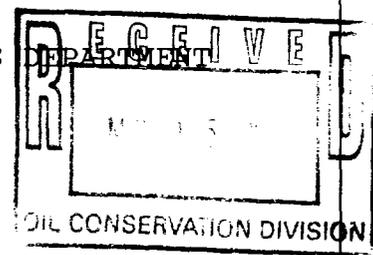


STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES
OIL CONSERVATION DIVISION



IN THE MATTER OF THE HEARING CALLED BY)
THE OIL CONSERVATION DIVISION FOR THE)
PURPOSE OF CONSIDERING:)
APPLICATION OF MARATHON OIL COMPANY FOR)
COMPULSORY POOLING AND AN UNORTHODOX GAS)
WELL LOCATION, EDDY COUNTY, NEW MEXICO)

CASE NO. 11,774

ORIGINAL

REPORTER'S TRANSCRIPT OF PROCEEDINGS
EXAMINER HEARING

BEFORE: MICHAEL E. STOGNER, Hearing Examiner

May 1st, 1997

Santa Fe, New Mexico

This matter came on for hearing before the New Mexico Oil Conservation Division, MICHAEL E. STOGNER, Hearing Examiner, on Thursday, May 1st, 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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 Examiner Hearing
 CASE NO. 11,774

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* * *

A P P E A R A N C E S

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* * *

1 WHEREUPON, the following proceedings were had at
2 10:57 a.m.:

3 EXAMINER STOGNER: At this time I'll call Case
4 Number 11,774.

5 MR. CARROLL: Application of Marathon Oil Company
6 for compulsory pooling and an unorthodox gas well location,
7 Eddy County, New Mexico.

8 EXAMINER STOGNER: Call for appearances.

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

13 EXAMINER STOGNER: Any other appearances?

14 MR. BRUCE: Mr. Examiner, Jim Bruce representing
15 Harvey E. Yates Company. I have no witnesses.

16 EXAMINER STOGNER: Other appearances?

17 Okay, will the witnesses please stand to be sworn
18 at this time?

19 (Thereupon, the witnesses were sworn.)

20 EXAMINER STOGNER: Mr. Kellahin, do you see a
21 necessity or any advantage of consolidation this case with
22 the next case?

23 MR. KELLAHIN: Mr. Examiner, they're slightly
24 different. I'll do my best to expedite the presentation.
25 But we would prefer to present them separately.

1 EXAMINER STOGNER: Okay.

2 MR. KELLAHIN: Mr. Examiner, in this case,
3 11,774, if you'll flip through and look at Exhibit 9 in the
4 package of information -- it's towards the end of the
5 exhibit packages -- Harvey E. Yates is obviously the
6 offsetting operator towards whom this well encroaches, and
7 through inadvertence the Marathon people that checked
8 records simply missed this offset operator, and so when
9 notice was sent we did not send it to Mr. Bruce's client.
10 He's entered their appearance on behalf of Heyco today, in
11 order to give them the full 20-day notice period.

12 We would propose to start that notice today, have
13 you hear the case today and then continue it to the May
14 29th docket, which will provide time for Heyco and Mr.
15 Bruce to tell me if there's any objection, and if not then
16 you can take it under advisement. If they choose to oppose
17 the unorthodox well location, we'll advise you of that fact
18 and then we'll have to deal with it.

19 MR. CARROLL: How did Heyco receive notice of the
20 hearing? They just noticed it on the docket?

21 MR. KELLAHIN: No, sir, we called them and told
22 them and had conversations with them, provided them with a
23 waiver. They have chosen to hold the waiver at this point
24 until they see the presentation, and they'll decide what
25 they want to do.

1 EXAMINER STOGNER: Mr. Bruce, any comments?

2 MR. BRUCE: That's acceptable to us, Mr.
3 Examiner.

4 EXAMINER STOGNER: Are you in the position to
5 waive the continuance of the 29th, or do you still want to
6 continue it to the 29th, even after presentation today?

7 MR. BRUCE: Well, we need to continue it at least
8 to the 15th, Mr. Examiner, so that Heyco can review the
9 geologic data.

10 EXAMINER STOGNER: Okay, with that, then we'll
11 continue -- okay, what I'm hearing from -- a continuance to
12 the 15th would be no problem with you, and then at that
13 point we could either continue it on to the 29th, should it
14 be necessary for --

15 MR. BRUCE: Take it under advisement.

16 EXAMINER STOGNER: Okay.

17 MR. KELLAHIN: Let's do that. I think that's an
18 acceptable arrangement.

19 So if there's no objection by the 15th, then you
20 can take it under advisement. If there is an objection,
21 we'll come back on the 29th.

22 EXAMINER STOGNER: On the 29th, yeah, so we'll
23 have -- we won't have a two-Hearing-Examiner scenario.

24 Thank you, Mr. Bruce.

25 Mr. Kellahin?

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TIM ROBERTSON,

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

DIRECT EXAMINATION

BY MR. KELLAHIN:

Q. All right, sir, will you please state your name and occupation?

A. My name is Tim Robertson, and I'm a landman for Marathon Oil Company.

Q. Mr. Robertson, on prior occasions have you testified as a landman before the Division?

A. No, I have not.

Q. Summarize for us your education and employment experience.

A. I have an MBA from the University of Texas at Austin, and I've been employed with Marathon for 13 years, and I have 16 years of industry experience as a landman.

Q. What's the date of your degree from Austin?

A. 1982.

Q. As part of your duties, have you reviewed the information, determined who are the interest owners that would participate in the well if it is productive, and have you identified and talked to all the various interest owners?

A. Yes, that is correct.

1 Q. That's part of your duties, and you've executed
2 that responsibility?

3 A. Yes, I have.

4 Q. As a result of that effort, do you now know the
5 current status of the ownership, and you can testify to the
6 Division about your efforts to obtain voluntary agreement?

7 A. Yes, I can.

8 MR. KELLAHIN: We tender Mr. Robertson as an
9 expert landman.

10 EXAMINER STOGNER: Any objection? Mr. Robertson
11 is so qualified.

12 Mr. Kellahin --

13 MR. KELLAHIN: Yes, sir?

14 EXAMINER STOGNER: -- a little point of order
15 before we continue here with this. Who's here for
16 Chesapeake?

17 MR. KELLAHIN: I am.

18 EXAMINER STOGNER: I would probably -- How long
19 do you think it's going to take to go through the 11,774
20 and 11,775?

21 MR. KELLAHIN: I hope to expedite that
22 presentation. I know Chesapeake has a plane scheduled back
23 to Oklahoma City this afternoon and I'm sure they're
24 anxious to have their turn, so I'm doing my best to
25 accommodate both Marathon and Chesapeake.

1 EXAMINER STOGNER: Okay, in that case we'll go
2 on. I was just going to send them off to lunch if --

3 MR. KELLAHIN: I think they would prefer to wait
4 and see if they can get a turn this morning.

5 EXAMINER STOGNER: Okay, thank you.

6 Q. (By Mr. Kellahin) Let's turn to Exhibit Number
7 1. Identify this for us, Mr. Robertson.

8 A. This is an exhibit which shows the working
9 interest ownership within the proposed spacing unit below
10 -- 500 feet below the top of the San Andres formation.

11 Q. All right. Marathon doesn't have the rights from
12 surface down to 500 feet below the top of the San Andres?

13 A. That's correct.

14 Q. And so we have specifically excluded in our
15 Application, as well as the rest of the information, that
16 shallower interval?

17 A. That's correct.

18 Q. We're dealing here, then, from that interval down
19 to the base of the Morrow?

20 A. That's correct.

21 Q. And this well is targeted to be a Morrow well; is
22 that not true?

23 A. Yes.

24 Q. Within the south half of 11, if that's formed as
25 a 320-acre spacing unit, do the percentages in the

1 companies shown on this display reflect the correct working
2 interest ownership?

3 A. Yes, it does.

4 Q. Go through the list for us and show us what is
5 the current status as to each of the three additional
6 entities.

7 A. Okay. With regard to the Atlantic Richfield
8 Company, we have sent them an AFE and a well proposal for
9 our well in December and have had numerous conversations
10 with them since December about either participating in the
11 well or granting some kind of support for our well.

12 Q. Is that interest committed yet?

13 A. No, it is not.

14 Q. Okay. That still needs to be subject to the
15 pooling, then, at this time?

16 A. Yes, it does.

17 Q. The Yates Petroleum Corporation, are they
18 committed to the well at this time?

19 A. No, they are not.

20 Q. Have they indicated that they are going to make a
21 commitment to participate in a voluntary fashion?

22 A. They have been willing to give us no decision as
23 of this point.

24 Q. So you'll need to have force pooling against
25 Yates?

1 A. That is correct.

2 Q. Louis Dreyfus, are they committed at this point?

3 A. They are committed, yes.

4 Q. And have fully signed, executed agreements as to
5 Louis Dreyfus that removes any doubt about their voluntary
6 participation?

7 A. That is correct.

8 Q. Okay. Let's turn to Exhibit Number 2, and you
9 can identify and describe what you've just told me, I
10 think.

11 A. Yes, the status of each party is shown, and their
12 percentage working interest within the spacing unit,
13 showing that the Atlantic Richfield Company and Yates
14 Petroleum Company are -- We have no agreement or
15 participation from them.

16 And the Louis Dreyfus Natural Gas Corporation, we
17 do have a signed agreement with them.

18 Q. All right. Let's start now with the actual
19 correspondence to the various working interest owners.

20 If you'll start with Exhibit Number 3, identify
21 and give me a short summary of what we're looking at here.

22 A. Okay, this is the well proposal to the Atlantic
23 Richfield Company which proposes the well and includes the
24 options of either participating in the well, farming out to
25 Marathon, or to selling Marathon a term assignment.

1 It also includes an AFE which is attached to the
2 letter.

3 Q. Since this AFE was circulated to the interest
4 owners in December, has that AFE changed?

5 A. There has been one change to the AFE, and that
6 was as to the well location.

7 Q. All right. Other than changing the location, the
8 cost and items are identical?

9 A. That is correct.

10 Q. Okay. Exhibit Number 4, have you used the same
11 format of letter to Louis Dreyfus as you used to Atlantic
12 Richfield?

13 A. Yes, I have.

14 Q. And this project was initiated by a different
15 landman, Mr. Wilson?

16 A. That's correct.

17 Q. After the initiation of his letter, have you then
18 assumed the responsibility for contacting these various
19 companies?

20 A. Yes, I have.

21 Q. Let's turn to Exhibit 5, identify and describe
22 that.

23 A. This is a similar letter and AFE to the Yates
24 Petroleum Corporation.

25 Q. Okay. Exhibit 6, would you identify and describe

1 that display?

2 A. Exhibit 6 is a farmout agreement between the
3 Louis Dreyfus Natural Gas Corporation and Marathon Oil
4 Company.

5 Q. All right, and this is the agreement, then, that
6 is executed that allows you to remove Louis Dreyfus as one
7 of the parties to be pooled?

8 A. That's correct.

9 Q. Let's turn to Exhibit 7 and have you identify for
10 the Examiner a summary of your telephone conversations with
11 ARCO and Yates.

12 A. Yes, I have.

13 Q. All right. As we stand before the Examiner this
14 morning, do you have an opinion as to the likely
15 probability of getting ARCO and Yates to commit their
16 interest to the well in the foreseeable future?

17 A. We are hopeful that they will. However, we did
18 not get any kind of response from them until we actually
19 filed our Application.

20 Q. Okay. At this point do you think you have
21 exhausted all efforts to obtain an agreement from ARCO and
22 Yates?

23 A. Yes, I have.

24 Q. In the event that after the issuance of the
25 pooling order and within the appropriate election periods

1 you reach a voluntary agreement, then you'll simply dismiss
2 them from the pooling order; is that not true?

3 A. That's correct.

4 Q. Let's turn to the question of the overhead rates.
5 If you'll look to Exhibit 8, identify and describe for me
6 what you've summarized on Exhibit 8.

7 A. I've summarized on Exhibit 8 two separate
8 operating agreements which Marathon has entered into in the
9 same township and range. One is with Mewbourne Oil Company
10 as operator, and the other is with the InterCoast Oil and
11 Gas Company.

12 Q. And these would be for deep gas wells?

13 A. Yes, also for Morrow wells.

14 Q. Do you have a recommendation for the Examiner as
15 to the appropriate overhead rates to charge under the
16 pooling order?

17 A. Yes, I do.

18 Q. And what is that number?

19 A. Those rates for drilling wells would be \$5400 and
20 \$540 for producing wells.

21 EXAMINER STOGNER: I'm sorry, that was \$5400?

22 THE WITNESS: \$5400 and \$540.

23 EXAMINER STOGNER: Okay.

24 Q. (By Mr. Kellahin) And then your last display,
25 Mr. Robertson, if you'll identify Exhibit Number 9 for us?

1 A. This display is a plat of the area surrounding
2 the proposed spacing unit, and shows offsetting operators
3 and the units for their wells.

4 MR. KELLAHIN: Mr. Examiner, my Exhibit 14 is the
5 certificate of notification to the offsets as well as
6 notification to the parties to be pooled.

7 Q. (By Mr. Kellahin) As a result of your efforts to
8 obtain pooling, did you receive any objections from ARCO or
9 Yates?

10 A. I did not.

11 Q. Concerning the unorthodox location, have you
12 received any objections from any of the offsets that were
13 notified?

14 A. No, we have not.

15 Q. After we recognized that Heyco had been deleted
16 from the notice list, did you or others on behalf of
17 Marathon contact Heyco?

18 A. Yes, we did.

19 Q. and they're awaiting making a judgment about
20 their objection until they see the information we're
21 supplying today?

22 A. That's my understanding.

23 MR. KELLAHIN: Mr. Examiner, that concludes my
24 examination of Mr. Robertson.

25 We move the introduction of his Exhibits 1

1 through 9.

2 EXAMINER STOGNER: Exhibits 1 through 9 will be
3 admitted into evidence.

4 EXAMINATION

5 BY EXAMINER STOGNER:

6 Q. Referring to Exhibit Number 9 --

7 A. Yes, sir.

8 Q. -- over in Section 12, does Harvey E. Yates
9 Company own both the north half and the south half?

10 A. I am not familiar with the ownership of the north
11 half of Section 12.

12 EXAMINER STOGNER: Wouldn't they be an affected
13 party, Mr. Kellahin?

14 MR. KELLAHIN: I thought I had that information,
15 Mr. Examiner, and I was seeing if they had supplied that
16 information to me.

17 Well, I think the difficulty is that Exhibit 9
18 has mis-spotted the well. The well, as I understand it, is
19 to be out of the south and east corner of the spacing unit?

20 THE WITNESS: That is correct.

21 MR. KELLAHIN: It is to be 1000 feet from the
22 south line and 700 feet from the east line. So if I'm
23 wrong, it's -- I am the one that made the judgment that the
24 well was encroaching on the north half of 13 and the south
25 half of 12, and because it was in the southeast portion, it

1 was not encroaching on the north half of 12. If I'm wrong,
2 then I'll have to find out who the owner is of 12, for the
3 north half.

4 EXAMINER STOGNER: Well, you caught me off guard
5 here. Why wouldn't they be an affected party, Mr.
6 Kellahin --

7 MR. KELLAHIN: Because that --

8 EXAMINER STOGNER: -- pursuant to the 1207 (a),
9 part 5?

10 MR. KELLAHIN: Yes, sir. The direct offset
11 encroaching spacing unit would -- encroached-upon spacing
12 unit would be the south half of 12 --

13 EXAMINER STOGNER: Okay.

14 MR. KELLAHIN: -- because it's a laydown.

15 EXAMINER STOGNER: Right.

16 MR. KELLAHIN: And the diagonal encroachment of
17 the well is on the northwest quarter of 13 --

18 EXAMINER STOGNER: Right.

19 MR. KELLAHIN: -- which is Harvey Yates, and
20 because we're encroaching on the southeast quarter as
21 opposed to the northeast quarter I had concluded that the
22 operator in the north half of 12 need not be notified.

23 EXAMINER STOGNER: Now, was Hallwood Petroleum
24 notified?

25 THE WITNESS: Yes, they were.

1 EXAMINER STOGNER: They were?

2 THE WITNESS: I believe so.

3 MR. KELLAHIN: I'm unable to locate exactly the
4 lists of where those parties operate in. It may have been
5 covered with a notice, if I could have a minute to find the
6 display.

7 EXAMINER STOGNER: As far as the northeast
8 notification and that north half of Section 12, I was going
9 by the dot.

10 THE WITNESS: Right.

11 EXAMINER STOGNER: And the only reason I was
12 asking about Hallwood -- Well, actually, you're not moving
13 any closer to them, so they wouldn't have been notified
14 anyway, would they?

15 MR. KELLAHIN: Well, that was the judgment we
16 made. I was looking to see if Hallwood operated the north
17 half of 12. I don't have any indication about that.

18 EXAMINER STOGNER: Okay, that's a moot issue,
19 then.

20 MR. KELLAHIN: Yeah. 14 didn't get notice,
21 although I think I may have said something to them. We
22 didn't encroach on 14.

23 EXAMINER STOGNER: Okay. Well, with that, that's
24 what was throwing me there.

25 MR. KELLAHIN: I think the wellspot's wrong in --

1 EXAMINER STOGNER: Yes, and I changed that.

2 Q. (By Examiner Stogner) Was there any written
3 correspondence between the December 20th letter and your
4 conversation with both parties on or around -- what was
5 that? -- February 3rd? It looks like -- what? About a
6 month and a half of time there?

7 A. Well, there were some conversations between the
8 parties with my predecessor Randall Wilson. He indicated
9 to me that he had spoken with all the parties. But I did
10 not include those because I was -- When I prepared the
11 exhibits I had not made those contacts myself.

12 Q. Okay. So there was -- You are at least aware of
13 perhaps some conversations with them --

14 A. Yes, they --

15 Q. -- but you didn't have verification?

16 A. My understanding was that Mr. Wilson had
17 contacted all the parties prior to February.

18 Q. But as far as any additional written
19 notification, there was none after the December 20th?

20 A. No, there was no additional notification to the
21 parties.

22 Q. Not notification, I should say negotiations,
23 written negotiations.

24 A. Oh, written negotiation. No, all the
25 negotiations have been follow-up phone conversations which

1 either Mr. Wilson or myself had with the parties.

2 Q. Okay. When I look at Exhibit Number 1 and all
3 the interest that's shown on that, is that an undivided
4 interest? Is that common throughout, whether it be 40-acre
5 spacing, 160 or 320?

6 A. Yes, sir, that's correct. There's just one
7 federal lease covering the entire south half.

8 Q. Okay, and that would reflect -- Those percentages
9 would reflect whatever size proration unit was out there?

10 A. That's correct.

11 Q. I want to make sure I heard this right. The
12 overhead charges were \$5400 and \$540?

13 A. That's correct.

14 Q. Okay, because you had higher on the others and
15 that's what threw me.

16 EXAMINATION

17 BY MR. CARROLL:

18 Q. I just had one question. On Exhibit 7, the
19 summary of your contacts --

20 A. Yes.

21 Q. -- you referred to ARCO's AMI partner, Altura?

22 A. Yes, sir.

23 Q. What's AMI stand for?

24 A. AMI is an area of mutual interest. They have an
25 agreement with Altura concerning, as I have been informed

1 by them, that if ARCO is not interested in any well
2 proposals by the parties, that their partner Altura has the
3 opportunity, according to their agreement, to participate
4 in that well.

5 MR. CARROLL: Thank you, that's all I have.

6 EXAMINER STOGNER: I have no other questions of
7 this witness. He may be excused.

8 MR. KELLAHIN: Mr. Examiner, my next witness is
9 Bill DeMis. Mr. DeMis is a petroleum geologist.

10 EXAMINER STOGNER: Mr. Bruce, did you have any
11 questions of --

12 MR. BRUCE: Not of this witness.

13 EXAMINER STOGNER: I'm sorry, I -- You weren't
14 sitting up here, so I forgot all about it.

15 WILLIAM DeMIS,

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

18 DIRECT EXAMINATION

19 BY MR. KELLAHIN:

20 Q. For the record, sir, would you please state your
21 name and occupation?

22 A. My name is William DeMis. I'm a geologist with
23 Marathon Oil Company.

24 Q. Mr. DeMis, on prior occasions have you testified
25 before the Division as an expert petroleum geologist?

1 A. No, I have not.

2 Q. Summarize for us your education?

3 A. I have a bachelor's degree from the University of
4 Wisconsin at Madison, I have a master's degree from the
5 University of Texas at Austin. The bachelor's degree is in
6 geology and geophysics, the master's degree is in geology.

7 Q. In what year, sir?

8 A. I graduated from Wisconsin in 1980 and from the
9 University of Texas in 1983.

10 Q. Have you been responsible for making a geologic
11 investigation of the proposed well that we have before the
12 Examiner today? It's the Jim Bowie "11" Federal 1.

13 A. Yes, I have.

14 Q. As part of that study, have you also made
15 yourself familiar with other Morrow production in wells in
16 this area?

17 A. Yes, I have.

18 Q. Based upon that study, do you now have
19 conclusions concerning an appropriate location for this
20 well in the south half of 11?

21 A. Yes, I do.

22 MR. KELLAHIN: We tender Mr. DeMis as an expert
23 petroleum geologist.

24 EXAMINER STOGNER: Any objections? So qualified.

25 Q. (By Mr. Kellahin) Mr. DeMis, let's turn to

1 Exhibit 10. Identify and explain that display for us.

2 A. This is a map that shows some of the Morrow --
3 This is a map that shows the Morrow production immediately
4 surrounding our proposed location.

5 Q. The current status of the south half of 11 is
6 that it's available for a deep gas test?

7 A. Yes, it is.

8 Q. To the best of your knowledge, is this going to
9 be on statewide 320-acre gas spacing?

10 A. Yes, it will.

11 Q. Have you attempted to locate what you believe to
12 be the nearest Morrow pools identified by the Division?

13 A. Yes, those would be the units that are outlined
14 in blue on this map, specifically the north half of 11 or
15 the south half of 12.

16 Q. Do you recall the name of the Morrow pool that
17 these wells are --

18 A. Yes, this would be the Empire South-Morrow Pool.

19 Q. You've given other information on the production
20 locator plat. Let's set that aside for a moment, and let's
21 look at the reservoir itself.

22 When we turn to Exhibit 11, what have you
23 targeted for the Morrow?

24 A. Our primary target at this well is the lower
25 Morrow, as shown on this plat.

1 Q. When we look at all the possible combinations of
2 formations or reservoirs from the San Andres down, is this
3 Morrow your best opportunity?

4 A. Yes, it is.

5 Q. And despite its best opportunity, is there still
6 substantial risk attached to that well?

7 A. Yes, there is.

8 Q. Does the fact that you have moved to a proposed
9 unorthodox location substantially diminish the risk so that
10 it is less than the maximum 200 percent?

11 A. No, it does not.

12 Q. Do you have a recommendation to the Examiner as
13 to a risk-factor penalty to apply in the pooling case?

14 A. Yes, I do.

15 Q. And what is that recommendation?

16 A. 200 percent.

17 Q. Let's look at your geologic interpretation. If
18 you'll turn to Exhibit 12, identify for us what you have
19 mapped.

20 A. This is a map of the lower Morrow sand
21 immediately surrounding -- that includes our proposed
22 location, as well as some of the wells in the immediate
23 vicinity.

24 Q. How long have you been involved in the geologic
25 efforts to get this well drilled?

1 A. Oh, it's been well over a year now.

2 Q. In addition to the land personnel of Marathon
3 talking to the other interest owners in the spacing, ARCO
4 and Yates and the others, were you also involved in talking
5 to those companies' corresponding geologists?

6 A. Yes, I have.

7 Q. The Application at this point seeks to pool ARCO
8 and Yates. Did you have conversations with either of those
9 companies concerning this well?

10 A. I have had many conversations with ARCO. I have
11 not been able to get ahold of Yates.

12 Q. Concerning your conversations with ARCO, have you
13 told them of your desires to have this well drilled?

14 A. Yes, I have.

15 Q. And with what results, sir?

16 A. There have been many offers of an agreement
17 forthcoming, but there has been nothing concrete.

18 Q. At this point is Marathon prepared to go forward
19 with drilling the well, pursuant to a pooling order?

20 A. Yes, we are.

21 Q. Describe for us what you see to be the reason for
22 the unorthodox location, as opposed to its closest standard
23 location.

24 A. The reason for the unorthodox location is because
25 that is where we feel we have the thickest lower Morrow

1 sand. This lower Morrow sand thick has been defined by our
2 3-D seismic in the immediate area. We feel that if we were
3 to move out to a standard location, we would greatly
4 increase the risk of finding an economic amount of Morrow
5 sand, and in fact it would render the well -- the
6 prospect -- undrillable.

7 Q. As part of your mapping technique and your
8 analysis, did you look at the available log data for the
9 Morrow wells in this area?

10 A. Yes, I did.

11 Q. And have you integrated the seismic information
12 that was appropriate for the southeast quarter of 11 as
13 well?

14 A. Yes, I have.

15 Q. In combination, then, that defines what for you,
16 sir, in terms of potential thickness?

17 A. Well, what this shows is that at the proposed
18 location we anticipate having greater than 30 feet of lower
19 Morrow sand.

20 Q. In actuality, is there still substantial risk
21 attached to that location, despite the fact that you may
22 have utilized some 3-D seismic information?

23 A. Yes, there is. We have participated in other
24 wells out here using 3-D seismic, and it has not proven to
25 be 100-percent effective.

1 Q. Let's set this display aside for a moment, then,
2 and talk about what has been your experience with other
3 deep gas wells in this area. If you'll identify and
4 describe Exhibit 13.

5 A. Exhibit 13 is a table of wells that we have
6 participated in, in the immediate vicinity, in about the
7 last year or so. We have been a minority interest in these
8 wells. Four of the five wells were drilled with 3-D
9 support. Unfortunately, we could best classify all these
10 wells as unsuccessful efforts, even though three of them
11 were completed. Those volumes of gas from those depths are
12 probably not going to be economic.

13 Q. In addition, you've duplicated on Exhibit 13 the
14 actual gross costs of those wells so the Examiner can
15 compare the actual cost to your estimated AFE for this
16 well?

17 A. Yes, I have.

18 Q. All right. Let's go back, then, to Exhibit
19 Number 12.

20 The strategy here in terms of the Morrow, what
21 type of Morrow deposition are we dealing with?

22 A. What we have in the lower Morrow is a series of
23 river channels that cut through this area. These river
24 channels can be sinuous, and the facies change from sand to
25 no sand can be sometimes abrupt.

1 We feel that what we've mapped here is a couple
2 of north-south-trending channels that can be defined by the
3 well data, and what I've done is embellish the isopachs
4 using our 3-D seismic survey in the proposed unit.

5 Q. Are there any analogies on this map to illustrate
6 the risk of finding the Morrow channel thickness at greater
7 than 20 feet, yet having a poor producer or a well that
8 does not produce?

9 A. Yes, there are. There are wells in Section 13.
10 For example, there's a well -- there are a couple of wells
11 in 13 that encountered 10 feet of Morrow sand, and those we
12 could classify as economic.

13 We also participated in the well in Section 10
14 that encountered 22 feet of Morrow sand, and that was also
15 uneconomic.

16 Q. So even if you get the thickness that you're
17 trying to achieve, there is still substantial risk attached
18 to the well?

19 A. Yes, there is.

20 MR. KELLAHIN: That concludes my examination of
21 Mr. DeMis, Mr. Examiner.

22 We move the introduction of his Exhibits 10
23 through 13.

24 EXAMINER STOGNER: Any objections?

25 MR. BRUCE: No.

1 EXAMINER STOGNER: Exhibits 10 through -- What
2 did you say, 13 or 14? --

3 MR. KELLAHIN: 13.

4 EXAMINER STOGNER: -- will be admitted into
5 evidence. Do you want to admit Number 14 while we're at
6 it?

7 MR. KELLAHIN: Yes, sir, if you please.

8 EXAMINER STOGNER: Okay, Exhibit Number 14 will
9 be admitted also.

10 Mr. Bruce.

11 MR. BRUCE: Just a couple of questions.

12 EXAMINATION

13 BY MR. BRUCE:

14 Q. Mr. DeMis, you mentioned you want more than 20
15 feet of sand in the lower Morrow; is that correct?

16 A. We want to cut the thickest Morrow section that
17 we think we can identify on the seismic data, that's
18 correct.

19 Q. Are there any other factors besides thickness
20 you're looking for, hoping to find?

21 A. Could you please be more specific in your
22 question?

23 Q. Permeability --

24 A. Well, yes, of course, we feel that there's a
25 relationship between -- There's a loose relationship

1 between thicker lower Morrow sand and thickness, or the
2 likelihood of encountering porosity and permeability.

3 Q. Are the middle Morrow or upper Morrow prospective
4 in this area?

5 A. Yes, they are productive in this area.

6 Q. Do they look prospective or potentially
7 prospective in your proposed well?

8 A. Yes, there is a chance that we may encounter
9 them. However, there are wells out here that have
10 encountered the middle Morrow, and they have not really
11 produced -- they have not really produced a lot of gas. We
12 feel this is a distant secondary fallback target.

13 Q. Would you also be looking for 20 feet of sand, or
14 would there be a different thickness involved in the upper
15 and middle Morrow?

16 A. There would be a different thickness involved in
17 the middle Morrow.

18 Q. What would that be?

19 A. I don't think I can honestly address that
20 question at this time. I have not focused much of my
21 attention on the lower Morrow -- on the middle Morrow,
22 because in the near vicinity it really hasn't been -- it
23 has not produced sufficient volumes of gas to pay out at
24 completion. Our focus has been on the lower Morrow.

25 Q. And other than the Morrow, what would be, in your

1 opinion, secondary zones?

2 A. There are secondary zones that are scattered
3 throughout the section in this area. These include the
4 Atoka, these include -- there are -- There's potential
5 perhaps in the Strawn, perhaps in the Wolfcamp, perhaps in
6 the Bone Springs.

7 MR. BRUCE: Okay. Thank you.

8 EXAMINER STOGNER: Mr. Bruce.

9 Mr. Kellahin, any redirect?

10 MR. KELLAHIN: No, sir.

11 EXAMINATION

12 BY EXAMINER STOGNER:

13 Q. Mr. DeMis, you -- When I'm referring to Exhibit
14 Number 12, you said this was a series of river channels?

15 A. Yes, sir.

16 Q. What was the main direction of flow during that
17 time, or did it change with what you're showing here?

18 A. Well, my thoughts are that overall these river
19 channel systems are flowing approximately from north to
20 south, but of course there is some sinuosity associated
21 with these rivers.

22 Q. In the preparation of this Exhibit, how much 3-D
23 do you have, or did -- You used 3-D surveys, right?

24 A. Yes, we did.

25 Q. And especially around Section 11 there, was the

1 3-D utilized heavily in describing the lower Morrow in this
2 particular portion?

3 A. Yes, sir, it was.

4 Q. Because most of your depiction here, back on the
5 east and to the west, shows a nice smooth, flowing pattern,
6 but I was -- To me it really doesn't make much sense as
7 you're coming down the middle of this, how that river would
8 flow through and then crook around --

9 A. Yes, sir.

10 Q. -- and you come up with -- and it doesn't look
11 the nice, sweeping contours like you have on the other. It
12 just -- It seems like some sort of a hill has developed
13 there. Perhaps you can enlighten me on why it was drawn in
14 this particular configuration.

15 A. Yes, sir. Please let me elaborate. What I've
16 done is, I've depicted the regional trends in the lower
17 Morrow channels, based just simply on subsurface mapping.

18 But then in our proposed location in 11, as well
19 as the location we're going to talk about in 15, what I've
20 done is, I've detailed the lower Morrow by integrating the
21 amplitude anomaly our geophysicist sees in Section 11 only.

22 To be candid, sir, what I've done is, I've
23 allowed the regional contours here through, say, 2 and 11
24 north of our location, to be based on the subsurface
25 geology that any geologist looking at the logs might be

1 able to derive a map like that.

2 I've specifically omitted what our 3-D seismic
3 shows farther to the north because, well, we'd be giving
4 away some of our proprietary information, and I didn't want
5 to do that. That's why the contouring looks so different.

6 Q. Now, your key to this shows quite a few shut-in
7 lower Morrow intervals, especially toward the south and
8 east, and then the two up there in Section 1. Are those
9 presently producing from the other Morrow -- the upper
10 Morrow and the middle Morrow intervals?

11 A. It is my understanding that these wells are shut
12 in.

13 Q. Okay, so they're shut in throughout the Morrow,
14 so not just -- It doesn't particularly depict just the
15 lower Morrow shut in?

16 A. Yes, sir, that is correct.

17 Q. Now, referring to Exhibit Number 11 -- this is a
18 type log of that well to the north of you there -- is the
19 lower Morrow the main producing Morrow string or interval
20 of the Morrow production in this area?

21 A. Yes, sir, it is.

22 Q. And do you find any of the middle Morrow or upper
23 Morrow being productive on a stand-alone basis?

24 A. Yes, there are some places farther to the west
25 and south where there are a couple of wells that had pretty

1 good Morrow production. They're off our maps here.

2 Q. Okay, so --

3 A. The middle Morrow.

4 Q. The middle Morrow. But the lower Morrow is your
5 main productive interval in this area?

6 A. Yes, sir.

7 Q. That leads me to Exhibit Number 10. Now, in some
8 wells, especially in 3 and 2, and one down there in Section
9 14, you have a bold parentheses, "middle Morrow". Are
10 these -- Am I to assume that these are just middle Morrow
11 producers, or were they also producing from the other
12 portions of --

13 A. No, sir, that's -- Your first thought was
14 correct, sir. These are middle Morrow producers and middle
15 Morrow producers only. They did not produce from the lower
16 Morrow ever.

17 And that addresses Mr. Bruce's question also,
18 that the middle Morrow in this area is really not all that
19 great. It's not capable of making an economic well in this
20 immediate area.

21 Q. Then I've got a problem here with the one in
22 Section 14, because if I switch back to Exhibit Number 12,
23 you show that as a lower Morrow producer, and then what
24 you're telling me, Exhibit Number 10, that's a middle
25 Morrow producer only. Something's wrong.

1 A. Thank you very much. That designation of lower
2 Morrow in the case of this well in Section 14 is incorrect.

3 Q. Okay, which is incorrect? The depiction in 12?

4 A. The depiction on 12, that's correct, that is a
5 middle Morrow producer also, and not a lower Morrow. The
6 red circle shouldn't be on that one.

7 Q. So that should be depicted the same way as the
8 two wells in the south half of 3 and also the south half of
9 2?

10 A. Yes, sir, it should.

11 EXAMINER STOGNER: No other questions of this
12 witness.

13 MR. KELLAHIN: That concludes our presentation,
14 Mr. Examiner.

15 EXAMINER STOGNER: Is there anything else in Case
16 Number 11,774 at this time? Then this matter will be
17 continued to the Examiner hearing scheduled for May 15th,
18 and should it be necessary, Mr. Bruce, Mr. Kellahin, to
19 contact me as soon as possible if we need to continue that
20 to May 29th, or this matter could be taken under advisement
21 at the May 15th.

22 Okay, with that we'll continue.

23 (Thereupon, these proceedings were concluded at
24 11:38 a.m.)

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.

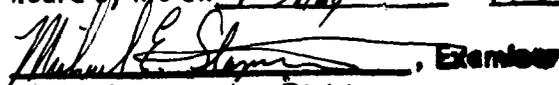
WITNESS MY HAND AND SEAL May 8th, 1997.



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. 11774, heard by me on 1 May 1997.


Examiner
Oil Conservation Division