

LINDIL C. FOWLER, JR., GENERAL COUNSEL COLIN K. LINEBERRY, DIRECTOR HEARINGS SECTION

# RAILROAD COMMISSION OF TEXAS

### OFFICE OF GENERAL COUNSEL

OIL & GAS DOCKET NO. 09-0261248

APPLICATION OF XTO ENERGY, INC. PURSUANT TO THE MINERAL INTEREST POOLING ACT FOR THE PROPOSED TEXAS STEEL "B" POOLED UNIT, NEWARK, EAST (BARNETT SHALE) FIELD, TARRANT COUNTY, TEXAS

APPEARANCES:

FOR APPLICANT:

APPLICANT:

**David Gross** Rick Johnston Tarah Fagen Andree French Griffin XTO Energy, Inc.

#### PROPOSAL FOR DECISION

#### PROCEDURAL HISTORY

DATE APPLICATION FILED:

DATE OF INITIAL NOTICE OF HEARING:

DATE OF INITIAL HEARING:

DATE OF REOPENED HEARING:

HEARD BY:

March 10, 2009

March 26, 2009

May 1, 2009

October 5, 2009

James M. Doherty, Hearings Examiner

Richard Atkins, Technical Examiner

DATE RECORD CLOSED:

October 16, 2009

DATE LAST TRANSCRIPT VOL. RECEIVED:

October 14, 2009

DATE PFD CIRCULATED:

December 17, 2009

#### STATEMENT OF THE CASE

Pursuant to the Mineral Interest Pooling Act ("MIPA"), Chapter 102, Texas Natural Resources Code, XTO Energy, Inc. ("XTO") requests that the Commission enter an order force pooling all mineral interests in 839 tracts of land into a 270.8852 acre proration unit for the Texas Steel "B" Unit ("TSBU"), Well No. 1H, Newark, East (Barnett Shale) Field, Tarrant County, Texas. An initial hearing was held on May 1, 2009. Subsequently, at XTO's request, the record of the hearing was reopened, and the reopened hearing was held on October 5, 2009. XTO appeared and

presented evidence at both hearings. No person appeared in opposition to the application. The record closed on October 16, 2009, when XTO filed a publisher's affidavit relating to publication of notice of the reopened hearing.

#### BACKGROUND

XTO initially requested the Commission to enter an order force pooling all mineral interests in 904 tracts of land into a 317.5771 acre proration unit for the TSBU Well No. 2H shown on XTO Exhibit No. 30 presented at the initial hearing. At conference on July 21, 2009, the Commissioners voted to remand to the examiners another application of XTO pursuant to the MIPA¹ for the purpose of determining the area that the proposed MIPA well would drain and to allow XTO, if it so elected, to propose a smaller force pooled unit conforming to the drainage area of the MIPA well. Thereafter, at XTO's request, the hearing was reopened in this docket for the same limited purposes.

At the reopened hearing, XTO abandoned its original proposal and requested that the Commission enter an order force pooling all mineral interests in 839 tracts of land into a 270.8852 acre proration unit for the TSBU Well No. 1H shown on XTO Exhibit No. R4<sup>2</sup>, which is a different well than proposed at the initial hearing.

#### APPLICABLE LAW

The MIPA is a unique act forged by the legislature largely to protect small tract owners and operators in the wake of the *Normanna* decision<sup>3</sup> which invalidated prorationing formulas with large per well allowable factors allowing substantial uncompensated drainage by wells on small tracts. Traditionally, the MIPA has been construed as limited in function to protect owners of small tracts rather than as a broad act designed to protect correlative rights generally or as an act allowing owners of large tracts more flexibility in development. Smith and Weaver, *Texas Law of Oil and Gas*, Vol. 3, Chapter 12, §12.1(B) at page 12-5 (Matthew Bender 2007).

Subject to limitations found elsewhere in the act, §102.011 of the MIPA provides that when two or more separately owned tracts of land are embraced in a common reservoir of oil or gas for which the Commission has established the size and shape of proration units, whether by temporary or permanent field rules, and where there are separately owned interests in oil and gas within an

Oil & Gas Docket No. 09-0260202; Application of XTO Energy, Inc., for Creation of A Force Pooled Unit Pursuant to the Mineral Interest Pooling Act for Its Texas Steel "A" Unit, Well No. 1H, Newark, East (Barnett Shale) Field, Tarrant County, Texas.

<sup>&</sup>lt;sup>2</sup> All references in this proposal for decision to exhibits presented by XTO at the reopened hearing carry an "R" preceding the exhibit number to distinguish from exhibits with the same number presented at the initial hearing.

<sup>&</sup>lt;sup>3</sup> Atlantic Refining Co. v. Railroad Commission, 346 S.W.2d 801 (Tex. 1961).

existing or proposed proration unit in the common reservoir and the owners have not agreed to pool their interests, and where at least one of the owners of the right to drill has drilled or has proposed to drill a well on the existing or proposed proration unit to the common reservoir, the Commission, on the application of an owner specified in Section 102.012 of the act and for the purpose of avoiding the drilling of unnecessary wells, protecting correlative rights, or preventing waste, shall establish a unit and pool all of the interests in the unit within an area containing the approximate acreage of the proration unit, which unit shall in no event exceed 160 acres for an oil well or 640 acres for a gas well plus 10 percent tolerance.

#### DISCUSSION OF THE EVIDENCE

XTO Exhibit No. 3 presented at the initial hearing, a copy of which is attached to this proposal for decision as Appendix 1, was a plat of the originally proposed 317.5771 acre TSBU, coded to differentiate tracts leased to XTO, tracts leased to Thornton Gas Ventures, and tracts that were unleased ("open"). This plat also showed the off-unit surface location for the proposed unit well, which is south of the proposed TSBU. XTO Exhibit No. 30 presented at the initial hearing, a copy of which is attached to this proposal for decision as Appendix 2, was a plat showing a multiple well development plan for the originally proposed 317.5771 acre TSBU. According to a consulting petroleum engineer who testified for XTO at the initial hearing ("Johnston"), this was the most likely development plan for the originally proposed TSBU, assuming approval of compulsory pooling. The Exhibit No. 30 plat showed four horizontal wells drilled from the same off unit drilling pad from south to north or south to northwest across the originally proposed unit. One of the four wells, Well No. 2H, shown on Exhibit No. 30 was the well originally proposed for the purposes of the MIPA.

At the reopened hearing, a XTO in-house reservoir engineer ("Williams") testified that XTO had changed its position as to the force pooled unit and MIPA well that it wished to propose. According to Williams, this was because the MIPA well originally proposed would not have drained the entire 317.5771 acre unit. Some unleased tracts in the originally proposed unit were more than 2,000' away from the proposed MIPA well, and even had the MIPA well been in the center of the

<sup>&</sup>quot;Q. (By Mr. Gross) Okay. Mr. Johnston, would you identify Exhibit No. 30 and show us what you have done here?

<sup>&</sup>quot;A. (By Mr. Johnston) Exhibit No. 30 is a multiple well scenario of if MIPA is approved, I would expect that XTO would go and develop this with multiple wellbores, not with just one. Obviously this would be dependent upon economic conditions and what kind of results they get from the first well that they drill out here, but if things are encouraging and they make the sorts of wells that we see in the study, I would expect that it would be developed with multiple wells. And this is the most likely development pattern of how the unit would be developed if encouraging results are obtained and MIPA is approved." (Tr. 1.85)

unit, the well would not have drained the entire unit. Accordingly, at the reopened hearing, XTO abandoned the compulsory pooling proposal made at the initial hearing and proposed a slightly smaller unit and an entirely different MIPA well. Under its proposal, as amended at the reopened hearing, XTO now requests that the Commission force pool 839 separate tracts of land into a 270.8852 acre proration unit for its proposed Well No. 1H in the Newark, East (Barnett Shale) Field, Tarrant County, Texas. Appendix 3 to this proposal for decision is a copy of XTO Exhibit No. R4 presented at the reopened hearing which shows the amended 270.8852 acre unit and the newly proposed MIPA well.<sup>5</sup>

The area of the proposed TSBU, which is about four miles from downtown Fort Worth, has mixed surface uses, but is heavily residential. Within a five mile radius of the proposed TSBU there are 41 pad sites for wells. Most of these are to the southeast of the proposed TSBU. Due south and west of the proposed TSBU, there is lesser oil and gas development, because these areas are heavily populated, and there are fewer surface areas that will accommodate pad sites.

Within the area of the proposed 270.8852 acre TSBU, at the time of the reopened hearing, XTO had effective oil and gas leases covering 242.1443 acres, which is 89.3901% of the acreage in the proposed unit. Thornton Gas Ventures and Chesapeake Exploration, LLC hold the leasehold interest in a total of four small tracts collectively containing 0.902 acres, but have agreed that these leases may be pooled into the proposed TSBU. Of the 839 separate tracts in the proposed TSBU, as amended, 753 are tracts for which 100% of the mineral interest is leased, 8 are tracts for which a partial undivided interest is leased, and 78 are tracts which are wholly unleased. The unleased tracts contain 27.8389 acres. Included among the tracts that are unleased are two City of Fort Worth tax foreclosed tracts collectively containing 0.356 acres that the City has agreed to pool in return for escrow of a 25% royalty but not to lease. The leases held by XTO have restrictions on use of the surface for "drilling activities" without the consent of the surface owner and all have standard pooling clauses enabling XTO to pool the separate leased tracts into a voluntary pooled unit.

<sup>&</sup>lt;sup>5</sup> The plat of the proposed unit has changed from the unit plat presented at the initial hearing as to size of the unit and tracts within the unit that remain unleased. Some unit tracts and city streets that were unleased at the time of the initial hearing had been leased by XTO as of the date of the reopened hearing.

Two additional tracts that had been tax foreclosed had been purchased by an individual at foreclosure sale, and their owner had agreed to lease to XTO. The City of Fort Worth has advised XTO that "due to an Attorney General's opinion, tax foreclosed properties are prevented from being leased in any capacity and the City is prevented from entering into any type of agreement for the recovery of minerals on these types of property." The City has proposed that (1) the tax foreclosed properties in the proposed TSBU be included in the unit without any agreement from the City; (2) XTO hold a 25% royalty in escrow for the tracts with no risk or obligation to the City, subject to disposition in the manner provided by law; (3) XTO assure the surface of the property shall never be used for drilling, seismic testing, pipelines or any other surface use without the consent of the City as trustee for the taxing entity; (4) XTO provide the city an initial report and thereafter an annual report of the actual tax-foreclosed acreage in the unit and all revenues attributed to each tax foreclosed tract; and (5) XTO assure compliance with all requirements of Railroad Commission rules and the City's gas drilling ordinance and other applicable ordinances. XTO has concurred with these conditions.

XTO puts the owners of only one of the unleased tracts within the amended TSBU in the category of an owner who affirmatively refused to lease: the Mobile Showroom Carpet Store with respect to a 1.1570 acre tract (Tract No. 569) where the owner wanted more bonus money than XTO offered. XTO places 41 owners of 25 unleased tracts in the category of owners XTO was unable to find for purposes of leasing. XTO puts another 102 owners of 61 unleased tracts in the category of owners who received XTO's voluntary pooling offer, as evidenced by receipts for certified mail, but did not respond to the offer.

XTO believes that it made a diligent effort to obtain correct mailing addresses for all owners of unleased tracts by researching probate and district court records and internet resources, including tax and property appraisal resources. On February 18, 2009, XTO sent a written "voluntary pooling offer" to all owners of tracts within the proposed TSBU that then remained unleased. This offer provided three options: (1) a lease option; (2) a participation option; and (3) a farm-out option.

The lease option included a bonus offer of a \$2,400 per net mineral acre and an offer of a 25% royalty. A standard lease form the unleased owners were asked to sign was for a primary term of four years. The lease provided that no "drilling activities" could be had on the surface of the leased premises without the prior written permission of the surface owner. The lease provided also that XTO had the right to pool the leased premises with any other lands or leases.

The participation option provided the unleased owners with an opportunity to purchase a working interest in the proposed TSBU by paying to XTO, prior to commencement of actual drilling operations, the owner's pro rata share of drilling and completion costs. An AFE (Authority for Expenditure) attached to the offer indicated that the estimated cost of drilling and completing the well originally proposed was \$3,580,000.

With respect to these unleased owners, the evidence is not clear as to whether they literally could not be found or simply could not be contacted when approached by XTO. A tabulation of the owners in this category, as to all of the unleased owners, carries the comment "We have sent pooling offer letter and attachments, we have also gone to property address, but mineral owner nonresponsive." Receipts for certified mail to these owners, containing XTO's voluntary pooling offer, were not returned to XTO.

Although, XTO's amended unit is 46.6919 acres smaller than the unit contemplated by the February 18, 2009, voluntary pooling offer, and the proportionate interest of owners of unleased tracts now proposed to be force pooled would be greater than stated in this offer, XTO did not extend a new voluntary pooling offer to the unleased owners prior to the reopened hearing.

The bonus offer to the unleased owners of \$2,400 per net mineral acre was inferior to the bonus paid to an undefined number of owners of leased tracts in the proposed TSBU. XTO was uncertain of the bonus offered and paid by Chesapeake to obtain the leases it subsequently assigned to XTO, but confirmed that the highest bonus paid to owners who leased directly to XTO was "probably" \$15,000 per net mineral acre. The \$2,400 bonus offer made to the unleased owners in February 2009 is deemed fair and reasonable by XTO because by February 2009, market conditions had become such that \$2,400 per net mineral acre was the prevailing bonus offer in the relevant market, and XTO no longer had any competition for leasing in the area of the proposed TSBU.

The farm-out option proposed to the unleased owners that they convey to XTO an 80% net revenue interest attributable to their mineral interests, and retain an overriding royalty interest equal to 20% of 8/8ths, proportionately reduced to the extent that each owner's interest bore to all of the mineral interests in the unit, until payout of all well costs to drill, test, fracture stimulate, complete, equip and connect the well for production, with the option, at payout, to convert the retained override to a 25% working interest, proportionately reduced.

XTO presented a structure map of the top of the Barnett Shale in the immediate area of the proposed TSBU. Color coded on this structure map are existing producing units operated by XTO in the same area. The structure map shows that the area of the proposed unit is in a gently east dipping portion of the Fort Worth Basin. XTO also presented a northwest to southeast cross section including two vertical pilot wells that were drilled to establish the thickness of the Barnett Shale, which is shown to be about 300 feet. XTO's geologist concluded that the Barnett Shale is present and reasonably productive throughout the area of the proposed unit. There are some good Barnett Shale wells in the area of the proposed TSBU.

The Newark, East (Barnett Shale) Field was discovered on October 15, 1981. This field has special field rules providing for 330 foot lease line spacing, and there is no between well spacing requirement. As to horizontal wells, where the horizontal portion of the well is cased and cemented back above the top of the Barnett Shale formation, the distance to any property line, lease line, or subdivision line is calculated based on the distance to the nearest perforation in the well, and not based on the penetration point or terminus. Where an external casing packer is placed in a horizontal well and cement is pumped above the external casing packer to a depth above the top of the Barnett Shale formation, the distance to any property line, lease line, or subdivision line is calculated based on the top of the external casing packer or the closest open hole section in the Barnett Shale. The standard drilling and proration unit for the Newark, East (Barnett Shale) Field is 320 acres. An operator is permitted to form optional drilling units of 20 acres.

From a plot of estimated ultimate recoveries of area wells versus drainhole length, XTO's engineers concluded that there is a general trend showing that the longer the drainhole, the greater the ultimate recovery. Calculated ultimate recovery of horizontal wells in this area of the Newark, East (Barnett Shale) Field is 0.8833 MMCF per foot.<sup>10</sup>

This estimate is derived from a plot of estimated drainhole length versus estimated ultimate recovery for various study wells in the area. A computer generated least squares regression developed a line through the data points having positive slope. The slope of this line is 0.8833 MMCF of ultimate recovery per foot. A similar plot with a fewer number of data points used in support of XTO's MIPA application in Oil & Gas Docket No. 09-0260202 arrived at an ultimate recovery per foot of 1.165 MMCF per foot. According to XTO's petroleum engineer (Johnston), the difference is accounted for by additional production information for the study wells and addition to the study of another well. There is considerable scatter of the data points on the plot. The plot included a well with a drainhole of about 1,700 feet with an EUR of more than 9,000 MMCF, while all three wells in the plot having drainhole length of more than 4,000 feet had EURs of about 1,300 MMCF or less. Of the 69 wells studied in the plot, 66 had drainhole length of less than 4,000 feet.

XTO Exhibit No. R4 (Appendix 3 to this proposal for decision) is a plat showing the amended 270.8852 unit and proposed Well No. 1H on this unit ("the proposed MIPA well"). The drainhole of the proposed well, as drawn by XTO on the Exhibit No. R4 plat, actually traverses two of the 78 tracts in the amended unit that are wholly unleased, and the bottom hole is located on or near a third unleased tract. According to XTO's reservoir engineer (Williams), there are 27 unleased tracts within 330' of the proposed well. The drainhole length of the proposed well is 3,118'.

At the reopened hearing, XTO's reservoir engineer (Williams) presented a volumetric analysis of gas in place beneath the amended 270.8852 acre unit. Based on average porosity of six percent and a 325 feet of pay, he calculated that gas in place beneath the proposed unit is 36 BCF. He estimated that the proposed MIPA will recover 0.8833 MMCF per foot of horizontal drainhole, or about 3.1 BCF, which is about nine percent of the gas in place beneath the amended unit. He claimed that this is a "reasonable recovery" of gas in place for a single well in the Barnett Shale where permeability is less than .0001 millidarcies.<sup>11</sup>

There is some conflict in the engineering testimony regarding the area that reasonably can be expected to be drained by the proposed MIPA well, apparently depending on the appropriate definition of "drainage" for purposes of the MIPA. At various places in the transcript of the reopened hearing, XTO's reservoir engineer (Williams) responded affirmatively to questions from XTO's counsel as to whether the proposed MIPA well "would likely drain" or "affect with drainage" the entire 270.8852 acre unit.<sup>12</sup> Mr. Williams based this claim on a study of two pairs of XTO Barnett Shale wells located about 20 miles north of the TSBU: the Golden Triangle D No. 4H and Golden Triangle B No. 2H and the Copeland D No. 1H and the Copeland G No. 1H (XTO Exhibits Nos. R1 and R2).

The closest perforations in the Golden Triangle D No. 4H and the Golden Triangle B No. 2H are 2,140 feet apart. From a daily production plot for the Golden Triangle D No. 4H, the first of the two wells to be completed, Williams concluded that a response was seen in the daily production of

The nine percent recovery factor assumed the drilling of the single proposed MIPA well on the amended 270.8852 acre unit. Williams testified that elsewhere XTO has drilled as many as four or five wells on a 320 acre unit in the Barnett Shale, and has also drilled horizontal wells in the Barnett Shale as close as 330 feet apart. Drilling of multiple wells on comparable units has resulted in incremental recovery, that is, recovery of gas that a single horizontal well could not recover. In cases where XTO develops comparable units in the Barnett Shale with three wells, it expects a recovery factor for the unit of about 24%.

For example, at Tr. 2.27:

<sup>&</sup>quot;Q. (By Mr. Gross) And if we look - - and is it your testimony that a well drilled as shown on Exhibit No. 4 would be capable of likely draining or affecting with drainage every one of the unleased tracts that we see on this exhibit?

<sup>&</sup>quot;A. (By Mr. Williams) Yes."

the No. 4H well when the Golden Triangle B No. 2H was fracture stimulated, indicating communication between these two wells. He reached a similar conclusion with respect to the Copeland wells, the closest perforations of which are 2,000 feet apart, that is, a response was seen in the daily production of the Copeland D No. 1H when the Copeland G No. 1H was fracture stimulated. Conceding that it cannot be determined from this type of analysis how far out any one of the four study wells is draining, Williams decided to assume lateral drainage of 1,600 feet as the basis for his opinion that the proposed MIPA well will "affect with drainage" or "likely" will drain the entirety of the proposed 270.8852 acre unit.

Williams clarified that his testimony about drainage was not to be construed to mean that the proposed MIPA well will "efficiently and effectively" drain the entire 270.8852 acre unit. His further explanation of his "drainage" testimony is illustrated in the following excerpts from the transcript of the reopened hearing:

"Q. (By Examiner Doherty) In the engineering world, is there a difference between the area impacted by drainage and the area in which a well can be said to be efficiently and effectively draining?

"A. (By Mr. Williams) Yes.

"Q. And the area that a well might be efficiently and effectively draining would be smaller than the area impacted by drainage?

"A. Yes." (Tr. 2.55-56)

"Q. All right. And then if you look at Exhibit No. 30 in the Texas Steel "B" Unit case.

"Q. Again, I am not going to try to quote the testimony, but this was an exhibit in the Texas Steel "B" Unit docket that was I think intended to have the same purpose as the last exhibit I asked you about, a multiple well option for the Texas Steel "B" Unit, and about how far away are the four wells?

"A. They are similar, just a little bit under 1000 feet apart.

"Q. All right. Well, wouldn't these two exhibits have suggested to anyone trying to analyze what they meant that several wells would be required to efficiently and effectively drain the same area that you're now contending a single well will drain?

"A. Well, a single well would not efficiently and effectively drain it, but I believe it would have some drainage over all tracts in the unit." (Tr. 2.57-58)

XTO Exhibit No. 30 (Appendix 2 to this proposal for decision) presented at the initial hearing by XTO's consulting petroleum engineer (Johnston) showed a four well development plan for the proposed TSBU. Three of the four wells shown on this exhibit could be accommodated by the amended 270.8852 acre unit, which covers the same acreage as the unit originally proposed at the initial hearing except for about 46 acres on the western side of the original unit. The four wells on Exhibit No. 30 are spaced about 1,000 feet apart. At the initial hearing, Mr. Johnston gave the following testimony regarding wells shown on Exhibit No. 30 other than the then proposed Well No. 2H which was in the western central portion of the originally proposed unit:

- "Q. (By Examiner Doherty) Now, looking again at Exhibit No. 30 and trying to understand this multiple well option that has been discussed, is it that you believe that the drilling of Well No. 4H as shown on Exhibit No. 30 would be necessary to drain the eastern side of this unit?
- "A. (By Mr. Johnston) Yes, sir.
- "Q. And then the drilling of No. 3-H would be necessary to drain tracts in the I will call it eastern central portion of the unit?
- "A. Yes, sir.
- "Q. And the drilling of the 1-H would be necessary to drain tracts in the western portion of the unit?
- "A. Yes.
- "Q. So the 2-H well, if you just considered it in isolation, would not come close to draining the entire unit?
- "A. I wouldn't expect the 2-H to drain the entire unit, no, by itself, not effectively." (Tr. 1,102-103).

XTO Exhibit No. R8 presented at the reopened hearing is a plat showing a horizontal well that could be drilled on the amended 270.8852 acre unit at a regular location without compulsory pooling. A copy of this plat is attached to this proposal for decision as Appendix 4. This well would be located on the west side of the unit and would have drainhole length of 2,415'. If this well recovered 0.8833 MMCF per foot of horizontal drainhole, it would have an EUR of about 2.5 BCF. Based on the assumption that the proposed MIPA well would recover 0.8833 MMCF per foot of horizontal drainhole, it would recover 0.6 BCF more than the regularly located well shown on XTO Exhibit No. R8. XTO did not present a plat showing the horizontal well or wells that could be drilled on XTO's leased acreage within the area of the TSBU with a Rule 37 exception.

#### **EXAMINERS' OPINION**

The examiners cannot recommend approval of XTO's application in its entirety for three reasons. First, XTO is proposing that the Commission force pool tracts and acreage in the western portion of its amended unit where XTO can drill a feasible horizontal well on a voluntarily formed unit without compulsory pooling. A second reason is that the proposed MIPA well will not efficiently and effectively drain the entire amended 270.8852 acre unit. Lastly, the examiners have concluded that XTO continues to propose a force pooled unit to accommodate future multiple well development. This is not permissible under the MIPA which authorizes compulsory pooling into a proration unit for a single well only. Nonetheless, in the particular fact circumstances of this case and on the authority of the *Finley* precedent, the examiners believe that the application should be granted in part, as discussed below.

#### Regular and/or Rule 37 Locations

With the exception of two unleased tracts in the extreme southwestern portion of the amended unit, there are no unleased tracts that present any particular hindrance to the drilling of a feasible horizontal well on a voluntarily formed unit on the western side of the proposed MIPA unit. Under the MIPA, the Commission may order compulsory pooling only if it is necessary to avoid the drilling of unnecessary wells, protect correlative rights, or prevent waste. Smith & Weaver, *Texas Law of Oil and Gas*, Vol. 3, Chapter 12, §12.3[A][6] at page 12.22.1. With respect to the tracts and acreage on the western side of the amended unit, it cannot be said that compulsory pooling is necessary to accomplish any of these purposes. This is a first reason why force pooling into the entirety of the unit now proposed by XTO cannot be ordered.

XTO's Exhibit No. R8 shows a well that could be drilled on the western side of the amended unit at a *regular* location without compulsory pooling. This well would have a drainhole length of 2,415', which is as long or longer than more than 50% of the Barnett Shale wells within five miles of the TSBU studied on XTO Exhibit No. R6. With the benefit of a Rule 37 exception, the drainhole of this well could be extended by moving the penetration point to the southeast and the bottom hole location to the northwest. This would add a minimum of 335 feet to the horizontal drainhole of the well, and it is unlikely that any longer drainhole could be drilled from the off-lease surface location on the western side of the amended unit with or without compulsory pooling. A conceptual plat showing this possible Rule 37 well is attached to this proposal for decision as Appendix 5. There is no precedent for the proposition that compulsory pooling under the MIPA is justified to avoid the need to obtain a Rule 37 exception. The examiners have officially noticed from Commission records that XTO has applied for and obtained hundreds of Rule 37 exceptions in the Newark, East (Barnett Shale) Field, and not one of these has required a contested case hearing.

#### The Drainage Issue

The drainage issue is significant because compulsory pooling of tracts that will not be drained by the proposed MIPA well is not authorized under the MIPA. Force pooling of tracts that will not be drained will not prevent the drilling of unnecessary wells because additional wells will be

required to drain these tracts. Force pooling of tracts that will not be drained will not prevent waste or protect correlative rights because whatever reserves exist under these tracts will remain there regardless of the drilling of the proposed MIPA well. See Smith & Weaver, Texas Law of Oil & Gas, Vol. 3, Chapter 12, §12.3[A][6] at pages 12-22.2 ("Conversely, if an additional well is necessary to drain the acreage sought to be forcibly pooled, then pooling should also be denied because the pooling would not avoid the drilling of unnecessary wells, prevent waste, or protect correlative rights.")

The examiners believe that XTO's application, as modified at the reopened hearing, cannot be approved in its entirety because XTO did not convincingly establish that the entirety of the proposed 270.8852 acre unit would be effectively and efficiently drained by the newly proposed MIPA well. In an attempt to demonstrate that the entirety of the proposed unit would be "impacted" by drainage or "likely" be drained by the newly proposed MIPA well, XTO relied on its analysis of two pairs of XTO Barnett Shale wells located about 20 miles to the north of the TSBU. According to XTO, although the closest perforations in each pair of wells are about 2,000 feet apart, plots of daily gas and water production show as to each well pair that fracturing of the second wells had an impact on production of the first well, so that the wells must be in communication. XTO could not determine how far out each well was draining, but, for the purpose of conclusions about drainage of the amended unit by the proposed MIPA well, assumed drainage 1,600 feet laterally from the horizontal drainhole. XTO's well pair analysis is not convincing evidence of efficient and effective drainage for several reasons.

First, even if XTO's interpretation is correct that the wells in each well pair in its drainage analysis are in "communication," this does not establish that any well studied is efficiently and effectively draining 1,600 feet laterally from the horizontal drainhole. XTO's reservoir engineer conceded that to say that the proposed MIPA well would have a drainage "impact" on tracts up to 1,600 feet away is something different than saying the MIPA well will efficiently and effectively drain tracts at this distance. In fact, this engineer concluded that it is *not* likely that the proposed MIPA well will efficiently and effectively drain the entirety of the proposed unit. The two well pairs in XTO's drainage analysis were selected from a study of all of XTO's Barnett Shale wells, including other horizontal wells with perforations at comparable distances apart that did not exhibit any communication. There was no showing by XTO that the two well pairs used for the purpose of its drainage analysis are in any way typical of Barnett Shale wells generally. It is counterintuitive to suggest that a typical well in the Newark, East (Barnett Shale) Field, a field with 330 foot lease line spacing and zero feet between well spacing, will effectively and efficiently drain an area extending out 1,600 feet on either side of the horizontal drainhole.

XTO's Exhibit No. 30 presented at the initial hearing (Appendix 2 to this proposal for decision) suggested that as many as three horizontal wells would be required to drain basically the same acreage as is now included in the amended unit. XTO's reservoir engineer explained this by saying that while a single well would have "some" drainage, it would not effectively and efficiently drain this acreage. The Exhibit No. 30 plat is relevant because it depicts XTO's conception of how far laterally horizontal wells in the Barnett Shale can effectively and efficiently drain. Three of the wells shown on this plat which could be accommodated by the amended unit are less than 1,000 feet

apart, suggesting that XTO believes that each well would drain laterally about 500 feet from the horizontal drainholes. It appears from use of the scale on XTO Exhibit No. R4 (Appendix 3 to this proposal for decision) that in order to drain the entirety of the amended 270.8852 acre unit, the proposed MIPA well would have to drain laterally from the horizontal drainhole a distance of up to about 1,594 feet to the east and west.

The examiners are persuaded that the area that will be efficiently and effectively drained is the proper drainage test under the MIPA, because only efficient and effective drainage by a MIPA well will prevent the drilling of unnecessary wells on the MIPA unit, prevent waste, and protect correlative rights. Assuming lateral drainage of no more than 500 feet as suggested by XTO Exhibit No. 30, the proposed MIPA well would efficiently and effectively drain only about one-third of the amended 270.8852 acre unit and leave numerous leased and unleased tracts within the unit undrained.

### Multiple Well Development Unit

The examiners remain convinced that even with the amended proposal, XTO is asking the Commission to form a large force pooled unit for future multiple well development. The Commission has authority to form compulsory units having acreage up to the standard proration unit for the field, but has frequently approved MIPA units having acreage less than the standard proration unit. Compulsory pooling is authorized only where necessary to prevent the drilling of unnecessary wells, prevent waste, or protect correlative rights, and for this reason, the size of a compulsory unit that may be approved should be no larger than the area that the MIPA well will efficiently and effectively drain. XTO has made no claim that its newly proposed MIPA well will efficiently and effectively drain the entirety of the amended 270.8852 acre unit, and, in fact, has conceded that such drainage of the unit is *not* likely. Instead, XTO says that if the requested compulsory unit is approved, it will drill the MIPA well and then determine whether additional wells will be drilled to efficiently and effectively drain the entire unit. At the initial hearing, XTO's petroleum engineer (Johnston) testified that a multiple well option is the most likely development plan XTO will pursue if its MIPA application is approved.

On 320 acre units elsewhere in the Barnett Shale, XTO has developed the unit with up to four or five wells and has achieved incremental recovery of gas by drilling multiple wells. While the single proposed MIPA well will achieve recovery of only 9% of the gas in place beneath the amended 270.8852 acre unit, XTO's experience elsewhere in the Barnett Shale has been that the drilling of three wells on 320 acre units will result in a 24% recovery factor.

The Commission's authority to order compulsory pooling under the MIPA is limited to the pooling of separately owned interests in oil and gas into an existing or proposed proration unit for

a well. Compulsory pooling into a development unit for multiple wells is not contemplated by the MIPA. See Oil & Gas Docket No. 06-0245016; Application of Patricia C. Nowak for Formation of A Pooled Unit Pursuant to the Mineral Interest Pooling Act, Proposed Waldrop Gas Unit 1-A, Carthage (Cotton Valley) Field, Panola County, Texas (Final Order served July 7, 2006) (Conclusion of Law No. 5: "The Commission's authority to order forced pooling under the Mineral Interest Pooling Act [Texas Natural Resources Code, Chapter 102] is limited to the pooling of separately owned interests in oil and gas into an existing or proposed proration unit for a well, and the Commission may not at once forcibly pool the entirety of the interest of Patricia C. Nowak into a unit which includes the location of multiple wells and all or portions of multiple proration units.") The proposed unit, even as amended, is simply too large given that the MIPA authorizes force pooling into a proration unit for only a single well.

# Recommended MIPA Unit

Notwithstanding the several reasons why the 270.8852 acre force pooled unit proposed by XTO cannot be approved, the examiners are of the opinion that compulsory pooling into a smaller unit that will be efficiently and effectively drained by the proposed MIPA well is justified by XTO's evidence under the *Finley* precedent.

The MIPA well proposed by XTO at the reopened hearing is basically in the center of the amended 270.8852 acre unit. While the drainhole of the proposed MIPA well shown on XTO Exhibit No. R4 (Appendix 3 to this proposal for decision) actually traverses only two tracts that are wholly unleased, and the bottom hole is located on or near a third unleased tract, there are 27 unleased tracts within 330 feet of the proposed well. The locations of unleased tracts make it impractical, if not impossible, to drill a well in the center of the proposed unit without trespass, and any attempt to snake a centrally located well around the unleased tracts with a Rule 37 exception would involve highly circuitous and impractical drilling operations and at least the possibility of an unintentional trespass on unleased tracts. This is the same factual scenario involved in *Finley*. The

Under Texas Natural Resources Code §102.011, the authority of the Commission to force pool pertains to two or more separately owned tracts of land in a common reservoir for which the Commission has established the size and shape of proration units, where there are separately owned interests in oil and gas within an existing or proposed proration unit and the owners have not agreed to pool, and where at least one of the owners of the right to drill has drilled or has proposed to drill a well on the existing or proposed proration unit to the common reservoir, Under §102.012(1) of the Code, the owner of any interest in oil and gas in an existing proration unit may apply under the MIPA for the pooling of mineral interests. Under §102.013(c) of the Code, an offer of the owner of any interest in oil and gas within an existing proration unit to share on the same yardstick basis as the other owners within the existing proration unit are then sharing is to be considered a fair and reasonable offer. Under §102.014(a) of the Code, the Commission may not require the owner of a mineral interest, the productive acreage of which is equal to or in excess of the standard proration unit for the reservoir, to pool his interest with others, unless requested by the holder of an adjoining mineral interest, the productive acreage of which is smaller than such pattern, who has not been provided a reasonable opportunity to pool voluntarily. Under §102.017 of the Code, a Commission compulsory pooling order must describe the land included in the unit, identify the reservoir to which it applies, and designate the location of the well. See also Carson v. Railroad Com'n of Texas, 669 S.W.2d 315, 317 (Tex. 1984), wherein the Texas Supreme Court held that the Legislature's intent in adding subsection (c) to §102.013 of the Code was to permit small tract owners to "muscle in" to a larger established "proration unit."

evidence demonstrates that compulsory pooling is necessary to permit the drilling of a horizontal well in the central portion of the proposed unit as necessary to prevent waste and protect correlative rights, to the extent that the proposed MIPA well will efficiently and effectively drain the entirety of the force pooled unit.

The examiners have concluded that it may be inferred from the testimony of XTO's engineers at the initial and reopened hearings, and from XTO Exhibit No. 30 showing proposed well spacing for a multiple well development pattern, that the proposed MIPA well in the central portion of the proposed unit will have efficient and effective drainage no more than 500 feet on either side of the drainhole. Attached to this proposal for decision as Appendix 6 is a plat with an outline of the force pooled unit which the examiners recommend, which consists of all leased and unleased tracts within 500 feet of the proposed MIPA well. The examiners recommend that the Commission enter an order force pooling all mineral interests in these tracts into a unit for the proposed MIPA well, subject to the same conditions imposed in the Commission's final order in *Finley*. The Commission's authority is limited to compulsory pooling into a proration unit for a single well. If XTO believes that compulsory pooling is justified to permit the drilling of a well on the eastern side of XTO's amended 270.8852 acre unit, it has the option of filing another application under the MIPA to accomplish this. As indicated previously, the examiners do not believe that compulsory pooling of tracts on the western side of the proposed 270.8852 acre unit is justified, because of XTO's ability to drill a feasible horizontal well there without compulsory pooling.

Based on the record in this case, the examiners recommend adoption of the following Findings of Fact and Conclusions of Law.

#### FINDINGS OF FACT

- 1. Notice of the initial and reopened hearings in this docket was mailed to all interested parties at mailing addresses provided by the applicant XTO Energy, Inc. ("XTO") at least 30 days prior to the hearing dates.
- 2. Notice of the initial and reopened hearings was published in the Fort Worth Star Telegram once per week for four consecutive weeks.
- 3. In this application, as amended at the reopened hearing, XTO requests that the Commission approve compulsory pooling pursuant to the Mineral Interest Pooling Act ("MIPA"), Chapter 102, Texas Natural Resources Code, of all mineral interests in 839 tracts of land into a 270.8852 acre proration unit for the Texas Steel "B" Unit ("TSBU"), Well No. 1H, Newark, East (Barnett Shale) Field, Tarrant County, Texas.
- 4. Appendix 1 to this proposal for decision, incorporated into this finding by reference, is a plat (XTO Exhibit No. 3) of the 317.5771 acre TSBU as proposed at the initial hearing, coded to differentiate tracts leased to XTO, tracts leased to Thornton Gas Ventures, and tracts that were unleased ("open").

- 5. Appendix 2 to this proposal for decision, incorporated into this finding by reference, is a plat (XTO Exhibit No. 30) of the 317.5771 acre TSBU as proposed at the initial hearing, depicting a "multiple well option" on the TSBU. Well No. 2H shown on Appendix 2 was the MIPA well proposed by XTO at the initial hearing.
- 6. At the reopened hearing, XTO modified its proposal by reducing the size of the proposed force pooled unit and proposing to drill a different MIPA well on the unit. The number of separate tracts proposed to be included in the force pooled unit was reduced from 904 to 839. The number of acres in the proposed unit was reduced from 317.5771 to 270.8852.
- 7. Appendix 3 to this proposal for decision, incorporated into this finding by reference, is a plat (XTO Exhibit No. R4) presented at the reopened hearing showing the amended 270.8852 acre unit proposed by XTO, coded to differentiate tracts leased to XTO, tracts leased to other lessors, and tracts that are unleased ("open"). This plat also shows the newly proposed MIPA well.
- 8. No person appeared at the hearings in opposition to the XTO application.
- 9. The Newark, East (Barnett Shale) Field was discovered on October 15, 1981. This field has special field rules providing for 330' lease line spacing, and there is no between well spacing requirement. As to horizontal wells, where the horizontal portion of the well is cased and cemented back above the top of the Barnett Shale formation, the distance to any property line, lease line, or subdivision line is calculated based on the distance to the nearest perforation in the well, and not based on the penetration point or terminus. Where an external casing packer is placed in a horizontal well and cement is pumped above the external casing packer to a depth above the top of the Barnett Shale formation, the distance to any property line, lease line, or subdivision line is calculated based on the top of the external casing packer or the closest open hole section in the Barnett Shale. The standard drilling and proration unit for the Newark, East (Barnett Shale) Field is 320 acres. An operator is permitted to form optional drilling units of 20 acres.
- 10. The proposed TSBU is about four miles from downtown Fort Worth, Texas. The proposed TSBU has mixed surface uses, but is heavily residential.
- 11. At the time of the reopened hearing, XTO had effective oil and gas leases covering 242.1443 acres within the proposed TSBU, which is 89.3901% of the acreage in the amended unit.
- 12. Thornton Gas Ventures and Chesapeake Exploration, LLC, which have agreed to participate as a working interest owner in the proposed TSBU, have oil and gas leases covering four small tracts containing 0.902 acres.

- 13. At the time of the reopened hearing, of the 839 separate tracts in the amended TSBU, 78 were wholly unleased, and these unleased tracts contained 27.8389 acres.
  - a. Included among the tracts that were unleased at the time of the hearing were two City of Fort Worth tax foreclosed tracts collectively containing 0.356 acres that the City has agreed to pool in return for escrow of a 25% royalty.
  - b. Another tract that was unleased at the time of the reopened hearing (Tract No. 143) is a 10.1515 acre tract owned by the Fort Worth ISD that XTO has nominated for lease.
  - c. The owner of one of the unleased tracts containing 1.1570 acres affirmatively refused to lease because the owner wanted more bonus money than XTO offered.
  - d. Forty-one owners of 25 unleased tracts could not be contacted by XTO for purposes of leasing. These owners could not be contacted when XTO went to their property addresses, and signed receipts for certified mail containing XTO's voluntary pooling offer sent to these owners were not returned to XTO by the U. S. Postal Service.
  - e. One hundred and two owners of 61 unleased tracts received XTO's voluntary pooling offer, as evidenced by signed receipts for certified mail, but did not respond to XTO's offer.
  - f. A substantial majority of the unleased tracts are small lots containing a fraction of an acre.
- 14. XTO made a diligent effort to obtain correct addresses for all owners of mineral interests within the proposed TSBU and to obtain oil and gas leases from these owners.
- 15. The leases held by XTO on tracts within the proposed TSBU have restrictions on use of the surface for "drilling activities" without the consent of the surface owner. All of these XTO leases have standard pooling clauses enabling XTO to pool the separate leased tracts into a voluntary pooled unit.
- On February 18, 2009, XTO sent a voluntary pooling offer via certified mail to all the owners of mineral interests in tracts within the proposed TSBU that remained unleased at the time of the offer. These unleased owners were offered a lease option, a participation option, or a farm-out option.
  - a. The lease option included a bonus offer of a \$2,400 per net mineral acre and an offer of a 25% royalty.
    - A standard lease form the unleased owners were asked to sign was for a primary term of four years.

- The standard lease form provided that no "drilling activities" could be had on the surface of the leased premises without the prior written permission of the surface owner.
- iii. The standard lease form provided that XTO had the right to pool the leased premises with any other lands or leases.
- iv. The largest bonus paid by XTO to any mineral owner within the proposed TSBU was \$15,000.
- v. Most of XTO's leases covering tracts within the proposed TSBU were taken between July 2008 and April 2009.
- vi. The price of gas declined precipitously from the summer of 2008 to the spring of 2009.
- vii. As of February 18, 2009, XTO was not experiencing any competition for leases within the TSBU.
- viii. As of February 18, 2009, the bonus offer of \$2,400 per net mineral acre was the prevailing bonus offer for leases in the relevant market.
- b. The participation option provided the unleased owners with an opportunity to purchase a working interest in the proposed TSBU by paying to XTO, prior to commencement of actual drilling operations, the owner's pro rata share of drilling and completion costs. An Authority for Expenditure ("AFE") attached to the offer stated that the estimated cost of drilling and completing the well initially proposed was \$3,580,000.
- c. The farm-out option proposed to the unleased owners that they convey to XTO an 80% net revenue interest attributable to their mineral interests, and retain an overriding royalty interest equal to 20% of 8/8ths, proportionately reduced to the extent that each owner's interest bore to all of the mineral interests in the unit, until payout of all well costs to drill, test, fracture, stimulate, complete, equip and connect the well for production, with the option, at payout, to convert the retained override to a 25% working interest, proportionately reduced.
- 17. The proposed TSBU is in a gently east dipping portion of the Fort Worth Basin. In this area the Barnett Shale has a thickness of about 300 feet. The Barnett Shale is present and reasonably productive throughout the area of the proposed TSBU.

- 18. A plot of estimated ultimate recoveries of 69 Barnett Shale wells within five miles of the TSBU versus drainhole length shows there is a general relationship between drainhole length and ultimate recovery. Calculated ultimate recovery of horizontal wells in this area of the Barnett Shale is 0.883 MMCF per foot.
- 19. XTO's plot of estimated ultimate recoveries of Barnett Shale wells in the area of the TSBU versus drainhole length has considerable scatter of the data points. The plot includes a well with a drainhole length of only 1,700 feet that has one of the best estimated ultimate recoveries of the study wells, more than 9,000 MMCF, while all three wells in the plot having drainhole length of more than 4,000 feet had EURs of about 1,300 MMCF or less. Of the 69 wells studied in the plot, 66 had drainhole length of less than 4,000 feet.
- 20. The MIPA well proposed by XTO at the reopened hearing would traverse two tracts in the proposed unit that are wholly unleased, and the bottom hole of this well would be on or near a third unleased tract. This horizontal well is proposed to be drilled from an off unit surface location southwest of the TSBU. The well would have a reach from the proposed surface location to the east of about 780 feet and would be landed in the Barnett Shale 330 feet from the south line of the proposed unit. The drainhole would then be drilled in a northerly direction to a terminus 330 feet from the north line of the proposed unit. The drainhole of the proposed MIPA well would have a length of 3,118 feet.
- 21. Volumetrically calculated gas in place beneath the amended 270.8852 acre unit is 36 BCF. If the proposed MIPA well recovers 0.8852 MMCF per foot of horizontal drainhole, its ultimate recovery will be about 3.1 BCF, which is about nine percent of the gas in place beneath the unit.
- 22. Appendix 4 to this proposal for decision, incorporated into this finding by reference, is a plat (XTO Exhibit No. R8) showing a horizontal well that could be drilled on the western side of the amended unit at a regular location without compulsory pooling. As depicted, this well would have drainhole length of 2,415 feet. With a Rule 37 exception, the drainhole of this well could be extended by moving the penetration point to the southeast and the bottom hole location to the northwest. This would add a minimum of 335 feet to the horizontal drainhole of the well, and it is unlikely that any longer drainhole could be drilled from the off-lease surface location on the western side of the amended unit with or without compulsory pooling. A conceptual plat showing this possible Rule 37 well is attached to this proposal for decision as Appendix 5, incorporated into this finding by reference.
- 23. The Rule 37 well depicted in Appendix 5 to this proposal for decision would efficiently and effectively recover gas beneath the proposed unit that would not be recovered efficiently and effectively by XTO's proposed MIPA well.

- 24. XTO did not establish that its proposed MIPA well will efficiently and effectively drain the entire amended 270.8852 acre unit. To accomplish such drainage, the proposed MIPA well would need to drain laterally from the horizontal drainhole up to 1,594 feet to the east and west. The proposed MIPA well will not have efficient and effective drainage over these distances from the horizontal drainhole.
  - a. XTO's analysis of communication between two pairs of Barnett Shale wells located about 20 miles to the north of the TSBU does not establish the area which the proposed MIPA well will drain efficiently and effectively.
    - The wells that are the subject of this analysis were selected from a review of all of XTO's Barnett Shale wells, including well pairs that did not demonstrate communication over comparable distances.
    - ii. The study wells were not shown to be representative of Barnett Shale wells generally.
    - iii. The area impacted by drainage of a well is different from the area the well will drain efficiently and effectively.
  - b. At least three parallel horizontal wells would be required to efficiently and effectively drain the entirety of the amended 270.8852 acre unit, as shown by XTO Exhibit No. 30 presented at the initial hearing (Appendix 2 to this proposal for decision) and the expert testimony relating to this exhibit by a petroleum engineer retained by XTO.
  - c. XTO's in-house reservoir engineer conceded at the reopened hearing that the proposed MIPA well would not efficiently and effectively drain the entire amended 270.8852 acre unit.
  - d. The proposed MIPA well cannot reasonably be expected to efficiently and effectively drain an area more than 500 feet laterally on either side of the horizontal drainhole, as demonstrated by the between well spacing of multiple horizontal wells shown XTO Exhibit No. 30 and the expert testimony relating to this exhibit by a petroleum engineer retained by XTO. In the multiple well development pattern depicted by XTO Exhibit No. 30, the between well spacing is no more than 1,000 feet, suggesting that each well will drain no more than 500 feet laterally from the horizontal drainhole.
- 25. The amended 270.8852 acre unit is likely proposed by XTO in contemplation of multiple, well development on the unit.
  - a. The single proposed MIPA well will not effectively and efficiently drain the entire unit.

- b. At least three horizontal wells would be required to efficiently and effectively drain the eastern, central, and western portions of the amended 270.8852 acre unit.
  - i. XTO Exhibit No. 30 presented at the initial hearing depicted a multiple well (four well) option on the originally proposed unit.
  - ii. The proposed amended unit contains only 46.6919 fewer acres than the originally proposed unit.
  - iii. At least three of the wells shown on XTO Exhibit No. 30 could be accommodated on the amended unit.
- c. The petroleum engineer presented by XTO at the initial hearing stated his expert opinion that the multiple well option would be the most likely development pattern for the TSBU if XTO's MIPA application is approved.
- d. The single proposed MIPA well will recover only about nine percent of the gas in place beneath the amended unit. On 320 acre units elsewhere in the Barnett Shale, XTO has drilled as many as four or five wells. Drilling of multiple wells on comparable units has resulted in incremental recovery, that is, recovery of gas that a single horizontal well would not recover. In cases where XTO has developed comparable units in the Barnett Shale with three wells, a recovery factor for the unit of about 24% of the gas in place is expected.
- 26. The owners of unleased tracts within the amended unit have not agreed to lease to XTO or accept any other aspect of XTO's offer to pool their interests into the proposed unit.
- 27. The proposed MIPA well cannot be drilled without compulsory pooling of separate tracts in the central portion of the proposed unit. This well would traverse two tracts that are wholly unleased and would be bottomed on or near a third tract that is wholly unleased.
- 28. There are 27 unleased tracts within 330 feet of the horizontal drainhole of the proposed MIPA well.
- 29. The locations of unleased tracts make it impractical, if not impossible, to drill a well in the central portion of the amended unit without trespass on unleased tracts.
- 30. Even with the benefit of a Rule 37 exception it would be impractical to drill a circuitous horizontal wellbore in the central portion of the amended unit to avoid unleased tracts, and any attempt to drill such a well would run the risk of an unintentional trespass.

- 31. The drilling of a horizontal well that will efficiently and effectively drain the central portion of the amended unit is necessary to prevent waste of hydrocarbons and afford the mineral interest owners in this portion of the unit a reasonable opportunity to recover their fair share of hydrocarbons.
- 32. There are no regular locations in the central portion of the amended unit where a feasible horizontal well might be drilled.
- 33. A horizontal well drilled at the location proposed by XTO will efficiently and effectively drain tracts within 500 feet on either side of the horizontal drainhole.
- 34. Compulsory pooling of all mineral interests in tracts all or portions of which are within 500 feet on either side of XTO's proposed MIPA well, as shown on Appendix 6 to this proposal for decision, incorporated into this finding by reference, will prevent waste of hydrocarbons and afford the mineral interest owners in this area a reasonable opportunity to recover their fair share of hydrocarbons.
- 35. XTO did not present evidence to establish that there is any risk of drilling a dry hole anywhere on the amended unit or that there are any dry holes, junked wells, or marginal or uneconomic wells in the Barnett Shale in the area of the amended unit.

#### CONCLUSIONS OF LAW

- 1. Pursuant to Texas Natural Resources Code §102.016, notice of this hearing was given to all interested parties by mailing the notices to their last known addresses at least 30 days before the hearing, and, in the case of parties whose whereabouts were unknown, by publication of notice for four consecutive weeks in a newspaper of general circulation in the county where the proposed unit is located.
- All things have occurred and been accomplished to give the Commission jurisdiction to decide this matter.
- 3. XTO Energy, Inc., made a fair and reasonable offer to pool voluntarily as required by Texas Natural Resources Code §102.013.
- 4. The Commission's authority to order compulsory pooling under the Mineral Interest Pooling Act, Chapter 102, Texas Natural Resources Code is limited to force pooling into a proration unit for a single well.
- 5. The Mineral Interest Pooling Act does not authorize the Commission to force pool separate tracts into a pooled unit requiring multiple well development to efficiently and effectively drain the unit.

- 6. Pursuant to Texas Natural Resources Code §102.011, the Commission has no authority to order compulsory pooling where it is not proved that such compulsory pooling is necessary to avoid the drilling of unnecessary wells, prevent waste, or protect correlative rights.
- 7. XTO Energy, Inc., did not prove that compulsory pooling of mineral interests in all tracts within the proposed 270.8852 acre unit is required to avoid the drilling of unnecessary wells, prevent waste, or protect correlative rights.
- 8. Compulsory pooling of mineral interests in all tracts within the boundaries on the unit shown on Appendix 6 to this proposal for decision is required to avoid the drilling of unnecessary wells, prevent waste, or protect correlative rights.
- The conditions imposed in the Commission's final order in this docket are fair and reasonable.

#### RECOMMENDATION

The examiners recommend that the XTO application be approved in part only, subject to conditions, as set forth in the attached recommended final order, and otherwise be denied.

Respectfully submitted,

James M. Doherty

James on Doh

Hearings Examiner

Richard Atkins

Technical Examiner