

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. 14394
ORDER NO. R-12444-C
Nunc Pro Tunc

APPLICATION OF CONOCOPHILLIPS COMPANY AND BURLINGTON
RESOURCES OIL & GAS COMPANY, LP TO EXPAND THE HORIZONTAL
LIMITS OF THE UTE DOME-PARADOX GAS POOL TO INCLUDE ALL OF
SECTION 23, 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-ISMAI 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 October 29, 2009, at Santa Fe, New Mexico, before Examiner William V. Jones.

NOW, on this 16th day of February, 2010, the Division Director, having considered the testimony, the record, and the recommendations of the Examiner,

FINDS THAT:

The following order is issued *nunc pro tunc* solely to clarify the language in finding (12) of Order R-12444-B. No other provision of that order is changed. This order shall wholly replace Division Order No. R-12444-B.

(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 ("applicant" or "ConocoPhillips") seeks to expand the horizontal limits of the Ute Dome-Paradox Gas Pool to include all of Section 23, Township 32 North, Range 14 West, NMPM, in San Juan County, New Mexico. ConocoPhillips also seeks to contract the horizontal limits of four existing Barker Dome pools to exclude the NW/4 of Section 23.

(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 23, Township 32 North, Range 14 West, NMPM, in 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 one well per 640-acre gas spacing with the well to be located no closer than 1650 feet from the outer boundary of the spacing unit nor closer than 330 feet from the center of the spacing unit.

(6) The Division in Order No. R-46-A 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: Akah/Upper Barker Creek, Desert Creek, and Ismay.

(7) Said Order No. R-46-A also created temporary Special Pool Rules for each of these three new pools. The Special Pool Rules for the Desert Creek and Ismay formations and related pools were permanently adopted in Division Order No. R-46-C, April 3, 1997. That order also extended, for two additional years, the temporary Special Rules governing wells completed in the Akah/Upper Barker Creek formations.

(8) Within the Barker Dome, the existing gas well spacing and location rules and relative depths (stratigraphic equivalent to the Ute Well No. 16 in La Plata County, Colorado) can be summarized as follows:

Barker Dome-Ismay Gas Pool (8502 feet to 8693 feet)
One well per 160-acre Gas Unit
Well to be located no closer than 790 feet from outer edge of spacing unit
and no closer than 130 feet from the quarter-quarter section lines.

Barker Dome-Desert Creek Gas Pool (8693 feet to 8809 feet)
One well per 320-acre Gas Unit
Well to be located no closer than 790 feet from outer edge of spacing unit
and no closer than 130 feet from the quarter-quarter section lines.

Barker Dome-Akah/Upper Barker Creek Gas Pool (8809 feet to 9134 feet)
Temporary Rules Expired, Statewide Rules in effect as follows:

One well per 640-acre Gas Unit
Well to be located no closer than 1200 feet from outer edge of spacing unit
and no closer than 130 feet from the quarter section line.

Barker Dome-Paradox Gas Pool (9134 feet to 9430 feet)
One well per 640-acre Gas Unit
Well to be located no closer than 1650 feet from outer edge of spacing unit
and no closer than 330 feet from the center of the Gas Spacing Unit.

(9) Horizontal limits of each of the four Barker Dome Gas Pools currently include the NW/4 of Section 23 but do not include the remainder of Section 23.

(10) The Ute Dome-Paradox Gas Pool currently bounds Section 23 to the east, southeast and south but does not include any acreage in Section 23.

(11) 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 a standard 640-acre gas spacing unit and relaxed the setback requirements so as to allow wells no closer than 660 feet to the outer boundary of a section line and 330 feet from a quarter section line.

(12) ConocoPhillips presented testimony at this hearing showing 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 located just outside the San Juan Basin within the "Four Corners Platform". Both structures provide traps for natural gas and have been produced from at least four separate carbonate reservoirs for over 50 years.

b. The Barker Dome has been the more prolific of the two and within the Barker Dome, the lowermost interval called the Alkali Gulch/Lower Barker Creek has been the most productive. Along with the gas, this interval sometimes produces high volumes of very saline water, some carbon dioxide and hydrogen sulfide.

c. Section 23 is cut by the fault which separates these two structures. A portion of the NW/4 of Section 23 is located on the Barker Dome side, but the majority of Section 23 is within the Ute Dome. ConocoPhillips predicts there to be no significant difference between Section 23 and the acreage within the Ute Dome-Paradox Gas Pool.

d. The spacing rules for the Ute 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 of the Ute Dome structure and allow the drilling of up to 4 wells per section. Section 23 lies primarily on the Ute Dome geologic structure and therefore it is most appropriate that the entire section be governed by the special rules for the Ute Dome-Paradox Gas Pool.

e. Since the NW/4 of Section 23 is currently contained in the Barker Dome pools, a standard 640-acre gas spacing unit cannot be created in Section 23 within either the Barker Dome or the Ute Dome. To drill and produce Paradox gas wells in Section 23, the Barker Dome or the Ute Dome must grow to encompass this entire section.

f. ConocoPhillips in this case asks for the spacing and well location relief granted for the Ute Dome-Paradox Pool in Order No. R-12444, be applied to Section 23.

g. All of Section 23 is in the Ute Mountain Ute Tribal lands and ConocoPhillips is the 100 percent leaseholder. XTO Energy, Inc. is the only other operator in this vicinity. There are multiple jurisdictional agencies that apply procedures to this area.

h. ConocoPhillips reported that this application is supported by the Division's district geologist in Aztec.

(13) To include all of Section 23 within the Ute Dome-Paradox Gas Pool with its Special Rules would enable ConocoPhillips to attempt the recovery of gas that might not otherwise be recovered.

(14) The applicant notified all affected parties in Section 23 and in surrounding sections within 1 mile. No parties opposed this case or otherwise appeared at the hearing.

(15) Approval of this application will protect correlative rights and prevent waste.

IT IS THEREFORE ORDERED THAT:

(1) The application of ConocoPhillips Company and Burlington Resources Oil & Gas Company, LP to extend the Ute Dome-Paradox Gas Pool (86760) to cover all of Section 23, Township 32 North, Range 14 West, NMPM, in San Juan County, New Mexico is hereby approved.

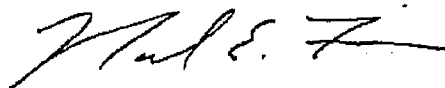
(2) The following pools are hereby contracted to exclude the NW/4 of Section 23 and shall not henceforth cover acreage within Section 23:

Barker Dome-Ismay Gas Pool (96354)
Barker Dome-Desert Creek Gas Pool (96353)
Barker Dome-Akah/Upper Barker Creek Gas Pool (96352)
Barker Dome-Paradox Gas Pool (71560)

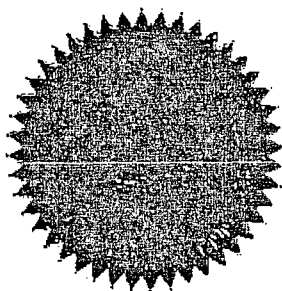
(3) Jurisdiction is hereby retained for the entry of such further orders as the Division may deem necessary.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION



MARK E. FESMIRE, P. E.
Acting Director



SEAL

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. 13544
ORDER NO. R-12444

APPLICATION OF XTO ENERGY, INC. TO AMEND THE SPECIAL RULES
AND REGULATIONS FOR THE UTE DOME-PARADOX GAS POOL, AND TO
EXPAND THE HORIZONTAL LIMITS OF THE POOL, SAN JUAN COUNTY,
NEW MEXICO.

ORDER OF THE DIVISION

RV THE DIVISION:

This case came on for hearing at 8:15 a.m. on August 25, 2005, at Santa Fe, New Mexico, before Examiner Richard I. Ezeanyim.

NOW, on this 17th day of October 2005 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) The Commission Order No. R-13, issued in Case No. 213 on March 15, 1950, initially created and defined the Ute Dome-Paradox Gas Pool. Division Order No. R-4292, issued on May 1, 1972, Order No. R-4690, issued on December 1, 1973, Order No. R-5772, issued on July 1, 1978, Order No. R-7046, issued on August 1, 1982, and order No. R-7420, issued on January 1, 1984, subsequently expanded the horizontal limits of this pool. The horizontal limits of this pool currently include the following described lands in San Juan County, New Mexico:

TOWNSHIP 31 NORTH, RANGE 14 WEST, NMPM

| | |
|----------------|------|
| Sections 1-3: | All |
| Sections 8-11: | All. |

TOWNSHIP 31 NORTH, RANGE 13 WEST, NMPM

Section 19

All

TOWNSHIP 32 NORTH, RANGE 13 WEST, NMPM

Sections 24-26 All

Sections 33-36 All

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

(4) XTO Energy, Inc. ("Applicant") now seeks to amend the above Rules and Regulations currently governing the Ute Dome-Paradox Gas Pool to provide:

- (a) the option to drill one well per quarter section within a standard 640-acre gas spacing unit; and
- (b) the relaxation of the setback requirements for wells, such that wells can be located no closer than (i) 660 feet to the outer boundary of a section line, (ii) 330 feet to an interior quarter section line, and (iii) 10 feet to any quarter-quarter section line or subdivision inner boundary.

(5) The Applicant also seeks to expand the horizontal limits of the Ute Dome-Paradox Gas Pool to include all of Sections 4 and 12 of Township 31 North, Range 14 West, NMPM, San Juan County, New Mexico.

(6) Jerry Simon, a Petroleum Engineer representing Ute Mountain Ute Tribe, appeared at the hearing in support of this application.

(7) The Applicant presented geological evidence that demonstrates that:

- (a) the Ute Dome-Paradox Gas Pool is approximately 1000 feet thick and consists of a sequence of carbonate rocks interspersed with shales;

(b) the type log ran in the pool indicated a very complex stratigraphic reservoir in the sense that porosity is highly variable and not uniformly distributed such that zones of porosity can show up in one well but absent in the adjacent well; and

(c) gas is being produced from spots throughout the 1000 feet thick reservoir, therefore additional wells are needed to develop this heterogeneous reservoir.

(8) The Applicant's engineering evidence demonstrates that:

- (a) the Ute Dome-Paradox Gas Pool is a volumetric gas reservoir with negligible water production;
- (b) the calculated recovery factor (RF) with one well per 640-acre spacing is forty-two (42%) percent;
- (c) the recovery factor increases to sixty (60%) percent when two wells are allowed per 640-acre spacing unit;
- (d) the anticipated recovery factor if four wells are allowed per 640-acre spacing unit is expected to be approximately ninety (90%) percent; and
- (e) typical recovery factors for volumetric gas reservoirs range from 85 to 90 percent.

(9) The Applicant presented evidence that XTO Energy, Inc. owns leasehold interests in Sections 4 and 12 of Township 31 North, Range 14 West. The Applicant has drilled a well in Section 4 that is currently productive in the Ute Dome-Paradox Gas Pool, and is planning to drill another well in Section 12.

(10) The Applicant testified that its request to relax the setback requirements is largely due to cultural issues, topography, and convenience.

THE DIVISION FINDS THAT:

(11) The Applicant's geological and engineering evidence demonstrate that: (i) one well per 640 acres is insufficient to adequately deplete the remaining gas reserves underlying the Ute Dome-Paradox Gas Pool; and (ii) infill drilling with one well per quarter section within this pool should provide the operators the opportunity to recover additional gas reserves, which may otherwise not be recovered by the existing wells, thereby preventing waste.

(12) The proposed well setback requirements should allow for greater flexibility in locating infill gas wells

(13) Pursuant to the applicable Division rules, the applicant notified all operators and interest owners within the area affected by this application. However, no operator or interest owner appeared at the hearing in opposition to the application.

(14) Approval of the application is in the best interest of conservation, prevention of waste, and protection of correlative rights.

IT IS THEREFORE ORDERED THAT:

(1) The application of XTO Energy, Inc. to amend the "*Special Rules and Regulations for the Ute Dome-Paradox Gas Pool*," currently comprising Sections 1, 2, 3, 8 through 11, of Township 31 North, Range 14 West, Section 19 of Township 32 North, Range 13 West, and Sections 24, 25, 26, 33 through 36 of Township 32 North, Range 14 West, NMPM, Ute Dome-Paradox Gas Pool, San Juan County, New Mexico, is hereby approved to provide:

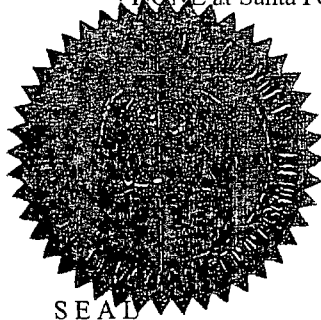
- (a) the option to drill one well per quarter section within a standard 640-acre gas spacing unit; and
- (b) the relaxation of the setback requirements for wells, such that wells shall be located no closer than (i) 660 feet to the outer boundary of a section line, (ii) 330 feet to an interior quarter section line, and (iii) 10 feet to any quarter-quarter section line or subdivision inner boundary.

(2) The horizontal limits of the Ute Dome-Paradox Gas Pool is hereby expanded to include all of Sections 4 and 12 of Township 31 North, Range 14 West, NMPM, San Juan County, New Mexico.

(3) With the exception of Ordering Paragraph No. 1, all other provisions of Commission Order No. R-46 shall remain in full force and effect.

(4) 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.



SEAL

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION

A handwritten signature in dark ink, appearing to read "Mark E. Fesmire".

MARK E. FESMIRE, P. E.
Director