# BEFORE THE NEW MEXICO OIL CONSERVATION COMMISSION FARMINGTON NEW MEXICO

CASE NO. 1305

SEPTEMBER 11, 1957

DEARNLEY - MEIER & ASSOCIATES
INCORPORATED
GENERAL LAW REPORTERS
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# NEW MEXICO OIL CONSERVATION COMMISSION

Farmington Municipal Bldg.

Farmington , NEW MEXICO

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Farmington Municipal Bldg.

Farmington , NEW MEXICO

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# BEFORE THE OIL CONSERVATION COMMISSION FARMINGTON, NEW MEXICO September 11, 1957

IN THE MATTER OF:

Application of Northwest Production
Corporation for an unorthodox gass well
location in the Tapicito-Pictured Cliffs
Gas Pool, Rio Arriba County, New Mexicc.
Applicant, in the above-styled cause, seeks)
an order authorizing the drilling of a gas )
well in the Tapicito-Pictured Cliffs Gas
Pool in the NW/4 of Section 7, Township
26 North, Range 4 West, Rio Arriba County, )
New Mexico, rather than in the SW/4 of the )
Section as required by Paragraph 4 of the
Special Rules and Regulations for the
Tapacito-Pictured Cliffs Gas Pool as set
forth in Order R-794.

CASE No. 1305

BEFORE: Daniel S. Nutter, Examiner.

### TRANSCRIPT OF HEARING

MR. NUTTER: The hearing will come to order, please. The first case on the Docket will be case 1305.

MR. UTZ: "Case 1305: Application of Northwest Production
Corporation for an unorthodox gas well location in the TapacitoPictured Cliffs Gas Pool, Rio Arriba County, New Mexico. Applicant,
in the above-styled cause, seeks an order authorizing the drilling
of a gas well in the Tapacito-Pictured Cliffs Gas Pool."

MR. NUTTER: Is there a representative of Northwest here?

MR. JOHNSTON: There is, sir. Mr. Nutter, I am W. R.

Johnston, Manager of Production for Northwest Production Corpora-

tion.

MR. NUTTER: Are you going to be the witness?

MR. JOHNSTON: I am.

(Witness sworn.)

#### W. R. JOHNSTON

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

### DIRECT EXAMINATION

MR. JOHNSTON: Northwest Production Corporation seeks an unorthodox location in the Tapacito-Pictured Cliffs Pool for several reasons: Primarily, we do not feel that the orthodox location will result in anything but a barely commercial gas well. I would like to introduce as exhibits in this case, One, a plat of the ownership within the area; Secondly, the Schlumberjay Log of the Mesaverde well drilled on the orthodox location, well Number"N" 10-7; Thirdly, the Schlumberjay Log of "N" 6-7, which is the eastern offset to our proposed location; and, Fourthly, the Schlumberjay log of "N" 1-8 well, which is a diagonal one mile to the east of our proposed location. On the basis of the Schlumberjay log in our "N" 10-7 well, although we had filed for a dual completion, we did not choose to attempt a dual.

MR. NUTTER: Mr. Johnston, before proceeding further, I think for the record's sake, we should establish who you are employed by, your position, and your qualifications.

A I am employed by Northwest Production Corporation as

Manager of Production Operations. I have testified before the Commission before as an expert witness in Petroleum Engineering problems, and, in this case, I feel that I am qualified to testify as to the quality of wells in the Pictured Cliffs formation.

- Q You are familiar with the Pictured Cliffs Section 7, Township 26 North, Range Four West?
  - A I am.
  - Q Proceed, Mr. Johnston.

The log on "N" 10-7 we did not feel was of good enough nature to attempt a dual completion. If you will compare the log on the 10-7 with the two nearby wells, you will notice that the Pictured Cliff is essentially gone in the 10-7. It is our opinion that if the proposed location is approved, we can make a commercial well and effectively drain gas from a portion of the west half of Section Seven. Now, we, in this case, will be assigning three hundred twenty acres to the well in accordance with the Tapacito Field Rules, but we will drill it unorthodoxically, in that it will be in the northwest quarter rather than the southwest quarter. From the basis of the royalty interest involved, which is Jicarilla Indian, we feel that the location as we propose will result in a well of higher deliverability and faster drainage, to say the least, and, in my opinion, recovery of considerably more gas than if we drilled it in the orthodox location. I think that is all.

MR. NUTTER: Does anyone have any questions of the witness?

(No response.)

MR. NUTTER: Mr. Johnston, in drilling Well 10-7 to the Mesaverde, you say you penetrated the Pictured Cliffs farmation, is that correct?

A Yes, sir.

Q Were any tests taken of the Pictured Cliffs when you drilled through it?

A No.

Q Was there any indication that the Pictured Cliffs was productive at all?

A The Schlumberjay Log indicates it is productive. As to the quantity or quality, it looks very negative. I'd like to state in that respect we could have dualed this well to an additional expense of -- we budgeted seventeen thousand five hundred dollars to dual Pictured Cliffs with a Mesaverde well. The new well we propose to drill will cost us forty thousand dollars. We feel definitely that the additional expense is worth it to get a good well, against what we might get in this 10-7.

Q Would a dual well, as on completion of the 10-7 well, have paid off the dual-completion cost of seventeen thousand five hundred dollars?

A I don't think so. Let me qualify that. I think it would be, at least, a ten-year pay out, and possibly it wouldn't pay out at all. There are, in evidence before the Commission, logs similar to our 10-7 which were used on the original Tapacito Field Rules, which call holes like this dry holes. I don't think they are; I think they would make a gas well, but I think it would be limited by the range of the well's I.P. and deliverability of less than a hundred thousand.

- Q You do feel that the southwest quarter of Section Seven would be productive?
  - A I think it would be.
- Q But not to the extent that even a dual completion would be a profitable venture?

A Not a profitable venture, no, sir. Had we thought so, we would have done it. I might add again, Mr. Nutter, had it not been for the Tapacito Field Rules, we probably wouldn't have attempted the well in this particular place. We were afraid of this location with respect to drilling the 10-7; but we were forced to try a dual completion there, because that's the only place we could put the Pictured Cliffs location. At that time I hadn't considered the possibility of an unorthodox location; but we were leery of that corner of that Section. As our drilling proved out, we couldn't make a very good well.

Q Do you think that quarter is productive enough in the Pictured Cliffs formation, it could be reasonably productive of gas and dedicated to a well in the northwest quarter of Seven?

A Yes, I believe it can be dedicated; I feel there is gas under the acreage, definitely.

O But no tests were made in that --

A -- It's not customary to test the Pictured Cliffs. We have enough information that is available from comparison of logs against potentials that -- we feel that the Schlumberjay Log is indicative of the type of well you can make in the Pictured Cliffs. I might follow along with that with these two other wells. If you laid the Pictured Cliffs side by side, this 1-8 Well will potential for thirty-five million cubic feet, the "N" 6-7 something around eight million, and similar wells that we have tried to complete, with logs like the 10-7, will make seven hundred thousand.

Q In the Tapacito hearing, however, in the original Tapacito hearing, wells with logs similar to the well logged on 10-7 were considered dry holes; is that correct?

A Well, I'm referring to Southern Union's Well 1-H; I have compared their log with this log. They did not complete it, but it is a very similar log.

Q What is the location of 1-H?

A It is located in the Northwest Quarter of Section Twenty-six, Four.

MR. NUTTER: Does anyone have any questions of Mr. Johnston?

MR. UTZ: I have.

MR. NUTTER: Mr. Utz.

Q (By Mr. Utz) Mr. Johnston, referring to your Exhibit Four, which is a portion of electric log -- I believe these are

electric logs, are they not?

A That's correct.

Q On the Number "N" 1-8, I wonder if you would take the top of the Pictured Cliff and net pay on that log for me?

A The top of the Pictured Cliff is determined from several pick methods, but some people will/the top immediately below the coal, which in this particular well is located at thirty-eight sixty-five, is your coal as indicated by your high resistive on the right hand side of the log. The top of the Pictured Cliff, in my opinion, on this well is located at thirty-eight eighty. The net pay, in my opinion, is thirty-two feet, extending from thirty-eight eighty-three to thirty-nine fifteen.

Q All right, sir. Likewise on your Exhibit Number Three, which is the electric log of your Number "N" 6-7. I wonder if you would pick the same on that, please?

A The top of your coal is at thirty-seven ninety-five. I would pick the top of the Pictured Cliff at thirty-eight hundred, and the net pay is less than the well -- twenty feet -- thirty-eight hundred and ten to thirty-eight hundred thirty.

Q And on your Exhibit Number Two, electric log of your Number "N" 10-7 -- would you pick the top of the Pictured Cliff and net pay on that well?

A Coal is at thirty-eight fifty-five; top of the Pictured Cliff is at thirty-eight twenty -- thirty-eight seventy, I'm sorry; such as there is as pay in the well would be possibly seven feet there, seventy-two to seventy-nine -- thirty-eight seventy-

two to seventy-nine.

Q You expect much better development in the Northwest Quarter of Section Seven, I presume?

A I expect development similar to our "N" 1-8 well. As you know, the trends have been diagonal in the area and we should get some type of a diagonal sand build up in that location.

- Q But what you are saying, is it not, is based on the log shown here, is reserves in the Southwest Quarter of Section Seven are not nearly as great as that in the Northwest Quarter?
  - A That is correct.
- Q But you still feel that there are reserves under the Southwest Quarter which had been dedicated to the west half of Section Seven?
  - A Under the present field rules, I do.
- Q Do you know who is the owner of the oil and gas leases in Sections One and Twelve?

  A Yes, sir.
  - Q Of Twenty-six North, Five West? A Right.
  - Q Is that Southern Union Gas Company?
  - A That's correct.
  - Q And they have voiced no objection either to you or hear?
  - A Not to my knowledge.

MR. UTZ: That's all I have.

MR. NUTTER: Does anyone else have a question of the witness?

MR. ARNOLD: Yes.

MR. NUTTER: Mr. Arnold.

Q (By Mr. Arnold) Mr. Johnston, isn't it true if this location is not approved, then all likelihood that portion of the gas in place under the Northwest Quarter of Section Seven could very easily be produced by Well 6-7, or possibly apply oil in the Northwest-Northeast Quarter of Section Twelve, due to the extremely low permeability in the Southwest Quarter of Section Seven?

A It is likely, in that a portion of the gas would be.

Q Therefore, you would be denied the right to produce the gas under your acreage?

A That is correct. I thank you very much for bringing out that point, because we would not, even if this application is not approved, we would not attempt a dual completion on our 10-7. We do not think it is what we consider a profitable commercial venture.

MR. NUTTER: Does anyone else have a question of the witness?

MR. UTZ: Along that same line, another point. The Pacific Northwest is the owner of 6-7 in the Northeast of Section Seven and the 5-6 in the Southwest of Section Six?

A Northwest Production.

Q Northwest Production, I'm sorry. Which wells would drain the Northwest Quarter, would they not?

A Of Section Seven?

- Q Yes.
- A That's a debatable question. We've had that one before.
- Q Do you feel the well in the Northwest Section of Twentysix. Five would drain the Northwest Quarter of Section Seven?

A I think it would affect drainage; I don't think it would drain it, no, sir.

MR. UTZ: That's all I have.

Q (By Mr. Nutter) Mr. Johnson, in previous testimony in the Tapacito case, has Northwest Production Corporation favored three hundred sixty or one hundred fifty in the Tapacito Pool?

A We have made no statement as to our intentions. I am at the present time working on that, the engineering study of the Tapacito Field, to determine exactly what our position will be; I do not know.

- Q Do you have any personal viewpoint at the present time?
- A No, sir.
- Q Do you think that the location of a well in the Northwest Quarter of Section Seven would tend to prejudice anyone's opinion as to whether the Tapacito should be developed on one sixty or three twenty?

A Well, no, I don't think so in the light of the three -there are three unorthodox locations at present within the limits
of the Tapacito; and I don't think they have prejudiced thinking
in the particular field. This additional location, as long as
we are still dedicated three hundred twenty acres to the well, in

my opinion, shouldn't prejudice the case one way or another.

MR. NUTTER: Does anyone have anything further in this case?

(No response.)

MR. NUTTER: If not, the witness may be excused. Mr. Johnston, do you want to offer this plat of Section -- of your well location in Section Seven as Exhibit One in this case?

- A That is correct.
- Q And the log of Well Number "N" 10-7 as Exhibit Two in this case?
  - A That's correct.
  - Q The log of Well 6-7 as Exhibit Three?
  - A Yes.
  - Q And the log of Well 1-8 as Exhibit Four in this case?
  - A That's correct.

MR. NUTTER: These Exhibits have been so identified. Without objection, they will be entered as evidence in Case 1305.

Does anyone have anything further they wish to offer in this case? If not, we will take the case under advisement.

(Witness excused.)

### REPORTER'S CERTIFICATE

I, J. CALVIN BEVELL, do hereby certify that the foregoing and attached Transcript of Proceedings, pages numbered three through thirteen were reported by me in Stenotype at the time and place aforesaid; that the same was reduced to typewritten transcript by me and contains a true and correct record of said proceedings, to the best of my knowledge, skill and ability.

I FURTHER CERTIFY that I am not employed by or related to any attorney or party of interest in this matter; and, further, that I have no financial interest in the outcome thereof.

DATED this 16th day of September, 1957, in the City of Albuquerque, County of Bernalillo, State of New Mexico.

J. Calvin Bevell, COURT REPORTER

I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of Case No. (305), heard by me on the foregoing is a complete record of the proceedings in the Examiner hearing of Case No. (305).

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