## 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. 14017 ORDER NO. R-12884

## APPLICATION OF CONOCOPHILLIPS COMPANY FOR AN EXCEPTION TO THE WELL DENSITY REQUIREMENTS FOR THE BLANCO-MESAVERDE GAS POOL, RIO ARRIBA COUNTY, NEW MEXICO.

### ORDER OF THE DIVISION

#### **BY THE DIVISION:**

This case came on for hearing at 8:15 a.m. on January 10, 2008, at Santa Fe, New Mexico, before Examiner William V. Jones.

NOW, on this 18<sup>th</sup> day of January, 2008, the Division Director, having considered the testimony, the record, and the recommendations of the Examiner,

### FINDS THAT:

(1) Due public notice has been given, and the Division has jurisdiction of this case and its subject matter.

(2) ConocoPhillips Company ("applicant"), seeks an exception to the well density provisions of the Special Rules and Regulations of the Blanco-Mesaverde (Prorated Gas) Pool (72319) within an existing standard 320-acre Mesaverde spacing and proration unit ("GPU") consisting of the E/2 of Section 34, Township 29 North, Range 5 West, NMPM, Rio Arriba County, New Mexico by approval of simultaneous production from the following two gas wells within the SW/4 NE/4 (Unit G):

(a) San Juan 29-5 Unit Well No. 34 (API No. 30-039-07515) located 1425 feet from the North line, and 2080 feet from the East line, Unit G of Section 34; and the

(b) San Juan 29-5 Unit Well No. 34R (API No. 30-039-21788) located 2450 feet from the North line, and 1850 feet from the East line, Unit G of Section 34.

(3) No other party entered an appearance in this case or otherwise opposed this application.

(4) Well density, well locations, and gas spacing and proration unit ("GPU") size, within the Blanco-Mesaverde (Prorated Gas) Pool, are governed by Special Rules detailed in Division Order No. R-10987-A(1) effective December 2, 2002. That portion of those Special Rules pertaining to GPU size and well density (shown below) also requires each quarter section to contain only two wells and each quarter-quarter section to only contain one well. The relevant provisions are as follows:

# I. ACREAGE AND WELL LOCATION REQUIREMENTS

A. Standard GPU (Gas Proration Unit): A standard GPU in the Blanco-Mesaverde Pool shall be 320 acres, more or less, comprising any two contiguous quarter sections of a single section that is a legal subdivision of the U. S. Public Land Surveys.

### B. Well density:

(1) Up to four (4) wells may be drilled on a standard GPU, as follows:

(a) the FIRST OPTIONAL INFILL WELL drilled on a GPU shall be located in the quarter section not containing the INITIAL Mesaverde well;

(b) the SECOND OPTIONAL INFILL WELL drilled on a GPU shall be located in a quarter-quarter section not containing a Mesaverde well and within a quarter section not containing more than one (1) Mesaverde well;

(c) the THIRD OPTIONAL INFILL WELL drilled on a GPU shall be located in a quarter-quarter section not containing a Mesaverde well and within a quarter section not containing more than one (1) Mesaverde well;

(d) at the discretion of the operator, the second or third optional infill well may be drilled prior to the drilling of the first optional infill well;

(e) no more than two wells shall be located within either quarter section in a GPU; and

(f) any deviation from the above-described well density requirements shall be authorized only after hearing.

(5) The applicant presented testimony and facts at the hearing as follows:

(a) ConocoPhillips has gone through a process of examining all wells for regulatory compliance and has discovered that this E/2 of Section 34 GPU contains two Mesaverde wells in the same quarter-quarter section, which is out of compliance with Rule I.B of the aforementioned Special Pool Rules.

(b) Phillips Petroleum Company re-completed the San Juan 29-5 Unit Well No. 88 to the Mesaverde formation, in January of 1996, and renamed the well: Well No. 34R. The well is on the same SW/4 NE/4 quarter-quarter section (Unit G) as the San Juan 29-5 Unit Well No. 34. Recently after discovering this error, ConocoPhillips picked the Well No. 34 well to shut-in (it is the older well with equivalent or lower production.) Well No. 34 had produced since February of 1957 and was last producing approximately 100 Mcf gas per day.

(c) Currently, this GPU contains three wells; two wells are located in Unit G and one (new) well is in Unit O. ConocoPhillips has no intention to drill more than four wells within this GPU.

(d) This GPU is located on the southern edge of the San Juan 29-5 Unit. ConocoPhillips has provided notice to all working interest owners in the San Juan 28-5 Unit, which is located directly south of the subject GPU. The offending quarter-quarter section (Unit G) is in the northern quarter section of this stand-up (E/2) GPU, and any drainage from wells located in Unit G should not affect the San Juan 28-5 Unit.

(e) ConocoPhillips has determined the effective drainage area for these two (combined) wells using a no-flow boundary calculation and compared this to a drainage area calculated using a projected dimensionless producing rate versus cumulative (flowing material balance) plot. The Well No. 34 has been a prolific producer and has likely drained approximately 500 acres. The Well No. 34R is not projected to be as good – and should only drain approximately 45 acres. Both the no-flow and material balance methods were in general agreement and show that the approximate cumulative drainage area for these two wells is 545 acres.

(f) ConocoPhillips then set up and ran a three-layer numerical simulator comparing pressure depletion in the calculated drainage area with and without the participation of Well No. 34. That analysis indicates that abandonment of Well No. 34 would result in a loss of approximately 560 MMscf of gas.

(6) The examiner finds as follows:

(a) ConocoPhillips is making a good faith effort to identify San Juan Basin wells which are not in compliance with Division rules, to bring those wells

into compliance, and to prevent future violations. ConocoPhillips has itself identified this well density exception and brought it to the Division's attention.

(b) Professionals from ConocoPhillips have used the latest technology and sound science to show that these two wells, located in the same quarterquarter section, are not violating correlative rights or causing waste.

(c) The subject quarter-quarter section is one-half mile north of the San Juan 28-5 Unit and should not affect correlative rights of those owners. None of the owners notified has entered an objection to this application.

(d) If this application is approved, ConocoPhillips will be allowed to resume production from the San Juan 29-5 Unit Well No. 34 located in Unit G and increase production within this spacing unit by approximately 100 Mcf gas per day.

(e) It appears that real additional developed reserves have been added by drilling the second well within this quarter-quarter section.

(f) Allowing both wells completed within Unit G of Section 34 to simultaneously produce will prevent waste by allowing the recovery of natural gas that may otherwise not be produced and will allow the use of a drilling investment that has already been made.

(g) If this application is approved, then all spacing and location provisions of the Special Rules and Regulations of the Blanco-Mesaverde Gas Pool should remain in effect, except as exempted in this order, including the provisions that no more than two wells shall simultaneously produce in any quarter section and no more than four wells shall simultaneously produce in any spacing unit.

(h) This application should be approved in order to prevent waste and protect correlative rights.

### **<u>IT IS THEREFORE ORDERED THAT</u>:**

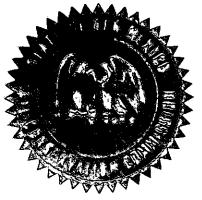
(1) The application of ConocoPhillips Company is approved. An exception is hereby granted to the well density provisions (Rule I.B) of the Special Rules and Regulations of the Blanco-Mesaverde (Prorated Gas) Pool (72319) as promulgated by Division Order No. R-10987-A(1), and the following two wells are allowed to simultaneously produce within the SW/4 NE/4 of Section 34 within an existing standard 320-acre, more or less, Mesaverde spacing and proration unit consisting of the E/2 of Section 34, Township 29 North, Range 5 West, NMPM, Rio Arriba County, New Mexico:

- (a) San Juan 29-5 Unit Well No. 34 (API No. 30-039-07515) in Unit G
- (b) San Juan 29-5 Unit Well No. 34R (API No. 30-039-21788) in Unit G

(2) Except as granted above, all spacing and location provisions of the Special Rules and Regulations of the Blanco-Mesaverde Gas Pool shall remain in effect including the provisions that no more than two wells shall simultaneously produce in any quarter section and no more than four wells shall simultaneously produce in any gas spacing and proration unit.

(3) 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.



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STATE OF NEW MEXICO OIL CONSERVATION DIVISION

MARK E. FESMIRE, P.E. Director