BEFORE THE OIL CONSERVATION COMMISSION SANTA FE. NEW MEXICO

IN THE MATTER OF:

CASE 1901:

Application of Caulkins Oil Company for a gas-gas dual completion and for establishment of a 320-acre non-standard Dakota gas unit. Applicant, in the above-styled cause, seeks an order authorizing the dual completion of its PC-233 Well. located in Unit D, Section 16, Township 26 North, Range 6 West, Rio Arriba County, New Mexico, in such a manner as to permit the production of gas from the South Blanco-Pictured Cliffs Pool and the production of gas from the Dakota Producing Interval. Applicant further seeks the establishment of a 320-acre non-standard gas unit in the Dakota Producing Interval consisting of the N/2 N/2 and S/2 NW/4and N/2 SW/4 of said Section 16 to be dedicated to said PC-233 Well.

> 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 1901. The appearances in this case.

MR. KELLAHIN: Jason Kellahin, Kellahin and Fox, Santa

Fe, New Mexico, representing the Applicant. We will have one



witness in the case.

MR. UTZ: Any other appearances?

(Witness sworn.)

A. F. HOLLAND

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

DIRECT EXAMINATION

BY MR. KELLAHIN:

- Q Will you state your name, please?
- A My name is A. F. Holland.
- Q By whom are you employed, and in what position, Mr. Holland?
- A I'm employed by Caulkins Oil Company, and I'm in charge of the production department.
- Q Mr. Holland, have you previously testified before this Commission as a petroleum engineer and had your qualifications accepted?
 - A Yes, I have.
 - MR. KELLAHIN: Are the witness qualifications acceptable?
 - MR. UTZ: Yes, sir, they are.
- Q (Bv Mr. Kellahin) Mr. Holland, are you familiar with the application, Case 1901?
 - A Yes, I am.
- Q Will you state briefly what is proposed in this application?



- A The application proposes, number 1, to form an unorthodox 320 acre unit for the production of gas from the Dakota formation, and, number two, to duly complete the presently producing Pictured Cliffs well on this unit in the Dakota formation and the Pictured Cliffs formation.
- Q Now, referring to what has been marked as Exhibit 1, will you state what that shows?
 - A Exhibit 1 is a brief resume of the completion--
 - Q I believe, Mr. Holland, Exhibit 1 is the plat.
- A Exhibit 1 is a plat showing in red outline the proposed unorthodox 320 acre unit which is located in Section 16, Township 26 North, Range 6 West, Rio Arriba County, New Mexico. Shows the proposed well to be duly completed PC 233, and shows the producing wells in the vicinity of the area, and the operators of those wells.
- Q Now, the present unit dedicated to the Pictured Cliffs well is outlined with a dotted line; is that correct?
 - A That's right, Northwest quarter of Section 16.
- Q Your proposed Dakota unit is outlined with a solid red line?
 - A That is correct.
- Q What is the reason for the shape and size of that unit for Dakota production, Mr. Holland?
- A The reason that it became necessary to form an unorthodox unit is that there is a -- there is presently a producing



Dakota well in Section 16 designated as D-268, and located in the Southeast quarter of the Northeast quarter which has ascribed to it the hundred and sixty proration unit, acre proration unit consisting of the South half of the Northeast quarter of Section 16, and the North half of the Southwest quarter of Section 16.

- Q East quarter, you mean, do you not? You said, "Southwest quarter".
 - A Yes, Southeast quarter, that is correct.
 - Q Now, has that unit been approved by this Commission?
 - A Yes, that unit has been approved.
- Q Would you give me that again? Was that a Dakota unit we are speaking of?
 - A Yes.
 - Q Would you give me that unit again?
- A It is the South half of the Northeast quarter of Section 16, and the North half of the Southeast quarter, and that unit was formed by order number R-896, dated October 10, 1956.
- Q Now, is the ownership common throughout in the proposed Dakota unit?
- A There is a difference in working interest ownership. The North half, North half of Section 16, has a working interest ownership different than the remainder of the acreage ascribed to the unit.

Has the acreage been communitized?



A It has been communitized. Caulkins Oil Company is the operator, and George P. Caulkins, Jr., is the owner of record and has communitized it for purposes of Dakota development.

- Q Is there a difference in the royalty ownership?
- A Yes, sir.
- Q And that is being communitized?
- A That is presently being communitized. It has a difference of overriding royalty interest.
 - Q Basically royalty. Who is the owner of that?
 - A The State of New Mexico.
 - Q And, it is, of course, common throughout the unit?
 - A It is common.
- Q Now, referring to what has been marked as Exhibit Number 2, Mr. Holland, will you discuss the status of the Well 223?
- A PC-233 is presently a well producing from the Pictured Cliffs formation. The Exhibit Number 2 sets out the pertinent completion information on this well.
- Number 3, would you discuss what is proposed to be done in the way of a dual completion on this well?
- A The proposed plan is to deepen the well from the Pictured Cliffs formation to the Dakota formation which will occur at a total depth of about seventy-six hundred fifty feet.

 A four and a half inch O.D. liner will be set and cemented from



the base of the Dakota formation up, through the Pictured Cliffs formation and into the seven inch case inset at the top of the Pictured Cliffs zone.

- Now, production will be through parallel strings of tubing: that is correct?
- It is planned to use two inch tubing for the production from the Dakota zone, and one inch tubing for production from the Pictured Cliffs zone.
 - And what type of packer will you use in the well?
- The packer to be used will be a Baker Model D production packer.
- Now, in your opinion, Mr. Holland, will that achieve complete separation of the two producing horizons involved in this well?
 - Yes, in my opinion, it will.
- Will this type of completion enable you to make any necessary remedial work or the tests as required by this Commission on packer leakage?
- Oh, yes. The two zones will be separated, and packer leakage tests can easily be conducted.
- Is it the same type of completion that has been approved by this Commission in other wells?
 - A great number of times, yes.
- Were Exhibits 1, 2 and 3 prepared by you, or under your direction and supervision?



A Yes, they were.

MR. KELLAHIN: At this time, we would like to offer into evidence Exhibits 1, 2 and 3.

MR. UTZ: Without objection, they will be accepted into the record.

MR. KELLAHIN: That's all we have.

MR. UTZ: Mr. Holland, how far will the four inch liner come up into the seven inch?

A About all that will be necessary, fifty to a hundred feet, enough to tie it in.

MR. UTZ: And, what will be the top of the cement?

A The top, the cement will be brought all the way back.

MR. UTZ: All the way back to the top of the liner?

A It is planned to cover the Pictured Cliffs formation with cement.

MR. UTZ: Is the South half, South half of 16 dedicated to any Dakota well?

A None, no.

MR. UTZ: Do you think that maverage to is productive from the Dakota?

A I think so, yes.

MR. UTZ: Why are you not dedicating the South half of the Southwest quarter rather than the North half of the Northeast quarter?



A In order to dedicate all of the North half, it becomes necessary to form a unit this size. We could do it the other way, but then we would leave the North half of the Northeast quarter undedicated.

MR. UTZ: Well, you only have one hundred sixty acres dedicated to the number 268, don't you?

A Yes, that's right.

MR. UTZ: Well, do vou have any plans of expanding that unit?

A We have no objection. If we do expand it, in order to maintain a common working interest ownership, we prefer to dedicate the South half of the Southwest quarter to it.

MR. UTZ: Then, what's going to happen to the South half of the Southwest?

A That's the eighty that we would have no objection to dedicating to that well.

MR. UTZ: Well, how about the South half of the Southeast? Then, what are you going to do with that?

A Well, we'd need both of those eighties to form--

MR. UTZ: What you meant to say was the South half of the South half of Section 16?

A Yes, we would have no objection.

MR. UTZ: Do you have objection to dedicating your South half of the Southwest quarter than the North half of the Northeast because of ownership?



A Yes. At the time the hundred and sixty acre unit was formed for D-268, the working interest ownership in the North half of the Section did not elect to participate in that well. It was an expensive well, a very expensive well, and a very marginal Dakota producer. So that working interest ownership elected not to participate, so that's the reason that the unorthodox one hundred sixty acres unit was formed.

MR. UTZ: Do youh have a Dakota unit in the South half of Section 9?

A There is a hundred and sixty acre Dakota unit comprising the Southeast quarter of Section 9.

MR. UTZ: Southeast?

A Southeast, yes.

MR. UTZ: That's the only one in Section 9?

A That's the only one in Section 9.

MR. UTZ: And no Dakota wells in 17?

A No Dakota wells in 17, that's right.

MR. UTZ: And 20?

A None in 20.

MR. UTZ: None in 21?

A None in 21.

MR. UTZ: 22?

A None in 22.

MR. UTZ: How about 15?



A None.

MR. UTZ: None in 10?

A None in 10.

MR. UTZ: Any other questions of the witness?

CROSS-EXAMINATION

BY MR. FLINT:

Q Mr. Holland, do you feel that in view of the location of your PC-233--

A Yes.

q --as it is presently designated, do you feel that the unit which you have proposed will be adequately drained by this well, and also, that drainage across lease lines between 9 and 16 will be equal?

A I believe so, yes.

Q The well, as it is located, it will be closer to that Northeast, the North half of the Northeast than it would be to the South half of the Southwest. It is more centrally located to the unit as you propose it than it would be if you just dedicated the West half of 16 to this well?

A Well, I believe the remote points would be equal.

It would be the same.

MR. UTZ: Any other questions of the witness?

If not, the witness may be excused.

(Witness excused.)

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



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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/or under my personal supervision, and that the same is a true and correct record to the best of my knowledge, skill and ability.

of March, 1960, in the City of Albuquerque,

County of Bernalillo, State of New Mexico.

NOTARY PUBLIC

My commission expires: October 5, 1960.

I do hereby cartify that the foregoing is a complete restrict of the proceedings in the Examiner New Mexico Oil Conservation Commission

