## 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. 14430 ORDER NO. R-12444-D Nomenclature

APPLICATION OF XTO ENERGY, INC. TO EXPAND THE HORIZONTAL LIMITS OF THE UTE DOME-PARADOX GAS POOL TO INCLUDE ALL OF SECTION 27, T32N, R14W AND THE CONCOMITANT CONTRACTION OF THE BARKER DOME-PARADOX POOL, THE BARKER DOME-AKAH/UPPER BARKER CREEK POOL, THE BARKER DOME-DESERT CREEK POOL AND THE BARKER DOME-ISMAY POOL, SAN JUAN COUNTY, NEW MEXICO.

#### ORDER OF THE DIVISION

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

This case came on for hearing at 8:15 a.m. on March 4, 2010, at Santa Fe, New Mexico, before Examiner David K. Brooks.

NOW, on this 17<sup>th</sup> day of March, 2010 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) XTO Energy, Inc. ("Applicant") seeks expansion of the horizontal limits of the Ute Dome-Paradox Gas Pool to include all of Section 27, Township 32 North, Range 14 West, NMPM, in San Juan County, New Mexico. Applicant also seeks contraction of the horizontal limits of four existing Barker Dome pools to exclude the NW/4 of Section 27.

(3) The Commission created the Ute Dome-Paradox Gas Pool and the Barker Creek-Paradox (Pennsylvanian) Gas Pool in Order No. R-13 issued in Case No. 213 on March 15, 1950.

(4) The Barker Creek-Paradox (Pennsylvanian) Gas Pool as defined by that order included the NW/4 of Section 27, Township 32 North, Range 14 West, NMPM, in

Case No. 14430 Order No. R-12444-D *Nomenclature* Page 2 of 4

San Juan County, New Mexico.

(5) By Order No. R-46 issued in Case No. 237 on December 29, 1950, the Commission promulgated Special Rules for the Barker Creek-Paradox (Pennsylvanian) Gas Pool and for the Ute Dome-Paradox Gas Pool, including provision for one well per 640-acre gas spacing unit, with the well to be located no less than 1650 feet from the outer boundary of the spacing unit nor less than 330 feet from the center of the spacing unit.

(6) The Division, in Order No.R-46-A, issued in Case No. 11089 on February 13, 1995 changed the Pool name of the Barker Dome-Paradox (Pennsylvanian) Gas Pool to the Barker Dome-Paradox Gas Pool, contracted the vertical limits to include only the lowest productive intervals, and created three additional Barker Dome pools encompassing the upper productive formations – listed from deepest to shallowest as: Barker Dome-Akah/Upper Barker Creek, Barker Dome-Desert Creek, and Barker Dome-Ismay.

(7) Order No. R-46-A also adopted temporary Special Pool Rules for each of the three new pools; providing for 320-acre units with one well per unit in the Barker Dome-Desert Creek Gas Pool and the Barker Dome-Akah/Upper Barker Creek Gas Pool, and 160-acre units with one well per unit in the Barker Dome-Ismay Gas Pool. The Special Pool Rules for the Desert Creek and Ismay formations and related pools were permanently adopted in Division Order No.R-46-C, issued on April 3, 1997. That order also extended, for two additional years, the temporary Special Rules for the Barker Dome-Akah/Upper Barker Creek Gas Pool. These temporary Special Rules have apparently not since been either made permanent or rescinded, and their present status is not material to the disposition of this case.

(8) The horizontal limits of each of the four Barker Dome gas pools currently include the NW/4 of Section 27 but do not include the remainder of Section 27.

(9) The Ute Dome-Paradox Gas Pool currently bounds Section 27 to the east, southeast and south but does not include any acreage in Section 27.

(10) By Order No. R-12444 issued in Case No. 13544 on October 17, 2005, the Division amended the Special Rules of the Ute Dome-Paradox Gas Pool to allow one well per quarter section within each standard 640-acre gas spacing unit and modified the setback requirements so as to a minimum of 660 feet to a unit outer boundary or section line and 330 feet to a quarter section line.

(11) Applicant appeared at the hearing in this case through counsel and presented testimony that:

a. The Barker Dome and the Ute Dome are side by side, distinct Pennsylvanian aged geologic structures separated by a NE-SW trending deep seated fault. Both structures provide traps for natural gas and have produced from at least Case No. 14430 Order No. R-12444-D *Nomenclature* Page 3 of 4

four separate carbonate reservoirs for over 50 years.

b. The fault that separates the two structures lies to the northwest of Section 27. There is no significant geologic difference between Section 27 and the acreage presently included within the Ute Dome-Paradox Gas Pool.

c. The porosity zones within the carbonate reservoirs in the Ute Dome, including Section 27, are very discontinuous. The spacing rules for the Ute Dome-Paradox Gas Pool, unlike the spacing rules for the Barker Dome-Paradox Gas Pool, acknowledge that one well per 640-acre spacing unit may not be sufficient to drain all of the separate reservoirs within the Paradox Formation, and allow the drilling of up to four wells per section (one well in each quarter section). Section 27 lies entirely, or almost entirely, within the Ute Dome geologic structure, and therefore it is most appropriate that the section be governed by the special rules for the Ute Dome-Paradox Gas Pool.

d. All of Section 27 is Ute Mountain Ute Tribal land. Applicant is the 100 percent working interest owner of the NE/4 and S/2 of Section 27. ConocoPhillips Company is the 100% working interest owner of the NW/4 of Section 27.

(12) Inclusion of all of Section 27 within the Ute Dome-Paradox Gas Pool with its Special Rules allowing four wells per 640-acre unit at all relevant depths would enable Applicant to recover gas that would probably not otherwise be recovered.

(13) Applicant notified all affected parties in Section 27 and in surrounding sections. No other party appeared at the hearing, or otherwise indicated any opposition to this application.

(14) Approval of this application will prevent waste, and will not impair correlative rights.

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

(1) The application of XTO Energy, Inc. to extend the horizontal boundaries of the Ute Dome-Paradox Gas Pool (86760) to include all of Section 27, Township 32 North, Range 14 West, NMPM, in San Juan County, New Mexico is hereby approved.

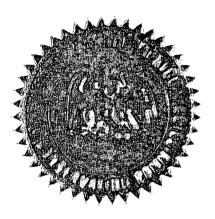
(2) The following pools are hereby contracted to exclude the NW/4 of Section 27 and shall not henceforth cover acreage within Section 27:

Barker Dome-Ismay Gas Pool (96354) Barker Dome-Desert Creek Gas Pool (96353) Barker Dome-Akah/Upper Barker Creek Gas Pool (96352) Case No. 14430 Order No. R-12444-D *Nomenclature* Page 4 of 4

Barker Dome-Paradox Gas Pool (71560)

(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.



OIL CONSERVATION DIVISION

STATE OF NEW MEXICO

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MARK E. FESMIRE, P. E. Acting Director

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