

BEFORE THE
OIL CONSERVATION COMMISSION
SANTA FE, NEW MEXICO

IN THE MATTER OF:

CASE NO. 1487

TRANSCRIPT OF HEARING

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JULY 24, 1958

BEFORE THE
OIL CONSERVATION COMMISSION
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IN THE MATTER OF: :

CASE NO. 1487 Application of Ohio Oil Company for two: :
non-standard gas proration units in the: :
Tubb Gas Pool and two non-standard gas :
proration units in the Blinebry Gas :
Pool. Applicant, in the above-styled :
cause, seeks an order establishing 160-: :
acre non-standard gas proration units :
in both the Blinebry Gas Pool and the :
Tubb Gas Pool, each consisting of the :
S/2 NE/4, NW/4 SE/4, and the NE/4 SW/4 :
of Section 24, Township 22 South, Range: :
37 East, Lea County, New Mexico, said :
units to be dedicated to its dually :
completed J. L. Muncy Well No. 2 in the: :
NE/4 SW/4 of said Section 24. Appli- :
cant further seeks the establishment of: :
160-acre non-standard gas proration :
units in both the Blinebry Gas Pool and: :
Tubb Gas Pool, each consisting of the :
E/2 SE/4, SW/4 SE/4, and the SE/4 SW/4 :
of said Section 24, said units to be :
dedicated to its J.L.Muncy Well No.3 in: :
the SE/4 SW/4 of said Section 24 and :
Well No. 1 in the SE/4 SE/4 of said :
Section 24 respectively. :
: :

BEFORE:

Elvis A. Utz, Examiner.

T R A N S C R I P T O F P R O C E E D I N G S

MR. UTZ: The hearing will come to order. The next case
on the docket will be Case 1487.

MR. PAYNE: Application of Ohio Oil Company for two non-

standard gas proration units in the Tubb Gas Pool and two non-standard gas proration units in the Blinebry Gas Pool.

MR. COUCH: Mr. Examiner, we have one witness, Mr. Tom Steele.

(Witness sworn)

TOM STEELE,

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

DIRECT EXAMINATION

BY MR. COUCH:

Q Will you please state your name, by whom you are employed and in what position?

A Thomas A. Steele. District petroleum engineer for the Ohio Oil Company in Midland, Texas.

Q Mr. Steele, have you previously testified before the New Mexico Oil Conservation Commission or its examiners?

A I have.

MR. COUCH: Are the qualifications of the witness acceptable?

MR. UTZ: They are.

Q Mr. Steele, in your duties as district engineer at Midland, Texas, do you have general supervision, from an engineering standpoint, in Lea County and in particular I am referring to the area in which the Ohio's Muncy lease is located?

A I have.

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Q The Muncy lease is comprised of acreage in Section 24, I believe, the SE/4 of Section 24, -- the S/2 of the NE/4 of Section 24, and the E/2 of the SW/4 of Section 24, all in Township 22 South, Range 37 East, is that right, sir?

A That is correct.

Q Mr. Steele, in your duties, have you acquainted yourself with the development of the Muncy lease as I have outlined it in that acreage.--

A I have.

Q -- and the surrounding area?

A Yes, sir, I have.

Q Mr. Steele, did you make an application to this Commission for authority to dually complete the Ohio's J. L. Muncy Well No. 2 in the NE/4 of the SW/4 of Section 24?

A I did.

Q And state whether or not that application has been approved.

A That application was approved.

Q The authority to dually complete was granted?

A The authority was granted in Order DC-630 dated July 7, 1958.

Q Now, this application for revision of existing gas proration units and creation of additional gas proration units in this acreage I have described is to obtain this revision of the units contingent upon the dual completion of the Muncy No. 2 so as to have a well capable of producing gas from either the Blinebry or

Tubb Pool or both pools?

A That is correct.

Q State the location of the Muncy No. 2 with regard to the lease lines, please, sir. It is approximately 660 feet from the --

A I was going to give you the exact measurements on that, Mr. Couch. It is approximately 660 feet from the West line of our lease.

Q Approximately the same distance from the next nearest line being the North line of the lease?

A From the north line, that is correct. Would run through the center of Section 24.

Q All right, sir. Now, the Muncy No. 3 located in the SE/4 of the SW/4 of Section 24 is presently completed as a Blinebry gas well, is it not?

A That is correct.

Q And that well now has allocated to it a non-standard production unit in the Blinebry Gas Pool that was approved by and authorized by Order No. R-8151 rendered by the Commission June 8, 1956 in Case No. 1074, is that correct, sir?

A That is correct.

Q Is that well still capable of producing in excess of the current 160-acre allowable for a Blinebry Gas Pool?

A Yes, sir, it certainly is.

Q And the Muncy Well No. 1 located in the SE/4 of the SE/4 of Section 24 is completed in the Tubb Gas Pool and the Drinkard Oil

Pool, is that right, sir?

A That is correct.

Q And that well presently has allocated to it a standard proration unit, being the SE/4 of Section 24, is that right, sir?

A That is correct.

Q And those two units, the standard unit allocated to No. 1 and the non-standard just described allocated to No. 3 are to be extinguished and revised if this application is granted, is that right?

A That is so.

Q Now then, if this application is granted, will you state the -- as shown in our application, the units which you would propose to create and allocate to the Muncy Well No. 2 when it is completed -- dually completed, as capable of producing from the Blinebry Gas Pool and Tubb Gas Pool?

A A one hundred sixty acre gas proration unit in the Blinebry Gas Pool and a one hundred sixty acre gas proration unit in the Tubb Gas Pool, each consisting of the E/2 of the NE/4.

Q That would be the S/2 --

A S/2 of the NE/4, the NW/4 of the SE/4, and the NE/4 of the SW/4 of Section 24, Township 22 South, Range 37 East.

Q All right, sir. Is it your opinion, from your knowledge and information of the area and of this well as it is presently completed in the Drinkard Pool, that the Muncy No. 2 can successfully be completed as a dually completed well in the Blinebry Gas

Pool and Tubb Gas Pool?

A That is my opinion.

Q Is it your opinion that when so completed, the well will be capable of producing in excess of the allowable currently being assigned to 160-acre proration units in each of those gas pools?

A From looking at the electric log on Well No. 2, it looks like, the section looks like -- where the Tubb and the Blinebry formations are being produced, and surrounding wells, it looks like the porosity is equivalent to the other logs and, therefore, it should be capable of making its full 160-acre allowable, if not in excess of that.

Q In each of the two pools?

A In each of the two pools.

Q And it is your opinion, based upon this information. that you have referred to, that the well can be so completed?

A That is my opinion.

Q All right, sir. With respect to the Muncy No. 1 now completed in the Tubb Gas Pool and the Drinkard Oil Pool, is that well still capable of producing in excess of 160-acre allowable currently assigned to the Tubb Gas Pool, in the Tubb Gas Pool?

A That is correct. At the present time, Well No. 1 is over-produced.

Q All right, sir. Now, the Ohio is operator of this acreage we have referred to, is it not?

A That is correct.

Q And Phillips Petroleum Company is owner of twenty-five percent of the working interest?

A That is correct.

Q Phillips Petroleum Company is in accord with this proposed revision of the units and with the attempt for dual completion of the Muncy No. 2?

A They are. I understand they sent a wire to the Commission to that effect, that they did not object to these non-standard proration units.

Q Now, with respect to the acreage included in each of these proposed proration units that will result from the granting of the application as we have described them in this case, is it your opinion that all of the acreage in each of those units is productive of gas or deemed to be productive of gas from the Blinebry Gas Pool and from the Tubb Gas Pool?

A That is my opinion.

Q Will it be necessary to negotiate any sort of a pooling agreement to form these proposed units?

A No, sir, it will not.

Q What would be the cost, Mr. Steele, of drilling a well, a new well to the Tubb and Blinebry formations somewhere on this acreage that we have described, a new well instead of attempting the dual completion of the Muncy No. 2?

A A new well would cost approximately ninety-five thousand dollars.

Q And have you investigated the cost of the proposed dual completion of the Muncy No. 2?

A I have.

Q And what is that approximate cost, please, sir?

A The approximate cost of dually completing Muncy No. 2 is twenty-nine thousand dollars.

Q Is it your opinion that the -- by dually completing Muncy No. 2, you would have substantially the same ultimate recovery as if a new well were drilled to the Blinebry Tubb formations, at least the same?

A That is my opinion.

Q As a matter of fact, if you attempted to drill a new well, Mr. Steele, would you be running any risk of perhaps not finding the desirable permeability or porosity in those two formations in this area?

A It is my opinion a new well could encounter the Blinebry or Tubb zones with low permeability and, therefore, would not be as good as the -- a dual completion that I believe we can make using Well No. 2.

Q In other words, the capability of the well to produce, you can look at this log on the Muncy No. 2 and tell that you can expect a good well in each of the pools there, is that right?

A That is correct.

Q But you can't look down and tell whether you would find that part of the formation adequate to make a well of that same or

as good producing capability somewhere else on the lease?

A No, sir, I have no way of telling if another location would be a better location than the Well No. 2.

Q Mr. Steele, if this application is denied, do you think the Ohio would be deprived of a fair opportunity to recover its just and equitable share of gas and liquid hydrocarbon in the Blinebry and Tubb Gas Pools?

A Yes, sir. That is my opinion.

Q Do you think that the granting of the relief sought by this application would endanger the correlative rights of any of the other operators in the field?

A I certainly do not.

Q Are there any other units in both pools of the same relative shape and size?

A Yes, sir, there are in both the Blinebry and Tubb Gas Pools.

Q Is it your opinion that the granting of this application will protect the correlative rights of the Ohio?

A Yes, sir, that is my opinion.

Q Is it your opinion -- what is your opinion on whether the granting of this application will cause or prevent waste?

A I am sure it will prevent waste.

Q Mr. Steele, attached to the application is a plat which shows the location of the proposed proration units, and the location of the surrounding tracts, is that correct, sir?

A That is correct.

MR. COUCH: Mr. Utz, is the plat attached to the application sufficient for the Commission's purpose with Mr. Steele identifying it as he can do, or do you prefer to have a separate Exhibit of the area?

MR. UTZ: If you want to use it as an Exhibit.

MR. COUCH: If it is all right, it would simplify your records to have Mr. Steele identify that plat attached to the application?

MR. UTZ: It will be perfectly all right.

MR. COUCH: All right, sir.

A We will give you an additional copy if you would like to have one.

Q Mr. Steele, I'll ask you to look at the plat marked Exhibit 1 attached to the Ohio's application filed in this case, and state whether that was prepared under your supervision or direction?

A It was.

Q And you have examined it, have you, sir?

A Yes, sir, I have examined it.

Q Is it a correct indication of the Ohio's acreage that is involved in this hearing, --

A To the best of my knowledge, that is correct.

Q -- and of the surrounding tracts, as far as you know, that is correct?

A As far as I know, it is correct.

Q And in your opinion, it is correct?

A Yes, sir.

Q One further question, Mr. Steele. In view of the development and configuration of the units of the lease within this section, is it your view that it is impracticable to pool the acreage involved in these proposed units with adjoining acreage in such a way that it will result in Ohio's having an opportunity to produce its share of the hydrocarbons in these two pools?

A Yes, sir, that is my opinion.

Q When was the Muncy No. 2 first completed, Mr. Steele?

A Muncy No. 2 was originally completed on December 28, 1947.

Q As a Drinkard Oil Well?

A As a Drinkard Oil Well, that is correct.

MR. COUCH: No further questions, Mr. Examiner.

MR. UTZ: Are there any questions of the witness? Mr. Payne.

CROSS EXAMINATION

BY MR. PAYNE:

Q Mr. Steele, what evidence do you have to support your conclusion that the Muncy No. 3 Well will drain the NE/4 of the SW/4 of Section 24?

A I don't believe I understood your question.

MR. COUCH: May I interject a comment here? I think his testimony was that -- well, I believe you raised the point -- I don't think we have any testimony in the record yet with regard to

drainage. We rely on the proposition here, on the Commission's finding that a well will drain 160 acres or a tract of 160 acres in the Blinebry and Tubb Gas Pools.

MR. PAYNE: But those 160 acres are a quarter section?

MR. COUCH: You mean the standard unit is a quarter section in each of those pools?

MR. PAYNE: That is correct. And your Muncy No. 1 Well from that point to the corner -- to the eastern corner of the NE/4 of the SE/4 is considerably further than 1540 feet?

MR. COUCH: Mr. Steele, do you have any evidence of pressures or otherwise to indicate that this well would drain in an area of the distance shown from that well to the northeast corner of the proposed proration unit?

A I have pressures to show in both the Blinebry Pool and the Tubb Pool that wells drilled say, in 1947 were drained by wells drilled in preceding years. It's a matter of record filed with the Commission on Form C-122 and also C -- Form 122-C, which lists casing head shut-in pressures and shows that the wells that are drilled later on in the life of the field are pressurewise depleted from wells drilled previously. I have a number of instances in both the Blinebry Field and the Tubb Field to show that wells drilled three years after a Tubb or Blinebry well suffered a drainage in bottom hole pressure between two and three hundred pounds. To my knowledge, interference tests have never been run in the Blinebry and Tubb Fields, but pressure depletion is very evident

in both of these fields, that they are being drained by the first wells in the field.

Q (By Mr. Payne) It is your opinion, then, that these wells can drain the hundred and sixty acres which you propose to dedicate to them in both the Blinebry and the Tubb?

A Yes, sir, that is my opinion.

Q What is the status of the NW/4 of Section 24, is there a standard unit there?

A Yes, sir. There is a 160-acre Blinebry unit assigned to Phillips Well No. 4. I think it is Phillips Muncy Well No. 4.

MR. UTZ: I believe it is the Sims No. 4.

A Pardon me. G. Sims No. 4 is correct.

Q (By Mr. Payne) And what about the W/2 of the SW/4?

A There is --

Q Is that --

A There is an 80-acre Blinebry unit assigned to that well.

MR. PAYNE: Thank you.

QUESTIONS BY MR. UTZ:

Q Mr. Steele, the evidence that you have just recited, do you believe that that is evidence that a well in the Blinebry Pool will drain further than 2,640 feet?

A Yes, sir, I believe they will.

Q Do the pressure declines that you recited show that?

A Yes, on several instances they do. They show that wells drilled three years after, gas wells have actually had a pressure

decline of two hundred pounds and are similar to the pressures noted on the first well at the subsequent date.

Q And the subsequent well that you speak of was drilled further than 2,640 feet from the previous existing well?

A I am not certain whether I can point out a well 2,600 feet. Actually, I believe I can point it out even a farther distance than that. What I am getting at is that a well drilled in 1954 will have a certain pressure decline with production, and wells drilled subsequent to that, which may be a considerably distance in excess of 2,620, had the same pressure or approximately the same pressure when they were drilled in 1957 that the first well had in 1957.

Q Well, there are, aren't there, some Blinebry units in the E/2 -- correction -- the W/2 of Section 19, which would actually be closer to your acreage than your No. 3 Well, Muncy No. 3?

A I didn't catch that, Mr. Utz.

Q The question was that, are there not some Blinebry wells on some Blinebry units in the W/2 of Section 19 which are closer to the proposed unit -- Blinebry unit from your Muncy No. 3 than the Muncy No. 3? In other words, aren't those wells to the west of your proposed unit --

A They are --

Q -- or to the east of your proposed unit?

A They are a little closer to the east line or to the north-east corner of our lease, that is correct.

Q So this will be a proposition of counter drainage, would it not?

A Yes, sir.

Q You wouldn't expect the No. 3 Well to drain the entire unit as such?

A That is pretty hard to determine that, but it would be counter drainage really. There are two dually completed wells in the Blinebry and Tubb in Section 19 which would be draining our east portion of our acreage, that is correct.

Q Any time you have a rectangular spacing unit, you have to rely on counter drainage in order to protect correlative rights, isn't that true?

A Yes, sir, that's true.

Q What is the current status of the Muncy No. 2? Is it now a producing Drinkard Well?

A Yes, sir, it is a producing Drinkard Well. It produces less than seven barrels a day with a ratio in excess of the two thousand gas-oil ratio limit of the Drinkard Field.

Q Well, this, in effect -- when you make a dual out of this well, will this not in effect abandon that particular unit in the Drinkard?

A Yes, sir, that is correct.

Q You don't feel that there is -- would be any economic loss by abandoning it?

A No, sir, I don't. That well has, for all practical purposes,

reached its economic limits.

Q How deep is the Drinkard in this area?

A Approximately 5,600 feet, -- let me change that a minute. Approximately -- would you like the top of the Drinkard on Well No. 2?

Q Yes, sir, if you have it there.

A 6,370 feet, and that No. 2 was perforated from 6,390 to 6,490 feet.

Q Have you actually dually completed and plugged back your No. 2 Well?

A No, sir, we have not.

Q Your No. 3 Muncy, has it always been a Blinebry single completion?

A Yes, sir, it has.

MR. COUCH: In order to correct the record on that, Mr. Steele, it has been the Blinebry only, it was not a Tubb Pool.

A It was originally drilled to granite, in 1949 the well was originally drilled to granite.

Q We are speaking of No. 3.

A We are speaking of No. 3, that is correct. It was drilled 7,474 feet to granite and then it was originally -- originally we tried to complete the well as a Drinkard Well, and that was not economical to do so, so the well was completed as a Blinebry gas well in January 1949.

Q And the Muncy No. 1, has it also been a single completion

in the Tubb?

A No, sir. No. 1 is a Drinkard Tubb Well, dual.

Q Drinkard Tubb dual?

A Yes, sir.

Q When was this well dually completed?

A On June 12, 1954. It was completed as a Tubb Drinkard dual. The well was originally completed in the Drinkard in January, 1946.

Q Has Gulf been notified of this application?

A Yes, sir, they have, by registered mail.

Q They offered no objection, that you know of.--

A No, sir. We have not received any objection.

Q -- in this particular situation?

A Let me change that. Pardon me -- they were notified by registered mail for the dual completion application, but they were just notified by mail for our application here today.

MR. COUCH: Copy of this application was mailed to Gulf, isn't that right?

A A copy of this application was mailed to all offset operators. However, I understand the Commission published it here and notified all operators. We have not received any objection to it.

Q This does leave it with an inside 80 as far as the Blinbry is concerned, does it not?

A Yes, sir, it does.

MR. UTZ: Are there any other questions of the witness?

MR. COUCH: Mr. Examiner, I have one or two more if cross examination is through.

MR. UTZ: All right.

REDIRECT EXAMINATION

BY MR. COUCH:

Q Mr. Steele, you are acquainted with the fact that Phillips Petroleum Company recently applied for authority for a 240-acre unit in the Tubb in this same section, are you not?

A Yes, sir, I am.

Q And that relief was denied?

A I understand it was denied.

Q Yes, sir. Due to the configuration of the leases in this section, would it seem reasonable to you that proration units could be arranged so that all proration units would have 160-acres allocated to them in this way? For example, that the Phillips Well No. 4 -- that's Sims No. 4 could reallocate it to the unit comprised of the N/2 of the NW/4 of the section, and the N/2 of the NE/4 of the section, so that it would ultimately be dually completed as a Tubb Well with the same proration unit?

A Yes, sir.

Q And so that then the S/2 of the NW/4 and the W/2 of the SW/4 in Section 24 could be a Tubb unit with respect to Phillips Well No. 3 and a Blinbry unit -- I should say Phillips Sims Well No. 3 and a Blinbry unit with respect to the Sims No. 1?

A Yes, sir, that could be done.

Q Actually, the way these lease lines fall in this section, it has resulted in the development of non-standard units, is that right, sir?

A Yes, sir, that is correct.

Q And if authority is granted here without regard whether a well will actually drain the specific acreage or the gas from that specific acreage allocated to it by the proration unit we propose and the others that I have just outlined, would it be your opinion that the wells will ultimately each produce a volume of gas equivalent to that which underlies the acreage attributed to them?

A That is my opinion.

Q And if there is not actual drainage of that acreage, there will be an equalization by counter draining, as Mr. Utz has pointed out?

A Yes, sir, that is correct.

Q Do you know whether there is a unit of this same shape and configuration for the Blinebry formation in the W/2 of Section 25?

A Yes, sir.

Q There are two such units for the Blinebry?

A There are two such units for the Blinebry and one unit for the Tubb.

Q One such unit for the Tubb?

A That is correct, in the W/2 of Section 25, Township 22 South, Range 37 East.

Q These wells were drilled prior to the time of the enactment

of the Blinebry Pool Order that specifies the standard proration unit as a regular quarter section, were they not?

A That is correct.

Q And do those Rules recognize specifically tolerance footage to be taken into account with respect to wells that are recompleted?

A Yes, sir. They do take into account tolerance footage allowance.

Q What would that tolerance be? Do you recall offhand with respect to Well No. 2 having been recompleted prior to the --

A No, sir, I don't recall offhand.

Q All right, sir.

MR. COUCH: I have no further questions.

MR. UTZ: Is there any other question of the witness? If there are no other questions, the witness may be excused.

(Witness excused)

MR. COUCH: It is my recognition, in reference to -- the Rules will verify or disprove it -- the tolerance footage, that 330 feet from each line is recognized with regard to the amount of acreage that can be allocated to wells in the Blinebry, and I think that that also applies in the Tubb. That's for the purpose of the amount of acreage that can be allocated. My purpose in pointing that out is to indicate, if it is of importance from that standpoint with regard to correlative rights of operators and application of the status dealing with opportunity to recover equivalent volume of

hydrocarbons which are in place, that it would also be of some weight and of some materiality in connection with the issue, drainage and the configuration of the unit.

MR. UTZ: Are you pointing that out in regard to Well No. 2 or Well No. 3?

MR. COUCH: Well, specifically with regard to each of them, I would say, and Well No. 1, for that matter, just as a matter of indicating Commission policy and recognition of the fact that these wells constitute recompletions of wells drilled to the formation.

MR. UTZ: Well No. 3 is the closest well to the proration unit line, is it not?

MR. COUCH: That's right.

MR. UTZ: And it is my understanding that it was also completed in the Blinbry in 1949?

MR. COUCH: I think that's right. And I might point out for the record as an assistance to you in developing historical factors concerning Well No. 3, it was first granted an 80-acre proration unit and was subsequently granted 160-acre proration unit comprised of the E/2 of the SW/4 of Section 24, and the W/2 of the SE/4 of Section 24.

MR. UTZ: Which order do you want cancelled at this time?

MR. COUCH: Yes, sir, in the event we are able to revise these units in the fashion that the Muncy No. 2 is dually completed. The reason we make it that way, Mr. Examiner, rather than going through the complications of changing the proration schedule, we

thought it would be preferable from the Commission's standpoint, administratively, to wait until the Muncy 2 is dually completed and then make the change all at once, if that is acceptable.

MR. UTZ: In the event this relief is granted, then you would like to see the order written in such a manner that this would be effective upon completion of the Muncy No. 2?

MR. COUCH: As a well capable of producing from either or both the Blinebry and Tubb Gas Pools, yes, sir. Unless that well is so completed, why then, if we are wrong about what we think that well can do and how it will be completed, why then, we think the Commission would want to have another look at the facts, than to determine whether the units are appropriate and what correlative rights of the parties would be under these circumstances.

MR. UTZ: Is there anything further in this case?

MR. COUCH: Nothing further from the application.

MR. PAYNE: Yes, sir, I have a statement to read; statement from Phillips Petroleum Company. "Gentlemen: In Case 1487, Ohio Oil Company is requesting two non-standard gas proration units in the Tubb Gas Pool and two non-standard gas proration units in the Blinebry Pool. These two units in each case consist of the S/2, NE/4, NW/4 SE/4 and the NE/4 SW/4, Section 24, Township 22 South, Range 37 East, and the E/2 SE/4, SW/4 SE/4 and SE/4 SW/4 of the same section.

Phillips Petroleum Company is a working interest owners in these leases as well as being an offset operator and this is to ad-

