# 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. 10821 Order No. R-9972

# APPLICATION OF PETROLEUM DEVELOPMENT COMPANY FOR A SHORT RADIUS HORIZONTAL DIRECTIONAL DRILLING PROJECT AREA 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 September 9, 1993, at Santa Fe, New Mexico, before Examiner David R. Catanach.

NOW, on this 22nd day of September, 1993, 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. 10818, 10819, 10820 and 10821 were consolidated at the time of the hearing for the purpose of testimony.

(3) The applicant, Petroleum Development Company, seeks authority to institute a short radius horizontal directional drilling project in the Tom Tom-San Andres Pool on a portion of its Wattam Federal Lease comprising Lots 2, 3 and 4, the E/2, SE/4 NW/4, and the E/2 SW/4 of Section 7 and the S/2 NW/4 and SW/4 of Section 8, Township 8 South, Range 31 East, NMPM, Chaves County, New Mexico, hereinafter referred to as the "project area".

(4) At the time of the hearing the applicant requested that the proposed project area be contracted to include only the NE/4 of Section 7 and the S/2 NW/4 and N/2 SW/4 of Section 8, Township 8 South, Range 31 East, NMPM.

(5) Within the project area the applicant seeks authority to:

- a) horizontally drill the existing Wattam Federal Well No. 2 located 1980 feet from the South line and 660 feet from the West line (Unit L) of Section 8, and the plugged and abandoned Exxon Corporation Wattam Federal Well No. 6 located 643 feet from the North line and 782 feet from the East line (Unit A) of Section 7, in a direction and lateral distance to be determined by the applicant;
- b) traverse quarter and quarter-quarter section lines within the project area by either of its proposed horizontal wellbores;
- c) drill the proposed horizontal wellbores to within 100 feet of the outer boundary of the project area; and,
- d) administratively receive an adjustable project allowable based upon the number of standard 40-acre proration units within the project area which are developed or traversed by a horizontal wellbore.

(6) The applicant further seeks the promulgation of special operating rules and procedures within the project area including provisions for administrative authorization of further horizontal wellbores, the formation of non-standard or irregular sized spacing units, and the assignment of special oil allowables.

(7) At the time of the hearing, the applicant requested that its proposal for the establishment of administrative authorization procedures within the project area be <u>dismissed</u>.

(8) The proposed project area is located within the Tom Tom-San Andres Pool which is currently governed by Statewide Rules and Regulations which require standard 40-acre spacing and proration units with wells to be located no closer than 330 feet from the outer boundary of the spacing unit, a standard oil allowable of 80 barrels of oil per day, and a limiting gas-oil ratio of 2,000 cubic feet of gas per barrel of oil.

(9) Testimony by the applicant indicates that it has successfully horizontally drilled wells in various San Andres Pools in this area.

(10) Division records indicate that the two subject wells are the only wells which have previously developed the Tom Tom-San Andres Pool within the project area.

(11) The applicant now seeks approval to develop the proposed project area with horizontal drilling technology by initially horizontally drilling its Wattam Federal Well Nos. 2 and 6, as described above.

(12) The procedures proposed by the applicant are more flexible and lenient than previously approved by the Division.

(13) According to applicant's testimony, it has tentatively determined that the Wattam Federal Well Nos. 2 and 6 will be drilled in a northeast and southwest direction, respectively, however, the applicant seeks the flexibility to alter the proposed direction of either wellbore in the project area when technological or geological data warrant such alteration.

(14) The applicant further seeks the flexibility to traverse quarter or quarter-quarter section lines within the project area with either of its proposed horizontal wellbores in order to remove unnecessary restrictions on lateral wellbore distances which may restrict applicant's ability to test the limits of horizontal drilling technology.

(15) Horizontal drilling within the project area should result in the recovery of a significant volume of oil and gas which was not recovered by the existing conventional vertical wellbores, thereby preventing waste.

(16) The NE/4 of Section 7 and the S/2 NW/4 and N/2 SW/4 of Section 8 is a single Federal lease which is commonly owned throughout. Approval of the subject application as proposed should not result in the violation of the correlative rights of any interest owner within the project area.

(17) According to applicant's testimony, the proposed 100 foot setback will allow for additional drilling flexibility, however, applicant further testified that it will attempt to maintain a reasonable distance from the outer boundary of the project area within its proposed horizontal wellbores.

(18) Murphy Operating Corporation, Yates Energy Corporation and Yates Petroleum Corporation, the only offset operators to the proposed project, were notified of the application in this case but did not appear in protest.

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

(20) In the interest of conservation and prevention of waste, the application of Petroleum Development Company for a short radius horizontal directional drilling project within the NE/4 of Section 7 and the S/2 NW/4 and N/2 SW/4 of Section 8 should be approved.

(21) The allowable assigned to the project area 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 a horizontal wellbore.

(22) The applicant should be authorized to produce the project allowable from any of the wells within the project area in any proportion.

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

(24) 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.

(25) 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 applicant, Petroleum Development Company, is hereby authorized to institute a short radius horizontal directional drilling project in the Tom Tom-San Andres Pool on a portion of its Wattam Federal Lease comprising the NE/4 of Section 7 and the S/2 NW/4 and N/2 SW/4 of Section 8, Township 8 South, Range 31 East, NMPM, Chaves County, New Mexico, hereinafter referred to as the "project area".

(2) Within the project area, the applicant is further authorized to horizontally drill the existing Wattam Federal Well No. 2 located 1980 feet from the South line and 660 feet from the West line (Unit L) of Section 8, and the plugged and abandoned Exxon Corporation Wattam Federal Well No. 6 located 643 feet from the North line and 782 feet from the East line (Unit A) of Section 7, in a direction and lateral distance to be determined by the applicant.

(3) The horizontal wellbores may traverse quarter and quarter-quarter section lines within the project area provided that the horizonal or producing portion of each wellbore shall be located no closer than 100 feet from the outer boundary of the project area.

(4) The applicant shall determine the actual location of the kick-off points in each well prior to commencing directional drilling operations. Also, the applicant shall conduct a directional survey on the lateral portion of each 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 project area in the Tom Tom-San Andres Pool shall be assigned by the supervisor of the Division's Hobbs district office and shall be equal to 80 BOPD X the number of standard 40-acre proration units within the project area which are developed or traversed by a horizontal wellbore.

(8) The portion of the application requesting the establishment of administrative authorization procedures within the project area is hereby <u>dismissed</u>.

(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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