# 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. 10631 ORDER NO. R-9819

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 December 17, 1992 at Santa Fe, New Mexico, before Examiner Michael E. Stogner.

NOW, on this 14th 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) The applicant, Meridian Oil Inc., seeks approval to drill its proposed Johnston Federal Well No. 15R at an unorthodox coal gas well location 2330 feet from the North line and 790 feet from the West line (Unit E) of Section 35, Township 31 North, Range 9 West, NMPM, San Juan County, New Mexico.
- (3) The subject well is proposed to be a replacement well for the Johnston Federal Well No. 15 located in the NW/4 of Section 35 at a non-standard coal gas well location 1680 feet from the North line and 1450 feet from the West line (Unit F) of said Section 35.
- (4) The non-standard location for the Johnston Federal Well No. 15 was approved by Division Administrative Order NSL-2643 dated March 29, 1989 and was dedicated to Lots 3 through 6 and 11 through 14 (W/2 equivalent) of said Section 35, comprising 314.25 acres.

- (5) The subject unit is located within the Basin-Fruitland Coal Gas Pool and is therefore governed by 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 35 has been initially developed in the Basin-Fruitland Coal Gas Pool with wells located "off-pattern" but each of those two original wells has not, in the opinion of the applicant, been commercially successful.
- (7) The location of the proposed Johnston Federal Well No. 15R, the replacement well, is standard with respect to the setback requirements but is "off-pattern" with respect to the quarter section location.
- (8) In 1979, the Johnston Federal Well No 15 was drilled by Union Texas Petroleum Inc. and was completed in the Blanco Pictured Cliffs Pool. On January 7, 1990, the well was recompleted into the Basin-Fruitland Coal Gas Pool but has been a low capacity producer because of mechanical problems and/or reservoir damage due to its original cased hole completion method.
- (9) While the spacing unit is estimated to contain approximately 16.42 BCF of gas in place, the existing Johnston Federal Well No. 15 is not capable of recovering its share of the gas and thus exposes the spacing unit to potential offset drainage.
- (10) Applicant has successfully recompleted its Johnston Federal Well No. 23 located in the SE/4 equivalent of said Section 35 by side-tracking out of the existing cased hole portion of the well and recompleting in the Basin-Fruitland Coal Gas Pool open-hole and is now capable of producing 2200 MCF per day as measured on a pitot gauge. According to Division production reports, this well's "cased-hole" production history totaled 219,582 MCF over a twenty-month period (January 1990 to August 1991); its best month during this period was January 1990 in which 24,607 MCF was reported (average of approximately 820 MCF per day). Its average production during those last four months was approximately 6950 MCF or 232 MCF per day.
- (11) The Applicant's apparent success with the Johnston Federal Well No. 23 demonstrates that redrilling or replacing certain low capacity producing coal gas wells can substantially improve the ability to recover gas from a spacing unit.

- (12) There are seventeen coal gas wells within the nine-section area surrounding the W/2 equivalent of Section 35 which currently have producing capacities ranging from 844 MCF per day to 6954 MCF per day.
- (13) Although the measured geologic parameters of coal thickness, structural position and formation continuity are all similar between the high capacity wells and the low capacity wells in this area, the Johnston Federal Well No. 15 does not have the ability to adequately drain its reserves underlying the W/2 equivalent of said Section 35.
- (14) While exact drainage areas have not been calculated for each well, the offsetting high capacity wells to the north and west of the subject spacing unit appeared to have the ability to drain a portion of the W/2 equivalent of said Section 35 and could thereby adversely affect the correlative rights of the owners of the affected spacing unit unless this application is approved.
- (15) No offset operator and/or interest owner appeared at the hearing in opposition to the application.
- (16) 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 said Section 35, thereby protecting its correlative rights and to prevent waste, the application should be approved.

#### IT IS THEREFORE ORDERED THAT:

- (1) The applicant, Meridian Oil Inc., is hereby authorized to replace the Johnston Federal Well No. 15 by drilling its Johnston Federal Well No. 15R at an unorthodox coal gas well location 2330 feet from the North line and 790 feet from the West line (Unit E) of Section 35, 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 35, being a standard 314.25-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. 15R and if such well is determined to be a commercial producer, the applicant shall not utilize the existing Johnston Federal Well No. 15 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. LEMA

Director

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