GOVERNOR JACK M. CAMPBELL CHAIRMAN

MAIN OFFICE OCC State of New Mexico Dil Conserbation Commission

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LAND COMMISSIONER E. B. JOHNNY WALKER MEMBER

STATE GEOLOGIST A. L. PORTER, JR. SECRETARY - DIRECTOR

P. D. DRAWER DD ARTESIA, NEW MEXICO

March 20, 1963

Dan Nutter Chief Engineer NMOCC P. O. Box 871 Santa Fe. New Mexico

> Re: Formation groups Group I Yates-Seven Rivers Group II Queen-Grayburg-SA

Dear Dan:

The two current problems involving the Queen formation, J. M Welch and Kersey and Hanson, have served to point out the following facts about oil production in Eddy County. Nowhere in the county, where production is found in more than one formation of the subject groups, has production been proven profitable enough to warrant the drilling of twin wells or the continued dual completion of wells. In general, production, thought initially high, has declined rapidly to marginal or stripper levels. I feel that for Eddy County, therefore, only single completions in the formation groups should be allowed without notice and hearing. In other words, on a 40 acre tract only one completion would be permitted in the Yates-Seven Rivers Group and one in the Queen-Grayburg-San Andres Group. There would be no dual completions within a single group.

I have made my two groupings the way they are because that is the pattern of production which naturally most often occurs. The only pool which has production from both groups is the Shugart Pool.

I do not feel that all pool nomenclature should arbitrarily be changed to show all formations in a Group if it is only being produced from one or two formations of the group. The group number could be added to the name and the formation names or abreviations shown to indicate the actual formations being produced. The following pool names are examples: Fren I (SR), Artesia II (Q.G. SA), North Square Lake II (G.SA), North Hackberry I Yates or West Henshaw Grayburg II. Benson Yates I etc.

Dan Nutter

Specifically, as regards Mr. Welch's application to combine the Henshaw (San Andres) Pool and the Henshaw Queen Gas Pool, we can find no reason for not merely adding this to the regular nomenclature case and proceeding accordingly.

Very truly yours,

OIL CONSERVATION COMMISSION

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R. L. Stamets Geologist

RLS/jw

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GOVERNOR JACK M. CAMPBELL CHAIRMAN

State of New Mexico **Bil Conserbation Commission**



LAND COMMISSIONER E. S. JOHNNY WALKER MEMBER

P. D. DRAWER DD ARTESIA, NEW MEXICO

May 6, 1963

Mr. Dan Nutter Chief Engineer New Mexico Oil Conservation Commission P. 0. Box 871 Santa Fe, New Mexico

> Re: Red Lake, East Red Lake-Queen West Cave San Andres and Vandagriff Keyes Pools

STATE GEOLOGIST

A. L. PORTER, JR.

SECRETARY - DIRECTOR

Dear Dan:

As promised, here is the follow up letter to the copy of the June nomenclature advertisement I sent you last week. At the time I made the ad up, I did not have all of my information together but I thought it would be better to go ahead rather than waiting until July.

Enclosed, herewith, please find a copy of a letter and a plat from Southern Union Production Company, a contour map of the top of the Queen Formation, a plat showing the pool limits of the proposed revision and a list of wells involved with certain information included.

The letter and plat from Southern Union Production Company are. I believe, self explanatory.

The contour map shows the following information: first, the attitude of the Queen Formation. Second, the pools involved are shown as follows; pink, West Cave-San Andres; red, Red Lake; blue, East Red Lake-Queen; green. Vandagriff Keyes Gas. The three Red Lake Wells producing from the Queen and Grayburg Formations have their units colored in green. The units colored yellow are those which Southern Union is currently using in their gas storage project. The triangles, orange, brown and orange and brown striped represent respectively, shows of gas, oil, and gas and oil reported in the Queen Formation in the Red Lake Pool. One gas well produces from the Grayburg Formation. It's unit is colored in blue. You will note from the structural position of wells located in the East Red Lake-Queen Pool and the reported shows that the Queen gas is not solely a gas cap. It would seem that the permiability in parts of the Queen are too low for the transmission of crude oil but not so low as to prohibit the accumulation and production of gas. Those wells in Section 5-17-28 shown as temporarily abandoned are former gas producers from the Queen Formation completed in the 1920's. It is interesting to note that a well being completed in the Queen in unit C of Section 4-17-28 has been

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tested at 500 MCFD and another well in unit L of Section 4-17-28 has been perforated in the Queen and is awaiting completion. The inferance here is that permiability and porosity in the Queen Formation must be low or these new wells located within one location would not be as good as they appear to be.

Finally, the attached list of producing wells shows; first, the approximate daily production, total January oil production total January gas production, calculated GOR, whether or not the GOR would affect the allowable based on a GOR of 2000 to 1 and finally a green circle and a GR indicates that the total volume of gas produced exceeds 2000 time NUA of 36 BOPD.

I feel sure I have not answered all your questions but if you send me a list l'11 try.

Please hang onto this information as there is only one copy of some of it.

Very truly yours,

OIL CONSERVATION COMMISSION

R. L. Stamets Geologist

RLS/jw

GOVERNOR JACK M. CAMPBELL CHAIRMAN

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State of New Mexico Oil Conservation Commission

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LAND COMMISSIONER E. S. JOHNNY WALKER MEMBER STATE GEOLOGIST A. L. PORTER, JR. SECRETARY - DIRECTOR

P. D. DRAWER DD ARTESIA, NEW MEXICO June 12, 1963

Mr. A. L. Porter, Jr. Director New Mexico Oil Conservation Commission P. O. Box 871 Santa Fe, New Mexico

Re: Nomenclature Case No. 2832, paragraph (q).

Dear Pete:

Doubting that I will be at the regular Commission Hearing June 19, I will now take this opportunity to register my objections to the adoption of paragraph (q), Case 2832 as adver-The need for the revision proposed therein, arose when tised. an operator in the Red Lake, G-SA Pool filed a completion with both the Queen and Grayburg formations open. The operator requested an extension of the vertical limits of the Red Lake Pool tion include the Queen formation. During my studies of this proposition, I found two additional Red Lake Pool wells already completed in the Queen and Grayburg formations. Further, one other operator informed me that if the vertical limits of the Pool were extended, he would complete the Queen section in his well and another operator now has a marginal Queen well nearing completion on the same unit with a Grayburg well. The Grayburg and San Andres formations in the Red Lake Pool produce predominately oil, while the Queen wells could most often be classed as "marginal gas", though some oil wells do occur. Years ago when most of these Red Lake wells were drilled, there was no market for the gas so no attempt to complete the Queen gas zones was made. Now there are several gasoline plants here which take all the good gas they can get.

In my original proposal for revision of the nomenclature in this case, I suggested that the vertical limits of the Red Lake Page 2, Mr. A. L. Porter, Jr., June 12, 1963

Pool be extended to include the Queen formation and the consolidation of the new Red Lake-Q-G-SA Pool, East Red Lake Queen Pool, Vandagriff Keyes-Queen Gas Pool and the West Cave-San Andres Pool; these pools being contiguous and having the same producing formations. Dan didn't like my proposal, especially the consolidation and we discussed this when I was in Santa Fe and I agreed that the consolidation was not a necessity. I continued, however, to maintain that the Queen formation should be added to the Red Lake Pool. The advertisement which has actually appeared in this case is to extend the vertical limits of the Red Lake Pool to include the Oueen formation under the three 40 acre tracts which precipitated this whole affair only, and this is what I take exception to and object to. My objections stem from the following reasons: the proposal discriminates against other operators in the Red Lake Pool in not allowing them the same privilege of well bore commingling as their neighbors; it does not seem generally consistant with Commission policies to establish small islands in pools where nomenclature varies from the standard; and finally the confusion which would reign in trying to work out future nomenclature in the area of the Red Lake Pool. We would not know whether to propose new pools for Queen wells or propose extensions to the Red Lake Pools vertical limits 40 acres at a time or whether or not a well completed in the Queen should receive allowable as a wildcat well or be required to remain shut in until its individual case had been worked out. In short, I feel, with all due respect, that if the proposal were to be adopted as advertised, the result would be a mess.

What can be done in the alternative? My original proposal was and still is to extend the vertical limits of the Red Lake Pool to include the Queen formation in total. However, if it is decided that this is a bad, wasteful, ill-advised, onery, pitiful suggestion, then I feel that it would be more appropriate to force the operators of the three wells now open in the Queen to plug off the wells in that zone rather than discriminate against the majority of operators in the Pool.

If you need any more information on this matter, please let me know.

Very truly yours,

R. L. Stamets

RLS/uh