PROPOSED 80 ACRE DEEP WELL PROPORTIONAL FACTORS

In response to the call of the Commission in Case 313 for an order amending Rule 505 with particular reference to Paragraph 2: Proportional Factors for Deep Wells Under Various Spacing Patterns, Continental Oil Company wishes to propose an amendment. This proposed amendment would provide for an 80 acre deep well proportional factor which would place the calculation of 80 acre deep well allowables on a comparable basis with the present calculation of 40 acre deep well allowables. It is presented as a matter of procedure under the existing rules and regulations of the Commissions and would apply only to those fields where the Commission had established 80 acre spacing after hearing.

It is the purpose of Rule 505 to provide for allocation between pools and to provide for a top unit allowable for each range of depth. The allocation to any pool may be distributed to the respective units in the pool in accordance with the proration plan of that pool where such a plan exists. The nature of the calculations involved in Rule 505 places proration in New Mexico on a statewide basis and each proration unit of comparable size and depth receives the same allowable. The operation of this rule appears to be satisfactory and its validity has not been questioned. It has been used herein, therefore, as a basis upon which to calculate 80 acre deep well proportional factors which would place the allowable of 80 acre proration units on the same statewide basis as all other proration units with appropriate consideration being given to the number of acres and the depth involved.

Before proceeding to the calculation of the 80 acre proportional factors, it might be well to review briefly, the composition of the 40 acre proportional factors with deep well adaptation. These factors are composed of an acreage credit and an economic credit added together. The acreage credit represents the normal unit allowable in the factor and has a numerical value of one (1). The economic credit adapts the

factor for depth and might be referred to as an "added investment factor" as it was designed to provide a reasonable return on the additional investment required to drill a well below 5000 feet. A breakdown of these credits for the 40 acre proportional factors is shown in columns A, B, and C of Continental Exhibit No. 1. The points I would like to emphasize here are as follows:

(a) The acreage credit for 40 acres has the value of one (1).

(b) The 40 acre proportional factor is the result of adding the acreage credit to the added investment credit, and

(c) That the relationship mentioned in (b) above would remain the same even though it were found that the added investment factor should require adjustment with changing economic conditions.

When these points are considered, it becomes and easy matter to expand Rule 505 to provide a reasonable proportional factor to compute the top unit allowable for a deep well located on a proration unit of any size. At present, we are concerned only with 80 acre units. It is important to remember that it is a fundamental principle of proration in New Mexico that every 40 acre unit receives the same normal unit allowable except in the case of deep wells where the nomal unit allowable receives "deep well adaptation" as mentioned above. Therefore, when two 40 acre tracts are combined to form an 80 acre proration unit, the proper calculation to determine the proportional factor is as follows:

(a) To the acreage credit of 1.00 for the first 40 acres is added the acreage credit of 1.00 for the second 40 acres giving a total acreage credit of 2.00.

(b) To the total acreage of 2.00 is added the appropriate "added investment factor", the sum giving the proper proportional factor to be multiplied by the normal unit allowable in order to calculate the top unit allowable. To illustrate: Given a well between 10,000 and 11,000 feet deep located upon an 80 acre proration unit, the proportional factor would be calculated as follows:

To the 40 acre proportional factor, which already contains the acreage credit of 1.00 for the first 40 acres and the added investment factor, add the acreage credit of 1.00 for the second 40 acres. The calculation would read 4.67 / 1.00 = 5.67. This calculation is illustrated for each depth bracket in columns D and E on Continental Exhibit No. 1.

The top unit allowable resulting from this method of calculating 80 acre deep well proportional factors is a proper so-called "double allowable". It gives appropriate credit to the fact that the basic proration unit of 40 acres has been doubled, but recognizes the fact that the operators investment has not been increased and that he is entitled to no additional economic credit.

It follows ~~then~~ that it is not proper to calculate a so called "double allowable" by multiplying the 40 acre ~~propor-~~ ~~tional factor~~ by some number such as 2 or 1½ to obtain an 80 acre deep well allowable for the following reasons:

(a) The 40 acre proportional factor already contains the "added investment credit". To multiply the 40 acre proportional factor by two (2) is to give an operator credit for making two investments or drilling two (2) wells when actually he has made but one investment. Such an operator has no just claim to compensation for an expenditure he did not make.

(b) The nature of the component parts of the 40 acre proportional factor are such that the factor must be increased by the process of addition and not by multiplication.

It is recommended therefore that paragraph 2 of state-wide Rule 505 be amended to provide for 80 acre deep well proportional factors calculated as herein described and as shown on Continental Exhibit No. 2. It is our contention that the proposed factors contain nothing that is new or not already a part of the Commission's records and that their application will have the effect of placing the top unit allowable for an 80 acre deep proration unit on a reasonable and comparable basis with the top unit allowable for other deep units in order to provide for a proper allocation between fields.

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CONTINENTAL OIL COMPANY
EXHIBIT NO. 1

Pool Depth Range	A 1st 40 Acre Credit	B Added Investment Credit	C 40 Acre Proportional Factor (A ÷ B)	D 2nd 40 Acres Credit	E 80 Acre Deep Well Proportional Factor (C ÷ D)
0 - 5,000	1.00	----	1.00	----	----
5,000 - 6,000	1.00	0.33	1.33	1.00	2.33
6,000 - 7,000	1.00	0.77	1.77	1.00	2.77
7,000 - 8,000	1.00	1.33	2.33	1.00	3.33
8,000 - 9,000	1.00	2.00	3.00	1.00	4.00
9,000 - 10,000	1.00	2.77	3.77	1.00	4.77
10,000 - 11,000	1.00	3.67	4.67	1.00	5.67
11,000 - 12,000	1.00	4.67	5.67	1.00	6.67
12,000 - 13,000	1.00	5.75	6.75	1.00	7.75

RULE 505. OIL PRORATION

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Pool Depth Range	40 Acre Proportional Factor	80 Acre Deep Well Proportional Factor
0 to 5,000 Feet	1.00	----
5,000 to 6,000 "	1.33	2.33
6,000 to 7,000 "	1.77	2.77
7,000 to 8,000 "	2.33	3.33
8,000 to 9,000 "	3.00	4.00
9,000 to 10,000 "	3.77	4.77
10,000 to 11,000 "	4.67	5.67
11,000 to 12,000 "	5.67	6.67
12,000 to 13,000 "	6.75	7.75