BEFORE THE
OIL CONSERVATION COMMISSION
Santa Fe, New Mexico
April 19, 1961

EXAMINER HEARING

IN THE MATTER OF:

Application of The Ohio Oil Company for exception to Rule 309 (a) and for two automatic custody transfer systems. Applicant, in the above-styled cause, seeks permission to commingle, prior to measurement, the Lea-Devonian Pool production from all wells presently completed or hereafter drilled in the Lea Unit Area, comprising portions of Township 20 South, Ranges 34 and 35 East, Lea County, New Mexico, and to commingle, prior to measurement, the Lea-Bone Springs Pool production from all wells presently completed or hereafter drilled in said Lea Unit Area. Applicant further proposes to install two automatic custody transfer systems, one to handle the Devonian production, the other to handle the Bone Springs production.

Case 2254

BEFORE: Mr. A. L. "Pete" Porter,
Secretary-Director, Alternate Examiner

TRANSCRIPT OF HEARING

MR. MORRIS: "Application of The Ohio Oil Company for exception to Rule 309 (a) and for two automatic custody transfer systems."

MR. PORTER: Mr. Couch.

MR. COUCH: Terrell Couch, representing The Ohio Oil Company. The records of the Commission will show that an entry

of appearance has been made in this case by Atwood and Malone of Roswell, New Mexico verifying that I'm associated with them for the presentation of this case.

MR. PORTER: I believe the case file shows we have such a communication.

MR. COUCH: Mr. Porter, we will have two witnesses in the case and I will be one of them for a brief moment, I hope, near the end of it in connection with the discussion of the provisions of the unit agreement in this case. The other witness will be Mr. Frank Varner.

MR. PORTER: I will ask you and the other witness to stand and be sworn.

(Witnesses sworn.)

MR. COUCH: I will make a brief preliminary statement to point out that we're seeking here not only approval of automatic custody transfer equipment for the Bone Springs Pool, and also for the Devonian Pool in the Lea Unit Area, we are also seeking authority in the nature of a verification of the right to commingle production from the various Devonian completions without prior measurement and the right to commingle production from the various Bone Springs completions without prior measurement. The necessity, or the reason, I should say, for requesting this authority to commingle, is the fact that participating areas have not yet been approved on pending applications, and I'll discuss

that a little further near the end of the case to give you the present status of that situation.

For now, we can only say that under a unit such as this, a participating area is in effect a single base lease. Our proposal is to commingle from wells which will be within the same participating area, ultimately, when those participating areas are finally acted on.

The first portion of our case will deal directly with the proposed automatic custody transfer system, which is in effect two systems, one for each of the two pools now designated in the Lea Unit Area. My first witness, Mr. Frank Varner.

FRANK VARNER

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

DIRECT EXAMINATION

BY MR. COUCH:

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

A My name is Frank Varner, employed by The Ohio Oil Company as a petroleum engineer.

Q Mr. Varner, have you previously testified before this Commission or its Examiners?

A No, I have not.

Q Would you state very briefly for us your professional

qualifications including your education and experience?

A I have a Bachelor of Science in mechanical engineering from the University of Texas, have been employed by The Ohio Oil Company for nine years. Three years I worked as field engineer, the past six years I have been working primarily on equipment and corrosion in the Houston office. Previous to Ohio I worked for four years as an engineer for oil equipment manufacturer.

MR. PORTER: What was the name of the firm?

A Oil Center Two.

MR. PORTER: What was the name of the firm?

A Oil Center Two.

MR. PORTER: Thank you.

(Applicant's Exhibit No. 1 marked for identification.)

Q (By Mr. Couch) Mr. Varner, will you please look at the instrument that has been marked The Ohio Oil Company's Exhibit 1?

A Exhibit 1 is a schematic diagram of the proposed custody transfer system. Only one well is shown on the exhibit, the other wells in the unit will be similarly connected.

Q Will there be a separate flow line for each well to the header, Mr. Varner?

A Yes, each completion will have its own flow line to the particular pool header.

Q The production from each of the two pools will be handled separately, will it not?

A It will.

Q Exhibit 1 has some red circles on it, Mr. Varner, before you begin a description of how this system or system will operate, please tell us what the red circles are intended to refer to.

A The red circles are the emergency shutout system, --

Q Go ahead.

A -- which take care of either full tanks or stoppage of delivery of oil to the pipe line.

Q And you'll discuss those more in detail as you get to them, will you not?

A Yes.

Q Will you then, beginning with this Exhibit 1, Mr. Varner, describe to us briefly the method of its operation?

A We start with the well in the upper left-hand corner. At the well head there will be a choke. This is part of the well head mounted on the T tree. We will have our flow line then to the battery, at the battery --

Q That is the flow line will go to the header, will it not?

A Yes, with the header located at the battery.

Q All right.

A At the header we'll have in each flow line a check valve, an adjustable choke, three-way diverter valve.

Q Is there a separate header for each of the pools?

A Yes, each pool has a separate header.

Q Now, downstream from each of these headers you show this emergency shut-in valve on production loop and on test loop for each of the two systems. Will those valves be located just where they are or will they be located nearer to the header itself?

A They will actually be closer to the header. We put them on the schematic diagram for clarity rather than crowding up the drawing. The distance between the header and the valve will be as short as possible.

Q Now, with reference to the equipment upstream from those emergency shut-in valves that are circled in red between there and the well heads, is that equipment capable of withstanding well head shut-in pressures?

A Yes, it's capable of withstanding the well head shut-in pressure and half again as much.

Q What's the highest of the present shut-in pressures, Mr. Varner?

A Our latest information on shut-in pressure, the highest is 1700 pounds.

Q This equipment will stand more than one and a half times that amount?

A Yes, it will.

Q All right. How do those valves work, what type of valves are they?

A The valves are electrically-controlled pneumatic-operated valves. They are controlled by the emergency shut-in float on the first tank of each system, either a failure in electricity or gas supply will shut them in.

Q Those valves are gas-operated, are they not?

A They are gas-operated valves, yes, sir.

Q Now, the drawing shows, I believe, a separate test loop for each of the pools. Will you describe those test facilities briefly?

A The test loop provides for the testing of one well at a time from each of the pools.

Q Will the other wells be able to remain on production while that's being done?

A The other wells will not be affected by the testing of one well.

Q Moving on down your diagram, you next show a heater treater in each of the diagrams. Will you state the purpose of that, please?

A The heater treater is to insure the absence of water in the oil. Production will pass from either the production header directly into the heater or through the test separator

and then into the heater. We will use the heater treater as a separator, we believe that the treaters will separate the oil and gas sufficiently to insure the absence of gas.

Q In other words, these heater treaters are actually the type that also act as field separator, are they not?

A Yes, they are.

Q Now, proceed on to describe the tankage briefly for us.

A The Devonian tankage consists of three 1,000-barrel tanks. The first tank contains the emergency float shut-in switch. The second tank is the tank which supplies oil to the automatic custody transfer unit. On the Bone Springs side of the system we have just two 1,000-barrel tanks and they are hooked up in the same manner.

Q To refer to the emergency float switch near the top of each of the first tanks, will that be located slightly below the roof of the tank?

A Yes, it will.

Q The overflow lines connecting the first tank to the second one on the Bone Springs side and connecting up even to the third tank on the Devonian side, what occurs if those flow lines operate normally?

A If those flow lines operate normally the oil will pass from the bottom of the first tank up through the tank and up over the overflow line into the second. If, in the event the

custody transfer unit is not delivering oil as it should on the Devonian side, all three tanks will fill, after they reach the overflow line they will be filling as one and then the emergency shut-in float will shut in the lease. In the Bone Springs side just the two tanks will act as one and shut in the lease with the emergency shut-in switch.

Q Now, on the Devonian side on the second tank there is a high level, low level control, is there not?

A Yes, there is. This high-low level control will maintain its level so that it just barely not reach the overflow line. It is the switch which controls the meter pump on the custody transfer unit.

Q Then does that have the effect of holding the third tank empty as the emergency space on the Devonian side?

A Yes, it does.

Q In reference to the Bone Springs, does it also provide emergency storage in that second tank?

A Yes, we plan on holding the level in the second tank on the Bone Springs side low so that the remainder of the tank will be emergency storage room.

Q All right. The actual operation we will show a little bit later on in connection with our second exhibit, is that right?

A Yes.

Q Mr. Varner, will you describe briefly the automatic

custody transfer units we propose to use?

A We plan on using National Tank Company products as far as possible on the custody transfer units. The two units are identical with the exception of the pump and meter sizes. They consist of a meter pump, a strainer, a deaerator, a sampler, positive displacement meter, back pressure valve, meter prover loop and a check valve.

Q Do each of the units have a separate control panel?

A Yes, there's a separate control panel for each unit mounted on the skid.

Q The piping in these units, how is it sized?

A We've sized the piping so that everything with the exception of the meter and the pump will be three inch. This is considerably above what we will presently be selling, so the pumping meters are sized under that.

Q But you can go up to a three inch meter with the present pipe?

A That's right.

Q Now, I observe you don't have a BS & W monitor in the system. Will you advise us about that, please?

A We don't expect to get any water in the custody transfer unit due to the fact that we have both the heater treater and twelve-hour storage capacity in our tankage.

Q That is twelve-hour weathering time actually, is that

right?

A Yes, it is.

Q Now, with reference to the circulation of the tank bottoms, I observed you had some pipe lines on there showing how that can be done. Will you tell us about that, please?

A That's a further assurance that we won't have any water getting to the custody transfer unit. We plan on having the lease pumper periodically circulate bottoms to keep them clean. He can circulate the bottoms either through the heater treater or by-pass the heater treater and go into the first tank.

Q Mr. Varner, are there provisions in the piping and in the control panel for BS & W monitor and a line back to recirculate if we need it?

A Yes, there are.

Q That's true as to each of the system?

A Each of the system has a provision for BSW monitor. We did not include the monitor because the pipe line didn't require it as long as our sampling was according to their specifications.

Q Is our sampling equipment acceptable to them?

A Yes, it is.

Q Tell us briefly about the prover that's shown on the lower right-hand corner of Exhibit 1. Actually it's shown on the Devonian automatic custody transfer unit.

A There will be a single ten-barrel prover for use with either of the skid units. It will be according to API Code 1101.

Q It's possible that we may use a portable prover, is that correct?

A This is our first custody transfer unit in the area. If we have sufficient number of them we will eventually consider using a portable meter prover.

Q For the time being we have one prover, but with connections to use it on either of the two systems, is that right?

A That's correct.

Q Are there adequate valves above those prover loops, and below them as well, to prevent the possibility of commingling production from the two zones?

A Yes, I believe there is. This is downstream of the positive displacement meter.

Q That is after the production from each of the two zones has been measured?

A Yes.

Q The control panel switch you mentioned a while ago will actually be located on each automatic custody transfer unit skid, will they not?

A Yes, they will.

Q Will you tell us briefly about that?

A The control panel for each of the units will include a

meter rate monitor to stop delivery in case the rate of the meter is not according to preset limits. There is an allowable shutdown counter for delivery that will stop when the monthly allowable has been reached.

Q That is when you have sold the monthly allowable?

A Yes. There's a high pressure pipe line pressure switch.

Q Will that also stop delivery?

A That will stop delivery in the event of high line pressures.

Q Briefly describe your pumps and meters, if you will.

A On the Devonian Pool we plan on using at first a pump that's rated for 110 GPN. That's equivalent to 157 barrels per hour. The meter is 2½", it will handle about 200 GPN, and that's equivalent to 286 barrels per hour. The Bone Springs side we plan on using a 60 GPN pump that's equivalent to 86 barrels per hour. There's 2" meter which will handle about 100 GPN or equivalent is 143 barrels per hour.

Q Now, the meters that we propose to use in both of those units are made by A. O. Smith, are they not?

A They are.

Q Will you describe them briefly?

A They are positive displacement meters with a non-reset totalizing counter temperature compensated.

Q Are they presently sized under the quantities that we

may ultimately expect to produce from the Lea area?

A Yes, they are.

Q Is it possible that experience may require us to change these sizes up and down as we proceed with the operation of this system?

A It's quite likely.

Q When the total production nears the capacity of those pumps and meters, we, of course, will propose to change them out for larger sizes, is that right?

A That's correct.

Q Why are we using the smaller size to start off with, Mr. Varner?

A We feel that by using a smaller size for what we may ultimately pass through the custody transfer unit, will save both on electricity power from the meter pump and increase our PD meter accuracy. The meters will start and stop less frequently.

Q Right down to the very end of our Exhibit 1 on the right-hand corner, we're showing there delivery of the oil to the pipe line. You have already testified after the oil from each pool has been separately measured in its own automatic custody transfer system, you have a check valve there through which the oil passes?

A Yes, the check valve is the last item on the skid unit.

Q Beyond that and below that the oil is then commingled

into the same pipe line, is that right?

A Yes. Then the pipe line will pump. There are provisions on the skid unit for pipe line pump controls.

Q There's only the one pipe line outlet for both types of oil in this area?

A Yes.

Q Is it your understanding that the price for the oil is the same whether sold separately or commingled?

A Yes, it is.

(Applicant's Exhibit No. 2 marked for identification.)

Q Now, observe the document that's marked Exhibit 2 and tell us what that shows, please.

A Exhibit 2 shows our proposed method of handling the tankage that we now have to include the pipe line's requirement of twelve hours weathering and allow us some emergency storage space. On the Devonian Pool, which is shown at the top of the sketch, we plan on using the first tank and most of the second tank for weathering volumes. The first tank will hold 850 barrels below our overflow line, the second 700 barrels, giving us a total of 1550 barrels for weathering. This will allow us to produce up to 3100 barrels with the pipe line's twelve-hour requirement.

Q That's daily production?

A That's the daily production.

Q How much is that volume sufficient to handle, how many top allowable wells?

A On the Devonian Pool this will handle eight top allowable wells of 362 barrels per day. That's a 35-barrel unit.

Q Normal unit allowable?

A Normal unit allowable.

Q Then a thousand-barrel emergency tank on the Devonian side again?

A The thousand-barrel Devonian emergency storage tank will handle these eight wells for eight hours before the float switch in the first tank will shut the lease in. We probably only have four wells, though, when the custody transfer unit is first put into operation, so that will be equivalent to sixteen hours storage.

Q Emergency storage? A Yes.

Q On the Bone Springs side?

A We have two 1,000-barrel tanks. We plan on using the entire first tank, part of the second tank for weathering. As shown on the drawings, the first tank will have 850 barrels, the second 250. This is 1100 barrels weathering, with the twelve-hours requirement by the pipe line we will be able to run a total of 2200 barrels without exceeding the twelve-hour limit for the pipe line. This is equivalent of 13 wells' production top allowable of 167 barrels per day. The emergency storage space

we calculate to be 650 barrels, which is equivalent time for the 13 wells of seven hours. Again, now, we will have only four wells completed when the custody transfer unit is put into operation. That's equivalent then to 23 hours of production.

Q This system, generally speaking, we can say, has four basic safeguards against the waste of oil, does it not?

A Yes, it does.

Q Would you enumerate those for us, please?

A The first is that the equipment that we plan on using is of the type which has been used on similar automatic custody transfer units and it's reliability has been established. The second, the emergency storage space, which will prevent the overflow of oil, is equivalent when we first start up to 16-hour period on the Bone Springs side and 23 hours on the -- I have them backward, on the Devonian side and 23 hours on the Bone Springs Pool.

Q That's with four wells connected?

A This is with four wells connected. Of course, this time of emergency storage will decrease as more wells are connected and change as the allowable is changed.

Q By that time would you anticipate that the system had been in use long enough to thoroughly check out its operation?

A Yes, I believe it will be.

Q When that has occurred, what is your opinion about the

need for the emergency storage that you will initially have?

A I believe at that time we will not need any emergency storage space to insure not spilling oil on the ground.

Q In other words, it's your opinion that these emergency shut-off valves, the emergency float switches that you have talked about, it's your opinion that it will afford reasonable protection against the waste of oil?

A Yes.

Q Without any emergency storage?

A Yes.

Q Those valves provide protection from power failure, do they not?

A Yes.

Q Protection from overflow due to power failure?

A The shut-in valves are operated in such a manner that either supply of gas failure or electrical supply failure will shut them in.

Q Or the malfunction of the system or failure of the pipe line company to take oil, what effect will that have?

A That will also shut them in.

Q All right.

A The third safeguard was the emergency shut-off valves that we have. The fourth, The Ohio Oil Company plans to have a pumper assigned to the unit until it is checked out for a total

of eight hours a day. After it is checked out that time will be decreased. His presence on the lease should be sufficient to detect flaws in the system.

Q In your opinion will that be sufficient supervision there to check it out?

A I believe it will, yes.

Q Mr. Varner, did you write a letter to the Texas-New Mexico Pipe Line Company in connection with this system?

A Yes, we wrote a letter to the pipe line company describing the system, sending the schematic diagrams that we're using here, and the list of the equipment we plan to use.

Q Will you please look at this document, a letter dated April 12, from that pipe line company directed to you and state if that is a copy of the original letter that you received?

A Yes, it is.

Q Does it state that the pipe line company approves of the system as we now propose it?

A Yes, it does.

MR. COUCH: We ask that this be marked Exhibit 3, please.

(Applicant's Exhibit No. 3 marked for identification.)

Q (By Mr. Couch) Mr. Varner, will you give us your opinion with regard to the savings accomplished here by the installation and use of this proposed system?

A The use of this installation will save us a capital investment which will be needed otherwise for additional tankage, and there would be a savings in the operation and maintenance cost of the tankage. There should be a savings in hydrocarbon loss due to evaporation since the twelve-hour weathering time will be constant. As development progresses on the Lea Unit, the use of a vapor recovery system will be much more attractive with the five tanks than with the number that would handle the equivalent production.

Q What about the correlative rights of the interested parties in connection with the operation of a system such as this?

A The correlative rights of all interested parties will be protected. No wells will be connected to the system except wells that are within or expected to be within the same participating area effective as of the time such wells are connected. Therefore, all wells connected will in effect be on the same base lease. In addition, each well can be tested regularly so that even if a well is not producing top allowable, this factor will be known and total production adjusted accordingly.

Q Is the design of this system or these systems such that commingling of production from Bone Springs and from Devonian from the two zones is not physically possible until after measurement?

A That's right, the first commingling of the oil is after

measurement. In addition there's a large difference in the gravity of the crudes which should give us a clue to any commingling in the system. The Devonian Pool crude is about 58 gravity, the Bone Springs about 42.

Q And by providing accurate measurement, will this system insure more accurate compliance with the Commission allowable orders?

A Yes, I believe it will.

Q And, I don't recall whether you testified to this, but will the automatic custody transfer unit be equipped so as to shut down the taking of oil, the delivery of oil to the pipe line when the monthly allowable has been reached in each zone?

A Yes, there's a monthly allowable shutdown counter mounted on the control panel.

Q Mr. Varner, would you state your conclusion, based on the testimony that you have given here, and the facts that you have presented to this Commission in the form of these two schematic diagrams?

A Considering all of the pertinent facts, I recommend that the installation and use of the system as shown on Exhibits 1 and 2 be approved with authority to connect up all wells now drilled or hereafter completed in each of the pools.

Q That's within the Lea Unit itself, however?

A Yes, sir.

Q All right.

A That is provided that each well so completed is or will be within the participating area for such pool effective not later than the date such well is connected into the system. I further recommend that authority be granted to commingle production from the different wells completed in the same pool in the Lea Unit without prior measurement even though the wells are not on the same base lease, provided the wells from which the production is commingled are or will be within the same participating area, effective not later than the date such commingling occurs.

Q All right.

MR. COUCH: This concludes the direct testimony from this witness, Mr. Porter.

MR. PORTER: Would you like to offer your exhibits at this time?

MR. COUCH: Yes.

Q (By Mr. Couch) Mr. Varner, were Exhibits 1 and 2 prepared under your supervision and direction?

A Yes, sir, they were.

Q And Exhibit 3 was a copy of a letter you personally had received?

A That's right.

MR. COUCH: We offer in evidence Exhibits 1 through 3.

MR. PORTER: Without objection the exhibits will be admitted. Does anyone have a question of Mr. Varner? Mr. Nutter.

CROSS EXAMINATION

BY MR. NUTTER:

Q You stated that the high pressure on your well heads was a maximum of 1700 pounds, is that correct?

A Yes, it is.

Q That's your shut-in pressure?

A Yes.

Q What about the flow lines, what kind of pipe are you using for flow lines, Mr. Varner?

A The dimension of the line may change with the distance from the battery, but in general we plan on using 3" schedule 40 grade B.

Q What's the bursting strength of that?

A Just a second, please. 6480 pounds.

Q Which should be capable of withstanding the well head pressure then, correct?

A Yes.

Q Is Ohio willing to test those flow lines periodically to determine their ability to withstand the shut-in well head pressures?

A Yes, they are.

Q You stated that the pumper would spend eight hours a

day on the unit until such time as it had been checked out, then the time would be decreased. It will be decreased to what?

A He will visit the lease at least once every twenty-four hours.

Q That will be the very minimum, one visit per day?

A Yes, that would be the minimum.

MR. NUTTER: I believe that's all.

MR. PORTER: Anyone else have a question of Mr. Varner?

MR. COUCH: One other item I would like to cover with this witness.

MR. PORTER: Mr. Couch.

REDIRECT EXAMINATION

BY MR. COUCH:

Q The Lea Unit is a large area about 2500 acres, is it not?

A Yes, it is.

Q As development progresses in the Lea Unit, if it goes like we hope it will go, we might have quite a few wells to connect through this system, is that right?

A That's right.

Q Mr. Varner, if that is done, is it your present plan, and so far as you know The Ohio's plan, to possibly install satellite stations, one or more, at appropriate places in the unit to connect up to this proposed automatic custody transfer system?

A Yes, we would like to install satellite stations if the distance to the individual wells becomes great.

Q Now, referring to Exhibit 1, would you give us some idea of how one of these proposed satellite stations would be set up?

A The proposed satellite station would consist of everything up to the heater treater.

Q That is coming from the well down through the test separator loops?

A Yes. We would have the header, the test separator at the satellite station.

Q And your flow lines from those satellite stations would connect into this system just upstream the heater treater of the pool from which it was produced?

A That is right.

MR. COUCH: No further questions.

MR. PORTER: Any further questions of Mr. Varner? The witness may be excused.

(Witness excused.)

MR. COUCH: Mr. Porter, the understanding of the question of the existence of the participating areas I think will be helped by reference to the plat which The Ohio introduced as its Exhibit 1 in Case 2206 pertaining to transfer of allowables from the Lea Unit area. I have additional copies of that exhibit

here, not to introduce it as an exhibit, but simply to refer to it for a clear understanding. As testified in that case, the red line and also shown on the plat, the red line encloses nine square 40-acre tracts and is at present Devonian participating area in the Lea Unit. The orange line encloses the proposed revised or expanded Devonian participating area for which application has been made. It also is the boundary of the proposed initial Bone Springs participating area.

Each of those applications, or the larger size participating areas, are now pending in Washington. I do not know when they will be acted upon, nor do I know, of course, whether they'll be granted to that extent or to some smaller size. I can say that it has been my understanding and experience that the minimum size for a participating area under their usual method of designation of participating areas is an area comprised of nine square 40-acre tracts around the well on which the participating area was based. That is what was followed in the designation of the original Devonian participating area.

You will observe from looking at the plat that Wells No. 1 and 2 are on the same base lease. Well No. 4 is on a different base lease, and Well No. 5 is on still a third base lease. Although the No. 4 well is within the Devonian participating area under the 80-acre spacing program, an additional 40 acres outside that area has been dedicated to it. It seems virtually certain

that each of those four wells, that is 1, 2, 4 and 5 as well as Well No. 6 which is proposed to be drilled in the Northwest Quarter of the Southeast Quarter of Section 11, Township 20 South, Range 34 East, will all be within the same participating area assuming that No. 4, 5 and 6 are productive.

The problems of the participating area is pending, and as to how we handled production from those different leases leaves us in a position of feeling virtually certain that they will all be included and, in effect, treated as if on the same base lease. We certainly do not want to install separate tank batteries for these wells and then have to just tear them out and disrupt the proposal for the automatic custody transfer unit. Therefore, we have written to and obtained from the United States Geological Survey at Roswell some information concerning the handling of this production, and I offer in evidence a copy of letter dated April 13 from Mr. John Anderson addressed to The Ohio Oil Company, attention Mr. I. G. Burrell, who is our assistant division manager, and ask that it be marked Ohio's Exhibit 4 and in clarification of that letter I also offer a copy of a letter signed by Mr. Anderson, again directed to our Mr. I. G. Burrell, dated April 17, 1961 and ask that it be marked Ohio's Exhibit No. 5.

(Applicant's Exhibits No. 4 & 5 marked for identification.)

MR. COUCH: Those letters will verify that the

United States Geological Survey has no objection to the commingling of actual production from these wells to which I have referred, 1, 2, 4, 5 and 6, or to the transfer of allowables between those wells as authorized by this Commission, provided only that we separately test the wells so that production can be allocated back on a lease basis for purpose of their accounting for royalty pending action on these participating areas.

Under the unit agreement all the working interests are pooled, the overriding royalty and royalty interests share in proportion to the acreage included in the participating area to which their respective overrides or royalty interests applies. Any expansion of a participating area under the unit agreement is to be effective on the first of the month in which the information is obtained to justify that expansion, unless a different date is justified by the operator and approved by the Secretary of the Interior and by the Land Commissioner.

On behalf of The Ohio Oil Company today I state that The Ohio will not seek to justify any other date for the designation of the effective date of a participating area other than the date on which, the first of the month on which the information is obtained that justifies that expansion. I'll make that committment on behalf of Ohio. So we will not connect to this system or commingle wells which we do not feel will justify the expansion of the participating area and thus be included in the same participating