

BEFORE THE
OIL CONSERVATION COMMISSION
STATE OF NEW MEXICO
Santa Fe, New Mexico

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TRANSCRIPT OF PROCEEDINGS
CASE NO. 704
Regular Hearing

May 19, 1954

BEFORE THE
OIL CONSERVATION COMMISSION
STATE OF NEW MEXICO
Santa Fe, New Mexico
May 19, 1954

IN THE MATTER OF:

Application of Kewanee Oil Company to
dually recompleate oil well in unortho-
dox location.

Case No. 704

Applicant, in the above-styled case, seeks
an order authorizing the recompletion of
Pearl Well No. 25-B (Presently producing
from the Maljamar Oil Pool) located in
SW/4 NE/4 Section 25, Township 17 South,
Range 32 East, Lea County, New Mexico, in
the Red sand of the Pearsall Oil Pool in
an unorthodox location, and to convert the
Maljamar pay horizon in said well into a
gas -injection well.

TRANSCRIPT OF PROCEEDINGS

MR. COCHRAN: My name is John E. Cochran, Jr. representing
Kewanee Oil Company. W. H. Miles, is the witness in this case.

W. H. M I L E S

the witness, having been first duly sworn, testified as follows:

DIRECT EXAMINATION

By MR. COCHRAN:

Q Will you state your name please?

A My name is W. H. Miles.

Q By whom are you employed? A Kewanee Oil Company.

Q In what capacity? A Division engineer.

Q What is the area of your employment?

A We cover the entire west Texas area and New Mexico.

Q Mr. Miles, have you previously testified before the Commis-
sion as a petroleum engineer? A I have.

MR. COCHRAN: Are Mr. Miles' qualifications acceptable to the

Commission?

MR. SPURRIER: They are.

Q Mr. Miles, have you prepared a map in connection with the application of Kewanee Oil Company to recomplete Pearl Well No. 25-B in the Red sand and convert the Maljamar pay to an injection well?

A Yes, sir, I have.

MR. COCHRAN: This will be Kewanee's Exhibit No. 1.

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

Q Mr. Miles, I hand you what is marked Kewanee's Exhibit No. 1. Will you state to the Commission what that purports to show?

A Exhibit No. 1 is a map of the general Maljamar Oil Pool with the Pearl lease on the east side of the map, the lease in question colored in yellow. On it also it shows the Kewanee Pearl 25 Well in red, which is the proposed Commission completion.

Q Mr. Miles, when was the Pearl Well 25-B drilled?

A The Pearl Well 25-B was drilled in May of 1948.

Q Was that well a regular location or an unorthodox location?

A It was an unorthodox location.

Q Do you know by what order of the Commission that was done?

A That was Pearl 25-B was drilled as an unorthodox location on permission granted by the Oil Conservation Commission in Case No. 141, entered as Order No. 770 granting Kewanee Oil Company permission to drill Pearl Well No. 25-B.

Q To what depth was the well drilled?

A It was drilled to a depth of 4203 feet.

Q And completed in the Maljamar pay?

A That is right.

Q What did the well make initially?

A Initial potential of the well was approximately 20 barrels per day.

Q What does the well make at this time?

A At the present time this well is producing approximately three barrels of oil per day.

Q On the Pearl lease have you for some time carried on a gas injection program?

A Yes, sir, we have carried on a gas injection program for approximately two years now.

Q Permission was granted for that by the Oil Conservation Commission?

A Yes, sir, permission was granted to inject gas in the so-called Pearl lease pursuant to Order No. R-146, entered by the Oil Conservation Commission in Case No. 356 on May 1st, 1952.

Q Mr. Miles, when this well was drilled, did you encounter shows of oil in the Red sand?

A Yes, sir, we did.

Q In your application you have asked that you be permitted to recomplete this well in the Red sands and convert the Maljamar pay into a gas injection well. Would you explain, or rather have you prepared any drawings which would be helpful to the Commission when you make your explanation of how this is to be done?

A Yes, sir, I have two schematic drawings here. One of the general geology of the area. Another of the actual manner in which we planned to effect this injection and completion in Pearl No. 25.

MR. COCHRAN: Will you mark that as Exhibit 2?

(Marked Kewanee's Exhibit No. 2
for identification.)

MR. COCHRAN: Mark that as Exhibit 3.

(Marked Kewanee's Exhibit No. 3,
for identification.)

Q I hand you Kewanee's Exhibit No. 2. Will you explain to the Commission what that purports to be and also explain in detail the method that you proposed to use in recompleting this well in the Red sand in converting the Maljamar pay into an injection well? .

A Exhibit 2 is a diagrammatic sketch of the geologic section encountered in Pearl No. 25. As you will note, we have portrayed in there in color the approximate location of the Red sand, the approximate top of the Grayburg formation, the approximate top of the San Andres formation. Actually this is a radioactive survey, a gama ray neutron survey of another typical Maljamar pay well. We have also showed on this diagram the location of the production string in Pearl No. 25 and further how we propose to cement the lower San Andres horizon which is non productive in Pearl 25, and then recomplete the subject well in the Red sand section at approximate depth of 3420 to 3440. Step by step we propose to effect this combination completion in the following manner.

We are going to go in and run a radioactive survey of the subject well and then we plan to plug off the lower 7 zone with cement. Then we propose to go in and set a Baker Model D Retainer Production Packer. Upon completing the setting of this tool we plan to blank off the tool and isolate the lower productive horizon. We then plan to go in there and perforate the Red sand zone and test the Red sand zone for oil production. If commercial oil is indicated, we will undoubtedly sand-oil treat the well with sufficient volume to stimulate production. Upon completion of this operation we will remove the blanking tool from the Baker Model D Retainer Production Packer and run a two inch tubing string and a one inch macaroni

string with a special baker adapter and tubing, flow tube to separate the producing horizons.

Then we will produce the Red sands zone through the regular two inch tubing and inject gas through the one inch macaroni string into the Maljamar reservoir with initial volume of approximately 200,000 cubic feet per day, the pressure 1500 pounds per square inch.

Q Mr. Miles, I hand you Kewanee's Exhibit No. 3. Will you explain to the Commission what that portrays?

A Exhibit 3 is a diagrammatic sketch of our plans to actually effect the dual completion by the use of a Baker Model D Retainer Production Packer. As you will note, the exhibit shows the 7 inch production string, and the mechanism by which we propose to seal off the lower zone from the upper Red sand zone, and isolate the two zones from communication. I might point out to the Commission that when the Baker Retainer Production Packer is set, it will remain there permanently and cannot be removed from the well unless it is drilled up.

Q Mr. Miles, where do you propose to obtain your gas supply?

A In view of the fact that the Pearl lease is a part of the so-called Maljamar repressuring cooperative agreement, and is now committed to that agreement, we plan to obtain gas for injection purposes from the Maljamar cooperative repressuring agreement.

Q Mr. Miles, if permission is granted to complete this well in the Red sand and convert the Maljamar pay into a gas injection well, what do you propose to do about the allowable for the Red sand?

A In the event that the Red sand horizon is productive in this well, we will request an allowable from the Commission for a regular 40 acre legal subdivision unit separate from the regular Maljamar pay well which is also located on the same 40 acre unit.

Q Mr. Miles, if this well is completed and converted in this manner, is it your opinion as a petroleum engineer that this will be in the interest of conservation and prevent waste?

A In my opinion it definitely is in the interest of conservation and will prevent waste and will also enable Kewanee to increase the ultimate production from the regular lower Maljamar pay by injecting gas in that horizon.

MR. COCHRAN: If the Commission please, we would like for the record to show that at the time this application was filed with the Commission, a copy was also filed with the United States Geological Survey, with the request that they give us an expression as to the feeling of that office about this proposal. They neither approved or disapproved the proposal, but they verbally stated that they would defer any action on the request until after this hearing. That is all.

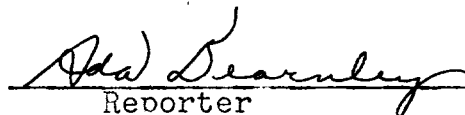
MR. SPURRIER: Anyone have a question of the witness? If not, the witness may be excused. (Witness excused.)

MR. COCHRAN: I do offer Kewanee's Exhibits one, two and three.

MR. SPURRIER: Without objection they will be admitted. Anyone else have a comment in the case? If not, we will go on to Case 705 and take this case under advisement.

C E R T I F I C A T E

I, ADA DEARNLEY, Court Reporter, do hereby certify that the foregoing and attached transcript of proceedings in the matter of Case No. 704 was taken by me on May 19, 1954, that the same is a true and correct record to the best of my knowledge, skill and ability.


Reporter