

BEFORE THE
OIL CONSERVATION COMMISSION
Santa Fe, New Mexico
November 8, 1962

EXAMINER HEARING

IN THE MATTER OF:)

Application of El Paso Natural Gas Company)
for the creation of a new gas pool and)
establishment of special rules and regula-)
tions, Lea County, New Mexico. Applicant,)
in the above-styled cause, seeks the crea-)
tion of a new gas pool for the Morrow for-)
mation underlying Sections 18, 19, 20, and)
29, Township 19 South, Range 32 East, Lea)
County, New Mexico. Applicant further seeks)
establishment of special pool rules includ-)
ing provisions for 640-acre proration units)
and the allocation of allowables to non-)
marginal wells in the proportion that each)
well's acreage factor bears to the total of)
the acreage factors for all non-marginal)
wells in the pool.)

Case 2691

BEFORE: Daniel S. Nutter, Examiner.

TRANSCRIPT OF HEARING

MR. NUTTER: The hearing will come to order, please.

The next case will be 2691.

MR. DURRETT: Application of El Paso Natural Gas Com-
pany for the creation of a new gas pool and establishment of
special rules and regulations, Lea County, New Mexico.

MR. WHITWORTH: Garrett Whitworth and the Santa Fe law
firm of Seth, Montgomery, Federici and Andrews, representing El

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Paso Natural Gas Company. We have two witnesses, Mr. Jerry Hickson and Mr. Henry Sweeney.

(Witnesses sworn.)

JERALD A. HICKSON

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

DIRECT EXAMINATION

BY MR. WHITWORTH:

Q Mr. Hickson, would you state your full name for the record, by whom and in what capacity you are employed?

A Jerald A. Hickson, proration engineer for El Paso Natural Gas Company.

Q Have you previously testified before this Commission and are your qualifications as an expert witness a matter of record?

A Yes, sir, they are.

Q What does El Paso seek to accomplish by this application, Mr. Hickson?

A Well, we are asking for the creation of a new pool which hereafter will be referred to as the Lusk Morrow field and establishment of special rules and regulations to operate in this field.

Q Do you have an exhibit showing the horizontal limits



of the field that you propose?

A Yes, sir.

Q Is that El Paso's Exhibit No. 1?

A Yes, sir, that is El Paso's Exhibit No. 1.

(Whereupon, El Paso's Exhibit No. 1 was marked for identification.)

Q Will you please explain that exhibit to the Examiner?

A This is a plat of the area surrounding the area of the Lusk Deep Unit and surrounding sections. It takes in all wells in this immediate area which are completed to the Morrow formation. On the plat we also have symbols "S" for Strawn, "M" for Morrow and we have three dual completions in the Strawn and Morrow, four dual completions in the Strawn Morrow, correction, and one single in the Morrow and two drilling to the Strawn.

Q What indicates the Lusk Deep Unit on this plat?

A The dark line, the dark brown line indicates the Lusk Deep Unit and the two parallel lines indicate the acreage that we have asked to be set for this Lusk Morrow field.

Q That includes four sections, does it not?

A Yes, sir, Sections 18, 19, 20 and 29 of 19, 32.

Q When were El Paso's wells shown on this plat completed?

A The first completion in the Morrow formation was in March of 1961.

Q Do you have potentials on these wells?



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A Yes, sir. We have potentials on El Paso Natural Gas Company's Lusk Unit No. 2, 3, and Southern California No. 1.

Q What are those potentials?

A The AOF on our Lusk Unit No. 2 was 5,008,800 MCF per day. Southern California Federal No. 1, it was 18,000,250 MCF per day.

Q In your opinion these four sections should be designated as a separate gas pool, is that correct?

A Yes, sir, that's correct.

Q What is your reason for requesting 640-acre spacing for this pool?

A The reason for asking for 640-acre spacing in this pool at this time is in order that this field can be developed on the widest possible spacing in order to efficiently and economically develop the area. We have another exhibit --

Q Which pertains to well costs?

A Yes, sir.

(Whereupon, El Paso's Exhibit No. 2 was marked for identification.)

Q Is that El Paso's Exhibit No. 2?

A Yes, sir.

Q Would you please explain this exhibit?

A This is a cost estimate of a single completion to the Morrow formation in this area. It sets out the drilling costs



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and all additional costs and the total is \$323,670. Now, investing \$323,000 on a Morrow formation, we feel like until we can determine the reserves and the drainage area of the reservoir we should try to get the widest possible spacing in order that we can economically drain this area.

Q This is for a single completion to the Morrow, is it not?

A Yes, sir.

Q How were these costs ascertained?

A This is a submitted bid from a contractor.

Q Would you explain to the Examiner the temporary nature of El Paso's request?

A Yes, sir, we are asking for temporary rules to be in force for one year after the date of first production in the area, at which time we will evaluate the reservoir and determine the proper spacing at that time.

Q Is it your opinion that this type of rule or order that we're asking for would have the effect of preventing the drilling of unnecessary wells?

A Yes, sir, I do. We can develop this field on 640-acre spacing and if it's set on 160 and we develop it on 160 we can't undrill wells, and it could mean the additional costs of around \$900,000 in one section.



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Q Is there a good likelihood that within a year there will be sufficient production history to determine what the proper spacing should be?

A That is possible. Pan American Petroleum Corporation has completed a well in Section 27 of 19, 32 as a single completion in the Morrow, and Southern Union Gas Company is planning on making a connection to that well within, I would say, the next ten days. I understand the pipe is on the ground, but it's just a matter of connecting it to the well head. It would give us a chance to obtain additional reservoir data in this area.

Q Do you have rules that you would like to recommend to the Commission with respect to this separate gas pool El Paso has proposed?

A Yes, sir. We have four rules. These would be special rules and regulations for the Lusk Morrow Pool.

Q What are they?

A Rule 1. Each well completed or recompleted in the Lusk Morrow Pool or in the Morrow formation within one mile of the Lusk Morrow Pool, and not nearer to nor within the limits of another designated Morrow pool, shall be spaced, drilled, operated and prorated in accordance with the special rules and regulations hereinafter set forth.

Rule 2. Each well completed or recompleted in the Lusk



Morrow Pool shall be located on a unit containing 640 acres, more or less, substantially in the form of a square, which is a section being a legal subdivision of the United States Public Lands Survey.

Rule 3. Each well completed or recompleted in said pool shall not be drilled closer than 660 feet to any quarter section line nor closer than 330 feet to any quarter-quarter section line.

Rule 4. For good cause shown, the Secretary-Director of the Commission may grant an exception to the requirements of Rule 2 without notice and hearing when the application is for a non-standard unit comprising less than 640 acres. All operators offsetting the proposed non-standard unit shall be notified of the application by registered or certified mail, and the application shall state that such notice has been furnished. The Secretary-Director of the Commission may approve the application if, after a period of thirty days, no offset operator has entered an objection to the formation of such non-standard unit.

Q With the exception of 640-acre spacing, these rules compare favorably with rules that the Commission has previously adopted with respect to the Lusk Strawn, is that correct?

A Yes, that is correct. The allocation of allowables to non-marginal wells in the proportion that each well's acreage factor bears to the total of the acreage factors for all non-



marginal wells in the pool. This is an addition to Rule 4.

Q Do you have anything else you would like to add to your testimony?

A Just one other thing, with the deep drilling and the expensive wells in this area we have to utilize the technical knowledge that all the companies possess and yet in some cases kind of ignore where in the shallow fields we go along with the 160-acre spacing until you reach a depth where we are drilling here where in order to keep up with the industry and make a fair return on our money the widest possible spacing must be obtained, and to me this is the only way that we can develop a field is on a temporary basis until such time as the information on the reservoir itself is obtained and then set a permanent spacing rule at that time.

Q As of this date there is no information or production history with respect to this proposed pool, is there?

A No, sir. There has been no production.

Q A number of companies have concurred with El Paso in this application. Do you know of any company that dissents or opposes El Paso's proposal?

A No, I know of no company that is objectionable to this proposal.

Q Were Exhibits 1 and 2 prepared by you or under your

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supervision?

A Yes, sir.

MR. WHITWORTH: We ask that these exhibits be admitted.

MR. NUTTER: El Paso's Exhibits 1 and 2 will be admitted in evidence.

(Whereupon, El Paso's Exhibits 1 and 2 were admitted in evidence.)

MR. WHITWORTH: That's all we have from this witness.

MR. NUTTER: Does anyone have any questions of Mr. Hickson?

CROSS EXAMINATION

BY MR. NUTTER:

Q Mr. Hickson, the Pan American well which will be connected in a few days is in the Morrow?

A Yes, sir, a single completion.

Q It isn't, what was AOF?

A The AOF on the Pan American was 1.4 million.

Q So it's considerably smaller than the other completions in the pool?

A Yes, sir, it is.

Q Including the Pan American well, there have been just four completions in the pool to date, or in this area in the Morrow?



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A No, there has been five. The Shell well, it's my understanding, is in the process of a dual completion in the Strawn and Morrow.

Q Their Middleton Federal No. 1?

A Yes, in Section 18.

Q And they have got production in the Morrow?

A They have a well completed in the Morrow, that's correct.

Q That's going to result in two Morrow wells in Section 18, isn't it?

A Yes, sir, it is.

Q But your Rule 4 would provide for an exception to Rule 2 for wells with less than 640?

A That's correct.

Q What is the status of Well No. 4 at this time?

A It's drilling. It's my understanding it's below 9,000 feet.

Q Is it contemplated that El Paso will take it to the Morrow?

A No, it's a single in the Strawn.

Q That will be a single in the Strawn?

A Yes, sir.

Q You stated that this well cost on Exhibit No. 2 was



based on a contractor's bid. Is the entire well cost based on a contractor's bid or the drilling costs of \$109,000?

A Just the drilling cost. We have our drilling engineers prepare the rest of it.

Q The rest are El Paso figures on the other items on the estimate?

A That's correct.

Q Is El Paso actually in this application seeking prorationing in the pool?

A Well, at the present time there is only one well producing and it would be kind of hard to have prorationing with one well, but the point we tried to make here is that drilling on less than 640 a well would be penalized as to its acreage of 640.

Q Have you contemplated that the pool rules wouldn't be a part of R-1670, which is the general gas pool rules for prorationed pools?

A They can be incorporated in 1670.

Q Included in this prorationing feature of Rule No. 5?

A Yes.

Q And you are not contemplating in this hearing offering anything as to the value of the reserves or estimated life of the pool after it's put on production, or anything like that?



A Well, sir, at this time that information is not available. We have no production and we just don't have enough --

Q Have core analyses or anything been made to get an estimate of gas in place?

A Not to my knowledge. We don't have a single core in the Morrow to my knowledge.

Q Have any of the wells produced any gas at all for drilling gas or anything?

A Just this AOF test is all.

MR. NUTTER: Any further questions of Mr. Hickson? He may be excused.

(Witness excused.)

H. N. SWEENEY

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

DIRECT EXAMINATION

BY MR. WHITWORTH:

Q Mr. Sweeney, would you state your full name, by whom and in what capacity you are employed?

A My name is H. N. Sweeney, Roswell, New Mexico. I'm an independent geologist representing in this hearing S. P. Yates and Martin Yates, III.

Q You previously testified before this Commission as an



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expert witness, haven't you?

A I have.

Q Your qualifications have been made a matter of record and have been accepted?

A Yes, sir.

Q What interest does Yates Brothers have in this application and in this proposed area?

A We are presently drilling a well in the Northeast Northeast Quarter of Section 30, which is, as of yesterday morning was at 10,338 feet. We have as yet, that well is projected to the Strawn at a depth of approximately 11,500 feet.

Q Is that well depicted on El Paso's Exhibit No. 1?

A Yes, sir. It's shown as a drilling location in Section 30.

Q Continue, please.

A Our experience in this area in trying to put our well deal together has indicated conclusively to us that lack of a temporary spacing order in the area would effectively retard development. There are several reasons, as we've found, for not producing the Morrow gas in the Lusk Deep Unit, one of which is the possibility of fairly rapid depletion of reservoir energy in the Strawn and that possibly the Morrow gas can best be used for recycling and injection into the Strawn for pressure



maintenance purposes rather than to sell this gas commercially and commit it for other uses.

In putting our deal together in Section 30, which incidentally, at the time we set out to drill this well in the Northeast Quarter of the Northeast Quarter we found that in that section there are nine separate leases and eight different owners, with 160-acre spacing in the Strawn and no spacing in the Morrow. When we talked about drilling a Morrow test to some of the owners in there without exception and the owners include Delhi-Taylor, Kerr-McGee, Shell, Phillips Petroleum, they felt that the spacing in the Lusk should be on the basis of 640 acres and that it would not be feasible to drill a Morrow test unless we could obtain 640-acre spacing, and actually our well is projected to the Strawn at the present time, we expect that within two to three weeks we will have tested the Strawn and before that time we'll have to make up our minds as to whether that well is taken to the Morrow, and the action or lack of action by the Commission in this hearing will have a great deal of bearing on whether this well is taken to the Morrow or not.

It is not feasible generally, I know we as operators don't feel that we can drill a Morrow test on the 200 acres which we have in the section, with the possibility that spacing might go to 640 acres later on, which we would take all the risk of drilling

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the well in the section and later have a very small interest in the well.

Q In other words, you feel that unless spacing is 640 acres for each well the development of this area will be retarded in the Morrow gas formation?

A Definitely. I would like to make some general remarks about the Morrow formation from my experience with it.

Q All right.

A The Morrow series Pennsylvanian system is the course in this shelf area in Eddy and Lea Counties is predominantly a shale section, but it's characterized by thin sand members which, where productive, consist of an unconsolidated coarse to medium grain subrounded sand with very high porosities and permeabilities, porosities running in the range of 25 to 35%. The permeabilities are also high while we have no evidence, the principal reason for not taking cores in the Morrow in this area is the high pressures in the Strawn above the Morrow. There's a considerable risk in doing extensive coring where you have a high pressure formation open in your well bore, but all of the Morrow wells, the three El Paso Morrow wells were completed, naturally there was no artificial stimulation whatsoever, which indicates to us that there is a very high degree of permeability in the Morrow, and that we think that 640-acre spacing is reasonable on a



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temporary basis until it's more definitely proven one or another as to whether the 640 acres could be drained by one well, but we think the evidence now, and we have talked to possibly eight or nine operators with some interest in the area, and without exception they all favor 640-acre spacing.

Q In other words, when the information on drainage is available you won't have the problem of undrilling some wells, or attempting to?

A That's right.

Q El Paso's Exhibit No. 2 which reflects well costs for a single completion to the Morrow, have you had a chance to examine that?

A Yes, sir.

Q Does that truthfully reflect, according to your experience, well costs of a well singly completed to the Morrow formation?

A We have done considerable investigating into well costs and made estimates in this connection on our well, and I think the El Paso estimate is reasonable representation of costs of a Morrow well.

Q Is there anything that you would like to add to your testimony?

A I don't believe so.



MR. WHITWORTH: That's all we have from this witness.

MR. NUTTER: Does anyone have any questions of Mr. Sweeney? He may be excused.

(Witness excused.)

MR. NUTTER: I would like to ask Mr. Hickson another question or two, please.

JERALD A. HICKSON

recalled as a witness, having been previously duly sworn, testified further as follows:

CROSS EXAMINATION

BY MR. NUTTER:

Q We know that the Pan American well will be connected to Southern Union in a short time. Is the acreage in the Lusk Unit under contract to any gas purchaser?

A No, sir, it is not at this time.

Q So you don't know when it will be connected?

A No. I'm sure if the Yates well goes down that they'll probably try to connect that well, and if so, we may make some arrangements to work out a gas purchase contract.

Q You mean we as El Paso a purchaser or El Paso a producer?

A As El Paso a producer.

Q I see.



A That's not certain at this time. We'll just have to wait and see what happens in the area.

Q Were any of your wells cored in the Morrow formation in this unit?

A No, sir.

MR. NUTTER: That's all.

MR. WHITWORTH: That's all we have in this case.

MR. NUTTER: Does anyone have anything further they wish to offer in Case 2691?

MR. DURRETT: Yes, sir, I have some statements I would like to read into the record from the Commission files. I have a letter from Texaco, Inc. received by the Commission on November 7. I'll read one paragraph from this letter, the last paragraph which reads as follows: "Texaco, Inc. at the present time does not have any wells completed in this reservoir. However, we do own considerable undeveloped acreage in the area, and it is believed that this acreage could be productive from this reservoir. It can therefore be seen that Texaco, as a prospective operator, is vitally interested in the establishment of any special rules pertaining to this reservoir. Texaco has reviewed the above proposals set forth by El Paso Natural Gas and finds that we are in agreement with the proposed rules. We therefore strongly urge the Commission to adopt the rules as proposed by El Paso Natural

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Gas Company. Very truly yours," signed by Mr. R. N. Bischoff, B-i-s-c-h-o-f-f.

Also have a telegram in the Commission files which I would like to read into the record at this time, received November 8, reading as follows: "Re Case No. 2691, Shell Oil Company supports the application of El Paso Natural Gas Company for creation of a new gas pool and establishment of special rules and regulations for the Morrow formation underlying Sections 18, 19, 20 and 29, Township 19 South, Range 32 East, Lea County, New Mexico. Shell Oil Company, D. D. Stokes."

Also have another telegram received November 6. This telegram reads as follows: "Re Case No. 2691, El Paso Natural Gas Company has applied for the establishment of 640-acre proration units and special pool rules for the Morrow formation underlying Sections 18, 19, 20 and 29, Township 19 South, Range 32 East, Lea County, New Mexico. Kerr-McGee Oil Industries, Inc. as a working interest owner within this area supports El Paso Natural Gas Company's application and respectfully recommends to the Commission that those sections be spaced and rules established as requested by El Paso Natural Gas Company. B. G. Taylor, Kerr-McGee Oil Industries, Inc."

MR. NUTTER: Thank you, Mr. Durrett.

MR. WHITWORTH: I'm reliably informed that I'm authorized

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to make a statement on behalf of Pan American in this case.

MR. NUTTER: Would you make that statement?

MR. WHITWORTH: Pan American wholeheartedly and without reservation concurs with all of El Paso's proposals in this case.

MR. NUTTER: Does anyone else have anything else in this case?

MR. KASTLER: Kastler, appearing on behalf of Gulf. We are one of the working interest owners in the Lusk Deep Unit and also Gulf concurs in this application. We particularly believe that on a temporary basis until more data is received that it would be beneficial and lend to greater, more rapid development to establish 640-acre spacing.

MR. NUTTER: You do this wholeheartedly and without reservation? Mr. Gordon?

MR. GORDON: Joe Gordon, Socony-Mobil, as owner of an interest in this area, supports El Paso's request for 640-acre spacing rules in this reservoir. We do expect that further proof of the productivity of 640 acres in each unit will be required for each producing well if the 640 acres are made permanent.

MR. NUTTER: Anyone else? We will take Case 2691 under advisement.

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STATE OF NEW MEXICO)
) ss
COUNTY OF BERNALILLO)

I, ADA DEARNLEY, Court Reporter, do hereby certify that the foregoing and attached transcript of proceedings before the New Mexico Oil Conservation Commission at Santa Fe, New Mexico, is a true and correct record to the best of my knowledge, skill and ability.

IN WITNESS WHEREOF I have affixed my hand and notarial seal
this 24th day of November, 1962.

Notary Public-Court Reporter

My commission expires:

June 19, 1963.

I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of case No. 2691, heard on the 11-8, 1962.

[Signature], Examiner
New Mexico Oil Conservation Commission



BEFORE THE
NEW MEXICO OIL CONSERVATION COMMISSION
Santa Fe, New Mexico

May 7, 1964

EXAMINER HEARING

IN THE MATTER OF: (Reopened)

Case No. 2691 being reopened pursuant to the provisions of Order No. R-2373, which order established temporary 640-acre gas proration units for the Lusk-Morrow Gas Pool, Lea County, New Mexico, for a period of 18 months. All interested parties may appear and show cause why said pool should not be developed on 160-acre gas proration units.

Case No. 2691

BEFORE: Daniel S. Nutter, Examiner.

TRANSCRIPT OF HEARING

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MR. NUTTER: We'll call Case 2691.

MR. DURRETT: In the matter of Case No. 2691 being re-opened pursuant to the provisions of Order No. R-2373, which order established temporary 640-acre gas proration units for the Lusk-Morrow Gas Pool, Lea County, New Mexico, for a period of 18 months.

MR. CHRISTY: Sim Christy, Hinkle, Bondurant and Christy for the applicant, Southern New Mexico Oil Corporation.

(Witness sworn.)

M. B. WILSON

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

DIRECT EXAMINATION

BY MR. CHRISTY:

Q Would you state your name, address, occupation, and by whom you are employed, and in what capacity?

A My name is M. B. Wilson, and I live in Midland, Texas; employed by Southern New Mexico Oil Corporation as Vice President.

Q You are a petroleum engineer, Mr. Wilson?

A Yes, sir.

Q Have you previously testified before this regulatory body as a petroleum engineer and had your qualifications accepted?

A Yes, I have.

Q Are you familiar with the area involved in Case 2691, which is the area around the Lusk Unit in Eddy and Lea Counties, New Mexico, Township 19 South, Ranges 31 and 32 East?

A Yes, I am.

Q And the wells in that area?



A Yes, sir.

(Whereupon, Applicant's Exhibit A was marked for identification.)

Q Now, I refer you to what has been marked as Applicant's Exhibit A and ask you if you will please identify it for us?

A Exhibit A is a map of the area of the Lusk field that shows the wells that are presently drilled or drilling in that particular area. That shows Strawn wells as well as Morrow wells. However, there's a color code that shows Morrow wells that were drilled and completed prior to November the 8th, 1962, and wells that were drilled after November 8, 1962.

Q Case 2691 did involve only Morrow wells and was heard on November 8, 1962?

A Yes, sir.

Q Now, would you take up very briefly the new wells that have been drilled since November 8, 1962, tell us their potential, whether or not any cores have been taken, and their production?

A The color code, the yellow designates those wells that were drilled prior to the 11-8-62 hearing, and beginning in Section 27, 19 South, 32 East, the Pan American No. 1 Plains Unit was completed October 19, 1962, for 1.24 million.

Q Excuse me, Mr. Wilson, I am asking for wells that have been drilled since the last hearing.

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A Pardon me.

Q I believe the wells drilled before the last hearing are in the testimony here. Let's bring them up from that date.

A The wells drilled subsequent to November 8, 1962, beginning in Section 8, 19 South, 32 East, is the Pan American Plains Unit No. 2 completed May 31, 1963 for three million cubic feet per day. In Section 30, 19 South, 32 East, the Yates Petroleum Corporation No. 1 Elliott Hall completed July 8th, 1963 for 4.69 million cubic feet per day. Section 19, 19 South, 32 East, the Lusk Deep Unit No. 5 well was completed June the 25th, 1963 for 9.45 million. In Section 25, 19 South, 31 East, the Delhi-Taylor No. 1, a Federal well, was completed July the 6th, 1963 for 1.2 million cubic feet per day.

Q Do you happen to know whether any cores were taken on those wells?

A To my knowledge there were no cores taken in the Morrow formation.

Q Has there been any production from those four wells that you have just eliminated?

A There has only been production from one of those last four wells that I have enumerated.

Q I refer you to what has been marked as Applicant's Exhibit B and ask you what the production is from those wells.



(Whereupon, Applicant's Exhibit B was marked for identification.)

A Exhibit B is a tabulation taken from the New Mexico Engineering Committee files showing the Morrow production from all wells in the area, or all wells that have been produced in the area. Of the wells that were completed after November 8, 1962, the one well, the Pan American Plains Unit No. 2 is the only one that has any production.

Q And the production is reflected there on Exhibit B?

A Yes, sir.

Q Those are Pan American's sales?

A Yes, sir.

(Whereupon, Applicant's Exhibit C was marked for identification.)

Q We'll not go into detail on it, but I will ask you if you will identify Exhibit C and state just briefly what it is?

A Exhibit C is a short history on each well that has penetrated the Morrow formation in the area of the Lusk Field. That's both producers and dry holes.

MR. CHRISTY: That's the history of all the wells.

Q Now, you say there have been no sales on the other three Morrow wells in and adjacent to the Lusk Unit, is that correct?

A That's correct.

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Q Does Southern New Mexico have a contract to sell that gas?

A Yes, sir, there is a contract, but the gas is not being sold into a pipeline.

Q Has everyone in the Lusk Unit -- I understand it's a fully-participating working interest unit?

A Yes, sir.

Q Have all the working interest owners joined in that contract?

A To my knowledge none of the other working interest owners except Southern New Mexico have executed a contract for their Morrow gas.

Q Now, Southern New Mexico is an operator of the Lusk Unit, is it not?

A That is correct.

Q Do you have any plans for the use of this Morrow gas from the three wells and other Morrow wells that may be drilled in the area?

A Yes. There is a possibility that the Morrow gas may be needed to be injected into the Strawn formation. At this present time there is, or is an organization known as the Lusk Field Engineering Committee that is studying the overall possibilities of pressure maintenance in the Strawn formation. Present data



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indicates that considerable additional oil could be recovered by the injection of gas pressure maintenance full of the Strawn formation. The Morrow formation would be a prime source of gas and to this date the operators in the area, with the exception of Pan American, have retained or have not sold any gas pending a final determination that they would inject gas into the Strawn formation.

Q Do your present plans also encompass forming a separate unit for the Strawn formation repressuring and the sale of Morrow gas to this new unit?

A That is correct. The Strawn would be a separate unit and gas would be purchased from the Morrow formation.

Q At that time the royalties and overrides would be paid, of course?

A Yes.

Q This is all Federal acreage, is it not, involved?

A Yes, sir.

Q Now, do the plans for this new Strawn repressuring unit appear favorable at this time?

A At this time the formation of the unit appears favorable. The physical aspects appear favorable, and the Committees are moving forward rapidly to make a final determination that either there will be a pressure maintenance unit or that there will not be.

Q I believe they are meeting all this week, as a matter



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of fact?

A That's right.

Q If it is undertaken, by what latest date could the Strawn have to be pressured up?

A The Strawn formation is rapidly approaching the bubble point, and this work should have already been done, or injection should already have started, however. It takes time to do these things and we have estimated on a very tight time schedule that this could be accomplished within six months.

Q And then about how many months would you need to test and evaluate the drawdown on the Morrow well that you would take and purchase gas from in order to be able to advise this Commission more definitively as to the drainage of one more well?

A Six months' production should give definitive production data to establish the drainage radius or area.

Q So that, in other words, in approximately twelve months from now, assuming the Strawn repressuring unit is formed and which appears favorable at this time, you should be able to give the Commission rather definitive data with respect to the Morrow production, is that correct?

A Yes, sir.

Q Now, the Morrow formation, as far as you have been able to determine, now, does it all underlie the Strawn formation?



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A Yes, it does.

Q Referring to the transcript in the prior hearing on November 8, 1962, I believe there was testimony there that the costs of wells were about three hundred thousand plus per Morrow well, is that correct?

A Yes, sir.

Q About what does it cost now to drill a Morrow test in this area?

A These costs have been estimated as of today's conditions, and that shows to be approximately \$250,000.

Q This is depicted on your Exhibit D?

A Yes, sir.

(Whereupon, Applicant's Exhibit D was marked for identification.)

Q So the costs have gone down a little bit, about fifty thousand?

A Yes, and that's because of more experience of drilling in the area and a modified casing program, and certain adjustments in mud program, but otherwise it's correlative to the costs submitted in the last hearing.

Q Now, the last hearing did take up the cost factors. They also took up the question of a type of sand we encountered in the Morrow and the excellent permeability and porosity. Have you



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read that transcript?

A Yes, I have.

Q Do you concur in the testimony?

A Yes, sir, I do.

Q Have you obtained any concurrences from other operators in the Lusk area?

MR. CHRISTY: By way of explanation, I realize that one or more may have concurred or sent statements. I believe two sent them erroneously to us instead of the Examiner.

Q That's the purpose of the question.

A We do have statements from Tenneco or Yates Petroleum Corporation. They have been submitted to our Midland office. I do not have them in hand.

Q Do you know if they were favorable or unfavorable?

A They were reported favorable to me.

Q Would you supply those to the Commission when you get home?

A Yes.

Q Were Exhibits A, B, C and D prepared by you or under your direct supervision?

A They were.

MR. CHRISTY: At this time we would like to offer into evidence Exhibits A, B, C and D, and we would further like to



retender the evidence in the original case as a portion of this case, and move that the matter be continued for another one-year period in order to properly evaluate the Morrow and its drainage potentials.

MR. NUTTER: Applicant's Exhibits A through D will be admitted in evidence.

(Whereupon, Applicant's Exhibits A, B, C and D were admitted in evidence.)

MR. NUTTER: Does anyone have any questions of Mr. Wilson?

CROSS EXAMINATION

BY MR. NUTTER:

Q Mr. Wilson, are these other wells that are depicted on Exhibit A the Strawn wells?

A Yes.

Q Are there any wells presently drilling to the Morrow?

A There are none that I know of that are projected to that depth.

Q You have a couple or three locations shown here, but they're headed for the Strawn?

A Yes, sir. I've heard, and possibly the Texaco people can corroborate that the No. 2 "CR" in Section 32, Township 19 South, Range 32 East is headed for a Devonian.

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Q Evidently the Pan American Plains Unit No. 1 and 2 are both producing and have been producing for some several months, is that correct?

A Yes, sir.

Q Do you know what the outlet for that gas is?

A That is Southern Union, I believe.

Q So it's going into a pipeline then?

A Yes, sir.

Q Will the repressuring project in the Strawn Pool be on a unit basis?

A Mr. Examiner, there's many problems to be worked out there. I have, and many people have envisioned that the Strawn repressuring would be a unit, or on a unitized basis of the whole Strawn reservoir.

Q Do you know whether the gas from those two Pan American wells will be used for repressuring the Strawn or not, or will it continue to be sold to the pipeline?

A That is, of course, a hurdle we have not yet overcome. We would certainly like to retain it if necessary for the Strawn repressuring.

Q When you indicated awhile ago it would take six months to iron this thing out as far as repressuring the Strawn, did you mean six months to come to a negotiated agreement as far as the



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operators are concerned, and then after that put the injection system in, or did you mean six months for the negotiations to be concluded and the injection system to be installed and gas put in the ground?

A I would visualize that this six-months' period, the first six-months' period that we mentioned, that would be required in the negotiations to reach an effective date on the unit if it is to be used at all. And on the effective date, the Morrow being high pressure wells, that the Morrow gas could be used without additional, for the time being, without additional compression facilities. Certainly compression facilities will need to be installed, but it could be initiated without.

Q Would that gas go through a gasoline plant or other extraction plant?

A It would need to be stripped or partially stripped, because it does contain some condensate.

Q Now, you indicated that the Strawn was reaching the bubble point at the current rates of withdrawal. How long is it going to be before the bubble point is reached?

A We have scheduled, or tentatively scheduled fieldwide survey, bottomhole pressure survey of the Strawn reservoir for the middle to latter part of May; the exact date has not been set exactly. That should give us a much more definitive point to



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determine how close we are to the bubble point.

Q You don't know right now just where you are as far as reservoir pressures?

A No, sir. We think we're approaching rather rapidly, but as to a definite number, we do not have it today.

Q And you've requested here that these present temporary rules be extended for a period of one year, is that correct?

A Yes, sir.

MR. NUTTER: Are there any other questions of Mr. Wilson? He may be excused.

(Witness excused.)

MR. CHRISTY: That's the only thing we have.

MR. NUTTER: Do you have anything further, Mr. Christy?

MR. CHRISTY: No, sir.

MR. NUTTER: Does anyone have anything they wish to offer in case 2691?

MR. KASTLER: Bill Kastler appearing on behalf of Gulf. Gulf is a working interest owner in the Lusk Deep Unit and concurs in this application.

MR. NUTTER: Thank you.

MR. BUELL: Guy Buell for Pan American Petroleum Corporation. We would concur in the recommendation that has been made here today, and actually Pan American would go further and recommend



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that the Commission adopt a permanent order at this time, because according to our economics it is going to be impossible to ever develop this Morrow gas down to a development more dense than 640's. So Pan American would also recommend adoption of a so-called permanent order.

MR. NUTTER: Thank you.

MR. WHIGHAM: Carl Whigham, appearing for Texaco, Incorporated. We would like to make the statement that we concur with the recommendation made by Southern New Mexico Oil Corporation in extending these temporary rules for another twelve months. Our reservoir people recognize the current lack of specific data, but the data that is available does indicate that these wells would be non-profitable if spaced on 160 acres. So, we, therefore, favor prolonging the temporary rules in order to obtain additional reservoir information.

MR. NUTTER: Thank you.

MR. DURRETT: If the Examiner please, I would like to state for the record that the Commission has received communications from several operators, all communication supporting continuance of the rules, of the present rules. These communications have been received from Glen W. B-a-r-b, producing Superintendent for Socony-Mobil. We also have communications from Phillips Petroleum, Kerr-McGee, Shell and Delhi-Taylor supporting continuance



of the rules.

MR. NUTTER: Thank you.

MR. CHRISTY: I might state for the record also that Delhi-Taylor and Kerr-McGee are both overriding royalty owners.

MR. NUTTER: If there's nothing further in Case 2691, we will take the case under advisement.

* * *

STATE OF NEW MEXICO)
) ss
COUNTY OF BERNALILLO)

I, ADA DEARNLEY, 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; and that the same is a true and correct record of the said proceedings, to the best of my knowledge, skill and ability.

Witness my Hand and Seal this 8th day of June, 1964.

Ada Dearnley
NOTARY PUBLIC

My Commission Expires:

June 19, 1967.

I do hereby certify that the foregoing is a complete record of the proceedings in the Bernalillo hearing of Case No. 2691, heard by me on May 7, 1964.

Osborne, Examiner
New Mexico Oil Conservation Commission

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BEFORE THE
NEW MEXICO OIL CONSERVATION COMMISSION
Santa Fe, New Mexico
May 12, 1965

EXAMINER HEARING

IN THE MATTER OF:

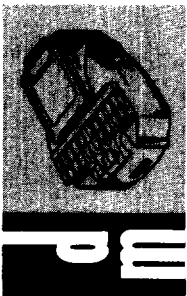
Case No. 2691 being reopened pursuant
to the provisions of Order No. R-2373-A,
which order continued 640-acre gas
proration units for the Lusk-Morrow
Gas Pool, Lea County, New Mexico, for
one year.

Case No. 2691
(reopened.)

BEFORE:

ELVIS A. UTZ, Examiner

TRANSCRIPT OF HEARING



MR. UTZ: The first case will be Case 2691.

MR. DURRETT: In the matter of Case No. 2691 being reopened pursuant to the provisions of Order No. R-2373-A, which order continued 640-acre gas proration units for the Lusk-Morrow Gas Pool, Lea County, New Mexico, for one year.

MR. CHRISTY: Sim Christy, Hinkle, Bondurant and Christy, Roswell, for the Southern New Mexico Oil Corporation who is the unit operator of the Lusk Unit where substantially all of the field is.

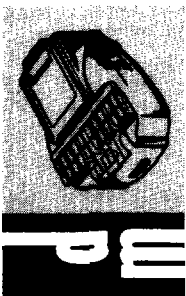
Mr. Examiner, I want to apologize for Mr. Wilson. He had planned to be here for the Hearing. He testified last year at the Hearing and is very familiar with the case, but he was unavoidably unable to come. However, he has sent a consultant of Southern New Mexico to testify as to what has happened in the last year.

We have one witness. Would you stand and be sworn, please?

(Witness sworn.)

(Whereupon, Applicant's Exhibits 1 through 3 marked for identification.)

J O H N H A M P T O N, a witness, having been first duly sworn, was examined and testified as follows:



DIRECT EXAMINATION

BY MR. CHRISTY:

Q Would you please state your name, address and occupation?

A John Hampton.

MR. UTZ: Let me ask for other appearances, please, before you proceed.

MR. CHRISTY: Excuse me.

MR. UTZ: Are there other appearances? Do you have an appearance to make in this State?

MR. KELLY: I probably would make a statement; do you want to have the appearance now?

MR. UTZ: Should have.

MR. KELLY: Booker Kelly, of White, Gilbert, Koch and Kelly, Santa Fe, appearing for Texaco and Tenneco.

MR. JOHNSON: Bob Johnson, for Shell Oil Company.

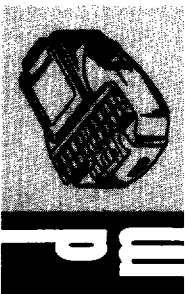
MR. SWEENEY: H. M. Sweeney, independent.

MR. UTZ: You may proceed.

Q (By Mr. Christy) Would you please state your name, address and occupation?

A John Hampton, 134 Petroleum Plaza Building, Farmington, New Mexico. Special consultant to Southern New Mexico.

Q Mr. Hampton, have you previously testified before



this regulatory body and had your qualifications as a petroleum engineer accepted?

A I have. Yes, sir.

Q Are you familiar with the Lusk Unit area and the wells and what has happened in the production history in the last year or two?

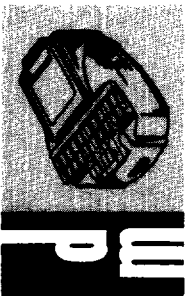
A Yes, sir.

Q Now, sir, let's refer to Exhibit 1 and orient the Commission here; would you briefly identify it?

A The Exhibit 1 is a plat or a map of the area in question in Lea and Eddy County, New Mexico. We show on this map several things. We show all of the wells drilled in the area, the wells with the dark center are wells which have gone to the Strawn and the wells which we've circled in red indicate wells which have been penetrated to Morrow formation. We show in the usual symbols some of them have been plugged and abandoned, some of them temporarily abandoned and some of them still capable of production from the Morrow Zone.

In addition, one well we show with a green arrow pointing to it is the only well which has been drilled and penetrated the Morrow in the area since the last Hearing.

Q That is producing at this time?



A We also show two or three wells drilling in the area.

Q This well marked with a green arrow is the only well penetrating the Morrow that has been producing at this time that was drilled since the last Hearing?

A That has been drilled since the last Hearing.

Q And is producing?

A I don't believe the well has had any production. It's capable of producing.

Q We have seven producing Morrow plus this Texaco State, the new one?

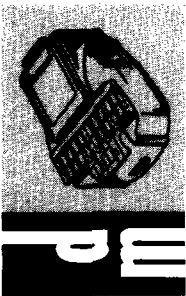
A Correct.

Q Making a total of eight capable of producing at this time in the Morrow?

A That is eight wells, I think, capable of producing. There have been sixteen wells in the area that have penetrated the Morrow. I think eight are plugged and abandoned or temporarily abandoned.

MR. CHRISTY: I believe the record will show that the well history on the other seven Morrow wells was testified to at prior Hearings, and I would at this time like to have some testimony concerning this new Texaco State Well.

Q (By Mr. Christy) Would you refer to Exhibit 2 please, and briefly give us a little well history on the



Texaco State Two C Well?

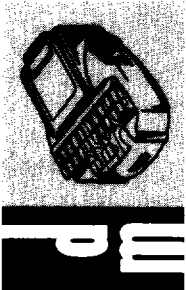
A Exhibit 2 is just a simple tabulation of what transpired on the Texaco Well. The Texaco Number Two State C Well in Section 32, of Township 19 South, Range 32 East. The well was completed 7-22-64, with two and seven-eighths inch casing set at 12895 feet with 2500 sacks of cement. The TD on the well was 13,000 feet and on 7-27-64, it was producing from the perforation at 12,332 to -36 and 12,378 to -88; the calculated absolute open flow on the well from the Morrow Zone was 2.2 million cubic feet of gas a day and 24 barrels of condensate.

Q Is that well capable of producing gas in commercial quantities?

A To the best of my knowledge, it is.

Q Referring back to Exhibit 1 for a moment, I notice that this plat map shows a number of additional Strawn wells from last year; approximately how many Strawn wells have been drilled since May of last year?

A Mr. Examiner, May of last year at the date of this Hearing, I think there were approximately 27 strawn wells in the area. I think we thought at that time the area was fairly well developed but since that time, or to date now, there are 49 Strawn wells in the area and there are three wells drilling in the area at the time.



Q So that we have a great expansion in the Strawn from last year which I believe was unanticipated at that time?

A It was not anticipated by us at that time, no, sir.

Q Now, sir, of these seven or eight Morrow wells which ones are producing at this time?

A To the best of my knowledge, we might refer momentarily to Exhibit 3.

Q All right. What is Exhibit 3, would you identify it for us, please?

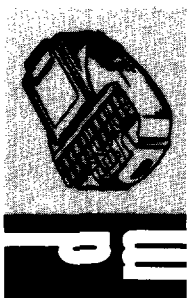
A Exhibit 3 was a tabulation of production intended to bring the Commission up to date on the production from the Morrow. Production to 3-11-64 has previously been submitted and this was merely another tabulation to bring the Commission up to date on what the production has been from the Morrow Zone so far.

Q I believe it reflects that only one of the wells is producing at this time?

A It reflects right now that one well is producing, that is the Pan American Plains Unit Number Two. I believe that well is located in Section 28 of 19 South, 32 East.

Q The balance of the morrow wells are shutin?

A That is correct, yes, sir.

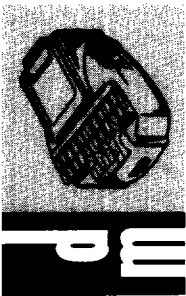


Q Now, last year, I believe it was testified that we anticipated that the bubble point would be reached in the Strawn, the field would be fully developed and we would be able to go into and anticipated repressuring or pressure maintenance program in the Strawn utilizing the Morrow gas.

Now, can you bring us up to date on what has transpired since that time?

A One of the things we anticipated has transpired. We have passed the bubble point. We have discovered, though, in the production of the Strawn that it was not as critical as it was anticipated the bubble point would be at that time. The general idea was when the bubble point was reached, that the gor's would rise very fast and the wells would fall off in productive capacity. Like I say, the bubble point has been passed. That has not happened.

The wells are still essentially top allowable wells and still essentially producting at solution gor which is about 2300 to one. In addition, we thought at the time the field was almost developed but as I've testified to before, there have been about 22 wells drilled in the Strawn since the last Hearing, and there's still three wells drilling and right now, we can't see much of an end to it.



Q When the field will be defined we don't know yet, is that correct?

A We can not anticipate when the field will be defined.

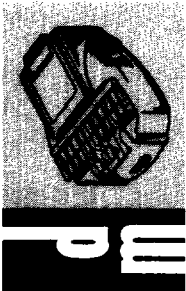
Q All right.

A It will have to be defined by drilling it appears now and of course, there's quite a bit of drilling going on in the area.

Q Now, with respect to forming a Strawn repressuring or pressure maintenance program, are you having any difficulties in forming it, or has it been formed; what is the status of that program.

A Unfortunately, the status is approximately where it was at the last Hearing. Due to several things, mainly the continuing development in the area and of course, in trying to negotiate and form a pressure maintenance or a secondary unit of any sort, it's what you might say impossible to come up with parameters agreeable to everyone when one well has been completed today and another well has a production history and due to the continuing development there has just not been at this time, a meeting of the minds on how this can be unitized in the Strawn.

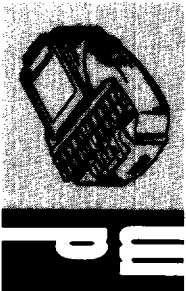
The engineering committees have been together, they're continuing to be together, several of the major



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companies have run the reservoir through their computers and every effort is being made to unitize, everybody is in the mood to unitize but parameters are difficult if not impossible to come by at this time.

Q So, the pressure maintenance program that had been anticipated a year ago is still not in effect and you would not anticipate it to reach agreement until the field is defined?

A Of course, it was anticipated a year ago that the thing would be in and well along the way by now. It is not in. It's not any -- probably no closer than it was at that time, although there has been a lot of reservoir work done in the Strawn. I personally would not anticipate the unit would be formed until after the field is defined. I just don't see any way to get together until the drilling is over with in the field.

Q Southern New Mexico testified at the last Hearing that they had planned to use the Morrow gas in this pressure maintenance or repressuring program paying the royalty as it's extracted; has there been any change in that plan, is that still anticipated?

A That is still anticipated.

Q That was one of the main reasons it is still shut in?

A As far as Southern New Mexico and most other

operators are concerned, that's the reason it is still shutin.

Q Last year it was testified that the Morrow has excellent permeability and porosity in this area and with that fact in mind and at these departments, do you believe that it is still probably that one well will effectively and efficiently drain 640 acres in the Morrow? Do you see any reason why it would not? I realize you can't see it will.

A We do not have the history of the reservoir to back us up on whether we thing it will or won't, but it's my opinion it's quite possible that one well will drain 640 acres.

Q To your knowledge has there been any demands by the royalty or overriding royalty owners to produce the Morrow gas?

A No, sir.

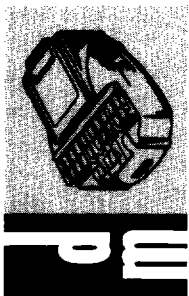
Q I believe this is all Federal acreage?

A To the best of my knowledge, it is.

Q Is there anything I have not covered that you feel would be of interest to the Examiner?

A I believe not. No, sir.

MR. CHRISTY: I believe that's all from this witness.



CROSS EXAMINATION

BY MR. UTZ:

Q Mr. Hampton, on Exhibit 1, the wells with the solid blue dot were Strawn wells, is that correct?

A Yes, sir.

Q And the Strawn is an oil pool?

A Yes, sir.

Q And if I remember correctly it's 160 acre spacing for the Strawn?

A Yes, sir.

Q Now, the wells marked with the wagon wheel, what are they?

A Are you referring, Mr. Examiner, to the well for instance, in Section 29, the well number 1 with the red circle around it?

Q That's correct.

A Those are wells capable of producing gas from the Morrow Zone.

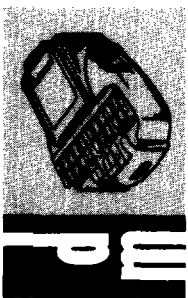
Q Now, are those dual completions?

A Yes, sir.

Q In the Strawn and Morrow?

A Yes, sir.

Q Now, the wells that just show dual completions with the black dot and circle?



A Those are not duals, Mr. Examiner. They are merely just an indication of the Strawn wells.

Q Those are Strawn wells?

A Yes, sir. Let me be sure we're talking about the same thing, for instance, well number 7 in Section 20?

Q Correct.

A Right, those are Strawn wells.

Q Now, the number 4 over in Section 21, the Pan American Section with the cross in it; is that a dry hole?

A Yes, sir.

Q That would be a dry hole in which zone?

A In the Strawn. As would the well up in Section 16, the Superior well.

Q Yes, sir. Is the Strawn producing a substantial amount of gas in this area?

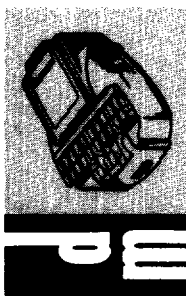
A I think, Mr. Examiner, the wells are like I said, essentially top allowable gas wells, oil wells and are producing at an average of 2300 cubic feet of gas to a barrel of oil.

Q The gor's aren't real high?

A They're not near what we anticipated they would be after the bubble point was passed.

Q What is happening to the Strawn gas?

A The strawn gas is being sold to Phillips, Mr .



Examiner.

Q At a casing head gas price, no doubt?

A No doubt.

Q This brings me to the question as to why isn't the Morrow gas being sold?

A Mr. Examiner, it's our opinion, and I think the other operators in the field opinion, that the Morrow gas is more valuable both to the operators and the royalty owners in repressuring the Strawn than it would be sold on the open market.

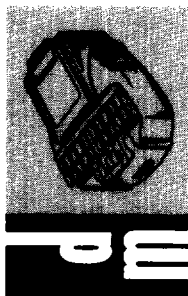
Q It's your intention, then, to use that at a later date?

A We still have every intention to repressure or pressure maintain the Strawn with the Morrow gas.

Q Now, would this reason be one of the reasons why the Morrow was not being developed at a very rapid pace?

A I think probably all the operators are of the same opinion that we are, that one well will drain a section, or 640 acres and the zone is fairly well developed on 640 acres.

Q Well, would the fact that you are not intending to sell the gas, the Morrow gas at this time, saving it for repressuring be the main reason that the Morrow isn't being developed?



A That's the main reason it isn't being sold, if that's what your question means. As to why wells are not being drilled, I just couldn't answer your question, Mr. Examiner. It has been fairly well defined, as you can see by the dry holes, which are indicated with the handle bars so to speak around the field, the red circles.

Q How many undeveloped Morrow tracts would you say are left in the pool at the present time?

A It appears to be about four, maybe five.

MR. CHRISTY: I don't think there's that many.

A Probably four.

Q (By Mr. Utz) There could well be anywhere from three to five, right?

A I believe there would be.

Q There are now how many wells?

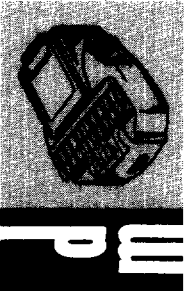
A There are eight wells capable of producing.

Q On your Exhibit 3, you only show three wells, is there any particular reason for this? Are all the other wells, the five wells, shut in?

A All of the other wells are shut in, Mr. Examiner. Those are the only three wells that have a production history.

Q Would you consider the Texaco Number 2 State CS as being somewhat of an edge well in the Morrow?

A It appears to be, yes, sir.



Q The reason for my asking that question is you spoke of rather high permeabilities in the Morrow Section. Would you say that 2200 AOF would indicate high permeability?

A No, sir. On the surface it would not.

Q Pretty tight in that hole, anyway?

A Yes.

MR. CHRISTY: For the record, Mr. Examiner, I believe I stated that in last year's testimony it was stated that it had high permeabilities and porosities. I don't believe that this witness necessarily made that statement.

MR. UTZ: No, you are correct. You stated that the previous record did show that?

MR. CHRISTY: It did show that and it's a fact.

Q (By Mr. Utz) Do you know how the absolute open flows were in the other wells? Were they pretty good wells?

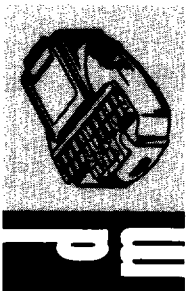
A No, sir, they were not. The average was probably less than two million.

Q Does that indicate a high permeability?

A Well, on the surface, if that's all you look at, it doesn't, no, sir.

Q What else do you look at for permeability?

A Volume, I mean you may have poor volumes rather than being the permeability, it may just be the volume in



the reservoir.

Q Thin pay section?

A It is thin. Well, the quality of it is just not known, we just don't have the history to know the quality of the well.

Q And you haven't had enough production to know what the wells will actually do?

A Right, yes, sir.

Q What kind of pressures do you have?

A I think on the order of five thousand pounds. In the neighborhood of five thousand pounds, Mr. Examiner, judging from the drill stem tests that have been taken.

Q Is the Morrow area unitized?

A Partially.

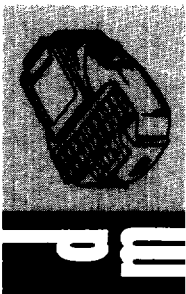
Q You said partially?

A It's like the Strawn. The Strawn is partially. You'll notice on this map an outline, Mr. Examiner, in Section 17, 20, 19 and portions of 18 and 24; that is the Lusk Deep unit and I think the Strawn and the Morrow coincide with the exception of Section 17, the east half is not in the participating area, I understand, in the Morrow.

Q Who is the operator of the Lusk Deep Unit?

A Southern New Mexico.

Q You do have leases outside the unit?



A Yes, sir.

Q These Morrow wells may not be very big, but they are pretty deep, is that about it?

A That's about right, Mr. Examiner.

MR. UTZ: Any other questions of the witness?

MR. CHRISTY: I would like to ask you one question.

REDIRECT EXAMINATION

BY MR. CHRISTY:

Q I believe it was previously testified that these Morrow wells cost about \$250,000.00 to drill and complete?

A Yes.

Q Is that estimate still valid?

A Yes.

Q In other words, they're rather expensive operations?

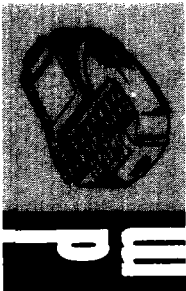
A Yes, sir.

MR. SWEENEY: I would like to ask one question on that -- H. M. Sweeney, Roswell. That on the initial completion data, at least four of those wells were over fifteen million. I just wondered if Southern Union had taken any subsequent tests and that the capabilities hadn't been reduced that much. There's one, I believe, around thirty million on the initial completion. That's Number 2, Number 3 unit well.

dearnley-meier

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A To my knowledge, we have taken no subsequent tests, Mr. Sweeney. Number 3, you say?

MR. SWEENEY: Yes.

MR. UTZ: Are you questioning the average of two million absolute open flow?

A If there was subsequent data that I wasn't aware of. I think they're better wells than that. Number 3 Lusk, you say?

MR. SWEENEY: Yes.

A It might be my dope is all wrong. Mine shows 2350 mcf.

MR. SWEENEY: I believe the initial completion was thirty million.

I have a report here by Gruen in which they give it as that from the data they got from El Paso.

A I'm sorry, that's all the information that I have.

MR. CHRISTY: The records that the witness is testifying from are the records in the last Hearing. They are the information on the other Morrow wells, which were previous testified.

MR. SWEENEY: It isn't exactly pertinent and I wouldn't question it but -- except I wanted to know if there was some information that I wasn't aware of. I believe that Yates well in Section 30 potentialled for something like fifteen million.

A The date of this test that I have here was 10-31-61 and I show no subsequent test to that.

MR. UTZ: Does your record show whether it was a natural completion at that time or not?

A Natural, yes, sir.

MR. SWEENEY: All those wells were completed naturally?

MR. UTZ: There has been no stimulation?

MR. SWEENEY: No.

MR. UTZ: Do you know whether or not, Mr. Sweeney, whether an absolute open flow on Form C 122 has been filed with the Commission on these wells that you speak of?

MR. SWEENEY: I'm sure they were because it was necessary to get permission, of course, for the dual completion.

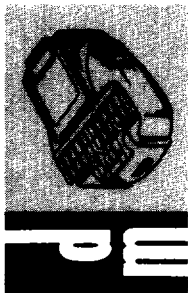
MR. UTZ: In that case then, Mr. Sweeney, the Commission will take cognizance of its records in that respect as far as the absolute open flow on those wells is concerned.

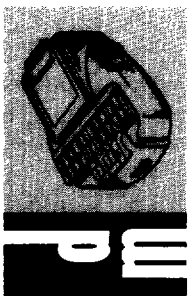
Any other questions of the witness? The witness may be excused.

(Witness excused.)

MR. UTZ: Any statements in the case?

MR. CHRISTY: At this time, I would like to offer





in evidence Applicant's Exhibits 1, 2 and 3.

MR. UTZ: Without objection, the exhibits 1, 2 and 3 will be entered into the record in this case.

(Whereupon, Applicant's Exhibits 1, 2, and 3 were offered and admitted into evidence.)

MR. CHRISTY: Mr. Examiner, we have copies of letters and wires from Kerr McGee and Yates Petroleum. I'm wondering if the Commission already has them, it indicates that you have a copy.

MR. UTZ: Pan American, Gulf, Kerr McGee, Phillips Petroleum, Yates.

MR. CHRISTY: That's all for the Applicant.

MR. KELLY: Booker Kelly on behalf of Texaco Inc., and Tenneco Oil Company support the position of Southern New Mexico in the continuation of the 640 acre spacing.

MR. UTZ: Was that Texaco and Tenneco?

MR. KELLY: Both.

MR. UTZ: You represent them both?

MR. KELLY: Yes.

MR. JOHNSON: Mr. Bob Johnson, on the behalf of Shell; Shell desires that the present temporary field rules for 640 acre spacing be continued.

MR. UTZ: Any other statements?

MR. SWEENEY: H. M. Sweeney, Independent, Roswell. I have both leasehold and royalty interest in the field and I endorse the position of Southern New Mexico in asking that the temporary rules be continued. If I might add to that statement, that in my opinion, the Morrow gas has been reasonably defined with not more than one or two potential drillable locations and in both of those locations, Strawn wells have been drilled and it doesn't appear advisable to the operators to spend the approximately \$100,000.00 it would take to drill to and complete in the Morrow and those locations are extremely doubtful. For all practical purposes, I think the Morrow gas Pool has been defined.

MR. DURRETT: If the Examiner please, I would like to state for the record, that the Commission has received letters from Gulf Oil Corporation and Yates Petroleum Corporation supporting continuation of the rules, and they have received telegrams from Phillips, Kerr McGee and Pan American supporting the continuation of the rules.

MR. KELLY: Mr. Examiner, also for the record, I would like to state I have examined title to the Lusk unit and Tenneco as successor to Delhi-Taylor and Kerr McGee is an over-riding royalty owner in the Lusk unit area.

MR. UTZ: Am I correct in that you are requesting

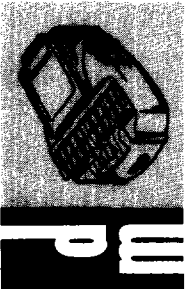
at this Hearing, a continuation for a certain period of time of the temporary rules?

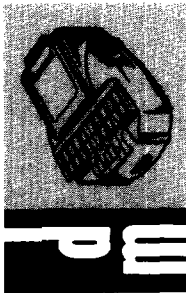
MR. CHRISTY: Yes, we would like continuation for at least a year. We just could not have any more definitive information before a year. As testified at the previous Hearing, when the field is developed, the Strawn is developed, it will take approximately six months thereafter in order to get the operators together and form the pressure maintenance or the repressuring unit. It will take approximately six more months to pressure up the area and utilize the Morrow gas as you have to give it some well history. Therefore, a minimum of a year will be sincerely appreciated. We may have to come back if the field is not developed then. We don't know where we'll end up with the Strawn.

MR. UTZ: Any other statements? The Case will be taken under advisement.

Let's take a ten minute coffee break.

(Whereupon, a recess was held.)





I N D E X

WITNESS	PAGE
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Cross Examination by Mr. Utz	12
Redirect Examination by Mr. Christy	18

E X H I B I T S

<u>NUMBER</u>	<u>MARKED FOR IDENTIFICATION</u>	<u>OFFERED</u>	<u>ADMITTED</u>
Applt's. 1	2	21	21
Applt's. 2	2	21	21
Applt's. 3	2	21	21

STATE OF NEW MEXICO)
) ss
 COUNTY OF BERNALILLO)

I, ADA DEARNLEY, 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; and that the same is a true and correct record of the said proceedings, to the best of my knowledge, skill and ability.

Witness my Hand and Seal this 17th day of May, 1965.

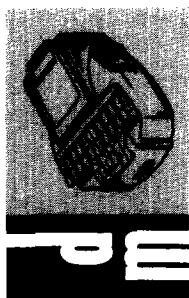
Ada Dearnley

 NOTARY PUBLIC

My Commission Expires:

June 19, 1967.

I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of Case No. 2691, heard by me on May 12, 1965.
Thos. G. J. H.
 _____, Examiner
 New Mexico Oil Conservation Commission



NEW MEXICO OIL CONSERVATION COMMISSION

EXAMINER HEARINGSANTA FE, NEW MEXICOREGISTERHEARING DATE MAY 12, 1965 TIME: 9 A.M.

NAME:	REPRESENTING:	LOCATION:
R.E. Johnson	Shell Oil Co	Roswell
Richard F. Morris	Seth, Montgomery, Federico & Andrews	Santa Fe
Richard B. Knall	U. S. G.S.	Farmington
Wage Rogers	Worldwide Petr.	Denver
W.C. Christy	Hinkle, Bondurant & Christy	Roswell
Booker Kelly	White, Bellard, Kord, Kelly	S.F.
Jason W. Kellahi	Kellahi & Fox	Santa Fe
V.M. Swenney	Independent	Roswell
C.L. WHIGHAM	TEXACO INC.	MIDLAND, TEXAS
Frank E. Dwy	State Eng'r. Office	Santa Fe -
Henry Birdseye	Henry Birdseye	Albuquerque