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The New Mexico Oil Conservation Commission

Santa Fe, New Mexico

Concerning: Brief submitted on behalf of some of the independent operators and small land owners of San Juan County in regard to:

Case Number 126, relative to the request of the Southern Union Gas Company for a spacing ruling for the Fulcher Basin-Kutz Canyon Gas Fields, San Juan County.

Gentlemen:

I wish to submit herewith for your consideration in this matter a few written statements summarizing this case and testimony pertaining thereto, as I have analyzed it.

1. The general problem of optimum spacing in any field requires careful study and a large amount of carefully gathered and compiled information.

2. Until approximately two weeks prior to this hearing all of the necessary information has been available only to the Southern Union Gas Company. At that time part of this necessary information has been compiled by them from their files and made available to interested parties. Two weeks is not sufficient time, however, to permit a study of this nature by an outside company or individual. Moreover, the information assembled at that time was not adequate to provide a definite solution.

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3. A spacing ruling in an old field without regard to proration--or without a proration ruling--would, in effect, be a direct contradiction to the conception of correlative rights as understood in the petroleum industry.

For, just as new 40-acre wells offsetting old wells on 160 acres would unfairly drain the 160-acre tract; so would new 160-acre units be drained by old wells on 40-acre tracts.

4. The problem of increased wells without an unlimited market, and resulting smaller per well production rate as brought out by Mr. Foster Morrell of the USGS would, in my opinion, be more likely aggravated by 160-acre units than relieved; due to the increased number of forced offsets.

5. In regard to the evidence presented at the hearing, February 17, 1948 it was shown that old wells had a drainage influence over extended distances in some areas, and in interference test conducted on adjoining wells established communication between them: but the evidence presented did not show how much gas will be left unrecovered in the reservoir at abandonment for various well spacings; nor dis the testimony describe the manner in which wells would be located on 160-acre units in order that wells could later be infilled on smaller tracts, if proven economically feasible.

To briefly clarify these points, I wish to point out:

(a) That, although drainage over extended distances has been proven and communication has been established between adjoining wells; the Katz Canyon-Fulcher Basin Field is not unique in this respect. The same can be shown for most of the oil and gas fields now in existence.

(b) In view of this, a decision on a spacing ruling should be based--not from evidence of communication and some drainage alone--byt also from a consideration of the value of the ultimately unrecoverable gas left

in the reservoir for various well spacings; for which subject inadequate testimony was presented.

(c) A provision should be made, if a spacing of 160 acres per well is contemplated, to permit later infilled drilling on a closer spacing, if ever proven economically feasible. It should be recognized that the next smallest, practical spacing from 160-acre units is 80 acres per well; and this is possible only if the wells on the initial 160-acre tracts are spotted on 80-acre patterns. If a rigid center-spot location on 160 acres is required, the only uniform spacing on infilled drilling for each 160-acre tract, would require 4 more wells, or an average of 32 acres per well.

From the testimony presented at the hearing it can be seen that an increase in the price of gas, plus a decrease in the cost of drilling the wells (both of which are normal trends•) would justify infilled drilling on 80-acre locationsif it is found later that as much as approximately 25% more gas can be recovered on the closer spacing. This same information indicates that infilled drilling of 32 acres per well would probably never be economically feasible. Hence, 160-acre center-spot locations would make later infilled drilling on individual 160-acre tracts forever impossible.

Moreover, a study of the field indicates that a large number of the drilling units can be more effectively drained by locating the wells in the most permeable part of the unit; and this permeable part is not necessarily in the center of 160-acre tracts. For the same number of wells, the field can be more effectively drained by placing the wells in the most permeable parts of units rather than rigid centerspot locations.

It is therefore requested, that in the event the Commission decides to set a spacing ruling requiring 160-acres per well, that consideration be given to flexibility of locating each well on its unit; in order that maximum advantage may be realized from the continuously developed geological and engineering information; and in order that operators may have the opportunity to locate their wells on 80-acre patterns if they so choose, so that they would be in position in the future to infill wells if proven

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economically justifiable.

6. It is realized that some action may be necessary to protect the investment of operators who drilled wells on 160-acre tracts. It is possible, however that the entire situation could best be handled by an operators committee formed by active operators in the area. Regular meetings could be held and all additional information studied and discussed. In the event of failure of such a committee to bring reasonable agreement among the operators, resort could be had to legal action by the Oil Conservation Commission.

Yours very truly,

/s/ Albert E. Greer
Albert E. Greer

* The decrease in the cost of drilling would result from improved methods and competition in drilling as more activity centers in this area.

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