BEFORE THE
OIL CONSERVATION COMMISSION
Santa Fe, New Mexico
July 10, 1963

EXAMINER HEARING

IN THE MATTER OF:

Application of Amerada Petroleum Corporation for a triple completion and for commingling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval of the triple completion (combination) of its State NJ "A" Well No. 1 located in Unit A of Section 2, Township 25 South, Range 37 East, North Justis Field, Lea County, New Mexico, to produce oil from the McKee and Ellenburger zones through 1-1/2 inch tubing inside parallel strings of 3-1/2 inch casing and from the Montoya zone through 1-1/4 inch tubing inside 2-7/8 inch casing, all casing strings to be cemented in a common well bore. Applicant further seeks to add the Montoya zone to the commingling authority previously granted by Administrative Order No. PC-84.

CASE 2852

BEFORE: Elvis A. Utz, Examiner

TRANSCRIPT OF HEARING

MR. UTZ: Case 2852.

MR. DURRETT: Application of Amerada Petroleum Corporation for a triple completion and for commingling, Lea County, New Mexico.

MR. KELLAHIN: Jason Kellahin, Kellahin and Fox, Santa Fe, representing the Applicant, and we will have one witness I would like to have sworn, please.

(Witness sworn.)

MR. UTZ: Are there any other appearances in this case? You may proceed.

L. E. THOMAS

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

DIRECT EXAMINATION

BY MR. KELLAHIN:

Q Would you state your name, please?

A L. E. Thomas.

Q By whom are you employed and in what position, Mr. Thomas?

A I am employed by Amerada Petroleum Corporation as District Engineer in the New Mexico District.

Q Have you ever testified before the Oil Conservation Commission and made your qualifications a matter of record?

A I have.

MR. KELLAHIN: Are the witness' qualifications accepted?

MR. UTZ: Yes, they are.

Q (By Mr. Kellahin) In connection with the application of Amerada Petroleum Corporation in Case 2852 --

A Yes, sir.

Q -- would you state briefly what Amerada proposes in this application?

A We propose to complete this well as a triple completed oil well from the Montoya, McKee, and Ellenburger zones in the

North Justis Area.

Q Do you also propose to commingle production from the basic lease involved?

A Yes, sir.

(Whereupon, Amerada's Exhibits Nos. 1 through 5 marked for identification.)

Q Referring to what has been marked as Exhibit 1, would you identify that exhibit, please?

A Exhibit No. 1 is a plat showing the location of the well in question. The well is the State NJ "A" No. 1 located 660 feet from the north line, 660 feet from the east line of Section 2, Township 25 South, Range 37 East, Lea County, New Mexico, in the North Justis Area.

Q Now the Exhibit No. 1 also shows the offsetting ownership, does it not?

A Yes, it does.

Q Does it show the production from the various wells offsetting the lease?

A It shows the completed interval that the wells are completed in.

Q Referring to what has been marked as Exhibit No. 2, would you identify that exhibit, please?

A Exhibit No. 2 is the application for triple completion in the three zones mentioned, the Montoya, McKee, and Ellenburger, also showing the perforated interval in each of these zones.

Q Does the exhibit also indicate that you contemplate using gas lift on two of the zones?

A It does.

Q Which two?

A The Montoya and the Ellenburger would be gas lifted.

Q Now referring to what has been marked as Exhibit No. 3, would you identify that exhibit and discuss the information shown thereon?

A Exhibit No. 3 is a schematic of the completion of this well. It shows the various strings of casing, cement tops, depths of the casings, the tubing and its depth, perforated intervals, tops of cement, Now in more detail, the three strings of casing include two strings of 3-1/2 inch casing set at 8559 and 8563, respectively. The 2-7/8 string of casing is set at 8566. The string labeled No. 1 is presently perforated in the McKee zone with perforated intervals from 7986 to 8105. This will be produced through 1-1/2 inch tubing with a packer set at 7912.

The string labeled No. 2 is the Ellenburger completion with perforations at 8444 to 8494. This will be completed through 1-1/2 inch tubing set at 8397. It will be gas lifted.

String No. 3 is the 2-7/8ths inch casing with perforations in the Montoya at 7175 to 7218. This will have 1-1/4 inch tubing set at approximately 7,000 feet, and that will be gas lifted.

I might mention that the cement behind these three

strings of casing comes back up to a depth of 2975, which is up in the 10-3/4. So we will have either cement or another string of casing behind each of the strings of production casing.

Q All of the production will be through tubing?

A Right.

Q Referring to what has been marked as Exhibit No. 4, would you identify that exhibit and state what information is shown on it?

A The Exhibit No. 4 is a copy of the electric log, and it is marked with the perforated interval and the tops of the three zones in question.

Q This well has previously been approved as a triple completion, has it not?

A Yes, it has. In November of 1961, this well was completed as a triple completion in the Fusselman, McKee and Ellenburger zones and was approved by Order R-2164 dated January 17, 1962. It was completed in those three zones and produced until July of 1962 when mechanical problems were encountered, and additional tests were made on other zones that resulted in failure; and we wound up with a dual completion, one string of idle casing there, from June of 1962 until June of 1963, at which time we tested the Montoya and now request permission to triple complete the well.

Q What is the present status of the well?

A The well is completed in the three zones mentioned, the

Montoya, McKee, and Ellenburger.

Q And you are gas lifting the Ellenburger at the present time, is that correct?

A Right.

Q And you propose to gas lift the Montoya?

A Yes.

Q Is that a practical completion for this type of well?

A Yes, this has been done in other wells in the area. The fact that we are using 1-1/4 inch tubing will make no difference on efficiency, so forth, or the mechanics of the well.

Q Have all of these zones been approved for triple completions and tubingless completions?

A They have. It is set up for administrative approval providing we have tubingless completions, but these are conventional.

Q That is the occasion for the hearing in this case?

A That's right.

Q In your opinion, will approval of this application result in the prevention of waste?

A Yes, it will. We at present have no production from the Montoya, and also we have an idle string of casing that can be utilized.

Q It is of no value unless this is approved, is that correct?

A Right.

Q Referring to what has been marked as Exhibit No. 5, would you identify that exhibit and discuss the information shown on it?

A Exhibit No. 5 is a schematic diagram of our battery system in which we request permission to commingle production from the other well on the lease, which would mean we would have five oil zones commingled in this battery. They would be the Ellenburger, McKee, Montoya, Fusselman, and Blinebry. These are all sweet oil; all zones will be metered; and I might add that all of these zones have been submitted for administrative approval by Order PC-84, with the exception of the Montoya, which is the one we wish to add to this battery at this time.

Q How would the gravities of the Montoya compare with the others involved in this commingling?

A The comparative zone would be the Fusselman, and these gravities are similar, the Montoya being 37.2 degrees and the Fusselman 37 degrees. Ratios vary some, but not enough to warrant a great deal of concern.

Q What are the GOR's?

A The GOR on the Montoya is 846, on the Fusselman 423 in this well.

Q Would the approval of the commingling in any way reduce the value of the total product from the various zones?

A No, it would not.

Q Would it be in the interest of conservation and the

prevention of waste?

A It would.

Q In what way?

A Since the battery is already set up to handle this number of zones, there would be no additional expense and we feel that this would be additional expense to separate this production.

Q Will you be able to account for the production from each zone separately with accuracy?

A Yes, we will.

Q What type of meters are you using?

A These are positive displacement type meters.

Q Were Exhibits 1 through 5 prepared by you or under your supervision?

A They were.

MR. KELLAHIN: I would like to offer Exhibits 1 through 5 inclusive.

MR. UTZ: Without objection, Exhibits 1 through 5 will be entered into the record of this case.

(Whereupon, Amerada's Exhibits Nos. 1 through 5, inclusive, received in evidence.)

MR. KELLAHIN: That's all the questions I have on direct examination, Mr. Utz.

MR. UTZ: Any questions of the witness?

CROSS EXAMINATION

BY MR. UTZ:

Q Your surface casing in this case, which is 10-3/4, is circulated?

A I don't believe that they circulated. We found the top as 2210.

Q 2210?

A Yes, sir.

Q Your 16-inch is actually the surface casing, isn't it?

A Yes, it's down to 518.

Q That's circulated?

A No, we cemented with 700 sacks, which apparently should have brought it to the surface but it didn't.

Q What formations are between 2210 and 518 feet that might be contaminated or intermingled?

A In this area we have tested none of these zones. I think in that area the Rustler has been known to give up a little bit of water around a thousand feet. We have done no testing and the other fresh waters that we have experimented with are in the neighborhood of 275 feet, which would be behind even another string of pipe. On this Rustler, we feel like that since we are protected with an extra string of casing, that this shouldn't be bothered. If we detect a leak, we'll find it before it gets to that point.

Q What type of water is this, the Rustler?

A The Rustler?

Q Yes.

A I understand it's kind of brackish, possibly not completely fresh but on the order of fresh water. This is also hearsay. We haven't tested it. I don't know for sure.

Q Is this commingling system that you have shown here on Exhibit 5, is that already installed?

A Yes, sir.

Q In operation?

A We had another zone completed at one time and used the separator system meters and so forth here on initial completion of the well, but this zone resulted in very short term work so we had an idle separator and meter and so forth already installed.

Q That's the one that you utilized for the Montoya?

A Yes, sir.

Q I believe you stated you already had approval for all the other zones?

A Right. Actually we are changing nothing on the lease or the well with the exception of just setting a bridge plug in that No. 3 string of casing and additionally perforating above that in the Montoya zone.

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

(Witness excused.)

MR. UTZ: Any other statements in this case? The case will be taken under advisement.

* * *

STATE OF NEW MEXICO)
) ss
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 Hearing before the New Mexico Oil Conservation Commission was reported by me, and that the same is a true and correct record of the said proceedings, to the best of my knowledge, skill, and ability.

WITNESS my Hand and Seal this 18th day of July, 1963.

Ada Dearnley
NOTARY PUBLIC

My Commission Expires:
June 19, 1967.

I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of Case No. 2552, heard by me on July 10, 1963.

..... Examiner
New Mexico Oil Conservation Commission