

DEARNLEY-MEIER REPORTING SERVICE, Inc.

FARMINGTON, N. M.
PHONE 325-1182

SANTA FE, N. M.
PHONE 983-3971

ALBUQUERQUE, N. M.
PHONE 243 6691

BEFORE THE
OIL CONSERVATION COMMISSION
Santa Fe, New Mexico
April 10, 1963

EXAMINER HEARING

IN THE MATTER OF:)

)
Application of Ralph Lowe for a dual com-)
pletion, Eddy County, New Mexico. Appli-)
cant, in the above-styled cause, seeks)
approval of his Indian Basin "A" Well No.)
1, located in Unit J of Section 22, Town-)
ship 21 South, Range 23 East, Eddy County,)
New Mexico, as a dual completion (conven-)
tional) to produce gas from the Indian)
Basin-Upper Pennsylvanian Gas Pool and the)
Indian Basin-Morrow Gas Pool through)
parallel strings of tubing.)

Case 2788

BEFORE: Daniel S. Nutter, Examiner.

TRANSCRIPT OF HEARING

MR. NUTTER: We'll call Case 2788.

MR. DURRETT: Application of Ralph Lowe for a dual
completion, Eddy County, New Mexico.

MR. BRATTON: Howard Bratton on behalf of the appli-
cant. We have one witness.

(Witness sworn.)

(Whereupon, Applicant's
Exhibits Nos. 1 through 7
were marked for identi-
fication.)



ARCHIE P. FARR

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

DIRECT EXAMINATION

BY MR. BRATTON:

Q Will you state your name and occupation?

A Archie Farr with West Texas Oil Reports in Midland, Texas.

Q You have been employed by Ralph Lowe as a consultant in connection with the well in question here?

A I have.

Q Will you state briefly your professional and educational background?

A I'm a graduate of the University of Texas with a B. S. degree in petroleum engineering. I worked for approximately a year with Stanolind Oil and Gas, now Pan American. For the last twelve years I've been associated with West Texas Oil Reports.

Q And you are familiar with the well in question and the matters under consideration in this application?

A I am.

MR. BRATTON: Are the witness's qualifications acceptable?

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MR. NUTTER: Yes, sir.

Q Refer to Exhibit No. 1, Mr. Farr. Is that a plat of the area indicating the well in question?

A Yes, the well in question is circled in red.

Q That's the Ralph Lowe No. 1 "A" in the Southeast Quarter of Section 22?

A Yes.

Q Now, in this application we are seeking approval for a dual completion of this well, is that correct?

A That is correct.

Q And these are dual completions in two formations just recently designated by the Commission in pool rules recently adopted?

A That is correct.

Q Are there other wells that are similarly completed to this well shown on this exhibit?

A Yes. Ralph Lowe is the operator of two other wells, namely the Ralph Lowe Indian Basin No. 1 in Section 23, and also the Indian Basin "B" 1 in Section 14.

Q And both of these wells have encountered the same two formations?

A They did.

Q But this is the first application for a dual completion



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of these two formations in the area, is that correct?

A It is correct.

Q This area is under a working interest operating agreement, is that correct?

A Yes.

Q So there are no offset operators?

A That is correct.

Q The potentials of the three wells are indicated on Exhibit 1, is that correct?

A Yes.

Q Refer then to your Exhibit No. 2, Mr. Farr. Is that the form of application for dual completion--

A Yes, it is.

Q -- indicating the reservoirs and the tops and bottoms of the formation?

A Yes.

Q And both zones, both the Upper Penn and the Morrow are gas wells?

A They are.

Q Turn then to Exhibit No. 3, which is the log of the well, Mr. Farr. Would you explain what it indicates and what is marked, are marked on it?

A A Baker Model K packer, a production packer has been



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set at 7280, which is, oh, some 70 feet above the top of the Upper Penn formation, shown as a horizontal red line on the log. The perforations in the upper zone are shown as 7505 to 17 and 7524 to 33, 7539 to 72. That is the perforated interval.

Now, going down to the Morrow, which is shown at approximately 8952, we see below this a Baker Model D packer, a permanent type packer, has been set at 9050 feet, and this separates the two zones. The perforations in the Morrow being from 9118 to 30 and 9252 to 66.

Q Turn to your Exhibit No. 4, Mr. Farr, which is your schematic diagram of the actual dual completion. Will you explain what it indicates?

A Exhibit 4 indicates the actual physical condition of the well. It shows 9-5/8" casing set at 1925 feet with cement circulated to surface. The 7" casing is set at 9385 and cemented with 625 sacks, with top of the cement by temperature survey being indicated as 6355, which is well above the top of the Upper Penn. 2-3/8" ten round tubing has been set at 7280 and short string, and at 9053 in the long string. This shows the Baker Model K packer set at 7280, and the Baker Model D packer set at 9050.

Also the perforated interval, it shows just the over-all interval in the upper zone from 7505 to 72 and in the bottom



from 7118 to 30 and 9252 to 66.

Q Is this a standard dual completion, Mr. Farr, is there anything unusual about it?

A No. This is a very standard dual completion.

Q Is there any reason you would anticipate any production difficulties utilizing this method of dual completion?

A None whatsoever.

Q Turn to your Exhibit No. 5, that is your packer leakage test?

A That is correct.

Q What is indicated on it?

A That there is no communication between the Morrow and the Upper Penn zone.

Q Does this indicate your pressure GOR's?

A Yes. It indicates the shut-in pressures at the beginning of the test, the shut-in pressure on the upper was 2360 pounds and on the lower, 2893 pounds. It was flowed on the -- upper completion was opened first and it was flowed on a 22/64 choke for 18 hours. It produced 47 barrels of 58.4 gravity distillate along with 3,770 MCF of gas.

The lower zone was flowed on a 19/64 choke for four hours, and it made 1.6 barrels of 53.0 gravity distillate, 830 MCF of gas.

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Q Is there anything else you care to point out in connection with that exhibit?

A Only that the change by dead weight gauge of the pressures on the shut-in zone, while the test was being conducted, was very, very small, most of which can be attributed to temperature change.

Q All right. Turn, then, to your Exhibits Nos. 6 and 7. Are those your multiple-point back pressure tests on the two formations?

A They are. These are the actual test data.

Q And No. 6 is the --

A Is on the Upper Penn.

Q No. 7 is on the Morrow sand?

A At the time these tests were made the pool designation had not been made, and the formation is shown as Pennsylvanian dolomite, and at that time there were several different names for this formation. It has now been established as Upper Pennsylvanian.

Q Mr. Farr, approximately what would be the saving on this well by dual completion rather than by drilling two separate wells?

A I should think it would be in the vicinity of \$100,000.

Q Is there any reason in your opinion why the two



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reservoirs can not be as efficiently and economically drained under a dual completion as under separate wells?

A No, they can be produced effectively as dual, as separate.

Q Were Exhibits 1 through 7 prepared by you or under your supervision or by companies employed by Ralph Lowe?

A Yes, they were.

MR. BRATTON: We would offer in evidence Applicant's Exhibits 1 through 7.

MR. NUTTER: Applicant's Exhibits 1 through 7 will be admitted in evidence.

(Whereupon, Applicant's Exhibits Nos. 1 through 7 were offered and admitted in evidence.)

MR. BRATTON: We have nothing further at this time.

MR. NUTTER: Are there any questions of the witness?

MR. DURRETT: Yes, sir, I have one question.

CROSS EXAMINATION

BY MR. DURRETT:

Q Mr. Farr, this Baker Model D packer is a permanent type packer?

A Yes, it is.

Q What about the Model K, is that a permanent type?

A No, it is retrievable, it was run in on the long



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string. It's just a production type packer to facilitate moving any fluids that might be produced from the upper zone.

MR. DURRETT: I see. Thank you.

MR. NUTTER: If no further questions, the witness may be excused.

(Witness excused.)

MR. NUTTER: Do you have anything further, Mr. Bratton?

MR. BRATTON: No, sir.

MR. NUTTER: Does anyone have anything they wish to offer in Case 2788? We'll take the case under advisement.



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 22nd day of April, 1963.

Ada Dearnley
 Notary Public-Court Reporter

My Commission Expires:

June 19, 1963.

I do hereby certify that the foregoing is a correct record of the proceedings in the Oil Conservation Commission of Case No. 2788, heard by me on 4/10, 1963.

[Signature], Examiner
 New Mexico Oil Conservation Commission

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