## BEFORE THE OIL CONSERVATION COMMISSION SANTA FE, NEW MEXICO

#### IN THE MATTER OF:

CASE 1845: Application of Western Natural Case Company for an oil-gas dual completion and for an unorthodox gas well location.

TRANSCRIPT OF HEARING

PHONE CH 3-6691

# BEFORE THE OIL CONSERVATION COMMISSION SANTA FE, NEW MEXICO JANUARY 6, 1960

#### IN THE MATTER OF:

CASE 1845 Application of Western Natural Gas Company for : an oil-gas dual completion and for an unorthodox gas well location. Applicant, in the above-styled cause, seeks an order authorizing: the dual completion of its Bonnie Schlosser Federal Well No. 1, located 790 feet from the North line and 1980 feet from the West line of Section 10, Township 27 North, Range 11 West, San Juan County, New Mexico, in such a manner as to permit the production of oil from an undesignated Gallup pool and the production of gas from an undesignated Dakota pool through parallel strings of tubing. Applicant further: seeks an unorthodox Dakota gas well location for the said Bonnie Schlosser Federal Well No.

#### BEFORE:

Daniel S. Nutter, Examiner.

### TRANSCRIPT OF PROCEEDINGS

MR. NUTTER: We will take next Case 1845.

MR. PAYNE: Case 1845. Application of Western Natural Gas Company for an oil-gas dual completion and for an unorthodox gas well location.

MR. COOLEY: Mr. Examiner, William J. Cooley of Burns & Cooley, Farmington, New Mexico, appearing on behalf of Western

Natural Gas Company. Our only witness in this case will be Mr.



HONE CH 3-6691

Roy C. Jeter, J-e-t-e-r.

(Witness sworn)

ROY C. JETER,

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

#### DIRECT EXAMINATION

#### BY MR. COOLEY:

- Q Will you state your full name for the record, please?
- A Roy C. Jeter, J-e-t-e-r.
- Q Where do you reside, Mr. Jeter?
- A I reside in Midland, Texas.
- Q What is your occupation?
- A I'm assistant division superintendent of the Western Natural Gas Company.
  - Q Do you hold any degrees of higher learning?
- A I have a Bachelor of Science degree from the New Mexico School of Mines in 1944.
- Q Would you briefly outline for the Examiner your experience and background since 1944?
- I was employed by the Western Natural Gas Company, and I remained in this employment during all of this time. I went through regular field training of approximately a year and a half of routine petroleum engineering field training at which time I was made a district superintendent in the Four Corners area with responsi-



bilities pertaining to exploration and drilling and production. Since that time I have been -- I was in that capacity for approximately three and a half years and was moved to Midland, Texas to do geological and engineering work, and for the last four years I have been assistant division superintendent.

Q Mr. Jeter, is the area of San Juan County, New Mexico within the scope of your employment?

A It is.

Q Are you aware as to whether Western Natural Gas Company owns a lease in that area known as the Bonnie C. Schlosser Federal lease?

A Yes, I am.

Q Is that particular lease under your supervision?

A It is.

Q Can you state, Mr. Jeter, whether a well has been drilled or is in the process of being drilled on that lease?

A The well has been drilled and is now in the process of completion in the Bonnie Schlosser.

Q Have you prepared a plat showing the Western Natural Gas properties surrounding the Bonnie Schlosser Federal lease?

A Yes, I have.

(Thereupon, Western Natural Gas Company's Exhibit No. 1 was marked for identification.)

Q I hand you what has been marked for identification purposes as Exhibit No. 1 and ask you to state what that is, the



plat to which you refer?

- A Yes, this is the plat to which I refer.
- Q Would you please explain the legend on this plat?
- A This plat was prepared to show the acreage of Western Natural Gas Company and offset operators in regard to the Bonnie Schlosser Federal No. 1 in Section 10, 27 North, Range 11 West, San Juan County, New Mexico. And the Western Natural Gas Company's acreage is colored in green, the Bonnie Schlosser Federal No. 1 circled in red, and the acreage which is dedicated to the undesignated Dakota zone is outlined in red.
- Q Would you please give the footage location on the Bonnie Schlosser Federal No. 1 Well from a section line?
- A This said well is located 1980 feet from the West line and 790 feet from the North line of Section 10, Township 27 North, Range 11 West, San Juan County, New Mexico.
  - To what formation or formations is this well projected?
  - A This well has been drilled to the Dakota formation.
- Q Are there any other target zones or formations contemplated in the well?
- A We are contemplating a dual completion from the Gallup and Dakota formations.
- Q Can you state whether the location of the Bonnie Schlosser Federal No. 1 Well is an orthodox location for the Gallup formation?
  - A The location is orthodox for the Gallup.



- Q And what acreage is dedicated to the well, proposed to be dedicated to the well in the Gallup formation?
  - A The NE/4 of the NW/4 of Section 10.
- Q What acreage is dedicated to the well, or propose to be dedicated to the well in the Dakota formation?
  - A The W/2 of Section 10.
- Q With such dedication, is the location of the Bonnie Schlosser Federal No. 1 Well orthodox with regard to the Dakota formation?
  - A No, sir, it is an unorthodox location.
- Q In what respect does it vary from the orthodox requirements of the rules and regulations?
- A It is closer than 790 feet to the East line of the unit.
  - O And what is that distance?
  - A The distance is 660 feet.
- Q Can you state for the Examiner the cause of this well being so located?
- A Yes, sir, I can. This location was made in good faith, and due to a misinterpretation of our interpretation of the existing rules, we were not aware of this unorthodox location until it was called to our attention by the Aztec office of the Commission, at which time we were approximately 1600 feet in depth in drilling the well.
  - Q What acreage is being crowded by the fact that the



Bonnie Schlosser Federal No. 1 Well is in an unorthodox location?

A Western Natural Gas Company, as shown by Exhibit No. 1, owns the E/2 of Section 10; also it is the acreage that would be crowded by the unorthodox location. We also, or Western Natural owns all of Section 3 to the north, but that is orthodox in that respect.

MR. NUTTER: Mr. Jeter, let me interrupt right here.

I note that you say

A Yes, sir.

MR. NUTTER: What are the shallow rights?

A The shallow rights pertain to the Pictured Cliffs only.

MR. NUTTER: Go ahead.

A May I correct that, everything down to and including the Pictured Cliffs.

MR. NUTTER: And Western owns the Dakota?

A Yes, sir.

Q (By Mr. Cooley) Is there any acreage owned by an operator other than Western Natural Gas Company that is being crowded by this well?

A No, sir, there is not.

Q In your opinion, will the fact that this well is so located materially impair its ability to drain the acreage to which it is dedicated to this well?



- A No, sir.
- Q Will its unorthodox location, in your opinion, result in the impairment of correlative rights of any other operator in the area?
  - A No, sir, I think not.
- Q Does it in any way affect any other operator in the area?
- A No, sir, not that I can see. As a matter of fact, inasmuch as it is so far removed from the El Paso production acreage and the other acreage in Sections 4 and 9, it doesn't appear to have any --
- Q The unorthodox nature of the location, in fact, moved it further away from these other operators, did it not?
  - A That's right.

MR. COOLEY: Mr. Examiner, the notice indicates we've also made application for dual completion of the Bonnie Schlosser Federal No. 1 Well. At the time the application was filed, it was not possible to obtain application for dual completion forms in the Aztec office. We have prepared such form, if you would like to have it.

MR. NUTTER: I think we would like to have a copy in the file.

(Thereupon, Western Natural Gas Company's Exhibit No. 2 was marked for identification.)

Q Mr. Jeter, I hand you what has been marked as Exhibit



No. 2 for purposes of identification, and ask that you explain this Exhibit.

A This is an application for dual completion on the Western Natural Gas Company's Bonnie Schlosser Federal No. 1.

Q Does all the data set forth on this Exhibit correctly reflect the condition of the well?

A It does.

Q Mr. Jeter, have you prepared a diagrammatic sketch of the mechanical installation which you propose to use for the dual completion of the Bonnie Schlosser Federal No. 1 Well?

A Yes, sir.

(Thereupon, Western Natural Gas Company's Exhibit No. 3 was marked for identification.)

Q I hand you what has been marked as Exhibit No. 3 for identification purposes and ask you if this is the diagrammatic sketch to which you refer?

A Yes, sir, it is.

Q Would you please proceed to explain the data set forth on Exhibit No. 3?

A Exhibit No. 3 is a diagrammatic sketch of the proposed oil and gas dual completion for the Bonnie Schlosser Federal No. 1. To start with a well history of this particular well, ten and three-quarter inch surface casing was set at a hundred and ninety-six feet and cemented with cement circulated to the surface. Seven inch casing was cemented at a total depth of sixty-eight



hundred and twenty-eight feet, and the top of the cement on -- it was a two-stage job -- the top of the cement on the first stage being at fifty-four hundred feet, second stage being located at twenty-one hundred seventy-four feet, with the top of the cement on the second stage coming back to sixteen hundred and fifty feet. This schematic diagram shows our proposal with dual parallel strings of parallel tubing strings for this proposed dual comple-It will be noted that we have run a string of two and threeeighths OD 8 round EUE four point seventy pounds J-55 tubing with turned down N-80 couplings for the long string or Dakota zones. Perforations indicated here on the Dakota section occur from sixty-six hundred and thirty feet to sixty-six hundred and sixty-In this well we attempted -- we set a Baker Model "D" permanent type production packer at -- on wire line -- at sixtysix hundred and eight feet. And we set a DR plug in this Model "D" packer prior to coming back and working on the Gallup zone. After fracing this particular zone and working it over, we went back and attempted to pull the DR plug, and on the DR plug the latch-on assembly we had some difficulty, and we left six slip segments in the hole. We attempted to circulate these out and recover them by fishing for them, but we were unsuccessful, and we went back in and tried -- attempted to land our seal assembly in this Model "D" packer and were unable to do that. cided that -- to go ahead and make positive proof and for additional precautionary measure, that we go in and set another Model



"N" Baker production packer permanent type. This packer was set on a tubing with two and three-eighths tubing at sixty-five hundred and eighty-seven feet. The tubing is landed in that Baker Model "N" permanent type packer with the anchor being run through the Model "D" packer so we are doubly sure that we have shutoff between the two zones. The other string of two and three-eighths inch OD tubing is landed at six thousand and twenty-five feet, opposite, between perforations in the Gallup at fifty-nine sixty-two to fifty-nine eighty-two, and from six thousand thirty-six to six thousand and fifty-four. We also have a Baker parallel anchor at six thousand and forty-five feet. At the present time the two strings are not latched together.

Q Mr. Jeter, have you conducted any pressure tests in the Gallup or Dakota zones on this well?

A We are in the process of taking packer leakage tests at this time. We have conducted, however, a bottom hole pressure survey on the Dakota zone.

Q What pressure do you find there?

A It amounts to three hundred eighty-four feet subsea or sixty-six forty-six. Bottom hole pressure on this well was twenty-four hundred and eight pounds.

Q Do you have a reservoir pressure for the Gallup formation?

A No, sir, not on this particular well. We've not run bottom hole pressure as yet. However, from other wells in the



immediate vicinity, we expect a pressure of approximately fourteen hundred and seventy-five pounds.

- Q And what would then -- assuming that to be the pressure in this well, what would be the pressure differential on the packer?
  - A A thousand to eleven hundred pounds.
- Q Do you have knowledge whether the type of packers here installed are adequately designed to provide for such differential?
  - A Yes, sir, they are.
- Q Do you have any idea what the maximum differential pressure is?
- A I am not completely positive, but I think it is in the vicinity of five to six thousand pounds difference.
  - Q You feel you have a safe degree of margin?
  - A Yes, sir.
- Q Mr. Jeter, have you had conducted on this well any surveys, electric logs or otherwise?
  - A Yes, we ran electrical surveys to total depth.

(Thereupon, Western Natural Gas Company's Exhibit No. 4 was marked for identification.)

- Q I hand you what has been marked as Exhibit No. 4 and ask you to state whether this is the log to which you refer?
  - A Yes, it is.
  - Q Will you please explain any pertinent data that may



#### be shown there?

A This is an induction electrical log run on the Bonnie Schlosser Federal No. 1. On this particular log we have designated the various tops and various formations and also indicated the zones which are perforated.

Q Are you aware of any data, Mr. Jeter, which would indicate to you that this well could not be produced as a dual completion successfully?

A No, sir, I'm not aware of any.

Q You feel it can be produced as a dual completion without causing waste?

A I do.

MR. COOLEY: That's all, Mr. Examiner.

MR. NUTTER: Does anyone have any questions of the

witness?

MR. PAYNE: Yes, sir.

CROSS EXAMINATION

#### BY MR. PAYNE:

Q Mr. Jeter, the dual completion portion of your application was eligible for administrative approval, wasn't it?

A Yes, sir, it was because this well is actually located within one mile of a well that has been singly completed, which is the El Paso Natural Gas Products Company's No. 1 "D" Frontier.

Q Yes, sir. Now, I notice on your application you



list this as an undesignated Dakota gas pool, and on your electric log is listed in the Angels Peak Dakota?

A At the time it certainly wasn't undesignated. I understand there has been a new designation made on that? Is that right?

MR. NUTTER: I think that might be one that is pending, I'm not sure.

- A The nomenclature is in error, in the electric log.
- Q (By Mr. Payne) In any event, it is adjacent to the Angels Peak Pool?

  A Yes, sir.
- Q Could you tell me how much distillate the Dakota zone produces?

A No, sir, I can't right at this time because we are in this testing period.

- Q You do anticipate it will make some distillate?
- A Yes, sir, it will be a gas distillate.

MR. PAYNE: Thank you.

#### QUESTIONS BY MR. NUTTER:

Q Mr. Jeter, there is considerable distance there between the bottom of the perforations in this upper section of the Gallup and the top of the perforations in the lower section of the Gallup. Is the El Paso well completed in both of these sections?

A I don't believe it is completed in the lower section or what we call the Tolcito. I believe it is completed only in the Nelson zone. However, there are other wells in the area that



are completed from the same two zones.

- Q From the same two zones?
- A Yes, sir.
- Q Are there any pools in San Juan County Gallup pools that contain these two sands as being the vertical limits?
  - A Not that I'm aware of.
- Q I was just wondering about the possibility that these may -- This is an undesignated Gallup at the present time, isn't it?
  - A Yes, sir.
- Q I was wondering of the possibility of perhaps later when the pools are created that there may be two pools established for these two pays?
- A Well, that possibility might exist. We do not have sufficient reservoir data, this is our first well in the area, to be able to say with any real certainty about it.
- Q These upper sections in the Gallup were not productive in this well?
- A They were not tested. I think they possibly are productive.
- Q Do you have any data of the gravity in the Gallup, Mr. Jeter?
  - A The gravity in the Gallup is about forty-one degrees,
  - Q And what is the GOR?
  - A We have not run it yet.



Q Do you have any knowledge of the gravity of the distillate in the Dakota?

A I anticipate it will be a hundred fifty degrees.

Q Of course, you have no knowledge as to what your GOR will be there?

A No, sir. As I say, we are in the process of running the packer leakage test.

MR. NUTTER: Any further questions of Mr. Jeter? He may be excused.

(Witness excused)

MR. COOLEY: Mr. Examiner, we offer Exhibits 1 through 4 in evidence in this case.

MR. NUTTER: Western's Exhibits 1 through 4 will be entered in evidence.

(Whereupon, Western Natural Gas Company's Exhibits 1 through 4 were received in evidence.)

MR. NUTTER: Do you have anything further, Mr. Cooley?

MR. COOLEY: Nothing.

MR. NUTTER: Does anyone have anything further in Case 1845? We will take the case under advisement and take Case 1846.



STATE OF NEW MEXICO

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 Stenotype and reduced to typewritten transcript by me, 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 day of day of learned light of Albuquerque, County of Bernalillo, State of New Mexico.

NOTARY PUBLIC

My Commission Expires:

October 5, 1960

