

BEFORE THE
OIL CONSERVATION COMMISSION
SANTA FE, NEW MEXICO
JUNE 7, 1961

EXAMINER HEARING

IN THE MATTER OF:

CASE 2286

Application of Aztec Oil & Gas Company
for an exception to Rule 309 (a), San
Juan County, New Mexico.

TRANSCRIPT OF HEARING

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PHONE CH 3-6691

IN THE MATTER OF:

CASE 2286 Application of Aztec Oil & Gas Company for an exception to Rule 309 (a), San Juan County, New Mexico. Applicant, in the above-styled cause, seeks permission to commingle the Totah-Gallup Pool production from the following-described leases, all in Township 29 North, Range 13 West, San Juan County, New Mexico.

Federal Lease No. SF 079065 in Sections 19, 20 and 29.

State Lease B-11017-23 comprising in pertinent part the SW/4 NW/4 of Section 20.

State Lease B-11017-21 comprising in pertinent part the NW/4 NW/4 of Section 20.

Smith-Eaton Lease comprising in pertinent part the NE/4 SE/4, SE/4 NE/4 and the E/2 NW/4 of Section 20.

Applicant proposes to commingle said production in a common tank battery located on the SW/4 of said Section 20 after separately metering the production from the State and fee leases only.

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

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MR. NUTTER: We will call next Case 2286.

MR. MORRIS: Case 2286. Application of Aztec Oil & Gas Company for an exception to Rule 309 (a), San Juan County, New Mexico.

(Witness sworn)

MR. VERITY: George Verity appearing for the applicant.

L. M. STEVENS,

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

DIRECT EXAMINATION

BY MR. VERITY:

Q Will you state your name, please?

A L. M. Stevens.

Q Mr. Stevens, by whom are you employed?

A Aztec Oil & Gas Company.

MR. NUTTER: How is that spelled?

A S-t-e-v-e-n-s.

Q (By Mr. Verity) What is your occupation with them?

A District engineer, Farmington area.

Q Are you familiar with production methods in use in the area and means of metering and measuring gas and liquids?

A Yes, sir.

MR. MORRIS: If you care to consolidate them.

MR. NUTTER: Are they enough alike?

MR. VERITY: They have some similarities, but I think we

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had better keep them apart, because there is a definite distinction.

(Whereupon, Aztec's Exhibits Nos. 1 and 2 were marked for identification).

Q (By Mr. Verity) I hand you what the Reporter has marked Exhibit 1. Will you please tell us what it is, and what it shows and represents?

A It's a plat showing Sections 18, 19 and 20 of Township 29 North, Range 13 West area that Aztec Oil & Gas Company holds under a mineral lease. The acreage circled in purple is the acreage, is the production from this acreage, which we propose to produce to a common tank battery. The acreage circled in purple, all of it goes to a present tank battery at the present time, except from the production from the Totah-Gallup Lease, and the Smith "A" and Smith "B," which have locations established on them, but they're not drilled yet.

Q In addition to what you have shown on this Exhibit, do you also have production from Section 29, to the south of 20?

A Yes, sir.

Q Does it also go into that common battery?

A Two wells in Section 29 are flowed to the common battery.

Q As to these wells that are now flowing into the common tank battery, is the royalty ownership and the lease ownership all the same?

A Yes, sir.

Q Now, then, you have at the present time completed your

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State Totah-Gallup No. 1 in the west half of the northwest of 20, right?

A Yes, sir.

Q And you propose to drill a well in the east half of the northwest on the Smith "B" and in the northeast, southeast and southeast, northeast on Smith "A?"

A Yes, sir.

Q Do you propose to separately be able to calculate the production of the oil from the various leases?

A Yes, sir. We do.

Q I hand you what the Reporter has marked Exhibit 2. Referring to it, will you please explain how you propose to keep a separate calculation and tab upon the production of all of the wells that you propose to flow into one common tank battery?

A Well, this well, this is a diagrammatic sketch of metering equipment that we propose to set. The top is a plain view, and the bottom drawing is an elevation.

Q You refer to the one on the right as being the top view, and the one on the left as being the elevation?

A Yes, sir. This equipment consists of an oil and gas separator, a metering chamber, and a three-way valve, which controls the flow of the oil; an oil header and a gas header.

Q Will you tie the wells into the separator?

A Yes, sir. Each well will be equipped with an individual flow line.

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Q Explain, if you will, please, the procedure of the oil through this equipment.

A The oil will enter the oil and gas separator, production from the well will enter this oil and gas separator, where the oil and gas will be separated. The gas will pass through the top of the separator and be conducted to a gas header, a common gas header. Before reaching the header, it will pass through some test connections, making it possible to GOR test each individual well. From the header, it will pass to a vent valve out to a burner pit. The oil from the separator will flow by gravity through a three-way valve into a metering chamber. As the oil fills the metering chamber, after it has received back to, the metering chamber has received one barrel, the top float will actuate this three-way valve to close the flow line from the separator to the chamber, and open the flow line from the metering chamber to a common oil header. After the oil has emptied from the metering chamber, the bottom float will actuate the three-way valve, which will close the flow line from the metering chamber to the common oil header, and will open the flow line from the separator to the metering chamber. The metering chamber is equipped with a counting device, which will count each barrel produced to the metering chamber. The metering chamber will measure one barrel of oil each time.

Q Have you made any plans with regard to being able to make accurate computation and correction for any water that might be in the oil produced from wells in different proportions?

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A Yes, sir, we have. The metering chamber reading will be corrected at the end of each month for BS&W and shrinkage, by averaging those corrections which appear on the daily run tickets, and applying it to the monthly volume measured by the metering chamber.

Q Will you test the proportion and the percentage of water and BS&W in the flow line from each well?

A Yes, sir.

Q Is this a relatively static item?

A Yes.

Q How often will you make periodic tests?

A We will make it approximately once a week.

Q Do you propose to put one of these metering devices on each of the three wells, being the State Totah-Gallup 1, the Smith "B" 1, and the Smith "A" 1?

A Yes, sir.

Q Will this give you an accurate measurement of the production from each of those three wells?

A Yes, it will.

Q How do you propose to ascertain accurately the production from the wells located upon the balance of the acreage?

A By subtracting the corrected readings of these metering chambers from the total production.

MR. VERITY: I believe that's all we have.

MR. NUTTER: Are there any questions of Mr. Stevens?

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MR. MORRIS: Yes, sir.

CROSS-EXAMINATION

BY MR. MORRIS:

Q Mr. Stevens, we are dealing here with one Federal lease, 2 State leases, and 1 fee lease; is that correct?

A Yes, sir, that is correct.

Q Has approval been obtained for this commingling from the Federal and State authorities?

A We have filed our request with them.

Q You have not received permission from either body?

A No, sir.

Q In your application, Mr. Stevens, on Page 2, it is stated that the oil production will be separately measured from each well that is or may be located on lands not covered by Federal lease. Is your application amended in that regard now? In other words, you plan to measure the production from each lease now, do you not?

A We plan to measure the production from the Smith "A," the Smith "B" and the State Totah-Gallup, and arrive at Federal lease production by deduction.

MR. VERITY: It will be measured, but not individually measured.

MR. MORRIS: It's not going to be separately measured on the Federal lands?

MR. VERITY: It will be separately measured, if I can answer it, in that it will be measured in the tank and by the

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separate measurement device of the other three wells totaled, leaving the Federal measure.

Q (By Mr. Morris) It's not directly measured, then?

A No.

Q You have not as yet received Federal approval for this procedure?

A No, sir.

Q Do you have any idea, Mr. Stevens, when you can expect to hear one way or ~~the~~ other from the Federal, State authorities?

A I think we can expect to hear from them the early part of next week.

Q Are they going to notify you of ~~their~~ action on this, or did you request that they notify the Oil Conservation Commission?

A They will notify us.

Q Would it be possible for you to furnish the Commission with a copy of any correspondence you receive relative to this application from the Federal authorities, and from the State authorities?

A Yes, sir, it would, and we would be glad to do that.

MR. MORRIS: Thank you. That's all.

MR. VERITY: We have no objection to it being in that fashion, introduced into evidence of this case.

BY MR. NUTTER:

Q Mr. Stevens, is the Smith acreage fee land?

A Yes, sir.

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Q And there are three tracts there, correct?

MR. VERITY: Two Smith tracts.

A Two Smith tracts, Smith "A" and Smith "B."

Q What's this battery on up here north of this? This is not the subject of the application here today?

A No, sir.

MR. VERITY: That is our next application.

Q This Hagood "G" lease comprises the acreage shown here in purple, and also the couple of wells south of this plant?

A Immediately south of Section O.

Q They are all on the same basic lease?

A Yes.

Q It's an extension of the Hagood lease?

A Yes, sir.

MR. VERITY: And are presently producing into one battery.

MR. NUTTER: I see. That's this battery "F" on the plant?

MR. VERITY: Right.

Q (By Mr. Nutter) Are any of these wells capable of making top allowable, Mr. Stevens?

A All of them are, with the exception of the State Totah-Gallup 1.

Q Are you aware of any instance in which the Oil Conservation Commission has approved the commingling of wells from more than one lease in which there was any top allowable wells, and using the subtraction method for determining the production from any



of the leases?

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

Q Are you aware of the appointment by the Oil Conservation Commission of a Committee to study the commingling of oil from various leases as well as separate pools, and the recommendation of minimum standards by that Committee to the Commission for commingling?

A Yes, I'm aware that they have been appointed. I don't know what their decision has been, though.

Q In the event that this installation that you proposed should be approved by the Commission, and you installed it, would Aztec be willing to modify it in case this installation didn't meet the minimum standards as recommended by the Committee and subsequently adopted by the Commission?

A Yes, they would.

Q As I understand it, you are not going to have a constant sample of the production from the State or either of the Smith leases; is that correct?

A No, sir.

Q Nor a sampling of the fluids from the Federal lease?

A No, sir.

Q But you would rely on a BS&W grind-out, which you would take approximately once a week?

A Yes, sir.

Q And you would have to assume that the BS&W from each of

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the leases remained constant from the time of the last sample until the time of the next sampling?

A If we notice any appreciable change, of course, we would increase the frequency of the sampling period.

Q Do these metering chambers utilize non-reset totalizers on the counters?

A No, sir. They would be a reset counter. However, we could equip them with a non-reset counter.

Q How will you determine the accuracy of the metering chamber and the counting mechanism?

A We would weigh the oil dumped by the metering chamber.

Q Are these temperature compensated counters on the dump vessels?

A No, sir, they are not. They are just a mechanical counter. We would weigh the oil dumped by the metering chamber, and the way these things are constructed, you can calibrate the metering chamber in the field.

Q But any fluctuation in temperature from the time you set it the last time would not be compensated by the counter in this dump vessel, is that correct?

A No, sir.

Q I believe you stated that after the gas comes from the separator and goes into the header, it is passed off into a pit and burned?

A Yes.

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Q In the event you had a gas market, you would install separate gas meters for each of the leases, is that correct?

A That is correct. We would install a separate orifice meter for each well.

Q Is the oil that comes off the separators at this present time pipeline quality oil, or is it necessary to treat the oil?

A It's pipeline quality.

Q You anticipate that you may have to treat it, and that's the reason your header goes off to a treater?

A Yes. There's one exception to that. The oil must be heated in order to remove gas from the oil. It's pretty light oil, and the pipeline will not accept it if it has gas in it, and there's some gas driven off in the heater treater.

Q That's the purpose of heating it?

A Yes, sir.

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

(Witness excused)

MR. VERITY: We offer Exhibits 1 and 2.

MR. NUTTER: Aztec's Exhibits 1 and 2 in Case 2286 will be admitted.

(Whereupon, Aztec's Exhibits Nos. 1 and 2 were received in evidence).

MR. NUTTER: Do you have anything further?

MR. VERITY: I have nothing further.

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MR. NUTTER: Does anyone have anything further in Case 2286? We will take the case under advisement.

* * * *

STATE OF NEW MEXICO)
) ss
COUNTY OF BERNALILLO)

I, ADA DEARNLEY, Court Reporter, 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 machine shorthand 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, the 13th day of June, 1961, in
the City of Albuquerque, County of Bernalillo, State of New Mexico.

Red Seaweed
NOTARY PUBLIC

My Commission expires:

June 19, 1963

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