

DEARNLEY-MEIER REPORTING SERVICE, Inc.

PHONE CH 3-6691

ALBUQUERQUE, NEW MEXICO

BEFORE THE
OIL CONSERVATION COMMISSION
Santa Fe, New Mexico

IN THE MATTER OF
CASE NO. 1865

TRANSCRIPT OF PROCEEDINGS

January 13, 1960.



I N D E XWITNESSPAGE

W. V. HOLICK
 Direct Examination by Mr. Buell
 QUESTIONS by Mr. Payne

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CHARLES R. MARSHALL
 Direct Examination by Mr. Buell
 Cross Examination by Mr. Nutter
 QUESTIONS by Mr. Payne

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E X H I B I T S

<u>Number</u>	<u>Exhibit</u>	<u>Marked for Identification</u>	<u>Offered</u>	<u>Received</u>
Pan-Am.No.1	Plat	4	16	16

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BEFORE THE
OIL CONSERVATION COMMISSION
Santa Fe, New Mexico
January 13, 1960

) IN THE MATTER OF:)

) APPLICATION OF PAN AMERICAN PETROLEUM)
) CORPORATION for an exception to the "no-)
) flare" provision of Order R-1427.)
) Applicant, in the above-styled cause,)
) seeks a 30-day exception to the "no-flare")
) provision of Order R-1427 for 7 wells in)
) the Bisti-Lower Gallup Oil Pool and 4 wells)
) in the Gallegos-Gallup Oil Pool, San Juan)
) County, New Mexico.)
) -----

) CASE)
) NO. 1865)

BEFORE:

A. L. Porter, Secretary-Director
Murray Morgan, Land Commissioner
Hon. John W. Burroughs

TRANSCRIPT OF PROCEEDINGS

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

I believe the final case in this category is Case 1865.

MR. PAYNE: Application of Pan American Petroleum Corporation for an exception to the "no-flare" provision of Order R-1427.

MR. BUELL: If the commission please, Guy Buell of the Texas Bar, and Kirk Newman of Atwood and Malone, representing Pan American. We have one witness who has not been sworn.

(Witness sworn.)

MR. BUELL: May it please the Commission, two of the

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wells in our application would probably fall in the category that you have been granting the administrative request for; in that connection, I am apprehensive if we don't have time to get a letter from El Paso, and in turn get it to you, prior to midnight on the 15th, for that reason, may I briefly call Mr. Holick to the stand, and let him state that these two wells will not be connected.

W. V. HOLICK

a witness, called by and on behalf of the Applicant, having been previously sworn, testified as follows:

DIRECT EXAMINATION

BY MR. BUELL:

Q Mr. Holick, in your capacity with El Paso, are you familiar with the wells which are not economical to connect?

A Yes, sir, generally so.

Q I direct your attention to what will be marked as Pan American's Exhibit Number 1, and further direct your attention to our Harrison Number 2 and our Heggie Number 1, in Sections 6 and 8 of 24, 19.

A Yes, I believe I have those located at those points.

Q Does El Paso intend to connect those two wells, even though they are committed to you by contract?

A Our present figures on these wells indicate that, these two batteries, I should say, won't be in our estimation economical to connect.

MR. BUELL: Fine. Thank you, Mr. Holick.

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(Witness excused.)

MR. PAYNE: Mr. Buell, do you intend to file a written application for administrative approval for those two wells?

MR. BUELL: Yes. Thank you, Mr. Payne. (Gives paper to Mr. Payne.)

CHARLES R. MARSHALL

a witness, called by and on behalf of the Applicant, having been duly sworn, testified as follows:

DIRECT EXAMINATION

BY MR. BUELL:

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

A Charles R. Marshall. I am employed by Pan American Petroleum Corporation in their Farmington, New Mexico, office.

Q You have testified at prior Commission hearings, have you not?

A Yes, sir.

Q Your qualifications, I assume, are merely a matter of public record?

A Yes, sir.

Q I direct your attention to what has been marked as our Exhibit Number 1, Mr. Marshall. What does that reflect?

A Exhibit 1 is a portion of the San Juan Basin, which shows the areas covered by the Bisti-Gallup and Gallegos-Gallup

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Fields. I have indicated the Commission defined limits on these. The Bisti Field is shown in purple, and the Gallegos-Gallup Field in orange.

Q All right, sir. What is the significance of the yellow coloring that I notice on some leases, and in some sections?

A These are areas which are, according to information available to me, are connected to and selling gas, or will be connected and selling gas, casing-head gas by the 15th of January.

Q What was the source of your data in preparing that exhibit, Mr. Marshall?

A I was furnished the data by El Paso Natural Gas Company.

Q In what form was that data furnished you, similar to the map that El Paso has on the board here today?

A Yes, it was furnished by batteries, on location of batteries. This necessitated some degree of interpretation. I have shown each well in green, that in my opinion according to the information, will be connected to a battery, which will be in turn connected to a casing-head gas sales outlet. But, now, because of the fact that I have it by batteries, in some cases it required interpretations as to how many wells and what wells were logically being produced into one battery, and there could be a few exceptions where I am in error. However, on the majority, I feel like the wells in green are the wells that will be connected by the 15th.

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Q All right, sir. Now, in some cases, Mr. Marshall, where you weren't completely sure that the wells were connected to a battery -- I have in mind the Shell-Carson unit -- if you weren't convinced, you left that completely blank as if it were completely unconnected?

A Yes, sir. I am aware on the Shell-Carson unit, I believe there are a certain amount of consolidated batteries, consequently, it is difficult to tell from just a well map as to what wells may be possibly going into one battery. However, I feel these are the minimum wells that are going into connected batteries.

Q All right, sir. I also understand that the Commission has granted some administrative exceptions. Did you make any attempt to find out what wells they were?

A No, sir.

Q I notice in the approximate center of the Bisti Pool, you have none of the wells colored. Why is that?

A This area is within the central Bisti unit. I have indicated the outline in green on this exhibit. It is my understanding that all of the gas being produced, or essentially all being produced in that unit, is being re-injected. Therefore, I am assuming that the wells within the unit are taken care of, as far as the "no-flare" order is concerned.

Q All right, sir. Let me direct your attention first to the Gallegos Pool, and I will ask you to name and locate the

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wells that are the subject matter of this hearing in that Pool. Start with the Easternmost well first.

A The Eastern well is Pan American O. H. Random Number 2 Well, located in the Southwest quarter of Section 10, Township 26 North, Range 11 West.

Q What is the State's allowable on the latest schedule?

A This well has an allowable of 45 barrels of oil per day.

Q What is the gas-oil ratio?

A Thirty-one hundred and seventy-four.

Q And what is the total amount of gas that it produces in a day?

A It is producing the daily gas limit. It is a Pennsylvania listed well, it would be, assuming a 71 barrel top allowable unit, which I believe it is, January 1st it would be a 142 MCF gas daily.

Q When was the casing-head gas from that well dedicated to El Paso?

A This well was contracted in August of 1958.

Q As a matter of fact, Mr. Marshall, that is when we signed our basic contract with El Paso, is that correct?

A The basic contract for the sale of gas from both fields, both Bisti and Gallegos were signed in October of '58, yes, sir.

Q And since then, we have signed supplemental contracts

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for wells completed subsequent to **October of 1956?**

A That's correct, yes.

Q All right, sir. Going now to the next well, locate it and name it.

A The next well to the West is Pan American Randall Number 1 Well, located in the Southwest Quarter of Section 9, Township 20 North, Range 11 West.

Q What is its allowable at the present time?

A This well has an allowable of 15 barrels of oil per day, and a producing gas-oil ratio of 8407 cubic feet.

Q Which results in a total daily gas production of what figure?

A Approximately 140 MCF of gas per day.

Q All right, sir. Go now to the third and last well in this pool, name and locate it.

A This well is Pan American Oskayahewood Number 1, located in the Northwest Quarter of Section 18, of Township 26 North, Range 11 West.

Q Mr. Marshall, do you know of any lack of diligence on the part of Pan American that has resulted in these wells not being connected at this time?

A No, sir. In my opinion, they have been as diligent as possible in getting these wells connected. As you can see from the location of the wells, they are sort of on the eastern edge of the field, and naturally, they would logically be expected to

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be connected last, and it is just a matter of they haven't been gotten to yet.

Q In other words, the fact they are not connected is probably due to our unfortunate geographical position in the field?

A Yes, due to geography more than anything else, probably.

Q What is Pan American requesting with respect to those three wells, Mr. Marshall?

A That an exception be granted to the provision of Order R-1427, for a period of 30 days, in order to allow Pan American to continue producing these wells.

Q Is it possible that those wells will be connected in less than 30 days?

A Yes, sir.

Q Why are you asking for 30?

A Well, sir, notwithstanding the extreme diligence that El Paso has used in connecting wells in both of these fields, we are still selling them the gas. We are not giving it to them, and we would certainly connect it at the earliest possible date; and El Paso has advised us that it will probably be before our 30-day period is over. However, because of the unforeseeable things, for instance the weather in the San Juan Basin, we feel that we are justified in requesting thirty days in order to be sure that the wells will not be shut in.

Q All right, sir. Let's go now to the Bisti Pool, and



first let's talk about it briefly. The Harrison Number 2, and the Number 1 Heggie, the wells that Mr. Holick testified were uneconomical to connect, locate the Harrison Number 2, Mr. Marshall.

A The Harrison Number 2 is located in the Southeast Quarter of Section 6, Township 24 North, Range 9 West.

Q What is its allowable?

A This well has an allowable of 37 barrels of oil per day.

Q Is it producing that much?

A No, sir, it had a rather rapid decline. The well was completed in June of '59, and in November of 1959 the well only produced 404 barrels during the month.

Q About 15 barrels a day?

A Something in that neighborhood, yes, sir; thirteen.

Q What is its gas-oil ratio, Mr. Marshall?

A The Harrison 2 has a ratio too small to measure.

Q The gas that is produced in that well, is it put to any beneficial use at all?

A Yes, sir, we are pumping the well, and we are running the pumping unit engine with gas produced from this well, which considering the horsepower of the unit and so forth, is just about all the gas that the well will make. It is barely enough to run the unit.

Q All right, sir. Now, go to the Heggie Number 1, and name and locate it. I have named it.

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A The Heggie Number 1 is located in the Northeast Quarter of Section 8, Township 24 North, Range 9 West.

Q What is its allowable?

A It has an allowable of 7 barrels of oil per day.

Q Is it measuring it?

A During November, this well produced 111 barrels, or approximately four barrels a day.

Q What is its gas-oil ratio?

A It has, on the latest test that we have taken on this well, it has a ratio of 396 cubic feet per barrel.

Q Is any of the gas produced in that well put to a beneficial use?

A Yes, sir. Again, almost all of the gas produced is required to run the pumping unit engine.

Q If the produced gas in these two wells is put to a beneficial use, Mr. Marshall, why are we asking for an administrative exception?

A To be on the safe side, so to speak, although the quantities produced are essentially required to run the unit, due to the producing characteristics, at some time the well may be producing more gas than is required, and some amount may be flared over temporary periods. And, in order to comply with the Order R-1427, we think that the exception should be given.

Q All right, sir. Now, go to Pan American State A. V. lease, locate that for the record, will you please?

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A This lease is the lease containing the two wells in the East half of the -- or in the Southeast Quarter of Section 2 of Township 24 North, Range 10 West.

Q What is the allowable of well Number 1?

A It has an allowable of 57 barrels of oil per day.

Q What is the gas-oil ratio of it?

A 998 cubic feet per barrel.

Q Resulting in a total gas production per day of what?

A 178 MCF.

Q All right, sir. Go now to Well Number 2, when was it --

A Excuse me. I misread a figure. The State A. V. Number 1 has a producing ratio of 998, so that the total gas flared per day would be about 16, produced today would be 16 rather than the 178.

Q All right. Now, Well Number 2, what is its allowable?

A Fifty barrels of oil per day.

Q And the gas-oil ratio?

A It has a ratio of 3575, and it produced 178 MCF a day.

Q All right, sir. Now, were these wells completed after the October 1958 contract?

A Yes, sir.

Q And they were committed by a supplemental contract; when was it signed?



A In August of '59.

Q August or September?

A September, excuse me.

Q September. All right, sir. Go now to the State A. W. lease, locate it.

A This lease consists of two wells, located in the Southwest Quarter of Section 2, 24, 10.

Q What is the allowable for Well Number 1?

A It is a top allowable well of 106 barrels of oil per day.

Q And what is the gas-oil ratio?

A 612 cubic feet per barrel, or a total production of 64 MCF.

Q All right. Well Number 2, what is its allowable?

A It also has an allowable of 106 barrels of oil per day. It has a gas-oil ratio of 709 cubic feet per day, or it produces approximately 80 MCF of gas.

A All right, sir. Again directing your attention to these wells, Mr. Marshall, do you know of any lack of diligence on Pan American's part, resulting in them not being connected at this time?

A No, sir. Again, it is probably a matter of geography. As you can notice, these wells are located, although other wells are shown on this map as being connected around it, the wells are located in the extreme Southeast end of the field, and it is



probably for that reason, more than anything else, that these particular wells have not been connected.

Q All right, sir. Now, with respect to the four wells on the two State leases, are we asking the same exception that we asked in the Gallegos?

A Correct, 30-days.

Q All right, sir. With respect to Pan American's unconnected wells in both pools, are their leases adjacent to those wells that are connected at this time?

A Yes, sir. As shown by the yellow coloring, there are leases adjacent to the State A. V. and A. W. which are connected, and also there are leases adjacent, and in the vicinity of the three wells in Gallegos, which will be connected by the 15th.

Q In a common pool, where part of the wells are shut-in, and others are producing, what happens, Mr. Marshall?

A Well, naturally, when we have a continuous reservoir, if part of the wells are producing and part don't, it results in migration of oil from the wells that are not producing toward and to the wells that are producing.

Q All right, sir. For the purpose of this questioning, assume that the Commission does not grant our request, and our wells have to be shut-in while others produce, in your opinion, as an engineer, will that cause violation of correlative rights through the migrating feature that you mentioned?

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A Yes, sir. If, in this field, Pan American wells are shut-in, while other wells in the same reservoir in both fields are allowed to produce, migration will occur and that will naturally be in violation of both Pan American and its correlative rights.

Q Do you, as an engineer, Mr. Marshall, recommend to the Commission that they grant the request we are making here today?

A Yes, sir, I do. I feel that the request should be granted. I recognize the fact that in a situation where there is sufficient gas being flared, that it would be economical to dispose of this gas by other means, some physical waste is occurring. However, in this case, I feel that Pan American has been certainly diligent in their efforts to connect the gas, and in view of the fact that all parties concerned have been diligent in their efforts to connect all wells, I feel that the controlling factor the Commission should use, is the violation of correlative rights, and consequently should grant this exception.

MR. BUELL: That's all we have at this time. And may I formally offer our Exhibit 1.

MR. PORTER: Without objection, Pan American's Exhibit 1 will be received. Anyone else have any questions of this witness?

MR. NUTTER: I have a few questions.

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CROSS EXAMINATION

BY MR. NUTTER:

Q Mr. Marshall, turning first to the Gallagos-Gallup Pool, you mention gas-oil ratios, which are the gas-oil ratios shown on the oil proration schedule, are those the latest that Pan American has?

A Yes, sir, those are the latest. Most of them were connected in the middle of '59.

Q And you have not taken any gas-oil ratios since?

A No, sir.

Q What is the gas-oil ratio on this Oskayahewood Number 1 Well?

A 136,578 cubic feet per barrel.

Q How much oil does that well make per day?

A It has an allowable of 2 barrels of oil per day, and it produces that.

Q How many MCF of gas does this well produce per day?

A That would be approximately 273 MCF daily.

Q What is the value, what would the approximate value of that gas be?

A Oh, approximate net to Pan American?

Q I mean the gross.

A Gross value would be somewhere in the neighborhood of \$30.00.

Q And how much would the value of those two barrels

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of oil per day gross?

A Somewhere in the neighborhood of \$6.00.

MR. PAYNE: You would not want to flare \$30.00 worth of gas, to get \$6.00 worth of oil, would you, Mr. Marshall?

A I think that's what I'm here for.

MR. BUELL: If that well was shut in, someone else might get that \$6.00 worth of oil and \$30.00 worth of gas?

A Yes, sir, we would not realize the \$30.00 worth of gas, of course, if the well wasn't connected, and we would rather have \$6.00 than nothing.

Q (By Mr. Nutter) Do you have any -- now, turning to the Bisti Pool, please, do you have any later ratios on the Bisti?

A No, sir. To my knowledge, these ratios which are in the proration schedule, are the latest ratios run in the Bisti Field. Now, one ratio I quoted was on the Heggie Well; I don't believe it has been filed yet, however, it will be shortly.

Q Now, you gave the production for the Harrison and Heggie Wells. Would you give us the production for the A. V. Wells and the A. W. Wells, for the month of November?

A Yes, sir. The A. V. Lease, both wells, during November produced 1328 barrels. The A. W. Lease, State A. W. Lease, during November produced 6,329 barrels.

Q You don't have the wells' total, you just have the lease totals?

A Yes, sir, I have the wells. The A. V. Number 1 was



471 barrels; the A. V. Number 2 was 857 barrels. The A. W. Number 1 was 3155 barrels; and the A. W. Number 2 was 3174 barrels.

Q Mr. Marshall, do you have any idea as to why, particularly in the Gallup Pool, leases all around yours are connected, and your leases are not?

A No, sir, not other than the fact that we are in an area, in both cases, where these leases, these surrounding leases you are referring to, have, in fact, some of them may not be connected yet. These are the ones that will be connected by the 15th, and they are the last, probably some of the last ones to be connected. Other than that, certainly there is no reason. There is a reason in the fact that one of them had to be last, or near the last, and we fell in that lot.

Q Now, has El Paso given you any idea as to when your A. V. lease and your A. W. lease will be connected?

A Yes, sir. It is possible that the A. V., or A. W. Lease will be connected by about the 15th, or the 21st, really. This information as to Pan American wells was determined yesterday, and as we cannot tell from our observation in the field just exactly what date they will be connected, we expect that they will be connected about the 15th. It is possible some of them will; and the rest of them by the 21st, according to El Paso.

Q Does that apply to the Gallegos area, as well as the Bisti?

MR. NUTTER: Thank you.

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MR. PORTER: Does anyone else have any questions of the witness:

MR. PAYNE: I have a few.

QUESTIONS BY MR. PAYNE:

Q Mr. Marshall, your application asks for an exception for four wells in the Gallegos, and I notice that you only discussed three?

A Yes, sir.

Q Is the fourth well connected?

A Yes, sir, since that time.

MR. PORTER: Any further questions of this witness?

(No response.)

MR. PORTER: You may be excused.

(Witness excused.)

MR. PAYNE: I would like to ask Mr. Holick a question.

QUESTIONS BY MR. PAYNE:

Q Mr. Holick, do you have a reason why the A. V. Lease and the A. W. Lease are not connected, when the leases around them are?

A I want to be sure that I have those A. V. and A. W. straight.

Q Those leases are in the South Half of Section 2 --

A Yes. I mentioned five places where we messed up this morning. As a matter of interest, what you said, I believe, about the September 28th contract date on those



wells, late September, as I recall?

MR. BUELL: Yes, I believe that's right.

A I specifically checked one of those batteries, just to see how close I could run it down, and there is a gap of between September, late September, until November the 18th, when we requested a survey on that, that I can't account for, and must therefore say we are responsible for the loss somewhere, as the survey was requested on the 18th. It was sent on the 25th, received in El Paso on the 27th; drawings went out on the right-of-way on the 4th; ownership was received back from the office sometime on the 9th; right-of-way requested on the 11th; right-of-way bought and released on December 30th. That is about as far as we could go.

Q (By Mr. Payne) It was just a matter of, in this case, getting started a little bit late?

A That first six weeks, I cannot account for.

MR. PAYNE: Thank you.

MR. BUELL: Thank you.

MR. PORTER: Does anyone have anything further to offer in this case?

(No response).

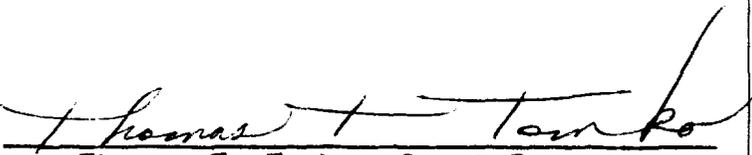
MR. PORTER: I will take the case under advisement.



STATE OF NEW MEXICO)
) ss.
COUNTY OF BERNALILLO)

I, THOMAS T. TOMKO, Court Reporter, 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 under my personal supervision, and that the same is a true and correct record to the best of my knowledge, skill and ability.

WITNESS my Hand this 18th day of January, 1960, in the City of Albuquerque, County of Bernalillo, State of New Mexico.


Thomas T. Tomko, Court Reporter.

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