SEPTEMBER 10, 1958

BEFORE THE OIL CONSERVATION COMMISSION SANTA FE, NEW MEXICO SEPTEMBER 10, 1958

IN THE MATTER OF:

Application of El Paso Natural Gas Company CASE 1498 for permission to conduct maximum pressure build-up tests and for the non-cancellation and/or transfer of allowables for test wells.: Applicant, in the above-styled cause, seeks: an order authorizing it to conduct maximum pressure build-up tests on seventeen gas wells in the Aztec-Pictured Cliffs, Ballard-: Pictured Cliffs, Fulcher Kutz-Pictured Cliffs: South Blanco-Pictured Cliffs, and Blanco Mesaverde Gas Pools in San Juan and Rio Arriba Counties, New Mexico. Applicant further: requests the non-cancellation of allowable accruing to test wells during the test period: and for authority to transfer said allowables: to other wells on the same basic lease, and : for such other relief as is necessary to properly conduct said tests.

BEFORE:

Mr. Daniel S. Nutter, Examiner.

TRANSCRIPT OF PROCEEDINGS

MR. NUTTER: The next case on the docket is Case 1498.

MR. PAYNE: Application of El Paso Natural Gas Company for permission to conduct maximum pressure build-up tests and for the non-cancellation and/or transfer of allowables for test wells.

MR. WHITWORTH: For the record, I am Gary Whitworth, representing El Paso Natural Gas Company. The witness in the case is Mr.

David Rainey.

(Witness sworn)

DAVID RAINEY,

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

DIRECT EXAMINATION

BY MR. WHITWORTH:

- Q Will you please state your full name?
- A David H. Rainey.
- Q By whom and in what capacity are you employed?
- A El Paso Natural Gas Company as administrative assistant in the proration department.
 - Q Are you familiar with the application filed in this case?
 - A Yes, sir, I am.
 - Q What is the purpose of this application?
- A In this application El Paso seeks permission to conduct maximum pressure tests in the San Juan Basin area of San Juan and Rio Arriba Counties, necessary for the purpose of obtaining reservoir information.
- Q Now, I notice attached to the application is Exhibit A.

 Did you prepare that Exhibit?

 A Yes, sir.
 - Q What does it purport to show?
- A Exhibit A is a list of the wells -- the fields in which those wells are presently designated, and the location of those wells, the wells we are seeking permission to conduct maximum pressure

build-up tests on.

- Q And this Exhibit contains all of the wells which are the subject of this application?
 - A Yes, sir.
- Q Does El Paso operate these wells and the leases on which they are located?
 - A Yes, sir.
- Q Now, why does El Paso wish to conduct maximum pressure build-up tests with respect to these wells?

A Well, in the San Juan Basin area there is a seven-day shutin pressure required in connection with the permeability tests, and
it has been our experience this seven-day pressure is not the maximum build-up that these wells will obtain. This application is for
the purpose of obtaining maximum pressure build-up on these wells
for the pressure build-up information.

- Q Have these tests been conducted before?
- A Yes, sir.
- Q Were they conducted last year?
- A Tests had been conducted in \$56 and \$57, and we propose to conduct these in 1958.
 - Q Now, is the order -- go ahead.
- A These wells on this application, for the main part, are the same wells, with two or three exceptions, that were tested in 1956.
- Q Is the order that El Paso seeks in this application similar to the order that has been issued previously by this Commission?

A Yes, sir. Specifically Case No. 1270 from which Order R-1065 was written in October of 1957 is the identical order that El Paso is seeking in this case with the exception that the wells - the wells listed in Order 1065 should be changed in the Order. We are now seeking to include the wells in this application.

Q By the way, have you testified before this Commission before as an expert, Mr. Rainey?

A Yes, sir.

MR. WHITWORTH: We ask that Mr. Rainey's qualifications be accepted.

MR. NUTTER: They are. You may proceed.

Q How does El Paso propose to obtain this reservoir information?

A El Paso proposes to shut these wells in and place a seal on the valves in such a manner that the wells cannot be inadvertently turned on and take periodic pressure readings with a dead weight pressure gauge.

Q How long a period of time do you estimate it would take El Paso to conduct these tests?

A It is anticipated that we should be able to complete all these tests within a one year period from the date of issuance of any order on this application.

Q Is it possible it may require a longer period of time?

A It is possible. It is hard to determine until we have shut them in for a considerable period of time to determine the

exact period of time that would be involved.

Q And if it does require an additional period of time, you will need an extension of time, is that correct?

A That's correct. Order 1065 issued last year provides for administrative approval for extension of time in which to complete the tests, and we are seeking the same type of provision in this Order.

Q In your opinion, would the taking of these tests create or constitute any waste or violate or prejudice anybody's correlative rights?

- A No, sir.
- Q Are you familiar with Order R-333-C and D --
- A Yes, sir.
- Q -- of this Commission?
- A Yes, sir.
- Q Would you tell briefly what that Order contains?

A R-333-C and D, as amended by 333-E, is an Order in the San Juan Basin providing the annual deliverability tests on wells in that area.

Q Now, in your opinion, should the wells that are shut in for the purpose of conducting these tests be excepted from the requirements of this Order, R-333-C-D, as amended by E?

A Yes, sir.

Q How does El Paso propose that wells that are shut in for the purpose of being tested, and that have been assigned an allowable prior to the effective date of any Order that this Commission may make, pursuant to El Paso's application, be handled with respect to allowables?

A El Paso proposes that the allowables on these wells continue to be assigned in, and using the latest deliverability test today available. I might point out at this time that all of these wells have previously been tested in 1958, so that if we can complete these tests within a one-year period, we would have an up-to-date deliverability test on which to assign 1959 allowables.

- Q Was that the way it was handled by the Order of last year?
- A Yes, sir.
- Q What is the recommendation of El Paso with respect to transfer of allowables that accrued in any of these shut-in wells?

A El Paso proposes that at the end of the test on these wells, that allowables be permitted to be transferred to the off-set wells which are shown on another Exhibit that we have and that of the allowable which is accrued to the shut-in might be transferred or it might be produced from the test well itself at the end of the testing period.

Q You mentioned another Exhibit. These wells are shown on the Exhibits you mentioned?

A Yes, sir. It is Exhibit B, which is comprised of seventeen parts, and each part is two pages, the first page of which is a well completion data sheet on each of the proposed test wells, and shows at the bottom of the sheet the offset wells on the same basic lease. The second part, or each second page of each part is a plat showing the location of the test well and the offset wells. I might point out at this time that the test well is indicated by a square around it, and the offset wells have a circle around them.

Q Now, this Exhibit is designated B and each of the parts are numbered, is that right, each of the parts?

A I don't believe we actually have them numbered on the sheets themselves, but I think all of the Exhibit -- all of the copies of the Exhibit we have presented here are in the same order, so if we can number them --

- Q The first one pertains to Aztec-Pictured Cliffs?
- A Yes, sir.
- Q And that would be El Paso's Exhibit B-1, is that correct?
- A Yes, sir.
- Q And the others would be numbered consecutively through seventeen, is that right?

A Yes, sir, and each portion of that Exhibit will have two pages.

- Q I wonder if we could go through those?
- A All right.
- Q Would you explain each Exhibit?
- A All right. The first Exhibit -- the first portion of Exhibit B is El Paso Natural Gas Company's Lackey 5-B in the Aztec-Pictured Cliffs Pool. No. 2, the El Paso Natural Gas Company's McConnell No. 5 in the Ballard-Pictured Cliffs Pool.

MR. NUTTER: I think in the interest of saving time, Mr. Rainey, I think you can call off the name of the well without the company, even, and the Exhibit No.

A All right.

MR. UTZ: What was the name of the last one?

A McConnell 5. The McManus No. 10. B-4 is the Atlantic

No. 5; B-5 is the Fields No. 1. No. 5 is the Fields No. 1. No. 6

is the Fields No. 5; No. 7 is the Gartner No. 4. No. 8 is the

Grambling No. 3. No. 9 is the Howell 3-A. No. 10, the Mansfield 4.

No. 11, the Prichard 2-1. No. 12 is the San Juan 28-7 Unit No. 49.

No. 13 the San Juan 32-9 Unit No. 29. No. 14 is the Stewart No. 4.

No. 15 is the Wilson 30-6 Unit No. 6. No. 16 is the Rowley No. 4,

and No. 17 is the Jicarilla 5-B.

I might point out, if I may, before the question comes up, in some instances we show offset wells that don't have the same lease name as the test well. If the Examiner desires it, I have the Federal or State lease number for each one of these leases, and for some reason or other, at the time we drilled these wells, we didn't name them all the same, but they are on the same basic lease, and I have the Federal or State lease, if it is necessary to show that.

MR. NUTTER: I don't believe that will be necessary, sir.

Q Now, in your opinion, will the acreage that is dedicated to each of these wells that will be shut in for testing be drained by adjoining wells during the test period?

A It is quite possible, but the acreage on which the adjoin-

ing wells is drilled has common ownership, so it essentially will be the same final arrangement as if it were produced from the test wells.

Q What action does El Paso request the Commission take during the test period with respect to the overage and underage provisions in the Commission's rules governing respective pools in which the wells covered by this application are located?

A El Paso proposes that the appropriate underage and overage and balancing provisions of the field rules concerned be suspended until the end of the proration period following the proration period in which the tests are completed. This provision is in compliance with the Order that was issued last year, that is Order R-1065.

Q What does El Paso request of the Commission with respect to substitute tests for the purpose of obtaining reservoir information?

A It's conceivable when we shut these wells in and have had them shut in for some period of time that we will have some doubts as to the correctness of the build-up on these wells, and we may need to substitute some other well in the immediate area of that particular test well. And we are requesting administrative approval for the substitution of any additional test in case that contingency arises. That, again, is in accordance with the provisions of Order R-1065.

Q Now, are any of the wells that are listed on Exhibit 1 presently shut in for maximum pressure build-up tests?

A Yes, sir. I have a memorandum from our Farmington office dated September 5th, and they -- in that they advise me that all these wells have been tested and that at the time they were shut in for the seven-day pressure build-up in accordance with the deliverability testing procedures, that these wells were -- have remained shut in since that time. Nearly all of these wells were shut in on approximately July the 31st, and they have remained shut in since that time.

Q How long do you estimate that they will be -- remain shut in?

A Well, it is estimated it will take anywhere from six months to a year to complete these tests. Seals have been placed on these wells, at the Commission's wish. We will be glad to furnish them with the numbers of those seals and any other evidence that they deem appropriate to indicate that the wells have been shut in and remain shut in.

Q Do you have anything that you would like to add to your testimony that I may have omitted?

A I think not. I believe we covered it pretty well. As I stated previously, we are seeking an order exactly like Order R-1065, which was issued last year for a similar type build-up.

- Q You personally prepared all of these Exhibits, didn*t you?
- A They were prepared under my direction, yes, sir.

MR. WHITWORTH: We ask that the Exhibits be accepted.

MR. NUTTER: Let's see. You first had Exhibit A --

A Exhibit A, which was attached to the application.

MR. NUTTER: -- and Exhibit B-1 through B-17, right? Is there objection to El Paso's Exhibits A and B-1 through B-17? If not, they will be received in evidence. Does anyone have any questions of Mr. Rainey?

MR. UTZ: I have some questions.

MR. NUTTER: You may proceed.

CROSS EXAMINATION

BY MR. UTZ:

- Q Mr. Rainey, in this request, have you asked for anything different than Order R-1065?
 - A No, sir. We are asking for exactly the same type of order
- Q In reference to the administrative approval of test wells, are you referring to Paragraph 7 of 1065, which is on Page 9?
 - A Yes, sir.
- Q As I interpret that, it means that within the framework of the same basic lease in the immediate area surrounding this application that you might have administrative approval to add to or delete transfer wells or shut-in wells?
 - A Yes, sir, if I might clarify the --
 - Q But not administrative approval for any other area?
- A If I might clarify the purpose of these tests. If you will note from the various Exhibits, these wells are pretty well scattered over the entire basin, and what we are trying to obtain is average shut-in pressures, maximum shut-in pressures over the entire basin,

so that if we lose one of these tests, or one of the wells shows evidence that it is not going to give us a proper build-up, we will, of course, not take a well in the same general area, so that we will have a spread over the whole basin to test, and that is the purpose of that substitution clause in there.

Q Mr. Rainey, have you completed any of the build-up communications tests authorized in 1065?

A Yes, sir, we have. My recollection is that there are twenty-four wells in that order, and we completed approximately twenty of them. I had been advised by our reservoir office in Houston that they are at the present time endeavoring to analyze the data obtained, and there are three or four wells on test, and as soon as they had completed that and had had sufficient time to analyze them, we'll file the data with the Commission in compliance with Rule 10 of Order 1065.

Q How long do you think it will be before you file completion dates?

- A Did you say dates or data?
- Q Dates.

A We can file completion dates at any time the Commission desires them. I have been preparing some letters at the present time. I don't have them today, but I have been preparing letters to apply for the transfer of allowables based on the August 1st status just recently passed.

Q That's the very point I am coming to.

A Yes, sir. We are preparing to make application for the transfer of allowables based on the August 1st status as soon as we have all the data available.

Q You have three or four out of the way --

A No, sir. Some of the wells were completed in 1955, in the latter part of 1957, and the Order provides that we have the end of the proration period following the proration period in which the tests are completed, so that this will take care, as I recall, of approximately half of the test wells -- of the tests. Then we have until, as I understand the Order, until February 1st, 5 -- I mean \$59 -- to complete trying to bring into balance the remainder of those tests, which would be the end of the proration period following the period in which the tests were completed. In other words, some of the tests were completed after February 1st, 1958.

MR. UTZ: Well, that's something we can discuss outside of this hearing.

Q Are any of these wells, Mr. Rainey, that you are applying for build-up of pressures now -- build-up tests now, included in 1065 or any other subsequent orders?

A There are three of the wells, I believe, and I haven't analyzed it completely, but it is my recollection that there are about three of the wells in Order 1065 which were never shut in for tests which we are currently applying for in this application so that we can test them this year.

Q Do you know what those wells are?

- A I can go through it right quickly, I believe, and find them.
- Q If you don't know --

A I don't know offhand. I will be glad to furnish the Commission that information later. The Atlantic 5 is one. The Howell 3-A is one. The McManus No. 10 is one. I believe those are all No, the Rowley No. 4 was never shut in. That's four of them.

- Q The McManus No. 10?
- A Yes, sir, McManus 10 and Rowley No. 4.
- Q I believe you stated that all of the wells which you list here as the wells on the same basic lease, as the shut-in wells, are the wells to which you intend to transfer allowables?
 - A Any or all of those wells, yes, sir.

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

MR. NUTTER: Any further questions of Mr. Rainey?

MR. PAYNE: I have a question.

MR. NUTTER: Go ahead.

QUESTIONS BY MR. PAYNE:

- Q Mr. Rainey, did you find it necessary after the entry of Order R-1065, I believe it is, to utilize this administrative procedure contained in Paragraph 7 of the Order?
 - A No, sir, we did not.

MR. PAYNE: Thank you.

MR. NUTTER: Any further questions?
QUESTIONS BY MR. NUTTER:

Q Mr. Rainey, I note that the application in Paragraph 8

states that the applicant should be permitted to transfer the allowables which accrue to any shut-in well during its testing period to any other well or wells. Now, you haven't actually requested that at this hearing today, have you? You asked that you be permitted to transfer the allowable to certain wells or the alternative?

A Any other wells or wells on the same basic lease, and the wells listed on the various portions of Exhibit B are the other wells on the same lease.

Q Are they all of the wells on the same basic lease?

A All the offset wells on the same basic lease. The application should say offset wells on the same basic lease.

MR. NUTTER: Mr. Whitworth, would you amend your application at this time to read like that?

MR. WHITWORTH: We will amend the application to that effect, Mr. Nutter, to add the word "offset" in front, between the words "other" and "well."

Q (By Mr. Nutter) And then in the alternative -- in the event that these particular wells that you have listed on these B Exhibits cannot handle all of the transferred allowables, then you would ask administrative authority to add wells to the list of wells which are on the allowables?

A No, sir, that's not the intention. These wells shown on Exhibit B are on the basic lease.

- Q What is the administrative authority sought?
- A The administrative authority sought is to transfer the

allowable accrued to the test well to any and all of these offset wells, or in the alternative to allow it, if we complete the test in time, and the test well is of sufficient capacity to produce its own allowable, to produce it from the test well, possibly.

Q In other words, you don't want to substitute any of the wells which will receive allowable as listed on your Exhibit, on your B Exhibit?

A No, sir, other than as we have pointed out the possibility that we may need to change the test wells. If we change the test well, it will, of course, be -- we would, of course, of necessity have to possibly change one of the offset wells to that test well, which is, as I understand it, provided for in Paragraph 7 of Order R-1065, which provides that no well -- wait a minute -- that the Commission be and the same hereby authorized to administratively approve the substitution of wells to, designated to participate in any of the tests listed in this order, provided that no well shall be designated as a transfer well which is not on the same basic lease and an offset well as the shut-in well. I believe that that would give the Commission power to, if we do substitute a test well, to further give us the power to further substitute transfer wells for that test well.

Q Would this Order more correctly state "provided that no well shall be designated as a transfer well which is not on the same basic lease and an offset well to the shut-in well?"

A We would have no objection to that change.

MR. NUTTER: Any further questions of Mr. Rainey?

MR. UTZ: One further question.

MR. NUTTER: Go ahead.

QUESTIONS BY MR. UTZ:

Q Mr. Rainey, in the event you complete a new well on the same basic lease offsetting the shut-in well, is it your desire to have administrative approval to approve that as a transfer well?

A In that event, my recommendation, Mr. Utz, is that there are -- that in the areas of these test wells the field is pretty well developed, and I think that is a pretty remote contingency. don't believe there are any open drilling locations surrounding these test wells. It is our further feeling that we have enough transfer wells to probably handle the allowable even in the event that we did, but it is conceivable that we would request such an additional well.

MR. UTZ: That's all I have.

QUESTIONS BY MR. FISCHER:

Q Mr. Rainey, these dates shown on the shut-in of the wells on Exhibit B, those shut-in days, was that the completed build-up?

A Mr. Fischer, that's a little bit misleading, I am afraid, on this particular Exhibit. That is the original shut-in pressure on that well at the time the well was completed and that was the number of days that we shut-in to obtain those pressures shown.

Those pressures shown are the completion pressures on these wells, they are not the build-up pressures.

Q Well, then, in just about every well, the number of days

shut in that you think you'll need for this requested test period will be longer?

A Yes, sir, it is anticipated, and our past experience has indicated that it takes anywhere from six months to twelve months for maximum build-up for wells in San Juan Basin area.

Q What are your reasons for chosing these particular wells?

Do you have any particular reason?

A For one thing, these wells are wells which were tested in 1956 for the most part. For another thing, they are wells that we picked that did have a number of offset wells on the same basic lease. They further gave us a pretty good spread over the whole basin to be able to arrive at a basin-wide pressure.

MR. FISCHER: That's all. QUESTIONS BY MR. NUTTER:

- Q Mr. Rainey, refer, please, to your Exhibit No. B-lo --
- A Yes, sir.
- Q -- in which the Mansfield No. 4 Well is to be shut in, and there are no wells to which to transfer the allowable. What do you expect should be the thing to apply in this case, only that the allowable not be cancelled?

A Yes, sir. That well, if you note, has a current deliverability of 1,627 MCF and it is our feeling that it has sufficient deliverable capacity to make up the underage that may be accrued during the time it is tested, and make it up during a six months period.

- Q So, the only recommendation sought in this case is that the allowable not be cancelled?
 - A Yes, sir.
 - Q Now, refer, please, to your Exhibit B-17.
 - A Yes, sir.
- Q I note that you have included among the wells which would receive the allowable, the Jicarilla 1-B in the NW/4 of Section 28.
 - A Yes, sir.
- Q Does this well appear in a location that would be an offset location --
 - A Well, --
 - Q -- to the 5-B?

A Well, in many instances, and this may have occurred on some of these other Exhibits, we have picked the nearest well which had been drilled in surrounding areas that was on the same basic lease. Technically speaking, that 1-B is not a direct offset. However, this particular area is developed on 320-acre spacing. It's in the southeast edge of the South Blanco-Pictured Cliffs Pool. All pool rules provide for 160-acre development. This area is actually developed on 320, so in the northwest direction that would be the nearest offset.

Q Well, inasmuch as all of these other transfer wells are direct offsets and also inasmuch as you have some very good wells to which the allowable can be transferred, would El Paso have objection to the deletion of the No. 1-B to the transfer list in the

case of the Jicarilla well?

A As you have pointed out, there are several wells with sufficient deliverability capacity, and we have no objection to the removal of 1-B on Exhibit 17.

Q Now, you stated that the working interest ownership and royalty ownership were identical in each case in which the allowable will be transferred --

A Yes, sir.

Q -- is there any diversity of any interest whatsoever, including overriding royalty interests?

A I have been advised by our Land Department who furnished me this information that there is complete similarity of ownership and royalty interests on each of these offset wells.

Q Throughout?

A Yes, sir.

MR. NUTTER: Any further questions of Mr. Rainey? If not he may be excused.

A If I might make one statement to clarfly a question Mr. Utz asked a moment ago. Mr. Utz, if you will refer to Rule 3 of Order R-1065 on Page 9, that was the provision that I was referring to when I made the statement previously that we had the end of the proration period following the proration period in which the test was completed, and which to either transfer allowables or make up the underproduction on the test well. It says, "however, that the said wells shall be subject to the provisions of the aforementioned

rules," which is the overage and underage and balancing rules of the appropriate field rules," after the end of the six-month proration period following the proration period during which the test is completed."

MR. UTZ: Yes, sir, that's true. If you will read Rule 2, it also states that, "if the proposed transfer is approved by the Commission, the transfer shall be effected upon completion of the test or upon receipt of the deliverability test for the shutin well, whichever date is later." That's the only point I made of this.

A All right, sir.

Q Transfer at the completion of the test and still have a period to make it?

A Yes, sir.

MR. NUTTER: If there are no further questions of Mr. Rainey, he may be excused.

(Witness excused)

MR. NUTTER: Does anyone have anything further they wish to offer in Case 1498?

MR. PAYNE: I have a statement to read, Mr. Examiner,
"Re: Case 1498. Gentlemen: Aztec Oil and Gas Company has received
a copy of El Paso Natural Gas Company's application for an order of
the Commission to allow it to make maximum build-up pressure tests
and provide for noncancellation and/or transfer of allowables of
the test wells. The Company offsets the proposed shut-in test wells

in the Aztec Pictured Cliffs Pool and four of the proposed shut-in test wells in the Blanco Mesaverde Pool.

"Aztec Oil & Gas Company has no objection to the granting of the application so made by El Paso Natural Gas Company and, in fact, we urge that the Commission grant such request. Yours very truly, Q. B. Davis"

MR. NUTTER: If there is nothing further in Case 1498, we will take the case under advisement and take a ten-minute recess and then take Case 1499.

DEARNLEY - MEIER & ASSOCIATES GENERAL LAW REPORTERS ALBUQUERQUE, NEW MEXICO Phone CHapel 3-6691 . * 1 *

STATE OF NEW MEXICO)

Ounty of Bernalillo)

I, J. A. TRUJILLO, Notary Public in and for the County of Bernalillo, State of New Mexico, do hereby certify that the foregoing and attached Transcript of Hearing before the New Mexico Oil Conservation Commission was reported by me in stenotype and reduced to typewritten transcript by me and/or under my personal supervision; that the same is a true and correct record, to the best of my knowledge, skill and ability.

> A G. Surgella Notary Public

My Commission Expires: October 5, 1960.

New Mexico Oil Composition Commission