BEFORE THE OIL CONSERVATION COMMISSION OF THE STATE OF NEW MEXICO

IN THE MATTER OF PETITION OF MID-CONTINENT PETROLEUM COMPANY, MAGNOLIA PETROLEUM COMPANY, AND OTHERS REQUESTING A REHEARING TO RESCIND OIL CONSERVATION COM-MISSION ORDER R-100 RELATING TO SPACING IN THE CROSSROADS POOL (Lea County, New Mexico).

> CASE NO. 149 ORDER NO. R-100-B

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause having come on for special hearing at 10: 00 o'clock December 19, 1951, at Santa Fe, New Mexico, before the Oil Conservation Commission hereinafter called the "Commission", upon the application of Mid-Continent Petroleum Company, Magnolia Petroleum Company, Oil Development Company of Texas and Santa Fe Pacific Railroad Company for a rehearing in the matter of oil well spacing in the Crossroads-Devonian pool, Lea County, New Mexico, and for the rescission of the Commission's Order No. R-100 relating thereto;

NOW, on this day of March 1952, the Commission, a quorum being present, having considered the testimony adduced and the exhibits received at said hearing, and being otherwise fully advised in the premises finds:

1. That an active water drive is present within the Crossroads Devonian pool.

2. That the loss of the bottom-hole pressure during the life of the field, three years, has been approximately 28 lbs., half of which loss has occurred within the last seven months.

3. From the evidence it appears that core analyses taken within the Crossroads-Devonian formation show a wide range of permeability and porosity within the pool.

4. That the water-drive movement can be made more uniform through the permeable channels of the formation by the adoption of a 40-acre spacing pattern than can be obtained by an 80-acre spacing program.

5. That the combination of the active water drive within the field and the non-uniform permeability within the formation has the inherent danger of channeling water when wells are produced at high daily perwell rates, and that a 40-acre spacing program would permit the continued' producing capacity of said reservoir at lower daily per-well rates, would reduce the tendency of the water channeling or coning, and would minimize the danger of the by-passing of oil within said reservoir by reason of a more uniform encroachment of the water.

6. That a proration unit of 40 acres should be established in the Crossroads -Devonian pool, Lea County, New Mexico, as being the area necessary for one well to effectively, efficiently and economically drain and develop said reservoir and to prevent waste and protect correlative rights.

-2-Case No. 149 Order No. R-100-B

IT IS THEREFORE ORDERED, That petitioners' application be and the same hereby is denied and the Commission's Order No. R-100 be and the same hereby is affirmed in all respects, except the finding of fact No. 6 is hereby withdrawn.

IT IS FURTHER ORDERED, That a proration unit of 40 acres per well be and the same is hereby established for the Crossroads Devonian Pool, Lea County, New Mexico.

DONE at Santa Fe, New Mexico, on the day and year hereinabove written.

STATE OF NEW MEXICO OIL CONSERVATION COMMISSION

: Ken Z preile

EDWIN L. MECHEM, CHAIRMAN

GUY SHEPARD; MEMBER

and ····

SECRETARY R. R. SPURR

SEAL

BEFORE THE OIL CONSERVATION COMMISSION

OF THE STATE OF NEW MEXICO

EXHIBIT "E"

IN THE MATTER OF PETITION OF MID-CONTINENT PETROLEUM COMPANY, MAGNOLIA PETROLEUM COMPANY, AND OTHERS REQUESTING A REHEARING TO RESCIND OIL CONSERVATION COMMISSION ORDER R-LOO RELATING TO SPACING IN THE CROSSROADS POOL (Lea County, New Mexico)

> CASE NO. 149 ORDER NO. R-100-B

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause having come on for special hearing at 10:00 o'clock December 19, 1951, at Santa Fe, New Mexico, before the Oil Conservation Commission hereinafter called the "Commission", upon the application of Mid-Continent Petroleum Company, Magnolia Petroleum Company, Oil Development Company of Texas and Santa Fe Pacific Railroad Company for a rehearing in the matter of oil well spacing in the Crossroads-Devonian pool, Lea County, New Mexico, and for the rescission of the Commission's Order No. R-100 relating thereto;

NOW, on this 6th day of March 1952, the Commission, a quorum being present, having considered the testimony adduced and the exhibits received at said hearing, and being otherwise fully advised in the premises finds:

1. That an active water drive is present within the Crossroads Devonian pool.

2. That the loss of the bottom-hole pressure during the life of the field, three years, has been approximately 28 lbs., half of which loss has occurred within the last seven months.

3. From the evidence it appears that core analyses taken within the Crossroads-Devonian formation show a wide range of permeability and porosity within the pool.

4. That the water-drive movement can be made more uniform through the permeable channels of the formation by the adoption of a 40-acre spacing pattern than can be obtained by an 80-acre spacing program.

5. That the combination of the active water drive within the field and the nonuniform permeability within the formation has the inherent danger of channeling water when wells are produced at high daily per-well rates, and that a 40-acre spacing program would permit the continued producing capacity of said reservoir at lower daily per-well rates, would reduce the tendency of the water channeling or coning, and would minimize the danger of the by-passing of oil within said reservoir by reason of a more uniform encroachment of the water.

-2-Case Nc. 149 Order No. R-100-B

6. That a proration unit of 40 acres should be established in the Crossroads-Devonian pool, Lea County, New Mexico, as being the area necessary for one well to effectively, efficiently and economically drain and develop said reservoir and to prevent waste and protect correlative rights.

IT IS THEREFORE ORDERED, That petitioners' application be and the same hereby is denied and the Commission's Order No. R-100 be and the same hereby is affirmed in all respects, except the finding of fact No. 6 is hereby withdrawn.

IT IS FURTHER ORDERED, That a proration unit of 40 acres per well be and the same hereby is established for the Crossroads Devonian pool, Lea County, New Mexico.

DONE at Santa Fe, New Mexico, on the day and year hereinabove written.

STATE OF NEW MEXICO OIL ONSERVATION COMMISSION

(Signed) EDWIN L. MECHEM, Chairman

(Signed) GUY SHEPARD, Member

(Signed) R. R. SPURRIER, Secretary

SEAL