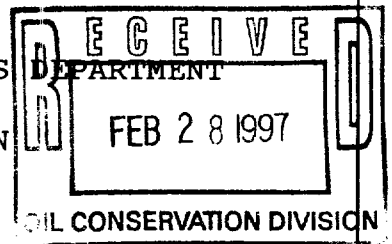


STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES
OIL CONSERVATION COMMISSION



IN THE MATTER OF THE HEARING CALLED BY)
THE OIL CONSERVATION COMMISSION FOR THE)
PURPOSE OF CONSIDERING:)
HEARING CALLED BY THE OIL CONSERVATION)
DIVISION ON ITS OWN MOTION TO CONSIDER)
PROPOSED APRIL, 1997, TO SEPTEMBER,)
1997, GAS ALLOWABLES FOR THE PRORATED)
GAS POOLS IN NEW MEXICO)

CASE NO. 11,721

ORIGINAL

REPORTER'S TRANSCRIPT OF PROCEEDINGS

COMMISSION HEARING

BEFORE: WILLIAM J. LEMAY, CHAIRMAN
WILLIAM WEISS, COMMISSIONER
JAMI BAILEY, COMMISSIONER

February 13th, 1997

Santa Fe, New Mexico

This matter came on for hearing before the Oil Conservation Commission, WILLIAM J. LEMAY, Chairman, on Thursday, February 13th, 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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February 13th, 1997
 Commission Hearing
 CASE NO. 11,721

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* * *

Chevron

Statements (2), not identified, offered or admitted

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* * *

1 WHEREUPON, the following proceedings were had at
2 9:20 a.m.:

3 CHAIRMAN LEMAY: Next, we'll look at the
4 proration hearing, I think. Is everyone available for
5 that? Tom? Okay, you're okay? All right to start
6 proration, Tom? Yeah?

7 MR. KELLAHIN: Do you want to do that before
8 the --

9 CHAIRMAN LEMAY: I was going to because it was
10 quicker, yeah, unless everyone's not here.

11 MR. KELLAHIN: Okay. Well, I have probably a 30-
12 minute presentation on the Blinebry, so --

13 CHAIRMAN LEMAY: Right.

14 MR. KELLAHIN: -- do you want to hear that?

15 CHAIRMAN LEMAY: I would --

16 MR. KELLAHIN: Okay, we're ready.

17 CHAIRMAN LEMAY: -- if everyone's here.

18 Okay, we shall now call Case Number 11,721, which
19 is the Application of the Oil Conservation Division, called
20 on its own motion, to consider the allowables for the
21 April, 1997, to September, 1997, gas proration period.

22 And I'd like to call for appearances in Case
23 Number 11,721.

24 MR. KELLAHIN: Mr. Chairman, I'm Tom Kellahin of
25 the Santa Fe law firm of Kellahin and Kellahin. This

1 morning I'm appearing on behalf of Marathon Oil Company in
2 association with Mr. Tom Lowry, an attorney for that
3 company. He resides in Midland, Texas.

4 We are here to request adjustments in the
5 Blinebry Gas Pool. I have one witness to be sworn.

6 CHAIRMAN LEMAY: Thank you, Mr. Kellahin.

7 MR. BRUCE: Mr. Chairman, Jim Bruce representing
8 Exxon Corporation. I'm also here on the Blinebry Pool in
9 support of Marathon's application. I have one possible
10 witness.

11 CHAIRMAN LEMAY: Okay, thank you, Mr. Bruce.

12 MR. CARR: May it please the Commission, my name
13 is William F. Carr with the Santa Fe law firm Campbell,
14 Carr, Berge and Sheridan. We represent USA Production
15 Company [sic], and I have two statements to read in support
16 of the proposed allowables, one for the Eumont and one for
17 the Indian Basin-Upper Penn Gas Pool.

18 CHAIRMAN LEMAY: But no witnesses, Mr. Carr?

19 MR. CARR: No witnesses --

20 CHAIRMAN LEMAY: Thank you.

21 MR. CARR: -- a statement.

22 MR. CARROLL: May it please the Commission, my
23 name is Rand Carroll, appearing on behalf of the Oil
24 Conservation Division. I have no witnesses.

25 CHAIRMAN LEMAY: Thank you, Mr. Carroll.

1 Additional appearances?

2 At the end we will take statements, and -- So any
3 of you can still chime in at the end if you would like.

4 Okay just for -- Just kind of a recap, what we
5 have done -- and the memo to the docket pretty well
6 explains the current practice in gas proration. It's --
7 Rather than look at each pool, what we do is put out what
8 amounts to the fall allowables. They generally are the
9 allowables that have been in effect in that pool for the
10 previous six months, with the testimony indicating in the
11 past that there are markets for this gas.

12 Actually under the current system of
13 deregulation, it's the operator who finds the markets, and
14 the field is no longer captive to a market the pipeline
15 company might have had in the past.

16 But we do open up these hearings for any new
17 information, any requests for either increases or decreases
18 in allowables. So those figures that were put out are
19 merely the fall allowables. In the absence of any
20 additional testimony or requests, those allowables will
21 prevail.

22 So with that, we'll now call -- Mr. Kellahin, you
23 may begin.

24 MR. KELLAHIN: Thank you, Mr. Chairman.

25 Mr. Chairman, I have Robert Ellis. He's a

1 geologist and a petroleum engineer with Marathon Oil
2 Company. He needs to be sworn as a witness.

3 CHAIRMAN LEMAY: Thank you, Mr. Kellahin.

4 Let's see, Jim, if you want to -- your witness
5 wants to stand, and we'll swear them both in at this time.

6 (Thereupon, the witnesses were sworn.)

7 MR. KELLAHIN: Mr. Chairman, members of the
8 Commission, Mr. Ellis and I are about to present to you his
9 recommendation on behalf of Marathon Oil Company to make an
10 adjustment in the Blinebry Gas Pool. It's easier for me to
11 remember this in terms of adjusting the F1 factor, and so
12 for shorthand we will talk about that issue. Mr. Ellis has
13 made the calculations to show what you would have to do, if
14 you agree with him, to adjust the monthly pool allowable.

15 His proposal will be that the default F1 factor
16 for the pool on a monthly basis is 46,800 MCF. Marathon's
17 requesting that that adjustment be made to 70,200 MCF a
18 month. The basis for that change is to restore the pool
19 allowable to the level it was in from January of 1994
20 through about September of 1995, and then after that there
21 was a substantial reduction in the allowable.

22 Mr. Ellis will conclude for you he thinks that
23 was an artificial downward adjustment, and he seeks the
24 opportunity to make that correction.

25 In addition, Marathon has polled the operators in

1 the pool. They have communicated with all the operators
2 that they were aware of in the Blinebry Gas Pool. They are
3 aware of no opposition to this request. They have received
4 support in the form of letters. And my co-counsel on
5 behalf of Exxon has shown his support.

6 So with that introduction, I'll proceed to
7 qualify Mr. Ellis.

8 ROBERT L. ELLIS,

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. For the record, sir, would you please state your
14 name and occupation?

15 A. Robert Ellis. I'm a reservoir engineer for
16 Marathon Oil Company.

17 Q. On prior occasions, Mr. Ellis, have you testified
18 before the Division?

19 A. No, I haven't.

20 Q. Summarize for us your degrees.

21 A. In 1986 I graduated from the University of Texas
22 at Austin with a geological engineering degree. In 1988 I
23 graduated from the University of Texas, also at Austin,
24 with a master's in petroleum engineering.

25 Q. You have degrees both in geology and in petroleum

1 engineering?

2 A. Yes, geological engineering and petroleum
3 engineering.

4 Q. The -- Your personal involvement in the Blinebry
5 Gas Pool extends for what period of time, Mr. Ellis?

6 A. One and a half years.

7 Q. During that period of time, have you made
8 yourself knowledgeable about the gas proration system in
9 place in that pool?

10 A. Yes, I have.

11 Q. And are you aware of the rules and conditions by
12 which gas wells are produced and operated in that pool?

13 A. Yes.

14 Q. And have you been responsible for inquiring of
15 the other operators if they would support or oppose your
16 request for the adjustment in the gas allowable for the
17 Blinebry Gas Pool?

18 A. Yes, I have.

19 Q. Have you, to the best of your knowledge,
20 information and belief, constructed what you believe to the
21 information available by which the Commission can make a
22 decision upon your case?

23 A. I have.

24 MR. KELLAHIN: We tender Mr. Ellis as an expert
25 both in geology and in petroleum engineering.

1 CHAIRMAN LEMAY: His qualifications are
2 acceptable.

3 Q. (By Mr. Kellahin) Let's turn to the first
4 display, Mr. Ellis. Were you able to able to take
5 available information from the Division records to
6 determine gas sales in the pool?

7 A. No.

8 Q. What was the last published proration schedule
9 that included the Blinebry Gas Pool that was available to
10 you for your use?

11 A. The October, 1995, through March, 1996, proration
12 period.

13 Q. How did you overcome the fact that the Division
14 does not have a current published proration schedule for
15 the Blinebry Gas Pool?

16 A. We analyzed all the wells in the pool through a
17 public database and -- analyzing their GOR, and looked back
18 at the wells that were considered gas wells in that
19 proration period in 1995-96.

20 Q. To the best of your ability, then, you have
21 duplicated what the Division was using as its proration
22 system in place for this gas pool?

23 A. Yes, I have.

24 Q. Based upon your knowledge and information, do you
25 believe that you have accurately tabulated the gas sales

1 and gas production in the pool as shown on Exhibit 1?

2 A. Yes.

3 Q. In addition, have you indicated on that display
4 the red line that estimates the pool allowable?

5 A. Yes.

6 Q. In addition, were you able to determine, to the
7 best of your knowledge, what should be the proper
8 classification of wells between nonmarginal and marginal
9 wells?

10 A. Yes.

11 Q. Okay. Describe for us what you've concluded when
12 we look at Exhibit 1.

13 A. I concluded in March of 1995 that on the -- the
14 red line on the graph, the pool allowable, was decreased
15 substantially while gas sales were increasing, and our
16 objective today is to raise the red allowable line back to
17 historical trends.

18 Q. The recent past practice of the Commission has
19 been very positive in increasing gas allowables in all the
20 gas pool in New Mexico, has it not, sir?

21 A. Yes.

22 Q. What do you believe is the reason that, despite
23 that intent by the Commission, the gas allowable in this
24 pool dropped substantially in July-September of 1995?

25 A. Due to the fact that there are no -- showing no

1 more nonmarginal gas proration units in the pool.

2 Q. In fact, that's not correct?

3 A. As of now, it is not correct.

4 Q. Okay. What -- When we talk about nonmarginal
5 wells, in order to classify a well as nonmarginal under
6 your analysis, were you using the current F1 factor of
7 46,800 MCF per month?

8 A. Yes, sir.

9 Q. And based upon that classification, how many
10 nonmarginal gas proration units have you identified in the
11 pool?

12 A. We found three nonmarginal acreage factors.

13 Q. Okay. Now, in this pool a standard F1 acreage
14 factor is 160 acres; is that not true?

15 A. That's correct.

16 Q. But also in this pool there are numerous gas
17 proration units that are on less than 160 acres?

18 A. That's correct.

19 Q. Many as small as 40 acres?

20 A. Yes.

21 Q. And so to make the calculation, if you're on 40
22 acres, you simply get one-fourth of the F1 factor?

23 A. That's correct, one fourth.

24 Q. Based upon that analysis, who operates the
25 nonmarginal wells at this point?

1 A. Marathon, Exxon, and Collins and Ware.

2 Q. Okay. Is -- To the best of your knowledge, is
3 there a market for gas that would be produced if the
4 allowable is adjusted as you request?

5 A. Yes.

6 Q. Okay. Let's look to see what you forecast to
7 occur if the adjustment is allowed to be made, if you'll
8 turn to Exhibit 2 for me. Have you got a green bar graph
9 here on Exhibit 2?

10 A. Yes.

11 Q. What's that mean?

12 A. The green is our forecast for the next -- from
13 September of 1996 through May of 1997.

14 Q. And that's the forecast of gas sales?

15 A. Forecast of gas sales in the Blinbry Gas Pool.

16 Q. Okay, what has happened to the red line?

17 A. The red line is -- The dashed red line is what
18 we're proposing today.

19 Q. And if that's approved, what does that allow to
20 occur?

21 A. It allows it to return to its historical trends
22 of 1994 and 1995, the gas sales -- or, excuse me, the
23 allowable.

24 Q. Do you have an opinion as to whether that's an
25 appropriate adjustment?

1 A. I think it is.

2 Q. Okay, and why is that?

3 A. Well, it allows the operators to produce their
4 wells in a less restricted basis.

5 Q. And it will allow you to return to the historic
6 basis back in 1994 and 1995?

7 A. That's correct.

8 Q. All right, let's see how you make the
9 calculation. If you'll turn to Exhibit 3, let's look to
10 see how you actually make the adjustment. If you'll start
11 with the default preliminary schedule that the Division has
12 published and go through the analysis and show us how you
13 would propose the Commission make the change.

14 A. Okay, we -- In the second box down from the top,
15 in the preliminary from the OCD, the monthly marginal pool
16 allowable, we pooled that off an old proration schedule,
17 the April, 1996, through September, 1996 and we've just
18 assumed it's carried forward into this proration period.

19 The monthly F1 factor for the nonmarginal pool
20 allowable of 46,800 is added to that 335,259 to get the
21 total pool allowable -- it's down at the bottom -- of
22 382,059, with zero adjustments and one nonmarginal acreage
23 factor.

24 Q. Your analysis now shows that there are more than
25 one nonmarginal acreage factors?

1 A. That's correct.

2 Q. All right. In addition, you have, in the last
3 column, made the appropriate adjustments so that we could
4 get a monthly pool allowable, which is the bottom row?

5 A. That's correct.

6 Q. All right. Show us how you get to the bottom
7 row.

8 A. Well, we've carried over the monthly marginal
9 pool allowable of 335,259 from the previous period, and
10 we're proposing the F1 factor of 70,200, and from my
11 analysis I've seen three nonmarginal acreage factors in the
12 pool, for a total monthly nonmarginal pool allowable of
13 210,600. And adding the marginal pool allowable to the
14 nonmarginal, we get the 545,859 that we're proposing for
15 the pool today.

16 Q. If the Commission agrees with you and makes the
17 adjustment, will there still be nonmarginal GPUs that are
18 curtailed below their capacity to produce gas?

19 A. Yes, there will be.

20 Q. Okay. Let's turn to look at the Marathon GPUs
21 that you're illustrating. If you'll start with Exhibit 4,
22 identify for us what we're looking at on this display.

23 A. Okay, this is the gas proration unit encompassing
24 Marathon's Lou Worthan Wells Number 12 and 21. It's a 160-
25 acre standard gas proration unit.

1 Q. Those two wells, then, share the allowable on a
2 160 GPU?

3 A. That is correct.

4 Q. Okay. What else is shown?

5 A. And on this graph we showed the allowable,
6 historical allowable back to 1995, in red, the historical
7 gas sales, current gas sales in blue, the cumulative
8 overproduction in the purple color, and the six-times
9 overproduction limit in green.

10 Q. All right. When you read the display, then, if
11 you look at the red line, that's the allowable, without
12 your adjustment?

13 A. That is the allowable without the adjustment.

14 Q. And under the rules for prorationing, you're
15 allowed to overproduce that allowable as much as six times,
16 right?

17 A. That's correct.

18 Q. And that six-times line is the green line on top?

19 A. Yes, that's correct.

20 Q. Okay. When we see the -- You'll have to help me.
21 What's that? A pink line? I don't know what your color
22 is. What's your color code?

23 A. Purple.

24 Q. Purple?

25 A. Magenta.

1 Q. We'll call it anything you want.

2 A. Okay.

3 Q. All right.

4 A. Magenta.

5 Q. That is the actual gas production?

6 A. No, the blue is the actual gas production.

7 Q. All right, the blue is the gas production. It
8 has increased since August of 1996?

9 A. That is correct.

10 Q. What caused that increase to occur?

11 A. We drilled the Lou Worthan 21 development well.

12 Q. Okay. So now your gas rate is above the base
13 allowable but still within the six-times-over rule?

14 A. That's correct.

15 Q. Okay. All right, what's the conclusion?

16 A. The conclusion is, we have gone out through
17 infill drilling in this pool, established production, or
18 gas sales, greater than the allowable. We're still
19 underneath our six-times limit. But we're here today to
20 try to raise that F1 factor.

21 Q. And infill drilling is not unique; many other
22 operators historically have infill drilled their 160 gas
23 units, have they not?

24 A. They've either infill drilled or recompleted
25 deeper wells.

1 Q. How old a pool is this?

2 A. It was established in 1953.

3 Q. And how many wells are currently operated and
4 producing in the gas pool? Can you estimate for me?

5 A. 143.

6 Q. All right. Let's look at your next slide, if
7 you'll turn to Exhibit 5. What are you showing here, and
8 what does it mean to you?

9 A. This graph is presented in the same way as the
10 previous one. It's for Marathon-operated Lou Worthan Well
11 Number 5 and 9. It's a 160-acre gas proration unit
12 adjacent to the previous gas proration unit.

13 It's set up in similar fashion, where the red
14 line is showing the allowable for the GPU, the blue line is
15 showing the gas sales, the magenta is showing the
16 cumulative overproduction, and the green line is showing
17 the six-times limit.

18 Q. Again, in March of 1995, on this display -- I'm
19 sorry, it goes back earlier than that, doesn't it? It's
20 February of 1996. Your gas production or gas sales is
21 climbing in this GPU?

22 A. That's correct.

23 Q. What caused that to happen?

24 A. We deepened the Lou Worthan 5 and recompleted it
25 in the Blinebry.

1 Q. You're still in the gas portion of the Blinebry
2 Pool?

3 A. That's correct.

4 Q. The Blinebry interval, if you will, has got a gas
5 reservoir that is separate and unique to an oil reservoir
6 below, and they're both called the Blinebry?

7 A. That's correct.

8 Q. Okay. All right, what's your conclusion here?

9 A. The conclusion here is, once again we've gone out
10 through development work, established gas sales greater
11 than the current allowable, and we're trying to raise that
12 allowable to produce the well.

13 Q. All right. And you've got a market for that gas?

14 A. That's correct.

15 Q. And when the well exceeded the six times over,
16 then, in September, the well is shut in and substantially
17 curtailed, do you see the gas rate drop?

18 A. Yes, we -- Once we noticed in September that we
19 went over our six times limit, we shut in both of the wells
20 in the gas proration unit, to get back underneath the
21 limit.

22 Q. Okay. Let's turn to Exhibit 6, Mr. Ellis, and
23 show the Commission how the wells are distributed in the
24 pool. Identify the display for us.

25 A. This is a map of the Blinebry Pool near Eunice,

1 New Mexico, on a scale of one inch equals 2000 feet. The
2 red outline that goes around the wells is the pool
3 boundaries. The yellow acreage or the yellow portion of
4 the map is Marathon acreage. The wells highlighted in red
5 are wells that are classified as gas wells. And the black
6 dots are the Blinebry oil wells, scattered throughout the
7 pool.

8 Q. Do you have an opinion as an expert as to whether
9 the gas reservoir is isolated and separate from the oil
10 reservoir?

11 A. Yes, I do.

12 Q. And what is your opinion?

13 A. They are separate.

14 Q. So we're not dealing here with a common source of
15 supply in an oil reservoir that's got a gas cap that you're
16 trying to produce?

17 A. That's correct.

18 Q. That's not what's happening here?

19 A. That is not what is happening here.

20 Q. All right. You talked about two of your GPUs in
21 Exhibits 4 and 5. Help the Commission find on the pool map
22 where that area is.

23 A. Okay, it's in Section 11. It's this --

24 Q. Section 11 on my copy of the display.

25 A. Yes, that 320-acre yellow colored-in acreage.

1 Q. Let's use that as an identification map and go on
2 to Exhibit 7A and 7B, Mr. Ellis. Would you identify and
3 describe what this letter is?

4 A. Exhibit 7A is a letter we sent out to the 16
5 Blinebry Gas Pool operators, notifying them of our intent
6 to increase the F1 factor.

7 And 7B is the operator address list of the
8 companies we sent the notification to.

9 Q. All right. And to the best of your knowledge,
10 there's been no objection communicated to you on behalf of
11 any of the operators in the pool as to increasing the gas
12 allowable?

13 A. That's correct.

14 Q. Let's turn to Exhibit 8, and I think before we
15 talk about it, help me set the stage. What do you see as a
16 reservoir engineer for the future opportunity in the
17 Blinebry Gas Pool to further develop and produce that gas?

18 A. I see additional recompletion from existing wells
19 and possible additional development wells in the pool.

20 Q. Give us a sense of how amazing this reservoir is.
21 Have you done volumetric calculations to give us a sense of
22 how much gas is in place in a 160-acre spacing unit?

23 A. I have.

24 Q. And how much is that?

25 A. Under portions of our lease it's upwards of 17

1 BCF.

2 Q. Okay, and when -- and have you done decline-curve
3 analysis on your producing wells --

4 A. That's correct.

5 Q. -- in addition to that?

6 A. Yes.

7 Q. And does that decline-curve analysis balance or
8 match the volumetrics that you're calculating?

9 A. It matches real close.

10 Q. Okay. Based upon those calculations, have you
11 also made any drainage calculations?

12 A. Yes, I have.

13 Q. And based upon those calculations, are you
14 satisfied that if the Commission increases the allowable to
15 the level you're requesting, that on 160-acre spacing
16 you're not going to adversely affect the correlative rights
17 of any of the offsets with these nonmarginal wells?

18 A. Yes.

19 Q. That's true, is it not?

20 A. That's true.

21 Q. Okay. Let's look to see the investment
22 opportunity that your company has made in the pool in order
23 to continue to produce this gas. What's shown on Slide 8?

24 A. On Exhibit 8 it's a historical trend of
25 Marathon's investment in the Blinebry Pool.

1 As you can see, in 1993 we had no activity at all
2 in this pool. And in 1994 we did our first recompletion,
3 and based on its success we followed that up in 1995 with
4 four recompletions and one workover of an existing Blinebry
5 well.

6 And after feeling comfortable with the reservoir
7 and getting more knowledge of the reservoir, in 1996 we
8 stepped out, did two more recompletions, did three
9 additional workovers of existing Blinebry wells and drilled
10 two development wells to further develop the pool.

11 Q. It appears from Exhibit 8 that there is a
12 substantial opportunity for your company for workovers and
13 recompletions?

14 A. That is correct.

15 Q. Describe for me what you mean by a workover in
16 this pool.

17 A. What I mean by a workover is an existing well
18 that's already in the Blinebry Pool, where we go out and
19 add additional perforations or additional stimulation to
20 that completion.

21 Q. And what do you mean by a recompletion in this
22 pool?

23 A. Recompletion, there's a lot of deeper wells in
24 this pool, or deeper zones in this area. And what I
25 determine are re- -- or what I classify as a recompletion

1 is a plug-back coming -- changing pools into the Blinebry.

2 Q. Okay, let's give the Commission an illustration
3 in a vertical sense of how the gas pool is separated from
4 the oil pool. If you'll turn to the type log, Exhibit 9,
5 this log is from what well, sir?

6 A. Lou Worthan Number 21. It's one of our
7 development wells we drilled in 1996.

8 Q. All right. Give us an example of how the gas
9 reservoir is separated from the oil reservoir?

10 A. From this type log, we have the Blinebry split
11 into two portions, the upper Blinebry and the lower
12 Blinebry.

13 And from our well work, we've identified the
14 upper Blinebry as being the predominant gas portion and the
15 lower Blinebry being the predominant oil, and the reservoir
16 as being not in pressure communication.

17 Q. The production strategy of the operators in the
18 pool historically has been to use this single wellbore and
19 to, over time, make choices as to what portion they
20 perforate, whether it's the gas pool, the oil pool or some
21 combination?

22 A. That's correct.

23 Q. Is that not true?

24 A. That's correct.

25 Q. And they're permitted to do that in this pool,

1 are they not?

2 A. Yes, that is correct.

3 Q. And if their producing gas-oil ratio exceeds
4 50,000 to 1, it's reclassified as a gas well; is that not
5 true?

6 A. That's correct.

7 Q. And if they happen to have a spacing unit that
8 has an oil well on it, they have to exclude that 40-acre
9 tract from the gas-well spacing unit?

10 A. That's correct.

11 Q. So the operator, by selecting where he
12 perforates, can decide upon the classification of his well?

13 A. That's correct.

14 Q. Historically, the gas has been produced from the
15 pool by perforating the top portion of the gas pool?

16 A. Yes, the upper Blinebry.

17 Q. Okay. And how have you chosen to continue to
18 produce recoverable gas in the pool with these older wells?

19 A. We have gone back and -- We are perforating both
20 the upper and the lower Blinebry and completing them in one
21 interval or one completion.

22 Q. Do you see any reservoir problem with that
23 strategy of production?

24 A. No, I don't.

25 Q. Seems to be an efficient and prudent way to do

1 this?

2 A. That's correct.

3 Q. Let's look at some of the completion strategy.

4 If you'll turn to 10, you've summarized for us Marathon's
5 strategy of how you're recovering additional gas out of the
6 pool?

7 A. Yes, I have.

8 Q. Summarize that for us.

9 A. Basically, I've got six bullets there on things
10 that we have done to try to enhance our production from
11 this reservoir.

12 We have acidized the Blinebry in different stages
13 to try to better open up the reservoir.

14 On our main stimulation, we fracture-stimulate
15 the Blinebry all together as -- in one stage.

16 We have substantially increased the amount of
17 proppant pumped, and our stimulation basically doubled what
18 had historically been done.

19 To make our wells better and to enhance the
20 productivity of the wells, we've increased our proppant
21 size, or the frac sand that we use in our frac jobs.

22 We've also utilized some technology of some new
23 gels that -- gel fluids that have come out, fracture-
24 stimulation fluids that have come onto the market in the
25 last year or so, to increase our flow capacity from our

1 wells.

2 Q. Does the increased allowable you're requesting
3 provide an economic incentive to Marathon and the other
4 operators in the pool to go ahead and continue the
5 recompletion and workover strategy that you're describing?

6 A. Yes, it does.

7 Q. And does the current gas price market encourage
8 that activity as well?

9 A. Yes, it does.

10 Q. Is this opportunity unique just to Marathon?

11 A. No, it isn't.

12 Q. It's available to everybody in this reservoir, is
13 it not?

14 A. That's correct.

15 MR. KELLAHIN: Mr. Chairman, we have a letter of
16 support from Collins and Ware which was faxed to my office
17 yesterday evening. I've marked it as Marathon Exhibit 7B.

18 Q. (By Mr. Kellahin) Mr. Ellis, in conclusion, do
19 you have an engineering and geologic opinion as to whether
20 or not approval of the requested increase in the gas
21 allowable for the pool will provide an opportunity to
22 recover gas that might not otherwise be produced, and to do
23 so in a way that does not violate correlative rights?

24 A. Yes, I do.

25 Q. And what is that opinion?

1 outlined in purple. Could you explain what those are?

2 A. The sections that are outlined in purple on the
3 map are areas which are not in the Blinebry Pool.

4 The big purple place on the top portion of the
5 map is -- The Blinebry is classified as the North Eunice-
6 Blinebry Tubb Drinkard Pool, and so it's basically a hole
7 in the pool.

8 Q. And just one last question.

9 A. Okay.

10 Q. You testified that your calculations do not
11 indicate drainage of the entire 160-acre spacing for each
12 of these proration units? What size do you calculate for
13 drainage?

14 A. What I've calculated on my drainage calculations
15 is, on our two nonmarginal gas proration units, that they
16 are draining approximately 160 acres.

17 Q. And if the allowable is increased, it would
18 not --

19 A. It would not harm that.

20 COMMISSIONER BAILEY: That's all I have.

21 CHAIRMAN LEMAY: Commissioner Weiss?

22 EXAMINATION

23 BY COMMISSIONER WEISS:

24 Q. Yeah, let's maybe talk a little bit about the --
25 Is the upper and lower Blinebry in pressure communication?

1 A. I believe they're not.

2 Q. What are the different pressures, static
3 reservoir pressures?

4 A. On our Lou Worthan lease, where we have our
5 nonmarginal gas proration units, we've done some zone
6 testing where we've isolated the upper from the lower, and
7 we believe the lower Blinebry is still near virgin
8 reservoir pressure, 2200, 2300 pounds, where the upper
9 Blinebry is around 400 pounds, 380 to 400 pounds.

10 Q. And that's in this one, the 21?

11 A. Yes, sir.

12 Q. Well, where did you isolate it? Where did you
13 set the packer?

14 A. Okay, from our perforations that you see on the
15 type log, the perforations that start around 5635, down to
16 5755 --

17 Q. Uh-huh.

18 A. -- that's what I'm calling the lower Blinebry.
19 That was isolated separate and completed separate, and that
20 has the higher reservoir pressure.

21 Q. Okay, have you got any information -- This tells
22 us something about vertical differences. Have you got any
23 areal stuff?

24 A. No, I do not.

25 COMMISSIONER WEISS: Those are my only questions.

1 THE WITNESS: Okay.

2 COMMISSIONER WEISS: Thank you.

3 EXAMINATION

4 BY CHAIRMAN LEMAY:

5 Q. I just looked at the map, Mr. Ellis. It looked
6 like, if you were going to pick an average, maybe two wells
7 per 160 is kind of average through there?

8 A. Yes, in a lot of areas there's four wells.

9 Q. There's four -- I saw that.

10 Do you think eventually that this will be
11 developed basically on 40 acres, four wells per 160, to
12 drain it effectively?

13 A. Eventually it could be as many as four wells per
14 160.

15 Q. A lot of the areas where there's four wells per
16 160 that are marginal units, that's because they're older
17 or because they haven't utilized some of the new technology
18 or --

19 A. It could be a combination of both.

20 Q. The only other question I have is this hole; that
21 kind of fascinates me.

22 A. Okay --

23 Q. What's the reason for the hole in the field?

24 A. Okay, the large hole on the north end, Shell, in
25 the late Eighties, created the northeast Drinkard unit,

1 where they were going to waterflood the Blinebry, Tubb and
2 the Drinkard, and they wanted to operate these as an entire
3 unit, and I believe to do that, they carved out this
4 portion out of the Blinebry Pool and reclassified that
5 portion as the Eunice North-Blinebry Tubb Drinkard Pool, to
6 enhance their unit operations.

7 Q. It certainly looks like very little development
8 has occurred in there compared to the outside, doesn't it?

9 A. Well, the wells that are inside that -- There are
10 probably a lot of well -- spacing units on 40 acres. The
11 wells on this map are just the wells that are classified in
12 the Blinebry --

13 Q. Oh, I see.

14 A. -- Pool.

15 So those wells are now classified in another
16 pool, so they didn't get picked up on this map.

17 CHAIRMAN LEMAY: Okay, that explains it. I
18 couldn't imagine a hole like that in the middle of a rather
19 old field.

20 That's the only question I had.

21 THE WITNESS: Okay.

22 CHAIRMAN LEMAY: Thank you very much, appreciate
23 your testimony.

24 Thank you, Mr. Kellahin.

25 Mr. Bruce?

1 WILLIAM T. DUNCAN, JR.,

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

4 DIRECT EXAMINATION

5 BY MR. BRUCE:

6 Q. Would you please state your name for the record?

7 A. William Thomas Duncan, Jr.

8 Q. Who do you work for and in what capacity?

9 A. I work for Exxon Corporation in Midland, Texas,
10 as a regulatory engineer.

11 Q. Have you previously testified before the
12 Commission as an engineer?

13 A. Yes, I have.

14 Q. And were your credentials as an expert engineer
15 accepted as a matter of record?

16 A. Yes, they were.

17 Q. And are you familiar with prorationing matters
18 pertaining to the Blinebry Pool?

19 A. Yes, I am.

20 MR. BRUCE: Mr. Chairman, I would tender Mr.
21 Duncan as an expert engineer.

22 CHAIRMAN LEMAY: His qualifications are
23 acceptable.

24 Q. (By Mr. Bruce) Mr. Duncan, are you here today to
25 -- in support of the proposed allowable presented by

1 Marathon?

2 A. Yes, I am.

3 Q. Let's discuss the reasons for that. Let's go to
4 your Exhibit 1, and could you discuss situations that Exxon
5 has in the Blinebry Pool which would need an extra
6 allowable?

7 A. Exxon operates two nonmarginal gas proration
8 units in the Blinebry Pool. I've included the details of
9 those GPUs on Exhibit Number 1.

10 Exhibit Number 1 is the tabulation showing the
11 lease name in the left-hand column.

12 The next column is the well number that is in
13 that GPU. Neither of these are multiple-well GPUs.

14 The next column shows the acreage. Both of these
15 are nonstandard units.

16 And the next column is the acreage factor for
17 those GPUs.

18 The capability is shown in the next column.
19 They're both capable of about 600 MCF per day.

20 And the initial proposed allowable is proposed in
21 the sixth column. It would be 11,700,000 per month, with
22 the one-quarter acreage factor.

23 The capability over the allowable is shown in the
24 next column.

25 And then the second-to-the-last column, or

1 second-to-the-right column, or from-the-right column, is
2 the increased allowable that would result from approval of
3 the Marathon-requested increase.

4 That shows that both of these GPUs would still
5 have to pass over their allowable and would still be
6 nonmarginal.

7 Both of these nonmarginal GPUs are nonstandard
8 because adjacent proration units, adjacent 40-acre tracts,
9 have wells on them that have changed GOR and moved into
10 oil-well classifications. Therefore, these used to be in
11 multiple-well 160-acre GPUs that are now reduced. That's
12 some explanation for why we only have 40 acres dedicated to
13 each one.

14 Q. Okay. Why don't you move on to your Exhibits 2
15 and 3 -- I think they're fairly similar -- and why don't
16 you just discuss them briefly?

17 A. Exhibit Number 2 is a plot showing the New Mexico
18 "S" State Number 7 GPU with the proposed Blinebry
19 allowable. On this plot I've shown the sales with the gray
20 bars. The black bars are the allowable for each month.
21 The lines connecting the closed squares on the monthly over
22 and under for each month. The open squares are the
23 cumulative over/under.

24 The axis on the left is the units for the sales
25 and allowable. The axis on the right is the units for the

1 over and under status.

2 I've shown the period from August, 1996, through
3 a projected -- through the projected end of September,
4 1997.

5 And what you can see from this plot is that we'll
6 be producing considerably over the allowable for the entire
7 period, we believe, we'll accumulate almost 50 million
8 cubic feet of overproduction by the end of this proration
9 period.

10 The second page of Exhibit Number 2 is simply a
11 tabulation of the data that's shown on Exhibit 2, on the
12 first page.

13 Exhibit Number 3 is the same depiction, but it
14 includes the 50-percent increase that Marathon's requesting
15 in the Blinbry allowable. If this occurs, our cumulative
16 overproduction in September, 1997, will be a little over
17 10,000 MCF.

18 So the GPUs will still be limited, but they will
19 be a lot less limited.

20 Q. Does Exxon have a market for the gas it's
21 producing?

22 A. Yes, it does.

23 Now, I've included the Exhibits 2 and 3 for the
24 "S" State Number 7. The "S" State Number 38 would be very
25 similar. In fact, the plot looks identical, except for the

1 past performance of the well. So I didn't include those.

2 Q. One final thing, Mr. Duncan. You've been here on
3 behalf of Exxon over the last few days encouraging
4 allowable increases in other pools and now in the Blinebry
5 pool. Has that -- Have the increases in allowable allowed
6 Exxon to do extra work on its lease and produce extra gas?

7 A. Yes, they have. It's caused us to be able to do
8 a significant amount of workover activity and, in fact,
9 recompletion activity that would have been much more
10 difficult otherwise.

11 Q. In your opinion, is the granting of the 50-
12 percent allowable increase proposed by Marathon in the
13 interest of conservation and the prevention of waste?

14 A. Yes, it is.

15 Q. And were Exhibits 1 through 3 prepared by you?

16 A. Yes, they were.

17 MR. BRUCE: Mr. Chairman, I would move the
18 admission of Exxon's Exhibits 1 through 3.

19 CHAIRMAN LEMAY: Without objection, Exxon's 1
20 through 3 Exhibits will be admitted into the record.

21 Questions of Mr. Duncan?

22 Commissioner Bailey?

23 COMMISSIONER BAILEY: No.

24 CHAIRMAN LEMAY: Commissioner Weiss?

25 COMMISSIONER WEISS: Yes.

EXAMINATION

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BY COMMISSIONER WEISS:

Q. Yes, do you have any information on the areal distribution of the pressure in new wells or in these workovers or -- you know, we still have the last exhibit where we saw a significant difference between the gas zone and the oil zone. I was wondering how this pressure varies in the gas zone if you drill a new well, as opposed to a more workover zone?

A. Exxon has essentially two leases that it works pretty hard in the Blinebry Pool. They are fairly limited in areal extent. One is a section and the other is a half section.

On those two sections we have opened a lot of additional pay, and we see differences in pressure in those vertical pay members.

But as far as areal distribution over those two small leases, we don't see any significant pattern.

COMMISSIONER WEISS: Thank you.

CHAIRMAN LEMAY: I have no questions. Thank you very much, you may be excused.

Thank you, Mr. Bruce.

Anything else in testimony concerning the Blinebry?

Are there any other fields you all would like to

1 present, or are we ready for the statements?

2 Let's go with the statements.

3 Mr. Carr?

4 MR. CARR: May it please the Commission, Chevron
5 has asked that I present two statements.

6 The first one concerns the Eumont Gas Pool.
7 Chevron is the principal operator in this pool and supports
8 a proposed allowable which results in a monthly allocation
9 factor of 38,000 MCF.

10 This year -- In fact, in the first half of this
11 year, Chevron proposes to drill four new wells and perform
12 recompletions or restimulations on approximately ten
13 additional wells in this field. We believe that a lower
14 allowable will jeopardize this development program, and
15 therefore we are supporting and encourage the Commission to
16 adopt the proposed monthly acreage allocation factor of
17 38,000 MCF.

18 In the Indian Basin, Chevron operates 16
19 producing gas wells and owns working interest in three
20 additional non-operated properties. In this pool we're
21 supporting the Oil Conservation Division's proposed
22 nonmarginal well allowable rate of 200,000 MCF per month,
23 as set forth in your recent memorandum.

24 We're actively pursuing opportunities to optimize
25 development from this pool and, in fact, six of the

