EXAMINER HEARING OIL CONSERVATION COMMISSION Santa Fe, New Mexico April 9, 1958

IN THE MATTER OF: Case No. 1405:

TRANSCRIPT OF PROCEEDINGS

DEARNLEY MEIER & ASSOCIATES
INCORPORATED
GENERAL LAW REPORTERS
ALBUQUERQUE, NEW MEXICO
3-6691 5-9546

EXAMINER HEARING OIL CONSERVATION COMMISSION Santa Fe, New Mexico April 9, 1958.

IN THE MATTER OF:

Application of Continental Oil Company for an oil-oil dual completion. Applicant, in the above-styled cause, seeks an order authorizing the dual completion of its A. M. Lockhart B-14 "A" No. 1-D Well, located 1980 feet from the North line and 660 feet from the East line of Section 14, Township 21 South, Range 37 East, Lea County, New Mexico, in such a manner as to produce oil from the Terry Blinebry Oil Pool and oil from the Drinkard Oil Pool through parallel strings of tubing.

<u>Case 1405</u>

BEFORE: Elvis A. Utz, Examiner

TRANSCRIPT OF PROCEEDINGS

MR. UTZ: The next case on the docket will be Case 1405.

MR. PAYNE: Case 1405: Application of Continental Oil

Company for an oil-oil dual completion.

MR. KELLAHIN: We have the same witness, Mr. Lyon. I think the record shows that he has already been sworn.

MR. UTZ: Yes, it does.

VICTOR I. LYON

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

DIRECT EXAMINATION

By MR. KELLAHIN:

Q Mr. Lyon, are you familiar with the application in Case 1405?

- A Yes, sir.
- Q What is proposed in that application?

A We propose to effect an oil-oil dual completion whereby we will produce Drinkard oil and Terry-Blinebry oil through separate strings of tubing in our Lockhart B-14 "A" Well No. 1-D.

Q Do you have a plat showing the lease location and the well location, together with offset lease ownership and wells?

A Yes, sir.

(Continental's Exhibit No. 1 marked for identification.)

Q Referring to Exhibit No. 1, will you state what that shows?

A Exhibit No. 1 is an ownership and location map showing the Lockhart B-14 "A" lease, the wells located thereon, the location and ownership of leases in the immediately surrounding area, and the wells located on those leases. It shows the Lockhart B-14 "A" lease outlined in red, the No. 1-D Well circled in red, and it shows the producing Drinkard wells in the area circled in green.

(Continental's Exhibit No. 2 marked for identification.)

Q Now, referring to what has been marked as Exhibit No. 2, will you state what that shows?

A Exhibit No. 2 is a plat showing the same area as Exhibit No. 1. It also shows structural contours of the Blinebry formation contoured on the Blinebry marker. The Lockhart B-14 "A" lease is outlined in red, and the No. 1-D is circled in red, and producing Terry-Blinebry oil wells are circled in brown.

Q Now on the basis of that exhibit, Mr. Lyon, and in your opinion as an engineer, may the acreage proposed to be dedicated to this well reasonably be presumed to be productive from the Terry-Blinebry Oil Pool?

A The well is entirely surrounded by Terry-Blinebry producers which are both structurally higher and lower and comparably located on the structure to this well, and I feel confident that it is productive of oil in the Terry-Blinebry Pool.

- Q Now the well is presently completed in the Drinkard formation, is it not?
 - A That is correct.
 - Q Is it productive from the Drinkard?
 - A Yes, sir.

(Continental's Exhibit No. 3 marked for identification.)

Q Referring to what has been marked as Exhibit No. 3, would you state what that shows?

A Exhibit No. 3 is a tracing of the radioactive log on this well, and it shows the Blinebry marker, the top of the Drinkard, the point at which the seven-inch casing was set, the open hole interval, and in red, the proposed perforations which are from 5728 to 5748, 5755 to 5772, and 5814 to 5852.

Q Just for the record, would you also describe the open hole formation there, Mr. Lyon?

A Seven-inch casing is set at 6583, and the total depth of the

well is at 6648, so the open hole interval extends from 6588 to 6648.

Q Is that open hole interval within the defined vertical and horizontal limits of the Drinkard Pool?

A Yes, sir.

Q Are the proposed perforations in the Terry-Blinebry located within the vertical and horizontal limits of the Terry-Blinebry Oil Pool?

A Yes, sir, they are.

(Continental's Exhibit No. 4 marked for identification.)

Q Now referring to what has been marked as Exhibit No. 4, would you state what that shows?

A Exhibit No. 4 is a schematic diagram showing the present condition of the well. It shows the seven-inch casing set at 6483, packer set at 6566, two and a half inch tubing is set at 6605 within the open hole interval, and it also indicates the cement top as measured by temperature survey at 3250.

- Q How is that well presently being produced?
- A It is flowing from the Drinkard formation.
- Q Through tubing?
- A Through two and a half inch tubing.
- Q Now referring to Exhibit No. 5, would you state what that shows?

(Continental's Exhibit No. 5 marked for identification.)

A Exhibit No. 5 is a schematic diagram of the proposed dual completion. It shows the casing pattern, the Blinebry marker, the proposed interval to be perforated in the Terry-Blinebry, the approximate location or proposed location of the Baker Model "D" Retainer Production Packer, the top of the Tubb, the top of the Drinkard, and the seven-inch casing setting depth and the total depth. That is the information shown on the left.

On the right is shown the tubing to be installed in the well, the long string which will be run through the packer, will have Baker Locater Tubing Seal Assembly, it will be 2-inch EUE tubing. Alongside we will run a short string of tubing which will have beveled and turned-down collars to produce the Terry-Blinebry oil.

Q The tubing proposed to be used, this 2-inch tubing, is that approximately the inside diameter of the tubing?

A Approximately, yes.

(Continental's Exhibit No. 6 marked for identification.)

Q Now referring to what has been marked as Exhibit No. 6, will you state what that shows?

A Exhibit No. 6 is a drawing of the proposed wellhead equipment, showing the tubing hanger and the details of the head itself. The proposed equipment will be such that we can take any test that the Commission requires on either formation.

Q Is the equipment such that any work that may reasonably be

anticipated in this well can be performed with that equipment?

- A Yes, sir, it can.
- Q Is the proposed dual completion as outlined by your testimony and exhibits of a type that has heretofore been approved by this Commission for oil-oil dual completions?
 - A Yes, sir.
- Q In your opinion, is the approval of this type of completion in the interest of conservation and the prevention of waste?
 - A Yes, sir, I believe it is.
- Q Would correlative rights be protected by approval of this application?
 - A Yes. sir.
 - Q Is the lease ownership in both horizons common?
 - A Yes, it is.
- MR. KELLAHIN: At this time we offer in evidence Exhibits 1 through 6, inclusive.
- MR. UTZ: Is there objection to the entrance of Exhibits 1 through 6? If not, they will be accepted.
 - Q Do you have anything you want to add to your testimony?
 - A I don't believe so.
 - MR. KELLAHIN: That's all the questions.
 - MR. UTZ: Any questions of the witness? Mr. Nutter.

CROSS EXAMINATION

By MR. NUTTER:

Q Mr. Lyon, is this proposed dual completion installation

such that you would be able to pump either zone in the event such would be necessary?

- A Yes, sir.
- Q How many sacks of cement were used in cementing that 7-inch string of pipe, Mr. Lyon?
 - A 625 sacks.
 - Q Where is the top of the cement?
 - A 3250.
- Q So the top of the cement is well above the proposed perforations into the Blinebry zone, is that correct?
 - A Yes. it is.
- Q What is the GOR in the present completion in the Drinkard zone?
 - A I don't believe I have that information with me.
 - Q Do you have the bottom-hole pressure in the Drinkard zone?
 - A No, sir. I can supply that to you.
 - Q What is the anticipated GOR in the Blinebry zone?
- A We hope to complete a well which will not be penalized for high gas-oil ratio, which would be less than 6,000.
- Q Are the wells immediately offsetting this well which are completed in the Terry-Blinebry high GOR or low GOR wells?
 - A I really couldn't say.
- Q Do you know what the anticipated bottom-hole pressure would be in the Terry-Blinebry?
 - A I anticipate it will be somwehere in the neighborhood of

2,000 pounds.

Q Could you find out what the GOR is in the Drinkard zone, and also the bottom-hole pressure, and submit that to us?

A Yes, sir.

MR. NUTTER: That's all. Thank you.

MR. UTZ: Any other questions of the witness?

MR. NUTTER: What are the gravities of the two zones that you are expecting to complete in?

A This record doesn't seem to have the gravity on here. I can get the information and furnish it to you.

MR. NUTTER: Thank you.

MR. UTZ: Any other questions? Do you have another question, Mr. Kellahin?

MR. KELLAHIN: Yes.

REDIRECT EXAMINATION

By MR. KELLAHIN:

Q Is the completion which is proposed in this application of the type which would prevent commingling of the fluid between the two common sources of supply?

A Yes, sir, there would be no commingling whatsoever.

MR. KELLAHIN: That's all.

RECROSS EXAMINATION

By MR. UTZ:

Q Did you state, Mr. Lyon, that you would comply with the required packer leakage tests at required intervals?

A I didn't state that, but we will.

MR. UTZ: Any other questions of the witness?

MR. COOLEY: Yes.

MR. UTZ: Mr. Cooley.

By MR. COOLEY:

Q Mr. Lyon, in answer to Mr. Kellahin's question, you said that the completion would be such that no commingling would be possible?

A Yes, sir.

Q Isn*t it possible that there might be a packer leakage with any type of packer you would use?

A I meant by the statement that if the equipment is placed in as we would expect it to be, we would not expect any commingling of fluids.

Q At any time during the life of a dually completed well, it is possible that a packer leakage is possible?

A It is always possible.

Q Through packer leakage tests, the producing characteristics of the two zones, it is possible to determine if such a leak is present, is it not?

A That is true.

MR. COOLEY: That's all.

MR. UTZ: Any other questions? The witness may be excused.

(Witness excused.)

MR. UTZ: Any other statements in this case? If not, the

case will be taken under advisement.

CERTIFICATE

STATE OF NEW MEXICO)

COUNTY OF BERNALILLO)

I, ADA DEARNLEY, Notary Public in and for the County of Bernalillo, State of New Mexico, do hereby certify that the foregoing and attached Transcript of Proceedings before the New Mexico Oil Conservation Commission was reported by me in stenotype and reduced to typewritten transcript under my personal supervision, and that the same is a true and correct record to the best of my knowledge, skill and ability.

WITNESS my Hand and Seal this /8 day of April, 1958, in the City of Albuquerque, County of Bernalillo, State of New Mexico.

Dea Searnley NOTARY PUBLIC

My commission expires:

June 19, 1959.

I do hereby continue that the foregoing is a continue of the last of the last