

BEFORE THE

Oil Conservation Commission

SANTA FE, NEW MEXICO
November 17, 1954

IN THE MATTER OF:

CASE NO. 792 - Regular Hearing

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
November 17, 1954

IN THE MATTER OF:

Application of the Commission for an order
creating the North Mason-Delaware Pool in
Eddy County, New Mexico, for production of
oil from the Delaware, described as
follows:

Township 26 South, Range 31 East
All of Sections 25, 26, 35 and 36;

and establishing a temporary allowable for
a period not to exceed one year commensur-
ate with the allowable presently assigned
wells in the portion of the pool lying
within the State of Texas.

Case No. 792

BEFORE:

Honorable Edwin L. Mechem
Mr. E. S. (Johnny) Walker
Mr. William B. Macey

TRANSCRIPT OF HEARING

MR. MACEY: The next case on the docket is Case 792.

E R N E S T A. H A N S O N ,

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

DIRECT EXAMINATION

By MR. KITTS:

Q State your name and position, please.

A Ernest A. Hanson, independent operator, appearing on behalf
of the Ibox Company in this case.

Q Mr. Hanson, have you made a study of the area in question
in this case and have you prepared two exhibits in connection there-

with?

A I have.

Q Would you turn your attention first to what we will mark as Exhibit 1, and explain that exhibit?

(Marked Exhibits Nos. 1 and 2, for identification.)

A Exhibit 1 is a map of the southeastern part of the State. Roswell being here and southeast corner of the State here, showing the exact location of the map which will be offered as Exhibit 2. The Texas-New Mexico boundary comes through the southeastern one-third of the red square and the small red portion is the area that will probably be included within the limits of the North Mason-Delaware Pool. You will note that about two-thirds of the pool is shown on the Texas side of the boundary and apparently one-third might extend into New Mexico.

The map that is offered as Exhibit 2, or will be offered as Exhibit 2, it is a structure contour map based on the top of the Delaware sand, and shows that the apparent extension on the New Mexico side, which is known as Ibex-Hanson No. 1, is located in the southwest corner of Section 25, Township 26 South, Range 31 East.

The surface contours are based on the top of the Delaware sand, which also is the producing formation of this pool and other pools in the area. The contouring indicates that the apparent extension is on a strike due north of the northern part of the North Mason Pool, as developed in Texas. The oil accumulation, we believe, as other pools of the area, is due mainly to changes in porosity and permeability, and to changes in the regional dip, which is in this area to the east.

The contours are drawn on a 50 foot interval and the datum is mean sea level. The farthest west contour is a minus 700, the farthest east shown on the map is minus 1200. The nearest production on the New Mexico side is about 20 miles to the northwest in the Maljamar Pool. I believe that is all I have to offer on the geological side.

Q For the record, what is the closest well on the Texas side?

A It is nearly an even mile due south.

Q How far is your well north of the New Mexico line?

A The well is, not exactly, one-half mile due north of the boundary line.

Q Is it your conclusion that the pool does extend across the line as indicated on that map?

A Yes.

MR. KITTS: That is all.

MR. MACEY: You feel, Mr. Hanson, that it is probably the same common source of supply that produces on the Texas side of the line, and also that you feel that the withdrawals on an acreage basis should be the same?

A Yes. Mr. Reaugh will testify as to the petroleum engineering factors, pressures, and so forth.

MR. MACEY: Are there any questions of the witness? If not the witness may be excused.

(Witness excused.)

O. H. R E A U G H ,

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

DIRECT EXAMINATION

By MR. KITTS:

Q Will you state your name, please?

A O. H. Reaugh.

Q By whom are you employed, Mr. Reaugh, and in what capacity?

A I am a production superintendent for the Ibex Company.

Q Have you ever testified before this Commission before as a petroleum engineer?

A No.

Q Will you state your educational and professional qualifications?

A I was graduated with a Bachelor of Science Degree in chemistry from Washington State in 1933, employed by the Gypsy Oil Company, which subsequently became the Gulf Oil Corporation, for about 15 years, being district engineer in Seminole for four years, and Illinois for two years and a half, and after Army Service another two years and a half in southern Oklahoma. After that I was production superintendent for McElroy Ranch Company at Breckenridge, and have been production superintendent for Ibex for three years.

Q Are you familiar with the area in question here?

A I am.

MR. KITTS: Are the witness's qualifications accepted?

MR. MACEY: They are.

(Marked Exhibits Nos. 3, 4, 5 and 6,
for identification.)

Q You have prepared, I believe, four exhibits, the first of which is Exhibit Number 3. Will you explain what that is to the

Commission?

A Exhibit Number 3 is a tabulation of the bottom hole pressure tests which have been submitted to the Railroad Commission of Texas in the North Mason Field, which indicates that although the original discovery well had a low pressure, the second well bottom hole pressure was 1,841 pounds at the same datum, which is mean, using 900 feet as the pressure taken on the Hanson Number 1 in New Mexico. Pressure on this was 1,861, and wells drilled as late as June 1954 have shown pressures as high as 1,834, where they have been in an area where there is some withdrawals, indicating that the bottom hole pressure is the same throughout the area.

Q What conclusion have you reached, if any, from your study of that exhibit?

A Well, it appears from this that the oil is probably from a common source of supply, due to the same initial potential bottom hole pressures within the area.

Q I believe you also have certain other exhibits. Will you explain what they are?

A I have here electrical logs on three wells, Ibex-Hanson Number 1, the well in question; Ibex North TXL 1 and 2, the two closest wells on the Texas side. And, from the subsea points on these, and the comparison of the intervals between the base of the lower salt and the top of the Delaware lime indicates that it is a very uniform section between the two wells, between the wells on the Texas side and the Hanson Number 1.

Q As a result of your study, it is your conclusion, is it, that the well in question produces from the same source of supply?

A Yes.

Q Common source of supply as well as the wells in the North Mason in Texas?

A Yes, that is right.

MR. KITTS: I believe that is all.

MR. MACEY: What is the present allowable on the wells in the Texas portion of the pool?

A It is 93 barrels a day on allowable days. This month it is 15 days, next month it is published at 16 days.

MR. MACEY: The MER is 96,000 barrels?

A Yes.

MR. MACEY: What does that amount to?

A 15 days, on a 30 day month it is forty-six and a half barrels. Next month on 16 days at a 31 day month it is 48 barrels.

MR. MACEY: Do you feel it would be advisable to set the pool up on a temporary allowable basis, say, 48 barrels or 47 barrels, whatever the Commission deems advisable, for a period of about a year, until we see what actually is going to happen across the line?

A That would be very satisfactory with us.

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

(Witness excused.)

MR. KITTS: We offer Exhibits 1 through 6 in evidence.

MR. MACEY: Is there objection to the introduction of the Exhibits 1 through 6? If not they will be received. Does anyone have anything further in this case? Mr. Walker?

MR. WALKER: Don Walker, with Gulf. It is anticipated that the allowable will change monthly.

MR. MACEY: No, sir, I think we would set a fixed allowable, even though the Texas allowable would vary somewhat. We felt it would be advisable to set a fixed allowable equal to what they would be producing on the Texas side, until we found out definitely whether or not the field was continuous, and then we would have to call a joint hearing and set up pool rules for both sides.

Anyone else? If not, we will 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 19th day of November, 1954.

Ada Dearnley
Notary Public, Court Reporter

My Commission Expires:
June 19, 1955