BEFORE THE
OIL CONSERVATION COMMISSION
SANTA FE, NEW MEXICO

IN THE MATTER OF:

CASE 1717

TRANSCRIPT OF HEARING

JULY 8, 1959

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BEFORE THE
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IN THE MATTER OF:

CASE 1717 Application of Pan American Petroleum Corporation for an exception to the "No-Flare" provisions of Order No. R-1237. Applicant, in the above-styled cause, seeks an exception to the requirement in Order No. R-1237 that no casinghead gas be flared or vented from any well within the defined limits of the Otero-Gallup Oil Pool or within one mile therefrom for its Jicarilla Tribal 35 Well No. 1, located in the NW/4 SW/4 of Section 35, Township 25 North, Range 5 West, Rio Arriba County, New Mexico.

BEFORE:

Daniel S. Nutter, Examiner.

T R A N S C R I P T O F P R O C E E D I N G S

MR. NUTTER: We will take next Case 1717.

MR. PAYNE: Case 1717. Application of Pan American Petroleum Corporation for an exception to the "No-Flare" provisions of Order No. R-1237.

MR. NEWMAN: Kirk Newman of Roswell, New Mexico, and Guy Buell of Fort Worth, Texas, a member of the Texas Bar, representing the applicant, Pan American Petroleum Corporation.

MR. BUELL: May it please the Examiner, we have one witness, Mr. Marshall.

(Witness sworn)

CHARLES R. MARSHALL,

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

DIRECT EXAMINATION

BY MR. BUELL:

Q Mr. Marshall, will you state your full name, by whom you are employed, in what capacity and what location, please?

A Charles R. Marshall with Pan American Petroleum Corporation in Farmington, New Mexico, and I'm employed as a petroleum engineer.

Q Mr. Marshall, does the Farmington office have jurisdiction over Pan American's operations in the Otero-Gallup Pool area?

A Yes, they do.

Q Now, you have testified at prior Commission hearings, have you not, Mr. Marshall?

A Yes, I have.

Q And your qualifications are a matter of public record?

A Yes.

MR. BUELL: Any questions?

MR. NUTTER: No, sir. Proceed.

(Thereupon, Pan American's Exhibit No. 1 was marked for identification.)

Q Mr. Marshall, I direct your attention to what has been

marked as Pan American's Exhibit No. 1. What is that Exhibit, please?

A Exhibit No. 1 is a map of the Otero-Gallup Field area on which I've noted the field limits of -- the present field limits of the Otero-Gallup Field in a solid blue line, the proposed extension to the Otero-Gallup Field in a dashed heavy blue line, and Gallup completions in this area I've colored in red.

Q How are the field limits and the proposed extension areas designated on this Exhibit, Mr. Marshall?

A The field limits are designated, the present field limits by the solid blue heavy line, and the proposed extension by the dashed.

Q Now, the well that is the subject matter of this hearing, Pan American's Jicarilla Tribal 35 No. 1, is it within the proposed extension area?

A Yes, it is.

Q Would you locate that well for the record, please?

A It is located in the NW/4 of the SW/4 of Section 35, Township 25 North, Range 5 West.

Q Are you familiar with the pool rules for the Otero-Gallup Field?

A Yes, I am.

Q And do those rules contain a provision prohibiting the flaring of produced casinghead gas?

A Yes.

Q This proposed extension area, is it the subject matter of a hearing at the regular July statewide hearing of the Commission?

A That is correct, yes, sir.

Q And assuming the Commission includes that area within the horizontal limits of the Otero-Gallup Pool, then that area will become subject to the provisions of the field rules, is that correct?

A Yes, sir.

Q With respect to that well, Mr. Marshall, when was it completed?

A The well was completed in August -- on August the 13th, 1958.

Q Do you recall what its initial potential was?

A Thirty-nine barrels of oil per day **pumping** with a gas-oil ratio of 1322 cubic feet per barrel.

Q Do we have a recent production test on that well?

A Yes, a test conducted on the 14th of March, 1959. The well pumped twenty-six barrels of oil per day with a gas-oil ratio of 4271 cubic feet per barrel.

Q That was this March. What is the well making now, do you know?

A It is producing approximately twenty-four barrels a day, average.

Q Mr. Marshall, is there a gathering system in the

Otero-Gallup Pool that gathers the casinghead gas?

A Yes. The majority of the wells in the Otero-Gallup Pool belong to Skelly Oil Company, and Skelly has a gathering and compression system for delivering casinghead gas to a high pressure line in the area.

Q Are some of the wells in the proposed extension area connected to that system?

A I believe they are, yes, sir.

Q Has Pan American requested Skelly to connect our Tribal 35 Well No. 1?

A Yes, sir, they have.

Q What do they say?

A It was Skelly's conclusion that the amount of gas that would be available from Pan American's 35 No. 1 would not be sufficient to justify any addition to their present system and could foresee no justification for enlarging their system in the future to accommodate the small amount of gas coming from this well.

MR. BUELL: In that connection, Mr. Examiner, I have a wire here from Skelly Oil Company, which I will mark as Exhibit No. 2, and I would like to read it for the record, if I may.

MR. NUTTER: Please do.

MR. BUELL: "Case 1717, Otero-Gallup. Skelly as owner of gathering lines in field unable due to present line capacity to connect to Pan American on existing lines. Hence, necessary for

Pan American to lay several miles of line direct to compressor in northeast quarter of Section 27."

Mr. Examiner, I believe the telegram is garbled there. That should be Section 28.

Quoting from the wire again: "Maximum gas volume of well does not justify economically either present line enlargement or laying of new lines from this well in Section 35."

That wire is signed by George W. Selinger, Skelly Oil Company.

Q (By Mr. Buell) Mr. Marshall, directing your attention again to Exhibit No. 1, how far would we have to go to connect our well to the Skelly system?

A It would be approximately two miles. I've denoted the line that would be necessary on Exhibit 1 in green, and it is labeled "gathering line." That would be the necessary line to get to Skelly's compressor.

Q Now, that is not necessarily the nearest point on the Skelly system, but that is the only point that they will allow us to tie in?

A Yes, that's the only point they will accept the gas.

Q Mr. Marshall, now Skelly has said it is uneconomical for them to connect our well. Have you made a study to evaluate the economic feasibility of Pan American laying a line to connect the well?

A Yes, I have.

Q What was the result of that study with respect to whether or not it is economical?

A I conclude that it would not be economical for Pan American to dispose of this gas to Skelly's compression system.

(Thereupon, Pan American's Exhibit No. 3 was marked for identification.)

Q Does the Exhibit which has been marked as Pan American's Exhibit No. 3 reflect the results of your economic evaluation?

A Yes. Exhibit 3 is the comparison of the initial investment to lay the line with the revenues that would be derived from the future gas to be produced from this well. It shows an initial investment of approximately $6,100, and total expected revenue from the gas is approximately $3,000 -- $3,040, which would result in a loss of $3,060 through the life of the well.

Q Actually, Mr. Marshall, it is not simply or merely uneconomical, it results in a loss, does it not?

A Yes, sir, that is correct.

Q And in making this study, Mr. Marshall, did you use the most optimistic approach possible? Now, I use the word "optimistic" from the standpoint of minimum investment expense.

Q Yes, I believe the $6,100 represents the minimum possible investment, the reason for this being: (1) In all probability, it will be necessary to bury the line that is shown in green on Exhibit No. 1. My cost figures assume that this will not be nec-

essary because of the fact that it is possible to obtain a special exception to the normal practices of the Indians who own the leases in this area, and lay it on the surface. However, this would require an exception, and it is doubtful that it could be obtained. Also, Skelly has all of their gathering lines in the area buried. One additional minor cost is,the exact location of the compressor was not available to me. I knew that it was in the quarter quarter section in which it is shown, that being the SE/4 of the NE/4 of Section 28. In order to assure that I would not figure on too much line, I put the compressor as close to the well as I could and still remain in that quarter quarter secion. All in all, I think the investment is probably less than what would actually be incurred with this installation made.

Q And even though it is a minimum investment, it still results in a loss?

A That is correct.

Q Mr. Marshall, for the purpose of this question I am going to ask you, I want you to assume that the Commission grants our request, for an exception to that rule, and that we continue to produce and operate our well as we have in the past without this additional investment expense. Under that assumption, Mr. Marshall, will this well be a profitable well?

A No, sir. The total revenues to be received from this well will never pay the drilling cost.

Q So actually, if we are required to make this uneconomi-

ical investment, it will just be an additional burden on what it is already, an unprofitable well?

A Yes. The operation in this well now is -- can be described as a salvage operation and naturally causing additional investment necessarily would resulted in loss,in that gas revenue is not sufficient to pay for the investment and would only result in further loss of the well.

Q Are you through?

A As a result of drilling the well.

Q Mr. Marshall, in your opinion, as an engineer, what conclusions have you reached with respect to this application from the standpoint of preventing avoidable physical waste as well as the protection of the correlative rights of the parties of interest?

A Assuming the exception, which is requested, is granted, I can see no avoidable waste which will take place, and it is also my opinion that the correlative rights of all involved will be protected.

Q Actually, if we are required to make this uneconomic investment, economic waste will result, will it not, Mr. Marshall?

A That is correct.

Q And the value of the casinghead gas, which will be saved, gathered and sold, will not pay out the investment required to--

A That is correct.

MR. BUELL: May it please the Examiner, that's all

we have at this time, and I would like to formally offer Pan American's Exhibits 1 through 3 in evidence.

MR. NUTTER: Pan American's Exhibits 1 through 3 will be admitted in evidence.

(The documents heretofore marked Pan American's Exhibits 1,2 and 3 were received in evidence.)

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

MR. PAYNE: Yes, sir.

CROSS EXAMINATION

BY MR. PAYNE:

Q Mr. Marshall, are you aware that the gas-oil ratio limitation in this field is 6,000 to 1?

A Yes, sir.

Q And, of course, you are aware that the field, the pool rules provide that no gas should be flared or vented?

A Yes.

Q Do you feel that if this exception is granted, that this particular well should be held to a gas-oil ratio of 2,000 to 1?

A I can see no reason why it should not be or no reason why it should be. I've not made a study as to exactly the reservoir it is producing from. It appears it is producing from the Otero-Gallup Field.

Q There would be more gas vented, would there not, if

the ratio is left at 6,000 to 1?

A Yes. However, I do not feel that, if it is true, which, as I say, I have not made a study. If it is true that the well is in the same reservoir with the remaining well , it would seem to me that it would be an inequitable situation for one well to be producing with a limit of 2,000 while the remaining well is produced with a limit of 6,000, since even with the limit of 6,000 the volume of gas which will be vented from 35 No. 1 is not a very large amount of gas.

Q How much is it?

A At the present time it's approximately a hundred MCF a day, a little bit less, probably.

Q Have you calculated how much it would be if it were operated on a 2,000 to 1 GOR?

A It would be the same, I believe. The well is capable of producing only twenty-five barrels of oil a day, which is the 2,000 limit. I believe the field is on a -- what averages out around seventy barrels a day allowable, so that at a 2,000 limit you would have one hundred forty MCF a day, which the well is not capable of producing, and it will not become capable of producing, in my opinion, and you would not have any more gas flared that way than you would under 6,000 or any limit.

Q You are not actually challenging the fact that this well is in the Otero-Gallup Pool, are you?

A No, sir.

MR. PAYNE: That's all, thank you.

QUESTIONS BY MR. NUTTER:

Q Mr. Marshall, what is your estimate of revenue of $3,040 from the gas based upon?

A It is based upon the past, a prediction of the gas rate which will be produced in the future, and this rate is based upon the past performance of the well as well as information we have on the Gallup to predict the future performance.

Q How much gas do you expect will be produced from the well during its life?

A Produced from the well, not subtracting what will be used on the lease, it will be approximately 62,000 MCF of gas.

Q What is this gas that is used on the lease? Is this to run a pump unit?

A Yes.

Q It is a gas operated engine?

A Yes.

Q How much gas does it take to operate that unit per day?

A It takes 6 MCF per day to run the unit.

Q Is any gas being used in the operation of a heater-treater or anything like that?

A Not to my knowledge, no, sir.

Q Does Pan American have any plans for drilling any additional wells on this lease?

A Not to the Gallup, no, sir.

Q Now, you show your gathering line going from the well to the compressor. What is the location of the nearest tank battery on another lease which is connected?

A Skelly's?

Q Yes, sir. Well, anybody's.

A Well, I believe Skelly's would be the nearest one, and I am not sure, but I believe that the tank battery is also located in the same quarter quarter section as the compressor.

Q You don't think there is any tank battery any closer than the compressor is, then?

A I don't believe there are, but I can't be sure on that point because there has been some late developments, and I notice there is another lease here on Section 27, which possibly has a tank battery. But it's my opinion right now that the tank battery is in the same quarter quarter section.

Q If there a tank battery closer to the well than the compressor is, it would be possible to run the line to that tank battery and commingle that gas with the other --

A It would be physically possible, but under Skelly's terms, under which they would take the gas, it would not be possible because they have stated that their lines are run to capacity, and we would not be able to drive the gas anywhere unless -- to the compressor, and it would be necessary to compress the gas ourselves.

Q You estimated it would cost $6100 to lay this line on the surface?

A Yes, sir.

Q Is that line cost only, or have you taken into consideration there a share of the cost of the compressor?

A No, sir. That cost is based on the cost of the line. The cost to lay the line is subtracting what we feel the salvage value of the line would be after the well is depleted, and some charge for what it would cost to remove the line.

Q Have you considered any compressor costs?

A Yes, sir, there are some meter costs and right-of-way costs which would be necessary.

Q Now, what did you estimate to be the length of this line?

A Approximately ten thousand feet.

Q What was your cost per foot?

A The cost of the line per foot, not counting the line and right-of-way, was fifty cents.

Q Installed?

A Installed.

Q What is that, two-inch line, Mr. Marshall?

A Yes, sir.

Q Pan American would be willing for this order, if entered by the Commission, to be contingent upon there being only one well and this known volume of gas that is presently

produced?

A Yes, from the Gallup.

Q And in the event any other well is drilled on this lease or a larger volume of gas became available, Pan American would be willing to review this case on another hearing?

A Yes.

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

QUESTIONS BY MR. PAYNE:

Q Who owns the acreage in Section 34, Mr. Marshall?

A Skelly, I believe; at least in the N/2. I am not sure about the S/2.

Q Now, to the best of your knowledge, are all the wells in this proposed extension connected to gas gathering facilities other than yours?

A To the best of my knowledge, they are, or will be, since I believe all of them belong to Skelly.

MR. PAYNE: That's all. Thank you.

MR. NUTTER: Any further questions? Mr. Marshall may be excused.

(Witness excused)

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

MR. BUELL: No, Mr. Examiner, nothing further.

MR. NUTTER: Does anyone have anything further they wish to offer in Case 1717? We will take the case under advisement

and recess the hearing until one-thirty.

STATE OF NEW MEXICO)
) ss
COUNTY OF BERNALILLO)

I, J. A. Trujillo, Notary Public in and for the County of Bernalillo, State of New Mexico, do hereby certify that the foregoing and attached Transcript of Proceedings before the New Mexico Oil Conservation Commission was reported by me in Stenotype and reduced to typewritten transcript by me, and that the same is a true and correct record to the best of my knowledge, skill and ability.

WITNESS my Hand and Seal this, the 23rd day of July, 1959, in the City of Albuquerque, County of Bernalillo, State of New Mexico.

Joseph G Trujillo
NOTARY PUBLIC

My Commission Expires:

October 5, 1960

I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of Case No. 1717, heard by me on 7-8, 1959.

....., Examiner
New Mexico Oil Conservation Commission