

BEFORE THE
NEW MEXICO OIL CONSERVATION COMMISSION
HOBBS, NEW MEXICO

CASE NO. 1155

TRANSCRIPT OF HEARING

SEPTEMBER 26, 1956

DEARNLEY-MEIER AND ASSOCIATES

COURT REPORTERS

605 SIMMS BUILDING

TELEPHONE 3-6691

ALBUQUERQUE, NEW MEXICO

BEFORE THE
NEW MEXICO OIL CONSERVATION COMMISSION
HOBBS, NEW MEXICO
SEPTEMBER 26, 1956

IN THE MATTER OF: :

CASE NO. 1155: Application of Continental Oil Company for an :
order establishing a 240-acre non-standard gas :
proration unit in the Jalmat Gas Pool in ex- :
ception to Rule 5 (a) of the Special Rules and :
Regulations for said pool as set forth in :
Order R-520. Applicant, in the above-styled :
cause, seeks an order establishing a 240-acre :
non-standard gas proration unit in the Jalmat :
Gas Pool comprising the SE/4 and E/2 SW/4 of :
Section 31, Township 21 South, Range 36 East, :
Lea County, New Mexico. Said unit to be dedi- :
cated to applicant's Lockhart "B-31" Well No. :
4 located 330 feet from the South line and 660 :
feet from the East line of said Section 31. :

BEFORE:

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: Next case will be Case 1155.

MR. COOLEY: Application of Continental Oil Company for an
order establishing a 240-acre non-standard gas proration unit in the
Jalmat Gas Pool in exception to Rule 5 (a) of the Special Rules and
Regulations for said pool as set forth in Order R-520.

W. T. W H E E L E R, J R.

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

DIRECT EXAMINATION

BY MR. KELLAHIN:

Q State your name, please.

A W. T. Wheeler, Jr.

Q By whom are you employed, Mr. Wheeler?

A Continental Oil Company.

Q Position? A Associate engineer.

Q Have you ever testified before the Oil Conservation Commission before? A No, sir, I haven't.

Q What is your education and background, Mr. Wheeler?

A I was graduated from the University of Texas in 1953, with a Bachelor of Science in Petroleum Engineer.

Q And what have you done since then?

A I was employed by Continental Oil Company in April of 1955 and completed their engineering training program and employed as associate engineer since January of 1956, in the Eunice District.

Q And that is your present employment?

A Yes, sir.

MR. KELLAHIN: Are the witness' qualifications acceptable?

MR. NUTTER: Yes, sir.

Q (By Mr. Kellahin.) Mr. Wheeler, are you familiar with the Continental Oil Company Case 1155? A Yes, sir.

Q What is proposed to be done in that application?

A It's an application to enlarge the present unit assigned to the Lockhart "B-31" No. 4 well to include the E/2 of the SW/4 of Section 31, Township 21 South, Range 36 East.

Q Referring to what has been marked for identification as No. 1, will you state what that shows?

A Exhibit No. 1 is a location plat showing the location of the

Lockhart "B-31" lease, and the exact location of all the wells within that lease, and the proposed gas proration unit is outlined in red, with the Lockhart "B-31" No. 4 well outlined with a red circle. Shows all of the acreage within a governmental section.

Q What is the location of the well, Mr. Wheeler?

A The No. 4 well is located 330 feet from the south line and 660 feet from the east line, Section 31, Township 21 South, Range 36 East.

Q Is any portion of the acreage proposed to be dedicated to that well dedicated to any other well at the present time?

A No.

Q Is there any other well to which the acreage proposed to be dedicated could be dedicated, I mean reasonably and economically?

A No, sir, not the most economical and best means of allocation.

Q Now, what is the status of the Lockhart "B-31" Well No.2?

A The Lockhart "B-31" No. 2 is presently classified as a Jalmat gas well, classified as a shut in Jalmat gas well, this well was completed on October 14, 1937 as an oil well, and produced oil until August, 1955, when it was reclassified as a Jalmat gas well, and it was assigned a 40-acre unit allowable, but the well has never produced as a Jalmat gas well, due to noncommercial production.

Q Do you know what formation it is presently completed in?

A Presently completed in the Seven Rivers formation.

Q Now, referring to what has been marked for identification as No. 2, will you state what that is, please?

A No. 2 is a structural plat of the Lockhart "B-31" area, with contours on top of the Yates formation.

Q What does that show with relation to the contour?

A It shows the structural position of all the wells within the proposed unit, it shows the No. 4 well to be the highest structural well within the unit. The No. 4 well is approximately 260 feet higher than the No. 5 well.

Q Now, those contours are at the top of the Yates, is that correct?

A Yes, sir.

Q Now, approximately what is the difference between the No.4 well and the Nos. 2 and 5 wells?

A Difference in structural position?

Q Yes.

A Approximately 260 feet, No. 2 and 5 wells, are approximately on the same line of strike, and approximately 260 feet lower than the No. 4.

Q Are both of those completed in the Seven Rivers?

A The Nos. 2 and 5?

Q Yes.

A Yes, sir.

Q Now, referring to Exhibit No. 3, will you state what that is?

A Exhibit No. 3 is a cross section comparing the structural position of the Lockhart "B-31" wells Nos. 2, 3, 4, 5 and 6, and it shows the zones open to production in each well, and shows the top of the Yates and the top of the Seven Rivers formations, and there is a red line drawn across the cross section at sub-sea minus 150

feet, which is our estimated gas oil contact in that area.

Q Now, is the Yates formation continuous across the four units?

A Yes, sir, it is, shown by the cross section.

Q Does that also indicate that the No. 4 is higher on the section?

A Yes, sir, there is a vertical scale of one inch for one hundred feet, shows the No. 4 to be the higher.

Q Is it reasonable to presume that the entire unit is productive of gas?

A Yes.

Q Would a well located as the Lockhart "B-31" No. 4 well is located drain and develop the acreage?

A Yes, sir, I feel that it would.

Q And would approval of the proposed unit be in the interest of conservation and prevention of ways?

A Yes, sir.

Q Now, do you have any information on the completion of Lockhart "B-31" No. 2 well?

A No. 2 well?

Q Yes, sir.

A The Lockhart, as stated before, it was completed on October 14, 1937, as shown on the cross section, there is five and a half inch pipe set at 3,674 and this well produced from open hole zone below that packer, and in 1940, due to a high gas-oil ratio, the completion packer was pulled, and an Exner-Dodge packer was set at 3,788 as shown on the cross section, this is set in open hope and the well at present is open zoned for production, if there was any,

would be below the packer set at 3,788 to a TD of 3,872.

Q What about the No. 3 Well?

A Lockhart "B-31" No. 3 well was completed November 17, 1937, at a total depth of 3,824 for an I.P. of 108 barrels of oil with an estimated 25,000 MCF gas, it was completed as a shut in gas well, and then in an attempt to shut off the gas, the well was whipstocked at 3,602 and drilled to a new TD of 3,967 with a five and a half inch liner set at 3,803, the well was then completed for an I.P. of 57 barrels of oil per day, with 190 MCF gas with 20/64th choke and that completion date was February 26, 1939.

Q What about the No. 4 well? A Well, okay.

Q Did you have something you wanted to add?

A No, I might add that the No. 3 well is classified -- is completed within the limits of the South Eunice Pool and classified as a South Eunice Pool oil well. Present production and allowable is 8 barrels of oil per day and accumulatively is 147,185 barrels to September 31st, 1956.

Q What is the history of the No. 4 well?

A Lockhart "B-31" No. 4 was completed on November 29th, 1938 at 3,874 for an I.P. of 1,680 barrels of oil per day. Based on a two-hour test. In April, 1953, the well was plugged back to 3,841 to shut off water production, the well was non-productive in this zone and was logged and radio activity log was run and the well was shut in on July the 3rd, 1953 pending additional study. The accumulative production to that day 1,139,522 barrels of oil, which depleted the

south Eunice oil zone, and beyond its economical limit. In September, 1956, the well was recompleted, was plugged back within the limits of the Jalmat Pool and recompleted as a Jalmat gas well for a calculate open flow potential of 8,430,000 cubic feet of gas per day, now completed in the Yates formation as a gas well.

Q Would you give us the same information in regard to well No. 5?

A Well No. 5 was completed on June 6, 1949 at a plug back depth of 3,868 feet, I. P. 144 barrels of oil per day, in October, 1951, the well was drilled out to a new plug back depth, 3,891 and additional zone was perforated from 3,878 to 3,886, this remedial work increased oil production from 22 to 240 barrels of oil per day, and it is presently producing from intervals from 3,814 to 3,886 in the Seven Rivers formation within the limits of the Jalmat Pool. Its present allowable and production is 16 barrels of oil per day, with accumulative production to September 1st, 1956, of 64,851 barrels of oil.

Q Now, then the well No. 4 is the only well completed and open in the Yates formation, is that correct?

A Yes, sir, that's right.

Q Mr. Wheeler, is the lease ownership the same throughout the proposed unit?

A Yes, sir, it is.

Q It is all under one basic lease?

A It is all N.M.F.U. Federal acreage.

Q And no communication would be required?

A No, sir.

MR. KELLAHIN: That is all the questions I have.

QUESTIONS BY MR. NUTTER:

Q Mr. Wheeler, in reciting the intervals that these wells are perforated in, well No.5, starting there, it is perforated at the present time 3,814 to 3,886?

A Yes, sir, there is two intervals of perforation within that interval.

Q And what would that be classified as, middle, or lower Seven Rivers?

A I believe that would be classified as approximately middle Seven Rivers, it is within the limits of the Jalmat Pool.

Q The No. 5?

A Yes, sir.

Q Now, the No. 2, has open hole between the casing shoe at 3,674 to -- wait a minute, it is open below the packer, is that right?

A Yes, sir, it is open above the packer, but we are assuming, -- it is open for production below the packer.

Q From 3,788 to a TD of 3,872?

A Yes, sir.

Q What would that be?

A That would be approximately the same interval as the No. 5 well, which would be middle Seven Rivers.

Q Now, this No.3 well, where is it open?

A The No.3 well is open -- there is a five and a half inch liner set at 3,803. However, the liner is perforated and the production is from 3,790 to total depth 3,967, and that is in the lower Seven

Rivers, which penetrates the South Eunice Pool, and this well is classified as a South Eunice Pool well.

Q In other words, you have got a portion of that liner perforated and the interval below the liner shoe? A Sir?

Q In other words, the open interval there is a portion of the liner which is perforated and open hole below that?

A Yes, sir.

Q All in the lower Seven Rivers? A Yes, sir.

Q Now, the No. 4 well is it already perforated or to be?

A It is already perforated.

Q And it is up here in the Yates? A Yes, sir.

Q What are the plans for well No. 2?

A Well, at the present time well No. 2 is shut in. There are no present plans to produce this well as a gas well. However, there is a possibility of performing remedial work to reclassify the well as an oil well.

Q Producing from the middle Seven Rivers?

A Yes, sir, it was originally produced as an oil well, and due to high gas-oil ratio was reclassified, but not commercial as gas.

Q Both the No. 5 and 2 are in the middle Seven Rivers, No. 5 is presently making oil and the No. 2 could be worked over and make oil?

A Yes, sir, that is the opinion.

Q Is the middle Seven Rivers in the Jalmat Gas Pool, Mr. Wheeler?

A Yes, sir, I believe the Jalmat Gas Pool includes the Yates and all of the Seven Rivers except the bottom 100 feet.

