

BEFORE THE
OIL CONSERVATION COMMISSION
SANTA FE, NEW MEXICO

IN THE MATTER OF:

CASE NO. 1491

TRANSCRIPT OF HEARING

AUGUST 13, 1958

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BEFORE THE
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IN THE MATTER OF:

Application of Pan American Petroleum Corporation :
for permission to commingle oil production from :
two separate leases. Applicant, in the above- :
styled cause, seeks an order authorizing it to : CASE NO.
commingle the oil production from two separate : 1491
leases in the Empire-Abo Pool. One lease com- :
prises the N/2 and SW/4 of Section 11, and the :
other lease comprises the E/2 of Section 10, all :
in Township 18 South, Range 27 East, Eddy County :
New Mexico. Applicant proposes to separately :
meter the production from each individual well :
prior to being run into common storage. :
:

BEFORE:

Mr. Edwin L. Mechem
Mr. Murray Morgan
Mr. A. L. Porter

TRANSCRIPT OF HEARING

MR. PORTER: Take up next Case 1491.

MR. PAYNE: Application of Pan American Petroleum Cor-
poration for permission to commingle oil production from two
separate leases.

MR. BUELL: May it please the Commission, we will have
one witness.

(Witness sworn.)

DAN CURRENS

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

follows:

DIRECT EXAMINATION

BY: MR. BUELL:

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

A Dan Currens, employed by Pan American Petroleum Corporation as reservoir engineer at Roswell, New Mexico.

Q Mr. Currens, you have testified at prior Commission hearings and your qualifications as a petroleum engineer are a matter of record, are they not?

A Yes, sir, they are.

MR. BUELL: Are his qualifications accepted?

MR. PORTER: Yes, sir.

Q What leases are involved in this application, Mr. Currens?

A The leases involved in this application are two leases in Eddy County, New Mexico, one being in Section 11, Township 18 South, Range 27 East, that lease being the N/2 and SW/4 of that section, and the other lease being the E/2 of Section 10, Township 18 South, Range 27 East.

Q Mr. Currens, I hand you now what has been marked as Pan American's Exhibit No. 1. What is that exhibit, please, sir?

A Exhibit No. 1 is a plat showing the two leases in question here today, that we are asking to commingle production from, and the adjacent area, surrounding area around these two leases. One lease, the one in Section 11 is outlined in red, and

the one in Section 10 is outlined in green.

Q All right, sir. Is there any more detail on that exhibit that you would like to bring out at this time? Are there any lease divisions shown on that?

A Yes, sir. I might go ahead and mention here that in Section 11, you'll see three 80-acre tracts designated as "A", "B", and "C", and in Section 10, you'll see an 80-acre tract that is designated as "D". I will be referring to these designations later. They are simply lease accounting designations within our company.

Q From what pool is production from these two leases obtained?

A From the Abo, Empire-Abo. I might add here that at present only the NW/4 of Section 11 is in the defined Empire-Abo Pool. However, in a nomenclature case on this docket today, which is 1489, as I recall, -- Yes, Case 1489, there is a proposed extension to the Empire-Abo Pool that will add the NE/4 of Section 10 and the NE/4 of Section 11.

Q And as a result of that case which will be heard today, production from these two leases will all be classified in that pool?

A Yes, sir.

Q And both leases are producing from a common source of supply, the same reservoir?

A Yes, sir.

Q Briefly, what is the request we are making here today, Mr. Currens?

A We are asking that we be allowed to commingle production from these Abo wells in Section 11 with wells in Section 10, and putting it into a tank battery after separate metering.

Q Where will this tank be located, on which lease?

A Section 11; on the NW/4 of that lease.

Q And is that battery installed and being used in Section 11?

A Yes, sir, that battery is now in there and taking production from the Section 11 wells.

Q Where is it located in Section 11?

A The NW/4.

Q I hand you now what has been marked as Pan American's Exhibit No. 2. What is that exhibit?

A Exhibit No. 2 is a sketch showing the present battery facilities at the battery site in Section 11. This is a simplified diagram of the equipment that we now have installed.

Q Would you describe such equipment just as briefly as you possible can?

A Well, you can see here the storage tanks, the lines from the wells into separators, separators for each of the different accounting designations, and test separator facilities, and lines from the separator to meters, and lines for test and normal fill purposes from the meters to the tanks.

Q Would you just briefly run through the process or the procedure by which oil is handled at that battery at this time?

A Well, I think I could probably do that easiest by taking one of these and going through it. Let's take this "C" accounting designation that we have here, which is up at the top on the right. We have a flow line from the Malco "C" No. 1 coming into the "C" separator. The line from the separator to the meter is for either test or normal fill of the tanks into the storage facilities and into the tanks themselves. Also, you can see we have the test facilities there, and we can route the production through the test separator and test meter separately from the "C" meter.

Q All right, sir. Would the same flow pattern generally be the same for the other accounting designations?

A Yes, sir, it would. That's just one. The others are all similar.

Q Now, this installation is currently in use handling Section 11 production, is that not right?

A Yes, it is.

Q Are these meters at this time so located so that the only oil that reaches them is pipeline oil?

A Yes, sir, they are located in such a way that only pipeline oil will be metered. Any treating that might be necessary on any of the wells will be done prior to the time that it gets to that meter, so only pipeline oil will be going through that meter.

Q I hand you now what has been marked as Pan American's

Exhibit No. 3. What is that Exhibit?

A Exhibit 3 is essentially the same thing we saw on Exhibit 2. The blue lines are all the same. However, there are certain lines on here in red that represent the proposed facilities for what we are asking for here today. In other words, the separator, metering lines and installation for bringing production in from Section 10 wells.

Q Will you briefly discuss the additional facilities that are reflected there in red?

A Well, this is, of course, rather simplified. We have the flow line coming into the separator, which would bring the production from the Section 10 wells into the separator, from the separator into the meter where it will either be routed through the test or normal fill route to the battery itself. Incidentally, I don't show it here, but we would have a similar hookup so that we could send production through separate test facilities, also separate test meters.

Q Let me ask you this, Mr. Currens, in the mechanical installation as proposed, would it be possible to run or flow oil production from Section 10 through a Section 11 meter?

A No, sir, it wouldn't be.

Q All right, sir. By the same token, would it be possible under the proposed mechanical installation to flow Section 11 oil through a Section 10 meter?

A No, sir. The only place oil can be -- that would be

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from Section 10. It could only go through a Section 10 meter or test facility.

Q With respect to the meter location for the Section 10 production, will it also be so located that only pipeline oil will reach that meter and be metered?

A Yes, sir. Again, there we would locate that meter so that any necessary treating would be done ahead of that meter. Only pipeline oil would go through it.

Q What type of meters are we currently using to handle our Section 11 production?

A We are using ~~National~~ positive meters.

Q Will we use the same meter to handle the Section 10 oil?

A Yes, sir, National Tank Company meter.

Q Is that a proven piece of oil field equipment?

A Yes, sir. It has been in use -- we have been using it several months, and it's a good piece of equipment. We are satisfied with it. And, incidently, you may not be familiar with that particular meter. I have some National brochures here that might explain the operation to you, if you are not familiar.

Q Mr. Currens, what is your personal opinion of this equipment, this meter, with respect to accuracy and reliability?

A Well, sir, as I said before, we have been using it several months on this Section 11 production, and we found it to be very reliable.

Q Have we conducted tests of these meters that are currently

installed?

A Yes, sir, we made individual tests on these meters. We are operating the meters right now with an accuracy as good as our hand manual gauging accuracy of our tanks. We are well within that accuracy at this time.

Q In other words, our experience has certainly shown that they are reliable and accurate?

A Yes, sir.

Q Mr. Currens, if the Commission approves this application today, will continuous checks as to accuracy be made on the meters?

A Yes, sir. It will be done in two ways. I might point out here that in addition to metering the oil through the meters, we will continue to make daily manual gauging of the tanks to check that production actually into the tanks against the meter readings. This ought to afford us a very good check. In addition to that, we have -- we'll have a meter prover vessel there, which can be used for very accurate test of the meters themselves.

Q Now, do you think that this program that you just outlined will assure continued accuracy of the meters?

A Yes, sir. We will run those meters through the prover on a routine basis.

Q Let me ask you this. In your opinion, will approval of this request serve conservation?

A Yes, sir, I believe it will in that we should enjoy a longer life, greater ultimate recovery of oil from these leases,

due to a lower check limit, due to the advantages of the checks and operations, where we have a consolidated battery of this type.

Q All right, sir. Now, with respect to the protection of correlative rights, do you feel that the installation as proposed will adequately protect the rights of all parties in interest?

A Yes, sir, I believe it certainly will. We are separately metering the production from each lease, and that should afford good protection of correlative rights.

MR. BUELL: That's all I have at this time.

MR. PORTER: Anyone else have a question of Mr. Currens?
Mr. Morgan.

CROSS EXAMINATION

BY MR. MORGAN:

Q Are there actually divided royalty interests between Section 11 and Section 10?

A Yes, sir. Part of this is one hundred percent Pan American, part of it is fifty-fifty, Pan American Malco. This is all U. S. basic royalty. U.S.G.S. has okayed our arrangement here, the basic royalty. There are some overrides in here.

MR. BUELL: But only one royalty owner as such, U.S.G.S.

Q (By Mr. Morgan) There are separate overriding royalty interests?

A Yes, sir.

MR. BUELL: Yes, sir.

MR. PORTER: Anyone else have a question of Mr. Currens?

QUESTIONS BY MR. COOLEY:

Q Mr. Currens, has U.S.G.S. and all other persons or agencies owning an interest in these two leases been notified of this application?

A They have all been notified, of course, by the advertisement, and we have written each individual owner of any interest in either of these leases.

Q Have you received any reply or indication -- concurrence from U.S.G.S.?

A Yes, sir. We have a letter from U.S.G.S. saying what their requirements are for the separate meters for the two leases, which we are doing here.

MR. BUELL: If the Commission so desires, we will offer that as an exhibit, if you would like to have it in the record.

MR. PORTER: Do you have a copy of that letter?

MR. BUELL: Yes, sir.

Q (By Mr. Cooley) Mr. Currens, will payment to the various interest holders be made on the basis of the meter readings?

A Yes, sir.

Q Will that be a hundred percent of meter readings, or will there be a shrinkage factor applied or some type of factors applied to the meter readings?

A I don't believe we will have much of a shrinkage here, sir. We, as I say, have checked these into tank production and have checked those within the accuracy of gauging our tanks. I

believe it will be on the meter reading, sir. Of course, we are running a continual cross check by our gauges of total production.

Q Wouldn't it be normal for the runs from the tanks, runs to pipelines on the basis --

A I am talking about, of course, allocated back by the meter readings to the actual runs too. Pipeline, yes, sir.

Q It would be percentage, each meter would bear a percentage to the total runs, is that right?

A Yes, sir. That would be the easiest way to work it. They should, of course, always check, go down the line.

Q But basically the participation will be found upon the meter reading?

A Yes, sir.

Q Have you received any objection to this proposed application from any interest holder?

A No, sir, we have not.

MR. COOLEY: That's all the questions I have.

QUESTIONS BY MR. UTZ:

Q Mr. Currens, can you give me the exact location of the tank battery in Section 11?

A Yes, sir. That's located in the NE/4 of the NW/4 of Section 11. It is south of that Well "A" No. 1. I might point out here, of course, we are not, I hope we are not fully developed in this area at this time, and we may want to add some to this battery as it now stands; additional tanks, depending on which

way our trend might run here. We might be looking down the road a little bit to shifting the location of that battery at some later date.

Q Will Section 11 oil have separate test separator?

A Yes, sir. I believe that is the proposal that we have here, a separate test facility for each one. We intend to keep these always completely separate and distinct so that there is no way of getting 10 into 11 or vice versa.

Q That is what you intended to show on your Exhibit 3 --

A Yes, sir.

Q -- where you have the word "test?"

A Well, you'll note here that all of these lines have their own test facilities, and normal test facilities from each of the meters in addition to the completely separate test facilities for the lease as a whole. We've got a great deal of flexibility for testing here.

Q The oil from Section 10 and Section 11 cannot in any way commingle with any other oil?

A I don't know how it could, sir.

MR. PORTER: What type of depth, approximately six thousand feet?

A Six thousand. About six thousand, fifty-nine hundred, so on.

MR. PORTER: Does anyone have a question?

A I might mention the discovery well was six thousand and

fourteen.

QUESTIONS BY MR. FISCHER:

Q Mr. Currens, I want to find out what the size of the present tanks are.

A They are thousand barrel tanks.

Q And there are only two?

A There are two, yes, sir.

Q Do you contemplate that they will have to be extended when this "D" 1 and proposed "D" 2 come in there?

A I don't believe they will for the "D." I certainly hope we have to set another tank down there, though.

Q How much oil is flowing into that tank battery at the present time?

A Well, the depth factor is 1.77. They are all top allowable wells.

Q That is about sixty-six barrels a day, per well, isn't it?

A Sixty-two barrels.

Q Sixty-two for four wells?

A Sixty-two for four wells, yes, sir. That would be one hundred and -- two hundred and forty-eight; I am about a hundred short there.

Q If you put those --

A Yes, sir.

Q How many days storage do you have with each tank -- in each tank, how many days do you think it will take?

A Sixty-two times six. And you say how many barrels?

Q Three seventy-two, have about three days.

A Have about three days, roughly.

MR. FISCHER: That is all.

MR. PORTER: Anyone else have a question of Mr. Currens?
You may be excused.

(Witness excused.)

MR. BUELL: May I offer at this time our Exhibits 1 through 4 inclusive?

MR. PORTER: Without objection, Exhibits 1 through 4 will be entered into the record.

Anyone have any statement to make, any comments in the case? We will take the case under advisement and take a ten minute recess.

STATE OF NEW MEXICO)
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COUNTY OF BERNALILLO) ss

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/or 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 and Seal, this 25th day of August 1958, in the City of Albuquerque, County of Bernalillo, State of New Mexico.


Notary Public

My Commission Expires:

October 5, 1960