STATE OF NEW MEXICO

ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT OIL CONSERVATION DIVISION

IN THE MATTER OF THE HEARING CALLED BY THE OIL CONSERVATION DIVISION FOR THE PURPOSE OF CONSIDERING:

CASE NO. 11,909

APPLICATION OF MARATHON OIL COMPANY FOR COMPULSORY POOLING, EDDY COUNTY, NEW MEXICO ORIGINAL

REPORTER'S TRANSCRIPT OF PROCEEDINGS

EXAMINER HEARING

BEFORE: MICHAEL E. STOGNER, Hearing Examiner

January 22nd, 1998

Santa Fe, New Mexico

This matter came on for hearing before the New Mexico Oil Conservation Division, MICHAEL E. STOGNER, Hearing Examiner, on Thursday, January 22nd, 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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APPEARANCES

FOR THE DIVISION:

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FOR THE APPLICANT:

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By: W. THOMAS KELLAHIN

* * *

1	WHEREUPON, the following proceedings were had at
2	8:23 a.m.:
3	EXAMINER STOGNER: At this time I'll call Case
4	Number 11,909.
5	MR. CARROLL: Application of Marathon Oil Company
6	for compulsory pooling, Eddy County, New Mexico.
7	EXAMINER STOGNER: Call for appearances.
8	MR. KELLAHIN: Mr. Examiner, I'm Tom Kellahin of
9	the Santa Fe law firm of Kellahin and Kellahin, appearing
10	on behalf of the Applicant, and I have two witnesses to be
11	sworn.
12	EXAMINER STOGNER: Are there any other
13	appearances?
14	Will the witnesses please stand at this time to
15	be sworn?
16	(Thereupon, the witnesses were sworn.)
17	TIM B. ROBERTSON,
18	the witness herein, after having been first duly sworn upon
19	his oath, was examined and testified as follows:
20	DIRECT EXAMINATION
21	BY MR. KELLAHIN:
22	Q. For the record, sir, would you please state your
23	name and occupation?
24	A. My name is Time Robertson. I'm a petroleum
25	landman for Marathon Oil Company.

1	Q. Mr. Robertson, on prior occasions have you
2	testified before the Division and qualified as an expert in
3	petroleum land matters?
4	A. Yes, I have.
5	Q. Pursuant to your employment by Marathon, are you
6	involved in consolidating the working interest owners for a
7	well to be drilled in the south half of Section 22 that's
8	on the docket today as Case 11,909?
9	A. Yes, sir, I am.
10	MR. KELLAHIN: We tender Mr. Robertson as an
11	expert landman.
12	EXAMINER STOGNER: Mr. Robertson is so qualified.
13	Q. (By Mr. Kellahin) Let me have you turn to
14	Exhibit 1. It's a plat showing the south half of Section
15	22. Walk us through the information, Mr. Robertson, so
16	that we can see where the various leases are in the spacing
17	unit and what the various gross working interest
18	percentages are for each of the leases.
19	A. Yes, the working interests shown on this plat are
20	for the leases within the south half of Section 22 as to
21	depth below 5000 feet below the surface.
22	It shows that there are four separate leases in
23	the south half of the section with four separate sets of
24	ownership.

One is owned by Exxon; one is owned by Chevron;

one is owned by Marshall and Winston, Petro-Quest and Logro Corporation; and the last is owned by Atlantic Richfield, Yates Petroleum, Marathon Oil and Louis Dreyfus.

- Q. At this point, have you been able to consolidate all the working interest owners in this proposed spacing unit for the drilling of this well?
- A. I have been able to obtain written agreements of either participation in the well or agreements to farm out or term assign leases for all the parties except for Exxon Corporation.
- Q. And Exxon has the 40-acre tract that's in the northwest of the southwest of 22?
 - A. That's correct.

- Q. Your pooled interval, the interval that you're seeking compulsory over, is unique in that it is specifically limited by a footage depth, is it not?
- A. Yes, that's correct.
 - Q. And that's a circumstance created by the contracts and agreements that preceded your proposal for this well?
 - A. Yes, it was an artifact, basically, of the ownership of different depths in the leases themselves.
 - Q. Specifically, the pooled interval would be 5000 feet down to 11,152 feet. The lower depth is the approximate base of the Morrow formation, is it not?

A. That's correct.

- Q. Let's turn to your Exhibit Number 2 and have you give us a status report on the commitment of interest. How do we read and understand the summary?
- A. This is a summary of all the working interest owners within the spacing unit for this well. It shows each party's working interest within the unit, and it also, on the left-hand column, shows the current status of the party as to the negotiations to either join, farm out or sell a term assignment.

Atlantic Richfield has sold Marathon a term assignment on this particular well. Yates Petroleum has signed an AFE to participate in the well. Louis Dreyfus has signed an AFE to participate in the well. Chevron has traded acreage with Marathon.

And Exxon, as I mentioned before, has not -- we have not been able to come to any agreement to bring them under the operating agreement or another agreement.

The last three, Marshall and Winston, Petro-Quest and Logro Corporation, have all signed AFEs and the operating agreement to participate in the well.

- Q. Your original proposal in writing to these various working interest owners, including a submittal of your proposed AFE, was November 4th of 1997, was it not?
 - A. That's correct.

- Q. Let's turn to Exhibit Number 3. It's a summary of your operating agreement overheads. What do you propose to have the Examiner adopt for the overhead rates for this pooling case?
- A. We would propose overhead rates of \$5400 for drilling wells and \$540 for producing wells, which is based on -- The other operating agreements in this area is similar to the rates.

Then we have outlined three of those agreements that Marathon is a party to in this same township on this page.

- Q. In addition, in this generalized area, you have received recent Division compulsory pooling orders for other Morrow wells, have you not, sir?
 - A. That's correct.

- Q. And what has been the rate approved in those other pooling cases?
- A. The rate has been the same that we're proposing in this case.
- Q. Let's turn now to the topic of your well proposal. If you'll turn to Exhibit Number 4, identify and describe the written proposal.
- A. This is the letter with the attached AFE that was sent to all the working interest owners on November 4th of 1997. It proposes the drilling of this well as a Morrow

well, and it invites the participation of each of the working interest owners.

In the alternative to participation, it proposes that the working interest owner either sell Marathon a term assignment or farm out their interest to Marathon.

- Q. Since submitting this proposal to the eight other working interest owners, you were able to consolidate within that period of time the cooperation and participation in some fashion of seven of the eight working interest owners?
 - A. That's correct.
 - Q. This letter was sent to Exxon?
- 13 A. Yes, sir, it was.

- Q. Approximately how many contacts have you had with Exxon since the November 4th letter?
- A. We -- I have had this letter, another letter proposing the operating agreement, and I've had phone conversations with representatives of Exxon approximately eight times between the time the letter was sent out, November 4th, and today.
- Q. All right, let's turn to Exhibit 5 and have you identify and describe that display.
- A. Yes, Exhibit 5 is a copy of the letter that went out with the proposed operating agreement for this well.
- 25 It also contains the list of working interest owners, the

return receipts that were received from the working interest owners, the first page of the operating agreement, page number 6 of the operating agreement which shows the nonconsent penalties of 100 and 300 percent.

It also includes page 4 of the COPAS attached to the operating agreement, which shows our proposed fixed overhead rates of \$5400 for drilling wells and \$540 for producing wells.

- Q. If the Division Examiner adopts your proposed rates in the pooling order, then those rates will be consistent with the subsequent operation penalties contained in the operating agreement to which some of these parties have agreed to participate?
 - A. That's correct.

- Q. Have any of the working interest owners objected to the AFE?
 - A. No, sir, they have not.
- Q. All right. Has there been any objection to
 Marathon being the operator?
 - A. No, there has not.
 - Q. Let's turn finally to Exhibit 6. Contained within this exhibit package are what, sir?
 - A. Contained within this exhibit are either executed AFE pages or executed signature pages to our operating agreement by the parties who are participating in the well,

1	which would include Yates Petroleum, Louis Dreyfus Natural
2	Gas, Marshall and Winston, Petro-Quest Exploration and
3	Logro Corporation.
4	Q. Within the period of time subsequent to November
5	4th, then, all these companies have managed to find time to
6	make decisions concerning participating in this well
7	proposal, with the exception of Exxon?
8	A. That's correct.
9	Q. You now seek a pooling order against Exxon, do
10	you not, sir?
11	A. That's correct.
12	MR. KELLAHIN: That concludes my examination of
13	Mr. Robertson.
14	We move the introduction of his Exhibits 1
15	through 6.
16	EXAMINER STOGNER: Exhibits 1 through 6 will be
17	admitted into evidence.
18	EXAMINATION
19	BY EXAMINER STOGNER:
20	Q. Mr. Robertson, Exxon is the only holdout at this
21	point; is that correct?
22	A. Yes, sir, that's correct.
23	Q. And all their interest includes that northwest
24	quarter of the southwest quarter?
25	A. That's correct, which would make their interest

1 in the well 12 1/2 percent. Twelve and a half. That is only for 320-acre 2 Q. 3 spacing only; is that correct? 4 Α. Yes, sir, that's correct. So at this time would it be prudent for me to 5 Q. 6 dismiss the other portion of this case requesting 160- and 7 40-acre compulsory poolings? 8 Α. Yes, you may do that. Do you have a lease expiration coming up any time 9 Q. soon, or what's the status of that? 10 No, sir, the leases that we have, the nearest 11 expiration that we have is our ARCO term assignment. ARCO 12 sold us a one-year term assignment, which I believe was 13 14 dated approximately December 1st. So --Of -- ? 15 0. -- of 1997. So we would have until December 1st 16

Α. of this year to -- before that lease expires. But I quess our only pressure at this point is to keep up with our drilling schedule.

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- Do you know anything about that rig schedule? 0. Have you all got one ready to go or --
- We have a contracted -- a rig to drill this and Α. several other wells in the area. And currently, I believe this well is on the schedule to be drilled in April.

EXAMINER STOGNER: Are there any other questions

of Mr. Robertson? 1 **EXAMINATION** 2 BY MR. CARROLL: 3 Yeah, you have had no contact from Exxon? 4 0. 5 Α. Well, I've spoken with them a number of times, and all they can tell me is that they will give us some 6 7 kind of a deal. They've indicated that they'll probably give us a term -- sell us a term assignment. But 8 apparently it's not a high priority on their list of things 9 to get done. 10 FURTHER EXAMINATION 11 12 BY EXAMINER STOGNER: 13 Q. Actually, I'm glad Mr. Carroll brought that 14 question up. Who have you been dealing with in Exxon, and 15 what offices have you been dealing with? I've been dealing with Mr. Bob Matthew in their 16 Α. Houston office. 17 Now, do they have operations in Midland? 18 19 Α. Exxon had an office in Midland until last year. They closed their Midland office in 1997. 20 Do you know about when they closed that office 21 Q. 22 down in Midland? I believe it was around May or June of 1997. 23 Α. So that shouldn't be a factor in there, but 24 Q. 25 you're dealing with the Houston office at this time?

1	A. Yes, at this time they have no land people in
2	Midland at this point.
3	EXAMINER STOGNER: Any other questions?
4	Thank you, Mr. Robertson.
5	THE WITNESS: Thank you.
6	EXAMINER STOGNER: You may be excused.
7	Mr. Kellahin?
8	MR. KELLAHIN: Mr. Examiner, this exhibit is out
9	of sequence. It's Exhibit 9. It's our certificate of
10	notification to Exxon.
11	Exxon received notification of the hearing of
12	this case, along with a copy of the Application, on January
13	5th. It was sent to them on December 29th. We'd request
14	the introduction of Exhibit 9.
15	EXAMINER STOGNER: Exhibit Number 9 will be
16	admitted into evidence at this time.
17	MR. KELLAHIN: Mr. Examiner, my last witness is
18	Mr. Bill DeMis. Mr. DeMis is a petroleum geologist with
19	Marathon Oil Company. He resides in Midland, Texas.
20	WILLIAM D. DEMIS,
21	the witness herein, after having been first duly sworn upon
22	his oath, was examined and testified as follows:
23	DIRECT EXAMINATION
24	BY MR. KELLAHIN:
25	Q. For the record, sir, would you please state your

1 name and occupation? Yes, sir. My name is William DeMis. 2 3 geologist and I work for Marathon Oil Company in Midland, Texas. On prior occasions, Mr. DeMis, have you testified 5 Q. 6 before the Division involving assessments of risk factor penalties in compulsory pooling cases involving the 7 drilling of Marathon's Morrow gas wells in Eddy County, New 8 9 Mexico? Yes, I have. 10 Α. Pursuant to your employment, have you made a 11 geologic investigation of the potential risk involved in 12 13 drilling the subject well? Yes, I have. 14 Α. And based upon that study, do you now have an 15 Q. 16 opinion as to an appropriate risk factor penalty? Α. Yes, I do. 17 MR. KELLAHIN: We tender Mr. DeMis as an expert 18 geologist. 19 EXAMINER STOGNER: Mr. DeMis is so qualified. 20 Sir, how do you spell your name? 21 22 THE WITNESS: Yes, sir, it's D-e-M-i-s, with a 23 capital "M", sir. 24 EXAMINER STOGNER: Okay, just one "s", all right. Yes, sir. 25 THE WITNESS:

Q. (By Mr. Kellahin) Let me have you direct your attention to what is marked as Exhibit Number 7. It is a locator map that gives us information about wells that are deeper than 9000 feet, and this would show us Morrow production in the area, would it not?

A. Yes, it does.

- Q. Let's look at the south half of 22, the proposed Garvin well is to be located in Unit Letter O of Section 22?
 - A. Yes, sir.
- Q. Let's set that aside for a moment, because it has information I want to ask you about later, but let's turn to your isopach map, which is Exhibit Number 7 -- I'm sorry, that's 8. Identify and describe what you're showing us here.
- A. Yes, what I've done is, I've made an isopach map of the lower Morrow sand, which is the main productive horizon in this area.

And what I've done is, there's production in 26 and 27, and I feel that there's a -- The Morrow, the lower Morrow, is a series of fluvial channels or river sands.

And what I've done is, I've connected up this sand channel with the well in Section 15, which has a very thick sand section in it. The operating model here is that the sand should be distributed along some sort of sinuous channel,

like a river.

- Q. When we look at this display, where is the closest best well to your proposed location?
- A. Yes, sir, the closest best well would be in Section 27, approximately a half mile -- a little bit more than a half mile away.
- Q. As we move to the north and to the west of the well in 27, describe for us the confidence you have in the well control for your isopach map.
- A. Yes, thank you. As we move to the north from that well, the next well we pick up is the well in the north half of 22. That only has two feet of net sand. To the west there's the well in the west half of Section 27 that also only has two feet of sand.

So the exact -- The orientation of this channel through the south half of Section 22 is highly inferential, inasmuch as my only good sand control from 27, the well in the east half of Section 27 is over a mile and a half away in Section 15.

Q. Let me turn to another topic about sand thickness. Your isopach map presumes thicknesses greater than 22 feet within this channel. Have there been any successful Morrow wells within this channel as you've interpreted it that produce from wells that have greater than 22 feet?

1 Α. Are there wells that have produced with greater than 22 feet? 2 Yes, sir, in this particular interpretation. 3 0. A. Yes, sir, there are. 4 5 And where would they be? Q. Those would be the wells -- the well in the west Α. 6 7 half of Section 26. 8 Q. Okay. 9 Or, I guess -- I'm sorry, I see what you're A. 10 getting at. Please excuse me. Twenty-six has got the greatest thickness of 11 Q. 12 Morrow channel sand in this system with a producing well, and it was 22 feet? 13 14 Α. Yes. 15 Is that the greatest thickness? Q. The greatest thickness if 51 feet in Section 15. 16 Α. Did that well produce? 17 Q. No, that well did not. That well was drilled in 18 Α. 1992 by Mewbourne, and they've perforated and fracture-19 stimulated the lower and middle Morrow. And after 20 21 completing a sand-acid frac with 54,000 gallons of acid and 22 40,000 pounds of sand, they were only able to establish 100 MCF per day on the well. 23 24 My thought is that there may be -- My thought is

that the completion practice may not have been optimum for

that well. The reason why it has an oil symbol on it is because it was later recompleted in the Bone Springs.

- Q. Based upon your analysis, then, what is your conclusion concerning an appropriate risk factor penalty in terms of a percentage?
 - A. Yes, 200 percent would be appropriate.
- Q. Let me turn to another topic. You've been involved with Marathon's other Morrow wells in this area. The AFE that was sent to the working interest owners that was approved by certain of the owners showed a total well cost -- and my copy is awfully difficult to read. I think it's -- You'll have to help me, Mr. DeMis. It's eight-hundred-plus-thousand.
 - A. \$836,000.

- Q. Make sure we're looking at the same thing.
- A. I'm sorry, I had -- I pulled out one of the old
 AFES.
 - Q. All right. The current AFE proposed to Exxon is what, sir?
 - A. \$865,000.
 - Q. How does that compare to the actual costs that have been accrued to the other wells drilled by Marathon to the Morrow formation in this area?
- A. That compares very closely. Just last year,

 Marathon drilled the Crockett 27 State and the Buchanan 33

1 State, and the average cost for those two wells was \$830,000 -- \$833,000. 2 So this AFE is a fair and accurate representation 3 of the cost to drill a well -- drill and complete a well to 4 5 the Morrow. 6 MR. KELLAHIN: That concludes my examination of 7 Mr. DeMis, Mr. Stogner. 8 We move the introduction of his Exhibits 7 and 8. EXAMINER STOGNER: Exhibits 7 and 8 will be 9 admitted into evidence at this time. 10 11 **EXAMINATION** BY EXAMINER STOGNER: 12 Mr. DeMis, in looking at Exhibit Number 8, a few Q. 13 things do stand out and you covered one, and that was 51 14 feet in that well up in Section 15. 15 Α. Yes. 16 The other one is the little blurb down in Section 17 Q. Can you explain that? 18 Yes, what I've done is, I've contoured this up as 19 a fluvial system or a river channel sand. And what I --20 This little blurb I infer to be what's known as a crevasse 21 22 splay. Crevasse splays occur when there's a flooding 23 event in a river system and the river actually leaves its 24 natural confines, and it goes out into the floodplain. 25

When it does that, when it floods over the -It's called overbank flooding. When it floods over the
bank, it deposits a little tiny fan off on the flanks of
the river channel that has a lobate shape to it. It also
has a -- and this is how I interpret this sand.

- Q. How about the production on that well? Do you have any -- Can you comment on that?
- A. Yes, sir, it's -- That well has cum'd 3.7 BCF of gas. It's currently producing about 11 million cubic feet of gas per month now.
- Q. There's another well in Section 27. Now, you show that to be an Atoka producer.
- A. Yes, sir.

- Q. Is that the only Atoka well, or are there any in the confines of these maps?
- A. Yes, there is another Atoka well. There's an Atoka well in the north half of Section 23. That's the gas symbol there in Unit F, and that's also an Atoka well.
- Q. Is that the only two producing areas -- when I say "producing", deep gas Morrow and Atoka -- in this confine?
 - A. Yes, sir, it is.

The well in Section 27 is the Marathon well that we just drilled, the Crockett well, and we completed it for a nice rate in the Atoka, but it had an extremely steep

1	decline.
2	Q. Okay, that's the well on the east half of 27,
3	that's the Crockett well?
4	A. Sir, the west half of 27, sir.
5	Q. Oh, that's the Crockett well.
6	A. That's our Crockett well. And that has a very
7	steep decline, and it's probably not going to last much
8	longer. That will not be an economic well in the Atoka.
9	And the well in the north half of 23 cum'd about
10	a third of a BCF out of the Atoka, so that will not be
11	that really won't be economic at those depths.
12	EXAMINER STOGNER: Any other questions of this
13	witness?
14	MR. KELLAHIN: No, sir.
15	EXAMINER STOGNER: Mr. DeMis, you may be excused.
16	THE WITNESS: Thank you, sir.
17	EXAMINER STOGNER: Mr. Kellahin, do you have
18	anything further in this matter?
19	EXAMINER STOGNER: Not in this matter, sir.
20	EXAMINER STOGNER: Does anybody else have
21	anything further in Case Number 11,909? Then this case
22	will be taken under advisement at this time.
23	(Thereupon, these proceedings were concluded at
24	8:48 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 January 22nd, 1998.

STEVEN T. BRENNER

CCR No. 7

My commission expires: October 14, 1998

des hereby certify that the foregoing is a complete related to the second of the secon

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