# 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. 9362 ORDER NO. R-7588-B

APPLICATION OF MERIDIAN OIL INC. FOR THE EXTENSION OF THE VERTICAL LIMITS OF THE CEDAR HILL-FRUITLAND BASAL COAL POOL AND THE CONCOMITANT CONTRACTION OF THE MT. NEBO-FRUITLAND POOL, SAN JUAN COUNTY, NEW MEXICO

## ORDER OF THE DIVISION

## BY THE DIVISION:

This cause came on for hearing at 8:15 a.m. on June 22, 1988, at Santa Fe, New Mexico, before Examiner Michael E. Stogner.

NOW, on this 19th 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) By Order No. R-7588, dated July 9, 1984, temporary special rules were promulgated for the Cedar Hill-Fruitland Basal Coal Pool, San Juan County, New Mexico, establishing temporary 320-acre spacing units. Order No. R-7588-A, dated March 7, 1986, made permanent the rules adopted by said Order No. R-7588.
- (3) Finding No. (6) of said Order No. R-7588, as amended, defined the vertical limits of said Cedar Hill-Fruitland Basal Coal Gas Pool as the "Basal Coal member of the Fruitland formation from approximately 2795 feet to 2878 feet as found on the type log from the Amoco Production Company Schneider Gas Com "B" Well No. 1 located 1110 feet from the South line and 1185 feet from the West line of Section 28, Township 32 North, Range 10 West, NMPM, San Juan County, New Mexico."

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- (4) The applicant, Meridian Oil Inc., now seeks to extend the vertical limits of the Cedar Hill-Fruitland Basal Coal Pool to include any and all coal zones within the Fruitland formation as defined by the type log for said Schneider Gas Com "B" Well No. 1. The applicant also seeks the concomitant contraction of said zones from the Mt. Nebo-Fruitland Pool.
- (5) Within the subject pool and within one mile of this outer boundary, there are a number of Fruitland gas wells drilled, developed and producing from coal seams.
- (6) Said definition of the vertical limits of said Cedar Hill-Fruitland Basal Coal Gas Pool has proven inadequate for the following reasons:
  - (a) There exist numerous commercial gasproducing coal seams within the stratigraphic interval from the highest Fruitland coal through the basal Fruitland coal.
  - (b) Said coal seams existing within the Fruitland formation from approximately 2450 feet to 2795 feet, as shown on the type log for the subject pool, produce coal methane gas typical of the gas produced from the interval defined as being the vertical limits of the subject pool in Order No. R-7588.
  - (c) At this time, all of the coal seams appear to be exhibiting reservoir performance similar to the subject basal coal pool and have drainage areas of approximately equivalent size.
- (7) All of the methane coal gas production with the Fruitland formation should be regulated under special pool rules separate and distinct from those rules governing the production of gas from the sandstone members of the Fruitland formation.
- (8) A temporary extension of the vertical limits of the Cedar Hill-Fruitland Basal Coal Gas Pool to include all of the coal seams within the Fruitland formation should permit the maximum development of the coal gas, should protect correlative rights and prevent waste.

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- (9) To accommodate the extension of the vertical limits of the Cedar Hill-Fruitland Basal Coal Pool where there are two distinctly different rules governing the same formation, certain changes in the Special Rules for said pool should be made. Such amendments and additions to the existing rules should include procedures to identify "coal seams", or gas produced therefrom.
- (10) The applicant's request to authorize downhole commingling of Fruitland sand and Fruitland coal zones at the District level should be denied.
- (11) The Mt. Nebo-Fruitland Pool should be redesignated the Mt. Nebo-Fruitland Sand Pool and the vertical limits should be contracted so as to exclude all coal seams and is further defined and described as having vertical limits consistent with the vertical extension of the Cedar Hill-Fruitland Basal Coal Pool.
- (12) This case should be reopened at an examiner hearing in October, 1990, at which time the operators in the subject pool should be prepared to appear and show cause why the temporary extension of the Cedar Hill-Fruitland Basal Coal Pool should not be rescinded and Division Order No. R-7588, as amended, should not be re-instituted as it existed prior to the issuance of this order.

# IT IS THEREFORE ORDERED THAT:

- (1) Effective November 1, 1988, the vertical limits for the Cedar Hill-Fruitland Basal Coal Pool are hereby expanded so that said limits are defined as comprising any and all coal seams within the stratigraphic interval from approximately 2450 feet to 2880 feet on the Gamma Ray/Bulk Density Log of the Amoco Production Company Schneider Gas Com "B" Well No. 1, located 1110 feet from the South line and 1185 feet from the West line of Section 28, Township 32 North, Range 10 West, NMPM, San Juan County, New Mexico.
- (2) Effective November 1, 1988, the Mt. Nebo-Fruitland Gas Pool is hereby redesignated as the Mt. Nebo-Fruitland Sand Pool and is hereby contracted so as to exclude all coal seams and is further defined and described as having vertical limits consistent with the vertical extension of the Cedar Hill-Fruitland Basal Coal Pool.
- (3) Rule 1 of said Division Order No. R-7588, as amended, is hereby suspended and shall be replaced with the following:

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- Rule 1(A) Each well completed or recompleted in the Cedar Hill-Fruitland Basal Coal Pool shall be spaced, drilled, operated and prorated in accordance with the Special Rules and Regulations hereinafter set forth.
- Rule 1(B) A Cedar Hill-Fruitland Basal Coal
  Pool well will be defined as one
  which meets a preponderance of the
  generally characterized coalbed
  methane criteria as derived from:
  - (a) Wireline log data;
  - (b) Drilling time;
  - (c) Drill cutting;
  - (d) Mud logs;
  - (e) Completion data;
  - (f) Gas analysis;
  - (g) Water analysis;
  - (h) Reservoir performance;
  - (i) Any other evidence that indicates the production is predominantly coal methane.

No one characteristic of lithology, performance or sampling will either qualify or disqualify a well from being classified as a coal gas well. Absent any finding to the contrary, any well completed in accordance with these rules that has met a preponderance of the criteria for determining a coal well is therefore presumed to be completed in from the Cedar Hilland producing Fruitland Basal Coal Pool. The District Supervisor may, at his discretion, require that an operator document said determination of the appropriate pool or require an order under the provisions of General Rule 303(c) authorizing the commingling of pools in the event a coal well fails to meet the criteria for a coal well as set forth in this rule.

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### IT IS FURTHER ORDERED THAT:

- (4) Any well drilling to or completed in a coal member of the Fruitland formation within this vertical extension of the Cedar Hill-Fruitland Basal Coal Pool on or before November 1, 1988 that will not comply with the well location requirements of Rule 4 is hereby granted an exception to the requirements of said rule. The operator of any such well shall notify the Aztec District Office of the Division, in writing, of the name and location of any such well on or before January 1, 1989.
- (5) Applicant's request to authorize downhole commingling of Fruitland Sandstone Gas and Fruitland Coal Gas at the District Office level of the Division is hereby denied.
- (6) This case shall be reopened at an examiner hearing in October, 1990, at which time the operators in the subject pool may appear and show cause why the vertical extension of the Cedar Hill-Fruitland Basal Coal Pool should not be rescinded and Division Order No. R-7588, as amended, should not be reinstituted as they existed prior to the issuance of this order.
- (7) 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 designated.

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION

WILLIAM J. LEMAY

Director