# 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:

CASE NO. 9145 Order No. R-8497

APPLICATION OF MARATHON OIL COMPANY FOR POOL CREATION, SPECIAL POOL RULES AND DISCOVERY ALLOWABLE, LEA COUNTY, NEW MEXICO.

### ORDER OF THE DIVISION

#### BY THE DIVISION:

This cause came on for hearing at 8:15 a.m. on June 3, 1987, at Santa Fe, New Mexico, before Examiner David R. Catanach.

NOW, on this <u>28th</u> day of August, 1987, 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) Division Case Nos. 9145 and 9146 were consolidated at the time of the hearing for the purpose of testimony.
- (3) The applicant, Marathon Oil Company (Marathon), seeks the creation of a new pool for the production of oil from the Siluro-Devonian formation consisting of the S/2 SE/4 of Section 14, Township 16 South, Range 38 East, NMPM, Lea County, New Mexico, and further seeks the promulgation of temporary special rules and regulations for said pool including a provision for 80-acre spacing and proration units and designated well locations.
- (4) The applicant further seeks the assignment of an oil discovery allowable pursuant to Division General Rule 509 to its Benson Well No. 1 located 330 feet from the South line and 990 feet from the East line (Unit P) of Section 14,

-2-Case No. 9145 Order No. R-8497

Township 16 South, Range 38 East, NMPM, Lea County, New Mexico.

- (5) By Order No. R-8451 entered in Case No. 9133 and effective June 1, 1987, the Division, on its own motion and upon the recommendation of the Hobbs district office of the Division, defined the producing formation in the Benson Well No. 1 to be the Devonian formation and created the North Knowles-Devonian Pool consisting of the SE/4 of said Section 14, Township 16 South, Range 38 East, NMPM, Lea County, New Mexico.
- (6) Inasmuch as the subject pool has already been created and defined by the Division, that portion of the application concerning the creation of a new Siluro-Devonian pool should be dismissed.
- (7) James A. Davidson, an interest owner in the S/2 SE/4 of said Section 14 whose interest in the SE/4 SE/4 of said Section 14 was compulsorily pooled by Marathon by Division Order No. R-8282 entered in Case No. 8960, appeared at the hearing in opposition to the establishment of 80-acre spacing for the North Knowles-Devonian Pool.
- (8) The applicant presented a decline curve analysis based upon the production history of the Benson Well No. 1 which indicates the total recoverable reserves to be 109,663 barrels of oil.
- (9) The applicant further presented a volumetric reserve calculation based upon known reservoir parameters and assuming 80-acre drainage which indicates reserves to be approximately 106,835 barrels of oil.
- (10) Comparison of reserve estimates obtained from the decline curve analysis and the volumetric analysis indicates that one well should be capable of draining an 80-acre area in this reservoir.
- (11) The applicant further presented economic evidence which indicates that based upon the recoverable reserve estimates obtained for the Benson Well No. 1, it would be uneconomical to drill wells on 40-acre proration units.
- (12) The evidence presented in this case justifies the establishment of 80-acre spacing and proration units and, therefore, in order to prevent the economic loss caused by the drilling of unnecessary wells, to avoid the augmentation of risk arising from the drilling of an excessive number of

-3-Case No. 9145 Order No. R-8497

wells, to prevent reduced recovery which might result from the drilling of too few wells, and to otherwise prevent waste and protect correlative rights, temporary special rules and regulations providing for 80-acre spacing units should be promulgated for the North Knowles-Devonian Pool.

- (13) The applicant requested at the hearing that the temporary special rules and regulations be established for a period of two years but testified that sufficient data necessary to adopt permanent rules for the pool would be available in approximately one year.
- (14) Temporary special rules and regulations should be established for a period of 18 months in order to allow the operators in the subject pool to gather reservoir information to establish the area that can be efficiently and economically drained and developed by one well.
- (15) Said temporary rules and regulations should also provide for well locations to be within 150 feet of the center of a governmental quarter-quarter section.
- (16) The applicant further requested at the hearing that an oil discovery allowable pursuant to Division General Rule 509 be assigned to its Benson Well No. 1.
- (17) Evidence presented at the hearing indicates that the Benson Well No. 1 is currently producing at low rates and is incapable of producing its oil allowable and therefore the applicant's request for a discovery allowable should be denied.
- (18) This case should be reopened at an examiner hearing in February, 1989, at which time the operators in the subject pool should appear and show cause why the pool rules promulgated herein should not be rescinded.

# IT IS THEREFORE ORDERED THAT:

- (1) The application of Marathon Oil Company for the creation of a new pool for Siluro-Devonian production is hereby dismissed.
- (2) Temporary Special Rules and Regulations for the North Knowles-Devonian Pool are hereby promulgated as follows:

# SPECIAL RULES AND REGULATIONS FOR THE NORTH KNOWLES-DEVONIAN POOL

- RULE 1. Each well completed or recompleted in the North Knowles-Devonian Pool or in the Devonian formation within one mile thereof, and not nearer to or within the limits of another designated Devonian oil pool, shall be spaced, drilled, operated, and produced in accordance with the Special Rules and Regulations hereinafter set forth.
- RULE 2. Each well shall be located on a standard unit containing 80 acres, more or less, consisting of the N/2, S/2, E/2, or W/2 of a governmental quarter section; provided, however, that nothing contained herein shall be construed as prohibiting the drilling of a well on each of the quarter-quarter sections in the unit.
- RULE 3. For good cause shown, the Director may grant an exception to the requirements of Rule 2 without notice and hearing when the application is for a non-standard unit comprising a single quarter-quarter section or lot. All operators offsetting the proposed non-standard unit 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 if, after a period of 30 days, no offset operator has entered an objection to the formation of such non-standard unit.

The allowable assigned to any such non-standard unit shall bear the same ratio to a standard allowable in the North Knowles-Devonian Pool as the acreage in such non-standard unit bears to 80 acres.

- RULE 4. Each well shall be located within 150 feet of the center of a governmental quarter-quarter section or lot.
- RULE 5. The Division Director may grant an exception to the requirements of Rule 4 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 another horizon. All operators offsetting the proration unit 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 proration unit or if no objection to the unorthodox

location has been entered within 20 days after the Director has received the application.

RULE 6. Top unit allowable for a standard proration unit (79 through 81 acres) shall be based on a depth bracket allowable of 535 barrels per day, and in the event there is more than one well on an 80-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 80 acres.

#### IT IS FURTHER ORDERED THAT:

- (3) The portion of the application requesting that a discovery allowable be assigned to the Benson Well No. 1 is hereby denied.
- (4) The locations of any other wells, presently drilling to or completed in the North Knowles-Devonian Pool or within one mile thereof, and not nearer to or within the limits of another designated Devonian pool, are hereby approved; the operator of any well having an unorthodox location shall notify the Hobbs District Office of the Division in writing of the name and location of the well on or before November 1, 1987.
- (5) Pursuant to Paragraph A. of Section 70-2-18, NMSA 1978 Comp., contained in Laws of 1969, Chapter 271, existing oil wells in the North Knowles-Devonian Pool shall have dedicated thereto 80 acres in accordance with the foregoing pool rules; or, pursuant to Paragraph C. of said Section 70-2-18, existing wells may have non-standard spacing or proration units established by the Division and dedicated thereto.

Failure to file new Forms C-102 with the Division dedicating 80 acres to a well or to obtain a non-standard unit approved by the Division within 60 days from the date of this order shall subject the well to cancellation of allowable. Until said Form C-102 has been filed or until a non-standard unit has been approved, and subject to said 60-day limitation, each well presently drilling to or completed in the North Knowles-Devonian Pool or in its corresponding vertical limits as described in Ordering Paragraph No. (1) above, or within one mile thereof, shall

-6-Case No. 9145 Order No. R-8497

receive no more than one-half of a standard allowable for said pool.

- (6) This case shall be reopened at an examiner hearing in February, 1989, at which time the operators in the subject pool may appear and show cause why the North Knowles-Devonian Pool rules should not be rescinded.
- (7) Jurisdiction of this cause is retained for the entry of such further orders as the Division may deem necessary.

 ${\tt DONE}$  at Santa Fe, New Mexico, on the day and year hereinabove designated.

STATE OF NEW MEXICO OIL CONSERVATION DIVISION

WILLIAM J. LEMAY

Director

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