BEFORE THE OIL CONSERVATION COIMISSION OF THE STATE OF NEW MEXICO

IN THE MATTER OF THE HEARING CALLED BY THE OIL CONSERVATION COMMISSION OF THE STATE OF NEW MEXICO FOR THE PURPOSE OF CONSIDERING:

CASE NO. 62

ORDER NO. <u>637</u>

THE PETITION OF THE GULF OIL CORPORATION FOR REVISION OF STATEWIDE PRORATION ORDER NO. 538 TO PROVIDE FOR INCREASING THE OIL ALLOWABLE PROGRESSIVELY ACCORDING TO DEPTH FOR POOLS PRODUCING BELOW 5000 FEET.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at ten o'clock A.M., May 14, 1945, at Santa Fe, New Mexico, before the Oil Conservation Commission of New Mexico, hereinafter referred to as the "Commission".

NOW, on this 7th day of Juliany 1946, the Commission having before it for consideration the testimony adduced at the hearing of said case and being fully advised in the premises;

IT IS THEREFORE ORDERED that:

The order herein shall be known as:

THE STATE-WIDE PRORATION ORDER (with deep-pool adaptation)

- l. (a) i. The unit of proration shall consist of 40 acres or lot in accordance with the legal sub-divisions of the United States Public Lands Surveys, on which is at least one producing well. No well shall be drilled closer to any unit boundary line than 330 feet or less than 660 feet from any other well except upon petition, notice and hearing as provided by law, provided such unorthodox well location will create neither waste nor hazards conducive to waste.
- (a) ii. Where, however, a given proration unit appears to be underlain by more than one pool, each a separate common reservoir, and it is sought to produce from more than one such pool, no well shall be drilled and completed in the same pool closer to the unit boundary line than 330 feet nor less than 660 feet from any other well completed in the same pool. In these cases, within the discretion of the Commission, wells may have a surface proximity closer to each other than 660 feet to permit twinning, trippling, and so on in accordance with the number of such pools lying above or below the other. In any case in this paragraph mentioned, in addition to the information now required in Form C-101, Notice of Intention to Drill, there must also be shown in said notice the distance of the proposed location from any other well nearer on the surface than 660 feet.
- (b) A marginal unit is a unit that will not produce the top unit allowable for the pool.
- (c) A non-marginal unit is a unit that will produce the top unit allowable for the pool.

- (d) The top unit allowables in accordance with various depth ranges to be used for the purpose of making allocations to the respective pools and for the purpose of distributing or prorating the pool allocations to the units within the pool, except for those pools having proration plans of their own, shall be as defined in the computation for making allocations to pools as set forth in Section 2 hereinbelow.
- (e) The normal unit allowable to be used for the purpose of computing the top unit allowables for each of several ranges of depth shall be as defined in Section 2 (c) hereinbelow.
- (f) The proration month shall be the calendar month which shall begin at 7 A.M., on the first day of such month.
- 2. (a) The total allowable for pools in Lea, Eddy and Chaves Counties shall be in terms of total barrels daily for each calendar month and shall be allocated to the respective pools by the following computation:
- (b) From the total allowable shall be deducted the sum of the allowables for all marginal units. The remainder shall be divided among the non-marginal units in a proportion as set forth in Section 2 (c).
- (c) Top unit allowables shall be calculated for each of several ranges of depth in the following proportions:

Pool Depth Range	Proportional F	actor
		Gult
From 0 to 5000'	1.00	-
Below 5000 to 6000!	1.3 3	*
" 6000 to 7000"	1.77	e.
" 7000 to 8000"	2.33	
" 8000 to 90001	3.00	-
" 9000 to 10,000'	3.77	_
" 10,000 to 11,000'	4.67	4.66
" 11, 9 00 to 12,000'	5.67	5.66

(Figures subject to change as in Section 5)

The calculation of the respective top unit allowables for each pool depth range shall be made in the following manner: Multiply the number of non-marginal units within each depth range by the above corresponding proportional factors (subject to Section 4). Add all of the products so obtained. Divide this total of the products into the total allocation for all non-marginal units. The quotient thus obtained shall be the normal unit allowable. Top unit allowables for each range of depth shall then be determined by multiplying the normal unit allowable for the proportional factor for each depth range as set out in the table hereinabove: any fraction of a barrel shall be regarded as a full barrel for both normal and top unit allowables.

- (d) The top unit allowables so determined in Section 2 (c) shall be assigned to the respective pools in accordance with each pool's depth range. The sum of all marginal units plus the sum of the top unit allowables for all non-marginal units in each pool shall constitute the allocation for each pool. In the event that the normal unit allowable as calculated in Section 2 (c) is found to be less than 30 barrels per day for any month, the top allowable for the depth range from 0 to 5000 feet shall be set at 30 barrels per day and a corrected top allowable shall be computed for all other depth ranges below 5,000 feet by the following formulae:
 - (1) Corrected top allowable top allowable times correction factor

(2) Correction factor =
$$\frac{(B - 30U)}{(30 - N)U + (B + 30U)}$$

Where:

- B = Total allocation to Lea, Eddy and Chaves Counties, non-marginal units.
- N = Normal unit allowable as calculated in Section 2 (c)
- U = Number of non-marginal units within the depth range of 0 to 5,000 feet.

The allocation for each pool shall then be computed as described hereinabove, using the corrected top allowables in place of the top allowables.

(The figure 30 as used in this section is subject to change as in Section 5)

- (e) The depth classification for each pool shall be determined from the depth of the first well measured to the top of the producing formation. In event the casing is set into or through the producing formation, the depth to the casing shoe or the top perforation in the casing, whichever is the highest, shall be the assumed top of the formation for purposes of determining the depth. When such depth classification for a pool has been established, all non-marginal units in that pool shall have the same top unit allowable.
- (f) Thereupon the allocation to each pool shall in turn be prorated or distributed to the respective units in each pool in accordance with the proration plan of the particular pool where any such plan exists. Where no proration plan for any pool exists, then the pool allocation shall be distributed or prorated to the respective marginal and non-marginal units therein as determined hereinabove.
- (g) At the beginning of each calendar month, the distribution or proration to the respective units in each pool shall be changed in order to take into account all new wells which have been completed and were not in the proration schedule during the previous calendar month. Where any well is completed between the first and sixteenth day of the calendar month, its unit shall be assigned an allowable in accordance with whether such unit is marginal or non-marginal, beginning at 7 A.M., on the sixteenth and for the remainder of that calendar month.
- 3. For convenience, pools with depth range from 0 to 5000 feet may be referred to as "ordinary pools" and the allowables computed for proration units therein, as "ordinary pool" allowables; and pools with depth range below 5000 feet may be referred to as "deep pools" and the allowables computed for proration units there, as "deep pool" allowables—notwithstanding the fact that the allowable for any proration unit may be marginal or non-marginal for the particular pool in accordance with pool depth range.
- 4. No proration unit in any pool with pool depth range below 5000 ft. shall have both a deep pool allowable and a bonus discovery allowable, by reason of Order 573, at the same time. At the operator's option the operator may either waive such bonus allowable so as to permit the deep pool allowable; or the operator may first make full use of any such bonus allowable to which he may be entitled before receiving a deep pool allowable. In case of the latter alternative, the deep pool allowable shall be calculated as for an ordinary pool allowable pending the making use of such bonus allowable.
- 5. Any of the figures in Section 2 (c) and Section 2 (d) is subject to revision to prevent waste, to meet changed conditions, and to preclude inequities, upon petition and hearing as provided by law; however, the Commission retains jurisdiction of this case for the purpose of providing in executive session an equitable proportional factor in Section 2 (c) applicable to any pool that may be discovered at any depth range below 12,000.
- 6. Pools in counties other than Lea, Eddy and Chaves, shall be permitted to produce their market demand as long as such can be done without waste, until production in such other counties is deemed sufficient to warrant proration determinable by hearing as provided by law.

7. The Order herein replaces Order No. 538, State-Wide Proration Order, and Order No. 413, Eddy Coumty Fields Proration Order. Order No. 235, the Proration Schedule Order, is retained as supplemental to the order herein.

This order shall become effective on March 1, 1946.

Done at Santa Fe, New Mexico, on the day and year hereinabove designated.

DIL CONSTRUATION COMMISSION

JOHN J. DEMPSET, CHAIRMAN

JOHN E. MILLS, MAMBER

R. R. SPURRIER, SECRETARY.

SEAL