### BEFORE THE

## Gil Conservation Commission

SANTA FE. NEW MEXICO April 20, 1955

IN THE MATTER OF:

CASE No. 874 - Regular Hearing

TRANSCRIPT OF PROCEEDINGS

ADA DEARNLEY AND ASSOCIATES

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# BEFORE THE OIL CONSERVATION COMMISSION Santa Fe, New Mexico April 20, 1955

## IN THE MATTER OF:

Application of Kewanee Oil Company for permission to recomplete its Pearl Well No. 22-B, NW/4) SE/4 25-17S-32E, Lea County, New Mexico, to permit production of oil from the Red Sand, at the) same time continuing the gas-injection operation now in effect in the same well-bore in the Maljamar sand for secondary recovery; said well) to be approved as an unorthodox location 2615' from the south and east lines of said Section ) 25.

Case No. 874

#### BEFORE:

Mr. E. S. (Johnny) Walker Mr. William B. Macey

## TRANSCRIPT OF HEARING

MR. MACEY: The next case on the docket is case 874.

MR. COCHRAN: If the Commission please, John E. Cochran, Jr. appearing for Kewanee Oil Company. I have one witness.

# W. H. MILLS,

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

### DIRECT EXAMINATION

## By MR. COCHRAN:

- Q Will you state your name, please?
- A W. H. Mills.
- Q Where do you live, Mr. Mills?
- A Odessa, Texas.
- Q By whom are you employed?

- A Kewanee Oil Company.
- Q In what capacity are you employed?
- A Division Engineer.
- Q As Division Engineer, what properties come under your juris-diction?
- A The properties located in the western portion of Texas and the State of New Mexico.
  - Q Have you ever testified before the Commission?
  - A Yes, sir, I have.
- Q Mr. Mills, have you prepared a plat showing your Pearl Lease involved in this application?
  - A Yes, sir, I have.

(Marked Kewanee Oil Company's Exhibit No. 1, for identification.)

- Q Will you tell the Commission what this plat, identified as Kewanee's Exhibit No. 1 shows?
- A This plat shows the major portion of the Maljamar Pool, located in Lea County, New Mexico. The area colored shows Kewanee's Pearl Lease located in Section 25, Township 17 South, Range 32 East, Lots 1, 2, 3 and 4, and the east half of the west half of Section 30, Township 17 South, Range 33 East.
- Q How many producing wells or how many wells have been drilled on the Pearl Lease?
  - A A total of 27 wells.
  - Q What is the status of those wells?
- A At the present time 20 wells are producing from the Maljamar pay, three wells are used as gas input wells, and one well is a combination gas injection well and red sand producing oil well; two wells were abandoned as dry holes and one well, after producing for

sometime, was abandoned.

- Q In the application which Kewanee filed, you wish to recomplete Well No. 22 in the Red Sand?
  - A That is right.
- Q You wish to continue to inject gas through that well into the Maljamar reservoir?
  - A That is right.
  - Q Will you tell the Commission the history of Well 22-B?
- A Pearl No. 22-B was originally drilled as an unorthodox location upon approval by the New Mexico Oil Conservation Commission as entered in Order No. 763 dated April 28, 1948, Case No. 132.

The well was completed at a total depth of 4,189 feet. Initial production was 54.7 barrels per day. The initial completion date on the well was September 20, 1948.

- Q After that well was completed, how long did it produce oil?
- A It produced oil up until the time it was converted to a gas input well, which was on August 24, 1952.
- Q The conversion of the well to a gas input well was okayed by the Commission?
  - A Yes, sir, in Case 856 entered as Order R-146.
- Q How much oil was that making when it was converted to an input well?
- A At the time it was converted to an input well it was producing approximately 18 barrels of oil per day.

(Marked Kewanee Oil Company's Exhibits Nos. 2, 3, 4, for identification.

- Q Mr. Mills, I hand you Kewanee's Exhibit No. 2. Will you tell the Commission what that Exhibit is?
  - A Exhibit 2 is a typical radio-active log of the formation

encountered on the Pearl Lease. Exhibit shows the sequence of the formations as they are encountered, and the approximate depths.

Q Mr. Mills, will you tell the Commission in detail how you propose to recomplete Well No. 22-B in the Red Sands and continue to inject gas through this well into the Maljamar reservoir?

A Specifically, we propose to recomplete Pearl No. 22-B in the following manner: Run a Gamma Ray Neutron Survey, set a Baker Model "D" retainer production packer, below the base of the Red Sand; blank off the Baker Model "D" retainer production packer, perforate the Red Sand zone; test the Red Sand zone for oil production, naturally sand-oil treat in sufficient volume to stimulate production and then remove the blanking tool from Baker Model "D" retainer production packer; run two-inch tubing and one-inch macoroni string with special Baker Adapter and tubing flow tube to separate producing horizons and then produce the Red Sand zone through two-inch tubing and inject gas through one-inch macoroni string into the Maljamar reservoir.

Q Mr. Mills, I hand you Kewanee Exhibit No. 3. Will you tell the Commission what that portrays?

A Exhibit No. 3 is a schematic diagram of the method that has been previously outlined, of how we propose to set the retainer production packer and how we plan to effect the combination completion and separate the two horizons from one another.

- Q Is this Pearl Lease committed to the Maljamar Cooperative Agreement?
  - A Yes, sir, it is.
- Q From what source do you now obtain and will you continue to obtain gas for injection purposes?

A We now obtain gas from the Maljamar Cooperative Repressuring Agreement Plant and we will continue to receive gas from that source.

Q Has this method of recompletion been used before by Kewanee?

A Yes, sir, we have recompleted one other well in this very same manner in our Pearl Number 25 and, as of this date, it has produced, approximately, 9,000 barrels of oil and we have injected gas at the rate of approximately 200,000 cubic feet a day at pressure of 1,350 pounds with no visible effects of communication between the two zones.

Q When was that well recompleted?

A Banking on memory, it was recompleted in the fall of '54, I would say in October of '54.

Q Mr. Mills, if the Commission permits you to recomplete Well No. 22-B in the manner which you propose, and the well produces from the Red Sand, what do you propose to do about an allowable for this well?

A We would propose that the Commission grant us an allowable separate from the other well on the other legal sub-division which is producing oil from the Maljamar pay.

Q In recompleting this well in the manner outlined, and continuing to inject gas into the Maljamar reservoir, in your opinion, is that in the interest of conservation?

- A It definitely is.
- Q It will prevent waste?
- A It certainly will.

MR. COCHRAN: If the Commission please, this is a Federal Lease and a copy of the application was filed with the United States

Geological Survey, and I have marked here, as Kewanee's Exhibit No. 4, a letter from Mr. John A. Anderson, Regional Oil and Gas Supervisor in which he states that his office offers no objection to the proposed recompletion of this well. We would like to offer in evidence Kewanee's Exhibits 1, 2, 3 and 4.

MR. MACEY: Without objection it will be received in evidence.

MR. COCHRAN: That is all.

MR. MACEY: Any questions of the witness? Mr. Rhodes?

## CROSS EXAMINATION

## By MR. RHODES:

Q One question, for the purpose of the record, in the event that you desire to discontinue injection of gas into the Grayburg, would you be willing to plug that well on back to the Queen?

A I don't know whether I can answer that question for you right at this time or not, because I don't know what disposition we would want to make of that well in the Maljamar pay in the event we ceased gas well injection operation.

Q Would you be willing to work that well over in the event that you desire to discontinue the injection of gas so that you would be recovering from only one of the two horizons?

A Definitely, yes, sir.

MR. RHODES: That is all.

MR. MACEY: Anyone else? If not the witness may be excused.

(Witness excused.)

MR. MACEY: Wo you have anything further?

MR. COCHRAN: No, I don't.

MR. MACEY: We will take the case under advisement and take

a short recess.

STATE OF HEW MEXICO )
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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 3rd day of May, 1956.
Ada Dearnley
Notery Public, Court Reporter
My Commission Expires:

June 19, 1955

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