, Inc. I have no
18 witnesses in this case.

19 EXAMINER ASHLEY: Any additional appearances?
20 Will the witnesses please stand to be sworn in?
21 (Thereupon, the witnesses were sworn.)

22 EXAMINER ASHLEY: All right, Mr. Kellahin?

23 MR. KELLAHIN: Thank you, Mr. Examiner.

24 Mr. Examiner, my first witness is a petroleum
25 landman with Matador. Her name is Mona Ables.

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MONA D. ABLES,

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

DIRECT EXAMINATION

BY MR. KELLAHIN:

Q. Ms. Ables, would you please state your name and
occupation?

A. Mona Ables, and I'm a landman.

Q. Where do you reside?

A. Dallas, Texas.

Q. On prior occasions have you testified as a
landman before the Division?

A. Yes, I have.

Q. Has it been your responsibility for Matador
Petroleum Corporation to identify the interest owners in
the proposed spacing unit?

A. Yes, sir.

Q. And having identified those owners, was it your
responsibility to attempt to negotiate on a voluntary basis
some means by which all the parties could participate in
this well?

A. Yes, sir.

MR. KELLAHIN: We tender Ms. Ables as an expert
witness.

EXAMINER ASHLEY: Ms. Ables is so qualified.

1 Q. (By Mr. Kellahin) Let me direct your attention
2 to what is marked as Exhibit 1, and let's take a moment and
3 describe for us what we're seeing.

4 A. Exhibit 1 is a lease map. The acreage that's
5 shaded in yellow is Matador's acreage position in this
6 area.

7 Our Topacio Federal Com 28 Number 1 well, we have
8 proposed a standup proration unit consisting of 320 acres
9 that's highlighted also on this map as the east half of
10 Section 28.

11 Q. When we look on this display we see a number of
12 well symbols and well names. Do these represent, to the
13 best of your knowledge, the location of wells at all depths
14 in this area?

15 A. Yes, sir.

16 Q. The proposed spacing unit is the east half of
17 Section 28?

18 A. That's correct.

19 Q. What type of leases are we looking at when we
20 examine leases in that half section?

21 A. There are two federal leases.

22 Q. And how are they configured?

23 A. In the northeast quarter, Matador owns a full
24 interest. That's one federal lease. And the southeast
25 quarter is a separate federal lease, and that's owned 50

1 percent by Santa Fe Energy Resources, Inc., and 50 percent
2 by Penwell Energy, Inc.

3 Q. Let's turn to Exhibit 2 and have you break out
4 for us the percentages and the parties.

5 A. In the spacing unit that we propose for the well,
6 Matador is here today representing 75 percent interest.

7 Q. How did you achieve that?

8 A. We have received a farmout from Santa Fe Energy
9 Resources, Inc.

10 Q. What is the outstanding percentage of working
11 interest ownership, then, that is not yet committed to the
12 well?

13 A. Twenty-five percent.

14 Q. And who controls that?

15 A. Penwell Energy, Inc.

16 Q. Let's turn to your efforts to attempt to reach a
17 voluntary agreement with Penwell and how you achieved your
18 agreement with Santa Fe. And to aid you in that
19 presentation, I'd like you to turn to Exhibit Number 3.
20 Did you prepare Exhibit Number 3?

21 A. Yes, I did.

22 Q. Is it prepared based upon a review by you of all
23 the business records of Matador Petroleum Corporation that
24 dealt with this issue of negotiating a solution?

25 A. That is correct.

1 Q. And you have placed this in chronological order?

2 A. That's correct.

3 Q. And describe for us how you have organized the
4 spreadsheet.

5 A. Basically, I just put the date of the letter or
6 phone call, whichever the case may be, and then the type of
7 our communication. Part of our communication has been by
8 phone, part of it in person, part of it in writing, so I
9 tried to designate that.

10 Who the primary individuals were that initiated
11 the communication is under the "From" column, and who the
12 contact was made with is listed under the "To" column, and
13 then the "Description" is just a summary of the content of
14 the communication.

15 Q. Up until yesterday there was a competition
16 between Penwell and Matador to determine who operated and
17 where the well would be drilled; is that not true?

18 A. That is correct.

19 Q. And yesterday Penwell advised us that they were
20 dismissing their competing pooling application; you're
21 aware of that?

22 A. That is correct.

23 Q. Let's go through the chronology, then, and not to
24 look at each of the items, but let's look at the general
25 flavor of what you're doing and how you're trying to

1 accomplish a voluntary agreement, Ms. Ables, starting first
2 of all with Penwell's proposal in August 7th of this year.

3 A. Okay. I'd like to just briefly state that in
4 January of this year, Matador had finalized an agreement
5 with Spirit Energy where we acquired their interests in
6 southeast New Mexico. That gave us an opportunity for the
7 first time in our business to develop a prospect inventory.
8 The well that was proposed by Ms. Bainbridge on August 7th
9 was a well that Matador has in its prospect inventory and
10 had in its prospect inventory at that time.

11 When I received their proposal, the first thing I
12 did was call Mark Wheeler, and I had discussed with him
13 what their timing was. He indicated to me that they
14 intended to drill the well later this year.

15 I then followed up with him with another
16 conversation, to advise him that this was something that we
17 had in our prospect inventory and had planned to drill in
18 the first quarter of 1999.

19 I discussed with him that we were going to be
20 representing 50-percent interest, and we felt it would be
21 appropriate for Matador to operate. He told me -- this was
22 on August 20th -- that that would be an issue for them,
23 that they would insist on operatorship.

24 Once again, they have 25 percent. Matador at
25 that time had 50 percent.

1 I tried to convince him that it would be better
2 for us to operate because we had operations in the area.
3 On the initial -- On Exhibit 1, immediately to the west, is
4 the Maduro Federal Unit, and that is operated by Matador.
5 In Section 21, directly to the north, is the Diamante well,
6 and that's also operated by Matador. And then off to the
7 east where the yellow is just barely showing on our map,
8 that's our Laguna Deep Unit, and that's also operated by
9 Matador. We have very -- This is a core area for us, and
10 it was an issue that I thought was convincing to resolve
11 the operatorship issue.

12 Q. Was Mr. Wheeler willing to concede to having
13 Matador operate?

14 A. No.

15 Q. When did you submit to Mr. Wheeler, on behalf of
16 Penwell, Matador's proposal for a well?

17 A. On August 31st, I mailed a proposal to Penwell
18 and to Santa Fe Energy Resources by certified mail.

19 Q. On August 7th, Penwell had submitted a well
20 proposal for you?

21 A. Right.

22 Q. Do your records reflect when Penwell filed their
23 compulsory pooling application?

24 A. It was filed on August 25th.

25 Q. So they gave you what? Eighteen days' notice

1 before they filed the pooling application?

2 A. That's correct. Actually, that's being
3 courteous. The initial communication that I received with
4 them was strictly an AFE. It didn't have a well-proposal
5 letter or a JOA or anything that accompanied it. That did
6 not come in until October -- or until August 21st.

7 Q. On August 31st, you're sending Mr. Wheeler your
8 proposal?

9 A. That's correct.

10 Q. And that was the written proposal for a specific
11 well at a location and a spacing unit?

12 A. That's correct.

13 Q. And did you include an AFE?

14 A. Yes, sir, I did.

15 Q. What then transpires?

16 A. To follow up with Penwell and Santa Fe, I then
17 went out to Midland and sat down with them in person to
18 discuss our plans for the area. First I met with Santa Fe,
19 and they had -- In the meeting that I had with them, they
20 had indicated that they also felt like this area was
21 prospective and that they would have an interest in
22 participating but that they would need to take that out of
23 their 1999 budget, so they were kind of wanting to see
24 about time and whether or not we could move things back.

25 And then he also indicated to me that they would

1 be supportive of Matador operating with our majority
2 interest.

3 He also made a comment to me that he was upset by
4 the way that it had been handled by Penwell, that they
5 had -- basically, their offices are eight blocks away in
6 Midland, and he received the JOA and then four days later
7 received a pooling application without any kind of a
8 personal visit or a phone call or any kind of follow-up.
9 He was upset by that.

10 Q. Did you go to Matador -- to Penwell's office, Ms.
11 Ables?

12 A. Yes, that same day, that same -- I was at Santa
13 Fe in the morning and Penwell in the afternoon.

14 Q. At your meeting with Penwell's office, what did
15 you provide Mr. Wheeler?

16 A. When I went by to see Mr. Wheeler I offered him
17 some well information and he declined, he said that they
18 were not interested in that.

19 Q. He was not interested in seeing your well
20 information?

21 A. That's correct.

22 Q. Did he express to you why he didn't want to see
23 this information?

24 A. He just said that they didn't have any interest
25 in it, in seeing it.

1 Q. Did you address with him the issue of why he
2 filed a force-pooling case against you so soon after he had
3 proposed the well and before you had sat down to negotiate
4 this proposal?

5 A. Yes, sir, I did.

6 Q. And what did he respond?

7 A. He told me that basically, don't take it
8 personal, it's just the way that you do business in
9 southeast New Mexico.

10 Q. Apart from that response, did you continue to
11 contact Penwell in an effort to try to reach a solution?

12 A. Yes.

13 Q. Without going through all the details of your
14 various contacts, summarize for us what you did.

15 A. We basically -- I continued to try to call him.
16 You'll note on this schedule that on the 28th of September
17 I actually had made some progress because he had agreed at
18 that point that Matador could operate a well if we would
19 agree to move our proposed well location to their proposed
20 well location. So we were making a little bit of progress
21 through the communication that we had.

22 Then the next main event that occurred would be
23 when -- On October 19th Santa Fe had advised me that after
24 they had reviewed all of the information, they had elected
25 to farm out their interest to Matador. And I do have

1 included as an exhibit our agreement. It's an intent to
2 farm out. I don't have their actual farmout agreement, but
3 it's forthcoming.

4 Q. Did Penwell express any desire to farm out their
5 interest to Matador or to anyone else?

6 A. Yes, actually Penwell had come to terms with
7 Nearburg Exploration there in Midland. They were -- or --
8 I say that. Mark had instructed me to provide him with a
9 revised Exhibit A that would indicate Nearburg was giving
10 him a third carry-to-casing-point, which I did on October
11 27th.

12 Q. To your knowledge, did Penwell complete its
13 transaction where they would farm out their interest to
14 Nearburg?

15 A. No, they did not.

16 Q. They did not. So then did you renew your
17 negotiations with Mr. Wheeler and attempt to get a
18 voluntary agreement with Penwell?

19 A. Actually, at that point the president of Matador
20 became involved and made a phone call to Penwell himself,
21 to try to resolve the issue without having it go to
22 hearing.

23 Q. Were you able to successfully resolve the
24 difference between your company and Penwell concerning the
25 terms of the farmout they wanted to provide to you?

1 A. No, sir, we were not.

2 Q. Do you believe at this point you've exhausted
3 every opportunity to reach a voluntary agreement with
4 Penwell?

5 A. Yes, sir, I do.

6 Q. Let me have you go through a summary of the
7 correspondence so that the Examiner will have that in the
8 record. Let's start with Exhibit 4 and ask you to simply
9 identify the documents as you turn the pages.

10 A. Okay. First letter, August 31st is the letter
11 where I proposed our well to Santa Fe Energy Resources, and
12 the AFE that accompanied it.

13 Behind that is our letter which was also mailed
14 by certified mail to Penwell Energy, Inc., proposing our
15 well, again with the AFE.

16 And then I've got a copy of the signed receipts
17 from both Penwell and Santa Fe, showing that these letters
18 were received.

19 On October 20th, 1998, is a letter from Santa Fe
20 Energy to Matador, wherein we've set out our intent for the
21 farmout terms.

22 Behind that, October 22nd, 1998, is
23 correspondence that was provided to Penwell when we
24 transmitted a revised Exhibit A to them that would include
25 Wolfcamp intervals in a portion of the acreage. The

1 Exhibit A that was transmitted with that letter did reflect
2 the farmout terms that Matador had come to agreement with
3 Santa Fe on.

4 And the lastly is the Exhibit A that I prepared
5 when I was instructed by Mark Wheeler of their proposed
6 farmout with Nearburg that did not transpire.

7 Q. Do you have any personal knowledge as to what
8 Penwell is doing currently with its interest in this tract,
9 as well as its other property interests in southeastern New
10 Mexico?

11 A. Currently Penwell Energy has their interest in
12 southeast New Mexico available for a bid by industry. It's
13 for sale. They have a significant acreage position, about
14 125,000 gross acres and 30,000 net acres, and they're -- In
15 fact, Matador was in their offices yesterday reviewing the
16 package.

17 Q. It appears to you that Penwell is in the process
18 of placing all their properties in southeastern New Mexico
19 up for sale?

20 A. That is correct.

21 Q. Let's look at the AFE; it's Exhibit Number 5.
22 This is the same AFE that was attached to the
23 correspondence to Santa Fe and Penwell?

24 A. That is correct.

25 Q. How is this document prepared?

1 A. Our drilling manager prepared it based on rates
2 that he would -- or the costs that he would expect to find.

3 Q. And has it been approved internally within your
4 company for circulation to working interest owners?

5 A. Yes, sir, it has.

6 Q. Have you received any objection from Penwell or
7 Santa Fe Energy concerning the proposed cost of the well?

8 A. No, sir.

9 Q. To the best of your knowledge, information and
10 belief, are these cost estimates current and reasonable in
11 terms of well costs in this area?

12 A. Yes, sir.

13 Q. Let's turn and have you identify Exhibit Number
14 6, Ms. Ables. What is this document?

15 A. This is the operating agreement that I had
16 proposed be used.

17 Q. In that operating agreement do you have some
18 proposed overhead rates for a drilling and producing well
19 on a monthly basis?

20 A. Yes, sir, I do.

21 Q. And what have you proposed in the operating
22 agreement?

23 A. \$6562 is what's been proposed as a drilling well
24 rate, and \$660 is for the producing well rate.

25 Q. Is that your recommendation to the Examiner, for

1 inclusion of those rates within the compulsory pooling
2 order?

3 A. Yes, sir.

4 Q. Is that consistent with the rates that you're
5 charging others on voluntary agreements for wells such as
6 this within this area?

7 A. Yes, it falls within the low range of what has
8 been charged.

9 MR. KELLAHIN: Mr. Examiner, that concludes my
10 examination of Ms. Ables.

11 We move the introduction of her Exhibits 1
12 through 6.

13 EXAMINER ASHLEY: Exhibits 1 through 6 will be
14 admitted as evidence.

15 EXAMINATION

16 BY EXAMINER ASHLEY:

17 Q. Ms. Ables, what did you just say the overhead
18 rate was for drilling?

19 A. \$6562.

20 Q. On Exhibit 1, the area in yellow, what exactly is
21 that? Is that --

22 A. That is Matador's acreage position.

23 Q. Okay. And you're 100-percent leaseholder in the
24 east half of Section 28?

25 A. In the northeast quarter of Section 28, we do own

1 100 percent. In fact, the federal lease that we have
2 covers the north half of 28 and the south half of 21. That
3 is all one common federal lease.

4 Q. Okay, and what about the southwest quarter of 28?

5 A. The southeast or the southwest?

6 Q. The southwest. I was just kind of curious.

7 A. Oh, the southwest, that's included in the Maduro
8 Federal Unit --

9 Q. Okay.

10 A. -- which Matador operates.

11 Q. Okay.

12 A. Actually, right now it's also within the Maduro
13 Federal Unit Number 5 well that you'll see there in the
14 northwest quarter. That is operated by Nearburg Producing
15 Company. Spirit had granted them a farmout prior to our
16 transaction with them, and that's a 320-acre standup
17 location as well --

18 Q. Okay.

19 A. -- for the Morrow.

20 Q. And the southeast quarter of Section 28 was Santa
21 Fe and Penwell, and you have farmed out from Penwell for 25
22 percent of that?

23 A. We took a farmout from Santa Fe Energy Resources.

24 EXAMINER ASHLEY: Okay. All right. I have no
25 further questions. You may be excused.

1 MR. KELLAHIN: Mr. Examiner, Exhibit 7 is my
2 certificate of notice, and we would ask with your
3 permission to introduce Exhibit 7 at this time.

4 EXAMINER ASHLEY: Exhibit 7 will be admitted as
5 evidence.

6 MR. KELLAHIN: Call our last witness, Mr. Kirk
7 Sparling. Mr. Sparling is a petroleum geologist.

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

11 DIRECT EXAMINATION

12 BY MR. KELLAHIN:

13 Q. Mr. Sparling, would you please state your name
14 and occupation?

15 A. Kirk Sparling, petroleum geologist.

16 Q. Where do you reside, sir?

17 A. Dallas, Texas.

18 Q. On prior occasions, have you testified before the
19 Division?

20 A. No.

21 Q. Summarize for us your education.

22 A. Bachelor's and master's degrees, both in geology,
23 from West Texas A&M University.

24 Q. In what year, sir?

25 A. Bachelor's in 1982, master's in 1988.

1 Q. And have you been employed, then, by Matador as a
2 geologist to study their properties, including the property
3 that we're discussing today?

4 A. Yes.

5 Q. As a result of that study, were you able to make
6 an informed study and reach an informed opinion about an
7 appropriate risk-factor penalty to apply in this case?

8 A. Yes.

9 MR. KELLAHIN: Mr. Examiner, we tender Mr.
10 Sparling as an expert witness.

11 EXAMINER ASHLEY: Mr. Sparling is so qualified.

12 Q. (By Mr. Kellahin) Mr. Sparling, when we look at
13 Exhibit Number 8 and the balance of the exhibits, are these
14 presentations to be made by you in support of your
15 recommendation for a penalty factor?

16 A. That's correct.

17 Q. What is that recommendation?

18 A. The maximum allowed by the Division of cost plus
19 200 percent.

20 Q. Let's look at Exhibit 8 and take a moment and
21 orient the Examiner as to the various color codes that
22 you've used so that he can see the location and the
23 interval produced by wells in this area.

24 A. This is a production map. The wells you see
25 colored in green are all Morrow producers, and in

1 particular, Section 28, in the center of the production
2 map, and you'll notice there's currently a producing Morrow
3 well, known as the Nearburg Maduro Federal Number 5. It's
4 a little over 1300 feet northeast of that well, is the
5 proposed location for the Matador Topacio Fed Com Number 1.

6 Q. Can you give us a general summary, Mr. Sparling,
7 of the reasons that support your conclusion about the
8 appropriateness of the maximum penalty factor?

9 A. Yes, there are three primary reasons. Number 1
10 is, the Morrow itself is a target, historically has been
11 recognized and accepted as an exploratory in nature,
12 specifically due to the discontinuous nature of the sands,
13 and secondly, because of the abrupt variations in both
14 porosity and permeability, which is the primary factor for
15 the erratic production that's derived from the Morrow wells
16 in this area and other regions.

17 Secondly, within this region in particular, we
18 see a very small percentage of wells that would be deemed
19 economic by industry standards.

20 And thirdly, the anticipated structural position
21 for this particular well is likely to be encountered in a
22 structural low, which does not bode well for one of the
23 possible objectives, particularly the lower Morrow.

24 Q. Does having a well location in proximity to a
25 producing Morrow well reduce your risk so that it is less

1 than the maximum allowed by the Division?

2 A. No, not in my opinion.

3 Q. Let's look at the details of your opinion. If
4 you'll turn to Exhibit Number 9, let's keep the production
5 map, 8, as a locator, if you will, and turn your attention
6 to Exhibit 9. First of all, tell us the line of
7 orientation for the cross-section.

8 A. This is a stratigraphic cross-section
9 highlighting the Morrow sequence, and in particular I would
10 call your attention to the third well from the right, and
11 that is labeled the Nearburg Federal Number 5.

12 And in that particular wellbore, you'll notice
13 towards the lower portion of the Morrow in section, you'll
14 see some perforations included on that well log. That is
15 the sequence of sands that the Nearburg well is currently
16 producing from.

17 And the point I'd like to make with this cross-
18 section is, you'll notice in a north-south direction, as
19 depicted by this cross-section, the absence or
20 discontinuity of the perforated interval producing in the
21 Nearburg well relative to the wells on either side.

22 Q. When we look at the Maduro well on the cross-
23 section, it's third from the right. As I move from that
24 well and go to the two wellbore -- the log sections for two
25 wellbores to the right and find the correlative interval

1 that's perforated in the Nearburg well, has that interval
2 been perforated in the two wells to the right?

3 A. No, sir.

4 Q. And why not?

5 A. Primarily because of a poor or no net
6 accumulation.

7 Q. Do the same thing, let's go to the left. Find
8 the perforations in the Nearburg well, make the correlation
9 in that perforated interval and show us if it had been
10 perforated in the wells to the north.

11 A. No, sir, the three wells to the north of the
12 Nearburg Maduro well are not perforated in the same
13 sequence of sands.

14 Q. Is this typical of Morrow exploration challenges
15 in southeastern New Mexico?

16 A. This is a fair representation of the risk.

17 Q. And this risk is not simply limited to the Morrow
18 interval you've just described, is it?

19 A. That's correct.

20 Q. It will apply to the various Morrow stringers as
21 we move up and down this location?

22 A. Yes.

23 Q. Okay. Let's turn and look at the cross-section
24 in an east-west direction. If you'll look at Exhibit 10,
25 help us understand what you're doing here.

1 A. This is a west-to-east cross-section, again a
2 stratigraphic cross-section depicting the Morrow in
3 sequence. Again, the third well in from the right of this
4 cross-section is this Nearburg Maduro Federal Number 5
5 well, depicting the same sequence of sands and the
6 perforations as outlined on the previous cross-section.

7 We can see that essentially, whether it's a
8 north-south direction or west to east, as in this
9 particular exhibit, the story is the same. That is, the
10 reservoir that's perforated in the Nearburg well is not
11 developed and not producing in wells either to the east or
12 back towards the west.

13 Q. Let's use Exhibit 10 as a locator, if you will,
14 so that we can keep the vertical sections in mind, and
15 let's examine your argument on the lower Morrow, which you
16 said has a structural component to it. Remind us why that
17 is of significance.

18 A. In this particular region, while the lower Morrow
19 is capable of yielding significant hydrocarbons, there does
20 appear to be a strong relationship between structural
21 position and producibility from that lower Morrow. And
22 essentially, it's most productive and most commonly
23 encountered -- that production is encountered, along
24 structural highs.

25 Q. What happens if you're not on a structural high?

1 A. Generally, the cases are threefold: very low
2 producing rates commonly, or they might be wet and in some
3 instances tight.

4 Q. Have you made an examination of the structural
5 relationship in the lower Morrow at your location so that
6 you could help assess that risk?

7 A. Yes.

8 Q. Let's turn to Exhibit 11. First of all, tell us
9 what we're looking at, and then let's describe your
10 conclusions.

11 A. This is a lower Morrow structure map. It
12 incorporates both existing 2-D seismic data shown in the
13 region, as well as electric logs.

14 Q. Does the utilization of the seismic data allow
15 you to reduce the risk less than the maximum allowed by the
16 Division?

17 A. No.

18 Q. So we're talking about geologic risks associated
19 with risk levels far beyond what the Division can
20 authorize?

21 A. That's correct.

22 Q. Show us what this structure map tells you.

23 A. When we look at the structure map, you'll --
24 Section 28, of course, is highlighted in yellow. You can
25 clearly see the Maduro Fed Number 5 labeled. Northeast of

1 that, a little over 1300 feet, the Topacio Fed 28.

2 And in this particular map the quickest way to
3 review this is, the lighter colors depict high areas,
4 yellows and reds and oranges, and the low structural areas
5 are in the greens and the blues. And you can see that
6 clearly the Topacio location rests squarely in a structural
7 low position.

8 Q. How does the Topacio's location compare to that
9 of the Maduro?

10 A. We are downdip slightly of -- anticipate within
11 10 feet of being at this structural level, compared to the
12 Maduro.

13 Q. Let's examine the cross-section, Exhibit 10, go
14 back and look at the Maduro well. You see where the
15 perforations are in that lower middle Morrow interval
16 that's colored in yellow?

17 A. Correct.

18 Q. How do you characterize that? What's your
19 nomenclature for that interval?

20 A. This is designated by Matador Standards as the
21 Y-2 and Y-3 intervals.

22 Q. All right. When we look at the Y-2 and Y-3
23 intervals, show us the top and the bottom of the interval
24 that you've isopached on Exhibit 12.

25 A. You'll notice above the perforated sand

1 intervals, there's a bolder line, and there's also an
2 accompanying wavy line beneath the perforated interval.
3 And those two bold lines above and below depict the
4 interval that has been isopached.

5 Q. Let me ask you about your methodology in creating
6 the isopach. You look at each of the lots that you have
7 available, right?

8 A. That's correct.

9 Q. And within that interval, then, you will find
10 instances of porosity using your analysis that have a
11 certain cutoff?

12 A. Yes.

13 Q. And what did you use for a cutoff?

14 A. A lower-limit cutoff of 6-percent porosity.

15 Q. For example, in the Maduro well, when you add up
16 all those values in excess of 6-percent porosity, you're
17 going to come up with a total net number of feet, right?

18 A. That's correct.

19 Q. That total net is simply an addition of separate
20 stringers that you've added together?

21 A. That's correct.

22 Q. So in looking at the log we see how many separate
23 individual sand stringers within the interval isopached?

24 A. Collectively we see at least five.

25 Q. You do that for each of the wells for this

1 interval?

2 A. That's correct.

3 Q. And you find a sum for the net sand greater than
4 6-percent porosity, and you map it on the contour map?

5 A. Correct.

6 Q. Let's look at the contour map. Give us a sense
7 of the geologic description for the depositional
8 environment that we're looking at here.

9 A. The Morrow and sequences are for the most part,
10 starting in the sands that occur in the lowermost section,
11 are largely transgressive marine, with resulting geometries
12 that are very widespread.

13 As we move higher and higher in the Morrow in
14 section, the upper sands become increasingly more fluvially
15 dominated.

16 So collectively we've got a full spectrum from
17 marine transgressive sands to the top units, which are
18 fluvial, and the units in between are somewhat gradational
19 between those two points.

20 Q. Let's look at this interval in terms of your
21 reasoning about the penalty factor. When we find the
22 Maduro well, which is the offset, the sum total of the net
23 sands is 13 feet? Did I read that right?

24 A. That's correct.

25 Q. When you go north to the Diamante well in Section

1 21, you have totaled 27 feet?

2 A. That's correct.

3 Q. And then you've contoured the various intervals
4 using the same methodology?

5 A. Yes.

6 Q. When we get to your proposed location for the
7 Topacio well, what is your estimated net footage thickness
8 for this interval?

9 A. Fourteen to 15 net feet expected at the Topacio.

10 Q. Okay. Can you draw a direct correlation between
11 the total thickness and the productivity of the well in
12 that interval?

13 A. No, you can't. The thickness is not indicative
14 of production.

15 Q. Let's illustrate that example. If you'll turn to
16 Exhibit 13, identify what we're seeing in Exhibit 13.

17 A. This is another small cross-section. Actually,
18 one might refer to it as a log comparison. In the two logs
19 we're comparing, the one on the right side is the currently
20 completing Matador Diamante well in Section 21, and then
21 the other well we're comparing to is the Nearburg Maduro
22 Federal Number 5.

23 The color code and the correlations that you see
24 depicted on this log-comparison cross-section are the exact
25 replicates. The picks are the same as what was previously

1 displayed on the cross-section.

2 Q. The expectation would be, the greater net
3 thickness, the greater chance of productivity, right?

4 A. Yes.

5 Q. What was the reality when you tested this
6 interval in the Diamante well?

7 A. We did not encounter the same thickness, or
8 anywhere nearly as thick as what was encountered in the
9 Nearburg well. Again, you'll note the perforations, what's
10 producing in that well in the Morrow section.

11 And we can correlate those zones over to the
12 Matador Diamante well, and you can see that at best we have
13 -- at the top and bottom of that same correlative unit, we
14 have very thin zones.

15 So for the most part it is not well developed at
16 the Diamante location.

17 Q. This is current applicable methodology and using
18 available data to come up with geologic assumptions and
19 conclusions about where to put wells?

20 A. That's correct.

21 Q. This is conventional stuff that everybody is
22 using?

23 A. Yes, sir.

24 Q. Am I correct in understanding there's a huge risk
25 associated with this?

1 A. Yes.

2 Q. And that being in proximity to a producing well
3 does not reduce your risk?

4 A. That's correct.

5 Q. And mapping a point of greatest thickness
6 certainly doesn't reduce your risk in terms of the maximum
7 penalty allowed?

8 A. That's correct.

9 MR. KELLAHIN: That concludes my examination of
10 Mr. Sparling, Mr. Examiner.

11 We move the introduction of his Exhibits 8
12 through 13.

13 EXAMINER ASHLEY: Exhibits 8 through 13 will be
14 admitted as evidence.

15 EXAMINATION

16 BY EXAMINER ASHLEY:

17 Q. Mr. Sparling, I was looking at Exhibit 13, at the
18 Diamante well, and where is it producing from? Is it shown
19 on here?

20 A. Currently it's -- we are completing the well, it
21 is not --

22 Q. Completing it, okay.

23 A. And we are trying multiple intervals within that
24 Morrow in sequence.

25 EXAMINER ASHLEY: Okay. I have no further

1 questions. You may be excused.

2 THE WITNESS: Thank you.

3 MR. KELLAHIN: That completes our presentation,
4 Mr. Examiner.

5 EXAMINER ASHLEY: Case 12,063 will be taken under
6 advisement.

7 (Thereupon, these proceedings were concluded at
8 10:58 a.m.)

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Hank Ashley
Oil Conservation Division


CERTIFICATE OF REPORTER

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

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

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

WITNESS MY HAND AND SEAL November 24th, 1998.



STEVEN T. BRENNER
CCR No. 7

My commission expires: October 14, 2002