

BEFORE THE  
OIL CONSERVATION COMMISSION  
SANTA FE, NEW MEXICO

IN THE MATTER OF:

CASE 1746

TRANSCRIPT OF HEARING

AUGUST 19, 1959

DEARNLEY - MEIER & ASSOCIATES  
GENERAL LAW REPORTERS  
ALBUQUERQUE NEW MEXICO  
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BEFORE THE  
OIL CONSERVATION COMMISSION  
SANTA FE, NEW MEXICO  
AUGUST 19, 1959

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IN THE MATTER OF:

CASE 1746: Application of Skelly Oil Company for an oil-  
gas dual completion. Applicant, in the  
above-styled cause, seeks an order authoriz-  
ing the dual completion of its Mexico-Fed."A"  
Well No. 1. located 1650 feet from the South  
line and 990 feet from the East line of Sec-  
tion 1, Township 24 North, Range 6 West, Rio  
Arriba County, New Mexico, in such a manner  
as to produce oil from an undesignated Gallup  
pool and to produce gas from an undesignated  
Dakota pool through parallel strings of tub-  
ing.

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BEFORE:

Daniel S. Nutter, Examiner.

T R A N S C R I P T    O F    P R O C E E D I N G S

MR. NUTTER:    The next case will be Case 1746.

MR. PAYNE:    Case 1746. Application of Skelly Oil Com-  
pany for an oil-gas dual completion.

(Witness sworn)

HAROLD E. AAB,

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

DIRECT EXAMINATION

BY MR. WHITE:

Q Mr. Aab, will you state your full name for the record, please?

A Harold E. Aab.

Q And will you spell your last name for the benefit of the Reporter?

A A-a-b.

Q Mr. Aab, in what capacity are you employed by Skelly Oil Company?

A I am Assistant District Superintendent at Farmington, New Mexico.

Q Have you previously testified as an expert petroleum engineer before this Commission or one of its Examiners?

A Yes, sir, I have.

Q Are you familiar with Skelly's application in Case No. 1746?

A Yes, sir.

Q Will you briefly state what Skelly proposes under this application?

A We seek to dually complete our Mexico-Fed. "A" No. 1 Well in the Gallup Sand and Dakota Sand.

Q Will you state where Mexico-Fed. "A" Well No. 1 is located?

A This well is located 1650 feet from the South line and 990 feet from the East line of Section 10, 24 North, 6 West, Rio Arriba County.

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(Thereupon, Applicant's Exhibit No. 1 was marked for identification.)

Q Will you refer to what has been marked Exhibit No. 1, the same being an ownership plat, and explain that, please?

A Exhibit No. 1 is an ownership map showing all offset operators surrounding our proposed dual completion.

Q Does it show the location of the subject well?

A Yes, sir, it shows the location of the Mexico-Fed. "A" Well with relation to offset leases.

Q And that is in Section 10, --

A Yes.

Q -- Township 24 North, Range 6 East?

A 6 West.

Q Will you discuss the nature of the reservoir fluids, please?

A The Gallup zone produces sweet crude oil with a gravity of approximately 39, and our well has a gas-oil ratio of 1143 to 1. The Dakota produces gas condensate, being sweet gas condensate.

Q What type of solution drive?

A The Gallup is a gas solution reservoir, and the Dakota is just a condensate reservoir, gas condensate.

(Thereupon, Applicant's Exhibit No. 2 was marked for identification.)

Q Will you refer to what has been marked Exhibit 2, and explain that diagramatic sketch to the Examiner?

A This is a schematic sketch or the mechanics of this dual completion. This well has got 10 3/4 inch, 32.75 pound casing set at 302 feet, cemented to the surface with 300 sacks of regular cement. We have 7 inch 20 and 23 pound casing set at 6749. And the bottom section is cemented to 4730. There is a Howco two-stage cement tool at 3284 below the Chaco Sand and is cemented over the Chaco and Pictured Cliffs to 1800. The Gallup Sand is perforated in four intervals from 5388 to 5587. The Dakota Sand is perforated in four intervals from 6475 to 6556. There is a Baker Model "D" production packer set at 6425 with one string of 2 inch J-55 tubing set through the packer at 6560. The Gallup is produced through another string of 2 inch tubing set at 5477. This well is equipped with a Camperon Iron Works Series 900 split doughnut wellhead.

Q In your opinion, is there any possibility of communication between these two zones?

A No. We have a packer leakage test approved by O.C.C.

(Thereupon, Applicant's Exhibit No. 3 was marked for identification.)

Q I'll ask you to examine Exhibit No. 3 and state if that is the packer leakage test?

A This is the packer leakage test taken on this particular well.

MR. WHITE: We would like to substitute the original for a photostatic copy.

MR. NUTTER: That is fine.

Q Were Exhibits No. 1 and 2 prepared by you or under your direction?

A Yes.

(Thereupon, Applicant's Exhibit No. 4 was marked for identification.)

Q I hand you what has been marked Exhibit No. 4, and will you state what that is, please?

A This is a letter to Mr. Emery Arnold, New Mexico Oil Conservation Commission, stating the time that a packer leakage test was to be taken, with carbon copies sent to all offset operators.

Q And there are noted on the letter as to who the offset operators are?

A Yes.

(Thereupon, Applicant's Exhibit No. 5 was marked for identification.)

Q I'll ask you to refer to what has been marked Exhibit No. 5, and ask you to explain that, please?

A Exhibit No. 5 is a Schlumberger injection electric log. The Mexico Fed. "A" 1 which shows the relation of the Gallup and Dakota Sand to each other.

Q Is it self-explanatory?

A Self-explanatory.

Q How will the production be gauged and stored?

A It will be produced into separate tank batteries.

Q What economic advantages, if any, will be gained by this dual completion operation?

A It will prevent us from drilling a well to the Gallup at a cost of approximately \$65,000, or to the Dakota at a cost of approximately \$85,000.

Q In your opinion, are the mechanics of the proposed completion feasible in accordance with good conservation practices?

A Yes.

Q Will the granting of the application, in your opinion, cause waste or impair any correlative rights?

A No.

MR. WHITE: At this time we move the introduction of Exhibits 1 through 5 inclusive.

MR. NUTTER: Skelly's Exhibits 1 through 5 will be entered.

(Thereupon, Applicant's Exhibits Nos. 1 through 5 were received in evidence.)

MR. WHITE: We have no further questions on direct.

CROSS EXAMINATION

BY MR. NUTTER:

Q Mr. Aab, you stated what the gravity of the Gallup production is. What is the gravity of the Dakota condensate?

A Approximately 55.

Q And do you have a GOR on it?

A No, we don't. We have an open flow potential of

899,000 cubic feet of gas per day.

Q 899,000 cubic feet?

A Yes.

Q And how many barrels of liquid were made on that test?

A Well, I don't have that, but it is very small.

Q It doesn't make much liquid?

A No, not very much at all.

Q How about the pressures on these two zones?

A Our shut-in casing pressure on the Gallup is 115, and our shut-in -- that was in two days -- and our shut-in tubing pressure on the Dakota was 220 $\frac{1}{2}$ .

Q You don't know the bottom hole pressures in the two zones?

A No, I don't.

Q Have those been measured, and do you have that information in your office?

A No, they haven't been measured.

QUESTIONS BY MR. PAYNE:

Q Mr. Aab, has Skelly experienced any difficulty with Model "D" production packers?

A No, we have not.

Q Is it Skelly's practice to use these not only in New Mexico but generally in dual completions?

A Yes. That is more or less standard practice with Skelly Oil Company in areas that I have worked, which includes

Oklahoma and New Mexico.

Q And if there were a leak, would you be able to detect it in your packer leakage test or even before?

A Yes.

MR. NUTTER: Any further questions of Mr. Aab?

MR. WHITE: I might have one further one.

REDIRECT EXAMINATION

BY MR. WHITE:

Q Mr. Aab, do you know whether or not this Commission has approved similar installations as to this in the past?

A Yes, we have installations exactly like this that have been approved.

MR. WHITE: That's all I have.

MR. NUTTER: No further questions from Mr. Aab? He may be excused.

(Witness excused)

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

MR. WHITE: That's all we have.

MR. NUTTER: Does anyone have anything further in Case 1746? Take that case under advisement.

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 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 26<sup>th</sup> day of September, 1959, 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. 1746, heard by me on 8-19, 1959.  
*[Signature]*, Examiner  
New Mexico Oil Conservation Commission