

BEFORE THE
OIL CONSERVATION COMMISSION
SANTA FE, NEW MEXICO

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1958 JUN 17

IN THE MATTER OF:

CASE NO. 1470

TRANSCRIPT OF HEARING

DEARNLEY - MEIER & ASSOCIATES
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ALBUQUERQUE NEW MEXICO
Phone CHapel 3-6691

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I N D E X

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BEFORE THE
OIL CONSERVATION COMMISSION
SANTA FE, NEW MEXICO

IN THE MATTER OF: :

CASE NO. 1470 Application of Phillips Petroleum Com- :
pany for a non-standard gas proration :
unit. Applicant, in the above-styled :
cause, seeks an order establishing a :
320-acre non-standard gas proration :
unit in the Eumont Gas Pool consisting :
of the N/2 of Section 12, Township 19 :
South, Range 36 East, Lea County, New :
Mexico, said unit to be dedicated to :
the applicant's Monument Well No. 1, :
located 1977 feet from the North line :
and 660 feet from the East line of :
said Section 12. :

BEFORE:

Mr. Daniel S. Nutter, 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. NUTTER: The next case on the docket will be Case 1470.

MR. PAYNE: Application of Phillips Petroleum Company for
a non-standard gas proration unit.

MR. KELLAHIN: We will use the same two witnesses.

MR. NUTTER: The record will reflect, I believe, that they
were sworn in for this case.

MR. KELLAHIN: Our first witness will be Mr. Lawrence.

CARL F. LAWRENCE,

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

DIRECT EXAMINATION

BY MR. KELLAHIN:

Q Mr. Lawrence, are you familiar with the application in Case 1470? A Yes, sir.

Q And have you made a study of the area involved in this application? A Yes, sir.

Q Now, referring to what has been marked as Exhibit No. 1, will you state what that shows?

A Exhibit No. 1 is a structure map of the Eumont area, Lea County, New Mexico, as contoured on top of the Penrose. The minus datums are indicated opposite the wells; the wells producing from the Eumont Gas Field are colored in green, and indicated on the structure map. The proposed unit is outlined in red; the structure map exhibits a westerly dip of approximately 350 to 400 feet per mile. The lease -- that's our Monument lease again, is located on the extreme west flange of the Monument anticline, whose axis run essentially in a north-south direction.

Q With reference to the Exhibit, where is the Monument Well No. 1 located?

A The Phillips Petroleum Company's Monument No. 1 Well is located 1977 feet from the North line and 660 feet from the East line, Section 12, Township 19, South, Range 36 East.

Q It is presently completed for production of gas from the Eumont Gas Pool? A Yes, sir.

Q Now, have you made a study of the geological information

within that area, and the gross thickness of the pay?

A Yes, sir. The gross pay thickness of the Penrose is 170 feet; net pay thickness is 235 feet; the average porosity is 10.5 percent, with the average permeabilities ranging from 2.2 millidarcys to .1 millidarcys.

Q Where is the gas-oil contact fall, in your opinion?

A Minus 175, plus or minus 25 feet.

Q Now, have you prepared an Exhibit showing the completion datums of wells within the vicinity of this well?

A Yes, sir. It would be the same as Exhibit No. 2, in the previous hearing.

Q For the purpose of this case, if the Commission please, we would like to incorporate Exhibit No. 2 into Case No. 1470.

MR. NUTTER: Without objection, Exhibit No. 2 will be entered in Case 1470 as well.

Q That shows the same information which you discussed in the previous case?

A That's correct.

Q Does that also verify or depict the gas-oil contact?

A Yes, sir.

Q Now, in your opinion, Mr. Lawrence, is all of the acreage proposed to be dedicated to the Monument Well No. 1 productive of gas from the Eumont Gas Pool?

A As the Commission has defined the boundaries of the Eumont Gas Field, yes, sir.

Q Now, have you prepared a cross-section showing the wells

located in this area?

A Yes, sir, I have.

Q Now, referring to what has been marked as Exhibit No. 3, will you state what that shows, Mr. Lawrence?

A Exhibit No. 3 is an east-west cross-section. The line of cross-section is indicated on the cross-section itself. It extends from a westerly point from the Gulf Oil Corporation's Lea State "DA" Well No. 7, eastward, including our Monument, Phillips Petroleum Company's Monument No. 2 Well, the Phillips Petroleum Company's Monument No. 1 well, the Gulf Oil Corporation's Shipp "NCTB" Well No. 3, as the easternmost well.

MR. NUTTER: Where is that well located, please?

A The Gulf Oil Corporation's well is located in Section 7, 19 South, 37 East; 1980 from the North and 660 from the East. Our plat -- it is indicated as a Shell well, I believe. I don't know the reason for that. The lease is a Gulf lease. It was drilled by Gulf, but the land map shows that Shell is written above the well. That's correct. I'm sorry. I could not find the electrical log. That is the correct well.

Q Which is the correct well, for the record?

A The Gulf Oil Corporation's Shipp "NCTB" No. 3. The Shell Oil Corporation's No. 1 State, I believe it would be, was omitted from the cross-section because we could not locate the electrical or radioactive log on that well.

Q On the basis of Exhibit No. 3, what conclusions can you

draw, Mr. Lawrence?

A That the formation -- the Penrose formation in the Eumont reservoir is continuous over the entire lease and that it should be productive of gas.

Q Now, the Exhibit likewise shows the completion information on the wells, does it not?

A Yes, sir. At the bottom of each log is indicated the completion information, completion date and the initial potential.

Q Now, with reference to the Monument Well No. 1, on what date was it completed?

A Monument No. 1 Well was drilled to a total depth of 3901 and completed 4/20/53.

Q That was prior to the pool Rules in the Eumont Gas Pool, was it not?

A Yes, sir.

Q Now, have you any information from any recent test showing the gas-oil ratios in this area?

A Our Monument No. 2 Well, completed out of the base of the Penrose section, is a very marginal well. The last well test, which was in April of 1958, the well pumped 7 barrels of oil per day; very marginal well. There are not any direct offsets that we can use as far as GOR tests are concerned.

Q Now, your Monument No. 2 at the present time is a penalty well under the pool Rules, is it not? GOR; penalized for the gas-oil ratio?

A No, sir, I don't believe it is penalized because of the

high GOR's. It was completed in the base of the Penrose. It is just a marginal well. We reworked it, refractured it, but we can't do anything with it.

Q In your opinion, would the dedication of 320 acres to the Monument Well No. 1 result in any appreciable loss of ultimate recovery of oil in this pool?

A No, sir.

MR. KELLAHIN: That's all the questions I have.

Q (By Mr. Kellahin) Mr. Lawrence, were Exhibits 1 and 3 prepared by you or under your direction and supervision?

A Yes, sir.

MR. KELLAHIN: At this time we would like to move the introduction of Exhibits 1 and 3, and by incorporation from Case 1469 Exhibit No. 2, with permission to withdraw Exhibit No. 3 for reproduction and return to the Commission.

MR. NUTTER: Is there objection to the introduction of Phillips' Exhibits Nos. 1 through 3 under the conditions specially outlined for Exhibit No. 2 by Mr. Kellahin? If not, they will be so admitted. That would be No. 3?

MR. KELLAHIN: That would be No. 3.

MR. NUTTER: Is there any objection? If not, the Exhibits will be so admitted.

MR. KELLAHIN: That's all the questions I have.

MR. NUTTER: Anyone have any questions of Mr. Lawrence?

CROSS EXAMINATION

BY MR. NUTTER:

Q Mr. Lawrence, in your opinion, does the gas-oil ratio -- I mean, the gas-oil contact line, in passing through the westernmost portion of this proposed unit indicate that the acreage on the extreme west of the unit may be productive of oil or some other product rather than gas?

A There, again, we have no direct offset production information, or drill stem test, or completion attempt. There is a good possibility that it will produce gas.

Q Even though it may be below the gas-oil contact?

A Yes, sir. I don't believe we can really pin it down that close. I mean, it is permanent and it does vary. I mean that 25 feet. And that small amount of acreage, it would be awfully hard just to pin it down that close, I believe.

Q At the present time, is there any well adjoining the westernmost portion of that proposed unit which would drain the gas from under the unit in the event the unit were not granted as requested?

A The John M. Kelly No. 1 Phillips State, approximately one half mile south of our Monument No. 1, is a gas well having assigned to it, I believe, three or -- I believe four hundred acres, if I am not mistaken.

Q What would the acreage assigned to that well be there?

A Four hundred acres, I believe, is assigned to the John M. Kelly No. 1 State located 660 from the South and East lines of

Section 12.

Q Where would that acreage be that is assigned to that well?

A The entire south half of Section 12, plus the north half of the southwest quarter of Section 7.

Q Is that well so located that it would drain the westernmost portion of Phillips proposed unit?

A Well, sir, I would think so. Otherwsie, it wouldn't have that much acreage assigned to it.

Q I mean, is it so located as to drain the western half of the northermost 320 acres in Section 12?

A Theoretically it would drain it, yes, sir.

MR. NOTTER: Are there any further questions of Mr. Lawrence? If not, he may be excused.

(Witness excused)

MR. KELLAHIN: Mr. White, please.

H. T. WHITE,

recalled as a witness, having previously been duly sworn, testified as follows:

DIRECT EXAMINATION

BY MR. KELLAHIN:

Q Will you state your name, please?

A H. T. White.

MR. KELLAHIN: I think the record will show that this witness was qualified and sworn in the preceding case for the purpose of testimony in this case.

MR. NUTTER: Yes, sir.

Q Mr. White, have you made a study of the area involved in connection with Case No. 1470? A Yes, sir.

Q In the event this application is not approved, as provided for, in your opinion, will the lease involved suffer drainage?

A Yes, sir, it will.

Q On what do you base that conclusion?

A The fact that Phillips' acreage is productive of gas and that there are wells in the neighborhood capable of receiving this gas.

Q And what wells would you have reference to in connection with this application?

A There is to the east a Shell State Well, to the south a John M. Kelly Well. Still further south, another John M. Kelly Well in Section 13, or immediately close to the well.

Q Now, in your opinion, would the dedication of 320 acres to the Monument Well No. 1 have any effect upon the total gas production from the Eumont Gas Pool?

A No, sir, it will not.

Q On what do you base that?

A On the fact that the total production from the Eumont Field is determined by the pipeline nominations and not by the acreage assigned to the individual wells.

Q Would it reduce the reservoir energy available for the production of oil?

A No, sir, it would not, for the same reason.

Q Is the approval of this application, in your opinion, in the interest of preventing waste and protecting correlative rights?

A Yes, it is.

MR. KELLAHIN: That's all the questions I have of the witness.

MR. NUTTER: Any questions of Mr. White?

CROSS EXAMINATION

BY MR. NUTTER:

Q Mr. White, is there presently assigned a proration unit to this Monument No. 1 Well?

A Yes, sir, 160 acres.

Q And is the well producing?

A Yes, sir, it is.

Q If this application for 320-acre unit were to be denied, how would this permit the Shell Well to the east to drain the proposed unit?

A All the wells in this Field are capable of draining much further than the confines of their particular lease.

Q Would the Shell Well drain around the Monument Well?

A Yes, sir, I believe that it could.

Q I believe you said that you thought the John M. Kelly No. 1 Well in Section 13 would also drain the unit?

A Yes, sir, and the one in 14 too.

Q The Bell 4 in 14?

A In Section 12. Not the Gulf; I was wrong there. The well in Section 14 probably would receive some of the gas too. However, I did not mention that particular well, but it could.

MR. NUTTER: I believe that's all. Any further questions of Mr. White?

MR. KELLAHIN: I would like to ask one more question with reference to the John M. Kelly immediately to the south.

REDIRECT EXAMINATION

BY MR. KELLAHIN:

Q Did you find that 400 acres was dedicated to that well?

A Yes, sir.

Q Would that fact have any bearing upon the question of drainage involved with the Monument Well No. 1, in your conclusions, as to the possibility of drainage?

A Do you mean as to the size of acreage?

Q In relation to the allowable assigned to the well, yes, sir.

A No, sir, not particularly. Any well which has unassigned acreage is going to be drained by the surrounding wells, whatever the size of the unit.

MR. NUTTER: Mr. White, is the 400-acre unit presently assigned to the John M. Kelly Well located entirely up structure from the gas-oil contact?

A Between--

Q (By Mr. Nutter) If the gas-oil contact is at a minus 175 feet?

A It appears to be, yes, sir.

MR. NUTTER: Any further questions of Mr. White? If not, he may be excused.

(Witness excused)

MR. KELLAHIN: That's all we have in Case 1470, Mr. Nutter.

MR. NUTTER: Does anyone have any further evidence or statements to offer in Case 1470? If not, we will take the case under advisement and take a twelve minute recess.

(Recess)

