BEFORE THE
OIL CONSERVATION COMMISSION
SANTA FE, NEW MEXICO
APRIL 19, 1961

EXAMINER HEARING

IN THE MATTER OF

CASE 2252: Application of Cities Service Petroleum Company for an automatic custody transfer system. Applicant, in the above-styled cause, seeks permission to install an automatic custody transfer system to handle the production from the Vacuum-Abo Pool from all wells presently completed or hereafter drilled on its State B "J" lease, S/2 of Section 35, Township 17 South, Range 35 East, Lea County, New Mexico.

BEFORE:

A. L. Porter, 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. PORTER: We'll call the hearing to order again. Because of transportation commitments, we will take up Case 2252.

MR. MORRIS: Case 2252. Application of Cities Service Petroleum Company for an automatic custody transfer system.

MR. KELLAHIN: Jason Kellahin, Kellahin & Fox, representing the applicant. We'll have one witness, Mr. E. F. Motter.

(Witness sworn)

E. F. MOTTER,

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 E. F. Motter.

Q By whom are you employed and in what position?

A Cities Service Petroleum Company as Division Engineer, Hobbs Division.

Q Mr. Motter, are you familiar with the application of Cities Service in Case 2252?

A Yes, I am.

Q Would you state briefly what's proposed in this application?

A Yes. We propose to deliver crude from production on our State BJ lease through ACT system, using a positive displacement meter.

Q How many wells are located on the lease at the present time?

A Only one, at present.

Q Have you prepared a plat showing the location of the lease involved?

A Yes. This first Exhibit, which is entitled "Vacuum Abo Area, Lea County, New Mexico," indicates the south half of Section 35, Township 17 South, Range 35 East is the Cities Service State BJ

lease. We have drilled the No. 1 Well to the Abo formation in the northeast of the southeast quarter of that particular section. I might also add that this particular plat shows all Abo wells drilled to date in this particular area.

MR. MORRIS: Could we have that marked as Exhibit No. 1, please?

(Whereupon, Cities Service Exhibits 1 through 5 were marked for identification)

Q (By Mr. Kellahin) Now, referring to what has been marked as Exhibit No. 2, will you discuss the information that was shown on that Exhibit?

A This is a plat or an enlargement of the subarea showing the No. 1 Well, which has been drilled, the proposed LACT location, and the proposed well locations in the future. Those are simply one well to a 40. We anticipate there will be additional development. Only time will tell how far this will go.

Q Now, referring to what has been marked as Exhibit No. 3, would you discuss the type of installation that you propose to make?

A This is a proposed ACT installation and schematic diagram indicating production from the various wells, which will enter either a treater or in the future a test separator. The production from the treater, after removal of water, goes to the ACT unit reservoir. The next Exhibit will show that in more detail, but it will monitor the crude, and if it is good, it will be stored in a good oil tank, and if bad, stored in a bad oil tank. Delivery of crude

from the good oil tank is made to the pipeline through the positive displacement meter located on the ACT unit. I might add that since we have only the one well, we do not propose to install the test separator,as shown, as yet, but it will be installed upon the completion of a second well.

The two tanks shown, will be 500-barrel capacity. The bad oil tank will also provide emergency storage, and will be equipped with a high level shut-off, which will operate the valve at the header, and, in turn, the wells will be shut-in with valves on each particular well by pressuring up on the flow lines.

Q Will the type of installation that you propose enable you to make the test which may be required from time to time by this Commission of the individual wells?

A Yes, sir, I am quite sure we can accomplish all tests that are required as of this date.

Q Will adequate storage facilities be available for the maximum unattended time on the lease?

A Well, as I've said, these are two 500-barrel tanks. I will assume that we will probably carry, due to requirements of the pipeline, a twenty-four hour storage in the good oil tank. Anything above that will be used as storage, and also the capacity of the bad oil tank will be used as storage. Our current allowable for this present month is 104 barrels a day, so we have adequate storage for any unattended time on the lease. In the future, when this lease fully developes to eight wells, why, we will probably

provide one more emergency storage tank.

Q What will be the maximum unattended time on the lease, Mr. Motter?

A This lease will probably switch with a resident switcher, and I would think that two days will be the maximum unattended.

Q Referring to what has been marked as Exhibit No. 4, would you discuss that Exhibit?

A This is in detail the components of the ACT installation, and reading from right to left, first is a pump designated as "A." "B" is the BS&W monitor. "C" is a three-way two-position valve. "D" is the filter. "E" is the deaerator. "F" is a PD meter, which will be equipped with ticket printer and will also have a timing device to stop delivery of oil should there be any malfunction of the meter after a certain time delay. In other words, when a pump starts delivering through the meter, a timing device is started, and if the counter on the PD meter does not stop this counter within a certain length of time, the controls shut down the delivery of the pump and the crude through the meter. "G" is the prover connections; we propose to use master meter for proving. "H" is a back pressure valve, and "I" is the sampler. I might add that on Figure "C" the three-way two-position valve, that will also be timed into delivery of crude with the pump, crude will be taken back through the good oil tank for some short period of time, say, about five minutes, to bring the temperature of the oil up to what it normally is at tank. We have found, especially in the wintertime, if this

crude stands in these facilities and starts immediately through the PD meter, we have some fluctuation of our temperature compensator. We feel we get more accurate results by doing this other method.

Q Who is the pipeline transporter?

A Texas-New Mexico Pipeline Company, and I have a copy of a letter here which I believe is designated No. 5, dated April 11, 1961, advising us that this proposed setup is acceptable to them. This did not print very good, but this is Mr. Whitaker, the general superintendent in Texas.

MR. PORTER: Mr. Whitaker signed the letter?

A Yes, sir, he did. F. B. Whitaker. I see his name at the top.

Q (By Mr. Kellahin) Were Exhibits 1 through 4 prepared by you or under your direction or supervision?

A Yes.

Q Exhibit 5 is a copy of a letter from the Pipeline Company and in your files?

A Yes. I have the original with me.

MR. KELLAHIN: At this time I would like to offer the Exhibits in evidence.

MR. PORTER: They will be admitted in evidence without objection.

(Whereupon, Applicant's Exhibits 1 through 5 were received in evidence)

Q (By Mr. Kellahin) Under the system that Cities Service

proposes, will there be any commingling of fluids?

A We do not think there will be at present. If you will notice on Exhibit 1, we have a 40-acre tract northeast of there. We may commingle that at a later date.

Q Would that be from the Abo formation?

A Yes.

Q Will it call for the production of oil?

A Not at this time.

Q Is this type of installation similar to those which have heretofore been approved by this Commission?

A Yes. We have three installations almost identical to this in operation in the Drickey-Queen sand unit, which has been approved by the Commission at various times.

Q In your opinion, is this installation in the interest of conservation and prevention of waste?

A It is.

MR. KELLAHIN: That's all the questions I have of the witness.

MR. PORTER: Do you have any questions, Mr. Nutter?

MR. NUTTER: Yes, sir.

CROSS-EXAMINATION

BY MR. NUTTER:

Q What are the normal working levels of the oil in the good oil tank, Mr. Motter?

A Mr. Nutter, we normally operate off of one control. It

will operate both a start and stop, and, as I stated previously, the pipeline in this instance normally requires twenty-four hour storage for weathering time, with a minimum of twelve hours. I would assume that in this case we would seat the float about half way up the tank, or probably about eight feet.

Q Now, that would be the low level, or the high level?

A The low level would possibly be six feet; the high level about eight feet.

Q You would have a range there of two feet?

A That's right. For delivery.

Q What amount of capacity is available above eight feet?

A That would be the remainder tank, or slightly over 200 barrels for a 500-barrel tank.

Q And normally the bad oil tank won't have any oil in it unless the monitor has detected that oil, is that correct?

A That's right. We will carry a very low level in there. I would assume possibly not over two and a half to three feet, perhaps 50 barrels.

Q Does treating of the bad oil in the bad oil tank have to be done manually?

A It can be equipped either way. Since this is only a one or two well lease, to start with, we will, and since we are producing no water, we will set our facilities up for manual treating. I might add that our proposed system of ACT has a red light indicator. At any time that there has been bad oil stored in the bad oil

tank, any time the switcher comes up and sees the light on, he knows there has been bad oil passed since he has been there, and resets the equipment.

Q You are not relying on additional storage to prevent the waste of oil,in the event of malfunction you have automatic shut-down facilities?

A Yes, we propose automatic shut-down on all the wells on the header.

Q Oh, does this PD meter incorporate a set stop counter for the allowable?

A We have not been required by the transporter of this crude to put on set stop counters. They're handling crudes in other installations similar to this for us in New Mexico. We have personally one feeling about a set stop counter for an allowable in that if the allowable is set for some figure, say, 10,000 barrels per month, that is gross oil, and net oil is not figured until the sample is run at the end of the month. We feel that on our top allowable lease that you would continuously run less than your allowable if a set stop counter were used. Since this is a lease that is unattended, as I stated before, not over two days, we feel that we could manually shut this lease in upon production of its allowable.

Q If a set stop counter were incorporated, and if the set stop counter were set at the allowable, plus the last known BS&W content, you wouldn't lose any allowable?

A That is correct. If we were allowed to do that, that would be entirely satisfactory, or say, some one percent --

Q Whatever last month's figure was?

A It's all right.

MR. NUTTER: I believe that's all. Thank you.

MR. PORTER: Anyone else have a question? The witness may be excused.

(Witness excused)

MR. PORTER: If nothing further to be offered in Case 2252, we'll take it under advisement and adjourn the hearing until 1:30.

STATE OF NEW MEXICO)
) ss
COUNTY OF BERNALILLO)

I, ADA DEARNLEY, Court Reporter, 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 machine shorthand 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 and Seal this, the 19th day of April, 1961, in the City of Albuquerque, County of Bernalillo, State of New Mexico.

Ada Dearnley
NOTARY PUBLIC

My Commission expires:

June 19, 1963

I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of Case No. 2257, heard by me on April 13, 1961.

A. L. Porter, Examiner
New Mexico Oil Conservation Commission