

**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. 10729
Order No. R-9911**

**APPLICATION OF MERIDIAN OIL INC.
FOR A HIGH ANGLE/HORIZONTAL DIRECTIONAL
DRILLING PILOT PROJECT, SPECIAL OPERATING
RULES THEREFOR, A SPECIAL PROJECT GAS
ALLOWABLE AND A NON-STANDARD GAS SPACING
AND PRORATION 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 May 20, 1993, at Santa Fe, New Mexico, before Examiner David R. Catanach.

NOW, on this 10th day of June, 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) The applicant, Meridian Oil Inc., seeks authority to initiate a high angle/horizontal directional drilling pilot project in the Blanco-Mesaverde Pool underlying all of Section 3, Township 25 North, Range 6 West, NMPM, Rio Arriba County, New Mexico, thereby creating a non-standard 642.52-acre gas spacing and proration unit for said pool.

(3) The applicant proposes to drill its Canyon Largo Unit Well No. 388 from a standard surface location 2040 feet from the South line and 1625 feet from the West line (Unit K) of Section 3 in the following unconventional manner:

Drill vertically to a depth of approximately 4,707 feet, kick off from the vertical at this depth and drill in an east-northeast direction building angle to approximately 88 degrees so as to penetrate the upper portion of the Point Lookout formation at a true vertical depth of approximately 5,095 feet. Continue drilling horizontally a distance of approximately 2,600 feet.

(4) The applicant further seeks:

- a) the adoption of special operating provisions and rules within the pilot project area including the designation of a prescribed area limiting the horizontal displacement of said well's producing interval such that it can be no closer than 790 feet from the outer boundary of Section 3;
- b) approval of a 642.52-acre non-standard gas spacing and proration unit comprising all of Section 3;
- c) a special project gas allowable calculated by utilizing an acreage factor of 2.0 in the gas allowable formula.

(5) The proposed well is located within the boundaries of the Blanco-Mesaverde Pool and is therefore subject to the Special Rules and Regulations for said pool and the General Rules for the Prorated Gas Pools of New Mexico, both contained within Division Order No. R-8170, as amended.

(6) According to applicant's geologic evidence, the proposed well is located at the southwest edge of the Blanco-Mesaverde Pool. The proposed well is designed to test the effectiveness of horizontal drilling in recovering gas from an area of the pool which has limited potential for gas recovery from conventional vertical wellbores.

(7) The potentially productive zone in the subject wellbore is the Point Lookout interval. The Point Lookout interval is characterized by natural fractures oriented in a north-northeast south-southwest direction.

(8) Through its evidence and testimony, the applicant demonstrated that the proposed horizontal wellbore should encounter a substantially greater number of natural fractures within the Point Lookout interval than would a conventional wellbore, which should substantially increase the productivity of the subject well and which should ultimately result in the recovery of a greater amount of gas from the proposed project area, thereby preventing waste.

(9) The evidence further indicates that the subject wellbore, which should traverse both the W/2 and E/2 of Section 3, should effectively drain and develop all of Section 3.

(10) There is currently no other wellbore in Section 3 producing from the Blanco-Mesaverde Pool.

(11) The proposed well is located within the Canyon Largo Unit, a federal exploratory unit formed in 1953 which is currently operated by the applicant.

(12) The applicant is the only working interest owner in Section 3.

(13) Merrion Oil and Gas Corporation and Robert Bayless, the only two offset operators, were notified of the application in this case and did not appear at the hearing in opposition.

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

(15) The aforementioned prescribed area limiting the horizontal displacement of the wellbore would allow for flexibility, serve to minimize risk, maximize the success of such a completion, and would serve to protect correlative rights.

(16) In the interest of conservation, prevention of waste, and protection of correlative rights, the application of Meridian Oil Inc. for a high angle/horizontal directional drilling project should be approved.

(17) The subject well and project area should be assigned a gas allowable calculated by utilizing an acreage factor of 2.0 in the gas allowable formula for the Blanco-Mesaverde Pool.

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

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

(20) The applicant should be required to submit copies of all directional surveys conducted on the subject well to both the Santa Fe and Aztec offices of the Division.

IT IS THEREFORE ORDERED THAT:

(1) The applicant, Meridian Oil Inc., is hereby authorized to initiate a high angle/horizontal directional drilling pilot project in Section 3, Township 25 North, Range 6 West, NMPM, Rio Arriba County, New Mexico, by drilling its Canyon Largo Unit Well No. 388 from a standard surface location 2040 feet from the South line and 1625 feet from the West line (Unit K) of Section 3 in the following unconventional manner:

Drill vertically to a depth of approximately 4,707 feet, kick off from the vertical at this depth and drill in an east-northeast direction building angle to approximately 88 degrees so as to penetrate the upper portion of the Point Lookout formation at a true vertical depth of approximately 5,095 feet. Continue drilling horizontally a distance of approximately 2,600 feet.

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

(2) All of Section 3 shall be dedicated to the above-described well forming a non-standard 642.52-acre gas spacing and proration unit, also hereby approved.

(3) The subject well and project area shall be assigned a gas allowable calculated by utilizing an acreage factor of 2.0 in the gas allowable formula for the Blanco-Mesaverde Pool.

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

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

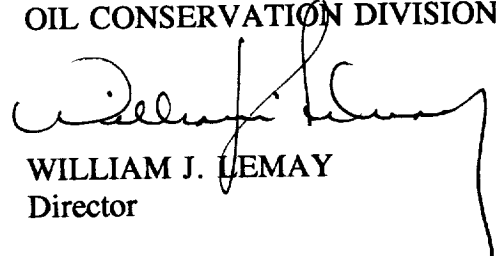
(6) The applicant shall submit copies of all directional surveys conducted on the subject well to both the Santa Fe and Aztec offices of the Division.

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

CASE NO. 10729
Order No. R-9911
Page -5-

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION



WILLIAM J. LEMAY
Director

S E A L