

**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. 10481
Order No. R-9682**

**APPLICATION OF MERIDIAN OIL, INC.
FOR A HIGH ANGLE/HORIZONTAL DIRECTIONAL
DRILLING PILOT PROJECT, SPECIAL OPERATING
RULES THEREFOR, A NON-STANDARD OIL
PRORATION UNIT, AND SPECIAL PROJECT OIL
ALLOWABLE, SAN JUAN COUNTY, NEW MEXICO.**

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 8:15 a.m. on May 28, 1992, at Santa Fe, New Mexico, before Examiner David R. Catanach.

NOW, on this 17th day of June, 1992, 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 Undesignated Gallegos-Gallup Associated Pool underlying the N/2 of Section 29, Township 26 North, Range 10 West, NMPM, San Juan County, New Mexico, by re-entering its Huerfano Unit Well No. 218 located at a standard surface location 800 feet from the North line and 790 feet from the West line (Unit D) of Section 29 and drilling in the following unconventional manner:

Cement squeeze existing Dakota perforations at 5375 feet to 6551 feet. Set kick-off plug from 5375 feet to 5225 feet. Kick off from the vertical at a depth of 5324 feet and drill in a southeasterly direction building angle to approximately 80 degrees. Penetrate the top of the Tocito Sandstone interval at a total vertical depth of 5655 feet. Continue drilling horizontally a distance of approximately 1250 feet.

(3) The N/2 of Section 29 is proposed to be dedicated to the above-described well forming a standard 320-acre gas spacing and proration unit for said pool.

(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 the proposed proration unit.
- b) approval of a 320-acre non-standard oil proration unit comprising the N/2 of said Section 29.
- c) a special project allowable equal to as much as four times the allowable for an oil well in the Gallegos-Gallup Associated Pool.

(5) The proposed high angle/horizontal pilot project is located within one mile of the outer boundary of the Gallegos-Gallup Associated Pool and is therefore subject to the Special Rules and Regulations for said pool and the General Rules for the Associated Pools of New Mexico, both promulgated by Division Order No. R-5353, as amended, which provide for:

- a) 80-acre oil spacing and proration units with a top oil allowable of 187 barrels of oil per day and for wells to be located no closer than 790 feet from any quarter section line nor closer than 330 feet from any quarter-quarter section line or subdivision inner boundary; and
- b) 320-acre gas spacing and proration units with a top gas allowable of 1496 MCFPD and for wells to be located no closer than 790 feet from any quarter section line nor closer than 330 feet from any quarter-quarter section line or subdivision inner boundary.

(6) The Upper and Lower Tocito Sandstone intervals of the Gallegos-Gallup Associated Pool are the potentially productive zones in the proposed project area.

(7) Testimony by the applicant indicates that conventional vertical wellbores are uneconomical to drill within the Gallegos-Gallup Associated Pool in this area.

(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 Tocito Sandstone 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 oil and gas from the proposed project area, thereby preventing waste.

(9) The subject well and project area are located within the Huerfano Unit, a Federal production unit operated by the applicant.

(10) All of the N/2 of Section 29 is located within a common Gallup participating area within the Huerfano Unit, therefore all of the same parties in a standard gas proration unit will participate equitably in the proposed non-standard oil proration unit.

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

(12) The subject well should be assigned an allowable as follows:

- a) if the subject well is classified as an oil well, the oil allowable shall be determined by multiplying the top unit oil allowable for the pool (187 BOPD) times the number of standard 80-acre oil proration units contacted by the wellbore; and
- b) if the subject well is classified as a gas well, the gas allowable shall equal 1496 MCFGD.

(13) The aforesaid prescribed area limiting the horizontal displacement of the wellbore would allow for flexibility, serve to minimize risk and maximize the success of such a completion and does not interfere with the accepted development of the pool.

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

(15) 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.

(16) 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.

(17) 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 the Undesignated Gallegos-Gallup Associated Pool underlying the N/2 of Section 29, Township 26 North, Range 10 West, NMPM, San Juan County, New Mexico, by re-entering its Huerfano Unit Well No. 218 located at a standard surface location 800 feet from the North line and 790 feet from the West line (Unit D) of Section 29 and drilling in the following unconventional manner:

Cement squeeze existing Dakota perforations at 5375 feet to 6551 feet. Set kick-off plug from 5375 feet to 5225 feet. Kick off from the vertical at a depth of 5324 feet and drill in a southeasterly direction building angle to approximately 80 degrees. Penetrate the top of the Tocito Sandstone interval at a total vertical depth of 5655 feet. Continue drilling horizontally a distance of approximately 1250 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) The N/2 of Section 29 shall be dedicated to the above-described well forming a standard 320-acre gas spacing and proration unit or a 320-acre non-standard oil proration unit, also hereby approved, whichever is applicable.

(3) The subject well shall be assigned an allowable as follows:

- a) if the subject well is classified as an oil well, the oil allowable shall be determined by multiplying the top unit oil allowable for the pool (187 BOPD) times the number of standard 80-acre oil proration units contacted by the wellbore; and
- b) if the subject well is classified as a gas well, the gas allowable shall equal 1496 MCFGD.

(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.

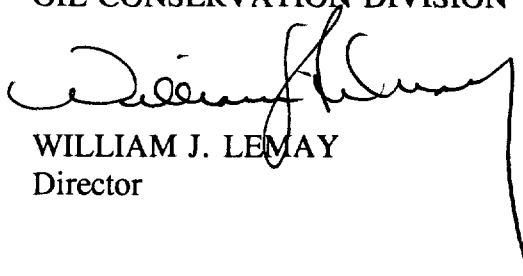
(5) The applicant shall notify the supervisor of the Aztec district office of the Division of the date and time of conductance of any directional surveys in order that the same may be witnessed.

(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.

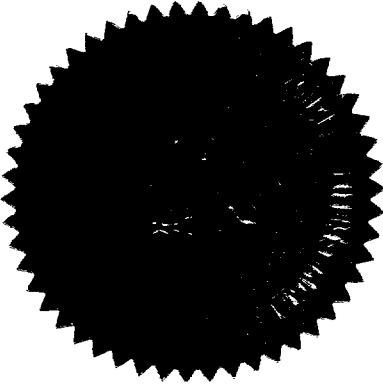
(7) Jurisdiction is hereby retained for the entry of such further orders as the Division may deem necessary.

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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