BEFORE THE
OIL CONSERVATION COMMISSION
SANTA FE, NEW MEXICO
JULY 19, 1961

EXAMINER HEARING

IN THE MATTER OF:

CASE 2339

TRANSCRIPT OF HEARING

BEFORE THE
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IN THE MATTER OF:

Application of J. Gregory Merrion & Associates, for a gas-oil dual completion, Rio Arriba County, New Mexico. Applicant, in the above-styled cause, seeks permission to complete its Edna Well No. 2, located in Unit O, Section 7, Township 24 North, Range 6 West, Rio Arriba County, New Mexico, as a gas-oil dual completion with production of Pictured Cliffs gas through 2 7/8 inch casing and production of Gallup oil through 2 3/8 inch tubing installed within a string of 4 1/2 inch casing, with the casing strings cemented in a common well bore.

Case 2339

BEFORE:

Elvis A. Utz, Examiner

TRANSCRIPT OF HEARING

MR. UTZ: Case 2339.

MR. MORRIS: Application of J. Gregory Merrion & Associates, for a gas-oil dual completion, Rio Arriba County, New Mexico.

MR. UTZ: What are the Appearances in this case?

MR. VERITY: George L. Verity for the Applicant.

MR. UTZ: Are there any other Appearances? You may

proceed.

J. GREGORY MERRION,

called as a witness herein, having been first duly sworn on oath, was examined and testified as follows:

DIRECT EXAMINATION

BY MR. VERITY:

Q Will you state your name, please.

A J. Gregory Merrion.

Q Mr. Merrion, what is your educational background?

A I received a Bachelor of Science in Petroleum Engineering from The University of Tulsa in 1951.

Q Where are you living at this time?

A Farmington, New Mexico.

Q Are you familiar in the situation in San Juan Basin up there?

A I am.

(Whereupon Petitioner's Exhibit 1 marked for identification.)

Q (By Mr. Verity) Are you the Operator of the leases underlying Section 7 in Township 24 North, Range 6 West?

A I am.

Q Do you and your associates own all of the Southeast Quarter of Section 7?

A We own the operating rights.

Q Have you drilled and completed the No. 2 Edna in the

Southwest Quarter of the Southwest Quarter of Section 7?

A I have.

Q What is the total depth to which it was drilled?

A 5,950 feet from the Kelly bushing.

Q I hand you what the reporter has marked as Exhibit 1. Will you tell us what it is, please?

A It's a diagramatic sketch of the dual completion showing all of the mechanical features thereof.

Q Have you completed the well at the present time in the Gallup formation?

A I have.

Q At what depth did you encounter the Gallup?

A Well, the zone of the Gallup was perforated from 5,872 to 5,887. That is roughly the better part of it.

Q Did you set casing to a total depth in the hole?

A We set casing of 1 foot of total depth.

Q What size casing did you set?

A 4 1/2 inch.

Q And you submitted the bottom?

A We did.

Q Or one foot of the bottom?

A Yes.

Q Did you run a temperature survey on this cement?

A Yes, we did.

Q At what elevation did the cement come, or what depth

back of the hole?

A The top of the cement was found at 5,350 feet.

Q Does this seal off the entire Gallup formation from any other formation?

A Yes, it does.

Q And, you have set tubing in the Gallup formation, have you, and perforated through the cement?

A We perforated through the 4 1/2-inch casing and then ran 2 1/2-inch tubing inside the formation.

Q Have you, at this time, completed this well as shown in this diagramatic sketch set out as Exhibit 1?

A I have.

Q Will you explain how you have made your actual completion?

A After drilling to total depth and logging, after drilling a 7 7/8 hole, the total depth and logging the hole, was reached to 9 7/8-inch to a depth of 629 feet. And, the 4 1/2-inch casing was run with a stretch collar set at 2,524 feet, and a temperature survey run. The 2 7/8-inch tubing was run along the 4 1/2-inch casing and set at a depth of 2,516 feet. The 2 7/8 casing was cemented through a stage collar in the 4 1/2 casing and cement was brought up to 2,190 feet, some 184 feet above the top of the perforation in the Picture Cliff Zone.

Q Did you run a temperature survey on that cement?

A A temperature survey was run on that stage of the job,

finding the top of the cement at 2,190 feet.

Q What were the mechanics of completing in this zone after you ran the depth and temperature survey?

A The Picture Cliff Zone was perforated by the oriented perforating method used by Schlumberger Wells Surveying Corporation, and the Picture Cliff was sand-water fracted down to 2 7/8 casing.

Q Now, at the present time you are producing the Gallup in your Lobe Zone?

A That is correct.

Q And, you propose, if granted permission, to produce the Picture Cliff by virtue of this dual completion method?

A Yes, sir.

Q By the two cement jobs, have you effectively isolated both of these pay zones from any other pay zones in the well hole?

A Yes, I have.

Q In your opinion, can both of these zones be adequately produced by this method of dual completion?

A Yes, they can.

Q And, can this be done without, in any way, damaging either the formation, or without, in any way, commingling the reservoir energy or hydrocarbons from either formation?

A That is correct.

Q Did you prepare this diagramatic sketch?

A I did.

MR. VERITY: We offer it in evidence.

Now, one other question. You can produce your lower zone here as effectively as if it was not dually completed, can't you? I mean, anything you could do --

A That is correct.

Q And, the Pictured Cliff is gas productive?

A That is correct.

Q So that it will be effectively produced through your dual completion?

A Yes, sir.

MR. VERITY: We offer Exhibit 1 in evidence, and that is all I have of this witness.

MR. UTZ: Without objection, Exhibit 1 will be entered into the record.

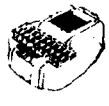
(Whereupon Petitioner's Exhibit 1 received in evidence.)

Q (By Mr. Morris) Mr. Merrion, did you give the characteristics of your Gallup production in your testimony?

A No, I didn't.

Q Do you have those available?

A Yes. The Gallup side of the dual completion potential for 157 barrels per day, the gravity was 42. A subsequent test on the Gallup side on June 30, 1961 -- Backtracking, the initial potential was run on May 26. More than a month later the Gallup



side was tested again at 95 barrels per day flowing. It had a gas-oil ratio at that time of 1,452 feet gas per barrel.

Q Do you anticipate that your GOR is going to rise rapidly in these completions?

A In the Gallup side?

Q Yes.

A We are not too awfully far from a gas cap in the Gallup itself, possibly. We are not as close to the gas cap in this well as we were in the No. 1 Well on this lease. The GOR on the No. 1 Well has risen up to above 4,000 and backed down, now, to 1,200; and possibly, eventually we could get a rapid rising GOR on the Gallup side. I don't anticipate it in the near future; and just when it might come about, I don't know, but I think we might look at the No. 1 Well as a case of -- If we do get a rapid rise in GOR, it will probably happen to the No. 1 Well first.

Q This No. 1 Well is between this well and the gas cap?

A Not exactly between, but a little bit closer to it, further on down the line.

Q Thank you, sir.

Q (By Mr. Utz) Mr. Merrion, the top of the cement on the 4 1/2-inch 5,350, and your stage collar on your 4 1/2, which would be the bottom of the cement on the Pictured Cliff 2522; is that correct?

A That is correct.

Q That is, 2,828 feet of open hole. What formations lie

in that Area?

A The Mencus shale, the Mesa Verde formation, and the Lewis Shale.

Q Did you encounter any gas-oil zones in that interval?

A No.

Q The top of the Pictured Cliff cement is at 2,190, and the bottom of your surface is at 213; is that correct?

A That is correct.

Q That leave 1,977 feet of open hole there. What formations lie in that Area?

A The Fruitland, Farmington, Joho Abo, and several other sand formations which I don't know the name of. We encountered no oil or gas zones in those formations either.

Q Did you encounter much water in the Joho?

A It was drilled with mud and we didn't test it. We don't have any case of whether it had much water or not?

Q It wasn't enough to bother you?

A That's right.

Q Now, your Pictured Cliff completion is the nearest Pictured Cliff Pool to the south?

A No. This is in the Ballard Picture Cliff Pool. I don't know whether we are within a mile in the next section, in Section 12 of 247. The T. H. McElvain No. 1B Miller is a Ballard Picture Cliff completion. It is located 990 from the east line and 1650 from the north line to the best of my recollection, and

to the east in Section 17246 El Paso Natural Gas Company has some Ballard Pictured Cliff Wells.

Q Have you tested the Pictured Cliff in this well?

A I have.

Q What was the IP?

A The IP was three million nine hundred eight five, MCF per day through a 3/4-inch choke after three hours flowing through that choke.

Q And, what is your nearest Gallup pool?

A We are in the Devil's Fork Gallup Pool.

Q You are actually in it?

A Well, it's within a mile of the limits and in the clarified limits for Gallup.

Q And therefore, the zone you are completing here is one of the zones of the Devil's Fork Pool?

A Yes, sir.

Q Does Pictured Cliff make any liquids?

A A very small amount of concentrate, and also, it was still making some frac water, it was brine water, and I hadn't entirely cleaned it up with the frac water.

MR. UTZ: Are there other questions of the witness? The witness may be excused. Are there other statements in this case.

MR. VERITY: We have nothing further.

MR. UTZ: The case will be taken under advisement.

STATE OF NEW MEXICO)
) ss
COUNTY OF BERNALILLO)

I, MICHAEL P. HALL, 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 ,u lmpw;edge, skill and ability.

IN WITNESS WHEREOF I have affixed my hand and notarial seal this 19th day of July, 1961.

Michael P. Hall
Notary Public-Court Reporter

My Commission expires:

June 20, 1965.

I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of Case No. 2339, heard by me on July 19, 1961.

Examiner
New Mexico Oil Conservation Commission