## STATE OF NEW MEXICO ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT OIL CONSERVATION DIVISION

IN THE MATTER OF THE HEARING CALLED BY THE OIL CONSERVATION DIVISION FOR THE PURPOSE OF CONSIDERING:

APPLICATION OF MARATHON OIL COMPANY TO AMEND THE SPECIAL RULES AND REGULATIONS FOR THE LEA DEVONIAN POOL, LEA COUNTY, NEW MEXICO.

APPLICATION OF MARATHON OIL COMPANY FOR AN UNORTHODOX OIL WELL LOCATION AND SIMULTANEOUS DEDICATION, LEA COUNTY, NEW MEXICO. Case No. 11163

Case No. 11164

Order No. R-1826-C

## **ORDER OF THE DIVISION**

#### **BY THE DIVISION**:

This cause came on for hearing at 8:15 a.m. on December 15, 1994, at Santa Fe, New Mexico, before Examiner Michael E. Stogner.

NOW, on this <u>25th</u>day of January, 1995, the Division Director, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised in the premises,

### FINDS THAT:

(1) Due public notice having been given as required by law, the Division has jurisdiction of this cause and the subject matter thereof.

(2) At the time of the hearing Case Nos. 11163 and 11164 were consolidated for the purpose of presenting testimony.

(3) By Order No. R-1772, dated September 16, 1960 and made effective October 1, 1960, the Division, in part, created and defined the Lea-Devonian Pool for the production of oil from the Devonian formation. The horizontal limits for said pool, as currently designated, include the E/2 of Section 11, the W/2 and SE/4 of Section 12, and all of Section 13, of Township 20 South, Range 34 East, NMPM, Lea County, New Mexico.

(4) The Lea-Devonian Pool is currently governed by special pool rules, as promulgated by Division Order No. R-1826-A, as amended, which require standard 160-acre oil spacing and proration units (**Rule 2**) with wells to be located within 150 feet of the center of either the NW/4 or SE/4 of the quarter section on which the well is located (**Rule 3**), however nothing prohibits the drilling of a well on each of the quarter-quarter sections in the unit (**Rule 2**). Further, said special pool rules were silent with regards to administrative exceptions to the well location requirements.

(5) The applicant in Case 11163, Marathon Oil Company ("Marathon"), seeks an amendment to said Special Rules and Regulations for the Lea-Devonian Pool to provide for standard oil well locations not closer than 330 feet to the outer boundary of a 160-acre proration unit nor closer than 330 feet to any quarter-quarter section or subdivision inner boundary and the omission of the initial well being in either the NW/4 or SE/4 of the quarter section "rule". In addition a single proration unit would be permitted no more than one well in each quarter-quarter section or lot.

(6) As applicant in Case 11164, Marathon is seeking an exception to the location requirements to the current rules and regulations governing the Lea-Devonian Pool to permit its Lea Unit Well No. 17 to be drilled and completed as an infill well at an unorthodox oil well location 900 feet from the South line and 1756 feet from the East line (Unit O) of said Section 13, said well to be simultaneously dedicated to an existing standard 160-acre oil spacing and proration unit comprising the SE/4 of said Section 13 which is currently dedicated to the Lea Unit Well No. 3 (API No. 30-025-20038) located at a standard oil well location 1980 feet from the South and East lines (Unit J) of said Section 13.

(7) Marathon is owner and operator of the Lea Unit that comprises the following described area in Lea County, New Mexico:

TOWNSHIP 20 SOUTH,	RANGE 34 EAST, NMPM
Section 11:	E/2
Sections 12 and 13:	All
Section 14:	NE/4
Section 24:	N/2

# TOWNSHIP 20 SOUTH, RANGE 35 EAST, NMPMSection 18:Lots 1 through 4 and E/2 W/2Section 19:Lots 1 and 2 and E/2 NW/4.

Said unitized area totally encompasses the current Lea-Devonian Pool boundary. Subsequently, Marathon has been the only operator of the eleven wells ever drilled into and produced from the Lea-Devonian Pool, there are currently four wells still producing oil from this pool.

(8) The geologic and engineering evidence presented by the applicant indicates that the Lea-Devonian Pool is a nearly depleted reservoir with approximately 200,000 barrels of calculated recoverable oil with current development. Evidence further indicates the existence of an additional 100,000 barrels of attic oil to be produced that might not otherwise be recovered by the drilling of the Lea Unit Well No. 17 alone. Marathon is proposing, at this time, an additional four such infill wells, each having an estimated volume of like attic oil with the potential of recovering 500,000 barrels of oil that might not otherwise be produced from the pool.

(9) The technical evidence further indicates the need for flexibility to locate these additional wells in order to assure the best possible structural position in the reservoir and to help minimize water encroachment, which historically has been a major problem in the old wells.

(10) Approval of Marathon's request to amend the existing Special Rules and Regulations for the Lea-Devonian Pool, being the subject of Case No. 11163, is in the best interest of conservation, exhibits sound engineering practices, will allow additional oil recovery which might not otherwise be produced thereby preventing waste, and with the existing Lea Unitized Area correlative rights will be further protected.

(11) The following provision is included within the current Special Rules and Regulations governing the Lea-Devonian Pool:

"<u>RULE 5</u>. A 160-acre proration unit (158 through 162 acres) in the Lea-Devonian Pool shall be assigned a proportional factor of 12.33 for allowable purposes, and in the event there is more than one well on a 160-acre proration unit, the operator may produce the allowable assigned to the unit from wells on the unit in any proportion." By Order No. R-4348, issued in Case 4737, dated July 20, 1972 and made effective September 1, 1972, the Division amended General Rule 505 and enacted the current "Depth Bracket Allowable" provisions. The Lea-Devonian Pool was assigned an appropriate poolwide depth bracket allowable of 740 barrels of oil per day.

**<u>FINDING</u>**: "**Rule 5**" of said special pool rules is therefore deemed obsolete and should be revised to concur with the General Rules applicable in this matter at this time.

(12) Approval of Case 11163 would effectively make Marathon's request in Case No. 11164 unnecessary; therefore, said application for its Lea Unit Well No. 17 to be drilled at an unorthodox oil well location 900 feet from the South line and 1756 feet from the East line (Unit O) of said Section 13 should be <u>dismissed</u>.

### IT IS THEREFORE ORDERED THAT:

(1) The application of Marathon Oil Company ("Marathon") in Case 11164 for an exception to the location requirements to the current rules and regulations governing the Lea-Devonian Pool to permit its Lea Unit Well No. 17 to be drilled and completed as an "infill well" at an unorthodox oil well location 900 feet from the South line and 1756 feet from the East line (Unit O) of said Section 13, said well to be simultaneously dedicated to an existing standard 160acre oil spacing and proration unit comprising the SE/4 of said Section 13 which is currently dedicated to the Lea Unit Well No. 3 (API No. 30-025-20038) located at a standard oil well location 1980 feet from the South and East lines (Unit J) of said Section 13, is hereby dismissed.

(2) The Special Rules and Regulations for the Lea-Devonian Pool, in Sections 11, 12, and 13, Township 20 South, Range 34 East, NMPM, Lea County, New Mexico, as promulgated by Division Order No. R-1826-A, as amended, shall be amended further to reflect the following changes:

(a) "<u>Rule 2</u>" shall read in its entirety as follows:

"<u>RULE 2</u>. Each well completed or recompleted in the Lea-Devonian Pool shall be located on a unit containing 160 acres, more or less, which consists of a single governmental quarter section; provided however, that nothing contained herein shall be construed as prohibiting the drilling of not more than one well in each quarter-quarter section or lot making up a single proration unit." (b) "<u>Rule 3</u>" shall read in its entirety as follows:

"<u>RULE 3 A</u>. Each well shall be located no closer than 330 feet to the outer boundary of a proration unit nor closer than 330 feet to any quarter-quarter section or subdivision inner boundary therein.

<u>RULE 3 B</u>. The Division Director may grant an exception to the requirements of <u>Rule 3 A</u>, above without notice and hearing when an application has been filed for an unorthodox location necessitated by topographical conditions or the recompletion of a well previously drilled to a deeper horizon. All operators offsetting the proposed location shall be notified of the application by registered or certified mail, and the application shall state that such notice has been furnished. The Director may approve the application upon receipt of written waivers from all operators offsetting the proposed location or if no written objection to the unorthodox location has been entered within 20 days after the Director has received the application."

### (c) "<u>Rule 5</u>" shall read in its entirety as follows:

"<u>RULE 5</u>. The allowable for a standard proration unit (158 through 162 acres) shall be based on a depth bracket allowable of 740 barrels of oil per day, and in the event there is more than one well on a 160-acre proration unit, the operator may produce the allowable assigned to the unit from the wells on the unit in any proportion. The allowable assigned to a non-standard proration unit shall bear the same ratio to a standard allowable as the acreage in such non-standard unit bears to 160 acres."

## IT IS FURTHER ORDERED THAT:

(3) The location of all wells presently drilling to or completed in the Devonian formation within the Lea-Devonian Pool or within one mile thereof that does not comply with the well location requirements of <u>Rule 3 A</u> is hereby granted an exception to said requirements. The operator shall notify the Hobbs District Office of the Division in writing of the name and location of such a well within 30 days from the date of this order.

(4) Jurisdiction is hereby retained for the entry of such further orders as the Division may deem necessary.

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

STATE OF NEW MEXICO OIL CONSERVATION DIVISION 1 • 00 ( WILLIAM J. LEMAY Director

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