

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. 10198
Order No. R-9419

APPLICATION OF RICHMOND PETROLEUM INC.
FOR A HORIZONTAL DIRECTIONAL DRILLING
PILOT PROJECT, SPECIAL OPERATING RULES
THEREFOR, AN UNORTHODOX OIL WELL
LOCATION, AND A NON-STANDARD OIL PRO-
DUCTION UNIT, RIO ARriba 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.

CASE NO. 10198
Order No. R-9419
Page -2-

(2) The applicant, Richmond Petroleum Inc., seeks authority to initiate a horizontal directional drilling pilot project in Irregular Section 28, Township 27 North, Range 2 West, NMPM, Rio Arriba County, New Mexico, being a non-standard 430.56-acre oil spacing and proration unit in the Undesignated Gavilan-Mancos Oil Pool. The applicant proposes to drill its Jicarilla Richmond "JV" Well No. 28, located at an unorthodox surface oil well location 500 feet from the South and East lines (Unit I) of said Section 28 in the following unconventional manner:

Directionally drill to a depth of approximately 7100 feet, being the top of the Mancos formation, at which point the wellbore will be located no closer than 790 feet from the South and East lines of said Section 28, plug back and kick off from vertical at a depth of approximately 6645 feet, commence a medium radius curve in a northwesterly direction building angle to approximately 90 degrees, commence drilling horizontally at a depth of approximately 7412 feet a distance not in excess of 2000 feet.

(3) 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 790 feet to the outer boundary of its assigned spacing and proration unit.

(4) The proposed well and project area are located within one mile of the boundary of the Gavilan-Mancos Oil Pool, and as such are subject to the Special Rules and Regulations for said pool as promulgated by Division Order No. R-7407, as amended, which require standard 640-acre spacing and proration units, an oil allowable of 800 barrels of oil per day per standard proration unit, and designated well locations such that a well cannot be located closer than 790 feet to the outer boundary of the proration unit nor closer than 330 feet to any governmental quarter-quarter section line or subdivision inner boundary.

CASE NO. 10198
Order No. R-9419
Page -3-

(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 Mancos formation than would a conventional wellbore, which should ultimately result in the recovery of a greater amount of oil from the proposed proration unit, thereby preventing waste.

(6) The proposed unorthodox surface location and directional drilling is necessitated by topographic obstructions within said Section 28, namely the presence of dense forest land.

(7) The non-standard oil proration unit is necessitated by a variation in the legal subdivision of the United States Public Lands Survey.

(8) The entire non-standard proration unit may be reasonably presumed productive from the Gavilan-Mancos Oil Pool and the non-standard proration unit can be efficiently and economically drained and developed by the subject well.

(9) According to evidence presented, the offset acreage in Sections 21 through 23, 27 and 29 is all under Jicarilla Apache Tribal ownership with the applicant, and the offset acreage to the South in Sections 3 and 4, Township 26 North, Range 2 West, is contained within the Amoco Production Company operated Bear Canyon Unit.

(10) Amoco Production Company initially opposed the application but has subsequently withdrawn its objection by stipulation of the applicant and Amoco.

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

(12) Approval of the proposed horizontal directional drilling pilot project should result in the recovery of an additional amount of oil 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. (3) above.

CASE NO. 10198
Order No. R-9419
Page -4-

(13) The proposed well and project area should receive an allowable which bears the same ratio to a standard allowable as the proposed 430.56-acre non-standard proration unit bears to a standard 640-acre proration unit, or 538 barrels of oil per day.

(14) The applicant should be required to conduct a directional survey on the directionally drilled portion of the wellbore prior to commencing horizontal directional drilling operations, and on the horizontal portion of the wellbore during or subsequent to completion of horizontal 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.

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

(16) The applicant should notify the supervisor of the Aztec 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 applicant, Richmond Petroleum Inc., is hereby authorized to initiate a horizontal directional drilling pilot project in Irregular Section 28, Township 27 North, Range 2 West, NMPM, Rio Arriba County, New Mexico, being a non-standard 430.56-acre oil spacing and proration unit in the Undesignated Gavilan-Mancos Oil Pool. The applicant is further authorized to drill its Jicarilla Richmond "JV" Well No. 28, located at an unorthodox surface oil well location 500 feet from the South and East lines (Unit I) of said Section 28 in the following unconventional manner:

CASE NO. 10198
Order No. R-9419
Page -5-

Directionally drill to a depth of approximately 7100 feet, being the top of the Mancos formation, at which point the wellbore will be located no closer than 790 feet from the South and East lines of said Section 28, plug back and kick off from vertical at a depth of approximately 6645 feet, commence a medium radius curve in a northwesterly direction building angle to approximately 90 degrees, commence drilling horizontally at a depth of approximately 7412 feet a distance not in excess of 2000 feet.

PROVIDED HOWEVER THAT no portion of the horizontal wellbore shall be located closer than 790 feet to the outer boundary of the project area.

(2) The subject well and project area shall receive an allowable equal to 538 barrels of oil per day.

(3) The applicant shall conduct a directional survey on the directionally drilled portion of the wellbore prior to commencing horizontal directional drilling operations, and on the horizontal portion of the wellbore during or subsequent to completion of horizontal 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.

(4) The applicant shall submit copies of said directional surveys to the Santa Fe and Aztec offices of the Division.

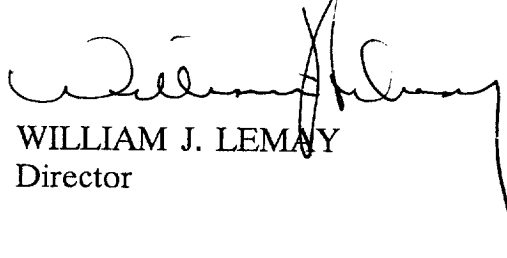
(5) The applicant shall notify the supervisor of the Aztec district office of the Division of the date and time of commencement of directional drilling operations and of the conductance of any directional surveys on the subject well in order that these operations may be witnessed.

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

CASE NO. 10198
Order No. R-9419
Page -6-

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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