BEFORE THE
OIL CONSERVATION COMMISSION
SANTA FE, NEW MEXICO

IN THE MATTER OF:

CASE NO. 1503

TRANSCRIPT OF HEARING

SEPTEMBER 10, 1958

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

BEFORE THE
OIL CONSERVATION COMMISSION
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SEPTEMBER 10, 1958

IN THE MATTER OF:

CASE 1503 Application of The Pure Oil Company for permission to commingle the production from two separate oil pools. Applicant, in the above-styled cause, seeks an order authorizing the commingling of oil produced from the Kemnitz-Cisco Pool and the Kemnitz-Wolfcamp Pool on its State Lea "E" Lease located in Section 21, Township 16 South, Range 34 East, Lea County, New Mexico. The applicant proposes to separately meter the production from each pool prior to commingling.

BEFORE:

Mr. 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: We will take Case 1503 next.

MR. PAYNE: Application of The Pure Oil Company for permission to commingle the production from two separate oil pools.

HARRY C. WELLS,

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

DIRECT EXAMINATION

BY MR. PAYNE:

Q Will you state your name?

A Harry C. Wells.

Q Are you the same Harry C. Wells who testified in Case 1502?

A I am.

Q Please proceed.

A The Pure Oil Company is owner and operator of the State Lea "E" Lease, which covers the E/2 of Section 21, Township 16 South, Range 34 East, Lea County, New Mexico. This lease currently has two producing wells. The State Lea "E" No. 1 located 1980 feet south of the north line, and 1980 feet west of the east line of Section 21, and completed in the Kemnitz-Cisco Pool, through perforations in 5 1/2 inch casing, 11,410 to 11,476. On the latest test taken September 6th, 1958, this well flowed 92 barrels of oil in twenty-four hours through a 13/64 inch choke with a tubing pressure of 310 pounds, and approximately gas-oil ratio of 1400 cubic feet per barrel.

The State Lea "E" No. 2 located 1980 feet west of the east line, and 760 feet north of the south line of Section 21, is completed in the Kemnitz-Wolfcamp Pool through perforations in 5 1/2 inch casing from 10,681 to 10,696 -- 97 -- I am sorry. On the latest test taken September 6th, 1958, this well produced 134 barrels of oil and 270 barrels of water in twenty-four hours, with a gas-oil ratio of approximately 1700 cubic feet per barrel through the use of a Kobe hydraulic pump. These wells are presently being produced into two separate tank batteries. The flowing pressure on Well No. 1 has been steadily declining in recent months, and the

well will soon be to the point of requiring artificial lift equipment. Kobe pump equipment will be used on this well when this point is reached. We propose to use the same power oil tank and pump now in use serving Well No. 2. This will necessitate the commingling of oil from the Kemnitz-Cisco Pool and the Kemnitz-Wolfcamp Pool. Exhibit A is a schematic diagram of the proposed system which will be used in each of the two reservoirs. The production from Well No. 1 will pass through a separator, then through a dump type meter into the power oil tank. The production from Well No. 2 will pass through a heater treator to eliminate the water, and through a similar dump meter to the power oil tank. The overflow from the power oil tank will go into the stock tanks to the pipeline. From a second line in the power oil tank, a triplex pump will pump the power oil through separate meters to each of the wells. These meters will be a nutating disk, or would be an all plate type. We believe that the proposed system will provide accurate allocation of production to each reservoir. And since this system involves the commingling of production from two separate pools, we request exceptions to Rule 303. It is our belief that the approval of this application will not cause waste or impair correlative rights. I would like to offer Exhibit A.

MR. NUTTER: Without objection, Pure Oil Company's Exhibit A will be received in evidence in Case 1503.

CROSS EXAMINATION

BY MR. NUTTER:

Q Mr. Wells, the production from Well No. 1 will pass through a separator, but production from Well No. 2 will not. Is there no gas produced from Well No. 2?

A The treater being used on this lease is of a type which acts both as a water eliminator and gas separator.

Q It is a dual function treater, then?

A Yes.

Q The separator that is on Well No. 1 will remove any water that may be produced with the well, or is that strictly a gas separator?

A That is strictly a gas separator, no water is now being produced.

Q And you don't anticipate that it will be in the foreseeable future?

A If it does, we will simply put a treater in that place instead of a separator.

Q What particular make of dump type meter do you propose to install down stream from the separator and the treater?

A We haven't decided definitely yet. It will either be a National Tank Company dump meter or a Rolo dump meter.

Q Now, what about this wobble type meter in the other installations, just what is that?

A That is a -- you are familiar with a Pittsburg meter which measures fluid by means of a plate, which is -- has an axis on the center, and wobbles around. I don't know exactly how to explain it.

Q Is that what you refer to sometimes as a positive displacement meter?

A No, sir, it is not a positive displacement meter.

Q Can you obtain some literature on these wobble meters?

A It is an old type of meter that has been used for years and which is very efficient for measuring fluid, if you do not have any intrain gas which will be the case in the power oil system. Niagara also makes a meter. Niagara Five Point Meter, they call them, which are the same type.

Q You will furnish us a brochure or something to put on the file for this type of meter?

A Yes, sir.

MR. NUTTER: Does anyone have any questions of Mr. Wells?

QUESTIONS BY MR. FISCHER:

Q What type of heater treater is that, Mr. Wells?

A It is a National Tank Company I C P. Four foot by twenty-four, something like that.

Q And the first place that production from both those wells will come together is the power tank?

A It will be at a "T" downstream off each meter, and upstream off the power oil tank.

Q The first tank that will be together is the power tank, then?

A Right.

MR. FISCHER: That's all I have. Thank you.

REDIRECT EXAMINATION

BY MR. PAYNE:

Q Mr. Wells, what are the gravities from each of these wells, do you know?

A Something just over forty degrees, forty to forty-two degrees, I think.

Q In each one of them, I mean, they are relatively close, are they?

A I think so. I hesitate to say because I haven't checked it recently.

Q The way you have this installation set up, it would be impossible to physically commingle this production from these two pools prior to having been separately metered, wouldn't it, or would it?

A It would be impossible if you did not bypass the meters.

Q Yes, that's what I meant.

A Yes.

MR. PAYNE: That is all.

RECROSS EXAMINATION

BY MR. NUTTER:

Q Could you determine the exact gravities of the oil from the different zones and report them to us, and also what you expect the mixed gravity of the two oils after they have been combined in the stock tank will be, taking into account the proportions of the two tanks mentioned?

A I am sorry I didn't do that, but I will furnish that.

MR. NUTTER: Does anyone have any further questions of Mr. Wells? Mr. Fischer?

MR. FISCHER: I have a few more questions.

MR. NUTTER: You may proceed.

QUESTIONS BY MR. FISCHER:

Q Will you have a bypass around each meter that will efficiently meter the production from each well?

A No, there will not be a bypass around the meters. I don't know exactly what you mean.

Q These meters coming off here. I guess it could come out of the separator through the meter?

A Right.

Q And from the prover to the meter?

A Right.

Q Do you contemplate that you will have a bypass set up around those meters?

A No, we won't. There are two meters, one for each string.

Q So when those meters meter that production from each zone, they will be metering power oil plus production?

A Right.

Q And you'll get a power oil factor for your power oil each month? Will you have to do that?

A Our power oil volume will be measured by the nutating disk type meters downstream of the Kobe pump, and we will simply subtract

that power oil from the total measured by the dump type meter in each case to determine the production from the well.

MR. FISCHER: That's all.

A I might say that we will have a self check on this system because the stock tank production can be added to the power -- let me change that. The total of the production in the stock tank plus the power oil pressurement in the power oil meters must equal the total production from the wells, and if it doesn't, then you know that one of your meters is off.

Q Don't you have to get a meter factor for each meter? Or is it required on each type of power meter?

A We will calibrate the meters, yes. We will calibrate the meters periodically, but like I say, we can tell by adding these figures whether the meters are correct or not. With four meters in there, we will be able to tell if all of the meters are functioning properly.

MR. FISCHER: That's all I have.

MR. NUTTER: Any further questions of Mr. Wells? If not, he may be excused.

(Witness excused)

MR. NUTTER: Does anyone have anything further they wish to offer in this case? If there is nothing further, we will take Case 1503 under advisement.

C E R T I F I C A T E

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/or 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 and Seal, this, the 24th day of Sept., 1958, in the City of Albuquerque, County of Bernalillo, State of New Mexico.

J. A. Trujillo
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. 1503, heard by me on 9-10, 1958.

....., Examiner
New Mexico Oil Conservation Commission