well file

BCO, Inc.

OIL WELL OPERATOR
AND
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SANTA FE, N. M. 87501

AREA CODE 505
983-1228

November 17, 1976

Mr. A. R. Kendrick
New Mexico Oil Conservation Commission
1000 Rio Brazos Raod
Aztec, New Mexico 87410

Re: Dunn 2 Order R-5310
SF-078272

10-25-7

Dear Al:

Pursuant to our discussion in my office last week and to comply with the above order, I am writing this letter to express my opinion as to how production from the above well should be allocated.

The order provides that the formula should separate the Mancos-Gallup and the Greenhorn-Dakota. In that the above two classifications do not fit the defined legal limits of the Lybrook-Gallup or Basin Dakota field, I am not sure if we should report production to an Undesignated Mancos-Gallup field and Undesignated Greenhorn-Dakota field, or to the Lybrook-Gallup and Basin Dakota fields. Production tests on this well, described further in this letter, were for the Mancos-Gallup and Greenhorn-Dakota and it is our opinion the Mancos added a small, but relatively minor amount of production to the Gallup and the same is true for the Greenhorn in relationship to the Dakota production. I would appreciate your advising me what descriptive fields you want the production allocated to.

Greenhorn-Dakota Test

Our perforations from 6485-6735 first produced on May 8, 1976. We cleaned the well up, tried to run an absolute open flow test, but could not keep the well flowing for the required three-hour period, and finally ran a gas oil ratio test on July 26, 1976. The well ran on a gas lift intermittent flow and made 269 MCF, 1 barrel of oil and 7 barrels of water. We feel the well had established its gas rate at about 270 MCF, however, the oil and water were still declining on the date of the test. We shut the well in after the test and did not let the oil and water rate stabilize, in that we were venting the gas.

Mancos-Gallup Test

We set a bridge plug at 6200' to seal off the Greenhorn-Dakota formation. Our perforations from 5598-5931 first produced on September 28, 1976. The well was cleaned up and a gas oil ratio test was run on October 13, 1976. The well ran on a gas lift intermittent flow and made 80 MCF, 15 barrels of oil, and no measurable amount of water.

We feel the well had not established its real production rate, however, based on our past experience with Gallup production, we feel the test showed what our maximum Gallup rate would be.

Mancos-Gallup and Greenhorn-Dakota Test

We drilled out the bridge plug at 6200' on November 6, 1976. Our perforations from 5598-6735 were placed in production and started selling gas to El Paso Natural Gas Company via a BCO gathering line in Section 23, T24N, R7W on November 11, 1976. On November 15, 1976, the well made 270 MCF, 6 barrels of oil and an estimated 6 barrels of water. It appears the well has pretty well stabilized on gas, the oil is increasing as we lower the producing casing pressure and the water production is still decreasing.

Based on the above tests, my general knowledge of production from the Lybrook-Gallup oil field and my limited knowledge of Dakota production, which is caused in part by relatively little Dakota production in the area, I suggest that we assign a formula to the Mancos-Gallup first, and leave the balance of production to the Greenhorn-Dakota.

Mancos-Gallup Formula

I would suggest that all oil production from the well be allocated to these formations. It is further my opinion, that if we assigned a gas oil ratio of 6000 to 1, we would be in the ball park of experience in the Lybrook-Gallup and Escrito fields where a piston well will run with a ratio of 3000 to 1 and our highest well produces at about 8000 to 1.

Greenhorn-Dakota Formula

These formations would be assigned no oil production, which I feel is consistent with our test on July 26, 1976, when we made 1 barrel of oil and all gas produced by the well less the amount of gas allocated to the Mancos-Gallup above.

In the event the production changes substantially, I feel we should be able to re-examine our allocation and make any changes that we agree are necessary. In the event you feel any changes should be made to my proposed formula, please let me know.

I am attaching a new Form C-104 on this well which I believe has all the pertinent information on it. If there is anything further you need, please let me know. In your reply letter to us, I would appreciate your advising me what type of semi-annual test will be required on this well to obtain an allowable.

We again wish to thank you for all the assistance you have given us on this well.

Very truly yours,

Harry R. Bigbee

HARRY R. BIGBEE
President

HRB/rcd

enclosure

CC: U. S. G. S.
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