

EXAMINER HEARING
OIL CONSERVATION COMMISSION
Santa Fe, New Mexico
January 8, 1958

IN THE MATTER OF: Case No. 1366

TRANSCRIPT OF PROCEEDINGS

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

DIRECT EXAMINATION

By MR. CAMPBELL:

Q Will you state your name, please?

A Norman E. Godbe.

Q By whom are you employed and what capacity?

A I am employed by Signal Oil and Gas Company in Fort Worth, Texas, as Chief Division Engineer.

Q Mr. Godbe, will you please give the Examiner a brief history of your educational and professional background?

A I was graduated from the University of California in June of 1951 with the Degree of Bachelor of Science in Petroleum Engineering. Immediately upon graduation I was employed by Signal Oil and Gas Company. I worked until the latter part of 1955 as a drilling and production engineer in our West Coast Division. The latter part of '55 I was transferred to the West Texas and New Mexico District of the Mid-Continent Division. I worked as a drilling and production engineer until the mid-part of 1956, at which time I assumed the title of District Engineer. My responsibilities during that period were the handling of all drilling and production engineering for leases in those areas. The District responsibilities included the supervision of that type work.

In the middle part of 1957 I was transferred to our Division Office with the title of Chief Division Engineer, at which time I assumed the responsibility of supervision of all engineering work in our Mid-Continent Division. I'm a registered petroleum engineer

in the State of Texas.

Q Have you had occasion to appear before the Oklahoma Corporation Commission in your professional capacity?

A Yes, sir, I testified before that group.

Q Mr. Godbe, are you acquainted with the application of Signal Oil and Gas Company in this case?

A Yes, I am.

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

Q I'll hand you what has been identified as Applicant's Exhibit No. 1 and ask you to state what that is.

MR. CAMPBELL: I might say I inadvertently do not have additional copies of the same plat. However, it is the same plat attached to the application on file with the Commission and of which I furnished three copies. It is identical.

MR. NUTTER: That is good.

Q Will you please refer to that Exhibit No. 1 and state what it is?

A This plat is a plat of the area surrounding Signal Oil and Gas Fred Turner No. 1 Well. Said well is located in the southeast quarter of the southeast quarter of Section 6, Township 20 South, Range 30 East, Lea County, New Mexico.

MR. NUTTER: I believe that is Range 38 East.

A Pardon me, Range 38 East. The exact location is 660 from the South line and 560 from the East line of Section 6. The plat

also indicates the ownership of working interests surrounding the well and on leases surrounding the Signal leases; in addition, producing wells are shown in the area.

Q Have all of the owners of working interests surrounding that well been furnished with copies of this application, to your knowledge?

A Yes, they have.

Q Mr. Godbe, will you please refer to the records that you have available and give the Examiner a brief history of the well which is involved in this application?

A Yes, sir. Signal's Fred Turner No. 1 commenced drilling on March 9 of 1955. Said drilling was completed June 4, 1955. During the drilling of the well we encountered oil shows throughout the Grayburg formation, and subsequently set eight and five-eighths inch 32 pound casing to a depth of 4150 feet. We then continued drilling to the McKee which was found to be wet. Total depth of 7,014 feet was reached, and the well was plugged back to 7,000 feet. During the drilling of the lower portion of the well, we encountered what appeared to be gas pay sections from 6898 to 6962 feet. This interval was tested on a drill stem test from 6932 to 6968 and produced on drill stem test 10,500 MCF per day rate. It was a 58 minute test. 30 minute shut-in pressure indicated a bottomhole of 2715 pounds. A Baker Model "D" type permanent production packer was set at 4300 feet. The well was subsequently completed through perforations in the Grayburg oil producing zone.

Q During the time that that packer has been set above the gas zone, have you had any indications whatsoever of any leakage of gas from the lower zone?

A No, we haven't. I should point out that upon completion in the Grayburg producing zone, we took a 53-hour, I believe, shut-in pressure test and found the pressure of that zone to be 1209 pounds; so we have a differential pressure in excess of 1500 pounds. In addition, it should be brought out that we performed water shut-off tests both above and below the Drinkard zone, and water shutoff tests at the bottom portion of the Drinkard zone was from an interval 6990 to 91. We took in a portion of the gas zone itself and had a rate of flow of 295 MCF per day. A bottomhole pressure of 2785 pounds. Those perforations were not squeezed off, and the lower portion of the well, that is, the Drinkard zone packer itself has been subjected to that 2785 pounds, or possibly greater, since that time. There has been no evidence that there has been any packer leakage either around the exterior portion of the packer or from the center flap.

Q Now, Mr. Godbe, I hand you what has been identified as Applicant's Exhibit No. 2 and I will ask you to state what that is.

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

This is the same as the Exhibit "B" attached to the application; I think that has already been marked. Will you state what that is, and referring to it, explain to the Examiner the proposed

method of dual completion of this well.

A This is a proposed dual completion sketch prepared under my supervision. This is a no-scale sketch which indicates merely mechanics of the operation. It is our proposal to run two and three-eighths inch tubing through the model D production packer, landing that tubing with a model D landing assembly. We then propose to run a tubing gun and perforate the perforations indicated on our sketch; namely, 6898, 6904; 6915, 6922; and 6934 to 6962. We will then complete the well and produce the well through the two and three-eighths inch tubing.

Q Will this procedure that you have outlined and as indicated on the diagrammatic sketch, Exhibit 2, alter in any way the procedures to be used in pumping the upper oil producing zone?

A No, it will not. Upon completion of the running of the tubing for the lower zone, we will run the production string for the upper zone, landing it in approximately the same position which is currently producing. The same pumping equipment which we are now utilizing will be run, and the well will be produced in its normal fashion. The only change is moving the pumping equipment back a few inches to allow for the dual completion head.

Q During the time that you were making the initial test of the gas zone, did you make any gas analysis at that time?

A Yes, we did. We made a gas analysis from the gas received on the water shutoff test. That analysis indicated that gas was relatively dry and free of corrosion.

Q You were not able to find any substantial amount of liquid in the tests that you ran in connection with this gas zone, is that correct?

A That is correct, we did not find any appreciable amount.

Q Based on your experience as an engineer, and considering the method that you propose to use here with regard to the production of this well, do you believe that these two zones can be produced separately without any commingling of the gas in the lower zone and the oil or gas in the upper zone?

A Yes, I do. We feel that the Baker Model "D" permanent type production packer will form an effective seal and the dual equipment tubing head installation which we plan on using has been used in this area successfully without any commingling.

Q Have you undertaken negotiations for the marketing of the gas, should the application be granted and the well tested to produce sufficient amounts of gas to justify it?

A Yes, we have had correspondence with El Paso Natural Gas, that they agree to accept the gas at this time.

Q Is there an El Paso Natural Gas Company line within a reasonable distance of this well at this time?

A Yes, there is now a line in that area, and my recollection is it is approximately three-quarters of a mile distant from the well.

Q Of course, I assume that other than testing, you would not intend to produce such gas until such time as the well was completed,

for marketing gas?

A That's right. We wouldn't produce any gas other than the gas that was required for El Paso's tests.

Q Were the Exhibits 1 and 2 prepared by you or under your supervision?

A They were.

MR. CAMPBELL: I would like to offer Signal's Exhibits 1 and 2 in evidence.

MR. NUTTER: Without objection, Signal's Exhibits 1 and 2 will be received.

MR. CAMPBELL: That's all the questions I have at this time.

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

CROSS EXAMINATION

By MR. UTZ:

Q Mr. Godbe, the Signal offsets to the east and the west, what zone are they completed in? That is east and west offsets from you Signal No. 1 which is the application subject to this hearing.

A These wells to my knowledge are all completed in the Grayburg producing zone.

Q Is there any other Drinkard gas wells in the immediate area?

A No, sir, there aren't.

Q Is there any other Drinkard oil wells in the area?

A No, sir.

Q I assume that since this is a non-prorated gas pool, that you would produce whatever gas you could sell?

A That's correct.

Q And there would be no need of dedicating any acreage to the Drinkard zone?

A That's correct.

MR. UTZ: That's all the questions I have.

MR. CAMPBELL: I might say at such time as this is designated as a gas pool, I think it would be necessary to establish pool rules for it, at which time a determination of the size, the spacing requirements or proration units, at such time as it is a prorated gas pool, would become pertinent. I felt that at this time the only matter would be the question of the dual completion of the well, and that at such time as it is designated, it would then be a question of pool rules for that Drinkard Gas Pool.

MR. UTZ: Before such time, though, wouldn't it be subject to the statewide rules?

MR. CAMPBELL: It would be subject to the statewide rules, such as they are, yes. The 160-acre provisions of the statewide spacing rules, I would say, would apply until such time as the pool rules to the contrary are established. As to proration units, they wouldn't be necessary until such time as proration was established.

By MR. PORTER: Are there other Drinkard gas wells in the area?

A No, sir, there are not.

Q There are several oil wells?

A Yes, there are Grayburg oil wells surrounding our well.

Q You do have some Skaggs-Drinkard oil wells, but I suppose they are not in that immediate vicinity?

A No, sir, they are not in the area involved in this particular pool, to my knowledge.

MR. NUTTER: The Skaggs-Drinkard Pool is approximately a mile and a half away, Mr. Porter.

MR. PORTER: It doesn't underlie this Skaggs Pool?

MR. CAMPBELL: No, sir.

MR. NUTTER: Not this portion of it.

MR. COOLEY: Back to this question of spacing, Mr. Godbe, in the event that 160-acre spacing is established for this Drinkard Gas Pool which the well has been discovered, what acreage would Signal have to dedicate to it?

A We would have the two 80's to the north.

Q Oh, you can dedicate the entire southeast quarter of Section 6?

MR. CAMPBELL: That is correct.

A That's right.

MR. NUTTER: The Wire and Moran threw me for a while; they would be three different leases?

MR. CAMPBELL: We would not like to be in a position at this stage, before the well is tested, before we know the amount

of potential gas production over a period of time, to be in the position of committing ourselves to 160-acre proration units insofar as this area is concerned. I think that is a question that we reserve the right to be left open. It may be all right or it may require, in an economic sense, a larger spacing for the gas zone. There is sufficient acreage available to Signal for either 160 or larger.

MR. COOLEY: 160 or larger?

MR. CAMPBELL: Yes.

MR. COOLEY: That is 660 --

A 660 from the south line and 560 from the east.

MR. COOLEY: 560?

A I don't recall why we deviated, I think it was either a power line or an oil line.

MR. COOLEY: Are you aware, Mr. Godbe, that the standard locations for gas wells under the statewide 160-acre spacing rules provide for 660 - 660 location?

MR. CAMPBELL: That is correct, and we intend to -- I think we are in a position because of the rules to request administrative approval of that, and that is what we would have to do. I think it is a topographic situation, but the reason, the circumstances surrounding the 560 acres, the position, I'm not just certain of at this time.

MR. UTZ: Do you have topographic conditions in Lea County?

MR. CAMPBELL: I don't know if a high line is topographic

condition or not.

MR. PORTER: You have occasions where you have a pipe line and oil lease houses, such things as that --

MR. COOLEY: Off the record.

(Discussion off the record.)

MR. CAMPBELL: We would like to request that the Commission order, should it issue an order approving the application, include authorization for an unorthodox location for the Fred Turner No. 1 Well at a point 660 from the south line and 560 feet from the east line of Section 6, Township 20 South, Range 38 East.

MR. COOLEY: The offset that you are crowding, Mr. Godbe, would be your own, is that correct?

A That is correct. We have the acreage to the east.

MR. COOLEY: Immediately offsetting to the east?

A That is correct.

MR. NUTTER: Then inasmuch as the case was advertised for a dual completion of a gas well 560 from the east line and 660 from the south line of Section 6, Township 20 South, Range 38 East, and inasmuch as Signal Oil and Gas Company is the owner of the acreage offsetting this subject well to the east, even though the royalty ownership may be varied, the Commission order if entered in this case, will authorize an unorthodox location for the gas well.

Does anyone have any further questions of Mr. Godbe?

MR. UTZ: Yes.

MR. NUTTER: Mr. Utz.

By MR. UTZ:

Q Why did we have to drill an unorthodox location?

A I don't recall the exact details on that, but I believe it was either due to an oil line or power line in the area. Actually we didn't intend this to be a gas well. We were drilling for a McKee test.

MR. CAMPBELL: It would have been a standard oil location.

MR. PORTER: Standard oil location within a hundred feet of the center.

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

By MR. NUTTER:

Q Mr. Godbe, is the cement around the five and a half inch liner circulated?

A Yes, sir. That's, I believe, indicated on the diagrammatic sketch. It was circulated and the splice was tested for, yes, the splice was tested at 1,000 pounds.

Q The seal at the liner hanger --

A Yes, sir.

Q -- proved satisfactory with 1,000 pound test?

A Yes, sir.

Q What's the top of the cement on your eight and five-eighths inch pipe?

A The top of the cement is at 2370.

Q So you feel that all zones are adequately protected by a

column of cement outside the pipe?

A Yes, that is correct, and we have performed a water shutoff test satisfactorily.

MR. NUTTER: Any further questions of Mr. Godbe? If not, he may be excused.

(Witness excused.)

MR. CAMPBELL: We have nothing further.

MR. NUTTER: For the record, let us show that Mr. Godbe was qualified for an expert witness.

MR. CAMPBELL: I figure if anybody wants to challenge that, they will.

MR. NUTTER: Does anyone have anything further they wish to offer in Case 1366?

MR. COOLEY: Yes, the Commission has received a letter from the De Kalb Production Association, Inc., offices in Lubbock, Texas, to the effect, and I quote: "This will notify you that we have no objections to the dual completion of the Fred Turner Well No. 1 located in the SE/4 SE/4 of Section 6, Township 20 South, Range 38 East, Lea County, New Mexico, operated by Signal Oil and Gas Company." Signed, Jack L. Brown, Production Superintendent for the De Kalb Production Association Corporation.

MR. NUTTER: Anything further in Case 1366? If not, we will take the case under advisement.

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C E R T I F I C A T E

STATE OF NEW MEXICO)
) ss
COUNTY OF BERNALILLO)

I, ADA DEARNLEY, 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 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 11th day of February, 1958, in the City of Albuquerque, County of Bernalillo, State of New Mexico.

Ada Dearnley

NOTARY PUBLIC

My commission expires:
June 19, 1959.

I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of Case No. 9366 heard by me on 1-8, 1958.
James

New Mexico Oil Conservation Commission Examiner