

BEFORE THE
OIL CONSERVATION COMMISSION
SANTA FE, NEW MEXICO

IN THE MATTER OF:

CASE 1682

TRANSCRIPT OF HEARING

JUNE 3, 1959

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BEFORE THE
OIL CONSERVATION COMMISSION
SANTA FE, NEW MEXICO
JUNE 3, 1959

IN THE MATTER OF:

CASE 1682 Application of Continental Oil Company for
permission to commingle the production from
two separate pools. Applicant, in the
above-styled cause, seeks an order authoriz-
ing it to commingle the oil production from
the Blinbry Oil Pool and the Tubb Gas Pool,
from wells located in the E/2 NE/4 and the
NE/4 SE/4 of Section 17, Township 21 South,
Range 37 East, Lea County, New Mexico.

BEFORE:

Daniel S. Nutter, 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. NUTTER: Next case on the docket will be Case 1682.

MR. PAYNE: Case 1682. Application of Continental Oil
Company for permission to commingle the production from two separ-
ate pools.

MR. KELLAHIN: Jason Kellahin, Kellahin & Fox, Santa Fe,
New Mexico, representing the applicant. We will have one witness,
Mr. Lyon.

(Witness sworn)

VICTOR T. LYON,

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

DIRECT EXAMINATION

BY MR. KELLAHIN:

Q Will you state your name, please?

A Victor T. Lyon.

Q By whom are you employed and in what position, Mr. Lyon?

A I am employed by Continental Oil Company as district engineer in the Eunice District, Eunice, New Mexico.

Q Have you previously testified before the Oil Conservation Commission as an expert petroleum engineer and had your qualifications accepted?

A Yes, sir, I have.

MR. KELLAHIN: Are the witness' qualifications acceptable?

MR. NUTTER: Yes, sir, they are.

Q Mr. Lyon, are you familiar with the application in Case 1682?

A Yes, sir.

Q And what is proposed in that application?

A This is the application of Continental Oil Company for an exception to Rule 303 in order to commingle the production from the Tubb and Blinebry Pools on our Lockhart "A" 17 lease, located in Section 17, Township 21 South, Range 37 East.

Q Now, referring to what has been marked as Exhibit No. 1, would you state what that is?

A Exhibit No. 1 is a plat showing the Lockhart "A" 17 lease and the immediate surrounding area. The lease is outlined in red

and is shown, and is composed of two tracts of land; one consisting of the E/2 of the NE/4, and the NE/4 of the SE/4 of Section 17, and the other parcel consisting of the W/2 of the SE/4 of Section 17, Township 21 South, Range 37 East.

The particular tract that we are involved here with today is the East, the E/2 of the NE/4 and the NE/4 of the SE/4, 120 acres in size, and the No. 4 Well is shown circled in red. This well is a dual completion completed in the Drinkard and Tubb Pools. The No. 3 Well, which is a Blinebry oil producer, is shown circled in green. The No. 4 Well had been dually completed and anticipated to be a Drinkard Oil Tubb Gas dual. However, the Tubb zone proved to be oil productive, and so an amended application was filed asking for approval as a Drinkard Oil Tubb Oil dual completion.

Q Now, is the oil from the lease as you describe it, that you want to commingle under this application, is that correct?

A I didn't understand your question.

Q I say, it is the oil solely from that eastern area outlined in red?

A Yes, sir.

Q Is the ownership common throughout on that lease?

A Yes, it is.

Q The royalty interest ownership and the working interest ownership?

A Yes, sir. The parcel of the west--consisting of the W/2, SW/4 is not involved in this thing at all. It has its own

storage facilities.

Q Now, referring to what has been marked as Exhibit No. 2, will you describe what that is?

A Exhibit No. 2 is a schematic diagram of the proposed installation. It shows the three wells on this lease Nos. 2, 3, and 4, and it shows 2 -- No. 2 and No. 4 producing into the Drinkard battery, No. 3 producing into the Blinebry battery, and No. 4 proposed to be connected to the Blinebry battery after being metered through a metering separator. The metering separator involved is a two-phased metering separator with a sampler so that the volume of oil and water produced can be accurately measured.

Q And then the production from each of the zones would be separately measured before commingling?

A No, they would not each be separately measured, according to our proposal. The Tubb production would be measured and then the balance of production, of course, would be Blinebry.

Q Now, what type of meters would you use in there, Mr. Lyon?

A We propose to use a two-phase metering separator which is a separator with a one-barrel dump meter internally built into it.

Q Now, can you tell us anything about the fluid characteristics from these two reservoirs?

A Well, I can tell you some about the Blinebry, and a little about the Tubb. The Blinebry is sweet crude, 36 degree gravity, and the Tubb, we feel that we don't have a truly representative sample of the crude yet because of the fact that when it became

apparent that the well would be an oil well, the fluid produced from it may have been somewhat contaminated by the Drinkard crude which was used to frac the well. But we believe that it -- it appears to be sweet and in the range of around 40 degree gravity.

Q Now, the Tubb zone in the Lockhart "A" 17 No. 4 has been completed, has it not?

A Yes, sir.

Q Has a B. C. order been entered approving that completion as yet?

A No, sir. It has been filed and is presently pending. It was received by the Commission on the 6th day of May, and I understand the order is being held up awaiting a favorable report from the Hobbs office.

Q Now, is your tank battery adequate to handle the production which you anticipate from the various zones involved here?

A Yes, sir. We have two 210-barrel tanks, and the No. 3 Well producing from the Blinebry has an allowable of 5 barrels a day. The No. 4 Well, that is, the Tubb portion of it, tested at 15 barrels of oil, and no water per day. Consequently, we have about twenty days' storage on the lease.

Q Now, in your opinion, is the commingling of the fluids from the two zones an economical measure?

A Yes, sir.

Q Is it in the interest of the conservation and the protection against waste?

A Yes, sir. We fell that commingling the crude from these two wells will prevent considerable loss of oil by weathering, due to the fact that it takes such a long time to fill a tank from the Blinebry crude or from the Tubb.

Q What has been the production from the Blinebry separately?

A About five barrels a day.

Q And the oil has been run into the tanks until a sufficient amount has accumulated to run, is that the situation?

A That is correct.

Q And if more oil is available, will that reduce the time which the oil would be exposed to weathering?

A Yes, sir. The weathering time would be reduced by about 75 percent.

Q Were Exhibits 1 and 2 prepared by you or under your direction and supervision?

A Yes, sir.

MR. KELLAHIN: At this time we would like to offer in evidence Exhibits 1 and 2.

MR. NUTTER: Without objection, Continental's Exhibits 1 and 2 will be received.

MR. KELLAHIN: That's all we have.

MR. NUTTER: Any questions of the witness?

MR. PAYNE: Yes, sir.

MR. NUTTER: Mr. Payne.

CROSS EXAMINATION

BY MR. PAYNE:

Q Mr. Lyon, as I understand it, your application is just to commingle the Tubb and Blinebry production on a portion of this lease, is that correct?

A Yes, sir.

Q Just the E/2 of the NE/4 and the NE/4 of the SE/4?

A That is correct.

Q Now, you propose to meter only the Tubb, is that correct, and then subtract that from the total to determine the Blinebry production?

A Yes, sir.

Q By that method, any shrinkage that takes place will be charged against the Blinebry, wouldn't it?

A I believe that is true.

Q Would your company be willing to separately meter both formations?

A Yes, sir.

MR. PAYNE: That's all. Thank you.

QUESTIONS BY MR. NUTTER:

Q Mr. Lyon, what is the purpose of the heater treater there in the system?

A That is to separate or to facilitate the separation of oil and water from the Blinebry formation.

Q Is there any necessity to run the Tubb production through a heater treater?

A Not at the present time, but we feel that probably down the road it will be necessary to do so.

Q But you are metering the production prior to the time it goes through the heater treater on the Tubb leg of this connection, is that correct?

A Yes, sir. Of course, these connections have not been made. Initially it may be connected downstream from the treater.

Q There is no necessity at the present time for treating the Tubb production, though?

A We found no indication of water to date, but, of course, our production history is extremely limited.

Q Now, if you install meters on both systems, what will you do? You will put a similar separator on the Blinebry leg of the installation, a similar type of separator that you have indicated here for the Tubb leg?

A We would either do that or install an external dump meter downstream from the separator.

Q Downstream from the separator. What type of a sampler is this deal, Mr. Lyon?

A Well, it is a sampler which can be set to take samples at just about any desired interval at almost any desired amount, which, in other words, it has quite a variety of settings so that you can take a large sample or a small sample, but it extracts from the stream a sample of the fluid passing through the line.

Q Now, by means of this sampler, would you know how much oil

and water is coming from the Tubb into that heater treater?

A Yes, sir. The heater treater -- excuse me -- the separator, the metering chamber in the separator would, of course, meter all of the liquid and the sampler would determine the amount of water, and by -- multiplying by the percent oil, you could arrive very easily at the amount of oil produced.

MR. NUTTER: Any further questions? Mr. Kellahin.

REDIRECT EXAMINATION

BY MR. KELLAHIN:

Q Mr. Lyon, in response to a question by Mr. Payne, you stated that if there were any shrinkage under the proposed system, it would be charged against the Blinebry production. In the event there were shrinkage, would there be any danger of it exceeding the allowable or having any other effect on account of shrinkage?

A No, I can see no effect. There certainly would be less shrinkage of the entire fluid than there is of the Blinebry now.

Q And the Blinebry production, as I understand your testimony, is quite low?

A Yes, sir, it is.

MR. KELLAHIN: That's all.

: RECROSS EXAMINATION

BY MR. NUTTER:

Q Is the ownership of the Blinebry and the Tubb formations identical?

A Yes, sir.

Q Mr. Lyon, there is no diversion of ownership for depth here?

A No, sir.

QUESTIONS BY MR. PORTER:

Q You say five barrels a day, Mr. Lyon?

A Yes, sir.

MR. NUTTER: If there are no further questions of Mr. Lyon, he may be excused.

(Witness excused)

MR. NUTTER: Does anyone have anything further they wish to offer in Case 1682? Take the case under advisement and take next Case 1687.

STATE OF NEW MEXICO)
) ss
COUNTY OF BERNALILLO)

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 16th day of June,
1959, in the City of Albuquerque, County of Bernalillo, State of
New Mexico.

Joseph A. Luzzi
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. 1682
heard by me on 6-3-59, 1959.
_____, Examiner
New Mexico Oil Conservation Commission