# 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:

APPLICATION OF WILLIAMS PRODUCTION COMPANY, LLC FOR EXCEPTIONS TO THE SPECIAL RULES AND REGULATIONS FOR THE BLANCO-MESAVERDE GAS POOL FOR A PILOT PROJECT TO DETERMINE THE PROPER WELL DENSITY REQUIREMENTS FOR MESAVERDE FORMATION WELLS, SAN JUAN AND RIO ARRIBA COUNTIES, NEW MEXICO.

CASE NO. 14291 ORDER NO. R-13123

#### ORDER OF THE DIVISION

#### BY THE DIVISION:

This case came on for hearing at 8:15 a.m. on March 19, 2009 at Santa Fe, New Mexico, before Examiners Richard Ezeanyim, David Brooks, and Terry Warnell.

NOW, on this 11<sup>th</sup> day of May 2009, the Division Director, having considered the testimony, the record and the recommendations of the Examiners,

#### **FINDS THAT:**

- (1) Due public notice has been given, and the Division has jurisdiction of this case and of the subject matter.
- (2) The applicant, Williams Production Co., LLC ("Williams" or "Applicant"), seeks exceptions to the Special Rules and Regulations for the Blanco-Mesaverde (Prorated Gas) Pool (72319) for a two-year Pilot Project in the Rosa Unit Area to determine the proper well density in the Pool and authorization to drill one additional well on each standard 320-acre gas proration unit in the pilot project area.
- (3) Well density, well locations, and gas spacing and proration unit ("GPU") size, within the Blanco-Mesaverde Gas Pool are governed by Special Rules as adopted in Division Order No. R-10987-A(1), effective December 2, 2002. The Special Rules provide for 320-acre gas proration units, and allow for up to four (4) wells on each standard GPU.

- (4) Williams is the present operator of the Rosa Unit, which was approved by Division Order No. R-759, in Case No. 133, dated April 22, 1948 and which currently encompasses 54,209.49 acres, more or less, of federal, state, and fee lands in San Juan and Rio Arriba Counties, New Mexico.
- (5) Williams proposes to conduct a Pilot Project in a portion of the Rosa Unit within the Mesaverde Participating Area, as described below:

## Township 31 North, Range 6 West, NMPM

Sections 1 through 5: All Sections 8 through 17: All Sections 21 through 26: All

## Township 32 North, Range 6 West, NMPM

Sections 32 through 36: All

- (6) Williams appeared through legal counsel and presented the following geologic and engineering testimony:
- (a) The purpose of the proposed Pilot Project is to study the feasibility of increased well density for all of the Mesaverde formation in the Rosa Unit Area.
- (b) Williams proposes to drill new wells on each spacing unit in quarter-quarter sections that are not currently occupied by another Mesaverde well.
- (c) Williams' proposed pilot project is within the Mesaverde Participating Area; therefore correlative rights are not being affected.
- (d) The Cliffhouse sandstone member of the Mesaverde formation is more homogeneous in nature with lateral continuity of sand bodies.
- (e) The Point Lookout sandstone is more heterogeneous in nature and the lateral continuity of sand bodies is less likely.
- (f) The Menefee sandstone is highly heterogeneous in nature with highly lateral continuity of sand bodies.
- (g) Williams' geologic data indicates that Mesaverde wells in the Rosa Unit are not effectively draining the reservoir.
- (h) The original gas in place in the Cliffhouse is 90,201 MMcf, in the Menefee is 261,787 MMcf, in the Upper Point Lookout is 76,414 MMcf, and the Lower Point Lookout is 208,679 MMcf for a total of 637,081 MMcf. The current recovery factor is 17.8% of the original gas in place. The estimated ultimate recovery under the current

configuration is 113,480 MMcf.

- (i) Williams has achieved recovery factors of 50% in other projects with similar geology and reservoir characteristics.
- (j) Due to the low recovery rates and the fact that the Rosa Unit is nearly fully developed, Williams has determined that this would be an ideal location to conduct a pilot project.
- (k) Williams' existing pressure data did not isolate between zones in the past and is therefore not helpful in determining proper well density. Williams proposes to obtain zonal specific pressure data in addition to gathering sufficient geologic and reservoir engineering data to determine wellbore interference, drainage area and orientation, incremental recovery and rate acceleration factors.
- (l) Williams' engineering data indicates that current well spacing is not effectively draining the Mesaverde formation in the Rosa Unit and that Williams needs better information on drainage efficiency and pressure drawdown to base decisions on the most efficient spacing and completion practices to allow the recovery of additional gas reserves from the Rosa Unit which may otherwise not be recovered, thereby preventing waste and without violating correlative rights.
- (7) Devon Energy Production Company appeared at the hearing through legal counsel but did not oppose the application. No other operator or party appeared in this case in opposition to the application. The Bureau of Land Management submitted a letter to the Division in support of Williams' application.
- (8) This application should be approved in order to prevent waste and protect correlative rights.

### IT IS THEREFORE ORDERED THAT:

- (1) The application of Williams Production Company, LLC (OGRID 120782) seeking exceptions to the Special Rules and Regulations for the Blanco-Mesaverde (Prorated Gas) Pool (72319) for a two-year Pilot Project in the Rosa Unit Area to determine the proper well density in the Pool and authorization to drill one additional well on each standard 320-acre gas proration unit in the pilot project area is hereby approved.
- (2) The Pilot Project area shall comprise the Mesaverde Participating Area as described below:

# Township 31 North, Range 6 West, NMPM

Sections 1 through 5: All Sections 8 through 17: All Sections 21 through 26: All

## Township 32 North, Range 6 West, NMPM

Sections 32 through 36: All

- (3) As an exception to the Special Rules and Regulations for the Blanco-Mesaverde Gas Pool, Williams is hereby authorized to drill one additional infill well on each standard 320-acre gas proration unit.
- (4) The Pilot Project is authorized for a period of two years from the date of this Order. Within six (6) months of completion of the Pilot Project, Williams shall provide their overall findings and well density recommendations to the Division.
- (5) Jurisdiction of this case 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 hereinabove designated.

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION

MARK E. FESMIRE, P.E.

Director