BEFORE THE
OIL CONSERVATION COMMISSION
Santa Fe, New Mexico
January 28, 1960

IN THE MATTER OF

CASE NO. 1881

TRANSCRIPT OF PROCEEDINGS

January 28, 1960

I N D E X

NUMBER	EXHIBIT	MARKED FOR IDENTIFICATION	INTRODUCED	OFFERED	ADMITTED
App.#1	Plat	3	4	8	8
" #2	Schematic Diagram	3	5	8	8
" #3	3-Dimensional Drawing	3	7	8	8

BEFORE THE
OIL CONSERVATION COMMISSION
Santa Fe, New Mexico
January 28, 1960.

IN THE MATTER OF: APPLICATION OF TEXACO, INC., for approval of an automatic custody transfer system. Applicant, in the above-styled cause, seeks an order authorizing the installation of automatic custody transfer facilities to handle the Crossroads-Devonian Pool production from the U. D. Sawyer lease comprising the E/2 of Section 34, Township 9 South, Range 36 East, Lea County, New Mexico.	CASE NO. 1881

BEFORE:

Elvis Utz, Examiner

TRANSCRIPT OF PROCEEDINGS

MR. UTZ: The next case will be Number 1881.

MR. PAYNE: Application of Texaco, Incorporated, for approval of an automatic custody transfer system.

Let the record show that the witness has previously been sworn.

MR. WHITE: Charles White, of Gilbert, White and Gilbert, Santa Fe, New Mexico, appearing on behalf of the applicant. We have one witness, Mr. Robinson.

(Thereupon Applicant's Exhibits 1, 2, 3, and 4, were marked for identification.)

J. E. ROBINSON, JUNIOR

a witness, called by and on behalf of the Applicant, having been previously sworn, testified as follows:

DIRECT EXAMINATION

BY MR. WHITE:

Q Mr. Robinson, are you acquainted with Texaco's application for an automatic custody transfer system, on its U. D. Sawyer lease?

A Yes, sir, I am.

Q Is the Texaco Company the sole owner and operator?

A They are.

Q Will you refer to Exhibit Number 1, and explain it to the Commission, please?

A Exhibit Number 1 is a plat of the area, showing Texaco's U. D. Sawyer lease, located in Section 34 and 35 of Township 9 South, Range 36 East. The lease is bordered with the yellow marking. It shows that Texaco has three wells completed in the Crossroads-Devonian Pool. It also shows all other wells within the immediate area that are completed in the Crossroads-Devonian Field.

In this application, Texaco is asking for an ACT Unit, since it is economically desirable, in that it will conserve natural resources by preventing waste, reduce the initial investment cost, and improve operating efficiency and economics.

Q Where will this unit be located?

A It will be located in the approximate center of our lease, covering the East half of Section 34. Texaco is completing their well Number 3 at this time. Wells Number 1 and 2 are completed in the Devonian, at a depth in excess of 12,000 feet; with flowing pressures of wells Number 1 and 2 there, between 25 and 40 PSI. Well Number 3 will be completed, and will be pumped by a Cope pump in the future. This is a water drive reservoir, and all wells will be pumped by Cope installations.

Q Now, will you refer to Exhibit Number 2, and explain it, please.

A Exhibit Number 2 is a schematic diagram, showing the surge tanks, and the controls that are located on the surge tanks. I might say that before the oil gets here, it comes from the well through the flow line into a separator, and then into a treater, and then into three 500-barrel power oil tanks. This oil will be used as power oil for the Cope pumps, and the -- this oil carries a gritty material, gilsonite, which if not allowed to settle out, will plug up the screens on the Cope pump, and by running the oil through the power oil tanks, we allow two days settling time for the gilsonite to settle out, and then it will come into the surge tanks. The surge tanks have a fabricated boot attached to the tank, with the low level switch located five points, five feet above the bottom of the tank, and with the high level switch located 11 feet above the bottom of the tank.

This exhibit was prepared, taking into consideration, the

lease allowables, which were 253 barrels a day. The -- when the oil reaches the upper float switch, the Lact unit will be turned on, the oil will come out near the bottom of the tank, and be passed through a B. S. & W. Monitor. If the oil is acceptable by the pipeline, it will be, continue going downstream to the Lact Unit. If it is not acceptable by the pipeline, a selenoid valve, a shut-off valve, will shut off downstream; a recirculating valve will open, and a B. S. & W. Monitor pump will start and recirculate the oil back to the treater until such time as acceptable oil starts passing the B. S. & W. Monitor.

With the exhibit as shown, presently with three wells, and using the lease allowable of 243, we have a daily rate of 729 barrels a day allowable.

We have 177 barrels of additional storage above the high level swith in Tank "A", and we have 500 barrels storage in Tank "B"; or, actually, we have .93 days, or 22.3 hours additional storage capacity; with the 750 barrels a day allowable in January, we have 21.6 hours of additional storage.

We are presently considering drilling an additional well in the field, and when we install this, we are going to put on the third 500-barrel surge tank, which will give us 37.6 hours storage with three wells, or 28.2 hours storage with four wells.

Q Then, in your opinion, do you believe these storage facilities will be adequate?

A Yes, sir, I do. The maximum time that the lease will

go unattended, is 18 hours. This pumper, we have pumpers on this lease, seven days a week in that he will come and check the lease in the morning on his initial rounds, and then he will recheck the lease again in the afternoon, prior to going in. And the maximum time that the lease will go unattended, is 18 hours. We are not automizing -- making the lease automatic. We are merely asking for an automatic custody transfer to eliminate additional tank batteries.

Q In the event there were a power failure, then there would be an overflow into Tank "B", is that correct?

A That's correct. And also into Tank "C", which we will install.

Q Now, will you refer to Exhibit 3, and explain that to the Commission?

A Exhibit 3 is a 3-dimensional drawing of the automatic custory transfer system itself. As the oil passes the B. S. & W. Monitor, and is acceptable by the pipeline, it will go downstream where it will be picked up by the gear pump. The oil will pass through the gear pump into a strainer, where any foreign matter will be strained out of the oil. It will then pass through a deaerator, which will allow any air to be bled out of the system. Also, the deaerator will have an additional safety device, or a float, that would shut down the unit in case of a malfunction or failure on the low level switch on the surge tank. The oil will pass through the deaerator, and will pass through the P. D. meter,

which has a temperature compensator and a sampler spool device within the unit. The sampler spool device will allow a sample of the crude, that is proportional to the flow passing through the meter, to be collected and stored in a 20-gallon container for the pipeline. It will pass on downstream where it will pass through a back pressure valve, or a shut-in valve. This back pressure valve will keep a back pressure on the pressure on the system, you see, thus preventing gas from bleeding out in the system, as it is passing through the back unit.

We also have a prover connection on this unit. On that well prover, are meters which measure it through a prover tank. The crude from the Devonian is sweet, and we do not expcet any corrosion from the sweet crude. However, the strainer and air eliminator will be plastic coated.

Q And the gas-oil ratios on your wells Number 1 and 2 are too small to measure?

A Yes, sir, they are.

Q And what are the gravities?

A The gravity is 44.2 degrees.

Q Were these exhibits prepared by you, or under your direction?

A Yes, sir, they were.

MR. WHITE: We move the admission of the exhibits.

MR. UTZ: Without objection, they will be entered.

Q (By Mr. White) Is there anything further you have to

say in regard to this application?

A No, sir.

MR. WHITE: That's all we have on direct examination.

QUESTIONS BY MR. UTZ:

Q Mr. Robinson, am I clear on the fact that there is 677 barrels of storage, total, in both tanks "A" and "B"?

A No, sir. There is 177 barrels of storage in Tank "A", to the equalizer line. And, after Tank "B" fills to the equalizer line, there is a storage of 500 barrels there.

Q That's a total storage of how much?

A We have 677 barrels.

Q In those tanks?

A Yes, sir, above the high level switch.

Q Yes.

A I'm sorry, I thought you meant with a fill-up of 11 feet in Tank "B".

Q No, I was trying to clarify the 677 barrels storage, in two 500-gallon tanks.

A Yes, sir.

Q So, you have the difference between 677 and a thousand, above the transfer line, or equalizing line? In other words, don't these 500-barrel tanks hold 500 barrels?

A That's correct, yes, sir.

Q Then why don't we have a thousand barrels of storage?

A We do have a thousand barrels of storage. We have

500-barrels in Tank "B". We have 177 barrels of storage above the high level swith, located on Tank "A". If you have a malfunction or a power failure at the moment that the crude reaches the high level swith, then you would have an additional 677 barrels of storage left.

Q Oh, I see, all right.

A However, we were putting on an additional 500-barrel tank, and actually, we would have 1,177 barrels of storage.

Q Do you carry this lease by the U. D. Sawyer name?

A Yes, sir.

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

QUESTIONS BY MR. PAYNE:

Q Who is the pipeline that takes this oil, Mr. Robinson?

A I believe Magnolia.

Q Do you have any corrosion problem with the Devonian production here?

A No, sir. It is a sweet crude.

Q No paraffin problem?

A No problems. We have a little paraffin there, but no problem.

Q Are these pumping wells, or flowing wells?

A Wells 1 and 2 are presently flowing wells, with tubing pressures varying between 25 and 40 pounds. Well Number 3 will be pumped by a Cope installation.

Q Now, you don't have a low oil shut-off switch, do you?

A Yes, sir. The low level switch will shut off at a point five and a half feet above the bottom of Tank "A".

Q I see. How about a low pressure shut-off switch?

A On the Lact unit itself. The back pressure valve, at the end of the system, that keeps a back pressure on the unit, it will shut the unit down in case of a failure in the system there, or a line break in the system.

MR. PAYNE: Thank you.

MR. UTZ: The witness may be excused.

(Witness excused.)

MR. UTZ: Any other statements to be made in this case?

(No response.)

MR. UTZ: The case will be taken under advisement. We will take a short recess.

(Recess.)

STATE OF NEW MEXICO)
) ss.
COUNTY OF BERNALILLO)

I, THOMAS T. TOMKO, Court Reporter, 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 under my personal supervision, and that the same is a true and correct record to the best of my knowledge, skill and ability.

WITNESS my hand this 29th day of January, 1960, in the City of Albuquerque, County of Bernalillo, State of New Mexico.

Thomas T. Tomko

Thomas T. Tomko, Court Reporter.

I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of Case No. 1881, heard by me on 2-10, 1960.

Examiner
New Mexico Oil Conservation Commission