DEARNLEY-MEIER REPORTING SERVICE, Inc.

BEFORE THE
NEW MEXICO OIL CONSERVATION COMMISSION
Santa Fe, New Mexico
August 5, 1964

EXAMINER HEARING

IN THE MATTER OF: (Reopened)

Case No. 2858 being reopened pursuant to the provisions of Order No. R-2549, which order established temporary 80-acre spacing units for the La Plata-Gallup Oil Pool, San Juan County, New Mexico, for a period of one year. All interested parties may appear and show cause why said pool should not be developed on 40-acre spacing units.

Case No. 2858

BEFORE: ELVIS A. UTZ, Examiner.

TRANSCRIPT OF HEARING

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MR. UTZ: We will call Case 2858.

MR. DURRETT: In the matter of Case No. 2858 being reopened pursuant to the provisions of Order No. R-2549.

MR. KELLAHIN: Jason Kellahin, Kellahin & Fox, Santa Fe, representing the Applicant. We have one witness I would like to have sworn, please.

(Witness sworn.)

(Whereupon, Applicant's Exhibits l-b through 5-b were marked for identification.)

M. E. McCUTCHEN

called as a witness, having been first duly sworm on oath, was examined and testified as follows:

DIRECT EXAMINATION

BY MR. KELLAHIN:

- Q Would you state your name, please?
- A M. E. McCutchen.
- Q Spell that, please.
- A M-c C-u-t-c-h-e-n.
- Q By whom are you employed and in what position, Mr. McCutchen?
- A I'm employed by Standard Oil Company of Texas in the Proration Department.
 - Q Have you ever testified before the Oil Conservation



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Commission of New Mexico?

- A I have not.
- Q For the benefit of the Examiner, would you outline your education and experience?

A I was graduated from Colorado School of Mines with a Bachelor of Science in 1961. Subsequent to that time I went to work for Standard Oil Company of Texas in Snyder, Texas, where I was production engineer for the two years, and for the last year and a half I have been employed in the Proration Department in Houston.

- Q In connection with your work in the Reserves and Proration Department does the La Plata Oil Pool come under your jurisdiction?
 - A It does.

MR. KELLAHIN: Are the witness's qualifications acceptable?

MR. UTZ: Yes, sir.

- Q Are you familiar with the Case No. 2858 that is being reopened at this time?
 - A I am.
- Q In connection with that there was an order entered setting up temporary 80-acre spacing unit for the La Plata-Gallup Oil Pool, San Juan County, New Mexico. What is the



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present position of Standard Oil Company of Texas in connection with this order?

A Since the previous hearing there have been no changes in the area of the La Plata-Gallup Oil Pool. There have been no additional wells drilled and the production has not varied substantially from that time.

As shown on the Exhibit 1-b for this hearing, which was presented at the previous hearing, there are three wells in the vicinity of the producing well, the Standard of Texas 12-5 No. 1. Each of these wells was primarily drilled to test the Gallup reservoir. As you can see, not a one of the wells was completed in the Gallup. There's a dry hole to the south, a Dakota well to the northeast, and a Mesaverde well to the west. In none of these wells was the Gallup developed to justify, sufficiently developed to justify completion.

Q Would you say, then, on the basis of this information that the boundaries of the La Plata-Gallup Oil Pool have been substantially defined?

A I would, I would say no further development is anti-

Q Have you prepared a production curve showing the performance of the single well in the pool?

A I have.



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Q Referring to what has been marked as Exhibit 2-b, will you discuss the information shown on that exhibit?

A As shown on the exhibit, there has been very little variation on the average of the production from the Federal 12-5 No. 1, the only well in the pool. In September of '63 the well was acidized in order to stimulate production, and it did have a small response. In January of '64 another and larger acid treatment was tried, which indicates that we have increased our production, oh, approximately 400 barrels a month as a result of that treatment.

- Q Have you prepared a tabulation of the production from this well?
- A I have, and this reflects the same information as shown on the production curve.
- Q That is the basis on which the production curve was prepared?
 - A That is correct.
 - Q That is marked as Exhibit 3-b?
 - A Yes.
- Q Referring to what has been marked as Exhibit 4-b, would you identify that exhibit and discuss it?
- A Exhibit 4-b is a tabulation of the general reservoir characteristics of the La Plata-Gallup Pool. Substantially



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these are the same as were presented in the previous hearing, with the exception of the cumulative oil production and the produced GOR which is now 352 cubic feet per barrel and a cumulative production is 166,672 barrels of oil through April of '64; gas production is 68,100 MCF. The remainder of the information is substantially the same as presented in the previous hearing.

Q Now, referring to what has been marked as Exhibit No. 5-b, would you identify that exhibit and discuss that?

A That is the pressure build-up analysis taken August 29, 1962, also presented at our previous hearing, which reflects the pressure build up in the Federal 12-5 No. 1 and was used in the calculation of reserves and drainage for the previous hearing, which there have been no changes in that either since we have no further pressure data on the well.

- Q For what reason do you not have any further pressure data?
 - A The well has been put on the pump.
 - Q The pressure data at this point would be meaningless?
 - A Right.
- Q In the prior hearing in this case, Mr. McCutchen, there was testimony and evidence presented as to the economics of the operation in the La Plata-Gallup Oil Pool. Have you



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examined that information?

- A I have.
- Q Is there any change in the information offered in that case?
- A No, sir. Inasmuch as no further wells have been drilled and we're still faced with a one and four risk factor, the economics are still the same.
- Q At the same hearing information as to drainage of the well and calculations were offered to the Examiner. Is there any difference in the calculations today and as of that time?
- A Our calculations with respect to drainage, based on the initial pressure data, and our subsequent build up test, we have made no further reservoir calculations either with respect to reservoir performance or to reserves.
- Q In your opinion, were the calculations presented at that time a valid analysis of the performance of this well and its drainage pattern?
- A On the basis of the information we had available I believe they were the best we could get.
- Q Would it be possible for you to get any further information?
- A No, I don't think we can obtain any more relevant information inasmuch as our pressure information would be at



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best secondary to the information we had when the well was flowing.

Q Is there any other area in the northwestern part of the State of New Mexico which is comparable to the La Plata-Gallup Oil Pool in your opinion?

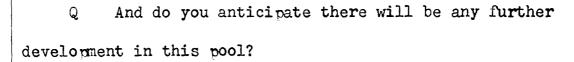
A This Gallup reservoir is similar to the Puerto Chiquito reservoir inasmuch as they are both fractured shale and silt zones and have similar characteristics. It's our understanding that pool has been recommended to be, or the Oil Commission order has been entered to allow that pool to develop on 160 acres for three years and to be reconsidered at that time.

- Q In your opinion the two pools are comparable, is that correct?
 - A Right, the reservoir characteristics are similar.
- Q Will the well on this pool make the allowable assigned to it on the basis of an 80-acre proration unit?
- A No, sir, it will not at this time. We hope with the substantial response we've had from these previous treatments to improve the productivity of the well. However, it will make from three to four hundred barrels over a 40-acre allowable.
- Q Unless the 30-acre spacing is continued, the allowable would be curtailed on this particular well, is that correct?
 - A Yes, sir.



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A We have no clans for any further development.

Q For what reason, basically, would you say Standard
Oil Company wants to continue the 80-acre spacing in the pool?

A Well, basically, of course, we can not justify further drilling inasmuch as these wells cost around \$260,000 to drill, and on the basis of the risk factor involved which would be one in four, you can't justify further development, and so in order to get full benefit from one well and eliminate the possibility of unnecessary wells, we recommend the 30-acre spacing.

Q In your opinion will one well adequately drain the 30-acre unit assigned to it?

A Yes, sir, in excess of 80 acres.

Q Were Exhibits 1-b through 5-b prepared by you or under your supervision?

A Yes, sir.

MR. KELLAHIN: At this time I would like to offer in evidence Exhibits 1-b through 5-b.

MR. UTZ: The exhibits mentioned will be entered into the record of this case.

(Whereupon, Applicant's Exhibits 1-b through 5-b were offered and admitted in evidence.)



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MR. KELLAHIN: That's all the questions I have, Mr.

CROSS EXAMINATION

BY MR. UTZ:

Utz.

Q Would 40-acre spacing cause you to have to drill another well in this pool?

A No, sir. I don't think we'd drill another well even if 40-acre spacing were ordered in this pool. However, it would affect our economics to the extent that it would approximately double the payout period and halve the rate of return.

- Q What is the non-marginal allowable for this well now?
- A I believe it's 174.
- Q 174 barrels a day. What's the depth factor, do you recall?

A No, sir, I may have that here, though. 133 I believe for 40's, isn't it? 233 for 80.

Q Well, the well is producing a little more than a 40-acre allowable since 40-acre would be 279, and it looks like the maximum production is around 3,000 a month?

A Yes, sir. We estimated it was two to four hundred barrels a month over the 40-acre allowable, and as a result of our January, '64 treatment, there's some plans to go back in and treat this thing regularly in order to maintain this rate.



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Q Did you submit evidence at the last hearing to the effect that this was definitely a fractured reservoir?

A Yes, sir. We -- I don't believe we had core data, yes, we did, we had core data on this well. I don't know whether we presented it or not. I don't believe we did. I believe it was testified to that effect by the geologist, Mr. Murphy.

Q You say you did have core data on this well?

A Yes, sir, I believe so. We have core data I believe on this well and on the 13-6 No. 1, which is the well to the west. The Gallup section in that well showed very little fracturing and very slight show.

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

(Witness excused.)

MR. UTZ: Any other statements in this case?

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

MR. UTZ: The case will be taken under advisement.



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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 13th day of August, 1964.

Oda Dearley NOTARY PUBLIC

My Commission Expires: June 19, 1967.



I do hereby certify that the foregoing is a complete reserve of the proceedings in the Examiner leaving of Case No. 2.65.

New Mexico Oil Conservation

Examiner Commission