STATE OF NEW MEXICO

ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION

IN THE MATTER OF THE HEARING CALLED BY THE OIL CONSERVATION DIVISION FOR THE PURPOSE OF CONSIDERING:	) CASE NOS.	11,555
	)	11,556
APPLICATIONS OF AMOCO PRODUCTION COMPANY FOR QUALIFICATION OF A WELL WORKOVER PROJECT AND CERTIFICATION OF APPROVAL, SAN JUAN COUNTY NEW MEXICO	)	11,557
	)	11,558
	)	11,559
	)	11,560
	)	(Consolidated)

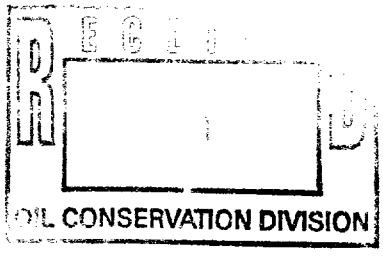
REPORTER'S TRANSCRIPT OF PROCEEDINGS

EXAMINER HEARING

BEFORE: DAVID R. CATANACH, Hearing Examiner

June 27th, 1996

Santa Fe, New Mexico



This matter came on for hearing before the New Mexico Oil Conservation Division, DAVID R. CATANACH, Hearing Examiner, on Thursday, June 27th, 1996, at the New Mexico Energy, Minerals and Natural Resources Department, Porter Hall, 2040 South Pacheco, Santa Fe, New Mexico, Steven T. Brenner, Certified Court Reporter No. 7 for the State of New Mexico.

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I N D E X

June 27th, 1996
Examiner Hearing
CASE NOS. 11,555, 11,556, 11,557, 11,558, 11,559 and 11,560
(Consolidated)

* * *

E X H I B I T S

Applicant's

Case No. 11,555	Identified	Admitted
Application	-	26
Denied Form C-140	-	26
Well Data	-	26
New Form C-140	-	26
Production Projection	-	26

* * *

(Continued...)

E X H I B I T S (Continued)

Case No. 11,556	Identified	Admitted
Application	-	26
Denied Form C-140	-	26
Well Data	20	26
New Form C-140	-	26
Production Projection	-	26

* * *

Case No. 11,557	Identified	Admitted
Application	-	26
Denied Form C-140	-	26
Well Data	-	26
New Form C-140	-	26
Production Projection	-	26

* * *

Case No. 11,558	Identified	Admitted
Application	10	26
Denied Form C-140	10	26
Well Data	13	26
New Form C-140	15	26
Production Projection	17	26

* * *

Case No. 11,559	Identified	Admitted
Application	-	26
Denied Form C-140	-	26
Well Data	24	26
New Form C-140	-	26
Production Projection	-	26

* * *

(Continued...)

E X H I B I T S (Continued)

Case No. 11,560	Identified	Admitted
Application	-	26
Denied Form C-140	-	26
Well Data	-	26
New Form C-140	-	26
Production Projection	-	26

* * *

A P P E A R A N C E S

FOR THE APPLICANT:

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* * *

WHEREUPON, the following proceedings were had at 9:23 a.m.:

EXAMINER CATANACH: At this time we'll call Case 11,555, which is the Application of Amoco Production Company for qualification of a well workover project and certification of approval, San Juan County, New Mexico.

Are there appearances in this case?

MR. CARR: May it please the Examiner, my name is William F. Carr with the Santa Fe law firm Campbell, Carr, Berge and Sheridan.

We represent Amoco Production Company in this case, and I have one witness.

Mr. Catanach, this case and each of the following five cases involve a similar question. The question is whether or not we can use a straight-line projection when we file applications for well workover tax incentives.

The testimony in each of the cases will be virtually identical, and therefore for the purpose of testimony I request that this case be consolidated with Cases 11,556, 11,557, 11,558, 11,559 and 11,560.

EXAMINER CATANACH: Okay, at this time I'll call Cases 11,556 through 11,560, which are all the Application of Amoco Production Company for qualification of a well workover project and certification of approval, San Juan County, New Mexico.

Are there appearances in any one of these cases, any additional appearances?

MR. PEARCE: Mr. Examiner, I am Perry Pearce, appearing on behalf of Meridian Oil, Inc., and I would like my appearance shown in each of the cases called and consolidated.

I do not have a witness and would like to make a statement at the close of the case, please, sir.

EXAMINER CATANACH: Okay. All right, can I get the witness to stand and be sworn in?

(Thereupon, the witness was sworn.)

J.W. "BILL" HAWKINS,

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

DIRECT EXAMINATION

BY MR. CARR:

Q. Will you state your name for the record, please?

A. Bill Hawkins.

Q. Where do you reside?

A. Denver, Colorado.

Q. By whom are you employed?

A. Amoco Production Company.

Q. And what is your current position with Amoco?

A. Petroleum engineer.

Q. Mr. Hawkins, have you previously testified before

this Division and had your credentials as a petroleum engineer accepted and made a matter of record?

A. I have.

Q. Are you familiar with the Application filed by Amoco in each of these consolidated cases?

A. Yes, I am.

Q. And are you familiar with the rules and statutes that relate to the qualification of wells for well-workover projects and the certification of those projects for the lower tax rate?

A. Yes, I am.

MR. CARR: Are the witness's qualifications acceptable?

EXAMINER CATANACH: They are.

Q. (By Mr. Carr) Mr. Hawkins, could you briefly state what Amoco seeks with each of these Applications?

A. We're seeking that the six wells in each of these cases be qualified and certified for well workover incentive tax rate, authorized pursuant to the Division rule -- procedure for qualifying these projects.

Q. Mr. Hawkins, could you initially review the events which have resulted in these cases coming on for hearing?

A. Yes, these six cases were originally filed by Amoco in April, 1996. I think it was on the 26th. They

went into the Aztec Division for review and certification or qualification.

The Applications were denied on May 10th. The reason that they were denied on each of the cases was that the method of determining the future rate of production is not acceptable.

Q. Can you review for the Examiner how Amoco was proposing to determine the future rate of production prior to workover for each of these wells?

A. We had looked at a number of alternatives to identify what the future production is and be in compliance with the rules and also the statute.

We made a determination that if we used twelve-month average production for the twelve months prior to doing the work on the well, that that would be the easiest for us to do. It took a lot of the subjective nature of decline curve out of the picture and also did meet the requirements for the statute and the rules.

Q. What basically do the rules provide in terms of making a projection of the well's future production?

A. The rules provide that all applications shall have a decline curve or other acceptable method that specifies the producing interval and the monthly tabulated estimate of production, and it should be based on at least twelve months of established production, and shows the

future rate of production based on well performance prior to performing the workover.

Q. So what Amoco was doing is using a straight-line projection based on an average of the last twelve months' production, and you're asking that that now be approved as another acceptable method of projecting a well's performance?

A. That's correct.

Q. Have you prepared exhibits which illustrate Amoco's reasoning in proposing the use of this straight-line projection?

A. Yes, I have.

Q. Now, we have provided the Examiner with six booklets. Is there one booklet for each well involved in each of these six cases?

A. Yes, there is.

Q. I'd like to go to the booklet for Case 11,558, for the Lackey "B" LS Number 13M well. Would you take that please? And I'd like to use this one to work through Amoco's reasoning.

Are all of these exhibits, Mr. Hawkins, basically the same?

A. Yes, they are, they're in the exact same format, pretty much contain the same type of material for each individual well.

Q. All right, let's go to the exhibit packet for the Lackey "B" LS Number 13M well, and I'd ask you just to identify what is behind the first tab in that exhibit book.

A. Okay, the first tab, marked "Application", is a cop of the Application that was filed requesting this hearing.

Q. And this Application was filed seeking the hearing because you were directed to do this by the District Office if, in fact, we had wanted to pursue this issue?

A. That's correct.

Q. Let's go to the second tab. Can you identify the material behind that tab?

A. That second tab is labeled "Denied Form C-140". It's a copy of the letter that we received from the Aztec District that denies the Application we filed for the well workover project. You see it gives the reason being that the method of determining future rate of production is not acceptable and also directs us that we may request a hearing on the Application.

Just behind that is a copy of the Application that we had filed with the Aztec District, that on the last page -- let's see, excuse me, on the back of the first page, there, where there's a certification of approval, the District Supervisor has written "Denied, F.C.", with his

initials.

Q. You also had discussions with Mr. Chavez concerning this matter, did you not?

A. Yes, I did.

Q. And basically did he not advise you that no one had proposed a straight-line estimate before, and he felt if it was to be approved it had to come to Santa Fe for hearing?

A. That's exactly right. He indicated that it was something that he wanted to make sure the Santa Fe office was comfortable with in terms of making this method another acceptable method that would fit the rules and said we should come to Santa Fe on a hearing on this.

Q. And is -- the letter transmitting his denial also directed Amoco that if they wanted a hearing they would have to request it?

A. That's correct.

Q. If we go to the first page behind the Form C-140, what you have labeled the decline curve --

A. Right.

Q. -- is that in fact the straight-line estimate that you are proposing to be accepted for wells of this nature?

A. That's correct. We -- What we're showing on this plot is the oil production and the gas production for each

month, for the twelve months prior to actually going in and doing the workover on the well. Gas production is shown in squares, the oil production is shown in the diamonds.

We also have -- show the gas average as the solid dark line. In this case, that number is about 935 MCFD -- excuse me, MCF per month.

The dashed line is the oil average or its condensate from this well, and that is 11 barrels a month.

Q. From what formation is this well producing?

A. That is producing from the Basin Dakota formation.

Q. And if we go to the first page behind this graph, you have included the production information in tabular form; is that right?

A. That's correct. The graph goes along -- or excuse me, the table here goes along with the graph. It shows for each of those months -- we're looking basically in the last three columns on the spreadsheet there -- the month of production, the monthly oil production and the monthly gas production. And then at the bottom where we've marked "12 month average - Future Trend" is the average per month for the oil and for gas, and that's what we are using as the estimate of future production.

Q. Mr. Hawkins, behind that tabular summary is other information concerning the actual workover that was

undertaken on the well, correct?

A. That's correct.

Q. And that's really not an issue in this case?

A. No, they were not an issue with the Aztec District. I think those -- these workover procedures qualify under the rules, and I don't think they had any concern about that.

But we have included here with the Application copies of the completion reports and then details of the work that was done on each of the wells.

Q. Let's go now to the information behind the tab entitled "Well Data".

A. Yes.

Q. Can you identify what's set forth on the first page behind that tab?

A. On the first page behind the tab marked "Well Data" is just a real short summary of the facts surrounding this case, for each of these wells.

I've shown the case number and the well number, and then the data includes the date the well was completed, in which horizon, the date that the workover commenced and was completed, a synopsis of what that work was, to in this case perf and frac the Otero Chacra and Blanco Mesaverde, and then complete as a downhole commingle of all three zones, and then a little asterisk here which identifies the

date of production that we used to come up with the twelve-month average. As you can see, in this case it was from June, 1994, through May, 1995. We commenced the work for this well in June of 1995, so we took the twelve months prior to the month that we performed the work on the well.

Q. Let's go to the next page, "decline curve".

A. Okay.

Q. Can you review that for Mr. Catanach?

A. Yes, this is a historical production plot for the well. It's basically all the production from the well from the time it was completed through, in this case, near the end of 1996. We did the work in this case, you recall, in the middle of 1995.

I guess -- I need to back up.

This production is through the end of 1995. So the production that you see basically is the production from the Basin Dakota that we would need to make some estimate of future production from.

Q. And this well is in fact showing a fairly flat decline at this point in its life in any event; is that not true?

A. That's true. The gas rate is shown on the right-hand Y axis. It's a little over 1000 MCF per month, is the bar that the production has been, I would say, following for the last several years.

Q. Is it fair to say that a flat decline of this nature is typical for numerous wells in the San Juan Basin at this point in their producing life?

A. Yes.

Q. And there really is not a substantial difference in most cases between use of an actual decline curve or the straight-line projection that Amoco is proposing?

A. Well, I think you could probably draw some decline through there. It would be a very, very flat decline and would be very close to, in fact, just an average production.

Q. What is the source of the information shown on this exhibit?

A. This is from the *Dwight's* production information.

Q. And behind this decline curve, is there a tabular form, the information from *Dwight's*?

A. That's correct, it shows just a summary of the well completion on the first page and then the last several years of production on the next two pages in tabular form. And I have shown in parenthesis just the average production for the year, the average monthly production for the year, and that would give you an idea of comparison of that number to the twelve-month average that we've worked up.

Q. All right, let's go to the next tab, entitled "New Form C-140". Can you identify and review that form

for Mr. Catanach?

A. Yes, in this form -- in this section we have a clean or a new Form C-140 that we would hope would be approved by the Division. On the back of this page we show, you know, an appropriate place for a certification of approval.

Q. Again, you're requesting that the approval be based on a straight-line production; is that right?

A. That's correct.

Q. And there were certain errors in data attached to various applications. Have those been corrected in the material that is included in this exhibit?

A. Yes, they have. There were a few wells here that had some corrections that needed to be made. What I did was include in this section behind the new Form C-140 a corrected table and graph showing the average production for those wells.

Q. And if, in fact --

A. This well had no correction on it.

Q. And so there's no additional information. But in the other exhibits, if there were additional corrections or if corrections were needed, those are included in the exhibit packet?

A. That's right.

Q. And they do not affect the question that we're

asking the Division to consider, which is whether or not use of a straight-line projection is appropriate?

A. That's correct.

Q. In your opinion, would adoption of the straight-line projection as another acceptable method of projecting the future rate-of-production capability of a well give the operator a greater tax incentive than the use of a decline curve?

A. No, the --

Q. Let's go to the information behind the tab marked "Production Projection", and I'd ask you to review that for Mr. Catanach.

A. The last tab here, "Production Projection", has a couple of pages that I wanted to go over with you.

First is a graph. It's just a typical example, I guess, not specific to this well, but it's a generic example of production from a well that is following an exponential decline similar to the wells in the San Juan Basin.

And then you can see that we've plotted rate versus time. And at the end of that, we've made an extrapolation, either on a twelve-month average or an exponential decline.

And as you can see, typically the exponential decline will be less than the twelve-month average, to some

degree.

Q. If we look at this, by raising the baseline, in fact, less production qualifies for lower tax rate; isn't that right?

A. That's exactly right.

Q. And by use of the straight line as you're proposing, in fact, it's simpler from an administrative view but, in fact, it is reducing the amount of tax credit that would be available for the well?

A. That's correct.

Q. Let's go to the last page in the exhibit book. I'd ask you to refer to this and then just summarize the reasons that Amoco would support the use of adopting this as another acceptable method for making a production projection.

A. On this last page we've got about six bullet points here that qualify, I guess, why we think that the twelve-month average is an acceptable method.

First off, it does give a reasonable estimate of the productive capacity of the well.

It is certainly less subjective than trying to draw an estimated decline through production data that varies month to month.

It's simple for the operator to determine.

It's easy for the NMOCD to verify and certify.

It takes a lot of the subjectiveness out of their certification.

It's easier for operators and probably for the State to manage in a dual tax rate accounting, where the amount of production that qualifies for the full tax rate never changes, and the amount of production that benefits from the reduced tax rate is easier to calculate each month.

And lastly, it still meets the intent of limiting the amount of production which would qualify for the incentive tax rate.

Q. In your opinion, will approval of the use of a straight-line projection be consistent with the statute and rules which authorize the well workover tax rate?

A. Yes, it would.

Q. And does Amoco recommend that the use of a straight-line projection be authorized by the Division as another acceptable method of making a production projection?

A. Yes.

Q. Would the testimony that you've presented, then, as it relates to the Lackey "B" LS Number 13M well, equally apply to each of the wells involved in the consolidated cases being heard at this time?

A. Yes.

Q. Mr. Hawkins, let's now go on the case book or the exhibit book for Case 11,556 -- this is the case book for the Gallegos Number 8 well -- and I'd ask you to turn in that exhibit to the tab marked "Well Data" --

A. Okay.

Q. -- and go to the decline curve, which is the second page behind that tab.

A. Okay.

Q. What is the base period that was utilized by Amoco to make a production projection for this well?

A. It was August, 1994, through July of 1995.

Q. When we look at that period of time, are there months when the well recorded no production?

A. Yes, there are.

Q. In your opinion, is it reasonable to consider this twelve-month period, including these wells [*sic*] when no production was recorded, in making a production projection for the well?

A. Yes, it is.

Q. Why is that?

A. In this case, the well was producing an average of around 700 MCF per month -- that relates to about 20 MCFD -- and also producing an average of around 11 barrels of condensate per month.

The indications in this well are that the well

was so close to a depletion in the Basin Dakota that it was having difficulty lifting the condensate out of the wellbore and would experience a loading condition where the well would not produce until enough pressure was built up or some other method was used to unload the well.

And what we experienced in this case was four months of production -- or four months where the well was unable to unload the condensate, and then did unload about 100 barrels of condensate over the next month, and production came back at a rate of around 2000 MCF per month but began to decline very quickly again.

The indication there is that once the well pressure began to build up and -- sufficient to unload the well, we got some flush production from the gas as well, as a result of that high pressure around the well. That high pressure began to bleed off kind of quickly, and the rate began to drop back down closer to its average.

As an engineer, the way I would interpret that is that although there may be some periods of time when the well was unable to produce, the flush production that it experienced after it unloaded would tend to offset those months of zero production.

And in fact, if the well had continued to produce in this fashion without being worked over, we would have expected it to continue to experience loading conditions

and months when the well would not be able to produce, and should be taken into account in any kind of future production projection.

Q. Mr. Hawkins, the objective of making these production projections is to accurately forecast what the well would do without -- before workover; is that correct?

A. That's correct.

Q. If we look at the Gallegos Number 8 well, the well in fact was on production for the entire twelve-month period that Amoco has utilized; is that fair to say?

A. That's correct.

Q. When the well is loading up and performing like this, is that not evidence that in fact it's time to undertake workover activities on that wellbore?

A. That's correct.

Q. When you look at this well and you try to determine what is at least twelve months of established production, it's your opinion that it's appropriate to include the entire twelve-month period; is that right?

A. That's right.

Q. Now, if we discount months when the well did not produce, would that in fact have the potential for distorting data or the production projection for the well?

A. I believe it would. I believe it would overstate what the well would likely produce in the future, given the

fact that it would probably experience those loading conditions again.

Q. If we have this well or any well, and it is unable to produce 40 consecutive days, and if that time period ran from the 10th of June to the 20th of July, if we only look at this on a monthly basis, both June and July would be counted; isn't that right?

A. That's right, there would be production in each of those months.

Q. If that same well was shut in for 40 days but it ran from June 1st to the 10th of July, and you don't count a month when there is no production, in fact, you would discard June, would you not?

A. Well, you could. I think it would be inappropriate to dis- -- to not include the month of June, simply because the well had no production that month.

Q. Is it your testimony that to get an accurate read on what the well's future production capability would be, that you have to include the days it produces as well as the days it is shut in?

A. That's right.

Q. Or unable to produce?

A. That's right.

Q. And all of those days need to be counted, whether they fall in one month or they fall in two months or many

months?

A. That's right.

Q. Let's now go to what has been -- our exhibit book for Case 11,559, for the Armenta Gas Com "C" Number 1E well. And again, I'd like you to go behind the second page behind the tab marked "Well Data", the decline curve.

A. Okay.

Q. If we look at this decline curve, you have shown on this curve at least twelve months of established production history for the well, have you not?

A. That's correct, the well --

Q. What is the problem with this exhibit?

A. Well, in this case, the well began production in 1980 and produced until around the middle of 1986. The well was shut in for a period of time and then reopened for production in 1994.

So there is a large gap of time there where there was no production from the well, but the well certainly has at least twelve months of established production from this completion zone.

Q. Mr. Hawkins, this is an extreme case, of course, but if we look at the production history you have in, say 1995, how would that decline curve alone compare to a decline curve, say, for the production on 1980 to 1986? Would they be different?

A. Oh, I think they would be significantly different. For one thing, back in 1986 the well was producing on the order of 2000 MCF a month, and in 1994 and 1995 the well was only producing 500 or 600 MCF a month.

Q. Now, when you start filling out applications to qualify wells for the incentive tax rate, you find numerous examples where you have breaks in the production history; isn't that fair to say?

A. That's correct.

Q. Not necessarily ten years, but --

A. No.

Q. -- you can have them?

Is this the kind of situation where some guidance is needed from the Division so that operators know exactly how to handle this kind of a production situation?

A. Well, I think that it would help. My impression as an engineer would be to try to predict the future production based on the most current data, not go back in time eight years or thereabouts to try to predict what the current production is going to be. In this case, I would use the production from the most recent time period and make my projection from there.

Q. Also, showing the -- at least twelve months established production, but being able to make a prudent engineering call as to what now accurately shows the

decline of the production capability?

A. That's right.

Q. In your opinion, do each of the Applications filed in each of these consolidated cases meet the requirements of the statute and the rules to qualify for the well workover tax rate?

A. Yes, they do.

Q. Does Amoco request that each of these Applications be approved and that the subject wells be certified as well workover projects?

A. Yes, we do.

Q. Does Amoco also request that an order be entered by this Division that would approve the use of a straight-line projection for wells at the discretion of the operator as an acceptable alternative method of establishing a production projection?

A. Yes.

Q. Were each of these exhibit books prepared by or compiled by you or under your direction and supervision?

A. Yes, they were.

MR. CARR: Mr. Catanach, at this time we would move the exhibit books in each of these cases, being Cases 11,555 through 11,560.

EXAMINER CATANACH: The exhibits in Cases 11,555 through 11,560 will be admitted as evidence.

MR. CARR: And that concludes my direct examination of Mr. Hawkins.

EXAMINER CATANACH: Mr. Pearce, do you have any questions?

MR. PEARCE: No, sir.

EXAMINATION

BY EXAMINER CATANACH:

Q. Mr. Hawkins, I've not been exposed to very many of these. In fact, this is the first one I've seen.

The usual procedure on getting one of these approved in a normal situation is to use a decline curve as your production forecast?

A. Well, since we're pretty early in the process of filing these things, I don't know that there necessarily is a usual procedure. The rules require that an operator make -- submit a decline curve or other acceptable method to determine a future -- an estimate of the productive capacity of the well and make a future production projection that the Division would certify.

In this instance, I guess you've got -- You know, one of the typical ways that you could do that would be to try to draw a decline through the production data that was available prior to doing the work on the well.

Most of the wells in the San Juan Basin that have been producing for any length of time have what I would

call a very low decline rate, less than 10 percent a year. And if they've been producing for a fairly significant period of time, which most of these have, the last few years of production may appear to be relatively flat or constant at that low rate.

I think that we're still early enough in this process of establishing, you know, qualifying wells as well workover projects that most operators are still looking for ways to implement this, trying to make use of the statute to get some tax incentive, as simple as possible, not require a lot of additional costs for their own accounting systems, as well as the State's. And using this twelve-month average is a method that would significantly benefit the operators and probably the State as well, in terms of managing this statute.

Q. Can you elaborate on some of the problems that you think would be encountered using a projected decline curve, as far as Amoco is concerned?

A. Well, there's a couple of things I think you would want to take into account.

First would be the engineer's time in going back and looking at the historical production for the well. The rule requires that you allow at least twelve months' history. Certainly, it would require some degree of subjective judgment, I guess, to draw a decline curve in

there and then have the State take a look at that and certify that as being reasonable.

And the tendency I think you might see from a number of engineers' point of view would be to draw that decline as steeply as you could, to qualify as much of the future production as possible. And you kind of get into a judgment call from the State's perspective of whether or not some engineers were being overly aggressive with that.

The second thing is that, along with that, you have to submit a table of future production that shows what would the monthly production be each month of the rest of the life of the well, or as far into the future as you can foresee, under that decline curve, and then have that table of production entered under the tax accounting systems of the companies, as well as the State. And a lot of that is going to be manual input, or some additional software would have to be developed that either the State or the operator hasn't prepared.

I guess -- Those would be the two main things that would make this be manpower intensive: the engineer's time, the State's time in making sure that someone's not getting overly aggressive, the accounting department or tax department time to get that kind of production data input into their system so that it could operate monthly and have a new number every month of what was going to be the full

tax rate, and then do some subtraction for the incremental tax rate.

And I guess lastly the thing is, you have some concern that if a well were to go off production for a month or two, what do you do with the decline? Do you shift it a couple of months now to pick back up where it left off, or do you just assume that the decline was fixed and not take into account any of that down time at all?

Using the twelve-month average pretty much eliminates the concern on all of those concerns that I've got, that you're saying that regardless of whether the well is producing or not producing for a certain month, you wouldn't have to shift the decline. It's the same number every month.

It's fairly simple to be put into the accounting systems. It's certainly no challenge for an engineer or anybody else to calculate the twelve-month average of production. And it takes a lot of the burden off of the State in trying to make a judgment on was the engineer being overly aggressive or not in trying to draw some decline in here?

So I think there's a lot of benefits from both the operator's perspective and the State's perspective.

The other thing that I think the straight-line projection does is, it's simple enough for us to implement

that we are willing to give up that little incremental bit of tax incentive that the decline method might have offered to us. It takes a lot less manpower, time and effort.

Q. Is the additional time and manpower something that Amoco might say that it's not worth doing this on this well, if we have to do all this work?

A. I think it's something that we seriously are taking into consideration.

As you're aware, the tax incentive is 1.875 percent of the taxable value of the incremental production, and in many cases that's not very much money. And it doesn't take very many hours of engineering time or accounting time to completely offset what benefit you might get from that tax incentive.

Q. Mr. Hawkins I know that you did say that Frank Chavez wanted these to come up to Santa Fe for the initial decision. Did Frank have an opinion on this?

A. He didn't offer an opinion to me. I think he was -- he felt like that we just needed to make sure that the State office was comfortable that we set this precedent. And then it's my, I guess, perspective on this, that if it were approved by hearing, that Frank would be able to use these -- approve them in future cases.

I think he was just a little -- wanted a little bit more review on the matter.

Q. If this method is approved, is this going to be the method that Amoco exclusively uses in the San Juan Basin?

A. I would say that the vast majority of the wells that we qualify as well workovers will use this approach. There may be some wells that are still earlier in their life of production, that there may be enough of a difference between some projected decline and the twelve-month average that it would justify the use of, you know, trying to draw that decline in and putting it in.

For the most part, though, we're working with a large number of older wells that we're trying to add new zones to, to increase production from, and most of those wells have been on production for such a long time that they're in the latter stages of their production and are on a much flatter decline. So that's why I say the vast majority, we'll probably be using this method.

Q. Can you see any instances where Amoco might come out better using this method?

A. No. Just to save us time and money, I think, in the long run, make it worth our while to try to capture the benefit that the State's offering through the statute.

Q. But there's no instances where you might get credit for more production than you would using --

A. I really don't believe so. I think for the vast

majority of cases that I can envision, the twelve-month average is going to be higher than a decline rate, and there would be more -- some incremental tax incentive kind of left in the pocket of the state, as opposed to the operator, by using the twelve-month average method.

Q. Okay. And the other question was, utilizing the twelve-month past production, under the current scenario, if you -- say if you had production, say -- dating back to 1986, you could still use that production, that twelve-month production of --

A. If the last time the well produced was 1986?

Q. Yeah.

A. And you came in to do the work in 1994?

Q. (Nods)

A. I think you would -- If you had no other production data available, you'd have to look pretty hard before you would predict that the well would come back on at the same rate that it was producing in 1986 and say that that is a reasonable estimate of the future production projection for this well.

I think you would take that information into account, but I don't think that that would be a reasonable estimate of future production projection. I think that's probably too long of a period, that there's probably some reservoir pressure decline, and you would need to get --

you would need to use more facts on a case like that. You would have to have some additional input, some other way to estimate the future production. And that might be to attempt to return the well to production or look behind the facts of, you know, is the well capable of producing at all? Is the future production projection for that well zero?

So I think there are some extreme cases that you would certainly have to do some more digging into, to give you a reasonable future projection.

But for the most part, if you've got production that's -- during the last twelve months prior to doing the work, when the well, you know, was producing and selling gas and condensate, then that's the data that you would focus on.

If there were some months of zero production during that period you would, in my opinion, need to include that or take it into account. Is that something that's going to be a recurring kind of a condition that you would expect, that you should build into your forecast of future production?

Q. So what is acceptable now is, Frank would approve something like if you had -- if you performed the workover in 1994, if you had twelve months' production prior to that, that would be entirely acceptable?

A. Certainly.

Q. Now, in a case like the Armenta, he would not approve something like this; is that correct? Based on the fact that you don't have twelve months of prior production?

A. Well, I believe he should approve this. In this case we have -- There were four months in which there was zero production for the well.

Q. What four months are you talking about here?

A. The months of August, 1994, September and October of 1994, and then the month of March of 1995, we indicate there was zero production from the well.

For the months of November, 1994, through February of 1995, and then April through July of 1995, there was production from the well although it was at a very low rate of about -- you know, anywhere from 200 to -- Well, I guess actually, you know, the average here is 240 MCF per month. So we're really just trying to seek, is this well capable of producing, and at what kind of a rate?

And I think that's kind of the charge an operator probably has, is to gather enough production data to see, is this -- you know, what is a reasonable estimate for the well? And for this well it would be clearly reasonable to assume that the future production is going to be in the 200-to-300-MCF-per-month range, based on its production.

Q. So if I'm correct in understanding, the question

that you're asking me to resolve is whether or not -- You have certain months of production within the twelve-month period that don't have any production, and you're still asking us to accept that as reasonable?

A. That's right. And maybe the way that as an engineer I would view that is that during that twelve-month period I ought to have -- at least half of that time, have some data to make some judgment on. If there are some months that have zero production during that time, it shouldn't automatically disqualify that period.

But if you had no production during the twelve-month period prior to doing the work, then I think you need some additional facts before it could be approved -- of zero, you'd need to have some further justification of that. And it might be the kind of thing that would require coming into a hearing to, you know, dig into the facts of it.

But as an engineer, if I had six months of the well producing and selling gas and six months that it was zero, and I looked at the production and the production is very marginal, then it's pretty obvious to me that the well is having a difficult time producing. And if I don't do some work on the well, I should continue that -- for that condition to happen in the future. And so I should take that into account in any future projection that I'm going

to make, until I do work on the well.

Q. If you've got some months that there wasn't any production and you're using the average, that average, to forecast future production, wouldn't that necessarily lower your average below maybe what it should be?

A. I think the -- Certainly there's a chance for that to occur.

But for the most part, when a well is not producing, the pressure is building up around the wellbore. And in almost every case that I can envision, when you return the well to production, either by itself, it builds up enough pressure to start to unload itself or get back into a producing condition, you get some period of flush production that is greater than what the well average would be, or what the well would have normally been able to make.

And for the most part, I think that those two conditions can offset each other, particularly if you had -- at least half the time the well was on production and, you know, you had some actual sales out of there. So...

But I think there's some reason why it wouldn't necessarily understate what your future projection should be.

EXAMINER CATANACH: I think that's all I have, Mr. Carr.

MR. CARR: I have a statement at the end I'd like

to make.

I think Mr. Pearce wants to make a statement.

EXAMINER CATANACH: Okay, we'll let Mr. Pearce make his statement.

MR. PEARCE: Thank you, Mr. Examiner.

Meridian Oil was one of the companies which participated in support of what was then known as House Bill 65 during the 1995 session of the New Mexico Legislature, the incentive bill which resulted in the program under consideration this morning.

Meridian appears this morning to encourage you to allow the straight-line estimate of future productive capacity as a conservative approach to implementing the incentive adopted by the New Mexico Legislature.

As has been pointed out by the witness in this proceeding, allowing this procedure to be implemented has the effect of reducing the financial benefit of the incentive to the producer in terms of the incentive itself, and the exchange for that is that accounting operations, particularly, in oil and gas companies may be greatly simplified and made more efficient. We believe that that is an appropriate tradeoff in some instances.

Meridian, to my knowledge, has not yet filed any straight-line estimates, but we certainly suspect that we may find wells in which that is appropriate in the future.

We believe that what is suggested in these cases by Amoco is an accurate implementation of the incentive which was adopted by the legislature and that if producers are willing to forego some of the incentive and still utilize the program to get well workovers done which might not otherwise be done, which was the bottom-line purpose of the legislation, that the Division will be acting in response to legislative purpose as it is reflected in the Act. We encourage you to do that.

We believe that, if I may call it, a signal needs to be given to the field office staff personnel to know that this has been considered by the Division. It does not work a hardship on State revenues; it in fact represents a benefit to state revenues. We encourage you to allow these applications to go forward.

Thank you.

EXAMINER CATANACH: Thank you, Mr. Pearce.

Mr. Carr?

MR. CARR: Mr. Catanach, as I believe you're aware, Mr. Pearce and I were involved at a legislative level when this legislation was under consideration. We were not involved in the drafting of the statute, and the statute has got some very difficult provisions in it. And we then became involved for our respective companies in developing the rules to implement the Act.

And I think it's fair to say that the approach taken in developing these rules was to take a very conservative approach and stay very, very close to the statute wherever it was possible to do so.

And in developing the rules, we also assigned responsibility for administering this program to the District Offices. And so the Districts are now looking at having to interpret and improve applications within rules that are very, very tight in the way they were actually developed and finalized.

When we talk about production projections in the rules and in the forms, we say decline curve or other acceptable method. We should specifically state decline curve, so there's no issue that when you come in with a decline curve, that can be approved.

When we step beyond that and start looking at other acceptable methods, all of a sudden more interpretation is involved, and the districts really do need direction from Santa Fe, because they're trying to administer out of three offices a program in a fashion, and they're trying -- in a fashion that is consistent across the State. So I suspect that that is one of the reasons that this came before you.

But you also need to now that when we drafted these rules, we recognized that we were taking a very

narrow approach, and we specifically provided that from time to time -- or that if they were denied, that -- you know, these matters could come for hearing in Santa Fe. And we anticipated that as we got into this process, we would have to flesh this thing out, with certain hearings.

The dollars involved with many of these wells is relatively small. And we're anticipating that we're going to have a lot of these hearings, but this is the first one. And as I'm sure you suspect, there is some examiner-shopping that goes on when we start bringing matters before the Division, and we frankly docketed this today anticipating that Mr. Stogner would be the Examiner because, as you know, he was the staff person who sat with us as we developed these rules and procedures. And so that's why I've gone through this little background for you.

But I'd like to look at the particular questions that are being presented for your consideration. One is the use of this straight-line method. And all we're asking is that we be allowed to use a very, we think, conservative tool that is extremely simple at our end, company end, to develop. It certainly is easy at a Division level.

But when we were developing the rules, everyone said, Oh, everyone has computers that can do the decline curve for you. In practice, it's not as simple as it

looked, and we also found that the only people who don't have a computer to do these happens to be the Oil Conservation Division.

So a straight line seems to be consistent with not only the intent to make this simple, but it seems to work. And it also is simple when you go to the Tax and Revenue Department, because the only reason we present this data in tabular form is, they're not equipped to deal with it when they look at a decline curve. And so it works better at that level as well.

And we think it is consistent with the language and the rules and in the statute, because, you see, what we are telling operators to do is provide a decline curve or other accepted -- or acceptable method, and it is to be based on at least 12 months of established production to show the future decline rate or production capability of the well.

The statute also defines production projection, and it says it is an estimate of the future rate of production from the well, based on well performance. And so we believe that when we come in and we show you what a well has done during the last twelve months, some days or months when it's down, and others when it's up and producing, if it's open and we're attempting to produce it, that we can give you an accurate estimate if we come in and

take the last twelve months and provide that to you in the form of an average.

Because when you assume that wells decline and you recognize we're using an average, not continuing to check to project out the decline, continually going down, we're coming with a more conservative figure in terms of the production available for the lower tax rate than we would if we used the actual decline curve. So we think what we're seeking is appropriate.

The third thing that we've only sort of touched on is the situation we have with the Armenta well, where we have a few months' production in the last year and then we have a very large gap, and we're not anticipating we may ever find another one with a ten-year gap, but a few months or a year back to when it was last on production, and we're told to look at twelve months' established production in making our future production projection.

Now, it would be very simple to just lock in on the rule and say four months in eighty-six -- or ninety-five, eight months in eighty-six, and average those. But we think it's important to recognize that what we have told the operators they must do when they file these applications is sign an affidavit that verifies certain things, including a statement that, and I quote, this projection was prepared using sound petroleum engineering

principles.

You look at the Armenta, you look at what it did in 1986, and you compare that to what it did in 1985, and if you as an engineer are going to employ sound engineering principles, you can consider at least the last twelve months or the entire five years when you were attempting to produce the well.

But when you apply a standard of using sound principles, apply those sound principles to this data, you have to consider what you know really accurately projects what the well will do. That's why we're asking for guidance on that last point.

We recognize we're kind of lopping something your way that may in some sense not be real fair to you, but this is, I think, a significant case in that what is done with this Application, I think, will have a very large impact on how these applications are filed, not only for production in the San Juan Basin but for wells in the Permian Basin as well.

EXAMINER CATANACH: Mr. Carr, can I ask you to give me some rough-draft orders --

MR. CARR: Yes.

EXAMINER CATANACH: -- and I think the Armenta would certainly be one, because it's kind of its own issue there.

I would ask for one order where the straight-line method is the only issue, and one where the zero production for any given month is an issue. So just three orders in those --

MR. CARR: Yes, sir.

EXAMINER CATANACH: That would probably help us out.

Is there anything further?

MR. CARR: Nothing further.

EXAMINER CATANACH: Okay. There being nothing further, Case Numbers 11,555 through 11,560 will be taken under advisement.

(Thereupon, these proceedings were concluded at 10:18 a.m.)

* * *

I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of Case No. ____, heard by me on June 27 1996.

David R. Catanach, Examiner
Oil Conservation Division

CERTIFICATE OF REPORTER

STATE OF NEW MEXICO)
) ss.
COUNTY OF SANTA FE)

I, Steven T. Brenner, Certified Court Reporter and Notary Public, HEREBY CERTIFY that the foregoing transcript of proceedings before the Oil Conservation Division was reported by me; that I transcribed my notes; and that the foregoing is a true and accurate record of the proceedings.

I FURTHER CERTIFY that I am not a relative or employee of any of the parties or attorneys involved in this matter and that I have no personal interest in the final disposition of this matter.

WITNESS MY HAND AND SEAL June 30th, 1996.

STEVEN T. BRENNER
CCR No. 7

My commission expires: October 14, 1998