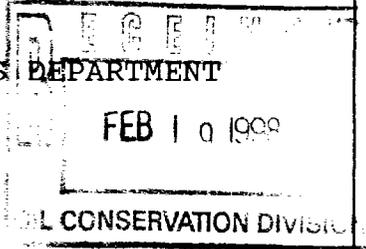


STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION



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

CASE NO. 11,908

ORIGINAL

REPORTER'S TRANSCRIPT OF PROCEEDINGS
EXAMINER HEARING

BEFORE: DAVID R. CATANACH, Hearing Examiner

February 5th, 1998

Santa Fe, New Mexico

This matter came on for hearing before the New Mexico Oil Conservation Division, DAVID R. CATANACH, Hearing Examiner, on Thursday, February 5th, 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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 Examiner Hearing
 CASE NO. 11,908

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* * *

A P P E A R A N C E S

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 By: W. THOMAS KELLAHIN

* * *

1 WHEREUPON, the following proceedings were had at
2 8:54 a.m.:

3 EXAMINER CATANACH: At this time we'll call Case
4 11,908.

5 MR. CARROLL: Application of Marathon Oil Company
6 for compulsory pooling, Eddy County, New Mexico.

7 EXAMINER CATANACH: Call for appearances in this
8 case.

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 CATANACH: Any additional appearances?
14 (Thereupon, the witnesses were sworn.)

15 MR. KELLAHIN: Mr. Examiner, this case was on the
16 last Examiner docket in January of this year. That was Mr.
17 Stogner's docket.

18 At that time we requested the case be continued
19 to today. It was our hope and expectation we would have
20 voluntary agreement from all parties. In fact, that has
21 occurred.

22 However, Enron has chosen to be subject to a
23 compulsory pooling order and desires to be nonconsent under
24 that order. Therefore, it requires us to make a
25 presentation today and to obtain from the Division a

1 compulsory pooling order.

2 We have all other parties voluntarily committed
3 in other types of agreements.

4 With your permission, we'd like to proceed.

5 MR. CARROLL: Mr. Kellahin --

6 MR. KELLAHIN: Yes, sir.

7 MR. CARROLL: -- do you know why Enron prefers to
8 be compulsory pooled, rather than entering into a voluntary
9 agreement?

10 MR. KELLAHIN: Mr. Tim Robertson perhaps can
11 speak to that. He's the Marathon landman that negotiated
12 that solution.

13 I can't speculate as to why they chose to require
14 us to do it this way.

15 TIM B. ROBERTSON,

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. Mr. Robertson, for the record, sir, would you
21 please state your name and occupation?

22 A. Yes, my name is Tim Robertson. I'm a petroleum
23 landman for Marathon Oil Company. I live in Midland,
24 Texas.

25 Q. On prior occasions, sir, have you testified

1 before the Division in your capacity as a petroleum
2 landman?

3 A. Yes, I have.

4 Q. And is it your responsibility as a petroleum
5 landman to identify the interest owners for this proposed
6 well and, once identified, to negotiate with those parties
7 in terms of obtaining joinder in a voluntary agreement for
8 this well?

9 A. Yes, I am.

10 MR. KELLAHIN: We tender Mr. Robertson as an
11 expert witness.

12 EXAMINER CATANACH: He is so qualified.

13 Q. (By Mr. Kellahin) Mr. Robertson, if you'll turn
14 to Exhibit 1 and identify that for us?

15 A. Yes, this is a map showing the proposed 320-acre
16 proration unit for our proposed Burns 34 State Number 1
17 well. It shows the three different leases that make up
18 this tract and also the working interest owners and their
19 percentages within each of the leases shown.

20 Q. You're seeking a pooling order that has a
21 specific limitation to it in terms of the footage depth to
22 be pooled?

23 A. Yes, that's correct. The ownership in this
24 particular proration unit is different as to depths above
25 3500 feet and depths below 11,152, so we have chosen this

1 particular interval as the interval that was of interest
2 and of the zones that we were interested in testing.

3 Q. The contractual arrangements are such that there
4 is a specific footage depth that you've identified that
5 applies to these various interests --

6 A. Yes, that's correct.

7 Q. -- as to a stratigraphic-equivalent formation?

8 A. Yes, sir.

9 Q. All right. The percentages outlined on this
10 exhibit are percentages within each lease that constitutes
11 the spacing unit that's proposed?

12 A. That's correct.

13 Q. Let's turn to Exhibit 2 and have you show us what
14 the working interest percentage would be, presuming a 320-
15 acre north-half spacing unit.

16 A. Yes, this exhibit shows the interests of the
17 working interest parties as to the 320-acre spacing unit
18 proposed for the well.

19 It shows the names and addresses of these
20 parties, and it shows the status of our negotiations in a
21 code along the left-hand column, and then the legend for
22 that code is at the bottom.

23 Q. As of today, the only party subject to a
24 compulsory pooling order is which company?

25 A. Enron Oil and Gas Company.

1 Q. All right, let's set that exhibit aside for a
2 moment. When did you propose this well to all the working
3 interest owners in the spacing unit?

4 A. This well was proposed in a letter dated November
5 4th, 1997, and was sent out that day to all the working
6 interest owners that you see, and that letter is shown as
7 Exhibit Number 3.

8 Q. Did you advise them of the estimated costs of the
9 well in that letter?

10 A. Yes, an AFE was attached to that letter, which is
11 also part of that exhibit. Also, we proposed that if a
12 party did not wish to participate, that they either farm
13 out their interest to Marathon or that they sell us a term
14 assignment.

15 Q. All right. In addition to proposing the well and
16 participation, you gave them other options?

17 A. Yes, we gave them two other options other than
18 participation in the well.

19 Q. All right, let's turn to the next correspondence;
20 it's Exhibit 4. Would you identify and describe that
21 display?

22 A. Yes, this is a cover letter that was sent to all
23 the working interest owners, in which we sent an operating
24 agreement to each of the owners and requested that they
25 join this operating agreement if they were interested in

1 participating in the well.

2 Q. All right. And you had working interest owners
3 that executed the joint operating agreement, did you not?

4 A. Yes, we have three working interest owners that
5 have joined us in the operating agreement and have signed
6 the AFE to participate in the well.

7 Q. And who are those entities or individuals?

8 A. Yes, those parties are Yates Petroleum
9 Corporation; Read and Stevens, Inc.; and Mr. Roy Barton,
10 Jr., as trustee of a revocable trust.

11 Q. When we turn to Exhibit 5, is this verification
12 of the commitment of these various companies to
13 participation pursuant to the operating agreement?

14 A. Yes, this exhibit has copies of the signature
15 pages of both the AFE and the operating agreement which
16 have been signed by these three parties, as well as
17 Marathon.

18 Q. Did any of these parties object to your proposed
19 AFE?

20 A. No, they did not.

21 Q. Has any party objected to your proposed AFE?

22 A. No, they have not.

23 Q. Have there been any objections communicated to
24 you on any subject with regards to this proposal?

25 A. No.

1 Q. Let's turn to Exhibit 6. Would you identify and
2 describe that display?

3 A. Yes, this exhibit shows three examples of
4 operating agreements in the immediate area in which
5 Marathon is a party. Two of these operating agreements,
6 Marathon is a nonoperator; and the third, Marathon is the
7 operator. It shows the overhead rates that are in -- that
8 were proposed and existing within these operating
9 agreements to show that they are within the same range as
10 the overhead rates which we are proposing under our
11 operating agreement.

12 Q. Do these three examples of operating agreements
13 provide for the drilling of wells as deep gas wells, such
14 as your proposed well?

15 A. Yes, these were all operating agreements covering
16 deep Morrow wells.

17 Q. What, then, is your recommendation to the
18 Examiner for an overhead rate on a monthly basis for a
19 drilling and a producing well?

20 A. Our recommendation is for a fixed overhead rate
21 of \$5400 for drilling wells and \$540 for producing wells.

22 Q. Let's turn now to your summary, Exhibit 7, and
23 have you summarize for us your contacts with Enron in
24 efforts to obtain voluntary agreement from that company.

25 A. Yes, this is a summary of the contacts that I've

1 had with Mr. Patrick Tower at Enron. It shows the dates in
2 which they received our well proposal, in which they
3 received our operating agreement, and then also dates on
4 which I spoke with Mr. Tower.

5 Enron's position on this well and other wells
6 that we have proposed in this immediate area is that
7 because their interest is relatively small, that they do
8 not wish to spend their time evaluating and reviewing
9 agreements concerning wells in which they have interest
10 this small, and they prefer to simply go nonconsent under
11 pooling orders.

12 Q. You were not able to persuade them to simply
13 execute a standard joint operating agreement that had been
14 modified to allow them to go nonconsent on the initial
15 well?

16 A. No, sir, I was not.

17 Q. Let's turn to what you were able to negotiate
18 with Mr. Tower. If you'll turn to that letter -- it's
19 marked as Exhibit 8 -- summarize for us what you've agreed
20 to.

21 A. This agreement actually covers four wells, and
22 all of these four wells we have either obtained pooling
23 orders or, in the case of the Burns well, which is the well
24 we're speaking of today, an order -- it's a case in which
25 we have an Application before the Commission.

1 determined for this well?

2 A. Yes, it's -- I believe it's Unit C of the Section
3 34, is the proposed well location. It's shown on the
4 Exhibit Number 1.

5 Q. You don't offhand know the footage for that well?

6 A. No, not off the top of my head I don't. I'm sure
7 our second witness will know that.

8 EXAMINER CATANACH: Okay. We have no further
9 questions.

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

12 WILLIAM D. DeMIS,

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

15 DIRECT EXAMINATION

16 BY MR. KELLAHIN:

17 Q. For the record, sir, would you identify yourself
18 and tell us where you're employed and where you reside?

19 A. My name is William D. DeMis. I'm employed by
20 Marathon Oil Company, and I reside in Midland, Texas.

21 Q. On prior occasions have you qualified before the
22 Division as a petroleum geologist in compulsory pooling
23 cases and testified in that capacity?

24 A. Yes, I have.

25 Q. Pursuant to your employment, have you made a

1 geologic assessment of the risks involved in drilling this
2 particular well?

3 A. Yes, I have.

4 MR. KELLAHIN: We tender Mr. DeMis as an expert
5 witness.

6 EXAMINER CATANACH: He is so qualified.

7 Q. (By Mr. Kellahin) Let me have you turn to
8 Exhibit Number 10, Mr. DeMis. Give us a general review of
9 what we're seeing when we look at the well data on this
10 display.

11 A. Yes, thank you. This is a map of the immediate
12 area surrounding our proposed unit. In blue it shows the
13 outline of the existing units. The red circles are other
14 Morrow wells in this area that are productive or are now
15 inactive. The inactive wells are shown by a little stroke
16 through them.

17 What this map shows is that our location in the
18 north half of 34 is quite a distance from any significant
19 production. We're kind of taking a stepout here. There's
20 a dry hole to the south and east of us, and there's a well
21 due north that only had a couple feet of Morrow sand and is
22 not capable of production.

23 Q. In order to develop a prospect, what type of
24 geologic maps do you generate to assess the viability of a
25 location for a section like this?

1 A. Yes, what I did was, I -- The primary objective
2 here is the lower Morrow sand, which is a series of fluvial
3 sands or river sands. And what I did was, I've made a --
4 constructed a map, which is Exhibit 11, of the net sand as
5 I have interpreted it for the area immediately around our
6 proposed well location.

7 Q. Has this been your methodology for the other
8 compulsory pooling cases that you've testified about?

9 A. Yes, sir, it has.

10 Q. In this particular case, is structure a component
11 of your analysis?

12 A. Yes. Well -- Yes, it was a component of the
13 analysis insomuch as that when I completed an investigation
14 of the relationship between structure and production for
15 the immediate couple of townships, I did not see a
16 relationship between structure and Morrow production.

17 In order to have a good Morrow well, you've got
18 to find the sand. That seems to be the most critical
19 factor in finding and having an economically successful
20 well.

21 Q. When we look at Exhibit 11, can you utilize this
22 display to reach a conclusion or opinion about the
23 appropriate risk factor penalty to recommend to the
24 Examiner in this case?

25 A. Yes, I can.

1 Q. And what is that recommendation?

2 A. I would recommend a 200-percent risk penalty.

3 Q. Describe for us the reasons why you have that
4 opinion.

5 A. Yes, sir. The -- What we're playing on is a
6 conceptual model with these fluvial sands oriented in a
7 north-northwest-trending trend. The control immediately to
8 the south and north, both those wells had only a couple of
9 feet of Morrow sand in them. The well in the south half of
10 34 had eight feet of sand in it, but that may not be an
11 economically successful well at the Morrow.

12 The critical well is the well in the east half of
13 Section 3 that was drilled back in the early 1950s. That
14 well, they cut four cores in. And the sample description
15 of those cores described over 30 feet of medium to coarse
16 sand, and they were able to actually DST the interval in
17 that well and got it up -- got rates up over a million a
18 day.

19 This well was drilled with fresh water. Back in
20 the 1950s they did not have a very sophisticated
21 understanding of how to limit damage to the Morrow. So we
22 see this well as having a producibility potential that was
23 damaged long ago.

24 In any event, this well sets up a north-south
25 trend to the -- what we think is a north-south trend to the

1 fluvial system here. And so on the basis of this, we've
2 inferred that this channel trends to the north northwest
3 from that location.

4 Though, as you can see, we're passing some wells
5 with not a lot of net sand in them, along the way to get to
6 our location. And you can see there's a well with eight
7 feet, a well with two feet, another one to the north with
8 two feet, and so on. The map speaks for itself.

9 Q. When we look at those control points on each side
10 of the channel as it moves through Sections 34 --

11 A. Yes, sir.

12 Q. -- and on north, they frame a minimum thickness
13 in this Morrow channel, and you've hypothesized that they
14 are west and east of a channel thickening that you've
15 oriented through the northwest quarter of 34?

16 A. Yes.

17 Q. When we look at that thickness, the only basis
18 for that thickness is the presumption, based upon the data
19 in the well in Section 3?

20 A. Yes, that's correct. It's based on the
21 presumption that this is a fluvial system. And somehow the
22 sand had to get there, so we envision it coming from the
23 north. But of course, this is highly inferential.

24 Q. And therein lies the substantial risk?

25 A. Yes, sir. Thank you, sir.

1 Q. With regards to the location itself, has it been
2 specifically staked?

3 A. The location will be in Unit C, the legal
4 location.

5 Q. We don't have a specific footage at this point?

6 A. I believe it would be at 1650 and 660, a legal
7 location in Unit C.

8 Now, there may be a little bit of -- a hundred
9 feet either way, just due to the -- There may be some
10 surface problems at this point.

11 Q. If the Examiner approves the well in location C,
12 then, in that 40-acre tract, that should accommodate any
13 desire or need to move for topographic reasons?

14 A. Yes, for topographic reasons or, you know, other
15 minor problems that occur, as you know, in the course of
16 staking a location, yes, Unit C would be sufficient.

17 MR. KELLAHIN: That concludes my examination of
18 Mr. DeMis. We move the introduction of his Exhibits 10 and
19 11.

20 EXAMINER CATANACH: Exhibits 10 and 11 will be
21 admitted as evidence.

22 EXAMINATION

23 BY EXAMINER CATANACH:

24 Q. Mr. DeMis, is the lower Morrow sand the only
25 prospective target in the Morrow formation?

1 A. In this immediate area, unfortunately, it is the
2 only one that we can assign a reasonable probability of
3 success to. There is also the middle Morrow sand in this
4 -- in the greater several-township area. There is middle
5 Morrow sand farther to the east.

6 But unfortunately, in the immediate vicinity the
7 middle Morrow sand is just not productive.

8 Q. All of the wells that you've shown here are
9 producing from the lower Morrow interval?

10 A. No, there would be exception to that, thank you,
11 sir, and that is the well in the north half of 28. That
12 well was completed in the middle Morrow sand.

13 It came on -- it had a -- After an acid-frac
14 stimulation, it had a nice calculated absolute open flow,
15 but it quickly died, and it is not an economic test.

16 Q. Okay. Do you know what the well in the south
17 half of Section 34 is currently producing at?

18 A. The well in the south half of Section 34, is
19 it -- I'm sorry, the question?

20 Q. Do you know what that well is currently producing
21 at? At what rate?

22 A. At what rate? About 150 M a day.

23 Q. And that was drilled and completed just last
24 year?

25 A. Yes, sir. That well was drilled by Mewbourne Oil

1 Company.

2 Q. What about the uphole intervals, the secondary
3 objectives in this well? Can you describe any?

4 A. Yes, there's the possibility for Atoka at this
5 location. Marathon drilled the well in the west half of 27
6 and encountered 14 feet of Atoka sand that was capable of
7 gas production.

8 Unfortunately, this sand -- We completed it for
9 over a million a day, almost 1 3/4 million a day, in the
10 Atoka sand. But that well is now down to about 30 M a day,
11 and it will not be an economically successful test.

12 There's also some potential in the Strawn. There
13 is scattered -- what's called Strawn pay in this area.
14 Again, unfortunately at this point we have only indications
15 that there is Strawn potential in here, and we have no
16 definitive proof yet.

17 Q. Okay. Any shallower oil zones or --

18 A. There could be -- Well, yes, but at this point --
19 We're getting beyond the confines of the actual mapped
20 area, but there is potential in Bone Springs, there is
21 potential in the Canyon, there is potential in the Cisco.
22 There is some possibility of -- There are a lot of shows in
23 this area in the Wolfcamp horizon also. And that pretty
24 well exhausts the possibilities that are for secondary
25 objectives within the interval that we have under lease.

1 Now, there is a lot of very shallow San Andres-
2 Queen, but we don't have the rights to those, and that's
3 what Mr. Robertson addressed earlier --

4 Q. Okay.

5 A. -- the depth restriction on our lease.

6 Q. The well that was drilled, the dry hole in the
7 north half of Section 34 --

8 A. Yes, sir.

9 Q. -- could you tell me a little bit about that?

10 A. Yes, sir. That well was drilled by Hanagan
11 Petroleum in 1979. It was drilled to a total depth of
12 11,205 feet. They did conduct one DST of the Morrow, which
13 recovered 90 feet of mud. The flowing pressure was 236
14 p.s.i., and the shut-in -- the final shut-in pressure was
15 337. This is a tight test. It's a condemnation test for
16 that well.

17 Q. Okay, and it only encountered two feet sand in
18 that interval?

19 A. Two feet of what I would consider net sand, sand
20 greater than six percent, yes, sir.

21 Q. Okay. Do you know the orientation of this field?
22 Is it generally -- Is this generally the extent of this
23 field, or on a more -- on a larger scale -- is it larger
24 than this?

25 A. As concerns the Morrow?

1 Q. Right.

2 A. Yes. Well, what I'm hoping is that it's oriented
3 approximately north northwest.

4 As we look farther to the northeast, there's a
5 series of Morrow channels that are extremely productive in
6 the northeastern corner of this township, and they do
7 have -- the sand channel trends do have a north --
8 northeast trend to them. There's a series of these river
9 channels.

10 You can see part of one that's developed in the
11 north half of Section 26 and 27, and we're hoping that
12 there's another analogous one here. That's the way we
13 envision at this point.

14 EXAMINER CATANACH: Okay. I have nothing
15 further, Mr. Kellahin. The witness may be excused.

16 Do you have anything further in case?

17 MR. KELLAHIN: No, sir.

18 EXAMINER CATANACH: There being nothing further
19 in this case, Case 11,908 will be taken under advisement.

20 (Thereupon, these proceedings were concluded at
21 9:20 a.m.)

22 I do hereby certify that the foregoing is
23 a complete record of the proceedings in
24 the Examiner hearing of Case No. 11908
25 heard by me on 2/27 1988.
David 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 February 7th, 1998.


 STEVEN T. BRENNER
 CCR No. 7

My commission expires: October 14, 1998