

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. COUGH: 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. COUGH: 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 is that, as you know, is the fact that certain wells have not yet been approved on pending applications, and will therefore

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 combine 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 the system, one for each of the two pools now designated in the Oil Unit Area. My first witness, Mr. Frank Varner.

FRANK VARNER

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

DIRECT EXAMINATION

Q. A. VARNER:

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 as 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. Vainer, 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 these more in detail as you get to them, will you not?

A Yes.

Q Will you then, beginning with this Exhibit 1, Mr. Vainer, 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 these 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 pressure, 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. Now 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 these 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 trailer in each of the diagrams. Will you state the purpose of that, please?

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

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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 these 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. In the event the

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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 Bose 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 New 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. Warner, will you describe briefly the automatic

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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 degasator, 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 pump 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 Deconian automatic custody transfer unit.

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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

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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 GPM. That's equivalent to 157 barrels per hour. The meter is 2½", it will handle about 200 GPM, and that's equivalent to 286 barrels per hour. The Bone Springs side we plan on using a 60 GPM pump that's equivalent to 86 barrels per hour. There's 2" meter which will handle about 100 GPM or equivalent is 143 barrels per hour.

Q Now, the meters that we propose to use in both of these 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

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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-hour 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

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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

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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 pipeline 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 pump assigned to the unit until it is checked out for a total

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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?



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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



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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.



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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

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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?

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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

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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 commitment 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

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area effective the date of first production from that well. A copy of the unit agreement was, of course, introduced in the original hearing on this unit and is a part of the records of the Commission. My interpretations of it here, I feel quite sure, are correct and obviously subject to verification by reference to the unit agreement itself.

I have no further testimony.

MR. PORTER: Does anyone have a question of Mr. Couch?

Mr. Nutter.

CROSS EXAMINATION

BY MR. NUTTER:

Q One thought enters my mind, Mr. Couch. You stated that Ohio would not attempt to justify any other date than the date which the unit agreement provides would be the date of the expansion?

A Yes, sir.

Q It provides that it would be the first of the month in which the knowledge is obtained?

A Yes, sir.

Q Is it the plan of Ohio to find out on it, make the determination whether the well should be in the participating area prior to commingling it with the other production?

A That would be our intention, Mr. Nutter. As I said, after making that commitment on behalf of The Ohio, I made the



further statement that The Ohio will not plan, does not plan to connect any well unless it is of the opinion, unless Ohio's of the opinion that that well will justify the expansion of the area to include it.

Q It's not The Ohio's plan to put the well into the commingled tank battery and produce it for an extended period of time to determine whether it ought to be in the participating area or not?

A No, sir, we would expect to test the well and make that determination before we started to commingle. Obviously, in order to test, particularly under the automatic custody transfer, system, that we propose in order to test, as I understand the system, it would be necessary for us to run that well's production through the test loop for the zone in which it was completed and there to measure that production and run it on then into the system. That production would be separately measured at that time.

Q The production would, in all events, be separately measured while the determination was being made then?

A That would seem to me to be quite feasible under this mechanical installation, as I understand it, and other than that it would be possible, I'm quite sure, to set a test tank if that became necessary, if there seemed to be some possible doubt.

Perhaps I am being optimistic, I am hoping the wells will be top allowable under our open flow test and we won't have any serious

DEARNLEY-MEIER REPORTING SERVICE, Inc.

PHONE CH 2-6031

ALBUQUERQUE, NEW MEXICO



question about extending the unit area, but it would be our intention to feel certain, at least in our own mind, that the well would justify the expansion before we would commingle it without separately measuring it, and, in the event we should be overruled later on by the Government refusing to approve our recommendation, we will at least have the test data available on which we could make the appropriate allocations back.

MR. NOTTER: Thank you.

MR. PORTER: Any further questions of Mr. Couch? He may be excused.

(Witness excused.)

MR. PORTER: Does anyone have anything further to offer in this case?

MR. COUCH: Mr. Porter, I believe I offered those letters as I handed them up there. If not, I now request.

MR. PORTER: That's Exhibits 4, 5 and 6?

MR. COUCH: Yes.

MR. PORTER: Without objection Ohio's Exhibits 4 and 5--

MR. COUCH: Four and five is all.

MR. PORTER: -- 4 and 5 will be admitted to the record. We will take the case under advisement and take up next Case 2255.

DEARNLEY-MEIER REPORTING SERVICE, Inc.

PHONE CH 2-4671

ALBUQUERQUE, NEW MEXICO



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 25th day of April, 1961.

Ada Dearnley
 Notary Public-Court Reporter

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. 2254 heard by me on April 19, 1961.
W. H. Carter
 Examiner
 New Mexico Oil Conservation Commission

DEARNLEY-MEIER REPORTING SERVICE, Inc.

PHONE: CH 2-4411

ALBUQUERQUE, NEW MEXICO



12-61

DOCKET: EXAMINER HEARING - WEDNESDAY, APRIL 19, 1961

9 A.M. - OIL CONSERVATION COMMISSION CONFERENCE ROOM
STATE LAND OFFICE BUILDING, SANTA FE, NEW MEXICO

The following cases will be heard before Elvis A. Utz, Examiner, or A. L. Porter, Secretary-Director, as alternate examiner:

CASE 2246: Application of Sinclair Oil & Gas Company for an exception to Rule 303 (a) and Rule 309 (a). Applicant, in the above-styled cause, seeks permission to commingle, without separate measurement, the oil production from the Tubb Gas Pool, the oil production from the Blinbry Gas Pool and the oil production from the Drinkard Pool from all wells presently completed on its J. R. Cone "A" lease, comprising the W/2 SW/4 of Section 26, Township 21 South, Range 37 East, Lea County, New Mexico, and on its J. R. Cone "B" lease comprising the SE/4 SW/4 and the SW/4 SE/4 of said Section 26.

CASE 2247: Application of Sinclair Oil & Gas Company for an exception to Rule 303 (a). Applicant, in the above-styled cause, seeks permission to commingle, without separate measurement, the distillate production from the Tubb Gas Pool, the distillate production from the Blinbry Gas Pool, the oil production from the Drinkard Pool and the oil production from the Wantz-Abo Pool from all wells presently completed on the S. J. Sarkeys lease, comprising the the SE/4 of Section 23, Township 21 South, Range 37 East, Lea County, New Mexico.

CASE 2248: Application of Sinclair Oil & Gas Company for an exception to Rule 303 (a). Applicant, in the above-styled cause, seeks permission to commingle, without separate measurement, the oil production from the Drinkard Pool with the oil production from the Tubb Gas Pool from all wells presently completed on its A. M. York "B" lease, comprising the NE/4 NE/4 of Section 20, Township 21 South, Range 37 East, Lea County, New Mexico.

CASE 2249: Application of Southern Union Production Company for an order force-pooling a standard 160-acre proration unit in the Tapacito-Pictured Cliffs Gas Pool. Applicant, in the above-styled cause, seeks an order force pooling all mineral interests in the Tapacito-Pictured Cliffs Gas Pool in the SW/4 of Section 2, Township 25 North, Range 3 West, NMPM, Rio Arriba County, New Mexico, to form a standard 160-acre gas proration unit.

CASE 2250: Application of Texaco, Inc. for an exception to Rule 309 (a) and for an automatic custody transfer system. Applicant, in the above-styled cause, seeks permission to commingle the Paduca-Delaware Pool production from all wells presently completed or hereafter drilled on the Cotton Draw Unit, comprising portions of Townships 24 and 25 South, Ranges 31 and 32 East, Eddy and Lea Counties, New Mexico. Applicant further proposes to install an automatic custody transfer system to handle said commingled production.

CASE 2251: Application of Texaco, Inc. for a non-standard gas proration unit. Applicant, in the above-styled cause, seeks the establishment of a 280-acre non-standard gas proration unit in the Jalmat Gas Pool consisting of the SW/4, the E/2 SE/4 and the NW/4 SE/4 of Section 31, Township 23 South, Range 37 East, Lea County, New Mexico, to be dedicated to its E. E. Blinebry Well No. 2, located 1980 feet from the South line and 660 feet from the East line of said Section 31.

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.

CASE 2253: Application of G. E. Reagin for permission to operate a treating plant. Applicant, in the above-styled cause, seeks permission to operate a sediment oil treating plant to be located at or near the City of Hobbs, New Mexico.

CASE 2254: 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 2255: Application of Tenneco Corporation for approval of the Kemnitz-Wolfcamp Unit Agreement and for a pressure maintenance project. Applicant, in the above-styled cause, seeks approval of the Kemnitz-Wolfcamp Unit Agreement, which unit embraces 4.520 acres of State lands in Township 16 South, Ranges 33 and 34 East, Lea County, New Mexico. Applicant further seeks an order authorizing it to institute a pressure maintenance project in said Kemnitz-Wolfcamp Unit Area by the injection of gas into 5 wells in said area, and for special rules governing the operation of said project.
- CASE 2256: Application of Hondo Oil & Gas 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 Culwin-Queen Pool from all wells presently completed or hereafter drilled on the State RD Lease in Section 36, Township 18 South, Range 30 East, Eddy County, New Mexico.
- CASE 2257: Application of J. R. Cone for an exception to Rule 303 (a). Applicant, in the above-styled cause, seeks permission to commingle, without separate measurement, the production from the Blinebry Oil Pool, the Drinkard Pool and the Tubb Gas Pool from all wells presently completed on the Anderson Lease, comprising the NE/4 SE/4 of Section 21, Township 21 South, Range 37 East, Lea County, New Mexico.
- CASE 2258: Application of Markham, Cone & Redfern for an exception to Rule 303 (a). Applicant, in the above-styled cause, seeks permission to commingle, without separate measurement, the production from the Drinkard Pool, the Blinebry Gas Pool and the Tubb Gas Pool from all wells presently completed on the Eubank's lease, comprising the SW/4 of Section 14, Township 21 South, Range 37 East, Lea County, New Mexico.
- CASE 2259: Application of Southwest Production Company for a non-standard oil proration unit and for an unorthodox oil well location. Applicant, in the above-styled cause, seeks the establishment of a 71.3-acre non-standard oil proration unit in the Cha Cha-Gallup Oil Pool comprising that portion of the SW/4 of Section 16, Township 29 North, Range 14 West, San Juan County, New Mexico, lying North of the mid-channel of the San Juan River. Applicant further seeks approval for an unorthodox oil well location in said pool at a point 1850 feet from the South line and 330 feet from the West line of said Section 16, to serve as the unit well.

Docket No. 12-61

CASE 2260:

Application of Continental Oil Company for an unorthodox gas well location. Applicant, in the above-styled cause, seeks approval of an unorthodox gas well location in the Eumont Gas Pool for its State F-1 Well No. 1, located 660 feet from the South and West lines of Section 1, Township 21 South, Range 36 East, Lea County, New Mexico, said well to serve as the unit well for a gas preparation unit comprising all of said Section 1.

The Ohio Oil Co.

1001 APR 12 1961
Legal Department

W. Hume Everett
Division Attorney

April 11, 1961

P.O. Box 3128
Houston, Texas

J. O. Terrell Couch
Warren B. Leach, Jr.
Attorneys

Re: NMCC Case No. 2254
A.C.T. System
Lea Unit

Mr. Elvis Utz
New Mexico Oil Conservation Commission
P. O. Box 871
Santa Fe, New Mexico

Dear Sir:

I observe from the docket that you or Mr. Porter will be the Examiner for the above styled case. I have heretofore furnished to Mr. Dan Nutter a copy of our preliminary drawing of our proposed A.C.T. System. For your information I enclose two copies of each of the exhibits which we plan to present at the hearing on April 19. There have been some revisions since the preliminary drawing we submitted to Mr. Nutter and I would therefore appreciate it if you would hand a copy of each of the exhibits to him.

We look forward to seeing you in Santa Fe April 19.

Very truly yours,


J. O. Terrell Couch

TC:MK
Enc. 4

The Ohio Oil Co. Case 2554

P. O. BOX 3128
HOUSTON 1, TEXAS

March 17, 1961

Re: Lea-Devonian Pool and Lea-Bone Springs Pool
in Township 20 South, Ranges 34 and 35 East,
N.M.P.M., Lea County, New Mexico

New Mexico Oil Conservation Commission
P. O. Box 871
Santa Fe, New Mexico

Attention: Mr. A. L. Porter, Jr.
Secretary-Director

Gentlemen:

The Ohio Oil Company, Operator of the Lea Unit created by Unit Agreement for the Development and Operation of the Lea Unit Area heretofore approved by Lea Unit Agreement Order No. R-1540 dated November 30, 1959, in Case No. 1823, acting with the concurrence of the other working interest owners in said Unit; hereby applies for authority to:

- (1) Construct and operate Automatic Custody Transfer equipment for the handling, measurement and delivery of oil produced from the Lea-Devonian Pool and from the Lea-Bone Springs Pool, from wells now existing or hereafter completed within the Lea Unit Area, provided such equipment is designed to separately and accurately measure the oil produced from each such Pool prior to delivery of such oil to or for the account of the purchaser of such oil;
- (2) Commingle all oil and gas produced from the Lea-Devonian Pool by such well or wells, without separately measuring such production from the respective wells;
- (3) Commingle all oil and gas produced from the Lea-Bone Springs Pool by such well or wells, without separately measuring such production from the respective wells.

Operations pursuant to the requested authority will prevent waste and protect correlative rights.

The Ohio therefore requests that this application be set for hearing before the Commission, or an Examiner of the Commission, at the earliest possible date, and that notice be given as requested by the applicable laws and regulations. A list of the interested parties now known to applicant is attached.

Very truly yours,

THE OHIO OIL COMPANY

By

J. O. Terrell Couch
J. O. Terrell Couch

TC:MK

Forbes
Mitchell
4-5-61
OK

March 17, 1961
New Mexico Oil Conservation Commission
Page 2

c - Mr. E. S. Johnny Walker
Commissioner of Public Lands
P. O. Box 791
Santa Fe, New Mexico

Mr. John Anderson
Regional Oil and Gas Supervisor
United States Geological Survey
P. O. Box 6721
Roswell, New Mexico

List of Interested Parties known to Applicant
re: Foregoing Application

W. G. Ross and wife, Vee K. Ross
P. O. Box 1094
Midland, Texas

Jake L. Hemon
5th Floor Vaughn Building
1712 Commerce Street
Dallas 1, Texas

Edwin B. Cox
2100 Adolphus Tower
Dallas, Texas

The Pure Oil Company
P. O. Box 239
Houston 1, Texas

Gulf Oil Corporation
P. O. Box 669
Roswell, New Mexico

Sinclair Oil & Gas Company
P. O. Box 1470
Midland, Texas

Drilling & Exploration Co., Inc.
Box 35366, Airlawn Station
Dallas 35, Texas

Mr. John Anderson
Regional Oil and Gas Supervisor
United States Geological Survey
P. O. Box 6721
Roswell, New Mexico

Mr. E. S. Johnny Walker
Commissioner of Public Lands
P. O. Box 791
Santa Fe, New Mexico

Mr. and Mrs. W. H. Milner
609 S. Lea
Roswell, New Mexico

Martina Featherstone
236 Petroleum Building
Roswell, New Mexico

Harvey E. Roelofs
Trustee for Olen F. Featherstone, II
c/o Olen F. Featherstone
236 Petroleum Building
Roswell, New Mexico

Edith M. Kasper and husband, Paul Kasper
P. O. Box 1094
Midland, Texas

Dorothy E. Cox McCormick and husband,
Don G. McCormick
c/o Reese, McCormick, Lusk & Paine
3 Bujac Building
112 North Canyon
Carlsbad, New Mexico

L. N. Hapgood and wife, Mary C. Hapgood
P. O. Box 966
Casper, Wyoming

E. F. Howe and wife, Frances E. Howe
c/o New Mexico Bank & Trust
Hobbs, New Mexico

Thomas Joseph Sheehan and wife,
Louise Sheehan
112 West Fairview Boulevard
Inglewood, California

R. R. Herrell
Oil & Gas Properties
P. O. Box 1656
Midland, Texas

Western Oil Fields, Inc.
P. O. Box 1139
Denver, Colorado

Ernest A. Hanson
P. O. Box 852
Roswell, New Mexico

E. B. Todhunter
P. O. Box 852
Roswell, New Mexico

2177
1877-A

APR 17 1932

BEFORE THE OIL CONSERVATION COMMISSION
OF THE STATE OF NEW MEXICO

APPLICATION OF THE OHIO)
OIL COMPANY FOR EXCEPTION) Case No. 2254
TO RULE 309 (a))

ENTRY OF APPEARANCE

COMES NOW Atwood & Malone, duly licensed
practitioners of the law, of Roswell, New Mexico, and enters
its appearance in this case on behalf of The Ohio Oil Company.
Associated with this firm for the presentation of this case be-
fore the Commission will be J. O. Terrell Couch of Houston,
Texas, a member of the State Bar of Texas.

ATWOOD & MALONE

By E. H. Newman
Attorneys for Applicant
Post Office Box 700
Roswell, New Mexico

RM
4/24
DRAFT

RSK/esr
April 24, 1961

BEFORE THE OIL CONSERVATION COMMISSION
OF THE STATE OF NEW MEXICO

Don
IN THE MATTER OF THE HEARING
CALLED BY THE OIL CONSERVATION
COMMISSION OF NEW MEXICO FOR
THE PURPOSE OF CONSIDERING:

CASE No. 2254

Order NO. R- 1920

W.H.
APPLICATION OF THE OHIO OIL
COMPANY FOR AN EXCEPTION TO
RULE 309 (a) AND FOR TWO
AUTOMATIC CUSTODY TRANSFER
SYSTEMS, LEA COUNTY, NEW
MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 o'clock a.m. on
April 19, 1961, at Santa Fe, New Mexico, before A. L. Porter, Jr.,
Examiner duly appointed by the Oil Conservation Commission of New
Mexico, hereinafter referred to as the "Commission," in accordance
with Rule 1214 of the Commission Rules and Regulations.

NOW, on this _____ day of April, 1961, the Commission,
a quorum being present, having considered the application, the
evidence adduced, and the recommendations of the Examiner,
A. L. Porter, Jr., and being fully advised in the premises,

FINDS:

(1) That due public notice having been given as required by
law, the Commission has jurisdiction of this cause and the subject
matter thereof.

(2) That the applicant, The Ohio Oil Company, is the opera-
tor of the Lea Unit Area, comprising portions of Township 20 South,
Ranges 34 and 35 East, NMPM, Lea County, New Mexico.

(3) That the applicant seeks permission to commingle, prior
to measurement, the Lea-Devonian Pool production from all wells
presently completed or hereafter drilled in the above-described
Lea Unit Area, except that the production from ^{any} well ^{not yet}
~~determined by the operator of the Lea Unit to be in the~~
~~separately measured until such time as it has been determined by~~
~~the operator of the Lea Unit that such well is to be in the~~
~~participating area will be measured prior to commingling~~
~~with production from wells in a~~
~~participating area on another lease.~~

(4) That the applicant further seeks permission to com-
mingle, prior to measurement, the Lea-Bone Springs Pool produc-
tion from all wells presently completed or hereafter drilled

in the above-described Lea Unit Area, except that the production from ~~each well shall be separately metered until such time as it has been determined by the operator of the Lea Unit that such well is to be commingled with production from wells in a participating area or on another basic lease.~~ ^{any well not yet determined by the operator of the Lea Unit to be in a participating area will be measured prior to commingling with production from wells in a participating area or on another basic lease.}

(4) That the applicant further proposes to install two automatic custody transfer systems, one to handle the Devonian production, the other to handle the Bone Springs production in the above-described Lea Unit Area.

(6) That the previous use of automatic custody transfer equipment, similar to that proposed by the applicant, has shown that such equipment is a reliable and economic means of transferring the custody of oil, and that the use of such equipment should be permitted, provided adequate safety features are incorporated therein.

IT IS THEREFORE ORDERED:

(1) That the applicant, The Ohio Oil Company, is hereby authorized 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, N.M.P.M., Lea County, New Mexico, provided, however, that the production from ~~each well shall be separately metered until such time as it has been determined by the operator of the Lea Unit that such well is to be commingled with production from wells in a participating area or on another basic lease.~~ ^{any well not yet determined by the operator of the Lea Unit to be in a participating area shall be measured prior to commingling with production from wells in a participating area or on another basic lease.}

(2) That the applicant is hereby authorized to commingle, prior to measurement, the Lea-Bone Springs Pool production from all wells presently completed or hereafter drilled in the above-described Lea Unit Area, provided, however, that the production from ~~each well shall be separately metered until such time as it has been determined by the operator of the Lea Unit that such well is to be commingled with production from wells in a participating area or on another basic lease.~~ ^{any well not yet determined by the operator of the Lea Unit to be in a participating area shall be measured prior to commingling with production from wells in a participating area or on another basic lease.}

(3) That the applicant is authorized to install two automatic custody transfer systems, one to handle the Devonian production, the other to handle the Bone Springs production in the above-described Lea Unit Area.

PROVIDED HOWEVER, That the applicant shall install adequate facilities to permit the testing of all wells located ⁱⁿ the above-described Lea Unit Area at least once each month to determine the individual production from each well.

PROVIDED FURTHER, That in order to prevent the overflow and waste of oil in the event the automatic custody transfer systems fail to transfer oil to the pipeline, the applicant shall add additional storage facilities from time to time, as it becomes necessary, to store the production which will accrue during the unattended hours, or in the alternative, shall so equip the existing facilities as to automatically shut-in the production at the wellhead in the event the storage facilities become full.

IT IS FURTHER ORDERED:

That all meters used in the above-described automatic custody transfer systems shall be operated and maintained in such a manner as to ensure an accurate measurement of the liquid hydrocarbon production at all times.

That meters shall be checked for accuracy at least once each month until further direction by the Secretary-Director.

That meters shall be calibrated against a master meter or against a test tank of measured volume and the results of such calibration filed with the Commission on the Commission form entitled "Meter Test Report."

(4) That jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

58 gals

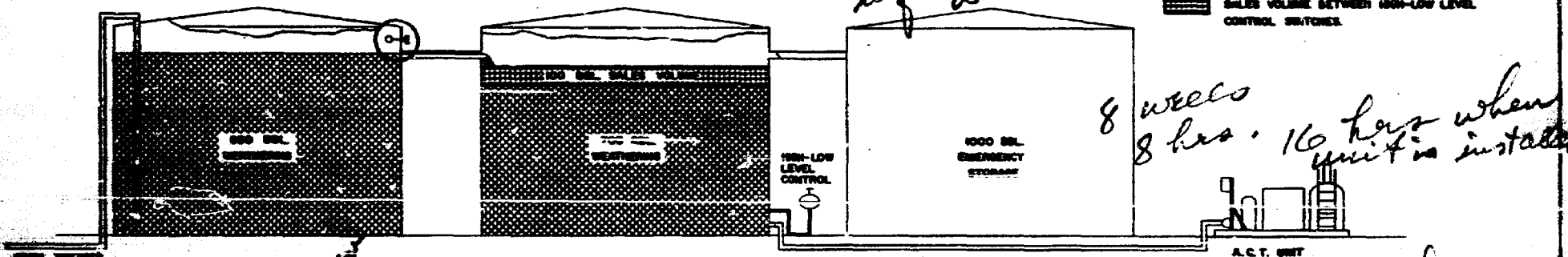
2254
EX ✓

850
700
1550 weathering
3100 B/D w/ P.L.
req of 12 hrs weathering

PROPOSED A.G.T. SYSTEM, LEA UNIT
LEA COUNTY, NEW MEXICO
THE OIL CO. COMPANY'S
EXHIBIT #2
NEW MEXICO OIL CONSERVATION COMMISSION
CASE 2254 APRIL 10, 1941

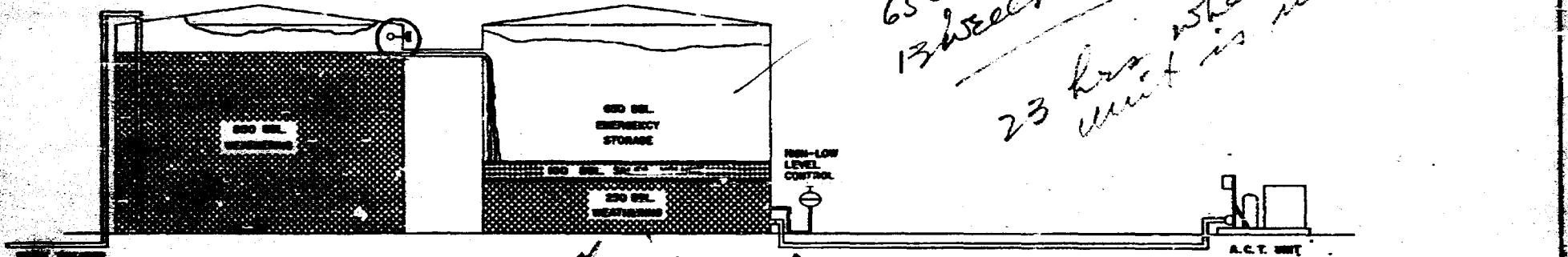
LEGEND
[Pattern] VOLUME BEING WEATHERED
[Pattern] SALES VOLUME BETWEEN HIGH-LOW LEVEL CONTROL SWITCHES

DEVONIAN POOL



BONE SPRINGS POOL

A2 gals



1100 weathering
2200 B/D w/ P.L. req
12 hr weathering

--- facilities or to
 automatically shut-in the
 production at the [header in
 the event the storage facilities
 become full, in which
 latter case the flowline
 shall be tested ^{pressure} at ^{test} 1 1/2 times
 the maximum shut-in pressure
 prior to ~~operation~~ initial
 use of the ACT ^{equipment} system and
 each two years thereafter]

GOVERNOR
EDWIN L. WISEMAN
CHAIRMAN

State of New Mexico
Oil Conservation Commission

LAND COMMISSIONER
E. S. JOHNSON
MEMBER



P. O. BOX 971
SANTA FE

STATE GEOLOGIST
A. L. PORTER, JR.
SECRETARY - DIRECTOR

April 28, 1961

Mr. Terrell Couch
The Ohio Oil Company
P. O. Box 3128
Houston 1, Texas

Re: Case No. 2254
Order No. N-1938
Applicant:
The Ohio Oil Company

Dear Sir:

Enclosed herewith are two copies of the above-referenced Commission order recently entered in the subject case.

Very truly yours,

A. L. Porter, Jr.
A. L. PORTER, Jr.
Secretary-Director

ir/

Carbon copy of order also sent to:

Hobbs OCC _____
Artesia OCC _____
Aztec OCC _____

OTHER Kirk Newman

OIL CONSERVATION COMMISSION

P. O. BOX 871

SANTA FE, NEW MEXICO

May 1, 1961

**Mr. Joe Roney
District Supervisor
Oil Conservation Commission
P. O. Box 2045
Albuquerque, New Mexico**

Dear Joe:

We are enclosing herewith a copy of corrected Page 3 of Order No. R-1956, recently entered in Ohio's Case No. 2254.

Please substitute this page for Page 3 of the copy of the order which was recently mailed to you, and acknowledge receipt of the corrected Page 3.

Very truly yours,

**DANIEL J. MOTTEN
Chief Engineer**

**DJM/ear
Enclosure**

C
O
P
Y

OIL CONSERVATION COMMISSION

P. O. BOX 671

SANTA FE, NEW MEXICO

May 1, 1961

**Mr. Kirk Henson
Shovel & Shovel
P. O. Box 667
Durham, New Mexico**

Dear Mr. Henson:

We are enclosing herewith a copy of corrected Page 3 of Order No. H-1956, recently entered in Ohio's Case No. 2234.

Please substitute this page for Page 3 of the copy of the order which was recently mailed to you, and acknowledge receipt of the corrected Page 3.

Very truly yours,

**DANIEL S. NETTER
Chief Engineer**

**DSS/enc
Enclosure**

**C
O
P
Y**

OIL CONSERVATION COMMISSION
P. O. BOX 871
SANTA FE, NEW MEXICO

May 1, 1961

Mr. Terrill Couch
The Ohio Oil Company
P. O. Box 3128
Houston 1, Texas

Dear Terrill:

We are enclosing herewith two copies of corrected Page 3 of Order No. R-1956, recently entered in Ohio's Case No. 2254.

Please substitute these two pages for page 3 of the two copies of the order which were recently mailed to you, and acknowledge receipt of the corrected Page 3.

Very truly yours,

DANIEL S. HUTTER
Chief Engineer

DSH/ear
Enclosures

C
O
P
Y

MAIN OFFICE

The Ohio Oil Co.

1961 MAY 8 AM 10 00

Legal Department

W. House Everett
Division Attorney

May 5, 1961

P.O. Box 3128
Wichita, Kansas

J. O. Terrell Couch
Warren R. Leach, Jr.
Attorneys

Re: Order No. R-1956
Ohio's Case No. 2254

Mr. Daniel S. Nutter, Chief Engineer
New Mexico Oil Conservation Commission
P. O. Box 871
Santa Fe, New Mexico

Dear Dan:

Thank you for your letter of May 1. I acknowledge receipt of the two copies of corrected page 3 of Order No. R-1956 entered in Case No. 2254. The revised pages are being substituted for page 3 of the two copies of the order forwarded with the Commission's letter of April 28.

Very truly yours,

J. O. Terrell Couch
J. O. Terrell Couch

TC:MK

**BEFORE THE OIL CONSERVATION COMMISSION
OF THE STATE OF NEW MEXICO**

**IN THE MATTER OF THE HEARING
CALLED BY THE OIL CONSERVATION
COMMISSION OF NEW MEXICO FOR
THE PURPOSE OF CONSIDERING:**

**CASE No. 2254
Order No. R-1966**

**APPLICATION OF THE OHIO OIL
COMPANY FOR AN EXCEPTION TO
RULE 309 (a) AND FOR TWO
AUTOMATIC CUTOFF TRANSFER
SYSTEMS, LRA COUNTY, NEW
MEXICO.**

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 o'clock a.m. on April 19, 1961, at Santa Fe, New Mexico, before A. L. Porter, Jr., Examiner duly appointed by the Oil Conservation Commission of New Mexico, hereinafter referred to as the "Commission," in accordance with Rule 1214 of the Commission Rules and Regulations.

NOW, on this 28th day of April, 1961, the Commission, a quorum being present, having considered the application, the evidence adduced, and the recommendations of the Examiner, A. L. Porter, Jr., and being fully advised in the premises,

FINDS:

- (1) That due public notice having been given as required by law, the Commission has jurisdiction of this cause and the subject matter thereof.
- (2) That the applicant, The Ohio Oil Company, is the operator of the Los Unit Area, comprising portions of Township 20 South, Ranges 34 and 35 East, NMM, Lea County, New Mexico.
- (3) That the applicant seeks permission to commingle, prior to measurement, the Los-Bonaville Pool production from all wells presently completed or hereafter drilled in the above-described Los Unit Area, except that the production from any well not yet determined by the operator of the Los Unit to warrant inclusion in a participating area will be measured prior to commingling with production from wells in a participating area or on another basis later.
- (4) That the applicant further seeks permission to commingle, prior to measurement, the Los-Bon Springs Pool production from all wells presently completed or hereafter drilled

-2-

CASE No. 2254
Order No. R-1956

in the above-described Lea Unit Area, except that the production from any well not yet determined by the operator of the Lea Unit to warrant inclusion in a participating area will be measured prior to commingling with production from wells in a participating area or on another basic lease.

(4) That the applicant further proposes to install two automatic custody transfer systems, one to handle the Devonian production, the other to handle the Bone Springs production in the above-described Lea Unit Area.

(5) That the previous use of automatic custody transfer equipment, similar to that proposed by the applicant, has shown that such equipment is a reliable and economic means of transferring the custody of oil, and that the use of such equipment should be permitted, provided adequate safety features are incorporated therein.

IT IS THEREFORE ORDERED:

(1) That the applicant, The Ohio Oil Company, is hereby authorized 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, NE1/4, Lea County, New Mexico, provided, however, that the production from any well not yet determined by the operator of the Lea Unit to warrant inclusion in a participating area shall be measured prior to commingling with production from wells in a participating area or on another basic lease.

(2) That the applicant is hereby authorized to commingle, prior to measurement, the Lea-Bone Springs Pool production from all wells presently completed or hereafter drilled in the above-described Lea Unit Area, provided, however, that the production from any well not yet determined by the operator of the Lea Unit to warrant inclusion in a participating area shall be measured prior to commingling with production from wells in a participating area or on another basic lease.

(3) That the applicant is authorized to install two automatic custody transfer systems, one to handle the Devonian production, the other to handle the Bone Springs production in the above-described Lea Unit Area.

PROVIDED HOWEVER, That the applicant shall install adequate facilities to permit the testing of all wells located in the above-described Lea Unit Area at least once each month to determine the individual production from each well.

-3-

CASE No. 2254
Order No. R-1956

PROVIDED FURTHER, That in order to prevent the overflow and waste of oil in the event the automatic custody transfer systems fail to transfer oil to the pipeline, the applicant shall add additional storage facilities from time to time, as it becomes necessary, to store the production which will accrue during the unattended hours, or in the alternative, shall so equip the existing facilities as to automatically shut-in the production at the header in the event the storage facilities become full, in which latter case the flowlines shall be pressure tested to at least $1\frac{1}{2}$ times the maximum well-head shut-in pressure prior to initial use of the automatic custody transfer equipment and each two years thereafter.

IT IS FURTHER ORDERED:

That all meters used in the above-described automatic custody transfer systems shall be operated and maintained in such a manner as to ensure an accurate measurement of the liquid hydrocarbon production at all times.

That meters shall be checked for accuracy at least once each month until further direction by the Secretary-Director.

That meters shall be calibrated against a master meter or against a test tank of measured volume and the results of such calibration filed with the Commission on the Commission form entitled "Meter Test Report."

(4) That jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

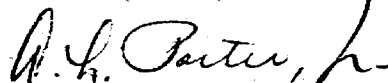
STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION



EDWIN L. MECHEM, Chairman



E. C. WALKER, Member



A. L. PORTER, Jr., Member & Secretary



csr/

-3-

CASE No. 2254
Order No. R-1956

PROVIDED FURTHER, That in order to prevent the overflow and waste of oil in the event the automatic custody transfer systems fail to transfer oil to the pipeline, the applicant shall add additional storage facilities from time to time, as it becomes necessary, to store the production which will accrue during the unattended hours, or in the alternative, shall so equip the existing facilities as to automatically shut-in the production at the wellhead in the event the storage facilities become full.

IT IS FURTHER ORDERED:

That all meters used in the above-described automatic custody transfer systems shall be operated and maintained in such a manner as to ensure an accurate measurement of the liquid hydrocarbon production at all times.

That meters shall be checked for accuracy at least once each month until further direction by the Secretary-Director.

That meters shall be calibrated against a master meter or against a test tank of measured volume and the results of such calibration filed with the Commission on the Commission form entitled "Meter Test Report."

(4) That jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION



EDWIN L. MECHEM, Chairman

E. S. WALKER, Member



A. L. PORTER, Jr., Member & Secretary

S E A L

esr/

P. O. Box 287
Hobbs, New Mexico

June 26, 1961

*Case
file*

New Mexico Oil Conservation Commission
P. O. Box 2845
Hobbs, New Mexico

Attention: Mr. J. D. Ramsey

Dear Sir:

This will serve to advise you that on June 21, 1961, the Devonian and Base Springs flowlines from the wellhead to the header of The Ohio Oil Company's Lee Unit, Well Nos. 1, 2 and 4 were pressure tested in accordance with the provisions of Order No. 8-1956. These lines were tested with 2000 psig, and held satisfactorily. The shut-in valves and headers were tested with 2000 psig.

The maximum shut-in tubing pressure observed to date in either of the referenced pools is 1700 psig.

Yours very truly,

Frank M. Verner

Frank M. Verner
Petroleum Engineer

FMV:hjs

Subscribed and sworn to before me, a Notary Public, in and for
Lee County, New Mexico, this 26th day of June, 1961.

Roger R. Lout
My Commission Expires January
28, 1963

cc: MMS - Santa Fe
L. H. Sherrer
J. A. Grimes
T. A. Stankle
D. V. Edley
S. L. Walters
PVL

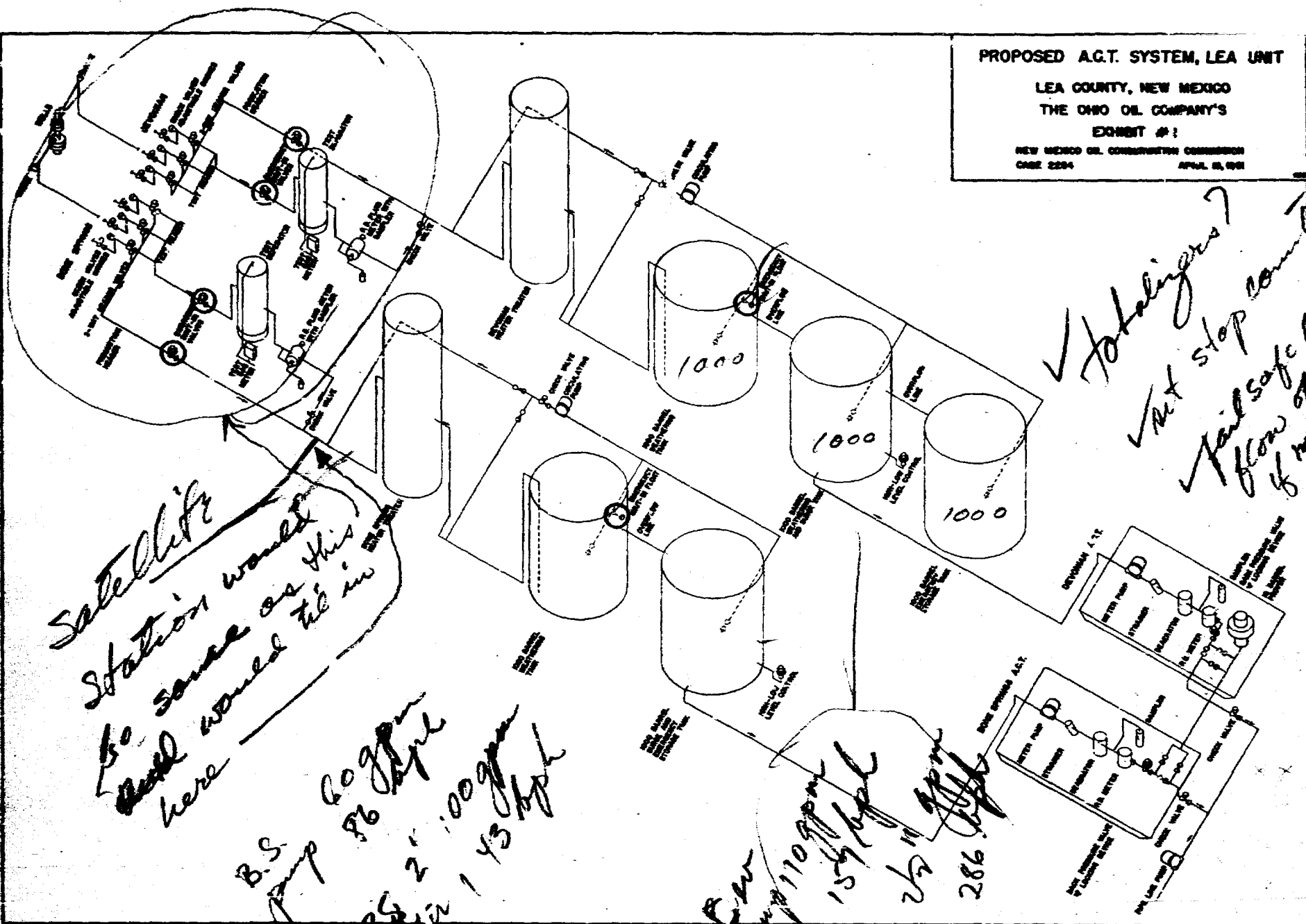
PROPOSED A.G.T. SYSTEM, LEA UNIT

LEA COUNTY, NEW MEXICO

THE OHIO OIL COMPANY'S

EXHIBIT #1

NEW MEXICO OIL CONSERVATION COMMISSION
CASE 2294 APRIL 15, 1951



✓ Totalizers?
✓ Aut stop counters
✓ fail safe
flow of oil
if meter
fails?

Satellite
Station would
be same as this
and would tie in
here

B.S. pump 60 gpm
meter 2100 gpm
143 bph

Car pump 110 gpm
154 bph
26 11 gpm
286 bph
meter

PROPOSED A.G.T. SYSTEM, LEA UNIT

LEA COUNTY, NEW MEXICO

THE OHIO OIL COMPANY'S



EXHIBIT #2

NEW MEXICO OIL CONSERVATION COMMISSION

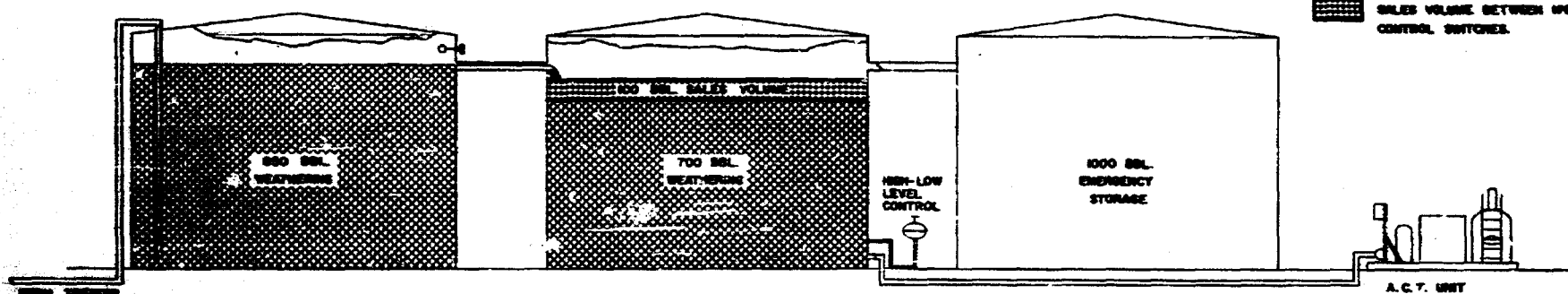
CASE 2254

APRIL 18, 1941

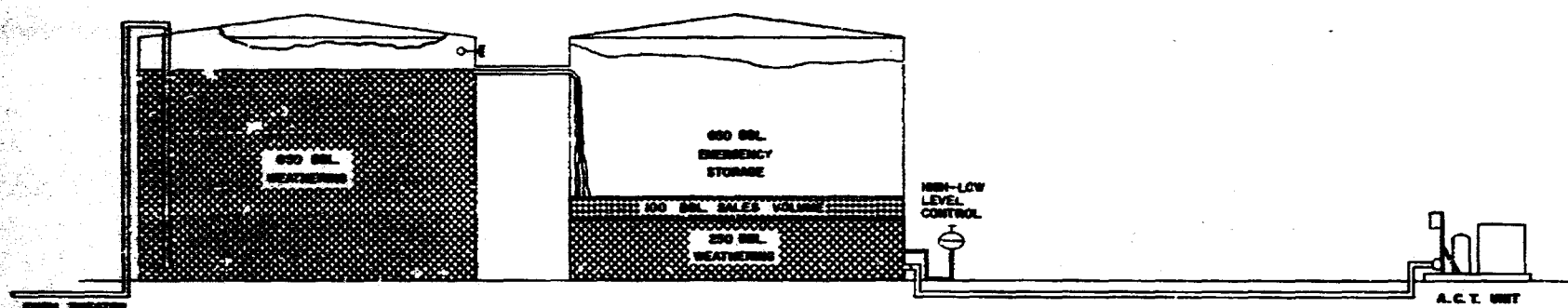
LEGEND

-  VOLUME BEING WEATHERED
-  SALES VOLUME BETWEEN HIGH-LOW LEVEL CONTROL SWITCHES

DEVONIAN POOL



BOHE SPRINGS POOL



TEXAS-NEW MEXICO PIPE LINE COMPANY

F. G. WHITAKER, JR.
DIVISION MANAGER

April 12, 1961

P. O. BOX 1000
MIDLAND, TEXAS

RECEIVED

APR 14 1961

LEGAL DEPT.

Re: Proposed ACT Installations
The Ohio Oil Company
Lea Unit Area
Lea County, New Mexico

The Ohio Oil Company
P. O. Box 3128
Houston 1, Texas

Attention: Mr. Frank Varner

Gentlemen:

This is in reply to your letter dated April 10, 1961, concerning your proposal to install two automatic custody transfer units at your present tank battery location in the Lea Unit Area, Lea County, New Mexico.

We have examined your proposal in some detail and think that it should prove satisfactory from both of our viewpoints. We would be pleased to receive fluid through these installations following a minimum testing period.

Yours very truly,

F. G. Whitaker, Jr.

FBWjr-btk

*Exhibit 3
2254*

RECEIVED
APR 13 1961
THE OHIO OIL CO.
HOUSTON DIVISION
Petroleum Engineering Dept.



UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
Drawer 1857
Roswell, New Mexico

IN REPLY REFER TO

April 13, 1961

The Ohio Oil Company
P.O. Box 3128
Houston 1, Texas

Attention: Mr. I. G. Burrell

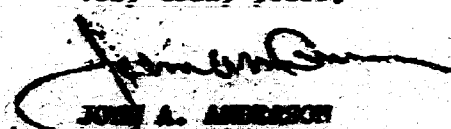
Gentlemen:

Reference is made to your letter of March 30, 1961, concerning royalty reporting and payments for the Lea unit agreement, Lea County, New Mexico.

Pending approval of a revision of the participating area for the Devonian formation and establishment of an initial participating area for the Bone Springs formation, the following procedure should be followed:

1. All production from all committed lands in the Lea unit should be reported as unit production. Separate reports for Devonian and Bone Springs production should be submitted monthly on U.S.G.S. forms 9-329 and 9-361.
2. Royalties for production from the Devonian wells within the presently approved participating area should be paid on the basis of the allocation schedule for the participating area.
3. Royalties for production from Devonian wells outside the presently approved participating area, and from Bone Springs wells for which a participating area has not yet been approved, should be paid on a lease basis; i.e., paid for the lease on which the well is located.
4. When a revised participating area for the Devonian formation, or an initial participating area for the Bone Springs formation is approved, appropriate adjustments will be made by this office as of the effective date of such participating area or revision, in order that the royalties paid as above may be reapportioned to the lands then entitled thereto.

Very truly yours,


JOHN A. ANDERSON
Regional Oil and Gas Supervisor

*Copy
Ex 4
2254*



IN REPLY REFER TO:

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
Drawer 1857
Roswell, New Mexico

April 17, 1961

AIR MAIL

The Ohio Oil Company
P.O. Box 3128
Houston 1, Texas

Attention: Mr. I. G. Durrell

Gentlemen:

This is to clarify the procedure prescribed in our letter of April 13 for reporting production and royalties from the Devonian and Bone Springs Formations in the Lee unit area, Lea County, New Mexico.

1. Wells Nos. 1, 2, 4, 5, and 6 will no doubt be in the same Devonian and the same Bone Springs participating areas (if all are productive in paying quantities), effective on or before the dates of completion of the wells.
2. As all paying wells in the Devonian and in the Bone Springs will be in their respective participating areas as of the dates of their completion, it will not be necessary to measure the production of each well separately. The oil from wells in each zone can be co-mingled; and, the oil to be reported on a lease basis until the appropriate participating area is revised or established may be estimated by periodic tests. Transfer of allowables for the purpose of interference tests or otherwise, if approved by the Oil Conservation Commission, is acceptable to this office.

Very truly yours,

[Orig. Sgd.] JOHN A. ANDERSON

JOHN A. ANDERSON
Regional Oil and Gas Supervisor

Copy to: J. G. Terrell Couch
Gen. Public Lands, Santa Fe
Washington

*Copy
#5
2257*