

**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. 10161
Order No. R-9381**

**APPLICATION OF PETROLEUM DEVELOPMENT
CORPORATION FOR A HORIZONTAL DIRECTIONAL
DRILLING PILOT PROJECT AND FOR SPECIAL
POOL RULES, CHAVES AND ROOSEVELT COUNTIES,
NEW MEXICO.**

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 8:15 a.m. on November 14, 1990, at Santa Fe, New Mexico, before Examiner David R. Catanach.

NOW, on this 6th day of December, 1990, 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. 10161, 10162, 10163 and 10164 were consolidated at the time of the hearing for the purpose of testimony.

(3) The applicant, Petroleum Development Corporation, seeks authority to initiate a short radius horizontal directional drainhole pilot project in the SE/4 SW/4 of Section 25, Township 7 South, Range 31 East, NMPM, Chaves County, New Mexico, being a standard 40-acre oil spacing and proration unit in the Tomahawk-San Andres Pool.

(4) The applicant proposes to horizontally drill the existing JFG Enterprise Strange Federal Well No. 5 located 660 feet from the South line and 1980 feet from the West line (Unit N) of said Section 25 in the following manner:

Kick off from vertical at a depth of approximately 4003 feet and commence a short radius curve in a southeasterly direction building angle to approximately 75-85 degrees, commence drilling horizontally at a depth of approximately 4044 feet a distance of approximately 275 feet and bottoming said wellbore at a location no closer than 330 feet from the outer boundary of the proposed proration unit.

(5) The applicant requested that the Division Director be authorized to administratively approve the drilling of additional horizontal drainholes originating from the subject well.

(6) The applicant further requests the promulgation of special rules and regulations for the Tomahawk-San Andres Pool, Chaves and Roosevelt Counties, New Mexico, including provisions for administrative review of horizontal or high angle wellbores and the designation of a prescribed area limiting the horizontal extent of such wellbores such that they be no closer than 330 feet to the outer boundary of a standard 40-acre spacing unit.

(7) Under the provisions of Division General Rule No. 1207 (a)(4), the applicant is required to provide notice of its application for special pool rules to all operators of wells and each unleased mineral owner within the Tomahawk-San Andres Pool and to all operators of wells within one mile of the pool boundaries.

(8) The evidence presented indicates that the applicant failed to provide adequate notice of its application for special pool rules as described above, and therefore that portion of the application should be denied.

(9) Through its evidence and testimony, the applicant demonstrated that the proposed horizontal wellbore, which is experimental in nature, should encounter a substantially greater number of natural fractures within the San Andres formation than would a conventional wellbore, which may ultimately result in the recovery of a greater amount of oil from the proposed project area, thereby preventing waste.

(10) No offset operator and/or interest owner appeared in opposition to the proposed horizontal directional drilling pilot project.

(11) The pilot project area should be limited to the SE/4 SW/4 of said Section 25.

(12) No part of the horizontal wellbore should be located closer than 330 feet from the outer boundary of the project area.

(13) 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 subsequent to directional drilling operations in order that the direction, extent, and terminus of said wellbore may be determined to be in compliance with the proposed bottomhole location.

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

(15) The applicant should notify the supervisor of the Hobbs 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.

(16) The Division Director should be authorized to administratively approve the drilling of additional drainhole(s) originating from the subject well provided that:

- a) Application showing proposed drilling details, direction, extent and terminus of such additional drainhole(s) is filed with the Santa Fe office of the Division;
- b) A copy of such application is furnished to all offset operators;
- c) No objections from offset operators are received within 20 days after the Division has received the application.

(17) Approval of the proposed pilot project should result in the recovery of an additional amount of oil from the project area which may not otherwise be recovered, thereby preventing waste, and will not violate correlative rights.

IT IS THEREFORE ORDERED THAT:

(1) The application of Petroleum Development Corporation for a short radius horizontal directional drainhole pilot project in the SE/4 SW/4 of Section 25, Township 7 South, Range 31 East, NMPM, Tomahawk-San Andres Pool, Chaves County, New Mexico, is hereby approved.

(2) The applicant is further authorized to horizontally drill the existing JFG Enterprise Strange Federal Well No. 5 located 660 feet from the South line and 1980 feet from the West line (Unit N) of said Section 25 in the following manner:

Kick off from vertical at a depth of approximately 4003 feet and commence a short radius curve in a southeasterly direction building angle to approximately 75-85 degrees, commence drilling horizontally at a depth of approximately 4044 feet a distance of approximately 275 feet and bottoming said wellbore at a location no closer than 330 feet from the outer boundary of the proposed proration unit.

PROVIDED HOWEVER THAT, the horizontal portion of the subject well shall be located no closer than 330 feet from the outer boundary of the project area.

(3) The Division Director shall be authorized to administratively approve the drilling of additional drainhole(s) originating from the subject well provided that:

- a) Application showing proposed drilling details, direction, extent and terminus of such additional drainhole(s) is filed with the Santa Fe office of the Division;
- b) A copy of such application is furnished to all offset operators;
- c) No objections from offset operators are received within 20 days after the Division has received the application.

(4) 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 subsequent to directional drilling operations in order that the direction, extent, and terminus of said wellbore may be determined to be in compliance with the proposed bottomhole location.

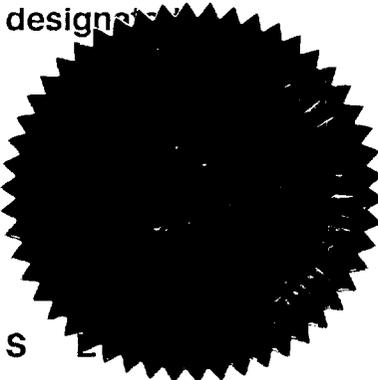
(5) The applicant shall further be required to submit copies of said directional surveys to the Santa Fe and Hobbs district offices of the Division.

(6) The applicant shall notify the supervisor of the Hobbs 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.

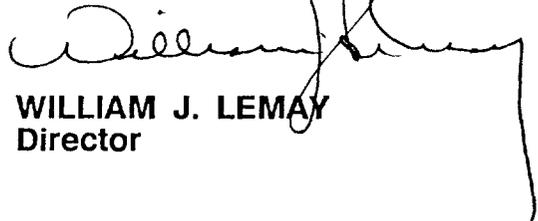
(7) That portion of the application requesting the promulgation of special pool rules for the Tomahawk-San Andres Pool including provisions for administrative review of horizontal or high angle wellbores is hereby denied.

(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