July 18, 1995

KELLAHIN AND KELLAHIN Attorneys at Law P. O. Drawer 2265 Santa Fe, New Mexico 87504

ATTN: Tom Kellahin

RE: CASE NO. 11261

ORDER NO. R-10082-B

Dear Sir:

Enclosed herewith are two copies of the above-referenced Division order recently entered in the subject case.

Sincerely,

Sally E, Martinez

Administrative Secretary

cc: BLM - Carlsbad

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W. THOMAS KELLAHIN*

7/7/95

Here's A 549902100

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. 11261 ORDER NO. R-10082-B

APPLICATION OF MARATHON OIL COMPANY FOR AN ADDITIONAL HIGH ANGLE/HORIZONTAL WELL, AND TO AMEND DIVISION ORDER R-10082-A, LEA COUNTY, NEW MEXICO

ORDER OF THE DIVISION

BY THE DIVISION

This cause came on for hearing at 8:15 a.m. on April 20, 1995, at Santa Fe, New Mexico, before Examiner Michael E. Stogner.

NOW, on this _____ day of July, 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) The applicant, Marathon Oil Company, is the operator of the Denton Horizontal Well Project being conducted in the Denton-Devonian Pool within its J. M. Denton lease (the "Project") consisting of the SW/4, N/2SE/4 and SE/4SE/4 of Section 11, T15S, R37E, NMPM, Lea County, New Mexico.
- (3) On March 15, 1994, the Division entered Order R-10082 which approved a high angle/horizontal/directional drilling pilot project consisting of the above described acreage and granted Marathon's request to use the J. M. Denton Well No. 5 located in Unit N of said Section 11 as the initial project well to be re-entered and drilled as a high angle/horizontal/ directional well.
- (4) This project is an attempt to test the feasibility of improving ultimate recovery from the Denton-Devonian Pool by placing the producing lateral of the horizontal wells at a high structural point of greatest reservoir thickness within the separate fault blocks in the project area between existing or formerly producing oil wells to produce remaining oil that may not have been recovered by any prior well.
- (5) By drilling high angle/horizontal/directional drilled wellbores, the applicant is attempting to increase the probability of encountering portions of the Denton-Devonian Pool which have not been adequately produced with existing vertical wells resulting in the recovery of a greater amount of gas and oil, thereby preventing waste.
- (6) On November 10, 1994, the Division entered Order R-10082-A which approved Marathon's request to substitute for its original selection of the J. M. Denton Well No. 5 as the initial project well the following two wells:
 - (a) J. M. Denton Well No. 4 located 1980 feet from the South line and 2080 feet from the West line (Unit K) of said Section 11; and

- (b) J. M. Denton Well No. 6 located 660 feet from the South line and 990 feet from the East line (Unit P) of said Section 11 for the subject high angle/ horizontal/directional drilling pilot project.
- (7) Now Marathon seeks to add the originally selected J. M. Denton Well No. 5 to the approved project wells because the drilling of the J. M. Denton Well No. 4 as a short radius horizontal well has been successful. Marathon now desires to attempt a medium radius well from the J. M. Denton Well No. 4 wellbore to target additional in-fill reserves in this same fault block.
- (8) In addition, Marathon seeks a special oil allowable equal to the depth bracket allowable for a 40-acre spacing unit times the number of spacing units intersected by the horizontal well and the authority to simultaneously produce said allowable with any existing vertical well which may also be producing on any such unit.
- (9) In as much as the exact distance and direction of the lateral portion of the J. M. Denton Well No. 5 is not known at this time, the Applicant seeks approval to be allowed to drill and produce said lateral portion anywhere within an area designated a target window as follows: commencing at a distance not closer than 330 feet from any of the side boundaries of the proposed project area so that within the drilling window no portion of the wellbore open for production shall be closer than 330 feet to the outer boundary of the project area.
 - (10) No offset operator appeared and objected to the application.
 - (11) The applicant's request is reasonable and should be granted.
- (12) In the interest of conservation, the prevention of waste and the protection of correlative rights, the application of Marathon Oil

Company in this matter should be approved.

- (13) The applicant should be required to determine the actual location of the kick-off point prior to directional drilling operation. Also, the applicant should notify the supervisor of the Hobbs District Office of the Division of the proposed direction of the horizontal hole and of the date and time of the commencement of directional drilling in order that the same may be witnessed.
- (14) The applicant should be required to conduct a directional survey on the lateral portion of the wellbore during or after completion of the drilling operations on the well and submit a copy of said survey to both the Santa Fe and Hobbs Offices of the Division.

IT IS THEREFORE ORDERED THAT:

- (1) The application of Marathon Oil Company to amend Division Order R-10082-A is hereby approved.
- (2) The applicant is further authorized to utilize the existing J. M. Denton Well No 5, located at a standard surface location 660 feet from the South line and 1980 feet from the West line (Unit N) of Section 11, and horizontally drill (medium radius) in the following unconventional manner:

Squeeze perforations from approximately 11,390 feet to 11,476 feet. Mill casing from a depth of 11,370 feet to 11,420 feet. Set cement plug and kick off from the vertical at a depth of approximately 11,400 feet and drill in a northeast direction to penetrate the Devonian formation **provided however** that all of the producing interval of the well shall be confined to the 40-acre spacing unit consisting of the SE/4SW/4 (Unit N) of said Section 11 and shall be no closer than 330 feet to the eastern and southern boundaries of said spacing unit.

- (3) The applicant shall conduct a directional survey on the lateral portion of the wellbore during or after completion of drilling operations tin order to verify that the bottomhole location and producing lateral are in compliance with the terms of this order.
- (4) The applicant shall notify the supervisor of the Hobbs district office of the Division of the date and time of conductance of any directional survey in order that the same may be witnessed.
- (5) Upon completion of the horizontal drilling operations on the well, the applicant shall file a copy of said directional survey along with a final report specifying the depth and location of the terminus of said horizontal wellbore to both the Santa Fe and Hobbs Offices of the Division.
- (6) The subject well shall be assigned an allowable of 365 barrels of oil per day in the Denton-Devonian Pool.
- (7) Jurisdiction of this cause is 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

WILLIAM J. LEMAY Director