

18 wells into a common tank
battery. Bled County, New Mexico.

Case No.

1662

Application, Transcript,
Small Exhibits, Etc.

BEFORE THE
OIL CONSERVATION COMMISSION
SANTA FE, NEW MEXICO

IN THE MATTER OF:
CASE 1662

TRANSCRIPT OF HEARING

MAY 6, 1959

DEARNLEY - MEIER & ASSOCIATES
GENERAL LAW REPORTERS
ALBUQUERQUE, NEW MEXICO
Phone CHapel 3-6691

BEFORE THE
OIL CONSERVATION COMMISSION
SANTA FE, NEW MEXICO
MAY 6, 1959

IN THE MATTER OF:

CASE 1662 Application of Pan American Petroleum Cor-
poration for permission to commingle the
production from several separate leases and
for permission to produce more than sixteen
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 all or a por-
tion of seven separate federal leases in
Township 18 South, Range 27 East, Eddy
County, New Mexico. Applicant further re-
quests authority to produce more than six-
teen wells into the common tank battery for
said leases. Applicant proposes to separ-
ately meter production from each lease prior
to commingling.

BEFORE:

Elvis A. Utz, 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. UTZ: Next case will be Case 1662.

MR. PAYNE: Case 1662. Application of Pan American
Petroleum Corporation for permission to commingle the production
from several separate leases and for permission to produce more
than sixteen wells into a common tank battery.

MR. NEWMAN: I am Kirk Newman of Roswell, New Mexico,
and Guy Buell of Fort Worth, Texas, representing the applicant,
and we will have one witness.

MR. UTZ: Are there other appearances to be made in this case? If not, you may proceed.

(Witness sworn)

MR. BUELL: May it please the Examiner, this request is actually a dual request in that we are requesting, one, authority to commingle production, and two, authority to produce more than sixteen wells into a common tank battery. Since the testimony and the evidence relating to each one of these phases is very closely intertwined, we will simply put on our general testimony supporting both requests.

DANIEL R. CURRENS,
called as a witness, having been first duly sworn on oath, testified as follows:

DIRECT EXAMINATION

BY MR. BUELL:

Q Will you state your full name, please, Mr. Currens?

A Daniel R. Currens.

Q You are employed by Pan American?

A Pan American Petroleum Corporation, yes, sir.

Q In what capacity and in what location, Mr. Currens?

A As petroleum engineer at Lubbock, Texas.

(Whereupon, Pan American's Exhibits were marked for identification).

Q I direct your attention to what has been marked as Pan American's Exhibit No. 1, and I'll ask you, Mr. Currens, what

does that Exhibit reflect?

A Exhibit 1 is a map or a plat showing the area covered by our application, and the area around the acreage covered by our application, generally, the area of the entire Abo Pool in Eddy County, New Mexico.

Q All right, sir. With respect to the detailed information reflected on Exhibit 1, what does that cover?

A Well, shown on here are a number of wells that are circled in red. These are the Abo Wells that are now completed in this area, or drilling to, or in the process of completing. In addition to that, a portion of the acreage is crosshatched in green. Other portions of the acreage shown on the plat are outlined in various colors.

Q What is the significance, Mr. Currens, of the cross-hatched area?

A The area that is crosshatched in green here is the area that was covered by a previous order on a similar application to commingle production from several leases, and to produce more than sixteen wells into a common battery. That Order was Order R-1295, dated November 26, 1958.

Q All right, sir. What is the significance of the leases that are bordered with a varying color symbol?

A These are the leases or the acreage covered by this application.

Q All right, sir. Now, you stated that there was a

prior Order granted Pan American in this field to commingle as well as to produce more than sixteen wells into a common battery, is that correct?

A Yes, sir.

Q Where is that present battery located?

A It is located in Section 11, Township 18 South, 27 East, in the NE/4 of the NE/4 of that Section -- beg pardon -- the NE of the NW/4 of that Section, and the approximate location is indicated by the yellow marking on this Exhibit.

Q Since we will be talking about another tank battery, let's refer to that as Federal battery No. 1.

A All right, the existing one.

Q And the proposed common tank battery, let's refer to it as Federal battery No. 2.

A All right, sir.

Q For the purpose of the record, Mr. Currens, would you briefly state and locate the leases that are the subject matter of this hearing today?

A Yes, sir. On Exhibit 1, the portion outlined in green is lease NM 033825, and is the N/2 and the SW/4 of the NW/4 of Section, of the NE/4 of Section 4. All these are in Township 18 South, Range 27 East.

The next one is outlined in lavender, and it is the SE/4 of the NE/4 of Section 4. That is lease MN 025530.

Outlined in blue is lease L C 061783-A, and that is the

SE/4 of Section 4.

Outlined in brown is lease MN 025604, and that is the NE/4 and the N/2 of the SE/4 of Section 9, and the W/2 of Section 10.

Outlined in red, starting in Section 9, lease LC 065478-B, is the S/2 of the SE/4 of Section 9. Moving up to Section 3, part of the same lease is the N/2 of the NW/4 of Section 3, the NE/4 of Section 3, N/2 of the SE/4 of Section 3, and the E/2 of the SW/4 of Section 3.

Outlined in orange is lease LC 061783-D, which is the W/2 of the SW/4 of Section 3. As I previously stated, these are all in Township 18 South, Range 27 East.

Q Mr. Currens, where will the proposed common battery, which is the subject matter of this hearing, be located?

A It will be located in Section 3 in the SW/4 of the SW/4 of Section 3, at approximately the location marked in yellow on this map.

Q All right, sir. Now, as I recall, you stated that the areas crosshatched in green were given authority to commingle under Order 1295, is that correct?

A Yes, sir, R-1295.

Q I notice that some of the leases, which are the subject matter of this hearing, are crosshatched in green, is that correct?

A Yes, sir, portions of them.

Q Then, in effect, those leases which are so designated, which now have authority under Order R-1295, and are the subject

matter of this hearing, is it your request that they be given authority to produce into our proposed battery, which we have designated Federal battery No. 2?

A That is true, with one exception.

Q What is that exception, Mr. Currens?

A In the area in Section 3 that is outlined in black, we would like to produce the well that is located in the NE/4 of the SE/4, and designate it there as Well No. 1. We would like to continue to produce that well into the existing battery in Section 11, that battery No. 1.

Q Why do you want to do that, Mr. Currens?

A Well, it is producing now, and it is a matter of convenience and practicality to continue to produce it there.

Q And other than that well, which you have just designated, all of the present wells, as well as future wells in the leases, which are the subject matter of this hearing, will produce into Federal battery No. 2, is that correct?

A With the exception of that one well, any Abo well completed on or later drilled on this acreage covered by this hearing, we would like to produce into battery 2.

Q Why are you requesting authority to produce more than sixteen wells into a common battery, Mr. Currens?

A Well, it is conceivable that we might obtain more than sixteen Abo completions in this area. The battery being on the acreage covered by the application, the battery can certainly handle --

be designed to handle more than sixteen wells, and we will realize economic savings by doing that.

Q Do you know of any reason why more than sixteen wells could not produce into a common battery as efficiently and effectively as less than sixteen?

A No, sir, I don't know of any reason why we couldn't.

Q And, as well as being an economic savings, then, this will be as efficient as it would be if sixteen wells were producing into this common battery?

A I certainly believe so.

Q Now, I direct your attention to what has been marked as Pan American's Exhibit No. 2, and I'll ask you what does that Exhibit reflect?

A Well, Exhibit 2 is a sketch showing the proposed, or the facilities that we would use in this proposed battery that we are discussing, to serve the acreage covered by this application.

Q All right, sir. Would you briefly describe the facilities that are reflected on Exhibit No. 2, and I wonder, Mr. Currens, if it would be expeditious if you would just trace the production from one lease through the facilities?

A All right, sir. That would probably be the simplest manner of doing it. I might state that this is very similar to the facilities that serve our other commingled batteries in this area in this same pool. Starting on the right-hand side of the Exhibit where we have some flow lines coming in, let's simply just

2
trace production from the lease through the facilities that we have. We show flow lines coming into a separator, from the separator through a meter, from the meter normal production routed on out into the storage tanks.

Q All right, sir. Are any facilities installed here to check on the accuracy of the meter installation?

A Yes, sir, they are.

Q And how would that work? How would you test the meters, Mr. Currens?

A Well, let's follow the same system here. We have production coming in through a separator through the meter, and production from that meter can be routed through a prover tank prior to being placed into the normal storage facilities. Therefore, we can check the meter against the prover tank.

Q With these facilities as proposed, how would you accomplish a production test of an individual well?

A Well, sir, we have all strong flowing wells in this area at this time. The area covered here. We would shut in all wells on a particular lease that would be going through any particular meter. We would shut in all but the one that we were testing. The well we were testing, we would continue to produce, and only one well would be producing at that time. Therefore, the production from that well would come in through the separator, through the meter and on into storage.

Q In your opinion, Mr. Currens, and based on your

knowledge of the producing capacities of these Abo Wells, about how long do you think it would take to accomplish a production test?

Q We would contemplate production tests would take about six hours.

Q In other words, the remaining wells on the lease other than the wells being tested, will only have to be shut in for a six-hour period in order to accomplish an individual well test?

A Yes, sir.

Q In your opinion, are the capacities of these wells such that with that six-hour shut-in that they will be able to make their daily allowable in the remainder of the twenty-four-hour period?

A Oh, certainly, sir. They are very strong flowing wells.

Q And in the event that you left them shut-in the entire day, they have sufficient capacity in the ensuing month that they could make up that day's allowable in complete conformance with the Commission's Rules with respect to production of allowables?

A Yes, sir.

Q What type meters are proposed for this installation, Mr. Currens?

A We plan to use an A. O. Smith PD meter.

Q To your knowledge, have these type meters been field

tested?

A We have conducted some tests on the meter we plan to use in this particular field. We've had very good success with that meter.

Q Were these meters tested in this particular pool?

A Yes, sir, we've tested them in this pool.

Q And they gave every indication of extreme accuracy, is that right?

A Yes, sir, we are well satisfied with them.

Q With respect to corrosion, Mr. Currens, do you have any concern about corrosion of meters in this pool?

A Even though this is a sour crude, we've had no difficulties from corrosion with any of our existing installations, or on any of our tests.

Q Are you taking any particular action with respect to these meter installations from the standpoint of corrosion production?

A Certainly. We are going to use the meter designed for corrosive service in this pool.

Q Pan American is currently metering production in the Empire-Abo, are they not?

A Yes, sir.

Q Have we had any corrosion problems in those meter installations?

A No, sir, we have had no problems of that nature.

Q In your opinion, Mr. Currens, will the Commission's approval of this request we are making here today, serve conservation as well as protect the correlative rights of all parties of interest?

A Yes, sir, I certainly believe so. Certainly we will realize some economic savings in making this installation, and we will realize some savings in utilizing this installation which should give us a lower economic limit for the wells in this pool, and, therefore, give us more opportunity to recover more ultimate oil from this pool, or from these wells. With respect to correlative rights, I certainly think they are amply protected here in that no production, or oil production will be metered prior to the time that it is commingled with production from any other lease. Each lease will be metered separately prior to commingling.

MR. BUELL: That's all we have at this time, Mr. Examiner, in the way of testimony. I would like to submit at this time what has been marked as Pan American's Exhibit No. 3, which is a letter from the United States Geological Survey approving the installation that we have described here today. These are all federal leases, and the U.S.G.S. is the only royalty owner. And may I also formally offer Exhibits 1 through 3, inclusive?

MR. UTZ: Without objection, Exhibits 1 through 3 will be accepted into the record.

(Whereupon, Pan American's Exhibits 1 through 3 were received in evidence.)

CROSS EXAMINATION

BY MR. UTZ:

Q Mr. Currens, how long have you been using PD meters in this pool?

A We've had a PD meter on test in this pool for about two months.

Q Two months?

A Yes, sir.

Q Do you feel that that is long enough to assure you that it will meter sour crude satisfactorily?

A We have had no difficulty with them to date. We plan to use the meter designed for corrosive service.

Q What features does a meter designed for corrosive service have over the one that is not designed for corrosive service?

A Well, it is the material that is used in construction of the meter. There are corrosive resistance materials.

Q Stainless steel, or --

A Well, --

Q -- nickel alloys, or what?

A I don't recall the exact specifications on this particular meter. It is the one recommended for corrosive service, however, by the manufacturer.

Q Do you know of any of these meters being in service in any sour crude area for any length of time?

A No, sir, I don't.

Q Mr. Currens, could you tell me which wells are being produced into your Federal No. 1 tank battery?

A At this time?

Q Yes.

A All the wells that are now completed on the area that is crosshatched in green are now going into that No. 1 battery.

Q In other words, --

A All the red circled wells that are completed.

Q I see. Then, is it my understanding that some of the red circled wells that are now completed, you wish to disconnect from the No. 1 and produce into the No. 2?

A Yes, sir, that is true.

Q In effect, this is deleting a portion of Order 1295, is it not?

A Yes, sir, in effect, it is.

MR. PAYNE: One Order entered after this hearing would take the place of Order R-1295, if it was written right, of course?

MR. BUELL: Yes, sir.

MR. PORTER: Make it all inclusive.

MR. PAYNE: Of course, we still wouldn't know which wells are going to be produced into which battery, is that right?

MR. BUELL: Yes, sir. Well, now, all the wells on the leases that are the subject matter of this hearing, with that

one exception, will produce into Federal battery No. 2.

QUESTIONS BY MR. PAYNE:

Q (BY MR. PAYNE:) Approximately how many wells are producing into the No. 1 battery now?

A At this time?

Q Yes, sir: Yes, sir.

A There are fourteen, sir.

Q And of the wells that are presently drilled, how many will be producing into the No. 2 battery?

A Of the existing tank completions?

Q Of the existing tank completions, yes, sir?

A There will be nine, sir, of the existing completions.

Q So there will be fourteen into the No. 1 battery, and nine into the No. 2 battery at this time?

A Pardon me, sir. I understood your second question to be, what would be going into the No. 1 -- what would be going into the No. 1 if we got this Order?

Q Yes.

A There would be nine going into the No. 1 going at this time, and there would be eight going into the No. 2 at this time.

Q I see. Now, these additional wells that are drilled, do you propose to produce all of them into the No. 2 battery?

A Any that are drilled on the acreage that's outlined by this application?

Q Yes.

A Yes, sir.

MR. PAYNE: All right, thank you.

QUESTIONS BY MR. PORTER:

Q You may have had some discussion, but have you encountered any difficulties with PD meters for corrosion in your installations?

A In New Mexico, this is the only place that we have used PD meters. I don't know of any difficulty we've had at any other place along those lines.

Q The reason I ask that, I inject this into the record, is because we have had an occasion for having to revise an Order to allow the use of either dump type or PD because of corrosion in the particular area in Eddy County.

A But it is a different formation than this. No doubt the characteristics are different.

MR. PORTER: That's all I have.

MR. UTZ: Any other questions of the witness?

MR. BUELL: I wonder if I may formally request that the Order simply cover meters period. That's the way Order R-2195 is, and that way that problem will be obliterated.

MR. PAYNE: Dump type or PD meters.

MR. PORTER: I was just asking the question for my own information to see if anyone has run into trouble with these meters on account of the corrosive nature of the oil.

MR. BUELL: I might state, generally it has been our

experience in Texas where we have used these meters, that we have not experienced any extreme difficulty with corrosive crude where proper precautions were taken.

MR. UTZ: Using the corrosive resistance meters?

MR. BUELL: In the meters themselves, the material, yes.

MR. UTZ: Any other questions of the witness? If not, the witness may be excused.

Just a moment, did you bring out anything in regard to safety features in these wells in the event of line breakage?

A Well, sir, the wells will be controlled from the wellhead.

MR. UTZ: They will be controlled from the wellhead with --

A With normal flow line facilities. The control in this installation that we are asking for, is not at the battery of the wells themselves. What we are asking for, is, at this time --

MR. UTZ: It would be controlled manually?

A Yes, sir.

MR. UTZ: The witness may be excused.

(Witness excused)

MR. UTZ: Any other statements to be made in this case? If not, the case will be taken under advisement, and the hearing is adjourned.

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 11th day of May,
1959, in the City of Albuquerque, County of Bernalillo, State of
New Mexico.

Joseph A. Lippell
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. 1662, heard by me on May 1959.

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

PAN AMERICAN PETROLEUM CORPORATION

P. O. Box 268
Lubbock, Texas
April 14, 1959

File: JET-4124-986.510.1

Subject: Commingling of Production
Empire Abo Field
Eddy County, New Mexico

New Mexico Oil Conservation Commission (3)
P. O. Box 871
Santa Fe, New Mexico

Attention: Mr. A. L. Porter, Jr.

Gentlemen:

Pan American Petroleum Corporation respectfully requests a hearing for the purpose of obtaining an order approving the commingling of Abo production obtained from wells now completed or later completed on the acreage described below, and permitting the production of more than 16 wells into a common tank battery. This acreage is in and around the area now designated as the Empire Abo Pool and is comprised of all or a portion of seven Federal Leases. The acreage covered is located in Sections 3, 4, 9 and 10, T-18-S, R-27-E, Eddy County, New Mexico, and is described as follows:

<u>Federal Lease</u>	<u>Description</u>
1 NM-033825 ✓	N/2 NE/4, SW/4 NE/4 Section 4-18S-27E
2 NM-025530 ✓	SE/4 NE/4 Section 4-18S-27E
3 LC-061783-A ✓	SE/4 Section 4-18S-27E
4 NM-025604 ✓	N/2 SE/4, NE/4 Section 9-18S-27E
5 LC-065478-B ✓	✓ S/2 SE/4 Section 9-18S-27E ✓ N/2 NW/4 Section 3-18S-27E ✓ E/2 SW/4 Section 3-18S-27E
6 LC-061783-B	✓ W/2 SW/4 Section 3-18S-27E
7 NM-025604	W/2 Section 10-18S-27E

As you will recall, Order R-1295 dated November 26, 1958, approved our application to commingle Abo production from wells then existing

*Docketed
4-22-59
BP*

and wells to be drilled on leases then operated by Pan American Petroleum Corporation in Sections 3, 10 and 11, T-18-S, R-27-E, Eddy County, New Mexico. A portion of the acreage involved in this application was included in Order R-1295, specifically, the W/2 Section 10 and the NW/4 and E/2 of the SW/4 of Section 3. As you are aware, development has moved to the west and it now appears that several additional Abo completions will be obtained on the acreage covered by this application, making it desirable to commingle production from all of the Abo wells now completed or later completed on the acreage tabulated above.

In addition to the above, as Abo development progresses in this area, we may find it desirable from the standpoint of the most efficient means of operations to include wells located on other acreage covered by Order R-1295 in the battery that is proposed to serve the acreage described above. Therefore, we would also like to have approval to commingle production from any or all of the Abo wells completed now or at a later time on the acreage described below with other Abo production obtained from the acreage described above.

Federal LeaseDescription

4
LC 065478-B

NE/4 Section 3-18S-27E,
N/2 SW/4 Section 3-18S-27E

We would, however prefer the option to operate these wells (a maximum of six) under the provisions of Order R-1295 or under the provisions of an order that we might obtain approving the commingling plan outlined in preceding paragraphs.

Separate metering facilities will be used to meter production from each individual lease prior to the time that production is commingled with oil produced from other leases.

It is requested that this case be called at the earliest possible Examiner Hearing. Attached is a plat illustrating the acreage involved in this application.

Yours very truly,

Neil S. Whitmore
Neil S. Whitmore
District Superintendent

*Rechecked
Mailed
5-1-59*
DRC:js
Attachment

DOCKET: EXAMINER HEARING May 6, 1959
CASE 1662

F. O. Box 6721
Roswell, New Mexico

May 4, 1959

Pan American Petroleum Corporation
P. O. Box 766
Lubbock, Texas

Attention: Mr. Neil S. Whitmore

Gentlemen:

Your letters of March 25 and April 30, 1959, request our approval of metering and central storage installations you propose for the leases listed below. The installation was discussed in a conference with your representative, Mr. Gus Athanas, on April 28, 1959.

When the installations are complete, oil from the following described lands will be run to the battery in sec. 11:

Lease No.	T. 18 S., R. 27 E.
LC 067858	N $\frac{1}{2}$, SW $\frac{1}{4}$ sec. 11
✓ NM 025604	S $\frac{1}{2}$ SW $\frac{1}{4}$ sec. 3
* LC 065478(b)	N $\frac{1}{2}$, N $\frac{1}{2}$ SW $\frac{1}{4}$ sec. 3, E $\frac{1}{2}$ sec. 10

Oil from the following described lands will be run to the battery in sec. 3:

Lease No.	T. 18 S., R. 27 E.
NM 033625	N $\frac{1}{2}$ SW $\frac{1}{4}$, SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 4
NM 025530	SE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 4
LC 061783(a)	SW $\frac{1}{4}$ sec. 4
✓ NM 025604	N $\frac{1}{2}$, N $\frac{1}{2}$ SW $\frac{1}{4}$ sec. 9; W $\frac{1}{2}$ sec. 10
* L $\frac{1}{2}$ 065478(b)	N $\frac{1}{2}$, N $\frac{1}{2}$ SW $\frac{1}{4}$, E $\frac{1}{2}$ SW $\frac{1}{4}$, N $\frac{1}{2}$ SW $\frac{1}{4}$ sec. 3, S $\frac{1}{2}$ SW $\frac{1}{4}$ sec. 9
LC 061783(b)	W $\frac{1}{2}$ SW $\frac{1}{4}$ sec. 3

Automatic manifold equipment will be installed at the proposed second common storage area to flow the wells coming into that battery. The production from each well will be metered separately at the battery. Automatic custody transfer equipment will also be installed.

The method that you propose for gathering, metering, and shipping lease products from the aforementioned leases is satisfactory to this office.

Very truly yours,

(Orig. Sgd.) JOHN A. ANDERSON

JOHN A. ANDERSON
Regional Oil and Gas Supervisor

Copy to: Artesia
MWHCC-Santa Fe ✓

FORM 592-2-53

PAN AMERICAN PETROLEUM CORPORATION

REFERENCE:

5-15 19 59

MAIL ROOM CCC
MEMORANDUM

MR. Dan S. Nutter

RECEIVED MAY 15 1959

Dear Dan:

I want you to know that we appreciate your giving us the opportunity to review this order. Inasmuch as you indicated to Dan Currens that this was an unusual handling, I am taking the liberty of returning the order attached under personal cover and without a file record.

All of the lease and acreage descriptions are correct. In the Findings and the Order the battery in Section 3 is located incorrectly. It should be in the SW/4 SW/4 of Section 3. It is also located incorrectly on your sketch map. The battery location for the eastern acreage is described correctly in the Order and Findings but is shown incorrectly on the sketch. This sketch may not be a part of the Order, but I am just calling this to your attention.

It may be presumptuous of me to suggest this, but the location of the acreage and batteries described in Paragraphs (3) and (4) of the Findings is worded differently than it is under Paragraphs (1) and (2) of the Order. As I see it, the wording of the Findings is to be preferred since it locates both the battery and the acreage to be produced into that battery in T-18-S, R-27-E, NMPM, Eddy County, New Mexico.

GUS ATHANAS

PAN AMERICAN PETROLEUM CORPORATION

19

REFERENCE:

MEMORANDUM

MR.

In regard to the letter from the U.S.G.S., we realize that they indicated that oil would be run from the NE/4, N/2 SE/4, Section 3 into the battery in Section 11 and then repeated these lands in the lands which will run oil to the battery in Section 3. We consider this as their way of stating that they would not object to our using either battery to run oil from these lands. For your information, we had talked to them in an informal conference since it was difficult for them to understand our written request.

With the exception of the items noted above, the Order is satisfactory. Again, thank you for giving us this opportunity to review this Order prior to formal publication.

GA:ms


GUS ATHANAS

-2-

Case No. 1551
Order No. R-1295

(3) That the applicant proposes to commingle the Empire-Abo Pool production from the above-described leases after separately metering the production from each lease.

(4) That the applicant further proposes to produce more than sixteen wells presently completed or hereafter drilled in the Empire-Abo Pool on the above-described leases into a common tank battery.

(5) That approval of the subject application will not cause waste nor impair correlative rights provided that the production from each lease is separately metered prior to commingling and provided further that adequate testing and measuring equipment is installed.

IT IS THEREFORE ORDERED:

That the applicant, Pan American Petroleum Corporation, be and the same is hereby authorized to commingle the production from the Empire-Abo Pool from all existing and future wells on the following-described separate Federal leases:

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

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

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

all in Township 18 South, Range 27 East, Eddy County, New Mexico.

PROVIDED HOWEVER, That the production from each lease shall be separately metered prior to commingling.

PROVIDED FURTHER, That meters shall be checked for accuracy at intervals and in a manner satisfactory to the Commission.

PROVIDED FURTHER, That the applicant shall install adequate testing facilities to permit the testing of all wells located on the above-described leases at least once each month to determine the individual production from each well.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

EDWIN L. MECHEM, Chairman

MURRAY E. MORGAN, Member

A. L. PORTER, Jr., Member & Secretary

S E A L

BEFORE THE OIL CONSERVATION COMMISSION
OF THE STATE OF NEW MEXICO

IN THE MATTER OF THE HEARING
CALLED BY THE OIL CONSERVATION
COMMISSION OF NEW MEXICO FOR
THE PURPOSE OF CONSIDERING:

CASE NO. 1551
Order No. R-1295

APPLICATION OF PAN AMERICAN PETROLEUM
CORPORATION FOR PERMISSION TO COMMINGLE
THE PRODUCTION FROM THREE SEPARATE LEASES
IN THE EMPIRE-ABO POOL, EDDY COUNTY, NEW
MEXICO, AND FOR PERMISSION TO PRODUCE MORE
THAN SIXTEEN WELLS INTO A COMMON TANK
BATTERY.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 o'clock a.m. on November 19, 1958, at Santa Fe, New Mexico, before Elvis A. Utz, Examiner duly appointed by the Oil Conservation Commission of New Mexico, hereinafter referred to as the "Commission," in accordance with Rule 1214 of the Commission Rules and Regulations.

NOW, on this 26th day of November, 1958, the Commission, a quorum being present, having considered the application, the evidence adduced and the recommendations of the Examiner, Elvis A. Utz, and being fully advised in the premises,

FINDS:

(1) That due public notice having been given as required by law, the Commission has jurisdiction of this cause and the subject matter thereof.

(2) That the applicant, Pan American Petroleum Corporation, is the owner and operator of the following-described Federal leases in the Empire-Abo Pool, Eddy County, New Mexico:

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

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

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

all in Township 18 South, Range 27 East.

OIL CONSERVATION COMMISSION
SANTA FE, NEW MEXICO

Date _____

CASE NO. 1662

HEARING DATE _____

My recommendations for an order in the above numbered case(s) are
as follows:

(Cont)
The P. D. or Dump type meters shall
be of the corrosion resistant type.
In the event the P. D. meters show
corrosion or inaccuracy they shall be
replaced with D.T. meters.

Thos. H. [Signature]

Staff Member

OIL CONSERVATION COMMISSION
SANTA FE, NEW MEXICO

Date 5-6-59

CASE NO. 1662

HEARING DATE 5-6-59

My recommendations for an order in the above numbered case(s) are as follows:

Grant Dan Americans application to ~~cancel~~ ^{acquire} ~~for use of Battery~~ ^{by} ~~superceding R-1295.~~

Use all acreage in R-1295 Plus

NM-033825 N/2 NE/4, SW/4 NE/4, sec. 4-18S-27E
NM-025530 SE/4 NE/4 sec. 4-18S-27E.
LC-061783-A SE/4 sec 4-18S-27E.
NM-025604 N/2 SE/4, NE/4 sec. 9-18S-27E.
LC-065478-B S/2 SE/4 sec. 9-18S-27E.
N/2 NW/4 " 3 " "
E/2 SW/4 " 3 " "
LC-061783-B N/2 SW/4 sec. 3-18S-27E

The Federal No. 1 Battery to be located
in NE/4 NW/4 sec. 11-18S-27E.

The Federal No. 2 Battery to be located in
the SE/4 SW/4 sec. 3-18S-27E.

P.A. shall test ~~until~~ ^{Staff Member} ~~new~~ mouth
until further notice of the Commission.

BEFORE THE OIL CONSERVATION COMMISSION
OF THE STATE OF NEW MEXICO

IN THE MATTER OF THE HEARING
CALLED BY THE OIL CONSERVATION
COMMISSION OF NEW MEXICO FOR
THE PURPOSE OF CONSIDERING:

CASE NO. 1662
Order No. R-1399

APPLICATION OF PAN AMERICAN
PETROLEUM CORPORATION FOR
PERMISSION TO COMMINGLE THE
PRODUCTION FROM SEVERAL
SEPARATE FEDERAL LEASES IN THE
EMPIRE-ABO POOL, EDDY COUNTY,
NEW MEXICO, AND FOR PERMISSION TO
PRODUCE MORE THAN SIXTEEN WELLS
INTO A COMMON TANK BATTERY

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 o'clock a.m. on May 6, 1959, at Santa Fe, New Mexico, before Elvis A. Utz, Examiner duly appointed by the Oil Conservation Commission of New Mexico, hereinafter referred to as the "Commission," in accordance with Rule 1214 of the Commission Rules and Regulations.

NOW, on this 25th day of May, 1959, the Commission, a quorum being present, having considered the application, the evidence adduced, and the recommendations of the Examiner, Elvis A. Utz, and being fully advised in the premises,

FINDS:

(1) That due public notice having been given as required by law, the Commission has jurisdiction of this cause and the subject matter thereof.

(2) That the applicant, Pan American Petroleum Corporation, is the owner and operator of the following-described Federal leases in the Empire-Abo Pool Eddy County, New Mexico;

LC-067858, N/2 and SW/4 of Section 11
LC-065478-B, N/2 NW/4, NE/4, E/2 SW/4 and
N/2 SE/4 of Section 3; S/2 SE/4
of Section 9; E/2 of Section 10
LC-061783-B, W/2 SW/4 of Section 3

-2-

Case No. 1662

Order No. R-1399

NM-025604, S/2 SE/4 of Section 3; NE/4 and
N/2 SE/4 of Section 9; W/2 of Section 10
NM-033825, N/2 NE/4 and SW/4 NE/4 of Section 4
NM-025530, SE/4 NE/4 of Section 4
LC-061783-A, SE/4 of Section 4

all in Township 18 South, Range 27 East, NMPM, Eddy County, New Mexico.

(3) That the applicant proposes to produce the Empire-Abo wells on the following-described acreage into a battery located in the NE/4 NW/4 of said Section 11:

S/2 SE/4 and NE/4 SE/4 of Section 3
E/2 of Section 10
N/2 and SW/4 of Section 11

all in Township 18 South, Range 27 East, NMPM, Eddy County, New Mexico.

(4) That the applicant proposes to produce the Empire-Abo wells on the following-described acreage into a battery located in the SW/4 SW/4 of said Section 3:

NW/4 SE/4, NE/4, N/2 NW/4 and SW/4 of Section 3
E/2 of Section 4
E/2 of Section 9
W/2 of Section 10

all in Township 18 South, Range 27 East, NMPM, Eddy County, New Mexico.

(5) That the applicant further proposes to produce more than sixteen wells presently completed or hereafter drilled in the Empire-Abo Pool on the above-described acreage into each of the above-described tank batteries.

(6) That approval of the subject application will neither cause waste nor impair correlative rights provided that the production from each lease is separately metered prior to commingling and provided further that adequate testing and measuring equipment is installed.

IT IS THEREFORE ORDERED:

(1) That the applicant, Pan American Petroleum Corporation, be and the same is hereby authorized to commingle the production from the Empire-Abo Pool from all existing and future wells on the following-described acreage into a common tank battery located in the NE/4 NW/4 of Section 11, Township 18 South, Range 27 East, NMPM, Eddy County, New Mexico:

S/2 SE/4 and NE/4 SE/4 of Section 3
E/2 of Section 10
N/2 and SW/4 of Section 11

-3-

Case No. 1662
Order No. R-1399

(2) That the applicant be and the same is hereby authorized to commingle the production from the Empire-Abo Pool from all existing and future wells on the following-described acreage into a common tank battery located in the SW/4 SW/4 of Section 3, Township 18 South, Range 27 East, NMPM, Eddy County, New Mexico:

NW/4 SE/4, NE/4, N/2 NW/4 and SW/4 of Section 3
E/2 of Section 4
E/2 of Section 9
W/2 of Section 10

PROVIDED HOWEVER, That the production from each lease shall be separately measured with a corrosion-resistant type meter prior to commingling.

PROVIDED FURTHER, That meters shall be operated and maintained in such a manner as to ensure an accurate measurement of the liquid hydrocarbon production at all times.

PROVIDED FURTHER, That meters shall be checked for accuracy at least once each month until further direction by the Secretary-Director. Meters shall be calibrated against a master meter or against a test tank of measured volume and the results of such calibration filed with the Commission on the Commission form entitled "Meter Test Report."

PROVIDED FURTHER, That the applicant shall install adequate testing facilities to permit the testing of each well at least once each month to determine the individual production from each well.

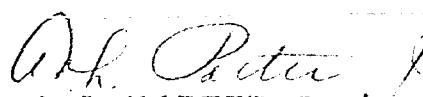
(3) That Order No. R-1295 be and the same is hereby superseded.

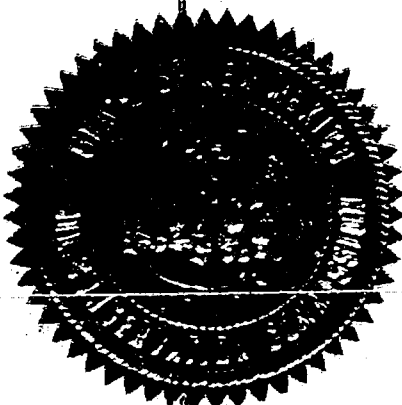
DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION


JOHN BURROUGHS, Chairman


MURRAY E. MORGAN, Member


A. L. PORTER, Jr., Member & Secretary



vam/

OIL CONSERVATION COMMISSION

P. O. BOX 871

SANTA FE, NEW MEXICO

C
O
P
Y

Mr. Kirk Newman
Atwood & Malone
P. O. Box 867
Roswell, New Mexico

Dear Mr. Newman:

On behalf of your client, Pan American Petroleum Corporation, we enclose two copies of Order R-1399 issued May 25, 1959, by the Oil Conservation Commission in Case No. 1662, which was heard on May 6, 1959 before an examiner.

Very truly yours,

A. L. PORTER, Jr.
Secretary-Director

lr/

Enclosures



UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

P. O. Box 672
Roswell, New Mexico

IN REPLY REFER TO:

May 4, 1959

Pan American Petroleum Corporation
P. O. Box 268
Lubbock, Texas

Attention: Mr. Neil S. Whitmore

Gentlemen:

Your letters of March 25 and April 30, 1959, request our approval of metering and central storage installations you propose for the leases listed below. The installation was discussed in a conference with your representative, Mr. Gus Athanas, on April 28, 1959.

When the installations are complete, oil from the following described lands will be run to the battery in sec. 11:

<u>Lease No.</u>	<u>T. 18 S., R. 27 E.</u>
LC 067858	N $\frac{1}{2}$, SW $\frac{1}{2}$ sec. 11
NM 025604	S $\frac{1}{2}$ SE $\frac{1}{2}$ sec. 3
LC 065478(b)	NE $\frac{1}{2}$, N $\frac{1}{2}$ SE $\frac{1}{2}$ sec. 3; E $\frac{1}{2}$ sec. 10

Oil from the following described lands will be run to the battery in sec. 3:

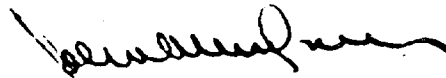
<u>Lease No.</u>	<u>T. 18 S., R. 27 E.</u>
NM 033825	N $\frac{1}{2}$ NE $\frac{1}{2}$, SW $\frac{1}{2}$ NE $\frac{1}{2}$ sec. 4
NM 025530	SE $\frac{1}{2}$ NE $\frac{1}{2}$ sec. 4
LC 061783(a)	SE $\frac{1}{2}$ sec. 4
NM 025604	NE $\frac{1}{2}$, N $\frac{1}{2}$ SE $\frac{1}{2}$ sec. 9; W $\frac{1}{2}$ sec. 10
LC 065478(b)	NE $\frac{1}{2}$, N $\frac{1}{2}$ NW $\frac{1}{2}$, E $\frac{1}{2}$ SW $\frac{1}{2}$, N $\frac{1}{2}$ SE $\frac{1}{2}$ sec. 3, S $\frac{1}{2}$ SE $\frac{1}{2}$ sec. 9
LC 061783(b)	W $\frac{1}{2}$ SW $\frac{1}{2}$ sec. 3

Automatic manifold equipment will be installed at the proposed second common storage area to flow the wells coming into that battery. The production from each well will be metered separately at the battery. Automatic custody transfer equipment will also be installed.

BEFORE EXAMINER UTZ
OIL CONSERVATION COMMISSION
5-859 EXHIBIT NO. 3
CASE NO. 166 ✓

The method that you propose for gathering, metering, and shipping lease products from the aforementioned leases is satisfactory to this office.

Very truly yours,



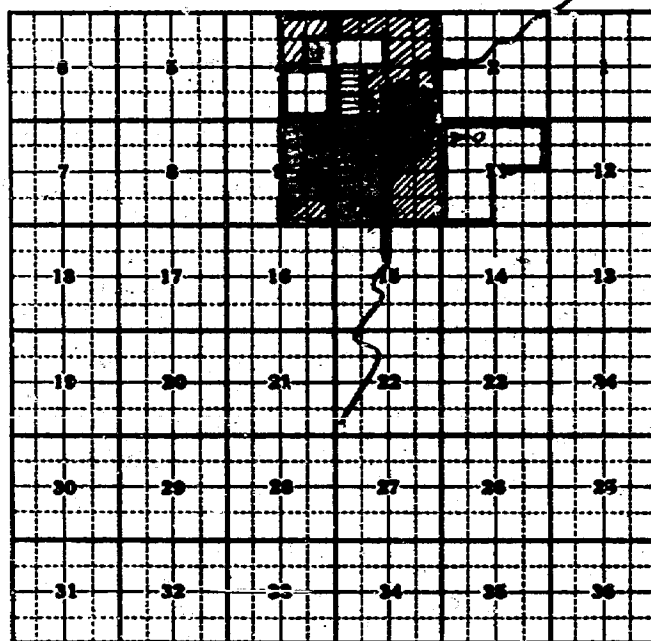
JOHN A. ANDERSON
Regional Oil and Gas Supervisor

Name

Address

Ph.

Remarks



T R State
or County

OIL CONSERVATION COMMISSION

P. O. BOX 871
SANTA FE, NEW MEXICO

February 8, 1962

C
O
P
Y

Pan American Petroleum Corporation
P. O. Box 68
Eobbs, New Mexico

Attention: Mr. V. E. Staley

Gentlemen:

Reference is made to your letter of January 5, 1962, wherein you propose to remove the four treaters presently installed in your Empire Ahe Storage System I and to replace them with separators and continuous sampling facilities. This commingling installation was authorized by Order No. R-1399, entered in Case No. 1662.

Inasmuch as the proposed method of allocating BS&W to each lease is in accordance with the Commission's "Manual for the Installation and Operation of Commingling Facilities," this office hereby approves your plan.

Very truly yours,

A. L. PORTER, Jr.
Secretary-Director

ALP/DSM/lr

cc: - Mr. M. L. Armstrong
Oil Conservation Commission
Artesia, New Mexico

Case File 1662

PAN AMERICAN PETROLEUM CORPORATION

Post Office Box 58
Hobbs, New Mexico

January 5, 1962

File: VES-9-400 x 986.510.1

Subject: Notification of Proposed
Installation of Continuous
Sampling Facilities, Empire
Abo Storage System I,
Empire Abo Field, Eddy
County, New Mexico

Mr. A. L. Porter
Secretary-Director
New Mexico Oil Conservation Commission
P. O. Box 871
Santa Fe, New Mexico

Dear Sir:

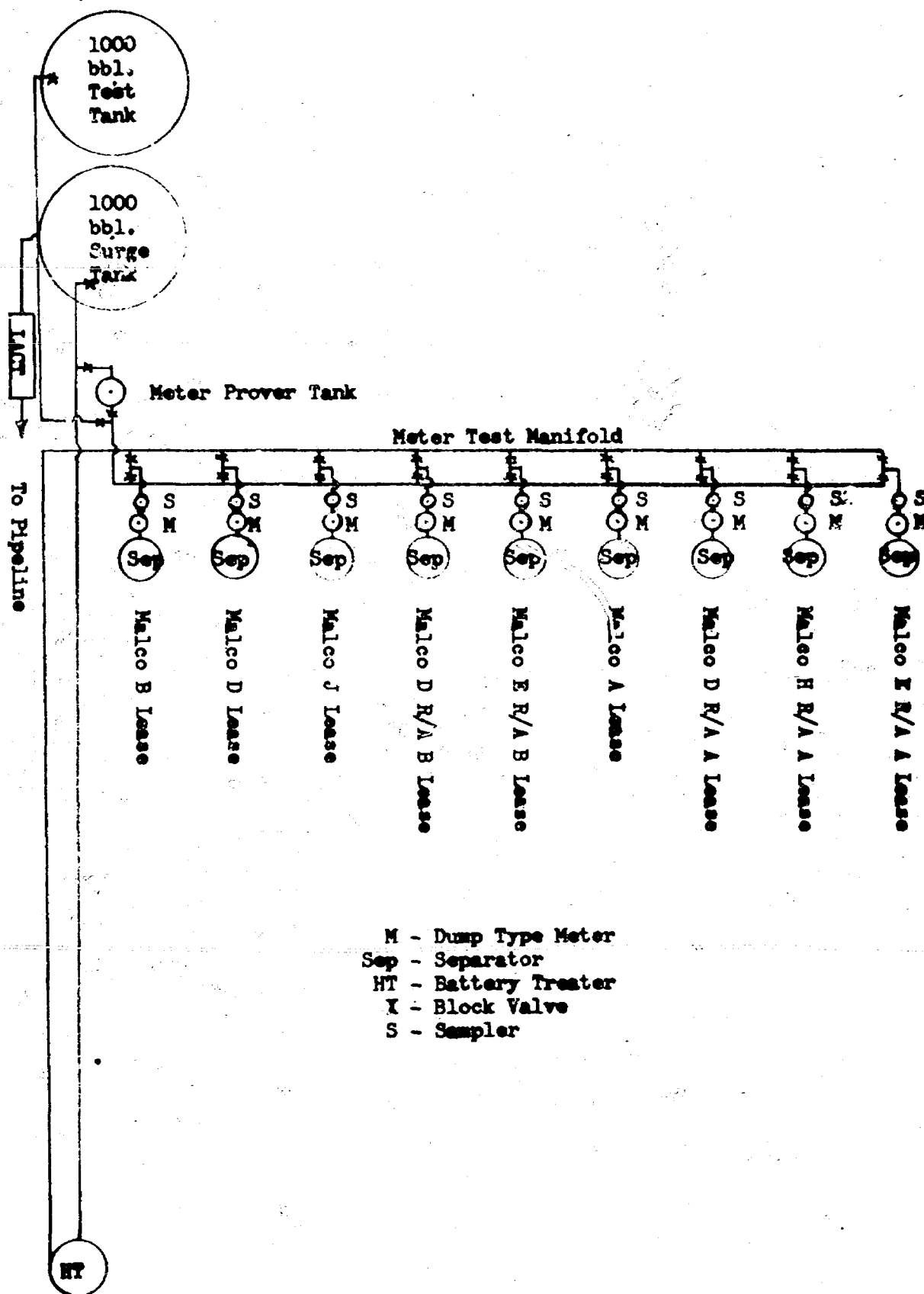
This has reference to Order No. 1399, Case No. 1662, wherein Pan American was granted permission to commingle production from various leases into the Empire Abo Storage System I located in the NE/4 NW/4 Section 11, T-18-S, R-27-E.

Pan American respectfully requests approval to install continuous sampling facilities at this battery. At the present time, four treaters are utilized to treat the oil from those leases producing in excess of 1% BS&W. Present plans are to replace the treaters with separators and equip all meters at the battery with continuous sampling facilities as shown on the attached plat.

Yours very truly,

V. E. Staley

Attachment



PAN AMERICAN PETROLEUM CORPORATION

Proposed continuous sampling facility, Empire Ace Storage System I, NE/4
 Sec 11, T-18-S, R-37-E, Eddy County, New Mexico

Scale:

Rev.
 No.

OIL CONSERVATION COMMISSION

P. O. BOX 2088

SANTA FE, NEW MEXICO

April 14, 1965

**Van American Petroleum Corporation
Post Office Box 48
Hobbs, New Mexico**

Attention: Mr. V. H. Staley

**AMENDMENT
Administrative Order CTS-118**

Gentlemen:

Reference is made to your application dated April 2, 1965, wherein you request an amendment to Administrative Order CTS-118 to permit the commingling of Empire Abo production from your Chalk Bluff Draw Well No. 1-P located in the SE/4 NE/4 of Section 8, Township 18 South, Range 27 East, with other Empire Abo production at your Empire Abo Storage System III located in the SW/4 SW/4 of Section 3, Township 18 South, Range 27 East.

It is our understanding that production from each lease is metered and sampled separately prior to commingling and that the production from the subject Well No. 1 would likewise be metered and sampled.

Administrative Order CTS-118 is hereby amended to permit the inclusion of the aforesaid Chalk Bluff Draw Well No. 1-P in the commingling installation as proposed, subject to the provisions of the Commission "Manual for the Installation and Operation of Commingling Facilities," including the requirement for temperature-compensated meters, couplers, and non-reset counters on the meters.

Very truly yours,

**A. L. PORTER, Jr.
Secretary-Director**

ALP/ESH/scr

**cc: Oil Conservation Commission (with enclosure) - Artesia
Oil & Gas Engineering Committee - Hobbs
United States Geological Survey - Maxwell**

DEPT.
OF MINES
May 11

5/12
5/18
5/19

BEFORE THE OIL CONSERVATION COMMISSION
OF THE STATE OF NEW MEXICO

IN THE MATTER OF THE HEARING
CALLED BY THE OIL CONSERVATION
COMMISSION OF NEW MEXICO FOR
THE PURPOSE OF CONSIDERING:

CASE NO. 1662
Order No. R-1399

APPLICATION OF PAN AMERICAN
PETROLEUM CORPORATION FOR
PERMISSION TO COMMINGLE THE
PRODUCTION FROM SEVERAL SEPARATE
FEDERAL LEASES IN THE EMPIRE-ABO
POOL, EDDY COUNTY, NEW MEXICO, AND
FOR PERMISSION TO PRODUCE MORE
THAN SIXTEEN WELLS INTO A COMMON
TANK BATTERY

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 o'clock a.m. on May 6, 1959, at Santa Fe, New Mexico, before Elvis A. Utz, Examiner duly appointed by the Oil Conservation Commission of New Mexico, hereinafter referred to as the "Commission," in accordance with Rule 1214 of the Commission Rules and Regulations.

NOW, on this _____ day of May, 1959, the Commission, a quorum being present, having considered the application, the evidence adduced, and the recommendations of the Examiner, Elvis A. Utz, and being fully advised in the premises,

FINDS:

- (1) That due public notice having been given as required by law, the Commission has jurisdiction of this cause and the subject matter thereof.
- (2) That the applicant, Pan American Petroleum Corporation, is the owner and operator of the following-described Federal leases in the Empire-Abo Pool, Eddy County, New Mexico:

LC-067858, N/2 and SW/4 of Section 11.

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

of Section 9; E/2 of Section 10.

LC-061783-B, W/2 SW/4 of Section 3.

NM-025604, S/2 SE/4 of Section 3; NE/4 and

N/2 SE/4 of Section 9; W/2 of Section 10.

NM-033825, N/2 NE/4 and SW/4 NE/4 of Section 4.

NM-025530, SE/4 NE/4 of Section 4.

LC-061783-A, SE/4 of Section 4.

all in Township 18 South, Range 27 East, NMPM, Eddy County, New Mexico.

no puncture
after
Sec. 70.

-2-

Case No. 1662

Order No. R-_____

(3) That the applicant proposes to produce the Empire-Abo wells on the following-described acreage into a battery located in the NE/4 NW/4 of said Section 11:

S/2 SE/4 and NE/4 SE/4 of Section 3_X

E/2 of Section 10_X

N/2 and SW/4 of Section 11_X

all in Township 18 South, Range 27 East, NMPM, Eddy County, New Mexico.

(4) That the applicant proposes to produce the Empire-Abo wells on the following-described acreage into a battery located in the SW/4 SW/4 of said Section 3:

NW/4 SE/4, NE/4, N/2 NW/4 and SW/4 of Section 3.

E/2 of Section 4_X

E/2 of Section 9_X

W/2 of Section 10_X

all in Township 18 South, Range 27 East, NMPM, Eddy County, New Mexico.

(5) That the applicant further proposes to produce more than sixteen wells presently completed or hereafter drilled in the Empire-Abo Pool into each of the above-described tank batteries. *on the above-described acreage*

(6) That approval of the subject application will neither cause waste nor impair correlative rights provided that the production from each lease is separately metered prior to commingling and provided further that adequate testing and measuring equipment is installed.

IT IS THEREFORE ORDERED:

(1) That the applicant, Pan American Petroleum Corporation, be and the same is hereby authorized to commingle the production from the Empire-Abo Pool from all existing and future wells on the following-described acreage into a common tank battery located in the NE/4 NW/4 of Section 11, Township 18 South, Range 27 East, NMPM, Eddy County, New Mexico:

S/2 SE/4 and NE/4 SE/4 of Section _X

E/2 of Section 10_X

N/2 and SW/4 of Section 11_X

~~all in Township 18 South, Range 27 East, NMPM, Eddy County, New Mexico.~~

1
PROVIDED HOWEVER, That the production from each lease shall be separately measured with a corrosion-resistant type meter prior to commencing

PROVIDED FURTHER, That meters shall be ~~checked~~
~~for accuracy~~ operated and maintained in such a manner as to ensure an accurate measurement of ^{the liquid hydrocarbon} production at all times.

PROVIDED FURTHER, That meters shall be checked for accuracy at least once each month until further direction by the Secretary-Director. Meters shall be calibrated against a master meter or against a test tank of measured volume and the results of such calibration filed with the Commission on the Commission form entitled "Meter Test Report."

PROVIDED FURTHER, That the applicant shall install adequate testing facilities to permit the testing of each well at least once each month to determine the individual production from each well.

1
(3) That Order No. R-1295 be and the same is hereby superseded.

Done at

-3-

Case No. 1662

Order No. R-_____

(2) That the applicant be and the same is hereby authorized to commingle the production from the Empire-Abo Pool from all existing and future wells on the following-described acreage into a common tank battery located in the SW/4 SW/4 of Section 3, Township 18 South, Range 27 East, NMPM, Eddy County, New Mexico:

NW/4 SE/4, NE/4, N/2 NW/4 and SW/4 of Section 3,

E/2 of Section 4,

E/2 of Section 9,

W/2 of Section 10,

~~all in Township 18 South, Range 27 East, NMPM, Eddy County, New Mexico.~~

PROVIDED HOWEVER, That the production from each lease shall be ^{measured} separately ~~metered prior to commingling~~ with a corrosion-resistant type meter ^{prior to commingling.}

PROVIDED FURTHER, That meters shall be checked for accuracy at least once each month until further direction by the Secretary-Director and the results of such tests furnished to the Commission. ~~the meters are to be checked for accuracy at least once each month until further direction by the Secretary-Director and the results of such tests furnished to the Commission.~~

PROVIDED FURTHER, That the applicant shall install adequate testing facilities to permit the testing of each well at least once each month to determine the individual production from each well.

(3) That Order No. R-1295 be and the same is hereby superseded.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

Meters shall be operated and maintained at all times to ensure that the liquids in such as manner as an accurate measurement of production at all times. meters shall be calibrated against a master meter or against a test tank of measured volume and the results of such calibration filed with the Commission on the Commission form entitled "meter test Report."