# 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. 14355 ORDER NO. R-13203

APPLICATION OF CONOCOPHILLIPS COMPANY AND BURLINGTON RESOURCES OIL & GAS COMPANY, LP TO ESTABLISH A SPECIAL TRANSISTION AREA, INCLUDING AN ADMINISTRATIVE PROCEDURE FOR EXPANSION, AND THE MODIFICATION OF THE SPECIAL RULES FOR THE BASIN-FRUITLAND COAL GAS POOL FOR CERTAIN NON-STANDARD GAS SPACING UNITS ALONG THE STATE LINE BETWEEN NEW MEXICO AND COLORADO, ALL WITHIN SAN JUAN COUNTY, NEW MEXICO.

#### **ORDER OF THE DIVISION**

#### **<u>BY THE DIVISION:</u>**

This case came on for hearing at 8:15 a.m. on August 6, 2009, at Santa Fe, New Mexico, before Examiners David K. Brooks and William V. Jones.

NOW, on this 16<sup>th</sup> day of December, 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 its subject matter.

(2) ConocoPhillips Company and Burlington Resources Oil & Gas Company, LP (collectively "ConocoPhillips"), seeks to establish a special, state-line transition area within the lower productivity portion of the Basin-Fruitland Coal Gas Pool (71629) whereby increased well densities are allowed in order to prevent future drainage from offsetting Fruitland coal gas wells which may be drilled to the north in Colorado.

(3) This "*transition area*" is proposed to include contiguous lands in San Juan County, New Mexico; all of which adjoin the Colorado state line. These lands begin in the west with all of Section 9, T32N, R9W and extend east to include the western portion (102.53 acres) of Section 9, T32N, R7W, NMPM.

(4)	ConocoPhillips also requests in this case:
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- a. To exclude one gas spacing unit from approval for additional wells.
- b. Approval of a method for possible future expansion of this *transition area* along the State line.
- c. Approval of non-standard locations within this transition area.
- d. Approval of a well density exception for horizontal wells within the *transition area*.
- e. Approval of a delegation of authority for certain exceptions within the *transition area* to the Division's Aztec district office.

(5) The Rules governing Fruitland Coal gas well density within Colorado can be summarized as follows: <u>a density of one well per 80 acres</u>.

(6) Colorado Oil and Gas Conservation Commission Orders No 112-197, 112-181, and 112-190 effective beginning in 2005 and 2006, govern well spacing and location within Colorado lands located directly opposite the *transition area*. These orders each allow up to 4 producing wells within a standard 320-acre Ignacio Blanco (Fruitland Coal) Field gas spacing unit and require 660 feet setbacks from the unit boundary.

(7) The Rules governing Fruitland Coal gas well density within New Mexico allow for <u>one well per 160 acres</u>.

(8) More specifically, the well density in New Mexico within the Low Productivity Area of the Basin-Fruitland Coal Gas Pool (71629) is governed by Special Pool Rules detailed in Commission Order R-8768-F dated 17 July 2003. Rule 7(d)(1) limits each 320-acre gas spacing unit to only two wells and restricts the placement of these wells to one per quarter section. The proposed New Mexico *transition area* is wholly within the Low Productivity Area of the Basin-Fruitland Coal Gas Pool.

(9) No other party entered an appearance in this case or otherwise opposed this application. The Farmington Field Office of the United States Department of the Interior, Bureau of Land Management ("BLM") supplied a letter of support as did Speerex Limited Partnership (see exhibits).

(10) The BLM, in its letter, expressed the need to protect the mineral estate within this *transition area* and said it had identified several potential drainage situations "where drainage is, or is likely to occur."

(11) The Sections involved in the *transition area* are all irregular with some disparity in the records of acreage, depending on the Land Survey referenced. These Sections have been partitioned into non-standard Fruitland Coal gas spacing units which sometimes cross the Section lines. For purposes of this application, ConocoPhillips assigned the letters A through N, consecutively from west to east to these spacing units. These 14 gas spacing units within the *transition area* and the orders creating these units are detailed below along with the corresponding reference "letter".

(a) Division Order R-9222 issued in Case No. 9975 on 13 July, 1990, established the following four (4) non-standard gas spacing units, located in Sections 9 through 12, Township 32 North, Range 9 West, NMPM, San Juan County, for production of gas from the Basin-Fruitland Coal Gas Pool:

	R-9222	2		
Letter	Tract	Acres	Description within T3	2N, R9W
Α	3	362.28	Irregular Section 9:	All
В	4	367.84	Irregular Section 10:	All
С	5	369.19	Irregular Section 11:	All
D	6	400.52	Irregular Section 12:	All

(b) Division Order R-9055 issued in Case No. 9811 on 21 November, 1989, established seven (7) non-standard gas spacing units, located in Sections 7 through 12, Township 32 North, Range 8 West, NMPM, San Juan County, for production of gas from the Basin-Fruitland Coal Gas Pool:

	R-9055			
Letter	Tract	Acres	Description within T32N, R8W	
Е	1	314.78	Irregular Section 7: All	
F	2	375.07	Irregular Section 8: All	
G	3	382.84	Irregular Section 9: All	
Н	4	290.69	Irregular Section 10: Lots 6 - 11, Lots 14 – 16	
I	5	293.65	Irregular Section 10: Lots 5, 12, and 13 Irregular Section 11: Lots 7 - 10, Lots 15 and 16	
J	6	299.89	Irregular Section 11: Lots 5 and 6, Lots 11 - 14 Irregular Section 12: Lots 8, 9, and 16	
K	7	322.34	Irregular Section 12: Lots 5 - 7, Lots 10 - 15	

(c) Within the Township 32 North, Range 7 West portion of the *transition area*, three Fruitland Coal gas spacing units, each conforming to previously created Blanco-Mesaverde Gas Pool Units by Division Order R-1066, were created as follows:

Letter Order Acres Description within T32N, R7W

0131/4	L	NSP-1884	319.42 Irregular Section 7:	Lots 2, 3, 5, 6 and 7, the E/2
SW/4,				and the W/2 SE/4
	M	NSP-1886	298.38 Irregular Section 7: and 4	Lot 1 and the E/2 SE/4 Irregular Section 8: Lots 3 and the SW/4
	N	NSP-1885	303.66 Irregular Section 8: Irregular Section 9: SW/4	Lots 1, 2, and 5 the N/2 SE/4, and SW/4 SE/4 Lots 4, 14 and the NW/4

## (12) ConocoPhillips presented testimony at the hearing as follows:

- a. Notice of this proposed *transition area* was provided within New Mexico to operators of offsetting spacing units and, in cases where the offsetting operator was ConocoPhillips, to the offsetting working interest owners. The only other operator within the "notice area" other than ConocoPhillips was BP America Production Company, LP.
- b. ConocoPhillips and BP America were both primary parties to two of the three Colorado orders allowing 4 coal gas wells per 320 acre unit.
- c. For purposes of this increased well density, ConocoPhillips proposes that each of these irregularly sized gas spacing units be divided into north and south "halves" by drawing a horizontal line at the midpoints.
- d. Ownership within each gas spacing unit would be unchanged by this north and south division. All owners of each unit would continue to share costs and revenue throughout the unit according to the respective ownership percentages.
- e. Each of these non-standard spacing units is proposed to be allowed up to two Fruitland coal gas wells within the north half of the unit and only one well in the south half of the unit.
- f. Because the well density within the south half of the unit would remain at one well per 160 acres, this south half could be envisioned as the buffer zone between the higher well density directly to the north and the lower well density to the immediately to the south.
- g. The exception to this would be the gas spacing unit called "B" which consists of all of irregular Section 10, Township 32 North, Range 9 West, NMPM, San Juan County. This unit already has two Fruitland coal gas wells located within the south half of the spacing unit and no well located within the north half. ConocoPhillips proposes no additional wells should be approved within this spacing unit until the operator of this gas spacing unit sees the need for an additional well and obtains an approved permit to do so from the Division.

- h. ConocoPhillips reports that rock and reservoir properties within the Fruitland Coal are very similar between the proposed *transition area* and the immediately offsetting spacing units to the north in Colorado. The area does need to be dewatered and additional wells help accelerate this process.
- i. As of the date of this hearing, there had been no wells drilled or completed at the 80-acre well density within the immediately adjoining Colorado spacing units, so drainage has not yet been an issue. However, the majority royalty owner within the *transition area* is the BLM. The BLM is concerned about the possibility of future drainage and has presented ConocoPhillips in New Mexico with a "drainage demand letter".
- j. Exceptions for well locations within the *transition area* for vertical and horizontal wells may be required due to the need to complete existing wells in the Fruitland coals or because of topography or other surface issues.
- k. There is present in this *transition area* a Fruitland coal seam that is sometimes targeted for drilling horizontally. The most economic and practical way to drill horizontal wells in this area is to begin from existing vertical wellbores and extend these wells to the legal edge of the spacing unit. This frequently violates the portion of the Special Pool Rules for the Basin-Fruitland Coal Gas Pool limiting one well per quarter section. ConocoPhillips asks in this case to waive well density restrictions for horizontal wells.
- 1. This state line *transition area* may need to be expanded in east or west directions to match future rule changes in Colorado.

(13) Division records indicate that the Pictured Cliffs, the Mesaverde, and the Dakota formations are productive within the *transition area* and some wells are completed in these formations. The primary formation completed in the *transition area* is the Fruitland Coals and the gas production from these coals is the focus in this case.

(14) The *transition area* involves one or more gas spacing units in the Allison Unit, the San Juan 32 9 Unit, the San Juan 32 8 Unit, and the San Juan 32 7 Unit. Some of the gas spacing units within this *transition area* are not located in any of those "units".

#### The Division director concludes as follows.

(15) Approval of this *transition area* within New Mexico with provisions to drill additional Fruitland Coal wells so as to match the 80-acre well density allowed in Colorado within the northern portions of gas spacing units included in this *transition area* will protect correlative rights and reduce possible future drainage from Colorado.

(16) Restricting well density within the southern portions of these gas spacing units to only one well, will match the current spacing allowed within the Basin Fruitland Coal Gas Pool and is a workable solution to provide a "buffer area" so as to protect against drainage from spacing units to the south.

(17) The New Mexico *transition area* has been sized to adequately match or offset the Colorado spacing units approved for 80-acre well density. Future extensions of this *transition area* east or west should be granted only after notice and hearing.

(18) The Division's Aztec district geologist should be given authority to approve the footage division within each of these irregularly sized gas spacing units between what should be considered the "north half" and the "south half" of such spacing unit.

(19) Up to two producing wells drilled either vertically or horizontally, should be allowed within the northern portion of the gas spacing units located within the *transition area*. The locations or placement of these two wells should be allowed within any portion of the northern "half" of the unit without requiring an exception to the well density rules of the Basin Fruitland Coal Gas Pool. Horizontal wells, if drilled, completed, and produced across this north-south boundary, should be considered to be two wells within this spacing unit.

(20) Each well should be located no closer than 660 feet from the boundary of the spacing unit but should be allowed up to 10 feet from the north-south division line within the spacing units. The Division director should be allowed to grant well location exceptions administratively after application is made, notice is provided to affected parties, and adequate reasons given.

(21) The gas spacing unit "B" comprised of all of irregular Section 10, Township 32 North, Range 9 West, NMPM, should be included in this *transition area* but restricted to only one well in the northern portion of that spacing unit until, and unless, the operator obtains approval from the Division for additional wells. The Division director should be given permission to approve administratively additional wells in this spacing unit provided the operator submits an application with adequate notice provided to affected parties in offsetting New Mexico spacing units.

(22) All spacing and location provisions of the Special Pool Rules of the Basin-Fruitland Coal Gas Pool should remain in effect, except as exempted in this order.

# **IT IS THEREFORE ORDERED THAT:**

(1) The application of ConocoPhillips Company and Burlington Resources Oil & Gas Company, LP (collectively "ConocoPhillips"), to establish a special, state-line transition area for Fruitland coal gas development, in the Basin-Fruitland Coal Gas Pool (71629), is hereby approved.

(2) The transition area shall include the following 14 contiguous Basin-Fruitland Coal Gas Pool spacing units with assigned letters A through N:

# Within Township 32 North, Range 9 West, NMPM

Letter Acres

	A	362.28	Irregular Section 9:	All		
	В	367.84	Irregular Section 10:	All		
	С	369.19	Irregular Section 11:	All		
	<b>D</b> '	400.52	Irregular Section 12:	All		
Within Township 32 North, Range 8 West, NMPM						
·	Е	314.78	Irregular Section 7:	All		
	F	375.07	Irregular Section 8:	All		
	G	382.84	Irregular Section 9:	All		
	Н	290.69	Irregular Section 10:	Lots 6 - 11, Lots 14 – 16		
	I	293.65	Irregular Section 10: Irregular Section 11:	Lots 5, 12, and 13 Lots 7 - 10, Lots 15 and 16		
	J	299.89	Irregular Section 11: Irregular Section 12:	Lots 5 and 6, Lots 11 - 14 Lots 8, 9, and 16		
	K	322.34	Irregular Section 12:	Lots 5 - 7, Lots 10 - 15		
Within Township 32 North, Range 7 West, NMPM						

#### L 319.42 Irregular Section 7: Lots 2, 3, 5, 6 and 7, the E/2 SW/4, and the W/2 SE/4 298.38 Irregular Section 7: Lot 1 and the E/2 SE/4 М Irregular Section 8: Lots 3 and 4 and the SW/4 Ν 303.66 Irregular Section 8: Lots 1, 2, and 5, the N/2 SE/4, and SW/4 SE/4 Lots 4, 14 and the NW/4 SW/4 Irregular Section 9:

(3) Future extensions of this *transition area* east or west shall be granted only after notice and hearing.

(4) The Division's Aztec district geologist is hereby granted authority to approve the footage division within each of these irregularly sized gas spacing units between what shall be considered the "north half" and the "south half" of such spacing unit.

(5) Up to two producing wells drilled either vertically or horizontally, shall be allowed within the north half of the gas spacing units located within this *transition area*. The locations or placement of these two wells shall be allowed within any portion of the north half of the unit without requiring an exception to the well density rules of the Basin Fruitland Coal Gas Pool. Horizontal wells if drilled, completed, and produced across this north-south boundary shall be considered to be two wells within this spacing unit.

(6) Each well shall be located no closer than 660 feet from the boundary of the spacing unit but shall be allowed up to 10 feet from the north-south division line within the spacing units. The Division director may grant well location exceptions administratively in accordance with Division Rule 15.13.

(7) The gas spacing unit "B" comprised of all of irregular Section 10, Township 32 North, Range 9 West, NMPM, shall be restricted to only one well in the north half of that spacing unit until, and unless, the operator obtains approval from the Division for additional wells. The Division director may approve administratively additional wells in this spacing unit only after the operator submits an application with notice provided to affected parties in offsetting New Mexico spacing units.

(8) All provisions of the Special Pool Rules of the Basin-Fruitland Coal Gas Pool shall remain in effect, except as exempted in this order.

(9) 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

MÁRK E. FESMIRE, P.E. Director