BEFORE THE OIL CONSERVATION COMMISSION NOVEMBER 19, 1958

IN THE MATTER OF:

APPLICATION OF PAN AMERICAN PETROLEUM CORPORATION, CASE 1551

TRANSCRIPT OF HEARING

BEFORE THE OIL CONSERVATION COMMISSION NOVEMBER 19, 1958

IN THE MATTER OF:

Application of Pan American Petroleum Corporation for permission to commingle the production from three separate leases and for permission to produce more than 16 wells into a common tank battery. Applicant, in the above-styled cause, seeks an order authorizing it to commingle the production from the Empire-Abo Pool from the three separate Federal leases hereinafter described:

LC-065478-B N/2 NW/4, NE/4, N/2 SE/4, and E/2 SW/4 Section 3; E/2 Section 10

)Case 1551

NM-025604 S/2 SE/4 Section 3; W/2 Section 10

LC-067858 N/2 and SW/4 Section 11

all in Township 18 South, Range 27 East, Eddy County, New Mexico. Applicant further requests authority to produce more than 16 wells into the common tank battery for said leases. Applicant proposes to separately meter production from each of the above-described leases prior to being commingled.

BEFORE:

Elvis A. Utz, Examiner.

TRANSCRIPT OF HEARING

MR. UTZ: Next case will be Case 1551.

MR. PAYNE: Case 1551, Application of Pan American Petroleum Corporation for permission to commingle the production from three separate leases and for permission to produce more than 16 wells into a common tank battery.

MR. BUELL: May it please the Examiner, my name is Guy

Buell with Pan American Petroleum Corporation. We will have one witness to present in this case, Mr. Currens.

(Witness sworn.)

DAN CURRENS

the witness, having first been duly sworn, testified as follows:

DIRECT EXAMINATION

BY MR. BUELL:

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

A Daniel R. Currens, employed by Pan American Petroleum Corporation, Petroleum Engineer in the Roswell office, Roswell, New Mexico.

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

A That's correct.

MR. BUELL: Any questions, Mr. Examiner?

MR. UTZ: No, sir.

Q (By Mr. Buell) I direct your attention to what has been marked as Pan American Exhibit Number One. What does that exhibit reflect?

A Exhibit One is a plat showing the area involved in this application, Case 1551, showing the acreage that will be involved in the application and showing the wells in the area. It also shows the area immediately surrounding these particular leases.

- Q Have you designated the Abo wells in any fashion to distinguish them from any other wells in the area?
- A Yes, sir, the wells completed in the Abo are encircled in orange.
- Q All right, sir, with respect to the acreage you have outlined in various colors, actually, a portion of that acreage has already, you already have approval to commingle at a common battery on aportion of that acreage?
 - A That's correct.
- Q Point out that acreage on the exhibit and state it for the record.
- A Well, Order R-1240, August 14, 1958, we obtained approval to commingle production from the lease that is shown here on the Exhibit One outlined in Blue, being the north half and the southwest quarter of Section 11, Township 18 South, Range 27 East, and a portion of another lease, which is outlined in green, that portion being the portion that is the east half of Section 10. Township 18 South, Range 27 East.
- MR. BUELL: Mr. Examiner, in the interest of expediting this hearing, we might incorporate by reference Case 1491, which was held August 14, 1958, a result of which Order R-1240 was issued.
- Q (By Mr. Buell) So, actually, Mr. Currens, then the commingling phase of this hearing is a request to enlarge a previously approved facility?

- A Yes, sir, that's correct.
- Q All right, sir, with respect to the area which we hope to bring into the commingling authority, would you point out that on Exhibit One and locate it for the record?

A In addition to what we have previously been authorized here, we would like to add the north half of the northwest quarter of Section 3, the north half of the southeast quarter of Section 3, the east half of the southwest quarter of Section 3, the east half of the southwest quarter of Section 3, that being another portion of one of these leases, and another lease which was comprised of the south half of the southeast quarter of Section 3 and the west half of Section 10. All of these are in Township 18, South, Range 27 East.

- Q Is all of the acreage in the area in question Federal acreage?
 - A Yes, sir. These are three separate Federal leases.
- Q Mr. Currens, I notice on some of the acreage on which we are asking commingling authority, as yet no wells have been drilled. Is this field in the active stage of development?

A This field is in the early stage of development. There are nine Abo completions here now. We are very early in the development stage of this field, and an active program is now under way.

Q Do you feel it is a matter of practicality to request the authority prior to development to obviate the necessity of temporary batteries on these leases?

- A Yes, sir, I do. I think if we can cover a larger area at this time, we'll save time and money both.
- Q For both ourselves time and money for Pan American and also time for the Commission?
 - A Yes, sir.
- Q Let me ask you this, Mr. Currens, to back up for a minute. Are we now operating a common battery in the area in question here under Order R-1240?
 - A Yes, sir, we are.
 - Q Where is that located?
 - A Located in the northwest quarter of Section 11.
- Q Do you have a schematic diagram reflecting that current installation?
 - MR. UTZ: Be more specific with the matter located.
- A In the northeast quarter of the northwest quarter of Section 11.
 - MR. BUELL: We will have that exhibit marked Exhibit Two.

(Exhibit marked Pan American Number Two for identification.)

- Q (By Mr. Buell) What does Exhibit Two reflect?
- A Exhibit Two is a schematic diagram of the present installation plus some red lines which show what the proposed additions might be.
- Q All right, sir, for the purpose of your first discussion, ignore the red lines and simply discuss the installation as it

currently exists.

A Well, possibly we could best do that by following a particular lease through the system.

Q All right, sir.

A Taking the flow line we show here in the lower right hand corner of the exhibit designated "B" Number 2, we see the flow line coming into a manifold where production might be routed through what has been designated "B" Separator. After going through that separator on through the "B" meter, from that meter into the stock tanks either through normal fill facilities or test facilities. The alternate way of routing that production would be into the "B" separator through the "B" meter, from the "B" meter up to a proofer tank. We use this proofer tank for testing and calibration of our meter. From that proofer tank into the fill facilities into the tank battery itself.

As another possible alternate route that production could be brought in, instead of being taken through the normal facilities that are marked "B", it could be taken through the special test facilities which we use for well tests through the test separator, from the test separator to the test meter and then into the storage tanks themselves, after going through that meter or in through the proofer tank, and from there on into the storage tanks. I believe that covers the routes that production could take from that.

Q Directing your attention to the red lines now on Exhibit

Two, actually any leases that are added will follow generally the same flow pattern which you have just described?

A Yes, sir, it would have those various possibilities of going through separate test facilities, special test facilities, the proofer tanks or through the regular facilities.

- Q Now, separation and treatment if necessary will be upstream from the meters?
 - A Yes, sir, that's correct.
- Q What type meter are you currently using at this installation?
 - A A positive type volume meter.
- Q Have they proved themselves to be extremely accurate and reliable?
 - A Yes, sir, we've been satisfied with these meters.
- Q And under this proposal the production from each lease will be separately metered?
 - A Yes, sir, that's correct.
- Q All right, sir, you earlier stated this was all Federal acreage. Has the USGS been advised of our proposal we are presenting here today?
 - A Yes, sir, they have.
 - Q Have they expressed agreement with this proposal?
 - A They have.
- Q All right, sir, going now, Mr. Currens, to the second phase of this application, with respect to producing more than

16 wells into a common battery, how many wells, Abo wells, are currently producing on the acreage in question?

- A Some seven Abo wells are now producing on that acreage.
- Q Do you feel it is practical at this time to ask for authority to produce more than 16 wells into a common battery, even though we only have six wells at this time?

A I think it is timely to do it now. As stated, we have a very active development program in this area. We have four wells drilling now.

- Q I state six wells, I believe you stated seven?
- A There are seven wells on the area covered by the application. Six now go into the present facilities.
- Q Again, you think it is a matter of practicality and expediency to get this authority now so that temporary batteries will not have to be installed as the wells are completed?
 - A Yes, sir.
- Q Was the USGS, being the only royalty member were they advised of this feature of the application?
 - A Yes, sir, they were.
 - Q Did they express agreement with this proposal?
 - A Yes, sir, that met with their approval alos.
 - Q. Do you have a letter from the USGS expressing that?
 - A Yes, sir, we have.

MR. BUELL: May we offer such letter, Mr. Examiner, as Exhibit 3. It is a two-pagedletter. We have underlined in red

their approval of the commingling feature. The last paragraph on the last page is their approval of more than 16 wells producing into one common battery.

Q (By Mr. Buell) Mr. Currens, in your opinion, if the Conservation Commission approves this application, do you feel that the correlative rights of all parties of interest will be adequately protected?

A Yes, sir, I certainly do. We will meter the production from each individual lease before we commingle with production from any other lease. That should afford adequate protection of correlative rights.

- Q Have the **positive** volume type meters we are using and now use on the leases to be added, they have proved themselves accurate, is that right?
 - A Yes, sir.
- Q Do you feel that the Commission's approval of this application will serve conservation in that waste will be prevented?

A Yes, sir, I do. Certainly we can effect some savings here by putting our facilities in one spot; therefore, we should have a better economic picture on this in this particular area. We should have a longer economic life of the wells. Now, with longer economic life, we wouldn't reach the abandonment rate as early; and, therefore, we should be able to recover some more oil as a result of having this longer economic life.

MR. BUELL: Mr. Examiner, that's all the direct testimony we have at this time. I would like to formally offer Exhibits
One through Three inclusive.

MR. UTZ: Without objection they will be received. Are there questions of the witness?

CROSS-EXAMINATION

BY MR. PAYNE:

Q Mr. Currens, what is the maximum number of wells you eventually intend to produce into the common battery; do you have any idea?

A We are in an early stage of development now. I believe if we had authority to produce 20 wells into a common battery from this acreage, well, then, we'd have a better picture and we'd be to a point in development where we could make firmer plans.

Q If you drilled it up completely and had a producer on each unit, what would be the maximum number of wells?

MR. BUELL: Mr. Payne, do you want him to assume that all of the acreage outlined is productive?

MR. PAYNE: Yes.

MR. BUELL: We hope it is.

Q (By Mr. Payne) I was wondering if what you had in mind is maximum, if you had a maximum in mind on the order?

A Our count may be in error here. I have counted 40 locations on these three particular tracts.

MR. PAYNE: Thank you.

EXAMINATION BY MR. FISCHER:

- Q Do you have currently any automation equipment in there on that one particular battery?
- A No, sir. We checked these meters with hand gauges on the tank. We haven't started the design of any LACT equipment or anything like that.

EXAMINATION BY MR. UTZ:

- Q Mr. Currens, the green outline in Section 3, what is that mark?
 - A That is part of the same basic Malco "D" lease.
- Q And the red outline in the west half of Section 10 is part of the "E" Lease?
 - A Yes, sir, that is part of the same basic lease.
- Q Do you intend to commingle the entire production from all leases outlined in blue, green and red into tank battery located in the northeast of the northwest of Section 11?

A Actually, sir, we are still at an early stage of development here. We want to be able to commingle production from these leases. Now where we finally set our battery in here will be dependent on how our development goes. Right now, we want to put them into existing battery. As development progresses, we might find it advisible to move that battery to another location and might be able to work out automatic custody transfer facilities or some of the other methods of effecting economies in our operations.

Q And I believe you said the royalty interest under the "A".

"E" and "D" Leases were all common; the royalty interest in all of this acreage that is outlined in red, green and blue is USGS or the Department of Interior, I believe; no other overriding royalties?

A There are carved out interests out of the working interest.

MR. UTZ: Any other questions?

EXAMINATION BY MR. FISCHER:

- Q Mr. Currens, what is the size of the tanks at this battery?
- A Right now we have two thousand barrel tanks. We are planning to add a third.
- Q And you have completed the six wells you are now drilling, or four?
 - A Four.
- Q And these wells that are now drilled or drilling would be produced into this battery, is that correct?
- A Two are on State acreage, which is in Section 2. Two of them are drilling on this acreage. We've been running a four rig program in here. I hope we can continue it for some time.
 - Q Say you had 20 wells completed going into this battery --
 - A Yes.
- Q -- how long could you estimate that it would fill up one thousand barrel tank?
- A Well, the present allowable is 61 barrels a day, I believe.

 For the six to seven foot depth factor, we would be making then

about 1200 barrels a day. If we get in that position, I feel sure we will add another tank in there, because we certainly are going to have adequate storage facilities.

- Q And who is taking the oil at the present time?
- A We have a pipe line connection which, if I recall correctly, is with Malco.
- Q Say if you get 20 wells or half of your proposed program, assuming all your acreage is productive --
 - A Yes.
- Q -- and you might -- you'd fill up one tank a day, you wouldn't have any trouble getting your oil run?
 - A No, sir, I don't believe so.
- Q If you went to 40 wells, got 40 productive wells, do you think you would go to automatic draining?
- A At that time we would have taken a good look at it.

 We would certainly know where the trend was in here. If that is the case, I'm sure we will have made preliminary plans for LACT, anyhow.
- Q Say 20 producing wells, top allowable, you don't anticipate Malco taking a tank a day, do you?
 - A I don't know why there would be any trouble there.

MR. FISCHER: Thank you.

MR. UTZ: Are there other questions? If not, the witness may be excused.

(Witness excused.)

MR. UTZ: Are there other statements or testimony to be given in this case? If not, the case will be taken under advisement.

STATE OF NEW MEXICO)
) ss
COUNTY OF BERNALILLO)

I, JCHN CALVIN BEVELL, 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 in Stenotype and reduced to typewritten transcript by me; that the same is a true and correct record to the best of my knowledge, skill and ability.

WITNESS my hand and seal this 26th day of November, 1958, in the City of Albuquerque, County of Bernalillo, State of New Mexico.

NOTARY PUBLIC

My Commission Expires:

January 24, 1962

I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of Case No. 155/, heard by me on

New Mexico Oil Conservation Commission

Casa Mo.

1551

Application, Transcript,
5 mall Exhibits, Etc.