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

22 May 1985

EXAMINER HEARING

IN THE MATTER OF:

Application of Hondo Drilling Company for hardship gas well classification, Eddy County, New Mexico. CASE 8609

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 8609.

MR. TAYLOR: Application of Hondo Drilling Company for hardship gas well classification, Eddy County, New Mexico.

MR. PEARCE: Once again, Mr. Examiner, I am W. Perry Pearce of the law firm Montgomery and Andrews of Santa Fe, representing El Paso Natural Gas Company.

We request that we be allowed to make a statement at this time in Cases 8609, 8610, and 8611, rather than having the El Paso personnel make another trip for these cases.

MR. STOGNER: At this time I'm going to call Case 8610 and 8611, which are both applications of Hondo Drilling Company for hardship gas well classification, Eddy County, New Mexico.

The applicant has requested that these cases be continued to the Examiner Hearing scheduled for June 19th, 1985.

At this time we will consolidate these cases for the purposes that a statement may be made by El Paso Natural.

Please continue, Mr. Pearce.

MR. PEARCE: Thank you, Mr. Examiner, I appreciate it.

As you stated, Mr. Examiner, these cases are on the applications of Hondo Oil & Gas Company for hardship gas well determinations.

In each of these cases El Paso Natural Gas is the purchaser of gas from the wells and has for some period of time been attempting to arrive at a cooperative effort with the operator of these wells to assure ratable taking of gas from them.

El Paso Natural Gas has in fact incurred substantial added expense on each of the wells involved in these three cases by installing additional valves that El Paso would control at the wells in question so that they can be regulated to produce only a ratable amount of gas.

These efforts began in approximately May of 1984.

Now, approximately a year later the applicant has applied for hardship gas well classification after El Paso has incurred substantial additional expense.

El Paso has now journeyed to Santa Fe to participate in this hearing which should finally resolve the questions of whether or not these wells are pro-

perly entitled to hardship gas well classification. On arriving at Santa Fe, El Paso discovered that the applicant in these cases has requested continuance until June 19th of 1985.

These wells currently are producing under emergency hardship gas well classification granted by the District Supervisor and our review of the correspondence from the District Supervisor to the applicant in these cases indicates to us a very wide range of producing abilities of these wells.

Running through them, one well has been granted emergency hardship classification for 285 MCF per day; another for 722; one for 11 MCF; one for 7.35 MCF; one well has been granted emergency hardship gas well classification for 1000 MCF a day; one for 40; and one for 322.

Mr. Examiner, we request that the Division carefully review each of these applications to insure that in order to prevent underground waste it's necessary for that amount of gas to be produced from any of these wells if, in fact, any steady production is necessary.

In addition, El Paso is concerned that these cases not be continuously continued until the full ninety-day period is up. Our recollection is that when these rules were instituted the ninety-day period was

inserted to insure that the Division would have sufficient time to act on these applications. I not understand that grant of ninety days to be a guaranteed ninety days production under that emergency status.

We would request that these cases not be granted another continuance after June 19th; that is the applicant is not prepared to go forward at that time, we would request that the cases be dismissed and that the emergency hardship status be terminated.

Once again, Mr. Examiner, El Paso understands that there are wells which deserve and need hardship classification in order to prevent underground waste. We think the historically pursued goal of ratable taking, which has been pursued by the State of New Mexico and El Paso Natural Gas, is an important element in the natural gas production system of the State of New Mexico.

Therefore, we ask you to carefully review each application brought before you to insure that all possible steps have been taken; to interfere in the least possible way with the ratable take system; and that no hardship gas well classification be granted unless the granting of the application is necessary to prevent underground waste.

Thank you, sir.

MR. STOGNER: Thank you, Mr.

Pearce, your statement will be made part of the record on ech of these cases.

Is there anything further in any case -- in Cases 8609, 8610, or 8611 to be considered at this time?

If not, all three of these cases will be continued to the Examiner's hearing scheduled for June 5th, 1985, at which time they will be continued again to the Examiner Hearig scheduled for June 19th, 1985.

(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. 8609 heard by me on 22 May 1985.

Examiner
Oil Conservation Division

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION
State Land Office Building
Santa Fe, New Mexico

19 June 1985

EXAMINER HEARING

IN THE MATTER OF:

Application of Hondo Drilling Company for hardship gas well classification, Eddy County, New Mexico.	CASE 8609

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 El Paso Natural:	John Nance Attorney at Law El Paso Natural Gas Co. P. O. Box 1492 El Paso, Texas 79978

MR. STOGNER: We will call next Cases 8609, 8610, and 8611.

MR. TAYLOR: The applicatin of Hondo Drilling Company for hardship gas well classification, Eddy County, New Mexico.

MR. STOGNER: We will call for appearances at this time. Mr. Nance.

MR. NANCE: Mr. Examiner, representing El Paso National Gas Company, my name is John Nance.

For purposes of hearing at these hearings I'm associated with the firm of Montgomery and Andrews of Santa Fe.

MR. STOGNER: Do you have a statement at this time, Mr. Nance?

MR. NANCE: Yes, sir, Mr. Examiner.

El Paso understands that the hearing in these cases has been postponed again until July 2nd.

We would like to reiterate the position stated by Perry Pearce on behalf of El Paso at the May 22nd call of these hearings.

El Paso is concerned that pro

duction in the State of New Mexico be ratable. We recognize that to the extent that a well is granted hardship status, that it has an impact on other wells that are subject to the proration rules in the state.

We feel that any well that is granted an emergency hardship classification, as has been done in this case, and where such classification is continued during the delays that are involved in the several continuances of the hearing, that those wells are infringing on and abusing the procedure that allows an emergency classification to be granted.

El Paso feels strongly that at the July 2nd hearing consideration should be given by the Examiner to dismissing the applications at that point. We recognize that there has been a proposal made that a second continuance in cases like this be grounds for dismissal of the application. We would support the position like that.

In this particular circumstance there perhaps has not been notice of that suggested procedure to the applicant and it may not be appropriate in this particular circumstance to dismiss the applications outright, but very strong consideration should be given to that and particular attention should be paid to the -- to the case that is presented by the applicant in order to justify the hardship well classification here.

MR. STOGNER: Is that everything, Mr. Nance?

MR. NANCE: I think that will suffice real fast for today but we do intend to be here on July 2nd.

MR. STOGNER: Thank you, Mr. Nance. Your comments will be so noted in the record.

MR. NANCE: Thank you, Mr. Stogner.

MR. STOGNER: At the request of the applicant and upon instructions from the Division Director, Cases Number 8609, 8610, and 8611 will be continued to the Examiner's Hearing scheduled for July 2nd, 1985.

(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. 8609. heard by me on 19 June 1985.

Michael E. Stogner, Examiner
Oil Conservation Division

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

2 July 1985

EXAMINER HEARING

IN THE MATTER OF:

Application of Hondo Drilling Company for hardship gas well classification, Eddy County, New Mexico.	CASE 8609 8610
and	
Application of Hondo Drilling Company for five hardship gas well classifications, Eddy County, New Mexico.	CASE 8611

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 Legal Counsel to the Division Oil Conservation Division State Land Office Bldg. Santa Fe, New Mexico 87501
For Hondo Drilling Co.:	Joel M. Carson Attorney at Law LOSEE & CARSON P.A. P. O. Box 239 Artesia, New Mexico 87501

A P P E A R A N C E S

For EPNG Co.: John F. Nance
Senior Attorney
El Paso Natural Gas Co.
P. O. Box 1492
El Paso, Texas 79978

I N D E X

N. RAYMOND LAMB

CASE 8609

CASE 8610

I N D E X CONT'D

CASE 8611

E X H I B I T S

CASE 8609

CASE 8610

CASE 8611

E X H I B I T S CONT'D

MR. QUINTANA: We'll call next Case 8609.

MR. TAYLOR: The application of Hondo Drilling Company for hardship gas well classification, Eddy County, New Mexico.

MR. CARSON: Mr. Examiner, my name is Joel Carson, Losee and Carson, P. A., Artesia, New Mexico.

I'm here representing the applicant and we are also the applicant in Cases Number 8610 and 8611, for a total of seven wells. The wells are all located in essentially the same area.

The well in Case 8610 is a Cisco, while the other two -- other six are Morrow wells, and would it be permissible simply to consolidate these for the purposes of hearing?

MR. QUINTANA: Is your testimony that you've prepared --

MR. CARSON: The testimony will be in general as -- we can perhaps expedite things to a certain extent in that some remarks will be general and as it applies to a particular well, of course, the exhibit indicates.

MR. QUINTANA: for purposes of

consolidating testimony, in the interest of expediting these cases as far as hearing them, we'll call Case 8609, Case 8610, and Case 8611.

These are all applications of Hondo Drilling Company for hardship gas well classifications.

You may proceed.

MR. CARSON: I propose to have one witness, Mr. Raymond Lamb.

MR. QUINTANA: Are there further appearances in this matter?

MR. NANCE: Mr. Examiner, my name is John Nance on behalf of El Paso Natural Gas Company.

El Paso has one potential witness here and we wish to swear him in in the event that we do decide to present evidence this morning.

MR. QUINTANA: Fine. Would all witnesses and potential witnesses please stand and be sworn in at this time?

(Witnesses sworn.)

MR. CARSON: May I proceed?

MR. QUINTANA: Yes, you may.

N. RAYMOND LAMB,

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

DIRECT EXAMINATION

BY MR. CARSON:

Q Would you state your name, please?

A N. Raymond Lamb.

Q And, Mr. Lamb, by whom are you employed?

A I'm a consultant and I'm employed at this time Hondo Drilling Company.

Q And what are you by education?

A I'm a graduate geological engineer.

Q Have you previously testified before this Commission?

A Yes, I have.

Q And have your qualifications been acceptable?

A Yes.

MR. CARSON; Is the witness' qualifications acceptable?

MR. QUINTANA: You said you have testified before the Commission?

MR. CARSON: Yes, sir.

A Well, I started in 1942.

MR. QUINTANA: I see. His qualifications are accepted.

Q Mr. Lamb, referring first to Application Number 8609, which is the Union Texas State Com No. 1 Well, are you acquainted with that application?

A Yes, I am.

Q And you -- it was --

A You need to give me a copy.

Q I'm sorry.

(Thereupon a discussion was had off the record.)

Q Now, back to Case 8609, Mr. Lamb, you have examined the application and are conversant with what it says, are you not?

A Right.

Q And in general terms it appears that Hondo has -- perhaps I should ask, what is the general purpose of the application?

A The application is for a request to relief the operation of this well from periodic and scheduled and voluntarily announced shut-in periods by the pipeline company taking the gas.

Q And the request states that the shutting

in of this well causes intrusion of water into the well, which permanently damages the formation and makes it difficult to restore production, if, in fact, production can be restored, is that correct?

A That's correct.

Q Do you agree with that engineering or geological conclusion, as the case may be?

A Well, this well is in the category of a -- all Morrow gas wells in southeast New Mexico. The formation has a characteristic of being subject to downhole damage, or in-hole damage, from shut-in periods of (not understood) the water and which causes logoffs in some cases -- we have one later on which is an obvious logoff.

To take a logoff test on each well for determining the damage is almost an impossible situation unless we would elect to vent our gas for a relative period of time, which we do not feel is to our advantage and to the royalty owner, and probably would not give us the full information.

The logoff test taken under a pipeline delivery basis is not a reliable procedure in that we have a varying pipeline pressure. So that would have a big influence on any interpretation of the test, would really not be reliable.

Q Has there -- is there anything that you

have done, Mr. Lamb, or Hondo has done or can do, to, as I would say to rectify the problem of shutting in this well?

I mean can you do something to minimize the damage or to make it where it would be easier on El Paso in their --

A Well, the only thing that can be done at this point is to eliminate the shut-in times; that is, physical shut-in times, which are announced by El Paso at various intervals. There's no system to periods of time.

We are confronted continuously with a varying line pressure and those we understand and we accept it because it's a way of existence at this point.

Q Is -- so is there -- is there anything engineeringwise you can do to make these wells better and fight the problem, so to speak?

A Well, you mean downhole rework or stimulation or --

Q Yes.

A -- that type of thing?

Q That's right.

A There's none we can do at this point.

Q Were the -- there is attached to the application in 8609, which we've marked Exhibit One, a schematic diagram. Would you refer to that diagram and I will ask you if that is correct to the best of your knowledge and be-

lief?

A This plat, to the best of my knowledge, is correct, and I will say that the rest of the information that is supplied, I did not make the preparation of the application, but in examining it I believe that it is correct and reliable.

Q Exhibit One in Case 9609 also has a plat, and we will refer to another plat as Exhibit Two shortly, so I'll skip that for the time being.

There is also attached thereto, is notifications to offset operators, is that not correct?

A That's correct.

Q I would like to refer you, Mr. Lamb, to what I have marked as Exhibit Two, which for purposes of the record should be noted to be applicable to exhibits to Cases 9609, 9610, and 8611.

Would you -- was that plat prepared by you or under your supervision?

A It was prepared by me.

Q Would you explain to the Examiner what that plat purports to show as to, I suppose, as to all three cases?

A The plat in assorted colors sets out each of the proration units and wells that are covered by all three cases.

The yellow dots on the wells are the ones involved in this hearing.

There is one of the tracts which is brown in Section 31 that has a blue dot and it is designated because it's Cisco production.

The flourescent orange dots are the producing wells in the area as related to the leases involved and this production.

This plat was put together to give an overall view rather than individual plats.

Q Mr. Lamb, that plat also has some typed information on it. Would you explain what that shows?

A Well, the typed information which is on here is -- is taken from C-115 reports. The first number is the oil production, the second number is the water, and then the gas and then the number of days production, again the gas, and the purchaser.

The reason these numbers are repeated happens to be that they are January figures. The second number which appears is a cumulative number for the year; however, in this case, being the first month, they are the same.

Q I would refer you to applicant's Exhibit Number Three, and ask you to identify that, or did I fail to give you one? Here you go.

Would you -- was that Exhibit Number Three prepared by you or under your supevision?

A It was prepared by me.

Q Would you tell the Examiner what that exhibit purports to show?

A This is a graph of the monthly gas production on the Union TX No. 1. It covers a period '82, '83, and '84 and the update of '85.

It is a monthly production sold into the gas line. There is no adjustment for shut-in time and the other indicators on the plat show an "SI", which means the times that the well was officially shut in by notice from 19 - early 1984 through '85; the prior ones were not desig nated.

Q Mr. Lamb, you -- what is the cost to bring this well back on production once it has been shut down?

A Well, I can give you an average cost because you -- you don't really know whether it's going to take one day of swabbing or two days of swabbing, or what, but a one day swab job would run about $1000.

Q And does that include the lost gas that you would have completing the swab job?

A Well, it', number one, the lost gas that you refer to is that number one, you're going to lose 10-

12,000 feet of gas in 2-3/8ths tubing under a pressure, basically, to begin with, of 600 pounds. So you're going to lose 10 or 12 MCF of gas there, plus, if it's a continued swabbing, you'd have an additional amount of gas which is a little difficult to estimate.

Yes, it's in there.

Q Mr. Lamb, I want to refer you to applicant's Exhibit Number Four and ask if you would identify that.

A It is a tabulation prepared by the operator in his office of the monthly production from January, 1984, through May of 1985, showing the gas production or revenue, oil and gas production, the working interest income, the cost of operation, and a profit and loss statement.

Q Mr. Lamb, the regulation calls for, or advises that in some cases the taking of a flow or so-called logoff test. Have those tests been made in this case?

A The daily production test and the charts that I have are here. As I say, the logoff testing on all of these wells is very difficult and unreliable unless you're prepared to vent all of the gas during the test period to the air, which we feel is above ground waste.

And the reason for that is that you do not have a uniform line pressure during any 24-hour period,

so you have a varying line pressure which needs to go into any calculation and therefore I can give you none on this well.

Q Were the logoff tests that were performed on some of these wells performed with the -- under the -- with the inspection of the New Mexico Oil Conservation Division?

A Yes, sir.

Q And are those records on file with the Division?

A Yes, and I know they are in the Artesia office.

MR. CARSON: Mr. Examiner, we have the results of those or the graphs. Would it be preferable for the Division to take administrative notice of its own records or would you like for us to reproduce those for purposes of putting in this?

A Joel. Joel.

MR. CARSON: We have the --

A We have made no conclusions of logoffs from these, but they are available to you.

MR. QUINTANA: I'll take administrative -- I'll take the route of taking administrative notice of the -- our Artesia District's records and I'll just take a look at those; I'll retrieve them from there.

MR. CARSON: Okay, sir.

Q Mr. Lamb, in your professional opinion would failure to grant this hardship gas well designation result in premature abandonment of this well?

A Yes. These temporary shut-ins -- these temporary shut-in schedules have not basically been extremely detrimental to this point, but as the production decline comes about, we're going to face more of it and you'll see the final evidence on another well which we have to report later.

Q Mr. Lamb, in your professional opinion would the granting of this application prevent underground waste, protect correlative rights, and prevent the premature abandonment of this well?

A Yes, but I would make one comment on the correlative rights.

We have no concern about correlative rights between our property and the adjacent property in that correlative rights applies only to the relationship of wells in the common pool.

We have really no problem at this stage of depletion of our well that correlative rights is going to be violated on anybody's part.

Q Will the granting of this application prevent the loss of reserves which could otherwise be re-

covered?

A Yes, it would.

MR. CARSON: Mr. Examiner, I would like to move the admission of the exhibits in this case. One through Four I believe is what they're numbered.

MR. QUINTANA: Exhibits One through Four will be entered.

MR. CARSON: I don't have any further questions of Mr. Lamb.

MR. QUINTANA: Mr. Nance, do you have any questions of the witness?

MR. NANCE: Are we going to --

MR. CARSON: We'll go on, if you'd like, and do them all at once, would be fine with me.

MR. NANCE: I would be happy to ask a couple questions at this point. I don't want to preclude the opportunity to ask questions relative to this well in light of the entire showing once that's been --

MR. CARSON: We have no objection if he wants to ask them that pertain to all wells at the end. It just depends on what's convenient.

MR. QUINTANA: I would prefer that you ask questions right after each exhibit, because when I'm writing my notes here, it makes it easier for me to write my notes pertaining to one specific well, you know, I

may, grant one well, I may grant all wells, I don't know, and that way I can, when I go through my notes again, I look back and know what happened, I can look in one section and they'll all be in one section.

If you have questions to ask, please ask them at this time.

MR. NANCE: Yes, indeed.

CROSS EXAMINATION

BY MR. NANCE:

Q Mr. Lamb, with respect to this well, the Union Texas State Com No. 1, it appears that you have made a showing of some of the results of the wells having been shut in.

The copy of Exhibit Number Three that I had seen, indicates some dropoff in production but I -- I did not see that there seems to be a serious and lasting effect in reduced production following shut-in periods.

Do you see that a little differently?

A Well, you are correct in seeing what we have here, but what I said later was we are at the point of continued shut-in at unequal, unscheduled times, of causing problems which we would prefer now to avoid.

We do not want to walk into logoffs without making every effort we can to stay out of it.

Q I see.

A And we know that it's coming.

Q What you're saying, however, is that up to this point you have not experienced that type of --

A It's not serious.

Q -- problem yet. As far as variations in pipeline pressure are concerned, is this something that is unusual or is this more a standard operation condition that every operator faces in the operation of a well?

A All operators face it unless they go to the compressor.

Q Now, in making an application for a hardship well application -- excuse me.

In making an application for a hardship well classification there are a number of showings that are suggested, among them being efforts to correct problems within the well.

A We've had no problems within the well.

Q The harm that has resulted when the well has been shut in and in terms of actual harm to the well or -- or to the reservoir itself, there is none of that that you can demonstrate at this point, is that correct?

A It's not pronounced at this point.

Q Okay. What specifically do you see as the problems with the well, if any, in addition to the -- to

the water that would accumulate during the shut-in period?

A Well, the water accumulation will cause two things.

Number one, it will load up. In other words, a restricted flow on the well will let water accumulate in the bottom and in time kill the well.

When the accumulation of water in the bottom of the hole has bene known, and does, cause a precipitation in the reservoir, it causes a blockage of -- with the silting material in the collection, and sometimes scale.

Now the Morrow is a very unusual, and I'm sure that they've heard this in the Commission, erratic-type formation, and a complete prediction from one well to another is not a very easy thing to do, but from the overall history of the Morrow, we want to be as careful as we can not to cause underground waste, logging off, and the loss of production of ultimate recovery.

Q Do you feel that this well, though, is in any sense unusual and deserves any type of special treatment in relation to wells, other wells that are in the area?

A Well, most of the wells in the area, well fifty percent of the wells in the area covered by this request, these requests --

Q Right.

A -- and I would think in time most of the

other wells will be, the operator will be asking for a continued flow on market demand which controls the line pressure and we understand that that's something that you can't do anything about, and we understand that the other marketers can't do anything about, but we would like for the schedule shut-in out of your office on the computer to be at an absolute minimum because in time it is going to cause us loss of production and reserves.

Q Are there periods of time that you, in your opinion, would not be harmful -- a minimum period of time that would not be harmful for the well to be shut in?

A Well, do you mean time? Do you mean hours, days?

Q In terms of hours or days, yes.

Q Any -- any shut-in on a well that is approaching its flowing ability is going to be harmfula nd it's just as bad, almost, for an hour as it is for a day.

Q Is there any --

A The stopping of the movement of the fluid is the basic problem.

Q Is there any study that you have made on this particular well of a minimum flowing rate that could be sustained that would prevent the types of problems that you're discussing here that would be less than the full producing capacity of the well, that would allow El Paso, for

example, as the pipeline, to take less than full production but still keep the well on line?

A Well, our application states a 722 Mcf a day. Personally I think there's a little margin in that number.

Q What is the current producing rate of the well?

A That would be about the average current producing rate.

Q So there is not a specific study that has been made of a lower acceptble figure?

A Well, as -- let me go over this again.

Q Yes, sir.

A To reduce the flow of the well with the cycle of pressures that we have in the line would not give you the basic information you need to make the determination.

Q This is the logoff test you're talking about?

A Yes.

Q All right, and the logoff test has not been conducted on this particular well?

A Well, we have these tests, but as I said a minute ago, we have drawn no conclusions from them because of the varying pressure of the line, and the well floats on

the line.

Q So there are certain--

A In other words, we have no choke on the well.

Q There are --

A The well floats on the line.

Q There are certain periods of time, in other words, that 500 MCF a day, perhaps, might be an acceptable rate and other times in which that would be too low to prevent the problems you're talking about here.

A Well, we, of course, would prefer the 720, but 500 would -- would let us live, but, well, we don't say any particular reason that this well, being cut below its ability with the other wells in the area on a top allowable.

Now we really prefer not to be shut-in on the schedule we are shut-in by the pressure, but we will --

Q The gathering line pressure, is that what you mean?

A On the gathering line pressure we are shut-in but we prefer not to have any physical shut-in.

We do not want to interrupt the flow of gas out of the well.

MR. NANCE: Mr. Examiner, I don't think we have any further questions on this particular

well at this moment.

We would like to be able to address this well along with the others, perhaps, later in the proceeding.

CROSS EXAMINATION

BY MR. QUINTANA:

Q Okay, Mr. Lamb.

A Yes, sir.

Q I have a question for you just to make this clear in my mind.

Is your testimony at this time you have no problems with the well, no --

A That's right.

Q -- operating problems. You also have not experienced a loss of reserves as of yet?

A Beg your pardon?

Q You have not experienced a loss of reserves as of yet?

A Future reserves, you're talking about?

Q Future recoverable reserves.

A We have no evidence of it. You will note that we have only officially shut-in times on this well and they have been recent times.

Q Now, to clarify in my mind, the reason

you're asking for a harshipt gas well classification, you are telling me that I should grant you a hardship gas well classification because if I don't allow you to produce at this requested rate of 722 MCF a day, in the future you will develop problems with the well as far as loss of reserves.

A Right.

Q But as of now, you do not have anything to show that.

A Well, we -- no, that's right.

Q But --

A We're at -- we're at the breaking point on this well.

Q On what do you base that?

A Well, on the -- on the evidence that we will have on other wells. In other words, we have some that are further down the road than this one.

Q And it's your testimony that these other wells, since they're all Morrow gas wells except for one, they will pretty much show the same thing for each individual well. Fine, we'll take that up when we get to the other wells.

A Okay.

MR. QUINTANA: You may proceed. I have no further questions for the well in Case 8609.

You may proceed with the well in Case 8610.

REDIRECT EXAMINATION

BY MR. CARSON:

Q Mr. Lamb, let's get your exhibits out of the way for that case so we don't get confused.

Mr. Lamb, I hand you applicant's Exhibit Number One in Case Number 8610 and ask if you could identify that?

A Well, we haven't had --

Q Could you identify that?

A This is the application filed by Hondo Drilling Company in behalf of the Alscott No. 1, which is a newly completed Cisco Well at this point. It's a similar type reservoir but it is a different zone.

Q Are you familiar with the well which is the subject of this application?

A I am.

Q And as was the case with the preceding application, I believe, that Hondo has stated that the -- it is their belief that the shutting in of the well would cause intrusion of water into the well which would permanently damage the formation and make it difficult to restore production, is that correct?

A That is correct.

Q And is that -- do you agree with that statement?

A Yes.

Q You have previously stated what happens to a well when it is shut-in. Would that statement be the same --

A Yes.

Q -- for this well? Have you -- to make it clear, has -- have you done anything or can you do anything to this well to rectify what you view as the problem caused by shutting it in?

A No, there is not anything physically that we can do to the well to -- to restore it.

Q I mean there's not -- you can't change the size of the tubing or --

A No.

Q -- put in additional equipment, or any thing like that?

A No.

Q This application, Mr. Lamb, which is marked as Exhibit Number One, has a diagram of the wellbore. Would you look at that?

A Okay.

Q Is that diagram true and correct to the

best of your knowledge, Mr. Lamb?

A To the best of my knowledge it's correct.

Q Okay. Mr. Lamb, were the offset operators notified of this application?

A They were.

Q We have previously identified and had admitted into evidence, Exhibit Number Two, applicable to all cases, which is the colored plat.

Would you in Case Number 8610 refer to that plat and explain its applicability to this particular case?

A The Federal Alscott from the Cisco is located in Section 31 of 18, 29, and is identified by the brown tract that has the blue dot, which is a designation that it is a Cisco well, the production in the Morrow being abandoned and coming back up the hole and completing in a different formation, and you will note the depths are around 9518 to 48; pay zone covers about 30 feet.

It's the same type formation as the Morrow; therefore we have classified it in with these same hearings.

Q Okay. It has the same problem with -- in the sense it's easy to damage.

A Right.

Q Would you refer to what has been called

Applicant's Exhibit Number Three, which is a graph?

A Okay.

Q Would you -- was that graph prepared by you or under your supervision?

A It was.

Q Would you explain to the Hearing Examiner what that graph shows?

A The graph is identical in character to the previous one. It gives the monthly production on a semilog paper by years, and it is the production by months. And the arrows in this case also indicate the number of times, as close as we can put te arrows in, for the time that's been shut-in since August of 1984.

Q Can you draw any conclusions or what have you learned from this preparation of that exhibit?

A Well, the production makes some unusual changes and the decline is, from prior time, is at the economic limit. As a matter of fact, if you'll look at the next exhibit, we are below the economic limit and have been since January of 1984.

So we are below marginal and below the economic limit and we certainly feel that the shutting in of this well during these numerous times is detrimental to the well.

Q Mr. Nance asked awhile ago about what

would be the lowest sustainable flow that this well could stand.

A Well, 7.35, which is in the application, is about as low as -- it also would be a minimum and a maximum.

Q You previously testified as to the cost of bringing this well back on-stream after each shut-in. Is that -- is that testimony applicable to this well, as well as the others?

A It would be slightly less but (not understood) because it's shallower. The days of the rig probably won't change.

Q Mr. Lamb, I'm going to refer you to Applicant's Exhibit Number Four and ask if that was prepared under your direction?

A It was.

Q Would you --

A No, the Number Four? It was prepared by Hondo Drilling out of their (not understood).

Q But at your request?

A Yes, sir.

Q Would you explain to the Hearing Examiner what that shows?

A It is a tabulation of the production by month from January, 1984, to May of 1985. The income to the

working interest, the cost of operation, and the profit and loss statement.

Q Mr. Lamb, do you have any predictions as to the -- what the loss of reserves would be by the premature abandonment of this well caused by damage to the formation?

A Well, based on evidence of other wells in the area, the volume certainly can't be large because our monthly volume is not that large, but to make an estimate, we're only talking about 50-60 MCF gas.

Q That would be lost?

A Yes.

Q Mr. Lamb, in your professional opinion would the granting of this application prevent underground waste, protect correlative rights, and prevent the permature abandonment of this well, a loss of reserves?

A Yes.

MR. CARSON: I don't have any further questions.

MR. QUINTANA: Mr. Nance?

RECROSS EXAMINATION

BY MR NANCE:

Q Okay. Once again we have a situation, Mr. Lamb, of there not being a signficant change in the pro-

duction levels of the well over the history of the well prior to these announced shut-in periods that you've indicated and that production since those shut-in periods have been occurring.

Do you truly see an impact of shut-in on the producing ability of the well?

A Well, I feel that there is an impact and there will be continued detriment as far as the economics of the well is concerned by the shut-in periods.

Q As you demonstrated on your Exhibit Number Four here, the well appears to be operating at a loss since January of 1984.

Do you feel that allowing the well to produce at a constant -- well, at its producing ability without shut-in would tend to allow the well to be operated at at least a break even or a profit?

A We hope so.

Q You don't have any indication of the previous economics of the well's operation prior to the shut-in periods?

A Well, I don't have tabulation of the shut-in periods, as I said before, I don't have those. The fact that they're not here doesn't mean that they didn't occur. It is that I don't have them.

Q I see. Once again you have not indicated

in your testimony or your exhibits any corrective action that might have been taken or that has been taken as far as trying to prevent the problems that you're talking about in this well?

A Well, we haven't taken any because we haven't felt -- didn't feel it was justified or would make that much difference in the (not understood), but nothing we feel that we can do.

Q I see. Each of these shut-in periods that you have indicated on the Exhibit Number Three, do you know if all of those are at the request of the pipeline?

A Yes, positive.

Now, let me explain another thing, Mr. Nance. These are the official written notices. We do not have a tabulation of the telephone notices.

Q I see.

A And there were others than these. These are the official written ones that I have, and I have evidence to that, but I do not have a complete record of the telephone calls, "please shut that well in."

Q Is this well producing from a prorated gas pool?

A No. It's a single-well pool.

MR. NANCE: I don't think we have any further questions on this particular well, Mr. Exa-

miner.

MR. QUINTANA: I have no questions of the witness.

A If you will, Mr. Examiner, I'd like to state one other thing to clear any minds.

A shut-in period by notice sometimes will take in, say, six hours of one day and six hours of the next day. So on your production records you will show production on both days but the shut-in period may be a part of it and that's just a little item that I think needs to be in mind as to the length of time.

I've seen a shut-in notice for an hour and a half. I've seen a shut-in notice for 3 hours. I've seen a shut-in notice for 53 hours, and those things give us problems, not only in the production of the well but the management of the personnel.

And the most annoying are the telephone calls.

Q Is there any indication -- I'm sorry, I had --

MR. QUINTANA: You may cross examine, if you'd like.

MR. NANCE: If I just may ask one additional question.

Q Do you have any indication why production

dropped off relatively significantly from February down to March but then picked up again following March in 1985?

A No.

Q You don't know what that would be?

A There's no physical evidence that -- that wells, gas wells in particular, in my opinion, are personalities and they have character that carries these things on. We need to figure it out but sometimes it's very difficult.

REDIRECT EXAMINATION

BY MR. CARSON:

Q Mr. Lamb, does this well always produce at greater than a line pressure?

A No. We go back to the shut-in to the line pressure, we are accepting, not gracefully, but we are accepting the control which is placed on this well by the line pressure. It's just something that we and everybody else has to live with, but the additional shut-in periods are really, the thing that we're concerned about.

Q What is the difference in the effect on a well between shut-ins caused by line pressure and what you've previously referred to as physical shut-ins?

A Well, a physical shut-in is a -- is a stationary, no movement.

When a well is floating on the line, it

can give or take, except it can't take much from El Paso because it has a check valve on the line, but there is a breathing and can be a movement, but physically be shut-in, period.

Q Well, what, like geologically or engineeringwise, what is -- what does it do?

A Well, we have always had the opinion that a stationare, permanent shut-in, a no movement of fluid, is more detrimental than a breathing period.

MR. QUINTANA: The testimony you're about to give is on the next -- Case 8611?

MR. CARSON: Yes, sir, we're going --

MR. QUINTANA: We're through with these for 8610?

MR. CARSON; We're through with 8610. We're going on to 8611, the Alscott Federal No. 2.

MR. QUINTANA: My, something came to mind real quickly and I think I know the answer to it, but I'd better ask it before I forget it this time.

RECROSS EXAMINATION

BY MR. QUINTANA:

Q Both these pools are not prorated.

A Right.

MR. QUINTANA: You may proceed.

REDIRECT EXAMINATION

BY MR. CARSON:

Q Mr. Lamb, I hand you the application for -- in Case Number 8611 for the Alscott Federal Well No. 2, and ask if you would identify that?

A It is an application prepared by the Hondo Drilling Company in Midland for the hardship case of the Alscott No. 2 Federal Gas Well, producing from the Morrow.

Q In that application, as well as the other applications, Hondo has stated that the shutting in of this well causes the intrusion of water into the well which permanently damages the formation and makes it difficult to restore production.

Is that -- is that -- do you agree with that statement?

A That's correct.

Q Is there anything else that you would like to add as far as damage caused by shutting in the well?

A No. This -- this well follows the same pattern as the other wells in the Morrow.

We're in the -- at the economic limit and we're in a marginal stage of production. We have the

fear and the concern of logoffs as one other well in he area has had.

Q We've asked you in the previous case, and I'm not sure that it's been that clear as to what your answer is, but is there anything that you have done or can do of a remedial nature to prevent this problem?

A Everything that we know of to do has been done and there's nothing else that we know of at this point that can be done.

Q The application for the Alscott Federal No. 2 has a -- shows a diagram of the wellbore.

A Right.

Q Is that diagram correct to the best of your knowledge and believe?

A It is correct.

Q And you also show notification of the offset operators, is that correct?

A Right.

Q I refer you to Applicant's Exhibit Number Two, which is the combined exhibit in Cases Number 8609, 8610 and 8611, and ask you to explain that exhibit insofar as it pertains to this case.

A The Alscott 2 is in the south half of the Section 30 of 18, 29. There's 320 acres dedicated to it.

The number 27 on the left is the barrels

of oil production. Water production is zero. The gas production is 4257, and as far as the records, it produced 31 days.

Q All right.

A This is for January, 1985.

MR. QUINTANA: Let me interrupt you for a second.

Are you going to submit one of these for each one of these wells?

MR. CARSON: Yes, sir.

MR. QUINTANA: Sally, let's get off the record for a second here.

(Thereupon a discussion was had off the record.)

A And through May of 1985 a dramatic change in the producing ability of the well, and I also see considerable number of officially shut-in times by El Paso.

The swing of production in the latter part of '83, I do not have any information to explain that, but we see evidence here of the declining production and we hope it's not a logoff trend.

Q Is your testimony the same as it has been in the other cases that it costs $1000 or so per day to swab these?

A Yes, sir.

Q I'm going to hand you what I've now marked as Applicant's Exhibit Number Four-A and ask if that was prepared at your request?

A It was prepared at my request by the Hondo Drilling Company of Midland, Texas.

Q Okay.

A From their official records.

Q And tell the hearing officer what that shows.

A It is a tabulation of the gas income -- gas production, the working interest costs, the working interest income, the cost of operation, and the profit and loss statement.

Q Okay. Is there a suggested minimum sustainable flowing rate that -- that you could recommend --

A Let me see the application again.

Q I think you have it.

A Oh, do I have it? Well, 322 MCF a day.

Q And what is it now producing, approximately?

A That's approximately the amount it's producing.

Q Okay, so that any less would what?

A Well, it would curtail the flowing and be

forced to restrict flow on the well.

Q Is this another one of those wells which is having to fight the line pressure?

A Yes.

Q At the same time?

A Yes. They, all these wells, fight the line pressure.

Q Mr. Lamb, in your professional opinion would the granting of this application prevent underground waste, protect correlative rights, and prevent the premature abandonment of this well and the loss of reserves which it did to other wells here?

A It would.

Q Mr. Nance and the Examiner have asked you from time to time about what makes this well or these wells unique from other people's wells.

A In the area?

Q Yes, sir.

A There is nothing unique about these wells, where the others are going to face the same problems whether they have been in for a hardship case, I don't think so, but they will be here because they're in the same category; the same thing is going to happen to them.

Q In other words, what you're saying is that the shutting in from time to time of the wells in this

particular -- the Morrow wells in this particular area, will cause damage to all of those wells.

A That's right; they can expect it.

MR. CARSON: I don't have anything further.

MR. QUINTANA: Mr. Nance?

RECROSS EXAMINATION

BY MR. NANCE:

Q Mr. Lamb, once again there's a situation here of there not being a clear indication of any sustained damage to the well during the periods of shut-in, is that correct?

A No. The latter months, which I discussed a few minutes ago, show evidence of the trend that definitely has turned downward.

Q But then the upward turn over the perid from April through May of 1985, similarly there's no explanation for that, either, is that correct?

A Well, it's part of the personality of the well.

Q All right. You don't have any explanation for the tremendous swing upward between the end of 1983 and the first couple months of 1984 in the well's producing history?

A I need your question again.

Q I'm sorry. Do you have an explanation for the significant upward movement of this production curve from the period of late 1983 to early 1984?

Is there anything that was done to the well --

A No, no.

Q -- at that point that --

A No, no rework.

Q -- would indicate such a change in production?

A No.

Q Do you feel that there may be a production level less than the 322 MCF per day that you've indicated in the -- or that has been indicated in the application that would, perhaps, be an acceptable level of production that would prevent or at least postpone damage to the well?

A Well, you keep asking this question and let me go into a little depth on it.

Q Certainly.

A No. Now, the answer is no. In early '87 there will be because that will be its maximum production.

See, you're on a declining basis whether you can like it or not. You're on a declining basis.

The character of the curves are not normal. If this well were on a uniform line pressure, that curve would be as straight as a string.

The zigs and zags are from some restrictions that we put on the well. The normal decline is about 15 percent per year in the Morrow.

So you ask me if the 322 will be correct in '87, the answer is probably no, because it won't come anywhere near that production in '87. It should be down a good 30 percent.

Q Okay, would you agree that what we're concerned with today is the minimum amount of production that would be acceptable to prevent damage in the well today?

A At this point, right.

Q All right. And it is your opinion and your testimony that the 322 MCF per day which is the current average rate of production --

A That's right.

Q - is also the minimum rate that would prevent the damage --

A Right.

Q - that we're talking about.

A Right.

MR. NANCE: I have no further

questions on this well.

MR. QUINTANA: Bear with me a second.

RECROSS EXAMINATION

BY MR. QUINTANA:

Q Mr. Lamb.

A Yes.

Q On your Exhibit Number Three-A, that latter -- I mean the first part of 1985 shows a sharp decline in monthly gas production, can that sharp decline be attributable to the fact that they were being shut-in at that time and not based on the capacity of the well to produce?

A Well, that is the only outward influence that was put on the well, except as we've talked about many times, the cycle of the line pressure.

The cycle of the line pressure and the shut-in periods indicated are the only things that have been changed.

Q What I'm trying to say is -- maybe you misunderstood me -- what I'm trying to get at is would the decline be due to the fact that you weren't producing instead of the fact that it was shut-in and it was attributable then to lost reserves?

A Well, occasionally there is a manual

pinchback if the well seems to operate a little better at an adjusted choke, but that would be the only reason would be for more efficient operation.

What I'm talking about is loading up, if you can find a choke at which the well will flow continuously, if you open it, it will load and die. So it's the most efficient condition that we know.

RECROSS EXAMINATION

BY MR. TAYLOR:

Q Mr. Lamb, on your Exhibit Four-A, for November, those figures don't seem to make any sense. Would you look at those and explain them?

A Well, that's -- that's part of the national game; that's a rebate.

Q Well, why -- you show gas production of 10,000. What would your income be?

A Well, the income --

Q I don't understand the whole thing.

A Well, the numbers that you see here are the income of the production, which is 10,471 cubic feet of gas, less the rebate, which gets you down to a minus $6,297.59. That's the amount of the rebate.

Q What are you talking about; what rebate are you talking about?

A It's a Federal Energy Regulatory Commission refund and it's on all of these.

Q Well, if it's a refund, how do you show a loss?

MR. CARSON: It was a refund back to El Paso and back to the consumer, also.

Q Well, if that's -- okay.

A It's on all -- well, I would say without just now going specific, it's on all the wells.

Q Okay, well, that's --

A You know, that's the weird one in there. It's to cover the rebate. That's what the cost amounts to.

Q Well, that's essentially incorrect to show a loss for any given month, then, right, because that rebate should probably be scattered out over a year.

A Well, who knows how to carry it? That's the problem.

Q Okay.

A And it's on all of them that way. See, the amount of the rebate was a bill from El Paso.

MR. CARSON: I'd like to ask him a couple more, if I could, please.

MR. QUINTANA: You may proceed.

REDIRECT EXAMINATION

BY MR. CARSON:

Q Mr. Lamb, I want to refer you back to Exhibit Number Three-A and the decline in 1985.

A Okay.

Q And ask if there is anything that you attribute that decline to other than the constant shutting in of the well?

A Nothing that I have record of.

Q We talked about a number of other things, such as chokes and line pressure and so forth, but in your professional opinion, that's not what caused the well to decline, is it?

A No, because that was the same influence on the curve prior to that. In other words, it's a stable influence.

Q Uh-huh.

A The surge of the line pressure and those things are stable things. As I said before, it's a way of life, unfortunately.

MR. CARSON; That's all I had.

MR. QUINTANA: Fine, we'll proceed on with the next well.

(Thereupon a recess was taken.)

MR. CARSON: We'll continue now with the Alscott Federal Well No. 3.

Q Mr. Lamb, I'm going to hand you what I've marked as Applicant's Exhibit Number One-B.

I didn't mark yours, by the way, Mr. Nance.

MR. NANCE: Just fine; I've marked them already.

Q And ask if you can identify that?

A It is an application by Hondo Drilling Company, Midland Office, for classification of hardship gas well on the Alscott Federal No. 3 in Section 31, 18, 29, Unit O, which is identified on the large plat in green.

Q Mr. Lamb, are you familiar with the well which is the subject of that application?

A Yes.

Q And in this application, as well as the others that precede it, Hondo has stated that the shutting in of the well causes the intrusion of water into the well --

A That's correct.

Q -- which permanently, damages the formation and makes it difficult to restore production.

A Yes.

Q Do you agree with that?

A I agree.

Q Mr. Lamb, we have asked you in other cases and ask you in this one is whether there is any remedial measures that could or should be taken to prevent this problem?

A There are none at this time.

Q The application shows a diagram of a wellbore. Is that diagram correct to the best of your knowledge and belief?

A It is.

Q Were the offset operators notified of this application?

A They were.

Q Mr. Lamb, I refer you to a combined exhibit, which is marked as Exhibit Number Two, and ask if you would explain that exhibit insofar as it applied to the Alscott No. 3.

A The Alscott No. 3 is located in the south half of Section 31. The well's location is Unit O and the township is 18, 29, and was designated as green.

Q Now, Mr. Lamb, I'll hand you what I've marked as Applicant's Exhibit Number Three-C. Was that prepared by you or under your supervision?

A It was prepared by me.

Q Would you explain to the Hearing Officer

what that exhibit shows?

A This is a graph of the monthly gas production on the Alscott 3 on a semilog paper beginning in January of 1982 and ending in February of 1985, and I do note that on the tabulation, next exhibit there's a couple or three other months that are not on this sheet.

And the arrows indicate the number of official written notices from El Paso to shut in.

Q What conclusions do you draw from that exhibit?

A Well, we are at this point on a decline of our production and the decline at this particular point appears to be caused from the shut-in periods which we have designated as four since December, November of 1984.

Q And the costs of bringing this well back on production after it's shut in are essentially the same as the other wells?

A Yes, $1000, estimating one day.

Q Mr. Lamb, except for what you view as the peculiarities of each Morrow well and for that matter, the Cisco well, the behavior of these wells is essentially pretty much consistent throughout, is it not?

A That's right, they're the same.

Q I'm going to hand you what I have numbered as Applicant's Exhibit Four-D and ask you to

identify that.

A This is a tabulation of the monthly production from January of 1984 through May of 1985, showing the monthly production, the working interest income, the operations expense, and the profit and loss.

Since it was mentioned, I will mention the December of 1984 does reflect a rebate to Federal Energy Regulatory Commission.

Q Was that exhibit prepared under your supervision?

A It was prepared at my request.

Q It's previously been asked in regard to the other wells, if there is a -- if there is a minimum rate of flow that you could suggest these wells could be -- this well could be produced at without damaging the formation.

A The application states 11 MCF a day.

Q And that's -- that would be the minimum that you --

A Yes.

Q Is this another one of those wells that's also fighting the line pressure?

A Yes.

Q Is it true, Mr. Lamb, that all of these wells we're talking about today essentially are fighting the same line.

A That's right; same line pressure.

Q Mr. Lamb, in your professional opinion would the granting of this application prevent underground waste, protect correlative rights, and prevent the premature abandonment of this well and the loss of reserves which could otherwise be recovered?

A Yes, it would.

MR. CARSON: I don't have any further questions of this witness.

MR. QUINTANA: Any questions, Mr. Nance?

MR. NANCE: I don't have any questions on this well, Mr. Examiner. Thank you.

MR. QUINTANA: And I have no questions.

You may proceed on with the next case.

MR. CARSON: Okay, let me gather up my stuff here.

Q I would like to proceed on to what we've marked as Exhibit One-C, the Trigg Jennings Well. I'll hand you that Exhibit Number One, Mr. Lamb, and ask if you are acquainted with that application?

A I am.

Q And are you familiar with the well which

is the subject of the application?

A Yes.

Q As was the case in the other "aps", Hondo has stated that the shutting in of this well causes the intrusion of water into the well, which permanently damages the formation and makes it difficult to restore production. Do you agree with that?

A I agree with that.

Q Have there been -- it's previously been asked in connection with the other wells if there is anything that can or should be done or has been done to remedy this situation.

A Nothing at this time.

Q Okay. Is there anything that could be done?

A Not that we know of at this time, but if conditions change and a condition develop, we would research it and determine.

Q The application shows a diagram of the wellbore. Is that diagram correct to the best of your knowledge and belief?

A Yes.

Q And were the offset operators notified of this application?

A They were.

Q Mr. Lamb, you've previously been given an application, I mean a plat which is numbered as Exhibit Two. Would you explain that plat insofar as it applied to the Trigg Jennings No. 1?

A The Trigg Jennings No. 1 is the south half of Section 28 of 18, 29, and is colored blue and has a yellow dot, dot which indicates Morrow production. The designations are numbered through that as they were before, the oil, the water, the gas, and the number of days and the pipeline connection.

Q I refer you to Applicant's Exhibit Number Three-C and ask if you can identify that.

A It is a graph of the monthly production by months on a semilog paper from January of 1982 through February of 1985.

Q Can you -- was that prepared by you?

A It was prepared by me and the arrow indicates the number of times the well has been shut in since August of 1984.

Q Okay. Now, Mr. Lamb, what conclusions do you draw from that exhibit?

A We're seeing a normal decline of the production and in more recent times a more dramatic decline in production we attribute to the shut-in periods of the well, understanding that this well does float on the line to El

Paso.

Q You have some dramatic drops in production in '82 and '83. Do you know what that is?

A No, I don't have the records for that.

Q And you've previously testified as to the costs of bringing this well back on production. Is that the same as it is for the other wells?

A Yes.

Q I will hand you what has been marked as Applicant's Exhibit Number Four-C and ask if that was prepared at your request?

A It was.

Q Is it true and accurate to the best of your knowledge and belief?

A It is.

Q I don't know whether I asked this question before, but we have previously talked about a minimum flowing rate. Could you suggest what that should be?

A On the Trigg Jennings?

Q Yes.

A 285.

Q 285 MCF --

A MCF a day.

Q Is that -- can that be reduced or is that your opinion as to what the minimum would be?

A Well, at this point we feel that that's the minimum.

Q Mr. Lamb, in your professional opinion, would the granting of this application prevent underground waste, protect correlative rights, and prevent the premature abandonment of this well and the loss of reserves that could otherwise be recovered?

A It would.

MR. CARSON: I don't have any further questions.

MR. QUINTANA: Mr. Nance?

RECROSS EXAMINATION

BY MR. NANCE:

Q With respect to the suggested minimum production, is that also the current average production?

A Right; correct.

MR. NANCE: No further questions.

MR. QUINTANA: I have no questions concerning this well. I will, however, at the end of your testimony for all the wells have a question that will pertain both to El Paso and to Hondo Drilling with the minimum requested rates on some of the specific wells.

You may proceed with the next well.

REDIRECT EXAMINATION

BY MR. CARSON:

Q Now, Mr. Lamb, I'm going to refer you to what I've previously marked as Applicant's Exhibit Number One-D, the Wright Federal No. 1, and ask if you can identify it?

A It is an application by Hondo Drilling Company for classification of the Wright Federal No. 1 as a hardship gas well.

Q Are you familiar with the well which is the subject of the application?

A Yes.

Q And in that application, as is the case with the other applications, Hondo has stated that the shutting in of the wells causes the intrusion of water into the well which permanently damages the formation and makes it difficult to restore production.

A That's correct.

Q And do you agree with that conclusion?

A Yes.

Q This -- you also have a schematic of the wellbore.

A Correct.

Q Would you -- is that schematic correct to the best of your knowledge?

A It is.

Q Has -- and were the offset operators notified of this --

A They were notified.

Q -- application? Exhibit Two is a plat. Would you show that, explain that plat to the Hearing Examiner?

A The plat Two covers all of the tracts of all these hearings and the Wright 1 is in Section 29, Unit N, and it is colored in red with a yellow dot, indicating Morrow production.

Q Okay. Now, Mr. Lamb, is there -- is there anything of significance that would differentiate this well geologically from any of the other wells that we've been talking about?

A No.

Q In other words --

A Same structure.

Q Except for the peculiarities that you mentioned, this well should behave essentially the same way as the other wells.

A Correct.

Q Is this correct?

A Correct.

Q I'm going to hand you what I've marked as Exhibit Three-D and ask if you can identify that?

A Three-D is the monthly gas production graph of the Wright Federal No. 1 from January of 1982 through January of 1984.

Q Can you explain what that graph shows?

A This graph is a typical -- shows a typical well that has logged off, and the erratic production that took place in the prior two and a half years, which means, in my interpretation, that it has been attempting to log off a number of times in the last three years; namely, in July of '82, later in '82, and then again in July of 1984, but was revitalized and then in November of 1984 she logged off and was plugged and abandoned.

So this is a typical example as to what we expect. This is a Morrow formation, yeah. This is a typical logoff of the type of production we've been talking about on all the other wells and we are filing these applications in an attempt to avoid our other wells going into this same situation.

Q Now, do you attribute that logging off to the shutting in of these wells or natural conditions?

A Well, the shutting in of the wells and to stop the flow or movement of fluids is a contributor to those factors, yes.

It has caused the fluid not to move. This well has been subjected to the same line pressure flow

that the others have but it, obviously, has been sealed off by precipitation or the settling of smaller particles to the point of abandoning the production.

Q Mr. Lamb, the Wright Federal No. 1 Well itself has not been abandoned.

A No, the well itself has not been. We're talking about --

Q That graph shows a producing zone in that well, is that correct?

A It is comparable to the producing zones in the other wells.

Q And is it -- would it be correct to say that that Exhibit Three-D is an example of why you are applying for hardship gas well designation as to all seven wells.

A That's correct.

Q Because the geology would be similar.

A That's right.

Q I am going to hand you what I have marked as Applicant's Exhibit Number Four-D and ask you to identify that.

A This is a tabulation of the gas production on the Wright Federal No. 1 from January of '84 through January of -- February of '85; was production from a lower zone which is represented by this graph, along with the

working interest income, the cost of operation, and a profit and loss.

Q Was that prepared by you or under your direction?

A At my direction.

Q Now, Mr. Lamb, let's go back and some place in that Exhibit Number four you change zones. It's not all production from the same Morrow zone, is that correct?

A That's correct.

Q Okay, well, be sure that you make it clear to the -- for the purposes of the record where the change occurs.

A The last production for the lower zone was in February of 1985, which was 36 MCF of gas.

The well was then reworked, plugged back into a higher zone, and perforated into another Morrow zone.

Q In other words --

A The lower zone and the upper zone will have, in our judgement, the same characteristics of logoff.

Q What -- and this particular case we do not need to discuss the costs of bringing it back on production because there is no production from that zone.

A That's right, but for the production after March of 1985 the costs would be --

Q The same?

A Yeah, the same.

Q Is there any minimum flowing rate that you would suggest for the different -- for the second zone which -- from which you are now producing?

A Well, we, on the application we have estimated the minimum to be a million a day.

We have no record of shut-ins on this well, as yet, and this floats on the line, the new zone floats on the line just like the rest of them.

MR. CARSON: Mr. Examiner, without causing Sally any more complications than are absolutely necessary, will it be necessary -- we would like to have this Exhibit Three-D, which is an example of the worst case of what can happen, applicable to all our cases because the formations are similar.

Do I need to have that marked differently or will just Three-D be --

MR. QUINTANA: Since we have entered it and marked it as -- let's stop for a second.

(Thereupon a discussion was had off the record.)

MR. QUINTANA: Proceed.

Q Mr. Lamb, in your professional opinion

will the granting of this application prevent underground waste, protect correlative rights, and prevent the premature abandonment of this well and the loss of reserves which could otherwise be recovered?

A Yes.

MR. CARSON: I don't have any further questions.

MR. QUINTANA: Mr. Nance?

MR. NANCE: A couple of questions, Mr. Examiner.

RECROSS EXAMINATION

BY MR. NANCE:

Q Mr. Lamb, first of all, you've asked for a minimum of 100 MCF a day as the allowable production from this well for purposes of establishing a level at which the well might be produced without damage.

Your Exhibit Number Four-D indicates that production during the months of March and April of 1985 is only slightly over 20,000 MCF for the entire month.

For the month of May, 24,000 plus for the entire month, and all of these are without an indication of the well having been shut in.

If these figures are correct and the well has not been shut in at all, is the well even capable of

making 1000 MCF a day?

A Well, maybe there's a little anticipation in here, but you notice that there is an increase of about 4-million a month from April to May and we expect that it will clean up and do a little better up into 30-million.

Q You don't feel that a sustained production rate of something in the neighborhood of 20,000 for the month, or -- or even a little less, would still allow the well to correct its own problems if it has problems?

A Well, we --

Q And prevent future problems?

A At this point we would prefer to use every advantage that we can to completely clean the well up, is basically what we have in mind.

Q Now if the well does get to the point where it can produce a million a day, would you feel it appropriate to have the production limited at that figure if it is necessary to cut back production at all?

A If we can determine that it is -- had cleaned up, in other words, it reaches its peak, then I think it would be time to talk about what you're talking about.

Q Okay. The production from the upper zone that you're talking about in this well, is this the same zone from which other wells that we're talking about here

today are producing, or can you tell?

A Well, no, it is a different zone at this point and I'm not completely equipped to tell you whether it exists in the other wells or not but we have found in most cases we take our best zones and complete them and any handouts that we get later on, why, we take those, too, but it is not to our advantage and to your advantage to complete an extremely good zone with a weak zone in a borehole at the same time, and this happens to be one of those weaker ones.

Q Back to your Exhibit Three-D, you have indicated the significant variations in production levels but you have not, or prior to the -- the plugging and abandonment of the production from the Lower Morrow zone, you have not indicated on that exhibit nor have I heard you testify specifically that shutting in of the well was the reason for those variations. Is that your testimony?

A I don't have those shut-in information.

Q Okay. And subsequently to the shutting in of the lower zone and the perforation and opening of production from the upper zone, you have no indication of any shut-ins having been --

A No, I have no record of that. I'm not saying they're not; I just don't have them, and as I said in the other cases, I only have the written ones. I don't have the telephone ones.

Q And by the same token, then, you don't have any indication of the impact that a shut-in might have on production from the upper zones?

A That had any effect on them? Without any question of a doubt, I would say if they were shut-ins they had a serious effect on this well in reaching its logoff.

Q I'm sorry. I'm talking about as far as the upper zone is concerned. We don't have any --

A No.

Q -- evidence of -- of the impact that shut-in would have on that production?

A No, we're still at the point of cleaning up at this point.

MR. NANCE: I don't have any further questions on this well, Mr. Examiner.

MR. QUINTANA: I have some questions.

RECROSS EXAMINATION

BY MR. QUINTANA:

Q Again, this is just for my clarification. On Exhibit Number Three-D you don't have any markings as to when this well was shut -- shut-in, so in other words, was it shut-in or you don't know?

A I don't know.

Q You don't know?

A No, but I would -- I would hazard a guess that it has, but I have -- I don't have it.

Q And it was your testimony that the reason the well died was because of a logoff test?

A It is obvious that the final production, termination of production was caused by logoff, and -- and the other points in here, speaking from experience about heart attacks and so forth, personally have had those, you have these indicated logoffs and then for some, its own natural reason or whatever reason, it came back, and you see there's several of these things that were peaking down to indicate logoff and then finally it went.

Now, when we look back at the other wells, who knows which one of these points we're producing at?

Q And you're basing that, your 1000 MCF per day request for minimum for the new zone that you completed into --

A Yeah.

Q -- based on the fact that the lower zone was producing anywhere from 1000 to 2000 MCF, then logged off just abruptly?

A Yes.

Q You're saying that --

A Yes.

Q -- 1000 wouldn't be abnormal?

A No, now we're talking about the upper zone.

Q Right, I'm saying that 1000 be adnormal for the upper zone?

A No, I don't think so, no.

The 1000 that we have here is the idea that we feel like to continue with this increased production rate that we will obtain gas by cleaning the well up completely that would not otherwise be produced.

The important thing is the early part of a Morrow well or gas wells of these kinds, is to get them completely cleaned up, and that's -- that would be the purpose, as I see it.

Q Can you give me an estimate of the time when you think this well would be cleaned up? Can you anticipate a time when this well would produce its maximum?

MR. CARSON: Can we refer to Mr. Sivley here? He can help us.

MR. SIVLEY: Well, I'd say it's virtually -- pretty well cleaned up right at the present time.

A You mean sixty days would tell us?

MR. SIVLEY: I think so.

MR. QUINTANA: So it's testimony that approximately sixteen days from now it will be completely cleaned up?

A I would expect it to be.

Q You mean it's possible that you could produce at a lower rate than 1000 after it's cleaned up?

MR. SIVLEY: I think we could settle for 750,000 feet per day.

A Yeah, settle for 750 a day, reduce it to 750.

MR. SIVLEY: Without any further damage or any problem with that.

MR. QUINTANA: I have o further questions on this well, but like I say, again, at the end of the testimony I'm going to make a statement and concerning these requested minimum rates.

MR. CARSON: I'll have for Mr. Lamb just a couple more questions in regard to this particular Wright Well.

REDIRECT EXAMINATION

BY MR. CARSON:

Q Mr. Nance asked you about the well having been shut in.

The well has been shut-in at some time.

A Well, I'm sure of that but I don't have the written record from El Paso on it.

Q Okay, but it was by virtue of telephone requests is why you can't spot it on your graph, is that not true?

A Well, it could easily be written but I don't have it. It would be completely beyond my imagination to say that it was not shut in along with the other wells in the area, because all of them have been.

MR. CARSON: May I ask, Mr. Examiner, at this point may I have Mr. Sivley sworn for the purpose of asking one question, and that is whether this has been shut in?

MR. QUINTANA: Yes. Would you please -- is that appropriate?

MR. NANCE: We don't object.

(Thereupon Mr. Sivley was sworn upon his oath.)

T. J. SIVLEY,

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

VOIR DIRE EXAMINATION

BY MR. CARSON:

Q Would you state your name, please?

A T. J. Sivley.

Q Now, Mr. Sivley, what is your connection with Hondo Drilling Company?

A I'm a Vice President of the company. I live in Artesia.

Hondo Drilling Company is a New Mexico Corporation. We organized in 1948. I'm not involved in day-to-day operations with Hondo, that is, other than policy matters and things like that, although frequently, for instance, El Paso may want to try and get hold of Hondo for shut-in purposes or this and that and over the last couple of years or more we have been -- I have been frequently called myself concerning shutting in the wells; maybe come Friday they'll say we've got to shut in everything; no market demand over the -- over the weekend, and if industry shuts down, we can't get rid of this gas.

Q Mr. Sivley, as far as this Wright Federal No. 1 is concerned, was that well shut in from time to time at the request of El Paso?

A Yes, it was shut in from time to time at the request of El Paso, usually phone conversations. That's

been over the last two years, and then, of course, it's been shut in a time or two prior to that time for periodic bottom hole tests -- or rather tests, flowing tests by El Paso.

We did get an exemption to eliminate those because we could see every time we did shut it in there was a little bit of damage that was detectable.

MR. CARSON: I don't have any further questions of Mr. Sivley.

MR. LAMB: Mr. Sivley, since it has been recompleted has it been shut in?

A It has not been shut in since it was re-completed.

MR. CARSON; I have no further questions.

MR. NANCE: Mr. Examiner, I have one, one question.

RECROSS EXAMINATION

BY MR. NANCE:

Q Mr. Sivley, have there been any State-ordered shut-ins of the well within the last year and a half?

A No, not to my knowledge.

MR. QUINTANA: Mr. Carson, you may proceed.

N. RAYMOND LAMB,

continuing as a witness, testified as follows, to-wit:

REDIRECT EXAMINATION

BY MR. CARSON:

Q Mr. Lamb, I hand you what I have marked as Applicant's Exhibit Number One. Would you identify that exhibit?

A This is an application prepared by Hondo Drilling Company, Midland Office, for classification of the Wright Federal No. 2 as a hardship gas well. It's indicated that the well is located in Section 29.

Q Are you familiar with the well which is the subject of the application?

A I am.

Q Generally the application has stated that the well -- that the shutting in of the well caused the intrusion of water into the well which permanently damages the formation and makes it difficult to restore production.

A Right.

Q Do you agree with that conclusion?

A I agree.

Q We've asked you this same question in connection with the other wells. Is there anything that you can do or should have done to remedy this problem?

A There's nothing we know at the time that we can do to this well to increase production.

Q The application shows a diagram of a wellbore. Is that diagram correct to the best of your knowledge --

A Yes.

Q -- and belief?

A It is.

Q Were the offset operators notified of this application?

A They were.

Q I'll refer you to Exhibit Number Two and ask you to explain that plat insofar as it applies to the Wright Federal No. 2.

A The Wright Federal No. 2 is in the top center of the map and it is in the purple color. The designation of 11 barrels of oil, no water, 1463 MCF gas, and we show no shut-in days and that the gas is handled by El Paso.

Q And I take it that -- I think you've answered this question already but the geology at the Wright Federal No. 2 is similar to the -- and its characteristics are similar to those of the other six wells that we've talked about.

A That's correct.

Q I'm going to hand you what I've marked as

Applicant's Exhibit Number Three-E and ask you to identify that.

A It is a graph of the monthly production of gas from the Wright Federal No. 2 from the January of 1982 through February of 1985, and it's on a semilog paper.

Q Okay. What is the -- you have the little arrows up there. What are they for?

A They designate written notices for shut-in.

Q Okay. What conclusions do you draw from that exhibit?

A I would draw a conclusion from this exhibit and -- that the shut-in periods restricted the production from this well. In other words, my opinion is that the production would have been higher if they hadn't had the shut-in periods and that on the dramatic end of the February of 1985 we're getting an indication of a decline in production. We've had minor declines before so we'll wait and see what happens from these shut-in periods.

Q You've previously testified to the costs of bringing these back on stream. I take it this is no different.

A No different, $1000.

Q I'm going to hand you what I have marked as Applicant's Exhibit Number Four-E and ask you to identify

it.

A It is a tabulation prepared by Hondo Drilling Company at my request for the monthly production from January, 1984, through the current month of May, of the working interest income, the operational expense, and the profit and loss statement.

Q Was that prepared by you or under your supervision?

A Under my direction.

Q We have previously been asked to establish a minimum flowing rate which can be sustained without damaging the formation. Do you have such a figure to suggest?

A Yes, 40 MCF a day.

Q All right, is -- how do you arrive at that?

A Well, we feel that this will be the minimum production, particularly if the shut-in periods are terminated, that this will be the ability of the well to produce.

Q This well, like the other wells in this -- these combined cases, is fighting line pressure, is it not?

A Yes.

Q Mr. Lamb, in your professional opinion

will the granting of this application prevent underground waste, protect correlative rights, and prevent the premature abandonment of this well and the loss of reserves which could otherwise be recovered?

A That's correct.

MR. CARSON: I don't have any further questions of Mr. Lamb.

I'd like to move the introduction of these exhibits which I have not previously moved.

MR. QUINTANA: Exhibits --

MR. CARSON: I think it's Exhibits Number One through Four in all cases.

MR. QUINTANA: Exhibits One through -- One, Three, and Four for Case 8609, Exhibits One, Three, and Four for 8610; Exhibits One-A through One-E, Three-A to Three-E, and Four-A to Four-E, and Exhibit Two for all these cases will be entered as evidence.

MR. CARSON: And Exhibit, I believe it's -- we talked about it awhile ago, it's Three -- Exhibit Number Three-D will wind up applicable to all cases.

MR. QUINTANA: Let the record so note that.

I have no questions of the witness. Well, let's put it this way, I'll let Mr. Nance go first if he has questions.

MR. NANCE: I have one question.

RECROSS EXAMINATION

BY MR. NANCE:

Q You're talking about this well producing against line pressure, and what I wondered is as a physical matter is this well producing against the line pressure that is generated by the higher producing wells?

A They all go on the same line.

Q They all go into the same line.

A So do all wells in southeast New Mexico, I guess. I don't know your system.

Q Okay. Within this particular gathering system, though, that is the case.

A Yes.

Q The wells that are producing 700 MCF a day and the wells that are producing 7 or 11 are all producing into the same line?

A That's correct.

MR. NANCE: Thank you. No further questions.

RECROSS EXAMINATION

BY MR. QUINTANA:

Q Mr. Lamb, for clarification of matters, again.

It is your testimony that these Morrow gas wells that have been evidenced showing production rates and shut-in times, and so forth, you're basing the fact that you would like to have a hardship gas well classification for each one of these wells, you're basing that on the fact that the Wright Federal Well No. 1 logged off due to persistent shutting in and that all these other Morrow gas wells will exhibit the same thing if they're continued to be shut in.

A That's correct.

Q And even though you have not seen a loss of reserves, or of production capacity, you expect it to happen in the same manner that the Wright Federal Well No. 1 occurred.

A I'm positive in my own professional opinion that you will lose reserves to continue with these shut-in periods.

Q And the fact that they're all Morrow wells, all in the same area, and all in the same dips and the same type of formation and characteristics, you expect that to happen?

A All except the Cisco. The Cisco well has the same characteristics but it's an individual pay zone by itself, but I expect them all to have the same characteristics.

Q Mr. Lamb, should I decide to grant you hardship gas well classifications for each one of these wells, I have no problem with granting you minimum sustainable productin rates on some of these, which you request small, small amounts of producing capacity, but on some of these larger ones, I have to justify in my own mind if I do grant them to you why I would grant them to you, because if there's a hardship gas well classification placed on the well, then that means somebody else cannot take the well -- the gas ratably, El Paso can't take gas from somebody else, and that puts a hardship on other people.

Some of these larger requests, like for example, 1000 MCF a day for the Trigg Well No. 1, Trigg Jennings Well No. 1, no, excuse me, for the Wright Federal Well No. 1, and that's just one example, do you see a problem with me getting a request from El Paso, what they might think the minimum sustainable rate should be and that way I could get an opinion from both -- both parties and I could make a determination?

A Well, I see nothing to keep you from making a request of El Paso but we certainly would like to have

the advantage of what information you develop.

Q Right. The reason I'm asking that is because we don't really have anything to base some of these requests on except on average producing, what you've been producing for the last few months or so, and if I, in order for me to protect myself as a Hearing Examiner, to back up what I'm doing now and somebody come back later and say, well, why did you do that, you know, I would like to think that I'm basing it on some type of engineering, you know, calculation, or something of that sort.

Let me rephrase that. Let me direct this question to El Paso.

MR. QUINTANA: If you'd like, we would request that you would recommend a minimum sustainable producing rate from the testimony you have heard today on some of these wells.

If you don't submit anything, then I'll assume that you concur with the requested minimum rates.

MR. NANCE: Mr. Examiner, from El Paso's point of view, and we would like to present a witness to address these specific questions, but generally our point of view is that the minimums requested in the two lowest producing wells are acceptable and we would have no serious objection to those wells being granted hardship gas

well classification, and having those minimums established as the acceptable lower limits of production from those wells.

For each of the other wells that evidence has been presented on today, we feel that the evidence is insufficient to grant any sort of hardship well classification at all, and therefore, we don't feel the minimums that might be requested otherwise are appropriate at all.

MR. QUINTANA: Do you wish to have a witness be called at this time?

MR. NANCE: We would like to do so if this would be the appropriate time to do that.

MR. QUINTANA: Are there further questions of the witness, of Mr. Lamb?

MR. LAMB: I would like to make one other statement, if I may.

MR. QUINTANA: You may proceed.

MR. LAMB: You can understand the lower capacity wells and we feel that the other wells in which you refer to are destined for the same course of production and we will lose ultimate recovery on those if they go with the shut-in period.

Now on those higher wells are are still on a variable flow by the pipeline pressure, so we

feel that we, on all these wells, we are going down the same primrose path and we were just trying to remedy the situation before be got into it.

If we continue with these into the marginal stage, we certainly are going to lose gas that would otherwise be produced.

MR. QUINTANA: I understand. Thank you. You may be excused.

Mr. Nance?

MR. NANCE: Thank you, Mr. Examiner.

Mr. Examiner, El Paso does have one witness we would like to present today.

E. R. MANNING,

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

DIRECT EXAMINATION

BY MR. NANCE:

Q For the record, Mr. Manning, would you state your name, your current position, and by whom you're employed?

A My name is E. R. Manning. I'm employed by El Paso Natural Gas in El Paso, Texas, as Manager of Con-

servation.

Q Have you previously testified before this Commission or before one of its hearing examiners?

A Yes, sir, I have.

Q Are you familiar with the applications that have been presented in this case?

A Yes, sir, I am.

MR. NANCE: Mr. Examiner, we would ask that the witness' qualifications be accepted.

MR. QUINTANA: They are accepted.

MR. CARSON: May I inquire as to what his -- what his capacity is? I mean what's his education?

Q Mr. Manning, what is your background, then?

A I have a BS in petroleum engineering from Texas Tech University.

I have been a drilling and production engineer, a straight production engineer.

I have experience in reservoir engineering, enginerring economics, and I have at one time been, like Mr. Lamb and Mr. Sivley, I had my own company.

I've been employed by El Paso Natural Gas for the past twenty-five years, approximately.

Q Could you also describe your professional involvement and your membership on either professional associations or committees?

MR. CARSON: Oh, that's fine. We were just --

A I'm a Registered Professional Engineer in Texas and Member of the Texas Society of Professional Engineers.

I am a member of the AIME, API, Texas MidContinent Oil and Gas Association, IOCC.

Is that sufficient?

Q I think that will do for right now, Mr. Manning.

MR. CARSON: Sorry I asked the question.

Q Mr. Manning, could you briefly describe El Paso's market history, current market situation, and any projections that you might be able to make on El Paso's market?

A Well, El Paso is tied to the western market, which is California and east of California, Arizona, and New Mexico, and we sell a very small amount of gas in Texas.

So that, basically, is our market area.

Prior to March of 1983 we had a demand

for all the gas available to our system and we constantly called upon this gas to be produced into our system.

In approximately March or April, 1983, for a period of about three or four months, our demand, we lost approximately 700-million cubic feet of gas a day.

Then, by the grace of God, or somebody, it picked up in September, October, and we went back to full demand and even bought gas on the spot market during the cold periods of 10 -- I believe it was 1983 and 1984; not a lot but a small amount to supplement what our operators could not furnish us.

Q What is El Paso's pipeline capacity?

A El Paso has a pipeline capacity of roughly 3.5-billion cubic feet of gas a day.

Q What has our market demand been for the past heating season?

A Well, for the past heating season our market demand has been around 3.4-billion cubic feet a day. Now when I told you our capacity was approximately 3.5, 3.6, this means we have to produce about 3.7; we have to take into our system roughly 3.6 or 3.7-billion cubic feet of gas in order to meet those 3.4, due to gas used in compression and the transportation of gas; gas that is used in the operations, the normal field operations.

Q Do you have any feel for the current mar-

ket demand that El Paso has?

A Yes, sir. We have lost here, let's see, in May we lost approximately one billion cubic feet of demand, which dropped us in the neighborhood of 3.4 -- 2.4, correction, 2.4 to 2.5 billion cubic feet a day.

Now, very recently we were notified that we were going to be cut another 210, approximately, million cubic feet, which should bring us on a normal operatin week, somewhere in the neighborhood of 2.1 billion cubic feet a day and on weekends, perhaps as low as 1.7 billion cubic feet a day. We were not given any indication as to how long this would last. Hopefully, in the coming heating season we will be back with a big demand.

MR. QUINTANA: Mr. Manning, not meaning to be arrogant, or anything, but I'm trying to see how this deals with the gas themselves, I'm --

MR. NANCE: Mr. Examiner, we are trying to put these wells into context of El Paso's takes and that is going to be my next question, if I may proceed.

Q Mr. Manning, could you describe the impact of harship wells generally on El Paso's takes?

A El Paso polisy is to take ratably between the states and it is bound by law and rules and regulations to take ratably within the state, and this is all of the

states in which we operate.

Now, any time one MCF is granted a hardship well, or a well is granted one MCF hardship allowable or permitted production, that means that one MCF somewhere else that has to be shut-in in these times of low takes and this becomes very difficult for us to abide by the statutes and the rules and regulations of the commissions and states in which we operate.

Q Mr. Manning, have you heard the testimony and seen the evidence that's been presented in this case?

A Yes, sir, I have.

Q In your opinion as a professional engineer, do you have any recommendations as to how the Commission should proceed with respect to each of these three cases?

A It is my recommendation that the 7.5 MCF, or 7.35 MCF a day on the Alscott No. 1 in the Cisco and the 11 MCF per day on the Alscott Fed No. 3, be granted a hardship status. It's very difficult for me as an engineer to see shutting in a 7 or 11 MCF well.

Then I recommend that all of the others be denied.

Q In the event that they -- that any of them might be granted, would El Paso need further information in order to make a recommendation as to a suggested

minimum level of production that would be appropriate for those wells as hardship wells?

A Yes, sir, we -- these wells have essentially been on all the time except for shut-in for the State mandated test, which I think is 24 hours. In fact, we've been unable to get these wells shut-in by the operator, and I agree with Mr. Lamb there, the telephone calls are very annoying and we attempt to locate someone, he says, we can't shut that well in, you've got to talk to Mr. So-and-So, and we can't find him, telephone calls are not being answered, and we have attempted to work, you know, with -- work with the people on this and we've been unable to do it.

Now, we would have to have, in my opinion as an engineer, we would have to have some sort of a minimum test or a minimum flow test determine by starting the well on a test and gradually cutting it back to a point, we don't want to kill it, necessarily, but to a point to where we think it can, under an agreeable volume, it can sustain its production.

Now we would recommend that the Commission have their witnesses out there along with the El Paso witness on this test, should any of these tests be run.

Q Do you feel that the granting of the applications that you have suggested and the denial of the remaining applications as you have mentioned, would be in fur-

therance of the prevention of waste and protection of correlative rights?

A In my opinion it would be. We're having correlative rights problems in this particular area and I think with being able to shut these wells in or the wells in which would not be immediately damaged, not talking about prospectively damaging but immediately damaging the well, being able to shut those wells in would certainly let us take ratably from those people that we're obligated to take ratably.

Q Thank you, Mr. Manning.

MR. NANCE: I have no further questions, Mr. Examiner.

MR. QUINTANA: I have one question and then I'll let you go ahead.

RECROSS EXAMINATION

BY MR. QUINTANA:

Q Mr. Manning, you suggested to me that some type of test be devised to determine minimum sustainable rate. How do you intend to account for the floating line pressure to accommodate this?

A Mr. Examiner, my opinion on that floating line pressure, or the varying line pressure, is that all wells should be tested under normal operating condition.

You heard Mr. Lamb's testimony that the variance in line pressure is normal with not only El Paso but other pipelines, and I believe that those tests should be conducted.

I'll agree with you, you may get not a bad test but you may get a test that is not exactly right, but then the well could be retested, if necessary.

The thing is, that we need to do here, is to allow other people access to our pipeline or we're going to be violating some statutes in the State of New Mexico.

Q Thank you.

MR. QUINTANA: You may proceed, Mr. Carson.

MR. CARSON: Oh, I don't have many questions.

RECROSS EXAMINATION

BY MR. CARSON:

Q I'm going to refer you, Mr. Manning, to what we've previously had, and I think you've just looked at, as Exhibit Number Three-A and ask, how do you determine that you're going -- that, according to the testimony, that well produces 285 MCF a day, how do you determine in your theory of ratable take that that well is going to be shut in that many times?

A Sir, we, in determining ratability, right or wrong, but in determining ratability from El Paso's viewpoint, we take what we call a demonstrated deliverability of the well.

Granted, due to the high line pressures, low line pressures, plants going down, et cetera, this will not be 100 percent foolproof, but it will be as close as we can get, and then your ratable share to our pipeline for that market is based on that as it bears to the total in any particular pool.

Mr. Quintana stopped me a moment ago, I was going to get into this, but he stopped me a moment ago, and I suspect because he's heard it so much, but you may not have heard it, so I'll, with Mr. Quintana's permission, I'll continue along this vein.

We divide up our market from California and east of California market, among the three principal states, Texas, New Mexico, Oklahoma. We'll eliminate the others right now just for clarity sake.

Texas gets approximately the same amount, approximately. Let's just use 40 percent, that's -- don't hold my feet toward the fire -- 40 percent for Texas, 40 percent for New Mexico, 20 percent for Oklahoma.

Now then, they take that volume and they allot it back to the pools in New Mexico, to the field in

Texas, to the pools in Oklahoma. This is the part that each state is allocated.

Now when it's allotted back to the pool, and this is based on deliverability, when it is allotted back to the wells within the pool, then it goes down deliverability again.

Here in the Cisco you've got seven -- well, that's not a very good one. Let's take the Wright Fed Com Well No. 1 here that has a million MCF. Certainly it would get more of the availability to our pipeline and market than would the Trigg Jennings Com Well No. 1 in the ame pool, and it is all allocated that way.

We print a production schedule in which at the top of the schedule would be Cisco Alscott No. 1, 7.35; certainly it's at the top.

Then you come down the schedule with increasing deliverability till you get into the prorated pools. Then when you come into the prorated pool, those that are the most underproduced then line up according to their underproduction, down to the zero line that balances them, on down to the ones that are overproduced, and the last well will be the most overproduced well in that particular state.

Q Let me ask -- let me refer you to what I believe is Exhibit Three in Case 8609; that's Union Texas

No. 1.

Now I may not have been understanding your speech at all, but that well has not been -- that well produces tremendously more than the preceding one that I handed you and yet it's not shut-in very regularly. Why is that?

A Sir, I cannot tell you why. If we get back to 1984, I can explain to you, in the interim there when we were trying to get Hondo to shut their wells in and they wouldn't do it, and we finally went out there and put a valve between their wellhead and our meter in order to shut those wells in trying to establish some type of ratability.

Now I am appalled that that well has been called to be shut-in that many times. It's hard for me to understand that, too.

Q That -- that was a written request, you know.

A Yeah, I heard the testimony it was a written request. We -- in order to get these wells to taking their ratable share, there must be some human element come into this. If I feel like Hondo's well is way overproduced as compared to the others, looking at the production around there, then I may -- I don't do it, but the man that does it may request that the well be shut-in in order to make it up.

Now, as far as that ratability goes, let me make this perfectly clear. We can't do that from day to day. We can't do it from week to week. We can't do it from month to month. We usually need about 12 to 14 months in order to do this, but if you'll give us enough time, you are going to get your share of our market.

Q Do you -- do you determine take in any way as far as determining who's going to be shut-in on the base of price?

A No, sir, absolutely not.

MR. CARSON: I don't think I have any further questions.

MR. TAYLOR: I have a question.

CROSS EXAMINATION

BY MR. TAYLOR:

Q Mr. Manning, could you explain to me or could you tell me from an engineering point of view if there is any relationship between the minimum sustainable rate of a well and its minimum daily production, which Mr. Lamb, I believe, recommended to be the rate that we allow it to produce at?

A I'm not sure I understand the question. Let me see if I understand it.

Q Okay.

A You want a relationship between a rate that would be minimum in order to sustain flow from the well?

Q I just want to know if there is any such.

A Well, --

Q And the average daily production.

A And (not understood) would not cause any damage to it, and let me say this, El Paso is the first one to not want any damage to a well; we are number one on that, because this is gas we're going to have to have to take to California.

I believe that Mr. Lamb took the high side of it. This is my professional opinion. He said we know this will work.

I -- I believe that most of those wells, all except two, will continue to produce after being shut-in and will not be damaged, now, and of course you've got to understand, all I know about the borehole in this is the testimony that Mr. Lamb gave today.

Now, remember, there are other operators out there that have the same wells that are being shut in. They're going to hit the bottom of the decline curve. This is a real fine thing here. This looks like infinite reserves here.

There is -- this one is -- I'm not going

say that.

Q Well, essentially are you saying that there is no per se relationship between the average daily production and the minimum sustainable rate?

A I think I would have to say that, yes, sir.

Q Thank you.

MR. QUINTANA: I have no questions of Mr. Manning.

MR. NANCE: I have one question on redirect examination, if I may, Mr. Examiner.

REDIRECT EXAMINATION

BY MR. NANCE:

Q Mr. Manning, does El Paso have a policy of objecting to hardship classification for a well simply because it produces a relatively larger volume of gas?

A No, sir, not necessarily. We come into this, our policy -- or our policy is this: We'll have an engineer here at these hearings. We want him to look at all the testimony that's been given outs and if there is a question in his mind that there will be damage, then for him to merely state that the fact that every MCF you grant me, comes off of someone else, and that is our policy, not only in New Mexico, but in every state in which we operate.

And if we feel like that a well is truly going to be damaged by watering out or something like that, then we certainly will object to it.

Now if it's some mechanical thing that needs to be done, we'll also object to that, but if it's the, as Mr. Lamb put it so adequately here, the characteristic of the individual well, then we try to go along with that.

Q Thank you, sir.

MR. QUINTANA: I retract my statement, I do have one additional question for Mr. Manning.

RECROSS EXAMINATION

BY MR. QUINTANA:

Q Mr. Manning, is it El Paso's policy that in order to -- for them to agree that a well is a hardship case that a well must first lose reserves?

A No, sir, we do not want to -- we want to get on these wells as soon as we can.

Now we object to them being postponed and postponed, and postponed; that we object to.

Q Then it is your opinion that you don't believe that these wells will experience a loss of reserves, even though on Well No. -- the Wright Federal Well No. 1

logged off, you don't believe that is applicable to the other wells?

A I think that was the characteristic of that well. To me he had a water problem there. Now, why he had the water problem I don't know. He looked at it, obviously, he looked at it and he would have cemented off some leakage in the casing or something. I do not know what that is, but he may have been, he may have rigged the rig up in the wrong place, too. He may have rigged it up over water, which is also a normal, natural occurring thing.

Q But you don't know.

A But I don't know, no, sir, without -- with just no more testimony than this, I don't know.

Q Okay.

A But I would say this: After having looked at thousands upon thousands of these when I was a reservoir engineer, that to me is a fine well right there, and I wish we had a lot more of them tied to us.

MR. QUINTANA: I have no further questions of Mr. Manning.

I'd like to recall Mr. Lamb for one quick question.

N. RAYMOND LAMB,

being recalled and being still duly sworn upon his oath, testified as follows, to-wit:

DIRECT EXAMINATION

BY MR. QUINTANA:

Q Mr. Lamb, since you represent Hondo, would you agree to, should I decide to grant hardship classifications to these wells, or all of them, would you agree to working with me in establishing some type of testing procedure in which we can see if we can determine minimum producing rate?

A Sure.

Q Fine, thank you. I have no further questions of Mr. Lamb.

MR. QUINTANA: Are there further questions of any of the witnesses?

Any additional comments?

In that case, for that matter, Case 8609, Case 8610, Case 8611 will be taken --

MR. NANCE: I'm sorry, I would like to make a brief closing statement if I might, and afford Hondo the same opportunity.

MR. QUINTANA: You may proceed.

MR. NANCE: Mr. Examiner, El

Paso basically feels that the evidence and testimony presented here indicate the applications for hardship well classification for the majority of the wells are premature.

We feel that there has been no real demonstration of damage to the wells. There has been no apparent attempt to remedy or correct situations that are found to exist in the wells. These wells do not appear to be in any way unusual; in fact, it was the testimony of the witness here that all of these wells -- that the wells that are part of this application are in fact similar to other wells in the -- in the producing area and that he would expect the same thing to happen to those wells that is happening to these.

The production rates have not been shown demonstrably to have been affected by shut-in, and the only problems which for the most part are visible here are anticipated problems rather than problems which have already occurred.

We feel that there has been a problem in bringing these cases before the Hearing Examiner or before the Commission, and that the delays have taken advantage of procedure and we feel recognition should be given to that fact.

We feel that there should be a development of some type of minimum level of production

other than the average production rates of the well that would be an acceptable lower limit for production if they are in fact granted hardship well classifications, but generally we feel that the purpose of the hardship well classification is to allow preferred treatment and exemption from shut-in for wells which will demonstrably be shown to be damaged, and that that showing has not yet been made in this case with respect to -- to these wells.

MR. CARSON: I won't take three minutes. I want to say that the -- that I believe that the testimony has been pretty uniform that the wells are similar in nature. I don't think that the regulation or the (not understood) of the Division is that we should have to damage those wells in order to prove that they are damagable.

We have shown in at least two or three instances that the -- that as empirically as possible that the shut-in, shutting in of the wells damaged the formation.

In the case of the Wright Federal we showed, you know, really dramatic damage, and for those reasons we think that we're entitled to the shut-in hardship gas classification.

MR. QUINTANA: Case 8609, Case 8610, and Case 8611 will be taken under advisement.

(Hearing concluded.)

C E R T I F I C A T E

I, SALLY W. BOYD, C.S.R., DO HEREBY CERTIFY that the foregoing Transcript of Hearing before the Oil Conservation Division 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. 8609, 8610, 8611 heard by me on JULY 2 1985.

Gilbert P. Quintana, Examiner
Oil Conservation Division