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 OXY USA, INC., TO RESCIND) DIVISION ORDER R-4949 WHICH ADOPTED THE SPECIAL POOL RULES FOR THE NORTH BURTON FLATS-WOLFCAMP GAS POOL, EDDY COUNTY, NEW MEXICO

CASE NO. 12,447

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ORIGINAL

OIL CODUCED AND UNIT

REPORTER'S TRANSCRIPT OF PROCEEDINGS

EXAMINER HEARING

BEFORE: MARK ASHLEY, Hearing Examiner

July 13th, 2000

Santa Fe, New Mexico

This matter came on for hearing before the New Mexico Oil Conservation Division, MARK ASHLEY, Hearing Examiner on Thursday, July 13th, 2000, 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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APPLICANT'S WITNESS:

<u>RICHARD E. FOPPIANO</u> (Engineer) Direct Examination by Mr. Kellahin Examination by Examiner Ashley

REPORTER'S CERTIFICATE

24

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* * *

EXHIBITS

| Applicant's | Identified | Admitted |
|-------------|------------|----------|
| Exhibit 1 | 5 | 19 |
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* * *

APPEARANCES

FOR THE DIVISION:

LYN S. HEBERT Attorney at Law Legal Counsel to the Division 2040 South Pacheco Santa Fe, New Mexico 87505

FOR THE APPLICANT:

KELLAHIN & KELLAHIN 117 N. Guadalupe P.O. Box 2265 Santa Fe, New Mexico 87504-2265 By: W. THOMAS KELLAHIN

* * *

STEVEN T. BRENNER, CCR (505) 989-9317

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| 1 | WHEREUPON, the following proceedings were had at |
|----|---|
| 2 | 9:45 a.m.: |
| 3 | EXAMINER ASHLEY: At this time Division calls |
| 4 | Case 12,447, Application of OXY USA, Inc., to rescind |
| 5 | Division Order R-4949 which adopted the special pool rules |
| 6 | for the North Burton Flats-Wolfcamp Gas Pool, Eddy County, |
| 7 | New Mexico. |
| 8 | 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 one witness to be |
| 12 | sworn. |
| 13 | EXAMINER ASHLEY: Additional appearances? |
| 14 | Will the witness please rise to be sworn in? |
| 15 | (Thereupon, the witness was sworn.) |
| 16 | EXAMINER ASHLEY: Mr. Kellahin? |
| 17 | RICHARD E. FOPPIANO, |
| 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. Mr. Foppiano, for the record, sir, would you |
| 23 | please state your name and occupation? |
| 24 | A. My name is Richard E. Foppiano, and I'm a |
| 25 | regulatory affairs engineer for OXY USA in Houston, Texas. |

| 1 | Q. On prior occasions, have you testified before the |
|----|---|
| 2 | Division, Mr. Foppiano, and been recognized as an expert in |
| 3 | petroleum engineering? |
| 4 | A. Yes, I have. |
| 5 | Q. As part of your responsibilities for your |
| 6 | company, have you made an investigation of the engineering |
| 7 | aspects of this case? |
| 8 | A. Yes, I have. |
| 9 | Q. And based upon that study, do you now have |
| 10 | opinions and conclusions concerning the pool rules that are |
| 11 | subject to this production? |
| 12 | A. Yes, I do. |
| 13 | MR. KELLAHIN: We tender Mr. Foppiano as an |
| 14 | expert witness. |
| 15 | EXAMINER ASHLEY: Mr. Foppiano is so qualified. |
| 16 | Q. (By Mr. Kellahin) Let's take a moment, Mr. |
| 17 | Foppiano, and unfold Exhibit 1. What is represented by the |
| 18 | yellow outline on this display, Mr. Foppiano? |
| 19 | A. Well, this display is a plat showing the Wolfcamp |
| 20 | wells in Township 20 South, Range 28 East, and the |
| 21 | surrounding area. And shown in yellow, or dark yellow, are |
| 22 | the boundaries of the North Burton Flat-Wolfcamp Gas Pool. |
| 23 | Q. Let's set that display aside for a moment and |
| 24 | identify for the Examiner Exhibit Number 2. What is this? |
| 25 | A. Exhibit Number 2 is the order setting out the |

| 1 | field rules applicable to the North Burton Flat-Wolfcamp |
|----|--|
| 2 | Gas Pool. |
| 3 | Q. It was originally issued on January 22nd of 1975, |
| 4 | and it's Order Number R-4949? |
| 5 | A. That's correct. |
| 6 | Q. Can you summarize for us the major portions of |
| 7 | the rule that make them special from the general rules? |
| 8 | A. Yes, I can. The order, pertinent sections of the |
| 9 | rule, relate to spacing and allowable. In particular, Rule |
| 10 | Number 2 requires standard units of 320 acres and one well |
| 11 | per 320 acres. |
| 12 | It also has, in Rule Number 4, the setback |
| 13 | requirements of 660 from the side boundary and 1980 from |
| 14 | the end boundary, which are reflective of what the |
| 15 | statewide rules were in effect at that time, I believe. |
| 16 | Rule Number 5 sets out an allowable for each well |
| 17 | producing from that pool of 1.5 million a day. |
| 18 | Q. All right. Those are the major components of the |
| 19 | rule, right? |
| 20 | A. Yes. |
| 21 | Q. Let's address the first one. Rule 2 says 320 |
| 22 | acres. Are you proposing to change that? |
| 23 | A. No. |
| 24 | Q. All right. The footage requirements in Rule 4, |
| 25 | which are currently 660 from the side and 1980 from the |

| 1 | end, do you propose to change those rules? |
|----|---|
| 2 | A. Yes. |
| 3 | Q. In what way would you change them? |
| 4 | A. We feel it's appropriate at this time to |
| 5 | eliminate these setbacks in favor of the new statewide Rule |
| 6 | 104 setbacks, which would allow 660 from the outer boundary |
| 7 | of the 160-acre tract on which the well is located. |
| 8 | Q. Okay. The implication and interpretation of this |
| 9 | order is such that the practice is to limit spacing units |
| 10 | in this pool to one well per 320, correct? |
| 11 | A. Yes. |
| 12 | Q. What do you propose to do about well density? |
| 13 | A. Well, under new Rule 104, we would be allowed two |
| 14 | wells per 320, and that's what we would propose as the |
| 15 | final result of this hearing. |
| 16 | Q. And then finally, this well has a gas allowable |
| 17 | limit of 1.5 million today, correct? |
| 18 | A. That's correct. |
| 19 | Q. What would you propose to do with that rule? |
| 20 | A. Eliminate it. |
| 21 | Q. What is the net effect, then, if the Examiner |
| 22 | grants your Application? |
| 23 | A. The existing wells and their production and any |
| 24 | new wells that could be completed in the pool would be |
| 25 | governed under Rule 104. |

| 1 | Q. All right, sir. Let's go back and look at |
|----|---|
| 2 | Exhibit 1, and when I relate Exhibit 1 to the order, 4949, |
| 3 | I find that Cities Service was keying off a well in Unit C |
| 4 | in Section 14, 20 South, 28 East. It was the Government T |
| 5 | 1 well. Is that your knowledge and understanding? |
| 6 | A. Yes. |
| 7 | Q. That was the key well, then, upon which the rules |
| 8 | were originally established, correct? |
| 9 | A. That's my understanding, yes. |
| 10 | Q. All right. Let me have you discuss with Mr. |
| 11 | Ashley the component of the current rule that established |
| 12 | the basis for the 1.5-million-a-day gas limit. What is |
| 13 | your belief as to why that occurred? |
| 14 | A. Well, in reviewing the testimony for the hearing |
| 15 | and looking at the field performance, it's obvious that |
| 16 | what was anticipated at that time were two things. One, |
| 17 | this is a gas-condensate reservoir. It became obvious |
| 18 | early on that it was a retrograde gas-condensate reservoir, |
| 19 | and there was some interest at the time in looking at the |
| 20 | reinjection of a processed gas to maximize the liquid |
| 21 | recovery from this reservoir. |
| 22 | Also, there was probably some concern, although |
| 23 | you have to read between the lines in the transcript, but I |
| 24 | believe there was some concern about pulling the wells too |
| 25 | hard and causing some higher than normal, or higher than |

| 1 | would be necessary, liquid saturations near the wellbore, |
|----|---|
| 2 | to the detriment of the ultimate recovery. |
| 3 | So I think there were really two reasons for the |
| 4 | 1.5 million a day: trying to keep the wells from being |
| 5 | pulled too hard, and also to maintain the reservoir as long |
| 6 | as possible above the dewpoint to facilitate or allow time |
| 7 | for investigation of secondary and tertiary recovery |
| 8 | methods, i.e., the injection of gas to maximize liquid |
| 9 | recovery. |
| 10 | Q. Let me ask you two questions. First, were there |
| 11 | any wells in this pool that were ever restricted by the gas |
| 12 | allowable limit? |
| 13 | A. It does not appear from my investigation of all |
| 14 | the wells and their production profiles over the entire |
| 15 | life of the pool that any well ever produced at any length |
| 16 | of time at 1.5 million a day or above. |
| 17 | Q. Is it necessary now to continue to maintain the |
| 18 | gas-allowable limit of 1.5 million, and if not, why not? |
| 19 | A. Well, it's not necessary, because the reservoir |
| 20 | is now far below the dewpoint. As it is right now, the |
| 21 | reservoir pressure has declined, and we're to the point |
| 22 | where all the wells are producing at maximum capacity. |
| 23 | They're all riding the line pressure, so to speak. The |
| 24 | average producing rates of the wells is around 200 MCF a |
| 25 | day, far below the 1.5 million. |

And so there's not really any expectation that a 1.5-million-a-day allowable -- a continuation of that allowable restriction is necessary for any conservation reason.

Q. Let's talk about altering the well-location
requirements in conjunction with increasing well density
under Rule 104, which would give you an optional second
well opportunity in this pool that you don't currently
enjoy. What would be the benefit of doing that?
A. Well, the primary benefit, this -- as I described

before, this reservoir is on its -- it's a mature reservoir, and we don't anticipate drilling wells with the primary objective being the Wolfcamp zone in this area, because of the low reserves, recoverable reserves that would be associated with it.

But we do drill deeper wells in this area to the Morrow, so we penetrate the Wolfcamp, and we already have existing Morrow wells that have recompletion opportunities in the Wolfcamp on the other 160.

20 So what we see here are just basically some 21 recompletion possibilities and some secondary objectives 22 when we drill deeper for a Morrow in this area. So it's 23 really bailout zones, is what we're looking at.

Q. Give us your explanation and opinion concerning
the reservoir management of the pool in terms of increasing

the well density. Will that increased-density well afford the opportunity to recover incremental reserves that would not otherwise be produced, or would it simply represent a rate acceleration?

A. We have evidence that we believe strongly shows that increased recovery will result if the rules were rescinded and we were allowed to operate under statewide rules here, both in liquid and in gas recoveries.

9 Q. All right, sir. Let's turn to some of the 10 specifics of the data that you've reviewed and assimilated. 11 Let's take a moment and look at Exhibit 3. Identify that 12 for us so that we understand how you have organized the 13 display, and then describe the points of importance to you.

A. Exhibit Number 3 is a production profile of all the wells that produced from the North Burton Flat-Wolfcamp Gas Pool. It's on a daily rate basis on the left side, and on the right side is the legend or the axis for the well count and the GOR.

19 Shown in black, the heavy black line at the top, 20 uppermost curve, is the daily gas rate for the field, 21 that's the entire field. And the curve right below that, 22 shown in black and -- green, I guess, is the oil rate or 23 condensate rate from the field. Below that and shown in 24 red is the well count for the field. And then the 25 bottommost curve, shown in yellow, is the GOR of the field.

And you can see production commences 1974, 1975, 1 that time frame. And you can see what happens over time: 2 The number of wells, initial development, went up and then 3 kind of steadied out at around 15. There were some 4 fluctuations later on. And the current well count today is 5 14 active wells in the North Burton Flat-Wolfcamp Gas Pool. 6 You can see, as is typical for a retrograde gas condensate 7 reservoir, the GOR shot up, dropped down a little bit, and 8 now it's just continued to gradually increase over time as 9 we approach depletion. 10

You can see the green line, oil rates, have dropped, consistent with a normal retrograde gas condensate reservoir over time. And the gas rates have dropped, and you can see in the recent years, particularly in 1997, on forward, there's actually been an increase in the gas rate from the pool. And we feel like there's two reasons for that.

18 One, there were some changes in the operating pressure of the gathering system out there where some 19 20 central compression was installed that dropped the 21 gathering pressure significantly, and that allowed gas 22 production to increase since the well was riding the line. 23 And also, the drilling of an additional well in 24 1997, the OXY Government NBFD Number 1 there in the 25 southwest quarter of Section 11, which we'll talk a little

1 | bit more in detail here in a minute.

2 Q. When I turn to Exhibit 4, Mr. Foppiano, what am I 3 looking at in this package of displays?

Exhibit 4 is just a pool that we did to create Α. 4 production decline curves of the gas rates from each well 5 in the North Burton Flat-Wolfcamp Gas Pool. 6 And the 7 primary reason for doing this was to investigate if any wells had produced for very long at the 1.5 million a day. 8 9 And so basically I did that to do that kind of research, 10 and this is a pool for all those wells. It just shows the gas rate, and it is on a daily rate basis. 11 12 Q. All right, sir. Let's go back to Exhibit 1, and I want to focus your attention for a moment on the 13 14 southwest quarter of Section 11, and I want to look at the

15 well in the southwest quarter of 11 that you have captioned

16 the Government NBFD Number 1. Do you see that well?

A. Yes.

17

18 Q. Turn now with me to Exhibit 5 and tell me what19 this is in relationship to that well.

A. Okay, before I describe Exhibit 5, let me just
draw the Examiner's attention to the Exhibit 1 and explain
a little bit of why we looked at that particular area.
Exhibit 1 shows the location of the NBFD well in
the southwest quarter of Section 11. And then surrounding

25 that, there were existing Wolfcamp wells on every 160

1 surrounding that, and in fact there was a Wolfcamp well on 2 the existing spacing unit for the NBFD. The NBFD actually 3 was authorized under a separate order to be completed in 4 the Wolfcamp, and because it was originally drilled as a 5 Devonian test, which turned out to be a dry hole in the 6 Devonian.

7 So what we've got here with this situation is essentially less than 160-acre effective density in this 8 one particular area, or in and around the NBFD location. 9 So we thought it instructive to investigate the performance 10 11 of the NBFD well in relation to the performance of the offsetting wells to see if there had been any interference 12 or anything that would lead us to believe that we were just 13 accelerating reserves or whatever. 14

15 So that was -- Exhibit Number 5, then, is a production decline curve. You can see it shows the 16 17 inclining production for this well. But it's on a gas --18 The only curve shown is the gas rate on a daily basis, MCF per day. But you can tell the well was completed right 19 20 there around early 1997, and it's continuing to produce to 21 this day. It was originally completed at around -- a 22 little less than 200 MCF a day, and it's approaching a 23 little less than 300 MCF a day in gas rate. And as you can see, it's showing, over time, basically increasing 24 25 production.

Another thing I'd like to point out about its 1 Initially when it was tested, the GOR of the 2 performance: well was 2278; yet over the three-year history of this 3 well, the cumulative GOR is over 15,000. And what that's 4 indicating to us is that the liquids recovered by this well 5 are essentially liquids that dropped out when the reservoir 6 pressure fell and liquid saturation increased in the 7 reservoir, and when this well was drilled in this depleted 8 area, it allowed the recovery of liquids that I don't 9 believe would have been recovered by any of these offset 10 wells. 11 And yet it's -- And now as it's depleting that 12 area, its GOR, of course, is going back up. But it has 13 recovered some liquids. And if you'll notice from the 14 chart, at the bottom, the oil cumulative recovery so far 15 has been 16,000 barrels of condensate. 16 So we think that this shows us that even on this 17 18 density pattern there are 16,000 barrels of incremental liquid recovery that wouldn't have occurred from the offset 19 wells. 20 21 And then cumulative recovery from the well so far in the first three years is 252 million. As we say, this 22 is not a barn-burner well, and this is probably what we 23 would expect of any wells that were recompleted in the area 24 25 as a result, if this -- if our Application was approved.

| Q. All right. So when we look at the Government |
|---|
| NBFD 1 and see its production history for gas on Exhibit 5, |
| that production started in about 1997? |
| A. Yes. |
| Q. And that prior to that there were existing |
| Wolfcamp wells adjacent to this well in a density that |
| would be comparable to what you would receive if the rules |
| are rescinded and you go to the current Rule 104? |
| A. That's correct. |
| Q. As part of your analysis, then, knowing what the |
| NBFD well is capable of doing, did you have available to |
| you sufficient data to see if its production was adversely |
| affecting this offsetting well pattern? |
| A. Yes, I went ahead and investigated the gas rates |
| on all four wells, and I summed them up, and the sum of |
| those gas rates on the offset wells is shown on Exhibit 6. |
| Q. All right, let's look at 6 and have you describe |
| that display, and then let's have you help us convert the |
| scales These are on different scales, aren't they? |
| A. Yes, they're on different vertical scales. The |
| time scales are the same. |
| Q. Let's make the conversion and show where we |
| should have seen an adverse effect on this well grouping if |
| they had been in effective communication with the newest |
| well. |
| |

| 1 | A. Okay, if we overlaid the graphs we would see that |
|----|--|
| 2 | obviously the NBFD well curve would be below the curve |
| 3 | shown on Exhibit 6. It would be from 200 to 300 MCF a day. |
| 4 | The curve shown on Exhibit 6 is particularly from 1997 |
| 5 | on, shows combined production rate of about a million a |
| 6 | day, or a little higher than a million a day, actually. |
| 7 | And I think what's illustrative about these |
| 8 | exhibits is that the production from the NBFD has had no |
| 9 | effect, no adverse effect, on the production from the four |
| 10 | offsetting wells. And this, of course, is indicating to us |
| 11 | that these are incremental reserves being produced and not |
| 12 | accelerated reserves that would have been produced by the |
| 13 | offset wells. |
| 14 | Q. Is this data, in your opinion, sufficient to |
| 15 | satisfy you as a petroleum engineer that it's now |
| 16 | appropriate to rescind the current rules? |
| 17 | A. Yes, it is. |
| 18 | Q. Have you shared that position with the other |
| 19 | operators in the pool? |
| 20 | A. Yes. |
| 21 | Q. Let's identify for Mr. Ashley who those other |
| 22 | operators are. |
| 23 | A. Referring back to Exhibit 1, we have three other |
| 24 | operators in the field actually, I'd have to say we have |
| 25 | four, and I can explain the difference there of active |

wells in the field. We have Chi Operating, or Chi Energy, Vision and Yates. And ONGARD shows Exxon to have a well in the field; it's a saltwater disposal well. And it escapes me why it's assigned to this field; I don't believe it's disposing of water under the Wolfcamp. But nonetheless, it's showing up on ONGARD, and we treated them as any other operator in the pool.

So what we did before we ever filed the 8 Application is, I drafted a letter with all the information 9 10 I had available to me, to the four operators in the field, and said, here's what we would propose, here's why we would 11 propose it, here's a waiver for you to execute if you have 12 13 no objection. If you do have any objections please let me know, I'd be interested to hear them. And I got no 14 response other than the signed waivers from all the other 15 16 operators.

Q. Let's turn to Exhibit 7. It's marked 7-A, 7-B,
and the latest one I've received yesterday is now marked 7C. Is this the letter you sent?

A. Yes, this is the letter I sent, and these are
executed by the other operators of actively producing
Wolfcamp wells in the pool. And it evidences their waiver
of any objection to our proposal to rescind the pool rules
for this field.

25

Q. Okay. And so you have a signed waiver from

| 1 | Vision, from Yates Petroleum Corporation and Chi Operating? |
|----|---|
| 2 | A. Yes. |
| 3 | MR. KELLAHIN: In addition, Mr. Examiner, our |
| 4 | notice of hearing is marked as Exhibit 8. It shows the |
| 5 | notice letter, and we sent all these parties the actual |
| 6 | Application, and it shows to whom those notices were sent. |
| 7 | I have not received any objections. |
| 8 | That concludes our presentation, Mr. Examiner. |
| 9 | And with your permission we would move the |
| 10 | admission of Exhibits 1 through 8. |
| 11 | EXAMINER ASHLEY: Exhibits 1 through 8 will be |
| 12 | admitted as evidence. |
| 13 | EXAMINATION |
| 14 | BY EXAMINER ASHLEY: |
| 15 | Q. Mr. Foppiano, do you know what the drainage |
| 16 | radius is of these wells? |
| 17 | A. No, I have not calculated the drainage radius of |
| 18 | the wells. We did investigate trying to calculate some |
| 19 | drainage radiuses of these wells when we came to the |
| 20 | Division for the hearing on the NBFD, and as I recall, the |
| 21 | testimony was based on the log information and the type of |
| 22 | environment we had. It was rather difficult to get good |
| 23 | porosity and water saturation information from this |
| 24 | carbonate reservoir. |
| 25 | Plus, there's kind of one main body of pay in |

| 1 | this area around the NBFD, but there are several stringers, |
|----|---|
| 2 | and so trying to estimate the extent of the stringers is |
| 3 | rather difficult. So the long-winded answer to your |
| 4 | question, no, we didn't really feel the results would be |
| 5 | very good. |
| 6 | Q. Now, is the NBFD an infill well? Is that drilled |
| 7 | on a It's the second well on a proration unit? |
| 8 | A. When we came to the Division to request approval |
| 9 | of that well as an infill well, the Division approved it. |
| 10 | But they approved the simultaneous dedication of it, with |
| 11 | the understanding that it would be perforated in Sections |
| 12 | that were not perforated in the existing well on the same |
| 13 | 160, which was the Government AB Number 1, and we were |
| 14 | directed to the District Office to get approval of our |
| 15 | perforations in the Wolfcamp, which we did do that. So we |
| 16 | perforated it as required, and those perforations were |
| 17 | approved by the District Office. |
| 18 | So I'm not sure I can answer your question. It |
| 19 | was a simultaneous dedication with a restriction. |
| 20 | Q. Do you have an order number for that? |
| 21 | MR. KELLAHIN: We have a copy of the order, Mr. |
| 22 | Examiner. |
| 23 | Q. (By Examiner Ashley) Okay. Thank you. |
| 24 | So the surrounding wells, the wells surrounding |
| 25 | the NBFD, are producing from a different zone within the |

1 Wolfcamp?

| 2 | A. They are all perforated in the same main pay as |
|----|---|
| 3 | the Wolfcamp. There's a main porosity interval there |
| 4 | that's somewhat that's pretty continuous through that |
| 5 | area. But there are stringers that were perforated in the |
| 6 | NBFD well, that were also perforated in the offset to the |
| 7 | south and east, which is the T Com Number 1. And we think |
| 8 | that's another reason for some increased reserves on |
| 9 | smaller than 320-acre spacing, is because of the presence |
| 10 | of these porosity stringers in the entire buildup section |
| 11 | of the Wolfcamp. |
| 12 | Q. And so the NBFD is not perforated in the main pay |
| 13 | of the Wolfcamp, is that |
| 14 | A. That is correct. |
| 15 | Q. Okay. And so the response that you saw in the |
| 16 | condensate in the NBFD was from the stringers that are |
| 17 | perforated in other wells, but these other wells are not |
| 18 | able to reach that or would not be producing that? |
| 19 | A. I think the NBFD encountered depleted reservoir |
| 20 | where it was perforated. The initial pressures, shut-in |
| 21 | pressures, indicated to us it was depleted. Even though it |
| 22 | was not perforated in the main body of the Wolfcamp |
| 23 | porosity, it was perforated in sections that were producing |
| 24 | in offset wells. |
| 25 | The result was, every indication to us was that |

1 it was perforated, and the drainage area of the NBFD has 2 been depleted by offset production. Is that because we 3 perforated in correlative stringers from another well, or 4 because there is vertical conductivity in the reservoir? 5 It's really hard to say. But it does appear, obviously, 6 that it's been depleted.

Q. Okay. Can you summarize again for me why you
8 felt like these pool rules were put in place?

A. From my read of the testimony and the exhibits,
the pool rules originally were set up to provide the
opportunity for a gas injection project, to maximize the
liquid recovery and to restrict development to one well per
320, and also to provide -- I think the primary reason was
to provide the rate restriction of 1.5 million a day.

15 I think there was -- What they were trying to do 16 there, I believe, was to restrict the rate to prevent 17 excessive liquid dropout right around the wellbore area, which would reduce the relative permeability of the gas and 18 reduce the flow rate right around those wellbores. 19 And 20 they were trying to keep the reservoir as long as possible to provide time for that analysis and that project to go 21 forward if it turned out to be economically feasible. 22 Obviously, it didn't turn out to be economically 23

24 feasible, it was never undertaken, and so the reservoir was 25 just depleted under these current rules.

| 1 | EXAMINER ASHLEY: Okay. Mr. Kellahin? |
|----|---|
| 2 | MR. KELLAHIN: Sir? |
| 3 | EXAMINER ASHLEY: Can you provide a draft order? |
| 4 | MR. KELLAHIN: Yes, sir, I'd be happy to. |
| 5 | EXAMINER ASHLEY: Can you give me a date that you |
| 6 | can provide that draft order? |
| 7 | MR. KELLAHIN: I need to do it before I go on |
| 8 | vacation, so you'll get it probably on Tuesday. |
| 9 | EXAMINER ASHLEY: Tuesday, which is |
| 10 | MR. KELLAHIN: Next week. |
| 11 | EXAMINER ASHLEY: the 18th? |
| 12 | MR. KELLAHIN: Yes, sir. |
| 13 | EXAMINER ASHLEY: Okay. I have nothing further, |
| 14 | thank you. |
| 15 | There being nothing further in this case, Case |
| 16 | 12,447 will be taken under advisement. |
| 17 | (Thereupon, these proceedings were concluded at |
| 18 | 10:15 a.m.) |
| 19 | * * * |
| 20 | |
| 21 | Complete record of the proceedings in |
| 22 | heard by me on |
| 23 | Mark Pahry, Examine |
| 24 | On Conservation Division |
| 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 July 17th, 2000.

STEVEN T. BRENNER CCR No. 7

My commission expires: October 14, 2002