STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO

25 June 1986

EXAMINER HEARING

IN THE MATTER OF:

Application of Amoco Production Company for the reinstatement of canceled under production, Eddy County, New Mexico.

CASE 8922 8923

BEFORE: Michael E. Stogner, Examiner

TRANSCRIPT OF HEARING

A P P E A R A N C E S

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I N D E X

E X H I B I T S

MR. STOGNER: Call next Case 8922, which is the application of Amoco production Company for the reinstatement of cancelled underproduction, Eddy County, New Mexico.

Call for appearances.

MR. WILLIAMS: Michael Williams in conjunction with William Carr , representing Amoco, with our technical expert, R. P. Zinsmeister.

MR. HORN: Ronald F. Horn, law firm of Keleher and McCleod in Albuquerque, representing Gas Company of New Mexico, a division of Public Service Company of New Mexico.

MR. MICHAELS: Mr. Examiner, I am not familiar with the procedures here because this is my first time, but I'd like to move to consolidate this hearing with hearing Number 8923.

MR. STOGNER: Are there any objections?

MR. HORN: No objection.

MR. STOGNER: We'll now call Case Number 8923, which is also the application of Amoco Production Company for the reinstatement of cancelled underproduction, Eddy County, New Mexico.

Please note that both parties

are represented in this case, too, and Case Number 8922 and 8923 are hereby consolidated for the purpose of testimony.

MR. MICHAELS: Thank you very much.

MR. STOGNER: Okay, and you have one witness to be sworn, is that correct?

MR. MICHAELS: We have one witness, R. P. Zinsmeister.

MR. STOGNER: Mr. Horn, any witnesses?

MR. HORN: No witnesses.

(Witness sworn.)

MR. STOGNER: Please continue.

MR. MICHAELS: I would like to make a brief opening statement.

Amoco is here today requesting reinstatement of cancelled nonmarginal well allowables for the 1983 to 1984, and the 1984 to 1985 proration periods for the Smith Federal Gas Unit Well No. 1 and the Smith Federal Gas Communitized Unit Well No. 1, both located in Sections 11 and 12, respectively, of Township 22 South, Range 23 East, of Eddy County, New Mexico.

We will demonstrate today by

the testimony of Mr. Zinsmeister that these two wells were of nonmarginal character throughout the period and they were classified as marginal wells only as a result of lack of gas takes by the gas purchaser, which is the Gas Company of New Mexico.

Amoco had the right throughout this period to petition the Commission for reclassification of those wells to nonmarginal status and to reinstate the unproduced allowable at the end of each proration quarter.

We didn't do that at the end of each quarter because, frankly, the purchaser was not taking very much gas, so the petitions would only have wasted the Commission's time.

We now hope to be able to market the gas and so we ask for a resinstatement. If we don't obtain the reinstatement, we will be drained by offset leases. The field, which is conserved by both wells, is a volumetric depletion field with some water drive. If we can't produce the cancelled underproduction, we will irrevocably lose it to offset leases and/or to the advancing water front. We believe that would be unfair.

We will show today that surrounding wells of similar nonmarginal character have recovered significantly larger volumes of gas than the Amoco wells merely because they have a different gas purchaser,

Marathon.

We believe that in the interest of conservation and the protection of correlative rights, this unproduced gas allowable should be reinstated for the Amoco Smith Federal and the Amoco Smith Federal Gas Communitized Unit Wells so that Amoco can recover its just and fair share of pool reserves within the Indian Basin Upper Penn Field.

R. P. ZINSMEISTER,

being called as a witness and being duly sworn upon his oath, testified as follows, to-wit:

DIRECT EXAMINATION

BY MR. WILLIAMS:

Q Mr. Zinsmeister, please state your name and place of residence.

A My name is Robert P. Zinsmeister. I'm employed by Amoco Production Company and reside in Houston, Texas.

Q Please summarize your educational background.

A I have a Bachelor's of Science in petroleum and natural gas engineering from the Pennsylvania State University. I was graduated from that university in June of

1980.

Q Please summarize your work experience including that with Amoco.

A Okay. I have worked solely for Amoco subsequent to my graduation for approximately six years now. In that time period I have done numerous engineering functions for that company in both operations, engineering of primary oil and gas fields, and in a supervisory capacity over other engineers with regard to engineering calculations and operations of gas fields throughout the Houston Region, which encompasses the states of Michigan, Texas, Illincis, and New Mexico.

For the past year, approximately, I have been employed as a Regulatory Affairs Engineer in the Houston Region doing engineering calculations and testifying to same in Texas, Illinois, and Michigan, and in this period I have been also responsible in New Mexico and today is my first appearance in New Mexico in that regard.

Q Are you familiar with the wells which are the subject of this hearing?

A Yes, sir.

Q And are you familiar with the applications filed in this case by Amoco Production Company?

A Yes.

MR. WILLIAMS: Are the witness'

qualifications acceptable, Mr. Examiner?

MR. STOGNER: They are.

MR. WILLIAMS: Thank you.

Q Have you prepared certain exhibits for this hearing?

A Yes, sir, I have.

Q And those are the exhibits we have given to the Examiner and to Mr. Horn, is that correct?

A That is correct.

Q Thank you. Would you please turn to Exhibit Number One and explain to us what that is?

A Exhibit Number One is a copy of the notice that we, that is Amoco, provided to all operators in the Indian Basin Uppe Penn Pool, and also includes the return receipt of this notice from the various operators.

Q And the purpose of this exhibit is merely to state that we have given notice as required.

A Yes, sir.

Q Okay, please refer to Exhibit Number Two and explain its meaning to us.

A Okay. Exhibit Number Two is a rather involved exhibit.

Exhibit Number Two is a map of the Indian Basin operating area and it has numerous colors and symbols, which I'll discuss in detail.

The base colors on the map comprise yellow, and the solid yellow is in the area of two Amoco operated gas units that are the subject of this application, the Smith Federal 11-1 and the Smith Federal Gas Communitized Unit 12-1.

The yellow cross hatched units are other Amoco operated units in this pool.

The solid pink units are nonmarginal wells within a two mile radius of the two Amoco wells that are the subject in these applications.

The pink outlined area is an area of review, again within two miles, which I used to investigate the coverage and gas sales or production figures for the wells and compare them to the Amoco wells.

Now there are also well symbols on this map.

The solid green dots are active producers in the Indian Basin Upper Penn Field.

The cross hatched green well symbols are active producers that are currently producing in excess of 20 barrels of water a day and the pink well symbols are wells that are shut in. The majority of these are shut in due to accelerated water production, such that the wells are uneconomical and one can approximate the position of the advancing water front from the location of these shut in wells.

Lastly, I'll address the numbers in each of the units. You will see a solitary large number that is also underlined in red within the two-mile investigation area, and this is the gas recovery of the unit as of January 1st, 1983.

You will also see a large group of numbers in each of the units. The numbers on the top of the line are the production figures for the month of November, 1985, which is when I did -- or that's when the data was available when I did this study.

The first number is the gas rate in NCFD. The second number is the condensate rate and the last number is the water rate.

Moving to the numbers below the line, one sees the cumulative gas recovery as of December 1st, 1985, in BCF, as well as the cumulative condensate recovery in thousands of barrels.

And as I earlier stated, the purpose of this map was I used it to review recoveries of the wells surrounding the Amoco wells that are the subject of this application.

Q Mr. Zinsmeister, as to this exhibit, let me ask you a couple of questions concerning the field.

Are all of the wells in this exhibit in communication with the same gas reservoir, to your know-

ledge?

A Yes, sir. I investigated the bottom hole pressure performance of the field versus time that are available in the State records, and I've also reviewed maps, pressure histories versus time, and it was obvious to me that this entire field is in pressure communication.

Q Okay, and it's a volumetric depletion field principally, is that correct?

A Principally this field has undergone volumetric depletion; however, it is in connection with an aquifer that is supplying water to the field and it has caused a number of the wells to water out.

Q Well, the point of my questions is that if we don't produce certain amounts of gas from our two wells at issue today, will that gas be produced by the other wells that are in this field?

A Yes, sir, it will.

Q Thank you. Okay, please turn to Exhibit Number Three and explain that to us.

A The Exhibit Number Three is a bar graph which compares the recovery of the various wells in this two-mile investigation area versus the Amoco wells over time.

It uses the same data that was on that map and again it reviews only nonmarginal wells in this two-

mile area.

I will additionally say that in my review I isolated only those nonmarginal wells that were completed in 1965, which is the same year that our wells were completed. Additionally, I have adjusted the recovery numbers such that they conform to the recovery from a 640-acre gas unit. Both of Amoco's units are 640-acre units.

To define or describe how I did that, a unit that is larger in size, let's say 670 acres, receives additional allowable, based on the acreage; therefore, a cumulative recovery was then adjusted by multiplying its cumulative recovery by 640 acres and then dividing by 670, which is the, for instance, acreage in the tract.

As you can see, as of 1-1-83, the recoveries of the surrounding wells are very comparable to the Amoco wells. The surrounding wells recovered 23.2 BCF on an averages. The Amoco wells average recovery is 23.25 BCF.

However, that is not the case as of December 1st, 1985. The surrounding wells have recovered on an average 27.1 BCF whereas the Amoco average recovery is 25.9 BCF, for a difference of approximately 1.2 BCF per well.

This difference in recovery is due to a lack of takes by our gas purchaser during this time period.

Q Has Amoco ever worked over the wells?

A No, we have not, not since the wells were initially completed in 1965.

Q The wells have been adequate in a production sense?

A Yes, sir.

Q Thank you. Please refer to Exhibit Number Four and explain that to us.

A Exhibit Number Four is a graph of gas production versus time again referencing the same wells as the earlier exhibits within this two-mile radius of investigation.

The orange data is the average gas production from the Amoco wells and the blue data is the average gas production by year for the surrounding wells, and these --

Q Excuse me, at that point the orange wells, which are Amoco's, are suppliers to the Gas Company of New Mexico, is that correct?

A Yes, sir.

Q And the blue, wells represented by the blue line are all suppliers of Marathon.

A Correct.

Q Thank you. Okay.

A As you can see, this has developed for a

five year period from '81 through 1985, and the Amoco gas sales were fairly consistent with those of the surrounding wells in the years 1981 and '82 and then fell behind for 1983, 1984, and 1985.

Q What was the reason for that?

A Again it's due to a lack of takes by our purchaser.

Q Will you please turn to Exhibit Number Five?

A Exhibit Number Five again is merely a new way of presenting the same data you saw on Exhibit Four. It is a difference curve, the difference between Amoco gas sales to the Gas Company of New Mexico from these two wells and the surrounding wells average sales to their purchaser.

Again you can see that Amoco was slightly ahead of the surrounding wells in 1981 and '82, approximately 200-300 MCFD.

And then again in '83 and '84 and '85 we fell substantially behind the production of the surrounding wells, falling in excess of 1.2-million cubic feet per day per well in 1985.

Q Please turn to Exhibit Number Six and explain that.

A Okay, Exhibit Number Six is a graph of nonmarginal well allowable versus time in comparison to the

Amoco wells' production rate for that same time period.

The blue data is the nonmarginal well allowable for a standard 640-acre unit in the Indian Basin Upper Penn Pool.

The orange data is the gas production from the Amoco-operated Smith Federal 11-1.

And the green data is the gas production from the Amoco-operated Smith Federal Gas Communitizaed Unit 12-1, and as you can see, the production from those two wells fell below the nonmarginal well allowable on or around November of 1983 and continued up until the fourth quarter of 1985 and the early portion of 1986, at which time we did exceed the nonmarginal well allowable because the purchaser began to take more gas.

Q I know that this is going to be discussed later, but for the knowledge of the examiner, would you briefly mention the split take situation of the Smith Federal Gas Communitized Well, to explain its performance on this chart?

A Okay. The Smith Federal Gas Communitized 12-1 is a split take well. The working interest in the well itself is divided between Amoco Production Company and Mobil. Amoco has a 50 percent interest and its 50 percent interest is dedicated to the Gas Company of New Mexico.

Mobil's 50 percent interest is dedicated

to Marathon.

As we said, the well is a split take well and this purely so since the well actually has a split action at the wellhead. There are two separate lines running to two separate production facilities and two separate gas gathering lines.

When Mobil is producing its share of the gas a Mobil employee operates the well and the gas is produced from Mobil's production equipment.

When Amoco's share of gas is produced from the well an Amoco employee tends to the daily operation of the well and sells our portion of the gas through our production equipment which eventually goes to the Gas Company of New Mexico.

Q On Exhibit Number Six, the green line representing that well, that includes --

A That's all gas sales production.

Q Right, so it includes Mobil's which it is producing for Marathon and that explains why it's produced more than the Smith Federal Well represented in orange, is that correct?

A The reason why is has produced more is in part due to the split take nature of the well, yes, sir.

Q Thank you. Okay, please turn to Exhibit Number Seven and explain that.

A Okay. Exhibit Number Seven is a graph of nonmarginal well allowable versus time again versus well test data.

Again in blue you see the nonmarginal well allowable.

The orange data is well test gas rate in MCFD. The scale is on the lefthand side for this well.

The green data is the flowing tubing pressure curve that is associated with the individual well test gas rates.

The blue curve is what I call a working pressure curve and it is the difference between the flowing tubing pressure at any given data point with the line pressure recorded with that data point.

When the flowing tubing pressure is large or the working pressure is large, that is an indication that the well has excess capacity to deliver gas to sales over and above that seen on the well test curve.

I believe there is one other curve I should -- set of data I should reference, some red information on the bottom of the curve, or plot.

The letters "SI" stand for shut in, and the inverted triangles in red indicate when the Gas Company of New Mexico asked us to alter our production rate, and the two groups of data are based on the correspondence that we

have in our Houston office when the Gas Company1 either requested us to shut in production from this well or to alter the gas rate.

Lastly, I believe if you connect the well test gas rates at the top of the curve from early 1982 to late '85 and '86, one can see that this well was able to make the nonmarginal allowable throughout this period.

Additionally, I have calculated deliverability of the well based on the well test gas rates and the flowing tubing pressure, and I calculated the deliverability of this well at 750 pounds flowing tubing pressure at this point in time or on or about January of 1986 is approximately 5.7-million cubic feet of gas per day.

Additionally, backtracking in time, in the '82-'84 period I estimate deliverability of the well as approximately 6.1/6.2-million cubic feet of gas per day.

The highest average quarterly nonmarginal allowable throughout this period is approximately 5.45-million cubic feet of gas per day. So not only does a simplistic connection of dots substantiate deliverability of this well in excess of nonmarginal allowables, but so do engineering calculations.

I would lastly like to point out with respect to the engineering calculations, these are based on the fact that we have a 1.995 inch ID tubing string in both

of our wells. There is a large friction loss associated with this tubing string.

I calculated if we had a 2.4 inch string in this well we would be able to deliver approximately 8.2-million cubic feet of gas per day from this well. This would certainly be in the realm of possibility since we have a 4.89 inch ID casing string.

Q Would that have been true also for the prior two gas proration periods at issue today?

A That is true for the whole period we're talking about if Amoco elected to change the tubing string, mind you, but we do have a 1.99 string in the wells right now.

Q On the issue of production, Mr. Zinsmeister, is our production from those wells within our control, to your knowledge?

A Amoco personnel control the valves, that is true, but on a daily or almost weekly basis we're in contact with individuals from the Gas Company of New Mexico who determine the volume of gas the need to take from the well, so realistically, although Amoco turns the valve, we have very little control over what gas we can produce.

Q If the Gas Company tells us to shut in the well, we shut in the well, is that correct?

A Yes, sir.

Q And that applies to both wells.

A Yes, sir.

Q Please turn to Exhibit Number Eight and explain that to us.

A Exhibit Number Eight is a graph of shut-in bottom hole pressure versus time for both the Smith Federal 11-1 and the Smith Federal Gas Communitized 12-1.

As you can see, there's been a nominal reduction in bottom hole pressure from the period 1982 through 1984, only 46 psi.

Also the wells have almost identical shut-in bottom hole pressures over this time period, which is an indication of the good permeability and pressure communication of this reservoir.

Lastly, it's my judgment that the nominal reduction in shut-in bottom hole pressure certainly indicates that the wells should have maintained their deliverability throughout this time period.

Q Thank you. Please explain Exhibit Number Nine.

A Exhibit Number Nine is a tabulation of the Gas Company of New Mexico nominations in MCF for the Smith Federal 11-1 for January through July of 1984.

In the far left column you see the month. Next to it you see the total nomination from Gas Company of

New Mexico in MCF for that month. Again, this is data that is published in the State proration schedule.

I next determined the nonmarginal nomination for this well by subtracting that portion of the nomination that would go to a marginal well. It is also part of the total nomination. That marginal well is the Amoco-operated Hoc Federal Gas Unit, which is in Section 13.

So subtraction of the allowable, the marginal allowable associated with the Hoc Federal, from the total nomination one can arrive at the nonmarginal nomination for the Smith Federal 11-1.

In the next column one sees the nonmarginal allowable for each of the months that is published in the proration schedule.

In the last column with regard to production is the actual production from this well for each month.

As you can see, for the period February through July, the total nonmarginal nomination for this well was less than the nonmarginal allowable. Additionally you can see where Amoco's production oftentimes fell even below the nonmarginal nomination.

In the comments period, or the comments column to the far right indicates some of the reasons why that occurred. On three separate occasions the Gas Company requested us to shut in the well.

I would also like to point out that the gas rules in the State of New Mexico state that if a well comes into a proration period underproduced and fails to make the nonmarginal allowable for a classification period, which is three months in length, that well will be reclassified from nonmarginal to marginal and the accrued underproduction at that time will be cancelled.

Well, we came into the proration period effective April 1st in an underproduced status, again due to lack of takes. As you can see, the nomination was less than the nonmarginal allowable for April, May, June, and July, and we subsequently did not make the nonmarginal allowable.

And in August, when June's data was available to the Commission they did reclassify this well, as well as the Smith Federal Gas Com 12-1, from a nonmarginal to marginal status.

Q Why didn't we go in at the end of each quarter administratively and request reinstatement of the underproduction, to your knowledge?

A Okay. Amoco could have done that, at least on a quarterly basis, to the best of my knowledge; however, that would have been of no material effect since our purchaser was not taking gas. We could have continued on a quarterly basis to ask the Commission to reinstate our underproduction but there is another rule in the Commission

gas rules that states that any underproduction not produced at the end of the year will be cancelled, so we would have continued tc ask the Commission to use their good grace to reinstate this allowable. It would not have been sold.

Q So it was rather pointless at that time.

A Yes, sir, in my opinion.

Q Thank you. Please explain Exhibit Number Ten.

A Exhibit Number Ten is merely a copy of the August, 1984, Proration Schedule for southeast New Mexico.

Highlighted in yellow one will see the status of the Smith Federal and on page two, the Smith Federal Gas Com Well.

It indicates that both of those were, in fact, reclassified in those months from nonmarginal to marginal.

Q And Exhibit Number Eleven? Please explain that.

A Okay, Exhibit Number Eleven is again a well test curve versus time for the Smith Federal Gas Com 12-1. The colors and data on this curve are similar to the previous curve you saw.

Again the blue data represents the nonmarginal well allowable for a standard 640-acre proration unit within the Indian Basin Field.

The orange data is a well test gas rate that Amoco personnel gathered in the field on a periodic basis.

The green data is the flowing tubing pressure curve and the blue data is the working pressure curve.

This particular well, because of the split take scenario, we have much less data than the other well due to the infrequency that Amoco actually sold gas to the Gas Company of New Mexico; however, once again I was able to calculate the deliverability of the well based on the well test rates and associated flowing tubing pressure, and it is approximately the same as that of the other well, currently able to deliver approximately 5.7-million cubic feet of gas per day at 750 psi flowing tubing pressure.

I must also add that the line pressure in the area is on or about 600 psi so that gives me a working margin of 150 psi and I should really only need 50 to 70 psi to move these volumes of gas cross the lease, and so this would more or less be a pessimistic gas rate, in my opinion.

And again backtracking in time, this well would be capable of selling 6.1 to 6.2-million cubic feet from the '82 through the '84 periods and it is also hampered by a 1.995 ID tubing string and were we to swap out that tubing string with a 2.44 inch ID string, this well would be

capable of sales of approximately 8.2-million cubic feet as of this time.

Q And what about also during the times at issue --

A Yes, sir.

Q -- in these cases? Thank you.

Please explain Exhibit Number 12.

A Exhibit Twelve is rather busy, so I hope you will bear with me.

The blue curve once again is our nonmarginal well allowable. Now I have gone the extra step of dividing this nonmarginal allowable back in two and this is presented on the orange curve, and what I'm attempting to do is handle the split take nature of the well. 50 percent of the gas goes to Mobil and eventually Marathon and 50 percent of the gas, which is Amoco's portion of the gas, goes to the Gas Company of New Mexico. I'm trying to use this half allowable figure, so to speak, to show which purchaser is taking their portion of the gas allowable, presuming that it's halved between each of the purchasers and each of the working interests.

The actual production of the well is in green versus time, the green dots.

The Gas Company of New Mexico takes are the triangles that we see in the curve in blue and the Mara-

thon takes for Mobil are in purple.

As you can see, the majority of the time the takes are almost solely for Mobil by Marathon and actually fill the green production blocks, and over the 36 or so month period on this curve on only five occasions did the Gas Company even need half of the allowable.

Q Please explain Exhibit Number Thirteen.

A Exhibit Number Thirteen is tabular data for the period 1983, '84, and '85, and references the actual gas takes by purchaser for the Smith Federal Gas Com 12-1.

It is the same data that is on the previous exhibit, Mr. Examiner.

It is tabulated by month and totaled for each purchaser by year at the bottom and again you see that prorated marginal allowable. That's the total yearly allowable divided by two, to segregate the portion of the allowable that each purchaser more or less is responsible for.

Lastly you see a calculated imbalance. That's the difference between the total takes by purchaser and the nonmarginal half allowable for that year.

So you can see in 1983, for instance, Marathon exceeded their half of the allowable by approximately 16-million cubic feet, whereas the Gas Company of New Mexico fell below it by approximately 491-million cubic feet.

Q Mr. --

A Moving in time --

Q I'm sorry.

A That's okay. You can see where Marathon was ahead in '83, slightly behind in 1984, and then again ahead of the half allowable in 1985, whereas the Gas Company has fallen below in each of these three years and after going into the tabular data in the chart, it's typical to see six month periods where the Gas Company took no gas whatsoever for our portion of the working interest in this well.

Q As of this well are we being drained by Marathon in addition to being drained by the offset wells?

A Well, technically we're being drained by Mobil.

Q I'm sorry.

A Marathon being their purchaser, or transporter, I should say, and we're subject to internal drainage.

Q Of course Mobil has the right to do that.

A Yes, sir.

Q We're not alleging that they don't. We're just alleging that it may be unfair, is that correct?

A Yes, sir.

Q Fine, thank you. Please explain Exhibit

Fourteen.

A Exhibit Fourteen is a copy of the January, 1986, Southeast Gas Proration Schedule for the Indian Basin Upper Penn Field.

Again highlighted in yellow for ease of reference is the Smith Federal Gas Com 12-1. As you can see, this well was reclassified by the Commission's own motion from marignal to nonmarginal status. It's accrued underproduction for the 1985-86 proration period was reinstated due to increased takes of gas from this well over and above that of a nonmarginal well allowable.

Q And Exhibit Number Sixteen -- I'm sorry, Fifteen.

A This is a copy of the April, 1986, Southeast Gas Proration Schedule, indicates the status of the Smith Federal 11-1 Well and it shows that the Commission reclassified this well from a marginal to a nonmarginal status; reinstated its accrued underproduction for the '85/'86 proration period, and this was as a result of a petition from Amoco Production Company that we delivered to the Commission in February asking for this reinstatement.

Q Please explain Exhibit Number Sixteen.

A Exhibit Sixteen is a tabular representation of the cumulative proration status of the Smith Federal 11-1.

The far left column indicates the production from the well as published in the State Proration Schedule.

The column next to it, moving to the right, is the allowable by month in MCF. The difference between production and the allowable is indicated in the next column, and then the cumulative difference with respect to the initial proration status of the well is in the last column.

Moving down to the March '85 date, one can see that the cumulative production with respect to the nonmarginal well allowable for this time period, was approximately 1.3 ECF.

Q And turning to Exhibit Seventeen we have similar table for the Smith Federal Gas --

A Yes, sir, we do.

Q -- Com 12-1.

A Yes, sir, we do.

Q Please explain that.

A Each of the columns is the same with respect to the titles and the actual data in them.

I would merely like to point out that again as of March '85 the cumulative underage of this well with respect to the nonmarginal allowable is approximately 665,000,000 cubic feet.

Q And finally please explain Exhibit Numer Eighteen.

A Exhibit Numer Eighteen summarizes the cumulative underproduction of the well with respect -- wells, excuse me -- cumulative underproduction of the wells with respect to the nonmarginal well allowable by proration period.

For example, the Smith Federal 11-1 for the 1983 to '84 proration period was underproduced by 310,142 MCF.

The Smith Federal Gas Com for the same period was underproduced by only 13,784 MCF, and again, including the '84-'85 proration period, the total imbalance is in the order of 1.3 BCF for the Smith Federal 11-1 and 665-million cubic feet for the Smith Federal Gas Com 12-1.

Q And these are the amounts that we are asking today to have reinstated, is that correct?

A Yes, sir.

Q In summary, it's your opinion that these wells throughout the period of time at issue have deliverability far in excess of the nonmarginal well allowables, correct?

A Yes, sir.

Q But they didn't deliver because our customer didn't take gas, correct?

A Yes.

Q That the gas that we did not produce and have had cancelled, if it isn't reinstated we'll lose it through drainage because of the nature of the field, is that correct?

A Yes, sir. Technically we've already lost it. Were the field to stop producing as of this date we would be behind those volumes in comparison to all the surrounding wells.

Q And in your opinion that would be an unfair situation.

A Yes, sir.

Q Not protective of our correlative rights in this field.

A Would you repeat that? I didn't hear.

Q Our correlative rights would be unprotected without this reinstatement.

A Yes, sir.

Q Thank you.

MR. WILLIAMS: That's the end of my case, Mr. Examiner.

MR. STOGNER: Thank you.

Mr. Horn, your witness.

MR. HORN: Let me go through some of your --

MR. WILLIAMS: Oh, excuse me, one second.

I would like to offer the exhibits into evidence at this time.

MR. HORN: I --

MR. STOGNER: Is there any objection?

MR. HORN: I may have some. I'd like to voir dire the witness on some of these exhibits, if I may.

MR. STOGNER: Any ones in particular?

MR. HORN: Yes. Twelve, Six, Seven, Nine --

MR. STOGNER: Why don't we just hold off on admitting them now?

MR. WILLIAMS: All right.

MR. HORN: I can tell you the ones I have no objection to. I may not have an objection, Mr. Hearing Examiner.

I have no objections to Exhibits One, Two, Three, Four, Five, Eight, Ten, Fourteen or Fifteen.

VOIR DIRE EXAMINATION

BY MR. HORN:

Q If you would, turn to Exhibit Six, please, your blue plot, and it's also the same on Exhibit Seven, the x's where you have the allowable indicated, is it your testimony that this is the actual allowable for these two wells during this period of time?

A My actual testimony throughout this hearing has been that this is the nonmarginal well allowable for a standard 640-acre unit.

Q But you're not testifying that this is the allowable that were set for these two wells.

A No, sir, I'm not.

Q All right. And that would be true for every one of these exhibits, Six, Seven, Exhibit Nine, where you're saying nonmarginal allowable during that period of time, again that is not the allowable set for thesetwo particular -- this well on Exhibit Nine, Exhibit Eleven, Exhibit Twelve, Thirteen, Sixteen, Seventeen, and Eighteen, is that correct?

A Okay, let me exactly define when the nonmarginal allowable referenced on all these exhibits actually applied to these wells.

Q Okay.

A As you'll recall from my testimony, the wells were reclassified effective August 1st of 1984; therefore the nonmarginal well allowable was applicable for both wells up to August 1st of 1984.

Additionally, upon reclassification of each of these wells, the Smith Fed Gas Com in January, 1986, and the Smith Federal 11-1 in April, '86, subsequent to each of those two dates the wells would have nonmarginal allowables.

Q So for the period of time on all of these exhibits from August of '84 until January of '86 for one well and April of '86 for the other well your indication of an allowable here is -- is not the allowable that was set for these wells, is that correct?

A By the Commission, no.

Q All right.

MR. HORN: Mr. Hearing Examiner, I have no objection to any of the exhibits if the Hearing Examiner is clear that where indicated on the exhibits that this is the allowable, as the witness had testified that is not the allowable set for these two wells during the period of time August of '84 to January of '86 in the case of the -- is it the Smith Federal 1?

A Which was the second date, I'm sorry?

A January 1.

Q That would be for the Smith Federal Gas Com 12-1.

Q And through April of '86 for the Smith Federal No. 1.

MR. STOGNER: What exhibits are you talking about?

MR. HORN: The exhibits that I'm talking about would be Exhibit Six, Seven, Nine, Eleven, Twelve, Thirteen, Sixteen, Seventeen, and Eighteen.

A Give me one moment, please.

MR. WILLIAMS: Could I have just a second?

A For the clarity of the record, the allowables are correct on Exhibit Nine.

Those were the actual equivalents that we had.

Q Those were -- okay, I'm sorry. I withdraw my objection to Exhibit Nine.

A Well, let me check the rest.

MR. WILLIAMS: You know, the purpose of most of these exhibits is to show that, clearly that the wells could deliver, have delivered above the non-marginal well allowable, so we thought that it was rather obvious that that is what the marking on those charts are.

MR. HORN: Well, so long as

it's clear that these exhibits are not being offered to show that this was the allowable for --

MR. WILLIAMS: That's correct.

MR. HORN: -- these particular wells during the period of August of '84 through 1986, and from the face of them, someone just picked this, for example, picking up one of these exhibits, it may not be clear.

MR. WILLIAMS: I understand.

MR. STOGNER: Okay, so that I understand, I thought I understood and now I think I might be confused.

On Exhibit Six, the blue up there which shows allowable is what the allowable would have been if it stayed -- if it was at a nonmarginal status, is tha correct?

A Yes, sir. It is our opinion that on a periodic basis we could have petitioned the Commission to maintain that allowable at a nonmarginal status but that it would have been of no material benefit.

MR. WILLIAMS: Once again, Mr. Examiner, we used that on these exhibits to show that the wells had deliverability far in excess of the nonmarginal well allowable had it been applied to our wells.

MR. STOGNER: And so that I can get back on track here, Mr. Horn, you're objecting to the --

any of the exhibits at this time?

MR. HORN: If the Hearing Examiner is clear what -- that the blue lines here are what they're contending would have been the allowable had it been nonmarginal, but that that is not in fact the allowable for these two wells, we have no objection to it; as long as that point is clear.

MR. STOGNER: I am clear on it.

MR. HORN: All right.

MR. STOGNER: So do you have any objection?

MR. HORN: No, sir.

MR. STOGNER: Okay, Exhibits One through Eighteen will be admitted into evidence at this time.

MR. WILLIAMS: Thank you.

MR. STOGNER: Mr. Horn, your witness.

CROSS EXAMINATION

BY MR. HORN:

Q You have indicated on a number of occasions in your direct testimony that the production was in control of Gas Company of New Mexico and that you had no opportunity to produce this gas other than to -- to Gas Com-

pany of New Mexico, is that correct?

A Yes, sir.

Q Is it your view that during this period of time that there was migration of gas from beneath your 680-acre spacing on each of these two wells?

A Yes, sir.

Q Is it your view that the migration of this gas was due to the proration rules or some other cause?

MR. WILLIAMS: I'm not sure I understand that question. Perhaps you could rephrase that. I'm not sure that the rules can make gas move physically.

Q Is it your opinion that the migration or drainage in this case was caused by any proration rules as set by the Oil Conservation Division?

MR. WILLIAMS: Thank you. I'm sorry, I still don't understand that question. I'm not trying to be obstreperous but I really don't understand it so I have -- I can't ask him to answer it because I don't know what it is.

Do you understand the question?

A Not really.

MR. WILLIAMS: Is there a way that you could explain it otherhwise?

Q Is it your opinion that there was migration or drainge --

A Yes, sir.

Q -- of this -- of the gas from underneath the 640-acre spacing units? Is that correct?

A Yes, sir.

Q All right, and are you contending that migration or drainage was cause in any manner by the proration rules as set by the OCD?

MR. WILLIAMS: I don't -- I think you're asking something that he can't possibly -- how can rules make gas move? I think that's my trouble with the question. Gas will move under pressure, not by rules.

Q Do you understand my question?

A Not really.

Q Okay. What do you contend caused the migration of the gas that you claim -- that you -- that you've expressed your opinion on?

A The fact that surrounding wells produce at rates greater than our wells would cause migration.

Q All right. Do you believe the surrounding wells' production being greater than these two wells was caused in any manner by the proration rules as set by the OCD?

A It is my opinion that the difference in the production rates of the various wells was related to who their purchaser was.

Q And so I take it by your answer that you do not believe that that was caused by the proration rules as set by the OCD, is that correct?

MR. WILLIAMS: I object to that. I still don't understand that question, and he doesn't understand the question and I don't think it's fair to ask us to answer a question that boggles both of us, and I don't know where you're going with it, either, I mean, which doesn't matter, but I just can't understand it.

Q Do you contend, sir, that the migration due to the production from surrounding wells was caused in any manner by the proration rules of the OCD?

MR. WILLIAMS: Unless you're absolutely sure that you understand that question, please don't answer it, Mr. Zinsmeister.

MR. HORN: Mr. Hearing Examiner, could I have a direction that the witness answer the question?

MR. STOGNER: Do you understand the question?

A No, I don't, sir.

MR. STOGNER: Could you rephrase the question where it's understandable, or more clear?

Q You have stated to this hearing that the

migration was due to lack of takes by the purchaser, is that correct?

A No, I have stated that the migration is due to the surrounding nonmarginal wells producing at rates that were greater than the rates from the two Amoco-operated wells.

Q And you have further gone on with that answer and asserted that that differential was due to the lack of takes by your purchaser, is that correct?

A That is why Amoco did not sell the non-marginal allowable. My purchaser, or Amoco's purchaser, did not take the gas.

Q All right. Are you contending that that differential was in any manner caused by the proration rules as set by the OCD?

MR. WILLIAMS: Object. Instruct the witness not to answer. This is silly. I still don't understand it. You keep asking the same question over and over again. We just don't understand it, Mr. Horn. We're not trying to be obstructive to you.

MR. HORN: Mr. Hearing Examiner?

MR. WILLIAMS: You've already asked the Examiner the issue, too.

MR. HORN: May I have an answer

to my question? He has testified that the differential was due to the lack of takes by purchaser and now I'm asking him if he feels that the same differential was in any manner caused by the proration rules and he refuses to answer that question.

MR. WILLIAMS: Well, may I -- Mr. Examiner, may I state something in this regard? He asked -- there's two issues. What made the gas flow; he testified that it was migration from wells producing, and then he was asked why, and he said, well, because the other wells produced more because they had a purchaser. I think that answer the question and it's pretty clear to me. I don't know what's left. We know why the gas moved and we know why someone else produced more than others.

We know what the proration rules are. They're law. I don't understand this at all and I'm very afraid of letting my witness answer a question that he really doesn't understand. He's an engineer. He's an expert. He's --

MR. STOGNER: I don't see the point of that question, either.

MR. HORN: Well, the point of the question is it is a contractual requirement between the two parties and this production, if there is any drainage or migration under the terms of the contract between Gas

Company of New Mexico and Amoco, Amoco has the right to sell its gas to another party throughout the entire term of the contract and this witness has been testifying before you that all of this is due to the lack of takes by Gas Company of New Mexico, and that they would -- it would have been pointless in coming and requesting reinstatement from this Commission or from the Division because they could not get any additional sales and they have a contractual right in their contract, if the drainage or migration is not caused by the proration of production from the wells by the OCD, they have the right to go ahead to sell this gas to an additional purchaser.

And that is why, that is the rationale of my question, sir. He has been testifying that they could not sell this gas and I just want it clear on the record whether they could or what their contention is.

MR. WILLIAMS: May I answer that, Mr. Examiner?

MR. STOGNER: I think we just heard the closing argument here instead of cross examination.

MR. HORN: Yes, well --

MR. WILLIAMS: And I think this whole issue is clearly irrelevant to what we're here today for and I think it's very unfair to try to drag the Commis-

sion into a contract dispute, which is a completely different issue.

If there is wording in the contract it's unfair to ask the Examiner to allow you to go into that here, Mr. Horn.

We'll have plenty --

MR. HORN: If this witness is going to testify that this -- that it was fruitless to come before the Commission and seek reinstatement because they could not sell it, that is him opinion --

MR. WILLIAMS: Right.

MR. HORN: -- and he has testified to that, and in fact is not, if he had an alternataive purchasers, which his contract allows him to have, then it would not have been fruitless to do it, so I'm cross --

MR. WILLIAMS: Well, I don't --

MR. HORN: -- examining this witness about his opinion about not coming before this Commission and asking --

MR. WILLIAMS: Then ask him facts. Ask him if we had another purchaser. I mean that he can answer, but he can't interpret the contract for you here, Mr. Horn.

MR. HORN: May I have an answer to my question?

MR. WILLIAMS: Boy, I strenuously object to this and I still don't understand it.

I'm not even familiar with this contract, Mr. Examiner, and I don't -- it even places me in an unfair position. I don't --

MR. STOGNER: But the contract is not part of the cross examination as far as I can see. Did you offer a contract as an exhibit today?

MR. WILLIAMS: No, sir, I didn't.

MR. STOGNER: Let's go back on the cross examination. If you can't reinstate (sic) the question, let's move on to something else.

Q When were these wells -- let's take first the Smith Federal, when was that well classified -- or when was the classification changed from a marginal to a non -- to a marginal status?

A It was changed to a marginal status as of August 1st, 1984.

Q And were any allowables cancelled at that point in time?

A The accrued underproduction was cancelled?

Q And what was that amount?

A It's in the exhibit for the proration

schedule as of that month?

Q And what was that figure?

A Approximately 654,763 MCF, according to the proration schedule.

Q And when was the Smith Federal Gas Com reclassified to a marginal status?

A As of August 1st, 1984.

Q What was -- were there any allowables cancelled at that point in time?

A There was an accrued underproduction that was cancelled.

Q And what was that amount?

A That was 206,782 MCF.

Q Since the cancellation of those allowables in August, 1984, have there been any further cancellation of allowables on these two wells?

A I'm not sure I understand your question.

Q Has the OCD cancelled any allowables for these two wells since August of 1984?

A The OCD has issued an allowable for both of these wells every month.

Q And there have been no further cancellation of allowables since August of '84, is that correct?

A That's correct.

MR. HORN: That's all the questions I have.

MR. STOGNER: Any redirect?

MR. WILLIAMS: No, sir.

CROSS EXAMINATION

BY MR. STOGNER:

Q I'm not sure I'm clear, Mr. Zinsmeister, why Amoco didn't come out earlier and seek that underproduction to be reinstated.

Would you please elaborate a little bit more?

A To the best of my knowledge, we had a gas purchaser that wasn't taking our gas, and we saw no merit in approaching the Commission asking them to reinstate these wells to a nonmarginal status, which we could have demonstrated the performance of the well, had our allowable reinstated, and yet not be able to produce it in nonmarginal quantities.

There also was a provision under Rule R-1670 that any accrued underproduction that is not produced within a year would be cancelled, anyway; therefore, we would have had to come to the Commission, routinely, and ask for reinstatement, probably gain it, this is an inference on my part, and then lose it because we did not produce it.

Q So what you would have gained in '84 if you would have routinely came in, you're saying you would have lost it in '85.

A At the end of the next proration period, the Commission, I'm not quite sure how you all do this, by computer or Mr. Garcia, would have by the rules cancelled that accrued underproduction.

Q So this well, both these wells have been -- been drained, as you say, during this whole time.

A To the best of my knowledge.

Q But you didn't see fit for it to come in earlier and get it reinstated because you felt it was fruitless.

A Thought it was fruitless.

Mr. Examiner, I would like to point out to you my involvement in this issue has really only begun since October of this past year, so when I say it's fruitless for our company to come in, I'm not here telling you that I have been watching the field the entire time and cognizant of this problem.

Q So when you say "you" I think Amoco, okay.

A Personally.

MR. STOGNER: I have no further questions of Mr. Zinsmeister at this time.

Are there any other questions of this witness?

MR. WILLIAMS: No, sir.

MR. HORN: No, sir.

MR. STOGNER: Let's have Mr. Zinsmeister step down.

Now I guess we are ready for closing statements. I'll allow Mr. Horn to go first and then I'll have you follow up.

MR. HORN: Mr. Hearing Examiner, Gas Company of New Mexico has no objection to the reinstatement of the allowables that were cancelled in August, 1984. The witness testified as to the actual cancelled allowables that occurred when both of these wells were reclassified from a nonmarginal to a marginal status and we have no objection to that.

If Amoco believes that it was fruitless or needless to come in before this Commission to change from a marginal status back to nonmarginal in 1986, we don't see how there can be reinstatement of what would have been the allowables had these not been marginal wells, and even though Amoco is now coming in seeking reinstatement of the cancelled allowables from August of 1984, we have no objection to that, but to come in now and ask for some kind of a reinstatement of allowables that were never assigned to

these wells because they failed to come in and seek a reclassification, I don't see how this Commission can do that.

MR. STOGNER: Thank you, Mr. Horn.

MR. WILLIAMS: Well, Mr. Examiner, we feel that the Commission is well able to do that. In fact, we feel that it if doesn't do it it's terribly unfair, and certainly not within the spirit of the rules.

It is clear, there's no doubt, it would have been pointless to come in at the end of each quarter, spend your time and our time to reinstate these allowables when we had no market for them. Our customer wasn't taking.

At this point we hope, dearly hope, that we have a market for this gas and we'd like to have it to sell it. If we don't, our neighbors are going to take it and that's drainage and it's an unfair burden on our correlative rights, and that's the very point for the Commission's rules, to avoid that type of situation.

So that's why we're here today and I can't imagine any -- any fairer request being made to the Commission than this, and I think our evidence supports that.

MR. STOGNER: Is that all?

MR. WILLIAMS: That's it, sir. Thank you.

MR. STOGNER: Before you go, I will request that you provide me with a rough draft order of this.

MR. WILLIAMS: Yes, sir, will do.

MR. STOGNER: Mr. Horn, if you see fit --

MR. HORN: Okay.

MR. STOGNER: -- I'll take one from you, too. Let's say in ten days?

MR. WILLIAMS: How about ten minutes? We can do it. We have one for you.

MR. STOGNER: Mr. Horn, what would be sufficient time?

MR. HORN: If I could see theirs I may not have any problem with it, if I could have a few minutes to go over it.

MR. STOGNER: Well, let's take a little recess.

(Thereupon a recess was taken.)

MR. STOGNER: We've had a rough order from Amoco with some appropriate changes, or changes which Gas Company of New Mexico has submitted, so I've essentially got an order from both parties, and if there's nothing further in Cases Numbers 8922 or 8923, both cases will be taken under advisement.

(Hearing concluded.)

C E R T I F I C A T E

I, SALLY W. BOYD, C.S.R., DO HEREBY CERTIFY that the foregoing Transcript of Hearing before the Oil Conservation Division (Commission) was reported by me; that the said transcript is a full, true, and correct record of the hearing, prepared by me to the best of my ability.

Sally W. Boyd CSR

I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of Case No. 8922 and 8923 heard by me on 25 June 1986.

Michael E. Stogner, Examiner
Oil Conservation Division

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION
STATE LAND OFFICE BLDG.
SANTA FE, NEW MEXICO

12 June 1986

EXAMINER HEARING

IN THE MATTER OF:

The disposition of certain cases called on Docket No. 18-86 for which no testimony was offered.

CASE 8849, 8921, 8922, 8923.

BEFORE: David R. Catanach, Examiner

TRANSCRIPT OF HEARING

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