	OIL CONSERVATION COMMISSION MABRY HALL Santa Fe, New Mexico	
	July 13, 1960	
	REGULAR HEARING	
- IN	THE MATTER OF:	
	Application of Jal Oil Company and Olsen Oils, Inc., for a revision of the Jalmat Gas Pool rules as set forth in Order No. R-1670. Applicant, in the above-styled cause, seeks an order revising the special rules and regulations governing gas wells in the Jalmat Gas Pool, Lea County, New Mexico, by creating a category of wells known as distress wells, which wells would be exempt from gas proration.) A well would be classified as a distress well when the following conditions exist:	Case No 2014
	(1) the well is connected to a low pressure) dry gas line;	
	(2) the well is producing through artificial means, either a free floating piston or pump- jack, or the well is making water in such amounts that after a 72-hour shut in period the well becomes logged off and is unable to be restored to producing pressure after being swabbed for not less than 24 hours;	
	(3) that all acreage belonging to the operator) capable of being assigned to said well has been) assigned;	
	(4) the operator must furnish to the Com-) mission a report detailing the method employed) in producing the well and such other pertin-) ent information as the Commission may desire) from time to time.	

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BEFORE:

A. L. Porter, Secretary Director Murray Morgan, Lord Commissioner

TRANSCRIPT OF HEARING

MR. PORTER: I would like to call for appearances in Case 2014.

MR. GIRAND: W. D. Girand, Box 1445, Hobbs, New Mexico, and I am appearing on behalf of the applicants Jal Oil Company and Olsen Oil, Incorporated.

MR. RAINEY: El Paso will make an appearance and Mr. Girand will conduct the interrogation.

MR. KELLAHIN: Jason Kellahin, Kellahin & Fox, Santa Fe, appearing for Continental Oil and Amerada Petroleum Corporation.

MR. HINKLE: Clarence Hinkle, Roswell, New Mexico, appearing for Humble.

MR. SETH: Oliver Seth for Shell.

MR. TOMLENSON: Phil Tomlenson, appearing on behalf of Atlantic.

MR. PORTER: Would anyone like to make a statement?

MR. GIRAND: If the Commission please, the applicant would like to make a short statement at the commencement of the proceedings. The case was heard by the Commission involving approximately four wells on April the 14th, and as a result of that hearing the Commission held adversely to our position in part to the extent that we asked for another hearing to which the



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Commission refused. However, in refusing it, the Commission did on May the 16th address a letter to the applicants in reference to the subject well and in reference located in the Jalmat Pool, in which they required certain information or suggested that we furnish certain information pertaining to the production habits and characteristics of those wells during the period from the date of the letter. I assume or assumed thereafter that we could put the well into operation until August 1, 1960 and to report to the Commission in regard to the production habits or proceedings of the well. Following this letter and in light of the position of the Commission on a previous hearing which we have had, we had a hearing in October, 1959, which was the result of the Commission's reclassifying the well of the two applicants in July of 1959 and assigning to those wells the allowable dating back to June of 1958, the allowable the well had produced during the one year to which they were charged. The wells were under produced, the monthly allowable as shown by the monthly allowable schedule. The well had been marginal well up until this time of reclassification and then they were reclassified, they were six times over in many instances. At that time we made two applications, one on behalf of Jal Oil Company and one on behalf of Olsen Oils, Incorporated, No. 1778 and 1779 and for convenience were consolidated and tried for before an Examiner. The result of that hearing of course was expressed in the order entered, basing on which the Commission allowed the Applicants to make up their over production on the basis of 75% of

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the current allowable so that the wells would not be unnecessarily shut in. This procedure was fooled around with until the spring of 1960, when it was determined by the operator, that the well produced in the winter in which they were being produced would not be kept alive and produced on the 75% of the allowable because of certain factors. One of the factors being, the allowable was figured on the basis of a shut-in of 72 hours and then the testing period. The wells being shut-in for 72 hours and due to the encroachment of the water into the well we were unable to bring the wells in in time for any deliverability factor to be added to our wells. The wells were then allocated to an acreage factor in determining the allowable gas to be produced. So as a result of continued shut-in, our wells, due to the encroachment of water, we again filed an application on behalf of the Jal Oil Company covering some three wells and that case was heard at Hobbs on the 13th of April. The result of that hearing was practically the same as the previous regult: they allowed the wells to be produced and to make up overaverage for 75% of the assigned allowable, but we are still smothered with that minimum allowable because of our small acreage factor and no deliverability. Now, we feel that in the cases 1778 and 1779 as consolidated and the case heard on April the 13th, 1960, at Hobbs, Case 1941, that all of the technical data pertaining to the wells. their operations, the troubles the operators found in connection with those wells, has been offered to this Commission and in light of that fact in order to expedite this hearing and let



some of these Gentlemen see the Democratic convention by T. V., we now move that we be allowed to adopt the record in the cases 1778and 1779 consolidated and 1941 as a part of the record in this case.

MR. PORTER: Is there any objection to counsel's motion for incorporation of the previous evidence in this case?

MR. PAYNE: I think the case you had was 1994.

MR. GIRAND: Well, the copy I have, the order I have says Case 1941.

MR. PAYNE: All right, sir.

MR. PORTER: The record in the previous cases will be included in this one, sir.

MR. GIRAND: All right, sir. If the Commission, please, at this time I might state that we are out in the sticks over there on the east side and Order No. 1670 was entered by the Commission without much knowledge on the part of counsel. I had stood on my feet for some four or five hours in Hobbs and when they took up the consideration of the change of rules, I left. My application refers to amendments to order 967. However, the notice that the Commission gave in regard to that hearing did refer to order 1670 and it dealt on the gas pools involved and I feel that no one would be misled within the intended purpose of this application and we would like at this time that the application as filed be shown to go to Order No. 1670, without reference to amendments to any particular section but as to the subject matter to

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be contained therein.

MR. PORTER: Your application will be amended to your application to that effect, it will be accepted.

MR. GIRAND: I think the record should show the complete Commission file, which shows that a special notice was sent out on the proposed rule change before the calling of this case and then again readvertised at the time of the calling of this case and assignment of number. I would like to call Mr. Rainey to the stand, please.

(Witness sworn.)

DAVID H. RAINEY

called as a witness, having been first fully sworn on oath, testi---

DIRECT EXAMINATION

BY MR. GIRAND:

Q Will you state your name, position and the company by whom you are employed?

A David H. Rainey, administrative assistant in the proration department, El Paso Natural Gas Company.

Q Mr. Rainey, you are connected with the El Paso Natural Gas Company and are working in conjunction with Mr. Norman Woodruff, do you not?

A Yes.

Q

(Whereupon, Exhibit 1 was marked for identification.)

I hand you what has been marked as Applicant's Exhibit



No. 1 and ask you whether or not you have seen a copy of that letter?

A Yes, sir, I have.

Q Now, in conjuncture and with receipt of that letter, did you receive a letter from, over my signature, from Girand proposing amendments, suggested amendments, to Order Number 967?

A Yes, sir, insofar as it pertained to the Jalmat Gas Pool.

MR. GIRAND: If the Commission please, I would like to introduce Exhibit Number 1, a copy of it, and keep the original if I may, sir?

A Exhibit Number 1 is a letter addressed to the Commission pertaining to the finding and order on the well which they sought application for relief, under a certain provision they were asking for.

Q As a result of the receipt of the letter addressed to the Oil Conservation Commission over the signature of myself, did you and your department check into the proposed rules and changes?

A Yes, sir.

Q After making a clear check of the proposed rule changes, did you or your company come forth with a proposed amendment to Order Number 1670?

A Yes, sir, we did.

Q Do you have a copy of that order in front of you, sir?

A Yes, sir.

Q May we have it passed out and officially identified, sir?



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What was the number of that?

A El Paso Natural Gas Exhibit Number 1. In this case, after receipt of the letter from Mr. Girand, we checked the proposal that he outlined and El Paso come up with certain suggested amendments to his proposal which will be amended to the specific policy rules of the Jal Gas Pool in the southeast portion of Order R-1670 on which is consolidated the gas pool rule of the State of New Mexico.

Q Mr. Rainey, may I interrupt just a moment. Being the primary purchaser within the Jalmat Gas Pool and familiar with the production characteristics of this territory, is it the opinion of your company that some relief needs to be afforded the operators of wells making water and being produced in a secondary manner?

- A Yes, sir.
- Q What is your opinion?

A El Paso is of the opinion and based on my knowledge of certain wells in that pool, I might point out that I have no specific knowledge of the Jal Oil Company and Olsen Oil Company other than in a general way, El Paso is of the opinion due to waste of the water encroachment in certain areas of the Jal Pool, there may be wells that could and should be classed as to what Mr. Girand has termed and El Paso has used the term also as "distress Wells" and certain special provisions be made for production in regard to those wells.

Q Mr. Rainey, would you direct your attention to El Paso's



Exhibit Number 1 and go over the proposed changes to Order R-1670 as proposed by the El Paso Natural Gas Company?

A Yes, sir. To take care of the situation I can read these over fairly rapidly. It shows the places I found in checking over 1670 that it appeared these were necessary amendments. All these rules would have to be included as special pool rules or I believe it is designated special rules and regulations for the Jalmat Gas Pool in Order R-1670. Rule 8(A)1: The pool allowable remaining after deducting the total allowable assigned to marginal wells and distressed wells shall be allocated among the non-marginal wells in the Pool as follows: It would be necessary if you have a classification of distress wells to add after marginal wells the words and "distress wells" to take care of these situations because they should have the allowable assigned to those subject non-marginal wells.

Rule 8(A)4: No well except a distress well, this rule as it is now provides no well should be assigned an allowable until a deliverability test has been filed with the Commission and approved. Since these rules which definition would be incapable of being tested, it would be necessary, we feel, to add no well except a distress well. Now, there is provision in some of the rules in the Jalmat Pool, or I believe it is the memorandum provided for deliverability tests in the Jalmat Pool that provides that the shut-in pressure of offset wells or wells in the immediate area be submitted for the shut-in pressure of wells which are not subject to



being shut-in, they load up with fluid too rapidly, if that wants to be applied to this distress well situation also this 8(A)4 is not absolutely necessary.

Rule 10(A): A marginal well shall be assigned an allowable equal to its maximum production during any month of the preceding gas proration period. That is the existing rule, it appears to us it is going to be necessary to add a sentence to that. A distress well, as hereinafter defined, shall be allowed to produce the amount of gas necessary to maintain production under production methods approved by the Commission.

Rule 10(B): The Pool Allowable remaining after deducting the total allowable assigned to marginal wells and distress wells, shall be allocated among the non-marginal wells entitled to an allowable in the Jalmat Gas Pool.

Rule 15(A): A well classified as a distress well shall be exempt from the provisions of General Rule 15(A).

My recollection of 15A, I don't have a copy of 1670, I believe that is the rule that provides that deliverability tests must be taken.

Rule 20: All wells not classified as marginal wells or distress wells shall be classified as non-marginal wells.

Now, to the main portion of our position which is the designation of distress wells, and the provision that should be compiled as that of El Paso's position as stated a moment ago, that it may be necessary in some instances to make special provisions

for wells of that type. It is our feeling there should be some stringent and rigid requirements put on it. Thus I don't think it ought to be a matter that can just be granted freely on an application or even after a hearing. So we have set some fairly rigid requirements to that. On the other hand, I think that any well that thoroughly is a distress well, can undoubtedly meet these requirements.

This should be special Rule 16(C): The Secretary-Director of the Commission may classify a well as a distress well without notice and hearing where application has been filed in due form and where the following facts exist and the following provisions are complied with:

1) The operator shows that he has exercised due diligence and used all feasable means to maintain the well in a producible condition and:

a) The well is producing through artificial means with a free floating piston or pump jack, or from other mechanical means, and the well is making water in such amounts as after a 72-hour shut-in period the well becomes logged off and is unable to be restored to production after being swabbed for not less than 24 hours or:

b) The operator shows that it is uneconomically feasible to utilize mechanical aids to maintain the well on production.

2) That all acreage belonging to the operator capable of being assigned to said well has been dedicated; this, of course, is in an

effort to give the well as much allowable as possible to be permitted to maintain its production.

3) The operator must furnish to the Commission a report giving in detail all pertinent data with respect to the method employed by the operator in producing the well sought to be classified as a distress well, and such other and further information as the Commission may desire from time to time;

k) The applicant presents written consent in the form of waivers from all operators offsetting acreage dedicated to the proposed distressed well;

5) In lieu of 4) of this Rule, the applicant may furnish proof of the fact that said offset operators were notified by registered mail and furnished the same information as was furnished in their application to the Commission with respect to the proposed distress well. The Secretary-Director of the Commission may classify the well as a distress well if, after a period of twenty days following the mailing of said notice, no operator has made objection to the classification of the proposed distress well.

I think there should be a phrase added to that paragraph five, that if a protest is received, the matter should be set for hearing.

Now, that is El Paso's alternate proposal to the one that was sent out by Mr. Girand to us by letter and advertised by the Commission by memo. I might point out Mr. Girand had proposed in his original application, that an additional requirement be put in here as number 1, that the well be connected to the low-pressure

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gas line. El Paso is of the opinion that the term "low-pressure gas line" is subject to too vague a definition to a low-pressure gas line. One pipe line may differ markedly from a low-pressure line of another company. Further, a low-pressure pipe line in one company is quite different from the low-pressure gas pipe line from another area because it would be, of course, economically unfeasable to construct a low-pressure gas line so we connected a few distress rules that we are recommending be left out, and these other suggested changes be used.

Q In your opinion, Mr. Rainey, do you believe that the proposed changes will afford relief for a well that is designated as a distress well?

A Yes, sir.

Q We pass the witness for cross-examination.

CROSS-EXAMINATION

BY MR. PAYNE:

Q Mr. Rainey, you testified previously that you had set up some rather rigid conditions here under which a well could be classified as a distress well?

A Yes, sir.

Q I notice there is nothing in this classification that relates to remedial work?

A Well, we will discuss -- go ahead.

Q I was wondering why.

A We discussed that matter in our preparation of these rules



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and we felt that it should be up to the discretion of the Commission and showing by the order it is uneconomical, that the Commission could use its discretion as to whether or not to grant it. We felt it was covered in subject rule one of our rule 16C in which case he has exercised due diligence and all feasable means to maintain the well in a producible condition.

Q In other words, you feel that more general proration would allow the Commission to determine whether one, the water was occurring because of channeling or whether, two, it was further present throughout the pay zone?

A Yes.

Q And could be shut off by squeezing?

A The operators are required to furnish the Commission such information as they request and with regard to this, and we feel this whole proposition is a discretionary matter for the Commission. It is something that may not be proper through administrative means in this particular case, but the Commission has the privilege of setting the matter for hearing.

Q This would merely afford some means of administrative approval where there is none?

A If the well was not in a distress condition.

Q In paragraph 16(C) I notice it says being provided through artificial means, either a free floating piston or pump jack or from other mechanical means, would you explain what is meant?

That other mechanical means?



Q Yes, sir.

A I don't know to be perfectly honest, Mr. Payne, the other methods. The only way I know to remedy this type situation is a free floating piston or pump jack, there might be some other mechanical means that could be used that I am not aware of. I will put this in again, as I say, its a discretionary matter. If the Commission is not satisfied, it has sufficient means to justify the granting of this classification, they can set it for hearing or deny it.

Q You did not just mean any well producing, all with some kind of mechanical means?

A Well, sure, that was put in there because as I say, the only two methods I know of to unload a well are the two specifically enumerated, there may be other means that are just as feasable, I don't know.

Q In regard to this provision relative to swabbing --

A Yes, sir.

Q Do you have anything in mind there as to what size the swabbing unit should be?

A No, and when you come down to the matter or practicality, the pump jack, as far as swabbing for the thing, there is a provision in there, if I can't pump it within 72 hours, the classification would be granted also.

Q Of course, small pump jacks and small swabbing units too?
A That is right.



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Q You do not actually unload to achieve the result within 24 hours?

A That is correct. I say again this is a discretionary matter for the Commission. There is nothing mandatory about our proposal here, it is the director of the hearing who may classify a well.

Q A well in the Jalmat Pool, Mr. Rainey, where severe water problems have been encountered, have operators been successful in squeezing it off?

A I know that has happened. I couldn't set any specific well right at the moment.

MR. PAYNE: Thank you, that is all.

CROSS-EXAMINATION

BY MR. NUTTER:

Q Mr. Rainey, what would you think of the idea here under 160 to rephrase that one to "operator shows he has exercised due diligence and used all feasable means to maintain or restore the well to a producible condition."

A I think that will be of no more effect, it is expanding the rule a little, I don't think El Paso would have any objection to that wording.

Q I think I see a loop hole in subject paragraph B.

A It is discretionary, Mr. Nutter.

Q Under condition A, the wells can. It doesn't say it has to be making water under condition B. What would you think of



rephrasing A to say that well -- go on from the first paragraph there, maintain, restore the well in a producible condition and if the well is making water in sufficient amounts after a 72 hour period, it can be swabbed down and the well is producing through artificial means, but from other means, or the operator shows that it is uneconomically feasable to utilize mechanical aids to maintain the well on production.

A The arrangement of that wording would be more appropriate

Q The first condition then would be making large amounts of water?

A I could conceive no case in which a well, "distress well" was not making water and it couldn't unload itself, in the other case the well would be simply then a marginal well, I see no difference in your phraseology than mine. However, I have no objection to your wording rather than mine.

Q Do you think that an adoption of a rule such as this, Mr. Rainey, would encourage sloppy operations?

A No, sir, I do not. There again, as I mentioned several times, this is a discretionary matter and our rule one was intended to discourage that proration, that the operator shows that he has exercised due diligence and used all feasable means to maintain, and in your words, or restore the well to the producible condition.

MR. PORTER: Anyone else have a question of the witness? You may be excused.

(Witness excused.)



REDIRECT EXAMINATION

BY MR. GIRAND:

Q Mr. Rainey, do you say it is feasable for an operator to call out a small swabbing unit that would do the job, pay that expense to get it?

A It doesn't appear that he ultimately is going to have some part of the mechanical means on the well sufficient to maintain and to keep the well unloaded, so as I say it is somewhat unnecessary to call on a little better one.

Q That would call for the installation of a pump jack, would it not?

A I think so.

Q Practically changes the engineering figure, would it not?

A That is right.

CROSS-EXAMINATION

BY MR. KELLAHIN:

Q Mr. Rainey, one of your conditions is that all of it be assigned to do the well. Do you mean by that spacing 640 acres, assuming other wells in the unit were shut-in and 640 dedicated?

A No, sir, all available undedicated acreage, if they got a 480 unit an effort would be made to return this well to production by getting it a sufficient allowable. They might elect to get 160-640. I don't propose they should dedicate all the acreage they own, deeded is not deeded so only one well would be feasable, dedicated to this well.



MR. PORTER: Anyone else have a question of Mr. Rainey?

You may be excused.

(Witness excused.)

(Whereupon, Jal Oil Company Exhibits 1 through 7 were marked for identification.)

ED HARDWICK

called as a witness, having been first duly sworn on oath, testified as follows:

DIRECT EXAMINATION

BY MR. GIRAND:

Q Will you state your name, please?

A Ed Hardwick.

Q Are you the same Ed Hardwick who appeared on behalf of the Jal Oil Company in Cases 1778 and 1779, consolidated in October of 1959?

A I am.

Q You are the same Ed Hardwick that appeared on behalf of Jal Oil Company on April the 14th, 1960, in case 1941?

A Iam.

Q On behalf of Jal Oil Company?

A Yes.

Q What is your office in the Jal Oil Company?

A Repeat that please?

Q What is your office, your position with Jal Oil?

I am Vice-President.



Q Mr. Hardwick, you have received notification or a copy of notification from the Conservation Commission respecting the obtaining of certain production information in regard to the wells, the subject matter of our hearing in October and again in April, October of 1959 and April, 1960, did you not?

A Yes, sir.

Q In response to that letter did you prepare a memo showing the information requested by the Commission in regard to the subject well?

A I either prepared it or it was prepared under my supervision.

Q That information was obtained by you from the field office of Jal Oil Company, was it not?

A That is correct.

Q That purports to be a daily record of the wells, subject wells?

A Yes.

Q Directing your attention to your Exhibit Number 2 which is an instrument containing four pages and entitled "Legal Number 2".

A Five pages.

Q Let the record show it is five pages. Is that the information that you obtained from your local field office?

A That is correct.

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And does that cover the information sought from you



under their letter of May 16, 1960?

A We felt it did.

Q We would like to offer Exhibit Number 2.

MR. PORTER: Mr. Girand, will you withhold all the Exhibits and offer them all at once?

MR. GIRAND: All right, sir.

Q (By Mr. Girand) I hand you what has been marked Exhibit Number 3, with the title of "Eva Owen #1", containing two pages, and ask you whether or not that instrument was prepared from information furnished to you by the local office of the Jal Oil Company in Jal, New Mexico?

A That is correct.

Q And that does contain the information under the requirements of May the 16th, 1960?

A That is correct.

Q I hand you what has been marked for identification as our Exhibit Number L and has a heading of "Jenkins #1", containing four pages, and ask you whether or not that is a detailed report, daily record of the operation of the Jenkins Number 1 and furnishes the information that is under the requirements of the letter to the Commission on the date, 1960?

A That is correct. That is from the time we were able to get the wells, or from the time we started getting the wells back on after we received the notice, which was not as of the date of the letter.



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Q From the time you were able to put in force the request of the Commission, you done so, that is the report by days in that report?

A That is correct.

Q That is true of Exhibits 2 and 3 also, is it not?

A That is correct.

Q I hand you what has been marked for identification as Applicant's Number 5 and entitled "Watkins #2", and ask you whether or not that report was prepared from information furnished to you by the Jal office? It contains two pages, does it not?

A That is correct.

Q That is the information furnished to you by the local office?

A That is correct.

Q Is that the information that you understand the Commission desired in their letter of May the 16th, 1960?

A It is.

Q And it covers the period of time which you were able to comply with the full operation of the well?

A That is right.

Q And I hand you what has been marked Jal, Applicant's Exhibit Number 6, "Dyer #3", and containing five pages, and ask you whether or not that is a detailed report on the operation of the Dyer #3, furnishing the information that was requested by the Oil Conservation Commission in their letter of May the 16th, 1960?



A It is.

Q I ask you this, Mr. Hardwick, in Case Number 1941, was similar information furnished the Commission?

A Yes, it was.

Q It dealt with an 8 day period rather than a daily record? A That is correct.

Q It was based entirely on the production charts as furnished you by the purchaser of the gas?

A That is correct.

Q Now, Mr. Hardwick, I hand you what has been marked as Apllicant's Exhibit Number 7 for identification and ask you to please refer to that exhibit and state into the record what that exhibit purports to show?

A This is just merely information compiled from our records which we kept which pertains to various wells, all of which have already been exhibits, and it indicates the monthly allowable taken from the gas allowable book. And also shows the production by months which the well produced. And this covered a period from 1959 down through June, 1960.

Q Directing your attention to the Exhibit, the right hand column, beg your pardon, the left hand column of the exhibit, are the months and years, and the years covered are '58 and '59 and part of '60, is that correct?

A That is correct.

Q Your first column, the figures deal with the allocation



or the allowable as fixed by the Commission for the period shown?

A Yes, that was the monthly allowable.

Q And then your second column there deals with the production of the particular well?

A That is correct.

Q And you have the two columns for each of the subject wells, the Dyer #3, and Jenkins #1, Legal #2, and the Eva Owens #1, and the Watkins #2?

A That is correct.

Q Now, about the middle of the page of the exhibit it shows a July allowable on the Dyer #1 at 10,192 and those of production of 6,412; the month of August shows the allowable of this well at 3,305, is that correct?

A That is correct.

Q And production for 4,710. How do you account for the considerable drop in the allowable for the Dyer #3 during the month of, June to August?

A You speaking of the year '59?

Q '59, yes, sir.

A The drop in the allowable was, came about because the wells were reclassified from marginal wells to non-marginal wells.

Q In each of the cases of the wells covered by the exhibit, I will ask you whether or not adding the total allowables allocated to the wells as determined by the Commission, equals the production of any of the subject wells through, well, June, 1960?



A You mean total?

Q Yes, sir.

A I think not.

Q And was that true as to totals through the year 1959?

A They did not equal the allowable which was assigned in the monthly allocation.

Q I direct your attention to the two wells and ask you to refer back to the exhibit in the five month period, 1960, and I direct your attention to the Legal #2 and the Watkins #2, and ask you if that would be the true statement there if the production was less than the allowable assigned?

A Well, the production was more in 1960 on the Legal #2, the production was more than the allocation and the same thing was true on the Watkins #2. My statement prior to that, I thought you was up in the year 1959.

Q That is correct, for the year 1959. Now, have the wells exceeded the assigned allowable to those wells?

A I don't believe so, not according to my figures here.

Q Then it was due entirely to the reclassification of the wells in June of 1959 that brought about the over-production factor, is that correct?

A That is correct.

Q We would like at this time to offer Exhibits, Applicant's Exhibits 2 through 7.

MR. PORTER: Without objection, the exhibits will be



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admitted into the record.

Q (By Mr. Girand) Now, Mr. Hardwick, you are familiar with the proposed rule change offered by the Jal Oil Company and Olsen Oils in this application, generally?

A I am.

Q You have familiarized yourself with the recommendations as offered by the El Paso Natural Gas Company, is that correct?

A That is correct.

Q Speaking on behalf of the Jal Oil Company, do you know any reason why the proposed rules as submitted by the El Paso Natural Gas Company cannot be workable and usable, insofar as you are concerned as operator in the Jalmat Pool?

A I see no reason why they couldn't be worked.

Q And if the Commission should adopt such rules, would those rules be satisfactory to your company?

A They would.

MR. GIRAND: We pass the witness.

MR. PORTER: Mr. Payne.

BY MR. PAYNE:

Q Mr. Hardwick, I don't quite follow you on this Exhibit 7. Let's take 1960, inasmuch as the wells are not producing the allowable assigned, why do you need any relief?

MR. GIRAND: If Mr. Payne would check the exhibits 2 through 3 he would find out why they are not producing.

(By Mr. Payne) Why don't you produce them at least up



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MR. GIRAND: They have been put down, Mr. Payne, we don't produce against that water, three quarters, I only said that about a hundred times before this Commission.

MR. PAYNE: Are you doing anything about remedial work on the wells?

A I can't answer that.

Q Do you want someone else to testify to that?

A That is correct.

BY MR. UTZ:

Q Mr. Hardwick, referring to Exhibit 7, particularly Dyer #3 --

A Yes, sir.

Q -- you will note that you have listed as allocation for the months of May '58 through June of '59 the 15,119, is that the marginal allowable that you listed here?

A That is correct. That is still quoted in the allocation

Q And do you understand our method of allocating marginal allowables?

A Yes, sir, I do. I merely took this from the monthly allocations.

Q Is that allowable higher than the non-marginal allowable of like size and acreage?

A At that time I do not know whether it was or not.

Q Do you have the supplement of recirculated oil when you



reclassified this well?

A I believe they have, though at this time I do not.

Q Is that figure, that allowable is considerably less than 15,119?

A I might merely make the statement that the allocation for this well was shown to be 15,119 in the monthly schedule.

Q What was shown on the supplement when you reclassified this well to the non-marginal well?

A That came out quite sometime after these were published here.

Q You understand that marginal allowable is assigned to a well and a schedule is merely a shot in the dark to try to give a well a certain allowable, it is not an actual allowable?

A I believe it is allowable on the schedules for the month following after it was issued.

Q This would probably appear to be what the well produced, am I correct on that?

A That is right.

Q Till such time that the well is producing more than a non-marginal allowable?

A That is correct.

Q Actually in showing the allowable during that period expressed on the Jenkins #1, Dyer #3, the Legal #2, those are not the actual allowables, are they?

They were merely the ones published prior to the month.



HONE CH 3-6691 DEARNLEY-MEIER REPORTING SERVICE, Inc. ALBUQUERQUE, NEW MEXICO for the production for the well during that month. They would not be the same as re-allocated as after they came back.

Q Not the same as non-marginal allowables?

A This is a come back and re-allocated, no.

Q I think the point which I might bring out, I believe on July '59 on the Dyer #3, did you testify that was a marginal or non-marginal allowable?

A I believe that is a non-marginal because they reallocated there.

Q Then the decrease from 10,192 in July to 3,305 in August was not due to reclassification but due to the market demand for the pool?

A That is correct. If I made that statement it was wrong.

MR. PORTER: Anyone else?

BY MR. NUTTER:

Q Mr. Hardwick, referring to these various exhibits which show your production rates and work overs or swabbing efforts on these various wells, when the wells were finally swabbed in and put on production were they producing in that capacity?

A I think when the well first, that is probably an engineers question on that and we probably should let Mr. Watson answer that. I think when you first swab on it it would not be at its capacity, it would still be unloading some fluid.

Q For instance, we can take this Dyer #3, and it appears when it got on the line it had an average anywhere from 2 to 3 hundred MCF, particularly in the latter part of June there and hasn't been shut-in for two or three weeks? Would that be the capacity of the well to produce?

A I think probably that might be -- we will check that with someone more qualified.

Q Well, I will wait till Mr. Watson testifies.

MR. PORTER: Anyone else have a question of this witness? You may be excused.

(Witness excused.)

DEWEY WATSON

called as a witness, having been first duly sworn, testified as follows:

DIRECT EXAMINATION

BY MR. GIRAND:

Q State your name, please.

A Dewey Watson.

Q By whom are you employed, Mr. Watson?

A Olsen Oil, Incorporated.

Q Mr. Watson, you have appeared previously before the Commission and testified in cases number 1778 and 1779 consolidated?

A Yes, sir, I have.

Q You also appeared in April, 1960, in case number 1941 before this Commission, testified in regard to some of the wells involved here?

Yes, sir.

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Q Have you previously been employed by the Jal Oil Company?
A Yes, sir.
Q And by whom are you presently employed?
A Olsen Oils, Incorporated.

Q Are you familiar with the Jal Oil Company and Jalmat Gas Pool?

A Yes, sir.

Q You are also familiar with the wells in the Olsen-Jalmat Gas Pool?

A Yes, sir.

Q Mr. Watson, I hand you what has been marked as Applicant's Exhibit Number 8 and ask you whether or not you can identify that instrument?

A Yes, sir. This is a summary of the Olsen Oil SR Cooper #1 well from the first of June through the 8th of July.

Q Now, have you checked that exhibit?

A Yes, sir.

Q Does it contain the information as you interpreted the letter of the Commission dated May the 16th, 1960, as to the information they desired?

A Yes, sir, it does.

Q I hand you here what has been marked Applicant's Exhibit Number 9 and ask you what that exhibit purports to show?

A This is a summary of the Winningham #3 Olsen Oils, Inc., and shows the production from the first of June through the 8th



of July.				
Q	In connection with what well does that cover?			
A	Winningham #3.			
Q	Exhibit Number 8 is SR Cooper #1?			
A	Yes, sir.			
Q	In connection with those two wells, the Winningham and			
SR Cooper	, what date were the wells produced on the basis of three-			
quarters of their allowables?				
A	Up through June 30th.			
Q	And then from that time were the wells on basically a			
24 hour a day operation?				
A	Yes, sir.			
Q	Without regard to the allowable?			
A	That is right.			
Q	That was the instruction authorized by the Commission			
in their letter of May 16, 1960?				
A	Yes, sir.			
Q	Mr. Watson, in connection with this application are you			
familiar with the proposed rules as prepared and submitted by the				
El Paso Natural Gas Company?				
A	Yes, sir.			
Q	In your Exhibit Number 1			
A	Yes, sir.			
Q	are you familiar with the problems of the Olsen Oil,			
Inc., and the Jal Oil Company in regard to the certain wells which				



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in our opinion are distress wells and which in all probability applications will be filed having so classified if an order is opposing such a classification? Do you feel with your knowledge of our wells, of the wells involved, that the rule is a workable rule for the operators in the Jal Gas Pool?

A Yes, sir, I do.

Q Do you feel that if the Commission should adopt such a rule that an operator owning such a well would be afforded a right to protect his reservoir in the pool?

A Yes, sir.

Q We pass the witness.

MR. PORTER: Any questions?

BY MR. PAYNE:

Q Mr. Watson, do you agree with Mr. Rainey, it is applied in this rule that the operators either attempt more remedial work or would show in purpose?

MR. GIRAND: I object if you are going to this line of questioning on this ground. We are only seeking the revision of the special rules and anyone who figures they have a distress well can come into this Commission and file their application and talk about that well. I think it is improper at this time for the Commission to even consider a hypothetical question about one well in a general place as against another well because the Commission is going to be called to pass on each well on its own four feet and not on the hypothetical question about remedial work as a



general proposition.

MR. PAYNE: This was the proposal of El Paso Natural Gas Company which Mr. Rainey testified, he said, that it was his understanding that remedial work was being covered in the paragraph where he read and said, the operator shows he has exercised due diligence and all feasable means to maintain the condition. I am asking if he agrees with Mr. Rainey in the producible determination of this proposed rule.

MR. GIRAND: It is just to present this matter that we come before this Commission. The witness has testified that the rules as submitted by El Paso Natural Gas are satisfactory. We think we can live under them. When we come, we did not come to hear what this Commission may go in to in regard to any subject well, we are seeking to get classified as a distress well, this is another matter, but as a general proposition or to try to spell out that the operator must do remedial work before he is eligible to come into this Commission is entirely wrong at this hearing.

MR. PAYNE: I am just trying to find out what the rule actually provides. I didn't phrase it, he did, to try, I said, I asked him if he implied to what Mr. Rainey said, either they had to do remedial work or show by some means or other crosssection or some kind of evidence it would be of no value. We got to know what your rule provides.

MR. GIRAND: Mr. Payne, I don't want to be disrespectful, but if the Commission adopts the rules they will know what it means.



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MR. PAYNE: I am trying to find out what your witness thinks it means.

MR. GIRAND: I think the operator under the present test testified what he thinks he ought to do or shouldn't do. If the Commission had determined that you have to do anything in regard to the particular well to determine whether or not that well would be eligible for the relief granted by this rule, that is another matter. And if the rule is passed, we will have your interpretation of our rule.

MR. PAYNE: Mr. Girand, if it comes to that, and you get into all these hassles what the rule actually provides, it seems to me it is to everybodys advantage to know ahead of time what the rule covers and what conditions you have to meet before being eligible.

MR. GIRAND: I submit I don't think the rule is ambiguous to that extent. I don't know that you got too much jurisdiction in here, that we primarily agree on any particular engineering problem as to the proper solution.

MR. PAYNE: It doesn't matter to me if it is or not. I am trying to find out what the rule meant to him.

MR. GIRAND: Rephrase it and see how it sounds the second time.

Q (By Mr. Payne) Mr. Watson, do you agree with Mr. Rainey that it is implied in paragraph 1 of rule 160 that an operator should show either that he has attempted to do remedial work and



that it is feasable that remedial work would be of no value or that remedial work would cost so much it would make the well uneconomical to operate?

A Yes, sir, I think I agree with that interpretation. MR. PAYNE: Thank you.

MR. MORGAN: You understand we are providing a yard stick for the determination of a distress well, that is all it amounts to.

A That is all it amounts to, that is right.

MR. PORTER: Mr. Nutter.

CROSS-EXAMINATION

BY MR. NUTTER:

Q Mr. Watson, we have several exhibits here. It appears that this Watkins #2 never was restored to production, is that right?

A I didn't hear you.

Q From this exhibit on the Watkins #2, it would appear it wasn't restored to production?

A No, sir, it was not.

Q Your Jenkins #1 was swabbed and restored to production and since being placed on production has averaged from 40 to 50 MCF per day, is that the capacity of that well to produce?

A Yes, sir, it is, under the present conditions in that, if you will turn back to Exhibit Number 7 it gives you a pretty good picture of what happens to these wells when an attempt is made to

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PHONE

curtail your production because the production in the last five months in 1960 and the last five months of '59, nowhere compares to production in 1958 or first six months of '59. To me that shows what we have been talking about all the time. A well is curtailed more than what they have been, you are going to lose production on them. It is not a temporary thing, it is permanent.

Q You feel that this rate of production after this well was put back on is top capacity?

A Yes, sir, that is my opinion.

Q In your Legal #2 after being swabbed it has listed 250,300 MCF, is that the capacity of that well?

A Yes, sir, it is.

Q Your Eva Owens has never been put back on production, correct?

A That was put in for one year and when we attempted to put it back on production we were unable to get it to produce any substantial amount of gas, and again Exhibit Number 7 shows what it made the first four months of 1958 before it was shut-in.

Q You swabbed it in the middle of June and fooled around with it until the 20th of June and never did get any production from it?

A No, sir, that is the same condition as far as the Jenkins is concerned. It is either pumping or abandoned.

Q The Dyer #3 was swabbed or something, it has a pump jack, was put in operation, the well was restored to operation and since



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then has offered maybe 250 MCF per day, is that the capacity of that well with its existing pump jack?

A Yes, sir.

Q Mr. Watson, how many of these wells that you have these exhibits on, how many of these five wells that we have these exhibits on would in your opinion be eligible for classification as distressed wells?

MR. GIRAND: Will all the figures be bound by this?

Q (By Mr. Nutter) In your opinion, would you classify the Watkins #2 as a distress well?

A I think the Watkins is so far distressed it is through, there is no question about it.

Q How about the Jenkins #1?

A Jenkins #1, yes.

Q The Legal #2?

A Not at this time, it is getting close to it.

Q I see. The Eva Owen #1?

A Yes, sir.

Q The Dyer #3?

A Since the pump jack, the Dyer #3 could get back the way it was, with pump jack installation.

Q How about this SR Cooper #1 well, is there any particular problem involved with this well?

A Well, the only problem of that well at the present time is the fact that at any time it is shut-in for a week or ten days



you might have to blow it to the air or to get it to kick off, but so far we have not found too much wrong with the well. I mean it --

Q Well, it was shut-in from the first of June until the 16th of June, then you just opened it it started pumping 259 MCF per day. Did that involve some sort of working to establish the production that is not mentioned on this production?

- A Not at this time.
- Q Just opened the float?
- A That is right.

Q The Winningham #3 was shut-in on the first and second of June and opened up on the third of June, it was also shut-in from the llth to the 30th of June and then opened up on the 30th. Does that involve just opening the well up and it flows?

A That well is on pump jack.

Q So you just go turn on the pump jack?

A In order to get it to flow.

Q After you turn the pump jack off will it keep flowing?

A No, sir, it will produce approximately four hours after you shut the pump jack down.

Q Do you regard the Winningham #3 as a distress well?

A Not under the present conditions, no, sir.

Q If the word restore was placed in paragraph one of that rule, would it be possible for you to qualify any of these wells as to distress wells? In other words, the thing would read, "The operator shows he has exercised due diligence and used all feasable



PHONE CH 3-6691 DEARNLEY-MEIER REPORTING SERVICE, Inc. ALBUQUERQUE, NEW MEXICO means to maintain the well under or restore it to condition."

A Yes, sir, to restore any of these wells to a producing condition. Let me give you a little history on the Winningham or the SR Cooper #1 both, they were reworked, the Winningham #3 was reworked sometime in '54 or '55 and made a gas well and as far as I can see it is in the same situation as the Dyer #3, the Legal #2, and the Jenkins #1, maybe not quite as far along but is following the same pattern. It doesn't seem to me that it would be advisable to spend the money to settle in those other offset wells close to the vicinity.

Q You have reworked the Winningham #3?

A Yes, sir. It was worked in 1954 or '55.

Q Well, it is one of the wells you said wouldn't be a distress well, so maybe the work-over kept it from being distressed?

A It's a matter of time till it will be. To me there is a cycle, those wells they flow and flow on the free piston and then on the pump jack, and eventually there will be plenty of water.

MR. NUTTER: I believe that is all.

MR. PORTER: Any further questions?

CROSS-EXAMINATION

BY MR. PAYNE:

Q Mr. Watson, you have utilized the partial relief, that was to use the shut-in portion of an adjacent well so you would have a deliverability in the calculation of your allowable? A Oh, you are speaking of the Olsen Oil wells now. Well.



the deliverability and deliverability test was run, we went along with the shut-in pressure for 72-hours on our particular wells, I don't know whether that was a case from the Jal Oil Company or not. Something else I don't know, there are certain cases, when you take a high shut-in pressure on those cases you are going to reduce your deliverability by taking a higher shut-in pressure than the lower one.

Q You are going to have some deliverability to the well, however, which you don't have? I was wondering if you go through this proceeding so you can get the allowable up on these wells by taking a high shut-in pressure on an adjacent well which does not have a water problem?

A Why not take the lowest pressure?

Q That would give an undue advantage to the operator?

A You are fighting a loss. For example, production, we are not making enough oil to run the pump the way it is.

Q That again is the problem of interpretation, Mr. Girand shows under 1b of 16C, the operator shows it is uneconomically feasable to utilize mechanical aids to maintain the well on production. Where would you show this in regard to reserve or as opposed to the monies that have to be spent to put in this mechanical aid to recover reserves?

A Not necessarily, I have to take the allowable that you were receiving currently and figure out how many months, years or whatever it would take in order to pay back the cost of the pump



Q And also take into consideration how long the well would produce after putting in the installation?

A Yes, sir.

Q Thank you.

CROSS-EXAMINATION

BY MR. UTZ:

Q Mr. Dewey, at this time on these seven wells that you have given us exhibits, are there deliverability tests?

A Again I speak for Olsen Oil Company, not on the SR Cooper or Winningham #3, I am not qualified to say on Jal Oil Company, I don't know.

Q Which are Olsen and which are Jal?

A SR Cooper #1, Winningham are Olsen oil wells.

Q You are speaking for Olsen Oil?

A I hope I am.

Q Do either of these wells have deliverability tests? MR. GIRAND: If the Commission --

A Not to my knowledge.

MR. GIRAND: What effect does this hearing have as to whether or not deliverability is paying our pool checks. This is a hearing on rules, not to whether --

MR. UTZ: I submit that it makes a lot of difference in allowables.

MR. GIRAND: We are seeking a rule.



HONE CH 3-6691 DEARNLEY-MEIER REPORTING SERVICE, Inc. ALBUQUERQUE, NEW MEXICO MR. PAYNE: If you got the allowable up on these rules by increases in deliverability, then perhaps they wouldn't have to be classified as distress wells.

MR. GIRAND: Get the allowables up on these wells, we have knocked on these doors twice. You never would let us unite on adjacent wells to get a deliverability. You said open them up and let's see what happens, that looked better than shutting them in and running a 24-hour test on top of them. Well now if you want us to do right then, we are kind of interested in seeing whether or not if the Commission wants to set up a rule, regulation by where operators as well consider yourself to be producing in and having wells of our kind and will have a large amount of trouble, they can go too and ask for a relief, and where the Commission will have the background to grant it.

MR. MORGAN: All we are after is giving these a dry run to see what the effects are. If the rules are applied as they are proposed, at least lets wait and see.

MR. GIRAND: Mr. Commissioner, I don't intend to be disrespectful and I apologize. The only thing I am considering is I came up here to support a rule regardless of our wells, our exhibits here, primarily two through seven, were in response to the letter from this Commission asking certain information.

MR. PORTER: Granting certain relief?

MR. GIRAND: During a limited period of time I tried to tie it in with the regard we made in the previous case to try to



have a full picture before this Commission, to what we are doing. The Commission had the chance to look at our operations over a period of better than a year now and they are hearing all we wanted to do, and all we came frankly prepared to do was say here to the Commission we think that it is a good limit to our amendment to our present rule, the operators can live on it. The Commission has to face it soon or lose a lot of reserves, and we think under the present rule and that wells making water, gas wells making water, that to shut them in brings back unwanted and unnecessary waste and we think our exhibit number 7 clearly shows that as well as the other exhibits that we have offered. If my clients have failed in filing something or haven't taken some tests, I see no need to single us out against the other operators in New Mexico.

MR. MORGAN: The wells are not on trial, the results are on trial.

MR. GIRAND: The deliverability as such is not a part of these rules.

MR. PORTER: Mr. Girand, the Commission will sustain your objection to the question just asked by Mr. Utz about the deliverability. Do you have any further questions? BY MR. UTZ:

Q Mr. Watson, are you familiar with the operation of these rules?

A Yes, sir.



Q	Do	you	know	if	a n y	other	operate	ors, d	offset	oper	rators	and
operators	in	the	near	vi	cinit	y h ave	these	rules	and	have	water	
problems :	such	n as	yours	3?								

A Yes, sir.

Q Have they been able to do anything about it?

A Well, at the present time I mean the things are affected, have a free piston.

MR. PORTER: We will adjourn until 9:00 A.M. tomorrow.

(Whereupon the hearing was adjourned until 9:00 A.M. on July 14, 1960.)

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BEFORE THE OIL CONSERVATION COMMISSION MABRY HALL Santa Fe, New Mexico July 14, 1960 SECOND DAY HEARING

REGULAR HEARING

MR. PORTER: The hearing will come to order, please. The Commission will continue with case 2014. I believe Mr. Watson was on the stand, Mr. Dewey as Mr. Utz calls him. Mr. Utz, I believe you were questioning Mr. Watson at the end of the session yesterday.

MR. UTZ: Yes, sir, I was.

BY MR. UTZ:

Q Mr. Dewey, I believe just before we adjourned yesterday we touched on the fact you were quite familiar with the activities in this immediate area of wells you have water problems on, is that correct?

A Yes, sir.

Q Do you know of any other operators in this immediate area that has water problems such as yours?

A Well, they don't seem to be quite as serious as ours. The offset operators on the Winningham lease and the Jenkins, they are operating on the free piston, and that was testified to in case one at the same time that 1778 and 1779 were taken and they testified to the fact they were having water problems in the area.



Q Do you know of any of these operators in this area that have been able to take care of their water problems by reworking, been able to produce the wells without free pistons, pump jacks and so forth?

A I don't believe there has been any rework on the wells offsetting the wells right in the Jal area, around the town site of Jal where most of these wells are. Shell reworked a well in the vicinity of the Watkins #2.

Q Did Jal's rework in this vicinity take care of their water problems?

A I am not sure about the Humble well, I believe it was in a little farther north from the area where we are speaking of.

Q The Commission's records show that some of the operators have been able to take care of their remedial work. You would not disagree with the Commission's records, would you?

A No, sir.

MR. UTZ: I believe that is all.

MR. PORTER: Any further questions? Mr. Payne. BY MR. PAYNE:

Q Mr. Watson, as I understand your proposed rule, it wouldn't actually be to exempt the wells from proration as such, rather it would be to allow the wells to produce whatever they had to produce to keep the water?

A That is correct.

Q On the wells that you feel are now distressed wells, in



answer to Mr. Nutter's questions yesterday, do you have any figures as to how much production would be necessary to accomplish this?

A No, sir, not at the present time.

Q Do you have any kind of range, an estimate?

A You mean by figures, the amount of gas that would be produced?

Q The amount of gas that would have to be produced to keep the water unloaded from the wells.

A In this area the amount of gas as we have shown it, has to be at a maximum rate of production to keep the water off of these particular wells.

Q It is maximum rate of production in a sense. How much does it come to, have you figured that out?

- A No, sir.
- Q I see.
- A You mean dollar-wise or --
- Q MCF of gas to --

MR. PORTER: Would that be shown on Exhibit 7?

MR. PAYNE: You worked that seven showing the total production during the months shown as to allowable you got to the Winningham?

A Yes, sir. If I understand your question correctly here on the Olsen Oil Winningham #3 and SR Cooper #1, I took the last six months of 1959 and totaled the allowable for these particular wells for that six months period.



PHONE CH 3-6691 DEARNLEY-MEIER REPORTING SERVICE, Inc. ALBUQUERQUE, NEW MEXICO Q Yes.

A The first eight days of July we operated those two wells continuously and obtained an average daily rate of flow which on the Winningham #3 it was 518.5 MCF per day and the SR Cooper #2 was 213 MCF per day. And those wells were stable during that period of time so that is the maximum production that we can expect from those wells. Now, in order to establish the comparison we just assumed that the proration period from July to December 1959 would be similar to the proration period of July to December, 1960. and I took the daily production times, the 184 day proration period and come up with 95,404 MCF, it would be an estimate of the production for this six months in 1960 if the well was allowed to produce continuously. And the 1959 allowable for a comparable six months period was 24,980, this is on the Winningham #3, that is allowing the well to produce at its maximum rate. On the SR Cooper the same periods are involved and taking a 213 MCF of an average per day times the 184 times the proration period, the production would be 39,192 MCF and the allowable for the '59 period. July to December was 32.369, which would be an over-production of 6.823 So this particular well is getting close to the border line. MCF. I mean if it is left on continuously there would be very little over-production as far as the well is concerned.

Q Now, assuming that each of these wells of which you are having water problems has a deliverability factor as high as any comparable size unit in the pool, would your allowable then be



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adequate to take care of your water problems, use the acreage factor, you assign a deliverability factor which is as high as any such deliverability factors of comparable size units in the pool?

A Now, do you mean take deliverability --

Q You have a 40-acre, I think it is the Watkins?

A Yes.

Q Take the highest deliverability on a 40-acre in the Jal Pool and use your same acreage factor. Would that allowable be sufficient to allow these wells to keep the water down?

A I don't have the figures before me, but as far as the top for 40-acres in the Jal Pool is concerned, if it were high enough I assume it probably would.

Q Well --

MR. PORTER: What does the size of the units have to do with deliverability?

MR. UTZ: Knowing and using the acreage factor you got now.

MR. PORTER: Deliverability for the highest one?

Q (By Mr. Utz) So that no well would be producing more than a non-marginal well of like size.

A The only way I can answer that is to go through the proration to see what the deliverability for 40-acres would be.

 \mathbf{Q} So you would have a hazard on the 160 acre unit?

A Well, some of those deliverabilities in there, seven million, such figures as that that would if through deliverability



factors, and I am sure it would take care of it.

Q That is what I was perhaps assuming, that if the Commission sees fit to adopt a rule along these lines whether it would be feasable to have a provision in there that no distress well would produce more than a non-marginal well with the same amount of acreage dedicated to it?

A Are you talking about a maximum production for 160?

Q Yes, sir, whatever is dedicated to the well. In other words, you assign a false deliverability?

A Yes, sir.

Q Your working on straight acreage?

A Well, at the present time I would see no objection to that along those lines, and I assume that it would take care of the situation because these wells are just, none of them are making much, very little more than what the allowable a day is, so if you increased the deliverability even say to 1 million a day the allowable would be enough to take care of the production, leave them on continuous.

Q I am trying to explore all aspects of this problem, thank you.

MR. PORTER: Anyone else have a question?MR. GIRAND: May I ask Mr. Payne a question, please?MR. PORTER: Do you want to put him under oath?

MR. GIRAND: Yes, sir.

BY MR. GIRAND:



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Q Mr. Payne, your last question of Mr. Watson and dealing with deliverability, you were meaning to deal with total volume of gas production?

A That is correct, sir?

Q Regardless of how you arrived at deliverability or otherwise?

A I was wondering if it would be feasable assuming the Commission went to some rule like this to have a provision in there that a distressed well would not produce more than a nonmarginal well with the same acreage dedicated to it.

MR. GIRAND: That is what I thought you were driving at. I wasn't quite sure the witness was clear on it or I was either.

MR. PORTER: The witness may be excused.

REDIRECT EXAMINATION

BY MR. GIRAND:

Q Mr. Watson, you testified yesterday afternoon to the extent that the SR Cooper well and the Winningham well were at the present time partially controllable due to the manner in which they were being produced. I will ask you what, if anything, has happened in regard to the encroachment of water into these two wells since they were shut down by the Commission order back last year?

A There has been a definite increase in the water production as far as these two wells are concerned since the approximate nine months period since they were all shut down.



Q Basing your answer to your knowledge of the Jalmat Pool and particularly of the wells where the water is encroaching on the gas wells within the pool and after having reviewed the proposed amendments offered by the El Paso Natural Gas Company to rule 1670, is it your opinion that the rule is workable and will be beneficial to the operators to prevent waste?

A Yes, sir.

MR. GIRAND: That is all.

MR. PORTER: Mr. Watson, in your testimony your attention was called to several wells on more than one occasion, I believe you said were watered out completely in succeeding weeks, have any of these wells been restored to production, they probably show on the exhibits?

MR. GIRAND: Exhibit 7 shows, but the Watkins #2 is definitely finished, that is the possibilities there were explored and it only obtained an increase in water so far as production is concerned.

Q The Watkins was not restored to production?

A No, sir.

Q The Apola?

A The Apola has not been restored and the Eva Owens at the present time is unable to produce.

Q But you haven't given up on it?

A No, sir. And the Jenkins #1 is in pretty sad state right now.



BY MR. NUTTER:

Q Mr. Watson, several times along the line of this case and in previous times on other cases similar to this that have been heard, I heard it mentioned several times that during the period these wells were shut-in by the Commission they accumulated a volume of water that prohibited them from producing because of the water, to that it is also true that some wells that have not been shut-in by the Commission have increasing volumes of water production?

A I am sure that is true. There is some encroachment throughout the area.

Q While the area well is shut-in or producing.

MR. PORTER: Any other questions? The witness may be excused.

(Witness excused.)

MR. GIRAND: At this time we would like to offer Applicant's Exhibits 8 and 9.

MR. PORTER: Without objection Exhibits 8 and 9 will be admitted.

MR. GIRAND: If the Commission please, in connection with this application copies of the proposed rule as covered by the application of the Applicant were circulated by the Commission, also by the application to certain operators and at this time we would like to offer also the names expressing approval of the

proposed change on behalf of the Husky Oil Company, Ralph Lowe, Pritchard Oil Company, Western States Petroleum Company, Albert Cackle, C. H. Limbs, and W. P. Prentiss.

If the Commission please, on the evidence given by Mr. Rainey yesterday he made a reference that the proposed change on rule 15A dealt with the deliverability. I believe in checking the order 1670 I find that 15A deals with over production. As along that one, I would like to make that correction for the record at this time. If the Commission please, the Applicants recommend that this Commission consider the proposed rule changes as submitted by the El Paso Natural Gas Company in their exhibit 1 as amended by Mr. Rainey on the stand to authorize a hearing in the event a proposal was filed as well as the submitted rules on the part of the Applicants. The rules are practically identical with the exception of a few minor changes.

MR. PORTER: Does that conclude your testimony? Does anyone else wish to present testimony in this case?

MR. KELLAHIN: Jason Kellahin, Continental Oil Company, we have one witness, Mr. V. T. Lyon.

(Witness sworn.)

VICTOR T. LYON

called as a witness, having been first duly sworn, testified as follows:

DIRECT EXAMINATION

BY MR. KELLAHIN:



Q	Would you state your name, please?
A	Victor T. Lyon.
Q	By whom are you employed and what position, Mr. Lyon?

A By Continental Oil Company as District Engineer, located in Eunice, New Mexico.

Q Now, in your district in New Mexico, do you have jurisdiction as district engineer over the Jalmat Gas Pool?

A Yes, sir.

Q Are you familiar with the Jalmat Gas Pool?

A Yes, sir.

Q Have you previously testified before this Commission as Petroleum Engineer and had your qualifications received?

A Yes, sir.

Q Are the witness' qualifications acceptable?

MR. PORTER: Yes, sir.

Q (By Mr. Kellahin) Mr. Lyon, have you made a study of the proposed rule change which has been submitted in case 2014?

A Yes, I have.

Q And subsequent to the commencement of this hearing have you made a study of the proposed rule as submitted by a witness for El Paso Natural Gas Company?

A I have studied to some extent, but not to the same extent that I had the original proposed rules.

Q In connection with that study did you reach a conclusion as to the effect of the proposed rule change?



Yes, sir. A

Would you state what conclusions you were able to draw Q from your study?

Well, in the first place I believe that the proposed A rules are contrary to good conservation practice. I think that good conservation practice calls for the treatment of wells in the fair and equitable manner and I believe that the proposed rules will give an advantage to certain wells and I believe this is improper. In my opinion no well should be given a greater allowable than its neighbor. And the only time that a well should be exempted from the standard pool wide rule is when the well is unable to produce the allowable, in which case the allowable is ineffective anyway. I do not mean to imply that under extenuating circumstances a well may not be given time to be explored on the temporary basis, but I do believe that any time such unusual treatment is granted there should be provisions in the order for a directive of the Commission whereby the well would be restored to a balance with its neighbors. In regard to the requirements for classification of distressed wells I would like to make some comments. The first requirement of the original proposal is that the well should be driving into the low-pressure dry gas line. As Mr. Rainey pointed out, it is unfortunate that these low-pressure gas lines are not immediately available to all wells which might otherwise qualify for distress wells classification. Consequently all wells would be not able to qualify for this classification.



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The second requirement is that the well must go through some artificial means or make water in some manner, for example it becomes logged off within 72-hours if it is shut-in, such that it requires swabbing to retain production. In my opinion such wells probably need remedial work done on them and this proposal is encouraging operators to delay remedial work which should be The rules also provide the operator a double benefit performed. by delaying such remedial work. First he doesn't spend the money that is required to perform the remedial work and in the second place he is completely exempted from allowables. And when one of the staff members asked Mr. Rainey yesterday if the proposals would not encourage sloppy operations and he said, "that it would not", in my opinion it encourages just as sloppy operations as the Commission will stand for. The third requirement is that all available acreage has been dedicated to the well and this is probably a good idea whether there is a single well in the large track, it is even better for a single well on the small tract. Where there is several wells on the general lease, I am a little bit confused as to how the thing would operate. It could be that the operator would be required to reallocate acreage to the weak well from wells which have a higher deliverability, such that the allowable for the lease would be reduced and thus would jeopardize the operator's competitive position. On the other hand, the operator may be able to allocate additional acreage to wells with larger deliverability, reducing the acreage to the weak well, which



enhances its needs for distress well requirements and then it is given exemption from allowable so that the operator again benefits from this distressed well classification. I note that the Applicant's Watkins #2 is a 40-acre tract, and under these rules it would receive the same allowable which is capacity as a well on the 640 acre lease. So we have completely eliminated every factor from allocating other than deliverability, and I just cannot see that that is protecting his correlative rights. Now, the fourth requirement calls for furnishing the Oil Commission with certain information, and I think that the Commission is entitled to this information, but I do believe it should be presented at a public hearing after due notice so that the other operators near the pool will have an opportunity to voice their opinion on the matter. I also note that the proposal calls for exemption from testing, sometimes these situations have a way of curing themselves, but unless there are tests performed I don't know how the Commission will ever know whether or not a well needs to continue in this very favorable classification as a distressed At the regular hearing in Hobbs on April 13th, the well. Applicant presented testimony and my recollection of the reserves which had been calculated for three of their wells is as following. if I am incorrect I would appreciate it if you would correct me. The Dyer #3 is supposed to have as of January 1, 1960 1.466,000 in MCF. The Owen #1, 1,897,003 MCF and the Watkins #2, 2,871,421 MCF.

I would like to make a comment on those reserve figures, if they



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are correct. One is that if those reserves are there, then the expense of performing remedial work is certainly justified, and 2, I just don't believe that any large proportion of these reserves will be recovered unless that water is shut off or at least effectively curtailed.

Q You state in your opinion remedial work would be beneficial to all of you. Has there been any remedial work in the area of other wells?

A Some remedial work has already been performed of Applicants wells.

(Whereupon, Continental's Exhibit 1 was marked for identification.)

Q Referring you to what has been marked as Exhibit Number 1, would you state what that is designed to show, Mr. Lyon?

A Exhibit 1 is a cross section showing 4 wells, the Phillips Petroleum Company, Woolworth #12, Jal Oil Company, Shell Oil, State #1, and Humble Harrison #1. That is reading the wells from left to right. The exhibit shows a trace of the logs on these wells, the completion data and some of the work that has been done on the wells. Before I proceed further, I might mention that on the Jal Oil Company's Watkins #2 the information we had as of the time it was made up showed that it was perforated only 2940 to 2952 and we have subsequently learned there is additional perforation in this well, and I do not have the exact perforations, there are additional perforations. On the left hand side of the Exhibit,



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the Phillips Petroleum Woolworth #12 is shown, it was originally completed in 1935 at a depth of 3490, a 7 inch casing was set at 3461 and it was completed as an oil well. In 1939 it was perforated at 3321 to 24 as advertised and it was recompleted as a gas well. In 1947 additional perforations were made in the Yates and the well is producing today at small gas volumes, but so far as we can determine, little or no water. The next well is the Jal Oil Company Watkins #2, as it is stated the information is incomplete on the cross section but as I understand it is a serious water producer. The next well is Shell Oil State #1. which was originally completed in 1953, through open hole intervals from 2636 to 2942. It was plugged back to 2844 to eliminate The well was fracked in April of this year with 20,000 water. gallons and its succeeded in eliminating the water and increasing the deliverability considerably. The deliverability was increased from 510 to 7,900, and the well is producing virtually water free. The next well is the Humble Harrison #1 which was originally completed in 1935 as an oil well, was recompleted for gas in 1943 by perforating 3140 to 3230, and has had remedial work done on it at successive times, one in 1944, one in 1948 and again in 1956. And the operators were successful in shutting off water and completing the well as a commercial gas well, but we do not intend to the Commission or Jal Oil Company what should be done with their wells. All we intend -- other operators have been succeeding in shutting off water by performing remedial work, which I think it is



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entirely reasonable and the Applicant can do the same thing.

Q Mr. Lyon, in referring to the exhibit again, do those wells compare structurally in the area involved in this application?

A The Humble Harrison #1 is structurally comparable to Jal Oil Watkins #1, and Shell Oil Well is about 100 feet higher than the Phillips well, it is considerably lower.

Q Would you have prepared another cross section?

A Yes, sir.

Q Would you have the Reporter mark it as Continental Exhibit Number 2 for identification?

> (Whereupon, the cross section was marked Continental's Exhibit No. 2 for identification.)

Q Referring to what has been marked as Exhibit No. 2, would you discuss that exhibit, please?

A Yes, sir. Exhibit No. 2 is a cross section showing two wells, the well on the left the Jal Oil Company Dyer #3 and the well on the Gulf the Arnott Ramsey. I believe it was number 1, these wells are at comparable structural locations. The Jal Dyer #3 was completed open hole with the casing set at 2792, total depth is 2977. The Gulf well has the casing set at 3194, the well has been plugged back into the casing so that the entire producing interval is producing through perforations in the casing. This well is producing within the same interval and some additional interval too from which the Jal well is producing and it is

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producing virtually water free. We think the reason it is water free is because it is producing through selected perforated intervals.

Q Have you made a study of the wells which are operated by Continental Oil Company in the Jal Pool?

A Yes, sir.

Q Taking into consideration the possible effect upon these wells of the proposed rule?

Yes. sir. I thought it might be interesting for the A Commission to see the possible magnitude of this thing, and after making a study of the wells operated by Continental, which is about 15% of the pool. I came to the conclusion that approximately 25% of them would be eligible for distress well classification within the next five years. On assuming that other operators from the pool would have approximately the same experience as Continental, and it isn't inconceivable that 25% of the wells in the Jal Pool would be eligible for distressed well classification. I have also made a comparison of the allowable that Jal and Olsen Oil wells would receive and their deliverability at 100 pounds, since that is approximately the allowable that they would receive as distressed wells, the amount of gas they could deliver into a 100 pound line. The Jal Oil Company Dyer #3 has, I might mention here too that these allowables are calculated on the basis of the pool allowable for the past year and determining average factors into which the acreage and deliverability have been inserted to



arrive at the average allowable over a yearly period, the Dyer #3 would have an allowable of 180 MCF a day and deliverability of 304. The Legal #2 would have an allowable of 233 and deliverability of 938. The Watkins #2 an allowable of 46 and deliverability at 100 pounds at 439. The Olsen Cooper #1 an allowable of 174 and a deliverability of 1,438. The Cooper B2 an allowable of 275, a deliverability of 1,029. The Winningham #3 an allowable of 328 and deliverability of 654. Adding up the allowables and comparing them to the sum of the deliverability it appears that these wells would be producing at approximately four times the allowable rate. Now, if 25% of the pool were given an allowable four times their allowable, it is obvious they are going to take a large percentage of the market and the non-marginal wells would be squeezed out.

Q Would you summarize your conclusions, Mr. Lyon, as to the effect of this proposed rule change?

A Yes, sir. I believe that the proposed rules encourages operators to delay repairs needed on gas wells. It also allows them to profit by such delay. We believe this is contrary to good conservation practices and would cause rather than prevent waste. The effect of the proposal to eliminate acre reserves, every other factor, is the factor in the allocation formula, for it would permit producing rates without regard to recoverable gas in place and consequently would violate correlative rights. And also the proposal would very likely result in such a large proration from gas takes from distressed wells that the non-marginal wells would



squeezed out of the market, which would in effect destroy gas proration in the pool altogether.

Q Do you have any recommendations to make in regard to the proposed rule?

A Yes, sir. In the interest of preventing waste, protecting correlative rights, and preserving orderly gas proration in the Jal Pool, we strongly recommend this proposal be denied.

Q Mr. Lyon, were Exhibits 1 and 2 prepared by you or under your direct supervision?

A Yes, sir.

Q At this time we would like to offer Exhibits 1 and 2. MR. PORTER: Without objection 1 and 2 will be received.

MR. GIRAND: We would like to hold the introduction of the exhibits until after cross-examination.

MR. KELLAHIN: We have no objection to that.

MR. PORTER: Mr. Kellahin, would you offer your exhibits after cross examination?

MR. KELLAHIN: They have been offered, the Commission can then make its ruling.

MR. PORTER: Mr. Girand.

CROSS-EXAMINATION

BY MR. GIRAND:

Q Mr. Lyon, in October the Continental Oil Company had some help in regard as requested relief from some wells for the method of production, did they not?



A	At	that	time	it	was	possible	they	needed	some	relief

Q And some help from shut-in wells?

A Yes, sir.

Q What is the relief Continental Oil asked for in regard to the encroachment of water on those wells?

A We asked and were permitted to make up over production at producing rates equal to 50% of the current allowable.

Q Didn't Continental Oil at that time take the position if their wells were required to be shut-in they would suffer material loss?

A Yes, sir.

Q Now, in connection with those wells what rework or remedial work has Continental done since that time?

A I don't recall right now the exact wells involved, there may have some tubing run in some.

Q You don't know?

A Not right now.

Q And at the present time what is the position of Continental Oil Company in regard to remedial work on any of the wells they have making water in the Jal Pool?

A When the water is serious enough we normally recommend that the water be shut off.

Q All right. Now, in that connection, what have you done?

A Well, I am not sure. I will have to check my records.

Q Now, Mr. Lyon, is it your opinion remedial work in every



instance is a success?

A Unfortunately it isn't.

Q And it is more or less in the same nature just like drilling another hole, isn't it?

A That is right.

Q Directing your attention to your Exhibit Number 1, Mr. Lyons --

A Yes, sir.

Q -- you have cross sections in regard to three wells, do you not, the Phillips Petroleum Oil, The Jal Watkins #2, Shell State #1, and the Humble Harrison #1.

A Four wells.

Q Four wells. Now, the Shell State which you testified to is a much higher well structurally than the Watkins #2 or the Humble Harrison #1?

A Approximately 100 feet higher.

Q And in directing your attention to the Humble Oil Harrison #1, I note you have in your notes there that the potential is 203 with 20. Did you calculate just BS&W and that amounted to barrel-wise?

A The information that we have received since this was prepared, this was the initial completion, and since that time the water has almost ceased entirely.

Q But you don't know that of your own knowledge?

A No. it isn't our well.



Q Then the information shown here is the information that you testified to as being correct information in preparing this exhibit?

A Yes, sir.

Q Getting back to my question, can you give the Commission some idea as to the volume of water represented by 20% of BS&W on that type of production?

A I don't know exactly what this 20% involves, except that I presume they were producing fluid with the gas, 20% of which was BS&W and that the fluid they were producing was primarily load oil. So I have nothing to compare it with.

Q Ordinarily you don't classify load oil as BS&W do you, Mr. Lyon?

A No.

Q It stains?

A That is true, given on here as to what the total fluid was.

Q Except it was 20% of it, whatever it produced out of the hole?

A It might have been one barrel.

Q Mr. Lyon, you have testified that you are familiar with the Jalmat Pool area, generally speaking, and you know of your own knowledge any number of wells that are making water at this time, is that correct?

A That is true.



Q Isn't that a problem that will continually grow and become more severe?

A Yes, sir.

Q Before the pool is completed?

A Yes, sir.

Q Assume that the Commission does adopt a rule giving some relief to distressed wells over making such a determination, it is not your position that the Commission will allow abuses such as you fear in your testimony?

A There is nothing in your proposed rules that would prevent it.

Q There is nothing in any rule that I know that will actually prevent it, it will only penalize for breaking.

A Well, in the normal course of events as under the present rules, the well is given an allowable when it is six times over produced, the Commission requires it be shut-in.

Q Mr. Lyon, connected with Continental Oil and by appearing here before the Commission whenever an abuse or irregularity come to the attention of the Commission in regard to any operator, hasn't this Commission taken steps to correct such abuse?

A I think they should.

Q Couldn't that Commission still perform under a rule or any rule and protect the offset operators?

A That is true. I think they exercise better judgment if they didn't adopt one which would permit such a thing.



Q In other words, it is just your theory that if the well is making water to such an extent that in order to relieve it of the water you would bring it about by over production, that then the operator would either have to spend large sums of money to plug the well?

A I think that an operator would do so.

Q Is that your testimony, and will that be the position of Continental Oil Company on their well?

A So far as I think each well is an individual problem, and I think that these things could be handled as individual problems, rather than in the general classification.

Let's assume just for the purpose of your testimony here Q that the Commission has taken a position they have no rule, background to afford interval relief of wells that are making large volumes of water, and in order to keep the water off -- the water has to be artificially lifted somewhat, either by free piston, pump jack, in order to keep it where it can buck a line. The well then produces more than the allowable that has been given because it fails to meet a deliverability test. Assuming that the Commission doesn't have that authority under the present rules, then it is your opinion that the Commission should not even have any order to fall back on where the applicant could come in and show, assuming that he could show what he asked for, and the well and how it could be handled under a distress basis, or do you want the Commission to say we have no rule, we can take no action.



A If the Commission doesn't have any rule I am not sure what the situation would be, Mr. Girand, if you have a problem, I am sure the Commission will listen to you.

Q Let's take this Commission by statute to prevent waste, Now, I will take a well performing, just for instance that it was performing, in such a manner that during that 12 month period, determination of the Order 976 and the deliverability that the wells were capable then of producing, more than the marginal allowable, it was producing enough gas during that period of time that it is classified to be changed. Now, the well shut-in causes it to become over produced due to the re-allocating of the allowable, then when it was opened up it was incapable of making anywhere near the same amount of gas that it made immediately before it was shut-in. Now, as a practical matter, the gas that was underlying that practical well has migrated somewhere else, hasn't it?

A I don't know.

Q It is not there any more?

A Eventually it can't get into the well bore.

Q Just what favorable position do you think a distressed well had, well operator would have, you missed by reason of this order?

A By being allowed to produce at capacity.

Q Have you made any calculations, you heard the testimony in regard to the Cooper and the Winningham at what they were able to produce on the full open hole operation, did you not?



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I looked at your deliverability tests and calculated A what the rate was and then calculated what your wells could produce. Q What do your deliverability tests show, Mr. Lyon? On which wells? A Say on the Winningham. Q Showed a deliverability of 654 MCF. A Was that taken from that particular well? Q A It was taken from the deliverability test filed for that well. What did SR Cooper show, the deliverability? Cooper #1, Q SR Cooper #1. All I have here is Cooper, I don't know if it's SR or A don't --Q You know there is SR and Cooper #1, don't you? You just told me. A Well now, Mr. Lyon, in making this exhibit here and in Q furnishing your testimony, you want to be fair with this Commission. don't you? Yes, sir. A Q And in looking over our property and our wells you noticed the application we were talking about, the SR Cooper #1, did you not?

The Cooper that was listed on the letter from the A Commission dated May 16th.



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<u> </u>	Thet		+ 40	OD	Geenem
Q	Inat	12	une	Sr	Cooper.

A That is the one, that is the one this is.

Q What does the deliverability test show on that?

A The deliverability of 1,438 MCF a day, that is at 100 pounds.

Q And when was that deliverability test, what was the date of that deliverability test, do you know?

A I didn't take that information down, it was the one taken this year.

Q You are familiar with the New Mexico Oil Conservation Commission's southeast gas proration schedule, are you not?

A Yes, sir.

Q I direct your attention to page number 32 and where the SR Cooper is shown, and ask you what is the deliverability test shown on the proration test?

A Is this SR Cooper in Section 23 or SR Cooper #1 in Section 11?

Q That is, state, where the SR Cooper is there.

A There is two number ones.

Q Is that SR Cooper involved in this here (indicating), this one is number one, unit FF, H unit on eleven, as far as I know, they are Cooper #1.

A Will you tell me which well you are referring to?

Q You just give the deliverability of both of them.

The one, Section 23 has a deliverability of 131 at 80% of



shut-in pressure. The one in Section 11 has a deliverability of 587 at 80% of shut-in pressure, the deliverability are 100 pounds.

MR. PAYNE: I think in order to clear up the record we ought to state the SR Cooper well #1, which is involved in this hearing, the SR Cooper which is in Section 23.

A Thank you.

Q (By Mr. Girand) That is the well that show 131 deliverability?

A That was.

Q Mr. Lyon, when did you learn that the Watkins #2 had some remedial work done on that?

A This morning.

Q You have made no check to the Conservation Office at Hobbs to see what had been done, what work?

A No, sir.

Q At the time you made this Exhibit No. 1?

A No, sir.

Q Just one further question, is it your testimony in the opinion of the Continental Oil Company that an order authorizing relief of any operator regardless of who it may be that they are not capable of granting an exception without entirely destroying the industry?

A No, sir.

Q Then if a rule were adopted, whether it is one proposed or not which would give this Commission what it considers jurisdiction



for treatment with wells making water, that is gas wells making water, and where anyone had a right to object and put on their particular proof, whatever it may be as to the feasability of granting the application or not, don't you feel that all operators would be safeguarded against any malfeasance of the Commission?

A I am sure the Commission is not going to destroy gas proration in this pool.

Q I ask the Commission that the answer be stricken. It is your opinion this Commission cannot in an orderly manner handle the proration of gas?

A I think the Commission is doing so now.

Q If the Commission adopts a rule or any rule, hasn't it been your opinion in the past they have been able to operate under it either uniformly, fairly --

MR. HELLAHIN: I object to this line of questioning as being argumentative and calling for a conclusion. Well, his voluntary statement couldn't be anything else but a closing argument, that is testified to.

MR. GIRAND: I pass the witness.

MR. PAYNE: I don't.

CROSS EXAMINATION

BY MR. PAYNE:

Q Mr. Lyon, do you believe in a distress well classification under any circumstances?

A Well, it doesn't make any difference what you call it.



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I think there are probably times when a well because of its condition deserves some special consideration for a particular problem, as I stated before, I think it should be of a temporary nature and there should be provisions where the well would have to make up any advantage that it received.

Q Well, I take it then what you are saying is in order to protect correlative rights you couldn't let one well with a similar deliverability acreage dedication produce more than another?

A The Commission has established an allocating formula which is supposed to divert gas in a fair and equitable manner. I think that formula should be applied to all wells.

Q What if in the specific case the formula is such that it would require the particular well to be abandoned?

A Well, there are cases, as I say, where I think that a special provision is, can be given of a temporary nature.

Q Now, Mr. Lyon, do you feel that if a gas well in the Jalmat Gas Pool is abandoned due to water problems, however, they might be created, that ultimate gas from the pool will be lost or will it only be lost to the particular well?

A I think there could very easily be, in instances.

If the gas in the reservoir is lost it could also be lost, Mr. Payne, by imprudent, where remedial work should be done, where it is not done.

Q So you feel perhaps that in the general principle, at



least, the gas that would be lost, like failure to perform remedial work, might offset the gas that will be lost by abandonment of the well due to water encroachment?

A I don't follow you.

Q Let's look at it this way. Obviously when you take a well with the same deliverability and dedication, more gas allowable than another one, you have automatically impaired correlative rights to a certain degree you have injured the preventation of waste, now if you were to meet head on which I can conceive of a situation where they would, do you feel that the prevention of waste should be paramount?

A I don't know if I am qualified to answer that question.

Q What is the general principle in these water problem cases whether the two do meet head on, for this reason I am trying to find out if the gas that would be lost due to water encroachment would be offset or likely to be offset by the amount of gas, but would be lost due to the -- either the failure or delay in performing remedial work?

A Well, borrowing a phrase from Mr. Rainey, I think it is a discretionary question of the Commission and a matter of degree. I believe that the Commission must in its discretion, must decide what is more important in each individual case.

Q Let's assume an applicant shows possibility that it is not economically feasable to rework a well due to the lower reserves or something of that nature, do you believe that well should



be exempt from proration, at least to the degree in order to allow it to produce whatever more gas it can?

A I think that could be reasonably done, yes, sir.

MR. PAYNE: I believe that is all, thank you.

MR. PORTER: Anyone else have a question of Mr. Lyon? Mr. Utz.

CROSS EXAMINATION

BY MR. UTZ:

Q Mr. Lyon, have you made any study of the Olsen and Jal wells as to the nature of their remedial work, if any?

A Very little.

Q Then you would have no opinion as to whether or not they would have exercised due diligence in trying to shut off the water in the wells?

A No, sir.

Q But you do know of other wells under very similar circumstances that have performed remedial work and successfully shut off the water?

A Yes, sir.

Q Now, as a matter of policy with Continental, what do you accomplish in regard to your water problems?

A Well, I don't know. There is no specific answer to that, when we in the district become aware there is a problem we begin the study necessary to determine the solution and prepare the necessary paper and requests for authority to perform the work,



sometimes it is a rather time consuming process.

Q If you have a well that say logs up a 72-hour shut-in? A We have to swab it in.

Q Do you try to take remedial action on that well?

A Yes, sir.

Q And have you done so in some instances where you have that problem?

A We have done so in some instances, we have some that need to be done soon.

Q In those instances where we have a problem such as this, were you able to prevent the well, in other words, to shut off the water so it didn't log up for 72-hours?

A Yes, sir, we have been successful in shutting off water. Sometimes we were successful in shutting off the gas too.

Q You shut off all the gas?

A No. We have been able to restore production but very often not to the extent that it was before the water encroached. Of course, you wouldn't normally expect it to have the same production at this time if you had to squeeze your producing zones.

Q Even though you did entail some of the wells productivity at this time, you got the well in such a condition you were able to feel, to produce the balance of your reserve?

A They are able to perform under the Commission's formula.

MR. UTZ: I believe that is all.

BY MR. GIRAND:



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Q	Mr. Lyon, could you give the number of wells that						
Continental has worked over in the Jal Oil Pool?							
A	No, sir, I sure couldn't.						
Q	Can you name one of the wells?						
A	We have worked over?						
Q	Yes.						
A	Yes, sir.						
Q	What well is that?						
A	Lockhart B31 #6.						
Q	What brought about the work-over on the Lockhart?						
A	It became logged with water.						
Q	All right. What remedial work did you do?						
A	We swabbed it on two occasions and were unable to lower						
the fluid	level or reduce the pressure on the casing. It was						
evident th	hat the water encroachment was just as fast as we were						
un loa ding	the water out of the well, and we then cut the producing						
 intervals	and perforated higher in the formation, in the Yates.						
Q	Do you know of any other well you worked over?						
A	Yes, sir, State #-17 #5.						
Q	I didn't get that.						
A	Number 4, excuse me, State #-17 #4.						
Q	All right. What brought about the work over on that						
particular	r well?						
A	It became loaded with water.						
Q	What did you do in the nature of rework?						

We discussed the 7-Rivers and perforated the Yates. A The 7-Rivers is left there, is that right? Q Yes, sir. A Q Isn't that from another horizon? That is right. Of course, if there is any gas there it A would be likely to be produced where the wells are obstructed. Do you know, isn't that true of the Lockhart? Q Yes, sir. A So the amount of gas you left down in the 7-Rivers is Q there also? Assuming there was some gas still there, yes, sir. A Q There was up until the well was overloaded in water. wasn't there? Well, it was producing gas up until it ceased to produce A yes, sir. Now, Mr. Lyon, say you have a well that when it is shut-Q in for 72-hours it becomes loaded still with water and say within 2h hours you are unable to unload the fluid to any extent, doesn't that have a great affect on the deliverability of the particular well? If you can't produce any gas at all it has a terrific A

It also has a terrific affect on the allowable assigned ۵ to that well?

Of course, you don't need one if you can't produce.



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impact on it.

Q You can produce by pump jack or floating piston to keep that water off the well too, wouldn't that lead you to believe there was gas in place underneath the well bore?

A If you can produce gas there must be gas coming in from the well bore from the formation.

MR. PORTER: Mr. Payne.

BY MR. PAYNE:

Q Mr. Lyon, to the point the operator abandoned any well there is generally some oil or gas left in the formation, is there not?

A True. It is just a question of how little you can produce and still continue to operate economically.

MR. PAYNE: Thank you.

BY MR. RAMEY:

Q Mr. Lyon, I note Continental squeezes their perforations when they have water coming in, is that correct?

A Yes, sir.

Q Would you say that if that bridge plug was placed above the given set of perforations it would in all cases adequately shut off the water?

A In my opinion if you got a water problem it would be foolish to try to shut it off, other than squeeze cementing.

MR. PORTER: Any questions.

BY MR. UTZ:

Q In answer to Mr. Payne's question, I believe you stated



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that at some point the well does become uneconomical to operate, therefore you recommend plugging?

A Or recompletion.

Q Pardon?

A Or recompletion.

Q After recompletion if you are not able to improve the well, at what point do you believe that you have to recommend plugging these wells? In other words, what minimum volume of gas can you produce and still pay to operate the well?

A Well, at that point when the revenue from the gas sales are less than the expense of operating the well.

Q Well, do you have a figure on what the expense of operating the well is?

A Well, it depends on several things.

MR. GIRAND: I doubt seriously if Mr. Lyon is qualified to make a cost study of wells of Continental Oil Company.

MR. PORTER: You are objecting to the questions?

MR. GIRAND: I am questioning. I don't think he is qualified to answer.

BY MR. PAYNE:

Do you think you are qualified to answer? What did you say to making a cost analysis, to determine the well.

A That is very definitely my response, I don't know how qualified I am.

MR. PORTER: Would you answer the question then?



A Well, it depends on the factors that go into your operating cost, for instance if you have a pump jack on the well it is more expense than to a well that flows naturally.

BY MR. UTZ:

Q I am talking about gas wells.

A They have -- you mean pump jacks on their wells?

Q Yes, they do. On your wells, you have no pump jacks?

A No, sir.

Q What I am trying to do is get in the ball park, the volume of gas you think you would have to recommend to plug the well, it being we have a premature abandonment closure in your statutes and in your rules and I am trying to find out, if I can, about how much gas that should be allowed to prevent premature abandonment.

MR. GIRAND: I think we are going pretty far afield as to the matters we have brought to the attention of the Commission, in event the order is approved or order is disapproved, dealing with the particular well involved. I am sure there is no major oil company, I mean I know of none of the 9 independent that want to be governed by the rule stick or major oil stick on the cost of operations.

MR. PAYNE: I think that is correct. It is going to vary from company to company and from pool to pool how the well is produced.

MR. PORTER: The Commission will sustain the objection.



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Q Mr. Lyon, you said there that you thought the determination would govern probably to the point when the expenses begin to exceed the revenues?

A No, sir. I believe I said, that the point at which the well is abandoned would be determined by that.

Q I thought you were dealing with remedial work, I misunderstood the question.

MR. PORTER: Anyone else have a question.

BY MR. GIRAND:

Q In connection with your last answer, Mr. Lyon, the two wells that you did remedial work on were wells that were logged off after a 72-hour shut-in?

A They had been shut in considerably longer than that. MR. GIRAND: That is all.

MR. KELLAHIN: I would like to renew my offer of Continental Exhibits 1 and 2.

MR. GIRAND: I have no objection. I think they are incomplete.

MR. PORTER: Continental Exhibits 1 and 2 will be admitted into the record. Anyone else have any further testimony, any statements?

MR. HINKLE: Humble Oil would like to go on record as being opposed to the application in this case of Jal Oil Company and Olsen Oil, Inc.; as a matter of principle the Humble Company is



opposed to any exemption from proration, ordinarily we would favor administrative rules of procedure, in this case we think that where there is going to be an exemption to proration, it should be after a hearing before the Commission and each individual case should be treated on its merits.

MR. TOMLENSON: Atlantic opposes the application of Jal and Olsen Oil for revision of Jal Gas Pool rules as set forth in Order R-1670. An adoption of the proposed provision would exempt some wells from any provision, any prevention whatsoever with possible damage to correlative rights. In addition the applicants have not established here that any need exists in the distress well category, other operators have been able to operate without such relief. Applicants have presented no evidence that work-over possibilities do not exist in their wells. In addition, waste might be caused by encouragement given to, not to work wells so as to qualify those wells to distress well classification.

MR. SETH: Shell Oil. Mr. Girand said yesterday he was seeking a haven for the shelter of particular operators. We think he is applying for a heaven instead of a haven. Shell Oil Company operators are opposed to this operation in this case. The application is obviously attempting to exempt part of the wells in the field from proration while seeking to put the rest of the wells on proration. If it is granted the correlative rights of other operators generally will be affected in that. We think the fact the well cannot be produced under proration does not justify



exempting it from proration and giving it license to drain the property of offset operators of their water production while they prorate it -- excessive production, proration units on which they are located are too small for them to have an adequate allowable. The proposed exemptions will inevitably result in a serious breaking off of the property of others and in violation of the correlative rights of others and will ultimately lead to a breakdown of pro-Not only correlative rights of operators are violated ration. by granting the proposed exemption here requested but there would also be waste that results from the unnecessary voidage of space in the reservoir from production of large amounts of water and rather advantage the waste of the reservoir. That will so result it seems to me, water to the neighbors, to abandon the records to be other wells and those cases where the water producing wells cannot be made economic by remedial work but all the while subject to proration rules.

MR. KELLAHIN: On behalf of Continental Oil Company and Amerada Petroleum Company, we are opposed to the proposed rule. We do not see at the present time any need for a special classification as a distress well. We feel that our testimony has clearly pointed up to the possible dangers which would be incurred by adopting such a rule. The primary objection we have to it is based on the fact that it would abandon proration as to these distress wells. The ability of the well to produce is the sole factor which would affect the productions in that well without any



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regard to the size of the tract on which the well is located or the reserves underlying that tract. Those are factors which must be considered by the Commission in any proration formula and it would create an anomalous situation in a pool where part of the wells are prorated and part of the wells are not prorated. The well located on the small tract, for example, could conceivably, and in some instances quite possibly would produce far in excess of the reserves underlying the acreage dedicated to that well. There are a large number of wells in the Jal Pool located on 40acres as the Commission well knows. To allow those wells to produce at their capacity would impair the correlative rights of the offsetting operators. Now, the other factor which the Commission must of course consider is the possibility of waste and certainly there is a factor that must receive serious consideration by this Commission. The waste involved here, as we see it, would induce premature abandonment. There has been no showing on the part of the applicant here, as any remedial work, the wells which they submit as examples showing the need for this special rule. Our evidence on the others shows where remedial work in the same area on wells structurally located on a comparable structure has been quite effective in shutting off water. We feel that in the first instance remedial work is the answer and in the second instance of the question of water encroachment is going to result in the premature abandonment and ultimate loss of gas in the reservoir that is gas that could not be produced by some other well.



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Certainly the Commission has the jurisdiction under our statutes to give consideration to that fact and the hearing on that one individual well. Our statutes so provide that a minimum allowable can be assigned to prevent premature abandonment and if an individual operator has a case which needs consideration this Commission is always open on a special application for relief if the situation is of that kind. Normally as we see it, such relief would be of a temporary basis until the acreage would be reassigned to the well which is not making water or remedial work attempted or some other method followed in order to relieve the situation. We don't see any need for a permanent order recreating distress wells which in turn under the proposed rules would never be subject to another test unless the Commission so ordered any special order. Therefore, we would never know whether they needed that classification any longer or not. We are opposed to the application.

MR. GIRAND: If the Commission please, the statements of the representative companies in opposition to it leave me a little bit confused in this manner. It would seem at this time they are attempting to pretrial the wells of my clients, Jal Oil Company and Olsen Oil Company, when they are really not at issue. We brought into this Commission what we consider knowledge of existing facts in the Jalmat Gas Pool. The water or fluids will be increasing from time to time as the pool is depleted. Some relief, some help has to be given to operators who own wells that are making water



at this time. Each well, if the Commission adopts the rule, each well has the applications filed for this particular classification. The operator will have to show this Commission and convince this Commission that all these counts that they have dug up in this statement and scaring this Commission of what is going to happen to the gas in the Jalmat Pool really didn't exist at all. This Commission is armed with the authority to control the production of gas and oil in the State of New Mexico. Any observation, any further examination that the Commission might want to make on the well that was classified as a distress well at one time can be made at anytime. The Commission can enter any order to show cause why the certain wells shouldn't be done this way or that way, and the operator would have to furnish this Commission with whatever information they want to, in addition to the normal monthly reports that you require. You are not going to declare under this order a well, a distress well, and then go in and tuck it in the closet and forget all about it. This is something that is new in your field or relatively new, and it will be something that will be reoccurring throughout the other fields. It is time this Commission adopt some rules to see whether they are workable or not, if they are not workable, the Commission who adopts the rules to the well, it can revoke it. The Commission can amend their order as they have any number of times. What we have suggested to this Commission is not fair to all people. We don't want it that way either, because we are part of those people. We have offered you what we



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thought was a workable rule. If it is not workable time will tell, but I don't mean by that years and years and years. I think it would be discovered in a short time, and I say that since the Commission has more or less taken the attitude that under your 967 as amended by 1670 that they cannot go beyond the allowable assigned to the well, that since they have taken that position we need then to have a classification to see just what these distressed wells can do, what they are doing and what effect it has on the position, as a pool within a given field. We submit that the Jalmat Gas Pool rules should be changed to afford some relief to operators producing or making water with their gas rather than to take the risk of the waste that could result from not taking such action.

MR. PORTER: Anyone else have anything further to offer in this case 2014?

MR. PAYNE: We have received a number of comminications from various companies. They vary considerably in their approach so perhaps I should read them all.

MR. PORTER: Would you read them into the record?

MR. PAYNE: "Gulf Oil Corporation is an interested operator in Case No. 2014, to be heard July 13, 1960. Gulf is opposed to the application as presented since we feel that correlative rights cannot be protected if certain wells in a prorated gas pool are exempt from proration. We do not object to a distress well classification providing a limitation is placed on



the amount of gas the well can produce." Gulf Oil Corporation, W. A. Shellshear, District Manager.

"Reference Case 201% Application Jal Oil Company and Olsen Oils, Inc., Phillips Petroleum Company agrees in principle with practice of exempting wells from proration where it is clearly established that such exemption is reasonably necessary to prevent waste. We do not believe that any rule can be promulgated which will accomplish this objection by administrative approval without abuse of the principle of granting relief for prevention of waste only. Recommend rules be amended to provide for exemption of wells from proration only after notice and hearing." Phillips Petroleum Co., L. E. Fitzjarrald.

Case No. 2014, Texaco, Inc., as an operator in the Jal-"RE: mat Gas Pool is opposed to the proposal of Jal Oil Company and Olsen Oil Company to create a category of wells to be known as distress wells, which wells would be exempt from gas proration. The Applicants have requested that a well be classified as a distress well if producing through artificial means without making any attempt to locate the point of matter entry or alleviate the water The Commission has always granted an applicant the problem. opportunity to hear hardship cases after proper notice. Texaco is opposed to this proposed rule change without giving an operator at a commission hearing the opportunity to protect its correlative rights when offset by these so-called distress wells; therefore we respectfully request the application be denied." Texaco Inc..



J. H. Markley, Division Manager.

"RE: Case No. 2014, July 13 hearing. The Ohio Oil Company opposes any change in the Jalmat Gas Pool rules at this time which would require the Commission to exempt any well from either gas proration or from the annual deliverability test solely on the ground that a well has met stated conditions such as are set out in the rule proposed by applicants and heretofore circulated by the Commission. However, the Ohio recognizes that an exemption from the deliverability test and from the regular allowable limitations may be justified for certain wells in this pool now or in the future. The Ohio's position concerning such exemptions is respectfully stated as follows: If exemption from the deliverability test is granted for a well a reasonable and fair substitute should be provided, there should be no complete exemption from proration except for marginal wells. Any special allowable for any other wells should be limited to the minimum volume necessary to maintain the well on production but should not exceed the current allowable assigned to a non-marginal well having the same amount of dedicated acreage in the pool. No such relief should be obtainable unless the operator establishes such relief is necessary for a designated well in order to prevent waste or to protect correlative rights. No such relief should be granted except upon a written application with a copy to each offset operator setting out all pertinent data including efforts made to rework the well. A hearing should be required on any such application either on the



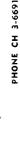
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Commission's own motion or upon request of any operation in the Pool." The Ohio Oil Co., I. G. Burrell, Asst. Division Mgr., J. O. Terrell Couch.

Pan American is opposed to any change in the Jalmat Gas Pool at this time. It is our opinion that previous rules and policies of the Conservation Commission adequately provide relief for the type wells defined as distress wells in this case. Pan American recommends the application be denied. This is to advise that Tidewater opposes the creation of a class to be designated as distressed wells as such by the term as set out in the notice of hearing. Our objection was based primarily on the precedent. it would stimulate administrative difficulties that they would encounter as such if a rule became prevalent.

That concludes the communications that we MR. PAYNE: have received.

MR. PORTER: Anyone else have any comments in this Case 2014? The Commission will take the case under advisement.



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STATE OF NEW MEXICO)) COUNTY OF BERNALILLO

I, LEW NELSON, Court Reporter, do hereby certify that the foregoing and attached Transcript of Hearing was reported by me in Stenotype, and that the same was reduced to typewritten transcript under my personal supervision and contains a true and correct record of said proceedings, to the best of my knowledge, skill and ability.

Dated this 15th of August, 1960, in the City of Albuquerque, County of Bernalillo, State of New Mexico.

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ALBUQUERQUE, NEW MEXICO



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