

BEFORE THE  
**Oil Conservation Commission**  
SANTA FE, NEW MEXICO

IN THE MATTER OF:

CASE NO. 799

TRANSCRIPT OF PROCEEDINGS

**ADA DEARNLEY AND ASSOCIATES**  
COURT REPORTERS  
ROOMS 105, 106, 107 EL CORTEZ BUILDING  
TELEPHONE 7-9546  
ALBUQUERQUE, NEW MEXICO

BEFORE THE  
OIL CONSERVATION COMMISSION  
Santa Fe, New Mexico  
December 16, 1954

IN THE MATTER OF:

Application of The Ohio Oil Company for approval  
of a 320-acre non-standard gas proration unit in the  
Eumont Gas Pool: NW/4 and N/2 SW/4 of Section 5,  
Township 20 South, Range 37 East, and S/2 SW/4 of  
Section 32, Township 19 South, Range 37 East, Lea  
County, New Mexico; and for assignment of the acreage  
in the unit to applicant's Bertha Barber Well No. 11,  
NW/4 NW/4 Section 5, Township 20 South, Range 37 East.

Case No.  
799

BEFORE:

MR. E. C. (Johnny) WALKER  
MR. WILLIAM B. MACEY

TRANSCRIPT OF HEARING

D. K. S P E L L M A N, J.R.,

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

DIRECT EXAMINATION

By: MR. COUCH:

Q Will you state your name and by whom you are employed and in what capacity, please, sir.

A D. K. Spellman, Jr., District Petroleum Engineer for the Ohio Oil Company.

Q At Midland, Texas, Mr. Spellman?

A Midland, Texas.

Q Mr. Spellman, are you generally acquainted with the Ohio Oil Company's Bertha Barber lease in Lea County, New Mexico?

A I am.

Q That lease covers the northwest quarter and north half of the southwest quarter of Section 5, Township 20 South, Range

37 east and the south half of the southwest quarter of Section 32, Township 19 south, Range 37 east, in Lea County, New Mexico?

A It does.

Q That acreage comprises 320 acres more or less, does it not?

A That is correct.

Q And the Ohio is here seeking a non-standard gas proration unit consisting of that acreage?

A It is.

Q Mr. Spellman, you recommend that the tract that we have just described be considered as containing 320 acres for the purpose of allocating gas allowable in the Eumont Gas Pool?

A I do.

Q On this acreage is located one gas well, I believe, Mr. Spellman?

A That is correct, our designated Bertha Barber No. 11.

Q When was that well completed, sir?

A November of 1952.

Q And at what location on this land was it completed?

A Well, it is located 990 feet from the north line and 330 feet from the west line of Section 5, Township 20 South, Range 37 East.

Q That location would be 330 feet from the west and 300 north and east of the lines of the proposed unit?

A It would be.

Q And is in the northeast quarter of the northwest quarter of that section 5 that you referred to?

A It is.

Q Mr. Spellman, all of the acreage within the proposed unit is within the boundaries of the Eumont Gas Pool as now defined.

is it not?

A It is.

Q In all of that 320 acres, in your opinion, is it reasonably presumed to be productive of gas from that pool?

A It is.

Q State whether or not in your opinion it is practical to pool or unitize this 320 acres with adjoining acres?

A We do not consider it practical to unitize or pool the acreage with adjoining acres.

Q Mr. Spellman, you have testified before the Commission, have you not?

A Yes, sir.

Q On petroleum engineering matters?

A That is right.

Q Are the qualifications of the witness accepted on those matters?

MR. MACEY: They are.

MR. COUCH: In your opinion, Mr. Spellman, would the Ohio be deprived of a fair opportunity to recover its just and equitable share of gas from the Eumont Pool if this proposed non-standard proration unit is not formed?

A It would.

Q It is your opinion that the assignment of that acreage to the well would or would not result in waste or protect the correlative rights?

A It would protect the correlative rights and would not be conducive to waste.

Q Mr. Spellman, when this well was originally drilled back in November of 1952, what was the total depth to which it was drilled?

A Well, it was drilled originally to a total depth of 5755 feet in the Blinebry pay.

Q You say Blinebry pay, it was originally a Blinebry project and was an attempt made to complete it in the Blinebry?

A Well, pay is actually a misnomer. The Blinebry pay is geologically speaking but we found there was no pay.

Q And you came on up the hole and where did you attempt to complete the well, Mr. Spellman?

A An attempt was made in the Paddock pay.

Q Was there another attempt?

A And immediately above the Paddock in the Glorietta section.

Q I see. At that time had Eumont Gas Pool been formed?

A No, sir.

Q Were the producing formations of the Eunice Monument then designated the Yates, Seven Rivers, Queens, Grayburg and San Andres?

A They were.

Q Now was this well finally plugged back and completed as a producing well, Mr. Spellman?

A Yes, sir, it was plugged back to 3524 feet within the casing and subsequently perforated for gas production.

Q What were the intervals at which the casing was perforated above that plug that you have just identified, Mr. Spellman?

A The intervals perforated were 3364 to 3376, 3385 to 3402, 3411 to 3474, 3496 to 3506.

Q Mr. Spellman, at the time this application was filed had the Ohio filed a form designated C-105 with the Oil Conservation Commission indicating that according to available information some

of those perforations might be in what is now designated the Grayburg formation?

A We did file C-105.

Q And that is now on file with the Commission?

A It is on file.

Q You have that photostatic copy of what was filed at that time? A Yes, sir.

Q Mr. Spellman, attached there is a radio activity log with reference to that well, is that correct, sir?

A Yes, sir.

Q When was that log run?

A The log was run on the 22nd day of October, 1952.

Q And has there been colored on this log in blue crayon some indications with reference to porosity at these perforations that you have testified about?

A There is colored in blue an interpretation of the log on the neutron side, outlining probably the best -- the better porosity within the perforated sections of the casing.

Q Mr. Spellman, since the filing of this application the New Mexico Oil Conservation Commission, Stratigraphic Nomenclature Committee has made a study of the area in which this well is and other areas in Lea County, is that correct, sir?

A That is correct.

Q Have you examined some of the cross-sections that were prepared and used by that committee in reaching its determinations?

A I have.

Q And will you state the correlative point in this well at which the Committee specifies the top of the Grayburg formation in

their studies?

A We correlate that the top of the Grayburg as expressed by the committee on --

Q (Interrupting) You say the committee which we referred to a while ago?

A The Committee to which we referred -- at 3490.

Q 3490? A On the radio activity log.

Q How far is that above the total depth of this well as now plugged back?

A It would be 34 feet above the present plugged back depth.

Q What is the first perforation, what is the depth of the first perforation encountered below the Grayburg as correlated from that committee's designation?

A Six feet.

Q Six feet from the top of the Grayburg?

A From the top of the Grayburg as correlated.

Q And what is the perforated interval from that point down?

A The perforated interval from that point down is 3496 to 3506, overall of ten feet.

Q Mr. Spellman, how long have you been engaged as petroleum engineer in petroleum operations in that area where the well is located? A Four years.

Q Mr. Spellman, will you state in your opinion whether or not there is any gas being produced from those ten feet of perforation between 3496 and 3506 in our Bertha Barber No. 11?

A As a matter of fact, there is not any gas being produced.

Q Your opinion is that there is no gas produced from those perforations? A We feel there is none.

Q Is it possible there is some gas being produced from those perforations?

A There may be a remote possibility but we still consider it, it is essentially zero.

Q Is it your recommendation that the 320 acres that we have described be assigned to this well for purposes of allocating the gas allowable in the Eumont Gas Pool?

A Yes, sir.

Q Now Mr. Spellman, in the event that it is necessary to re-work this well or do anything to it with reference to closing off these perforations, is there a possibility that the well would be killed or that the productability of the well would be reduced?

A Well, it would first be necessary to kill the well to work on it and there is the possibility of reducing the productivity of the well during work-over operations.

Q And there is a possibility that the well could be destroyed as a producer in the event you did run into trouble on that, is that right?

A There is that possibility.

MR. COUCH: We have no further questions.

MR. MACEY: You have any exhibits?

MR. COUCH: We'd like to offer in evidence as Ohio's Exhibit No. 1, this radio activity log on the Bertha Barber well that has been testified about and there is available for the Commission's examination the photostat of the remaining documents that were filed and are already on record with the Commission if it would facilitate your consideration of the case.

MR. MACEY: I don't think that is necessary. Is there an

objection to the introduction of Ohio's Exhibit 1 in the case? If not, the exhibit will be received. Any questions of the witness?

MR. DON WALKER: (Gulf) I'd like to ask Mr. Spellman one question. Would you consider any type of survey to determine the productivity of that ten feet in now what is defined as the Eunice Monument Oil Pool satisfactory? In other words, could you run us a temperature survey in your hole to see if you were producing any gas from the top of the Grayburg formation, would that be satisfactory?

A Temperature surveys to be run?

MR. WALKER: Have you made any? A I have not.

MR. WALKER: Made any such surveys?

A We have not made any surveys. In view of the high productivity of the well there might be some difficulty in getting a temperature survey that could be interpreted with any degree of accuracy.

MR. WALKER: Thank you, sir.

MR. MACEY: Anyone else?

MR. MANKIN: Texas Company likewise as an offset operator realizes that Ohio as a very prudent operator has brought this to the attention of the Commission and as to whether there is any gas being produced from the Grayburg, that seems to be something that is rather hard to determine. We would like to point out, however, that the interpretation as given in the application on Rule 520, there was no provision for it, that was for Jalnut and not for Eumont but in this particular case, if it could be determined here there was no productivity we would see nothing wrong with

leaving it that way, however, it would ordinarily be necessary.

MR. MACEY: Anyone else?

MR. MANKIN: Rule 520 there is a provision if it is open within the oil and gas -- if it is an oil or gas well but there is no such provisions allowed in Eumont.

MR. MACEY: Is there a rule, the provision you are referring to specifically is the Jalmut Pool?

MR. MANKIN: It is in the Jalmut, after Rule 18, which could still be considered rules on the Jalmut before it starts special rules for the Eumont, page 11, and it is not so included in the Eumont, it is just strictly a technicality.

MR. MACEY: I agree it is a technicality.

MR. MANKIN: In other words, the evidence put on was that the Eumont Pool was very definitely Yates, Seven Rivers and Queens could definitely be segregated from the oil pool of the Eunice Monument which was the Grayburg and San Andres whereas it wasn't so easy to keep the Jalmut Gas Pool in line with the Seven Rivers.

MR. MACEY: I realize what your point is, but the intention of this Commission was not to limit that proviso, which you are referring to, to the Jalmut Gas Pool. That provision and every provision unless it specifically outlines a certain pool applies to all the gas pools contained in order 520, that just so happens to fall in that spot.

MR. MANKIN: I am glad to know that.

MR. JIM TOWNSEND: (Stanolind) As this order is drawn, as I read it, it says, on page five of the order, starting with rule one, there at the bottom of the page, special

rules and regulations for the Jalmut Gas Pool, commencing on page 12, you have special rules and regulations for the Eumont Pool and Mr. Mankin's statement as to the, his interpretations of the rules we concur in that and we don't see how you could have made special provisions with reference to the Jalmut Pool, say from the order as drawn is that it applies to the Eumont or any other pool unless you so insert it and it will be a far stretch in the interpretation to say that it does apply to that when it is specifically not included in that section of the order.

MR. MACEY: Mr. Townsend, I agree with you a hundred per cent but I was just explaining to Mr. Mankin that that was the intent of the Commission when the order was written and it was omitted from the other order erroneously. I don't argue with you a bit, it is strictly in the Jalmut portion of the rules if you wanted to block it out as such but the intent I was trying to explain to Mr. Mankin that we did intend and I will discuss it with the Commission insofar as amending it.

MR. TOWNSEND: Is it your intention to include that proviso by an amendment order to include these other pools?

MR. MACEY: Yes, it is.

MR. COUCH: Mr. Spellman --

MR. WALKER: Excuse me just a minute, we are interested here we offset this well in three directions and very definitely order 520 specifies definite limits for the Eumont Gas Pool and definite limits for the Eunice Monument Oil Pool and if you should choose to go back in the record presented in Case 673, Gulf did a lot of work in convincing the Commission that those two pools should be separated and shouldn't be produced in the same well bore at the

same time and if Ohio is not producing out of the Grayburg we are not interested but if they are making any gas out of the Grayburg, we think they should plug back.

MR. COUCH: Mr. Macey, I --

MR. WALKER: Excuse me, one other thing, I'd like to commend Ohio, their prudence in filing the C-105 here which certainly shows their good intention of bringing it to public notice. We wouldn't have caught it otherwise.

MR. COUCH: The commendation is appreciated but we thought then and still think that we were doing what the rule required us to do. The controversy that has arisen here, the storm which has arisen about the construction of Order R-520 is interesting and certainly something that we can all give some further thought. So I would make these two observations: First, to get into the argument just on the construction of R-520 although the provisos so follow and are sandwiched in between the Jamut rules and Eumont rules, it doesn't seem to me that that is necessarily conclusive that they are a part of the Jalmut rules but aside from that, that Order R-520 was entered by this Commission after necessary hearing on the re-delineation of the pools and for pool rules. Likewise, the Commission has before it for consideration this case, after due notice and hearing, with reference to this well and the assignment of a gas allowable to this well and the Commission, in my judgment, certainly has the jurisdiction and the right, in view of the record in this case, to assign this acreage to this well for the purpose of granting a gas allowable in the Eumont Gas Pool, regardless of what the provisions of Order R-520 were or were not.

Also, I would say that as far as the fact of separation of the Grayburg, San Andres formations from the Yates, Seven Rivers and Queens formations is concerned that the Ohio in Case 673 and does here concur that they are two separate reservoirs. As to the correction of inequities, the recognition of inequities that may arise or have resulted from operations conducted in good faith, before we knew what we now know about those pools, I think this Commission certainly has the power and the authority to correct those inequities and those situations without requiring additional work, if the Commission feels that that is the proper course to take. I think that that fairly well summarizes the position that we would take here except for one thing that harkens back to some of the questions in case 673. It is my recollection that the testimony there shows that lithology, if I am using the right word, the structure of the top part of the Grayburg for about the first 50 or 60 feet along in that area is a shaly formation that is probably barren and unproductive generally speaking. That testimony, I believe is by Mr. Boulch.

MR. WALKER: Just one other statement, assuming that that is structurally right and I don't recall.

MR. COUCH: I can't quote, that is just my recollection.

MR. WALKER: We are not objecting to the 120 acres that crosses the section line at an unorthodox manner.

MR. MANKIN: I didn't say in my former statement that we, too, do not object to the non-standard proration or the non-standard location.

MR. TOWNSEND: I believe you testified, Mr. Spellman, that you don't know whether or not any gas is being produced from the

Grayburg or that portion of the well bore that extends into the Grayburg, is that right?

A We don't know positively, that is correct.

Q Well, you don't know positively that it is not being produced from it, do you?

A Right.

Q Would you agree that if gas is being produced from the Grayburg formation that without the production of oil that it is conducive or will produce waste of the reservoir energy from the Eunice Monument Oil Pool?

MR. COUCH: Mr. Macey, the question calls for a -- it is a theoretical question, if that situation exists does it result in waste. I don't see that it can materially add to the decision in this case. It would depend upon a great many other things than the matters mentioned by Mr. Townsend, how much gas and under what circumstances and pressure and quite a few other things. I think the question being a theoretical one, I don't see any great purpose can be served by going into it at this point.

MR. TOWNSEND: He testified that he doesn't know whether any is being produced or not, there is nothing theoretical about it if it is being produced. We have no evidence that it is not being produced, only his opinion, if it is being produced the question is quite relevant.

MR. MACEY: Well, Mr. Townsend, I think that to get right down to the heart of the thing, I think it would depend to a great deal upon the volume that was being produced in the Grayburg. As to whether any was to be produced. I think Mr. Spellman would agree with me, there is a possibility all of it is coming out of

there, there is a possibility none of it is.

MR. TOWNSEND: Agree.

MR. MACEY: Any time you produce a gas cap in a reservoir, I think the statute says it is waste, I don't think there is any question about it.

MR. TOWNSEND: The question is whether or not you are going to let him produce gas from the oil reservoir or the gas reservoir and that is what we are trying to determine.

MR. MACEY: Will you re-state your question for Mr. Spellman.

MR. TOWNSEND: If I can, I will. You testified, Mr. Spellman, that you don't know whether or not any of the production of the gas is coming from the Grayburg formation.

A That is correct, we do not know positively.

Q That is right. If gas is coming from the Grayburg, would it not be wasteful -- would it not be a commission of waste to produce that gas which accompanies the oil and supplies at least in part the energy for the production of oil from the Grayburg, San Andres formation?

A Theoretically that would be true, it would be conducive. You asked me if the, the gas is being produced in the Grayburg?

Q Yes.

A Would it be waste?

Q That is right.

A And I say it would.

MR. TOWNSEND: Thank you.

MR. COUCH: (resuming) Mr. Spellman, you say theoretically it would constitute waste if you are producing gas from the Grayburg?

A Yes, sir.

Q Is it your opinion or not that there is gas being produced from the Grayburg?

A We feel that it is not.

Q That is your opinion? A Yes, sir.

MR. COUCH: No further questions.

MR. MACEY: Any further questions of the witness? Mr. Spellman, when you perforated that zone, was the hole completely unloaded or was it when you perforated the lower zone, the so-called Grayburg zone?

A You mean was there air in the casing, is that what you mean?

Q Yes, something in the casing.

A There was mud.

Q Mud? A Yes, sir.

MR. MACEY: Any other questions of the witness? If not, the witness may be excused.

(Witness excused.)

MR. MACEY: You have anything further?

MR. COUCH: We appreciate the Commission taking our case up at this time.

MR. MACEY: Take the case under advisement.

STATE OF NEW MEXICO )  
 ) ss.  
COUNTY OF BERNALILLO)

I, Margaret McCoskey, 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 23rd day of December, 1954.

My commission expires August 15, 1956.

*Margaret McCoskey*  
Notary Public-Court Reporter  
ADA DEARNLEY & ASSOCIATES  
STENOTYPE REPORTERS  
ALBUQUERQUE, NEW MEXICO  
TELEPHONE 3-6691