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

3 October 1984

EXAMINER HEARING

IN THE MATTER OF:

Application of Doyle Hartman for reinstatement of cancelled under-production, Lea County, New Mexico.	CASE 8360

BEFORE: Gilbert P. Quintana, Examiner

TRANSCRIPT OF HEARING

A P P E A R A N C E S

For the Oil Conservation Division: Jeff Taylor
Attorney at Law
Legal Counsel to the Division
State Land Office Bldg.
Santa Fe, New Mexico 87501

For the Applicant:

MR. QUINTANA: We'll call next Case 8360.

MR. TAYLOR: The application of Doyle Hartman for the reinstatement of cancelled underproduction, Lea County, New Mexico.

The applicant has asked that this case be continued until October 17th.

MR. QUINTANA: Case 8360 will so be continued until October 17th, 1984.

(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 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. 8360, heard by me on Oct. 3 19 84.

Gilbert P. Quintana, Examiner
Oil Conservation Division

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

17 October 1984

EXAMINER HEARING

IN THE MATTER OF:

Application of Doyle Hartman for the reinstatement of cancelled underproduction Lea County, New Mexico. CASE 8361

BEFORE: Gilbert P. Quintana, Examiner

TRANSCRIPT OF HEARING

A P P E A R A N C E S

For the Oil Conservation Division: Jeff Taylor
Attorney at Law
Legal Counsel to the Division
State Land Office Bldg.
Santa Fe, New Mexico 87501

For the Applicant:

MR. QUINTANA: We'll call next Case 8361.

MR. TAYLOR: The application of Doyle Hartman for the reinstatement of cancelled underproduction, Lea County, New Mexico.

Applicant has also requested that this case be continued.

MR. QUINTANA: Case 8361 will be continued until October 31, 1984.

(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 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. 8361, heard by me on Oct. 17 19 84.

Gilbert P. Quintana Examiner
Oil Conservation Division

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

31 October 1984

EXAMINER HEARING

IN THE MATTER OF:

Application of Doyle Hartman for the reinstatement of cancelled underproduction, Lea County, New Mexico. CASE 8361

BEFORE: Michael E. Stogner, Examiner

TRANSCRIPT OF HEARING

A P P E A R A N C E S

For the Oil Conservation Division: Jeff Taylor
Attorney at Law
Legal Counsel to the Division
State Land Office Bldg.
Santa Fe, New Mexico 87501

For the Applicant:

MR. STOGNER: Call next Case Number 8361.

MR. TAYLOR: Application of Doyle Hartman for the reinstatement of cancelled underproduction, Lea County, New Mexico.

The applicant has requested that this case be continued.

MR. STOGNER: Case Number 8361 will also be continued to the Commission Hearing scheduled for December 12, 1984.

(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 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

Oct. 31 8361
84

Oil Conservation Division

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

12 December 1984

COMMISSION HEARING

IN THE MATTER OF:

Application of Doyle Hartman for the reinstatement of cancelled underproduction, Lea County, New Mexico.

Case 8359, 8360, 8361, 8425

BEFORE: Richard L. Stamets, Chairman
Commissioner Ed Kelley

TRANSCRIPT OF HEARING

A P P E A R A N C E S

For the Oil Conservation Division:

For the Applicant: William F. Carr
Attorney at Law
CAMPBELL AND BLACK P.A.
P. O. Box 2208
Santa Fe, New Mexico 87501

I N D E X

LARRY NERMYR

Direct Examination by Mr. Carr 6

Cross Examination by Mr. Stamets 18

DANIEL S. NUTTER

Direct Examination by Mr. Carr 23

Cross Examination by Mr. Stamets 71

Cross Examination by Mr. Kelley 72

Redirect Examination by Mr. Carr 75

WILLIAM P. AYCOCK

Direct Examination by Mr. Carr 76

STATEMENT BY MR. CARR 87

E X H I B I T S

CASE 8361

Hartman Exhibit One, Spread Sheet	26
Hartman Exhibit Two, Illustration	32
Hartman Exhibit Three, Computer Plot	35
Hartman Exhibit Four, Graphs	37

CASE 8425

Hartman Exhibit One, Spread Sheet	39
Hartman Exhibit Two, Illustration	44
Hartman Exhibit Three, Computer Plot	45
Hartman Exhibit Four, Graphs	47

CASE 8360

Hartman Exhibit One, Spread Sheet	48
Hartman Exhibit Two, Illustration	52
Hartman Exhibit Three, Computer Plot	53
Hartman Exhibit Four, Graphs	54

E X H I B I T S

CASE 8359

Hartman Exhibit One, Spread Sheet	14 (56)
Hartman Exhibit Two, Illustration	62
Hartman Exhibit Three, Computer Plot	63
Hartman Exhibit Four, Graphs	63

MR. STAMETS: We'll go back, then, and call Case 8359.

Application of Doyle Hartman for the reinstatement of cancelled underproduction, Lea County, New Mexico.

MR. CARR: May it please the Commission, my name is William F. Carr, with the law firm Campbell and Black, P. A., of Santa Fe, appearing on behalf of Mr. Hartman.

At this time we would request that this case be consolidated for purposes of hearing with Cases 8360, 8361, and 8425.

MR. STAMETS: We will call those additional cases. Each one has the same style os the first case called.

Is there any objection to consolidation of these cases?

They will be consolidated, then, for purposes of testimony.

You may proceed when ready.

MR. CARR: May it please the Commission, we have three witnesses who need to be sworn.

MR. STAMETS: I'd like to have each witness stand and be sworn at this time.

(Witnesses sworn.)

MR. CARR: We first call Mr. Nermyr.

LARRY NERMYR,

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

DIRECT EXAMINATION

BY MR. CARR:

Q Will you state your full name and place of residence?

A My name is Larry Nermyr, and Midland, Texas is my residence.

Q Mr. Nermyr, by whom are you employed and in what capacity?

A I'm employed by Doyle Hartman as an engineer.

Q Have you previously testified before this Commission or one of its examiners and had your credentials accepted and made a matter of record?

A Yes, I have.

Q And at that time you were qualified as an engineer?

A Yes.

Q Would you summarize generally your duties with Mr. Hartman?

A I look after the day to day operations of his oil operations and also look after the drilling and completing of his wells, and do some regulatory work and administrative work in the office.

Q And you're employed in-house by Mr. Hartman?

A Yes.

Q Are you familiar with each of the wells which are the subject of today's hearing?

A Yes, I am.

Q Are you familiar with the applications filed in each of these cases for Mr. Hartman?

A Yes, I am.

MR. CARR: Are the witness' qualifications acceptable?

MR. STAMETS: They are.

Q Mr. Nermyr, would you briefly state what Mr. Hartman seeks with each of these applications?

A Mr. Hartman requests reinstatement of cancelled allowable for certain wells in Lea County, New Mexico.

Q Are you aware as part of your job and part of your duties when wells operated by Mr. Hartman are, in fact, shut in?

A Yes, I am. I take a daily production re

port from our field foreman every morning and at that time they advise me of the status of all the wells in the field, and if something happens where a large amount of them are shut in or something during one day, he'll also notify me during the day, and we also have field people that inspect the wells on a daily basis to determine if they're producing properly or shut in, what their status is.

So we know on a daily basis what each well is doing.

Q How long have you been employed by Mr. Hartman?

A For five years.

Q During this period of time has there been any general trend in the frequency of the shutting in of wells operated by Mr. Hartman?

A Yes. Prior to May in 1982 the wells were very seldom shut in and after May, 1982, there's been quite a bit of shut-in time because of the market for gas.

Q Since '82 how would you describe the general situation concerning the days that Mr. Hartman's had wells actually producing?

A Well, since 1982 the shut-ins have been quite significant and at times they've been quite severe.

Q What control does Mr. Hartman have as operator of these wells over the actual shutting in of the wells?

A We feel we have very little control over

the wells that are shut in because El Paso determines which wells will be shut in and when they'll be shut in and when they'll be turned back on again, and because of this we feel we have very little control over it.

Q If you're displeased with an order to shut in a well what course of action is available to Mr. Hartman as operator of the well?

A We are generally contacted by the dispatcher when the wells are to be shut in and he really doesn't have any say on which wells are shut in or how long they're shut in. He just tells us that he operates off of a list that he receives from their production people, and so in order to really have any complaint we have to go to El Paso's supervisors, and we've done this. Generally they've told us that they feel that everything is being shut in and treated fairly.

Q As operator do you feel that you have any real control as to the overproduced or the underproduced status of any individual well?

A No, we don't, because we're told when we can turn the wells on and produce them and when we can't, and because of this sometimes if a well is getting way under produced and we can't turn it on, we have no way of making up the production that it should be making.

And, also, if a well is being produced and it's being overproduced we really didn't feel that we could shut it in because it might be shut in by El Paso on

several days and be shut in for a long period of time and then it will get underproduced, too. So we just -- we had to produce the wells that were allowed to be produced.

Q During your time with Mr. Hartman, has the shutting of gas wells been of major concern?

A Yes. We've always made an effort to keep all our wells producing all the time. We feel that the shutting in of wells for any length of time at all might result in formation damage and reduce the amount of recoverable reserves, and this is the reason that we have people that visit the wells on a daily basis, to be sure they're producing properly.

And also any wells that are making fluid or anything, we put pumping units on them to keep them pumping all the time to keep the fluid off the formation and keep the well producing good.

And if we have any problems, well, we start correcting immediately in order to minimize the time the well was down.

Q Would you identify for the Commission the wells which are involved in the hearing today?

A We've determined that four leases have suffered more production loss than should be normal and that's the Late Thomas Lease with Wells 1, 2, and 3; the Shell State Lease with Wells 2 and 5; the Custer State Lease, Well No. 1; and the Maralo State Lease, Well No. 1.

Q Would you look at the -- address the Mar-

alo Lease and just summarize the kinds of efforts that Mr. Hartman has made to keep the wells on that lease producing.

A Okay. In November of 1983 when we were reviewing our production and shut-in status, and everything, we determined that we thought the Maralo Lease had been shut-in more than normal, and we made several telephone calls about that time to El Paso Natural Gas to discuss our concern with this well being shut-in more than what we figured it should have been, and we really don't feel that we got the relief that we needed for the well.

Q Mr. Nermyr, has it been Mr. Hartman's policy to cooperate with the purchaser in the shutting in of gas wells?

A Yes, I feel that Mr. Hartman's policy has always been to cooperate with El Paso in the shutting in of wells.

All the wells that covered by Group 1 and 2, as outlined in Joe Ramey's letter dated February 18, 1983, these are shut in by field people without consulting us. They just shut them in and then reported afterwards.

And if we're asked to shut in wells in Groups 3, 4, 5, or 6, they usually call me and ask me about it prior to shutting them in.

Several times, if we've thought that our wells were being shut in when they shouldn't have been we've discussed it with El Paso people but we've never refused to shut a well in when we have orders to do so.

Q Is it fair to say that because of this cooperation you have found these wells in this confronted with the problem that you have here today?

A Yes. We feel that being asked to shut in these wells that we've mentioned here has resulted i the loss of the production and we feel that that was the direct cause of it.

Q Why were these applications not brought before the Commission until this time?

A Well, we spent quite a bit of time looking at it and it took awhile for the situation to develop and we gathered a lot of information and put it on our computer so we could analyze it properly, and this all took time and just took us this long to get it prepared and to decide what to do.

Q Are you generally familiar with the proration rules?

A Yes.

Q Is the production that we're talking about here today production that could have been reinstated under Rule 16-A had a request or data been provided within fifteen days?

A Yes. We probably could have wrote a letter within fifteen days if we'd have decided or we would have determined that it should have been done and according to the rule we believe that it probably would have been reinstated at that time.

Q During that fifteen day period did you have the data necessary to come forward to the Commission?

A We didn't have the data gathered and analyzed in such a process that we could really determine that this is what action we needed to take.

Q Mr. Nermyr, have you encountered previous problems with allowables for any of the wells which are the subject of this hearing, and I'm talking here about problems that required correcting the assignment of an allowable?

A Yes. We had a problem with the Late Thomas Lease, the Wells 1, 2, and 3.

Wells 2 and 3 were drilled on this 320-acre proration unit and at the time that they were put on the proration unit was given an acreage factor of 160 acres rather than the 360 acres that's continued for several months and we wrote a letter to the Oil and Gas Commission and got this straightened out and we got our allowble reinstated at that time.

MR. CARR: May it please the Commission, the way the exhibits have been marked is there are three or four exhibits and they've been marked as separate exhibits in each of the cases, and so for the next several questions I'm simply going to refer to Exhibit One, which is marked Exhibit One in Case 8360.

MR. STAMETS: We reed to straighten the exhibits out, Bill.

MR. CARR: Okay.

MR. STAMETS: I've got a whole stack of 8425.

MR. CARR: Okay, they haven't been collated, Dick.

MR. STAMETS: Yeah.

MR. CARR: Okay, we can sort those out right now.

Could we go off the record for a minute?

MR. STAMETS: Yeah, let's do that.

(Thereupon a brief recess was taken.)

MR. STAMETS: All right, we can go back on the record, Sally.

Q Mr. Nermyr, would you refer to what's been marked Exhibit Number One in Case 8359? And what I'd like you to do is go across the columns that are depicted across the top of this exhibit and simply state what they are and identify the source of that -- of the data.

A Okay. In the first group there, the production month is the month that this production refers to.

Column two is the graph month; it just numbers the lines going down.

Q And that's for the months as depicted on Exhibit Number Three in each of these packets.

A Yes.

Q Okay.

A Column number three is the monthly allowable that was assigned that month for a nonmarginal well in this proration unit with an acreage factor of one.

The next column is the monthly allowable that would have been assigned to a well with the same acreage factor as thee wells have.

Q So in this case the Maralo State No. 1 would have an acreage factor of .5.

A Yes.

Q Okay.

A The next figure is the --

MR. STAMETS: I'm sorry, I didn't understand that at all. We were talking about the Late Thomas Well.

MR. CARR: Well, I'm looking at Exhibit Number One in Case 8360.

MR. STAMETS: I thought we started with 8359.

MR. CARR: Did I refer to 8360?

THE REPORTER: No, 8359.

MR. CARR: All right.

A The monthly allowable has an acreage factor of 2 because the Late Thomas Lease has a 320-acre proration unit.

MR. STAMETS: Are you just

showing the acreage factor of 1 as a reference point or is there some reason for showing that?

A Yes, just as a reference point for this pool --

MR. STAMETS: Okay.

A -- during this month.

Q Then the acreage factor of 2 as shown here is for the Late Thomas wells and they have an acreage factor of 2 because they have twice the --

A Yes.

Q -- standard or the 160-acre allowed acreage.

A That's right.

Q All right.

A The next column is the actual monthly production from this lease.

The next --

Q And what is the source of that figure?

A This figure comes from El Paso's, or the purchaser's statement that they send us every month of gas that they have purchased from the well.

Q All right.

A Or from the lease.

Q Then the next column?

A The next column is the weighted average of the days produced.

Q Okay.

A The next column is the monthly over/under production for this lease.

And the next column is the cumulative over/under production for this lease.

Q Okay.

A Now, these figures here are all figures that we have gathered for information, both from our field people as to the days produced and the rest of the figures are information that we have generated in-house.

The next column is the monthly allowable as given in New Mexico's oil and gas proration book that they issue every month, and the amount redistributed is also from that figure.

The next is the monthly production as reported in their proration book, the monthly over and under, the cumulative over and under; the status that the well's being carried at, whether it's a marginal or nonmarginal well.

And the last column is the difference between what we calculated in our in-house figures and what the Oil and Gas Commission shows in their proration book.

Q Now, Mr. Nermyr, did you assist in the compilation of this data?

A Yes, I did.

Q And this is a correct representation of the information that you have on -- in this case, the wells from the Late Thomas Lease?

A Yes, it is.

Q And you've done the same thing for each of the leases which are the subject of hearing today?

A Yes.

Q Do you have anything further to add to your testimony?

A No.

MR. CARR: That's all I have of Mr. Nermyr, Mr. Stamets.

CROSS EXAMINATION

BY MR. STAMETS:

Q Mr. Nermyr, looking at the Exhibit One in Case 8359, it's on the Late Thomas, at the monthly allowable, first we have the column that you have calculated and the second monthly allowable is the one that is from the Oil Conservation Division proration schedule, and there are different numbers there until we get down to August of 1982, and then they seem to be -- well, yeah --

A This is what --

Q -- I'm confused as to what we're looking at here. The -- in your situation you calculated what the allowable would be if it had been classified as nonmarginal through that entire period.

A Yes.

Q All right. Now let's go back to the beginning of this thing, back to 1981.

I presume at that time then these wells must have been determined to have been marginal and that was the marginal allowable that they received?

A The Late Thomas Well No. 1 was an old well and it was marginal and it had this 320-acre proration unit, and so it was being classified as a marginal well.

Q Okay. I see that working, then, when we get into the one, two, three, fourth line down in the OCC monthly allowable, because if you trace that across -- well, actually the third line down -- because if you trace that across and up, too, to the monthly production, you see that the montnly allowable is the monthly production from two months ago.

A Yes, that's correct.

Q All right. Now in 1981 you did not have nonmarginal production, is that correct?

A We didn't have nonmarginal production until Wells No. 3 and No. 2 were put on line and after they were put on line our wells exceeded the marginal, so they were in a position where they could be classified as nonmarginal.

Q When was that?

A The first well was put on in October 23rd, which was Well No. 3.

Q October 23 what year?

A 1981.

MR. CARR: Those are set out at

the top of the exhibit, Mr. Stamets, in the center, first --

Q Okay.

A And the Late Thomas No. 2 was put on line November 9th, 1981.

Q Just looking at the volumes of production which were reported, I don't see that the well approached a nonmarginal status, or the unit approached nonmarginal status, until April of 1982, looking at the monthly allowable which would be for that proration unit in your lefthand column. I see 25892. I see monthly production -- well, all right, again there's confusion.

I don't understand why our production in the righthand column is so much less than your production in the lefthand column.

Do you have an explanation for that?

A Yes. This is what I was talking about when I mentioned that we had corrected some of these production and allowables from the Late Thomas by writing a letter. This -- we had confusion, both in proration unit size and allowables, when we first got these Wells No. 2 and 3 on, and it took us a little bit there to get it straightened out where everybody was showing the proration unit of 320 acres.

Q Well, do you know if the production for all the Late Thomas wells was ever properly credited to that proration unit for the October '81 through March of '82 period?

A I think it was. As far as we could tell it was, yes.

Q So what we're looking at here as far as published CCC status, that is what the situation was at that time, but that situation has been corrected.

A Yes.

Q Okay. Now, when we come down to the cum under/over. I can check that real quickly. I've got a copy of the November, 1984, gas proration schedule for southeast New Mexico.

Looking at the Late Thomas, they show overage of 70.6-million, more or less. Your figures, which cut off in October have 59-million, so I would assume that those figures must be reasonably close.

A Yes. If you notice the figure for September is 70-million .6175.

Q Now, are you telling me that this lease, Late Thomas 1, 2, and 3, should have been reclassified as nonmarginal beginning in October of 1981 and should have continued as nonmarginal through that entire period through October, 1984?

A Yes, that's what we feel should have been.

Q And I would just observe, looking at the -- at the production which is reported from time to time on that lease, like, for example, in November and December of 1982, there was production which was in excess of any of the

calculated nonmarginal allowables for that -- the entire period we're talking about here.

A Yes.

Q And does that demonstrate that those wells were indeed capable of producing a nonmarginal allowable throughout that period?

A Yes, that's what we feel it indicates that they were and they were allowed to produce just about the full months for those two (not clearly understood).

Q As a matter of fact, there was a long period of time in December of '83 through June of 1984 when there was substantial production from those -- those wells, indicating, I would assume, that that was not just a pressure build-up causing that extra production.

A Yes. They were capable of producing that.

Q Now, we have the same exhibit in each of the cases, is that correct?

A Yes.

Q I'd like to take just a little time to review those others.

MR. CARR: That would be fine. Mr. Stamets, we will call Dan Nutter as a witness who will review each of these exhibits with you in detail.

MR. STAMETS: Okay.

MR. CARR: We also will then call Mr. Aycock, who will present testimony on the ability

of these wells to produce over the period of time as a non-marginal well, whether or not they were shut in or not.

MR. STAMETS: All right, then I won't take any time right now.

Any other questions of Mr. Nermyr?

He may be excused.

MR. CARR: At this time we call Mr. Nutter.

DANIEL S. NUTTER,

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

DIRECT EXAMINATION

BY MR. CARR:

Q Would you state your full name and place of residence?

A My name is Dan Nutter. I live in Santa Fe, New Mexico.

Q Mr. Nutter, by whom are you employed?

A I'm a Consulting Engineer.

Q And you're employed in this case by Mr. Hartman?

A I've been retained by Mr. Hartman in these cases.

Q Mr. Nutter, would you briefly summarize

your educational background and your work experience?

A Yes. I have a Bachelor of Science in petroleum engineering degree from the New Mexico School of Mines, now New Mexico Institute of Mining and Technology, at Socorro, New Mexico; graduated there in 1952.

Subsequent to that time I was employed by Phillips Petroleum Company until 1954, when I came to work for the New Mexico Oil Conservation Commission.

I worked for the Commission from September 1, 1954, through December 31st, 1982, at which time left the Commission and have subsequently been employed as a consulting petroleum engineer.

Q While with the Commission did you have an opportunity to become familiar with the New Mexico system of prorating natural gas?

A Yes, sir, I sure did.

Q And what were your duties in regard to the prorationing system?

A General supervision of gas prorationing.

Q Are you familiar with each of the wells which are the subject of today's hearing?

A Yes, I am.

Q And are you familiar with the applications filed in these cases on behalf of Mr. Hartman?

A Yes, I am.

MR. CARR: Are the witness' qualifications acceptable?

MR. STAMETS: They are.

Q Mr. Nutter, would you briefly describe what Doyle Hartman is seeking here today?

A Yes. These cases involve four proration units. They're all presently classified as nonmarginal.

Mr. Hartman is seeking the continued classification of the four proration units in the Jalmat Pool as nonmarginal.

He's also seeking the assignment of certain previously unproduced allowable to these wells.

Q Basically why is Mr. Hartman seeking the reinstatement of this previous underage?

A We believe that all four of the units involved in the hearing today are not only properly classified by the marginal -- by the Division now as nonmarginal, but that they have been nonmarginal character all along, and that the only reason for having been previously classified as marginal was because of excessive shut-in time by the pipeline, due to lack of market.

Q Will your exhibits show that the -- what the takes from the wells have been and how they got classified as marginal?

A Yes, they will. I believe that we can show that each of these proration units is capable of producing in excess of nonmarginal allowables today, which is relatively easy because of the depressed market, but also, they will demonstrate this same ability to produce in excess

of nonmarginal allowables existed before the market deteriorated and before the allowables got so low.

Q Mr. Nutter, with this in mind, I'd like you now to refer to the exhibits, and I think we'll take them out of the order the cases were advertised, and first I'm ask you to refer to Exhibit One in Case 8361, which covers the Custer State Lease.

A Okay, we've got Case Number 8361 and the Custer State.

The first exhibit is the spreadsheet, which Mr. Nermyr was discussing with Mr. Stamets a few moments ago.

We'll see that this Custer State Well No. 1 had it's first delivery on December 27th, 1979. The well came on with an acreage factor of .5, having 80 acres dedicated to it, and during its first months of production produced 8770 against a nonmarginal allowable of 6626.

The subsequent production from the well was mostly in excess of the allowable. You'll see that it carries in the -- in the column on the left side of the spreadsheet, the assumed constant nonmarginal status, and also the monthly over/under production in the published OCC status.

You'll see that most of the months productions are followed by a minus sign, meaning that the well overproduced an allowable. It built up considerable amount of overproduction.

There appears to be a difference in the cumulative overproduction at the top of the sheet. We show that the well had 2144 overproduction at the end of February, while the Commission's records showed that it was 2588 underproduced.

Now, these spreadsheets right here, the study started, as far as Hartman's computer is concerned, on this particular lease with February of 1980. So this is cumulative under or over production from February, 1980. It's not the true over/under production as reflected by the Commission's records.

The Commission shows that in December of 1979 and in January of 1980 the well had accumulated 2588 Mcf of underproduction, whereas since our study starts with February of 1980, the well is immediately overproduced.

So you'll have approximately 45 to 4700 feet of difference, cubic feet of difference. We're showing more overproduction than the Commission would show on this particular well, because its records go back a little further than ours do, and its records go back into an underproduced time in the life of the well.

So you've got that 4500 or 4700 cubic feet -- Mcf difference all the way through.

But you'll notice that the well was overproducing its allowable through the entire first proration period beginning in April of 1980 through March of 1981.

And for the second proration period, from

April of '81 to March of '82, the well was still mostly -- the well was underproduced. This was an effort by El Paso and Mr. Hartman to work off the overproduced status of the well. This was voluntary and this was prior to the time that the market collapsed.

So you'll see that the overproduction under the Commission's records went from -- at March of 1981 it had a -9704 overproduction, and by January of 1982 they had worked the well down to where it had an underproduced status of 55.

So they were getting the well back into balance. Mr. Hartman and Mr. El -- Mr. Hartman and the El Paso pipeline were both working to get these wells -- you'll see this in all of these wells as we go through the exhibits. They were all in an overproduced status in that period of time and there was an effort to bring them back into balance.

By the time they brought them back into balance and got them into an underproduced state was when the market collapsed, and they -- they had underproduction at that time.

So the collapsed market just increased the problem as far as the underproduction was concerned.

Now you'll see that the well had good producing days until the market did collapse and the -- about mid-1982 it had produced almost constantly for the full 30 or 31 days each month, until June of 1982. The pro-

duction only dropped down to 20 days on line.

In July, 9 days; August, 24 days; and September, 19 days.

Now that was the disaster that hit the well because the average allowable for a nonmarginal well in July, August, and September, those months had an allowable of 5613, 5613, and 5432, for an average allowable of 5553.

Now if a well does not -- if the well's best month's production during a three month period is not equal to the average allowable for that three month period it will be classified as nonmarginal.

Now the best month's production was 5499 with 24 days on line, but the average allowable for the same period was 5553, so the well was reclassified as a marginal well.

That didn't occur until the November schedule but the November schedule is based back to the September production, so it is reclassified effective in September with a zero status.

Now, it's a marginal well with a zero status and 12,529 Mcf of gas was lost on the allowable.

Mr. Hartman's study on the left side of the spreadsheet shows that the well lost 7793.

Now if we take Mr. Hartman's columns on the left side and carry those forward, rather than the zero status that the well enjoyed under the OCC's reclassification as marginal, you'll see that the well accumulated un-

derage up to the point where it had 24,499 Mcf of underage at the end of March of 1983.

This followed a period in which the producing days dropped in January of '83 down to 7.9.

February of '83 the well produced only 6 days.

It had no production in March.

Ten days in April.

Thirteen in May.

Finally in June of '83 it got a pretty good month of 30 days.

The following month it was back down to only 14 days.

So during this period of time the underproduction increased.

Then we had a period when the well produced pretty good but the allowables were so low that it got some overproduction and that erased some of that underproduction; however, the well finally got reclassified back to a nonmarginal status.

The well enjoyed the best month that it ever had in its entire life in December of 1983, when it produced 10,362 barrels. Now a monthly allowable at that time was 5801 so we can see that the well could produce twice a normal allowable. This is far in excess of any allowables that the well had had even when allowables were good.

So we see that the well had not shown any decline. The well is still capable of producing far in excess of a previous high allowable and certainly in excess of the current low allowables.

Well, as a result of this good production during the first part of 1984, the well was reclassified as nonmarginal but it came in with 2824 Mcf of overproduction.

We show under our calculation which, as I stated at the beginning, only commenced with February of 1980 and missed the first two months of production history, we show that the well had 3525 Mcf of overproduction.

Whereas, since that time the well's been shut in for six months; hasn't produced a thing, and we show that it has now 5020 Mcf of underproduction but the Commission's records reflect that it's still 19,478 overproduced.

Now, since July of 1982 the well has produced 427 days. Now that against 854 days, calendar days, during that period of time. So that's exactly 50 percent of the time is all that the well has been on the line since July of 1982 when the market collapsed.

But the production during that period of time was 123,192 Mcf against a nonmarginal allowable for that same period of time of 124,000. So while it produced only 50 percent of the time, it has made 98.9 percent of the allowable, even with the shutins that it's experienced.

So we believe that the well is definitely a nonmarginal well. We would recommend to the Commission

that the status be changed back to the time when it was reclassified as a marginal well in September of 1982, and allow that underproduction to carry forward.

Q Now, Mr. Nutter, is the information contained on this exhibit displayed in graphic form on subsequent exhibits?

A Yes, it is.

Q Would you now go to Exhibit Number Two in Case 8361 and explain to the Commission what this exhibit shows?

A Okay, Exhibit Two is an illustration of what I was talking about on days on and days off the line.

Now you'll see that in 1980 the well was building up overproduction during the -- up until the first red line on the lefthand side.

Then commences the period of time in which El Paso and Mr. Hartman were trying to work off the overage, so the overproduction is decreasing.

Well, then the -- the heavy black dashed line that goes through May of 1982 there, it's just to the left of the arrow that is over the fraction 155/304, that heavy dashed line that's emphasized with red shows the beginning of the market interruptions in May of 1982, and from that point to the next red line the well was on the line 155 days out of 304 days, or 50.9 percent of the time it was on the line.

During that period there was a change in

its status of over 22-million cubic feet, increasing in the underproduction.

The following period of time it was on the line 290 days out of 426 days, or 68.1 percent of the time; however, at that time it built up overproduction again.

We'll show in another exhibit in a minute that it seems that after the wells got classified as marginal wells, that was when some of their best producing months occurred, but there wasn't any underproduction to compensate for any over production, so they built up this horrible overproduced status durign that period of time.

Now, the last 153 days, as the last segment of this exhibit, and it shows it was on zero days out of 153. It's zero percent on. This has been the order of the Commission, actually, because it was six times over produced based on the current low allowables, six times over those.

Q Now, Mr. Nutter, the zero line that runs across the page, now what does that line show?

A That's zero status. That's neither overproduced nor underproduced.

Q Would that correspond to the allowable?

A No, that's the -- well, the allowable has entered into it, but it's a status that reflects allowable and production.

Q And so when the well was classified mar-

ginal the actual overproduction as plotted here would correspond with that line.

A Okay, that's -- that's where the -- the calculated over/under is the dotted line with the little black rectangles on it, and you'll see that in September of 1982, where the dotted line with the little black rectangles hits the zero line and stays on that zero line right across the chart there.

We'll have another exhibit that shows this in a minute, also, a little clearer than this one, because this has so much information on it it's hard to see exactly what the status of the well is throughout.

But that's what happened. The well got into a zero status. It was accumulating these "X's" that are underneath the dotted line but they didn't do any good when the line went up over -- when the production line went up over the zero line. That -- the "X's" underneath the zero line were of no avail.

Q Would you now --

A Now there's attachments to this that show the days produced and the cumulative change in each one of these periods that's between the red lines on the front page of the exhibit.

For instance, the first attachment shows the period from 6-82 through 3-83. This is what we have depicted as being the 155/304, and the computer added it up. It came out to 156 days with the computer using fractions,

but during that period of time the well accumulated 22,134 Mcf of underproduction during that period of time.

The next attachment shows that the well accumulated 36,801 Mcf of overproduction all the time that it was being classified as marginal. That's in the period when it was on 290 out of 426 days, or 68.1 percent, but it accumulated all that overproduction during that period of time.

Now the next page shows what's happened in the most recent time. It has accumulated 17,322 Mcf of underproduction to be charged against the overproduction, but it's still in bad shape because the first page, I mean the first exhibit showed that as of the end of October, 1984, it's still 19,478 Mcf overproduced, despite the fact it's been shut in for six months, six and a half months, really.

Q Mr. Nutter, will you now go to Exhibit Number Three in Case 8361 and review that for the Commission?

A Okay. Exhibit Number Three is a computer plot of days produced, monthly allowable, and monthly production for the Custer State No. 1.

Now if we go over to the left side we'll see that for the first thirteen months the green line of production exceeds the red line of allowable.

Days produced are up at the top and they were pretty high. They were averaging 28 to 30 days a month

during that period of time.

The next period of time the well was producing less than the allowable. This is the period which we referred to as working off overproduction.

Then the dashed line, the vertical line that is at month number 27, I believe it is, yeah, that would be line number 28, that is May of 1982, and that's when the market went to pot and the line has just be zigzagging back and forth ever since.

The well was reclassified at month number 32. It was reclassified from nonmarginal to marginal and during that period of time production has exceeded the allowable. Now we're always referring to nonmarginal allowable, not the well's allowable, because the well's allowable, of course, as a marginal well would have been two months previous production.

But the well exceeded nonmarginal allowables some months. It was less than nonmarginal allowables other months. But that was the period of time when mostly that big amount of overproduction was built up. The allowables are very low, too. You'll note that the red line is right down near the base line of the graph, so it wasn't hard to exceed the allowables.

Okay. Now, if we go to month number 47, that's the highest month, that's the green line, that's the highest month. That's the best production the well ever had. It was 10,062 Mcf in December of 1983.

The best month's allowable was January of 1984, the following month, month number 48. That allowable was 7542.

So you'll see that even late in the life of the well the best production exceeds the best allowable it ever had. So we know that the well is a nonmarginal well basically.

Now, days produced, over here to the far right of the exhibit, are down on the zero line. As I mentioned before, it has had no production for six months. So days produced and production are right on the base line of the exhibit.

Q Will you now review Exhibit Number Four in Case 8361.

A Okay. Exhibit Number Four is a three-page exhibit.

The first page shows the status of the well under an assumed nonmarginal allowable from February of 1982 through today.

We have a zero line running across. You'll see that the overproduction, which is at the bottom part of the exhibit, being the minus figures, it overproduced through March of 1982.

At that time the well gets into an underproduced status, assuming nonmarginal allowables, and it stays underproduced until January of 1984.

Then it reverses back into the overpro-

duced status.

So we've got this overproduced status because of no -- because these allowables were low. We're assuming a nonmarginal allowable but the -- the well overproduced a nonmarginal allowable.

Now the next exhibit shows what's actually happened according to the Commission's records.

This shows that the well started out with a slightly overproduced -- underproduced condition, got 10,000 overproduced in February of '81, and then started working off the overproduction and finally got into an underproduced status of about 12,000 in mid-1982, at which time the well was reclassified as nonmarginal. It had no status then from September of 1982 until March of 1982, when it was reclassified and dropped way down here into the overproduced column.

That underproduction that we mentioned on the first exhibit was needed here.

Now we consolidated those two graphs in the third page of this exhibit, and you'll see how -- now, the difference between those lines is that 4500 Mcf that I referred to earlier, which the -- is the result of one study being two months late, than starting in the other study, and there is a basic difference of 45 or 46 or 4700 Mcf difference.

But at any rate, it shows that during the period that the well accrued the underproduction from Sep-

tember of 1982 until March of 1983, that it had zero status. So now the overproduction doesn't have anything to be balanced against and the well is in bad shape as far as overproduction is concerned.

Q Mr. Nutter, would you now move to the next set of exhibits, being those concerning the Shell State Well.

A Okay, Shell State is Case Number 8425 and we have Exhibit One here again to be considered first.

Now this is a little bit different situation. The previous well was classified as a nonmarginal well from the date of first production. This was an old lease here that had an old well on it and it was classified as a marginal well, as a marginal proration unit, and when the well came on it was capable of producing a nonmarginal allowable but because the unit was already classified as a marginal unit, the well, the new well didn't get classified as a nonmarginal. The marginal status stayed with the well for a long period of time.

Now you'll notice that the -- we're going to be talking here about the assumed nonmarginal allowable, not the monthly allowable that the Commission shows, because that's based on marginal production, that Commission allowable.

But if we compare production with assumed nonmamrginal allowables over on the left side, we'll see that in the first -- from the date of first production down

through May of 1984, we'll see that we had May of 1982 was overproduced. September and October of '82. April, May, and June of 1983. July, August, and September of '83. April, May, and June of 1984. The well overproduced an allowable at all points along there.

So we have -- we have months and months and months in which the well has overproduced an allowable, demonstrating that it is a nonmarginal well. It produced in excess of the average nonmarginal allowable from July 1 of 1981 -- July of 1981 through June of 1982 when the allowables were normal.

If we take that period of time and average the allowables we find that the average allowable for that period from July of '81 through June of '82 was 12,386.

The production from the -- the wells was as high as 14 -- from the two wells on the unit, the production was as high as 14,709 in February of 1984.

So we see that the well is still at a late date in 1984 capable of far in excess of the average allowable when allowables were good.

Now, in order to arrive at that allowable from July of 1981 through June of 1982 I had to go back to another one of the exhibits because, of course, this one doesn't start in this period of time. It starts with February of '82 and only goes through June of '82. But I went back to one of the other exhibits to calculate what that average allowable would have been for the twelve month per-

iod from July of '81 through June of '82.

But the well has -- was -- was reclassified as a nonmarginal well in March of 1984. At that period it had accrued 28,5 --it had a status there of 28,800 -- 25,855 overproduction. We show that the well had a real, true underproduced status from February of '82 through March of '84 of 14,425 Mcf underproduced.

MR. STAMETS: May I interrupt, Mr. Nutter?

The well was classified as marginal.

A The well was classified as marginal, never carried a status.

MR. STAMETS: At the beginning of 1982 and just looking at the monthly production versus the nonmarginal allowable, I see one month that it produced more. Looks like only one month in that period 1982 that it produced more than a nonmarginal allowable.

A No, no, Mr. Stamets, it didn't. It did it several times. If you look at February of 1982, it overproduced a nonmarginal allowable by 32 Mcf. Look at the column described monthly over/underproduction. You'll see a number of months there with the minuses at the --

MR. STAMETS: Well, I'm not -- I'm not -- somehow I'm not seeing that.

A Okay. February -- May of 1982, the allowable is 11,219.

MR. STAMETS: Yeah.

A Production is 11,251.

MR. STAMETS: Right.

A So it overproduced.

MR. STAMETS: Right.

A The next one, you come down to September of '82. Allowable is 10,865, production 11,643, and overproduction of 778.

October, it produced 13,000 against 11,000 for 1940 overproduction.

MR. STAMETS: Whoops, wait a minute. Okay.

A And then coming on down into the next proration period it overproduced in April, May, June, July, August, and September.

So the well -- we carry -- we show that the well carried underproduction and finally got back into an overproduced status for one month only in September of 1983. It got 72 Mcf over. But, of course, the Commission was carrying no status on it.

Well, now the Commission's classification in May of 1984 retroactive to March of 1984, what the computer does, it adds up the allowable for the entire previous proration period. So it would be adding up allowable from April of 1983 through March of 1984. It would also be adding up production for that same period of time of April of '83 to March of '84, and it would charge the well with that

amount of overproduction, and obviously, the well overproduced during the first six months of that proration period quite substantially. It lost credit for any underproduction it had previously, and there were a number of months in which it was underproduced, even in that proration period it underproduced a number of months.

It gets no credit for any underproduction. It only gets credit for overproduction when you make a calculation of overproduced status on a reclassification.

So it ended up with 25,855 Mcf of overproduction and even since the reclassification in March of 1984 the well has undergone some period of time in which it hasn't had much production. April, May, and June were not too bad, ranging from 27 to 29 days on line.

July only had 11 days on line.

August, only 3 days.

September, only 2 days.

And October, 16 days.

But still it's only worked off 4000. No, it's only worked off a little over 1000 Mcf of overproduction, even with those poor months of production. So it's still in bad shape and if allowables should get too low it's in danger of being completely shut in.

MR. STAMETS: Well, is your testimony, ration unit should have been reclassified as nonmarginal when the Shell State No. 5 Well was completed in --

A Yes, sir, because it was a marginal well. The No. 2 Well is still a -- is a marginal well and it doesn't make very much.

So I believe that when the No. 5 was brought on line, it was capable of producing nonmarginal allowables. The proration unit should have been classified as nonmarginal, and I don't believe anything has really happened to the well except experience bad pipeline days since then that would have changed its status from nonmarginal to marginal.

So I believe the well should have a complete history from the time the No. 5 was completed January 12th, 1982, through today as a nonmarginal well, with whatever status those figures would show, then.

Q Do you nave anything further to present on Exhibit Number One in Case 8425?

A No, I don't believe so.

Q Would you now go to Exhibit Number Two in that case?

A Okay. Exhibit Number Two is the exhibit that shows the percentage of time on and off. We see that over on the left side it had 100 percent producing time from February through May of 1982. That -- it enjoyed good days there, as were reflected by the previous exhibit.

Then from the collapse of the market in May of 1982 through March of 1983 it was on 207 out of 304 days, or 68 percent on.

Now it was accumulating underproduction, really, at that period of time, because the little "X" line is below the zero line. So it was underproducing. But the black line with the little black rectangles is on the zero line because it's marginal, not accruing any underproduction.

Now when it got reclass -- then the next period of time it was on 199 out of 244 days, 81 percent of the time and the underproduction was decreasing. It got even in September of 1983. That was the point where we showed that it had overproduction of 72 under our calculations, 72 Mcf, practically a zero status.

Then we accumulated some more underproduction during the period of time, but the well was reclassified then in March of 1984 and immediately the overproduction, it zooms up to the top of the chart with overproduction, because all the underproduction that was on the left-hand side of the chart below the zero line isn't credited to the well, so suddenly the proration unit is overproduced and has to be shut in.

Now the attachments show what's happened during the subsequent periods of time. Shows that during the first two periods it accumulated 35,000 Mcf and then 6000 Mcf, both of underproduction.

During the last period it shows that it's got a net change of 19,000 in the overproduced column.

Q Will you now review Exhibit Number Three

in Case 8425?

A Okay. Exhibit Number Three is the colored computer plot again of allowable, days produced, and production.

We divide this up into segments. We'll see that for the first 14 months, from month one through 14, the well was produced under the allowable more often than over the allowable. Producing days fluctuated. They weren't as even and steady as they were on some of the other exhibits, but for the most part the green line is under the red line for that first 14 month period.

Then the next six months the green line is consistently over the red line. This is the period of overproduction.

The market collapse was in May of 1982, which would be line number four. It's the dashed line over on the left.

So this never had any steady period of production before the market collapsed, that we've referred to several times. It's just a zigzag pattern up and down clear across; however, I would point out that the best month production that it ever had was month number 25, and that green dot there is 14,709 Mcf, and that represents the production during February of 1984.

Now, the best allowable the proration ever had was in month number 24, when the allowable in January of 1984 was 15,083.

So we see that its best month production is almost equal to the best allowable that has ever been assigned. The average production is better than the average allowable.

So again I believe we've got a nomarginal well here and that it should have been classified nonmarginal from the beginning until the present date.

Q Will you now review Exhibit Number Four in this case?

A Okay. Exhibit Number Four is the same thing we -- the first graph shows the cumulative over and under. Assuming a nonmarginal allowable we see that the well is underproduced almost entirely throughout the life of the -- the lease, except that after the reclassification -- except that it does drop down into the overproduced area of the exhibit over on the righthand side during the mid-1984. Then it's back up into the underproduced side when we compare production with an assumed nonmarginal allowable.

The next chart is very simple. It shows it had no status until the reclassification in March of 1984 and everything is on the negative side there. It's all overproduced.

Now a comparison of the two, you see that it's got this monstrous amount of overproduction on the righthand side, depicted by the chart line with the pluses on it. Now that's all overproduction, with no credit for all the previous underproduction when the dotted line was

above the zero line.

So all of the underproduction that the well has accumulated over its life is of no benefit to it now that it's classified nonmarginal and overproduced.

Q So on that exhibit when we see the rise in the dotted line during 1983 there was no credit given for that underproduction that would offset the overproduced status reflected in 1984.

A That's correct. This underproduction is never of any benefit to the well --

Q And that --

A -- because it carried zero status being classified as marginal.

Q And that's the last page in Exhibit Number Four in Case 8425.

A That's correct.

Q Okay.

A That's the composite of the two type systems, the assumed allowable and the actual allowable.

Q Would you now go to Case 8360, that's the case concerning the Maralo State Well, and refer to Exhibit Number One in this case and review the information on that exhibit with the Commission?

A Okay. Maralo State is Case Number 8360. Again we have a well that first, originally came on as marginal but it was corrected right away and reclassified as a nonmarginal well because it was recognized early in the life

of the well that it was not a marginal well but it was a nonmarginal well.

Now, here again we have the case where the well was producing from early 1980 all the way through the proration period, the second proration period, which commenced in April of '80. Through the first ten months of that period it was producing at almost maximum number of days. It overproduced almost every month during that twelve month period. I think there were three months in which there was underproduction.

The well accumulated an overproduced status, of course, according to the records that are shown here, as well as the records that are shown on the Commission's records.

The Commission shows that it reached its maximum overproduced status that it ever had in January of 1981, at which point it was 23,498 Mcf overproduced.

Mr. Hartman and El Paso then started to work the well back into a balanced condition and the overproduced status was gradually worked down where it finally crossed the line from overproduction into underproduction was in November of 1981. So this was before the collapse of the market.

They decreased the production and the status as far as the Commission was concerned changed from a 23,498 overproduced down to 900 -- down to 294 Mcf of overproduction in January of 1982.

So the well got back into balance. Then it started accruing underproduction.

Underproduction increased on the well until it was reclassified as nonmarginal -- as marginal in September of 1982.

Here again we have those same months and those same allowables we referred to in an earlier one, where the allowable for the three month period of July, August, and September, the average allowable for those three months was 5553 Mcf.

The best month's production for the well during that period of time was 4806. It didn't make the average allowable during its best month, which is only 24 days, so it was reclassified as marginal.

It has 6234 Mcf of over -- under -- of underproduction on the Commission's books and on this spreadsheet, which commences in February, it shows that it had 9394 Mcf of underproduction. We're not taking into consideration on our spreadsheet production during November, December, and January.

Probably these charts should have been made to the date of first production in all cases but they weren't. The study started with February, except in the case of the Late Thomas. It does go back to the beginning.

But at any rate, the well was reclassified as marginal. It lost its underproduction. Then went into the bad period of time in which there was little or no

producing days on some months and other months in which it overproduced.

It overproduced badly in August, September, October of 1983; also November of '83, December of '83, and January of '84. So it was accumulating a bad status and when it got reclassified, then, as a nonmarginal well in March of 1984, it had 16,974 Mcf of overproduction.

Now we show that if we had continued to consider the well as a marginal well, at that time it would have had 16,658 Mcf of underproduction. It would have just been almost opposite to what the Commission's records show, because the Commission records, of course, didn't give any credit for the underproduced months but our records are a continuous flow of underproduction and overproduction balancing each other.

As of October of 1984 the Commission's records show that the well is 17,265 Mcf overproduced.

Our balance sheet show that it's 16,368 Mcf underproduced.

In the 12-28 months from July of 1982 to the present the well has produced a total of only 365 days out of a total of 854 days. This represents 42.7 percent of the time. Even though -- even so, it has managed to produce 113,000 Mcf against a hypothetical nonmarginal allowble of 124,000 Mcf, or 91 percent of the allowble.

So with 42 percent of the time on line it's been able to produce 91 percent of the allowable. So

it's obviously a nonmarginal well, also.

The best months that the well ever had were in April of 1984, which was 14,491. Now that's not bad for a well whose production history goes all the way back to 1979, that its best month's production is one of its most recent months.

So it's obviously a good well and it should be classified as nonmargina. I believe we should go back to the beginning of this well and reclassify it nonmarginal; if not, at least go back to the period of time when it was reclassified as marginal in September of 1982.

Q Mr. Nutter, will you now go to Exhibit Number Two in Case 8360 and review that?

A Again we have the depiction of the time frames in the well's producing history.

We have the period of time from February of 1981 through March of 1982, where it was working off overage. It got overproduced and it was working it off.

Then the market collapse comes along in May of 1982 and from that point through September of 1983 the well is on only 192 days out of 488 days, or 39.3 percent; however, in September of '82 it was reclassified as nonmarginal -- as marginal, so the dashed line with the black rectangles is a horzontal line on the zero line. It's horizontally zero; however, we show that the well was accruing underproduction because the line with the little "X's" on it is dropping down.

The period of recovery, we might say, when allowables -- or production started increasing, from September of '83 through May of 1984 the well was on the line 83.4 percent of the time, being 227 out of 272 days, and also during that time it got overproduced. It didn't have any underproduction to counteract it, so it got into a badly overproduced status, the one we mentioned earlier which was 17,000 overproduced at the time of reclassification.

The backup sheets for these categories and these time frames are attached to Exhibit Number Two.

Q Will you now review Exhibit Number Three in Case 8360?

A 8360, Exhibit Number Two, the computer plot.

Q Number Three.

A Number Three, the computer plot. We show that -- this is over on the left side -- from month 1 through month 13 is the period of overproduction where the green line is higher than the red line. Producing days are up at a maximum most of the time.

The period from month 13 through month 29 are the underproduced times, when the green line is generally below the red line.

Then we go into the market interruptions, we have the zigzags again, but for 13 straight months, from month number 30 through month number 42 we had underproduc-

tion, where the green line is less than the red line.

Then we go into a period where the green line is greater than the red line.

The best month's production is month number 51, April of 1984. The production was 14,491. It's far in excess of the average allowble for the life of the well, which has been 5390. It's also better than the best allowable, which was month number 48, and was 7542.

So it produced almost twice what a normal allowable would be and its best month of production was almost twice what the best month's allowable has been during the life of this well.

Q Will you now review Exhibit Number Four in Case 8?60?

A Exhibit Number Four is the computer printout of the assumed normal allowable, cumulative Mcf of over or under under an assumed nonmarginal allowable without reclassification, or anything.

It shows that the well got into the overproduced condition from the beginning of its life; that the -- starting in February or January of 1981 they started working the overproduction off and finally got the well back into balance at about early 1982.

Then the overproduced period started. The overproductionw as worked off back to a zero status at about May of 1984.

Then underproduction started accruing

again.

If we look at the next chart, it shows that the overproduction was accumulating to the maximum in January of 1981. Then the overproduction was cut back. It reached a zero status in February of '82; got into a slightly underproduced status for a few months; then got reclassified as a non -- as a marginal well.

Stayed marginal until it was reclassified as nonmarginal with a substantial amount of overproduction against it.

Exhibit Number Three is the composite of the life of the well and it shows that the production and the assumed allowable lines coincide with each other up to the point where it was reclassified.

Then the underproduction increases if you go under the assumed allowable, but it stays at a zero status if you stay on the -- with the line with the little plus marks on it.

So you're not getting any credit for the underproduction. It carries a zero status. Then when it's reclassified nonmarginal it's hit with a monstrous amount of overproduction.

Q Now again on this exhibit, this last page of Exhibit Number Four, Mr. Nutter, the overproduction, which is shown in 1984 by the line that has the "X's" on it, in your opinon would that have occurred if, in fact, the well had always been classified as a nonmarginal well?

A No, if it had been classified as a non-marginal well, the line would have followed the other line.

Q And the well would have received credit for the periods --

A Well --

Q -- in which it was underproduced.

A Yeah, it would -- it would be -- it would have reached the zero status. It would have reached a zero status at about May of 1984 and it would have been underproduced now instead of overproduced.

Q Right. Would you now go to Exhibit Number One in Case 8359, relating to the Late Thomas Lease?

A Now the Late Thomas is a complicated one and that's where Mr. Nermyr and Mr. Stamets started discussing these allowables and these production figures, and I have tried every conceivable set of numbers to put together to try to resolve this one myself, and I'll say at the outset that I think that somebody needs to sit down with Harold and with the C-111's and the C-115's and go all the way back to the first production from these new wells back in October of 1981 and try to really arrive -- see if this current status is correct, because you'll notice over here, Dick, that they carried the production as marginal production for a good long while, although the well was probably a nonmarginal well.

But the amount of production that's being reported, and you'll see on the left side for November of

1981 Hartman showed that he produced 23,041 Mcf.

El Paso's report apparently showed 13,839, and that's what's in the Commission records, unless it was corrected.

Now, the Commission didn't pick up a double allowable for the well for the 320-acre unit until August of 1982, almost a year after the first -- after the new well was brought in, because you'll see that the allowable under the Commission's record, in July of 1982 is 11,227. Now that's the allowble for 160-acre unit.

The following month, in August of '82, they doubled that allowable and gave it 22,4554. So it finally got a 320-acre allowable, although the 320-acre unit was approved by the Commission by Order Number R-6781, it was a force pooling case, and that order was dated in September of 1981.

MR. STAMETS: Mr. Nutter, when did you retire?

A I don't know, maybe I was the one that heard this case, but there was something -- there was something that was drastically wrong somewhere in the records.

Now the plats were filed in October of 1981. So I think the records were all straight but the production reports don't jibe and you'll notice, if you come down to the current cumulative over/under column there on the righthand side, that in May of 1981 the Commission's computer shows that the lease was 19,071 overproduced.

Now they tried to make a correction on it and the next month it showed it was 79,000 underproduced.

The next month it's only 36,000 underproduced and there's no way it could have overproduced enough to change that figure.

So I'd like to just sit down and go through the whole record on this thing.

MR. STAMETS: I presume that if your client prevails in this case that you would do that.

A I would most certainly be happy to work with Harold and try to get a status arrived at and get this thing straightened out.

Now, I -- like I say, I've tried every conceivable set of numbers and I've gone to the individual well production reports that were filed by Hartman. I haven't gone to the El Paso 111's, but, see, the proration schedule was kind of fouled up, too, for awhile, because it showed the proration. It showed the proration unit as a 320 with one well on it. Then it showed another 160-acre unit with no well on it and some production was missing someplace along the line.

Now they may have picked it all up and got it into that 79,000 underproduction and then found out that that was too much underproduction and corrected it back to 36,500. I don't know. It's just one of those things. It's kind of intriguing.

But, at any rate, at any rate, the No. 2

Well, No. 3 Well, it was an old unit, been producing since 1953, the No. 3 Well was brought on in October of 1981. The No. 2 Well was brought on in November.

Now, on this particular chart we have gone back to date of first production, and although these production figures on your side of the ledger don't jibe with what we show on our side of the ledger, I believe that ours are correct as far as the unit is concerned.

And we show that the first month the well had underproduction of 18,287. Now the Commission didn't show any status at all, so --

MR. STAMETS: Might I -- might I interrupt at this point, Mr. Nutter.

I see we have a representative of El Paso Natural Gas Company here and just for a point of information I'd like to ask him if he -- if it proves necessary, would it be possible for El Paso to furnish us with new production figures on the Late Thomas proration unit, if we have to go back to 1981?

MR. KENDRICK: If we can identify them by well and if they're all metered separately, we can.

A I can give you the lease meter number and everything right now.

MR. AYCOCK: They're all metered separately. 173, it's simultaneous dedication.

A Yeah, all metered separately.

MR. STAMETS: You may proceed.

A Okay. So our production records go back to first production on these wells.

We show that the first month, in October, that we had 18,207 -- 87 Mcf of underproduction, whereas the Commission was just carrying us with a zero status.

By -- by March of 1982 we had acquired 23,049 Mcf of underproduction, according to our calculations, but when the Commission classified the well as non-marginal they weren't recognizing some of that previous allowable that should have been assigned to the 320-acre unit and they only gave it 4196 Mcf of underproduction.

Now, they, as I said, made an effort to make some sort of correction and they changed that underproduction to 79,000 in June of '82, but our calculation shows that the well was only 25,000 underproduced, or the unit was only 25,000 underproduced.

We were in a period where we've had mostly underproduction. There were a few months of overproduction, but it was accumulating underproduction during that period of time.

It accumulated prior to the end of the proration period, it acquired 86,892 Mcf of underproduction, according to our record, but the Commission, when it reclassified the well as a marginal well in March of 1983, wiped out whatever underproduction it had. They showed 68,419 the previous month to that.

So we lost a considerable amount of underproduction on the reclassification of the well.

Now the well went through what I call a generic reclassification. That was after those allowable hearings in the summer of 1983. You'll remember that Joe reclassified quite a group of wells as nonmarginal and it did experience a reclassification of nonmarginal in August of '83, but then immediately again it went back to marginal status in October of '83 and the underproduction/overproduction picture never even changed. It didn't even last long enough to get a status in that period of time.

So while there is a change from M to N back to M in that period in mid-1983, or the fall of '83, there was no real change in status.

So when it was reclassified again in 1984, March, it went in with 44,000 of overproduction. It experienced that disastrous period of allowables when -- back in January, February, and March of 1983 when the producing days dropped to 8, 4, and 8, respectively, for January, February, and March. The average allowable would have been the average of 29,000, 26,000, and 18,000, but the best month's production was only 9657. So it was classified as a marginal well, but it was definitely based because of no producing days, produced an average of 6.84 days per month during that period of time.

So producing days caused it to be classified as marginal the first time, when it lost the 68,000

Mcf.

Since it got reclassified as nonmarginal it came on, as I mentioned, with 44,000 overproduced status. It's experienced some pretty bad days, some bad months. August and September of 1984 it had no production at all. October it only produced 5 days, but still, at the end of October the Commission records show that it's 58,000 overproduced, and that's a lot of overproduction, especially in view of the fact that it lost over 68,000 Mcf production.

We figure that the well would have a status of about 45,000 underproduced against the Commission's record of about 58,000 overproduction.

Q And you're talking here about the lease, not any of the individual wells.

A I'm talking about the proration unit, yeah. You can't look at the wells here; you have to look at the unit status.

You've got two good wells and one lousy well on it.

Q Would you now refer to --

MR. STAMETS: Let's go off the record just a short second.

(Thereupon a discussion was had off the record.)

A Okay, Mr. Stamets, Exhibit Number Two in Case 8359 shows the days on and days off during the periods

of adjustment and prorationing.

The attached sheets show the accumulated status change during that period of time.

Q Would you now review Exhibit Number Three in Case 8359?

A Exhibit Number Three in Case 8359 is the computer plot of the days on, the monthly allowable and monthly production, and while I've got lots of notes to discuss here, I'll just simply say that it shows that the amount of producing days has fluctuated widely. The amount of allowable has fluctuated widely, and production has fluctuated widely on the Late Thomas Lease.

Q Mr. Nutter, would you now review Exhibit Number Four in Case 8359?

A Exhibit Number Four, the first page is the assumed nonmarginal allowable status. It shows that the well's producing history has been underproduced almost entirely, with one exception, a very brief period in which the production dropped below the zero line in mid-1984.

The next page shows the conditions as depicted by the Commission, with those wide variations in underproduction and overproductions that we discussed, when they were trying to make the adjustments back in 1982.

It also shows that when the well was reclassified in March of 1983 as marginal, that it had no status and then it came back on with a highly overproduced status in March of 1984.

The third page of this exhibit shows the difference between what could have been and what nas been and what we're seeking to have rectified.

Q And, again, this exhibit shows, this last page of Exhibit Four shows the lease substantially overproduced because it did not receive credit for underproduction during 1982 and 1983.

A No credit for all the underproduction that had accrued.

Q And this credit was not given because the well was reclassified.

A And had no actual status. There was nothing they could assign to it. That's what we're seeking now, retroactive assignment.

Q Mr. Nutter, in your opinion are the wells on the leases which we've been discussing today truly nonmarginal wells?

A Yes. I'd say that in my opinion all four of the proration units we've been discussing are nonmarginal in character and have been nonmarginal since the date of first production, date of recent production, because we had wells that were completed back in '53. I mean during these Hartman years, commencing back in '79, '80, and '81. They've been nonmarginal character ever since they were completed.

There's been no decline has set in on these units. Some of the best production has been in recent

months, except, of course, for the wells that have been completely shut in during recent months.

In my opinion the reclassification of the wells from nonmarginal to marginal was in error and resulted only from decreased producing days, not lack of ability of the wells to produce.

In some cases the wells accrued large amounts of overproduction early in their lives. Mr. Hartman and the pipeline worked diligently to reduce the overproduction and even achieved underproduced status.

Then the market collapsed and the underproduction grew as a result of curtailed producing days. The Commission's computer had no choice but to reclassify the wells as marginal and cancel the underproduction.

In the case of the Late Thomas the unit was originally classified marginal for unknown reasons, probably because it's a multi-well unit, and the accounting of production took more than a half a year to straighten out. I'm not sure that it's correct yet, but the unit is definitely nonmarginal in character and should be so classified from October 23rd, 1981, until now.

The Shell State lease was also originally classified marginal. Again we have a multi-well unit that took some special effort to get straightened out in the records, but it should also have been nonmarginal since January the 12th of 1982.

Q What are your recommendations in each of

these cases?

A In a nutshell, I'd recommend that the following classifications should be made:

Case 8361, the Custer State, originally classified nonmarginal, reclassified marginal, September '82; reclassified nonmarginal, March '84.

This unit should be reclassified nonmarginal back to September '82 and the underproductior cancelled at that time should be reinstated.

It's only had fifteen days production during the last month; zero days during the last five months of production.

For the Shell State Lease, Case 8425. It was previously classified as marginal because the original well on the unit was marginal and it still is; however, the new well was put on line January the 12th, 1982, and way, and is, a nonmarginal well.

This unit should be classified as nonmarginal, effective date of connection of the first -- of that new well, effective January 12th, 1982, and allowed to accrue underproduction against overproduction from that date to the present.

The Maralo State No. 1, Case 8360. It was originally classified nonmarginal with first delivery in November of '79.

It stayed nonmarginal until September of '82 and then was reclassified marginal with loss of under-

production.

Very definitely a nonmarginal well and so classified in March '84; however, the overproduction accrued during the time as a marginal well, which was not compensated for by previously cancelled underproduction, put the well in terrible condition insofar as status is concerned.

It should be reclassified nonmarginal effective September, 1982, and the underproduction reinstated.

The Late Thomas Lease, Case 8359. It's an old proration unit, since 1983. Two new wells were drilled and put on the line in October and November, 1981.

Very confusing records as to production and status from date of new wells. Was originally classified marginal, reclassified nonmarginal September, '82; reclassified marginal March, '83, with huge loss of underproduction; reclassified nonmarginal March, '84; is badly overproduced and still carries 58,000 Mcf overproduction even though there's been practically no production from the well during the last three months, only five days in three months, with 2555 Mcf.

I believe a thorough analysis of the production history of this unit from October, 1981, through the present should be made, and that a nonmarginal classification effective date of first delivery of the new well in October, 1981, should be effected.

Q Anything further?

A Only to say that in bringing these cases

we have no quarrel with the Commission or with the pipeline. We believe that everyone was doing what he thought was right in this and that the computer thought that it was doing what it -- the computer was doing what it thought was right.

I would only hope that the Commission will be inclined to speak with that computer and convince it that these are good, nonmarginal wells and that it should treat them that way and not as a bunch of Rodney Dangerfields.

That computer showed these wells no respect.

Q Mr. Nutter, if this application is not granted, what will be the effect on the correlative rights of Mr. Hartman?

A Well, it's obvious that the wells have produced up and down. In every case that we've showed here today the status of the wells, if you look at the whole life of the well, is underproduced, but the status of the wells as far as the Commission records is concerned is overproduced, but that's because of cancelled underproduction, and I believe that these wells could have been kept classified as nonmarginal and the reclassification as marginal rescinded if action had been taken at that time, but as Mr. Nermyr explained, it took time in order to analyze it.

Now the Commission rules say that you've got fifteen days from the date of notification and I don't know what the date of notification is. It's presumably when

the proration schedule comes out. Is it when you receive the proration schedule? Is it the date the proration schedule is published? They received the proration schedule normally in the Midland Office, the Hartman Midland Office, the 13th to the 15th, so if it's from the date of the proration schedule, being the first of the month, you don't have time to get a letter in.

I remember in days gone by that letters would come in sometimes later than fifteen days and the reclassification would be effective. I don't know if that's done today or not.

But at any rate, there's -- the rule provides that administratively you can get this reclassification done if you notify the Commission within fifteen days after being notified of the reclassification.

There's no specification as to when you have to bring a hearing -- seek to have a hearing on the matter.

Q It's only recently that the magitude of the problem has been fully understood.

A And it has really come into focus just recently, and so it seems like the periods of time, even now with this depressed market, when you'll have months that produce real well. Well, these are months when the allowables have been set low. I guess it's unforeseen deman that is coming back, or something. It just comes and goes and it's hard to predict, and so the proration schedule doesn't

always reflect what the demand is going to be that following month, and so if there's no cushion for tne wells to fall on and they're just classified as marginal, they produce that overproduction when the market comes back but there's nothing to produce it against.

So you're in bad snape when the day or reckoning comes on the reclassificaiton back to nonmarginal.

It's an ironic thing, the best wells have tc be shut in because they're overproduced against no -- no allowable.

Q Will Mr. Hartman's correlative rights he impaired if each of these applications is not granted?

A I believe so, because like I started to say a long time ago, the overall produced status, the overall balance status is underproduction and if he's forced to shut the wells in further he's -- he's -- his underproduction is increasing, really, as a true status, and he's losing allowable.

Q That he otherwise should be entitled to.

A That he otherwise should be entitled to produce.

Q Do you believe that granting tne application will impair the correlative rights of other interest owners in the area?

A No, I can't see how it would, because it's allowable that the wells have coming to them and should be able to produce.

Q Mr. Nutter, have you reviewed the exhibits in Cases 8361, 8425, 8360, and 8359?

A Yes. I either reviewed them or prepared them. Some of them I prepared.

Q With the qualifications expressed during your testimony, do they accurately portray the status of these wells?

A Yes, they do.

MR. CARR: At this time, Mr. Stamets, we would offer into evidence Hartman Exhibits One through Four in each of Cases 8361, 8425, 8360, and 8359.

MR. STAMETS: The exhibits will be admitted.

MR. CARR: I have nothing further of Mr. Nutter on direct.

I reserve the right to recall him for rebuttal testimony.

CROSS EXAMINATION

BY MR. STAMETS:

Q Mr. Nutter, while you were on the Commission staff, do you recall any similar cases where allowables were reinstated back more than six months or so?

A I don't know how far back. I know we've had cases for reinstatement of cancelled underproduction beyond the fifteen days.

Now I know that there have been cases

where Harold has made adjustments to allowable on wells that went back more than this period, as long as this, but it was in the case where, like in the northwest, where deliverability tests had not been processed, and they were carried with NC's for a long period of time and then we finally had to come in with a classification, go back and rectify allowble.

I've talked to Harold about what this would involve. He said it wouldn't be any monstrous task at all to reclassify these wells and create a new status for them going back.

But I don't recall, to answer your question specifically, Mr. Stamets, how far back any of those cases have gone when reclassification was sought, and reinstated.

MR. STAMETS: Any other questions of the witness?

MR. KELLEY: I have a couple of questions.

CROSS EXAMINATION

BY MR. KELLEY:

Q Mr. Nutter, do you think this prcblem exists with a lot of other wells in the state?

A I don't know if it exists with other wells in the state. I know it doesn't exist for very many wells in this particular pool.

We had a tabulation that shows the number

of nonmarginal units in this particular pool, yes.

MR. AYCOCK: Well, there were five of them, you may recall, in the hearing we had in June of '83.

A Yeah.

MR. AYCOCK: (Inaudible)

A Yeah, but I think that right now --

Q Well, while they're searching for that, maybe I'll ask the second question.

A I got it. Okay. In the -- in the Jalmat Pool there are a total -- there's a total of 22.25 proration units or factor, acreage factors, that are classified as nonmarginal out of over 400.

So there's just a smidgeon of nonmarginal proration units in the pool.

Now of those 22.5 -- .25 proration factors in that pool that are nonmarginal, Harman has 11.75 of them.

Alpha Twenty-One has one nonmarginala acreage factor.

ARCO has two and a half nonmarginal acreage factors.

Gulf has three nonmarginal acreage factors. I believe that Gulf well is a -- or, no, it's the Alpha Twenty-One, it's badly -- no, well, I don't know, I won't say. There's a couple of those that are in a bad state marginally or in production, and they'll be reclassi-

fied as marginal.

So really, this is not going to affect any other wells in the pool hardly at all. The marginal wells, the vast majority, the 400 marginal wells, get their allowable no matter what happens to the nonmarginal wells.

So while this may be a problem in other pools, it is no big problem in the Jalmat Pool with the exception of Hartman's wells. He's got most of the nonmarginal wells in the pool.

Q Do you think this problem arises from the computer system or the data put in?

A I don't know. These guys have been having all kinds of meetings lately discussing gas proration and the system that's used, and it may be an inherent problem in the system.

It seems, it's always seemed a shame that a well that has underproduction, it's cancelled, and the wells that are overproduced get production cancelled and reassigned as nonmarginal allowable. Them that has gets and them that hasn't gets hit, but it's -- it's -- the whole balancing system has always been kind of a mysterious process; it seems to work, it seems not to work, depends on how the well's situation is at the time.

MR. KELLEY: No further questions.

MR. STAMETS: Any other questions?

REDIRECT EXAMINATION

BY MR. CARR:

Q Mr. Nutter, when you are talking about wells having their underproduction cancelled, this is a unique situation, is it not, when the well has, and has had, the ability to produce that gas?

A It's all right to take a well's allowable that -- if he gets reclassified as a marginal well because he's of marginal character, that that allowable and give it to the wells that can make it, but when the well is reclassified as marginal because of things other than the ability of the well to produce, because of day's production, because of down time when the well is still capable of going on stream and producing its allowable, this is what's intended to be corrected, and we want to correct it, we're just late doing so.

We believe these are all nonmarginal wells that should have been nonmarginal from day one.

MR. CARR: I have no further questions?

The witness may be excused.

How long is your next witness?

MR. CARR: I don't know.

MR. AYCOCK: Not that long, very short.

MR. STAMETS: Let's take --

take five.

(Thereupon a recess was taken.)

MR. STAMETS: The hearing will please come to order.

Mr. Carr, you may continue.

MR. CARR: At this time we call Mr. Aycock.

WILLIAM P. AYCOCK,

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

DIRECT EXAMINATION

BY MR. CARR:

Q Will you state your full name and place of residence?

A William P. Aycock, Midland, Texas.

Q By whom are you employed?

A By Doyle Hartman as a consultant in connection with Cases 8359, 8360, 8361, and 8425.

Q Have you previously testified before this Commission or one of its examiners and had your credentials accepted and made a matter of record?

A I have.

Q Were you qualified as a reservoir engin-

eer at that time?

A Yes, I was.

Q Are you familiar with the applications in each of these cases filed on behalf of Mr. Hartman?

A I am.

Q Are you familiar with the subject wells?

A I am.

MR. CARR: Are the witness' qualifications acceptable?

MR. STAMETS: They are.

Q Mr. Aycock, have you analyzed the producing capabilities of each of the wells which are the subject of this hearing?

A I have not analyzed them in detail since the beginning of production, but I have analyzed them in detail since the beginning of the time when detailed information was available, which was January 1st, 1982.

Q In making this analysis what data have you reviewed?

A The monthly production, the number of days produced, the flowing casing pressure, since these wells are all completed on a rod pump, and the meter pressure or delivery pressure that is the basis for the production into the line.

Q And you have done this on each of the wells since January of '82?

A I've done it for -- yes, sir, for the

Custer State 1, for the Maralo State 1, for the Late Thomas 2 and 3, and for the Shell State 5.

I have made no attempt to analyze the performance of the Late Thomas 1 or of the Shell State 2, because they are the admittedly marginal, pre-existing wells that really don't enter into this application.

Q Would you refer to each of the wells and relate to the Commission what your study shows concerning the well's producing capability?

A For Case 8361, which is the Custer State 1, my approach has been different than Mr. Nutter's in this regard.

I have attempted to determine what the physical deliverability of the well was at various times during its life in order to be able to adequately demonstrate that it was capable of rates far in excess of what it was allowed to produce, not in the sense of allocation purposes, but the physics of the situation. Was it capable of producing at rates considerably higher.

For the Custer State No. 1 the highest monthly production from the entire life of the well was in the month of December, 1983, when it produced 10,362 Mcf in 31 days for an average monthly rate of 334.3 Mcf; however, when you normalize the previous production for the number of days, that is not the highest average daily production for the days produced.

Mr. Stamets legitimately brought up the

point was -- could you have an application based on the unsteady state performance of a well as compared to its stabilized performance, and that's one of the questions I've attempted to answer.

So in going back and reviewing the monthly production normalized for the number of days, I find that in contrast to this 334.3 in December of 1983 for the Custer State 1, I have the following:

In September of 1983 it produced for 26 days at an average rate of 353 Mcf per day.

In October it produced only four days but it produced at an average rate of 361 Mcf per day.

In November of 1983 it produced only 8 days but it produced at a rate of 391 Mcf per day.

In February and March of 1984 it produced 100 percent of the time and it produced at rates of 307 Mcf per day.

So for this well it is apparent that there is not a lot of difference between the unsteady state and the steady state performance and it is also apparent that the well has excess capacity as compared to any -- it never has been produced at its full physical capacity ever.

Q Would you now review the information on the Shell State --

A One more thing. The other thing that I have done is to take the cumulative number of calendar days since May of 1982 and the cumulative number of days produced

since May 1st, 1982, and bring those forward as sums and then take the ratio between them to see what the participation on a time basis has been, and as you might expect, the number starts out over 90 percent in the first month and it quickly reduces in the range of 60 percent for this well where it stays through the month of February, 1983, and then it drops down in the range of 50 to 55 percent where it substantially stays until March of 1984, when it goes back up over 60 percent, and due to the fact that the -- that the lease has been shut in for six months here, I believe, five months, four months -- five months, beg your pardon, it's down to the ratio is .52. Out of a total of 915 calendar days as of November 1st, 1984, the well has been allowed to produce 476 days, and that's -- the ratio between those is 52 percent.

Q Would you now go -- will you now review the data you're prepared on the Shell State Wells?

A On the Shell State No. 5 I've gone through the same exercise. The highest monthly production in the entire history of the well was in February of 1984, when it produced 14,108 Mcf and it produced that in 28 of the 29 calendar days that were in the month of February, 1984, for an average rate of 503.9 Mcf per day; however, going all the way back to March of 1983, it only produced for 7 days. It produced 3523 Mcf, but the average rate once again is 503 Mcf per day.

So it's apparent that the deliverability

has not perceptibly declined over that period of substantially a year, and furthermore, when the capacity of the well is computed from deliverability, from the wellhead flowing pressure and is compared to the line pressure, what could the well put into the line at that point in time if it were allowed to produce at capacity.

The well has never produced at capacity and has never produced actually over about 50 to 60 percent of what it was able to produce at that time.

So the well is highly capable and has been so since the beginning of production.

As far as the participation on a time basis, once again, this well has had a higher participation factor than the Custer State. It started out above 90 percent. It did not get down to -- in fact, it has never been below 70 percent except for one month since the beginning.

So this one has participated on a much more, well I don't know whether you'd call it an equitable basis, or however you would describe it, but it has shared much better in the available time since the market interruptions began than had the previous well, the Custer State.

The actual number, it's out of a total of 915 calendar days as of November 1st, 1984, since May the 1st, 1982, the well has produced on 652 days, which is .713 ratio.

Q Will you now review the information on the Maralo State Well?

A On the Maralo State No. 1 the highest monthly production in the history of the well was in April of 1984, when it produced all 30 days, produced 14,491 Mcf, for an average rate of 483 Mcf per day.

However, in the previous month of March it produced 28 of the available 31 calendar dayss, the average rate for which was 478 Mcf per day, and in February of 1984 it produced 14 of the available 29 calendar days, produced 7050 Mcf, or 504 Mcf per day.

So it is apparent, once again, that there's very little difference in the unsteady state and the steady state performance of this well. In other words, the long term deliverability is -- is not greatly below the short term deliverability for this well.

To find a comparable figure you would have to go all the way back to May of 1980 -- I mean, pardon me, March of 1980, when it produced 10,567 Mcf in 31 days for plus or minus a 300 Mcf a day.

So it's apparent that this well has, from a standpoint of demonstrated daily production rates, the highest that it's ever produced has been within the last year, and when you compute the deliverability and compare that to the -- to what was actually produced, you find that in general the well has produced no more than 40 to 50 percent of what it could have, what it was able to produce during this period of time, and of course it's produced down as little as 6 or 7 percent at various times.

When you take the time participation into account from May 1st, 1982, to November 1st, 1984, out of a total of 915 calendar days available the well has produced for 426 of those, the ratio of which is .466, once again showing the variation in the time that these wells have been allowed access to the market since the market interruptions began.

We're all over the page here on these things and some of them we're in pretty good shape, and on one like this we're in very poor shape, less than 50 percent of the time has the well been allowed to produce into the market.

Q Mr. Aycock, would you now review the information on the Late Thomas Lease?

A On the Late Thomas Lease, Mr. Nutter's presentation was on a lease total basis, including all three of the simultaneously dedicated wells.

I looked at only the Late Thomas 2 and 3 as individual entities and did not make any attempt to analyze the Late Thomas No. 1.

The highest monthly production in the history of the -- of the well was in the month of December, 1983, when it produced 19,260 Mcf in 31 of the 31 available calendar days, for an average rate of 621 Mcf per day; however, on a short time basis back in November, it produced 1952 Mcf per day in two days for an unsteady state rate of 976 Mcf per day.

Further than that, in the months of January through May, it produced at average rates with substantially full production, in other words, producing all of the calendar days available, it produced at rates of slightly less than from 543 to 593 Mcf per day in an irregular pattern, basically declining but very slowly.

So once again it looks like, except for very, very short term, the short term deliverability and the long term deliverability do not -- once you get past a few days the deliverabilities do not vary very greatly.

And you go back in the life of the well and you don't find numbers greatly in excess of those all the way back into -- into early '83. You don't find any of them in '82.

When you compare the capacity of the well and what the monthly gas production has been by making the deliverability analysis, you find out that the well has produced as little as 6 percent of what it was capable of, and generally produced about 25 percent of what it was capable of, and in one month, when it produced 16,916, it indicated it was 52 percent of what it should have produced in that month.

So the well is capable of producing over a million cubic feet of gas a day on a long term basis, in my opinion.

It's never come anywhere close to that in allowable. It's come, you know, up to maybe as close as

2/3rds of that, and that's as close as it's ever gotten.

When you look at the participation from a time factor, starting with May 1st, 1982, through November 1st, 1984, you find out that of the total of 915 calendar days available, the well has produced for 495 of them, which the ratio between is .451.

So once again we have a number that's down lower than we would like to see it.

The Late Thomas No. 3, a similar analysis has been made.

The highest production in the history of the well in this case was in December of 1982, when it produced 16,342 Mcf in 31 days, for an average rate of 543 Mcf per day; however, when normalized for the number of days, it has produced in the range of 5 to 600 Mcf per day basically or above for the whole year of 1983, and for a portion of the year of 1984, and further, when you compute the deliverability by taking the pressures and comparing those to the line pressure that it would have to buck to produce it, you find that the well has, in general, has produced 50 to 70 percent of its capability and has produced as little as about 7 percent at various months during this period of time.

When you look at the time participation, you find out that from May 1st, 1982, through October 31st of 1984, of a total of 915 available calendar days, the well has produced for 494, the ratio between which is .54.

So once again, we have a relatively low time participation that's been allowed for this well since the market interruptions began.

It is my opinion, based on this analysis, that all of these wells that have been discussed in detail, that is, the Custer State 1, the Shell State 5, the Maralo State 1, and the Late Thomas 2 and 3, have been capable of rates that were far in excess of what would have been under the top allowable in the beginning and they still are capable of this, and from a physical standpoint there is no reason they should ever have been classified as anything but nonmarginal.

MR. CARR: I have no further questions of Mr. Aycock.

MR. STAMETS: Any questions of the witness?

He may be excused.

MR. CARR: That concludes our direct case.

MR. STAMETS: Does anyone else have anything they wish to add in these cases?

They will be taken under advisement.

MR. CARR: I -- I do have a closing statement.

MR. STAMETS: Oh. All right.

MR. CARR: And I will keep it

brief.

MR. STAMETS: Very good.

MR. CARR: May it please the Commission, Mr. Hartman is before you today seeking reinstatement of the cancelled underproduction for four Jalmat leases.

The evidence presented upon which your decision should be based, we believe shows that the wells involved were always capable of nonmarginal production. They couldn't make the non -- and they could make the nonmarginal allowable assigned to the well.

The wells are truly nonmarginal and we're talking here only about four wells out of the 90 to 100 wells that Mr. Hartman operates in New Mexico.

Due to problems in the gas market the wells were classified and reclassified back and forth from marginal to nonmarginal and back again, and what the result was was the cancellation of accumulated underproduction.

Had we applied for reinstatement of this underproduction within fifteen days under Rule 16-A, we believe the underproduction would have been quickly reinstated.

But the problem we had was that the situation is complicated and has taken a substantial period of time to collect the data and analyze the data, to evaluate the magnitude of the problem, and to come before

you seeking relief.

What we're here today seeking is an order that will protect Mr. Hartman's correlativer rights, which will enable him to produce allowable to which he was entitled and to which he would still be entitled if in fact the reason for classifying these wells was their ability to produce and not fluctuations in the marketplace.

Now we have no quarrel with what El Paso has done. We have no quarrel with what anyone has done in this case. We simply have a problem that springs from the way the system works and we're coming before you asking you to enter an order which will protect our correlative rights and enable us to produce gas which we submit we're entitled to produce.

MR. STAMETS: If there is nothing further, the cases will be taken under advisement.

The hearing is hereby adjourned.

(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 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