BEFORE THE NEW MEXICO OIL CONSERVATION COMMISSION Santa Fe, New Mexico August 20, 1958

IN THE MATTER OF,

CASE NO. 1596

TRANSCRIPT OF PROCEEDINGS

BEFORE THE OIL CONSERVATION COMMISSION SANTA FE, NEW MEXICO August 20, 1958

IN THE MATTER OF:

CASE NO. 1496 Application of Tidewater Oil Company for an oil-oil dual completion. Applicant, in the above-styled cause, seeks an order authorizing the dual completion of its A. B. Coats "C" No. 14 Well, located 1650 feet from the North line and 2310 feet from the East line of Section 24, Township 25 South, Range 37 East, Lea County, New Mexico, in such a manner as to permit the production of oil from the Justis-Drinkard Pool and an undesignated Montoya oil pool through parallel strings of tubing.

BEFORE:

Mr. Elvis A. Utz

TRANSCRIPT OF PROCEEDINGS

MR. UTZ: The next case on the docket is Case 1496.

MR. PAYNE: Case 1496, Application of Tidewater Oil Company for an oil-oil dual completion.

MR. SETH: Oliver Seth appearing for Tidewater. Mr. Robert Miller is the witness.

(Witness sworn in).

ROBERT M. MILLER

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

DIRECT EXAMINATION

BY MR. SETH:

- Q Would you state your name, please, Mr. Miller?
- A Robert M. Miller.
- Q And by whom are you employed?
- A Tidewater Oil Company.
- Q Where and in what capacity?
- A In Hobbs, New Mexico as Area Petroleum Engineer.
- Q Are you familiar with Tidewater's application in Case
 - A Yes.
 - Q And in the area considered?
 - A Yes, sir.
- Q You have testified previously before the Commission, have you not?
 - A I have.
 - MR. SETH: May he testify as an expert?
 - MR. UTZ: He is acceptable.
- Q (By Mr. Seth) Mr. Miller, would you please describe the location of the well which is the subject of the application?
- A Tidewater A. B. Coates "C" Well Number 14 is located

 1650 feet from the North line and 2310 feet from the East line,

 Section 24, Township 25 South, Range 37 East, Lea County, New Mexico.
 - Q Do you have a plat showing the location of this well?
 - A Yes sir, I have.

Q How is the well designated on Tidewater's Exhibit Number One?

A It shows an outline of the dedicated 40 acres in red and the well that is in the Northwest portion of that 40 acres is Well 14, which is a Drinkard-Montoya dual.

- Q The LDM appears on the well, is that right?
- A Yes sir, that is correct.
- Q Would you describe the casing program that was followed in drilling this well?

A This well has 13 and 3 eights inch casing set at 537 feet and cemented to the surface, 9 and 5 eights inch intermediate set at 3318 and cemented to the surface and 7 inch casing set at 6973 and cemented back to 3610.

Q What are the producing sections or zones that were encountered in thie Well?

A Well, the objective was the Drinkard and the Montoya. The Montoya section was perforated 6840 to 80 and the Drinkard perforated 5876 to 5930. A Baker Model "D" production packer was set at 6490. The Montoya two and three eights inch tubing string was set at 6935 with a Baker parallel tubing anchor at 5989 and the Drinkard two and three eights inch tubing was run and set in anchor at 5989.

Q Do you have a log on this well that shows --

A Yes, I have a log that shows the perforations and a diagrammatic sketch of the well.

- Q You have a diagram of the well, too?
- A Yes, sir.
- MR. UTZ: Do you wish this to be Exhibit Number Two?
- MR. SETH: Yes, please.
- MR. UTZ: Which exhibit number for the diagrammatic sketch?
- MR. SETH: Number One.
- Q (By Mr. Seth) Referring to Exhibit Two, which is the log of the well, would you indicate, please, what that shows with regard to this dual completion?
- A On a reduced scale of this gamma ray neutron on the

 A. B. Coates "C" Number Fourteen, it shows the Montoya perforations
 the plug-back, total depths.
 - Q What else is there on the sketch?
- A On the 6800, actually, the Montoya perforations are from 6840 to 6880 and it shows also the plug-back, total depth, seven-inch casing set, and three eights inch tubing set for the Montoya section and the tubing perforation for the Montoya section.
- Q Were there any unusual conditions encountered in the completion and drilling of this well?
 - A No sir, there weren't.
 - Q Do you have the production data on the well?
- A Yes, the initial potential on the Drinkard section well, it flowed at 157.40, no water in six hours, daily rate of 192.90 through an 18/64 choke, tubing pressure at a 180, casing pressure at 550, GOR, 762 to 1 and produces 37.3 degrees API gravity.

crude oil corrected to 60 degrees.

- Q What about the Montoya section?
- A The Montoya flowed at 157.40 and again there was no water or daily rate of 630 through a 60/64 choke, tubing pressure, 600 pounds, GOR, 676 to 1, and 35.7 degrees API corrected crude oil.

MR. UTZ: What was the crude oil again?

- A 35.7 degrees.
- Q (By Mr. Seth) Do you have any bottomhole pressure data?

A Yes sir, the Drinkard bottomhole pressure was 2502 PSI at pool datum of minus 2800 after forty-seven hours shut-in and the Montoya was 2841 PSI at pool datum of minus 3940 after forty-six hours shut-in.

- Q Is the packer of the type that can be easily installed?
- A Yes, sir.
- Q In the Drinkard area?
- A Yes sir, it is the same type and description that we have encountered here with these.
- Q Is the completion such that whatever tests the Commission desires may be made from the zone separately?
 - A Yes, sir.
- Q Would you refer to the diagrammatic sketch in Exhibit Three. Do you have any comments as to this exhibit?
 - A No sir, it just sets out a diagrammatic sketch of the

dual completion which is identical to that shown in red in Exhibit Two.

- Q Is this dual type completion that you have here ever been made in this area?
- A Yes sir, there are several in the area. Most of them essentially use the same type completion.
- Q In your opinion, is it mechanically sound if properly installed?
 - A Yes, sir.
- Q Well, will the dual completion if it is approved in this case be in the interest of conservation?
 - A Yes.
- Q Would the production from both zones be at the same time?
 - A Yes sir, and protect correlative rights.
- Q Do you have any other comments as to the proposed completion?
- A Nothing other than the fact that at the same time the Montoya section is being produced, that the Drinkard is shut-in.
- Q This well location is not within the Montoya Pool as it is presently designated today?
- A It wasn't at the time of the application. I believe, however, Tidewater has filed application for extension to the Justis-Montoya Pool.
 - Q To include this 40 acres stretch, is that right?

- A Yes, sir.
- Q Were these Exhibits, One through Three, prepared under your direction and supervision?
 - A Yes sir, they were.
- MR. SETH: We would like to offer Exhibits One through Three.
- MR. UTZ: Without objections, Exhibits One through Three will be accepted into the record.
 - MR. SETH: That is all we have.
 - MR. UTZ: Do you have any questions of the witness?
 - MR. FISCHER: I do.
 - MR. UTZ: Mr. Fischer.

CROSS EXAMINATION

BY MR. FISCHER:

- Q Mr. Miller, where was that Baker packer set?
- A On a wire line.
- Q On a wire line?
- A Yes, sir.
- Q And I didn't get the bottomhole pressure for the Drinkard. Could you give me that, please?
 - A Yes sir, it was 2502 at a pool datum of minus 2800.
 - Q And the Montoya was 2841?
 - A 2841, yes sir, at a pool datum of minus 3940.
 - Q How long did it take the Drinkard to stabilize?
 - A We haven't run a packer leakage test to the well yet.

- Q What was the shut-in time on that?
- A Forty-six hours.
- Q On the Montoya?
- A Forty-six on the Montoya, forty-seven on the Drinkard.
- Q Thank you.
- A In the previous bottomheles pressures of the Drinkard section, we have run 48 in 72 hours and was satisfied that it will stabilize in 46, 47 hours.
- Q On your tubing, it shows on your log that that is that perforated part down there for both strings of tubing, isn't it?
 - A Where are you talking about?
 - Q Down there on your tubing perforations.
 - A It is 69 to 105.
 - Q Yes.
 - A Yes, it is a four-foot tubing perforation.
 - Q. And the weight of the seven inch casing?
 - A Twenty-three pounds, I believe.
- Q What type of collars have you used on your 2 and 3 eighth: inch tubing?
- A Let's see, I believe on this well the short string was 2 and 3 eighth hydril grade and the long string was 2 and 3 eighth nominal.
 - Q Has that been okayed?
 - A I don't believe that it has been turned down, no sir.

MR. FISCHER: That is all.

MR. PAYNE: Mr. Miller, this would have been eligible for administrative approval but for the fact that there was no previous dual authorized in it for the two zones, would it not?

A That is correct, yes sir.

MR. PAYNE: Thank you.

CROSS EXAMINATION

BY MR. UTZ:

Q Mr. Miller, what is the nature of the crude as to the zone, is it sweet or sour?

A The Montoya zone is classified as intermediate or sweet grade and the Drinkard is classified as sour.

Q All cement has been circulated to the surface with the exception of the seven inch which was left at the 192 feet of open hole?

A Yes, sir. I am not certain about the 292, they brought that cement back to 3610, I believe.

Q The 9 and 5 inches was 3318?

A Yes, sir.

MR. UTZ: Are there any other questions of the witness?

MR. PAYNE: No.

MR. UTZ: If not, the witness may be excused.

Are there any other further statements to be made in this

case?

MR SETH: That is all we have

MR. UTZ: If not, the case will be taken under advisement. (Witness excused).

<u>C E R T I F I C A T E</u>

STATE OF NEW MEXICO)
: ss
COUNTY OF BERNALILLO)

I, JERRY MARTINEZ, 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 25th day of August, 1958, in the City of Albuquerque, County of Bernalillo, State of New Mexico.

NOTARY PUBLIC

My Commission Expires: January 24, 1962 the factor of the foregoing is

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