

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. 1703
Order No. R-1330-A

APPLICATION OF TIDEWATER OIL
COMPANY FOR AN AUTOMATIC CUSTODY
TRANSFER SYSTEM AND PERMISSION
TO COMMINGLE THE PRODUCTION FROM
SEVERAL SEPARATE OIL POOLS FROM
TWO SEPARATE LEASES IN LEA COUNTY,
NEW MEXICO

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 8:00 o'clock a.m. on June 24, 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 27th day of July, 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, Tidewater Oil Company, is the owner and operator of the two following-described Federal leases in the Justis Field, Lea County, New Mexico:

Coates "C" Lease, E/2, SE/4 NW/4 and NE/4 SW/4,
Section 24, Township 25 South, Range 37 East

Coates "D" Lease, SE/4 SW/4, Section 24, Township
25 South, Range 37 East

(3) That the ownership of said Federal leases is common throughout.

(4) That the applicant proposes to commingle the intermediate grade crude production from the Justis-Ellenburger, Justis-McKee, Justis-Fusselman,

Justis-Montoya, and Justis-Blinebry Pools from all wells presently completed or hereafter drilled on both the said Coates "C" and "D" Leases after separately metering the production from each pool, and to pass this commingled production through an automatic custody transfer system.

(5) That the applicant further proposes to commingle the sour crude production from the Justis-Drinkard and Langlie-Mattix Pools from all wells presently completed or hereafter drilled on both the said Coates "C" and "D" Leases after separately metering the production from each pool.

(6) That the applicant further proposes to determine the volume of production from each of the various pools underlying said Coates "C" Lease by subtracting the metered volume of production from that pool on said Coates "D" Lease from the total measured volume from the same pool underlying both leases.

(7) That approval of the subject application will neither cause waste nor impair correlative rights provided the production from each pool is separately metered prior to commingling.

IT IS THEREFORE ORDERED:

(1) That the applicant, Tidewater Oil Company, be and the same is hereby authorized to commingle the intermediate grade crudes from the Justis-Ellenburger, Justis-McKee, Justis-Fusselman, Justis-Montoya, and Justis-Blinebry Pools from all wells presently completed or hereafter drilled on both its Coates "C" and Coates "D" Leases, which leases are described as follows:

Coates "C" Lease, E/2, SE/4 NW/4 and NE/4 SW/4,
Section 24, Township 25 South, Range 37 East

Coates "D" Lease, SE/4 SW/4, Section 24, Township
25 South, Range 37 East

all in the Justis Field, Lea County, New Mexico.

PROVIDED HOWEVER, That the production from each pool shall be separately metered prior to commingling with the production from any other pool.

(2) That after separately metering the production from each of the above-mentioned pools, the applicant be and the same is hereby authorized to pass this commingled production through an automatic custody transfer system.

(3) That the applicant be and the same is hereby authorized to commingle the Justis-Drinkard and Langlie-Mattix production from all wells presently completed or hereafter drilled on said Coates "C" and "D" Leases.

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

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(4) That the applicant be and the same is hereby authorized to determine the production from each of the various pools underlying the said Coates "C" Lease by subtracting the metered volume of production from that pool on said Coates "D" Lease from the total measured volume from the same pool underlying both leases.

(5) That all meters shall be operated and maintained in such a manner as to ensure an accurate measurement of production at all times.

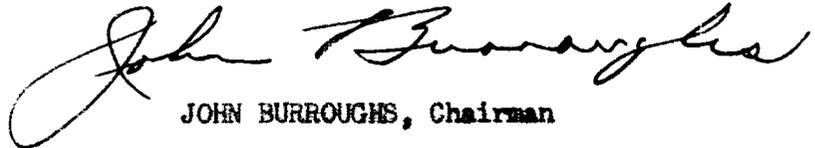
That all meters shall be checked for accuracy at intervals not to exceed one month until further direction by the Secretary-Director. Meters shall be calibrated against a master meter or against a test tank of measured volume and the results of such calibration filed with the Commission on the Commission form entitled "Meter Test Report."

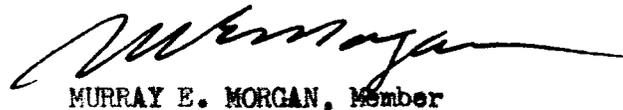
(6) That the applicant shall install adequate testing facilities to permit the testing of all wells located on the said Coates "C" and "D" Leases at least once each month to determine the individual production from each zone of each well.

(7) That Order Nos. R-1208, R-1297, and R-1330 be and the same are 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



BEFORE THE
OIL CONSERVATION COMMISSION
SANTA FE, NEW MEXICO

IN THE MATTER OF:

CASE NO. 1703

TRANSCRIPT OF HEARING

June 25, 1959

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

I N D E X

<u>WITNESS</u>	<u>DIRECT</u>	<u>CROSS</u>	<u>REDIRECT</u>
ROBERT N. MILLER	4	9	

ROBERT N. MILLER

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

DIRECT EXAMINATION

BY MR. SETH:

Q Will you state your name, please, Mr. Miller?

A Robert N. Miller.

Q By whom are you employed, Mr. Miller?

A Tidewater Oil Company.

Q And what are your duties in that connection?

A Area Petroleum Engineer in Hobbs, New Mexico.

Q Do you have to do with the lease production facilities?

A Yes, sir.

Q Have you testified at hearings before the
Conservation Commission?

A Yes, sir.

Q Considering Tidewater's application 1703, have you
prepared a plat showing the area covered by the application?

A Yes, sir.

Q Referring to this as Tidewater's Exhibit No. 1,
would you describe what it shows, please?

A Yes, sir. It is a lease ownership map of Section 25,
Township 25 South, Range 37 East, Lea County, New Mexico, and the
offset operators of the other sections. Outlined in red is

Tidewater's "A-B" Coates "C" lease, outlined in green is Tidewater's "A-B" States "D" lease.

Q Now, would you explain what the purpose in the application in this case is, Mr. Miller?

A The purpose of the application is Tidewater seeks an order authorizing it to commingle intermediate grade crude oils produced from its "A-B" Coates "D" lease with intermediate crude produced from its "A-B" Coates "C" lease and then to further commingle production through its automatic custody transfer system.

Q Now, has the Commission issued orders in commingling cases concerning these same leases?

A Yes, sir, they have.

Q Would you give us a brief resume of those orders?

A I would like to explain it with Exhibit 2.

Q Now, referring to the diagram as Tidewater's Exhibit 2, would you please explain what that shows?

A This Exhibit 2 is a simplified top view flow diagram of Tidewater's "A-B" Coates "C" and "D" facilities. Commission Order R-1297 provided that Tidewater could commingle its Fusselman, Montoya, McKee and Ellenburger production with the Blinebry if it proved to be intermediate grade crude to prior zone metering for determination with each zone's production.

Q Are those facilities shown?

A Yes, they are shown in Exhibit 2, and the complete

zone facilities are shown by the brackets. It further provided that Tidewater could commingle the Coates "C", Drinkard, the Coates "C" Langlie-Mattix and the Coates "C" Blinebry production if it proved to be sour crude with prior zone metering for determination of production for each zone. The reason the order was written that way, at the time of the application that resulted in Order 1297 the Blinebry was not developed. It has not been developed and has proven to be intermediate grade crude, and it is shown as the last separator on the right of the Coates "C" facilities, and is now being commingled with other intermediate grade crude in the Coates "C" lease. Order 1330 provided that Tidewater could commingle production from its "A-B" Coates "D" Fusselman zone with production from its "A-B" Coates "C" Fusselman zone. Then after metering to be commingled with other intermediate grade crudes on the Coates "C", which is the Montoya, McKee, Ellenburger and Blinebry. And that they could commingle their Coates "D" Drinkard production with the Coates "C" Drinkard production, and after metering it could be further commingled with the "A-B" Coates "C" Langlie-Mattix production. The other three intermediate grade crudes productive in this area that we have developed to date is the Ellenburger, Blinebry and Montoya. This application deals specifically with requests to commingle the "A-B" Coates "D" Ellenburger with the "A-B" Coates "C" Ellenburger. The "A-B" Coates "D" Blinebry, the "A-B" Coates "C" Blinebry, the "A-B"

Coates "C" Montoya, then after to be further commingled and passed through the automatic custody transfer system.

Q This application seeks to add the Ellenburger, Montoya and Blinbry zones on both leases to what the Commission has already granted?

A Yes, that's correct.

Q How are these shown?

A The Coates "D" facilities are shown the four separators on the right with the brackets in red pencilings. The four separators on the right are the three-phase metering separators. Tidewater felt that perhaps all of the zones would make water eventually, and due to the inability to sample free water, there was elected to install three-phase metering equipment to knock out the free water. A sample then would be obtained from the oil and emulsified water from which the water content of the measured oil would correct the volume to the pipe line oil. It would then pass in with your appropriate zone on the Coates "C" lease down through your zone meters where the oil is measured at 60 degrees and corrected for stock tank shrinkage to be further commingled with all of the same qualifications crude and pass into your surge tank for sale to the pipe line. Now, the primary reason for installing metering separators for the Coates "D" lease, these are both Federal leases, but under a different basic lease number. Therefore, under Federal regulations it's required to -- that prior

to removing oil from a lease it is necessary to measure that oil. We discussed the problem with the U.S.C.S. and they informed us that they would consider an individual flow line, since it is a continuous tube to be part of that lease and allow us to install the Coates "D" separators at the Coates "C" location.

Q Now, is this, in your opinion, an efficient and economical operation of the two leases concerned?

A Yes, the two zones that were previously given approval and have been installed in the Drinkard and the Fusselman have worked very satisfactorily.

Q Have the mechanical facilities, the equipment worked satisfactorily?

A Yes, sir.

Q Do you anticipate any particular problems if this petition is granted for this additional commingling?

A No, sir.

Q Are these all intermediate grade crudes as far as you know now?

A The present application is concerned, yes, sir, with intermediate grade crudes.

Q Is there anything further in connection with this application you would like to present?

A I believe not, no, sir.

MR. SETH: We would like to move that the Exhibits be

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admitted.

MR. UTZ: Without objection Exhibits 1 and 2 will be admitted.

MR. SETH: That is all the direct questions we had, Mr. Examiner.

CROSS EXAMINATION

BY MR. PAYNE:

Q Mr. Miller, what you either want now or have had authority in the past is a commingling of all the intermediate grade crudes from the "D" with each other and then with those intermediate grade crudes that are produced from the "C" lease?

A No, sir, if I understand your question. We want to commingle the same zone production from the Coates "D" and the Coates "C" and then to further commingle all production after it has been metered by zones.

Q Now, is it going to be metered by leases also?

A It is metered only on the Coates "D" lease. The total production is metered by the zone meters shown at the bottom and labeled as such, and the Coates "C" production can then be determined by subtraction.

Q And that method you say is satisfactory?

A Yes, sir. The Coates "D" lease being a 40 acre lease and the installation of three phase metering, separator metering, separator for the Coates "D" lease provides a 24 hour test on each

well every 24 hours such that it is not necessary to provide any test facilities other than what has been provided to handle your zone production, due to each zone having but one well on the Coates "D". Then we do have on the Coates "D" central test facilities for this their intermediate grade crudes in which to keep accurate monthly depths.

Q All right. So you commingle the Fusselman production with the "D", for example, with the Fusselman production from the "C", then you measure that. Then you commingle that with all other intermediate grade crudes produced from both of these leases which also have been separately metered. And the same thing with the sour crudes except that they are kept separate from the intermediate grade crudes.

MR. UTZ: So you are not metering the individual zones on the "C" lease, but you are getting that by subtraction?

A That's right.

Q (By Mr. Payne) You are metering each zone or are you metering each well on the "D" lease?

A Well, it happens to be since it is a 40 acre lease we are metering each well, but I believe it's under Order 309 as long as the working interest and royalty interests are common, the Commission doesn't require metering on anything. But since this is two Federal leases but under different basic lease numbers, they require that we meter the production from the "D" before

leaving that lease with it. And in the application resulting in Order 1330, we presented as an Exhibit at that time a letter from the U.S.G.S. approving this method of operation. I do not have titles of the exhibit to present.

MR. UTZ: Mr. Miller, you have the McKee, Ellenburger, and Blinebry and intermediate crudes from both leases producing at this time?

A We have the four shown producing at this time on the Coates "D" the Drinkard. We have in addition to that on the Coates "C" lease the McKee and Montoya. And this application is asking for permission in addition to the separator shown the four zones listed to also commingle the Montoya production if and when it's found commercial on that lease.

Q (By Mr. Payne) Do you think in the interest of clarity we might supersede the other orders and state it on the docket?

A State it such that the application showed it on the docket, I think would, yes.

Q That would help clarify it?

A I would like to point out, however, as shown on the docket, it states specifically intermediate grade crudes between the Coates "C" and the "D", while 1330 is handling one sour grade crude and one intermediate grade crude.

Q (By Mr. Payne) Yes, that's right.

MR. PORTER: How many different pay, Bob, would you finally have in your L.A.C.T. system?

A You mean at this time?

Q Yes.

A We have six.

Q There is a possibility of six for the Montoya?

A Well, now, the L.A.C.T. system handles the "C" and "D" and the Montoya handles the "C". The reason I say 6 because Gulf has four on 40 productive depending on how that holds out.

MR. PAYNE: This question has no bearing on the case, but do you think it may be possible here to recover all seven of those pays in any one well bore in this lease?

A Yes, sir. We have three particular wells on 40 acres in which we have 5 of the zones producing at this time.

Q Actually producing?

A Yes, actually producing.

Q Pretty good lease?

A Yes, sir.

MR. UTZ: Mr. Miller, as I understand this thing now, what I hope to be final resume, you have seven pay zones?

A On the Coates "C"? Well, that is intermediate grade crudes.

Q Okay. Give me the intermediate grade crudes.

A I'm sorry. There is 5 intermediate grade crudes, I

beg your pardon. The Fusselman, the Blinebry, the Montoya, Ellenburger, and McKee. And sour crudes we have the Drinkard, Langlie-Mattix.

Q And the Montoya is producing only on the "C" lease?

A Yes, sir.

Q And all the others are producing on both leases?

A Yes, sir. Now, the Langlie-Mattix well on the Coates "D" lease is an oil well completed and the gas cap and makes some distillate, and since it is an oil pool you can consider that it is productive.

Q Is there any McKee on the "D" lease?

A No, sir.

Q So if you had one order that would allow you to commingle all these zones on the "C" and "D" lease, metering on the "D" lease and getting this production on the "C" lease by subtraction and then commingling all of them on the "D" lease you would be satisfied?

A Yes, we would be satisfied.

Q You would leave the sour in 1330 and cover all the rest of them?

MR. UTZ: Are there any other questions of the witness?

MR. SETH: I don't believe I asked you directly about the ownership of the leases?

A Tidewater is the owning interest, and the government is the working interest.

MR. SETH: That's all I have.

MR. UTZ: Are there other questions? The witness may be excused.

(Witness excused.)

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

