BEFORE THE

# Oil Conservation Commission

SANTA FE, NEW MEXICO

November 17, 1954

IN THE MATTER OF:

CASE NO. 779 - Regular Hearing

TRANSCRIPT OF PROCEEDINGS

ADA DEARNLEY AND ASSOCIATES
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BEFORE THE
OIL CONSERVATION COMMISSION
Santa Fe, New Mexico
November 17, 1954

IN THE MATTER OF:

Application of the Commission upon its own motion for revision of Rule 312 of its Rules and Regulations to promulgate supplementary and additional rules governing the acquisition, transportation and sale of drip gasoline and trap oil.

Case No. 779 - (Cont'd.)

BEFORE:

Honorable Edwin L. Mechem
Mr. E. S. (Johnny) Walker
Mr. William B. Macey

TRANSCRIPT OF HEARING

MR. MACEY: The next case on the docket is Case 779.

MR. GIRAND: At the request of the Commission I formulated some proposed amendments to Rule 312, Section C of the Rules of the Commission. It has just recently come to my attention that these changes will not be entirely applicable to all of the interested parties, in that certain of the industries such as the gas pipeline people will only be confronted with drip gasoline, and will not be confronted with the other items covered in the order. We were attempting to assist the Commission in formulating a system of results which would provide for an adequate accounting method for transporters and purchasers of so-called waste oil, scrubber oil, washing oil, creek oil and drip gasoline. In compiling these amendments or changes, we followed more or less a reporting system and requirements of the Commission for operators who operate what

standpoint of service to the Commission. We want the Commission to understand our position. Thank you.

MR. MACEY: Thank you. Mr. Howell, do you have a statement in this case, or do you have any testimony to give in the case?

MR. HOWELL: Ben Howell, El Paso Natural Gas Company. El Paso Natural Gas Company introduced testimony in this case at a previous hearing. We do not care at this time to introduce any additional testimony. We have prepared some suggested rules which, in general, are the same as suggested rules previously filed by the company. We have revised those in the interest of clarity and added one additional rule, which would require the owner of a gathering and transmission line, that gathers and transports liquid hydrocarbons recovered from drips or other collecting devices on said lines, to file with the Commission a monthly report on Form C-112 indicating therein stocks of liquid hydrocarbons on hand and deliveries to storers or refiners for the month.

We have a number of these copies and we will just offer these as the suggestion of the company, and anyone who wants copies, I think there are enough to go around. They will be available right here.

MR. MACEY: Mr. Ainsworth, do you have a statement?

MR. AINSWORTH: Do you want me to be sworn?

MR. WALKER: Are you going to give testimony or read a statement?

MR. MACEY: I don't think it is necessary.

MR. AINSWORTH: My name is Earl Ainsworth, Permian Basin Pipeline Company, Omaha, Nebraska.

In the development of this Case 779, there have been numerous

references to a certain contract between Permian Basin Pipeline Company and Mr. Joseph S. Newman of Hobbs, New Mexico. Up to this time, Permian has entered no appearance in this case; however, at this time, we would like to make a statement of a general nature in connection with the case.

There does exist a contract between Permian and Mr. Newman, dated June 24, 1954. The primary term of the agreement is for one year from last June 24th.

MR. MACEY: Mr. Ainsworth, they can't hear you in the back.

MR. AINSWORTH: We have already furnished this Commission with a photostatic copy of the contract with Mr. Newman, and, if I may, I should like at this time to introduce that contract, by reference, as a part of this record. Is that satisfactory?

MR. MACEY: That is quite all right.

MR. AINSWORTH: The contract that we have been talking about simply gives Mr. Newman the right to and imposes upon him the responsibility to remove liquid condensates from a number of pipeline "drips" on our Lea County gathering system. Under the agreement, Mr. Newman has full freedom and full responsibility as to the disposition of these condensates.

It is generally known, of course, that in the operation of gas-gathering pipelines, it becomes necessary to construct and connect "drips" at intervals along the line for the purpose of accumulating condensates that separate in liquid form from the natural gas passing through the lines in order to prevent the restriction of the flow of gas through the pipelines. The alternative to some such an arrangement as we have made with Mr. Newman is to blow these condensates into a pit and burn them. And that constitutes waste of

a usable product, although to the pipeline company it is a waste product and a nuisance.

All of the drips to which Mr. Newman has access are located downstream from well metering stations. Hence, all the condensates available to him have settled out of the natural gas stream after the gas has been metered. Therefore, the accounting to operators and royalty owners includes such volumes of gas that liquefy after passing through the meters and thereupon become the problem with which this case is concerned.

Permian Basin Pipeline Company has been operating in New Mexico just a little over a year now, and we have tried diligently to acquaint ourselves with the rules of this Commission and to abide by them. Of course, we shall abide by whatever reasonable rules the Commission might adopt as a result of these proceedings. We do, however, suggest to this Commission that the rules proposed by Famariss Oil and Refining Company in this case go far beyond the needs of this Commission, and would only lead to additional, unnecessary paper work with which we are all burdened enough already.

We respectfully suggest that if this Commission finds need for any rules governing the disposition of so-called "drip gasoline" that those simpler rules proposed by El Paso Natural Gas Company would be entirely adequate. That is the extent of my statement.

MR. MACEY: Thank you, Mr. Ainsworth. Does anyone have any testimony now to present in the case? Proceed with your testimony.

MR. KITTS: I would like to have Mr. Stanley sworn.

S. J. STANLEY,

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

DIRECT EXAMINATION

By MR. KITTS:

Q Will you state your name and position, please?

A S. J. Stanley, Engineer for the New Mexico Oil Conservation Commission.

Q Where is your place of employment, Mr. Stanley?

A Hobbs, New Mexico.

Q You have testified many times before this Commission as a Petroleum Engineer, have you not?

A Yes, sir, I have.

Q Mr. Stanley, I believe you have made a study of the problem of drip gasoline or drip oil or distillate in the lines of Southeastern New Mexico?

A Yes, sir, I have.

Q Before proceeding with your testimony, you have a statement containing certain recommendations that you wish to make to the Commission?

A Yes, sir, I do.

Q Would you give that, please?

A I recommend that this Commission prevent the burning, evaporation and waste caused by seepage in open pits of hydrocarbon accumulation in gas transmission systems, or scrubber oil recovered at a gasoline plant.

Second, I recommend that the Commission institute controls governing the acquisition, transportation and disposition of crude oil or condensate accumulated in gas transmission systems or treating plants, commonly referred to as scrubber oil, and appropriately reported by use of Commission Form C-112 and C-110.

In conjunction with this recommendation it is further recommended that each owner or operator of a gas transmission system designate the transporter or transporters by means of Form C-110; that the transporter designated by the pipeline transmitter shall erect storage for the accumulation and accurate measurement of hydrocarbons, and shall report to the Commission on Form C-112, the exact amount of hydrocarbon recovered for each month of operation; and shall account for an accurate disposition of such hydrocarbons as deemed necessary by the Commission.

Q Is that your statement?

A Yes, sir.

Q In connection with your study, Mr. Stanley, have you prepared certain exhibits?

A Yes, sir, I have.

(Marked Commission's Exhibits 1 through 6 for identification.)

Q Would you go to Exhibit 1 and explain what that is?

A First of all I would like to divide my testimony into two parts. I would like to talk about low pressure gathering systems, or casinghead gasolines, whereby gas is recovered in a field by separation of that gas from oil.

Now, commonly in a field we have what is marked here as Exhibit Number 1, which is a low pressure separator, and we have many different innovations and different designs of separators. The modern separator is actually a horizontal separator. Nevertheless, the principle is the same. Whenever we speak of casinghead gas we usually refer to gas that is separated from the oil under relatively low pressure conditions. Usually a back pressure on a gas trans-

mission line will vary maybe as low as two pounds and it may be as high as 50 pounds. Nevertheless, in this exhibit we have what we call an inlet flow diverter, in which oil and gas enter this particular vessel together and gas being much lighter than a fluid, will naturally go to the top of this particular vessel. When it does, we usually have a connection on the particular vent line in which gas is going and at that particular connection we find that a gas transmitter will connect to the vent line and at that particular point take this casinghead gas.

We also have on this separator a device called an oil outlet valve. We also have what is called a back-pressure gas control valve. Actually these two valves operate on the same principle.

In this particular exhibit I would like to show this Commission why we do have a hydrocarbon accumulation, usually crude oil, in a low-pressure gas line.

We know that the accumulation of hydrocarbon varies seasonally; that we receive a more accumulation of hydrocarbons in a gas transmission line in the winter time than we do in the summer time. There is a particular reason for this. First of all the oil outlet valve is subjected to corrosion, it is subjected to calcium sulphate deposition or calcium carbonate deposition, and occasionally we find in a field that the oil outlet valve may actually freeze, due to the fact that water and oil may pass from the separator into the treating system through this particular valve. We find that whenever this valve freezes that it can freeze either in an open position which would allow the gas and all the fluids to pass into the stock tanks, or into the treating system, or it could freeze in a closed position. When it freezes in a closed position we fill

our vessel completely full with fluids, that could be water and oil, and at that time, whenever this vessel is filled full of fluids, they actually pass into a gas transmission system.

I would like at this particular time to present one of these valves. I would like to show this Commission what we call a back-pressure valve, and by the same principle, what we call an oil-dump valve. They work on the same principle. I obtained this particular valve, due to the fact it was inoperative, that is, it would not hold any back-pressure, and by the same principle a dump valve working. I would like to show the Commission the corrosion, the deposition that occurs in this particular valve and in its setting position, why this particular valve would leak.

Q We have designated that as Exhibit 3?

A Yes.

MR. KITTS: We request permission to withdraw that Exhibit.

A We have other adaptations of valves that the operators are using in the field, and we have noticed especially in the Monument Pool that operators have installed a different type of a valve, which is a modern version of this valve, and I would like to show the Commission this particular valve. It actaully has a ceramic body inside the valve, whereby there will not be deposited sulphate or carbonate deposition, and this valve is also equipped with a clamper and no ring device. It can't be replaced when it is worn out.

Secondly, many operators in the Monument Pools themselves have installed that same device between the gas transmission connection and the separator, to insure that they will continuously have a back-pressure on the separator, and thereby causing the fluids to

enter the stock tanks.

Q Will you explain very briefly, Mr. Stanley, the workings and purpose of a back-pressure valve, for the record?

A This particular separator requires, or any separator in the field requires a certain amount of pressure to overcome hydrostatic head and friction, in order for any hydrocarbon to move in this particular separator to a stock tank or a treating system. We usually find that the stock tanks are much higher elevation and actually are higher than the separator, causing this particular separator to dump its fluids only at a certain pressure, due to the fact that we have a higher hydrostatic head to overcome, and also friction. Naturally we saw in the field, or observed in the field, the operators have gone through quite a bit of expense in order to use another device or back-pressure valve which is installed between the gas transmission connection and the separator. In many cases, however, an operaotr will use the back-pressure device on what is called a meter loop.

Q You are now referring to what has been marked as Exhibit 2, are you not?

A Yes.

Q That is a photograph taken by you?

A Yes, sir, I took that photograph. In this particular device where an operator does not have a back-pressure valve as referred to previously, they utilize the pressure on this particular valve which belongs to the gas transmitter, to maintain a certain pressure on the separator.

I would like to mention the fact that this valve itself is subject to corrosion. It can mechanically fail, and when it does, we may

expose the pressure of this particular separator at such a low point that it can not dump these fluids, either to a treating system or into a stock tank. Therefore, we could have double failure, the sticking of the oil outlet valve, or mechanical failure in a back-pressure valve on the meter loop. Anytime we have these failures and the pressure is insufficient to dump the fluid, naturally these fluids will pass into the gas transmission line. I would like to show the Commission some samples that we have collected from low-pressure gas lines throughout Southeastern New Mexico.

(Marked Commission's Exhibits 7 through 25, for identification.)

Q I believe those are marked Exhibits 7 through 12?

A This particular Exhibit is from El Paso Natural Gas Company, Exhibit Number 11, from their Plant Number 2 in Section 24, Township 24 South, Range 37 East. The gravity of this particular product is 28 degrees, at 60 degrees fahrenheit.

Q Was that collected from a drip?

A Yes, sir, at the time that we collected this sample, El Paso Natural Gas Company had installed automatic drips throughout their system, and we obtained this sample directly from an automatic drip that was emptying this product into an open pit.

We have here, Exhibit Number 12. It also came from a 30 inch line, coming into what is called their Plant Number 2. It has a gravity of 28 at 60 degrees fahrenheit.

We have here what is marked Exhibit Number 10. We obtained this particular sample from Warren Gasoline Plant in Monument. We obtained this product from the scrubber system. It has a gravity of 28 at 60 degrees fahrenheit.

We also have some additional samples on El Paso's lines. This particular exhibit marked Number 9 has a gravity of 28 at 66 degrees fahrenheit.

Q That was, likewise, collected from a drip, was it?

A Yes, sir. We have here what is marked Exhibit Number 8, the Gulf Gasoline Plant in Eunice, New Mexico. We obtained this sample from a scrubber system in the particular plant, and it has a gravity of 30 degrees at 67 degrees fahrenheit.

We also have what is marked Exhibit Number 7. This was also picked up from El Paso Natural Gas Company lines, and a feeder line going into Plant Number 2, Section 34, Township 24 South, Range 37 East. It has a gravity of 30 at 64 degrees fahrenheit.

The reason that I am showing these samples is the fact that I would like to show to the Commission that the hydrocarbon accumulations in a low-pressure gas line, we believe, are mainly crude oil. This particular oil is indicative of the Langley-Mattix oil or the Monument Pool oil.

Q Mr. Stanley, were all these exhibits, were they collected by you or under your direction?

A They were collected under my supervision, on December 10, 1954, which was just a few days ago. We had a very fortunate thing happen in Southeast New Mexico, we actually received a snowfall.

Q January 10th?

A I mean January, excuse me. We knew at that particular time, with the temperatures being low, we know that these mechanical difficulties during the cold spell are encountered, as previously mentioned, and usually in Southeastern New Mexico at that particular time, whenever it is cold, we notice that we have very many fires

in the area. I actually had taken photographs that particular day and we followed one of the operators who had unloaded his hydrocarbon accumulation into pits and was going down the line setting them a-fire.

Q Those are Exhibits 5 and 6, so marked?

A Yes, sir. We had noticed that morning as he had driven down, we had seven or eight fires throughout the area, throughout the Monument area. They may not have all been hydrocarbon accumulation in the low gathering systems; perhaps some of the fires may have been due to tank bottoms. Nevertheless, I would like to present these photographs, which actually is a pit of oil that is being burned, that was blown out from low-pressure gathering systems and set a-fire a safe distance from the gas transmission line.

Q Were both pictures of the same fire?

A Yes, one is a close-up and the other is some distance away. The reason I bring up these photographs is, I would like to see this particular hydrocarbon saved. I know it can be arranged for a truck to actually pick it up and not be burned. I believe that the product itself can be saved and should be saved.

Q You are convinced that that is crude oil, are you?

A Yes, sir, I am.

Q Mr. Stanley, this oil you say that passes into the transmission lines, would that be metered in the fluid state?

A No, this particular metering device measures gas and does not measure any fluid that passes through that meter.

Q You believe that it passed the meter in fluid state?

A Yes, sir.

Q You spoke of cold weather, Mr. Stanley. Let us say that the

valves worked properly in the separator. Would you expect to find any oil passing through those lines, barring some mechanical stoppage or failure?

A No, sir, I believe that usually whenever every particular device, the back-pressure valve, the oil outlet valves are working properly, they should theoretically separate the oil and gas, allow the oil to pass into the stock tanks and the casinghead gas to go down the transmission system.

I would like to present the second part of my testimony which is relative to the high pressure gas system. I would like to show the Commission why we actually get an oil accumulation under high pressure conditions. First of all, I have here what is marked Exhibit 14. It is a contour map on the top of the Yates formation in Southeastern New Mexico. Actually this exhibit has been introduced to the Commission prior to this time on many cases.

The top of the Yates reflects some of the formations, some of the lower formations through the Queen, I believe, and that is generally understood by the oil industry. The reason that I present this particular exhibit is the fact that we have a very interesting operational problem west of Monument, or west of the oil center. Actually we have in the Eumont Pool a gas producing horizon which is commonly referred to as the Penrose sand in the Queens section. We find as this Penrose sand dips to the west and gets structurally lower, that we have an oil ring surrounding the Eumont Pool. This oil ring not only occurs in a western position of the Eumont Pool, but also to the north, and we believe it may to the east. We know that it occurs to the south. We found that an operator drilling a gas well in a structural position, usually at around minus 150 sub-

sea, can actually, instead of completing a gas well, complete an oil well. We have a fringe in this particular area, whereby we have had certain gas wells which initially potentialled for approximately 4,000,000 cubic feet a day, where actually in time it converted to oil and in one case with as low a ratio as 3,000 to one.

We find here that many times the operator himself does not realize that he is continuously producing a spray of oil. Naturally we feel that many of these particular wells do produce a spray of oil on the west side of the Monument Pool or the west side of the Eumont Pool, whichever the case may be. And, actually crude oil enters the gas transmission system or a high pressure gas system whenever we are devoid of a high pressure separator installation.

I would like to call the Commission's attention to many synclinal lows that we have in the Yates formation. The well known Falby Yates case whereby in the Yates section itself, we do have an accumulation of oil and as you go up structure you finally get into the main gas pool, which is called the Jalmat Pool. We do know that there is a transition zone and when you pass from the oil wells to the gas wells in this particular case, that some of these particular wells produce a spray of oil. Since we do not have high pressure separation, at that particular time, we can~~'t~~ expect crude oil to enter a high pressure system. I would like to call the Commission's attention to many synclinal lows that we have. Generally they are concentrated in the Jal area where the Yates section has an accumulation of oil. Therefore, we feel that in a high pressure gas system we have a combination of two products. We can have condensate, we can have crude oil. I would like to show the Commission some samples, whereby the two products are actually com-

bined.

We have what is marked here Exhibit 15, 15A, 15B, and we also have what is marked Exhibit 13. These particular maps are gas transmission companies maps showing low pressure gathering systems and high pressure gathering systems. The reason that I would like to refer to this particular exhibit, Exhibit Number 13, which is Permian Basin Pipeline's map, I would like to present this particular map and show why in some cases we may have condensate and then up the line as we approach their plant, which is located on the Carlsbad-Hobbs Highway, why we then have a change in product instead of having a light product condensate which is generally collected in the Blinebry and Tubb, that these particular samples are discolored due to the fact that we have an entrance of oil from the west side of the Eumont Pool.

At this particular time I would like to present some samples collected from the various high pressure gas systems.

Q These maps were not prepared by you, but you are satisfied as to their accuracy?

A Yes, sir.

Q Exhibits 13 through 15B?

A Yes, sir. I think these maps were actually made by El Paso Natural Gas Company. We asked El Paso for copies of these particular maps. We also obtained this map from Permian. They were prepared by the companies, I assume. This is Exhibit Number 16 and 17. These two exhibits were collected from Permian Basin Pipeline Company. Both exhibits were collected in Section 11, Township 22 South, Range 37 East. Exhibit Number 16 was collected from a 12-inch line and Exhibit Number 17 was collected from a 4-inch line.

I believe that both of these exhibits reflect condensate, both having a gravity above 70 degrees, at 50 degrees fahrenheit.

Q Mr. Stanley, would you expect the condensate to pass through the meter in a gaseous state?

A It could be possible that it passes through the meter in a gaseous state and is metered due to the physical properties of condensates, perhaps due to a lowering of temperature this product registers in the line.

Q And, therefore, probably registers in the meter?

A They have probably been registered as gas. I would like to talk a little more about these samples, their clearness and why they are clear. These samples, as I previously said, were collected in Section 11, Township 22 South, Range 37 East. Actually if you refer back to a map, or in any pool map, we find that these samples were collected within a short distance from certain wells in the Blinebry and Tubb Pool. Actually I believe that these samples on one drip may have been collected from condensate formed in the line caused by Ohio Worthman's Lease; Magnolia Long; ~~Roland~~ Rowan Elliott B-13 Number 1; Gulf Oil Corporation Dan-glade, or the Penrose Hinton Number 5. All of these wells are in the Blinebry and Tubb, and it is known that the Blinebry and Tubb is a combination condensate and could be an oil reservoir, as referred to in our previous hearings in the Blinebry case. But, as we move up the line we get a different type of a sample. We get a mixture of crude oil and condensate, and I would like to read the description of these various samples into the record.

This particular sample was collected out of Mr. George Bloucher's tanks, Exhibit Number 18, at the El Paso Natural Gas Company Plant

One. It has a gravity of 46 at 56 degrees fahrenheit. Actually this sample is a combination of a product that he had mixed in his tanks, mixing a higher gravity product with a low gravity crude.

This particular sample marked Exhibit 19 is also out of Mr. Bloucher's tanks at the El Paso Natural Gasoline Plant. It has a gravity of 42, 48 degrees fahrenheit. Now we move up the line. As previously mentioned, this particular sample marked Exhibit Number 20 has been caught from Permian Basin Pipeline Company, Section 34, Township 21 South, Range 36 East. It has a gravity of 65 at 51 degrees fahrenheit.

Q Was that collected from a drip?

A Yes, sir, from a high pressure drip. This particular sample marked Exhibit 23 was collected in Section 28, Township 20 South, Range 37 East. It has a gravity of 62 degrees at 50 degrees fahrenheit.

Q That likewise was collected from --

A (Interrupting) From the Permian Basin Pipeline high pressure line. Here is a sample marked Exhibit 22. We collected this particular sample from a Newman tank battery located in Section 11, Township 22 South, Range 37 East. It has a gravity of 69 at 50 degrees fahrenheit.

As we move further north we have what is marked Exhibit Number 21, taken from Permian Basin Pipeline Company in Section 6, Township 20 South, Range 37 East. It has a gravity of 52 degrees at 49 degrees fahrenheit. The sample was collected from a drip on a 16-inch line.

We usually found in the collection of these samples, that as we proceeded northward to their gasoline plant located on Hobbs-

Carlsbad Highway, that we had a lowering of gravity and we attribute this fact to the crude oil that is entering the line in the west part of the Eumont Pool.

Here are some more samples, marked Exhibit 25. This was taken from Permian Basin Pipeline in Section 33, Township 19 South, Range 37 East. This particular sample has a gravity of 49 at 49 degrees fahrenheit. We collected this sample from a 24-inch line. We have what is marked as Exhibit Number 24, another sample collected from George Bloucher's tanks at El Paso Natural Gasoline Plant, Plant No. 4. It has a gravity of 70 degrees at 54 degrees fahrenheit.

Q Mr. Stanley, would you expect these samples here, the contents of these bottles, would you expect those to register on the gas meter, would you expect them to go through in a liquid state or a gaseous state, or could you make any generalization on that?

A I can make some generalizations. I don't know whether they would pass in a gaseous state. I feel reasonably sure whenever you are producing condensate they could pass in a gaseous state, but I am convinced that some of the crude oil produced in the synclinal lows and on the west side of the Eumont Pool actually may pass a meter under a liquid state and not be recorded.

Q In other words, some of these samples of too low gravity, you feel that some of that may have passed through in a liquid state?

A I feel that could actually be a combination of both condensates and crude oil, and we obtained a mixed sample.

Q And, therefore, would not register on the meter?

A That is correct.

MR. KITTS: That is all.

MR. MACEY: Are there any questions of the witness? Mr. Howell?

CROSS EXAMINATION

By MR. HOWELL:

MR. HOWELL: Ben Howell, El Paso Natural Gas Company.

Q Mr. Stanley, is it a fair summary of the testimony to say that the separators near the wells when working properly do separate the liquids and permit only the gas to go into the line?

A Yes, sir, I believe that is generally the case.

Q The separators which are used in the field there are generally of the type and characteristics that are conventional and customary in the industry, are they not?

A Yes, sir, they are.

Q The occasions which result in oil passing through usually result from some condition such as weather or a mechanical breakdown?

A I believe so, yes, sir.

Q In the operation of the industry, generally it is just impossible to control the weather, isn't it?

A Yes, sir, it is.

Q Unfortunately, we can't always control mechanical breakdowns either?

A That is correct.

Q As a result, we do have things beyond the control of the operator, . . . the operators of the wells that permit oil to enter the gas pipelines?

A Yes, sir, that is correct. Of course, we can have, one operator may beprudent in his operation and may be a little more

efficient, others are not. I do believe that is generally correct.

Q Then gas having entered, or the gas and liquids having entered the lines, it then is necessary in the proper operation of the line, to install some sort of drips to remove the liquids from the gas pipeline?

A That is correct.

Q And that is done generally throughout the field there?

A Yes, sir, however, we have found that different operators, some choose to push the product whenever they have overly much pressure to the plant, and others may have such a low pressure that they could actually get a fluid block in the transmission line and at that particular point they would necessarily have to remove any accumulation they have for their operation.

Q In many of the plants there is a scrubber device of some character, that takes the oil out before the gas enters the plant for processing?

A Yes, my understanding is that it is an obnoxious product that must be removed.

Q Also, there is the difficulty that where a number of wells are attached to any particular gathering line, that it is almost impossible to determine the origin of any particular oil that might have slipped through?

A Yes, sir, that could be very possible.

Q And there would also be instances, would there not, where it would be uneconomical to attempt to pick up crude oil at certain locations on the gathering system?

A That could be very possible, due, probably, to the position of the drip and small accumulation of hydrocarbons.

Q Also, it is a little bit difficult to forecast when there is going to be a mechanical breakdown or excess accumulation, isn't it?

A That is correct.

Q Would you say that it would be possible when liquids pass through the customary meter, that they do cause the meter to register a larger amount of gas than actually passed through?

A Well, I don't exactly know, or have not studied the effect of the meter and its measurement at the time that the fluid is passing through that meter. I do know that meter was designed to measure gas and gas only.

Q That is, the meter doesn't measure liquid as such. You wouldn't say that the meter when liquids pass through, might not show more gas than actually passed through?

A It could be possible. I do not know what effect fluid would have on that particular meter.

Q Would you not think it advisable that the limitation on the gathering and marketing adopted by the Commission be primarily, and certainly at this time, one of reporting the quantities that have been accumulated at the various points at which liquids drop out?

A That is correct, we try to check our records and there actually is no accounting, you might say of an accurate nature, at the present time. That is the only recommendation that I made so that this Commission could really understand how much of this is involved, how much of the product is involved and at a later time, after we study further, if it is deemed necessary to formulate more rules, I think the Commission should consider the case again.

My recommendation at this time, this particular time my recommend-

ation for an accurate reporting to see how much of the product is involved.

Q Whatever system of reporting is adopted should be one that is reasonable, considering the characteristics of drips all over the field?

A Yes, sir, I think it should be very reasonable, and I would say that the minimum reporting, in order not to cause a burden on people collecting the product or the gas transmission company.

MR. HOWELL: Thank you.

A I would like to read, at this particular time, into the record -- I will give you the sheet of paper. This is copied from the Texas Railroad Commission, Section 2, Page 10. I do not advocate its adoption by this Commission at this particular time, however, I would like to read it to show that another State was very much concerned with so-called scrubber oil, and they adopted rules in the State of Texas for its primary control. It reads as follows:

"WHEREAS, In the operation of casinghead natural gasoline plants there is necessarily some small amount of crude oil which is carried over into the gas lines from the operation of separators and is known as scrubber oil, which collects in drips installed in the low points of the gathering lines and also in the scrubbers at the plants; and,

WHEREAS, Some question has been raised as to the amount of this scrubber oil which might properly be cleared on tenders; that is, as to what the proper amount is that might be legitimately collected in such operations; and,

WHEREAS, On January 17, 1936, after notice as required by

law had been given, a hearing was held in the Commission's Hearing Room at Austin, Texas, at which hearing evidence was introduced and from which evidence the Commission finds that no more than .75 of a barrel of scrubber oil per well per month can be legitimately recovered from such operation:

THEREFORE, BE IT ORDERED by the Railroad Commission of Texas, that in the interest of conservation of crude oil and natural gas in the State of Texas, that all scrubber oil accumulated in the operation of casinghead natural gasoline plants may be cleared on tenders but in no event to exceed in amount to .75 of a barrel of scrubber oil per well per month."

I believe the balance refers to tenders and its movement. I won't read it, in order to save time. However, I would like to make the statement that I am not recommending the adoption of such a rule at the present time.

MR. MACEY: Anyone have any questions of the witness? Go ahead, Mr. Kitts.

RE-DIRECT EXAMINATION

By MR. KITTS:

Q Mr. Stanley, in your experience, is this accumulation of these drips, are these isolated occurrences, or does it happen quite frequently?

A It happens more frequently in the wintertime than the summer. I think if we had an accurate reporting system, we could plat a graph where we could show we have had a heavier condensation or a greater amount of accumulation in the winter than in the summer.

Q But, it probably amounts to many barrels, does it not?

A Yes, sir, it does. The reason that I say that it does is

because we have reviewed some of Form C-110 which entitles certain operators to movement of this particular product. One case we have --

Q (Interrupting) You are talking of crude oil?

A We are talking about all the products. We have known that the Famariss Refining Company had C-110 for approximately 10,000 barrels, I believe I am correct, for the month of January. I believe that Mr. Newman had requested somewhere between five or eight thousand, I don't know the actual figures. What Mr. Newman had requested in his movement I do not remember, but it is probably in the hundreds of barrels. Actually what is being burned, that could be added to it, so that if you added the total product, I would say there was considerable product being involved.

Q You feel that a good deal of crude is being burned in the fashion illustrated in Exhibits 5 and 6?

A Yes, sir, and I do feel that the operators of this particular gas transmission company state that they would be willing to save that particular product if the Commission would inaugurate some rules for the prevention of it being burned.

Q On cross examination, Mr. Stanley, Mr. Howell asked you a question and you admitted that quite possibly liquids passing through a gas meter would have some effect on the meter, is that correct?

A It would have some effect, but I don't know what effect it would have.

Q You wouldn't expect that type of meter to give an accurate reflection of the amount of liquids that pass through, would you?

A No, sir, I don't believe that anyone could read that meter and state the number of barrels of fluid that is passing through it

at that particular time.

Q You also agree that there is no question here of fault or blame in having this crude oil in drips? It usually occurs from mechanical failures, it is no one's fault?

A That is correct.

Q But, what you are interested in is seeing that particularly the low gravity oil is not wasted or is disposed of in some orderly manner, is that correct? A That is correct.

MR. KITTS: That is all.the questions I have. I didn't offer my exhibits in evidence, and I would like to offer in evidence, Exhibits 1 through 25 inclusive, and request permission to withdraw Exhibits 3 and 4.

MR. MACEY: Is there objection to the introduction of these Exhibits? If not the Exhibits will be received.

MR. JOHNSON: Theodore R. Johnson, representing Newman Gas Service.

RE-CROSS EXAMINATION

By MR. JOHNSON:

Q Mr. Stanley, the separators and valves where you would ordinarily have mechanical failure, is that under the control of the operator of the gasoline facilities?

A Not in all cases. All the valves in Exhibit Number 1, which show a separator are under the control of an oil producer, or oil operator. However, in the absence of a back pressure valve, which is installed between the pipeline connection and the separator, that actually the oil operator resorts to a back pressure on this separator from the back pressure valve on the meter loop. This particular valve is under the operation of the gas transmission company, re-

ferring to Exhibit 2.

Q Do they always have those back pressure valves between the well and the main line?

A Yes, sir, we may have, as you understand, we may have a multiple of back pressure valves. Some operators have deemed it necessary to install the back pressure valve and not rely entirely on one valve which is installed on the meter loop, as marked on Exhibit 2. They would like to have their own back pressure valve and check it themselves.

Q But, in an incident of that kind would be where the producing lessee or the producer would be relying upon the use of the valve which the operator of the pipeline --

A (Interrupting) It would be very possible. Understand, Mr. Johnson, that in this particular exhibit, Exhibit Number 1, we do actually show back pressure valves here, and all vent-lines do have a back pressure valve on the end of the vent-line. There is a reason for that. Whenever due to mechanical difficulties marked in Exhibit 2, a gas transmitter not wanting the gas, and under emergency, could actually close the particular valve marked on Exhibit 2. When that valve is closed, the operator must resort to his own back pressure valve, which is not actually in use in this particular exhibit until such time as that valve is closed. This particular back pressure valve becomes operative and the gas is flared to the atmosphere, but in the meantime it does hold a back pressure on the separator for his operational problems and the dumping of that fluid into the stock pens.

Q In an incident of that kind, that would be under the operation and control of the producing lessee?

A Yes, sir.

Q Does that particular separator that you have shown there on your Exhibit Number 1, I believe, is that a low pressure or a high pressure separator?

A That is a low pressure separator.

Q Low pressure. The order from which you read, which was passed and adopted by the Railroad Commission of the State of Texas, did it apply to low pressure lines or high pressure lines?

A That particular order refers, I believe, to low pressure lines.

MR. JOHNSON: No further questions.

MR. MACEY: Any other questions of the witness?.... You mentioned the fact that there was a possibility of considerable volume of oil being produced by gas wells. I believe you referred generally to the Eumont area where the wells producing dry gas might produce a spray of oil. Are most of those wells connected directly into the transmission system without benefit of separation equipment.

A Yes, they are.

MR. MACEY: They have no way of knowing whether the well is making a spray of oil or --

A No, it would take them considerable time to find that out.

Q Do you have any recommendation as to what the Commission should do to require the operators to check that?

A No, sir, I do not. I haven't studied it well enough to make a recommendation.

MR. MACEY: Anyone else?

MR. JOHNSON: Mr. Johnson representing Newman Gas Service. I have one other question.

By MR. JOHNSON:

Q Did the Permian Gas line, is that a low pressure line or a high pressure line?

A It is considered a high pressure, usually five hundred to five hundred fifty pounds. In fact, Permian Basin Pipeline does not have, at least I do not know of any low pressure lines in Southeastern New Mexico.

Q Would you say that the testimony which you gave, which was applicable to low pressure lines would apply to high pressure lines?

A To a certain extent it would. The problem is related. I feel there is one difference between a high pressure line and a low pressure line. I think that in a low pressure line, generally we accumulate crude oil at a greater percentage of crude oil, but in a high pressure line we could have a combination of two products, condensate and crude oil.

RE-DIRECT EXAMINATION

By MR. KITTS:

Q That is what was shown by Exhibits 18 through 25?

A Yes, sir.

Q High pressure accumulation?

A Yes, sir.

MR. MACEY: Does anyone have any further questions of the witness? If not the witness may be excused.

(Witness excused.)

MR. MACEY: Does anyone have anything further in this case? Mr. Porter?

MR. PORTER: I have a question to ask Mr. Howell relative to his recommendation of El Paso. This is merely a clarification

on my part, Mr. Howell. I refer to Paragraph C of your recommendation, which refers to the owners gathering and transporting its own products. In that I notice that the only form that you have recommended be filed is a C-112. The other cases recommended the C-110 be filed.

MR. HOWELL: That is correct.

MR. PORTER: In other words you don't deem it necessary for an owner to file a C-110 authorizing the transportation of this product?

MR. HOWELL: That is our intention.

MR. PORTER: Another thing, in Paragraph A, I believe your Paragraph A refers strictly to the recovery of these products, the gathering and recovery, and in Paragraph B you refer to the transportation, is that right?

MR. HOWELL: That is correct.

MR. PORTER: In each case the C-110 would be executed by the owner of the transmission facilities, designating a transporter?

MR. HOWELL: Correct.

MR. PORTER: As I understand this recommendation, before that C-110 could be approved, the proposed or designated transporter would have to be, would have to have a permit from the Commission to transport the product?

MR. HOWELL: Perhaps I could amplify our thinking a bit on this rather than answer your question directly yes or no. We had contemplated under the Rule A, the necessity for any person who was going out to drips belonging to someone else to obtain a permit before he was authorized to go out to those drips and pick it up. We would require that person to obtain from the Commission a

permit and establish that that person was in that legitimate business of going out and picking this up. That is to stop, to some degree, at least, the stealing from drips, because a person then would not be authorized to take from a drip unless he had obtained this permit. We would use the Form C-110 in that instance, as evidence of the authority given that person by the owner of the pipeline facilities to go out on the line and do that.

Our Rule B is generally intended to cover the situation of transporting after it has either been gathered by the pipeline company or by the individual himself. We would not require the permit in advance, but the filing of the Form C-110 under those conditions. That is, it has already been gathered. In the third instance, while the pipeline company is the owner of the products merely files the report showing the disposition that has been made. Perhaps that reflects our thinking, the reason behind our distinguishing the three different types of operations.

MR. PORTER: Yes, I believe I understand. That is all I have.

MR. MACEY: Mr. Howell, maybe I am a little dense, but do I understand that you -- Let's suppose El Paso Natural decides to market the crude oil that collects in some of their drips. Do you propose to furnish the Commission with a C-110 in order to be authorized to transport that crude oil?

MR. HOWELL: No, under this we would propose to furnish them with a C-112 showing that report after the sale rather than prior to.

MR. MACEY: You think a pipeline company or refinery would accept that crude oil without a C-110?

MR. HOWELL: Our thinking is that the liquids which have been accumulated have been produced legally, passed through the meters and are owned by the company in the same situation really as products that are taken out of the gas itself. That is, that it is incidental thereto.

MR. MACEY: Mr. Porter, do you think they would take the crude oil from El Paso?

MR. PORTER: I doubt it. However, I think that I understand Mr. Howell's position. In other words, as the owner, they would be designating a transporter and they would just be designating themselves as the transporter. Of course, I, myself, think that C-110 should be filed, even one of that nature, because when it is approved by a Commission representative they become the authorized transporter.

MR. MACEY: Mr. Newman?

MR. NEWMAN: Would they have to be filed monthly or one blanket coverage for the entire length of the contract from Permian? How would you file those?

MR. PORTER: It is my thinking, Mr. Newman, that a C-110 once filed and approved by the Commission, would be good until, as long as that transporter, that owner is in business.

MR. NEWMAN: Just so long as the Commission has a copy of the contract showing that I am the owner of it and can collect it, one copy would cover it only, the entire operation?

MR. PORTER: It is my opinion that only one C-110 is necessary. I would hesitate to recommend anything else for the reason that it is hard to anticipate in advance the amount of the product which is to be transported during any particular month. After all, the

volumes that are transported are accounted for on Form C-112 at the end of the month.

MR. MACEY: Does anyone have anything further in this case? If not we will take the case under advisement.

STATE OF NEW MEXICO )
: SS.
COUNTY OF BERNALILLO )

I, ADA DEARNLEY, Court Reporter, do hereby certify that the foregoing and attached transcript of proceedings before the New Mexico Oil Conservation Commission at Santa Fe, New Mexico, is a true and correct record to the best of my knowledge, skill and ability.

IN WITNESS WHEREOF I have affixed my hand and notarial seal this 19th day of January, 1955.

Ada Dearnley
Notary Public, Court Reporter

My Commission Expires:
June 19, 1955