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. 10606 ORDER NO. R-9813

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

ORDER OF THE DIVISION

BY THE DIVISION:

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 28th day 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 Division Case No. 10604 for purposes of testimony.
- (3) The applicant, Meridian Oil Inc., seeks approval to drill its proposed Johnston Federal Well No. 270 at an unorthodox coal gas well location 790 feet from the North and West lines (Unit D) of Section 12, Township 30 North, Range 9 West, NMPM, Basin-Fruitland Coal Gas Pool, San Juan County, New Mexico.

- (4) The subject well is proposed to be a replacement well for the Johnston Federal Well 27 located in the SW/4 of Section 12 at a standard coal gas well location 1250 feet from the South line and 1010 feet from the West line (Unit M) of said Section 12, which is dedicated to a standard 320-acre gas spacing and proration unit for said pool comprising the W/2 of said Section 12.
- (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 12 has been initially developed with wells located "on-pattern" but each of those two wells has not been commercially successful.
- (7) The location of the proposed Johnston Federal 270 Well is standard with respect to the setback requirements but is "off-pattern" with respect to the quarter section location.
- (8) On December 20, 1990, the Johnston Federal 27 Well was drilled by Union Texas Petroleum Inc. and was completed in the Basin-Fruitland Coal Gas Pool at an initial producing rate of only 30 MCF gas per day and is currently shut-in.
- (9) The applicant attributes the low producing rate of the Johnston Federal Well No. 27 to low permeability within the coal seams within the immediate area of the well.
- (10) The applicant further contends that within Section 12 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 west of the Johnston Federal Well No. 27 exhibit substantially greater producing rates while wells to the south and east exhibit greatly reduced producing rates.
- (12) The Johnston Federal Well No. 27 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 eight wells within two miles of Section 12 which are drilled in "off pattern" locations.
- (14) The wells offsetting the W/2 of Section 12 located in the SW/4 of Section 1, the SE/4 of Section 2, and the NE/4 of Section 11 currently produce at rates of 800 MCFPD, 6280 MCFPD and 1010 MCFPD, respectively.
- (15) The E/2 of Section 12 is currently dedicated to the Johnston Federal Well No. 24 located in the NE/4, a low capacity producer.
- (16) The applicant's evidence and testimony indicate that its gas reserves underlying the W/2 of Section 12 is estimated to be 17.4 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 of Section 12 by producing its Johnston Federal Well No. 27 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 and west of the subject spacing unit may have the ability to drain a portion of the W/2 of Section 12 which would 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 west and the Johnston Federal Well No. 270 is such that the drainage area for the Johnston Federal Well No. 270 should not extend into those offsetting spacing units.
- (20) The area of the pool immediately to the east and south of the Johnston Federal Well No. 270 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 2, to the northwest 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 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 Johnston Federal Well No. 27 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 of Section 12, 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. 270 at an unorthodox coal gas well location 790 feet from the North line and West lines (Unit D) of Section 12, Township 31 North, Range 9 West, NMPM, Basin-Fruitland Goal Gas Pool, San Juan County, New Mexico.
- (2) The W/2 of said Section 12, being a standard 320-acre gas spacing unit for said pool, shall be dedicated to said well.
- (3) Subsequent to the drilling and completing of the Johnston Federal Well No. 270 and if such well is determined to be a commercial producer, the applicant shall not utilize the Johnston Federal Well No. 27 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.

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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