## STATE OF NEW MEXICO ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT OIL CONSERVATION COMMISSION

IN THE MATTER OF THE HEARING CALLED BY THE OIL CONSERVATION COMMISSION FOR THE PURPOSE OF CONSIDERING:

CASE NO. 11745

APPLICATION OF BURLINGTON RESOURCES OIL & GAS COMPANY TO AMEND DIVISION RULES 104.B AND 104.C TO ESTABLISH 640-ACRE SPACING, INCLUDING WELL LOCATION REQUIREMENTS FOR GAS PRODUCTION BELOW THE BASE OF THE DAKOTA FORMATION IN SAN JUAN, SANDOVAL AND MCKINLEY COUNTIES, NEW MEXICO.

#### **PRE-HEARING STATEMENT**

This pre-hearing statement is submitted by BURLINGTON RESOURCES OIL & GAS COMPANY as required by the Oil Conservation Division.

## **APPEARANCE OF PARTIES**

#### APPLICANT

Burlington Resources P. O. Box 4289 Farmington, N.M. 87499 Attn: Alan Alexander (505) 326-9757

#### ATTORNEY

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### STATEMENT OF CASE

**APPLICANT:** 

Effective January 1, 1950, the Commission revised its General Rules and Regulations and adopted Rule 104, which provided, in part, that "Each well drilled within a defined gas pool shall be located on a tract consisting of approximately 160 surface contiguous acres substantially in the form of a square..." and with wells located not closer than "660 feet" to the outer boundary.

December 1, 1950, the Commission revised its Rules and Regulations including amending Rule 104 to designate 160-acre gas well spacing for San Juan, Rio Arriba and Sandoval Counties, New Mexico, with well locations 990 feet to the outer boundary.

On December 29, 1950, the Commission issued Order R-46 which established 640acre spacing rules for the Barker Creek (Paradox-Pennsylvanian) Gas Pool and the Ute Dome (Paradox-Pennsylvanian) Gas Pool.

On October 17, 1996, the Commission issued Order R-46-B which redefined the Barker Creek Gas Pool as the Barker Dome-Paradox Gas Pool (640-acre spacing) with stratigraphic vertical limits of 9,1324 feet to 9,430 feet as specified on a certain log.

Except for these two pools, the "deep gas" reservoirs from the base of the Dakota formation to the base of the Pennsylvanian formation in the San Juan Basin has not been effectively explored because operators have generally confined exploration to the "shallow" gas reservoirs from the surface to the base of the Dakota formation.

There exists a substantial opportunity for operators in the San Juan Basin to commence more significant efforts to explore and produce the deep gas in the San Juan Basin.

Under the current rules, an Operator is required to drill a deep gas well on 160acre spacing and then petition the Division for the create of a deep gas pool with special rules and regulations including spacing units larger than 160-acres.

The 160-acre spacing unit size for deep gas has discouraged efforts to develop the deep gas in the San Juan Basin because:

(a) deep gas wells consistently drain more than 160-acres;

(b) a 160-acre unit does not provide sufficient gas-in-place to economically justify the drilling of deep gas wells which currently cost in excess of one million dollars to drill and complete;

(c) operators do not want to assume the risk of either (a) drilling a deep gas well on 160-acre spacing only to have the owners in the adjoining 160-acre drill another deep gas well which is not necessary in order to drain the area or (b) pooling the adjoining tracts into a 640-acre unit after the well is drilled only to have the adjoining owners avoid assuming any of the risk of drilling the deep gas well;

(d) it is extremely difficult to consolidate 640-acres into a voluntary spacing unit for the drilling of wildcat and development deep gas wells;

(e) compulsory pooling is available only for spacing units consistent with the well spacing adopted by the Division which is currently limited to 160 acres; and

(f) future deep gas wells are estimated to costs in excess of one million dollars and the estimate ultimate recovery for deep gas wells requires the dedication of 640 acres to provide sufficient gas reserves to justify the drilling of such wells.

Burlington has developed Barker Creek-Barker Dome area and now has in its possession sufficient geologic and reservoir engineering data from which to project that 640 acre spacing is appropriate of the San Juan Basin area.

Based upon its experience, Burlington recommends that the Commission allow for 640-acre units for deep gas wells in the San Juan Basin by amending Rule 104.B(2)(a) and Rule 104.C(3)(a) and adopting a new Rule 104.B(2)(b) and Rule 104.C(3)(b) as follows:

# For wildcat wells Rule 104.B(2)

(a) <u>Shallow Wildcat Gas Wells.</u> In San Juan, Rio Arriba, Sandoval and McKinley Counties, a wildcat well which is projected to a gas-producing horizon in a formation younger than the Dakota formation, or in the Dakota formation, which was created and defined by the Division prior to March 1, 1997, shall be located on a designated drilling tract consisting of 160 surface contiguous acres, more or less, substantially in the form of a square which is a quarter section, being a legal subdivision of the U.S. Public Land Survey, and shall be located not closer than 790 feet to any outer

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boundary of the tract nor closer than 130 feet to any quarter-quarter section line or subdivision inner boundary.

(b) <u>Deep Wildcat Gas Wells.</u> In San Juan, Rio Arriba, Sandoval and McKinley Counties, a wildcat well which is project to a gas-producing formation in a formation older than the Dakota formation which was created and defined by the Division after March 1, 1997, shall be located on a designated drilling tract consisting of 640 surface contiguous acres, more or less, substantially in the form of a square which is a section, being a legal subdivision of the U.S. Public Land Survey, and shall be located not closer than 1190 feet to any outer boundary of the tract nor closer than 130 feet to any quarter-quarter section line, nor closer than 130 feet to any quarter-quarter section line or subdivision inner boundary.

(c) Current Rules 104.B(2)(b), (c) and (d) shall be renumbered at Rule 104.B(2) (c), (d) and (e) respectively.

# For Development Wells Rule 104.C(3)

(a) <u>Gas Wells.</u> Unless otherwise provided in special pool rules, each development well for a defined gas pool in a formation younger than the Dakota formation, or in the Dakota formation, which was created and defined by the Division prior to March 1, 1997, shall be located on a designated drilling tract consisting of 160 surface contiguous acres, more or less, substantially in the form of a square which is a quarter section, being a legal subdivision of the U.S. Public Land Survey, and shall be located not closer than 790 feet to any outer boundary of the tract nor closer than 130 feet to any quarter-quarter section line or subdivision inner boundary.

(b) <u>Gas Wells.</u> Unless otherwise provided in special pool rules, each development well for a defined gas pool in a formation older than the Dakota formations which was created and defined by the Division after March 1, 1997, shall be located on a designated drilling tract consisting of 640 surface contiguous acres, more or less, substantially in the form of a square which is a section, being a legal subdivision of the U.S. Public Land Survey, and shall be located not closer than 1190 feet to any outer boundary of the tract nor closer than 130 feet to any quarter-quarter section line, nor closer than 130 feet to any quarter-quarter section line or subdivision inner boundary.

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The amendments of Rule 104 as set forth in paragraph (9) above, will prevent the economic loss caused by the drilling of unnecessary wells; will avoid the risks associated with the drilling of an excessive number of wells, will increase the opportunity to drill for "deep gas" by the consolidation of tracts into larger spacing units and will otherwise prevent waste and protect correlative rights.

### **PROPOSED EVIDENCE**

WITNESSES	EST. TIME	EXHIBITS
Mike Dawson (geologist)	30 Min.	5
Chip Lane (reservoir engineer)	45 min.	10
James Strickler (landman)	15 min.	5

### **PROCEDURAL MATTERS**

None anticipated at this time

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