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. 9498 Order No. R-8775

APPLICATION OF MERIDIAN OIL, INC. FOR A HORIZONTAL DIRECTIONAL DRILLING PILOT PROJECT AND SPECIAL OPERATING RULES THEREFOR, RIO ARRIBA COUNTY, NEW MEXICO.

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 8:15 a.m. on October 12, 1988, at Santa Fe, New Mexico, before Examiner David R. Catanach.

NOW, on this 28th day of October, 1988, 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. 9498 and 9499 were consolidated at the time of the hearing for the purpose of testimony.
- (3) The applicant, Meridian Oil, Inc., seeks authority to initiate a horizontal directional drilling pilot project in the SW/4 of Section 23, Township 32 North, Range 6 West, NMPM, Rio Arriba County, New Mexico, forming a standard 160-acre gas spacing and proration unit in the Fruitland Coal formation.
- (4) The applicant proposes to drill its San Juan 32-5 Unit Well No. 100 at a standard surface location 1765 feet from the South line and 1485 feet from the West line (Unit K) of said Section 23 vertically from the surface through

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the Fruitland formation at a depth of approximately 3080 feet.

- (5) The applicant further proposes to plug back to a depth of approximately 2475 feet, kick off from the vertical at this depth, and drill a medium radius curve in a southerly direction to an angle of approximately 89 degrees to a depth sufficient to encounter the top of the Fruitland Coal at which point the wellbore will be drilled an approximate lateral distance of 1062 feet within said formation.
- (6) Inasmuch as the direction of the lateral portion of the wellbore is not known at this time, the applicant requested that it be allowed to drill said lateral portion anywhere within a 60-degree arc-shaped area defined by lines extending approximately southwest and southeast of the surface well location and having a radius of 1600 feet, said lines bisected by a north-south line defined by a point 1765 feet from the South line and 1485 feet from the West line (surface well location) and a point 165 feet from the South line and 1485 feet from the West line, all in said Section 23.
- (7) The proposed proration unit is well within the boundary of the applicant's San Juan 32-5 Unit, which should ensure that correlative rights will be protected.
- (8) The applicant further testified that this type of well completion, which has been successfully attempted in the applicant's San Juan 30-6 Unit Well No. 404, should result in the recovery of a substantially greater amount of gas from the Fruitland Coal than would normally be recovered by a conventional well completion, thereby preventing waste.
- (9) In the interest of conservation, prevention of waste, and protection of correlative rights, the application of Meridian Oil, Inc. for a horizontal directional drilling pilot project should be approved, subject to the provisions contained in Finding Paragraph Nos. (10) through (13) below.
- (10) The applicant should be required to conduct a directional survey on the well during or upon completion of the drilling of the vertical portion of the wellbore and should submit a copy of said survey to the Santa Fe and Aztec offices of the Division prior to initiating any directional drilling.

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- (11) Prior to kick-off from vertical, the applicant should notify the supervisor of the Aztec district office of the Division of the direction of the deviated hole and of the date and time of commencement of directional drilling operations in order that the same may be witnessed.
- (12) The proposed direction and extent of the lateral portion of the wellbore should be confined to the arc-shaped area described in detail in Finding No. (6) above.
- (13) The applicant should be required to conduct a directional survey on the lateral portion of the wellbore during or after completion of drilling operations on the well and submit a copy to the Santa Fe and Aztec offices of the Division.
- (14) Subsequent to the hearing, the Division, by Order No. R-8768, has promulgated special rules and regulations for the Basin-Fruitland Coal Gas Pool, which encompasses said Section 23, including a provision for 320-acre spacing and proration units.
- (15) Under the terms of said Order No. R-8768, the applicant should be allowed to administratively enlarge the project area for the subject well in order to form a standard spacing and proration unit in the Basin-Fruitland Coal Gas Pool.

IT IS THEREFORE ORDERED THAT:

- (1) The application of Meridian Oil, Inc. for a horizontal directional drilling pilot project in the SW/4 of Section 23, Township 32 North, Range 6 West, NMPM, Rio Arriba County, New Mexico, is hereby approved.
- (2) The applicant is further authorized to drill its San Juan 32-5 Unit Well No. 100 vertically at a standard gas well surface location 1765 feet from the South line and 1485 feet from the West line (Unit K) of said Section 23, from the surface through the Fruitland formation at a depth of approximately 3080 feet, and to complete said well in the following unconventional manner:

Plug back said well to a depth of approximately 2475 feet, kick off from the vertical at this depth, and drill a medium radius curve in a southerly direction to an angle of approximately

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89 degrees to a depth sufficient to encounter the top of the Fruitland Coal at which point the wellbore will be drilled an approximate lateral distance of 1062 feet within said formation.

- (3) The SW/4 of said Section 23 shall be dedicated to the above-described well.
- (4) The applicant shall be required to conduct a directional survey on the well during or upon completion of the drilling of the vertical portion of the wellbore and shall submit a copy of said survey to the Santa Fe and Aztec offices of the Division prior to initiating any directional drilling.
- (5) Prior to kick-off from vertical, the applicant shall notify the supervisor of the Aztec district office of the Division of the direction of the deviated hole and of the date and time of commencement of directional drilling operations in order that the same may be witnessed.
- (6) The proposed direction and extent of the lateral portion of the wellbore shall be confined to a 60-degree arc-shaped area defined by lines extending approximately southwest and southeast of the surface well location and having a radius of 1600 feet, said lines bisected by a north-south line defined by a point 1765 feet from the South line and 1485 feet from the West line (surface well location) and a point 165 feet from the South line and 1485 feet from the West line, all in said Section 23.
- (7) The applicant shall be required to conduct a directional survey on the lateral portion of the wellbore during or after completion of drilling operations on the well and submit a copy of said survey to the Santa Fe and Aztec offices of the Division.
- (8) Under the terms of said Order No. R-8768, the applicant shall be allowed to administratively enlarge the project area for the subject well in order to form a 320-acre standard spacing and proration unit in the Basin-Fruitland Coal Gas Pool.
- (9) Jurisdiction of this cause is retained for the entry of such further orders as the Division may deem necessary.

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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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