

BEFORE THE
OIL CONSERVATION COMMISSION
SANTA FE, NEW MEXICO

IN THE MATTER OF:

CASE 1912: Application of Southern Union Gas Company for a gas-oil dual completion. Applicant, in the above-styled cause, seeks an order authorizing the dual completion of its Jicarillo 1-F, Unit L, Section 27, Township 26 North, Range 4 West, Rio Arriba County, New Mexico, in such a manner as to permit the production of gas from the Blanco Mesaverde Pool, and the production of oil from the Dakota producing interval through parallel strings of 2 3/8-inch tubing.

State Corporation Commission
Hearing Room
Capitol Building
Santa Fe, New Mexico
February 25, 1960

BEFORE:

Elvis A. Utz, Examiner.

TRANSCRIPT OF HEARING

MR. UTZ: Case 1912.

MR. FLINT: Case 1912. Application of Southern Union Gas Company for a gas-oil dual completion.

(Witness sworn.)

OREN HAZELTIN

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

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DIRECT EXAMINATION

BY MR. VERITY:

Q Will you state your name, please?

A Oren Hazeltin.

Q Mr.. Hazeltin, what is your present employment?

A Southern Union Gas Company at Farmington, Production Superintendent.

Q What is your educational background?

A Graduate from University of California College of Engineering 1950.

Q You've testified before this Commission heretofore as an expert petroleum engineer, have you not?

A Yes, sir.

Q Are you familiar with the completion of the Southern Union Gas Company's Jicarilla 1-F well located in the Northwest quarter of the Southwest quarter of Section 27, 26 North, 4 West of Rio Arriba County?

A Yes, sir.

Q Did you complete that well?

A Yes, sir.

Q You are familiar, then, with the details on how it was completed, are you?

A Yes, sir.

Q I hand you what the Reporter has marked Exhibit "A", and ask you to tell us what it is, please?

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A This is a tabulation of some of the facts and some of the official documents describing this completion, and including the application for dual, and letter of transmittal, packer setting ~~affidavit~~, electric log, and so on.

Q Turning to part 3 of this Exhibit, explain to us what that is?

A Part 3 is a plat showing location of the well in question, Jicarilla 1-F marked in red, and the nine sections surrounding that area.

Q Does Southern Union own the lease on all of those nine sections?

A Yes, sir, Southern Union has half interest in all of that acreage that's shown there.

Q And Humble has the other half?

A Humble has the other half of the six most westerly sections, and Aztec has the other half in the three eastern sections, Southern Union being the operator in all cases.

Q Referring to the next portion of the Exhibit, part 4, will you please explain to us what it is?

A This is a schematic of the casing and tubing details as the well presently exists.

Q Referring to this Exhibit, tell us, if you will, please, the history of the completions of this well?

A This well was originally drilled to a total depth of six oh eight oh with seven inch pipe set to fifty-four nineteen,



and was completed as an open hole completion in the Mesa Verde subsequently.

Q Was it produced in the Mesa Verde at that time?

A Yes, sir.

Q Proceed.

A Subsequently, it was felt advisable to recomplete the well and, at the same time, deepen to the Dakota, the Dakota being wildcat in that area, and at that time, it was drilled to a total depth of eighty-three fifty and a liner, five inch liner, was set on bottom and hung at fifty-two nineteen up in the seventies.

Q At that juncture, what was done to the Mesa Verde?

A The Mesa Verde was recompleted. It was perforated and fractured, and has since been cleaned up, is presently shut in.

Q Have you set tubing in this hole?

A Yes, sir. The Dakota string is set on top of a packer with the tail of that Dakota string at seven eight seven nine, that being two and three-eighths O.D. tubing, and the Mesa Verde string of two and three-eighths O.D. tubing is hung to five one eight oh.

Q What type of a packer did you set between the zones, and where was it set?

A That's a Giberson type A set at seven eight sixteen.



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Q Did you test the efficiency of this packer?

A Yes, sir. According to the Commission Rules, we tested that and there were no leaks evident.

Q Referring to part 5, is that a copy of your report with regard to the pressure test on the packer?

A Part 6 is the packer leakage test.

Q What is your back, the multipoint back pressure test, part 5?

A Part 5 is the productive test of the Mesa Verde zone.

Q And then, part 6 shows your pressure test between the zones?

A Yes, sir.

Q It did show no leakage at all?

A That's correct.

Q Can this well be effectively and efficiently produced as a gas-oil dually completed well?

A Yes, sir.

Q Is there any danger of waste being committed by virtue of it being dually completed?

A No, sir. Fluid from both zones can be kept separately.

Q And this will be done under the completion that you have outlined?

A Yes, sir.

MR. VERITY: I believe that's all. We offer Exhibit "A"



in evidence.

MR. UTZ: Without objection, Exhibit "A" will be entered in the record.

CROSS-EXAMINATION

BY MR. UTZ:

Q Your name is?

A Hazeltin.

Q Hazeltin?

A T-I-N.

Q What type of packer is the Gibersons, permanent type or retrievable?

A No, sir, that's a production packer, retrievable.

Q Now, I believe the top of your perforations for your Mesa Verde are fifty-nine hundred?

A That is right, sir.

Q And your tubing is hung at fifty-one eighty? Your tubing is to be seven hundred twenty feet above the top of the perforation on the Mesa Verde?

A Yes.

Q I cannot recall the Rule just now. There is a general rule that requires a tubing to be hung no higher than two hundred fifty feet above the top of the perforation. Is that how this well has been completed?

A As it is shown here.

Q And this well is completed in violation of that rule,



is it not--Dakota top of the perforation seventy-nine forty; is that correct?

A No, sir. Those perforations are squeezed off. The top of the perforations that are open, the top is eighty-one fifty-one.

Q This Exhibit is in error.

A No, it shows the perforations squeezed.

Q Eighty-one fifty-one?

A Right.

Q The tubing is hung at seventy-eight seventy-nine?

A Yes, sir.

Q A little closer on that two hundred.

A The reason that the top string is hung at fifty-one eighty is that we had a five inch liner which wouldn't admit two strings of two and three-eighths parallel, or actually wouldn't admit much else in the way of tubing.

Q Top of liner is at fifty-nine nineteen?

A Yes, sir.

Q So you had to hang your tubing above that?

A Right.

Q All this is caused by the fishing in the hole that you had to whipstock around, if I understand you correctly?

A No, the fishing was incidental to the redrilling, we hoped that we could reclean that old hole out. The reason for redrilling was twofold: The old hole had caved in around the

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tubing, and that's been the history with a lot of Mesa Verde completions in the San Juan Basin, that the old shotholes caved in, and have gone in later and cleaned them up and hung the liner against the Mesa Verde. Now, in this case, we went ahead and deepened to the Dakota at the same time because the bottom of the original Mesa Verde tubing string was caved in around to the point we couldn't recovery it.

Q The Rule that I'm speaking of is Rule 107.

MR. VERITY: 107?

MR. UTZ: Right.

CROSS EXAMINATION

BY MR. FLINT:

Q As I understand it, you are about seven hundred twenty feet above the pay with your tubing?

A The Mesa Verde is seven hundred and twenty feet above the top of the Mesa Verde zone, right.

Q So in fact, you are required to ask for an exception to this requirement as well as the normal dual?

MR. VERITY: That does not have to be until notice of hearing. I think that can be granted.

MR. UTZ: I think that can be granted administratively.

MR. VERITY: Isn't it possible the Commission could grant this gas-oil completion with provision that we comply with the



Rules which we must do. Recognize that.

MR. UTZ: That's true.

MR. VERITY: We will request administrative approval to leave this completion as it is.

MR. FLINT: I'm not clear as to the eligibility of this type of an exception for administrative approval. I don't see it. The provision for administrative exception in this Rule 107. I think we'll have to investigate that and handle it subsequent to this hearing the best we can.

MR. UTZ: The only thing we can determine here is that it is a violation of that Rule, and take whatever action is necessary.

Do you have bottom hole pressures for these two zones in this area?

A We have shutin casing head pressures, but we have not extroplated this or run bottom hole bombs. Shutin casing head pressure on the Mesa Verde is eleven seventy-seven gauge, and on the Dakota is thirteen hundred p.s.i.g.

MR. FLINT: Mr. Examiner, I do know that provision is made for administrative exception to that two hundred fifty foot limitation, and I suggest, if this dual completion, if approval of this dual completion is recommended, that it should be made subject to added approval of this deviation from the Statewide Rules.

MR. UTZ: Does the Dakota produce any liquids?



A Yes, sir.

Q That accounts for the thirteen hundred pound surface gauge?

A It is oil productive primarily. The gas-oil ratio attached to the Exhibit gives a gas-oil ratio twelve hundred ninety-eight cubic feet per barrel.

MR. UTZ: Any other questions of the witness?

MR. VERITY: I have one other question. Mr. Hazeltin, what cementing program did you use on your lower zone?

A That was-- The liner was cemented using Haliburton equipment, cemented with four hundred fifty sacks of dysel lightweight cement and four hundred fifty cubic feet of dysel and four hundred forty-five sacks of regular cement to give a good shoe cement job, and using temperature survey the height of that cement was determined, and the top of the liner was squeezed with, I believe, seventy-five sacks behind the top on the liner.

Q So that you had cement in the top and below?

A That is right.

MR. UTZ: No other questions? The witness may be excused.

(Witness excused.)

MR. UTZ: Any statements to be made in this case?

The case will be taken under advisement.



C E R T I F I C A T E

STATE OF NEW MEXICO)
) ss
 COUNTY OF BERNALILLO)

I, J. A. TRUJILLO, 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 steno-type and reduced to typewritten transcript by me and/or 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, the 15th day of March, 1960, in the City of Albuquerque, County of Bernalillo, State of New Mexico.

Joseph A. Trujillo
 NOTARY PUBLIC

My commission expires:
 October 5, 1960.

I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of Case No. 1912, heard by me on Feb. 20, 1960.
Amelia R. [Signature], Examiner
 New Mexico Oil Conservation Commission

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