



RAILROAD COMMISSION OF TEXAS

HEARINGS DIVISION

OIL & GAS DOCKET NO. 09-0296228: APPLICATION OF XTO ENERGY, INC. PURSUANT TO THE MINERAL INTEREST POOLING ACT FOR THE FORMATION OF A POOLED UNIT FOR THE PROPOSED TIMBER CREEK MW 2H POOLED UNIT, NEWARK, EAST (BARNETT SHALE) FIELD, TARRANT COUNTY, TEXAS.

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PROPOSAL FOR DECISION

APPEARANCES:

APPLICANT:

David Gross, Attorney
Luann Thomas, Landman
Rick Johnston, Consulting Engineer
Michael McLeod, Landman

APPLICANT:

XTO Energy, Inc.

OBSERVER:

John F. Gray

PROCEDURAL HISTORY

DATE APPLICATION FILED:	April 9, 2015
DATE OF NOTICE OF HEARING:	April 27, 2015
DATE OF HEARING:	June 18, 2015
HEARD BY:	Marshall Enquist, ALJ Karl D. Caldwell, Technical Examiner
DATE RECORD CLOSED:	July 6, 2015
DATE TRANSCRIPT RECEIVED:	July 6, 2015
DATE PFD CIRCULATED:	April 12, 2017

STATEMENT OF THE CASE

Pursuant to the Mineral Interest Pooling Act (“MIPA”), Chapter 102, Texas Natural Resources Code, XTO Energy, Inc. (“XTO”) requests the Commission to enter an order force pooling all mineral interests in 298 tracts of land, 265 leased or partially leased, into a 93.288-acre proration unit for a single well in the Timber Creek MW 2H Pooled Unit, Newark, East (Barnett Shale) Field, and all mineral interests in 128 tracts, with 108 tracts leased or partially leased, in a 51.168-acre proration unit for a single well for the Timber Creek MW 3H Pooled Unit, Newark, East (Barnett Shale) Field, Tarrant County, Texas.

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 gas wells in the Newark, East (Barnett Shale) Field is 320 acres. An operator is permitted to form optional drilling units of 20 acres. Operators must file a Form P-15 (Statement of Productivity of Acreage Assigned to Proration Units) listing the number of acres that are being assigned to each well on the lease or unit for proration purposes. No double assignment of acreage is permitted. While the allocation formula for the field is suspended, operators are not required to file plats of proration units with Form P-15.

A hearing was held on June 18, 2015. XTO, through its attorney David Gross, appeared and presented evidence. Mr. John F. Gray appeared as an observer.

APPLICABLE LAW

Section 102.011 of the Mineral Interest Pooling Act (“MIPA”) provides that “...when two or more separately owned tracts of land are embraced in a common reservoir of oil or gas from which the commission has established the size and shape of proration units, whether by temporary or permanent filed rules, and where there are separately owned interests in oil and gas within an 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 Mineral Interest Pooling 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 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

Docket No. 09-0296228 : The Timber Creek MW Well No. 2H MIPA Unit

The proposed XTO 93.288-acre Timber Creek MW (Meadows West) Well No. 2H MIPA Unit (“2H MIPA Unit”) lies within the 287.578-acre Timber Creek MW Unit (see Attachment I) in the City of Fort Worth, Tarrant County, in the J. Spillman Survey, Abstract No. 1377, J. Rogers Survey, Abstract No. 1264, J. Watson Survey, Abstract No. 1666 and the N. Proctor Survey, Abstract No. 1230.¹ The proposed Timber Creek MW 2H Pooled Unit, Well No. 2H, is about ten miles southwest of downtown Fort Worth, Texas. The surface culture of the 2H MIPA Unit is primarily residential, with the Meadows West subdivision in the north of the unit and the Bellaire Park subdivision in the south of the unit. The Notice of Hearing required publication, which was accomplished in the Commercial Recorder by publication of the NOH and accompanying plat on May 5, 2015; May 12, 2015; May 19, 2015 and May 26, 2015.²

XTO holds a leasehold interest in the mineral estate of about 265 tracts, both leased and partially leased, out of 298 tracts, and the 2H MIPA Unit, at the time of the hearing, had a total leased area of 79.803 acres and a total unleased area of 13.485 acres in the total unit area of 93.288 acres, for a total leased acreage in the 2H Unit of 85.5% (see Attachment II).³ Chesapeake Exploration, LLC/Total E&P USA, Inc. have an interest in 0.464 acres within the unit which is considered a part of the 79.803 leased acres. XTO has the right to pool all of the tracts for which it holds the leasehold interest. The leases are held by production from the Timber Creek MW 1H Unit, Well No. 1H.

On or about January 12, 2015, XTO sent a voluntary pooling offer to all mineral interest owners of unleased tracts within the boundaries of the proposed 2H MIPA Unit. The unleased owners were offered three options for inclusion of their interests: (1) a lease option, (2) a working-interest participation option, and (3) a farm-out option.⁴

The lease option has a primary term of three years, a 25% royalty, and a \$1,500.00 per net acre bonus. The lease would authorize pooling a signed mineral interest into the 2H Unit, but does not authorize surface use of the tract, as memorialized in paragraph 10 of the lease.⁵

¹ XTO Exhibit 18.

² XTO Exhibits 19, 20, 21, 22, and 23.

³ XTO Exhibit 5.

⁴ XTO Exhibit 8.

⁵ XTO Exhibit 8.

The working interest participation option requires that a mineral interest owner accepting that option pay their proportionate share of the drilling and completion expenses on or before the commencement of drilling operations, that is, the spudding of the well. An estimated cost of approximately \$10,600.00 was calculated for the average one-third acre lot, based on an Authorization for Expenditure (AFE) for the proposed Well No. 2H of \$3,194,500.00.⁶

Under the farm-out option, the mineral interest owner would convey to XTO an 80% net revenue interest, retaining an overriding royalty interest equal to 20% of 8/8ths, proportionately reduced to the extent that the mineral interest bears to all the mineral interests in the unit, until payout of all well costs, with the option, at payout, to convert the retained override to a 25% working interest, proportionately reduced.

As a result of offering the unleased mineral interest owners an opportunity to participate in the 2H Unit under the MIPA, XTO received 12 additional leases, of which one was for a tract directly in the path of the 2H wellbore, and two others were for tracts in which a corner impinged on the path of the 2H wellbore. Five tracts, directly in the path of the 2H wellbore, remained unleased. These are Lot Nos. 534, 531, 568, 597 and 480. The five unleased tracts prevent drilling the full-length wellbore of the proposed 2H MIPA Unit, causing XTO to resort to use of the Mineral Interest Pooling Act. There are about 33 separate tracts within the proposed unit that remain entirely unleased for mineral development. These unleased tracts collectively contain 13.485 acres. A substantial majority of the unleased tracts are small town lots containing a fraction of an acre.

XTO believes the pooling offers are fair and reasonable as they exactly follow the format of XTO's Page Street D1 and Wesco A1 offers, which were ultimately found by the Commission to be fair and reasonable offers.⁷

XTO offered into evidence a study to predict the recovery of Barnett Shale wells drilled in the area of the applied for 2H MIPA Unit, based on the recoveries of wells within a five mile radius. XTO believes the entirety of the area covered by the five mile radius map is productive in the Barnett Shale. The study plots estimated drainhole length versus estimated ultimate recoveries for 413 wells. From this information, a scatter plot was created, with estimated drainhole length on the "x" axis and estimated ultimate recovery on the "y" axis. This is the base information for a least squares regression analysis yielding the equation " $y = 0.4647x + 486.49$ " (see Attachment III). The inference drawn is that for every foot of additional drainhole added to a well, 0.4647 million cubic feet (MMCF) of gas is added to the EUR of the well. Put another way, each additional foot of

⁶ *Id.*

⁷ Oil & Gas Docket No. 09-0273417: Application of XTO Energy, Inc. Pursuant to the Mineral Interest Pooling Act for the Proposed Page Street D1 Pooled Unit, Well No. 11H, Newark, E. (Barnett Shale) Field, Tarrant County, Texas.

Oil & Gas Docket No. 09-0273416: Application of XTO Energy, Inc. Pursuant to the Mineral Interest Pooling Act for the Proposed Wesco A1 Pooled Unit, Well No. 10H, Newark, E. (Barnett Shale) Field, Tarrant County, Texas.

wellbore will increase the EUR of the well by 464 MCF.⁸ The R^2 (regression coefficient) is 0.2518, which means that 25% of the wells on the scatter diagram cluster around the slope of the red-dotted line. XTO's expert witness testified that this is a good regression coefficient for this area, as he has done a number of 5-mile studies in the Barnett Shale, and "...this is one of the higher regression coefficients that I've come up with."⁹

XTO demonstrated that there is no path for Well No. 2H that will not encounter an unleased, unpooled tract.¹⁰ XTO argues that absent MIPA approval for the 2H Unit, the underlying recoverable reserves cannot be recovered and will go to waste. If XTO receives approval for the applied-for 2H MIPA Unit, the drainhole length would be 4,145 feet in length. Without MIPA approval, XTO would be limited to a drainhole 2,050 feet long.

On its Exhibit 29, XTO calculates the recoverable gas in place beneath the 2H MIPA Unit is 5.1 BCF. Separately calculated using the regression analysis formula derived on Exhibit 26, and a full length drainhole of 4,145 feet, XTO projects the 2H well will recover 2.4 BCF of gas, slightly less than half the recoverable gas in place. Applying the recovery factor reached by the least squares regression analysis, the full length well would recover $4,145 (0.4647) + 486.49$ or 2,412.6715 MMCF, equivalent to roughly 2.4 BCF. If the MIPA is not granted, the wellbore would be 2,050 feet long. In that case, the well restricted to 2,050 feet would recover $2,050 (0.4647) + 486.49$ or 1,439.125 MMCF, equivalent to roughly 1.44 BCF. If the MIPA is not granted, 2,095 feet of wellbore would not be available to recover gas, resulting in the loss, or waste, of $2,095 (0.4647)$ MMCF or 973.5465 MMCF, equivalent to roughly 0.974 BCF. XTO's expert witness testified that the drainhole shortened by 2095 feet would lose 0.97 BCF.¹¹

XTO's application requests a 100% charge for risk, as authorized by Section 102.052 of the MIPA. XTO presented an exhibit¹² detailing the economic projection for the 2H MIPA Unit, depending on the EUR of the well. XTO's applied-for wellbore would be 4,145 feet long and is projected to recover 2.4 BCF of gas according to the least squares regression analysis. Using a gas price of \$3.25/MCF, and 10% discount rate, XTO projects that the 2H, if it recovered only 1,913 MMCF, would pay out in 4.11 years, with an internal rate of return of 9.96%, and a discounted cash flow of -\$2,190.00 in 2029. If the 2H recovers 2.02 BCF, would pay out in 3.45 years, with an internal rate of return of 13.58%, and a discounted cash flow of \$195,330 in 2029. If the 2H recovers 2.145 BCF, at the same price and discount rate, the well would pay out in 2.98 years with

⁸ Transcript, p. 87, lines 12-25; p. 88, lines 1-8.

⁹ Transcript, p. 87, lines 24-25; p. 88, lines 1-3.

¹⁰ XTO Exhibit 28.

¹¹ Transcript, p. 97, lines 18-24.

¹² XTO Exhibit 31.

an internal rate of return of 17.21%. If the 2H exceeds the calculated expectations and recovers 2.612 BCF, the well would pay out in 1.95 years with an internal rate of return of 32.2%.

XTO's expert witness testified it would be necessary for the well to produce 2 BCF to break even to achieve a 10% rate of return and show a positive present value.¹³ XTO's Exhibit 35 is the Final Order in Oil & Gas Docket No. 09-0288329¹⁴ in which the Commissioners approved a 50% charge for risk.

A. Johnston And if you flip to the second page of Terms and Conditions No. 8, you can see that the Commission approved a 50 percent charge for risk in this docket, which means that the parties are being force pooled - - after the well pays out 150 percent, then the working interest portion of their interest will go into pay status, a 50 percent charge for risk will be assessed.

Q. Gross In other words, to the extent they have a working interest, that working interest will pay its proportionate share of drilling and completion costs once and then pay another 50 percent of its proportionate share of drilling and completion costs?

A. Johnston Yes.¹⁵

XTO's Exhibit 32, titled "5 Mile Study Area Probability Curve", was presented for the proposition that a well drilled in this area would have a 50% probability of producing 1.7 BCF of gas. XTO's expert witness states "Since our break-even point is 2 BCF of gas, 2 BCF of gas falls roughly on the 40 percent probability line. So what that means is that 40 percent of the wells are going to produce reserves greater than 2 BCF, and then 60 percent of wells are going to recover reserves less than 2 BCF."¹⁶

The next exhibit offered by XTO, Exhibit No. 36, is a copy of the PFD in the consolidated applications of Vantage Fort Worth Energy for the formation of four pooled units under the MIPA

¹³ Transcript, p. 99, lines 2-6.

¹⁴ Final Order, Oil & Gas Docket No. 09-0288329: Application for Vantage Fort Worth Energy, LLC Pursuant to the Mineral Interest Pooling Act for the Formation of a Pooled Unit for the Rosedale North 3H MIPA Unit, Well No. 3H, Newark, E. (Barnett Shale) Field, Tarrant County, Texas.

¹⁵ Transcript, p. 106, lines 5 - 18.

¹⁶ Transcript, p. 100, lines 6-11.

for their Well Nos. 3H, 4H, 5H and 6H in the Rosedale North Unit.¹⁷ Four separate Final Orders were signed in these dockets, including the one referred to in the paragraph above. A 50% charge for risk was assessed in all four dockets.

Mr. Johnston offered his opinion that approval of the MIPA for the 2H MIPA Unit will protect correlative rights in the unit as it will allow XTO to drill a well to its complete length and allow the development of reserves for the parties that signed leases as well as those who have not signed leases in the southern portion of the MIPA unit.¹⁸ Mr. Johnston opined that approval of the MIPA will prevent waste by allowing for recovery in the southern portion of the MIPA unit.¹⁹ He also stated that "...based on the split of how many wells appear to be economic and then how many are uneconomic, a hundred percent charge for risk appears appropriate here."²⁰

Docket No. 09-0296223 : The Timber Creek MW Well No. 3H MIPA Unit

XTO's application for the Timber Creek MW Well No. 3H MIPA Unit ("3H MIPA Unit") is based on the same facts regarding recoverable reserves as the companion application for the 2H Unit. XTO uses the same five mile radius study of wells and the same least squares regression analysis used in the 2H Unit application. However, as a result of extending what it believes is a fair and reasonable offer to unleased interest owners to participate in the proposed MIPA 3H Unit, XTO arrives at a different end-point than it did in the case of the 2H MIPA Unit. XTO's presentation of evidence for the 3H Unit began as a standard "reverse MIPA" and then took an unexpected turn, as will become apparent shortly.

The proposed XTO 51.168-acre Timber Creek MW (Meadows West) Well No. 3H MIPA Unit lies within the 287.578-acre Timber Creek MW Unit. The 3H MIPA Unit is within the City of Fort Worth, Tarrant County, in the J. Spillman Survey, Abstract No. 1377, and the J. Rogers Survey, Abstract No. 1264. The hearing required publication, which was accomplished in the Commercial Recorder by publication of the Notice of Hearing and accompanying plat on May 5, 2015, May 12, 2015, May 19, 2015 and May 26, 2015.²¹

Prior to setting this matter for an MIPA hearing, the proposed wellpath of the 3H was blocked by several unleased tracts, being Lot Nos. 418, 607, 489 and 490 (see Attachment IV). After issuance of the voluntary pooling offer, XTO received five leases for the 3H MIPA Unit, which will

¹⁷ Oil & Gas Docket Nos. 09-0288329, 09-0288331, 09-0288332 and 09-0288333.

¹⁸ Transcript, p. 111, lines 5-16.

¹⁹ Transcript, p. 112, lines 20-24.

²⁰ Transcript, p. 113, lines 24-25; p. 114, lines 1-2.

²¹ XTO Exhibit 58.

be seen to have had a significant effect on the present application (see Attachment V).

XTO holds a leasehold interest in the mineral estate of about 108 tracts, both leased and partially leased, out of 128 tracts, in the 3H MIPA Unit. At the time of the hearing, the 3H MIPA Unit had a total leased area of 42.980 acres and a total unleased area of 8.188 acres, for a total leased acreage in the 51.168-acre 3H Unit of 83.99%.²² Chesapeake Exploration, LLC and Total E&P USA, have an interest in 0.6950 leased acres within the unit that are considered part of the 42.980 leased acres. The leases are held by production from the Timber Creek MW 1H Unit, Well No. 1H.

On or about January 12, 2015, XTO sent a voluntary pooling offer to all mineral interest owners of unleased tracts within the boundaries of the proposed 3H MIPA Unit. The unleased owners were offered three options for inclusion of their interests: (1) a lease option, (2) a working-interest participation option, and (3) a farm-out option.²³

The lease option has a primary term of three years, a 25% royalty, and a \$1,500.00 per net acre bonus. The lease would authorize pooling a signed mineral interest into the 3H Unit, but does not authorize surface use of the tract, as memorialized in paragraph 10 of the lease.²⁴

The working interest participation option requires that that a mineral interest owner accepting that option pay their proportionate share of the drilling and completion expenses on or before the commencement of drilling operations, that is, the spudding of the well. An estimated cost of approximately \$13,918.07 was calculated for the average one-third acre lot, based on an Authorization for Expenditure (AFE) for the proposed Well No. 3H of \$2,225,500.00.²⁵

Under the farm-out option, the mineral interest owner would convey to XTO an 80% net revenue interest, retaining an overriding royalty interest equal to 20% of 8/8ths, proportionately reduced to the extent that the mineral interest bears to all the mineral interests in the unit, until payout of all well costs, with the option, at payout, to convert the retained override to a 25% working interest, proportionately reduced.

XTO believes the pooling offers are fair and reasonable as they exactly follow the format of XTO's Page Street D1 and Wesco A1 offers, which were ultimately found by the Commission to be fair and reasonable offers.²⁶

²² XTO Exhibit 41.

²³ XTO Exhibit 52.

²⁴ XTO Exhibit 45.

²⁵ XTO Exhibit 45.

²⁶ Oil & Gas Docket No. 09-0273417: Application of XTO Energy, Inc. Pursuant to the Mineral Interest Pooling Act for the Proposed Page Street D1 Pooled Unit, Well No. 11H, Newark, E. (Barnett Shale) Field, Tarrant County, Texas.

Oil & Gas Docket No. 09-0273416: Application of XTO Energy, Inc. Pursuant to the Mineral Interest Pooling Act for the Proposed Wesco A1 Pooled Unit, Well No. 10H, Newark, E. (Barnett Shale) Field, Tarrant County, Texas.

XTO introduced into evidence a study to predict the recovery of Barnett Shale wells drilled in the area of the applied-for 3H MIPA Unit, based on the recoveries of wells within a five mile radius. XTO believes the entirety of the area covered by the five mile radius map is productive in the Barnett Shale. The study plots estimated drainhole length versus estimated ultimate recoveries for 413 wells.²⁷ From this information, a scatter plot was created, with estimated drainhole length on the “x” axis and estimated ultimate recovery on the “y” axis. This is the base information for a least squares regression analysis yielding the equation “ $y = 0.4647x + 486.49$ ”. This is the same regression analysis performed for the proposed 2H MIPA Unit, which is Attachment III to this PFD.

The inference drawn is that for every foot of additional drainhole added to a well, 0.4647 million cubic feet (MMCF) of gas is added to the EUR of the well. Put another way, each additional foot of wellbore will increase the EUR of the well by 464 MCF.²⁸ The R^2 (regression coefficient) is 0.2518, which basically means that 25% of the wells on the scatter diagram cluster around the slope of the red-dotted line. In his testimony regarding the 2H Unit and this same scatter diagram, XTO’s expert witness testified that this is a good regression coefficient for this area, as he has done a number of 5-mile studies in the Barnett Shale, and “...this is one of the higher regression coefficients that I’ve come up with.”²⁹

Different exhibits offered by XTO list different wellbore lengths for the 3H. Exhibit 42 states the wellbore is 2,032 feet long. Exhibit 44 indicates the wellbore is 1,862 feet long. Exhibit 67 indicates the wellbore is 1,962 feet long. XTO’s expert witness, Mr. Johnston, testified:

- A. Exhibit 68 is a calculation of the recoverable gas underneath - - a volumetric calculation of the recoverable gas underneath the proposed 3H MIPA Unit, which contains 42.98 acres. The methodology is the same as the volumetric calculation I prepared earlier. It shows that the recoverable gas under this relatively small unit is 2.8 BCF. If you look back at Exhibit 67, it’s labeled that that proposed MIPA well will have a completed drainhole length of 1,962 feet. Plugging that into the equation determined in Exhibit 65, it predicts on average that that well will recover 1.3 BCF of gas, which is below the 2 BCF economic break-even point that I previously have testified to. But if you look back at the - - the offer letter for this well, this well was AFE’d to be \$2.2 million. So that threshold would be lower if you used that \$2.2 million expense.³⁰

Using the drainhole length stated by Mr. Johnston, and applying the formula derived by the regression analysis, the 3H well drilled to 1,962 feet would recover $1,962(0.4647) + 486 = 1,398.23$

²⁷ These are the same 413 wells and the same five mile radius used in the calculations for the 2H Unit.

²⁸ XTO Exhibit 65.

²⁹ Transcript, p. 87, lines 24-25; p. 88, lines 1-3.

³⁰ Transcript, p. 147, lines 13-25; p. 148, lines 1-4.

MMCF, or 1.4 BCF when rounded up. XTO did not describe the recovery point at which this well would break even (pay for itself).

When XTO filed its MIPA application for Well No. 3H, roughly one third of the wellbore path of the 3H was blocked by Lots 418 and 607.³¹ However, after XTO made its offer to unleased mineral interest owners under the MIPA, five executed leases were received, among them, leases on Lot Nos. 418 and 607, which had prevented the drilling of a full-length wellbore.³² About 20 lots, totaling 1.88 acres, remained unleased. The current situation is reflected in XTO Exhibit 67 (see Attachment VI), as testified to by XTO's expert witness:

- A. Exhibit 67 is a similar exhibit to Exhibit 41, except for it's in color. And we have colored the unleased tracts in red and the partially leased tracts in stippled purple, and then we've highlighted the areas within which you could drill a regular location; in other words, it's the portion of the proposed MIPA unit highlighted in yellow where you could drill a well with a regular non-Rule 37 permit. If you look at Exhibit No. 67, with the current status that exists today, with the leases that have been taken, you can see that you could go drill this well with a Rule 37 based on the current status of leasing in the area.³³

XTO could drill the 3H MIPA Unit pursuant to its current MIPA application, or could withdraw the MIPA application and drill the well pursuant to Statewide Rule 37.

- Q. Okay. So this is one of the MIPA cases where, at the time the voluntary pooling offer was circulated, it would've been impossible to drill a well or a Rule 37 exception well; but as a result of the circulation of the voluntary pooling offer, tracts have been leased, and now a Rule 37 is a possibility?
- A. Yes. If you're successful in getting a Rule 37, you could drill the MIPA well. And, actually, I believe that they'll be able to drill this well to a longer length, further to the south than depicted in Exhibit 67. It would require a waiver, I believe, from XTO to - - you know, they'd have to waive themselves as the unit to the south.
- Q. And XTO would have to be comfortable with its relationship with its lessor to the south about waiving a Rule 37?

³¹ XTO Exhibit 41.

³² XTO Exhibit 42.

³³ Transcript, p. 144, lines 14-25; p. 145, line 1.

- A. That's correct.
- Q. All right. And, actually, have we seen that sort of circumstance at least once before? And I think it was the Page Street Unit, where, at the time the offers were circulated, it would've been impossible to drill a 37 just because of the congestion of unleased tracts. Then, as a result of the circulation of the voluntary pooling offer, I believe in that case a couple of pathways for a regular - - for Rule 37 locations opened up?
- A. That's right. But I still - - my recollection - - it's been a while since I looked at that. You could've drilled it, but I don't think it would have been as long as the proposed MIPA well.³⁴

XTO's counsel, Mr. Gross, in his closing argument, argued that the Commission had approved an MIPA under similar circumstances in the Page Street D1 case.³⁵

Mr. Gross Okay. Examiners, we ask that both of these applications be approved. And, you know, I look at these cases in the context of the prior XTO MIPA cases, both those that have been approved and those that were denied, you know. XTO really took the lead after Finley in doing a number of MIPAs; and, you know, we ended up sort of shaping the Commission's law and policy on MIPA right now. This case that we've just heard, the 3H, is interesting, because, like the Page Street D1, you could drill a Rule 37 as a result of the leases we got in response to the voluntary pooling offer. And, Examiners, I don't know if ya'll were - - I don't think you were involved Mr. Enquist. But early on, Examiner Doherty had an idea, which was that if you can drill a Rule 37, then you can't get an MIPA. And that was his opinion. It's not in the statute; it's certainly not on Rule 37, but that was his idea. And it resonated to a certain extent, I know, with Barry Smitherman, when he was on the Commission. But that Page Street case, it was interesting. When XTO got a bunch of leases, and we looked at it, and we saw that, yes, a Rule 37 could be applied, we actually thought about pulling out of the case. But I thought, you know, we've gone to all this trouble, circulated the offers, docketed the thing, you know, noticed it; let's have the hearing, and let's see what the Commission does with it. And the answer was this. David Porter, our chairman, said, "I would prefer an MIPA to a Rule

³⁴ Transcript, p. 145, lines 23-25; p. 146, lines 1-25; p. 147, lines 1-3.

³⁵ [Apparently] Oil & Gas Docket No. 09-0273417: Application of XTO Energy, Inc. Pursuant to the Mineral Interest Pooling Act for the Proposed Page Street D1 Pooled Unit, Well No. 11H, Newark, East (Barnett Shale) Field, Tarrant County, Texas.

37 because all those unleased owners would just get crowded and drained by a Rule 37 well. So he said, "I'd prefer MIPA." And then Commissioner Craddick - - her response to that was, "I agree." She said, "I think an operator in that position has two choices: A Rule 37 or a MIPA. I'm not going to tell them which of those two choices to take." And they voted 2:1 to approve the Page Street MIPA order, and it was approved. The dissenting vote being Smitherman.

So I would submit to you that that's a question that has been decided. And two commissioners currently sitting - - those are their opinions. And I'm very confident that would be their reaction here. Even though on the 3H, a Rule 37 could be drilled, they will be, I believe, happy to approve a MIPA on it.

On the question of risk, we've made our position clear. This will be the first XTO case in which we've asked a charge for risk. And, really, we're following the precedent set by Vantage in its cases. And, examiners, I would say this. We're asking for a hundred percent charge for risk. We are in a time crunch. We would not regard a recommendation for 50 percent charge for risk as adverse. And we're willing to make that concession just in the hope we could maybe speed up getting the order approved.³⁶

ALJ AND TECHNICAL EXAMINERS' OPINION

The ALJ and Technical Examiner recommend approval of the two XTO MIPA applications. The basis of approval differs between the applications.

Docket No. 09-0296228: The Timber Creek MW Well No. 2H MIPA Unit

Pursuant to the MIPA, the Commission may order compulsory pooling only if it is necessary to avoid drilling of unnecessary wells, protect correlative rights, or prevent waste. The evidence in this uncontested proceeding demonstrates that compulsory pooling is necessary to protect correlative rights and prevent waste.

XTO demonstrated that the 2H MIPA Unit cannot be drilled as proposed without compulsory pooling. The plat of the 2H MIPA Unit after receipt of additional leases following issuance of the voluntary pooling offer shows that Lots 534, 531, 568, 597 and 480, which remain unleased, prohibit drilling the wellbore path of the 2H well because drilling that wellbore path would require an unlawful subsurface trespass. If unleased Lots 534, 531, 568, 597 and 480, and all other lots in the proposed MIPA unit were pooled, XTO would be able to drill a well 4,145 feet long, with a projected recovery of 2.4 BCF of gas. Without the grant of the MIPA, the well would be only 2,050 feet long and would recover 1.44 BCF of gas. The remaining well length, 2,095 feet, would not be drilled, resulting in the loss, or waste, of 0.974 BCF of gas.

³⁶ Transcript, p. 153, lines 19-25; p. 154, lines 1-25; p. 155, lines 1-24.

The 2H MIPA Unit was properly noticed³⁷ under the MIPA and all unleased owners were provided an opportunity to participate in the unit on a fair and reasonable basis.³⁸ The grant of this MIPA application will protect correlative rights by assuring the development of the reserves under the entire 2H MIPA Unit and that the lessors of the tracts in the southern half of the unit and the unleased mineral interest owners are compensated. The grant of the MIPA prevents waste by allowing recovery of gas through an additional 2095 feet of wellbore.

The least squares regression analysis (see Attachment III) yields a recovery formula based on 413 wells within 5 miles of the proposed well. The slope of the line derived is the median between those wells, with 50% of the wells recovering more gas than the proposed 2H MIPA Unit well, and 50% of the wells recovering less. XTO's expert witness testified that R² regression factor of 0.2518 meant that 25% of the wells in this area clustered around the median line, a clustering that was better than he had seen in other five mile radius analyses.

The Commission's practice under the MIPA is to compensate the forced pooled tracts with a 25% royalty interest and a 75% working interest, proportionately reduced, with the owners share of expenses payable only from the owners' working-interest component (not from their royalty interest). The response of various applicant operators has been to request a risk penalty high enough to ensure that the force-pooled owners' working interest share of expenses is never paid out, thus nullifying any benefit from the owners' working interest.

With a break-even point of 2 BCF of gas for the proposed 2H MIPA Unit well, and a projected recovery of 2.4 BCF, the probability seems higher than usual that the 2H well will meet and exceed the break-even point. The risk associated with the drilling of this well seems minimal. Imposition of the 100% risk penalty requested by XTO would be excessive. If a 100% risk penalty is levied on the 2H well, which is projected to break even at 2 BCF and ultimately recover 2.4 BCF of gas, the well would have to recover 4 BCF of gas before the force-pooled mineral owners could begin to receive any benefit from their 75% working interest. Alternatively, if a 50% risk penalty is imposed, the mineral owners working interest would not take effect until the well recovers 3 BCF of gas, an unlikely event based on the evidence presented in this docket.

Docket No. 09-0296223: The Timber Creek MW Well No. 3H MIPA Unit

The application for the 3H MIPA Unit was properly noticed under the Mineral Interest Pooling Act. Had the voluntary pooling offer not resulted in signed leases for several unleased tracts within the proposed unit, XTO's case would be a standard reverse MIPA case. However, the new leases provide XTO an opportunity to drill its proposed well without the necessity of resorting to the MIPA. XTO's Exhibit 67 shows that the last take point of the well has now been slightly moved back, so that it does not intrude on the remaining unleased tracts.

Without unleased tracts limiting the length of a proposed wellbore, XTO is prevented from

³⁷ V.T.C.A., Natural Resources Code §102.016.

³⁸ V.T.C.A., Natural Resources Code §102.013.

contrasting the recovery from a full-length wellbore with the recovery from a limited, and shorter wellbore, which is the common justification for granting an MIPA application. This does not mean that XTO is barred from the use of the Mineral Interest Pooling Act.

The oral closing argument of Mr. Gross is quoted extensively on pages 10 and 11 of this PFD. The oral closing statement refers to the "Page Street D1" case for the proposition that, in the case of an MIPA application in which the voluntary pooling offer had resulted in the acquisition of leases that presented the applicant with the option of continuing the MIPA case or withdrawing and presenting a Statewide Rule 37 case, the Commissioners, by a two to one vote, granted the MIPA.

If the case referred to is the Page Street D1 Pooled Unit, Well No. 11H³⁹, the comparison is incorrect. The Page Street PFD was written by Examiners Michael Crnich and Richard Atkins. Examiner Doherty was not involved in this PFD, nor was there any argument that drilling the applied-for well with a Rule 37 exception was feasible. Finding of Fact 19(a) stated, "Drilling a horizontal well around the unleased tracts, even with the benefit of a Rule 37 exception, would involve a substantial risk of subsurface trespass through unleased tracts."

The Page Street case was XTO's application for a proposed MIPA unit of 247.5196 acres, which would have required two, or possibly three wells for full development. The Commissioners granted the application in that case, but for a smaller MIPA unit cut from the middle of the Page Street D1 Unit. The Final Order was granted on May 7, 2013 by a 3-0 vote by Commissioners Barry T. Smitherman, David Porter and Christi Craddick. In an Order granting XTO's Motion for Rehearing, the Commissioners adopted XTO's request for a slightly altered plat of the MIPA unit and removed Terms and Condition 6 from the previous Final Order. Chairman Smitherman agreed with the substitution of the slightly altered plat, but dissented on removal of Term and Condition 6.

It is likely that Mr. Gross was referring to the Wesco A1 Unit case⁴⁰, which more closely resembles the fact situation he describes. The Examiners were Michael Crnich and Richard Atkins. Examiner Doherty was not involved in the PFD. The case did involve a situation in which XTO received enough leases from the voluntary pooling offer that it could drill, in the opinion of the Examiners, the entirety of the proposed MIPA well as a Rule 37 exception well, as well as two other wells on the unit through use of Statewide Rule 37 exceptions.

The Wesco A1 Unit case involved XTO's application for a 229.597-acre MIPA Unit. The Final Order in the docket was granted on February 12, 2013 by a 2-0 vote, with Commissioners David Porter and Christi Craddick approving the MIPA unit and Commissioner Barry T. Smitherman dissenting. Commissioner Smitherman dissented based on his opinion that an MIPA application was inappropriate when Rule 37 options were available to the applicant. It is notable that the Order approving the MIPA application subjected the unleased owners to a risk penalty of zero.

Regardless of the exact case referred to by Mr. Gross in closing argument, his argument that

³⁹ Oil & Gas Docket No. 09-0273417: Application of XTO Energy, Inc. Pursuant to the Mineral Interest Pooling Act for the Proposed Page Street D1 Pooled Unit, Well No. 11H, Newark, East (Barnett Shale) Field, Tarrant County, Texas.

⁴⁰ Oil & Gas Docket No. 09-0273416: Application of XTO Energy, Inc., Pursuant to the Mineral Interest Pooling Act for the Proposed Wesco A1 Pooled Unit, Well No. 10H, Newark, East (Barnett Shale) Field, Tarrant County, Texas.

there is Commission precedent for granting an MIPA application, after applicant's receipt of leases due to the voluntary pooling offer create a situation in which Statewide Rule 37 could be utilized instead, is correct. The precedent does exist.

In the case at hand, XTO has applied for an MIPA for a 51.168-acre tract that will be fully developed with one well. The evidence is that XTO made a fair and reasonable offer, pursuant to the requirements of the MIPA, to unleased owners within the boundaries of the proposed 3H MIPA Unit.

XTO did not offer any evidence of the break-even point for the 3H MIPA Unit. However, Well No. 3H is located directly adjacent to Well No. 2H, which is expected to break even before it reaches its ultimate recovery. The Examiners see no obvious reason why Well No. 2H would not perform in a similar manner.

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. The examiners are of the opinion that XTO's MIPA application, considering all the circumstances of this case, would protect the correlative rights on the unleased owners by providing that they benefit from the production of minerals beneath their tracts. The correlative rights of the unleased owners would not be protected if XTO opted to obtain Statewide Rule 37 exceptions for Well No. 3H.

The ALJ and Technical Examiner do not arrive at this conclusion lightly and absolutely do not believe the MIPA should be applied as anything other than a last resort. To do otherwise would nullify mineral owners right to contract. The Examiners do not wish to interfere with the right of mineral owners to contract for the sale of their minerals, subject to a reversionary right, on any basis they find appropriate. Equally, the Examiners do not wish to create a precedent that might be expanded in the future to the extent that operators might use the MIPA as their first resort. In the Examiners' opinion, a key consideration in this case is that XTO, prior to bringing its MIPA application to the Commission, made a good faith attempt to sign individual lot owners within the boundaries of the 287.578-acre Timber Creek MW Unit through ordinary leasing activities. Of the 128 tracts within the subsidiary 51.168-acre 3H MIPA Unit, XTO had leased or partially leased 108 tracts out of 128 tracts, or 84% of the tracts within the 3H MIPA Unit before resorting to the use of the MIPA.

The Risk Penalty in Oil & Gas Docket Nos. 09-0296228 and 09-0296223

To date, the Commission's general policy in MIPA cases has been to compensate the force-pooled mineral interests owners with a 25% royalty interest in the unit and a 75% working interest. Operators sometimes complain this policy encourages mineral interest owners not to enter into an oil and gas lease with an operator, because they will get a better deal if they wait until they are later force-pooled into a proration unit. On the other hand, it is debatable whether many lot owners in Tarrant County are even aware the Mineral Interest Pooling Act exists. The salutary effect of the current Commission policy is that it gives an incentive to operators to make a good faith effort to acquire as many voluntary leases as possible, rather than immediately submit an MIPA application.

From the standpoint of an operator, the higher the risk penalty assessed against the mineral

owners, the less likely the possibility that the 75% working interest would ever take effect. A high risk penalty forecloses the possibility of a working interest payout to the force pooled mineral owner.

As stated by counsel for XTO and his expert witness, quoted on page six of this PFD, assessment of a 50% risk penalty means that a working interest owner would be required to pay his/her proportionate share of 100% of the drilling and completion costs once and then pay another 50 percent of his/her proportionate share of drilling and completion costs. The force-pooled mineral interest owner would see no benefit from a 75% working interest until payment of 150% of their proportionate share in the drilling and completion costs.

By way of example, in the case of the 2H MIPA Unit, the well would break even after recovery of 2 BCF. XTO's regression analysis indicates the well is expected to recover 2.4 BCF of gas. XTO has requested that the working interest owners be assessed a 100% risk penalty.

The practical effect of a 100% risk penalty is that the force-pooled mineral owner would have to pay twice the drilling and completion cost of the well before seeing any benefit from his working interest. In the present case, if Well No. 2H pays for itself after recovery of 2 BCF, in line with XTO's projection, then the force-pooled mineral owner's 75% working interest would not become operative until the well recovered 4 BCF of gas, an event not likely to happen according to XTO's own analysis of the well's expected recovery. In the event of a 50% risk penalty, the well would have to recover 3 BCF, also an unlikely recovery, before the force-pooled mineral owner's 75% working interest would take effect. If a 25% risk penalty is assessed, the well would have to recover 2.5 BCF of gas before the force-pooled mineral owner's 75% working interest would take effect.

Even if no risk penalty (0%) is assessed, the force-pooled mineral owner of a 75% working interest would still have to pay his proportional share of the cost of drilling and completing the well, which would not occur until after the well pays out and recovers 2 BCF of gas. The 2H MIPA Unit is already 85.5% leased, on an acreage basis, and those mineral owners are pooled on a lease basis only, with no working interest. Any payout to the relative handful of force-pooled mineral owners with a 25% royalty interest plus a 75% working interest after payout would only apply to the owners of 14.5% of the acreage in the unit.

The ALJ and Technical Examiner recommend that no risk penalty be applied to the force-pooled mineral owners in the 2H MIPA Unit and the 3H MIPA Unit.

Recommendation

The ALJ and Technical Examiner recommend that XTO's application for the 2H MIPA Unit in Oil & Gas Docket No. 09-0296228 be approved to protect correlative rights and prevent waste, and that XTO's application for the 3H MIPA Unit in Oil & Gas Docket No. 09-0296223 be approved to protect correlative rights. The Examiners further recommend that a 0% risk penalty be assessed in both dockets.

FINDINGS OF FACT

1. Notice of this hearing 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 date.
2. Notice of Hearing in Dockets Nos. 09-0296228 and 09-0296223 was published in the Commercial Recorder on May 5, May 12, May 19 and May 26, 2015.
3. In Oil & Gas Docket No. 09-0296228, XTO requests that the Commission approve compulsory pooling pursuant to the Mineral Interest Pooling Act, Chapter 102, Texas Natural Resources Code, of all mineral interests in 79.3386 acres leased to XTO (inclusive of 0.4640 acres leased to Chesapeake Exploration, LLC/Total E&P USA, Inc.), and 13.4854 acres that are unleased, into the 93.288-acre 2H MIPA Unit.
4. In Oil & Gas Docket No. 09-0296223, XTO requests that the Commission approve compulsory pooling pursuant to the Mineral Interest Pooling Act, Chapter 102, Texas natural Resources Code, of all mineral interests in 42.2850 acres leased to XTO (inclusive of 0.6950 acres leased to Chesapeake Exploration, LLC/Total E&P USA, Inc.), and 8.188 acres that are unleased into the 51.168-acre 3H MIPA Unit.
5. Attachment III to this proposal for decision, incorporated into this finding by reference, is a surveyed plat for the proposed Timber Creek MW 2H Pooled Unit which distinguishes between tracts for which XTO held the leasehold interest prior to initiation of the MIPA process and tracts for which XTO acquired the leasehold interest subsequent to initiation of the MIPA process.
6. Attachment III to this proposal for decision, incorporated into this finding by reference, is a plat showing the proposed location of the Timber Creek MW 2H Pooled Unit, Well No. 2H.
7. No person appeared at the hearing in opposition to the XTO applications. Mr. John F. Gray appeared as an observer.
8. 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.
9. The standard drilling and proration unit for gas wells in the Newark, East (Barnett Shale) Field is 320 acres. An operator is permitted to form optional drilling units of 20 acres. Operators must file a Form P-15 (Statement of Productivity of Acreage Assigned to Proration

Units) listing the number of acres that are being assigned to each well on the lease or unit for proration purposes. No double assignment of acreage is permitted. While the allocation formula for the field is suspended, operators are not required to file plats of proration units with Form P-15.

10. The proposed Timber Creek MW 2H Pooled Unit, Well No. 2H, is about ten miles southwest of downtown Fort Worth, Texas. The surface culture of the 2H MIPA Unit is primarily residential, with the Meadows West subdivision in the north of the unit and the Bellaire Park subdivision in the south of the unit.
11. XTO holds a leasehold interest in the mineral estate of about 265 tracts, both leased and partially leased, out of 298 tracts, or 79.803 leased or partially leased acres out of the total 2H MIPA Unit area of 93.288 acres, for a total leased acreage in the unit of 85.5%. XTO has the right to pool all of the tracts for which it holds the leasehold interest.
12. Twelve mineral owners within the proposed 2H MIPA Unit responded to XTO's voluntary pooling offer by electing to participate in the unit as leased mineral interest owners.
13. There are about 33 separate tracts within the proposed unit that remain entirely unleased for mineral development. These unleased tracts collectively contain 13.485 acres. A substantial majority of the unleased tracts are small town lots containing a fraction of an acre.
14. XTO mailed a voluntary pooling offer to all owners of unleased mineral interests in tracts within the proposed unit. The unleased owners were offered three options for inclusion of their interests in the Timber Creek MW 2H Pooled Unit: (i) a lease option; (ii) a participation option; or (iii) a farm-out option.
 - a. The lease option included a bonus offer of \$1,500 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 three years. The lease provided that no "drilling activity" could be had on the surface of the leased premises without the prior written permission of the lessor. The lease provided that XTO had the right to pool the leased premises with any other lands or leases. The lease terms offered to the unleased owners were comparable to, or better than, lease terms granted by XTO to its lessors within the proposed unit. Twelve owners who had not previously leased responded to XTO's voluntary pooling offer by accepting the lease option.
 - b. The participation option provided the unleased owners with an opportunity to purchase a working interest in the proposed unit by paying to XTO, on or before 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 stated that the estimated cost of drilling and completing the Timber Creek MW Unit, Well No. 2H, was \$3,194,500.00.
 - 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.

- d. XTO's voluntary pooling offer advised the unleased owners to whom the offer was extended that if they did not, within 14 days, make an election of the lease option, participation option, or farm-out option, XTO intended to seek compulsory pooling of their interests "pursuant to a forced pooling order to be issued by the Texas Railroad Commission under the rights granted in the Mineral Interest Pooling Act, §§102.001-102.112 of the Texas Natural Resources Code."
15. The Barnett Shale is present and reasonably productive in the area of the proposed 2H MIPA Unit.
16. A plot of estimated ultimate recoveries of Barnett Shale wells in the area of the proposed 2H MIPA Unit and the proposed 3H MIPA Unit shows a relationship between horizontal drainhole length and ultimate recovery. Calculated regional recovery of horizontal wells in the Newark, East (Barnett Shale) Field is 0.4647 MMCF per foot of horizontal drainhole. The least squares regression analysis for the area indicates an individual well recovery of " $y = 0.4647x + 486.49$ ", with "x" as the number of drainhole feet and all of the multiplied and added values in MMCF.
17. The proposed Timber Creek MW Well No. 2H MIPA Unit would allow the drilling of Well No. 2H with a drainhole, if compulsory pooling were ordered, with a drainhole length of 4,145 feet. If this well recovered 0.4647 MMCF per foot of horizontal drainhole, it would have estimated ultimate recovery of 2,412.6715 MMCF, or 2.4 BCF of gas. Without MIPA approval, the 2H drainhole would be 2,050 feet long, and would recover 1,439.125 MMCF, or 1.44 BCF of gas, resulting in the loss of approximately 0.97 BCF of gas.
18. The proposed Timber Creek MW Well No. 2H could not be drilled at the precise location proposed by XTO without compulsory pooling of at least five unleased tracts, Lot Nos. 534, 531, 568, 597 and 480, that would be traversed by the horizontal drainhole, as more particularly shown on Attachment III to this proposal for decision.
19. Attachment VI to this proposal for decision, incorporated into this finding by reference, is a surveyed plat for the proposed Timber Creek MW 3H Pooled Unit which distinguishes between tracts for which XTO held a leasehold interest prior to initiation of the MIPA process and tracts for which XTO acquired leasehold interest subsequent to initiation of the MIPA process.
20. Attachment VI to this proposal for decision, incorporated into this finding by reference, is a plat showing the proposed location of the Timber Creek MW 3H Pooled Unit, Well No. 3H.
21. The proposed Timber Creek MW 3H Pooled Unit, Well No. 3H, is about ten miles southwest of downtown Fort Worth, Texas. The surface culture of the 3H MIPA Unit is primarily

residential, with the Meadows West subdivision in the north of the unit and the Bellaire Park subdivision in the south of the unit.

22. XTO holds a leasehold interest in the mineral estate of about 108 tracts, both leased and partially leased, out of 128 tracts, or 42.980 leased or partially leased acres out of the total 3H MIPA Unit area of 51.168 acres, for a total leased acreage in the unit of 83.99%. XTO has the right to pool all of the tracts for which it holds the leasehold interest.
23. Five mineral owners within the proposed 3H MIPA Unit responded to XTO's voluntary pooling offer by electing to participate in the unit as leased mineral interest owners.
24. There are about 20 separate tracts within the proposed unit that remain entirely unleased for mineral development. These unleased tracts collectively contain 8.188 acres. A substantial majority of the unleased tracts are small town lots containing a fraction of an acre.
25. XTO mailed a voluntary pooling offer to all owners of unleased mineral interests in tracts within the proposed unit. The unleased owners were offered three options for inclusion of their interests in the Timber Creek MW 3H Pooled Unit: (i) a lease option; (ii) a participation option; or (iii) a farm-out option.
 - a. The lease option included a bonus offer of \$1,500 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 three years. The lease provided that no "drilling activity" could be had on the surface of the leased premises without the prior written permission of the lessor. The lease provided that XTO had the right to pool the leased premises with any other lands or leases. The lease terms offered to the unleased owners were comparable to, or better than, lease terms granted by XTO to its lessors within the proposed unit. Five owners who had not previously leased responded to XTO's voluntary pooling offer by accepting the lease option.
 - b. The participation option provided the unleased owners with an opportunity to purchase a working interest in the proposed unit by paying to XTO, on or before 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 stated that the estimated cost of drilling and completing the Timber Creek MW Unit, Well No. 3H, was \$2,225,500.00.
 - 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.
 - d. XTO's voluntary pooling offer advised the unleased owners to whom the offer was extended that if they did not, within 14 days, make an election of the lease option,

participation option, or farm-out option, XTO intended to seek compulsory pooling of their interests “pursuant to a forced pooling order to be issued by the Texas Railroad Commission under the rights granted in the Mineral Interest Pooling Act, §§102.001-102.112 of the Texas Natural Resources Code.”

26. A plot of estimated ultimate recoveries of Barnett Shale wells in the area of the proposed 3H MIPA Unit shows a relationship between horizontal drainhole length and ultimate recovery. Calculated regional recovery of horizontal wells in the Newark, East (Barnett Shale) Field is 0.4647 MMCF per foot of horizontal drainhole. The least squares regression analysis for the area indicates an individual well recovery of “ $y = 0.4647x + 486.49$ ”, with “x” as the number of drainhole feet and all of the multiplied and added values in MMCF.
27. The proposed Timber Creek MW Well No. 3H MIPA Unit would allow the drilling of Well No. 3H with a drainhole, if compulsory pooling were ordered, with a drainhole length of 1,962 feet. If this well recovered 0.4647 MMCF per foot of horizontal drainhole, it would have estimated ultimate recovery of 1,398.23 MMCF, or 1.4 BCF of gas.
28. In response to its voluntary pooling offer for the 3H MIPA Unit, XTO received five leases. Two of the five leases, for Lot Nos. 418 and 607, cleared the wellpath for the Well No. 3H such that it could be drilled based on a Statewide Rule 37 exception, with a drainhole length only a few feet shorter. The difference in drainhole lengths was not quantified by XTO.
29. Occasionally, after a voluntary pooling offer is made pursuant to the Mineral Interest Pooling Act, the unleased tracts that caused the MIPA application in the first place become leased, clearing the path for, from the operator’s perspective, a full-length wellbore. At that point, the wellpath may be regular to remaining unleased tracts or may require a Statewide Rule 37 exception.
 - a. In the instance in which the full-length wellbore could be drilled at a regular location without a Statewide Rule 37 exception, the remaining unleased tracts would not be included in the proration unit for the well and would not participate in the production from the productive interval. The correlative rights of the unleased tracts would not be protected.
 - b. In the instance in which the full-length wellbore could be drilled with a Statewide Rule 37 exception, the remaining unleased tracts would not participate in the production from the productive interval. The correlative rights of the unleased tracts would not be protected.
 - c. In the instance in which the operator chose to proceed with its MIPA application, the remaining unleased tracts would be included in the proration unit for the proposed well and would participate in production from the productive interval. The correlative rights of the unleased tracts would be protected.
30. Well No. 2H on the 2H MIPA Unit is projected to recover 2.4 BCF of gas. The well will break even, or pay for itself, upon recovery of 2 BCF of gas.

31. Well No. 3H on the 3H MIPA Unit is projected to recover 1.4 BCF of gas. XTO did not provide the break-even point for this well.
 - a. Well No. 3H is directly adjacent to Well No. 2H. The recovery for Well No. 3H is calculated using the same least squares regression analysis as Well No. 2H.
 - b. Well No. 2H is projected to pay for itself before it reaches its ultimate recovery.
 - c. There is no obvious reason why Well No. 3H would not also pay for itself, like Well No. 2H, before it reaches its ultimate recovery.
32. The Commission's current policy in MIPA cases is to award the force-pooled mineral interest owners a 25% royalty interest and a 75% working interest, proportionately reduced, with these owners share of expenses payable only from 3/4ths of production and not from their entire mineral interest, subject to a risk penalty assigned by the Commissioners.

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, and by publication of notice for four consecutive weeks in a newspaper of general circulation in the county where the proposed unit is located in the case of parties whose whereabouts were unknown, at least 30 days before the hearing.
2. All things have occurred and been accomplished to give the Commission jurisdiction to decide this matter.
3. XTO Energy, Inc., in Oil and Gas Docket Nos. 09-0296228 and 09-0296223, made a fair and reasonable offer to pool voluntarily as required by Texas Natural Resources Code §102.013.
4. XTO Energy, Inc., proved that compulsory pooling as proposed by XTO is required to protect correlative rights and prevent waste in Oil & Gas Docket No. 09-0296228, for the Timber Creek MW 2H Pooled Unit.
5. XTO Energy, Inc., proved that compulsory pooling as proposed by XTO is required to protect correlative rights in Oil & Gas Docket No. 09-0296223, for the Timber Creek MW 3H Pooled Unit.
6. Pursuant to Texas Natural Resources Code §102.011, the Commission has the authority to order compulsory pooling where it is proved that such compulsory pooling is necessary to avoid the drilling of unnecessary wells, prevent waste, or protect correlative rights.
7. Assessment of a 0% risk penalty against the force-pooled mineral interest owners is reasonable under the facts of both dockets.

RECOMMENDATION

The ALJ and Technical Examiner recommend that the applications of XTO Energy, Inc. in Oil & Gas Docket Nos. 09-0296228 and 09-0296223, pursuant to the Mineral Interest Pooling Act, be approved. The Examiners also recommend that a 0% risk penalty be applied to the force-pooled mineral interests.

Respectfully submitted,

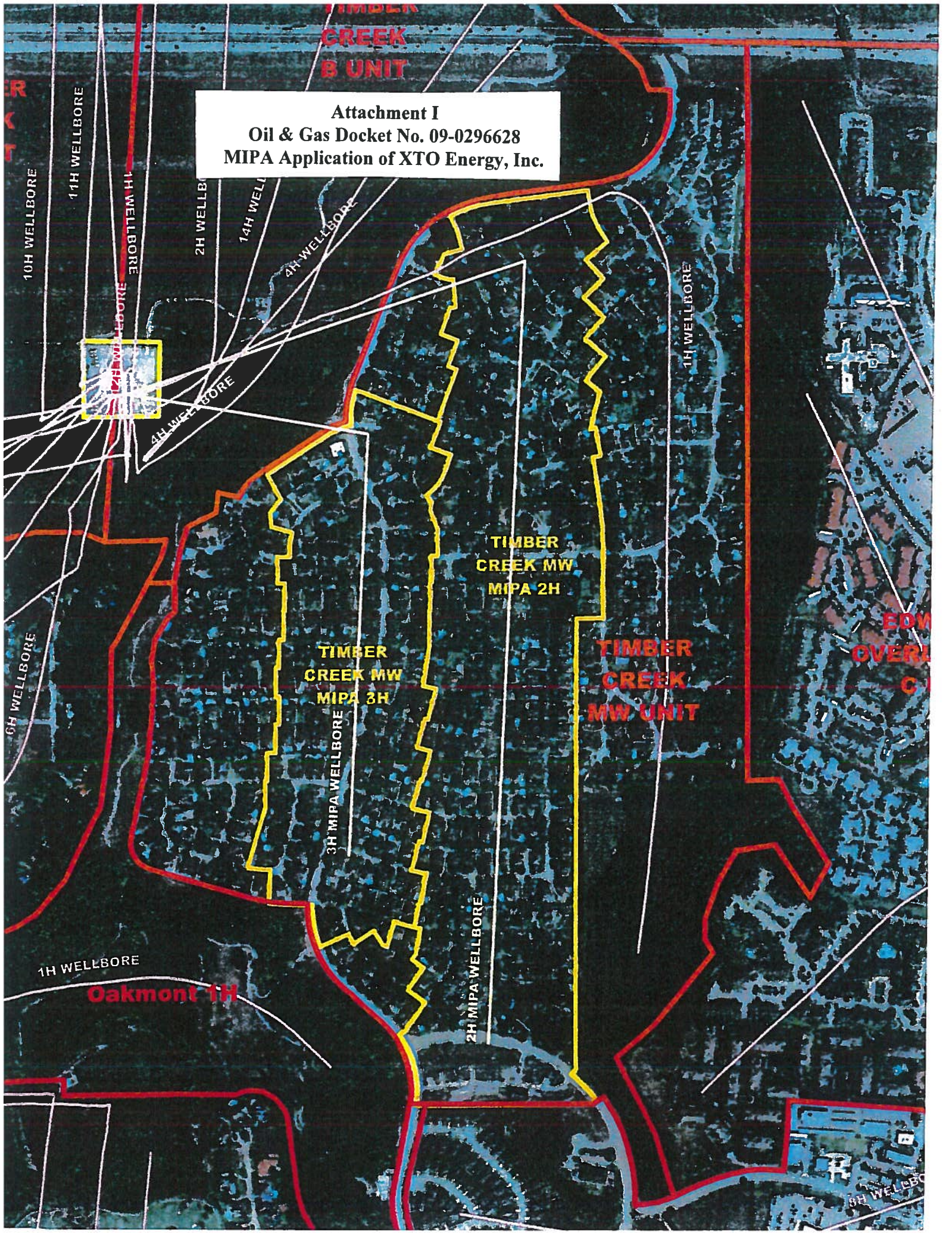


Marshall Enquist
Administrative Law Judge



Karl D. Caldwell
Technical Examiner

Attachment I
Oil & Gas Docket No. 09-0296628
MIPA Application of XTO Energy, Inc.



June 18, 2015

XTO Energy Inc.

Exhibit No. 5

LEGEND

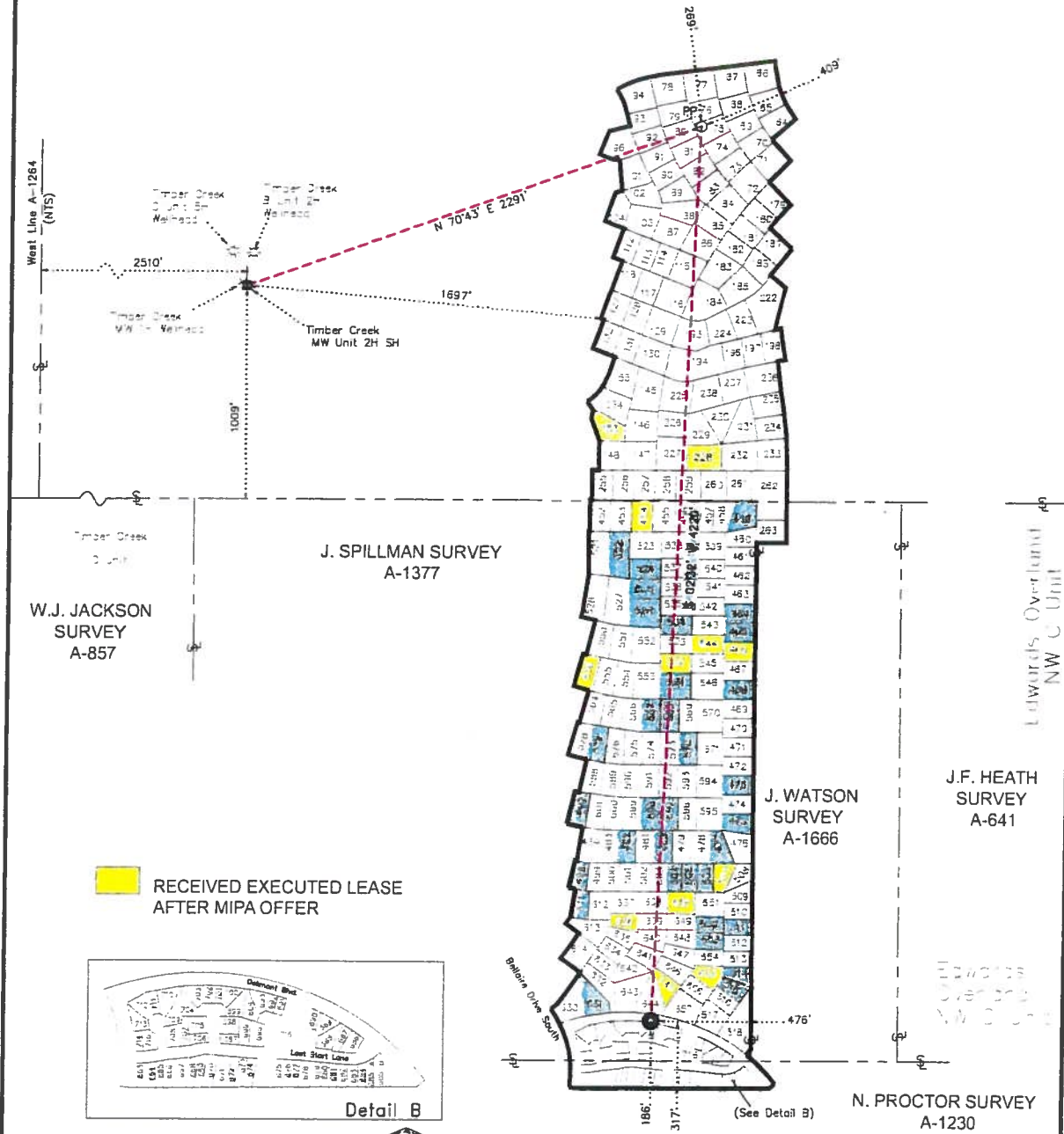
- Unleased Areas
- Partially Unleased

Original Scale : 1" = 500
 0 250 500 1000

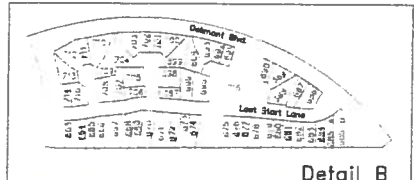
Graphic Scale in Feet
 Coordinates are North Central Zone
 NAD27 Grid Coordinates
 Surface location is in the city limit of
 Benbrook, Texas.

This Plat was prepared to represent the
 Timber Creek MW Unit 2H gas drilling unit
 and the mineral tracts within that unit,
 for the sole use of XTO Energy Inc. and
 does not represent a boundary survey.

Attachment II
Oil & Gas Docket No. 09-0296628
MIPA Application of XTO Energy, Inc.



RECEIVED EXECUTED LEASE AFTER MIPA OFFER



PREPARED FROM RECORDS AND A SURVEY
 MADE ON THE GROUND ON JUNE 30, 2011

George R. Hill
 GEORGE R. HILL R.F.L.S. NO. 6022

ACREAGE TOTALS PRIOR TO MIPA OFFER:
 TOTAL LEASED AREA: 76.1581 ACRES
 TOTAL UNLEASED AREA: 17.1299 ACRES
 TOTAL UNIT AREA: 93.2880 ACRES

CURRENT ACREAGE TOTALS:
 TOTAL LEASED AREA: 79.803 ACRES
 TOTAL UNLEASED AREA: 13.485 ACRES
 TOTAL UNIT AREA: 93.288 ACRES

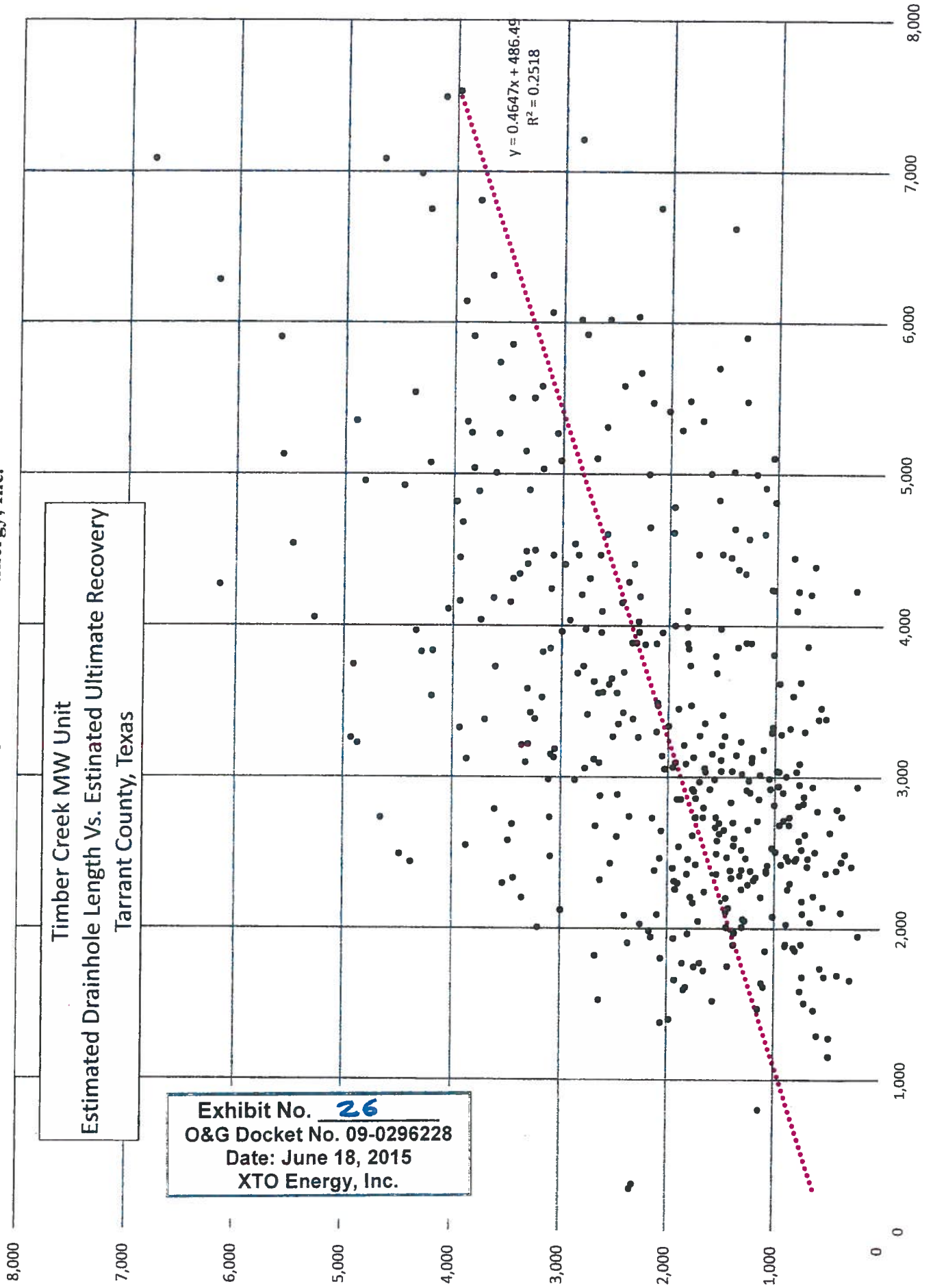
Proj: 9222-Timber Creek MW Unit 2H MIPA (11-18-14)

SCALE 1"=500'	XTO ENERGY INC. Timber Creek MW Unit 2H	Tarrant County, Texas	Sempco Surveying, Inc 3208 S. Main St Worth, TX 76110 (817) 926-7876
DWN GRH			
DATE: 11/18/14			

Attachment III
Oil & Gas Docket No. 09-0296628
MIPA Application of XTO Energy, Inc.

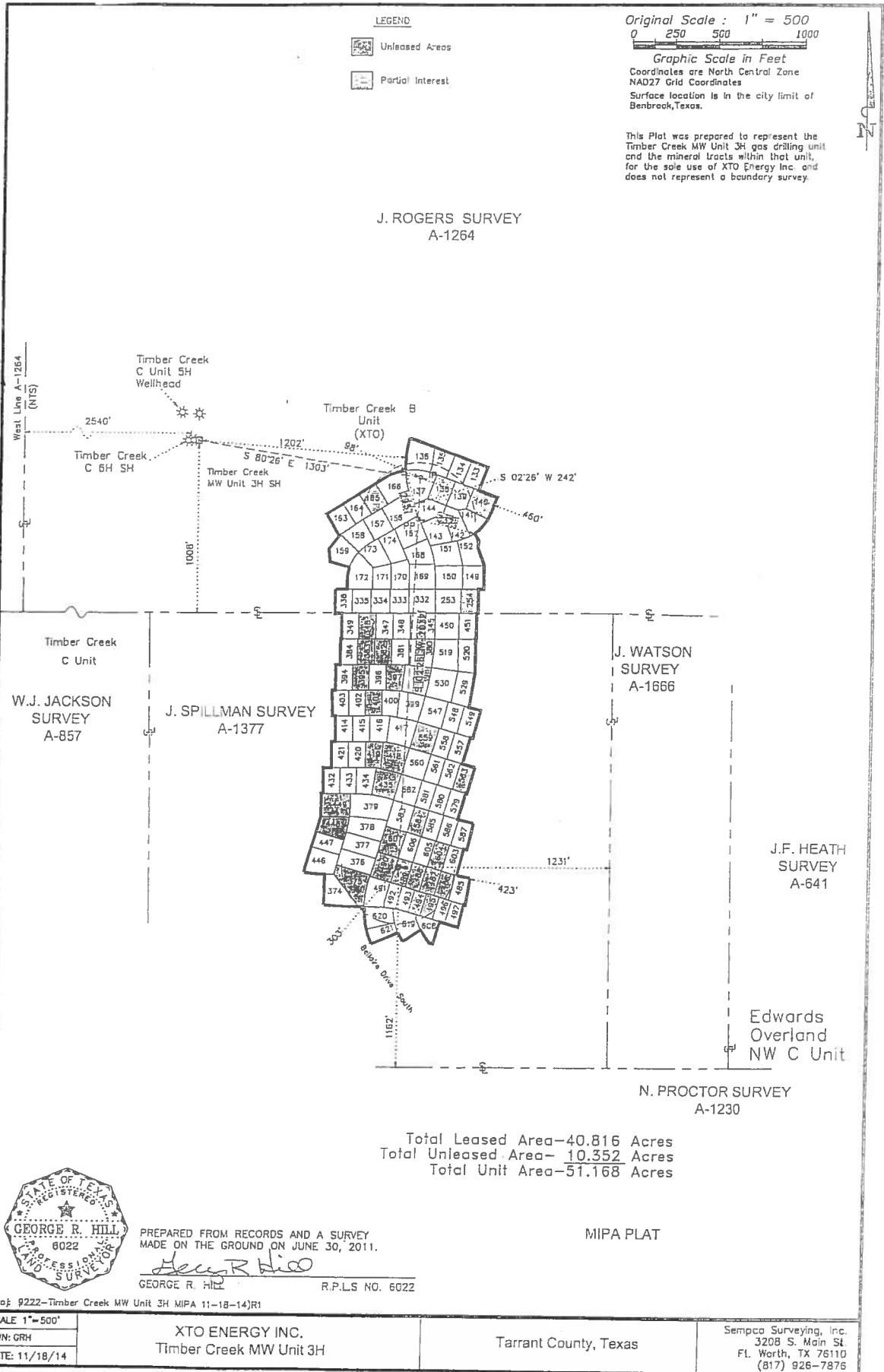
Timber Creek MW Unit
Estimated Drainhole Length Vs. Estimated Ultimate Recovery
Tarrant County, Texas

Exhibit No. 26
O&G Docket No. 09-0296228
Date: June 18, 2015
XTO Energy, Inc.



Attachment IV
Oil & Gas Docket No. 09-0296623
MIPA Application of XTO Energy, Inc.

Oil & Gas Docket No. 09-0296223
 June 18, 2015
 XTO Energy Inc.
 Exhibit No. 41



Total Leased Area-40.816 Acres
 Total Unleased Area- 10.352 Acres
 Total Unit Area-51.168 Acres



PREPARED FROM RECORDS AND A SURVEY
 MADE ON THE GROUND ON JUNE 30, 2011.
George R. Hill
 GEORGE R. HILL R.P.L.S. NO. 6022

MIPA PLAT

Proj: 9222-Timber Creek MW Unit 3H MIPA 11-18-14)R1	XTO ENERGY INC. Timber Creek MW Unit 3H		Tarrant County, Texas	Sempco Surveying, Inc. 3208 S. Main St. Fl. Worth, TX 76110 (817) 926-7876
SCALE 1"=500'				
DWN: GRH				
DATE: 11/18/14				

June 18, 2015

XTO Energy Inc.
Exhibit No. 42

LEGEND

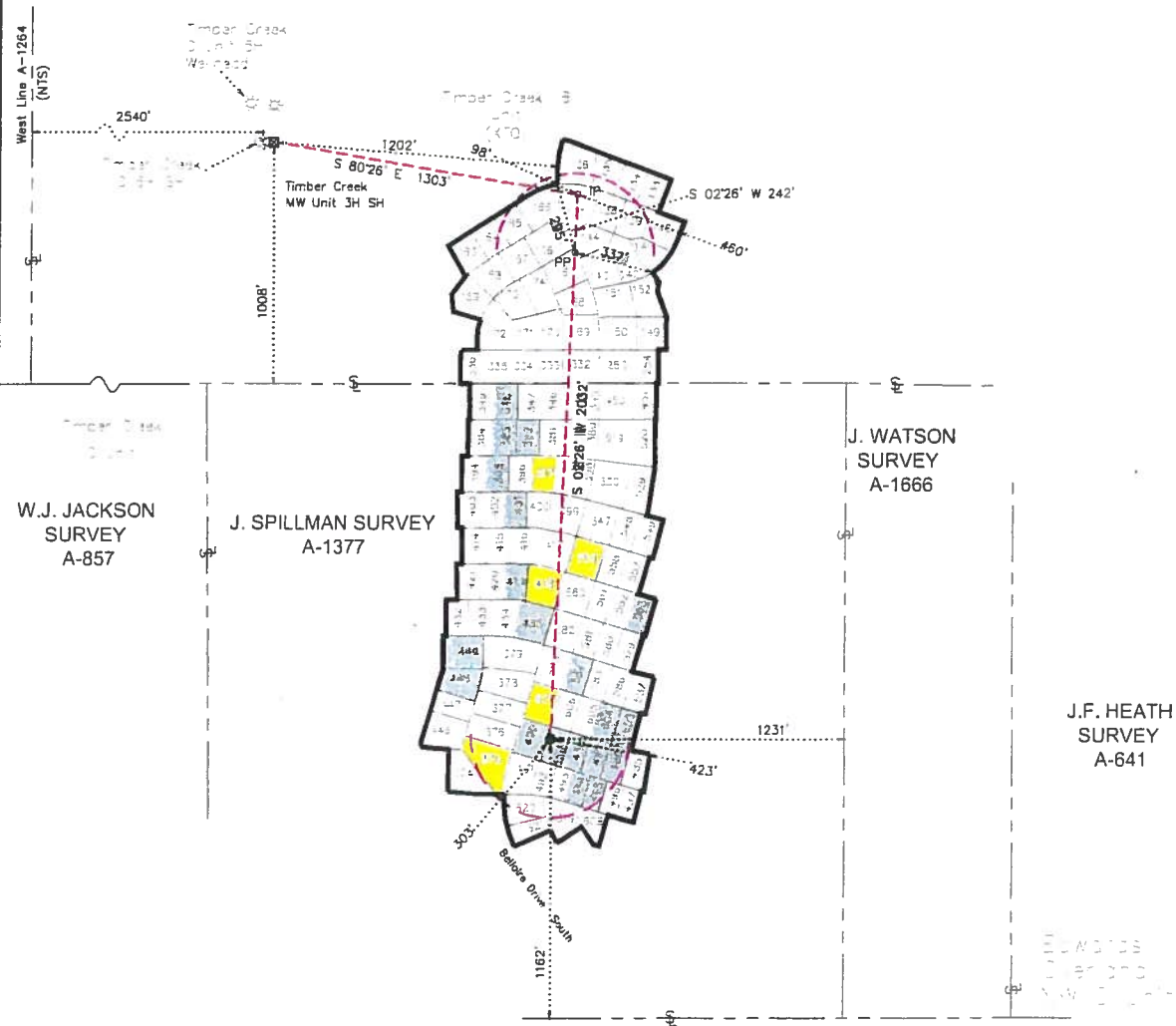
-  Released Areas
-  Partially Released

Original Scale : 1" = 500'


Graphic Scale in Feet
 Coordinates are North Central Zone
 NAD27 Grid Coordinates
 Surface location is in the city limit of
 Benbrook, Texas.

This Plot was prepared to represent the
 Timber Creek MW Unit 3H gas drilling unit
 and the mineral tracts within that unit,
 for the sole use of XTO Energy Inc. and
 does not represent a boundary survey.

Attachment V
Oil & Gas Docket No. 09-0296623
MIPA Application of XTO Energy, Inc.




 RECEIVED EXECUTED LEASE
 AFTER MIPA OFFER

ACREAGE TOTALS PRIOR TO MIPA OFFER:
 TOTAL LEASED AREA: 40.816 ACRES
 TOTAL UNLEASED AREA: 10.352 ACRES
 TOTAL UNIT AREA: 51.168 ACRES

CURRENT ACREAGE TOTALS:
 TOTAL LEASED AREA: 42.980 ACRES
 TOTAL UNLEASED AREA: 8.188 ACRES
 TOTAL UNIT AREA: 51.168 ACRES



PREPARED FROM RECORDS AND A SURVEY
 MADE ON THE GROUND ON JUNE 30, 2011:

 GEORGE R. HILL R.P.L.S. NO. 6022

Proj. 9222-Timber Creek MW Unit 3H MIPA 11-18-14)R1

SCALE 1"=500'
 DWN: GRH
 DATE: 11/18/14

XTO ENERGY INC.
 Timber Creek MW Unit 3H

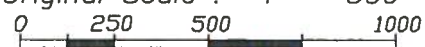
Tarrant County, Texas

Sempco Surveying, Inc.
 3208 S. Main St.
 Ft. Worth, TX 76110
 (817) 926-7876

LEGEND

- Unleased Areas
- Partially Unleased
- Regular Location Areas

Original Scale : 1" = 500



Graphic Scale in Feet

Coordinates are North Central Zone NAD27 Grid Coordinates

Surface location is in the city limit of Benbrook, Texas.

This Plat was prepared to represent the Timber Creek MW Unit 3H gas drilling unit and the mineral tracts within that unit, for the sole use of XTO Energy Inc. and does not represent a boundary survey.



Attachment VI
Oil & Gas Docket No. 09-0296623
MIPA Application of XTO Energy, Inc.

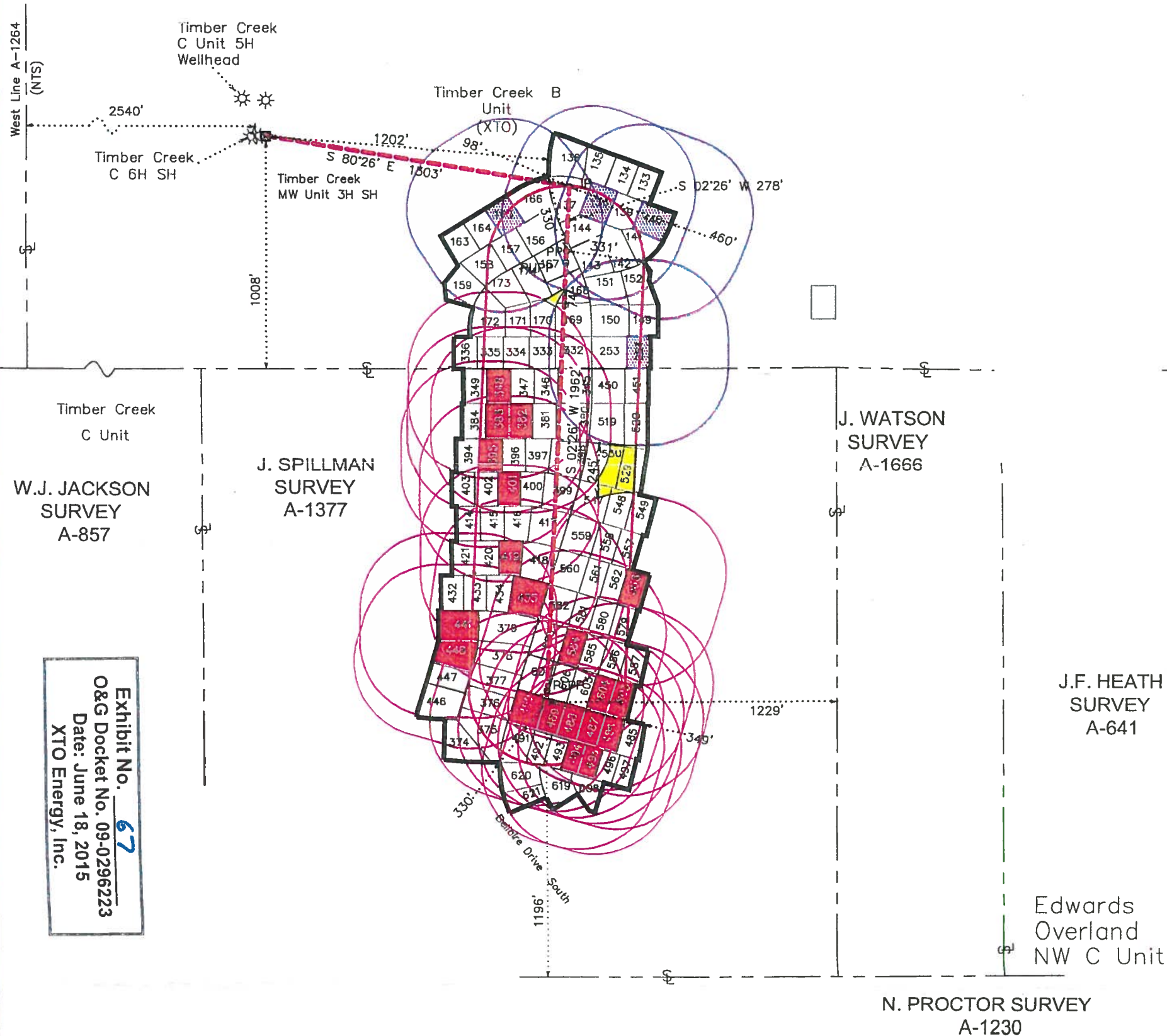


Exhibit No. **67**
 O&G Docket No. 09-0296623
 Date: June 18, 2015
 XTO Energy, Inc.

Total Leased Area—42.980 Acres
 Total Unleased Area— 8.188 Acres
 Total Unit Area—51.168 Acres



PREPARED FROM RECORDS AND A SURVEY
 MADE ON THE GROUND ON JUNE 30, 2011.

George R. Hill
 GEORGE R. HILL R.P.L.S. NO. 6022

MIPA PLAT

Proj: 9222-Timber Creek MW Unit 3H MIPA (06-15-15)

SCALE 1"=500'
 DWN: TRK-CK-GRH
 DATE: 06/15/15

XTO ENERGY INC.
 Timber Creek MW Unit 3H
 330' Offset-Unleased Tracts

Tarrant County, Texas

Sempco Surveying, Inc.
 3208 S. Main St.
 Ft. Worth, TX 76110
 (817) 926-7876