

DEARNLEY-MEIER REPORTING SERVICE, Inc.

PHONE CH 3-6691

ALBUQUERQUE, NEW MEXICO

BEFORE THE  
OIL CONSERVATION COMMISSION  
Santa Fe, New Mexico  
October 25, 1961

EXAMINER HEARING

IN THE MATTER OF:

Application of Socony Mobil Oil Company, Inc., for an exception to Rule 303 (a), Lea County, New Mexico. Applicant, in the above-styled cause, seeks an exception to Rule 303 (a) to permit the commingling of the production from the Anderson Ranch-Devonian and the Anderson Ranch-Wolfcamp Pools on its New Mexico "S" lease, which includes Lot 2 of Section 2, Township 16 South, Range 32 East, Lea County, New Mexico. Applicant proposes to meter the production from one pool only, and to allocate production to the other pool according to the subtraction method; the API gravity of the Anderson Ranch-Devonian crude is greater than 45°.

CASE NO.  
2411

BEFORE: Dan S. Nutter, Examiner.

TRANSCRIPT OF HEARING

EXAMINER NUTTER: We will call Case No. 2411.

MR. ERREBO: Burns H. Errebo, Modrall, Seymour, Harris, Sperling & Roehl, Albuquerque, appearing on behalf of the Applicant.

We have one witness at this time.

(Witness sworn.)

JAMES M. MCGEE

called as a witness by and on behalf of the Applicant, having been



first duly sworn, was examined and testified as follows:

DIRECT EXAMINATION

BY MR. ERREBO:

Q Will you state your name, please.

A James M. McGee.

Q By whom are you employed, in what capacity and at what location?

A I am employed by the Socony Mobil Oil Company, Inc., as a production engineer in the Hobbs district office.

Q Have you previously testified before this Commission and have your qualifications as an engineer been accepted?

A They have.

MR. ERREBO: We would like to have Applicant's Exhibits 1, 2 and 3 marked for identification.

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

Q (By Mr. Errebo) I refer you to an Exhibit which has been marked for identification as Exhibit 1 and ask you if that shows the lease in question and the location of the well upon it?

A It does.

Q There is only one well upon the lease?

A That is a dual completion.

Q That comprises Lot 2 of Section 2, is that correct?

A That's right.

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Q Township 16 South, 32 East?

A That's right, Lea County.

Q Refer to the second Exhibit, if you will, No. 2, and state what that shows.

Q Exhibit 2 shows a proposed commingling production. It shows the present gravity and a random monthly production with a unit volume per barrel of oil and total volume of oil for the random month; and then for the Anderson Ranch-Devonian and Anderson Ranch-Wolfcamp Pools and the Anderson Ranch commingled production, the total monthly commingled production and unit volume, with a total volume of the commingled production. You will notice there is a footnote there that the commingled production of the Anderson Ranch production is \$176.24 per month more than the two separate zones.

Q This is a dual completion, is it not?

A It is.

Q Do you have anything further with regard to this Exhibit?

A No.

Q If you will refer to the next Exhibit which has been marked for identification as Exhibit 3 and state what that shows.

A This shows the proposed flow diagram of the commingled installation. This particular installation does not have a header. Each well flows directly to the header treater. We propose to install a meter on the Wolfcamp on the dump side of the Wolfcamp



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heater to meter this well since it is not top allowable. We propose to allocate the production by subtracting the pipe line run, by subtracting the Wolfcamp reading and the total pipe line run each month. Also, in this diagram there is a power oil tank in the power oil pipe line which will be used on the Devonian side of the well.

Q What is the necessity for a hearing in this instance as opposed to administrative approval?

A You will notice that on Exhibit 2 the gravity of the Anderson Ranch-Devonian crude oil is 50.6° and the rules require that the subtraction method cannot be used when any crude is over 45°.

Q Without a hearing?

A Without a - - Well, we are asking for an exception to that rule.

Q Otherwise, do the plans which you have here - - Does your surface installation and method of production comply substantially with paragraph 2B of the manual for the installation and operation of commingling facilities dated September 13, 1961, heretofore adopted by the Commission?

A They do.

Q Is this lease presently being operated as commingled production pursuant to any previous administrative order of the Commission?

A It is not. However, we do have a previous order which



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has a different system set up. Originally we intended to install meters on both sides and meters on the recirculating pump but since the new installation manual came out we feel like we are lowering our operating expense by not having maintenance on two other meters.

Q They would be on the Devonian side?

A That is correct.

Q You will be able to eliminate them if the Commission grants this exception?

A Yes.

Q Have you advised the Commissioner of Public Lands of your plans and have you heard from them?

A We haven't advised him as to this particular hearing. However, there is a previous letter from them that approved our application in that they would realize more revenue from this system.

Q Has that been marked as Exhibit 4?

A It has been.

MR. ERREBO: That's all we have.

EXAMINER NUTTER: Are there any questions of Mr. McGee?

EXAMINATION

BY MR. MORRIS:

Q Mr. McGee, you recognize that the reason for having this hearing is that the gravity of the Devonian crude here is greater than 45°? I think you must also realize that 45° was put



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in the manual, in the commingling manual and in the rules implementing that manual for a reason, that reason being that you're going to have more shrinkage as your ~~gravity~~ drift gets greater.

Now, do you have any reason for feeling that in this particular case shrinkage will not be a factor to be considered?

A No, I don't, for this reason: We are involved right now in a series of tests involving vapor recovery units. I don't have any information here. We have run stock tank vapor recovery tests on the two stock tanks. We find there is not enough vapor coming off these tanks to justify installing a vapor recovery system, so there is very little shrinkage in the whole. Also, by commingling these two crudes, we should minimize the shrinkage on the Devonian by lowering the gravity of it. We intend to administratively install an ACT unit on this lease which should further minimize shrinkage.

Q Mr. McGee, what concerns me is that since the Commission has established 45° as the breaking point at which an exception to the administrative approval cannot be granted, if one of the crudes is greater than that figure it occurs to me that in order to get an exception you would need to show some reason for believing that if you have crude greater than 45° that you wouldn't have any shrinkage problem.

In other words, I am asking you to carry the burden of proof with respect to showing that the gravity being greater than 45° will not cause waste.



A Of course, I have no proof here with me, but we are operating several Devonian reservoirs. We operate several distillate reservoirs in New Mexico with the system we use on our batteries where we have vapor equipment whereby we maintain a few ounces to three ounces of back pressure on this tank. We haven't experienced any great loss in gravity.

Q Do you feel that the 45° that was established by the Commission was too low?

A I do.

MR. MORRIS: I have no further questions.

EXAMINATION

BY EXAMINER NUTTER:

Q Mr. McGee, you stated you had operated several Devonian installations. Do they average 50.6?

A Many of them do.

Q Do all of them?

A No, some of them do not. We are talking about a stocked tank figure here and that depends very much on how the crude oil is treated before it goes into the stock tank.

Q You are familiar with the system that the commingling manual sets forth, are you not?

A Yes, vaguely. I know it's there. I can't recall it right off hand.

Q When you run the oil through the meter into the stock tank and leave that oil there in the stock tank, would your lines



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run without shutting in the Devonian?

A We are going to prove our particular meter. It will have a test line down stream of our meter that we will run into a separate stock tank.

Q The installation does not drain completely?

A No. It is not proving the meter.

Q So this line will come out down stream from the meter but up stream from this check valve on Exhibit 3?

A That's correct.

Q And it will go to another stock tank?

A That's right.

Q Out here?

A Yes.

Q And then the stock tank in turn would be tied to the other stock tank or to the power oil tank?

A It will be tied to the other stock tank.

Q Now, unless you do get an automatic custody transfer system installed here, how long does it take to fill the tank of oil and how long is the oil held in storage before being run?

A We have a thousand barrel tank there. That would mean that we'd get oil once in about three days with allowable on these two wells.

Q So, when you prove this meter you will be able to run the oil from the meter in a separate stock tank and hold it there for three days?



A Under the rules it is required only twenty-four hours.

Q The time held in storage until a maximum of twenty-four hours?

A We will have plenty of storage to do that.

Q You will do that?

A Right.

Q You stated that you already will start to commingle the production here by the use of two meters?

A That's right.

Q What order number is that?

MR. ERREBO: T.C.-36.

EXAMINER NUTTER: Are there any further questions of Mr. McGee?

MR. ERREBO: As Mr. Morris pointed out, we do have the burden in proving this exception. Does the Commission desire anything further from us by way of evidence or data that you feel would be necessary for us to put on?

MR. MORRIS: I would like to point out that the decision is not made by the Examiner but that the Commission acts upon his recommendation and that the Examiner cannot faithfully answer your question.

EXAMINER NUTTER: We'll let you know.

MR. ERREBO: I do have one or two more questions, then of Mr. McGee.

REDIRECT EXAMINATION



BY MR. ERREBO:

Q The recovery of vapors from the stock tank and the amount of vapor which may or may not be lost is not affected in any way by the meter system, is it?

A No.

Q That is something which is ended outright?

A Yes.

Q And will you have a stock tank which stores the production from these zones, a fluid recovery mechanism or vapor recovery mechanism?

A I doubt when we get them commingled we'll run more tests but preliminarily tests on each battery now - - We won't put one in because there's just not enough there, there's about half an MCF in one and about two in the other one.

Q In the event the Commission should grant the application, have you any estimate as to the amount of saving which would be realized from this hookup?

A From the two meters?

Q Yes.

A About fifteen hundred plus the maintenance in our initial investment. Maintenance on these two would triple the maintenance on the meters.

Q Do you have any estimate as to what the maintenance might be over any period?

A No, we really haven't had enough experience to know what



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the maintenance will be.

MR. ERREBO: That's all.

EXAMINER NUTTER: Are there any further questions of Mr. McGee?

If not, he may be excused.

MR. ERREBO: I would like to offer in evidence Applicant's Exhibits 1 through 4.

EXAMINER NUTTER: Applicant's Exhibits 1 through 4 will be entered in evidence.

Is there anything further?

MR. ERREBO: No, nothing further.

EXAMINER NUTTER: The case will be taken under advisement.



