

BEFORE THE
OIL CONSERVATION COMMISSION
SANTA FE, NEW MEXICO

IN THE MATTER OF:

CASE NO. 1889: Application of Continental Oil Company
for three non-standard gas proration units.

TRANSCRIPT OF HEARING

FEBRUARY 10, 1960

NEW MEXICO OIL CONSERVATION COMMISSION

Examiner hearing - Daniel S. Nutter

Santa Fe, NEW MEXICO

REGISTER

HEARING DATE February 10, 1960 TIME: 9 a.m.

NAME:	REPRESENTING:	LOCATION:
<i>H. D. Farris</i>	<i>T. J. A.</i>	<i>Elmwood</i>
D. D. FARRIS	TEXACO INC	MIDLAND
F. X. Markine	Texaco Inc	Midland
R. L. Westlake	"	"
Jason Kellahi	Kellahi + Fox	Santa Fe, N.M.
Barus H. Erbe		Albuquerque, N.M.
Joe Gordon	Mobi	Hobbs
John E. Collins	Std. Oil Co. of Texas	Houston
John A. Queen	Continental Oil	Roswell
Malcolm D. Colberg	Northwest Prod Corp	Albuquerque
Geo. M. Varsity	Petro. Inc	Farmington
Norman Grove	"	Tulsa

JOHN QUEEN

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

DIRECT EXAMINATION

BY MR. KELLAHIN:

Q Will you state your name, please?

A John A. Queen.

Q By whom are you employed and in what position?

A By Continental Oil Company, division engineer for the New Mexico division.

Q Have you previously testified before the Commission as a petroleum engineer and had your qualifications accepted?

A I have.

MR. KELLAHIN: Are the witness' qualifications acceptable?

MR. NUTTER: Yes, sir. Please proceed, Mr. Kellahin.

Q (By Mr. Kellahin) Mr. Queen, are you familiar with the application in Case 1889 now before the Commission?

A I am.

Q Will you state briefly what is proposed in this application?

A The State A-32 has three producing Jalmat gas wells, and we wish to reallocate the acreage assigned to each one of these to obtain a more equitable allowable for these wells.

DEARNLEY-MEIER REPORTING SERVICE, Inc.

PHONE CH 3-6691

ALBUQUERQUE, NEW MEXICO



Q Now, referring to what has been marked as Exhibit 1, would you discuss that exhibit, please?

A Exhibit No. 1 is a location and ownership plat showing the State A-32 Lease and the area surrounding the State A-32 Lease is shown to consist of all of Section 32 in 22 South, 36 East. There are three Jalmat gas wells and are shown circled in red, being the State A-32 Nos. 2, 3, and 4. Gas proration units that are now assigned to these wells are shown outlined in green. The unit for the No. 2 well consists of the NE/4 of Section 32; the unit for the No. 3 well consists of the SE/4 of Section 3, and the unit for the No. 4 well consists of the W/2 of Section 32.

Q Now, referring to what has been marked as Exhibit 2, will you discuss the units which are proposed to be formed?

A Exhibit No. 2 is a plat showing the State A-32 lease again, and the area surrounding it, with the present units, Jalmat gas units outlined in green in the surrounding area.

It is proposed that the S/2 of the NW/4 be assigned to Well No. 4, and the S/2 of the S/2 of Section 32 to be assigned to No. 3, and the remaining acreage of Section 32 to be assigned to the No. 2 well.

Q Now, referring to what has been marked as Exhibit No. 3, will you discuss that exhibit?

A Well, if I may, Exhibits 3, 4 and 5 are the new New Mexico's Oil Conservation forms for the deliverability tests as conducted in the Jalmat pool. These three exhibits show the



present deliverability of each one of these wells, showing that the No. 4 well has the lowest deliverability and the No. 2 well has the highest deliverability.

Q Now, what is the present status of the wells involved?

A The present status of the three wells are that they are all overproduced. This was caused by the No. 4 well being reclassified in July of 1958 from a marginal to non-marginal well at the time the deliverability formula was enacted. On this basis, a large amount of what would be called overproduction, when it was reclassified, was charged against this well. As shown on Exhibit No. 5, this well has a very low deliverability, and as soon as the well makes up this overproduction, it will immediately fall behind carrying the acreage it now has.

Q Will the well be able to make up the overproduction, in your opinion?

A The well probably would not make up its overproduction, no, sir.

Q Do I understand your testimony correctly that the overproduction was accumulated when the accumulation was made solely on the basis of acreage?

A That is correct.

Q And with the deliverability factor in the formula, is the well a marginal or non-marginal well?

A Based on this one use of deliverability alone and as soon as the well makes up its allowable, in my opinion, it will

DEARNLEY-MEIER REPORTING SERVICE, Inc.

PHONE CH 3-6691

ALBUQUERQUE, NEW MEXICO



be classified as a marginal well.

Q What is the situation as to the other two wells?

A The other two wells are also overproduced. The No. 2 Well is the least amount overproduced, however it has been restricted. They are capable of carrying their larger assignment of acreage as shown in the difference between Exhibit 1 and Exhibit 2. I would like to clarify that statement in that the No. 3 Well will have the same number of acreage. A hundred and sixty acres under its present unit acreage and one hundred sixty under the proposed, a different area though.

Q Now, Mr. Queen, at the present time and under the present allocation, there does exist dual dedication of acreage in this unit, in this section, does it not?

A Yes, sir.

Q What is the status of the oil wells located in Section 32?

A There are three. I should say there were three oil producing wells, the State A-32 Nos. 1, 5, and 6. The No. 1 and 5 wells are shut down and do not produce. The No. 6 well produces from the Jalmat horizon also, and in November of 1959, produced one hundred and ninety-five barrels of oil, and seven hundred and eighty-four barrels of water, and two thousand six hundred fourteen MCF of gas.

Q Now, the No. 6 and the No. 3 and the No. 5 wells presently have dedicated to them similar acreage?



A That is correct, sir. Beg Pardon, sir, the No. 5 well is a shut down well, therefore, it has no acreage dedicated to it.

Q But the No. 6 would have a 40-acre unit dedicated to it which would lie in the same unit as the acreage dedicated to the No. 3 gas well?

A That is correct. That was correct before this request and we request it be the same.

Q Is the No. 6 well completed in the same interval as the No. 3 well?

A No, sir.

Q What is the difference, Mr. Queen?

A The No. 3 well is completed in the upper part of the Seven Rivers formation and the No. 6 well is completed in the lower part of the Seven Rivers formation, and they are definitely separated by a shale break.

Q Now, that is the situation as to the acreage dedicated which exists through the Jalmat pool?

A That is correct, I do not recall the exact number, but there are in excess of one hundred dual dedications in the Jalmat pool due to the same reason.

Q In the event the application of Continental Oil Company is approved in this case, will it result, in your opinion, in a more equitable distribution of the acreage to the producing wells?

DEARNLEY-MEIER REPORTING SERVICE, Inc.

PHONE CH 3-6691

ALBUQUERQUE, NEW MEXICO



A We think it will. I would like to point out that under the spacing provisions of Order R-520, the location of the wells would permit 160 acres to the No. 3 well, which we have requested by administrative procedure. Also, the location of the No. 2 would permit the assignment of the entire section to the No. 2 well as a standard unit by administrative procedure. This would provide, in fact, the maximum allowable for the lease. That is, if we were to assign the entire 640 acres to the No. 2 Well, Continental Oil Company would receive a maximum allowable due to the deliverability formula. However, to secure a more efficient drainage and to avoid the necessity of shutting in wells No. 3 and 4, we would prefer the proposed reallocation. This would permit the wells No. 2, 3 and 4 to produce to depletion.

Q In your opinion, would that prevent waste and result in the greater ultimate recovery of gas?

A Yes, sir, I think it would.

Q Were Exhibits 1 through 4 prepared by you or under your direction and supervision?

A They were.

Q One through five?

A They were, sir.

MR. KELLAHIN: At this time we would like to offer in evidence Exhibits 1 through 5 inclusive.

MR. NUTTER: Continental Exhibits 1 through 5 will be entered.



MR. KELLAHIN: That's all we have, Mr. Nutter.

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

MR. PAYNE: Yes.

MR. NUTTER: Mr. Payne.

CROSS EXAMINATION

BY MR. PAYNE:

Q Mr. Queen, the State is the royalty owner of the entire Section 32 --

A Yes, sir,

Q --so there is no particular reason why the well should be brought into balance prior to the issuance of an order in this case?

A No, sir.

Q Mr. Queen, do you feel that the Continental A-32 well No. 3 will efficiently drain the W/2 of the proposed unit?

A Mr. Payne, it would be very difficult to draw, to assign acreage allocation -- to state what one well will drain. With three wells so spaced on a 640-acre section, we feel like these three wells will effectively drain this section. Based on the common theory of gas migration, we would say that the No. 3 would drain --

Q You would have to rely on counter drainage?

A Yes, sir.

Q Perhaps this Trebol & Rodman will actually be getting some of your gas from the W/2 of the proposed unit?



A Yes, sir, this is not the first time someone else has gotten some of our gas.

Q Now, do you feel that the No. 2 well will be able to make a 40-acre allowable?

A Yes, sir, the deliverability on that well is, as I recall, about 3,200 MCF per day, and its a very good well, it makes negligible amounts of fluids, and I feel like that well would make a 640-acre allowable for a considerable period of time, so I see no reason why it would not make a 400-acre allowable.

Q What do you contemplate as the producing life of the No. 4 well? The one that has the lowest deliverability?

A Well, it would be several years. We have not run any pressure decline to try to anticipate when this well would reach its economic life. A great number of these wells in this pool that will produce a certain rate of gas do so because of the permeability, but when this rate is reached, they will have what we call a flat decline, so it may be a great number of years before it is depleted, but this is -- I'm not prepared to testify as to the estimated number of years according to my opinion.

Q Now, Mr. Queen, there are instances of dual dedication directly offsetting Section 32, aren't there?

A Yes, sir, numerous. All of the wells, I believe, shown on this map, on this Exhibit 2, are Jalmat oil wells. I

DEARNLEY-MEIER REPORTING SERVICE, Inc.

PHONE CH 3-6691

ALBUQUERQUE, NEW MEXICO



have the production on a few of these wells and we checked several of them to be sure, and it is my belief that all of them are Jalmat oil wells, but I could testify as to several of them that are immediate offsets.

Q Now, what led you to believe, Mr. Queen, that the W/2 of Section 32 is productive of gas from the Jalmat?

A Well, we did not try to justify or prove what was productive as to gas production as this time, since this section has previously to this time been assigned a full 640-acre gas unit. I can testify to the fact that the structural contours in this area run northeast to southwest in Section 30. There is a gas well there, and as previously testified, the Trebol & Rodman, I believe it is called, the No. "Y" is a gas well and if you observe, the contour lines of which we do not have a structure map here, they have indicated that the entire section was quite productive, however, we did not intend to prove this or disprove this because of the previous allocation.

MR. PAYNE: I see. Thank you.

MR. NUTTER: Any further questions?

EXAMINATION BY MR. NUTTER:

Q Mr. Queen, you stated that the No. 6 well was completed in the lower Seven Rivers?

A Mr. Nutter, I am not as thorough with my log interpretation in tops of formations as I should be. I have the log on the No. 3 well and on the No. 6 well here, and there is a

DEARNLEY-MEIER REPORTING SERVICE, Inc.

PHONE CH 3-6691

ALBUQUERQUE, NEW MEXICO



definite shale break or interval between the two zones. The No. 6 well, as I testified, produces seven hundred eighty-four barrels of water per day, which is something like twenty-five barrels of water per day. The No. 3 well does not produce any particular quantity of water per day. Therefore, this must be that they are not open in the same interval. The No. 3 well does not produce any oil either. I should have said fluid on No. 3.

Q Well now, the No. 6, if it were completed in the lower Seven Rivers as you stated, it would be classified as a Langley Mattix well, wouldn't it?

A Well, as I understand it, the Jalmat pool goes from the top of the Tensile formation to about one hundred feet above the base of the Seven Rivers, and the Seven Rivers is, I believe, as I recall, is over one hundred foot thick, so it still would be in the Seven Rivers. Possibly I should testify in the middle Seven Rivers.

Q In the middle Seven Rivers?

A Yes, more accurately.

Q There is a separate separation between the interval that the No. 3 is completed and the interval in which the No. 6 is completed?

A Yes, sir, there is no direct communication between those two wells.

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



He may be excused.

(Witness excused.)

MR. NUTTER: Does anyone have anything further they wish
to offer in Case 1889? Take the case under advisement and take
up Case 1890.

DEARNLEY-MEIER REPORTING SERVICE, Inc.

PHONE CH 3-6691

ALBUQUERQUE, NEW MEXICO



