BEFORE THE OIL CONSERVATION COMMISSION STATE LAND OFFICE BLDG. Santa Fe, New Mexico November 30, 1960 IN THE MATTER OF: APPLICATION OF SINCLAIR OIL & GAS COMPANY for permission to commingle the production from two separate pools and for an automatic custody transfer ) system. Applicant, in the above-styled cause, seeks permission to commingle the production from the Denton-Devonian and Denton-Wolfcamp Pools from CASE ) all wells presently completed or hereafter drilled on ) NO. 2128 its T. D. Pope Lease, consisting of the W/2 of Section 36, Township 14 South, Range 37 East, Lea ) County, New Mexico after separately metering only ) the Denton-Wolfcamp production. Applicant further ) seeks permission to install an automatic custody transfer system to handle said commingled production.

**BEFORE:** 

Daniel S. Nutter, Examiner

# TRANSCRIPT OF PROCEEDINGS

MR. MORRIS: Application of Sinclair Oil & Gas Company for

permission to commingle the production from two separate pools and for an

automatic custody transfer system.

MR. WHITE: May the record show that the same counsel is

appearing as recorded in Case 2127.

MR. NUTTER: Yes, sir.

MR. MORRIS: Let the record show that the witness has



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### DIRECT EXAMINATION

### BY MR. BURTON:

Q Will you please state your full name, by whom you are employed and in what capacity?

A R. M. Anderson, Senior Petroleum Engineer, Sinclair Oil & Gas Company, Midland Division Office.

Q Are your qualifications as an engineer before the Commission?A Yes, they are.

Q Have you made a study of the matter now being heard?

A Yes, I have.

Q Please proceed with the exhibits which you prepared and what is Exhibit No. 1?

A Exhibit No. 1 is a area map showing the sub-lease which is Sinclair's T.D. Pope Lease outlined in red. This lease is in the Denton-Devonian and Denton-Wolfcamp fields. I have colored the eight Devonian wells green and I have colored the five Wolfcamp wells red.

Q What is the ownership of the working interest and royalty here so far as the records of the company show?

A This is Fee land and the working interest and royalty interests are common and identical with regard to the two reservoirs.

Q Sinclair is the operator of the lease?

A Yes.

Q With reference to Exhibit Nos. 2 and 3, please explain the



like system, LACT system you propose.

Exhibit No. 2 is a diagrammatic sketch of the proposed tank Α battery installation and this is a little more complicated than the previous application in that we have Kobe pumping equipment installed in the Devonian wells. Starting with the Devonian header, we finished four of the wells that come in and go to one heater treater and the other four Devonian wells go to a second heater treater. The production from the heater treaters then go into a pair of flumes and thence into two 1500 barrel tanks. We are installing at this time a vapor recovery unit and that unit takes the vapors off the top of the flume which is the point of the lowest pressure in the system and compresses them and puts them back into the casing head gas line where they are metered along with the regular casing head gas and any liquids that are recovered are put into the power oil tank and thence are eventually sold to the - through the LACT system and for that reason because we are installing vapor recovery units, we are proposing to bring the different Wolfcamp wells and put them through their heater treater and meter the oil from the Wolfcamp and then inject that oil into the top of one of the flumes so that the vapors from the Wolfcamp can be recovered by the vapor recovery unit.

The power oil tanks of course have two outlets, one of them to the Kobe pumps and the oil is pumped down to the Devonian wells, mixes with the new production in the bottom of the well and is produced back out with the new Devonian oil from the wells and of course then comes back to the header. Any excess oil over the power oil requirement flows out of the top of the power oil tank and will go to the first 1000 barrel surge tank for settling purposes and



then into a second 1000 barrel surge tank which in turn discharges this oil to the LACT system. There is a prover tank to be installed on this system by Service Pipe Line Company and is agreeable in this installation that that will be their tank. It is their custom to set their own tank on one of these installations and it will be used to calibrate our meters. I believe that is the explanation on how the battery will work with regard to Exhibit No. 2.

Q Your Exhibit No. 3 is a detail of the automatic unit?

A Yes.

Q And is this the same equipment shown on your Exhibit No. 3 in the previous case, No. 2127?

A Yes, except the components are a little larger in this. We have two models and this is our larger model and it is designed from 700 to 2500 barrels of oil per day. We see on it two oil meters and the purpose of those are to double check each other. With this volume of oil involved, why, we have a double check on the amount of oil. We deem it necessary to have two meters and outside of that and the prover tank, it is identical to the previous unit.

Q So your testimony in this application would be the same except for that difference?

A Yes.

Q What would be the effect of commingling, the price received for the oil in this case?

A Here again both crudes are high gravity subject to penalty for high gravity and therefore when they are commingled, the resulting blend



calculates to come out the exact selling price of the commingled blend as some of the individual crudes. So there is no price advantage or disadvantage in commingling these crudes.

Q In your opinion, is this proposed system a reliable and economic means of measuring and transfering the custody of the oil produced?

A Yes, sir.

Q Is it in the interest of prevention of waste?

A Yes, sir.

Q And will there be any impairment of correlative rights?

A No, sir.

MR. BURTON: We would like to offer the exhibits into the

record.

MR. NUTTER: One through three will be admitted. Anyone

have any questions of Mr. Anderson?

# CROSS EXAMINATION

BY MR. PAYNE:

Q Mr. Anderson, are any of Denton-Wolfcamp or Denton-Devonian on this lease top allowable?

A No, sir.

Q Could you give me some relative production figures?

A I am sorry, yes, yes they are top allowable. The Denton-Devonian wells are all top allowable wells. The Denton-Wolfcamp wells are all less than top allowable and I have some production figures. The allowable in September for the Devonian wells was 55,971 barrels. However, they



produced 41,703 barrels which is about 75% of their allowable, and the Wolfcamp zone, its' allowable was 5790 barrels and it has produced 3078 barrels so it is not producing even its limited allowable and the Devonian wells are considerably under productive, they are top allowables.

Q

Is any individual well a top allowable well?

A It is my understanding they are not, they all have declined to a point where they are all somewhat less than top allowable. There is no individual well at this time that is capable of top allowable.

Q That is the Devonian as well as the Wolfcamp?

A Yes, sir.

Q You do propose in this case also to meter the Denton-Wolfcamp only and subtract that from the total?

A Yes, sir.

Q This lease is fully developed with the exception of three wells which would be completed in the Wolfcamp by dualing existing wells?

A Yes, sir. I don't know whether they could be dualed or not at these depths with the casing program that is in the three Devonian wells. I don't know whether they could be dualed, there certainly are three existing Wolfcamp completions on the lease.

Q Do you know if Sinclair is drilling any of these Wolfcamp locations?

We do not have any present development in the lease.

For all practical purposes your application is limited to the

existing wells?

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Yes.

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MR. PAYNE: Thank you.

MR. BURTON: However your application is filed for a present and future wells?

A That is right.

MR. BURTON: That is all we have.

# CROSS EXAMINATION

BY MR. NUTTER:

Q What is the reason the Devonian production is split and goes through two systems? Is it a matter of capacity for one system?

A Yes, sir, it is a matter of capacity of the heater treaters and that is the reason.

Q Would Sinclair Oil Company, if either or both of these zones became capable of producing top allowable, be willing to install additional positive displacement meters downstream from the heater treaters on the Devonian side or to re-open this case for further study?

A Yes.

MR. NUTTER: Any further questions of Mr. Anderson? You may be excused. Do you have anything further in this case, Mr. Burton?

MR. BURTON: Nothing further.

MR. NUTTER: Does anyone have anything further for case 2128? We will take the case under advisement and call case 2129.



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STATE OF NEW MEXICO COUNTY OF BERNALILLO

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SS.

I, LEWELLYN F. NELSON, 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 16-in day of this 1960, in the City of Albuquerque, County of Bernalillo, State of New Mexico.

Lewellyn F. Nelson, Court Reporter.

I do hereby certify that the foregoing is a complete recurs of the proceedings in the Example hearing of Case No. 212 , 19**60** heard by me on 11/30 inner, Examiner New Mexico Oil Conservation Commission