BEFORE THE
OIL CONSERVATION COMMISSION
Santa Fe, New Mexico
October 28, 1959

EXAMINER HEARING

IN THE MATTER OF:

Application of Argo Oil Corporation, for an exception to the overproduction shut-in provisions of Order R-520, as amended by Order R-967, for one well in the Jalmat Gas Pool. Applicant, in the above-styled cause, seeks an order allowing its B. T. Lanehart Well No. 1, Unit H, Section 21, Township 25 South, Range 37 East, Jalmat Gas Pool, Lea County, New Mexico, to compensate for its overproduced status without being completely shut-in in order to prevent possible waste. Case 1793

BEFORE:
Daniel S. Nutter, Examiner

TRANSCRIPT OF HEARING

MR. PAYNE: Application of Argo Oil Corporation, for an exception to the overproduction shut-in provisions of Order R-520, as amended by Order R-967, for one well in the Jalmat Gas Pool.

MR. CAMPBELL: Jack M. Campbell, Campbell and Russell, Roswell, New Mexico, appearing on behalf of the applicant, and have associated with me, Mr. Bryce Parker, attorney for Argo Oil Corporation, San Antonio, Texas.

If the Examiner please, this application involves the same well as was involved in Case 1794. I will assume that the Commission will take administrative notice insofar as it is appropriate

and necessary, of the testimony offered by this witness in Case 1794 insofar as it relates to this particular application to avoid some duplication.

MR. NUTTER: The Commission will do that.

(Witness sworn.)

HARRY C. WINSLOW

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

DIRECT EXAMINATION

BY MR. CAMPBELL:

Q Mr. Winslow, are you acquainted with the application of Argo Oil Corporation in Case No. 1793 relating to an exception for the overproduction shut-in provisions of the Jalmat Gas Pool proration orders?

A Yes, sir, I am.

Q You have, in your prior testimony, related to Case No. 1794, stated that there was some reworking effort on this well. I wonder if you would, for the record in this particular application, again state when that took place and what was done.

A Argo Oil Corporation reworked their B. T. Lanehart No. 1 well in September of 1958, and we reentered the well and ran a string of tubing and we did not treat the formation in any manner.

(Marked Applicant's Exhibits Nos. 1 & 2, for identification.)

Q I hand you what has been identified as Argo's Exhibit No. 1 in this case and ask you to state what that is, please.

A Exhibit No. 1 is the back pressure test, deliverability test, conducted on the well in March, 1958, and this shows a calculated deliverability of 15.71 MCF per day.

Q I now hand you what has been identified as Argo's Exhibit No. 2 in this case and ask you to state what that is.

A Exhibit No. 2 is the deliverability test run in March, 1959 after Argo had reentered the Lanehart well, and this exhibit shows a calculated deliverability of 446.7 MCF per day.

Q Were those deliverability tests taken on essentially the same basis, or do you know?

A No, sir, they were not. The first was the deliverability calculated against a back pressure of 198.56 pounds per square inch absolute. The second test was the deliverability calculated against a deliverability pressure at 356.2 pounds per square inch absolute. So in reality, the ratio of improvement is greater than that that is shown by the two deliverabilities on the same basis. The deliverability of the tests run in March of this year would be greater than this 446.7 MCF per day.

Q Was there anything done to the well between the time you installed the tubing in September, 1958 and the time of the taking of the March, 1959 deliverability test?

A Nothing was done mechanically. Actually we had handled

the water that was being produced in a better fashion.

Q Essentially the installation of the tubing alone resulted in at least a 30-fold increase in deliverability in that particular well during that particular time, is that correct?

A Yes, sir, that is correct.

Q What was the reason you installed the tubing?

A My reason for that was the low deliverability with which we were faced at that time.

Q What effect did the presence of fluids in the well have upon that situation?

A Well, they accumulate in the well bore and they exert a back pressure upon the formation and prevent the free flow of gas.

Q Does that situation still exist in regard to your well?

A We are still making water, yes, but the velocity of flow through a string of tubing is so much greater than through the casing that we can more readily keep the well bore cleared of fluid.

Q Do you believe that if the well were completely shut-in that it would result in an accumulation of liquids that might ultimately result in waste?

A Yes, sir, I do. I believe that permanent damage would result and that waste would occur.

Q Do you think that same thing might occur to perhaps a lesser extent on a very low rate of production?

A I believe that if an exceedingly low rate of production were in force that damage would occur under those circumstances.

Q You are seeking here some method of adjusting your overproduction other than a complete shut-in of the well or cutting it back to a very low rate of production, is that right?

A Yes, sir, that is correct.

Q Do you have any estimates as to what rate of production you feel would be required to prevent the waste that you referred to? Do you have any way of establishing that?

A I think that in all probability any rate of production less than that at which we were producing when this overproduction occurred will show less desirable producing characteristics for this well, and it is difficult to say what rate must be maintained. The only basis we have is the rate of production since having reentered the well and run tubing it was sufficient to keep the well producing on a satisfactory manner.

Going to the other extreme, what rate less than that would be such that harm would not occur, I think that is something that can not be calculated, it would be an observation matter.

Q It would be essentially a matter of degree as to how far it could be cut back or should be cut back to make up the overproduction over a reasonable period of time?

A Yes, sir.

Q Some of the overproduction was accumulated between the

time you did the rework and increased your deliverability and deliverability test was taken and credit for your deliverability?

A Yes, sir, approximately seven months elapsed there between the time the well was reworked and the March deliverability test was run.

Q Approximately how much is this well overproduced at this time?

A As of July 1st it was overproduced 140,466 MCF.

MR. NUTTER: How much was that?

A 140,466 MCF.

Q That is based on a calculation on the deliverability in March, 1959, is it?

A No, sir. That was using the deliverability factor established in March, 1958 of approximately 15 MCF per day. That also was based upon acreage factor of 80 acres.

Q If the deliverability factor of March, 1959 were used and the additional 80 acres added to this unit, of course the length of time required to make up the overproduction would be reduced, would it not?

A Yes, sir, it would be.

MR. CAMPBELL: I believe that's all I have.

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

MR. PAYNE: Yes, sir.

MR. NUTTER: Mr. Payne.

CROSS EXAMINATION

BY MR. PAYNE:

Q Mr. Winslow, how much fluid is this well making at present?

A Mr. Payne, we have never gauged that. The Lanehart well now is produced by El Paso Natural Gas Company; for a number of years it was necessary that Argo send a man out from their Midland office periodically to vent the well to atmosphere to blow the water out, but approximately five years ago El Paso informed us that they would perform that service for us. At that time that that was done no measure was made, it was simply blown to the atmosphere.

Q Now, when you attribute the additional 80 acres to this well, how much will that increase the allowable for the well, assuming that the allowable remains constant?

A Well, sir, following the formula, as I understand it, the acreage factor is 25% of the allowable as based upon the acreage factor, so I haven't put a pencil to it, Mr. Payne. I would guess about 12½% or some magnitude of that nature, based upon the acreage factor alone, and then of course, as I understand too, at their 75% is based upon the product of acreage and deliverability, so it would be reflected there also. I don't think it would constitute doubling the current allowable. I think

it would be something less than that.

Q Do you feel that if this well was allowed to produce 50% of its current allowable, and by current allowable now I'm speaking of the allowable that will be assigned on the basis of 160-acre units and the 1959 deliverability, do you feel that producing at 50% of that rate will prevent the loss of this well, permanent damage to the well?

A That would probably, Mr. Payne, result in an allowable comparable to that currently assigned for the month of October of this year which is based upon 80 acres, and deliverability of 447 MCF per day, 50% of the new calculated allowable or just slightly over a hundred thousand cubic feet per day. Again, I can't answer that, that is something that we will have to observe when the well has produced at that restricted rate.

Q Assuming it were produced at that restricted rate, you can make test to determine whether it had to be produced at a higher rate or whether that was sufficient?

A Yes, I think something could work out so that we could periodically unload the well of water. I am sure water will accumulate at the lower rate, periodically get the water out and see if it comes back to its producing rate before it was restricted.

Q I assume that Argo will make some kind of arrangement of the moneys to be paid the various interest holders, taking

notice of the fact that the production is now being made up of the joining 80 acres?

A Yes, sir.

MR. PAYNE: That's all I have.

BY MR. NUTTER:

Q Let me see if I have the history of the well correct. Originally completed in 1936 and shut it in to 1941?

A Yes.

Q It was put on production and started making water in 1945?

A Yes, sir.

Q Did the production constantly go down from 1941 when it was opened up until the first water was produced in 1945, or was it maintaining a pretty good rate of production until it did start making water?

A It was maintaining a fairly constant rate of production at that time. Of course we were prorated simply by pipeline. Their take from the well was relatively low. However, between 1941 and 1945 when the well started to make some water, the production characteristics were nearly the same. They didn't vary a whole lot and the production was simply governed by the pipeline take.

Q Now, what about when it started making water in '45 until you tubed the well in September of '58, was the water

production constantly increasing and the gas deliverability going down all at the same time?

A Again, Mr. Examiner, we did not at any time gauge the quantity of water, but deliverability and production characteristics varied, they would sag and then perhaps the next test they would be increased, and I believe that is due to the rate of production prior to any one test. If we had been producing at a low rate or had not blown the water from the well bore, why the rate, the deliverability test was low and the shut-in wellhead pressures were low. However, immediately prior to any deliverability test if we had blown the water from the casing, why the characteristics were improved.

Q Well, now, you stated that when you reentered the well and tubed it in September of 1958, that the deliverability increased, but you didn't give that figure. What did the increase amount to?

A The first test we have after our rework, Mr. Examiner, was the test in March, 1959.

Q You didn't get a test immediately after tubing it then?

A No, sir, we didn't.

MR. PAYNE: So you incurred considerable overproduction in the interim production from the rework of the well until you took another deliverability at the time?

A Yes, sir, we did.

Q Are you aware of the provisions of the Jalmat Pool rules that provides that you can take a retest after a workover?

A I am now, Mr. Examiner. However, at the time I was not.

Q So this well was being carried from the time you re-completed it or tubed it in September of 1958 until March of 1959 with the old 1958 deliverability factor of 15.71 MCF per day?

A Yes, sir.

Q Now, does the well make any liquids right now?

A Yes, sir, it does.

Q Is that liquid hydrocarbons or water?

A No, sir, it is water.

Q But you don't know how much?

A No, sir.

Q If the Commission, Mr. Winslow, should grant an order authorizing this well to be produced at some rate in excess of complete shut-in, would Argo Oil Corporation be willing to conduct a series of tests and determine what the minimum rate of production would be possible to prevent the well from loading up with liquid and being killed?

A Yes, sir, we would.

MR. NUTTER: Does anyone have any further questions of Mr. Winslow?

MR. CAMPBELL: I am not sure whether I offered exhibits, Argo Exhibits 1 and 2 in this case in evidence.

MR. NUTTER: Argo's Exhibits 1 and 2 in Case 1793 will be entered. If there are no further questions of Mr. Winslow he may be excused. Do you have anything further, Mr. Campbell?

MR. CAMPBELL: No, sir.

(Witness excused.)

MR. NUTTER: Does anyone have anything further for Case 1793? We will take that case under advisement and take next Case 1795.

STATE OF NEW MEXICO)
: ss
COUNTY OF BERNALILLO)

I, ADA DEARNLEY, Court Reporter, do hereby certify that the foregoing and attached transcript of proceedings before the New Mexico Oil Conservation Commission at Santa Fe, New Mexico, is a true and correct record to the best of my knowledge, skill and ability.

IN WITNESS WHEREOF I have affixed my hand and notarial seal this 4Th day of November, 1959.

Ada Dearnley
Notary Public - Court Reporter

My commission expires:

June 19, 1963.

I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of Case No. 1793, heard by me on 10/28, 1959.

, Examiner
New Mexico Oil Conservation Commission