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. 10208 Order No. R-9425

APPLICATION OF MCKAY OIL CORPORATION FOR A HORIZONTAL DIRECTIONAL DRILLING PROJECT AND SPECIAL OPERATING RULES THEREFOR, CHAVES COUNTY, NEW MEXICO.

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 8:15 a.m. on January 10, 1991, at Santa Fe, New Mexico, before Examiner David R. Catanach.

NOW, on this 25th day of January, 1991, 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. 10190, 10205, 10206, 10207 and 10208 were consolidated at the time of the hearing for the purpose of testimony.

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(3) The applicant, McKay Oil Corporation, seeks authority to initiate a horizontal directional drilling project in the NE/4 of Section 25, Township 5 South, Range 21 East, NMPM, Chaves County, New Mexico, being a standard 160-acre gas spacing and proration unit in the Undesignated West Pecos Slope-Abo Gas Pool. The applicant proposes to drill its West Fork Federal Unit Well No. 5 located at an unorthodox surface location 660 feet from the North line and 460 feet from the East line (Unit A) of said Section 25 in the following manner:

Drill vertically to a depth of approximately 3400 feet through the Abo formation, log well, plug back and set production casing, kick off from vertical at a depth of approximately 2817 feet and commence a short radius curve in an undetermined direction building angle to approximately 90 degrees, commence drilling horizontally at a depth of approximately 2877 feet a distance of approximately 500 feet.

(4) The applicant further seeks special rules and provisions within the project area including the designation of a prescribed area limiting the horizontal displacement of the wellbore such that the well can be no closer than 330 feet to the outer boundary of its assigned spacing and proration unit.

(5) The evidence and testimony presented indicates that the proposed horizontal wellbore, which is experimental in nature, should encounter a greater amount of natural fractures within the Abo formation than would a conventional wellbore, which should ultimately result in the recovery of a greater amount of gas from the proposed proration unit, thereby preventing waste.

(6) Evidence and testimony further indicate that the proposed unorthodox surface location is necessitated by topographic conditions within the NE/4 of said Section 25.

(7) The normal setback requirement for a West Pecos Slope-Abo Gas Pool well, pursuant to Rule 104 (C)(II) of the Division Rules and Regulations, is 660 feet from the outer boundary of the proration unit.

(8) The proposed non-standard bottomhole location is necessitated by the unorthodox surface location described above.

(9) According to evidence presented, the subject well is located within the applicant's West Fork Unit Area which contains therein all affected offset acreage surrounding the NE/4 of said Section 25.

(10) There are no other operators who offset the proposed horizontal directional drilling project.

(11) According to further evidence the proposed surface location is such that there is a possibility, depending on the kick off direction, that the horizontal portion of the wellbore may encroach upon the 330 foot setback as proposed by the applicant.

(12) Should the horizontal portion of the wellbore encroach upon the 330 foot setback requirement and commercial gas production is established within the well, the applicant should be required to reopen this case and appear and present evidence and testimony in order to demonstrate that correlative rights will still be protected.

(13) No party appeared at the hearing in opposition to the application.

(14) Approval of the proposed horizontal directional drilling project should result in the recovery of an additional amount of gas from the proposed proration unit which may not otherwise be recovered, thereby preventing waste, and will not violate correlative rights provided that the proposed horizontal drainhole is in compliance with the setback requirements described in Finding No. (4) above.

(15) The applicant should be required to conduct a directional survey on the vertical portion of the wellbore prior to commencing directional drilling operations, and on the horizontal portion of the wellbore during or subsequent to completion of directional drilling operations in order that the direction, extent and terminus of said horizontal drainhole may be determined to be in compliance with the terms of this order.

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(16) The applicant should further be required to submit copies of said directional surveys to the Santa Fe and Artesia offices of the Division.

(17) The applicant should notify the supervisor of the Artesia district office of the Division of the date and time of commencement of directional drilling operations and of the conductance of any directional surveys on the proposed well in order that these operations may be witnessed.

IT IS THEREFORE ORDERED THAT:

(1) The application of McKay Oil Corporation for a horizontal directional drilling project in the NE/4 of Section 25, Township 5 South, Range 21 East, NMPM, Undesignated West Pecos Slope-Abo Gas Pool, Chaves County, New Mexico, is hereby approved.

(2) The applicant is further authorized to drill its West Fork Federal Unit Well No. 5 located at an unorthodox surface location 660 feet from the North line and 460 feet from the East line (Unit A) of said Section 25 in the following manner:

Drill vertically to a depth of approximately 3400 feet through the Abo formation, log well, plug back and set production casing, kick off from vertical at a depth of approximately 2817 feet and commence a short radius curve in an undetermined direction building angle to approximately 90 degrees, commence drilling horizontally at a depth of approximately 2877 feet a distance of approximately 500 feet.

(3) The NE/4 of said Section 25 shall be dedicated to the above-described well forming a standard 160-acre gas spacing and proration unit for the West Pecos Slope-Abo Gas Pool.

(4) No part of the horizontal wellbore shall be located closer than 330 feet from the outer boundary of the proration unit.

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(5) Should the horizontal portion of the wellbore encroach upon the 330 foot setback requirement and commercial gas production is established within the well, the applicant shall be required to reopen this case and appear and present evidence and testimony in order to demonstrate that correlative rights will still be protected.

(6) The applicant shall be required to conduct a directional survey on the vertical portion of the wellbore prior to commencing directional drilling operations, and on the horizontal portion of the wellbore during or subsequent to completion of directional drilling operations in order that the direction, extent and terminus of said horizontal drainhole may be determined to be in compliance with the terms of this order.

(7) The applicant shall further be required to submit copies of said directional surveys to the Santa Fe and Artesia offices of the Division.

(8) The applicant shall notify the supervisor of the Artesia district office of the Division of the date and time of commencement of directional drilling operations and of the conductance of any directional surveys on the proposed well in order that these operations may be witnessed.

(9) 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

WILLIAM J. LEMAY Director

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