

BEFORE THE  
OIL CONSERVATION COMMISSION  
NOVEMBER 19, 1958

IN THE MATTER OF:

APPLICATION OF TIDEWATER OIL COMPANY, CASE 1550

TRANSCRIPT OF HEARING

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

BEFORE THE  
OIL CONSERVATION COMMISSION  
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IN THE MATTER OF:

Application of Tidewater Oil Company to commingle  
the production from several separate oil pools.  
Applicant, in the above-styled cause, seeks an  
order authorizing it to commingle the production  
from the Ellenburger, McKee, Fusselman, Montoya  
and any other pool or pools encountered which  
produces oil of similar qualities on its Coates  
"C" Lease comprising the E/2 and SE/4 NW/4 and  
NE/4 SW/4 of Section 24, Township 25 South,  
Range 37 East, Lea County, New Mexico. Applicant  
further requests permission to commingle  
production from the Drinkard formation on said  
lease with any other pool or pools encountered  
which produce sour crudes. Applicant proposes  
to separately meter production from each pool  
prior to being commingled. Applicant further  
seeks permission to produce more than sixteen  
wells in said common facilities.

) Case 1550

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BEFORE:

Elvis A. Utz, Examiner.

TRANSCRIPT OF HEARING

MR. UTZ: Proceed to Case 1550.

MR. PAYNE: Case 1550, Application of Tidewater Oil  
Company to commingle the production from several separate oil  
pools.

MR. SETH: Oliver Seth for Tidewater. This is an applica-  
tion by Tidewater to commingle production from the Coates "C"  
Lease comprising the east half and the southeast quarter north-  
west quarter and the northeast quarter southwest quarter of

Section 24, Township 25 South, Range 37 East, Lea County, New Mexico, the production to be commingled, being from the Ellenburger, McKee, Fusselman, Montoya and other pools that may be encountered on the same lease which may produce intermediate grade crude, the application also to commingle production from the Drinkard with any other production that may be encountered which is classified as sour crude. There are but slight gravity productions in the production from the several pools. Mr. Miller will appear as a witness for Tidewater.

(Witness sworn.)

ROBERT N. MILLER

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

DIRECT EXAMINATION

BY MR. SETH:

Q State your name, please, Mr. Miller.

A Robert N. Miller.

Q Your position with the company?

A Area Petroleum Engineer.

Q Have you testified before the Commission on previous occasions?

A Yes, sir.

Q Has the Commission heretofore approved running Ellenburger production through automatic custody transfer equipment?

A Yes, sir. Order 1208, Tidewater was granted approval to transfer Ellenburger crude through LACT unit.

Q Has the Commission previously approved the commingling of oil from the Coates "C" and "D" Lease

A Administrative Order 32, Tidewater was granted approval to commingle between the Coates "C" and "D" Leases.

Q Have you prepared a plat on these leases in question showing the proposed facilities?

A Yes, sir.

Q Would you describe what Exhibit One shows?

A Exhibit One shows the location of Tidewater's A. B. Coates "C" Lease outlined in green and the location of the proposed commingling facilities outlined in a red rectangle.

Q Referring to Exhibit Number Two, would you describe what that is, please?

A That is a flow diagram of the proposed facilities.

Q Would you describe, please, briefly the routing of the oil?

A Through the McKee Zone -- all zones are identical.

Q You are beginning at the right hand side of the exhibit?

A Yes, sir. And, if the Commission please, we will go through the McKee section. All others are identical.

The well production comes through individual flow manifolds where it is either routed to the McKee production separator or the test separator. The test separator, as oil enters the production separator, the gas is separated and goes through a meter to gas sales to El Paso. The oil is dumped to a zone meter which is of

the dump type. Oil is metered there, being corrected to 60 degrees and ~~weather~~ conditioned and is dumped in a thousand barrel stock tank. There is a flow action previously approved by the Commission on 1,000 barrel stock tanks where it is transferred through to the pipe to LACT unit. Well produce is routed from the manifold through the test leg to the test separator where the gas is metered. The oil is metered through a test meter. It is dumped into a manifold and then routed to the appropriate zone for zone metering.

The test meter is also of the dump type.

Q Would you describe briefly the test circuit, whether or not facilities are available for periodic testing if the Commission so desires?

A Yes. There are facilities available. We have plans of testing one well, a well each month, and the test will be recorded by the pumper who reads the odometer on the test meter. All gas coming from the test separator is commingled with the Ellenburger sales line; however, there is a gas meter on the test and each month it will be easy to deduct that amount of the gas produced through your Ellenburger gas sale.

Likewise, the production for the Fusselman, Montoya and Ellenburger can be routed as explained for the McKee zone.

Q And the oil from the test meter, test separator, is routed back through the appropriate circuit?

A Yes, sir, through a manifold into the appropriate zone meter.

Q Ahead of the zone meter?

A Yes, sir, that is correct.

Q Now, in the application of Tidewater, you have requested approval of a similar handling of any future production?

A Yes, sir.

Q Of oil of comparable quality. How would that, if the Commission approves the application in that respect, how would that be handled?

A It would be handled by putting a similar manifold production separator and zone meter for whichever was added, and the production would be the same as any other zone.

Q And the test separator would be utilized for that as well?

A Yes, sir. There is one test facility for all zones.

Q Have you prepared an additional exhibit showing a little more graphically the installation of the separator?

A Yes, sir, it's identical to Exhibit Two except it is an isometric drawing and shows the location of treaters at such times the zones produce water.

Q Do you contemplate the installation of these treaters at the present time?

A No, sir. There are no wells producing water from the four intermediate grades, crudes, proposed to commingle as described. We do not anticipate they will make water in the immediate future.

Q This Exhibit Number Three shows how the meters would be set in the circuits, is that correct? I mean the treaters?

A Yes, sir, it shows how they will be set in the line.

Q Is there any other comment on Exhibit 3 you would like to make?

A None, other than the fact should the Commission approve this the individual zone allowable will be determined by the dump meters and the allowable as run through the pipe line will be determined by the LACT unit.

Q Do you have any comments concerning the accuracy of the dump type meter?

A We have none in operation. The only testing that we can quote is that done by independent laboratories of the type meter we plan on installing has the accuracy of 99.5 percent based on weighted volumes put through the laboratory. There has been more extensive testing done on a similar type meter, and I will quote from an average. The average never fell below 99.8 percent for any set of the tests run and fell below 99.9 percent for only seven of the 28 groups of tests, the group of tests being flow rates of 250, 500, 750 and a thousand barrels per day at common pressure of 500 psig.

Q I notice you have no exhibits prepared as to the Drinkard?

A No, sir.

Q Will the Drinkard production be handled through a similar facility?

A At the present time it is handled through conventional type lease facilities. In the event there are more zones encountered that produce sour classification of crude oils, it could be set up; and we are asking for permission to set it up as our intermediate grade crudes in a similar manner.

Q That will evade future hearings in the event additional production zones are encountered on the same lease?

A Yes, sir.

Q What has the USGS indicated its position as to this application?

A Yes, sir, they have approved that. We have as Exhibit Number Four the letter from Mr. John Anderson, Regional Oil and Gas Supervisor, approving this type of installation.

Q Have you received any statement of the position of the pipe line company?

A Yes, sir. We have submitted as Exhibit 5 a letter from Mr. Whitaker to the New Mexico Oil Conservation Commission approving the commingling of the similar classifications of crude oils.

Q Would you state the advantages of the installation of this system that you've proposed?

A It will save in materials approximately 20 thousand dollars. There will be accrued savings produced, weathering time, based on the experience of Tidewater and of other operators, and will lead to more efficient operations. There will be workovers



of wells in the future, and by having these accurate well tests, we can perform workovers in an optimum time.

Q Does the installation of a facility of this type lead to better, easier well tests?

A Yes, sir, more accurate well tests.

A And is it so arranged that tests at irregular times or whenever requested by the Commission can be made satisfactorily?

A Yes, sir.

Q Is there any other comment on the application you'd like to make?

A Other than the API corrected gravity of the four crudes in question and sulfur content is as follows: Ellenburger 33.8 degrees API. Corrected gravity with sulfur content of .22 percent. McKee, 41.15 degrees. Corrected gravity 0.4 degrees. Fusselman 36.9 degrees API. Corrected 0.44 degrees. Montoya 37.1 degrees API. Corrected gravity sulfur content 0.36 percent.

Q Are all of those as far as sulfur content within reasonable limits would you say?

A Yes.

MR. SETH: At this time we offer Exhibits One through Five in evidence.

MR. UTZ: Without objection, they will be recieved.  
Any questions of the witness?

#### CROSS-EXAMINATION

BY MR. PAYNE:

Q You have Administrative Order CTB-32?

A Yes, sir.

Q It provides A. B. Coates D Lease -- referring to Exhibit One -- A. B. Coates D. Lease is the southeast, the southwest of Section 24, 25, 37; the Coates C Lease is shown outlined in green by Administrative Order CTB-32?

MR. SETH: I don't believe it is outlined in green on One.

MR. PAYNE: I see it here.

A A. B. Coates C is outlined in green. We were granted permission to commingle oil between the Coates C Lease and the Coates D Lease, royalty being common, working interest being common.

Q (By Mr. Payne) That is from all zones?

A That is the commingling of Fusselman oil from the Coates D with Fusselman oil of the Coates C, Drinkard oil from Coates D and Drinkard oil from Coates C, keeping each zone independent.

Q So the D Lease doesn't come in this common tank battery now?

A Yes, sir, by virtue of CTB Number 32.

Q That is for the Fusselman oil?

A That is for the Fusselman and Drinkard.

Q As I understand it, this battery here outlined in red doesn't have anything to do with the Drinkard?

A Yes, sir, that is where the Drinkard is located there.

Q No Drinkard oil is to be produced into this one?

A No, sir. The Coates D Lease as set out in Administrative

Order CTB-32, as pertaining to the Exhibit 2, commingling application, refers only to the Fusselman depth. We have authority to commingle oil from the Coates C; in the event we drill an Ellenburger well on the Coates D, there is none at this time.

Q I'm getting at now this Montoya production and the McKee production; leave it those two. If you had any of that production on the D Lease, you have no authority to commingle that into this common tank battery, is that right?

A That's right. We would have to ask for an Administrative CTB Order. We have, through this order, we have permission to commingle oil from the Ellenburger and the Fusselman zones as pertaining to the intermediate grade crude on the Coates lease. That is all.

Q On this automatic custody transfer, you have an order on the Justice-Ellenburger, there, is that correct?

A That's correct.

Q That will be all that is tied into the LACT system at present?

A That is all that is tied in at the present time. When this system is put in, all systems will go through the LACT Unit.

Q Then you'd have to have another hearing? I mean, does the order provided for the Justice-Ellenburger provide for other oils?

MR. SETH: It provides for the approval of the system to run oils from the Coates C Lease. I don't believe there is any

particular question as to what zone it comes from. With the installation of this system, it won't make any difference as we see it what oil is run through that system if the system meets the approval of the Commission. As such, we have the separate metering and testing before, ahead of that system, if this application is approved. So the entire commingled production will be returned through the automatic unit then, but the separate testing, metering and so forth will be, if this application is approved, will be accomplished through this system.

Q (By Mr. Payne) Do you see any possibility of encountering sweet crudes other than in four zones?

A Yes, sir, there is a possibility there. There is another zone in that area, the Blinebry, which was analyzed by Gulf Oil Corporation and found to be sour. It was analyzed by the Texas-New Mexico Pipe Line and found to be sweet. The Texas-New Mexico pipe line has set up the first well for any lease, established classification of that crude for that lease only. Therefore, we have two classifications. It would be hard for us to tell whether the Blinebry-Tidewater or Coates C Lease would be sour or sweet.

Q The way your application was framed, whether it was sour or sweet, you'd be able to produce into common storage if it was sour with the Drinkard, if it was sweet with the Montoya, etc.

A Yes, sir.

MR. SETH: That's the reason it was so presented.

MR. PAYNE: Thank you.

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

(Witness excused.)

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

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STATE OF NEW MEXICO    )  
                              ) ss  
COUNTY OF BERNALILLO )

I, JOHN 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.

*John Calvin Bevell*  
NOTARY PUBLIC

I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of Case No. 1550, heard by me on *Apr. 19*, 1958.

My Commission Expires:  
January 24, 1962

*James A. [Signature]* Examiner  
New Mexico Oil Conservation Commission