

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 WELLBORE AND TO AMEND DIVISION ORDER NO.  
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 17th day of July, 1995, the Division Director, having considered 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) By Order No. R-10082, issued in Case No. 10922 and dated March 15, 1994, the Division, upon application of Marathon Oil Company ("Marathon"), approved a high angle/horizontal directional drilling pilot project in the Denton-Devonian Pool underlying the SW/4, N/2 SE/4 and SE/4 SE/4 of Section 11, Township 15 South, Range 37 East, NMPM, Lea County, New Mexico. This order further authorized the applicant to utilize its 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 said Section 11, to horizontally drill to an unorthodox bottomhole location 1154 feet from the South line and 2305 feet from the West line (Unit N) of said Section 11.

(3) This project was initiated by Marathon 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 wells to produce any remaining unrecovered oil.

(4) By drilling high angle/horizontal directionally drilled wellbores, the operator 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 oil, thereby preventing waste.

(5) Division Order No. R-10082-A, dated November 28, 1994, amended said Order No. R-10082 and authorized Marathon to horizontally drill its J. M. Denton Well Nos. 4 and 6, located in Units "K" and "P", respectively, of said Section 11 in place of the J. M. Denton Well No. 5, which was omitted. Said amendment further provided for a 330 foot set-back requirement from the outer boundary of the project area approved in the previous order on the horizontal and/or producing portions of the J. M. Denton Well Nos. 4 and 6. Decretory Paragraph Nos. (2), (3), (4), (5), and (6) of said original Order No. R-10082 were superseded by Order No. R-10082-A.

(6) The applicant at this time seeks to further amend the provisions currently governing the subject high angle/horizontal project area and readmit its authority to horizontally drill said J. M. Denton Well No. 5 in a northeasterly direction. The applicant further seeks the designation of a target window for said well such that the horizontal or producing portion of said wellbore shall be no closer than 330 feet to the outer boundary of said project area, the creation and formation of an oversized and irregularly shaped spacing and proration unit to accommodate said wellbore, and the assignment of a special oil allowable for such non-standard oil proration unit based upon the number of standard 40-acre proration units within the project area which are developed or traversed by a horizontal wellbore.

(7) Marathon has successfully completed the J. M. Denton Well No. 4 as a short radius horizontal well and now desires to add the originally selected J. M. Denton Well No. 5 to the approved project wells in an attempt to recover additional in-fill reserves in this same fault block.

(8) The applicant's allowable request is reasonable and should be granted.

(9) No other offset operator and/or interest owner appeared at the hearing in opposition to the application.

(10) Marathon's plan of continued development for said project is reasonable and based upon good engineering principles.

(11) 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.

(12) The allowable assigned to the drilling tract for this particular well should be assigned by the supervisor of the Hobbs district office of the Division and should be based upon the number of standard 40-acre proration units within the project area which are developed or traversed by said lateral.

(13) The applicant should be required to determine the actual location of the kick-off point within said well prior to commencing directional drilling operations. Also, the applicant should be required to conduct a directional survey on the lateral portion of said wellbore during or after completion of drilling operations.

(14) The applicant should notify the supervisor of the Hobbs district office of the Division of the date and time of conductance of any directional surveys in order that the same may be witnessed.

(15) The applicant should be required to submit copies of all directional surveys conducted on the subject well 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 No. R-10082-A is hereby approved.

(2) Within the high angle/horizontal directional drilling pilot project area in the Denton-Devonian Pool underlying the SW/4, N/2 SE/4 and SE/4 SE/4 of Section 11, Township 15 South, Range 37 East, NMPM, Lea County, New Mexico, established by Division Order No. R-10082, the applicant is further authorized to horizontally drill 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 said Section 11.

(3) The horizontal wellbore may traverse quarter-quarter section lines within the project area provided that the horizontal or producing portion of said wellbore shall be located no closer than 330 feet from the outer boundary of the project area.

(4) The applicant shall determine the actual location of the kick-off points in said well prior to commencing directional drilling operations. Also, the applicant shall conduct a directional survey on the lateral portion of said wellbore during or after completion of drilling operations.

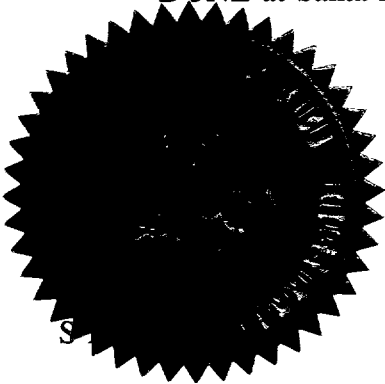
(5) The applicant shall notify the supervisor of the Hobbs district office of the Division of the date and time of conductance of any directional surveys in order that the same may be witnessed.

(6) The applicant shall submit copies of all directional surveys conducted on the subject well to both the Santa Fe and Hobbs offices of the Division.

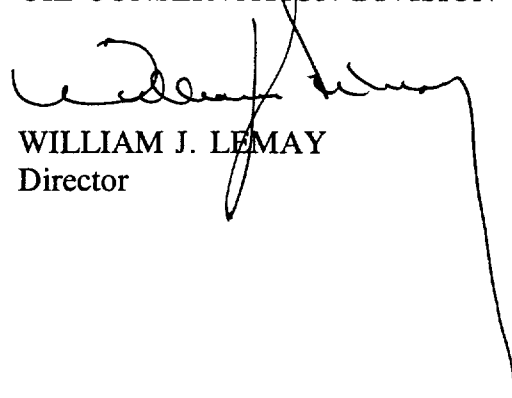
(7) The allowable assigned to the drilling tract for this particular well shall be assigned by the supervisor of the Hobbs district office of the Division and shall be based upon the number of standard 40-acre proration units within the project area which are developed or traversed by said lateral.

(8) 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