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. 10604 ORDER NO. R-9812

APPLICATION OF MERIDIAN OIL INC. FOR AN UNORTHODOX COAL GAS WELL LOCATION, SAN JUAN COUNTY, NEW MEXICO.

ORDER OF THE DIVISION

<u>BY THE DIVISION</u>:

This cause came on for hearing at 8:15 a.m. on November 19 and December 3, 1992 at Santa Fe, New Mexico, before Examiners Michael E. Stogner and David R. Catanach, respectively.

NOW, on this <u>28t</u>hday of December, 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) At the time of the hearing, this case was consolidated with Case No. 10606 for purposes of testimony.

(3) The applicant, Meridian Oil, Inc., seeks approval to drill a replacement coal gas well within an existing 315.76-acre gas spacing and proration unit comprising Lots 3 through 6 and 11 through 14 (W/2 equivalent) of Section 33, Township 31 North, Range 9 West, NMPM, Basin-Fruitland Coal Gas Pool, San Juan County, New Mexico, at an unorthodox coal gas well location within the NW/4 equivalent of said Section 33 that is no closer than 790 feet to any outer boundary of the proration unit nor closer than 130 feet to the quarter section line bisecting the unit nor closer than 10 feet to the

subdivision inner boundaries within the NW/4 equivalent of said Section 33. Said unit is presently dedicated to the Johnston Federal Well No. 28 located at a standard coal gas well location 2255 feet from the South line and 1065 feet from the West line (Unit L) of said Section 33, which will either be plugged and abandoned or used as a pressure observation well after the replacement well is completed.

(4) Subsequent to the hearing, the applicant submitted for approval a specific location for the Johnston Federal Well No. 280 which is 1255 feet from the North line and 1740 feet from the West line (Unit C) of said Section 33.

(5) The subject unit is located within the Basin-Fruitland Coal Gas Pool and is therefore subject to the Special Rules and Regulations for said pool as promulgated by Division Order No. R-8768, as amended, which require that wells be located in either the NE/4 or SW/4 of a single governmental section no closer than 790 feet from any outer boundary of the proration unit nor closer than 130 feet from any quarter section line nor closer than 10 feet from any quarter-quarter section line or subdivision inner boundary.

(6) All of Section 33 has been initially developed with wells located "onpattern" but each of those two wells has not been commercially successful.

(7) The location of the proposed Johnston Federal Well No. 280 is standard with respect to the setback requirements but is "off-pattern" with respect to the quarter section location.

(8) On December 27, 1990, the Johnston Federal Well No. 28 was drilled by Union Texas Petroleum Inc. and was completed in the Basin-Fruitland Coal Gas Pool at an initial producing rate of 35 MCF gas per day with compression.

(9) The applicant attributes the low producing rate of the Johnston Federal Well No. 28 to low permeability within the coal seams within the immediate area of the well.

(10) The applicant further contends that within Section 33 there exists a permeability transition zone within the coal seams.

(11) Although the applicant's geologic evidence does not conclusively establish the existence of a permeability transition zone, further evidence presented does indicate that wells generally to the north and northeast of the Johnston Federal Well No. 28 exhibit substantially greater producing rates while wells to the west exhibit greatly reduced producing rates. (12) The Johnston Federal Well No 28 is located in an area of the Pool which was drilled prior to the adoption of the Basin Fruitland Coal Gas Pool Rules on November 1, 1988.

(13) There are some seven wells within two miles of Section 33 which are drilled in "off pattern" locations.

(14) The wells offsetting the W/2 of Section 33 located in the SW/4 of Section 27 and the SE/4 of Section 28 currently produce at rates of 5390 MCFPD and 4050 MCFPD, respectively.

(15) The E/2 of Section 33 is currently dedicated to the Johnston Federal Well No. 22 located in the NE/4, a low capacity producer which is scheduled to be replaced by the Johnston Federal Well No. 22R.

(16) The applicant's evidence and testimony indicate that its gas reserves underlying the W/2 equivalent of Section 33 is estimated to be 22.1 BCF.

(17) The evidence in this case does demonstrate that the applicant cannot recover its just and equitable share of the gas reserves underlying the W/2 equivalent of Section 33 by producing its Johnston Federal Well No. 28 which is estimated to be able to recover only 160,000 MCF of gas.

(18) While exact drainage areas cannot be calculated for each well, the offsetting high capacity wells to the north of the subject spacing unit may have the ability to drain a portion of the W/2 equivalent of Section 33 and thereby adversely affect the correlative rights of the owners of the affected spacing unit unless this application is approved.

(19) The "no-flow" boundary which will be established between the offsetting wells located in the high permeability area to the north and east and the existing Johnston Federal Well No. 28 is such that the drainage area for the proposed Johnston Federal Well No. 280 should not extend into those offsetting spacing units.

(20) The area of the pool immediately to the west and northwest of the proposed Johnston Federal Well No. 280 is in a poor permeability portion of the pool and should not be drained or adversely affected by the granting of this application.

(21) The acreage in Section 28, to the north of the subject spacing unit, was drilled prior to the establishment of the Basin-Fruitland Coal Gas Pool Rules with a well located in what now would be the wrong quarter section.

(22) Because of the existing "off-pattern" wells in this area and the fact that the area is almost fully developed with existing wells, approval of the application will not further disrupt on-pattern development in the Basin-Fruitland Coal Gas Pool.

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

(24) At the hearing, the applicant testified that if its application is approved, it proposes to utilize the existing Johnston Federal Well No. 28 as an observation well in the Basin-Fruitland Coal Gas Pool.

(25) In order to allow the applicant the opportunity to produce its just and equitable share of the gas reserves in the Basin-Fruitland Coal Gas Pool underlying the W/2 equivalent of Section 33, thereby protecting its correlative rights, the application should be approved.

IT IS THEREFORE ORDERED THAT:

(1) The applicant, Meridian Oil Inc., is hereby authorized to drill its Johnston Federal Well No. 280 at an unorthodox coal gas well location 1255 feet from the North line and 1740 feet from the West line (Unit C) of Section 33, Township 31 North, Range 9 West, NMPM, Basin-Fruitland Goal Gas Pool, San Juan County, New Mexico.

(2) Lots 3 through 6 and 11 through 14 (W/2 equivalent) of said Section 33, being a standard 315.76-acre gas spacing unit for said pool, shall be dedicated to said Well No. 280.

(3) Subsequent to the drilling and completing of the proposed Johnston Federal Well No. 280 and if such well is determined to be a commercial producer, the applicant shall not utilize the existing Johnston Federal Well No. 28 as a producing well in the Basin-Fruitland Coal Gas Pool.

(4) Jurisdiction is hereby 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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