

**STATE OF OHIO  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL AND GAS RESOURCES MANAGEMENT**

In re the Matter of the Application of :  
XTO Energy Inc. for Unit Operation :  
 :  
 : Application Date: May 18, 2015  
 :  
 :  
Miller Unit A :

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**APPLICATION OF XTO ENERGY INC. ("XTO")  
FOR UNIT OPERATION**

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## TABLE OF CONTENTS

### APPLICATION

I.	APPLICANT INFORMATION.....	1
II.	PROJECT DESCRIPTION.....	2
III.	TESTIMONY .....	2
IV.	THE CHIEF SHOULD GRANT THIS APPLICATION.....	3
A.	Legal Standard .....	3
B.	XTO's Application Meets the Legal Standard .....	4
	<i>i. The Unitized Formation is Part of a Pool .....</i>	<i>4</i>
	<i>ii. Unit Operations Are Reasonably Necessary to Increase Substantially the Ultimate Recovery of Oil and Gas .....</i>	<i>5</i>
	<i>iii. The Value of Additional Recovery Exceeds Its Additional Costs .....</i>	<i>5</i>
	<i>iv. The Unit Plan Meets the Requirements of Ohio Revised Code § 1509.28 ..</i>	<i>6</i>
V.	HEARING.....	6
VI.	CONCLUSION.....	6

### ATTACHMENTS

Attachment 1	Unit Plan
Attachment 2	Unit Operating Agreement
Attachment 3	Prepared Direct Testimony of Jeff Jackson ("Geologist")
Attachment 4	Prepared Direct Testimony of Steven Cervantes ("Reservoir Engineer")
Attachment 5	Prepared Direct Testimony of David Pearson ("Landman")

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**APPLICATION**

Pursuant to Ohio Revised Code Section 1509.28, XTO Energy Inc. ("XTO"), hereby respectfully requests the Chief of the Division of Oil and Gas Resources Management ("Division") for an order authorizing XTO to operate the Unitized Formation and applicable land area in Belmont County, Ohio, (hereinafter, the "Miller Unit A") as a unit according to the Unit Plan attached hereto and as more fully described herein. XTO makes this request for, and unitization is necessary for, the purpose of substantially increasing the ultimate recovery of oil and natural gas, including related liquids, from the Unitized Formation, and to protect the correlative rights of unit owners, consistent with the public policy of Ohio to conserve and develop the state's natural resources and prevent waste.

**I.  
APPLICANT INFORMATION**

XTO is a corporation organized under the laws of the State of Delaware, with its principal office located at 810 Houston Street, Fort Worth, TX 76102-6298. XTO is registered in good standing as an "owner" with the Division.

XTO designates to receive service, and respectfully requests that all orders, correspondence, pleadings and documents from the Division and other persons concerning this filing, be served upon the following:

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## II. PROJECT DESCRIPTION

The Miller Unit A is located in Belmont County, Ohio, and consists of thirty-two (32) separate tracts of land. See Exhibit A-1 and A-2 to the Unit Operating Agreement (as defined herein), showing the plat and tract participations, respectively. The total land area in the Miller Unit A is approximately 496.3455 acres. At the time of this Application, XTO and other working interest owners participating in this Application have the right to drill on and produce from approximately 449.9675 acres of the proposed unit – i.e., approximately 90 and 65/100 percent (90.65%) of the unit area, well above the sixty-five percent (65%) threshold required by Ohio Revised Code § 1509.28<sup>1</sup>. As more specifically described herein, XTO seeks authority to drill and complete one or more horizontal wells in the Unitized Formation, defined as fifty (50) feet above the top of the Utica formation to fifty (50) feet below the top of the Curdsville Member of the Lexington/Trenton formation, from a single well pad located on the northwestern portion of the Miller Unit A, to efficiently test, develop, operate and produce the Unitized Formation for oil, natural gas, and related liquids production. XTO's plan for unit operations (the "Unit Plan") and accompanying unit operating agreement (the "Unit Operating Agreement") are attached to this Application as Attachment 1 and Attachment 2, respectively. Among other things, the Unit Plan allocates unit production and expenses based upon each tract's surface acreage participation in the unit; includes a carry provision for those unit participants unable to meet their financial obligations, and which determines reimbursement, in part, based upon the costs of and risks related to the project; and conforms to industry standards for the drilling and operating of horizontal wells.

## III. TESTIMONY

The following pre-filed testimony has been attached to the Application supporting the creation of the Miller Unit A: (i) testimony from a Geologist establishing that the Unitized Formation is part of a pool and supporting the Unit Plan's recommended allocation of unit

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<sup>1</sup> XTO currently has the contractual right, and is in the process of formally acquiring title, to oil and gas leases covering four (4) tracts totaling 93.6041 acres. XTO's acquisition of said oil and gas leases is anticipated be completed within thirty (30) days of the application date. As XTO holds equitable title to oil and gas leases covering these four (4) tracts, they have been included in the calculation of the acreage to which XTO and other working interest owners participating in this Application have the right to drill and produce.

production and expenses on a surface acreage basis<sup>2</sup>; (ii) testimony from a Reservoir Engineer establishing that unitization is reasonably necessary to increase substantially the recovery of oil and gas, and that the value of the estimated additional resource recovery from unit operations exceeds its estimated additional costs<sup>3</sup>; and (iii) testimony from a Landman describing the project generally and the terms of the Unit Plan<sup>4</sup>.

IV.  
THE CHIEF SHOULD GRANT THIS APPLICATION

A. Legal Standard

Ohio Revised Code § 1509.28 requires the Chief of the Division to issue an order providing for the unit operation of a pool – or a part thereof – If it is reasonably necessary to increase substantially the ultimate recovery of oil and gas, and the value of the estimated additional resource recovery from the unit's operations exceeds its additional costs. See Ohio Rev. Code § 1509.28(A).

The Chief's order must be on terms and conditions that are just and reasonable and prescribe a plan for unit operations that includes the following:

- (1) a description of the unit area;
- (2) a statement of the nature of the contemplated operations;
- (3) an allocation of production from the unit area not used in unit operations, or otherwise lost, to the separately owned tracts;
- (4) a provision addressing credits and charges to be made for the investment in wells, tanks, pumps, and other equipment contributed to unit operations by owners in the unit;
- (5) a provision addressing how unit operation expenses shall be determined and charged to the separately owned tracts in the unit, and how they will be paid;
- (6) a provision, if necessary, for carrying someone unable to meet their financial obligations in connection with the unit;
- (7) a provision for the supervision and conduct of unit operations in which each person has a vote with a value corresponding to the percentage of unit operations expenses chargeable against that person's interest;
- (8) the time when operations shall commence and the manner in which, and circumstances under which, unit operations will terminate; and

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<sup>2</sup> See [Attachment 3](#).

<sup>3</sup> See [Attachment 4](#).

<sup>4</sup> See [Attachment 5](#).

(9) such other provisions appropriate for engaging in unit operations and for the protection or adjustment of correlative rights.

XTO further proposes the following additional provisions in the event that the Division issues an order authorizing unitization of the Miller Unit A:

XTO shall present unleased mineral owners with the option to:

- (a) elect to enter into an oil and gas lease identical to the *Paid-Up Oil and Gas Lease* attached as Exhibit B of the Unit Operating Agreement, for a lease bonus payment of eight thousand dollars (\$8,000) per net mineral acre, and a royalty rate on production of twenty percent (20%); or
- (b) shall be deemed to be a non-consenting working interest owner receiving a royalty on production of twelve and one-half percent (12.5%), and a working interest of eighty seven and one-half percent (87.5%), subject to the terms and conditions of the Unit Plan and the Unit Operating Agreement.

Upon the issuance of an order authorizing unit operations, XTO shall present these options by certified mail. Should a unitized party fail to make an affirmative election prior to the effective date of a final non-appealable order the unitized party shall be deemed to have selected option (b).

See Ohio Rev. Code § 1509.28(A). The Chief's order becomes effective once approved in writing by those owners who will be responsible for paying at least sixty-five percent of the costs of the unit's operations and by royalty and unleased fee-owners of sixty-five percent of the unit's acreage. Once effective, production that is "allocated to a separately owned tract shall be deemed, for all purposes, to have been actually produced from such tract, and all operations \*\*\* [conducted] upon any portion of the unit area shall be deemed for all purposes the conduct of such operations and production from any lease or contract for lands any portion of which is included in the unit area." Ohio Rev. Code § 1509.28.

B. XTO's Application Meets the Legal Standard

*i. The Unitized Formation is Part of a Pool*

The "Unitized Formation" consists of the subsurface portion of the Unit Area (i.e., the lands shown on Exhibit A-1 and identified in Exhibit A-2 to the Unit Operating Agreement) at an approximate depth of fifty (50) feet above the top of the Utica formation to fifty (50) feet below the top of the Curdsville Member of the Lexington/Trenton formation. The evidence presented with this Application establishes that the Unitized Formation is part of a pool and, thus, an

appropriate subject of unit operation under Ohio Rev. Code § 1509.28.<sup>5</sup> Additionally, the evidence establishes that the Unitized Formation is likely to be reasonably uniformly distributed throughout the Unit Area and thus it is reasonable for the Unit Plan to allocate unit production and expenses to separately owned tracts on a surface acreage basis.<sup>6</sup>

*ii. Unit Operations Are Reasonably Necessary to Increase Substantially the Ultimate Recovery of Oil and Gas*

The evidence presented in this Application establishes that unit operations are reasonably necessary to increase substantially the ultimate recovery of oil and gas from the lands making up the Miller Unit A. The Unit Plan contemplates the drilling of one (1) horizontal well, with a lateral of approximately 11,152 feet.<sup>7</sup> XTO estimates that the ultimate recovery from this unit development could be as much as 16.7 billion cubic feet (“BCF”) of natural gas from the Unitized Formation.<sup>8</sup> Because of the location of the unleased and uncommitted working interest tracts within the Unit Area, only approximately 2,796 total feet of lateral could be produced absent unit operations. This would leave approximately 8,356 feet of stranded lateral, and potentially, as much as 12.5 BCF of natural gas undeveloped.<sup>9</sup> The evidence shows that the contemplated unit operations are reasonably necessary to increase substantially the recovery of oil and gas from the Unitized Formation.

*iii. The Value of Additional Recovery Exceeds Its Additional Costs*

The evidence shows that the estimated recovery from unit operations has a net present value in excess of \$5.335 million.<sup>10</sup> The additional recovery from unit operations has a net present value of approximately \$8.877 million, while the additional costs for unit operations total approximately \$4.819 million. Moreover, see Attachment 3 – Exhibit SC-2, showing the estimated value of the well's production and the estimated drilling and operating costs (incorporated here as if fully rewritten herein). The evidence accordingly establishes that the value of the estimated additional recovery exceeds the estimated additional costs incident to conducting unit operations.

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<sup>5</sup> A "pool" is defined by statute as "an underground reservoir containing a common accumulation of oil or gas, or both, but does not include a gas storage reservoir." Ohio Rev. Code § 1509.01(E). See also Attachment 3 at Pg. 2, Ln. 1 - 23

<sup>6</sup> See Attachment 3 at Pg. 2.

<sup>7</sup> See Attachment 4 at Pg. 1.

<sup>8</sup> See Attachment 4 at Pg. 2.

<sup>9</sup> See Attachment 4 at Pg. 2.

<sup>10</sup> See Attachment 4 at Pg. 2. We emphasize that these are only estimates, and like the rest of the estimates set forth in this Application, they should be treated as simply estimates based upon the best information available at the time.

*iv. The Unit Plan Meets the Requirements of Ohio Revised Code § 1509.28*

The Unit Plan proposed by XTO meets the requirements set forth in Ohio Revised Code § 1509.28. The unit area is described in the Unit Plan at Article 1, as well as on Exhibits A-1 and A-2 to the Unit Operating Agreement. The nature of the contemplated unit operations can be found generally in the Unit Plan at Article 3, with greater specificity throughout, including the Unit Operating Agreement. Unit production and unit expenses are allocated on a surface acreage basis as set forth in the Unit Plan at Articles 3 through 5 (generally), except where otherwise allocated by the Unit Operating Agreement. Payment of unit expenses is addressed generally in Article 3 of the Unit Plan. The Unit Plan provides for payment of costs by other working interest owners in the event a participant is unable to meet its financial obligations related to the unit - see, e.g., Article VI of the Unit Operating Agreement. Voting provisions related to the supervision and conduct of unit operations are set forth in Article 14 of the Unit Plan, with each person having a vote that has a value corresponding to the percentage of unit expenses chargeable against that person's interest. And the commencement and termination of operations are addressed in Articles 11 and 12 of the Unit Plan.<sup>11</sup>

V.  
HEARING

Ohio Revised Code § 1509.28 requires the Chief to hold a hearing to consider this Application, when requested by sixty-five percent (65%) of the owners of the land area underlying the proposed unit. Ohio Rev. Code § 1509.28(A). That threshold level is met here. See Attachment 5 – Exhibit DP-1. Accordingly, XTO respectfully requests that the Division schedule a hearing at an available hearing room located at the Division's Columbus complex on or before September 17, 2015, to consider the Application filed herein.

VI.  
CONCLUSION

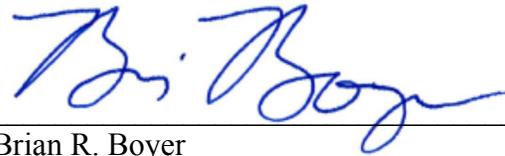
Ohio Revised Code § 1509.28 requires the Chief of the Division to issue an order for the unit operation of a pool or a part thereof if it is reasonably necessary to increase substantially the recovery of oil and gas, and the value of the estimated additional recovery from the unit's operations exceeds its estimated additional costs. XTO respectfully submits that the Application meets this standard, and that the terms and conditions of the proposed Unit Plan are just and reasonable and satisfy the requirements of Ohio Revised Code § 1509.28(B). XTO therefore asks the Chief

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<sup>11</sup> See Attachment 5 generally.

to issue an order authorizing XTO to operate the Miller Unit A according to the Unit Plan attached hereto.

Respectfully submitted,



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**PLAN FOR UNIT OPERATION**  
**MILLER UNIT A**  
**PULTNEY TOWNSHIP**  
**BELMONT COUNTY, OHIO**  
**MAY 18, 2015**

The following shall constitute the Plan for Unit Operations applicable to the Miller Unit A in Pultney Township, Belmont County, Ohio, and having as its purpose the unitized management, operation, and development of the Unitized Formation as herein defined, to advance the public welfare and promote conservation, to increase the ultimate recovery of oil, natural gas, and other substances therefrom, and to avoid waste and protect the correlative rights of the owners of interests therein.

**ARTICLE 1: DEFINITIONS**

As used in this Plan for Unit Operations:

**Division** refers to the Ohio Department of Natural Resources' Division of Oil and Gas Resources Management.

**Effective Date** is the time and date this Plan becomes effective as provided in Article 11.

**Oil and Gas Rights** are the rights to investigate, explore, prospect, drill, develop, produce, market, transport, and operate within the Unit Area for the production of Unitized Substances, or to share in the production so obtained or the proceeds thereof, including without limitation the conducting of exploration, geologic and/or geophysical surveys by seismograph, core test, gravity and/or magnetic methods, the injecting of gas, water, air or other fluids into the Unitized Formation, the installation, operation and maintenance of monitoring facilities, the laying of pipelines, building of roads, tanks, power stations, telephone lines, and/or other structures.

**Person** is any individual, corporation, partnership, association, receiver, trustee, curator, executor, administrator, guardian, fiduciary, or other representative of any kind, any department, agency, or instrumentality of the state, or any governmental subdivision thereof, or any other entity capable of holding an interest in the Unitized Substances or Unitized Formation.

**Plan** means this Plan for Unit Operations for the Miller Unit A, Pultney Township, Belmont County, Ohio, including, unless otherwise expressly mentioned, any and all attachments and exhibits hereto.

**Royalty Interest** means a right to or interest in any portion of the Unitized Substances or proceeds from the sale thereof, other than a Working Interest.

**Royalty Owner** is a Person who owns a Royalty Interest.

**Tract** means the land identified by a tract number in Exhibit A-2 to the Unit Operating Agreement.

**Tract Participation** means the fractional interest shown on Exhibit A-2 to the Unit Operating Agreement for allocating Unitized Substances to a Tract.

**Uncommitted Working Interest Owner** is a Working Interest Owner, other than an Unleased Mineral Owner, who has not agreed to, ratified or otherwise approved this Plan. Uncommitted Working Interest Owners are likely, but not necessarily, to have obtained their interest by lease.

**Unit Area** means the lands shown on the plat attached as Exhibit A-1 and identified on Exhibit A-2 to the Unit Operating Agreement, including also areas to which this Plan may be extended as herein provided.

**Unit Equipment** means all personal property, lease and well equipment, plants, and other facilities and equipment taken over or otherwise acquired for the unit account for use in Unit Operations.

**Unit Expense** means all cost, expense, investment and indebtedness incurred by Working Interest Owners or Unit Operator pursuant to this Plan for or on account of Unit Operations.

**Unitized Formation** means the subsurface portion of the Unit Area located fifty (50) feet above the top of the Utica formation to fifty (50) feet below the top of the Curdsville Member of the Lexington/Trenton formation.

**Unit Operating Agreement** means the modified A.A.P.L. Form 610-1989 Model Form Operating Agreement that is attached hereto (identified as "Attachment 2") and incorporated herein by reference as if fully re-written herein and to which all Working Interest Owners are deemed to be parties; provided, however, that in the event Working Interest Owners have agreed to a separate joint operating agreement relating to the supervision and conduct of unit operations contemplated herein, such operating agreement shall control. The Unit Operating Agreement contains provisions for credits and charges among Working Interest Owners for their respective investments in, and expenses for, Unit Operations, including a provision, if necessary, for carrying any Person unable or electing not to participate in Unit Operations. In addition, the Unit Operating Agreement also contains provisions relating to the supervision and conduct of Unit Operations and the manner in which Working Interest Owners may vote. In the event of a conflict between the terms of the Unit Operating Agreement and the other terms of this Plan, excluding the Unit Operating Agreement, such other terms of this Plan shall govern.

**Unit Operations** are all operations conducted pursuant to this Plan.

**Unit Operator** is the Person designated by Working Interest Owners under the Unit Operating Agreement to conduct Unit Operations.

**Unit Participation** is the sum of the interests obtained by multiplying the Working Interest of a Working Interest Owner in each Tract by the Tract Participation of such Tract.

**Unitized Substances** are all oil, gas, gaseous substances, sulfur, condensate, distillate, and all associated and constituent liquid or liquefiable hydrocarbons within or produced from the Unitized Formation.

**Unleased Mineral Owner** is a Person who owns Oil and Gas Rights free of a lease or other instrument conveying all or any portion of the Working Interest in such rights to another.

**Working Interest** means an interest in Unitized Substances in the Unit Area by virtue of a lease, operating agreement, fee title, or otherwise, including a carried interest, the owner of which is obligated to pay, either in cash or out of production or otherwise, a portion of the Unit Expense; however, Oil and Gas Rights that are free of a lease or other instrument creating a Working Interest shall be regarded as a Working Interest to the extent of 87.5% thereof and a Royalty Interest to the extent of the remaining 12.5% thereof, such Royalty Interest to be subject to any post-production costs, taxes, assessments and other fees as may be set forth in the Unit Operating Agreement. A Royalty Interest created out of a Working Interest subsequent to the participation of, subscription to, ratification of, approval by, or consent to this Plan by the owner of such Working Interest shall continue to be subject to such Working Interest burdens and obligations that are stated in this Plan.

**Working Interest Owner** is a Person who owns a Working Interest.

## ARTICLE 2: CREATION AND EFFECT OF UNIT

**Oil and Gas Rights Unitized.** All Royalty Interests and Working Interests in Oil and Gas Rights in and to the lands identified on Exhibits A-1 and A-2 to the Unit Operating Agreement are hereby unitized insofar as, and only insofar as, the respective Oil and Gas Rights pertain to the Unitized Formation, so that Unit Operations may be conducted with respect to the Unitized Formation as if the Unit Area had been included in a single lease executed by all Royalty Owners, as lessors, in favor of all Working Interest Owners, as lessees, and as if the lease contained all of the provisions of this Plan.

**Personal Property Excepted.** All lease and well equipment, materials, and other facilities heretofore or hereafter placed by any of the Working Interest Owners on the lands covered hereby shall be deemed to be and shall remain personal property belonging to, and may be removed by, Working Interest Owners with the prior consent of Unit Operator. The rights and interests therein, as among Working Interest Owners, are set forth in the Unit Operating Agreement.

**Continuation of Leases and Term Interests.** Unit Operations conducted upon any part of the Unit Area or production of Unitized Substances from any part of the Unitized Formation, except for the purpose of determining payments to Royalty Owners, shall be considered as operations upon or production from each portion of each Tract, and such production or operations shall continue in effect each lease or term, mineral or Royalty Interest, as to all Tracts and formations covered or affected by this Plan just as if such Unit Operations had been conducted and a well had been drilled on and was producing from each portion of each Tract. Each lease shall remain in full force and effect from the date of execution thereof until the Effective Date, and thereafter in accordance with its terms and this Plan.

**Titles Unaffected by Unitization.** Nothing herein shall be construed to result in any transfer of title to Oil and Gas Rights by any Person to any other Person or to Unit Operator.

**Pre-existing Conditions in Unit Area.** Working Interest Owners shall not be liable for or assume any obligation with respect to (i) the restoration or remediation of any condition associated with the Unit Area that existed prior to the Effective Date of this Plan, or (ii) the removal and/or plugging and abandonment of any wellbore, equipment, fixtures, facilities or other property located in, on or under the Unit Area prior to the Effective Date of this Plan.

## ARTICLE 3: UNIT OPERATIONS

**Unit Operator.** Unit Operator shall have the exclusive right to conduct Unit Operations, which shall conform to the provisions of this Plan.

**Unit Expenses.** All Unit Expenses shall be just and reasonable, and shall be charged as set out in the Unit Operating Agreement. Except as otherwise provided in the Unit Operating Agreement, Unit Expenses shall be allocated to each Tract based upon its Tract Participation, and shall be paid by the Tract's Working Interest Owners.

## ARTICLE 4: TRACT PARTICIPATIONS

**Tract Participations.** The Tract Participation of each Tract is identified in Exhibit A-2 to the Unit Operating Agreement and shall be determined solely upon an acreage basis as the proportion that the Tract surface acreage inside the Unit Area bears to the total surface acreage of the Unit Area. The Tract Participation of each Tract has been calculated as follows: TRACT SURFACE ACRES WITHIN THE UNIT AREA DIVIDED BY THE TOTAL SURFACE ACRES WITHIN THE UNIT AREA.

## ARTICLE 5: ALLOCATION OF UNITIZED SUBSTANCES

**Allocation of Unitized Substances.** All Unitized Substances produced and saved shall be allocated to the several Tracts in accordance with the respective Tract Participations effective during the period that the Unitized Substances were produced. The amount of Unitized Substances allocated to each Tract, regardless of whether the amount is more or less than the actual production of Unitized Substances from the well or wells, if any, on such Tract, shall be deemed for all purposes to have been produced from such Tract.

**Distribution Within Tracts.** The Unitized Substances allocated to each Tract or portion thereof shall be distributed among, or accounted for to, the Persons entitled to share in the production from such Tract or portion thereof in the same manner, in the same proportions, and upon the same conditions as they would have participated and shared in the production from such Tract, or in the proceeds thereof, had this Plan not been entered into, and with the same legal effect. If any Oil and Gas Rights in a Tract hereafter become divided and owned in severalty as to different parts of the Tract, the owners of the divided interests, in the absence of an agreement providing for a different division, shall share in the Unitized Substances allocated to the Tract, or in the proceeds thereof, in proportion to the surface acreage of their respective parts of the Tract. Any royalty or other payment which depends upon per well production or pipeline runs from a well or wells on a Tract shall, after the Effective Date, be determined by dividing the Unitized Substances allocated to the Tract by the number of wells on the Tract capable of producing Unitized Substances on the Effective Date; however, if any Tract has no well thereon capable of producing Unitized Substances on the Effective Date, the Tract shall, for the purpose of this determination, be deemed to have one (1) such well thereon.

## ARTICLE 6: USE OR LOSS OF UNITIZED SUBSTANCES

**Use of Unitized Substances.** Working Interest Owners may use or consume Unitized Substances for Unit Operations, including but not limited to, the injection thereof into the Unitized Formation.

**Royalty Payments.** No royalty, overriding royalty, production, or other payments shall be payable on account of Unitized Substances used, lost, or consumed in Unit Operations, including without limitation the testing of the productivity of any wells drilled in the Unit Area. Royalty payments shall be made to Unleased Mineral Owners beginning with the initial distribution date for production of Unitized Substances from any well within the Miller Unit A.

## ARTICLE 7: TITLES

**Warranty and Indemnity.** Each Person who, by acceptance of produced Unitized Substances or the proceeds from a sale thereof, may claim to own a Working Interest or Royalty Interest in and to any Tract or in the Unitized Substances allocated thereto, shall be deemed to have warranted its title to such interest, and, upon receipt of the Unitized Substances or the proceeds from a sale thereof to the credit of such interest, shall indemnify and hold harmless all other Persons in interest from any loss due to failure, in whole or in part, of its title to any such interest; provided, however, that nothing in this provision shall apply to Unleased Mineral Owners.

**Production Where Title is in Dispute.** If the title or right of any Person claiming the right to receive in kind all or any portion of the Unitized Substances allocated to a Tract is in dispute, Unit Operator at the direction of Working Interest Owners may: Require that the Person to whom such Unitized Substances are delivered or to whom the proceeds from a sale thereof are paid furnish security for the proper accounting therefor to the rightful owner or owners if the title or right of such Person fails in whole or in part; or withhold and market the portion of Unitized Substances with respect to which title or right is in dispute, and hold the proceeds thereof until such time as the title or right thereto is established by a final judgment of a court of competent jurisdiction or otherwise to the satisfaction of Working Interest Owners, whereupon the proceeds so held shall be paid to the Person rightfully entitled thereto.

**Transfer of Title.** Any conveyance of all or any part of any interest owned by any Person hereto with respect to any Tract shall be made expressly subject to this Plan. No change of title shall be binding upon Unit Operator, or upon any Person hereto other than the person so transferring, until 7:00 a.m. on the first day of the calendar month next succeeding the date of receipt by Unit Operator of a certified copy of the recorded instrument evidencing such change in ownership.

## **ARTICLE 8: EASEMENTS, GRANTS, OR USE OF SURFACE**

**Grant of Easements.** Subject to the terms and conditions of the various leases, Unit Operator shall have the right of ingress and egress along with the right to use as much of the surface of the land within the Unit Area as may be reasonably necessary for Unit Operations and the removal of Unitized Substances from the Unit Area.

**Use of Water.** The following shall apply subject to the terms and conditions of the various leases: Unit Operator shall have and is hereby granted free use of water from the Unit Area for Unit Operations, except water from any well, lake, pond, or irrigation ditch of a Royalty Owner. Unit Operator may convert dry or abandoned wells in the Unit Area for use as water supply or disposal wells.

**Surface Damages.** Subject to the terms and conditions of the various leases, Working Interest Owners shall reimburse the owner for the market value prevailing in the area of growing crops, livestock, timber, fences, improvements, and structures on the Unit Area that are destroyed or damaged as a result of Unit Operations.

**Unleased Property.** Notwithstanding anything in this Article 8 to the contrary, and except where otherwise authorized by the Division, there shall be no Unit Operations conducted on the surface of any property located within the Miller Unit A, and there shall be no right of ingress and egress over and no right to use the surface waters of any surface lands located within the Miller Unit A, owned by a non-consenting Unleased Mineral Owner.

## **ARTICLE 9: CHANGE OF TITLE**

**Covenant Running with the Land.** This Plan shall extend to, be binding upon, and inure to the benefit of the owners of the Royalty Interests and Working Interests in Oil and Gas Rights unitized hereby, and the respective heirs, devisees, legal representatives, successors, assigns thereof, and shall constitute a covenant running with the lands, leases, and interests impacted hereby.

**Waiver of Rights of Partition.** No Person affected hereby shall resort to any action to, and shall not, partition Oil and Gas Rights, the Unit Area, the Unitized Formation, the Unitized Substances or the Unit Equipment.

## **ARTICLE 10: RELATIONSHIPS OF PERSONS**

**No Partnership.** All duties, obligations, and liabilities arising hereunder shall be several and not joint or collective. This Plan is not intended to and shall not be construed to create an association or trust, or to impose a partnership or fiduciary duty, obligation, or liability. Each Person affected hereby shall be individually responsible for its own obligations.

**No Joint or Cooperative Refining, Sale or Marketing.** This Plan is not intended and shall not be construed to provide, directly or indirectly, for any joint or cooperative refining, sale or marketing of Unitized Substances.

## ARTICLE 11: EFFECTIVE DATE

**Effective Date.** This Plan shall become effective as of, and operations may commence hereunder as of, 7:00 A.M. on the date of an effective order approving this unit by the Division in accordance with the provisions of Ohio Revised Code Section 1509.28; provided, however, that Working Interest Owners may terminate this Plan in the event of a material modification by the Division of all or any part of this Plan in such order by filing a notice of termination with the Division within thirty (30) days of such order becoming final and no longer subject to further appeal. In the event a dispute arises or exists with respect to this Plan, or the order approving this unit issued by the Division, Unit Operator may, in its sole discretion, hold the revenues from the sale of Unitized Substances until such time as such dispute is resolved or, in the Unit Operator's opinion, it is appropriate to distribute such revenues.

## ARTICLE 12: TERM

**Term.** This Plan, unless sooner terminated in the manner hereinafter provided, shall remain in effect for five (5) years from the Effective Date and as long thereafter as Unitized Substances are produced, or are capable of being produced, in paying quantities from the Unit Area without a cessation of more than one hundred and eighty (180) consecutive days, or so long as other Unit Operations are conducted without a cessation of more than one hundred and eighty (180) consecutive days, unless sooner terminated by Working Interest Owners owning a combined Unit Participation of fifty-one percent (51%) or more whenever such Working Interest Owners determine that Unit Operations are no longer warranted. The date of any termination hereunder shall be known as the "Termination Date."

**Effect of Termination.** Upon termination of this Plan, the further development and operation of the Unitized Formation as a unit shall cease. Each oil and gas lease and other agreement covering lands within the Unit Area shall remain in force for one hundred eighty (180) days after the date on which this Plan terminates, and for such further period as is provided by the lease or other agreement. The relationships among owners of Oil and Gas Rights shall thereafter be governed by the terms and provisions of the leases and other instruments, not including this Plan, affecting the separate Tracts.

**Certificate of Termination.** Upon termination of this Plan, Unit Operator shall file with the Division and for record in the county or counties in which the land affected is located a certificate stating that this Plan has terminated and the Termination Date.

**Salvaging Equipment Upon Termination.** If not otherwise granted by the leases or other instruments affecting the separate Tracts, Working Interest Owners shall have a period of six (6) months after the Termination Date within which to salvage and remove Unit Equipment.

## ARTICLE 13: APPROVAL

**Original, Counterpart, or Other Instrument.** An owner of Oil and Gas Rights or its agent may approve this Plan by signing the original, a counterpart thereof, or other instrument approving this Plan. The signing of any such instrument shall have the same effect as if all Persons had signed the same instrument.

**Commitment of Interests to Unit.** The approval of this Plan by a Person or their agent shall bind that Person and commit all interests owned or controlled by that Person as of the date of such approval, and additional interests thereafter acquired.

**Joinder in Dual Capacity.** Execution as herein provided by any Person, as either Working Interest Owner or a Royalty Owner, shall commit all interests owned or controlled by such Person as of the date of such execution and any additional interest thereafter acquired.

## ARTICLE 14: MISCELLANEOUS

**Determinations by Working Interest Owners.** Each Working Interest Owner shall have a voting interest equal to its Unit Participation. All decisions, determinations, or approvals by Working Interest Owners hereunder shall be made by the affirmative vote of one or more parties having a combined voting interest of at least fifty one percent (51%). No vote, however, is required for such determinations if the Unit Operator owns or controls fifty one percent (51%) or more of the Working Interest in the Unit Area.

**Severability of Provisions.** The provisions of this Plan are severable and if any section, sentence, clause or part thereof is held to be invalid for any reason, such invalidity shall not be construed to affect the validity of the remaining provisions of this Plan.

**Laws and Regulations.** This Plan shall be governed by and subject to the laws of the State of Ohio, to the valid rules, regulations, orders and permits of the Division, and to all other applicable federal, state, and municipal laws, rules, regulations, orders, and ordinances. Any change of the Unit Area or any amendment to this Plan shall be in accordance with Ohio law.

A.A.P.L. FORM 610 - 1989

**MODEL FORM OPERATING AGREEMENT**

**MILLER UNIT A**

OPERATING AGREEMENT

DATED

May 18 , 2015 ,  
year

OPERATOR XTO Energy Inc.

CONTRACT AREA See Exhibits "A" and "A-1" attached hereto and made a part hereof.

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\_\_\_\_\_  
\_\_\_\_\_

COUNTY OR PARISH OF BELMONT , STATE OF OHIO

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AMERICAN ASSOCIATION OF PETROLEUM  
LANDMEN, 4100 FOSSIL CREEK BLVD.  
FORT WORTH, TEXAS, 76137, APPROVED FORM.

A.A.P.L. NO. 610 - 1989

**TABLE OF CONTENTS**

Article	Title	Page
<b>I.</b>	<b><u>DEFINITIONS</u></b> .....	1
<b>II.</b>	<b><u>EXHIBITS</u></b> .....	1
<b>III.</b>	<b><u>INTERESTS OF PARTIES</u></b> .....	2
	A. OIL AND GAS INTERESTS: .....	2
	B. INTERESTS OF PARTIES IN COSTS AND PRODUCTION: .....	2
	C. SUBSEQUENTLY CREATED INTERESTS: .....	2
<b>IV.</b>	<b><u>TITLES</u></b> .....	2
	A. TITLE EXAMINATION: .....	2
	B. LOSS OR FAILURE OF TITLE: .....	3
	1. Failure of Title .....	3
	2. Loss by Non-Payment or Erroneous Payment of Amount Due .....	3
	3. Other Losses .....	3
	4. Curing Title .....	3
<b>V.</b>	<b><u>OPERATOR</u></b> .....	4
	A. DESIGNATION AND RESPONSIBILITIES OF OPERATOR: .....	4
	B. RESIGNATION OR REMOVAL OF OPERATOR AND SELECTION OF SUCCESSOR: .....	4
	1. Resignation or Removal of Operator .....	4
	2. Selection of Successor Operator .....	4
	3. Effect of Bankruptcy .....	4
	C. EMPLOYEES AND CONTRACTORS: .....	4
	D. RIGHTS AND DUTIES OF OPERATOR: .....	4
	1. Competitive Rates and Use of Affiliates .....	4
	2. Discharge of Joint Account Obligations .....	4
	3. Protection from Liens .....	4
	4. Custody of Funds .....	5
	5. Access to Contract Area and Records .....	5
	6. Filing and Furnishing Governmental Reports .....	5
	7. Drilling and Testing Operations .....	5
	8. Cost Estimates .....	5
	9. Insurance .....	5
<b>VI.</b>	<b><u>DRILLING AND DEVELOPMENT</u></b> .....	5
	A. INITIAL WELL: .....	5
	B. SUBSEQUENT OPERATIONS: .....	5
	1. Proposed Operations .....	5
	2. Operations by Less Than All Parties .....	6
	3. Stand-By Costs .....	7
	4. Deepening .....	8
	5. Sidetracking .....	8
	6. Order of Preference of Operations .....	8
	7. Conformity to Spacing Pattern .....	9
	8. Paying Wells .....	9
	C. COMPLETION OF WELLS; REWORKING AND PLUGGING BACK: .....	9
	1. Completion .....	9
	2. Rework, Recomplete or Plug Back .....	9
	D. OTHER OPERATIONS: .....	9
	E. ABANDONMENT OF WELLS: .....	9
	1. Abandonment of Dry Holes .....	9
	2. Abandonment of Wells That Have Produced .....	10
	3. Abandonment of Non-Consent Operations .....	10
	F. TERMINATION OF OPERATIONS: .....	10
	G. TAKING PRODUCTION IN KIND: .....	10
	(Option 1) Gas Balancing Agreement .....	10
	(Option 2) No Gas Balancing Agreement .....	11
<b>VII.</b>	<b><u>EXPENDITURES AND LIABILITY OF PARTIES</u></b> .....	11
	A. LIABILITY OF PARTIES: .....	11
	B. LIENS AND SECURITY INTERESTS: .....	12
	C. ADVANCES: .....	12
	D. DEFAULTS AND REMEDIES: .....	12
	1. Suspension of Rights .....	13
	2. Suit for Damages .....	13
	3. Deemed Non-Consent .....	13
	4. Advance Payment .....	13
	5. Costs and Attorneys' Fees .....	13
	E. RENTALS, SHUT-IN WELL PAYMENTS AND MINIMUM ROYALTIES: .....	13
	F. TAXES: .....	13
<b>VIII.</b>	<b><u>ACQUISITION, MAINTENANCE OR TRANSFER OF INTEREST</u></b> .....	14
	A. SURRENDER OF LEASES: .....	14
	B. RENEWAL OR EXTENSION OF LEASES: .....	14
	C. ACREAGE OR CASH CONTRIBUTIONS: .....	14

**TABLE OF CONTENTS**

D. ASSIGNMENT; MAINTENANCE OF UNIFORM INTEREST: .....	15
E. WAIVER OF RIGHTS TO PARTITION:.....	15
F. <del>PREFERENTIAL RIGHT TO PURCHASE:.....</del>	<del>15</del>
<b>IX. <u>INTERNAL REVENUE CODE ELECTION</u></b> .....	15
<b>X. <u>CLAIMS AND LAWSUITS</u></b> .....	15
<b>XI. <u>FORCE MAJEURE</u></b> .....	16
<b>XII. <u>NOTICES</u></b> .....	16
<b>XIII. <u>TERM OF AGREEMENT</u></b> .....	16
<b>XIV. <u>COMPLIANCE WITH LAWS AND REGULATIONS</u></b> .....	16
A. LAWS, REGULATIONS AND ORDERS:.....	16
B. GOVERNING LAW: .....	16
C. REGULATORY AGENCIES: .....	16
<b>XV. <u>MISCELLANEOUS</u></b> .....	17
A. EXECUTION: .....	17
B. SUCCESSORS AND ASSIGNS:.....	17
C. COUNTERPARTS:.....	17
D. SEVERABILITY.....	17
<b>XVI. <u>OTHER PROVISIONS</u></b> .....	17

## OPERATING AGREEMENT

THIS AGREEMENT, entered into by and between XTO Energy Inc., hereinafter designated and referred to as "Operator," and the signatory party or parties other than Operator, sometimes hereinafter referred to individually as "Non-Operator," and collectively as "Non-Operators."

## WITNESSETH:

WHEREAS, the parties to this agreement are owners of Oil and Gas Leases and/or Oil and Gas Interests in the land identified in Exhibit "A," and the parties hereto have reached an agreement to explore and develop these Leases and/or Oil and Gas Interests for the production of Oil and Gas to the extent and as hereinafter provided,

NOW, THEREFORE, it is agreed as follows:

ARTICLE I.  
DEFINITIONS

As used in this agreement, the following words and terms shall have the meanings here ascribed to them:

A. The term "AFE" shall mean an Authority for Expenditure prepared by a party to this agreement for the purpose of estimating the costs to be incurred in conducting an operation hereunder.

B. The term "Completion" or "Complete" shall mean a single operation intended to complete a well as a producer of Oil and Gas in one or more Zones, including, but not limited to, the setting of production casing, perforating, well stimulation and production testing conducted in such operation.

C. The term "Contract Area" shall mean all of the lands, Oil and Gas Leases and/or Oil and Gas Interests intended to be developed and operated for Oil and Gas purposes under this agreement. Such lands, Oil and Gas Leases and Oil and Gas Interests are described in Exhibit "A."

D. The term "Deepen" shall mean a single operation whereby a well is drilled to an objective Zone below the deepest Zone in which the well was previously drilled, or below the Deepest Zone proposed in the associated AFE, whichever is the lesser. **When used in connection with a Horizontal Well, the term "Deepen" shall mean an operation whereby a Lateral is drilled to a Displacement greater than (i) the Displacement contained in the proposal for such operation approved by the Consenting Parties, or (ii) to the Displacement to which the Lateral was drilled pursuant to a previous proposal.**

E. The term "Displacement" shall mean the length of a Lateral.

F. The terms "Drilling Party" and "Consenting Party" shall mean a party who agrees to join in and pay its share of the cost of any operation conducted under the provisions of this agreement.

G. The term "Drilling Unit" shall mean the area fixed for the drilling of one well by order or rule of any state or federal body having authority. If a Drilling Unit is not fixed by any such rule or order, a Drilling Unit shall be the drilling unit as established by the pattern of drilling in the Contract Area unless fixed by express agreement of the Drilling Parties.

H. The term "Drillsite" shall mean the Oil and Gas Lease or Oil and Gas Interest on which a proposed well is to be located. **When used in connection with a Horizontal Well, the term "Drillsite" shall mean (i) the surface hole location, and (ii) the Oil and Gas Leases or Oil and Gas Interests within the Drilling Unit on or under which the wellbore, including the Lateral, is located.**

I. The term "Horizontal Rig Move-On Period" shall mean the number of days after the date of rig release of a Spudder Rig until the date a rig capable of drilling a Horizontal Well to its Total Measured Depth has moved on to location.

J. The term "Horizontal Well" shall mean a well containing one or more Laterals which are drilled, Completed or Recompleted in a manner in which the horizontal component of the Completion interval (i) extends at least one hundred feet (100') in the objective formation(s) and (ii) exceeds the vertical component of the Completion interval in the objective formation(s).

K. The term "Lateral" shall mean that portion of a wellbore that deviates from approximate vertical orientation to approximate horizontal orientation and all wellbore beyond such deviation to a Total Measured Depth.

L. The term "Non-Consent Well" shall mean a well in which less than all parties have conducted an operation as provided in Article VI.B.2.

M. The terms "Non-Drilling Party" and "Non-Consenting Party" shall mean a party who elects not to participate in a proposed operation.

N. The term "Oil and Gas" shall mean oil, gas, casinghead gas, gas condensate, and/or all other liquid or gaseous hydrocarbons and other marketable substances produced therewith, unless an intent to limit the inclusiveness of this term is specifically stated.

O. The term "Oil and Gas Interests" or "Interests" shall mean unleased fee and mineral interests in Oil and Gas in tracts of land lying within the Contract Area which are owned by parties to this agreement.

P. The terms "Oil and Gas Lease," "Lease" and "Leasehold" shall mean the oil and gas leases or interests therein covering tracts of land lying within the Contract Area which are owned by the parties to this agreement.

Q. The term "Plug Back" shall mean a single operation whereby a deeper Zone is abandoned in order to attempt a Completion in a shallower Zone. **When used in connection with a Horizontal Well, the term "Plug Back" shall mean an operation to test or Complete the well at a stratigraphically shallower Zone in which the operation has been or is being Completed and which is not in an existing Lateral.**

R. The term "Recompletion" or "Recomplete" shall mean an operation whereby a Completion in one Zone is abandoned in order to attempt a Completion in a different Zone within the existing wellbore.

S. The term "Rework" shall mean an operation conducted in the wellbore of a well after it is Completed to secure, restore, or improve production in a Zone which is currently open to production in the wellbore. Such operations include, but are not limited to, well stimulation operations but exclude any routine repair or maintenance work or drilling, Sidetracking, Deepening, Completing, ReCompleting, or Plugging Back of a well.

T. The term "Sidetrack" shall mean the directional control and intentional deviation of a well from vertical so as to change the bottom hole location unless done to straighten the hole or drill around junk in the hole to overcome other mechanical difficulties. **When used in connection with a Horizontal Well, the term "Sidetrack" shall mean the directional control and deviation of a well outside the existing Lateral(s) so as to change the Zone or the direction of a Lateral from the approved proposal unless done to straighten the hole or drill around junk in the hole or to overcome other mechanical difficulties.**

U. The term "Spudder Rig" shall mean a drilling rig utilized only for drilling all or part of the vertical component of a Horizontal Well; a rig used only for setting conductor pipe shall not be considered a Spudder Rig.

V. The term "Terminus" shall mean the furthest point drilled in the Lateral.

W. The term "Total Measured Depth," when used in connection with a Horizontal Well, shall mean the distance from the surface of the ground to the Terminus, as measured along and including the vertical component of the well and Lateral(s). **When the proposed operation(s) is the drilling of, or operation on, a Horizontal Well, the terms "depth" or "total depth" wherever used in this agreement shall be deemed to read "Total Measured Depth" insofar as it applies to such well.**

X. The term "Vertical Well" shall mean a well drilled, Completed or Recompleted other than a Horizontal Well.

Y. The term "Zone" shall mean a stratum of earth containing or thought to contain a common accumulation of Oil and Gas separately producible from any other common accumulation of Oil and Gas.

Z. The term "Initial Well" shall mean the well required to be drilled by the parties hereto as provided in Article VI.A. Unless the context otherwise clearly indicates, words used in the singular include the plural, the word "person" includes natural and artificial persons, the plural includes the singular, and any gender includes the masculine, feminine, and neuter. [SCRIVENER'S INSTRUCTION: Be careful to check the applicable leases and state statute and/or regulation for possible conflicting definitions.]

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**ARTICLE II.**  
**EXHIBITS**

The following exhibits, as indicated below and attached hereto, are incorporated in and made a part hereof:

- X   A. Exhibit "A," shall mean all sub-exhibits as appropriate, including Exhibit "A-1" and shall include the following information:
  - (1) Description of lands subject to this agreement,
  - (2) Restrictions, if any, as to depths, formations, or substances,
  - (3) Parties to agreement with addresses and telephone numbers for notice purposes **and fax numbers**,
  - (4) Percentages or fractional interests of parties to this agreement,
  - (5) Oil and Gas Leases and/or Oil and Gas Interests subject to this agreement,
  - (6) Burdens on production.
- X   B. Exhibit "B," Form of Lease.
- X   C. Exhibit "C," Accounting Procedure.
- X   D. Exhibit "D," Insurance.
- X   E. Exhibit "E," Gas Balancing Agreement.
- X   F. Exhibit "F," Non-Discrimination and Certification of Non-Segregated Facilities.
- G. ~~Exhibit "G," Tax Partnership.~~
- H. Other: ~~Model Form Recording Supplement to Operating Agreement and Financing Statement~~

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1 If any provision of any exhibit, except Exhibits "E," "F" and "G," is inconsistent with any provision contained in  
2 the body of this agreement, the provisions in the body of this agreement shall prevail.

3 **ARTICLE III.**  
4 **INTERESTS OF PARTIES**

5 **A. Oil and Gas Interests:**

6 If any party owns an Oil and Gas Interest in the Contract Area, that Interest shall be treated for all purposes of this  
7 agreement and during the term hereof as if it were covered by the form of Oil and Gas Lease attached hereto as Exhibit "B,"  
8 and the owner thereof shall be deemed to own both royalty interest in such lease and the interest of the lessee thereunder.

9 **B. Interests of Parties in Costs and Production:**

10 Unless changed by other provisions, all costs and liabilities incurred in operations under this agreement shall be borne  
11 and paid, and all equipment and materials acquired in operations on the Contract Area shall be owned, by the parties as their  
12 interests are set forth in Exhibit "A." In the same manner, the parties shall also own all production of Oil and Gas from the  
13 Contract Area subject, however, to the payment of royalties, ~~and other burdens on production as described hereafter.~~ **overriding royalties, production payments, or**

14 Regardless of which party has contributed any Oil and Gas Lease or Oil and Gas Interest on which royalty or other  
15 burdens may be payable and except as otherwise expressly provided in this agreement, each party shall pay or deliver, or  
16 cause to be paid or delivered, all burdens on its share of the production from the Contract Area up to, but not in excess of,  
17 20% and shall indemnify, defend and hold the other parties free from any liability therefor.  
18 Except as otherwise expressly provided in this agreement, if any party has contributed hereto any Lease or Interest which is  
19 burdened with any royalty, overriding royalty, production payment or other burden on production in excess of the amounts  
20 stipulated above, such party so burdened shall assume and alone bear all such excess obligations and shall indemnify, defend  
21 and hold the other parties hereto harmless from any and all claims attributable to such excess burden. ~~However, so long as~~  
22 ~~the Drilling Unit for the productive Zone(s) is identical with the Contract Area, each party shall pay or deliver, or cause to~~  
23 ~~be paid or delivered, all burdens on production from the Contract Area due under the terms of the Oil and Gas Lease(s)~~  
24 ~~which such party has contributed to this agreement, and shall indemnify, defend and hold the other parties free from any~~  
25 ~~liability therefor. See Article XVI.P for additional provisions.~~

26 No party shall ever be responsible, on a price basis higher than the price received by such party, to any other party's  
27 lessor or royalty owner, and if such other party's lessor or royalty owner should demand and receive settlement on a higher  
28 price basis, the party contributing the affected Lease shall bear the additional royalty burden attributable to such higher price.

29 Nothing contained in this Article III.B. shall be deemed an assignment or cross-assignment of interests covered hereby,  
30 and in the event two or more parties contribute to this agreement jointly owned Leases, the parties' undivided interests in  
31 said Leaseholds shall be deemed separate leasehold interests for the purposes of this agreement.

32 **C. Subsequently Created Interests:**

33 ~~If any party has contributed hereto a Lease or Interest that is burdened with an assignment of production given as security~~  
34 ~~for the payment of money, or if, after the date of this agreement, any party creates an overriding royalty, production~~  
35 ~~payment, net profits interest, assignment of production or other burden payable out of production attributable to its working~~  
36 ~~interest hereunder, such burden shall be deemed a "Subsequently Created Interest." Further, if any party has contributed~~  
37 ~~hereto a Lease or Interest burdened with an overriding royalty, production payment, net profits interests, or other burden~~  
38 ~~payable out of production created prior to the date of this agreement, and such burden is not shown on Exhibit "A," such~~  
39 ~~burden also shall be deemed a Subsequently Created Interest to the extent such burden causes the burdens on such party's~~  
40 ~~Lease or Interest to exceed the amount stipulated in Article III.B. above.~~

41 ~~The party whose interest is burdened with the Subsequently Created Interest (the "Burdened Party") shall assume and~~  
42 ~~alone bear, pay and discharge the Subsequently Created Interest and shall indemnify, defend and hold harmless the other~~  
43 ~~parties from and against any liability therefor. Further, if the Burdened Party fails to pay, when due, its share of expenses~~  
44 ~~chargeable hereunder, all provisions of Article VII.B. shall be enforceable against the Subsequently Created Interest in the~~  
45 ~~same manner as they are enforceable against the working interest of the Burdened Party. If the Burdened Party is required~~  
46 ~~under this agreement to assign or relinquish to any other party, or parties, all or a portion of its working interest and/or the~~  
47 ~~production attributable thereto, said other party, or parties, shall receive said assignment and/or production free and clear of~~  
48 ~~said Subsequently Created Interest, and the Burdened Party shall indemnify, defend and hold harmless said other party, or~~  
49 ~~parties, from any and all claims and demands for payment asserted by owners of the Subsequently Created Interest. See Article XVI.E for~~  
50 ~~additional provision.~~

51 **ARTICLE IV.**  
52 **TITLES**

53 **A. Title Examination:**

54 Title examination shall be made on the Drillsite of any proposed well prior to commencement of drilling operations and,  
55 if a majority in interest of the Drilling Parties so request or Operator so elects, title examination shall be made on the entire  
56 Drilling Unit, or maximum anticipated Drilling Unit, of the well. The opinion will include the ownership of the working  
57 interest, minerals, royalty, overriding royalty and production payments under the applicable Leases. Each party contributing  
58 Leases and/or Oil and Gas Interests to be included in the Drillsite or Drilling Unit, if appropriate, shall furnish to Operator  
59 all abstracts (including federal lease status reports), title opinions, title papers and curative material in its possession free of  
60 charge. All such information not in the possession of or made available to Operator by the parties, but necessary for the  
61 examination of the title, shall be obtained by Operator. Operator shall cause title to be examined by attorneys on its staff or  
62 by outside attorneys. Copies of all title opinions shall be furnished to each Drilling Party. Costs incurred by Operator in  
63 procuring abstracts, fees paid outside attorneys for title examination (including preliminary, supplemental, shut-in royalty  
64 opinions and division order title opinions) and other direct charges as provided in Exhibit "C" shall be borne by the Drilling  
65 Parties in the proportion that the interest of each Drilling Party bears to the total interest of all Drilling Parties as such  
66 interests appear in Exhibit "A." Operator shall make no charge for services rendered by its staff attorneys or other personnel  
67 in the performance of the above functions.

68 Each party shall be responsible for securing curative matter and pooling amendments or agreements required in  
69 connection with Leases or Oil and Gas Interests contributed by such party. Operator shall be responsible for the preparation  
70 and recording of pooling designations or declarations and communitization agreements as well as the conduct of hearings  
71 before governmental agencies for the securing of spacing or pooling orders or any other orders necessary or appropriate to  
72 the conduct of operations hereunder. This shall not prevent any party from appearing on its own behalf at such hearings.  
73 Costs incurred by Operator, including fees paid to outside attorneys, which are associated with hearings before governmental  
74 agencies, and which costs are necessary and proper for the activities contemplated under this agreement, shall be direct  
charges to the joint account and shall not be covered by the administrative overhead charges as provided in Exhibit "C."

A.A.P.L. FORM 610 - MODEL FORM OPERATING AGREEMENT - 1989

1 Operator shall make no charge for services rendered by its staff attorneys or other personnel in the performance of the above  
2 functions.

3 No well shall be drilled on the Contract Area until after (1) the title to the Drillsite or Drilling Unit, if appropriate, has  
4 been examined as above provided, and (2) the title has been approved by the examining attorney or title has been accepted by  
5 all of the Drilling Parties in such well.

6 **B. Loss or Failure of Title:**

7 1. Failure of Title: Should any Oil and Gas Interest or Oil and Gas Lease be lost through failure of title, which results in a  
8 reduction of interest from that shown on Exhibit "A," the party credited with contributing the affected Lease or Interest  
9 (including, if applicable, a successor in interest to such party) shall have ninety (90) days from final determination of title  
10 failure to acquire a new lease or other instrument curing the entirety of the title failure, which acquisition will not be subject  
11 to Article VIII.B., and failing to do so, this agreement, nevertheless, shall continue in force as to all remaining Oil and Gas  
12 Leases and Interests; and,

13 (a) The party credited with contributing the Oil and Gas Lease or Interest affected by the title failure (including, if  
14 applicable, a successor in interest to such party) shall bear alone the entire loss and it shall not be entitled to recover from  
15 Operator or the other parties any development or operating costs which it may have previously paid or incurred, but there  
16 shall be no additional liability on its part to the other parties hereto by reason of such title failure;

17 (b) There shall be no retroactive adjustment of expenses incurred or revenues received from the operation of the  
18 Lease or Interest which has failed, but the interests of the parties contained on Exhibit "A" shall be revised on an acreage  
19 basis, as of the time it is determined finally that title failure has occurred, so that the interest of the party whose Lease or  
20 Interest is affected by the title failure will thereafter be reduced in the Contract Area by the amount of the Lease or Interest failed;

21 (c) If the proportionate interest of the other parties hereto in any producing well previously drilled on the Contract  
22 Area is increased by reason of the title failure, the party who bore the costs incurred in connection with such well attributable  
23 to the Lease or Interest which has failed shall receive the proceeds attributable to the increase in such interest (less costs and  
24 burdens attributable thereto) until it has been reimbursed for unrecovered costs paid by it in connection with such well  
25 attributable to such failed Lease or Interest;

26 (d) Should any person not a party to this agreement, who is determined to be the owner of any Lease or Interest  
27 which has failed, pay in any manner any part of the cost of operation, development, or equipment, such amount shall be paid  
28 to the party or parties who bore the costs which are so refunded;

29 (e) Any liability to account to a person not a party to this agreement for prior production of Oil and Gas which arises  
30 by reason of title failure shall be borne severally by each party (including a predecessor to a current party) who received  
31 production for which such accounting is required based on the amount of such production received, and each such party shall  
32 severally indemnify, defend and hold harmless all other parties hereto for any such liability to account;

33 (f) No charge shall be made to the joint account for legal expenses, fees or salaries in connection with the defense of  
34 the Lease or Interest claimed to have failed, but if the party contributing such Lease or Interest hereto elects to defend its title  
35 it shall bear all expenses in connection therewith; and

36 (g) If any party is given credit on Exhibit "A" to a Lease or Interest which is limited solely to ownership of an  
37 interest in the wellbore of any well or wells and the production therefrom, such party's absence of interest in the remainder  
38 of the Contract Area shall be considered a Failure of Title as to such remaining Contract Area unless that absence of interest  
39 is reflected on Exhibit "A."

40 2. Loss by Non-Payment or Erroneous Payment of Amount Due: If, through mistake or oversight, any rental, shut-in well  
41 payment, minimum royalty or royalty payment, or other payment necessary to maintain all or a portion of an Oil and Gas  
42 Lease or interest is not paid or is erroneously paid, and as a result a Lease or Interest terminates, there shall be no monetary  
43 liability against the party who failed to make such payment. Unless the party who failed to make the required payment  
44 secures a new Lease or Interest covering the same interest within ninety (90) days from the discovery of the failure to make  
45 proper payment, which acquisition will not be subject to Article VIII.B., the interests of the parties reflected on Exhibit "A"  
46 shall be revised on an acreage basis, effective as of the date of termination of the Lease or Interest involved, and the party  
47 who failed to make proper payment will no longer be credited with an interest in the Contract Area on account of ownership  
48 of the Lease or Interest which has terminated. If the party who failed to make the required payment shall not have been fully  
49 reimbursed, at the time of the loss, from the proceeds of the sale of Oil and Gas attributable to the lost Lease or Interest,  
50 it shall be reimbursed for unrecovered actual costs previously paid by it (but not for its share of the cost of any dry hole  
51 previously drilled or wells previously abandoned) from so much of the following as is necessary to effect reimbursement:

52 (a) Proceeds of Oil and Gas produced prior to termination of the Lease or Interest, less operating expenses and lease  
53 burdens chargeable hereunder to the person who failed to make payment, previously accrued to the credit of the lost Lease or  
54 Interest, on an acreage basis, up to the amount of unrecovered costs;

55 (b) Proceeds of Oil and Gas, less operating expenses and lease burdens chargeable hereunder to the person who failed  
56 to make payment, up to the amount of unrecovered costs attributable to that portion of Oil and Gas thereafter produced and  
57 marketed (excluding production from any wells thereafter drilled) which, in the absence of such Lease or Interest termination,  
58 would be attributable to the lost Lease or Interest on an acreage basis and which as a result of such Lease or Interest  
59 termination is credited to other parties, the proceeds of said portion of the Oil and Gas to be contributed by the other parties  
60 in proportion to their respective interests reflected on Exhibit "A"; and,

61 (c) Any monies, up to the amount of unrecovered costs, that may be paid by any party who is, or becomes, the owner  
62 of the Lease or Interest lost, for the privilege of participating in the Contract Area or becoming a party to this agreement.

63 .  
64 ~~3. Other Losses: All losses of Leases or Interests committed to this agreement, other than those set forth in Articles  
65 IV.B.1. and IV.B.2. above, shall be joint losses and shall be borne by all parties in proportion to their interests shown on  
66 Exhibit "A." This shall include but not be limited to the loss of any Lease or Interest through failure to develop or because  
67 express or implied covenants have not been performed (other than performance which requires only the payment of money),  
68 and the loss of any Lease by expiration at the end of its primary term if it is not renewed or extended. There shall be no  
69 readjustment of interests in the remaining portion of the Contract Area on account of any joint loss.~~

70 4. Curing Title: In the event of a Failure of Title under Article IV.B.1. or a loss of title under Article IV.B.2. above, any  
71 Lease or Interest acquired by any party hereto (other than the party whose interest has failed or was lost) during the ninety  
72 (90) day period provided by Article IV.B.1. and Article IV.B.2. above covering all or a portion of the interest that has failed  
73 or was lost shall be offered at cost to the party whose interest has failed or was lost, and the provisions of Article VIII.B.  
74 shall not apply to such acquisition.

**ARTICLE V.  
OPERATOR**

**A. Designation and Responsibilities of Operator:**

XTO Energy Inc. shall be the Operator of the Contract Area, and shall conduct and direct and have full control of all operations on the Contract Area as permitted and required by, and within the limits of this agreement. In its performance of services hereunder for the Non-Operators, Operator shall be an independent contractor not subject to the control or direction of the Non-Operators except as to the type of operation to be undertaken in accordance with the election procedures contained in this agreement. Operator shall not be deemed, or hold itself out as, the agent of the Non-Operators with authority to bind them to any obligation or liability assumed or incurred by Operator as to any third party. Operator shall conduct its activities under this agreement as a reasonable prudent operator, in a good and workmanlike manner, with due diligence and dispatch, in accordance with good oilfield practice, and in compliance with applicable law and regulation, ~~provided, that, except to the extent of Operator's interest in the Contract Area, Non-Operators shall indemnify and defend Operator against any and all claims, damages and liability of every kind and character resulting from, or incidental to Operator's performance of duties on the Contract Area or pursuant to this Agreement and~~ ~~but in no event shall it have any liability as Operator to the other parties for losses sustained or liabilities incurred~~ except such as may result from gross negligence or willful misconduct.

**B. Resignation or Removal of Operator and Selection of Successor:**

1. Resignation or Removal of Operator: Operator may resign at any time by giving written notice thereof to Non-Operators. If Operator terminates its legal existence, no longer owns an interest hereunder in the Contract Area, or is no longer capable of serving as Operator, Operator shall be deemed to have resigned without any action by Non-Operators, except the selection of a successor. Operator may be removed only for good cause by the affirmative vote of Non-Operators owning a majority interest based on ownership as shown on Exhibit "A" remaining after excluding the voting interest of Operator; such vote shall not be deemed effective until a written notice has been delivered to the Operator by a Non-Operator detailing the alleged default and Operator has failed to cure the default within thirty (30) days from its receipt of the notice or, if the default concerns an operation then being conducted, within forty-eight (48) hours of its receipt of the notice. For purposes hereof, "good cause" shall mean not only gross negligence or willful misconduct but also the material breach of or inability to meet the standards of operation contained in Article XVI.A. or material failure or inability to perform its obligations under this agreement.

Subject to Article VII.D.1., such resignation or removal shall not become effective until 7:00 o'clock A.M. on the first day of the calendar month following the expiration of ninety (90) days after the giving of notice of resignation by Operator or action by the Non-Operators to remove Operator, unless a successor Operator has been selected and assumes the duties of Operator at an earlier date. Operator, after effective date of resignation or removal, shall be bound by the terms hereof as a Non-Operator. A change of a corporate name or structure of Operator or transfer of Operator's interest to any single subsidiary, parent or successor corporation shall not be the basis for removal of Operator.

2. Selection of Successor Operator: Upon the resignation or removal of Operator under any provision of this agreement, a successor Operator shall be selected by the parties. The successor Operator shall be selected from the parties owning an interest in the Contract Area at the time such successor Operator is selected. The successor Operator shall be selected by the affirmative vote of ~~two (2) or more parties~~ <sup>party(s)</sup> owning a majority interest based on ownership as shown on Exhibit "A"; ~~provided, however, if an Operator which has been removed or is deemed to have resigned / fails to vote or votes only to succeed itself, the successor Operator shall be selected by the affirmative vote of the party or parties owning a majority interest based on ownership as shown on Exhibit "A" remaining after excluding the voting interest of the Operator that was removed or resigned. \*\* The former Operator shall promptly deliver to the successor Operator all records and data relating to the operations conducted by the former Operator to the extent such records and data are not already in the possession of the successor operator. Any cost of obtaining or copying the former Operator's records and data shall be charged to the joint account. \*\* It is expressly understood and agreed that, in the event the Operator conveys all of its interest in the Contract Area, the party that acquires such interest shall be entitled to vote with that interest for any party, including itself, as Successor Operator.~~ **but continues to own an interest in the Contract Area**

3. Effect of Bankruptcy: If Operator becomes insolvent, bankrupt or is placed in receivership, it shall be deemed to have resigned without any action by Non-Operators, except the selection of a successor. If a petition for relief under the federal bankruptcy laws is filed by or against Operator, and the removal of Operator is prevented by the federal bankruptcy court, all Non-Operators and Operator shall comprise an interim operating committee to serve until Operator has elected to reject or assume this agreement pursuant to the Bankruptcy Code, and an election to reject this agreement by Operator as a debtor in possession, or by a trustee in bankruptcy, shall be deemed a resignation as Operator without any action by Non-Operators, except the selection of a successor. During the period of time the operating committee controls operations, all actions shall require the approval of two (2) or more parties owning a majority interest based on ownership as shown on Exhibit "A." In the event there are only two (2) parties to this agreement, during the period of time the operating committee controls operations, a third party acceptable to Operator, Non-Operator and the federal bankruptcy court shall be selected as a member of the operating committee, and all actions shall require the approval of two (2) members of the operating committee without regard for their interest in the Contract Area based on Exhibit "A."

**C. Employees and Contractors:**

The number of employees or contractors used by Operator in conducting operations hereunder, their selection, and the hours of labor and the compensation for services performed shall be determined by Operator, and all such employees or contractors shall be the employees or contractors of Operator.

**D. Rights and Duties of Operator:**

1. Competitive Rates and Use of Affiliates: All wells drilled on the Contract Area shall be drilled on a competitive contract basis at the usual rates prevailing in the area. If it so desires, Operator may employ its own tools and equipment in the drilling of wells, but its charges therefor shall not exceed the prevailing rates in the area and the rate of such charges shall be agreed upon by the parties in writing before drilling operations are commenced, and such work shall be performed by Operator under the same terms and conditions as are customary and usual in the area in contracts of independent contractors who are doing work of a similar nature. All work performed or materials supplied by affiliates or related parties of Operator shall be performed or supplied at competitive rates, pursuant to written agreement, and in accordance with customs and standards prevailing in the industry.

2. Discharge of Joint Account Obligations: Except as herein otherwise specifically provided, Operator shall promptly pay and discharge expenses incurred in the development and operation of the Contract Area pursuant to this agreement and shall charge each of the parties hereto with their respective proportionate shares upon the expense basis provided in Exhibit "C." Operator shall keep an accurate record of the joint account hereunder, showing expenses incurred and charges and credits made and received.

3. Protection from Liens: Operator shall pay, or cause to be paid, as and when they become due and payable, all accounts

A.A.P.L. FORM 610 - MODEL FORM OPERATING AGREEMENT - 1989

1 of contractors and suppliers and wages and salaries for services rendered or performed, and for materials supplied on, to or in  
2 respect of the Contract Area or any operations for the joint account thereof, and shall keep the Contract Area free from  
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1 liens and encumbrances resulting therefrom except for those resulting from a bona fide dispute as to services rendered or  
 2 materials supplied.

3 4. Custody of Funds: Operator shall hold for the account of the Non-Operators any funds of the Non-Operators advanced  
 4 or paid to the Operator, either for the conduct of operations hereunder or as a result of the sale of production from the  
 5 Contract Area, and such funds shall remain the funds of the Non-Operators on whose account they are advanced or paid until  
 6 used for their intended purpose or otherwise delivered to the Non-Operators or applied toward the payment of debts as  
 7 provided in Article VII.B. Nothing in this paragraph shall be construed to establish a fiduciary relationship between Operator  
 8 and Non-Operators for any purpose other than to account for Non-Operator funds as herein specifically provided. Nothing in  
 9 this paragraph shall require the maintenance by Operator of separate accounts for the funds of Non-Operators unless the  
 10 parties otherwise specifically agree.

11 5. Access to Contract Area and Records: Operator shall, except as otherwise provided herein, ~~Consenting Party~~  
 12 or its duly authorized representative, ~~Consenting Party's~~ ~~Non-Operator's~~ sole risk and cost, full and free access at all reasonable times to  
 13 all operations of every kind and character being conducted for the joint account on the Contract Area and to the records of  
 14 operations conducted thereon or production therefrom, including Operator's books and records relating thereto. Such access  
 15 rights shall not be exercised in a manner interfering with Operator's conduct of an operation hereunder and shall not obligate  
 16 Operator to furnish any geologic or geophysical data of an interpretive nature unless the cost of preparation of such  
 17 interpretive data was charged to the joint account. Operator will furnish to each ~~Consenting Party~~ ~~Non-Operator~~  
 18 and all reports and information obtained by Operator in connection with production and related items, including, without  
 19 limitation, meter and chart reports, production purchaser statements, run tickets and monthly gauge reports, but excluding  
 20 purchase contracts and pricing information to the extent not applicable to the production of the Non-Operator seeking the  
 21 information. Any audit of Operator's records relating to amounts expended and the appropriateness of such expenditures  
 22 shall be conducted in accordance with the audit protocol specified in Exhibit "C."

23 6. Filing and Furnishing Governmental Reports: Operator will file, and upon written request promptly furnish copies to  
 24 each requesting ~~Consenting Party~~ ~~Non-Operator~~ not in default of its payment obligations, all operational notices, reports or applications  
 25 required to be filed by local, State, Federal or Indian agencies or authorities having jurisdiction over operations hereunder.  
 26 Each Non-Operator shall provide to Operator on a timely basis all information necessary to Operator to make such filings.

27 7. Drilling and Testing Operations: The following provisions shall apply to each well drilled hereunder, including but not  
 28 limited to the Initial Well:

29 (a) Operator will promptly advise ~~each Consenting Party~~ ~~Non-Operators~~ of the date on which the well is spudded, or the date on which  
 30 drilling operations are commenced.

31 (b) Operator will send to ~~each Consenting Party~~ ~~Non-Operators~~ such reports, test results and notices regarding the progress of operations on the  
 32 well as the ~~Consenting Parties~~ ~~Non-Operators~~ shall reasonably request, including, but not limited to, daily drilling reports, completion reports, and well logs.

33 (c) ~~Operator shall adequately test all Zones encountered which may reasonably be expected to be capable of producing~~  
 34 ~~Oil and Gas in paying quantities as a result of examination of the electric log or any other logs or cores or tests conducted~~  
 35 ~~hereunder.~~

36 8. Cost Estimates: Upon request of any Consenting Party, Operator shall furnish estimates of current and cumulative costs  
 37 incurred for the joint account at reasonable intervals during the conduct of any operation/ pursuant to this agreement, ~~which requires a vote of the Consenting Parties~~  
 38 Operator shall not be held liable for errors in such estimates so long as the estimates are made in good faith.

39 9. Insurance: At all times while operations are conducted hereunder, Operator shall comply with the workers  
 40 compensation law of the state where the operations are being conducted; provided, however, that Operator may be a self-  
 41 insurer for liability under said compensation laws in which event the only charge that shall be made to the joint account shall  
 42 be as provided in Exhibit "C." Operator shall also carry or provide insurance for the benefit of the joint account of the parties  
 43 as outlined in Exhibit "D" attached hereto and made a part hereof. Operator shall require all contractors engaged in work on  
 44 or for the Contract Area to comply with the workers compensation law of the state where the operations are being conducted  
 45 and to maintain such other insurance as Operator may require.

46 In the event automobile liability insurance is specified in said Exhibit "D," or subsequently receives the approval of the  
 47 parties, no direct charge shall be made by Operator for premiums paid for such insurance for Operator's automotive  
 48 equipment.

49 **ARTICLE VI.**  
 50 **DRILLING AND DEVELOPMENT**

51 **A. Initial Well:**

52 On or before the \_\_\_\_\_ day of \_\_\_\_\_, 201\_\_\_\_, Operator shall commence **operations** for the drilling of the Initial  
 53 Well at the following location to be determined at the sole discretion of the Operator, within one (1) year of het effective date of the  
 54 Unitization Order issued by the Division,

55 and shall thereafter continue the drilling of the well with due diligence to a depth to test the ~~Marcellus or~~ Utica/Point Pleasant Shale  
 56 Formation.

57 In the event a Party elects not to participate (a Non-Consenting Party) in the Initial Well proposed in the Contract Area pursuant  
 58 to Article VI.A., upon the timely commencement of actual drilling operations on such Well, such Non-Consenting Party shall be deemed to  
 59 have relinquished to the Consenting Parties, and the Consenting Parties shall own and be entitle to receive, in proportion to their respective  
 60 interests, all of such Non-Consenting Party's interest in the well and share of production therefrom until the proceeds of the sale of such  
 61 share, calculated at the well, or market value thereof is such share is not sold, (after deducting production taxes, excise taxes, royalty,  
 62 overriding royalty and other interests not excepted by Article III.D. payable out of or measured by the production from such well accruing  
 63 with respect to such interest until it reverts) shall equal the total of the following: (a) 200% of such Non-consenting Party's share of the cost  
 64 of any newly acquired surface equipment beyond the wellhead connections (including, but not limited to, stock tanks, separators, treaters,  
 65 pumping equipment and piping), plus 200% of such Non-consenting Party's share of the cost of operation of the well commencing with first  
 66 production and continuing until such Non-Consenting Party's relinquished interest shall revert to it under other provisions of the Article, it  
 67 being agree that such Non-Consenting Party's share of such costs and equipment will be that interest which would have been chargeable to  
 68 such Non-Consenting Party had it participated in the well from the beginning of the operations; and (b) 200% of that portion of the costs  
 69 and expenses of drilling, testing and completing, after deducting any cash contributions received under Article III.C., and 200% of that  
 70 portion of the cost of newly acquired equipment in the well (to and including wellhead connections), which would have been chargeable to  
 71 such Non-Consenting Party if it had participated therein.

72 The drilling of the Initial Well and the participation therein by all parties is obligatory, subject to Article VI.C.1. as to participation  
 73 in Completion operations and Article VI.F. as to termination of operations and Article XI as to occurrence of force majeure.

74 **B. Subsequent Operations:**

75 1. Proposed Operations: ~~Operator~~ ~~any party hereto~~ should desire to drill any well on the Contract Area ~~other than the Initial Well,~~ or  
 76 if ~~any party~~ should desire to Rework, Sidetrack, Deepen, Recomplete or Plug Back a dry hole or a well no longer capable of  
 77 producing in paying quantities in which such party has not otherwise relinquished its interest in the proposed objective Zone under  
 78 this agreement, the party desiring to drill, Rework, Sidetrack, Deepen, Recomplete or Plug Back such a well shall give written  
 79 notice of the proposed operation to the parties who have not otherwise relinquished their interest in such objective Zone

A.A.P.L. FORM 610 - MODEL FORM OPERATING AGREEMENT - 1989

1 under this agreement and to all other parties in the case of a proposal for Sidetracking or Deepening, specifying the work to be  
2 performed, the location, proposed depth, objective Zone and the estimated cost of the operation. The parties to whom such a  
3 notice is delivered shall have thirty (30) days after receipt of the notice within which to notify the ~~party proposing to do the work~~ <sup>Operator</sup>  
4 whether they elect to participate in the cost of the proposed operation. If a drilling rig is on location, notice of a proposal to  
5 Rework, Sidetrack, Recomplete, Plug Back or Deepen may be given by telephone and the response period shall be limited to forty-  
6 eight (48) hours, exclusive of Saturday, Sunday and legal holidays. Failure of a party to whom such notice is delivered to reply  
7 within the period above fixed shall constitute an election by that party not to participate in the cost of the proposed operation.  
8 Any proposal by a party to conduct an operation conflicting with the operation initially proposed shall be delivered to all parties  
9 within the time and in the manner provided in Article VI.B.6. **See Article XVI.H.**

10 If all parties to whom such notice is delivered elect to participate in such a proposed operation, the parties shall be  
11 contractually committed to participate therein provided such operations are commenced within the time period hereafter set  
12 forth, and Operator shall, no later than ninety (90) days after expiration of the notice period of thirty (30) days (or as  
13 promptly as practicable after the expiration of the forty-eight (48) hour period when a drilling rig is on location, as the case  
14 may be), actually commence the proposed operation and thereafter complete it with due diligence at the risk and expense of  
15 the parties participating therein; provided, however, said commencement date may be extended upon written notice of same  
16 by Operator to the other parties, for a period of up to thirty (30) additional days if, in the sole opinion of Operator, such  
17 additional time is reasonably necessary to obtain permits from governmental authorities, surface rights (including rights-of-  
18 way) or appropriate drilling equipment, or to complete title examination or curative matter required for title approval or  
19 acceptance. If the actual operation has not been commenced within the time provided (including any extension thereof as  
20 specifically permitted herein or in the force majeure provisions of Article XI) and if any party hereto still desires to conduct  
21 said operation, written notice proposing same must be resubmitted to the other parties in accordance herewith as if no prior  
22 proposal had been made. Those parties that did not participate in the drilling of a well for which a proposal to Deepen or  
23 Sidetrack is made hereunder shall, if such parties desire to participate in the proposed Deepening or Sidetracking operation,  
24 reimburse the Drilling Parties in accordance with Article VI.B.4. in the event of a Deepening operation and in accordance  
25 with Article VI.B.5. in the event of a Sidetracking operation.

26 **2. Operations by Less Than All Parties:**

27 (a) Determination of Participation. If any party to whom such notice is delivered as provided in Article VI.B.1. or  
28 VI.C.1. (Option No. 2) elects not to participate in the proposed operation, then, in order to be entitled to the benefits of this  
29 Article, the ~~party or parties giving the notice~~ <sup>Operator</sup> and such other parties as shall elect to participate in the operation shall, no  
30 later than ninety (90) days after the expiration of the notice period of thirty (30) days (or as promptly as practicable after the  
31 expiration of the forty-eight (48) hour period when a drilling rig is on location, as the case may be) actually commence the  
32 proposed operation and complete it with due diligence. Operator shall perform all work for the account of the Consenting  
33 Parties; ~~provided, however, if no drilling rig or other equipment is on location, and if Operator is a Non-Consenting Party,~~  
34 ~~the Consenting Parties shall either: (i) request Operator to perform the work required by such proposed operation for the~~  
35 ~~account of the Consenting Parties, or (ii) designate one of the Consenting Parties as Operator to perform such work. The~~  
36 ~~rights and duties granted to and imposed upon the Operator under this agreement are granted to and imposed upon the party~~  
37 ~~designated as Operator for an operation in which the original Operator is a Non-Consenting Party. Consenting Parties, when~~  
38 ~~conducting operations on the Contract Area pursuant to this Article VI.B.2., shall comply with all terms and conditions of this~~  
39 ~~agreement.~~

40 If less than all parties approve any proposed operation, the ~~proposing party~~ <sup>Operator</sup>, immediately after the expiration of the  
41 applicable notice period, shall advise all Parties of the total interest of the parties approving such operation and its  
42 recommendation as to whether the Consenting Parties should proceed with the operation as proposed. Each Consenting Party,  
43 within forty-eight (48) hours (exclusive of Saturday, Sunday, and legal holidays) after delivery of such notice, shall advise the  
44 ~~proposing party~~ <sup>Operator</sup> of its desire to (i) limit participation to such party's interest as shown on Exhibit "A" or (ii) carry only its  
45 proportionate part (determined by dividing such party's interest in the Contract Area by the interests of all Consenting Parties in  
46 the Contract Area) of Non-Consenting Parties' interests, or (iii) carry its proportionate part (determined as provided in (ii)) of  
47 Non-Consenting Parties' interests together with all or a portion of its proportionate part of any Non-Consenting Parties'  
48 interests that any Consenting Party did not elect to take. Any interest of Non-Consenting Parties that is not carried by a  
49 Consenting Party shall be deemed to be carried by the party proposing the operation if such party does not withdraw its  
50 proposal. Failure to advise the ~~proposing party~~ <sup>Operator</sup> within the time required shall be deemed an election under (i). In the event a  
51 drilling rig is on location, notice may be given by telephone, and the time permitted for such a response shall not exceed a  
52 total of forty-eight (48) hours (exclusive of Saturday, Sunday and legal holidays). ~~The proposing party~~ <sup>Operator</sup>, at its election, may  
53 withdraw such proposal if there is less than 100% participation and shall notify all parties of such decision within ten (10)  
54 days, or within twenty-four (24) hours if a drilling rig is on location, following expiration of the applicable response period.  
55 If 100% subscription to the proposed operation is obtained, the ~~proposing party~~ <sup>Operator</sup> shall promptly notify the Consenting Parties  
56 of their proportionate interests in the operation and the ~~party serving as Operator~~ shall commence such operation within the  
57 period provided in Article VI.B.1., subject to the same extension right as provided therein.

58 (b) Relinquishment of Interest for Non-Participation. The entire cost and risk of conducting such operations shall be  
59 borne by the Consenting Parties in the proportions they have elected to bear same under the terms of the preceding  
60 paragraph. Consenting Parties shall keep the leasehold estates involved in such operations free and clear of all liens and  
61 encumbrances of every kind created by or arising from the operations of the Consenting Parties. If such an operation results  
62 in a dry hole, then subject to Articles VI.B.6. and VI.E.3., the Consenting Parties shall ~~plug and abandon the well and restore~~  
63 ~~the surface location\*\*~~ at their sole cost, risk and expense; provided, however, that those Non-Consenting Parties that  
64 participated in the drilling, Deepening or Sidetracking of the well shall remain liable for, and shall pay, their proportionate  
65 shares of the cost of ~~plugging and abandoning the well and restoring the surface location\*\*~~ insofar only as those costs were not  
66 increased by the subsequent operations of the Consenting Parties. If any well drilled, Reworked, Sidetracked, Deepened,  
67 Recompleted or Plugged Back under the provisions of this Article results in a well capable of producing Oil and/or Gas in  
68 paying quantities, the Consenting Parties shall Complete and equip the well to produce at their sole cost and risk, and the  
69 well shall then be turned over to Operator (if the Operator did not conduct the operation) and shall be operated by it at the  
70 expense and for the account of the Consenting Parties. Upon commencement of operations for the drilling, Reworking,  
71 Sidetracking, Recompleting, Deepening or Plugging Back of any such well by Consenting Parties in accordance with the  
72 provisions of this Article, each Non-Consenting Party shall be deemed to have relinquished to Consenting Parties, and the  
73 Consenting Parties shall own and be entitled to receive, in proportion to their respective interests, all of such Non-  
74 Consenting Party's interest in the well and share of production therefrom or, in the case of a Reworking, Sidetracking,  
75 **\*\* See Article XVI.I.**

A.A.P.L. FORM 610 - MODEL FORM OPERATING AGREEMENT - 1989

1 Deepening, Recompleting or Plugging Back, or a Completion pursuant to Article VI.C.1. Option No. 2, all of such Non-  
2 Consenting Party's interest in the production obtained from the operation in which the Non-Consenting Party did not elect  
3 to participate. Such relinquishment shall be effective until the proceeds of the sale of such share, calculated at the well, or  
4 market value thereof if such share is not sold (after deducting applicable ad valorem, production, severance, and excise taxes,  
5 royalty, overriding royalty and other interests not excepted by Article III.C. payable out of or measured by the production  
6 from such well accruing with respect to such interest until it reverts), shall equal the total of the following:

7 (i) 150% % of each such Non-Consenting Party's share of the cost of any newly acquired surface equipment  
8 beyond the wellhead connections (including but not limited to stock tanks, separators, treaters, pumping equipment and  
9 piping), plus ~~100%~~ <sup>150%</sup> of each such Non-Consenting Party's share of the cost of operation of the well commencing with first  
10 production and continuing until each such Non-Consenting Party's relinquished interest shall revert to it under other  
11 provisions of this Article, it being agreed that each Non-Consenting Party's share of such costs and equipment will be that  
12 interest which would have been chargeable to such Non-Consenting Party had it participated in the well from the beginning  
13 of the operations; and

14 (ii) 150% % of (a) that portion of the costs and expenses of drilling, Reworking, Sidetracking, Deepening,  
15 Plugging Back, testing, Completing, and Recompleting, after deducting any cash contributions received under Article VIII.C.,  
16 and ~~7%~~ <sup>150%</sup> of (b) that portion of the cost of newly acquired equipment in the well (to and including the wellhead connections),  
17 which would have been chargeable to such Non-Consenting Party if it had participated therein.

18 ~~Notwithstanding anything to the contrary in this Article VI.B., if the well does not reach the deepest objective Zone  
19 described in the notice proposing the well for reasons other than the encountering of granite or practically impenetrable  
20 substance or other condition in the hole rendering further operations impracticable, Operator shall give notice thereof to each  
21 Non-Consenting Party who submitted or voted for an alternative proposal under Article VI.B.6. to drill the well to a  
22 shallower Zone than the deepest objective Zone proposed in the notice under which the well was drilled, and each such Non-  
23 Consenting Party shall have the option to participate in the initial proposed Completion of the well by paying its share of the  
24 cost of drilling the well to its actual depth, calculated in the manner provided in Article VI.B.4. (a). If any such Non-  
25 Consenting Party does not elect to participate in the first Completion proposed for such well, the relinquishment provisions  
26 of this Article VI.B.2. (b) shall apply to such party's interest.~~

27 (c) Reworking, Recompleting or Plugging Back. An election not to participate in the drilling, Sidetracking or  
28 Deepening of a well shall be deemed an election not to participate in any Reworking or Plugging Back operation proposed in  
29 such a well, or portion thereof, to which the initial non-consent election applied that is conducted at any time prior to full  
30 recovery by the Consenting Parties of the Non-Consenting Party's recoupment amount. Similarly, an election not to  
31 participate in the Completing or Recompleting of a well shall be deemed an election not to participate in any Reworking  
32 operation proposed in such a well, or portion thereof, to which the initial non-consent election applied that is conducted at  
33 any time prior to full recovery by the Consenting Parties of the Non-Consenting Party's recoupment amount. Any such  
34 Reworking, Recompleting or Plugging Back operation conducted during the recoupment period shall be deemed part of the  
35 cost of operation of said well and there shall be added to the sums to be recouped by the Consenting Parties 150% of  
36 that portion of the costs of the Reworking, Recompleting or Plugging Back operation which would have been chargeable to  
37 such Non-Consenting Party had it participated therein. If such a Reworking, Recompleting or Plugging Back operation is  
38 proposed during such recoupment period, the provisions of this Article VI.B. shall be applicable as between said Consenting  
39 Parties in said well.

40 (d) Recoupment Matters. During the period of time Consenting Parties are entitled to receive Non-Consenting Party's  
41 share of production, or the proceeds therefrom, Consenting Parties shall be responsible for the payment of all ad valorem,  
42 production, severance, excise, gathering and other taxes, and all royalty, overriding royalty and other burdens applicable to  
43 Non-Consenting Party's share of production not excepted by Article III.C.

44 In the case of any Reworking, Sidetracking, Plugging Back, Recompleting or Deepening operation, the Consenting  
45 Parties shall be permitted to use, free of cost, all casing, tubing and other equipment in the well, but the ownership of all  
46 such equipment shall remain unchanged; and upon abandonment of a well after such Reworking, Sidetracking, Plugging Back,  
47 Recompleting or Deepening, the Consenting Parties shall account for all such equipment to the owners thereof, with each  
48 party receiving its proportionate part in kind or in value, less cost of salvage.

49 Within ninety (90) days after the completion of any operation under this Article, the party conducting the operations  
50 for the Consenting Parties shall furnish each Non-Consenting Party with an inventory of the equipment in and connected to  
51 the well, and an itemized statement of the cost of drilling, Sidetracking, Deepening, Plugging Back, testing, Completing,  
52 Recompleting, and equipping the well for production; or, at its option, the operating party, in lieu of an itemized statement  
53 of such costs of operation, may submit a detailed statement of monthly billings. Each month thereafter, during the time the  
54 Consenting Parties are being reimbursed as provided above, the party conducting the operations for the Consenting Parties  
55 shall furnish the Non-Consenting Parties with an itemized statement of all costs and liabilities incurred in the operation of  
56 the well, together with a statement of the quantity of Oil and Gas produced from it and the amount of proceeds realized from  
57 the sale of the well's working interest production during the preceding month. In determining the quantity of Oil and Gas  
58 produced during any month, Consenting Parties shall use industry accepted methods such as but not limited to metering or  
59 periodic well tests. Any amount realized from the sale or other disposition of equipment newly acquired in connection with  
60 any such operation which would have been owned by a Non-Consenting Party had it participated therein shall be credited  
61 against the total unreturned costs of the work done and of the equipment purchased in determining when the interest of such  
62 Non-Consenting Party shall revert to it as above provided; and if there is a credit balance, it shall be paid to such Non-  
63 Consenting Party.

64 If and when the Consenting Parties recover from a Non-Consenting Party's relinquished interest the amounts provided  
65 for above, the relinquished interests of such Non-Consenting Party shall automatically revert to it as of 7:00 a.m. on the day  
66 following the day on which such recoupment occurs, and, from and after such reversion, such Non-Consenting Party shall  
67 own the same interest in such well, the material and equipment in or pertaining thereto, and the production therefrom as  
68 such Non-Consenting Party would have been entitled to had it participated in the drilling, Sidetracking, Reworking,  
69 Deepening, Recompleting or Plugging Back of said well. Thereafter, such Non-Consenting Party shall be charged with and  
70 shall pay its proportionate part of the further costs of the operation of said well in accordance with the terms of this  
71 agreement and Exhibit "C" attached hereto.

72 3. Stand-By Costs: When a well which has been drilled or Deepened has reached its authorized depth and all tests have  
73 been completed and the results thereof furnished to the parties, or when operations on the well have been otherwise  
74 terminated pursuant to Article VI.F., stand-by costs incurred pending response to a party's notice proposing a Reworking,

A.A.P.L. FORM 610 - MODEL FORM OPERATING AGREEMENT - 1989

1 Sidetracking, Deepening, Recompleting, Plugging Back or Completing operation in such a well (including the period required  
2 under Article VI.B.6. to resolve competing proposals) shall be charged and borne as part of the drilling or Deepening  
3 operation just completed. Stand-by costs subsequent to all parties responding, or expiration of the response time permitted,  
4 whichever first occurs, and prior to agreement as to the participating interests of all Consenting Parties pursuant to the terms  
5 of the second grammatical paragraph of Article VI.B.2. (a), shall be charged to and borne as part of the proposed operation,  
6 but if the proposal is subsequently withdrawn because of insufficient participation, such stand-by costs shall be allocated  
7 between the Consenting Parties in the proportion each Consenting Party's interest as shown on Exhibit "A" bears to the total  
8 interest as shown on Exhibit "A" of all Consenting Parties.

9 In the event that notice for a Sidetracking operation is given while the drilling rig to be utilized is on location, any party  
10 may request and receive up to five (5) additional days after expiration of the forty-eight hour response period specified in  
11 Article VI.B.1. within which to respond by paying for all stand-by costs and other costs incurred during such extended  
12 response period; Operator may require such party to pay the estimated stand-by time in advance as a condition to extending  
13 the response period. If more than one party elects to take such additional time to respond to the notice, standby costs shall be  
14 allocated between the parties taking additional time to respond on a day-to-day basis in the proportion each electing party's  
15 interest as shown on Exhibit "A" bears to the total interest as shown on Exhibit "A" of all the electing parties.

16 4. Deepening: If less than all parties elect to participate in a drilling, Sidetracking, or Deepening operation proposed  
17 pursuant to Article VI.B.1., the interest relinquished by the Non-Consenting Parties to the Consenting Parties under Article  
18 VI.B.2. shall relate only and be limited to the lesser of (i) the total depth actually drilled or (ii) the objective depth or Zone  
19 of which the parties were given notice under Article VI.B.1. ("Initial Objective"). Such well shall not be Deepened beyond the  
20 Initial Objective without first complying with this Article to afford the Non-Consenting Parties the opportunity to participate  
21 in the Deepening operation.

22 In the event any Consenting Party desires to drill or Deepen a Non-Consent Well to a depth below the Initial Objective,  
23 such party shall give notice thereof, complying with the requirements of Article VI.B.1., to all parties (including Non-  
24 Consenting Parties). Thereupon, Articles VI.B.1. and 2. shall apply and all parties receiving such notice shall have the right to  
25 participate or not participate in the Deepening of such well pursuant to said Articles VI.B.1. and 2. If a Deepening operation  
26 is approved pursuant to such provisions, and if any Non-Consenting Party elects to participate in the Deepening operation,  
27 such Non-Consenting party shall pay or make reimbursement (as the case may be) of the following costs and expenses.

28 (a) If the proposal to Deepen is made prior to the Completion of such well as a well capable of producing in paying  
29 quantities, such Non-Consenting Party shall pay (or reimburse Consenting Parties for, as the case may be) that share of costs  
30 and expenses incurred in connection with the drilling of said well from the surface to the Initial Objective which Non-  
31 Consenting Party would have paid had such Non-Consenting Party agreed to participate therein, plus the Non-Consenting  
32 Party's share of the cost of Deepening and of participating in any further operations on the well in accordance with the other  
33 provisions of this Agreement; provided, however, all costs for testing and Completion or attempted Completion of the well  
34 incurred by Consenting Parties prior to the point of actual operations to Deepen beyond the Initial Objective shall be for the  
35 sole account of Consenting Parties.

36 (b) If the proposal is made for a Non-Consent Well that has been previously Completed as a well capable of producing  
37 in paying quantities, but is no longer capable of producing in paying quantities, such Non-Consenting Party shall pay (or  
38 reimburse Consenting Parties for, as the case may be) its proportionate share of all costs of drilling, Completing, and  
39 equipping said well from the surface to the Initial Objective, calculated in the manner provided in paragraph (a) above, less  
40 those costs recouped by the Consenting Parties from the sale of production from the well. The Non-Consenting Party shall  
41 also pay its proportionate share of all costs of re-entering said well. The Non-Consenting Parties' proportionate part (based  
42 on the percentage of such well Non-Consenting Party would have owned had it previously participated in such Non-Consent  
43 Well) of the costs of salvable materials and equipment remaining in the hole and salvable surface equipment used in  
44 connection with such well shall be determined in accordance with Exhibit "C." If the Consenting Parties have recouped the  
45 cost of drilling, Completing, and equipping the well at the time such Deepening operation is conducted, then a Non-  
46 Consenting Party may participate in the Deepening of the well with no payment for costs incurred prior to re-entering the  
47 well for Deepening

48 The foregoing shall not imply a right of any Consenting Party to propose any Deepening for a Non-Consent Well prior  
49 to the drilling of such well to its Initial Objective without the consent of the other Consenting Parties as provided in Article  
50 VI.F., however, this Article VI.B.4 shall not apply to a Deepening operation within an existing Lateral or a Horizontal well.

51 5. Sidetracking: Any party having the right to participate in a proposed Sidetracking operation that does not own an  
52 interest in the affected wellbore at the time of the notice shall, upon electing to participate, tender to the wellbore owners its  
53 proportionate share (equal to its interest in the Sidetracking operation) of the value of that portion of the existing wellbore  
54 to be utilized as follows:

55 (a) If the proposal is for Sidetracking an existing dry hole, reimbursement shall be on the basis of the actual costs  
56 incurred in the initial drilling of the well down to the depth at which the Sidetracking operation is initiated.

57 (b) If the proposal is for Sidetracking a well which has previously produced, reimbursement shall be on the basis of  
58 such party's proportionate share of drilling and equipping costs incurred in the initial drilling of the well down to the depth  
59 at which the Sidetracking operation is conducted, calculated in the manner described in Article VI.B.4(b) above. Such party's  
60 proportionate share of the cost of the well's salvable materials and equipment down to the depth at which the Sidetracking  
61 operation is initiated shall be determined in accordance with the provisions of Exhibit "C."

62 **This Article VI.B.5 shall not apply to operations in an existing Lateral of a Horizontal Well. Drilling operations  
63 conducted in a Horizontal Well that are intended to recover penetration of the objective Zone or deviate the Lateral before it  
reaches the objective Total Measured Depth shall be included in the original proposed drilling operations.**

64 Article 6. Order of Preference of Operations. Except as otherwise specifically provided in this agreement, including, but not limited to,  
65 ~~XVI.A~~ and ~~XVI.B~~, if any party desires to  
66 propose the conduct of an operation that conflicts with a proposal that has been made by a party under this Article VI, such  
67 party shall have fifteen (15) days from delivery of the initial proposal, in the case of a proposal to drill a well or to perform  
68 an operation on a well where no drilling rig is on location, or twenty-four (24) hours, exclusive of Saturday, Sunday and legal  
69 holidays, from delivery of the initial proposal, if a drilling rig is on location for the well on which such operation is to be  
70 conducted, to deliver to all parties entitled to participate in the proposed operation such party's alternative proposal, such  
71 alternate proposal to contain the same information required to be included in the initial proposal. Each party receiving such  
72 proposals shall elect by delivery of notice to Operator within five (5) days after expiration of the proposal period, or within  
73 twenty-four (24) hours (exclusive of Saturday, Sunday and legal holidays) if a drilling rig is on location for the well that is the  
74 subject of the proposals, to participate in one of the competing proposals. Any party not electing within the time required

A.A.P.L. FORM 610 - MODEL FORM OPERATING AGREEMENT - 1989

1 shall be deemed not to have voted. The proposal receiving the vote of parties owning the largest aggregate percentage  
2 interest of the parties voting shall have priority over all other competing proposals; in the case of a tie vote, the  
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A.A.P.L. FORM 610 - MODEL FORM OPERATING AGREEMENT - 1989

1 initial proposal shall prevail. Operator shall deliver notice of such result to all parties entitled to participate in the operation  
2 within five (5) days after expiration of the election period (or within twenty-four (24) hours, exclusive of Saturday, Sunday  
3 and legal holidays, if a drilling rig is on location). Each party shall then have two (2) days (or twenty-four (24) hours if a rig  
4 is on location) from receipt of such notice to elect by delivery of notice to Operator to participate in such operation or to  
5 relinquish interest in the affected well pursuant to the provisions of Article VI.B.2.; failure by a party to deliver notice within  
6 such period shall be deemed an election not to participate in the prevailing proposal.

7 7. Conformity to Spacing Pattern. Notwithstanding the provisions of this Article VI.B.2., it is agreed that no wells shall be  
8 proposed to be drilled to or Completed in or produced from a Zone from which a well located elsewhere on the Contract  
9 Area is producing, unless such well conforms to the then-existing well spacing pattern for such Zone.

10 8. Paying Wells. No party shall conduct any Reworking, Deepening, Plugging Back, Completion, Recompletion, or  
11 Sidetracking operation under this agreement with respect to any well then capable of producing in paying quantities except  
12 with the consent of ~~all~~ 51% of the parties that have not relinquished interests in the well at the time of such operation.

13 **C. Completion of Wells; Reworking and Plugging Back:**

14 1. Completion: Without the consent of all parties, no well shall be drilled, Deepened or Sidetracked, except any well  
15 drilled, Deepened or Sidetracked pursuant to the provisions of Article VI.B.2. of this agreement. Consent to the drilling,  
16 Deepening or Sidetracking shall include:

17  Option No. 1: All necessary expenditures for the drilling, Deepening or Sidetracking, testing, Completing and  
18 equipping of ~~the~~ a Horizontal well, including necessary tankage and/or surface facilities.

19  ~~Option No. 2: All necessary expenditures for the drilling, Deepening or Sidetracking and testing of the well. When  
20 such well has reached its authorized depth, and all logs, cores and other tests have been completed, and the results  
21 thereof furnished to the parties, Operator shall give immediate notice to the Non Operators having the right to  
22 participate in a Completion attempt whether or not Operator recommends attempting to Complete the well,  
23 together with Operator's AFE for Completion costs if not previously provided. The parties receiving such notice  
24 shall have forty eight (48) hours (exclusive of Saturday, Sunday and legal holidays) in which to elect by delivery of  
25 notice to Operator to participate in a recommended Completion attempt or to make a Completion proposal with an  
26 accompanying AFE. Operator shall deliver any such Completion proposal, or any Completion proposal conflicting  
27 with Operator's proposal, to the other parties entitled to participate in such Completion in accordance with the  
28 procedures specified in Article VI.B.6. Election to participate in a Completion attempt shall include consent to all  
29 necessary expenditures for the Completing and equipping of such well, including necessary tankage and/or surface  
30 facilities but excluding any stimulation operation not contained on the Completion AFE. Failure of any party  
31 receiving such notice to reply within the period above fixed shall constitute an election by that party not to  
32 participate in the cost of the Completion attempt; provided, that Article VI.B.6. shall control in the case of  
33 conflicting Completion proposals. If one or more, but less than all of the parties, elect to attempt a Completion, the  
34 provision of Article VI.B.2. hereof (the phrase "Reworking, Sidetracking, Deepening, Recompleting or Plugging  
35 Back" as contained in Article VI.B.2. shall be deemed to include "Completing") shall apply to the operations  
36 thereafter conducted by less than all parties; provided, however, that Article VI.B.2. shall apply separately to each  
37 separate Completion or Recompletion attempt undertaken hereunder, and an election to become a Non Consenting  
38 Party as to one Completion or Recompletion attempt shall not prevent a party from becoming a Consenting Party  
39 in subsequent Completion or Recompletion attempts regardless whether the Consenting Parties as to earlier  
40 Completions or Recompletion have recouped their costs pursuant to Article VI.B.2.; provided further, that any  
41 recoupment of costs by a Consenting Party shall be made solely from the production attributable to the Zone in  
42 which the Completion attempt is made. Election by a previous Non Consenting party to participate in a subsequent  
43 Completion or Recompletion attempt shall require such party to pay its proportionate share of the cost of salvable  
44 materials and equipment installed in the well pursuant to the previous Completion or Recompletion attempt,  
45 insofar and only insofar as such materials and equipment benefit the Zone in which such party participates in a  
46 Completion attempt. See Article XVI.J for this provision.~~

47 2. Rework, Recomplete or Plug Back: No well shall be Reworked, Recompleted or Plugged Back except a well Reworked,  
48 Recompleted, or Plugged Back pursuant to the provisions of Article VI.B. of this agreement. Consent to the Reworking,  
49 Recompleting or Plugging Back of a well shall include all necessary expenditures in conducting such operations and  
50 Completing and equipping of said well, including necessary tankage and/or surface facilities.

51 **D. Other Operations:**

52 Operator shall not undertake any single project reasonably estimated to require an expenditure in excess of \_\_\_\_\_  
53 Fifty Thousand and no/100 Dollars (\$ 50,000.00 ) except in connection with the  
54 drilling, Sidetracking, Reworking, Deepening, Completing, Recompleting or Plugging Back of a well that has been previously  
55 authorized by or pursuant to this agreement; provided, however, that, in case of explosion, fire, flood or other sudden  
56 emergency, whether of the same or different nature, Operator may take such steps and incur such expenses as in its opinion  
57 are required to deal with the emergency to safeguard life and property but Operator, as promptly as possible, shall report the  
58 emergency to the other parties. If Operator prepares an AFE for its own use, Operator shall furnish any Non-Operator so  
59 requesting an information copy thereof for any single project costing in excess of Fifty Thousand and no/100 Dollars  
60 (\$ 50,000.00 ). Any party who has not relinquished its interest in a well shall have the right to propose that  
61 Operator perform repair work or undertake the installation of artificial lift equipment or ancillary production facilities such as  
62 salt water disposal wells or to conduct additional work with respect to a well drilled hereunder or other similar project (but  
63 not including the installation of gathering lines or other transportation or marketing facilities, the installation of which shall  
64 be governed by separate agreement between the parties) reasonably estimated to require an expenditure in excess of the  
65 amount first set forth above in this Article VI.D. (except in connection with an operation required to be proposed under  
66 Articles VI.B.1. or VI.C.1. Option No. 2, which shall be governed exclusively by those Articles). Operator shall deliver such  
67 proposal to all parties entitled to participate therein. If within thirty (30) days thereof Operator secures the written consent  
68 <sup>two or more</sup> ~~of any party~~ or parties owning at least 51 % of the interests of the parties entitled to participate in such operation,  
69 each party having the right to participate in such project shall be bound by the terms of such proposal and shall be obligated  
70 to pay its proportionate share of the costs of the proposed project as if it had consented to such project pursuant to the terms  
71 of the proposal.

72 **E. Abandonment of Wells:**

73 1. Abandonment of Dry Holes: Except for any well drilled or Deepened pursuant to Article VI.B.2., any well which has  
74 been drilled or Deepened under the terms of this agreement and is proposed to be completed as a dry hole shall not be

1 **plugged and abandoned\*\*** without the consent of all parties. Should Operator, after diligent effort, be unable to contact any  
 2 party, or should any party fail to reply within forty-eight (48) hours (exclusive of Saturday, Sunday and legal holidays) after  
 3 delivery of notice of the proposal to **plug and abandon\*\*** such well, such party shall be deemed to have consented to the  
 4 proposed abandonment. All such wells shall be **plugged and abandoned\*\*** in accordance with applicable regulations and at the  
 5 cost, risk and expense of the parties who participated in the cost of drilling or Deepening such well. ~~Any party who objects to~~  
 6 ~~plugging and abandoning\*\*~~ such well by notice delivered to Operator within forty eight (48) hours (exclusive of Saturday,  
 7 Sunday and legal holidays) after delivery of notice of the proposed plugging shall take over the well as of the end of such  
 8 forty eight (48) hour notice period and conduct further operations in search of Oil and/or Gas subject to the provisions of  
 9 Article VI.B.; failure of such party to provide proof reasonably satisfactory to Operator of its financial capability to conduct  
 10 such operations or to take over the well within such period or thereafter to conduct operations on such well or **plug and**  
 11 **abandon\*\*** such well shall entitle Operator to retain or take possession of the well and **plug and abandon\*\*** the well. The party  
 12 taking over the well shall indemnify Operator (if Operator is an abandoning party) and the other abandoning parties against  
 13 liability for any further operations conducted on such well, except for the costs of plugging and abandoning the well and  
 14 restoring the surface, for which the abandoning parties shall remain proportionately liable.

15 2. Abandonment of Wells That Have Produced: Except for any well in which a Non-Consent operation has been  
 16 conducted hereunder for which the Consenting Parties have not been fully reimbursed as herein provided, any well which has  
 17 been completed as a producer shall not be **plugged and abandoned\*\*** without the consent of all parties /. If all parties consent to  
 18 such abandonment, the well shall be **plugged and abandoned\*\*** in accordance with applicable regulations and at the cost, risk  
 19 and expense of all the parties hereto. Failure of a party to reply within sixty (60) days of delivery of notice of proposed  
 20 abandonment shall be deemed an election to consent to the proposal. ~~If, within sixty (60) days after delivery of notice of the~~  
 21 ~~proposed abandonment of any well, all parties do not agree to the abandonment of such well, those wishing to continue its~~  
 22 ~~operation from the Zone then open to production shall be obligated to take over the well as of the expiration of the~~  
 23 ~~applicable notice period and shall indemnify Operator (if Operator is an abandoning party) and the other abandoning parties~~  
 24 ~~against liability for any further operations on the well conducted by such parties. Failure of such party or parties to provide~~  
 25 ~~proof reasonably satisfactory to Operator of their financial capability to conduct such operations or to take over the well~~  
 26 ~~within the required period or thereafter to conduct operations on such well shall entitle operator to retain or take possession~~  
 27 ~~of such well and **plug and abandon\*\*** the well.~~

28 ~~Parties taking over a well as provided herein shall tender to each of the other parties its proportionate share of the value of~~  
 29 ~~the well's salvable material and equipment, determined in accordance with the provisions of Exhibit "C," less the estimated cost~~  
 30 ~~of salvaging and the estimated cost of **plugging and abandoning the well\*\***; / provided, however, that in the event~~  
 31 ~~the estimated **plugging and abandoning of the well\*\*** costs and the estimated cost of salvaging are higher than the~~  
 32 ~~value of the well's salvable material and equipment, each of the abandoning parties shall / tender to the parties continuing~~  
 33 ~~operations their proportionate shares of the estimated excess cost. Each abandoning party shall assign to the non abandoning~~  
 34 ~~parties, without warranty, express or implied, as to title or as to quantity, or fitness for use of the equipment and material, all~~  
 35 ~~of its interest in the wellbore of the well and related equipment, together with its interest in the Leasehold insofar and only~~  
 36 ~~insofar as such Leasehold covers the right to obtain production from that wellbore in the Zone then open to production.\*\*\* If the~~  
 37 ~~interest of the abandoning party is or includes an Oil and Gas Interest, such party shall execute and deliver to the non-~~  
 38 ~~abandoning party or parties an oil and gas lease, limited to the wellbore and the Zone then open to production, for a term of~~  
 39 ~~one (1) year and so long thereafter as Oil and/or Gas is produced from the Zone covered thereby, such lease to be on the form~~  
 40 ~~attached as Exhibit "B." The assignments or leases so limited shall encompass the Drilling Unit upon which the well is located.~~  
 41 ~~The payments by, and the assignments or leases to, the assignees shall be in a ratio based upon the relationship of their~~  
 42 ~~respective percentage of participation in the Contract Area to the aggregate of the percentages of participation in the Contract~~  
 43 ~~Area of all assignees. There shall be no readjustment of interests in the remaining portions of the Contract Area.\*\*\*Any Assignments made~~  
 44 ~~hereunder pursuant to the provisions of Article VI.E.2 shall be made on a mutually acceptable form of Assignment and Bill of Sale.~~

45 ~~Thereafter, abandoning parties shall have no further responsibility, liability, or interest in the operation of or production~~  
 46 ~~from the well in the Zone then open other than the royalties retained in any lease made under the terms of this Article. Upon~~  
 47 ~~request, Operator shall continue to operate the assigned well for the account of the non abandoning parties at the rates and~~  
 48 ~~charges contemplated by this agreement, plus any additional cost and charges which may arise as the result of the separate~~  
 49 ~~ownership of the assigned well. Upon proposed abandonment of the producing Zone assigned or leased, the assignor or lessor~~  
 50 ~~shall then have the option to repurchase its prior interest in the well (using the same valuation formula) and participate in~~  
 51 ~~further operations therein subject to the provisions hereof.~~

52 3. Abandonment of Non-Consent Operations: The provisions of Article VI.E.1. or VI.E.2. above shall be applicable as  
 53 between Consenting Parties in the event of the proposed abandonment of any well excepted from said Articles; provided,  
 54 however, no well shall be permanently **plugged and abandoned\*\*** unless and until all parties having the right to conduct further  
 55 operations therein have been notified of the proposed abandonment and afforded the opportunity to elect to take over the well  
 56 in accordance with the provisions of this Article VI.E.; and provided further, that Non-Consenting Parties who own an interest  
 57 in a portion of the well shall pay their proportionate shares of abandonment and surface restoration cost for such well as  
 58 provided in Article VI.B.2.(b). See Article XVI.K. Disposal of Surplus Material

59 **F. Termination of Operations:**

60 Upon the commencement of an operation for the drilling, Reworking, Sidetracking, Plugging Back, Deepening, testing,  
 61 Completion or plugging of a well, including but not limited to the Initial Well, such operation shall not be terminated without  
 62 consent of parties bearing 51% of the costs of such operation; provided, however, that in the event granite or other  
 63 practically impenetrable substance or condition in the hole is encountered which renders further operations impractical,  
 64 Operator may discontinue operations and give notice of such condition in the manner provided in Article VI.B.1, and the  
 65 provisions of Article VI.B. or VI.E. shall thereafter apply to such operation, as appropriate.

66 **G. Taking Production in Kind:**

67  **Option No. 1: Gas Balancing Agreement Attached**

68 Each party shall take in kind or separately dispose of its proportionate share of all Oil and Gas produced from the  
 69 Contract Area, exclusive of production which may be used in development and producing operations and in preparing and  
 70 treating Oil and Gas for marketing purposes and production unavoidably lost. Any extra expenditure incurred in the taking  
 71 in kind or separate disposition by any party of its proportionate share of the production shall be borne by such party. Any  
 72 party taking its share of production in kind shall be required to pay for only its proportionate share of such part of  
 73 Operator's surface facilities which it uses.

74 Each party shall execute such division orders and contracts as may be necessary for the sale of its interest in  
 production from the Contract Area, and, except as provided in Article VII.B., shall be entitled to receive payment

\*\*See Article XVI.I

1 directly from the purchaser thereof for its share of all production.

2 ~~If any party fails to make the arrangements necessary to take in kind or separately dispose of its proportionate~~  
 3 ~~share of the Oil produced from the Contract Area, Operator shall have the right, subject to the revocation at will by~~  
 4 ~~the party owning it, but not the obligation, to purchase such Oil or sell it to others at any time and from time to~~  
 5 ~~time, for the account of the non-taking party. Any such purchase or sale by Operator may be terminated by~~  
 6 ~~Operator upon at least ten (10) days written notice to the owner of said production and shall be subject always to~~  
 7 ~~the right of the owner of the production upon at least ten (10) days written notice to Operator to exercise at any~~  
 8 ~~time its right to take in kind, or separately dispose of, its share of all Oil not previously delivered to a purchaser.~~  
 9 ~~Any purchase or sale by Operator of any other party's share of Oil shall be only for such reasonable periods of time~~  
 10 ~~as are consistent with the minimum needs of the industry under the particular circumstances, but in no event for a~~  
 11 ~~period in excess of one (1) year.~~

12 ~~Any such sale by Operator shall be in a manner commercially reasonable under the circumstances but Operator~~  
 13 ~~shall have no duty to share any existing market or to obtain a price equal to that received under any existing~~  
 14 ~~market. The sale or delivery by Operator of a non-taking party's share of Oil under the terms of any existing~~  
 15 ~~contract of Operator shall not give the non-taking party any interest in or make the non-taking party a party to said~~  
 16 ~~contract. No purchase shall be made by Operator without first giving the non-taking party at least ten (10) days~~  
 17 ~~written notice of such intended purchase and the price to be paid or the pricing basis to be used.~~

18 All parties shall give timely written notice to Operator of their Gas marketing arrangements for the following  
 19 month, excluding price, and shall notify Operator immediately in the event of a change in such arrangements.  
 20 Operator shall maintain records of all marketing arrangements, and of volumes actually sold or transported, which  
 21 records shall be made available to Non-Operators upon reasonable request.

22 In the event one or more parties' separate disposition of its share of the Gas causes split-stream deliveries to separate  
 23 pipelines and/or deliveries which on a day-to-day basis for any reason are not exactly equal to a party's respective proportion-  
 24 ate share of total Gas sales to be allocated to it, the balancing or accounting between the parties shall be in accordance with  
 25 any Gas balancing agreement between the parties hereto, whether such an agreement is attached as Exhibit "E" or is a  
 26 separate agreement. Operator shall give notice to all parties of the first sales of Gas from any well under this agreement.

27  ~~Option No. 2: No Gas Balancing Agreement:~~

28 ~~Each party shall take in kind or separately dispose of its proportionate share of all Oil and Gas produced from~~  
 29 ~~the Contract Area, exclusive of production which may be used in development and producing operations and in~~  
 30 ~~preparing and treating Oil and Gas for marketing purposes and production unavoidably lost. Any extra expenditures~~  
 31 ~~incurred in the taking in kind or separate disposition by any party of its proportionate share of the production shall~~  
 32 ~~be borne by such party. Any party taking its share of production in kind shall be required to pay for only its~~  
 33 ~~proportionate share of such part of Operator's surface facilities which it uses.~~

34 ~~Each party shall execute such division orders and contracts as may be necessary for the sale of its interest in~~  
 35 ~~production from the Contract Area, and, except as provided in Article VII.B., shall be entitled to receive payment~~  
 36 ~~directly from the purchaser thereof for its share of all production.~~

37 ~~If any party fails to make the arrangements necessary to take in kind or separately dispose of its proportionate~~  
 38 ~~share of the Oil and/or Gas produced from the Contract Area, Operator shall have the right, subject to the~~  
 39 ~~revocation at will by the party owning it, but not the obligation, to purchase such Oil and/or Gas or sell it to others~~  
 40 ~~at any time and from time to time, for the account of the non-taking party. Any such purchase or sale by Operator~~  
 41 ~~may be terminated by Operator upon at least ten (10) days written notice to the owner of said production and shall~~  
 42 ~~be subject always to the right of the owner of the production upon at least ten (10) days written notice to Operator~~  
 43 ~~to exercise its right to take in kind, or separately dispose of, its share of all Oil and/or Gas not previously delivered~~  
 44 ~~to a purchaser; provided, however, that the effective date of any such revocation may be deferred at Operator's~~  
 45 ~~election for a period not to exceed ninety (90) days if Operator has committed such production to a purchase~~  
 46 ~~contract having a term extending beyond such ten (10) day period. Any purchase or sale by Operator of any other~~  
 47 ~~party's share of Oil and/or Gas shall be only for such reasonable periods of time as are consistent with the~~  
 48 ~~minimum needs of the industry under the particular circumstances, but in no event for a period in excess of one (1)~~  
 49 ~~year.~~

50 ~~Any such sale by Operator shall be in a manner commercially reasonable under the circumstances, but Operator~~  
 51 ~~shall have no duty to share any existing market or transportation arrangement or to obtain a price or transportation~~  
 52 ~~fee equal to that received under any existing market or transportation arrangement. The sale or delivery by~~  
 53 ~~Operator of a non-taking party's share of production under the terms of any existing contract of Operator shall not~~  
 54 ~~give the non-taking party any interest in or make the non-taking party a party to said contract. No purchase of Oil~~  
 55 ~~and Gas and no sale of Gas shall be made by Operator without first giving the non-taking party ten days written~~  
 56 ~~notice of such intended purchase or sale and the price to be paid or the pricing basis to be used. Operator shall give~~  
 57 ~~notice to all parties of the first sale of Gas from any well under this Agreement.~~

58 ~~All parties shall give timely written notice to Operator of their Gas marketing arrangements for the following~~  
 59 ~~month, excluding price, and shall notify Operator immediately in the event of a change in such arrangements.~~  
 60 ~~Operator shall maintain records of all marketing arrangements, and of volumes actually sold or transported, which~~  
 61 ~~records shall be made available to Non-Operators upon reasonable request.~~

62 **ARTICLE VII.**

63 **EXPENDITURES AND LIABILITY OF PARTIES**

64 **A. Liability of Parties:**

65 The liability of the parties shall be several, not joint or collective. Each party shall be responsible only for its obligations,  
 66 and shall be liable only for its proportionate share of the costs of developing and operating the Contract Area. Accordingly, the  
 67 liens granted among the parties in Article VII.B. are given to secure only the debts of each severally, and no party shall have  
 68 any liability to third parties hereunder to satisfy the default of any other party in the payment of any expense or obligation  
 69 hereunder. It is not the intention of the parties to create, nor shall this agreement be construed as creating, a mining or other  
 70 partnership, joint venture, agency relationship or association, or to render the parties liable as partners, co-venturers, or  
 71 principals. In their relations with each other under this agreement, the parties shall not be considered fiduciaries or to have  
 72 established a confidential relationship but rather shall be free to act on an arm's-length basis in accordance with their own  
 73 respective self-interest, subject, however, to the obligation of the parties to act in good faith in their dealings with each other  
 74 with respect to activities hereunder.

1 **B. Liens and Security Interests:**

2 Each party grants to the other parties hereto a lien upon any interest it now owns or hereafter acquires in Oil and Gas  
3 Leases and Oil and Gas Interests in the Contract Area, and a security interest and/or purchase money security interest in any  
4 interest it now owns or hereafter acquires in the personal property and fixtures on or used or obtained for use in connection  
5 therewith, to secure performance of all of its obligations under this agreement including but not limited to payment of expense,  
6 interest and fees, the proper disbursement of all monies paid hereunder, the assignment or relinquishment of interest in Oil  
7 and Gas Leases as required hereunder, and the proper performance of operations hereunder. Such lien and security interest  
8 granted by each party hereto shall include such party's leasehold interests, working interests, operating rights, and royalty and  
9 overriding royalty interests in the Contract Area now owned or hereafter acquired and in lands pooled or unitized therewith or  
10 otherwise becoming subject to this agreement, the Oil and Gas when extracted therefrom and equipment situated thereon or  
11 used or obtained for use in connection therewith (including, without limitation, all wells, tools, and tubular goods), and accounts  
12 (including, without limitation, accounts arising from gas imbalances or from the sale of Oil and/or Gas at the wellhead),  
13 contract rights, inventory and general intangibles relating thereto or arising therefrom, and all proceeds and products of the  
14 foregoing.

15 To perfect the lien and security agreement provided herein, each party hereto shall execute and acknowledge the recording  
16 supplement and/or any financing statement prepared and submitted by any party hereto in conjunction herewith or at any time  
17 following execution hereof, and Operator is authorized to file this agreement or the recording supplement executed herewith as  
18 a lien or mortgage in the applicable real estate records and as a financing statement with the proper officer under the Uniform  
19 Commercial Code in the state in which the Contract Area is situated and such other states as Operator shall deem appropriate  
20 to perfect the security interest granted hereunder. Any party may file this agreement, the recording supplement executed  
21 herewith, or such other documents as it deems necessary as a lien or mortgage in the applicable real estate records and/or a  
22 financing statement with the proper officer under the Uniform Commercial Code.

23 Each party represents and warrants to the other parties hereto that the lien and security interest granted by such party to  
24 the other parties shall be a first and prior lien, and each party hereby agrees to maintain the priority of said lien and security  
25 interest against all persons acquiring an interest in Oil and Gas Leases and Interests covered by this agreement by, through or  
26 under such party. All parties acquiring an interest in Oil and Gas Leases and Oil and Gas Interests covered by this agreement,  
27 whether by assignment, merger, mortgage, operation of law, or otherwise, shall be deemed to have taken subject  
28 to the lien and security interest granted by this Article VII.B. as to all obligations attributable to such interest hereunder  
29 whether or not such obligations arise before or after such interest is acquired.

30 To the extent that parties have a security interest under the Uniform Commercial Code of the state in which the  
31 Contract Area is situated, they shall be entitled to exercise the rights and remedies of a secured party under the Code.  
32 The bringing of a suit and the obtaining of judgment by a party for the secured indebtedness shall not be deemed an  
33 election of remedies or otherwise affect the lien rights or security interest as security for the payment thereof. In  
34 addition, upon default by any party in the payment of its share of expenses, interests or fees, or upon the improper use  
35 of funds by the Operator, the other parties shall have the right, without prejudice to other rights or remedies, to collect  
36 from the purchaser the proceeds from the sale of such defaulting party's share of Oil and Gas until the amount owed by  
37 such party, plus interest as provided in "Exhibit C," has been received, and shall have the right to offset the amount  
38 owed against the proceeds from the sale of such defaulting party's share of Oil and Gas. All purchasers of production  
39 may rely on a notification of default from the non-defaulting party or parties stating the amount due as a result of the  
40 default, and all parties waive any recourse available against purchasers for releasing production proceeds as provided in  
41 this paragraph.

42 If any party fails to pay its share of cost within one hundred twenty (120) days after rendition of a statement therefor by  
43 Operator, the non-defaulting parties, including Operator, shall upon request by Operator, pay the unpaid amount in the  
44 proportion that the interest of each such party bears to the interest of all such parties. The amount paid by each party so  
45 paying its share of the unpaid amount shall be secured by the liens and security rights described in Article VII.B., and each  
46 paying party may independently pursue any remedy available hereunder or otherwise.

47 If any party does not perform all of its obligations hereunder, and the failure to perform subjects such party to foreclosure  
48 or execution proceedings pursuant to the provisions of this agreement, to the extent allowed by governing law, the defaulting  
49 party waives any available right of redemption from and after the date of judgment, any required valuation or appraisalment  
50 of the mortgaged or secured property prior to sale, any available right to stay execution or to require a marshaling of assets  
51 and any required bond in the event a receiver is appointed. In addition, to the extent permitted by applicable law, each party  
52 hereby grants to the other parties a power of sale as to any property that is subject to the lien and security rights granted  
53 hereunder, such power to be exercised in the manner provided by applicable law or otherwise in a commercially reasonable  
54 manner and upon reasonable notice.

55 Each party agrees that the other parties shall be entitled to utilize the provisions of Oil and Gas lien law or other lien  
56 law of any state in which the Contract Area is situated to enforce the obligations of each party hereunder. Without limiting  
57 the generality of the foregoing, to the extent permitted by applicable law, Non-Operators agree that Operator may invoke or  
58 utilize the mechanics' or materialmen's lien law of the state in which the Contract Area is situated in order to secure the  
59 payment to Operator of any sum due hereunder for services performed or materials supplied by Operator. **See also Article XVII.L – Notice  
60 of Liens and Mortgage-Financing Statement.**

61 **C. Advances:**

62 Operator, at its election, shall have the right from time to time to demand and receive from one or more of the other  
63 parties payment in advance of their respective shares of the estimated amount of the expense to be incurred in operations  
64 hereunder during the next succeeding month, which right may be exercised only by submission to each such party of ~~an~~  
65 ~~itemized~~ statement of such estimated expense, together with an invoice for its share thereof. Each such statement and invoice  
66 for the payment in advance of estimated expense shall be submitted on or before the 20th day of the next preceding month.  
67 Each party shall pay to Operator its proportionate share of such estimate within ~~fifteen (15)~~ <sup>thirty (30)</sup> days after such estimate and  
68 invoice is received. If any party fails to pay its share of said estimate within said time, the amount due shall bear interest as  
69 provided in Exhibit "C" until paid. Proper adjustment shall be made monthly between advances and actual expense to the end  
70 that each party shall bear and pay its proportionate share of actual expenses incurred, and no more.

71 **D. Defaults and Remedies:**

72 If any party fails to discharge any financial obligation under this agreement, including without limitation the failure to  
73 make any advance under the preceding Article VII.C. or any other provision of this agreement, within the period required for  
74 such payment hereunder, then in addition to the remedies provided in Article VII.B. or elsewhere in this agreement, the  
remedies specified below shall be applicable. For purposes of this Article VII.D., all notices and elections shall be delivered

1 only by Operator, except that Operator shall deliver any such notice and election requested by a non-defaulting Non-Operator,  
 2 and when Operator is the party in default, the applicable notices and elections can be delivered by any Non-Operator.  
 3 Election of any one or more of the following remedies shall not preclude the subsequent use of any other remedy specified  
 4 below or otherwise available to a non-defaulting party.

5 1. Suspension of Rights: Any party may deliver to the party in default a Notice of Default, which shall specify the default,  
 6 specify the action to be taken to cure the default, and specify that failure to take such action will result in the exercise of one  
 7 or more of the remedies provided in this Article. If the default is not cured within thirty (30) days of the delivery of such  
 8 Notice of Default, all of the rights of the defaulting party granted by this agreement may upon notice be suspended until the  
 9 default is cured, without prejudice to the right of the non-defaulting party or parties to continue to enforce the obligations of  
 10 the defaulting party previously accrued or thereafter accruing under this agreement. If Operator is the party in default, the  
 11 Non-Operators shall have in addition the right, by vote of Non-Operators owning a majority in interest in the Contract Area  
 12 after excluding the voting interest of Operator, to appoint a new Operator effective immediately. The rights of a defaulting  
 13 party that may be suspended hereunder at the election of the non-defaulting parties shall include, without limitation, the right  
 14 to receive information as to any operation conducted hereunder during the period of such default, the right to elect to  
 15 participate in an operation proposed under Article VI.B. of this agreement, the right to participate in an operation being  
 16 conducted under this agreement even if the party has previously elected to participate in such operation, and the right to  
 17 receive proceeds of production from any well subject to this agreement.

18 2. Suit for Damages: Non-defaulting parties or Operator for the benefit of non-defaulting parties may sue (at joint  
 19 account expense) to collect the amounts in default, plus interest accruing on the amounts recovered from the date of default  
 20 until the date of collection at the rate specified in Exhibit "C" attached hereto. Nothing herein shall prevent any party from  
 21 suing any defaulting party to collect consequential damages accruing to such party as a result of the default.

22 3. Deemed Non-Consent: The non-defaulting party may deliver a written Notice of Non-Consent Election to the  
 23 defaulting party at any time after the expiration of the thirty-day cure period following delivery of the Notice of Default, in  
 24 which event if the billing is for the drilling a new well or the Plugging Back, Sidetracking, Reworking or Deepening of a  
 25 well which is to be or has been plugged as a dry hole, or for the Completion or Recompletion of any well, the defaulting  
 26 party will be conclusively deemed to have elected not to participate in the operation and to be a Non-Consenting Party with  
 27 respect thereto under Article VI.B. or VI.C., as the case may be, to the extent of the costs unpaid by such party,  
 28 notwithstanding any election to participate theretofore made. If election is made to proceed under this provision, then the  
 29 non-defaulting parties may not elect to sue for the unpaid amount pursuant to Article VII.D.2.

30 Until the delivery of such Notice of Non-Consent Election to the defaulting party, such party shall have the right to cure  
 31 its default by paying its unpaid share of costs plus interest at the rate set forth in Exhibit "C," provided, however, such  
 32 payment shall not prejudice the rights of the non-defaulting parties to pursue remedies for damages incurred by the non-  
 33 defaulting parties as a result of the default. Any interest relinquished pursuant to this Article VII.D.3. shall be offered to the  
 34 non-defaulting parties in proportion to their interests, and the non-defaulting parties electing to participate in the ownership  
 35 of such interest shall be required to contribute their shares of the defaulted amount upon their election to participate therein.

36 4. Advance Payment: If a default is not cured within thirty (30) days of the delivery of a Notice of Default, Operator, or  
 37 Non-Operators if Operator is the defaulting party, may thereafter require advance payment from the defaulting  
 38 party of such defaulting party's anticipated share of any item of expense for which Operator, or Non-Operators, as the case may  
 39 be, would be entitled to reimbursement under any provision of this agreement, whether or not such expense was the subject of  
 40 the previous default. Such right includes, but is not limited to, the right to require advance payment for the estimated costs of  
 41 drilling a well or Completion of a well as to which an election to participate in drilling or Completion has been made. If the  
 42 defaulting party fails to pay the required advance payment, the non-defaulting parties may pursue any of the remedies provided  
 43 in the Article VII.D. or any other default remedy provided elsewhere in this agreement. Any excess of funds advanced remaining  
 44 when the operation is completed and all costs have been paid shall be promptly returned to the advancing party.

45 5. Costs and Attorneys' Fees: In the event any party is required to bring legal proceedings to enforce any financial  
 46 obligation of a party hereunder, the prevailing party in such action shall be entitled to recover all court costs, costs of  
 47 collection, and a reasonable attorney's fee, which the lien provided for herein shall also secure.

48 **E. Rentals, Shut-in Well Payments and Minimum Royalties:**

49 Rentals, shut-in well payments and minimum royalties which may be required under the terms of any lease shall be paid  
 50 by the party or parties who subjected such lease to this agreement at its or their expense. In the event two or more parties  
 51 own and have contributed interests in the same lease to this agreement, such parties may designate one of such parties to  
 52 make said payments for and on behalf of all such parties. Any party may request, and shall be entitled to receive, proper  
 53 evidence of all such payments. In the event of failure to make proper payment of any rental, shut-in well payment or  
 54 minimum royalty through mistake or oversight where such payment is required to continue the lease in force, any loss which  
 55 results from such non-payment shall be borne in accordance with the provisions of Article IV.B.2.

56 Operator shall notify Non-Operators of the anticipated completion of a shut-in well, or the shutting in or return to  
 57 production of a producing well, at least five (5) days (excluding Saturday, Sunday, and legal holidays) prior to taking such  
 58 action, or at the earliest opportunity permitted by circumstances, but assumes no liability for failure to do so. In the event of  
 59 failure by Operator to so notify Non-Operators, the loss of any lease contributed hereto by Non-Operators for failure to make  
 60 timely payments of any shut-in well payment shall be borne jointly by the parties hereto under the provisions of Article  
 61 IV.B.3.

62 **F. Taxes:**

63 Beginning with the first calendar year after the effective date hereof, Operator shall render for ad valorem taxation all  
 64 property subject to this agreement which by law should be rendered for such taxes, and it shall pay all such taxes assessed  
 65 thereon before they become delinquent. Prior to the rendition date, each Non-Operator shall furnish Operator information as  
 66 to burdens (to include, but not be limited to, royalties, overriding royalties and production payments) on Leases and Oil and  
 67 Gas Interests contributed by such Non-Operator. If the assessed valuation of any Lease is reduced by reason of its being  
 68 subject to outstanding excess royalties, overriding royalties or production payments, the reduction in ad valorem taxes  
 69 resulting therefrom shall inure to the benefit of the owner or owners of such Lease, and Operator shall adjust the charge to  
 70 such owner or owners so as to reflect the benefit of such reduction. If the ad valorem taxes are based in whole or in part  
 71 upon separate valuations of each party's working interest, then notwithstanding anything to the contrary herein, charges to  
 72 the joint account shall be made and paid by the parties hereto in accordance with the tax value generated by each party's  
 73 working interest. Operator shall bill the other parties for their proportionate shares of all tax payments in the manner  
 74 provided in Exhibit "C."

A.A.P.L. FORM 610 - MODEL FORM OPERATING AGREEMENT - 1989

1 If Operator considers any tax assessment improper, Operator may, at its discretion, protest within the time and manner  
2 prescribed by law, and prosecute the protest to a final determination, unless all parties agree to abandon the protest prior to final  
3 determination. During the pendency of administrative or judicial proceedings, Operator may elect to pay, under protest, all such taxes  
4 and any interest and penalty. When any such protested assessment shall have been finally determined, Operator shall pay the tax for  
5 the joint account, together with any interest and penalty accrued, and the total cost shall then be assessed against the parties, and be  
6 paid by them, as provided in Exhibit "C."

7 Each party shall pay or cause to be paid all production, severance, excise, gathering and other taxes imposed upon or with respect  
8 to the production or handling of such party's share of Oil and Gas produced under the terms of this agreement.

9 **ARTICLE VIII.**

10 **ACQUISITION, MAINTENANCE OR TRANSFER OF INTEREST**

11 **A. Surrender of Leases:**

12 The Leases covered by this agreement, insofar as they embrace acreage in the Contract Area, shall not be surrendered in whole  
13 or in part unless all parties consent thereto.

14 However, should any party desire to surrender its interest in any Lease or in any portion thereof, such party shall give written  
15 notice of the proposed surrender to all parties, and the parties to whom such notice is delivered shall have thirty (30) days after  
16 delivery of the notice within which to notify the party proposing the surrender whether they elect to consent thereto. Failure of a  
17 party to whom such notice is delivered to reply within said 30-day period shall constitute a consent to the surrender of the Leases  
18 described in the notice. If all parties do not agree or consent thereto, the party desiring to surrender shall assign, without express or  
19 implied warranty of title, all of its interest in such Lease, or portion thereof, and any well, material and equipment which may be  
20 located thereon and any rights in production thereafter secured, to the parties not consenting to such surrender. If the interest of the  
21 assigning party is or includes an Oil and Gas Interest, the assigning party shall execute and deliver to the party or parties not  
22 consenting to such surrender an oil and gas lease covering such Oil and Gas Interest for a term of one (1) year and so long  
23 thereafter as Oil and/or Gas is produced from the land covered thereby, such lease to be on the form attached hereto as Exhibit "B."  
24 Upon such assignment or lease, the assigning party shall be relieved from all obligations thereafter accruing, but not theretofore  
25 accrued, with respect to the interest assigned or leased and the operation of any well attributable thereto, and the assigning party  
26 shall have no further interest in the assigned or leased premises and its equipment and production other than the royalties retained  
27 in any lease made under the terms of this Article. The party assignee or lessee shall pay to the party assignor or lessor the  
28 reasonable salvage value of the latter's interest in any well's salvable materials and equipment attributable to the assigned or leased  
29 acreage. The value of all salvable materials and equipment shall be determined in accordance with the provisions of Exhibit "C," less  
30 the estimated cost of salvaging and the estimated cost of **plugging and abandoning the well.\*\*** If such value is less  
31 than such costs, then the party assignor or lessor shall pay to the party assignee or lessee the amount of such deficit. If the  
32 assignment or lease is in favor of more than one party, the interest shall be shared by such parties in the proportions that the  
33 interest of each bears to the total interest of all such parties. If the interest of the parties to whom the assignment is to be made  
34 varies according to depth, then the interest assigned shall similarly reflect such variances.

35 Any assignment, lease or surrender made under this provision shall not reduce or change the assignor's, lessor's or surrendering  
36 party's interest as it was immediately before the assignment, lease or surrender in the balance of the Contract Area; and the acreage  
37 assigned, leased or surrendered, and subsequent operations thereon, shall not thereafter be subject to the terms and provisions of this  
38 agreement but shall be deemed subject to an Operating Agreement in the form of this agreement.

39 **B. Renewal or Extension of Leases:**

40 If any party secures a renewal or replacement of an Oil and Gas Lease or Interest subject to this agreement, then all other parties  
41 shall be notified promptly upon such acquisition or, in the case of a replacement Lease taken before expiration of an existing Lease,  
42 promptly upon expiration of the existing Lease. The parties notified shall have the right for a period of thirty (30) days following  
43 delivery of such notice in which to elect to participate in the ownership of the renewal or replacement Lease, insofar as such Lease  
44 affects lands within the Contract Area, by paying to the party who acquired it their proportionate shares of the acquisition cost  
45 allocated to that part of such Lease within the Contract Area, which shall be in proportion to the interest held at that time by the  
46 parties in the Contract Area. Each party who participates in the purchase of a renewal or replacement Lease shall be given an  
47 assignment of its proportionate interest therein by the acquiring party.

48 If some, but less than all, of the parties elect to participate in the purchase of a renewal or replacement Lease, it shall be owned  
49 by the parties who elect to participate therein, in a ratio based upon the relationship of their respective percentage of participation in  
50 the Contract Area to the aggregate of the percentages of participation in the Contract Area of all parties participating in the  
51 purchase of such renewal or replacement Lease. The acquisition of a renewal or replacement Lease by any or all of the parties hereto  
52 shall not cause a readjustment of the interests of the parties stated in Exhibit "A," but any renewal or replacement Lease in which  
53 less than all parties elect to participate shall not be subject to this agreement but shall be deemed subject to a separate Operating  
54 Agreement in the form of this agreement.

55 If the interests of the parties in the Contract Area vary according to depth, then their right to participate proportionately in  
56 renewal or replacement Leases and their right to receive an assignment of interest shall also reflect such depth variances.

57 The provisions of this Article shall apply to renewal or replacement Leases whether they are for the entire interest covered by  
58 the expiring Lease or cover only a portion of its area or an interest therein. Any renewal or replacement Lease taken before the  
59 expiration of its predecessor Lease, or taken or contracted for or becoming effective within six (6) months after the expiration of the  
60 existing Lease, shall be subject to this provision so long as this agreement is in effect at the time of such acquisition or at the time  
61 the renewal or replacement Lease becomes effective; but any Lease taken or contracted for more than six (6) months after the  
62 expiration of an existing Lease shall not be deemed a renewal or replacement Lease and shall not be subject to the provisions of this  
63 agreement.

64 The provisions in this Article shall also be applicable to extensions of Oil and Gas Leases.

65 **C. Acreage or Cash Contributions:**

66 While this agreement is in force, if any party contracts for a contribution of cash towards the drilling of a well or any other  
67 operation on the Contract Area, such contribution shall be paid to the party who conducted the drilling or other operation and shall  
68 be applied by it against the cost of such drilling or other operation. If the contribution be in the form of acreage, the party to whom  
69 the contribution is made shall promptly tender an assignment of the acreage, without warranty of title, to the Drilling Parties in the  
70 proportions said Drilling Parties shared the cost of drilling the well. Such acreage shall become a separate Contract Area and, to the  
71 extent possible, be governed by provisions identical to this agreement. Each party shall promptly notify all other parties of any  
72 acreage or cash contributions it may obtain in support of any well or any other operation on the Contract Area. The above  
73 provisions shall also be applicable to optional rights to earn acreage outside the Contract Area which are in support of well drilled  
74 inside Contract Area.

\*\* See Article XVII.

A.A.P.L. FORM 610 - MODEL FORM OPERATING AGREEMENT - 1989

1 If any party contracts for any consideration relating to disposition of such party's share of substances produced hereunder,  
2 such consideration shall not be deemed a contribution as contemplated in this Article VIII.C.

3 **D. Assignment; Maintenance of Uniform Interest:**

4 ~~For the purpose of maintaining uniformity of ownership in the Contract Area in the Oil and Gas Leases, Oil and Gas~~  
5 ~~Interests, wells, equipment and production covered by this agreement~~ No party shall sell, encumber, transfer or make other  
6 disposition of its interest in the Oil and Gas Leases and Oil and Gas Interests embraced within the Contract Area or in wells,  
7 equipment and production unless such disposition covers either:

- 8 1. the entire interest of the party in all Oil and Gas Leases, Oil and Gas Interests, wells, equipment and production; or
- 9 2. an equal undivided percent of the party's present interest in all Oil and Gas Leases, Oil and Gas Interests, wells,  
10 equipment and production in the Contract Area.

11 Every sale, encumbrance, transfer or other disposition made by any party shall be made expressly subject to this agreement  
12 and shall be made without prejudice to the right of the other parties, and any transferee of an ownership interest in any Oil and  
13 Gas Lease or Interest shall be deemed a party to this agreement as to the interest conveyed from and after the effective date of  
14 the transfer of ownership; provided, however, that the other parties shall not be required to recognize any such sale,  
15 encumbrance, transfer or other disposition for any purpose hereunder until thirty (30) days after they have received a copy of the  
16 instrument of transfer or other satisfactory evidence thereof in writing from the transferor or transferee. No assignment or other  
17 disposition of interest by a party shall relieve such party of obligations previously incurred by such party hereunder with respect  
18 to the interest transferred, including without limitation the obligation of a party to pay all costs attributable to an operation  
19 conducted hereunder in which such party has agreed to participate prior to making such assignment, and the lien and security  
20 interest granted by Article VII.B. shall continue to burden the interest transferred to secure payment of any such obligations.

21 If, at any time the interest of any party is divided among and owned by four or more co-owners, Operator, at its discretion,  
22 may require such co-owners to appoint a single trustee or agent with full authority to receive notices, approve expenditures,  
23 receive billings for and approve and pay such party's share of the joint expenses, and to deal generally with, and with power to  
24 bind, the co-owners of such party's interest within the scope of the operations embraced in this agreement; however, all such co-  
25 owners shall have the right to enter into and execute all contracts or agreements for the disposition of their respective shares of  
26 the Oil and Gas produced from the Contract Area and they shall have the right to receive, separately, payment of the sale  
27 proceeds thereof. **See Article XVI.C for additional provisions.**

28 **E. Waiver of Rights to Partition:**

29 If permitted by the laws of the state or states in which the property covered hereby is located, each party hereto owning an  
30 undivided interest in the Contract Area waives any and all rights it may have to partition and have set aside to it in severalty its  
31 undivided interest therein.

32 **F. Preferential Right to Purchase:**

33 ~~(Optional; Check if applicable.)~~

34 ~~Should any party desire to sell all or any part of its interests under this agreement, or its rights and interests in the Contract~~  
35 ~~Area, it shall promptly give written notice to the other parties, with full information concerning its proposed disposition, which~~  
36 ~~shall include the name and address of the prospective transferee (who must be ready, willing and able to purchase), the purchase~~  
37 ~~price, a legal description sufficient to identify the property, and all other terms of the offer. The other parties shall then have an~~  
38 ~~optional prior right, for a period of ten (10) days after the notice is delivered, to purchase for the stated consideration on the~~  
39 ~~same terms and conditions the interest which the other party proposes to sell; and, if this optional right is exercised, the~~  
40 ~~purchasing parties shall share the purchased interest in the proportions that the interest of each bears to the total interest of all~~  
41 ~~purchasing parties. However, there shall be no preferential right to purchase in those cases where any party wishes to mortgage~~  
42 ~~its interests, or to transfer title to its interests to its mortgagee in lieu of or pursuant to foreclosure of a mortgage of its interests,~~  
43 ~~or to dispose of its interests by merger, reorganization, consolidation, or by sale of all or substantially all of its Oil and Gas assets~~  
44 ~~to any party, or by transfer of its interests to a subsidiary or parent company or to a subsidiary of a parent company, or to any~~  
45 ~~company in which such party owns a majority of the stock.~~

46 **ARTICLE IX.**

47 **INTERNAL REVENUE CODE ELECTION**

48 If, for federal income tax purposes, this agreement and the operations hereunder are regarded as a partnership, and if the  
49 parties have not otherwise agreed to form a tax partnership pursuant to Exhibit "G" or other agreement between them, each  
50 party thereby affected elects to be excluded from the application of all of the provisions of Subchapter "K," Chapter 1, Subtitle  
51 "A," of the Internal Revenue Code of 1986, as amended ("Code"), as permitted and authorized by Section 761 of the Code and  
52 the regulations promulgated thereunder. Operator is authorized and directed to execute on behalf of each party hereby affected  
53 such evidence of this election as may be required by the Secretary of the Treasury of the United States or the Federal Internal  
54 Revenue Service, including specifically, but not by way of limitation, all of the returns, statements, and the data required by  
55 Treasury Regulation §1.761. Should there be any requirement that each party hereby affected give further evidence of this  
56 election, each such party shall execute such documents and furnish such other evidence as may be required by the Federal Internal  
57 Revenue Service or as may be necessary to evidence this election. No such party shall give any notices or take any other action  
58 inconsistent with the election made hereby. If any present or future income tax laws of the state or states in which the Contract  
59 Area is located or any future income tax laws of the United States contain provisions similar to those in Subchapter "K," Chapter  
60 1, Subtitle "A," of the Code, under which an election similar to that provided by Section 761 of the Code is permitted, each party  
61 hereby affected shall make such election as may be permitted or required by such laws. In making the foregoing election, each  
62 such party states that the income derived by such party from operations hereunder can be adequately determined without the  
63 computation of partnership taxable income.

64 **ARTICLE X.**

65 **CLAIMS AND LAWSUITS**

66 Operator may settle any single uninsured third party damage claim or suit arising from operations hereunder if the expenditure  
67 does not exceed Fifty Thousand and no/100 Dollars (\$50,000.00) and if the payment is in complete settlement  
68 of such claim or suit. If the amount required for settlement exceeds the above amount, the parties hereto shall assume and take over  
69 the further handling of the claim or suit, unless such authority is delegated to Operator. All costs and expenses of handling settling,  
70 or otherwise discharging such claim or suit shall be a the joint expense of the parties participating in the operation from which the  
71 claim or suit arises. If a claim is made against any party or if any party is sued on account of any matter arising from operations  
72 hereunder over which such individual has no control because of the rights given Operator by this agreement, such party shall  
73 immediately notify all other parties, and the claim or suit shall be treated as any other claim or suit involving operations hereunder.  
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**ARTICLE XI.  
FORCE MAJEURE**

If any party is rendered unable, wholly or in part, by force majeure to carry out its obligations under this agreement, other than the obligation to indemnify or make money payments or furnish security, that party shall give to all other parties prompt written notice of the force majeure with reasonably full particulars concerning it; thereupon, the obligations of the party giving the notice, so far as they are affected by the force majeure, shall be suspended during, but no longer than, the continuance of the force majeure. The term "force majeure," as here employed, shall mean an act of God, strike, lockout, or other industrial disturbance, act of the public enemy, war, blockade, public riot, lightning, fire, storm, flood or other act of nature, explosion, governmental action, governmental delay, restraint or inaction, unavailability of equipment, and any other cause, whether of the kind specifically enumerated above or otherwise, which is not reasonably within the control of the party claiming suspension.

The affected party shall use all reasonable diligence to remove the force majeure situation as quickly as practicable. The requirement that any force majeure shall be remedied with all reasonable dispatch shall not require the settlement of strikes, lockouts, or other labor difficulty by the party involved, contrary to its wishes; how all such difficulties shall be handled shall be entirely within the discretion of the party concerned.

**ARTICLE XII.  
NOTICES**

All notices authorized or required between the parties by any of the provisions of this agreement, unless otherwise specifically provided, shall be in writing and delivered in person or by United States mail, courier service, telegram, telex, telecopier or any other form of facsimile, postage or charges prepaid, and addressed to such parties at the addresses listed on Exhibit "A." All telephone or oral notices permitted by this agreement shall be confirmed immediately thereafter by written notice. The originating notice given under any provision hereof shall be deemed delivered only when received by the party to whom such notice is directed, and the time for such party to deliver any notice in response thereto shall run from the date the originating notice is received. "Receipt" for purposes of this agreement with respect to written notice delivered hereunder shall be actual delivery of the notice to the address of the party to be notified specified in accordance with this agreement, or to the telecopy, facsimile or telex machine of such party. The second or any responsive notice shall be deemed delivered when deposited in the United States mail or at the office of the courier or telegraph service, or upon transmittal by telex, telecopy or facsimile, or when personally delivered to the party to be notified, provided, that when response is required within 24 or 48 hours, such response shall be given orally or by telephone, telex, telecopy or other facsimile within such period. Each party shall have the right to change its address at any time, and from time to time, by giving written notice thereof to all other parties. If a party is not available to receive notice orally or by telephone when a party attempts to deliver a notice required to be delivered within 24 or 48 hours, the notice may be delivered in writing by any other method specified herein and shall be deemed delivered in the same manner provided above for any responsive notice.

**ARTICLE XIII.  
TERM OF AGREEMENT**

This agreement shall remain in full force and effect as to the Oil and Gas Leases and/or Oil and Gas Interests subject hereto for the period of time selected below; provided, however, no party hereto shall ever be construed as having any right, title or interest in or to any Lease or Oil and Gas Interest contributed by any other party beyond the term of this agreement.

~~Option No. 1: So long as any of the Oil and Gas Leases subject to this agreement remain or are continued in force as to any part of the Contract Area, whether by production, extension, renewal or otherwise.~~

~~Option No. 2: In the event the well described in Article VI.A., or any subsequent well drilled under any provision of this agreement, results in the Completion of a well as a well capable of production of Oil and/or Gas in paying quantities, (This agreement shall continue in force so long as any such well / is capable of production, and for an additional period of 180 days thereafter; provided, however, if, prior to the expiration of such additional period, one or more of the parties hereto are engaged in drilling, Reworking, Deepening, Sidetracking, Plugging Back, testing or attempting to Complete or Re-complete a well or wells hereunder, this agreement shall continue in force until such operations have been completed and if production results therefrom, this agreement shall continue in force as provided herein. In the event the well described in Article VI.A., or any subsequent well drilled hereunder, results in a dry hole, and no other well is capable of producing Oil and/or Gas from the Contract Area, this agreement shall terminate unless drilling, Deepening, Sidetracking, Completing, Re-completing, Plugging Back or Reworking operations are commenced within 180 days from the date of abandonment of said well. "Abandonment" for such purposes shall mean either (i) a decision by all parties not to conduct any further operations on the well or (ii) the elapse of 180 days from the conduct of any operations on the well, whichever first occurs.~~

The termination of this agreement shall not relieve any party hereto from any expense, liability or other obligation or any remedy therefor which has accrued or attached prior to the date of such termination.

Upon termination of this agreement and the satisfaction of all obligations hereunder, in the event a memorandum of this Operating Agreement has been filed of record, Operator is authorized to file of record in all necessary recording offices a notice of termination, and each party hereto agrees to execute such a notice of termination as to Operator's interest, upon request of Operator, if Operator has satisfied all its financial obligations.

**ARTICLE XIV.  
COMPLIANCE WITH LAWS AND REGULATIONS**

**A. Laws, Regulations and Orders:**

This agreement shall be subject to the applicable laws of the state in which the Contract Area is located, to the valid rules, regulations, and orders of any duly constituted regulatory body of said state; and to all other applicable federal, state, and local laws, ordinances, rules, regulations and orders.

**B. Governing Law:**

**This agreement and all matters pertaining hereto, including but not limited to matters of performance, non-performance, breach, remedies, procedures, rights, duties, and interpretation or construction, shall be governed and determined by the law of the state Ohio.**

**C. Regulatory Agencies:**

Nothing herein contained shall grant, or be construed to grant, Operator the right or authority to waive or release any rights, privileges, or obligations which Non-Operators may have under federal or state laws or under rules, regulations or

A.A.P.L. FORM 610 - MODEL FORM OPERATING AGREEMENT - 1989

1 orders promulgated under such laws in reference to oil, gas and mineral operations, including the location, operation, or  
2 production of wells, on tracts offsetting or adjacent to the Contract Area.

3 With respect to the operations hereunder, Non-Operators agree to release Operator from any and all losses, damages,  
4 injuries, claims and causes of action arising out of, incident to or resulting directly or indirectly from Operator's interpretation  
5 or application of rules, rulings, regulations or orders of the Department of Energy or Federal Energy Regulatory Commission  
6 or predecessor or successor agencies to the extent such interpretation or application was made in good faith and does not  
7 constitute gross negligence. Each Non-Operator further agrees to reimburse Operator for such Non-Operator's share of  
8 production or any refund, fine, levy or other governmental sanction that Operator may be required to pay as a result of such  
9 an incorrect interpretation or application, together with interest and penalties thereon owing by Operator as a result of such  
10 incorrect interpretation or application.

11 **ARTICLE XV.**  
12 **MISCELLANEOUS**

13 **A. Execution:**

14 This agreement shall be binding upon each Non-Operator when this agreement or a counterpart thereof has been  
15 executed by such Non-Operator and Operator notwithstanding that this agreement is not then or thereafter executed by all of  
16 the parties to which it is tendered or which are listed on Exhibit "A" as owning an interest in the Contract Area or which  
17 own, in fact, an interest in the Contract Area. Operator may, however, by written notice to all Non-Operators who have  
18 become bound by this agreement as aforesaid, given at any time prior to the actual spud date of the Initial Well but in no  
19 event later than five days prior to the date specified in Article VI.A. for commencement of the Initial Well, terminate this  
20 agreement if Operator in its sole discretion determines that there is insufficient participation to justify commencement of  
21 drilling operations. In the event of such a termination by Operator, all further obligations of the parties hereunder shall cease  
22 as of such termination. In the event any Non-Operator has advanced or prepaid any share of drilling or other costs  
23 hereunder, all sums so advanced shall be returned to such Non-Operator without interest. In the event Operator proceeds  
24 with drilling operations for the Initial Well without the execution hereof by all persons listed on Exhibit "A" as having a  
25 current working interest in such well, Operator shall indemnify Non-Operators with respect to all costs incurred for the  
26 Initial Well which would have been charged to such person under this agreement if such person had executed the same and  
27 Operator shall receive all revenues which would have been received by such person under this agreement if such person had  
28 executed the same.

29 **B. Successors and Assigns:**

30 This agreement shall be binding upon and shall inure to the benefit of the parties hereto and their respective heirs,  
31 devisees, legal representatives, successors and assigns, and the terms hereof shall be deemed to run with the Leases or  
32 Interests included within the Contract Area.

33 **C. Counterparts:**

34 This instrument may be executed in any number of counterparts, each of which shall be considered an original for all  
35 purposes.

36 **D. Severability:**

37 For the purposes of assuming or rejecting this agreement as an executory contract pursuant to federal bankruptcy laws,  
this agreement shall not be severable, but rather must be assumed or rejected in its entirety, and the failure of any party to  
this agreement to comply with all of its financial obligations provided herein shall be a material default.

**ARTICLE XVI.**  
**OTHER PROVISIONS**

**A. SEQUENCE OF OPERATIONS - VERTICAL**

**1. When any well authorized under the terms of this Agreement, either by all parties, or by one or more but less than all parties, has been drilled to its objective depth and the parties participating therein cannot mutually agree upon the sequence and timing of further operations regarding such well, the following proposals shall control in the order hereafter enumerated:**

**a. A proposal to do additional logging, coring or testing, provided that, in the event a disagreement exists as to the testing to be performed on the well at any depth, testing shall be performed as follows:**

**i) Any logging, coring or testing provided in a prognosis or AFE shall be conducted for the joint account;**

**ii) Any additional logging, coring or testing shall be performed by the operator at the sole cost, risk, expense and liability, including indemnification against loss of hole, of the parties electing to participate in such additional operations, and such participating parties shall be exclusively entitled to the information obtained therefrom; provided, however, no such additional testing shall be performed on a well then producing in paying quantities unless all working interest owners in such well consent to such testing.**

**b. A proposal to attempt to complete the well at its objective depth;**

**c. A proposal to plug back and attempt to complete said well in prospective zones at lesser depths, with priorities given in ascending order;**

**d. A proposal to deepen the well to deeper formations than theretofore approved with priorities given in descending order;**

**e. A proposal to sidetrack the well to a new bottom hole location;**

**f. A proposal to plug and abandon the well.**

**2. In the event a well drilled pursuant hereto is in such a condition that, at the time the participating parties are considering any of the above proposals that, in the opinion of the Operator, a reasonable, prudent operator would not conduct the operations contemplated by a particular proposal for fear of placing the hole, life or property in jeopardy of losing same prior to completing such well at its objective depth, such election shall not be given the priority set forth above.**

**B. SEQUENCE OF OPERATIONS - HORIZONTAL**

**1. When any well authorized under the terms of this Agreement, either by all parties, or by one or more but less than all parties, has been drilled to its objective depth and the parties participating therein cannot mutually agree upon the sequence and timing of further operations regarding such well, the following proposals shall control in the order hereafter enumerated:**

**a. Attempt completion of drilling operations on all proposed laterals;**

**b. Deepen any lateral;**

**c. Attempt a Completion in a lateral, including testing and logging;**

**d. Kick out and drill additional lateral(s) in the same formation;**

**e. Sidetrack well to a different formation;**

- 1 f. Plug back and attempt Completion in ascending order from deepest to shallowest depths;
- 2 g. Deepen a well from the vertical section of the wellbore below the authorized depth in descending order from shallowest to deepest depths;
- 3 h. Abandon the well pursuant to Article VI.E.

In the event a well drilled pursuant hereto is in such a condition that, at the time the participating parties are considering any of the above proposals that, in the opinion of the Operator, a reasonable, prudent operator would not conduct the operations contemplated by a particular proposal for fear of placing the hole, life or property in jeopardy of losing same prior to completing such well at its objective depth, such election shall not be given the priority set forth above.

5 C. TRANSFER OF INTERESTS

A party may sell, transfer, or assign all or any undivided part of its interest in the leases and all wells and equipment covered hereby provided that:

- 6 1. Any such sale, transfer, or assignment shall be made only to a financially responsible party or parties;
- 7 2. Such party shall provide the Operator a copy of the fully executed assignment within thirty (30) days after all signatures on the assignment have been obtained;
- 8 3. Such party shall incorporate in such instrument, evidencing the sale, transfer, assignment, or other disposition, a provision making the same expressly subject to this Agreement and shall obtain (and furnish to the other parties) such transferee's written consent to be bound by all the provisions of this Agreement.

10 D. SUBDIVISION OF INTERESTS

If at any time the interest of any party is divided among and owned by three or more co-owners, Operator reserves the right to require that such co-owners appoint a single trustee or agent with full authority to receive notices, approve expenditures, receive billings for and approve and pay such party's share of the joint expenses, and to deal generally with, and with power to bind, the co-owners of such party's interests within the scope of the operations embraced in this Agreement; however, all such co-owners shall have the right to enter into and execute all contracts of agreements for the disposition of their respective shares of the oil and gas produced from the Contract Area and they shall have the right to receive, separately, payment of the sale proceeds thereof. Until the trustee or agent is appointed, the party who assigned to one or more co-owners shall be considered for all purposes hereof as such trustee or agent with all rights and responsibilities thereof. The trustee or agent appointed or deemed to be appointed hereunder shall be liable to Operator for all costs, expenses and liabilities incurred pursuant to this Agreement attributable to the interests for which the trustee or agent is appointed or deemed to be appointed. Operator shall not be required to account separately for the separate interests represented by the trustee or agent.

15 E. SUBSEQUENTLY CREATED INTERESTS

Notwithstanding any provisions of this Agreement to the contrary, if any Party hereto shall create an overriding royalty, production payment, net proceeds interest, or other similar interest, in excess of a eighty percent (80%) net revenue interest, proportionately reduced, subsequent to the effective date of this Agreement, or if such an interest was created prior to the effective date hereof but was neither recorded in the county in which the Contract Area is located (any such interest created under the circumstances herein mentioned shall hereafter be referred to as a "Subsequently Created Interest"), such Subsequently Created Interest shall be specifically subject to all of the terms and provisions of this Agreement, as follows:

- 19 (1) If non-consent operations are conducted pursuant to any provision of this Agreement, and the Party or Parties conducting such operations become entitled to receive the production attributable to the interest out of which the Subsequently Created Interest is derived, such Party or Parties shall receive same free and clear of such Subsequently Created Interest. The Party creating same shall bear and pay all such Subsequently Created Interests and shall indemnify and hold the other Parties hereto free and harmless from any and all liability resulting there from.
- 21 (2) If the owner of the interest from which a Subsequently Created Interest is derived fails to pay, when due, its share of expenses chargeable hereunder, any lien granted the other Parties hereto under any provisions hereof, including, but not limited to, Articles VII.B, XVI.K, and Exhibit "H", or under the appropriate state statutes shall cover and affect Subsequently Created Interest and the rights of the Parties shall be the same as if the Subsequently Created Interest had not been created. The owner of the interest from which such Subsequently Created Interest was derived shall be responsible to the owner of such Subsequently Created Interest for any amounts to which the latter may be entitled.
- 24 (3) If the owner of the interest from which a Subsequently Created Interest is derived (i) elects to abandon a well under the provision of Article VI.E. hereof, (ii) elects to surrender a lease (or portion thereof) under the provisions of Article VIII.A. hereof, or (iii) elects not to pay rentals attributable to its interest in any lease and thereby is required to assign the lease or that portion or interest therein for which it elects not to pay rentals to those Parties paying such rental, any assignment resulting from such election shall be free and clear of the Subsequently Created Interest.
- 27 (4) The party creating such Subsequently Created Interest shall indemnify and hold the other Parties hereto harmless from any claim or cause of action by the owner of the Subsequently Created Interest based on, or related to, the obligations created by such Subsequently Created Interest.

28 F. COSTS INCURRED BY OPERATOR: OUTSIDE LEGAL FEES, THIRD PARTY SERVICES, GOVERNMENTAL FILINGS

Notwithstanding anything to the contrary contained in this Operating Agreement of Exhibit "C" Accounting Procedure, all costs incurred by Operator in procuring curative matters to the benefit of any jointly owned leases, pooling amendments, preparation and recording of pooling designations or declarations and conducting hearings before governmental agencies or regulatory bodies, including fees and expenses of outside attorneys and/or professional consultants or landmen shall not be considered as administrative overhead, and Operator shall be entitled to make a direct charge against the Joint Account for same. Operator shall not charge, however, fees for legal or consulting services to those Parties hereto who have elected to represent themselves before any State and Federal agencies.

32 G. COMPLIANCE WITH LAWS AND ACCURACY OF RECORDS

- 33 (1) Operator agrees to comply with all laws and lawful regulations applicable to any activities carried out in the name of or on behalf of any one or more of the parties to this agreement under the provisions of this agreement and/or any amendments to it.
- 34 (2) Operator agrees that all financial statements, billings, and reports rendered to any one or more of the parties to this agreement, as provided for in this agreement and/or any amendments to it, will, to the best of its knowledge and belief, reflect properly the facts about all activities and transactions handled for the account of such party or parties, which data may be relied upon as being complete and accurate in any further recording and reporting made by such party or parties for whatever purpose.
- 36 (3) Operator agrees to notify the other parties to this agreement promptly upon discovery of any instance where the Operator fails to comply with the provision(1) above or where Operator has reason to believe data covered by (2) above is no longer accurate and complete.

1 **H. COMMENCEMENT OF OPERATIONS**

2 For the purpose of Articles VI.B.1. and VI.B.2., Operator may commence activities preliminary to actual drilling operations, including  
3 without limitation building location, roads and pits, delivering materials and equipment to the well site, rigging up a drilling rig, and/or  
4 actual drilling operations at any time either before or after giving the notice of proposed operations required by said Articles.  
5 Notwithstanding the foregoing, the parties receiving notice of proposed operations pursuant to Articles VI.B.1 and VI.B.2 shall have the full  
6 time allowed in which to make their election(s) and shall be subject to the non-consent provisions thereof to the same extent and in the same  
7 manner as provided in said Article VI.B. without reference to the time that such activities were commenced relative to giving notice.  
8 Nothing in this provision shall serve to extend the time within which Operator is required to commence operations pursuant to Article  
9 VI.B.1 and VI.B.2.

6 **I. DEFINITION OF THE TERM "PLUG AND ABANDON THE WELL"**

7 It is understood and agreed that, as used herein, the phrases "plug and abandon the well and plugging and abandoning the well" shall be  
8 deemed to include all costs associated with plugging and abandonment of a well and restoration of the surface, including, but not limited  
9 to, any costs of remediating contamination, to the extent that remediation and/or restoration is required by applicable laws or regulations  
10 or by prevailing oil field practices.

9 **J. CASING POINT ELECTION**

10  **Option No. 2:** All necessary expenditures for the drilling or deepening and testing of the a vertical well. When such well has reached its  
11 authorized depth, and all tests have been completed, and the results thereof furnished to the parties, Operator shall give immediate notice  
12 to the Non-Operators who have the right to participate in the completion costs. The parties receiving such notice shall have forty-eight  
13 (48) hours (exclusive of Saturday, Sunday and legal holidays) in which to elect to participate in the setting of casing and the completion at-  
14 tempt. Such election, when made, shall include consent to all necessary expenditures for the completing and equipping of such well, in-  
15 cluding necessary tankage and/or surface facilities. Failure of any party receiving such notice to reply within the period above fixed shall  
16 constitute an election by that party not to participate in the cost of the completion attempt. If one or more, but less than all of the parties,  
17 elect to set pipe and to attempt a completion, the provisions of Article VI.B.2. hereof (the phrase "reworking, deepening or plugging  
18 back" as contained in Article VI.B.2. shall be deemed to include "completing") shall apply to the operations thereafter conducted by less  
19 than all parties.

15 **K. DISPOSAL OF SURPLUS MATERIAL**

16 Operator may dispose of any items of surplus or obsolete materials or equipment, if the current price of new materials or equipment  
17 similar thereto is less than fifty thousand dollars (\$50,000).

17 **L. NOTICE OF LIEN AND MORTGAGE - FINANCING STATEMENT**

18 Each party to this agreement ratifies and agrees to execute a "Notice of Lien and Mortgage --Financing Statement" in the form attached  
19 hereto as Exhibit "H" simultaneously with their execution of this agreement. Each party further authorizes the Operator to file such  
20 instrument in the appropriate records of the county or counties where the contract lands are located and in the Uniform Commercial Code  
21 records of the appropriate Secretary of State's office and/or such other records as may be required under applicable state law to fully  
22 perfect the security interests created herein.

20 **M. CONFLICT BETWEEN AFE AND COPAS**

21 If any costs listed in approved AFE conflict with the provisions of Exhibit "C", the provisions of Exhibit "C" shall prevail unless such  
22 AFE, when submitted for approval, clearly and fully disclosed that such costs were an exception to, or in conflict with, Exhibit "C".

22 **N. ACCESS TO CONTRACT AREA AND INFORMATION**

23 No Non-Consent Party under Article VI.B. or Article VI.C.1, shall have access to the well site with respect to the applicable operation, and  
24 such Non-Consenting Party shall not be entitled to receive, and shall not be given or provided with any information relating to that  
25 operation, including any notices, applications, reports or similar information under Article V.D.5, until the Consenting Parties have  
26 recouped the non-consenting penalty provided for in Article VI.B with respect to that operation.

25 **O. CONFLICTS**

26 This Operating Agreement is subject to all the terms and provisions of that certain Plan for Unit Operation of the Miller Unit A dated May  
27 18, 2015, to which a copy of this Operating Agreement is attached (hereinafter the "Unit Plan"). In the event of a conflict between the  
28 provisions of this Operating Agreement, including this Article XVI, and the Unit Plan, the provisions of this Operating Agreement,  
29 including this Article XVI, shall prevail and control. This Operating Agreement is intended to cover the parties' respective interests in the  
30 Unitized Formation.

28 **P. BURDENS**

29 Operator will pay all royalties and overriding royalties which burden production from the Contract Area (other than any royalties or  
30 overriding royalties which constitute Subsequently Created Interests under the terms of Article XVI.D), it being understood and agreed  
31 that, for so long as Operator is making such payment, the proportionate interest of each Non-Operator in such production shall be reduced  
32 by the amount of such burdens. Non-Operator agrees to: 1) Promptly provide Operator any information and documentation reasonably  
33 requested by Operator that may facilitate such payment; and 2) Protect, indemnify, defend and hold harmless Operator from any claims  
34 liabilities or causes of action related to such payment. It is understood and agreed that Operator may elect to have Non-Operators pay  
35 their share of any royalties and overriding royalties upon one-hundred twenty (120) days written notification, provided that, within sixty  
36 (60) days of providing such notification, Operator shall provide Non-Operators with copies of all information and documentation in  
37 Operator's possession (without making any representation as to the completeness or accuracy of such information and documentation)  
38 which is necessary or useful in making such payment, and shall cooperate with any reasonable requests made by Non-Operators for  
39 assistance in setting up such payments.

34 **Q. CONTRACT DISCREPANCIES**

35 This Article XVI is intended to modify and supplement the other provisions of this Agreement. In the event of any discrepancies between  
36 the terms of this Article XVI and the remainder of this Agreement, the terms of Article XVI shall control.

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**R. HEADINGS**

The descriptive headings used in this Agreement are for convenience only and will not be deemed to affect the meaning of any provision in this Agreement

A.A.P.L. FORM 610 - MODEL FORM OPERATING AGREEMENT - 1989

1 IN WITNESS WHEREOF, this agreement shall be effective as of the \_\_\_\_\_ day of \_\_\_\_\_,  
2 \_\_\_\_\_.

3 \_\_\_\_\_, who has prepared and circulated this form for execution, represents and warrants  
4 that the form was printed from and, with the exception(s) listed below, is identical to the AAPL Form 610-1989 Model Form  
5 Operating Agreement, as published in computerized form by Forms On A Disk, Inc. No changes, alterations, or  
6 modifications, other than those made by strikethrough and/or insertion and that are clearly recognizable as changes in  
Articles \_\_\_\_\_, have been made to the form.

7 **ATTEST OR WITNESS:**

**OPERATOR**

8 **XTO ENERGY INC.**

9 \_\_\_\_\_ By \_\_\_\_\_

10 \_\_\_\_\_ Edwin S Ryan, Jr.

11 \_\_\_\_\_ Title: Senior Vice President – Land

12 \_\_\_\_\_ Date \_\_\_\_\_

13 \_\_\_\_\_ Tax ID or S.S. No. \_\_\_\_\_

14 **NON-OPERATORS**

15 \_\_\_\_\_ By \_\_\_\_\_

16 \_\_\_\_\_

17 \_\_\_\_\_ Title:

18 \_\_\_\_\_ Date \_\_\_\_\_

19 \_\_\_\_\_ Tax ID or S.S. No. \_\_\_\_\_

20 \_\_\_\_\_

21 \_\_\_\_\_ By \_\_\_\_\_

22 \_\_\_\_\_

23 \_\_\_\_\_

24 \_\_\_\_\_ Title:

25 \_\_\_\_\_ Date \_\_\_\_\_

26 \_\_\_\_\_ Tax ID or S.S. No. \_\_\_\_\_

27 \_\_\_\_\_

28 \_\_\_\_\_

29 \_\_\_\_\_ By \_\_\_\_\_

30 \_\_\_\_\_

31 \_\_\_\_\_ Type or print name

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33 \_\_\_\_\_ Title \_\_\_\_\_

34 \_\_\_\_\_ Date \_\_\_\_\_

35 \_\_\_\_\_ Tax ID or S.S. No. \_\_\_\_\_

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**ACKNOWLEDGMENTS**

Note: The following forms of acknowledgment are the short forms approved by the Uniform Law on Notarial Acts.

The validity and effect of these forms in any state will depend upon the statutes of that state.

Acknowledgment in representative capacity:

**OPERATOR**

State of \_\_\_\_\_ )

) ss.

County of \_\_\_\_\_ )

This instrument was acknowledged before me on

\_\_\_\_\_ by Edwin S. Ryan, Jr. as

Senior Vice-President Land of XTO Energy Inc., a Delaware corporation, on behalf of such corporation .

(Seal, if any) \_\_\_\_\_

Title (and Rank) \_\_\_\_\_

My commission expires: \_\_\_\_\_

**NON-OPERATORS**

State of \_\_\_\_\_ )

) ss.

County of \_\_\_\_\_ )

This instrument was acknowledged before me on

\_\_\_\_\_ by \_\_\_\_\_ as

\_\_\_\_\_ of \_\_\_\_\_ .

(Seal, if any) \_\_\_\_\_

Title (and Rank) \_\_\_\_\_

My commission expires: \_\_\_\_\_

State of \_\_\_\_\_ )

) ss.

County of \_\_\_\_\_ )

This instrument was acknowledged before me on

\_\_\_\_\_ by \_\_\_\_\_ as

\_\_\_\_\_ of \_\_\_\_\_ .

(Seal, if any) \_\_\_\_\_

Title (and Rank) \_\_\_\_\_

My commission expires: \_\_\_\_\_

**EXHIBIT "A"**

Attached to and made part of that certain Operating Agreement dated May 18, 2015, naming XTO Energy Inc. as "Operator" and covering the Miller Unit A in Pultney Township, Belmont County, Ohio

**1. Description of lands subject to this Agreement:**

496.3455 acres of land, more or less, being the same lands described herein on Exhibit "A" and as depicted on Exhibit "A-1".

**2. Restrictions, if any, as to depths, formations, or substances:**

The stratigraphic equivalent of the top of the Utica formation which occurs at a measured depth of 6,141 feet as found in the Batelle Memorial Institute – Ohio Geological Survey CO2 1 well (API#34157-25334-0000), located in Tuscarawas County, Ohio, to the top of the Curdsville Member of the Lexington formation which occurs at a measured depth of 6,398 feet found in the Batelle Memorial Institute – Ohio Geological Survey CO2 1 well (API#34157-25344-0000), located in Tuscarawas County, Ohio.

**3. Parties to Agreement with addresses and telephone numbers for notice purposes:**

XTO Energy Inc.  
810 Houston Street  
Fort Worth, TX 76102  
ATTENTION:  
Win Ryan                      Email: [Win\\_ryan@xtoenergy.com](mailto:Win_ryan@xtoenergy.com)  
(817) 870 - 2800  
(817) 870 – 1671 fax

**\*Phillips Exploration, LLC**  
Use same information as provided above for XTO Energy Inc.

**\*American Energy – Utica, LLC**  
301 N.W. 63<sup>rd</sup> Street, Suite 600  
Oklahoma City, OK 73116  
ATTENTION:  
Bob Kelly                      Email: [Bob.kelly@aep-lp.com](mailto:Bob.kelly@aep-lp.com)  
Thomas Blalock              Email: [Tom.blalock@aep-lp.com](mailto:Tom.blalock@aep-lp.com)  
Serena Evans                 Email: [Serena.evans@aep-lp.com](mailto:Serena.evans@aep-lp.com)  
TELEPHONE: (405) 418 – 8000  
FAX: (405) 418 – 8040

**Rice Drilling D LLC**  
400 Woodcliff  
Canonsburg, PA 15317  
ATTENTION:  
Aileen A. Rice, Sr. Land Manager - Appalachia  
Email: [aileen.rice@riceenergy.com](mailto:aileen.rice@riceenergy.com)  
(724)746-6720

\*Party not subject to the terms of this Operating Agreement

**4. Percentages of fractional interests of parties to this Agreement:**

<b><u>Operator</u></b>	<b><u>Working Interest %</u></b>
XTO Energy Inc.	44.927120%**
<b><u>Non-Operator</u></b>	
*Phillips Exploration, LLC	17.010006%**
*American Energy – Utica, LLC	28.718979%**
Rice Drilling D LLC	5.653320%**

\*Curtis Randall Wallner, et al - Unleased  
Unitized Party

3.690574%\*\*

**TOTAL**

**100.000000%**

\*Party not subject to this Operating Agreement.

\*\*It is understood by the Parties that the working interest listed above are estimates and are subject to change based upon the verification of title, additional leasehold acquired within the Contract Area, and/or participation or non-participation of unleased mineral interest and/or third parties. The Parties' interests shall be adjusted to reflect the actual interest owned by the Parties in the Contract Area.

**5. Oil and Gas Leases Subject to Agreement:**

1. Oil and Gas Lease dated July 22, 2013, between Ivan A. Miller and Mary H. Miller, husband and wife, Lessor, and Paloma Partners III, LLC, as Lessee, a Memorandum of which is recorded at Instrument Number 201300013514, Book 420, Page 648, Records of Belmont County, Ohio. (Tracts 1, 2, and 3 as depicted on Exhibit "A-1".)
2. Oil and Gas Lease dated April 9, 2006, between Penelton P. Clark and Katherine J. Clark, husband and wife, Lessor, and Reserve Energy Exploration Company, as Lessee, a copy of which is recorded at Instrument Number 200600005842, Book 65, Page 406, Records of Belmont County, Ohio. (Tract 4 as depicted on Exhibit "A-1".)
3. Oil and Gas Lease dated November 8, 2011, between Margaret Jane Hoskinson, a single woman, as Lessor, and Phillips Exploration, Inc., as Lessee, a Memorandum of which is recorded at Instrument Number 201200003955, Book 319, Page 67, Records of Belmont County, Ohio. (Tract 5 as depicted on Exhibit "A-1".)
4. Oil and Gas Lease dated November 9, 2011, between Rodney Ray Hoskinson, and Delia May Hoskinson, husband and wife, as Lessor, and Phillips Exploration, Inc., as Lessee, a Memorandum of which is recorded at Instrument Number 201200003952, Book 319, Page 61, Records of Belmont County, Ohio. (Tract 5 as depicted on Exhibit "A-1".)
5. Oil and Gas Lease dated November 9, 2011, between Rodney Ray Hoskinson, and Delia May Hoskinson, husband and wife, as Lessor, and Phillips Exploration, Inc., as Lessee, a Memorandum of which is recorded at Instrument Number 201200003389, Book 316, Page 421, Records of Belmont County, Ohio. (Tract 6 as depicted on Exhibit "A-1".)
6. Oil and Gas Lease dated September 24, 2013, between Mark A. Dunfee and Jody L. Dunfee, husband and wife, Lessor, and Great River Energy, LLC, as Lessee, a Memorandum of which is recorded at Instrument Number 201400001628, Book 450, Page 517, Records of Belmont County, Ohio. (Tract 7 as depicted on Exhibit "A-1".)
7. Oil and Gas Lease dated May 15, 2004, between Doris A. Woda, Trustee, as Lessor, and XTO Energy Inc., as Lessee, a copy of which is recorded at Instrument Number 201400008743, Book 483, Page 518, Records of Belmont County, Ohio. (Tract 8 as depicted on Exhibit "A-1".)
8. Oil and Gas Lease dated November 4, 2011, between Tabitha L. Shipe, a single woman, as Lessor, and Phillips Exploration, Inc., as Lessee, a Memorandum of which is recorded at Instrument Number 201200003964, Book 319, Page 85, Records of Belmont County, Ohio. (Tracts 9, 10, 11, and 16 as depicted on Exhibit "A-1".)
9. Oil and Gas Lease dated April 13, 2007, between Jay S. Van Dyne and Michele J. Van Dyne, his wife, as Lessor, and Mason Dixon Energy, Inc., as Lessee, a copy of which is recorded at Instrument Number 200700005096, Book 112, Page 769, Records of Belmont County, Ohio. (Tracts 12, 13, and 14 as depicted on Exhibit "A-1".)
10. Oil and Gas Lease dated April 24, 2006, between Harold D. Bell Jr. and Cathy L. Bell, husband and wife, as Lessor, and Reserve Energy Exploration Company, as Lessee, a copy of which is recorded at Instrument Number 200600005839, Book 65,

Page 396, Records of Belmont County, Ohio. (Tract 15 as depicted on Exhibit “A-1”.)

11. Oil and Gas Lease dated September 15, 2011, between Jay Van Dyne and Michele J. Van Dyne, his wife, as Lessor, and XTO Energy Inc., as Lessee, a Memorandum of which is recorded at Instrument Number 201100007938, Book 288, Page 554, Records of Belmont County, Ohio. (Tract 17 as depicted on Exhibit “A-1”.)
12. Oil and Gas Lease dated April 9, 2006, between Robert E. Violet and Loretta L. Violet, husband and wife, as Lessor, and Reserve Energy Exploration Company, as Lessee, a copy of which is recorded at Instrument Number 200600005961, Book 65, Page 833, Records of Belmont County, Ohio. (Tract 18 as depicted on Exhibit “A-1”.)
13. Oil and Gas Lease dated September 12, 2013, between Roger A. Barack and Lana J. Barack, his wife, as Lessor, and Paloma Partners III, LLC, as Lessee, a Memorandum of which is recorded at Instrument Number 201300014349, Book 424, Page 53, Records of Belmont County, Ohio. (Tract 19 as depicted on Exhibit “A-1”.)
14. Oil and Gas Lease dated September 28, 2011, between Mary Jane Pauley, a single woman, as Lessor, and XTO Energy Inc., as Lessee, a Memorandum of which is recorded at Instrument Number 201200000485, Book 304, Page 434, Records of Belmont County, Ohio. (Tract 20 as depicted on Exhibit “A-1”.)
15. Oil and Gas Lease dated September 16, 2011, between Elsie H. Fox, single, as Lessor, and XTO Energy Inc., as Lessee, a Memorandum of which is recorded at Instrument Number 201100007972, Book 288, Page 622, Records of Belmont County, Ohio. (Tract 21 as depicted on Exhibit “A-1”.)
16. Oil and Gas Lease dated September 28, 2011, between Patricia Harrison, a single woman, as Lessor, and XTO Energy Inc., as Lessee, a Memorandum of which is recorded at Instrument Number 201100009668, Book 295, Page 122, Records of Belmont County, Ohio. (Tracts 22 and 23 as depicted on Exhibit “A-1”.)
17. Oil and Gas Lease dated December 21, 2011, between Emil Nordone and Healy Nardone, husband and wife, as Lessor, and XTO Energy Inc., as Lessee, a Memorandum of which is recorded at Instrument Number 201200002733, Book 313, Page 771, Records of Belmont County, Ohio. (Tract 24 as depicted on Exhibit “A-1”.)
18. Oil and Gas Lease dated June 7, 2006, between David A. Johnson and Martha Johnson, husband and wife, as Lessor, and Reserve Energy Exploration Company, as Lessee, a copy of which is recorded at Instrument Number 200600005954, Book 65, Page 812, Records of Belmont County, Ohio. (Tract 26 as depicted on Exhibit “A-1”.)
19. Oil and Gas Lease dated June 7, 2006, between Leonard P. Johnson, divorced not remarried and Gregory A. Johnson, divorced and not remarried, as Lessor, and Reserve Energy Exploration Company, as Lessee, a copy of which is recorded at Instrument Number 200600005953, Book 65, Page 809, Records of Belmont County, Ohio. (Tract 26 as depicted on Exhibit “A-1”.)
20. Oil and Gas Lease dated June 7, 2006, between Michael W. Johnson and Carol Bessey, husband and wife, as Lessor, and Reserve Energy Exploration Company, as Lessee, a copy of which is recorded at Instrument Number 200600005955, Book 65, Page 815, Records of Belmont County, Ohio. (Tract 26 as depicted on Exhibit “A-1”.)
21. Oil and Gas Lease dated May 10, 2006, between Robert D. Workman and Ladonna S. Workman, husband and wife, as Lessor, and Reserve Energy Exploration Company, as Lessee, a Memorandum of which is recorded at Instrument Number 200600005964, Book 65, Page 842, Records of Belmont County, Ohio. (Tract 27 as depicted on Exhibit “A-1”.)

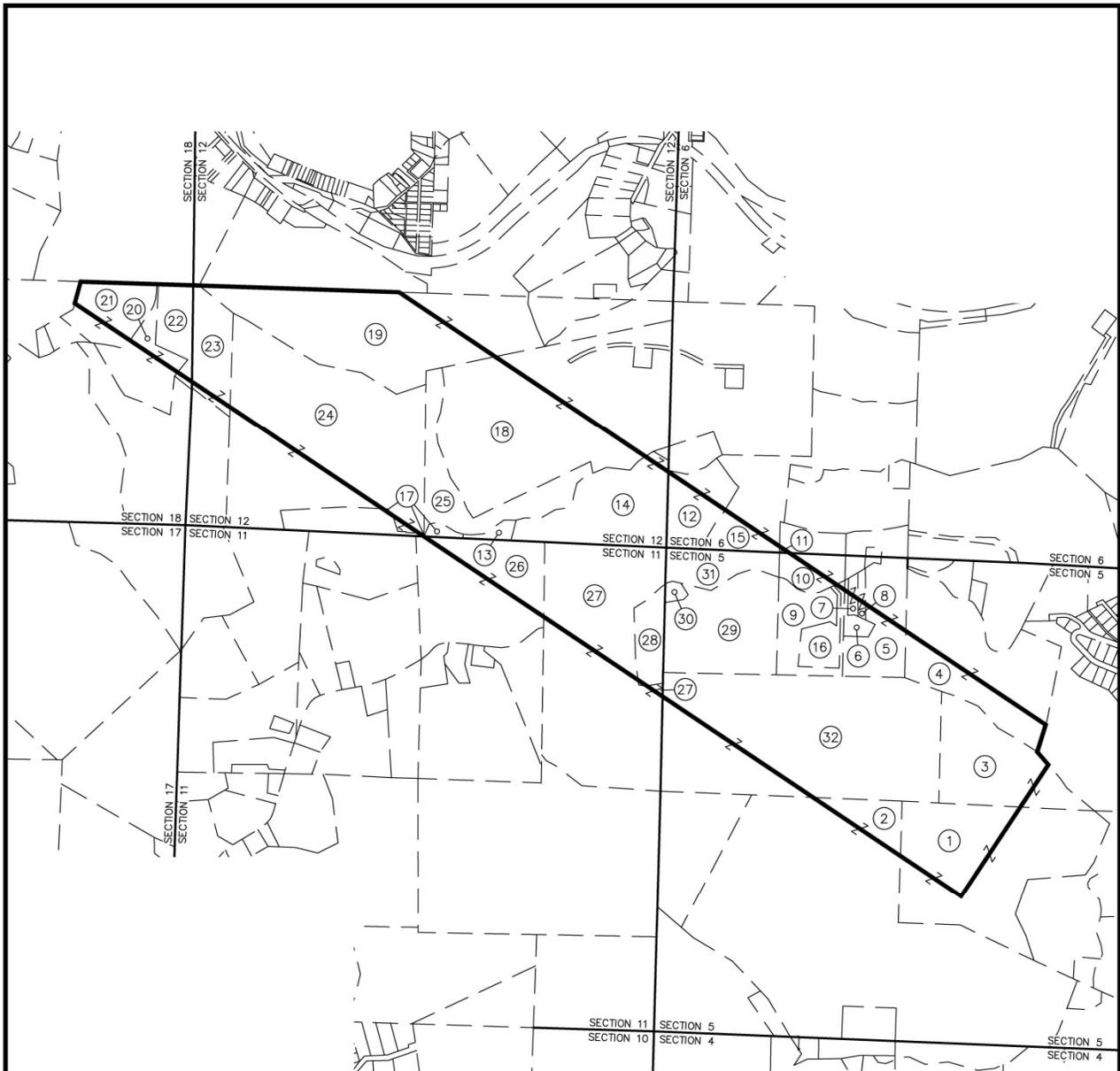
22. Oil and Gas Lease dated September 28, 2011, between James E. Riggs and Bobbie M. Riggs, husband and wife, as Lessor, and XTO Energy Inc., as Lessee, a Memorandum of which is recorded at Instrument Number 201100009229, Book 293, Page 796, Records of Belmont County, Ohio. (Tract 28 as depicted on Exhibit “A-1”.)
23. Oil and Gas Lease dated January 20, 2014, between James Richmond and Donna Richmond, husband and wife, as Lessor, and Varro Energy, LLC, as Lessee, a Memorandum of which is recorded at Instrument Number 201400001206, Book 449, Page 109, Records of Belmont County, Ohio. (Tract 29 and 30 as depicted on Exhibit “A-1”.)
24. Oil and Gas Lease dated March 18, 2015, between Robert Dale Workman and Ladonna Sue Workman, husband and wife, as Lessor, and XTO Energy Inc, as Lessee, a copy of which is recorded at Instrument Number 201500003308, Book 539, Page 1075, Records of Belmont County, Ohio. (Tract 31 as depicted on Exhibit “A-1”.)
25. Oil and Gas Lease dated November 24, 2014 between Ross W. Johnson Jr. and Glenda M. Johnson, husband and wife, as Lessor, and XTO Energy Inc., as Lessee, a Memorandum of which is recorded at Instrument Number 201400017877, Book 523, Page 778, Records of Belmont County, Ohio. (Tract 32 as depicted on Exhibit “A-1”.)

**Together with all amendments, ratifications, corrections, and/or modifications of the Oil and Gas Leases described herein, and INSO FAR as said Oil and Gas Leases cover those depths and formations identified in Section 2 above.**

**6. Surface and Production Burdens:**

- a) Surface – each party hereto shall bear and pay its proportionate share (as set forth above) of any and all overriding royalties and specific payments for additional wells burdening pad sites used to drill wells in and under the Contract Area covered by this Operating Agreement, insofar and only insofar as such overriding royalties and payments are attributable to wells drilled in and under the Contract Area.
- b) Production – all royalties affecting the Oil and Gas Leases in paragraph five (5) above and any overriding royalty interest(s) of record.

**END OF EXHIBIT “A”**

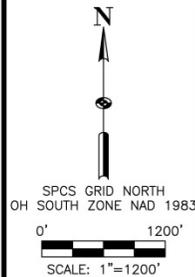
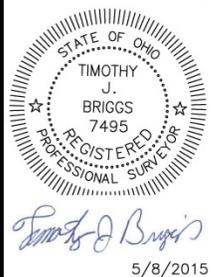


Tract #	Parcel #	Surface Owner (Denotes Royalty Owner)	Unit Acreage
1	26-01800.000	Ivan A. Miller, et ux	19.7132
2	26-01801.000		6.7369
3	26-01802.000		23.00
4	26-03167.000	Carol L. Evans, et vir (Carol L. Evans, et vir) (Penelton P. Clark, III, et al)	12.99
5	26-01651.000	Margaret Jane Hoskinson, et al	8.70
6	26-00596.000	Rodney Ray Hoskinson, et ux	1.71
7	26-01461.000	Mark A. Dunfee, et ux	0.54
8	26-01461.001	Doris A. Woda, Trustee	0.3515
9	26-01700.001	Tabitha L. White	10.9659
10	26-01700.000		3.43
11	26-01702.000		0.10
16	26-01700.002		5.00
12	26-01863.000	Jay S. Van Dyne, et ux	7.81
13	26-01354.000		1.51
14	26-03079.000		24.66
17	26-01906.000		1.1247

Tract #	Parcel #	Property Owner (Denotes Mineral Owner)	Unit Acreage
15	26-01862.000	Harold D. Bell Jr., et ux (Bounty Minerals)	5.0
18	26-01870.000	Robert E. Violet, et ux	50.3300
19	26-01942.000	Roger A. Barack, et ux	44.1540
20	26-01141.001	Mary Jane Pauley	3.2486
21	26-01141.004	Elsie H. Fox	8.5568
22	26-01141.003	Patricia A. Harrison, Trustee of the Harrison Keystone Trust Agreement	7.0309
23	26-01783.000		10.9129
24	26-01542.000	The Nardone Family Trust	59.9043
25	26-01755.000	Curtis Randall Wallner, et al	18.318*
26	26-03156.000	David A. Johnson, et al	12.3515
27	26-01901.000	Robert D. Workman, et ux	30.1366
28	26-01092.000	James E. Riggs, et ux	6.8523
29	26-01707.001	James Richmond, et ux	27.05
30	26-01707.000		1.01
31	26-01900.000	Robert Dale Workman, et ux	10.530
32	26-01661.000	Ross W. Johnson, Jr., et ux	72.6174

Unit Acreage Total 496.3455

Note: This map is for lessor identification purposes only and does not represent an actual boundary survey. The information shown should not be relied upon for any other purposes. Lessors and property lines are shown as per tax assessment records, deeds and recorded survey maps. The acreage numbers shown are based on lease documents or area calculations performed without the benefit of actual boundary survey.



**XTO ENERGY, INC.**  
502 KEYSTONE DRIVE  
WARRENDALE, PA 15086

**MILLER UNIT A**

TOWNSHIP 4 NORTH, RANGE 3 WEST  
SECTIONS 5, 6, 11, 12, 18  
OLD SEVEN RANGES  
BUSINESSBURG QUAD  
PULTNEY TWP, BELMONT CO, OHIO

**EXHIBIT A-1**

Attached to and made part of that certain Operating Agreement dated May 18, 2015 covering the Miller Unit A in Pultney Township Belmont County, Ohio

**EXHIBIT A-2  
Unit Tracts**

Attached to that certain Operating Agreement dated May 18, 2015 covering the Miller Unit A, Pultney Township, Belmont County, Ohio

Tract #	Tax Map Number	Mineral Owner	Leased (Y/N)	Parcel Surface Acres in Unit	Mineral Owner Interest	Mineral Owner Surface Acres	Tract Participation	Unit Working Interest	XTO Working Interest	XTO Unit Participation	Phillips Exploration Working Interest	Phillips Exploration Unit Participation	AEU Working Interest	AEU Unit Participation	Rice Working Interest	Rice Unit Participation	Mineral Owner Address	City	State	Zip Code
1	26-01800.000	Ivan A. Miller and Mary H. Miller	Yes	19.7132	1.0000	19.7132	0.039717	3.971669%	100.000000%	3.971669%	0.000000%	0.000000%	0.000000%	0.000000%	0.000000%	0.000000%	8240 Township Road 654	Fredericksburg	OH	44627
2	26-01801.000	Ivan A. Miller and Mary H. Miller	Yes	6.7369	1.0000	6.7369	0.013573	1.357301%	100.000000%	1.357301%	0.000000%	0.000000%	0.000000%	0.000000%	0.000000%	0.000000%	8240 Township Road 654	Fredericksburg	OH	44627
3	26-01802.000	Ivan A. Miller and Mary H. Miller	Yes	23.0000	1.0000	23.0000	0.046339	4.633869%	100.000000%	4.633869%	0.000000%	0.000000%	0.000000%	0.000000%	0.000000%	0.000000%	8240 Township Road 654	Fredericksburg	OH	44627
4	26-03167.000	Carol L. Evans and Dean P. Evans	Yes	12.9900	0.5000	6.4950	0.013086	1.308564%	0.000000%	0.000000%	60.000000%	0.785139%	40.000000%	0.523426%	0.000000%	0.000000%	3448 Greensburg Rd.	North Canton	OH	44720
4	26-03167.000	Penelton P. Clark, III	Yes	12.9900	0.1667	2.1650	0.004362	0.436188%	0.000000%	0.000000%	60.000000%	0.261713%	40.000000%	0.174475%	0.000000%	0.000000%	55450 Fulton Hill Road	Bellaire	OH	43906
4	26-03167.000	Mario J. Clark	Yes	12.9900	0.1667	2.1650	0.004362	0.436188%	0.000000%	0.000000%	60.000000%	0.261713%	40.000000%	0.174475%	0.000000%	0.000000%	55450 Fulton Hill Road	Bellaire	OH	43906
4	26-03167.000	Ryan L. Clark	Yes	12.9900	0.1667	2.1650	0.004362	0.436188%	0.000000%	0.000000%	60.000000%	0.261713%	40.000000%	0.174475%	0.000000%	0.000000%	55450 Fulton Hill Road	Bellaire	OH	43906
5	26-01651.000	Margaret Jane Hoskinson	Yes	8.7000	0.5000	4.3500	0.008764	0.876406%	0.000000%	0.000000%	60.000000%	0.525843%	40.000000%	0.350562%	0.000000%	0.000000%	55075 Fulton Hill Road	Bellaire	OH	43906
5	26-01651.000	Rodney Ray Hoskinson and Delia May Hoskinson	Yes	8.7000	0.5000	4.3500	0.008764	0.876406%	0.000000%	0.000000%	60.000000%	0.525843%	40.000000%	0.350562%	0.000000%	0.000000%	55050 Fulton Hill Road	Bellaire	OH	43906
6	26-00596.000	Rodney Ray Hoskinson and Delia May Hoskinson	Yes	1.7100	1.0000	1.7100	0.003445	0.344518%	0.000000%	0.000000%	60.000000%	0.206711%	40.000000%	0.137807%	0.000000%	0.000000%	55050 Fulton Hill Road	Bellaire	OH	43906
7	26-01461.000	Mark A. Dunfee and Jody L. Dunfee	Yes	0.5400	1.0000	0.5400	0.001088	0.108795%	60.000000%	0.065277%	0.000000%	0.000000%	0.000000%	0.043518%	0.000000%	0.000000%	55062 Fulton Hill Road	Bellaire	OH	43906
8	26-01461.001	Doris A. Woda, Trustee	Yes	0.3515	1.0000	0.3515	0.000708	0.070818%	60.000000%	0.042491%	0.000000%	0.000000%	40.000000%	0.028327%	0.000000%	0.000000%	229 Huber Village Road, Suite 100	Westerville	OH	43081
9	26-01700.001	Tabitha L. White	Yes	10.9659	1.0000	10.9659	0.022093	2.209328%	0.000000%	0.000000%	60.000000%	1.325597%	40.000000%	0.883731%	0.000000%	0.000000%	43 West Prospect Street, Apt #2	Bridgeport	OH	43912
10	26-01700.000	Tabitha L. White	Yes	3.4300	1.0000	3.4300	0.006911	0.691051%	0.000000%	0.000000%	60.000000%	0.414631%	40.000000%	0.276420%	0.000000%	0.000000%	43 West Prospect Street, Apt #2	Bridgeport	OH	43912
11	26-01702.000	Tabitha L. White	Yes	0.1000	1.0000	0.1000	0.000201	0.020147%	0.000000%	0.000000%	60.000000%	0.012089%	40.000000%	0.008059%	0.000000%	0.000000%	43 West Prospect Street, Apt #2	Bridgeport	OH	43912
12	26-01863.000	Jay S. Van Dyne and Michele J. Van Dyne, his wife	Yes	7.8100	1.0000	7.8100	0.015735	1.573501%	60.000000%	0.944100%	0.000000%	0.000000%	40.000000%	0.629400%	0.000000%	0.000000%	56721 Ferry Landing Road	Shadyside	OH	43947
13	26-01354.000	Jay S. Van Dyne and Michele J. Van Dyne, his wife	Yes	1.5100	1.0000	1.5100	0.003042	0.304224%	60.000000%	0.182534%	0.000000%	0.000000%	40.000000%	0.121689%	0.000000%	0.000000%	56721 Ferry Landing Road	Shadyside	OH	43947
14	26-03079.000	Jay S. Van Dyne and Michele J. Van Dyne, his wife	Yes	24.6600	1.0000	24.6600	0.049683	4.968313%	60.000000%	2.980988%	0.000000%	0.000000%	40.000000%	1.987325%	0.000000%	0.000000%	56721 Ferry Landing Road	Shadyside	OH	43947
15	26-01862.000	Bounty Minerals, LLC	Yes	5.0000	1.0000	5.0000	0.010074	1.007363%	0.000000%	0.000000%	60.000000%	0.604418%	40.000000%	0.402945%	0.000000%	0.000000%	55259 Trough Road	Bellaire	OH	43906
16	26-01700.002	Tabitha L. White	Yes	5.0000	1.0000	5.0000	0.010074	1.007363%	0.000000%	0.000000%	60.000000%	0.604418%	40.000000%	0.402945%	0.000000%	0.000000%	43 West Prospect Street, Apt #2	Bridgeport	OH	43912
17	26-01906.000	Jay S. Van Dyne and Michele J. Van Dyne	Yes	1.1247	1.0000	1.1247	0.002266	0.226596%	60.000000%	0.135958%	0.000000%	0.000000%	40.000000%	0.090638%	0.000000%	0.000000%	56721 Ferry Landing Road	Shadyside	OH	43947
18	26-01870.000	Robert E. Violet and Loretta L. Violet	Yes	50.3300	1.0000	50.3300	0.101401	10.140114%	0.000000%	0.000000%	60.000000%	6.084068%	40.000000%	4.056046%	0.000000%	0.000000%	54562 McClainsville Road	Bellaire	OH	43906
19	26-01942.000	Roger A. Barack and Lana J. Barack	Yes	44.1540	1.0000	44.1540	0.088958	8.895820%	100.000000%	8.895820%	0.000000%	0.000000%	0.000000%	0.000000%	0.000000%	0.000000%	64501 Harvey Hill Road	St. Clairsville	OH	43950
20	26-01141.001	Mary Jane Pauley	Yes	3.2486	1.0000	3.2486	0.006545	0.654504%	60.000000%	0.392702%	0.000000%	0.000000%	40.000000%	0.261802%	0.000000%	0.000000%	53882 McClainsville Road	Bellaire	OH	43906
21	26-01141.004	Elsie H. Fox	Yes	8.5568	1.0000	8.5568	0.017240	1.723960%	60.000000%	1.034376%	0.000000%	0.000000%	40.000000%	0.689584%	0.000000%	0.000000%	53883 McClainsville Road	Bellaire	OH	43906
22	26-01141.003	Patricia A. Harrison, Trustee of the Harrison Keystone Trust Agreement	Yes	7.0309	1.0000	7.0309	0.014165	1.416533%	60.000000%	0.849920%	0.000000%	0.000000%	40.000000%	0.566613%	0.000000%	0.000000%	54082 McClainsville Road	Bellaire	OH	43906
23	26-01783.000	Patricia A. Harrison, Trustee of the Harrison Keystone Trust Agreement	Yes	10.9129	1.0000	10.9129	0.021986	2.198650%	60.000000%	1.319190%	0.000000%	0.000000%	40.000000%	0.879460%	0.000000%	0.000000%	54082 McClainsville Road	Bellaire	OH	43906
24	26-01542.000	The Nardone Family Trust	Yes	59.9043	1.0000	59.9043	0.120691	12.069073%	60.000000%	7.241444%	0.000000%	0.000000%	40.000000%	4.827629%	0.000000%	0.000000%	32 15th Street	Wheeling	WV	26003
25	26-01755.000	Curtis Randall Wallner	No	18.3190	0.5000	9.1590	0.018453	1.845287%	0.000000%	0.000000%	0.000000%	0.000000%	0.000000%	0.000000%	0.000000%	0.000000%	64040 Sand Hill Road	Bellaire	OH	43906
25	26-01755.000	Roberta Kay Heil	No	18.3190	0.5000	9.1590	0.018453	1.845287%	0.000000%	0.000000%	0.000000%	0.000000%	0.000000%	0.000000%	0.000000%	0.000000%	64040 Sand Hill Road	Bellaire	OH	43906
26	26-03156.000	David A. Johnson and Martha Johnson	Yes	12.3515	0.2500	3.0879	0.006221	0.622122%	0.000000%	0.000000%	60.000000%	0.373273%	40.000000%	0.248849%	0.000000%	0.000000%	13656 Mansfield Road	Athens	OH	45701
26	26-03156.000	Kelley Miller	Yes	12.3515	0.1250	1.5439	0.003111	0.311061%	0.000000%	0.000000%	60.000000%	0.186637%	40.000000%	0.124424%	0.000000%	0.000000%	73680 Millers Road	Martins Ferry	OH	43935
26	26-03156.000	Keri Miller	Yes	12.3515	0.1250	1.5439	0.003111	0.311061%	0.000000%	0.000000%	60.000000%	0.186637%	40.000000%	0.124424%	0.000000%	0.000000%	54656 Fulton Hill Rd.	Bellaire	OH	43906
26	26-03156.000	Gregory A. Johnson and Nancy Sue Johnson	Yes	12.3515	0.2500	3.0879	0.006221	0.622122%	0.000000%	0.000000%	60.000000%	0.373273%	40.000000%	0.248849%	0.000000%	0.000000%	54634 Fulton Hill Rd.	Bellaire	OH	43906
26	26-03156.000	Michael W. Johnson and Carol Bessey	Yes	12.3515	0.2500	3.0879	0.006221	0.622122%	0.000000%	0.000000%	60.000000%	0.373273%	40.000000%	0.248849%	0.000000%	0.000000%	645 Glenmont Avenue	Columbus	OH	43214
27	26-01901.000	Robert D. Workman and Ladonna S. Workman	Yes	30.1366	1.0000	30.1366	0.060717	6.071698%	0.000000%	0.000000%	60.000000%	3.643019%	40.000000%	2.428673%	0.000000%	0.000000%	54905 Fulton Hill Road	Bellaire	OH	43906
28	26-01092.000	James E. Riggs and Bobbie M. Riggs	Yes	6.8523	1.0000	6.8523	0.013806	1.380550%	60.000000%	0.828330%	0.000000%	0.000000%	40.000000%	0.552220%	0.000000%	0.000000%	54960 Fulton Hill Road	Bellaire	OH	43906
29	26-01707.001	James Richmond and Donna Richmond	Yes	27.0500	1.0000	27.0500	0.054498	5.449833%	0.000000%	0.000000%	0.000000%	0.000000%	0.000000%	0.000000%	100.000000%	5.449833%	67567 Pogue Road	St. Clairsville	OH	43950
30	26-01707.000	James Richmond and Donna Richmond	Yes	1.0100	1.0000	1.0100	0.002035	0.203487%	0.000000%	0.000000%	0.000000%	0.000000%	0.000000%	0.000000%	100.000000%	0.203487%	67567 Pogue Road	St. Clairsville	OH	43950
31	26-01900.000	Robert Dale Workman and Ladonna Sue Workman	No	10.5300	1.0000	10.5300	0.021215	2.121506%	60.000000%	1.272904%	0.000000%	0.000000%	40.000000%	0.848602%	0.000000%	0.000000%	54905 Fulton Hill Road	Bellaire	OH	43906
32	26-01661.000	Ross W. Johnson, Jr. and Glenda M. Johnson	Yes	72.6174	1.0000	72.6174	0.146304	14.630414%	60.000000%	8.778248%	0.000000%	0.000000%	40.000000%	5.852165%	0.000000%	0.000000%	55008 Fulton Hill Road	Bellaire	OH	43906
				TOTAL UNIT ACRES		496.3455		100.000000%		44.927120%		17.010066%		28.718979%		5.653320%				
				TOTAL CONTROLLED ACRES		449.9675		90.656105%												

**EXHIBIT A-3**  
**Uncommitted Working Interest Owner**  
Attached to that certain Operating Agreement dated May 18, 2015 covering the Miller Unit A, Pultney Township, Belmont County, Ohio

Tract #	Tax Map Number	Mineral Owner	Leased (Y/N)	Parcel Surface Acres in Unit	Mineral Owner Interest	Mineral Owner Surface Acres	Tract Participation	Unit Working Interest	XTO Working Interest	XTO Unit Participation	Phillips Exploration Working Interest	Phillips Exploration Unit Participation	AEU Working Interest	AEU Unit Participation	Rice Working Interest	Rice Unit Participation	Address	City	State	Zip Code
29	26-01707.001	James Richmond and Donna Richmond	Yes	27.0500	1.0000	27.0500	0.049218	4.921800%	0.000000%	0.000000%	0.000000%	0.000000%	0.000000%	0.000000%	100.000000%	4.921800%	67567 Pogue Road	St. Clairsville	OH	43950
30	26-01707.000	James Richmond and Donna Richmond	Yes	1.0100	1.0000	1.0100	0.001838	0.183800%	0.000000%	0.000000%	0.000000%	0.000000%	0.000000%	0.000000%	100.000000%	0.183800%	67567 Pogue Road	St. Clairsville	OH	43950
TOTAL UNIT ACRES						28.0600		5.105600%		0.0000		0.0000		0.0000		5.105600%				

**EXHIBIT A-4  
Unleased Owners**

Attached to that certain Operating Agreement dated May 18, 2015 covering the Miller Unit A, Pultney Township, Belmont County, Ohio

Tract #	Tax Map Number	Mineral Owner	Leased (Y/N)	Parcel Surface Acres in Unit	Mineral Owner Interest	Mineral Owner Surface Acres	Tract Participation	Unit Working Interest	XTO Working Interest	XTO Unit Participation	Phillips Exploration Working Interest	Phillips Exploration Unit Participation	AEU Working Interest	AEU Unit Participation	Rice Working Interest	Rice Unit Participation	Address	City	State	Zip Code
25	26-01755.000	Curtis Randall Wallner	No	18.3180	0.5000	9.1590	0.016665	1.666500%	0.000000%	0.000000%	0.000000%	0.000000%	0.000000%	0.000000%	0.000000%	0.000000%	64040 Sand Hill Road	Bellaire	OH	43906
25	26-01755.000	Roberta Kay Heil	No	18.3180	0.5000	9.1590	0.011667	1.166650%	0.000000%	0.000000%	0.000000%	0.000000%	0.000000%	0.000000%	0.000000%	0.000000%	64040 Sand Hill Road	Bellaire	OH	43906
TOTAL UNIT ACRES						18.3180		2.833150%		0.0000		0.0000		0.0000		0.000000%				

## EXHIBIT "B"

Attached to and made part of that certain Operating Agreement dated May 18, 2015, naming XTO Energy Inc. as "Operator" covering the Miller Unit A in Belmont County, Ohio.

### PAID UP OIL and GAS LEASE

**THIS AGREEMENT** made and entered into this the \_\_\_\_ day of \_\_\_\_\_ 2015, by and between \_\_\_\_\_, hereinafter called Lessor (whether one or more), and **XTO Energy Inc., a Delaware corporation, with a mailing address of 810 Houston Street, Fort Worth, Texas 76102-6298**, hereinafter called Lessee,

**WITNESSETH**, that said Lessor, for and in consideration of the sum of ONE DOLLAR (\$1.00), the receipt of which is hereby acknowledged, and of the royalties herein provided, and of the covenants hereinafter contained to be paid, kept and performed by said Lessee, grants, demises, leases and lets, exclusively unto Lessee, the lands hereinafter described, with covenants of general warranty, for the purposes and with the rights of exploring by conducting geological surveys, by geophysical surveys with seismographs, by core tests, gravity, magnetic, geochemical and other methods whether now developed or developed later, and of constructing drill sites to drill new wells, recondition producing wells, re-drill and use abandoned wells, pipe and equipment on the property, and of drilling either vertically or horizontally, producing, and otherwise operating for oil or gas or both, along with all hydrocarbon substances produced in association therewith, together with the right and easement to construct, lay, modify, operate, repair, maintain and remove pipelines, telephone, power and electric lines (telephone, power and electric lines for use only with associated oil and gas production equipment), tanks, ponds, permanent roadways including stone or rock roads, plants, stations, compressors, equipment and structures thereon including houses for valves, meters, regulators and other appliances, together with the exclusive right to inject air, gas, water, brine or other fluids into the subsurface strata, with any and all other rights and privileges necessary, incident to or convenient for such operations on this land, alone or co-jointly with neighboring lands for these purposes, together also with the right to unlimited access to the lease premises so Lessee can exercise the aforesaid rights, all that certain tract of land situate in the \_\_\_\_\_ Township, \_\_\_\_\_ County, State of Ohio, and covering the following described lands as follows (the "lease premises"):

#### See Attached Exhibit "A"

containing \_\_\_\_\_ acres of land whether actually containing more or less. This lease also covers and includes, in addition to that above described, all land, if any, contiguous or adjacent to or adjoining the land above described and (a) owned or claimed by Lessor by limitation, prescription, possession, reversion, after-acquired title or unrecorded instrument or (b) as to which Lessor has a preference right of acquisition. Lessor agrees to execute any supplemental instrument requested by Lessee for a more complete or accurate description of said land.

1. It is agreed that this lease shall remain in force for a primary term of Five (5) years from the date hereof, hereinafter called "primary term", and as long thereafter as oil or gas is produced from the Leased Premises, or from lands pooled therewith, or operations, as hereinafter defined, are conducted upon the leased premises, without a cessation of such production and operations for an unreasonable period of time, or this lease is maintained in force under any subsequent provisions hereof.

2. Lessee covenants and agrees:

(a) to deliver to the credit of Lessor, his heirs or assigns, free of costs, a royalty of twelve and one half percent (12.50%) of that native oil produced and saved from the lease premises, with the exception of non-commercial nuisance oil, and delivered at the wells or into the pipeline to which the wells may be connected. Lessee may from time to time purchase any royalty oil in its possession, paying the market price then prevailing for the field where produced, and Lessee may sell any royalty oil in its possession and pay Lessor the price received by Lessee for such oil computed at the well, and

(b) to pay Lessor as a royalty, for the native gas and casinghead gas or other gaseous substance, produced from said land and sold or used beyond the well or for the extraction of gasoline or other product, an amount equal to twelve and one half percent (12.50%) of the gross amount realized by Lessee computed at the wellhead from the sale of such substances, less any incurred taxes and third party charges, from each and every well. On gas sold at the well, the royalty shall be twelve and one half percent (12.50%) of the amount realized by Lessee from such sale, and

(c) payment of royalties hereunder shall be made or tendered monthly, or may be withheld at the discretion of the Lessee until such time as the total withheld exceeds twenty-five dollars (\$25.00), or annually at the end of the calendar year. Lessee shall sell the production of the well on such terms and conditions as Lessee, in its sole discretion, may deem appropriate. Lessee shall have no duty to obtain production sales terms, which maximize the royalties payable to Lessor hereunder, but in no event shall Lessee market the royalty portion of production at a price less than Lessee receives for its production.

3. All payments under this lease shall be made by check or voucher to the order of, and shall be mailed to, \_\_\_\_\_ at \_\_\_\_\_ until Lessee shall have received written notice from Lessor, its heirs or assigns, accompanied by original or certified copies of deeds or other documents as Lessee may require, evidencing such change of ownership and directing payments to be made otherwise, and any payments made as above until such direction, and thereafter in accordance with such direction, shall absolve Lessee from any liability to any heir or assign of Lessor. All payments or royalty are to be made according to Lessor's respective interest therein, as herein set forth, and this lease shall not be forfeited for Lessee's failure to pay any royalties or other payments until Lessee has received written notice by registered mail of such default and shall fail, for a period of sixty (60) days after receipt of such notice, to pay same. This lease shall never be subject to a civil action or

## EXHIBIT "B"

Attached to and made part of that certain Operating Agreement dated May 18, 2015, naming XTO Energy Inc. as "Operator" covering the Miller Unit A in Belmont County, Ohio.

other claim to enforce claim of forfeiture due to Lessee's alleged failure to perform as specified herein, unless Lessee has received written notice of Lessor's demand and thereafter fails or refuses to satisfy Lessor's demand within sixty (60) days from the receipt of said notice by registered mail. If Lessor owns a lesser interest in the oil and gas in and under the premises than the entire undivided interest therein, then the royalties and other payments herein provided for shall be paid to Lessor only in the proportion which his interest bears to the whole and undivided interest therein.

4. In addition to the covenants of general warranty hereinabove contained, Lessor further covenants and agrees, that if Lessor's title to the lease premises shall come into dispute or litigation, or, if in the judgment of Lessee, there are bona fide adverse claims to the royalties hereinabove provided for, then Lessee, at its option, may withhold the payment of said royalties without interest until final adjudication or other settlement of such dispute, litigation, claim or claims; and that Lessee, at its option, may pay and discharge any taxes, mortgages or other lien or liens existing, levied, assessed or which may hereafter come into existence or be levied or assessed on or against the lease premises, and in the event it exercises such option, Lessee shall be subrogated to the lien and any and all rights of any holder or holders thereof, and may reimburse itself by applying to the discharge of any such mortgage, tax, or other lien or liens, any royalty or other payment accruing hereunder. The exercise of such reimbursement option shall not be considered an election of remedies.

5. If and when drilling or other operations hereunder are delayed or interrupted by the coal owner's development of the coal under the leased premises or lands pooled therewith, lack of water, labor or material, or by fire, storm, flood, weather, war, rebellion, insurrection, riot, strike, differences with workmen, failure of subcontractors, or failure of carriers to transport or furnish facilities for transportation, or as a result of some order, rule, regulation, requisition or necessity of the government, or any other recognized force majeure, or as the result of any other cause whatsoever beyond the control of Lessee, the time of such delay or interruption shall not be counted against Lessee, anything in this lease to the contrary notwithstanding. All express or implied covenants of this lease shall be subject to all Federal and State Laws, Executive Orders, Rules or Regulations and this lease shall not be terminated, in whole or in part, nor Lessee held liable in damages for failure to comply therewith, if compliance is prevented by, or if such failure is the result of, any such Law, Order, Rule or Regulation.

6. Whenever used in this lease, the word "operations" shall mean operations for any of the following: preparing the drill site location or access road, drilling, testing, reworking, recompleting, deepening, sidetracking, plugging back, or repairing of a well in search for, or in an endeavor to maintain, re-establish or enhance the production of oil or gas or both, whether or not in paying quantities.

7. Lessee shall have the right to assign this lease or any interest therein and the assignee of Lessee shall have corresponding rights, privileges, and obligations with respect to said royalties and the other obligations related to the acreage assigned to it. Upon such assignment, Lessee shall be relieved of any obligation, payment or liability thereafter to accrue to the assigned portion of the lease.

8. Lessee may, at any time during the term hereof, cancel and surrender this lease, and be relieved of any and all obligations, payments and liabilities thereafter to accrue as to the lease premises, by either the mailing of a notice to Lessor of such cancellation and surrender, or by filing of record a release or releases of this lease.

9. Lessee may drill or not drill on the lease premises as it may elect, and the consideration paid and to be paid hereunder constitutes full adequate compensation for such privilege.

10. No well shall be drilled by Lessee within 200 feet of any dwelling or barn now on the lease premises, except by written consent of the owner of the surface on which such dwelling or barn is located. Lessee may locate drill sites and well bores where it deems necessary or appropriate on the lease premises for the production of oil or gas or both. Lessee may construct and maintain drill site access roads connecting to available roads and/or to the nearest neighboring well operated by Lessee, or to which Lessee has the operator's permission to use its access road.

11. It is agreed that Lessee shall have the privilege of using free of charge sufficient water, oil and gas from the lease premises to run all machinery necessary for operations thereon. Lessee shall have the right at any time during the term of this lease or after the expiration or termination thereof to remove all machinery, fixtures, pipelines, meters, well equipment, houses, buildings, and other structures which Lessee has placed or caused to be placed on the lease premises, including the right to pull and remove all casing and tubing.

12. If Lessee shall begin operations for the commencement of a well during the primary term of this lease, or any extension thereof, Lessee shall then have the right to complete the drilling and/or completion of such well, and if oil or gas or both be found in paying quantities, this lease shall continue and be in force and with like effect as if such well had been completed within the primary term.

13. The lease premises may be fully and freely used by Lessor for any purpose, excepting such parts as are used by Lessee in operations hereunder. Lessee's drilling, producing and operating sites on the lease premises are for Lessee's use only; Lessor shall not use such sites for storage or any other purpose.

14. Lessee shall pay Lessor for all damages to growing agricultural crops caused by Lessee's operations on the lease premises and shall bury all permanent pipelines below plow depth through cultivated areas upon request of Lessor owning an interest in the surface. Damages shall be calculated at current marketable value only; in no instance shall estimates of future values be considered. Any timber cut by Lessee in preparing access roads, right-of-ways, or locations will be stacked in an orderly manner in locations to be mutually agreed upon between by Lessee and Lessor and will not be subject to damage reimbursement to Lessor by Lessee. Any injury to Lessee's workers or damages to Lessee's property that are caused by Lessor, whether intentional or not, shall be recoverable by Lessee from any royalty payments or any other payments to Lessor that are due or becoming due.

15. Lessee is hereby granted the right, at its option, to pool and unitize all or any part of the lease premises with any other lease or leases, land or lands, mineral estates, or any of them whether owned by the Lessee or others, so as to create one or more drilling or production units. Each such drilling or production unit shall not exceed 640 acres, plus an acreage tolerance of 10% in extent and shall conform to the rules and regulations of any lawful government authority having jurisdiction of the premises, and with good drilling or production practice in the area in which such unit is located. In the event of the pooling or unitization of the whole or any part of the lease premises, Lessee shall before or after the completion of the well, record a copy of its unit designation in the County where the lease premises are located. In order to give effect to the known limits of the pool of oil or gas or both as such limits may be determined from available geological or scientific information or drilling operations, Lessee may at any time amend,

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re-form, reduce, or enlarge the size and shape of any unit formed, and increase or decrease that portion of the acreage covered by this lease which is included in any drilling or production unit, or exclude it altogether; provided that Lessee shall file an appropriate instrument of record in the county records where lands are located and written notice thereof shall be given to Lessor promptly. As to each drilling or production unit designated by the Lessee, the Lessor agrees to accept and shall receive out of the production or the proceeds from the production from such unit, such proportion of the royalties specified herein, as the number of acres out of the leased premises covered by this lease which may be included from time to time in any such unit bears to the total number of acres included in such unit rather than the full amount of the royalty stated in paragraph 2 above. Operations on any portion of the unit created under the terms of this paragraph shall have the same effect upon the terms of this lease as if operations or production are being conducted or occurring on the lease premises.

**16.** If at any time after the primary term hereof there is a well capable of producing gas (with or without condensate) in paying quantities located upon the leased premises or on lands pooled therewith but such well is awaiting pipeline connection or is shut-in for any other reason (whether before or after production) and this lease is not maintained in force by operations or production at any well or by other activity or event, nevertheless it shall be considered that gas is being produced in paying quantities within the meaning of this lease (collectively, the "Shut-in Well"). On or before the end of the initial year during which this lease is maintained in force for the entire annual period under this paragraph 16, if the Shut-in Well has been shut-in for at least 90 consecutive days during such period, Lessee shall pay or tender to Lessor hereunder, or to those entitled to the royalties provided for in this lease, a shut-in royalty equal to \$1.00 per acre for the acreage held under this lease at the time such payment or tender is made. Each subsequent payment or tender shall be made thereafter in like manner and amount on or before the end of each annual period while the lease is maintained in force for the entire annual period under the first sentence of this paragraph 16. Lessee's failure to timely or correctly pay or tender the shut-in royalty for any year shall not operate to terminate this lease or serve as a basis for its cancellation, but Lessee shall correct any erroneous payment or tender, when notified thereof, and if late then Lessee shall make the correcting payment or tender with interest at the rate of eight (8%) percent per annum to those to whom such shut-in royalty was not timely or correctly paid or tendered. As long as any well is shut-in, it shall be considered for the purposes of maintaining this lease in force that gas is being produced in paying quantities and this lease shall continue in effect both before and after the primary term. Notwithstanding anything to the contrary contained in this lease, at the option of Lessee, which may be exercised by Lessee giving notice to Lessor, a well which has been drilled and Lessee intends to frac shall be deemed a well capable of producing in paying quantities and the date such well is shut-in shall be when the drilling operations are completed.

**17.** Lessee shall be entitled during the term of this lease to lay and maintain pipelines on and across Lessor's leased premises to transport, without any fee payable therefore to Lessor, natural gas produced on the leased premises and/or on other lands pooled therewith whether or not adjacent to the tract of land described herein. Any such transportation or gathering lines shall always remain the property of Lessee. Beyond the term of this lease, Lessee shall not be entitled to lay and maintain additional pipelines across Lessor's leased premises without specific written consent of Lessor. However, any pipelines laid during the term of this lease shall continue to be operative at the Lessee's option without any fee payable to Lessor and Lessee shall continue to have the right of unlimited access to maintain or remove said pipelines.

**18.** Lessee, in its sole discretion, may plug and abandon any well which it has drilled on the lease premises. Upon abandonment of said well or wells drilled on the lease premises, Lessee shall restore, to the extent reasonably practicable, the drill site, access road(s) to said drill site(s), culverts and gates.

**19.** All the terms, conditions, limitations and covenants herein contained shall be binding upon the parties hereto and shall extend to and be binding upon their respective heirs, successors, personal representatives and assigns, but no representations other than those herein contained shall be binding on either party.

**20.** In addition to the covenants of general warranty hereinabove contained, Lessor hereby warrants that: (i) the lease premises are not encumbered by any enforceable oil or gas lease(s) of record or otherwise, and (ii) Lessor is not currently receiving any bonus, rental, production royalty or shut-in royalty as the result of any prior oil or gas lease(s) covering any or all of the subject property, and (iii) all wells drilled upon the lease premises, or upon any lands with which the lease premises have been combined in a drilling or production unit, have been plugged and abandoned.

**21.** If during the term of this lease the Lessor makes a conveyance whereby the surface rights are transferred on the entire lease or a portion thereof, Lessor shall promptly give notice of same to Lessee and Lessor shall forward to Lessee a recorded copy of such conveyance. Lessor shall similarly provide the new title holder(s) to the surface rights with the terms and provisions of this Oil and Gas Lease that said title holders are subject to.

**22.** If Lessor receives an offer to lease the oil or gas or both concerning any portion of the leased premises described herein at any time while this agreement remains in full force and effect, or within six (6) months thereafter, Lessor hereby agrees to notify Lessee of offeror's name, and to offer immediately to Lessee, in writing, the same lease terms. Lessee shall have fifteen (15) days to accept or reject the said offer to lease the oil and gas covered by the offer at the price, terms, and conditions specified in the offer. Failure of Lessor to provide such notice and offer to Lessee shall terminate any Lease entered into between Lessor and such offeror.

**23.** This instrument may be executed in counterparts each having the same validity and all of which shall constitute but one and the same instrument. Should any one or more of the parties named as Lessor fail to execute this lease, it shall nevertheless be binding upon all such parties who do execute it as Lessor.

**24.** If any provision of this Lease is held invalid or unenforceable by any court of competent jurisdiction, the other provisions of this Agreement will remain in full force and effect. Any provision of this Agreement held invalid or unenforceable only in part or degree will remain in full force and effect to the extent not held invalid or unenforceable.

**25.** This Lease contains the entire agreement of Lessor and Lessee and supersedes and replaces any oral or written communication heretofore made between them relating to the subject matter.

**26.** As a result of topography, land development in the vicinity of the leased premises, governmental rules or ordinances regarding well sites, and/or surface restrictions as may be set forth in this lease and/or other leases in the vicinity, surface locations for well sites in the vicinity may be limited and Lessee may encounter difficulty securing surface location(s) for drilling, reworking or other operations. Therefore, since drilling, reworking or other operations may either be restricted or not allowed on said land or other leases in the vicinity, it is agreed that any

**EXHIBIT "B"**

Attached to and made part of that certain Operating Agreement dated May 18, 2015, naming XTO Energy Inc. as "Operator" covering the Miller Unit A in Belmont County, Ohio.

such operations conducted at a surface location off of the leased premises or off of lands with which the leased premises are pooled in accordance with this lease, provided that such operations are associated with a directional well for the purpose of drilling, reworking, producing or other operations under the leased premises or lands pooled therewith, shall for purposes of this lease be deemed operations conducted on the leased premises. Nothing contained in this paragraph is intended to modify any surface restrictions or pooling provisions or restrictions contained in this lease, except as expressly stated.

27. For the above consideration, Lessee is granted the option to renew this lease under the same provisions for a secondary primary term of four (4) years from the end of the initial primary term hereof, and as long thereafter as oil or gas is produced from the leased premises or land pooled therewith, or operations are being conducted upon the lease premises, without an unreasonable cessation of such production and operations. Lessee may exercise this option by paying or tendering to the Lessor or Lessor's credit in the depository named in this lease, the sum equal to the number of net mineral acres multiplied by the original bonus amount per net mineral acre paid as consideration for this lease on or before the expiration of the initial five (5) year primary term hereof; which payment, when made, shall constitute the entire payment due for the second primary term of four (4) years.

28. Lease includes attached addendum.

**IN WITNESS WHEREOF**, the parties to this agreement have hereunto set their hands and seals the day and year first above written.

LESSOR(S)

\_\_\_\_\_

**ACKNOWLEDGMENT**

STATE OF \_\_\_\_\_

COUNTY OF \_\_\_\_\_

On this, the \_\_\_\_ day of \_\_\_\_\_, 2014, before me \_\_\_\_\_, the undersigned officer, personally appeared \_\_\_\_\_, satisfactorily proven to me to be the person whose name is subscribed to the within instrument, and acknowledged that she executed the same for the purposes therein contained.

In witness whereof, I hereunto set my hand and official seal:

My Commission expires:

\_\_\_\_\_  
Notary Public

**EXHIBIT "B"**

Attached to and made part of that certain Operating Agreement dated May 18, 2015, naming XTO Energy Inc. as "Operator" covering the Miller Unit A in Belmont County, Ohio.

**Exhibit "A"**

Attached hereto and made a part hereof that certain Oil, Gas and Mineral Lease dated \_\_\_\_\_, by and between \_\_\_\_\_, and XTO Energy Inc.

**LEGAL DESCRIPTION**

<b>Tax Parcel No.</b>	<b>Acres</b>	<b>County</b>	<b>Township</b>	<b>R-T-S</b>	<b>Deed</b>

This lease shall include all streets, alleyways, easements, gores and strips of land adjacent and contiguous thereto.

## Exhibit "C" ACCOUNTING PROCEDURE JOINT OPERATIONS

1 Attached to and made part of that certain Operating Agreement dated May 18, 2015, by and between XTO Energy Inc., as  
2 "Operator" and Rice Drilling D LLC as "Non-Operators" covering the Miller Unit A in Belmont County, Ohio.

### I. GENERAL PROVISIONS

6 IF THE PARTIES FAIL TO SELECT EITHER ONE OF COMPETING "ALTERNATIVE" PROVISIONS, OR SELECT ALL THE  
7 COMPETING "ALTERNATIVE" PROVISIONS, ALTERNATIVE 1 IN EACH SUCH INSTANCE SHALL BE DEEMED TO HAVE  
8 BEEN ADOPTED BY THE PARTIES AS A RESULT OF ANY SUCH OMISSION OR DUPLICATE NOTATION.

10 IN THE EVENT THAT ANY "OPTIONAL" PROVISION OF THIS ACCOUNTING PROCEDURE IS NOT ADOPTED BY THE  
11 PARTIES TO THE AGREEMENT BY A TYPED, PRINTED OR HANDWRITTEN INDICATION, SUCH PROVISION SHALL NOT  
12 FORM A PART OF THIS ACCOUNTING PROCEDURE, AND NO INFERENCE SHALL BE MADE CONCERNING THE INTENT  
13 OF THE PARTIES IN SUCH EVENT.

#### 1. DEFINITIONS

15 All terms used in this Accounting Procedure shall have the following meaning, unless otherwise expressly defined in the Agreement:

17  
18  
19 "Affiliate" means for a person, another person that controls, is controlled by, or is under common control with that person. In this  
20 definition, (a) control means the ownership by one person, directly or indirectly, of more than fifty percent (50%) of the voting securities  
21 of a corporation or, for other persons, the equivalent ownership interest (such as partnership interests), and (b) "person" means an  
22 individual, corporation, partnership, trust, estate, unincorporated organization, association, or other legal entity.

24 "Agreement" means the operating agreement, farmout agreement, or other contract between the Parties to which this Accounting  
25 Procedure is attached.

27 "Controllable Material" means Material that, at the time of acquisition or disposition by the Joint Account, as applicable, is so classified  
28 in the Material Classification Manual most recently recommended by the Council of Petroleum Accountants Societies (COPAS).

30 "Equalized Freight" means the procedure of charging transportation cost to the Joint Account based upon the distance from the nearest  
31 Railway Receiving Point to the property.

33 "Excluded Amount" means a specified excluded trucking amount most recently recommended by COPAS.

35 "Field Office" means a structure, or portion of a structure, whether a temporary or permanent installation, the primary function of which is  
36 to directly serve daily operation and maintenance activities of the Joint Property and which serves as a staging area for directly chargeable  
37 field personnel.

39 "First Level Supervision" means those employees whose primary function in Joint Operations is the direct oversight of the Operator's  
40 field employees and/or contract labor directly employed On-site in a field operating capacity. First Level Supervision functions may  
41 include, but are not limited to:

- 43 • Responsibility for field employees and contract labor engaged in activities that can include field operations, maintenance,  
44 construction, well remedial work, equipment movement and drilling
- 45 • Responsibility for day-to-day direct oversight of rig operations
- 46 • Responsibility for day-to-day direct oversight of construction operations
- 47 • Coordination of job priorities and approval of work procedures
- 48 • Responsibility for optimal resource utilization (equipment, Materials, personnel)
- 49 • Responsibility for meeting production and field operating expense targets
- 50 • Representation of the Parties in local matters involving community, vendors, regulatory agents and landowners, as an incidental  
51 part of the supervisor's operating responsibilities
- 52 • Responsibility for all emergency responses with field staff
- 53 • Responsibility for implementing safety and environmental practices
- 54 • Responsibility for field adherence to company policy
- 55 • Responsibility for employment decisions and performance appraisals for field personnel
- 56 • Oversight of sub-groups for field functions such as electrical, safety, environmental, telecommunications, which may have group  
57 or team leaders.

59 "Joint Account" means the account showing the charges paid and credits received in the conduct of the Joint Operations that are to be  
60 shared by the Parties, but does not include proceeds attributable to hydrocarbons and by-products produced under the Agreement.

62 "Joint Operations" means all operations necessary or proper for the exploration, appraisal, development, production, protection,  
63 maintenance, repair, abandonment, and restoration of the Joint Property.

1       **“Joint Property”** means the real and personal property subject to the Agreement.

2  
3       **“Laws”** means any laws, rules, regulations, decrees, and orders of the United States of America or any state thereof and all other  
4 governmental bodies, agencies, and other authorities having jurisdiction over or affecting the provisions contained in or the transactions  
5 contemplated by the Agreement or the Parties and their operations, whether such laws now exist or are hereafter amended, enacted,  
6 promulgated or issued.

7  
8       **“Material”** means personal property, equipment, supplies, or consumables acquired or held for use by the Joint Property.

9  
10       **“Non-Operators”** means the Parties to the Agreement other than the Operator.

11  
12       **“Offshore Facilities”** means platforms, surface and subsea development and production systems, and other support systems such as oil and  
13 gas handling facilities, living quarters, offices, shops, cranes, electrical supply equipment and systems, fuel and water storage and piping,  
14 heliport, marine docking installations, communication facilities, navigation aids, and other similar facilities necessary in the conduct of  
15 offshore operations, all of which are located offshore.

16  
17       **“Off-site”** means any location that is not considered On-site as defined in this Accounting Procedure.

18  
19       **“On-site”** means on the Joint Property when in direct conduct of Joint Operations. The term “On-site” shall also include that portion of  
20 Offshore Facilities, Shore Base Facilities, fabrication yards, and staging areas from which Joint Operations are conducted, or other  
21 facilities that directly control equipment on the Joint Property, regardless of whether such facilities are owned by the Joint Account.

22  
23       **“Operator”** means the Party designated pursuant to the Agreement to conduct the Joint Operations.

24  
25       **“Parties”** means legal entities signatory to the Agreement or their successors and assigns. Parties shall be referred to individually as  
26 “Party.”

27  
28       **“Participating Interest”** means the percentage of the costs and risks of conducting an operation under the Agreement that a Party agrees,  
29 or is otherwise obligated, to pay and bear.

30  
31       **“Participating Party”** means a Party that approves a proposed operation or otherwise agrees, or becomes liable, to pay and bear a share of  
32 the costs and risks of conducting an operation under the Agreement.

33  
34       **“Personal Expenses”** means reimbursed costs for travel and temporary living expenses.

35  
36       **“Railway Receiving Point”** means the railhead nearest the Joint Property for which freight rates are published, even though an actual  
37 railhead may not exist.

38  
39       **“Shore Base Facilities”** means onshore support facilities that during Joint Operations provide such services to the Joint Property as a  
40 receiving and transshipment point for Materials; debarkation point for drilling and production personnel and services; communication,  
41 scheduling and dispatching center; and other associated functions serving the Joint Property.

42  
43       **“Supply Store”** means a recognized source or common stock point for a given Material item.

44  
45       **“Technical Services”** means services providing specific engineering, geoscience, or other professional skills, such as those performed by  
46 engineers, geologists, geophysicists, and technicians, required to handle specific operating conditions and problems for the benefit of Joint  
47 Operations; provided, however, Technical Services shall not include those functions specifically identified as overhead under the second  
48 paragraph of the introduction of Section III (*Overhead*). Technical Services may be provided by the Operator, Operator’s Affiliate, Non-  
49 Operator, Non-Operator Affiliates, and/or third parties.

## 50 51   2. STATEMENTS AND BILLINGS

52  
53       The Operator shall bill Non-Operators on or before the last day of the month for their proportionate share of the Joint Account for the  
54 preceding month. Such bills shall be accompanied by statements that identify the AFE (authority for expenditure), lease or facility, and all  
55 charges and credits summarized by appropriate categories of investment and expense. Controllable Material shall be separately identified  
56 and fully described in detail, or at the Operator’s option, Controllable Material may be summarized by major Material classifications.  
57 Intangible drilling costs, audit adjustments, and unusual charges and credits shall be separately and clearly identified.

58  
59       The Operator may make available to Non-Operators any statements and bills required under Section 1.2 and/or Section 1.3.A (*Advances*  
60 *and Payments by the Parties*) via email, electronic data interchange, internet websites or other equivalent electronic media in lieu of paper  
61 copies. The Operator shall provide the Non-Operators instructions and any necessary information to access and receive the statements and  
62 bills within the timeframes specified herein. A statement or billing shall be deemed as delivered twenty-four (24) hours (exclusive of  
63 weekends and holidays) after the Operator notifies the Non-Operator that the statement or billing is available on the website and/or sent via  
64 email or electronic data interchange transmission. Each Non-Operator individually shall elect to receive statements and billings  
65 electronically, if available from the Operator, or request paper copies. Such election may be changed upon thirty (30) days prior written  
66 notice to the Operator.

1 **3. ADVANCES AND PAYMENTS BY THE PARTIES**

- 2 A. Unless otherwise provided for in the Agreement, the Operator may require the Non-Operators to advance their share of the estimated  
3 cash outlay for the succeeding month's operations within thirty (30) days after receipt of the advance request or by the first day of  
4 the month for which the advance is required, whichever is later. The Operator shall adjust each monthly billing to reflect advances  
5 received from the Non-Operators for such month. If a refund is due, the Operator shall apply the amount to be refunded to the  
6 subsequent month's billing or advance, unless the Non-Operator sends the Operator a written request for a cash refund. The Operator  
7 shall remit the refund to the Non-Operator within thirty (30) days of receipt of such written request.  
8
- 9 B. Except as provided below, each Party shall pay its proportionate share of all bills in full within thirty (30) days of receipt date. If  
10 payment is not made within such time, the unpaid balance shall bear interest compounded monthly at the prime rate published by the  
11 *Wall Street Journal* on the first day of each month the payment is delinquent, plus three percent (3%), per annum, or the maximum  
12 contract rate permitted by the applicable usury Laws governing the Joint Property, whichever is the lesser, plus attorney's fees, court  
13 costs, and other costs in connection with the collection of unpaid amounts. If the *Wall Street Journal* ceases to be published or  
14 discontinues publishing a prime rate, the unpaid balance shall bear interest compounded monthly at the prime rate published by the  
15 Federal Reserve plus three percent (3%), per annum. Interest shall begin accruing on the first day of the month in which the payment  
16 was due. Payment shall not be reduced or delayed as a result of inquiries or anticipated credits unless the Operator has agreed.  
17 Notwithstanding the foregoing, the Non-Operator may reduce payment, provided it furnishes documentation and explanation to the  
18 Operator at the time payment is made, to the extent such reduction is caused by:  
19
- 20 (1) being billed at an incorrect working interest or Participating Interest that is higher than such Non-Operator's actual working  
21 interest or Participating Interest, as applicable; or
  - 22 (2) being billed for a project or AFE requiring approval of the Parties under the Agreement that the Non-Operator has not approved  
23 or is not otherwise obligated to pay under the Agreement; or
  - 24 (3) being billed for a property in which the Non-Operator no longer owns a working interest, provided the Non-Operator has  
25 furnished the Operator a copy of the recorded assignment or letter in-lieu. Notwithstanding the foregoing, the Non-Operator  
26 shall remain responsible for paying bills attributable to the interest it sold or transferred for any bills rendered during the thirty  
27 (30) day period following the Operator's receipt of such written notice; or
  - 28 (4) charges outside the adjustment period, as provided in Section I.4 (*Adjustments*).  
29

30 **4. ADJUSTMENTS**

- 31 A. Payment of any such bills shall not prejudice the right of any Party to protest or question the correctness thereof; however, all bills  
32 and statements, including payout statements, rendered during any calendar year shall conclusively be presumed to be true and correct,  
33 with respect only to expenditures, after twenty-four (24) months following the end of any such calendar year, unless within said  
34 period a Party takes specific detailed written exception thereto making a claim for adjustment. The Operator shall provide a response  
35 to all written exceptions, whether or not contained in an audit report, within the time periods prescribed in Section I.5 (*Expenditure*  
36 *Audits*).  
37
- 38 B. All adjustments initiated by the Operator, except those described in items (1) through (4) of this Section I.4.B, are limited to the  
39 twenty-four (24) month period following the end of the calendar year in which the original charge appeared or should have appeared  
40 on the Operator's Joint Account statement or payout statement. Adjustments that may be made beyond the twenty-four (24) month  
41 period are limited to adjustments resulting from the following:  
42
- 43 (1) a physical inventory of Controllable Material as provided for in Section V (*Inventories of Controllable Material*), or
  - 44 (2) an offsetting entry (whether in whole or in part) that is the direct result of a specific joint interest audit exception granted by the  
45 Operator relating to another property, or
  - 46 (3) a government/regulatory audit, or
  - 47 (4) a working interest ownership or Participating Interest adjustment.  
48  
49

50 **5. EXPENDITURE AUDITS**

- 51 A. A Non-Operator, upon written notice to the Operator and all other Non-Operators, shall have the right to audit the Operator's  
52 accounts and records relating to the Joint Account within the twenty-four (24) month period following the end of such calendar year in  
53 which such bill was rendered; however, conducting an audit shall not extend the time for the taking of written exception to and the  
54 adjustment of accounts as provided for in Section I.4 (*Adjustments*). Any Party that is subject to payout accounting under the  
55 Agreement shall have the right to audit the accounts and records of the Party responsible for preparing the payout statements, or of  
56 the Party furnishing information to the Party responsible for preparing payout statements. Audits of payout accounts may include the  
57 volumes of hydrocarbons produced and saved and proceeds received for such hydrocarbons as they pertain to payout accounting  
58 required under the Agreement. Unless otherwise provided in the Agreement, audits of a payout account shall be conducted within the  
59 twenty-four (24) month period following the end of the calendar year in which the payout statement was rendered.  
60

61  
62 Where there are two or more Non-Operators, the Non-Operators shall make every reasonable effort to conduct a joint audit in a  
63 manner that will result in a minimum of inconvenience to the Operator. The Operator shall bear no portion of the Non-Operators'  
64 audit cost incurred under this paragraph unless agreed to by the Operator. The audits shall not be conducted more than once each year  
65 without prior approval of the Operator, except upon the resignation or removal of the Operator, and shall be made at the expense of  
66

1 those Non-Operators approving such audit.

2 The Non-Operator leading the audit (hereinafter "lead audit company") shall issue the audit report within ninety (90) days after  
3 completion of the audit testing and analysis; however, the ninety (90) day time period shall not extend the twenty-four (24) month  
4 requirement for taking specific detailed written exception as required in Section I.4.A (*Adjustments*) above. All claims shall be  
5 supported with sufficient documentation.  
6

7 A timely filed written exception or audit report containing written exceptions (hereinafter "written exceptions") shall, with respect to  
8 the claims made therein, preclude the Operator from asserting a statute of limitations defense against such claims, and the Operator  
9 hereby waives its right to assert any statute of limitations defense against such claims for so long as any Non-Operator continues to  
10 comply with the deadlines for resolving exceptions provided in this Accounting Procedure. If the Non-Operators fail to comply with  
11 the additional deadlines in Section I.5.B or I.5.C, the Operator's waiver of its rights to assert a statute of limitations defense against  
12 the claims brought by the Non-Operators shall lapse, and such claims shall then be subject to the applicable statute of limitations,  
13 provided that such waiver shall not lapse in the event that the Operator has failed to comply with the deadlines in Section I.5.B or  
14 I.5.C.  
15

16 B. The Operator shall provide a written response to all exceptions in an audit report within one hundred eighty (180) days after Operator  
17 receives such report. Denied exceptions should be accompanied by a substantive response. If the Operator fails to provide substantive  
18 response to an exception within this one hundred eighty (180) day period, the Operator will owe interest on that exception or portion  
19 thereof, if ultimately granted, from the date it received the audit report. Interest shall be calculated using the rate set forth in Section  
20 I.3.B (*Advances and Payments by the Parties*).  
21

22 C. The lead audit company shall reply to the Operator's response to an audit report within ninety (90) days of receipt, and the Operator  
23 shall reply to the lead audit company's follow-up response within ninety (90) days of receipt; provided, however, each Non-Operator  
24 shall have the right to represent itself if it disagrees with the lead audit company's position or believes the lead audit company is not  
25 adequately fulfilling its duties. Unless otherwise provided for in Section I.5.E, if the Operator fails to provide substantive response  
26 to an exception within this ninety (90) day period, the Operator will owe interest on that exception or portion thereof, if ultimately  
27 granted, from the date it received the audit report. Interest shall be calculated using the rate set forth in Section I.3.B (*Advances and  
28 Payments by the Parties*).  
29

30 D. If any Party fails to meet the deadlines in Sections I.5.B or I.5.C or if any audit issues are outstanding fifteen (15) months after  
31 Operator receives the audit report, the Operator or any Non-Operator participating in the audit has the right to call a resolution  
32 meeting, as set forth in this Section I.5.D or it may invoke the dispute resolution procedures included in the Agreement, if applicable.  
33 The meeting will require one month's written notice to the Operator and all Non-Operators participating in the audit. The meeting  
34 shall be held at the Operator's office or mutually agreed location, and shall be attended by representatives of the Parties with  
35 authority to resolve such outstanding issues. Any Party who fails to attend the resolution meeting shall be bound by any resolution  
36 reached at the meeting. The lead audit company will make good faith efforts to coordinate the response and positions of the  
37 Non-Operator participants throughout the resolution process; however, each Non-Operator shall have the right to represent itself.  
38 Attendees will make good faith efforts to resolve outstanding issues, and each Party will be required to present substantive information  
39 supporting its position. A resolution meeting may be held as often as agreed to by the Parties. Issues unresolved at one meeting may  
40 be discussed at subsequent meetings until each such issue is resolved.  
41

42 If the Agreement contains no dispute resolution procedures and the audit issues cannot be resolved by negotiation, the dispute shall  
43 be submitted to mediation. In such event, promptly following one Party's written request for mediation, the Parties to the dispute  
44 shall choose a mutually acceptable mediator and share the costs of mediation services equally. The Parties shall each have present  
45 at the mediation at least one individual who has the authority to settle the dispute. The Parties shall make reasonable efforts to  
46 ensure that the mediation commences within sixty (60) days of the date of the mediation request. Notwithstanding the above, any  
47 Party may file a lawsuit or complaint (1) if the Parties are unable after reasonable efforts, to commence mediation within sixty (60)  
48 days of the date of the mediation request, (2) for statute of limitations reasons, or (3) to seek a preliminary injunction or other  
49 provisional judicial relief, if in its sole judgment an injunction or other provisional relief is necessary to avoid irreparable damage or  
50 to preserve the status quo. Despite such action, the Parties shall continue to try to resolve the dispute by mediation.  
51

52 E.  (*Optional Provision – Forfeiture Penalties*)

53 *If the Non-Operators fail to meet the deadline in Section I.5.C, any unresolved exceptions that were not addressed by the Non-*  
54 *Operators within one (1) year following receipt of the last substantive response of the Operator shall be deemed to have been*  
55 *withdrawn by the Non-Operators. If the Operator fails to meet the deadlines in Section I.5.B or I.5.C, any unresolved exceptions that*  
56 *were not addressed by the Operator within one (1) year following receipt of the audit report or receipt of the last substantive response*  
57 *of the Non-Operators, whichever is later, shall be deemed to have been granted by the Operator and adjustments shall be made,*  
58 *without interest, to the Joint Account.*  
59

60 **6. APPROVAL BY PARTIES**

61 A. GENERAL MATTERS

62 Where an approval or other agreement of the Parties or Non-Operators is expressly required under other Sections of this Accounting  
63 Procedure and if the Agreement to which this Accounting Procedure is attached contains no contrary provisions in regard thereto, the  
64  
65  
66

1 Operator shall notify all Non-Operators of the Operator's proposal and the agreement or approval of a majority in interest of the  
2 Non-Operators shall be controlling on all Non-Operators.

3 This Section I.6.A applies to specific situations of limited duration where a Party proposes to change the accounting for charges from  
4 that prescribed in this Accounting Procedure. This provision does not apply to amendments to this Accounting Procedure, which are  
5 covered by Section I.6.B.  
6

7 **B. AMENDMENTS**

8  
9 If the Agreement to which this Accounting Procedure is attached contains no contrary provisions in regard thereto, this Accounting  
10 Procedure can be amended by an affirmative vote of two (2) or more Parties, one of which is the Operator,  
11 having a combined working interest of at least fifty-one percent (51%), which approval shall be binding on all Parties,  
12 provided, however, approval of at least one (1) Non-Operator shall be required.  
13

14 **C. AFFILIATES**

15  
16 For the purpose of administering the voting procedures of Sections I.6.A and I.6.B, if Parties to this Agreement are Affiliates of each  
17 other, then such Affiliates shall be combined and treated as a single Party having the combined working interest or Participating  
18 Interest of such Affiliates.  
19

20 For the purposes of administering the voting procedures in Section I.6.A, if a Non-Operator is an Affiliate of the Operator, votes  
21 under Section I.6.A shall require the majority in interest of the Non-Operator(s) after excluding the interest of the Operator's  
22 Affiliate.  
23

24 **II. DIRECT CHARGES**

25  
26 The Operator shall charge the Joint Account with the following items:

27  
28 **1. RENTALS AND ROYALTIES**

29 Lease rentals and royalties paid by the Operator, on behalf of all Parties, for the Joint Operations.  
30  
31

32 **2. LABOR**

33  
34 **A.** Salaries and wages, including incentive compensation programs as set forth in COPAS MFI-37 ("Chargeability of Incentive  
35 Compensation Programs"), for:

- 36  
37 (1) Operator's field employees directly employed On-site in the conduct of Joint Operations,  
38  
39 (2) Operator's employees directly employed on Shore Base Facilities, Offshore Facilities, or other facilities serving the Joint  
40 Property if such costs are not charged under Section II.6 (*Equipment and Facilities Furnished by Operator*) or are not a  
41 function covered under Section III (*Overhead*),  
42  
43 (3) Operator's employees providing First Level Supervision,  
44  
45 (4) Operator's employees providing On-site Technical Services for the Joint Property if such charges are excluded from the  
46 overhead rates in Section III (*Overhead*),  
47  
48 (5) Operator's employees providing Off-site Technical Services for the Joint Property if such charges are excluded from the  
49 overhead rates in Section III (*Overhead*).  
50

51 Charges for the Operator's employees identified in Section II.2.A may be made based on the employee's actual salaries and wages,  
52 or in lieu thereof, a day rate representing the Operator's average salaries and wages of the employee's specific job category.  
53

54 Charges for personnel chargeable under this Section II.2.A who are foreign nationals shall not exceed comparable compensation paid  
55 to an equivalent U.S. employee pursuant to this Section II.2, unless otherwise approved by the Parties pursuant to Section  
56 I.6.A (*General Matters*).  
57

58 **B.** Operator's cost of holiday, vacation, sickness, and disability benefits, and other customary allowances paid to employees whose  
59 salaries and wages are chargeable to the Joint Account under Section II.2.A, excluding severance payments or other termination  
60 allowances. Such costs under this Section II.2.B may be charged on a "when and as-paid basis" or by "percentage assessment" on the  
61 amount of salaries and wages chargeable to the Joint Account under Section II.2.A. If percentage assessment is used, the rate shall  
62 be based on the Operator's cost experience.  
63

64 **C.** Expenditures or contributions made pursuant to assessments imposed by governmental authority that are applicable to costs  
65 chargeable to the Joint Account under Sections II.2.A and B.  
66

- 1 D. Personal Expenses of personnel whose salaries and wages are chargeable to the Joint Account under Section II.2.A when the  
2 expenses are incurred in connection with directly chargeable activities.
- 3 E. Reasonable relocation costs incurred in transferring to the Joint Property personnel whose salaries and wages are chargeable to the  
4 Joint Account under Section II.2.A. Notwithstanding the foregoing, relocation costs that result from reorganization or merger of a  
5 Party, or that are for the primary benefit of the Operator, shall not be chargeable to the Joint Account. Extraordinary relocation  
6 costs, such as those incurred as a result of transfers from remote locations, such as Alaska or overseas, shall not be charged to the  
7 Joint Account unless approved by the Parties pursuant to Section I.6.A (*General Matters*).
- 8 F. Training costs as specified in COPAS MFI-35 (“Charging of Training Costs to the Joint Account”) for personnel whose salaries and  
9 wages are chargeable under Section II.2.A. This training charge shall include the wages, salaries, training course cost, and Personal  
10 Expenses incurred during the training session. The training cost shall be charged or allocated to the property or properties directly  
11 benefiting from the training. The cost of the training course shall not exceed prevailing commercial rates, where such rates are  
12 available.
- 13 G. Operator’s current cost of established plans for employee benefits, as described in COPAS MFI-27 (“Employee Benefits Chargeable  
14 to Joint Operations and Subject to Percentage Limitation”), applicable to the Operator’s labor costs chargeable to the Joint Account  
15 under Sections II.2.A and B based on the Operator’s actual cost not to exceed the employee benefits limitation percentage most  
16 recently recommended by COPAS.
- 17 H. Award payments to employees, in accordance with COPAS MFI-49 (“Awards to Employees and Contractors”) for personnel whose  
18 salaries and wages are chargeable under Section II.2.A.

19  
20  
21  
22  
23 **3. MATERIAL**

24  
25 Material purchased or furnished by the Operator for use on the Joint Property in the conduct of Joint Operations as provided under Section  
26 IV (*Material Purchases, Transfers, and Dispositions*). Only such Material shall be purchased for or transferred to the Joint Property as  
27 may be required for immediate use or is reasonably practical and consistent with efficient and economical operations. The accumulation  
28 of surplus stocks shall be avoided.

29  
30 **4. TRANSPORTATION**

- 31 A. Transportation of the Operator’s, Operator’s Affiliate’s, or contractor’s personnel necessary for Joint Operations.
- 32 B. Transportation of Material between the Joint Property and another property, or from the Operator’s warehouse or other storage point  
33 to the Joint Property, shall be charged to the receiving property using one of the methods listed below. Transportation of Material  
34 from the Joint Property to the Operator’s warehouse or other storage point shall be paid for by the Joint Property using one of the  
35 methods listed below:
- 36 (1) If the actual trucking charge is less than or equal to the Excluded Amount the Operator may charge actual trucking cost or a  
37 theoretical charge from the Railway Receiving Point to the Joint Property. The basis for the theoretical charge is the per  
38 hundred weight charge plus fuel surcharges from the Railway Receiving Point to the Joint Property. The Operator shall  
39 consistently apply the selected alternative.
- 40 (2) If the actual trucking charge is greater than the Excluded Amount, the Operator shall charge Equalized Freight. Accessorial  
41 charges such as loading and unloading costs, split pick-up costs, detention, call out charges, and permit fees shall be charged  
42 directly to the Joint Property and shall not be included when calculating the Equalized Freight.

43  
44  
45  
46  
47  
48 **5. SERVICES**

49  
50 The cost of contract services, equipment, and utilities used in the conduct of Joint Operations, except for contract services, equipment, and  
51 utilities covered by Section III (*Overhead*), or Section II.7 (*Affiliates*), or excluded under Section II.9 (*Legal Expense*). Awards paid to  
52 contractors shall be chargeable pursuant to COPAS MFI-49 (“Awards to Employees and Contractors”).

53  
54 The costs of third party Technical Services are chargeable to the extent excluded from the overhead rates under Section III (*Overhead*).

55  
56 **6. EQUIPMENT AND FACILITIES FURNISHED BY OPERATOR**

57  
58 In the absence of a separately negotiated agreement, equipment and facilities furnished by the Operator will be charged as follows:

- 59  
60 A. The Operator shall charge the Joint Account for use of Operator-owned equipment and facilities, including but not limited to  
61 production facilities, Shore Base Facilities, Offshore Facilities, and Field Offices, at rates commensurate with the costs of ownership  
62 and operation. The cost of Field Offices shall be chargeable to the extent the Field Offices provide direct service to personnel who  
63 are chargeable pursuant to Section II.2.A (*Labor*). Such rates may include labor, maintenance, repairs, other operating expense,  
64 insurance, taxes, depreciation using straight line depreciation method, and interest on gross investment less accumulated depreciation  
65 not to exceed six percent (6%) per annum; provided, however, depreciation shall not be charged when the  
66

1 equipment and facilities investment have been fully depreciated. The rate may include an element of the estimated cost for  
2 abandonment, reclamation, and dismantlement. Such rates shall not exceed the average commercial rates currently prevailing in the  
3 immediate area of the Joint Property.

- 4 B. In lieu of charges in Section II.6.A above, the Operator may elect to use average commercial rates prevailing in the immediate area  
5 of the Joint Property, less twenty percent (20%). If equipment and facilities are charged under this Section II.6.B, the Operator shall  
6 adequately document and support commercial rates and shall periodically review and update the rate and the supporting  
7 documentation. For automotive equipment, the Operator may elect to use rates published by the Petroleum Motor Transport  
8 Association (PMTA) or such other organization recognized by COPAS as the official source of rates.  
9

10 **7. AFFILIATES**

- 11  
12 A. Charges for an Affiliate's goods and/or services used in operations requiring an AFE or other authorization from the Non-Operators  
13 may be made without the approval of the Parties provided (i) the Affiliate is identified and the Affiliate goods and services are  
14 specifically detailed in the approved AFE or other authorization, and (ii) the total costs for such Affiliate's goods and services billed  
15 to such individual project do not exceed \$ 50,000. If the total costs for an Affiliate's goods and services charged to such  
16 individual project are not specifically detailed in the approved AFE or authorization or exceed such amount, charges for such  
17 Affiliate shall require approval of the Parties, pursuant to Section I.6.A (*General Matters*).  
18  
19 B. For an Affiliate's goods and/or services used in operations not requiring an AFE or other authorization from the Non-Operators,  
20 charges for such Affiliate's goods and services shall require approval of the Parties, pursuant to Section I.6.A (*General Matters*), if the  
21 charges exceed \$ 50,000 in a given calendar year.  
22  
23 C. The cost of the Affiliate's goods or services shall not exceed average commercial rates prevailing in the area of the Joint Property,  
24 unless the Operator obtains the Non-Operators' approval of such rates. The Operator shall adequately document and support  
25 commercial rates and shall periodically review and update the rate and the supporting documentation; provided, however,  
26 documentation of commercial rates shall not be required if the Operator obtains Non-Operator approval of its Affiliate's rates or  
27 charges prior to billing Non-Operators for such Affiliate's goods and services. Notwithstanding the foregoing, direct charges for  
28 Affiliate-owned communication facilities or systems shall be made pursuant to Section II.12 (*Communications*).  
29

30 If the Parties fail to designate an amount in Sections II.7.A or II.7.B, in each instance the amount deemed adopted by the Parties as a  
31 result of such omission shall be the amount established as the Operator's expenditure limitation in the Agreement. If the Agreement  
32 does not contain an Operator's expenditure limitation, the amount deemed adopted by the Parties as a result of such omission shall be  
33 zero dollars (\$ 0.00).  
34

35 **8. DAMAGES AND LOSSES TO JOINT PROPERTY**

36 All costs or expenses necessary for the repair or replacement of Joint Property resulting from damages or losses incurred, except to the  
37 extent such damages or losses result from a Party's or Parties' gross negligence or willful misconduct, in which case such Party or Parties  
38 shall be solely liable.  
39

40 The Operator shall furnish the Non-Operator written notice of damages or losses incurred as soon as practicable after a report has been  
41 received by the Operator.  
42

43 **9. LEGAL EXPENSE**

44 Recording fees and costs of handling, settling, or otherwise discharging litigation, claims, and liens incurred in or resulting from  
45 operations under the Agreement, or necessary to protect or recover the Joint Property, to the extent permitted under the Agreement. Costs  
46 of the Operator's or Affiliate's legal staff or outside attorneys, including fees and expenses, are not chargeable unless approved by the  
47 Parties pursuant to Section I.6.A (*General Matters*) or otherwise provided for in the Agreement.  
48

49 Notwithstanding the foregoing paragraph, costs for procuring abstracts, fees paid to outside attorneys for title examinations (including  
50 preliminary, supplemental, shut-in royalty opinions, division order title opinions), and curative work shall be chargeable to the extent  
51 permitted as a direct charge in the Agreement.  
52

53 **10. TAXES AND PERMITS**

54 All taxes and permitting fees of every kind and nature, assessed or levied upon or in connection with the Joint Property, or the production  
55 therefrom, and which have been paid by the Operator for the benefit of the Parties, including penalties and interest, except to the extent the  
56 penalties and interest result from the Operator's gross negligence or willful misconduct.  
57

58 If ad valorem taxes paid by the Operator are based in whole or in part upon separate valuations of each Party's working interest, then  
59 notwithstanding any contrary provisions, the charges to the Parties will be made in accordance with the tax value generated by each Party's  
60 working interest.  
61

1 Costs of tax consultants or advisors, the Operator's employees, or Operator's Affiliate employees in matters regarding ad valorem or other  
2 tax matters, are not permitted as direct charges unless approved by the Parties pursuant to Section I.6.A (*General Matters*).

3 Charges to the Joint Account resulting from sales/use tax audits, including extrapolated amounts and penalties and interest, are permitted,  
4 provided the Non-Operator shall be allowed to review the invoices and other underlying source documents which served as the basis for  
5 tax charges and to determine that the correct amount of taxes were charged to the Joint Account. If the Non-Operator is not permitted to  
6 review such documentation, the sales/use tax amount shall not be directly charged unless the Operator can conclusively document the  
7 amount owed by the Joint Account.  
8

9  
10 **11. INSURANCE**

11 Net premiums paid for insurance required to be carried for Joint Operations for the protection of the Parties. If Joint Operations are  
12 conducted at locations where the Operator acts as self-insurer in regard to its worker's compensation and employer's liability insurance  
13 obligation, the Operator shall charge the Joint Account manual rates for the risk assumed in its self-insurance program as regulated by the  
14 jurisdiction governing the Joint Property. In the case of offshore operations in federal waters, the manual rates of the adjacent state shall be  
15 used for personnel performing work On-site, and such rates shall be adjusted for offshore operations by the U.S. Longshoreman and  
16 Harbor Workers (USL&H) or Jones Act surcharge, as appropriate.  
17

18 **12. COMMUNICATIONS**

19  
20 Costs of acquiring, leasing, installing, operating, repairing, and maintaining communication facilities or systems, including satellite, radio  
21 and microwave facilities, between the Joint Property and the Operator's office(s) directly responsible for field operations in accordance  
22 with the provisions of COPAS MFI-44 ("Field Computer and Communication Systems"). If the communications facilities or systems  
23 serving the Joint Property are Operator-owned, charges to the Joint Account shall be made as provided in Section II.6 (*Equipment and*  
24 *Facilities Furnished by Operator*). If the communication facilities or systems serving the Joint Property are owned by the Operator's  
25 Affiliate, charges to the Joint Account shall not exceed average commercial rates prevailing in the area of the Joint Property. The Operator  
26 shall adequately document and support commercial rates and shall periodically review and update the rate and the supporting  
27 documentation.  
28

29  
30 **13. ECOLOGICAL, ENVIRONMENTAL, AND SAFETY**

31 Costs incurred for Technical Services and drafting to comply with ecological, environmental and safety Laws or standards recommended by  
32 Occupational Safety and Health Administration (OSHA) or other regulatory authorities. All other labor and functions incurred for  
33 ecological, environmental and safety matters, including management, administration, and permitting, shall be covered by Sections II.2  
34 (*Labor*), II.5 (*Services*), or Section III (*Overhead*), as applicable.  
35

36 Costs to provide or have available pollution containment and removal equipment plus actual costs of control and cleanup and resulting  
37 responsibilities of oil and other spills as well as discharges from permitted outfalls as required by applicable Laws, or other pollution  
38 containment and removal equipment deemed appropriate by the Operator for prudent operations, are directly chargeable.  
39

40 **14. ABANDONMENT AND RECLAMATION**

41  
42 Costs incurred for abandonment and reclamation of the Joint Property, including costs required by lease agreements or by Laws.  
43

44 **15. OTHER EXPENDITURES**

45  
46 Any other expenditure not covered or dealt with in the foregoing provisions of this Section II (*Direct Charges*), or in Section III  
47 (*Overhead*) and which is of direct benefit to the Joint Property and is incurred by the Operator in the necessary and proper conduct of the  
48 Joint Operations. Charges made under this Section II.15 shall require approval of the Parties, pursuant to Section I.6.A (*General Matters*).  
49

50  
51 **III. OVERHEAD**

52  
53 As compensation for costs not specifically identified as chargeable to the Joint Account pursuant to Section II (*Direct Charges*), the Operator  
54 shall charge the Joint Account in accordance with this Section III.  
55

56 Functions included in the overhead rates regardless of whether performed by the Operator, Operator's Affiliates or third parties and regardless  
57 of location, shall include, but not be limited to, costs and expenses of:  
58

- 59
- 60 • warehousing, other than for warehouses that are jointly owned under this Agreement
  - 61 • design and drafting (except when allowed as a direct charge under Sections II.13, III.1.A(ii), and III.2, Option B)
  - 62 • inventory costs not chargeable under Section V (*Inventories of Controllable Material*)
  - 63 • procurement
  - 64 • administration
  - 65 • accounting and auditing
  - 66 • gas dispatching and gas chart integration

- human resources
- management
- supervision not directly charged under Section II.2 (*Labor*)
- legal services not directly chargeable under Section II.9 (*Legal Expense*)
- taxation, other than those costs identified as directly chargeable under Section II.10 (*Taxes and Permits*)
- preparation and monitoring of permits and certifications; preparing regulatory reports; appearances before or meetings with governmental agencies or other authorities having jurisdiction over the Joint Property, other than On-site inspections; reviewing, interpreting, or submitting comments on or lobbying with respect to Laws or proposed Laws.

Overhead charges shall include the salaries or wages plus applicable payroll burdens, benefits, and Personal Expenses of personnel performing overhead functions, as well as office and other related expenses of overhead functions.

## 1. OVERHEAD—DRILLING AND PRODUCING OPERATIONS

As compensation for costs incurred but not chargeable under Section II (*Direct Charges*) and not covered by other provisions of this Section III, the Operator shall charge on either:

- (Alternative 1) Fixed Rate Basis, Section III.1.B.
- (Alternative 2) Percentage Basis, Section III.1.C.

### A. TECHNICAL SERVICES

- (i) Except as otherwise provided in Section II.13 (*Ecological, Environmental, and Safety*) and Section III.2 (*Overhead – Major Construction and Catastrophe*), or by approval of the Parties pursuant to Section I.6.A (*General Matters*), the salaries, wages, related payroll burdens and benefits, and Personal Expenses for **On-site** Technical Services, including third party Technical Services:

(Alternative 1 – Direct) shall be charged direct to the Joint Account.

(Alternative 2 – Overhead) shall be covered by the overhead rates.

- (ii) Except as otherwise provided in Section II.13 (*Ecological, Environmental, and Safety*) and Section III.2 (*Overhead – Major Construction and Catastrophe*), or by approval of the Parties pursuant to Section I.6.A (*General Matters*), the salaries, wages, related payroll burdens and benefits, and Personal Expenses for **Off-site** Technical Services, including third party Technical Services:

(Alternative 1 – All Overhead) shall be covered by the overhead rates.

(Alternative 2 – All Direct) shall be charged direct to the Joint Account.

(Alternative 3 – Drilling Direct) shall be charged direct to the Joint Account, only to the extent such Technical Services are directly attributable to drilling, re-drilling, deepening, or sidetracking operations, through completion, temporary abandonment, or abandonment if a dry hole. Off-site Technical Services for all other operations, including workover, recompletion, abandonment of producing wells, and the construction or expansion of fixed assets not covered by Section III.2 (*Overhead – Major Construction and Catastrophe*) shall be covered by the overhead rates.

Notwithstanding anything to the contrary in this Section III, Technical Services provided by Operator's Affiliates are subject to limitations set forth in Section II.7 (*Affiliates*). Charges for Technical personnel performing non-technical work shall not be governed by this Section III.1.A, but instead governed by other provisions of this Accounting Procedure relating to the type of work being performed.

### B. OVERHEAD—FIXED RATE BASIS

- (1) The Operator shall charge the Joint Account at the following rates per well per month:

Drilling Well Rate per month \$ 10,500 (prorated for less than a full month)

Producing Well Rate per month \$ 1,050

- (2) Application of Overhead—Drilling Well Rate shall be as follows:

- (a) Charges for onshore drilling wells shall begin on the spud date and terminate on the date the drilling and/or completion equipment used on the well is released, whichever occurs later. Charges for offshore and inland waters drilling wells shall begin on the date the drilling or completion equipment arrives on location and terminate on the date the drilling or completion equipment moves off location, or is released, whichever occurs first. No charge shall be made during suspension of drilling and/or completion operations for fifteen (15) or more consecutive calendar days.

(b) Charges for any well undergoing any type of workover, recompletion, and/or abandonment for a period of five (5) or more consecutive work-days shall be made at the Drilling Well Rate. Such charges shall be applied for the period from date operations, with rig or other units used in operations, commence through date of rig or other unit release, except that no charges shall be made during suspension of operations for fifteen (15) or more consecutive calendar days.

(3) Application of Overhead—Producing Well Rate shall be as follows:

(a) An active well that is produced, injected into for recovery or disposal, or used to obtain water supply to support operations for any portion of the month shall be considered as a one-well charge for the entire month.

(b) Each active completion in a multi-completed well shall be considered as a one-well charge provided each completion is considered a separate well by the governing regulatory authority.

(c) A one-well charge shall be made for the month in which plugging and abandonment operations are completed on any well, unless the Drilling Well Rate applies, as provided in Sections III.1.B.(2)(a) or (b). This one-well charge shall be made whether or not the well has produced.

(d) An active gas well shut in because of overproduction or failure of a purchaser, processor, or transporter to take production shall be considered as a one-well charge provided the gas well is directly connected to a permanent sales outlet.

(e) Any well not meeting the criteria set forth in Sections III.1.B.(3) (a), (b), (c), or (d) shall not qualify for a producing overhead charge.

(4) The well rates shall be adjusted on the first day of April each year following the effective date of the Agreement; provided, however, if this Accounting Procedure is attached to or otherwise governing the payout accounting under a farmout agreement, the rates shall be adjusted on the first day of April each year following the effective date of such farmout agreement. The adjustment shall be computed by applying the adjustment factor most recently published by COPAS. The adjusted rates shall be the initial or amended rates agreed to by the Parties increased or decreased by the adjustment factor described herein, for each year from the effective date of such rates, in accordance with COPAS MFI-47 (“Adjustment of Overhead Rates”).

#### C. OVERHEAD—PERCENTAGE BASIS

(1) Operator shall charge the Joint Account at the following rates:

(a) Development Rate \_\_\_\_\_ percent (\_\_\_\_\_) % of the cost of development of the Joint Property, exclusive of costs provided under Section II.9 (*Legal Expense*) and all Material salvage credits.

(b) Operating Rate \_\_\_\_\_ percent (\_\_\_\_\_) % of the cost of operating the Joint Property, exclusive of costs provided under Sections II.1 (*Rentals and Royalties*) and II.9 (*Legal Expense*); all Material salvage credits; the value of substances purchased for enhanced recovery; all property and ad valorem taxes, and any other taxes and assessments that are levied, assessed, and paid upon the mineral interest in and to the Joint Property.

(2) Application of Overhead—Percentage Basis shall be as follows:

(a) The Development Rate shall be applied to all costs in connection with:

- [i] drilling, re-drilling, sidetracking, or deepening of a well
- [ii] a well undergoing plugback or workover operations for a period of five (5) or more consecutive work-days
- [iii] preliminary expenditures necessary in preparation for drilling
- [iv] expenditures incurred in abandoning when the well is not completed as a producer
- [v] construction or installation of fixed assets, the expansion of fixed assets and any other project clearly discernible as a fixed asset, other than Major Construction or Catastrophe as defined in Section III.2 (*Overhead-Major Construction and Catastrophe*).

(b) The Operating Rate shall be applied to all other costs in connection with Joint Operations, except those subject to Section III.2 (*Overhead-Major Construction and Catastrophe*).

#### 2. OVERHEAD—MAJOR CONSTRUCTION AND CATASTROPHE

To compensate the Operator for overhead costs incurred in connection with a Major Construction project or Catastrophe, the Operator shall either negotiate a rate prior to the beginning of the project, or shall charge the Joint Account for overhead based on the following rates for any Major Construction project in excess of the Operator’s expenditure limit under the Agreement, or for any Catastrophe regardless of the amount. If the Agreement to which this Accounting Procedure is attached does not contain an expenditure limit, Major Construction Overhead shall be assessed for any single Major Construction project costing in excess of \$100,000 gross.

1 Major Construction shall mean the construction and installation of fixed assets, the expansion of fixed assets, and any other project clearly  
2 discernible as a fixed asset required for the development and operation of the Joint Property, or in the dismantlement, abandonment,  
3 removal, and restoration of platforms, production equipment, and other operating facilities.

4 Catastrophe is defined as a sudden calamitous event bringing damage, loss, or destruction to property or the environment, such as an oil  
5 spill, blowout, explosion, fire, storm, hurricane, or other disaster. The overhead rate shall be applied to those costs necessary to restore the  
6 Joint Property to the equivalent condition that existed prior to the event.  
7

8 A. If the Operator absorbs the engineering, design and drafting costs related to the project:  
9

- 10 (1)  5  % of total costs if such costs are less than \$100,000; plus  
11  
12 (2)  4  % of total costs in excess of \$100,000 but less than \$1,000,000; plus  
13  
14 (3)  3  % of total costs in excess of \$1,000,000.  
15

16 B. If the Operator charges engineering, design and drafting costs related to the project directly to the Joint Account:  
17

- 18 (1)  4  % of total costs if such costs are less than \$100,000; plus  
19  
20 (2)  3  % of total costs in excess of \$100,000 but less than \$1,000,000; plus  
21  
22 (3)  2  % of total costs in excess of \$1,000,000.  
23

24 Total cost shall mean the gross cost of any one project. For the purpose of this paragraph, the component parts of a single Major  
25 Construction project shall not be treated separately, and the cost of drilling and workover wells and purchasing and installing pumping  
26 units and downhole artificial lift equipment shall be excluded. For Catastrophes, the rates shall be applied to all costs associated with each  
27 single occurrence or event.  
28

29 On each project, the Operator shall advise the Non-Operator(s) in advance which of the above options shall apply.  
30

31 For the purposes of calculating Catastrophe Overhead, the cost of drilling relief wells, substitute wells, or conducting other well operations  
32 directly resulting from the catastrophic event shall be included. Expenditures to which these rates apply shall not be reduced by salvage or  
33 insurance recoveries. Expenditures that qualify for Major Construction or Catastrophe Overhead shall not qualify for overhead under any  
34 other overhead provisions.  
35

36 In the event of any conflict between the provisions of this Section III.2 and the provisions of Sections II.2 (*Labor*), II.5 (*Services*), or II.7  
37 (*Affiliates*), the provisions of this Section III.2 shall govern.  
38

### 39 3. AMENDMENT OF OVERHEAD RATES 40

41 The overhead rates provided for in this Section III may be amended from time to time if, in practice, the rates are found to be insufficient  
42 or excessive, in accordance with the provisions of Section I.6.B (*Amendments*).  
43  
44

## 45 IV. MATERIAL PURCHASES, TRANSFERS, AND DISPOSITIONS 46

47 The Operator is responsible for Joint Account Material and shall make proper and timely charges and credits for direct purchases, transfers, and  
48 dispositions. The Operator shall provide all Material for use in the conduct of Joint Operations; however, Material may be supplied by the Non-  
49 Operators, at the Operator's option. Material furnished by any Party shall be furnished without any express or implied warranties as to quality,  
50 fitness for use, or any other matter.  
51

### 52 1. DIRECT PURCHASES 53

54 Direct purchases shall be charged to the Joint Account at the price paid by the Operator after deduction of all discounts received. The  
55 Operator shall make good faith efforts to take discounts offered by suppliers, but shall not be liable for failure to take discounts except to  
56 the extent such failure was the result of the Operator's gross negligence or willful misconduct. A direct purchase shall be deemed to occur  
57 when an agreement is made between an Operator and a third party for the acquisition of Material for a specific well site or location.  
58 Material provided by the Operator under "vendor stocking programs," where the initial use is for a Joint Property and title of the Material  
59 does not pass from the manufacturer, distributor, or agent until usage, is considered a direct purchase. If Material is found to be defective  
60 or is returned to the manufacturer, distributor, or agent for any other reason, credit shall be passed to the Joint Account within sixty (60)  
61 days after the Operator has received adjustment from the manufacturer, distributor, or agent.  
62  
63  
64  
65  
66

1     **2. TRANSFERS**

2     A transfer is determined to occur when the Operator (i) furnishes Material from a storage facility or from another operated property, (ii) has  
3     assumed liability for the storage costs and changes in value, and (iii) has previously secured and held title to the transferred Material.  
4     Similarly, the removal of Material from the Joint Property to a storage facility or to another operated property is also considered a transfer;  
5     provided, however, Material that is moved from the Joint Property to a storage location for safe-keeping pending disposition may remain  
6     charged to the Joint Account and is not considered a transfer. Material shall be disposed of in accordance with Section IV.3 (*Disposition of*  
7     *Surplus*) and the Agreement to which this Accounting Procedure is attached.  
8

9     **A. PRICING**

10     The value of Material transferred to/from the Joint Property should generally reflect the market value on the date of physical transfer.  
11     Regardless of the pricing method used, the Operator shall make available to the Non-Operators sufficient documentation to verify the  
12     Material valuation. When higher than specification grade or size tubulars are used in the conduct of Joint Operations, the Operator  
13     shall charge the Joint Account at the equivalent price for well design specification tubulars, unless such higher specification grade or  
14     sized tubulars are approved by the Parties pursuant to Section I.6.A (*General Matters*). Transfers of new Material will be priced  
15     using one of the following pricing methods; provided, however, the Operator shall use consistent pricing methods, and not alternate  
16     between methods for the purpose of choosing the method most favorable to the Operator for a specific transfer:  
17

- 18
- 19     (1) Using published prices in effect on date of movement as adjusted by the appropriate COPAS Historical Price Multiplier (HPM)  
20     or prices provided by the COPAS Computerized Equipment Pricing System (CEPS).  
21
    - 22         (a) For oil country tubulars and line pipe, the published price shall be based upon eastern mill carload base prices (Houston,  
23         Texas, for special end) adjusted as of date of movement, plus transportation cost as defined in Section IV.2.B (*Freight*).  
24
    - 25         (b) For other Material, the published price shall be the published list price in effect at date of movement, as listed by a Supply  
26         Store nearest the Joint Property where like Material is normally available, or point of manufacture plus transportation  
27         costs as defined in Section IV.2.B (*Freight*).  
28
  - 29     (2) Based on a price quotation from a vendor that reflects a current realistic acquisition cost.  
30
  - 31     (3) Based on the amount paid by the Operator for like Material in the vicinity of the Joint Property within the previous twelve (12)  
32     months from the date of physical transfer.  
33
  - 34     (4) As agreed to by the Participating Parties for Material being transferred to the Joint Property, and by the Parties owning the  
35     Material for Material being transferred from the Joint Property.  
36

37     **B. FREIGHT**

38     Transportation costs shall be added to the Material transfer price using the method prescribed by the COPAS Computerized  
39     Equipment Pricing System (CEPS). If not using CEPS, transportation costs shall be calculated as follows:  
40

- 41     (1) Transportation costs for oil country tubulars and line pipe shall be calculated using the distance from eastern mill to the  
42     Railway Receiving Point based on the carload weight basis as recommended by the COPAS MFI-38 ("Material Pricing  
43     Manual") and other COPAS MFIs in effect at the time of the transfer.  
44
- 45     (2) Transportation costs for special mill items shall be calculated from that mill's shipping point to the Railway Receiving Point.  
46     For transportation costs from other than eastern mills, the 30,000-pound interstate truck rate shall be used. Transportation costs  
47     for macaroni tubing shall be calculated based on the interstate truck rate per weight of tubing transferred to the Railway  
48     Receiving Point.  
49
- 50     (3) Transportation costs for special end tubular goods shall be calculated using the interstate truck rate from Houston, Texas, to the  
51     Railway Receiving Point.  
52
- 53     (4) Transportation costs for Material other than that described in Sections IV.2.B.(1) through (3), shall be calculated from the  
54     Supply Store or point of manufacture, whichever is appropriate, to the Railway Receiving Point  
55

56     Regardless of whether using CEPS or manually calculating transportation costs, transportation costs from the Railway Receiving Point  
57     to the Joint Property are in addition to the foregoing, and may be charged to the Joint Account based on actual costs incurred. All  
58     transportation costs are subject to Equalized Freight as provided in Section II.4 (*Transportation*) of this Accounting Procedure.  
59

60     **C. TAXES**

61     Sales and use taxes shall be added to the Material transfer price using either the method contained in the COPAS Computerized  
62     Equipment Pricing System (CEPS) or the applicable tax rate in effect for the Joint Property at the time and place of transfer. In either  
63     case, the Joint Account shall be charged or credited at the rate that would have governed had the Material been a direct purchase.  
64  
65  
66

1 D. CONDITION

2 (1) Condition "A" – New and unused Material in sound and serviceable condition shall be charged at one hundred percent (100%)  
3 of the price as determined in Sections IV.2.A (*Pricing*), IV.2.B (*Freight*), and IV.2.C (*Taxes*). Material transferred from the  
4 Joint Property that was not placed in service shall be credited as charged without gain or loss; provided, however, any unused  
5 Material that was charged to the Joint Account through a direct purchase will be credited to the Joint Account at the original  
6 cost paid less restocking fees charged by the vendor. New and unused Material transferred from the Joint Property may be  
7 credited at a price other than the price originally charged to the Joint Account provided such price is approved by the Parties  
8 owning such Material, pursuant to Section I.6.A (*General Matters*). All refurbishing costs required or necessary to return the  
9 Material to original condition or to correct handling, transportation, or other damages will be borne by the divesting property.  
10 The Joint Account is responsible for Material preparation, handling, and transportation costs for new and unused Material  
11 charged to the Joint Property either through a direct purchase or transfer. Any preparation costs incurred, including any internal  
12 or external coating and wrapping, will be credited on new Material provided these services were not repeated for such Material  
13 for the receiving property.

14  
15 (2) Condition "B" – Used Material in sound and serviceable condition and suitable for reuse without reconditioning shall be priced  
16 by multiplying the price determined in Sections IV.2.A (*Pricing*), IV.2.B (*Freight*), and IV.2.C (*Taxes*) by seventy-five percent  
17 (75%).

18  
19 Except as provided in Section IV.2.D(3), all reconditioning costs required to return the Material to Condition "B" or to correct  
20 handling, transportation or other damages will be borne by the divesting property.

21  
22 If the Material was originally charged to the Joint Account as used Material and placed in service for the Joint Property, the  
23 Material will be credited at the price determined in Sections IV.2.A (*Pricing*), IV.2.B (*Freight*), and IV.2.C (*Taxes*) multiplied  
24 by sixty-five percent (65%).

25  
26 Unless otherwise agreed to by the Parties that paid for such Material, used Material transferred from the Joint Property that was  
27 not placed in service on the property shall be credited as charged without gain or loss.

28  
29 (3) Condition "C" – Material that is not in sound and serviceable condition and not suitable for its original function until after  
30 reconditioning shall be priced by multiplying the price determined in Sections IV.2.A (*Pricing*), IV.2.B (*Freight*), and IV.2.C  
31 (*Taxes*) by fifty percent (50%).

32  
33 The cost of reconditioning may be charged to the receiving property to the extent Condition "C" value, plus cost of  
34 reconditioning, does not exceed Condition "B" value.

35  
36 (4) Condition "D" – Material that (i) is no longer suitable for its original purpose but useable for some other purpose, (ii) is  
37 obsolete, or (iii) does not meet original specifications but still has value and can be used in other applications as a substitute for  
38 items with different specifications, is considered Condition "D" Material. Casing, tubing, or drill pipe used as line pipe shall be  
39 priced as Grade A and B seamless line pipe of comparable size and weight. Used casing, tubing, or drill pipe utilized as line  
40 pipe shall be priced at used line pipe prices. Casing, tubing, or drill pipe used as higher pressure service lines than standard line  
41 pipe, e.g., power oil lines, shall be priced under normal pricing procedures for casing, tubing, or drill pipe. Upset tubular goods  
42 shall be priced on a non-upset basis. For other items, the price used should result in the Joint Account being charged or credited  
43 with the value of the service rendered or use of the Material, or as agreed to by the Parties pursuant to Section I.6.A (*General*  
44 *Matters*).

45  
46 (5) Condition "E" – Junk shall be priced at prevailing scrap value prices.

47  
48 E. OTHER PRICING PROVISIONS

49  
50 (1) Preparation Costs

51  
52 Subject to Section II (*Direct Charges*) and Section III (*Overhead*) of this Accounting Procedure, costs incurred by the Operator  
53 in making Material serviceable including inspection, third party surveillance services, and other similar services will be charged  
54 to the Joint Account at prices which reflect the Operator's actual costs of the services. Documentation must be provided to the  
55 Non-Operators upon request to support the cost of service. New coating and/or wrapping shall be considered a component of  
56 the Materials and priced in accordance with Sections IV.1 (*Direct Purchases*) or IV.2.A (*Pricing*), as applicable. No charges or  
57 credits shall be made for used coating or wrapping. Charges and credits for inspections shall be made in accordance with  
58 COPAS MFI-38 ("Material Pricing Manual").

59  
60 (2) Loading and Unloading Costs

61  
62 Loading and unloading costs related to the movement of the Material to the Joint Property shall be charged in accordance with  
63 the methods specified in COPAS MFI-38 ("Material Pricing Manual").  
64  
65  
66

1 **3. DISPOSITION OF SURPLUS**

2 Surplus Material is that Material, whether new or used, that is no longer required for Joint Operations. The Operator may purchase, but  
3 shall be under no obligation to purchase, the interest of the Non-Operators in surplus Material.  
4

5 Dispositions for the purpose of this procedure are considered to be the relinquishment of title of the Material from the Joint Property to  
6 either a third party, a Non-Operator, or to the Operator. To avoid the accumulation of surplus Material, the Operator should make good  
7 faith efforts to dispose of surplus within twelve (12) months through buy/sale agreements, trade, sale to a third party, division in kind, or  
8 other dispositions as agreed to by the Parties.  
9

10 Disposal of surplus Materials shall be made in accordance with the terms of the Agreement to which this Accounting Procedure is  
11 attached. If the Agreement contains no provisions governing disposal of surplus Material, the following terms shall apply:  
12

- 13 • The Operator may, through a sale to an unrelated third party or entity, dispose of surplus Material having a gross sale value that  
14 is less than or equal to the Operator's expenditure limit as set forth in the Agreement to which this Accounting Procedure is  
15 attached without the prior approval of the Parties owning such Material.  
16
- 17 • If the gross sale value exceeds the Agreement expenditure limit, the disposal must be agreed to by the Parties owning such  
18 Material.  
19
- 20 • Operator may purchase surplus Condition "A" or "B" Material without approval of the Parties owning such Material, based on  
21 the pricing methods set forth in Section IV.2 (*Transfers*).  
22
- 23 • Operator may purchase Condition "C" Material without prior approval of the Parties owning such Material if the value of the  
24 Materials, based on the pricing methods set forth in Section IV.2 (*Transfers*), is less than or equal to the Operator's expenditure  
25 limitation set forth in the Agreement. The Operator shall provide documentation supporting the classification of the Material as  
26 Condition C.  
27
- 28 • Operator may dispose of Condition "D" or "E" Material under procedures normally utilized by Operator without prior approval  
29 of the Parties owning such Material.  
30

31 **4. SPECIAL PRICING PROVISIONS**

32 **A. PREMIUM PRICING**

33 Whenever Material is available only at inflated prices due to national emergencies, strikes, government imposed foreign trade  
34 restrictions, or other unusual causes over which the Operator has no control, for direct purchase the Operator may charge the Joint  
35 Account for the required Material at the Operator's actual cost incurred in providing such Material, making it suitable for use, and  
36 moving it to the Joint Property. Material transferred or disposed of during premium pricing situations shall be valued in accordance  
37 with Section IV.2 (*Transfers*) or Section IV.3 (*Disposition of Surplus*), as applicable.  
38  
39  
40

41 **B. SHOP-MADE ITEMS**

42 Items fabricated by the Operator's employees, or by contract laborers under the direction of the Operator, shall be priced using the  
43 value of the Material used to construct the item plus the cost of labor to fabricate the item. If the Material is from the Operator's  
44 scrap or junk account, the Material shall be priced at either twenty-five percent (25%) of the current price as determined in Section  
45 IV.2.A (*Pricing*) or scrap value, whichever is higher. In no event shall the amount charged exceed the value of the item  
46 commensurate with its use.  
47  
48

49 **C. MILL REJECTS**

50 Mill rejects purchased as "limited service" casing or tubing shall be priced at eighty percent (80%) of K-55/J-55 price as determined in  
51 Section IV.2 (*Transfers*). Line pipe converted to casing or tubing with casing or tubing couplings attached shall be priced as K-55/J-  
52 55 casing or tubing at the nearest size and weight.  
53  
54

55  
56 **V. INVENTORIES OF CONTROLLABLE MATERIAL**  
57

58  
59 The Operator shall maintain records of Controllable Material charged to the Joint Account, with sufficient detail to perform physical inventories.  
60

61 Adjustments to the Joint Account by the Operator resulting from a physical inventory of Controllable Material shall be made within twelve (12)  
62 months following the taking of the inventory or receipt of Non-Operator inventory report. Charges and credits for overages or shortages will be  
63 valued for the Joint Account in accordance with Section IV.2 (*Transfers*) and shall be based on the Condition "B" prices in effect on the date of  
64 physical inventory unless the inventorying Parties can provide sufficient evidence another Material condition applies.  
65  
66

1 **1. DIRECTED INVENTORIES**

2 Physical inventories shall be performed by the Operator upon written request of a majority in working interests of the Non-Operators  
3 (hereinafter, "directed inventory"); provided, however, the Operator shall not be required to perform directed inventories more frequently  
4 than once every five (5) years. Directed inventories shall be commenced within one hundred eighty (180) days after the Operator receives  
5 written notice that a majority in interest of the Non-Operators has requested the inventory. All Parties shall be governed by the results of  
6 any directed inventory.  
7

8 Expenses of directed inventories will be borne by the Joint Account; provided, however, costs associated with any post-report follow-up  
9 work in settling the inventory will be absorbed by the Party incurring such costs. The Operator is expected to exercise judgment in keeping  
10 expenses within reasonable limits. Any anticipated disproportionate or extraordinary costs should be discussed and agreed upon prior to  
11 commencement of the inventory. Expenses of directed inventories may include the following:  
12

- 13 A. A per diem rate for each inventory person, representative of actual salaries, wages, and payroll burdens and benefits of the personnel  
14 performing the inventory or a rate agreed to by the Parties pursuant to Section I.6.A (*General Matters*). The per diem rate shall also  
15 be applied to a reasonable number of days for pre-inventory work and report preparation.  
16  
17 B. Actual transportation costs and Personal Expenses for the inventory team.  
18  
19 C. Reasonable charges for report preparation and distribution to the Non-Operators.  
20

21 **2. NON-DIRECTED INVENTORIES**

22 A. OPERATOR INVENTORIES

23 Physical inventories that are not requested by the Non-Operators may be performed by the Operator, at the Operator's discretion. The  
24 expenses of conducting such Operator-initiated inventories shall not be charged to the Joint Account.  
25

26 B. NON-OPERATOR INVENTORIES

27 Subject to the terms of the Agreement to which this Accounting Procedure is attached, the Non-Operators may conduct a physical  
28 inventory at reasonable times at their sole cost and risk after giving the Operator at least ninety (90) days prior written notice. The  
29 Non-Operator inventory report shall be furnished to the Operator in writing within ninety (90) days of completing the inventory  
30 fieldwork.  
31

32 C. SPECIAL INVENTORIES

33 The expense of conducting inventories other than those described in Sections V.1 (*Directed Inventories*), V.2.A (*Operator*  
34 *Inventories*), or V.2.B (*Non-Operator Inventories*), shall be charged to the Party requesting such inventory; provided, however,  
35 inventories required due to a change of Operator shall be charged to the Joint Account in the same manner as described in Section  
36 V.1 (*Directed Inventories*).  
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## **EXHIBIT "D"**

**ATTACHED TO AND MADE PART OF THAT CERTAIN OPERATING AGREEMENT DATED THE 18th DAY OF May, 2015 BY AND BETWEEN XTO ENERGY INC., AS "OPERATOR" AND RICE DRILLING D LLC, AS "NON-OPERATORS", COVERING THE MILLER UNIT A IN BELMONT COUNTY, OHIO.**

### **Insurance**

At all times while operations are conducted hereunder, Operator shall procure and maintain or cause to be procured and maintained for the Joint Account all insurances in the types and amounts required by applicable law where operations are being conducted, including all federal and state Worker's Compensation Laws; provided, however, that Operator may qualify as a self-insurer for liability under appropriate state workers' compensation laws in which event the only charge that shall be made to the joint account shall be in amount equivalent to the premium which would have been paid had such insurance been obtained. Operator shall, within reason, endeavor to require all Contractors engaged in work on or for the contract area to comply with all state and federal workers' compensation laws where the operations are being conducted and to maintain such other insurance as Operator may require.

No other insurance shall be purchased, or carried, by the Operator for the benefit of the Parties hereto except as directed by the operating committee or as required by third party contract to the joint account. Any liability, loss, damage, claim or expense resulting from occurrences not covered by or in the excess of insurance required under this provision shall be borne by parties hereto in the same proportion as their interests may appear at the time of the loss.

Each party may procure and maintain, at its own cost and expense such public liability, third party property damage, fire and extended coverage and/or other insurance as it shall determine, and any such insurance so procured and or maintained shall inure solely to the benefit of the party procuring such insurance and such party shall indemnify and hold harmless Operator and other parties to this agreement harmless against any claim of such insurance carrier arising against such other party by subrogation, or otherwise and be primary to, and receive no contribution from, any other insurance maintained by or on behalf of, or benefiting Operator or the other Parties, in connection with operations hereunder.

1 NOTE: Instructions For Use of Gas Balancing  
2 Agreement MUST be reviewed before finalizing  
3 this document.  
4  
5  
6

7 **EXHIBIT "E"**  
8 **GAS BALANCING AGREEMENT ("AGREEMENT")**  
9 **ATTACHED TO AND MADE PART OF THAT CERTAIN**

10 **OPERATING AGREEMENT DATED May 18, 2015**

11 **BY AND BETWEEN XTO Energy Inc. AND Rice Drilling D LLC ("OPERATING AGREEMENT")**  
12 **RELATING TO THE MILLER UNIT A AREA,**  
13 **BELMONT COUNTY/PARISH, STATE OF OHIO.**  
14

15 **1. DEFINITIONS**

16 The following definitions shall apply to this Agreement:

17 1.01 "Arm's Length Agreement" shall mean any gas sales agreement with an unaffiliated purchaser or any gas sales  
18 agreement with an affiliated purchaser where the sales price and delivery conditions under such agreement are  
19 representative of prices and delivery conditions existing under other similar agreements in the area between  
20 unaffiliated parties at the same time for natural gas of comparable quality and quantity.

21 1.02 "Balancing Area" shall mean (select one):

22  each well subject to the Operating Agreement that produces Gas or is allocated a share of Gas production, If a  
23 single well is completed in two or more producing intervals, each producing interval from which the Gas  
24 production is not commingled in the wellbore shall be considered a separate well.

25  all of the acreage and depths subject to the Operating Agreement.

26  \_\_\_\_\_  
27 \_\_\_\_\_  
28 \_\_\_\_\_  
29 \_\_\_\_\_

30 1.03 "Full Share of Current Production" shall mean the Percentage Interest of each Party in the Gas actually produced  
31 from the Balancing Area during each month.

32 1.04 "Gas" shall mean all hydrocarbons produced or producible from the Balancing Area, whether from a well classified  
33 as an oil well or gas well by the regulatory agency having jurisdiction in such matters, which are or may be made  
34 available for sale or separate disposition by the Parties, excluding oil, condensate and other liquids recovered by  
35 field equipment operated for the joint account. "Gas" does not include gas used in joint operations, such as for fuel,  
36 recycling or reinjection, or which is vented or lost prior to its sale or delivery from the Balancing Area.

37 1.05 "Makeup Gas" shall mean any Gas taken by an Underproduced Party from the Balancing Area in excess of its Full  
38 Share of Current Production, whether pursuant to Section 3.3 or Section 4.1 hereof.

39 1.06 "Mcf" shall mean one thousand cubic feet. A cubic foot of Gas shall mean the volume of gas contained in one cubic  
40 foot of space at a standard pressure base and at a standard temperature base.

41 1.07 "MMBtu" shall mean one million British Thermal Units. A British Thermal Unit shall mean the quantity of heat  
42 required to raise one pound avoirdupois of pure water from 58.5 degrees Fahrenheit to 59.5 degrees Fahrenheit at a  
43 constant pressure of 14.73 pounds per square inch absolute.

44 1.08 "Operator" shall mean the individual or entity designated under the terms of the Operating Agreement or, in the  
45 event this Agreement is not employed in connection with an operating agreement, the individual or entity  
46 designated as the operator of the well(s) located in the Balancing Area.

47 1.09 "Overproduced Party" shall mean any Party having taken a greater quantity of Gas from the Balancing Area than  
48 the Percentage interest of such Party in the cumulative quantity of all Gas produced from the Balancing Area.

49 1.10 "Overproduction" shall mean the cumulative quantity of Gas taken by a Party in excess of its Percentage Interest in  
50 the cumulative quantity of all Gas produced from the Balancing Area.

51 1.11 "Party" shall mean those individuals or entities subject to this Agreement, and their respective heirs, successors,  
52 transferees and assigns.

53 1.12 "Percentage Interest" shall mean the percentage or decimal interest of each Party in the Gas produced from the  
54 Balancing Area pursuant to the Operating Agreement covering the Balancing Area.

55 1.13 "Royalty" shall mean payments on production of Gas from the Balancing Area to all owners of royalties, overriding  
56 royalties, production payments or similar interests.

57 1.14 "Underproduced Party" shall mean any Party having taken a lesser quantity of Gas from the Balancing Area than  
58 the Percentage Interest of such Party in the cumulative quantity of all Gas produced from the Balancing Area.

59 1.15 "Underproduction" shall mean the deficiency between the cumulative quantity of Gas taken by a Party and its  
60 Percentage Interest in the cumulative quantity of all Gas produced from the Balancing Area.

61 1.16  (Optional) "Winter Period" shall mean the month(s) of November - December in one  
62 calendar year and the month(s) of January - March in the succeeding calendar year.

63 **2. BALANCING AREA**

64 2.1 If this Agreement covers more than one Balancing Area, it shall be applied as if each Balancing Area were covered  
65 by separate but identical agreements. All balancing hereunder shall be on the basis of Gas taken from the Balancing Area  
66 measured in (Alternative 1)  Mcfs or (Alternative 2)  MMBtus.

67 2.2 In the event that all or part of the Gas deliverable from a Balancing Area is or becomes subject to one or more  
68 maximum lawful prices, any Gas not subject to price controls shall be considered as produced from a single Balancing Area  
69 and Gas subject to each maximum lawful price category shall be considered produced from a separate Balancing Area.

70 **3. RIGHT OF PARTIES TO TAKE GAS**

71 3.1 Each Party desiring to take Gas will notify the Operator, or cause the Operator to be notified, of the volumes  
72 nominated, the name of the transporting pipeline and the pipeline contract number (if available) and meter station relating  
73 to such delivery, sufficiently in advance for the Operator, acting with reasonable diligence, to meet all nomination and other  
74

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1 requirements. Operator is authorized to deliver the volumes so nominated and confirmed (if confirmation is required) to the transporting pipeline in accordance with the terms of this Agreement.

2 3.2 Each Party shall make a reasonable, good faith effort to take its Full Share of Current Production each month, to the extent that such production is required to maintain leases in effect, to protect the producing capacity of a well or reservoir, to preserve correlative rights, or to maintain oil production.

3 3.3 When a Party fails for any reason to take its Full Share of Current Production (as such Share may be reduced by the right of the other Parties to make up for Underproduction as provided herein), the other Parties shall be entitled to take any Gas which such Party fails to take. To the extent practicable, such Gas shall be made available initially to each Underproduced Party in the proportion that its Percentage Interest in the Balancing Area bears to the total Percentage Interests of all Underproduced Parties desiring to take such Gas. If all such Gas is not taken by the Underproduced Parties, the portion not taken shall then be made available to the other Parties in the proportion that their respective Percentage Interests in the Balancing Area bear to the total Percentage Interests of such Parties.

7 3.4 All Gas taken by a Party in accordance with the provisions of this Agreement, regardless of whether such Party is underproduced or overproduced, shall be regarded as Gas taken for its own account with title thereto being in such taking Party.

12 3.5 Notwithstanding the provisions of Section 3.3 hereof, no Overproduced Party shall be entitled in any month to take any Gas in excess of three hundred percent (300%) of its Percentage Interest of the Balancing Area's then-current Maximum Monthly Availability; provided, however, that this limitation shall not apply to the extent that it would preclude production that is required to maintain leases in effect, to protect the producing capacity of a well or reservoir, to preserve correlative rights, or to maintain oil production. "Maximum Monthly Availability" shall mean the maximum average monthly rate of production at which Gas can be delivered from the Balancing Area, as determined by the Operator, considering the maximum efficient well rate for each well within the Balancing Area, the maximum allowable(s) set by the appropriate regulatory agency, mode of operation, production facility capabilities and pipeline pressures.

17 3.6 In the event that a Party fails to make arrangements to take its Full Share of Current Production required to be produced to maintain leases in effect, to protect the producing capacity of a well or reservoir, to preserve correlative rights, or to maintain oil production, the Operator may sell any part of such Party's Full Share of Current Production that such Party fails to take for the account of such Party and render to such Party, on a current basis, the full proceeds of the sale, less any reasonable marketing, compression, treating, gathering or transportation costs incurred directly in connection with the sale of such Full Share of Current Production. In making the sale contemplated herein, the Operator shall be obligated only to obtain such price and conditions for the sale as are reasonable under the circumstances and shall not be obligated to share any of its markets. Any such sale by Operator under the terms hereof shall be only for such reasonable periods of time as are consistent with the minimum needs of the industry under the particular circumstances, but in no event for a period in excess of one year. Notwithstanding the provisions of Article 3.4 hereof, Gas sold by Operator for a Party under the provisions hereof shall be deemed to be Gas taken for the account of such Party.

18 4. IN-KIND BALANCING

19 4.1 Effective the first day of any calendar month following at least twenty (20) days' prior written notice to the Operator, any Underproduced Party may begin taking, in addition to its Full Share of Current Production and any Makeup Gas taken pursuant to Section 3.3 of this Agreement, a share of current production determined by multiplying fifty (50) percent of the Full Shares of Current Production of all Overproduced Parties by a fraction, the numerator of which is the Percentage Interest of such Underproduced Party and the denominator of which is the total of the Percentage Interests of all Underproduced Parties desiring to take Makeup Gas. In no event will an Overproduced Party be required to provide more than fifty (50) percent of its Full Share of Current Production for Makeup Gas. The Operator will promptly notify all Overproduced Parties of the election of an Underproduced Party to begin taking Makeup Gas.

23 4.2  (Optional - Seasonal Limitation on Makeup - Option 1) Notwithstanding the provisions of Section 4.1, the average monthly amount of Makeup Gas taken by an Underproduced Party during the Winter Period pursuant to Section 4.1 shall not exceed the average monthly amount of Makeup Gas taken by such Underproduced Party during the ten (10) months immediately preceding the Winter Period.

25 4.2  (Optional - Seasonal Limitation on Makeup - Option 2) Notwithstanding the provisions of Section 4.1, no Overproduced Party will be required to provide more than \_\_\_\_\_ percent (\_\_\_\_%) of its Full Share of Current Production for Makeup Gas during the Winter Period.

27 4.3  (Optional) Notwithstanding any other provision of this Agreement, at such time and for so long as Operator, or (insofar as concerns production by the Operator) any Underproduced Party, determines in good faith that an Overproduced Party has produced all of its share of the ultimately recoverable reserves in the Balancing Area, such Overproduced Party may be required to make available for Makeup Gas, upon the demand of the Operator or any Underproduced Party, up to \_\_\_\_\_ percent (\_\_\_\_%) of such Overproduced Party's Full Share of Current Production.

29 5. STATEMENT OF GAS BALANCES

30 5.1 The Operator will maintain appropriate accounting on a monthly and cumulative basis of the volumes of Gas that each Party is entitled to receive and the volumes of Gas actually taken or sold for each Party's account. Within forty-five (45) days after the month of production, the Operator will furnish a statement for such month showing (1) each Party's Full Share of Current Production, (2) the total volume of Gas actually taken or sold for each Party's account, (3) the difference between the volume taken by each Party and that Party's Full Share of Current Production, (4) the Overproduction or Underproduction of each Party, and (5) other data as recommended by the provisions of the Council of Petroleum Accountants Societies Bulletin No.24, as amended or supplemented hereafter. Each Party taking Gas will promptly provide to the Operator any data required by the Operator for preparation of the statements required hereunder.

31 5.2 If any Party fails to provide the data required herein for four (4) consecutive production months, the Operator, or where the Operator has failed to provide data, another Party, may audit the production and Gas sales and transportation volumes of the non-reporting Party to provide the required data. Such audit shall be conducted only after reasonable notice and during normal business hours in the office of the Party whose records are being audited. All costs associated with such audit will be charged to the account of the Party failing to provide the required data.

6. PAYMENTS ON PRODUCTION

6.1 Each Party taking Gas shall pay or cause to be paid all production and severance taxes due on all volumes of Gas actually taken by such Party.

6.2  (Alternative 1 - Entitlements) Each Party shall pay or cause to be paid all Royalty due with respect to Royalty

owners to whom it is accountable as if such Party were taking its Full Share of Current Production, and only its Full Share of Current Production.

6.2.1  (Optional - For use only with Section 6.2 - Alternative I - Entitlement) Upon written request of a Party taking less than its Full Share of Current Production in a given month ("Current Underproducer"), any Party taking more than its Full Share of Current Production in such month ("Current Overproducer") will pay to such Current Underproducer an amount each month equal to the Royalty percentage of the proceeds received by the Current Overproducer for that portion of the Current Underproducer's Full Share of Current Production taken by the Current Overproducer; provided, however, that such payment will not exceed the Royalty percentage that is common to all Royalty burdens in the Balancing Area. Payments made pursuant to this Section 6.2.1 will be deemed payments to the Underproduced Party's Royalty owners for purposes of Section 7.5.

6.2  (Alternative 2 - Sales) Each Party shall pay or cause to be paid Royalty due with respect to Royalty owners to whom it is accountable based on the volume of Gas actually taken for its account.

6.3 In the event that any governmental authority requires that Royalty payments be made on any other basis than that provided for in this Section 6, each Party agrees to make such Royalty payments accordingly, commencing on the effective date required by such governmental authority, and the method provided for herein shall be thereby superseded.

**7. CASH SETTLEMENTS**

7.1 Upon the earlier of the plugging and abandonment of the last producing interval in the Balancing Area, the termination of the Operating Agreement or any pooling or unit agreement covering the Balancing Area, or at any time no Gas is taken from the Balancing Area for a period of twelve (12) consecutive months, any Party may give written notice calling for cash settlement of the Gas production imbalances among the Parties. Such notice shall be given to all Parties in the Balancing Area.

7.2 Within sixty (60) days after the notice calling for cash settlement under Section 7.1, the Operator will distribute to each Party a Final Gas Settlement Statement detailing the quantity of Overproduction owed by each Overproduced Party to each Underproduced Party and identifying the month to which such Overproduction is attributed, pursuant to the methodology set out in Section 7.4.

7.3  (Alternative I - Direct Party-to-Party Settlement) Within sixty (60) days after receipt of the Final Gas Settlement Statement, each Overproduced Party will pay to each Underproduced Party entitled to settlement the appropriate cash settlement, accompanied by appropriate accounting detail. At the time of payment, the Overproduced Party will notify the Operator of the Gas imbalance settled by the Overproduced Party's payment.

7.3  (Alternative 2 - Settlement Through Operator) Within sixty (60) days after receipt of the Final Gas Settlement Statement, each Overproduced Party will send its cash settlement, accompanied by appropriate accounting detail, to the Operator. The Operator will distribute the monies so received, along with any settlement owed by the Operator as an Overproduced Party, to each Underproduced Party to whom settlement is due within ninety (90) days after issuance of the Final Gas Settlement Statement. In the event that any Overproduced Party fails to pay any settlement due hereunder, the Operator may turn over responsibility for the collection of such settlement to the Party to whom it is owed, and the Operator will have no further responsibility with regard to such settlement.

7.3.1  (Optional - For use only with Section 7.3, Alternative 2 - Settlement Through Operator) Any Party shall have the right at any time upon thirty (30) days' prior written notice to all other Parties to demand that any settlements due such Party for Overproduction be paid directly to such Party by the Overproduced Party, rather than being paid through the Operator. In the event that an Overproduced Party pays the Operator any sums due to an Underproduced Party at any time after thirty (30) days following the receipt of the notice provided for herein, the Overproduced Party will continue to be liable to such Underproduced Party for any sums so paid, until payment is actually received by the Underproduced Party.

7.4  (Alternative 1 - Historical Sales Basis) The amount of the cash settlement will be based on the proceeds received by the Overproduced Party under an Arm's Length Agreement for the Gas taken from time to time by the Overproduced Party in excess of the Overproduced Party's Full Share of Current Production. Any Makeup Gas taken by the Underproduced Party prior to monetary settlement hereunder will be applied to offset Overproduction chronologically in the order of accrual.

7.4  (Alternative 2 - Most Recent Sales Basis) The amount of the cash settlement will be based on the proceeds received by the Overproduced Party under an Arm's Length Agreement for the volume of Gas that constituted Overproduction by the Overproduced Party from the Balancing Area. For the purpose of implementing the cash settlement provision of the Section 7, an Overproduced Party will not be considered to have produced any of an Underproduced Party's share of Gas until the Overproduced Party has produced cumulatively all of its Percentage Interest share of the Gas ultimately produced from the Balancing Area.

7.5 The values used for calculating the cash settlement under Section 7.4 will include all proceeds received for the sale of the Gas by the Overproduced Party calculated at the Balancing Area, after deducting any production or severance taxes paid and any Royalty actually paid by the Overproduced Party to an Underproduced Party's Royalty owner(s), to the extent said payments amounted to a discharge of said Underproduced Party's Royalty obligation, as well as any reasonable marketing, compression, treating, gathering or transportation costs incurred directly in connection with the sale of the Overproduction.

7.5.1  (Optional - For Valuation Under Percentage of Proceeds Contracts) For Overproduction sold under a gas purchase contract providing for payment based on a percentage of the proceeds obtained by the purchaser upon resale of residue gas and liquid hydrocarbons extracted at a gas processing plant, the values used for calculating cash settlement will include proceeds received by the Overproduced Party for both the liquid hydrocarbons and the residue gas attributable to the Overproduction.

7.5.2  (Optional - Valuation for Processed Gas - Option 1) For Overproduction processed for the account of the Overproduced Party at a gas processing plant for the extraction of liquid hydrocarbons, the full quantity of the Overproduction will be valued for purposes of cash settlement at the prices received by the Overproduced Party for the sale of the residue gas attributable to the Overproduction without regard to proceeds attributable to liquid hydrocarbons which may have been extracted from the Overproduction.

7.5.2  (Optional - Valuation for Processed Gas - Option 2) For Overproduction processed for the account of the Overproduced Party at a gas processing plant for the extraction of liquid hydrocarbons, the values used for calculating cash settlement will include the proceeds received by the Overproduced Party for the sale of the liquid hydrocarbons extracted from the Overproduction, less the actual reasonable costs incurred by the Overproduced Party to process the Overproduction and to transport, fractionate and handle the liquid hydrocarbons extracted therefrom prior to sale.

7.6 To the extent the Overproduced Party did not sell all Overproduction under an Arm's Length Agreement, the cash settlement will be based on the weighted average price received by the Overproduced Party for any gas sold from the

A.A.P.L. FORM 610-E - GAS BALANCING AGREEMENT - 1992

Balancing Area under Arm's Length Agreements during the months to which such Overproduction is attributed. In the event that no sales under Arm's Length Agreements were made during any such month, the cash settlement for such month will be based on the spot sales prices published for the applicable geographic area during such month in a mutually acceptable pricing bulletin.

7.7 Interest compounded at the rate of Citi Bank N.A. of New York percent (1%) per annum or the maximum lawful rate of interest applicable to the Balancing Area, whichever is less, will accrue for all amounts due under Section 7.1 beginning the first day following the date payment is due pursuant to Section 7.3. Such interest shall be borne by the Operator or any Overproduced Party in the proportion that their respective delays beyond the deadlines set out in Sections 7.2 and 7.3 contributed to the accrual of the interest.

7.8 In lieu of the cash settlement required by Section 7.3, an Overproduced Party may deliver to the Underproduced Party an offer to settle its Overproduction in-kind and at such rates, quantities, times and sources as may be agreed upon by the Underproduced Party. If the Parties are unable to agree upon the manner in which such in-kind settlement gas will be furnished within sixty (60) days after the Overproduced Party's offer to settle in kind, which period may be extended by agreement of said Parties, the Overproduced Party shall make a cash settlement as provided in Section 7.3. The making of an in-kind settlement offer under this Section 7.8 will not delay the accrual of interest on the cash settlement should the Parties fail to reach agreement on an in-kind settlement.

7.9  (Optional - For Balancing Areas Subject to Federal Price Regulation) That portion of any monies collected by an Overproduced Party for Overproduction which is subject to refund by orders of the Federal Energy Regulatory Commission or other governmental authority may be withheld by the Overproduced Party until such prices are fully approved by such governmental authority, unless the Underproduced Party furnishes a corporate undertaking, acceptable to the Overproduced Party, agreeing to hold the Overproduced Party harmless from financial loss due to refund orders by such governmental authority.

7.10  (Optional - Interim Cash Balancing) At any time during the term of this Agreement, any Overproduced Party may, in its sole discretion, make cash settlement(s) with the Underproduced Parties covering all or part of its outstanding Gas imbalance, provided that such settlements must be made with all Underproduced Parties proportionately based on the relative imbalances of the Underproduced Parties, and provided further that such settlements may not be made more often than once every twenty-four (24) months. Such settlements will be calculated in the same manner provided above for final cash settlements. The Overproduced Party will provide Operator a detailed accounting of any such cash settlement within thirty (30) days after the settlement is made.

**8. TESTING**

Notwithstanding any provision of this Agreement to the contrary, any Party shall have the right, from time to time, to produce and take up to one hundred percent (100%) of a well's entire Gas stream to meet the reasonable deliverability test(s) required by such Party's Gas purchaser, and the right to take any Makeup Gas shall be subordinate to the right of any Party to conduct such tests; provided, however, that such tests shall be conducted in accordance with prudent operating practices only after ten (10) days' prior written notice to the Operator and shall last no longer than fourteen (14) hours.

**9. OPERATING COSTS**

Nothing in this Agreement shall change or affect any Party's obligation to pay its proportionate share of all costs and liabilities incurred in operations on or in connection with the Balancing Area, as its share thereof is set forth in the Operating Agreement, irrespective of whether any Party is at any time selling and using Gas or whether such sales or use are in proportion to its Percentage Interest in the Balancing Area.

**10. LIQUIDS**

The Parties shall share proportionately in and own all liquid hydrocarbons recovered with Gas by field equipment operated for the joint account in accordance with their Percentage Interests in the Balancing Area.

**11. AUDIT RIGHTS**

Notwithstanding any provision in this Agreement or any other agreement between the Parties hereto, and further notwithstanding any termination or cancellation of this Agreement, for a period of two (2) years from the end of the calendar year in which any information to be furnished under Section 5 or 7 hereof is supplied, any Party shall have the right to audit the records of any other Party regarding quantity, including but not limited to information regarding Btu-content. Any Underproduced Party shall have the right for a period of two (2) years from the end of the calendar year in which any cash settlement is received pursuant to Section 7 to audit the records of any Overproduced Party as to all matters concerning values, including but not limited to information regarding prices and disposition of Gas from the Balancing Area. Any such audit shall be conducted at the expense of the Party or Parties desiring such audit, and shall be conducted, after reasonable notice, during normal business hours in the office of the Party whose records are being audited. Each Party hereto agrees to maintain records as to the volumes and prices of Gas sold each month and the volumes of Gas used in its own operations, along with the Royalty paid on any such Gas used by a Party in its own operations. The audit rights provided for in this Section 11 shall be in addition to those provided for in Section 5.2 of this Agreement.

**12. MISCELLANEOUS**

12.1 As between the Parties, in the event of any conflict between the provisions of this Agreement and the provisions of any gas sales contract, or in the event of any conflict between the provisions of this Agreement and the provisions of the Operating Agreement, the provisions of this Agreement shall govern.

12.2 Each Party agrees to defend, indemnify and hold harmless all other Parties from and against any and all liability for any claims, which may be asserted by any third party which now or hereafter stands in a contractual relationship with such indemnifying Party and which arise out of the operation of this Agreement or any activities of such indemnifying Party under the provisions of this Agreement, and does further agree to save the other Parties harmless from all judgments or damages sustained and costs incurred in connection therewith.

12.3 Except as otherwise provided in this Agreement, Operator is authorized to administer the provisions of this Agreement, but shall have no liability to the other Parties for losses sustained or liability incurred which arise out of or in connection with the performance of Operator's duties hereunder, except such as may result from Operator's gross negligence or willful misconduct. Operator shall not be liable to any Underproduced Party for the failure of any Overproduced Party, (other than Operator) to pay any amounts owed pursuant to the terms hereof.

12.4 This Agreement shall remain in full force and effect for as long as the Operating Agreement shall remain in force and effect as to the Balancing Area, and thereafter until the Gas accounts between the Parties are settled in full, and shall inure to the benefit of and be binding upon the Parties hereto, and their respective heirs, successors, legal representatives

1 and assigns, if any. The Parties hereto agree to give notice of the existence of this Agreement to any successor in interest of  
2 any such Party and to provide that any such successor shall be bound by this Agreement, and shall further make any transfer of  
3 any interest subject to the Operating Agreement, or any part thereof, also subject to the terms of this Agreement.

4 12.5 Unless the context clearly indicates otherwise, words used in the singular include the plural, the plural includes the  
5 singular, and the neuter gender includes the masculine and the feminine.

6 12.6 In the event that any "Optional" provision of this Agreement is not adopted by the Parties to this Agreement by a  
7 typed, printed or handwritten indication, such provision shall not form a part of this Agreement, and no inference shall be  
8 made concerning the intent of the Parties in such event. In the event that any "Alternative" provision of this Agreement is not  
9 so adopted by the Parties, Alternative 1 in each such instance shall be deemed to have been adopted by the Parties as a result  
10 of any such omission. In those cases where it is indicated that an Optional provision may be used only if a specific Alternative  
11 is selected: (i) an election to include said Optional provision shall not be effective unless the Alternative in question is selected;  
12 and (ii) the election to include said Optional provision must be expressly indicated hereon, it being understood that the  
13 selection of an Alternative either expressly or by default as provided herein shall not, in and of itself, constitute an election to  
14 include an associated Optional provision.

15 12.7 This Agreement shall bind the Parties in accordance with the provisions hereof, and nothing herein shall be construed  
16 or interpreted as creating any rights in any person or entity not a signatory hereto, or as being a stipulation in favor of any  
17 such person or entity.

18 12.8 If contemporaneously with this Agreement becoming effective, or thereafter, any Party requests that any other Party  
19 execute an appropriate memorandum or notice of this Agreement in order to give third parties notice of record of same and  
20 submits same for execution in recordable form, such memorandum or notice shall be duly executed by the Party to which such  
21 request is made and delivered promptly thereafter to the Party making the request. Upon receipt, the Party making the request  
22 shall cause the memorandum or notice to be duly recorded in the appropriate real property or other records affecting the  
23 Balancing Area.

24 12.9 In the event Internal Revenue Service regulations require a uniform method of computing taxable income by all  
25 Parties, each Party agrees to compute and report income to the Internal Revenue Service (**select one**)  as if such Party were  
26 taking its Full Share of Current Production during each relevant tax period in accordance with such regulations, insofar as same  
27 relate to entitlement method tax computations; or  based on the quantity of Gas taken for its account in accordance with  
28 such regulations, insofar as same relate to sales method tax computations.

29 **13. ASSIGNMENT AND RIGHTS UPON ASSIGNMENT**

30 13.1 Subject to the provisions of Sections 13.2 (if elected) and 13.3 hereof, and notwithstanding anything in this Agreement  
31 or in the Operating Agreement to the contrary, if any Party assigns (including any sale, exchange or other transfer) any of its  
working interest in the Balancing Area when such Party is an Underproduced or Overproduced Party, the assignment or other  
act of transfer shall, insofar as the Parties hereto are concerned, include all interest of the assigning or transferring Party in the  
Gas, all rights to receive or obligations to provide or take Makeup Gas and all rights to receive or obligations to make any  
monetary payment which may ultimately be due hereunder, as applicable. Operator and each of the other Parties hereto shall  
thereafter treat the assignment accordingly, and the assigning or transferring Party shall look solely to its assignee or other  
transferee for any interest in the Gas or monetary payment that such Party may have or to which it may be entitled, and shall  
cause its assignee or other transferee to assume its obligations hereunder.

13.2  (**Optional - Cash Settlement Upon Assignment**) Notwithstanding anything in this Agreement (including but not  
limited to the provisions of Section 13.1 hereof) or in the Operating Agreement to the contrary, and subject to the provisions  
of Section 13.3 hereof, in the event an Overproduced Party intends to sell, assign, exchange or otherwise transfer any of its  
interest in a Balancing Area, such Overproduced Party shall notify in writing the other working interest owners who are  
Parties hereto in such Balancing Area of such fact at least thirty (30) days prior to closing the  
transaction. Thereafter, any Underproduced Party may demand from such Overproduced Party in writing, within  
twenty (20) days after receipt of the Overproduced Party's notice, a cash settlement of its  
Underproduction from the Balancing Area. The Operator shall be notified of any such demand and of any cash settlement  
pursuant to this Section 13, and the Overproduction and Underproduction of each Party shall be adjusted accordingly. Any cash  
settlement pursuant to this Section 13 shall be paid by the Overproduced Party on or before the earlier to occur (i) of sixty (60)  
days after receipt of the Underproduced Party's demand or (ii) at the closing of the transaction in which the Overproduced  
Party sells, assigns, exchanges or otherwise transfers its interest in a Balancing Area on the same basis as otherwise set forth in  
Sections 7.3 through 7.6 hereof, and shall bear interest at the rate set forth in Section 7.7 hereof, beginning sixty (60) days  
after the Overproduced Party's sale, assignment, exchange or transfer of its interest in the Balancing Area for any amounts not  
paid. Provided, however, if any Underproduced Party does not so demand such cash settlement of its Underproduction from the  
Balancing Area, such Underproduced Party shall look exclusively to the assignee or other successor in interest of the  
Overproduced Party giving notice hereunder for the satisfaction of such Underproduced Party's Underproduction in accordance  
with the provisions of Section 13.1 hereof.

13.3 The provisions of this Section 13 shall not be applicable in the event any Party mortgages its interest or disposes of its  
interest by merger, reorganization, consolidation or sale of substantially all of its assets to a subsidiary or parent company, or to  
any company in which any parent or subsidiary of such Party owns a majority of the stock of such company.

## EXHIBIT "F"

Attached to and made a part of that certain Operating Agreement dated May 18, 2015, between XTO Energy Inc., as "Operator" and Rice Drilling D LLC as "Non-Operators" covering the Miller Unit A, in Belmont County, Ohio

### FEDERAL CONTRACT REQUIREMENTS

#### I. EQUAL EMPLOYMENT OPPORTUNITY:

##### A. Equal Opportunity Clause (41 CFR 60-1.4)

During the performance of this Contract, Contractor agrees as follows:

(1) Second Party will not discriminate against any employee or applicant for employment because of race, color, religion, or sex or national origin. Second Party will take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without regard to their race, color, religion, sex or national origin. Such action shall include but not be limited to the following: employment, upgrading, demotion or transfer, recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. Second Party agrees to post inconspicuous places, available to employees and applicants for employment, notices to employees and applicants for employment, notices to be provided by the contracting officer setting forth the provisions of this non-discrimination clause.

(2) Second Party will, in all solicitations or advertisements for employees placed by or on behalf of Second Party, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex or national origin.

(3) Second Party will send to each labor union or representative of workers with which Second Party has a collective bargaining agreement or other contract or understanding, a notice to be provided by the agency contracting officer, advising the labor union or workers' representative of Second Party's commitments under Section 202 of Executive Order 11246 of September 24, 1965, and shall post copies of the notices in conspicuous places available to employees and applicants for employment.

(4) Second Party will comply with all provisions of Executive Order 11246 of September 24, 1965, and of the rules, regulations, and relevant orders of the Secretary of Labor.

(5) Second Party will furnish all information and reports required by Executive Order 11246 of September 24, 1965, and by the rules, regulations, and orders of Secretary of Labor, or pursuant thereto, and will permit access to his books, records, and accounts by the contracting agency and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations, and orders.

(6) In the event of Second Party's noncompliance with the non-discrimination clauses of this Contract or with any of such rules, regulations, or orders, this Contract may be canceled, terminated or suspended in whole or in part, and Second Party may be declared ineligible for further Government contracts in accordance with procedures authorized in Executive Order 11246 of September 24, 1965, and such other sanctions may be imposed and remedies invoked as provided in Executive Order 11246 of September 24, 1965, or by rules, regulations, or orders of the Secretary of Labor, or as otherwise provided by law.

(7) Second Party will include the provisions of paragraphs (1) through (7) in every subcontract or purchase order unless excepted by rules, regulations, or orders of the Secretary of Labor issued pursuant to Section 204 of Executive Order 11246 of September 24, 1965, so that such provisions will be binding upon each subcontractor or vendor. Second Party will take such action with respect to any subcontract or purchase order as the contracting agency may direct as a means of enforcing such provisions including sanctions for noncompliance; provided, however, that in the event Second Party becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction by the contracting agency, Second Party may request the United States to enter into such litigation to protect the interests of the United States.

B. Employee Information Reports (41 CFR 60-1.7)

If the value of this Contract is \$50,000.00 or more, and if Second Party has 50 or more employees, Second Party agrees to file timely, complete and accurate reports on Standard Form 100 (EEO-1) with the appropriate federal agency.

C. Affirmative Action Program (41 CFR 60-1.40)

If the value of this Contract is \$50,000.00 or more and Second Party has 50 or more employees, Second Party agrees to develop a written affirmative action compliance program as required by law.

D. Certification of Non-segregated Facilities (42 CFR 60-1.8)

Second Party certifies that it does not and will not maintain or provide for its employees and segregated facilities at any of its establishments, and that it does not and will not permit its employees to perform their services at any location under its control, where segregated facilities are maintained. Second Party agrees that a breach of this certification is a violation of the Equal Employment Opportunity Clause in this Contract. As used in this certification, the term "segregated facilities" means any waiting rooms, work areas, rest rooms, and wash rooms, restaurants and other eating areas, time clocks, locker rooms and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing facilities provided for employees which are segregated by explicit directive or are in fact segregated on the basis of race, creed, color, or national origin, because of habit, local custom or otherwise. It further agrees that (except where it has obtained identical certifications from proposed subcontractors for specific time periods) it will obtain identical certifications from proposed subcontractors prior to the award to a subcontractor exceeding \$10,000.00 which is not exempt from the provisions of the Equal Employment Opportunity Clause; that it will retain such certifications in its files; and that it will forward the following notice to such proposed subcontractors (except where the proposed subcontractors have submitted identical certifications for a specific time period): NOTICE TO PROSPECTIVE SUBCONTRACTORS OR REQUIREMENTS FOR CERTIFICATIONS OF NON-SEGRAGATED FACILITIES. A certification of Non-segregated Facilities, as required by the May 9, 1967, Order on Elimination of Segregated Facilities, by the Secretary of Labor (32 Fed. Reg. 7439, May 19, 1967) must be submitted prior to the award of a subcontract exceeding \$10,000.00 which is not exempt from the provisions of the Equal Employment Opportunity Clause. The certification may be submitted either for each subcontract or for all subcontracts during a period (i.e., quarterly, semi-annually, or annually). Note: The penalty for making false statements in offers is prescribed in 18 U.S.C. 1001.)

II. LISTING OF EMPLOYMENT OPENINGS (41 CFR 50-250)

Second Party agrees to comply with the rules and regulations of the Department of Labor concerning the listing of employment openings, including the contract clause set forth in 41 CFR 50-250.4, which clause is incorporated herein by

reference. Second Party also agrees to place the foregoing provision in any subcontract directly under this Contract.

### III. EMPLOYMENT OF THE HANDICAPPED (20CFR 741.2)

This clause applies to all non-exempt contracts and subcontracts which exceed \$2,500.00 as follows:

A. Part A applies to contracts and subcontracts which provide for performance in less than 90 days;

B. Parts A and B apply to contracts and subcontracts which provide for performance in 90 days or more and the amount of the contract or subcontract is less than \$5000,000.00; and

C. Parts A, B, and C apply to contracts and subcontracts which provide for performance in 90 days or more and the amounts of the contract or subcontract is \$500,000.00 or more.

#### **PART A**

1. Second Party will not discriminate against any employee or applicant for employment because of physical or mental handicap in regard to any position for which the employee or applicant for employment is qualified. Second Party agrees to take affirmative action to employ, advance in employment, and otherwise treat qualified handicapped individuals without discrimination based upon their physical or mental handicap in all employment practices such as the following: employment, upgrading, demotion or transfer, recruitment or recruitment advertising; layoff or termination, rates of pay or other forms of compensation, and selection for training, including apprenticeship.
2. Second Party agrees that, if a handicapped individual files a complaint with the Second Party that Second Party is not complying with the requirements of the Act, Second Party will (a) investigate the complaint and take appropriate action consistent with the requirements of 20 CFR 741.29 and (b) maintain on file for three years, the record regarding the complaint and the actions taken.
3. Second Party agrees that, if a handicapped individual files a complaint with the Department of Labor that Second Party has not complied with the requirements of the Act, (a) Second Party will cooperate with the Department of Labor in its investigation of the complaint, and (b) Second Party will provide all pertinent information regarding Second Party's employment practices with respect to the handicapped.
4. Second Party agrees to comply with the rules and regulations of the Secretary of Labor in 20 CFR Ch. VI, Part 741.
5. In the event of Second Party's non-compliance with the requirements of this clause, the contract may be terminated or suspended in whole or in part.
6. This clause shall be included in all subcontracts over \$2,500.00.

#### **PART B**

7. Second Party agrees (a) to establish an affirmative action program, including appropriate procedures consistent with the guidelines and the rules of the Secretary of Labor, which will provide the affirmative action regarding the employment and advancement of the handicapped required by P.L. 93-223; (b) to publish the program in Second Party's employees' or personnel handbook or otherwise distribute a copy to all personnel; (c) to review Second Party's program

on or before March 31 of each year and to make such changes as may be appropriate; and (d) to designate one of Second Party's principal officials to be responsible for the establishment and operation of the program.

8. Second Party agrees to permit the examination by appropriate contracting agency officials or the Assistant Secretary for Employment Standards or designee, of pertinent books, documents, papers and records concerning Second Party's employment and advancement of the handicapped.
9. Second Party agrees to post in conspicuous places, available to employees and applicants for employment, notices in a form to be prescribed by the Assistant Secretary for Employment Standards, provided by the contracting officer stating Second Party's obligation under the law to take affirmative action to employ and advance in employment qualified, handicapped employees and applicant for employment and the rights and remedies available.
10. Second Party will notify each labor union or representative of workers with which he has a collective bargaining agreement or other contract understanding, that Second Party is bound by the terms of Section 503 of the Rehabilitation Act, and is committed to take affirmative action to employ and advance in employment physically and mentally handicapped individuals.

### PART C

11. Second Party agrees to submit a copy of Contractor's affirmative action program to the Assistant Secretary for Employment Standards within 90 days after the award to Second Party of a contract or subcontract.
12. Second Party agrees to submit a summary report to the Assistant Secretary for Employment Standards, by March 31 of each year during performance of the contract, and by March 31 of the year following completion of the contract, in the form prescribed by the Assistant Secretary, covering employment and complaint experience, accommodations made, and all steps taken to effectuate and carry out the commitments set forth in the affirmative action program.

**STATE OF OHIO  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL AND GAS RESOURCES MANAGEMENT**

In re the Matter of the Application of :  
XTO Energy Inc. for Unit Operation :  
 : Application Date: May 18, 2015  
 :  
Miller Unit A :

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**PREPARED TESTIMONY OF JEFF JACKSON  
ON BEHALF OF XTO ENERGY INC. ("XTO")  
(GEOLOGIST)**

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Brian R. Boyer (0085678)  
W. Richard Hathaway II (0091868)  
SHERRARD, GERMAN & KELLY, P.C.  
535 Smithfield Street, Suite 300  
Pittsburgh, PA 15222

Attorneys for Applicant,  
XTO Energy Inc.

Date: May 18, 2015

1 **INTRODUCTION**

2 **Q1. Please introduce yourself to the Division.**

3 A1. My name is Jeff Jackson. I am a geologist for XTO Energy Inc. working in the  
4 Appalachian Division.

5 **Q2. What is your educational background?**

6 A2. I graduated with a Bachelor of Arts degree in Geology from Western State College of  
7 Colorado. I then received a Master of Science degree in Geology from Colorado School  
8 of Mines.

9 **Q3. Would you briefly describe your professional experience?**

10 A3. I have 7 years of experience as a geologist in the oil and gas industry and have worked  
11 unconventional reservoirs for the majority of that time. I started my career with XTO  
12 working in the Uinta Basin of eastern Utah focusing on development and exploration  
13 projects. In 2011, I began working to develop the Utica and Point Pleasant  
14 unconventional plays for XTO in the Appalachian Basin.

15 **Q4. What do you do as a Geologist for XTO?**

16 A4. As a geologist at XTO, I am responsible for interpreting geologic data for predominantly  
17 Ohio, but I also interpret data in West Virginia and Pennsylvania. I create and update  
18 structure and isopach maps for various formations. I also create electric log cross  
19 sections to determine the various rock formations true vertical depths and characteristics.  
20 I also work to design and plan new drilling units for horizontal wells and geosteer the  
21 operated horizontal wells during drilling to make sure they remain in the target zone.

22 **Q5. What types of subsurface data are you analyzing?**

23 A5. Electronic log data from subsurface logs, as well as core data, and any published  
24 information from the ODNR or academia.

25 **Q6. Are you a member of any professional associations?**

26 A6. I am a member of the American Association of Petroleum Geologist as well as the  
27 Geological Society of America.

28 **Q7. What is the purpose of your testimony today?**

29 A7. I am testifying in support of the Application of XTO, for the Unit Operation files with  
30 respect to the Miller Unit A, consisting of 32 separate tracts of land totaling  
31 approximately 496.346 acres in Pultney Township, Belmont County, Ohio. My

1 testimony will show that the Unitized Formation described in the Application is part of a  
2 pool and thus an appropriate subject of unitization. My testimony will also support the  
3 Unit Plan's allocation of unit production and expenses to separately owned tracts on a  
4 surface acreage basis, based on the near identical geologic characteristics over the Unit.

5 **UNITIZATION FORMATION IS PART OF A POOL.**

6 **Q8. Can you please explain what a "pool" is in the context of oil and gas exploration?**

7 A8. A pool is considered to be an underground reservoir that contains a common  
8 accumulation of hydrocarbons that when drilled and or completed will yield these  
9 hydrocarbons for production to the surface. Each zone of a geologic feature that is  
10 separate from any other zone in the same feature could contain a separate pool.

11 **Q9. How is the Unitized Formation defined for the Miller Unit A?**

12 A9. It is defined as the subsurface portion of the Miller Unit A located from fifty (50) feet  
13 above the top of the Utica Formation to fifty (50) feet below the top of the Curdsville  
14 Member of the Lexington/Trenton.

15 **Q10. Do you have an opinion as to whether the Unitized Formation contemplated by the  
16 Miller Unit A constitutes a pool or a part of a pool?**

17 A10. Yes, based on my professional experience. It is my opinion that the Unitized Formation  
18 qualifies as part of a pool.

19 **Q11. Why do you believe the Unitized Formation constitutes part of a pool?**

20 A11. My interpretation of the geologic data, such as wireline well logs, indicates that the Utica  
21 / Point Pleasant formations should be present, with similar characteristics, across the  
22 entire Miller Unit A. This indicates to me that the Unitized Formation is part of a pool.

23 **Q12. When you refer to the Utica / Point Pleasant, to what are you referring?**

24 A12. The Utica / Point Pleasant is the term used to describe the subsurface formation from the  
25 top of the Utica to the top of the Trenton.

26 **Q13. Is your opinion based on your education and professional experience?**

27 A13. Yes, my opinion is based on my professional experience and education.

28 **Q14. Is this a commonly accepted method of analysis in your profession for determining  
29 whether a pool or part of a pool exists?**

30 A14. Yes.

31

1 **ALLOCATION METHODOLOGY**

2 **Q15. Production and expenses are allocated to the separate tracts in the Miller Unit A**  
3 **under the Unit Plan on a surface-acreage basis. Given your education and**  
4 **professional experience, do you have an opinion on whether that allocation method**  
5 **is appropriate?**

6 A15. Yes, in my opinion that allocation method is appropriate.

7 **Q16. Why?**

8 A16. It is appropriate because the Utica and Point Pleasant formations are expected to have  
9 similar thickness and characteristics across the Unit.

10 **Q17. Do you have any exhibits to help explain your testimony?**

11 A17. Yes. Exhibits JJ-1 and JJ-2 are a map and a cross section that show wireline well logs.  
12 The logs are annotated with the formation names. The cross section going over the  
13 Miller Unit A shows a near equal thickness of the Utica and Point Pleasant formations.  
14 The cross section displays wireline Gamma Ray data on a 0- 200 API scale. The  
15 formation tops are based on Gamma Ray and are shown on the cross section. As you can  
16 see, wireline log data indicates that the Utica and Point Pleasant formations are predicted  
17 to be of equal thickness across the unit.

18 **Q18. In your experience, is this a common method for allocating production and**  
19 **expenses?**

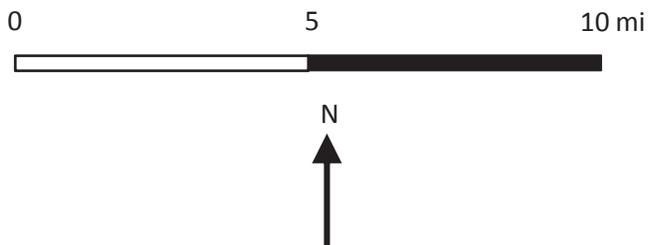
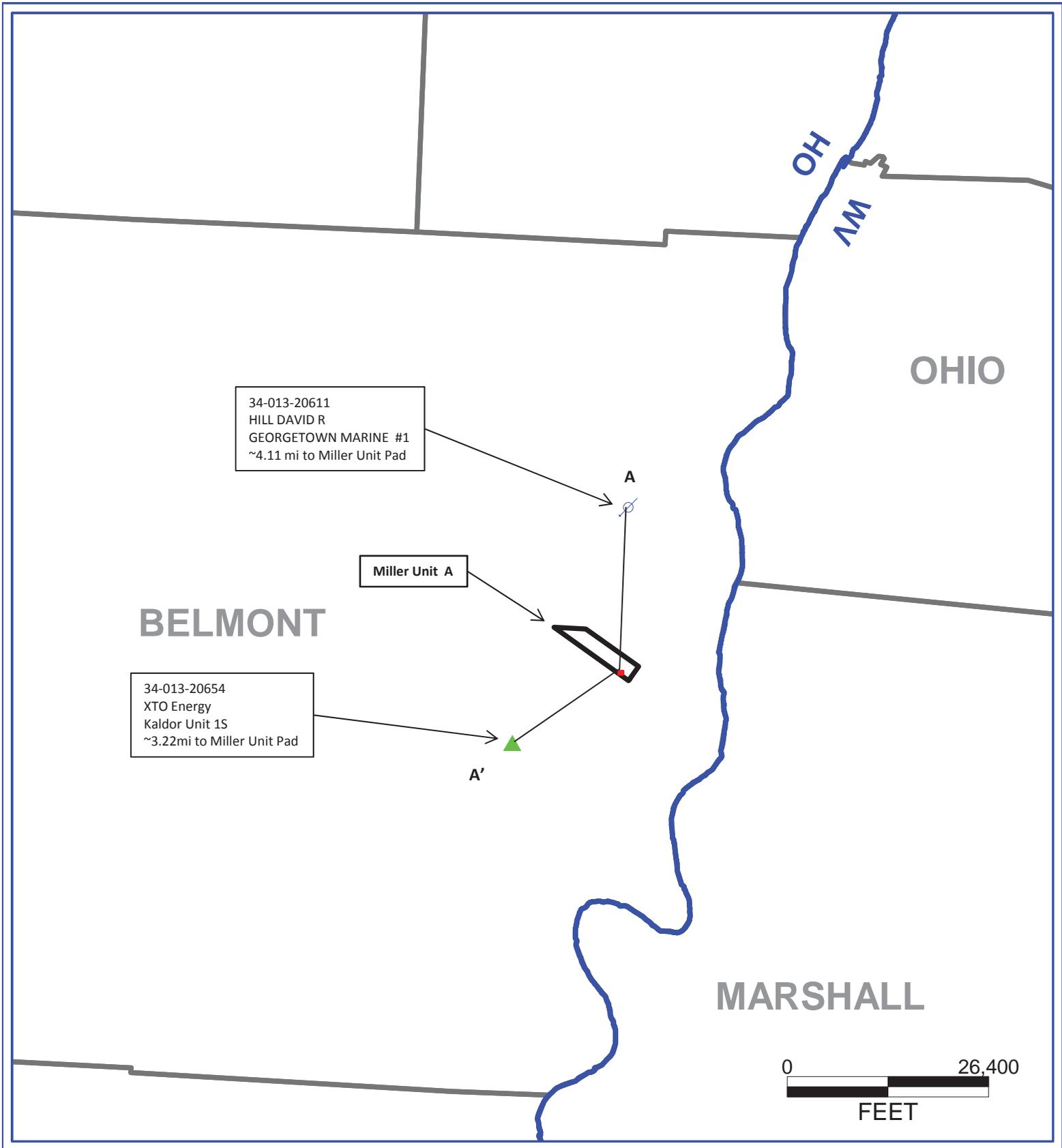
20 A18. Yes

21 **Q19. Have you seen this allocation method used in other shale basins?**

22 A19. Yes, I have seen production and expenses allocated on a surface acreage basis in the Fort  
23 Worth Basin and the D-J Basin.

24 **Q20. Does this conclude your testimony?**

25 A20. Yes.



	
<b>Miller Unit A &amp; Cross Section Location</b> Belmont County, Ohio	
Date: April 27 <sup>th</sup> , 2015	Geologist: Jeff Jackson

**EXHIBIT JJ-1**

Miller Unit A - Offset Cross Section  
 Gamma Ray Logs (0-200 API)  
 Resistivity Logs (0.2 – 2000 OHMM)

A

A'

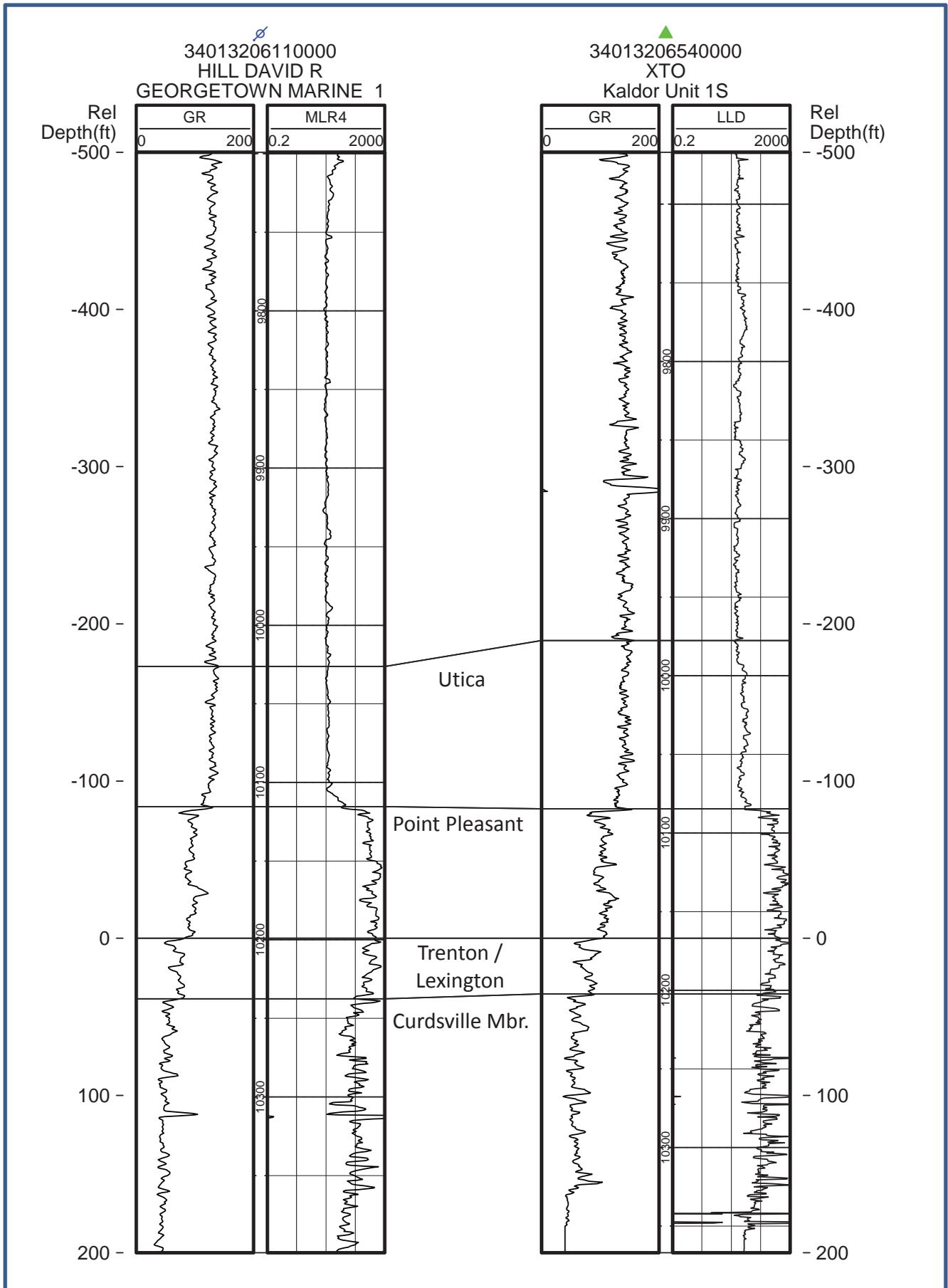


EXHIBIT JJ-2

**STATE OF OHIO  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL AND GAS RESOURCES MANAGEMENT**

In re the Matter of the Application of :  
XTO Energy Inc. for Unit Operation :  
 : Application Date: May 18, 2015  
 :  
Miller Unit A :

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**PREPARED TESTIMONY OF STEVEN CERVANTES  
ON BEHALF OF XTO ENERGY INC. ("XTO")  
(RESERVOIR ENGINEER)**

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Brian R. Boyer (0085678)  
W. Richard Hathaway (0091868)  
SHERRARD, GERMAN & KELLY, P.C.  
535 Smithfield Street, Suite 300  
Pittsburgh, PA 15222

Attorneys for Applicant,  
XTO Energy Inc.

Date: May 18, 2015

**ATTACHMENT 4**

1 **INTRODUCTION**

2 **Q1. Please introduce yourself to the Division.**

3 A1. My name is Steven Cervantes. I am a reservoir engineer for XTO Energy Inc.

4 **Q2. What is your educational background?**

5 A2. I have a Bachelors of Science in Petroleum Engineering from the University of Texas.

6 **Q3. Would you briefly describe your professional experience?**

7 A3. I have worked as a reservoir engineer for 5 years at XTO.

8 **Q4. What do you do as a Reservoir Engineer for XTO?**

9 A4. My primary function is to calculate oil and gas reserves and perform economic analysis  
10 of capital intensive projects.

11 **Q5. Are you a member of any professional associations?**

12 A5. Yes, I am a member of the Society of Petroleum Engineers.

13 **Q6. What is the purpose of your testimony today?**

14 A6. I am testifying in support of application of XTO Energy for Unit Operation filed with  
15 respect to the Miller Unit A, consisting of 32 separate tracts of land totaling  
16 approximately 496 acres in Pultney Township, Belmont County, Ohio. My testimony  
17 addresses that the unit operations for the Miller Unit A are reasonably necessary to  
18 increase the recovery of oil and gas substantially and that the value of the estimated  
19 additional recovery due to unit operations exceeds its estimated additional costs.

20 **UNIT OPERATIONS ARE REASONABLY NECESSARY TO INCREASE**  
21 **SUBSTANTIALLY THE RECOVERY OF OIL AND GAS.**

22 **Q7. I'd like to begin by addressing whether unit operations in the Miller Unit A are**  
23 **reasonably necessary to increase substantially the recovery of oil and gas from those**  
24 **properties. Would you describe briefly how XTO anticipates developing the Miller**  
25 **Unit A?**

26 A7. XTO plans to develop the Miller Unit A by drilling a horizontal well targeting the Utica-  
27 Point Pleasant Shale formation. It is estimated that the lateral length for the Miller A 4H  
28 will measure approximately 11,152 feet.

29 **Q8. Do you have an opinion as to whether unit operations in the Miller Unit A are**  
30 **reasonably necessary to increase substantially the recovery of oil and gas from those**  
31 **properties, and if so, what is your opinion?**

1 A8. By utilizing the full unit lateral length I previously stated, I estimate that production from  
2 the Miller A 4H could total as much as 16.7 BCF. Without unitization, the lateral lengths  
3 would have to be shortened by approximately 8,356 feet, and therefore production would  
4 only total 4.2 BCF. Due to this difference in production, it is my opinion that unit  
5 operations are necessary in order to capture the additional 75% or 12.5 BCF of reserves.

6 **Q9. Can you please describe your method for making these production projections?**

7 A9. Yes, I looked at existing production for nearby offset dry gas wells and forecasted their  
8 estimate ultimate recovery (EUR) using XTO's proprietary production type curve. I then  
9 divided each offset well's EUR by their respective lateral length to determine a ratio of  
10 EUR per foot of lateral length. I used the average EUR/ft from the group of offset wells  
11 and multiplied it by our planned lateral length for the Miller A 4H in order to determine a  
12 EUR.

13 **Q10. Can you calculate the production from these wells ahead of time with mathematical  
14 certainty?**

15 A10. No, I can only estimate how much gas the well will produce. There is a lot of uncertainty  
16 with how an unconventional rock formation such as the Utica-Point Pleasant Shale will  
17 produce while still in the early phases of development.

18 **Q11. Is horizontal drilling technology, including hydraulic fracturing the formation,  
19 required to economically develop unconventional resources?**

20 A11. Yes.

21 **Q12. Is horizontal drilling common in the oil and gas industry?**

22 A12. Yes.

23 **Q13. Is it fair to say that horizontal wells are commonly used to develop shale formations  
24 like the Unitized Formation?**

25 A13. Yes.

26 **Q14. In your professional opinion, would it be economical to develop the Miller Unit A  
27 using vertical drilling?**

28 A14. No, due to the very low permeability of a shale formation such as the Utica-Point  
29 Pleasant, profitable oil and gas development from the Utica-Point Pleasant requires that  
30 the well make significantly more contact with the reservoir than it would with just  
31 drilling a vertical well. Even though drilling a vertical well would be less expensive than

1 drilling horizontal well, it is highly unlikely that we would be able to produce enough gas  
2 to overcome the high cost of drilling the vertical well.

3 **VALUE OF ESTIMATED ADDITIONAL RECOVERY EXCEEDS ITS ESTIMATED**  
4 **ADDITIONAL COSTS**

5 **Q15. Let's turn to the financial side of the project. Generally, in your professional**  
6 **experience, how would the economics of a development project such as the**  
7 **development of the Miller Unit A be evaluated?**

8 A15. For each well I would use an estimated gas production profile coupled with anticipated  
9 natural gas prices to estimate the wells' gross revenue streams, and then subtract all  
10 capital costs, operating expenses, royalty burdens, and severance taxes from that revenue  
11 stream.

12 **Q16. Did you do that here?**

13 A16. Yes.

14 **Q17. Can you explain your economic analysis, beginning with your estimate of the**  
15 **anticipated revenue stream from the Miller Unit A's development?**

16 A17. Yes, for each well I estimated a monthly gas production profile by adjusting my type  
17 curve to fit to each well's respective EURs that I discussed earlier. I then took a constant  
18 gas price of \$3.82/MMBTU which was derived from a twelve month trailing average  
19 NYMEX spot price, applied a price decrement to account for the differential between  
20 market price conditions and NYMEX, and multiplied the adjusted constant gas price with  
21 the gas production profile to determine a gross revenue stream. I then deducted Ohio oil  
22 and gas production taxes, a midstream gas gathering/transportation fee, and a 19%  
23 royalty burden to determine a net revenue stream. All estimated capital and recurring  
24 operating expenses were then deducted in order to determine a total value for the wells.

25 **Q18. Can you describe the anticipated capital costs?**

26 A18. Capital costs consist of items such as surface location or pad construction, road  
27 construction, drilling, completions, and facilities. Due to the discrepancy in lateral  
28 length, capital costs for the fully unitized and non-unitized Miller A 4H are estimated to  
29 total \$12.9 million and \$8.1 million, respectively.

30

1 **Q19: With respect to pad construction costs, are wells for other units being drilled from**  
2 **the same pad as the Miller Unit A?**

3 A19. Yes, there will be two additional wells drilled from the Miller pad, one each in the Miller  
4 B and Miller C units.

5 **Q20: How are the pad construction costs allocated between the Miller Units A, B, & C?**

6 A20. Construction costs for the Miller pad are estimated to total approximately \$2.1 million,  
7 which was split evenly between the first three wells to be drilled in each unit, or about  
8 \$700,000 per well.

9 **Q21. Can you describe the anticipated operating expenses?**

10 A21. Operating expenses include recurring repairs or maintenance for items such as the well's  
11 surface facilities, casing or production tubing, the pad location itself, and disposing of  
12 produced water. For the economic analysis, I applied the operating expenses as a  
13 monthly recurrence throughout the life of the well. While operating expenses can vary  
14 significantly from well to well, I estimated that the operating expenses for the Miller A  
15 4H would average \$4,000 per month in fixed costs plus \$8 per barrel of produced water  
16 as a variable cost.

17 **Q22. Based on this information and your professional judgment, does the value of the**  
18 **estimated recovery from the operations proposed for the Miller Unit A exceed its**  
19 **estimated costs?**

20 A22. Yes.

21 **Q23. Do you have an opinion as to whether the value of the estimated additional recovery**  
22 **from the proposed Miller Unit A operations – compared to the estimated recovery if**  
23 **unit operations do not occur – exceeds the operation's estimated additional costs?**

24 A23. Yes, I believe it would.

25 **Q24. Would you explain?**

26 A24. With full unit operations, XTO will be able to extend the lateral length of the Miller A 4H  
27 by 8,356 feet. It is estimated that extending the lateral will cost an additional \$4.8  
28 million in drilling and completion capital expenses. According to my economic analysis,  
29 by increasing the lateral length XTO will not only increase the total gas reserves for the  
30 Miller A 4H by about 12.5 BCF, but the net present value of the unit will increase by

1           about \$8.9 million, which more than exceeds the additional capital costs to drill the  
2           longer lateral.

3   **Q25. And your opinions are based on your education and professional experience?**

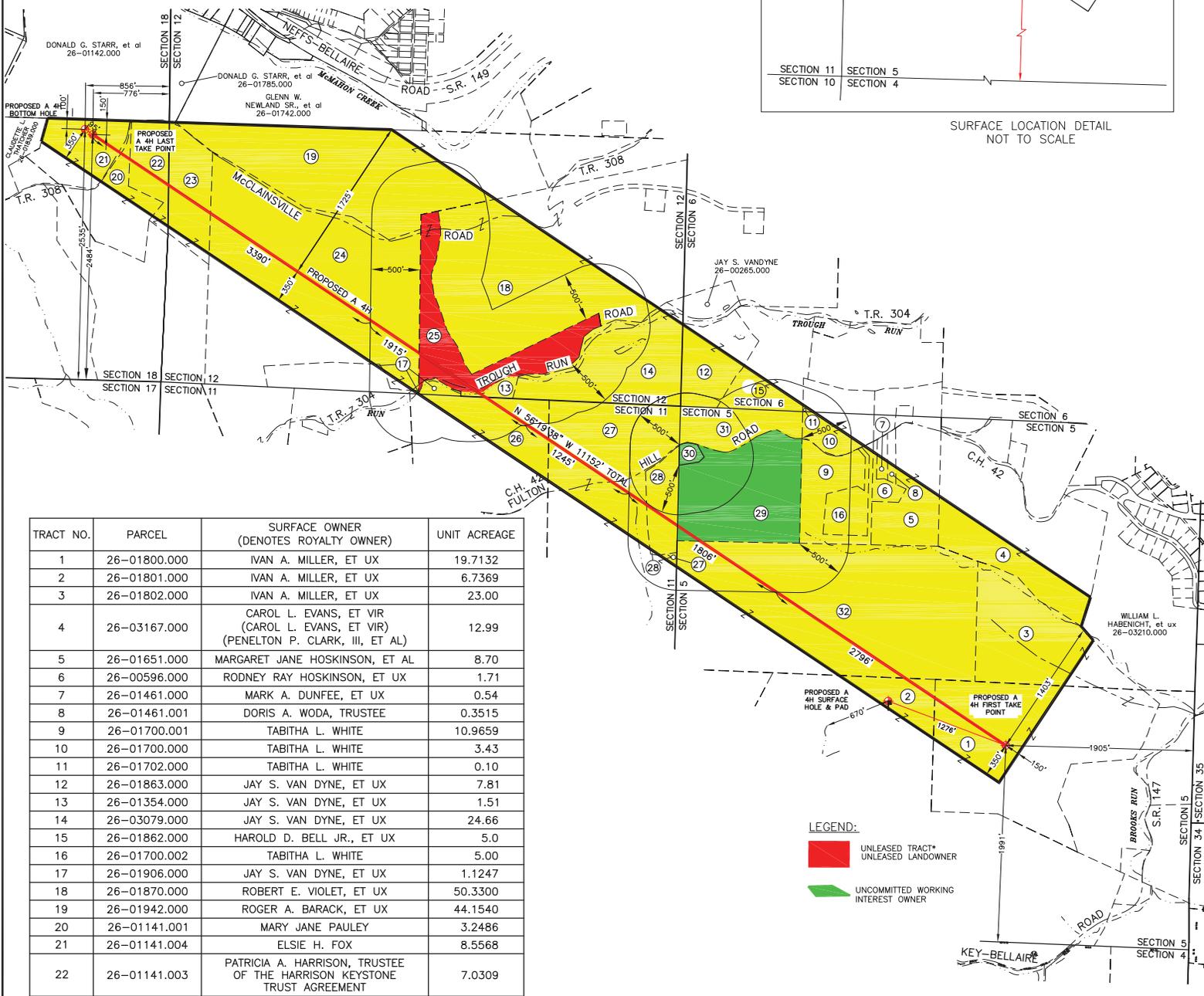
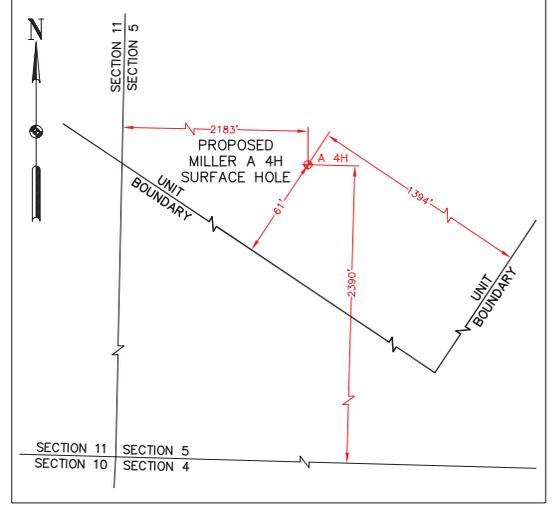
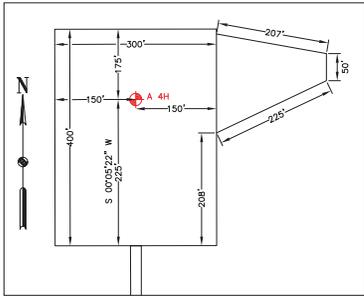
4   A25. Yes.

5   **Q26. Does this conclude your testimony?**

6   A26. Yes.

# UNIT PLAT FOR MILLER UNIT A 496.346 ACRES

BASIS OF BEARINGS IS GRID NORTH,  
OHIO STATE PLANE COORDINATE SYSTEM,  
SOUTH ZONE, NAD83.



TRACT NO.	PARCEL	SURFACE OWNER (DENOTES ROYALTY OWNER)	UNIT ACREAGE
1	26-01800.000	IVAN A. MILLER, ET UX	19.7132
2	26-01801.000	IVAN A. MILLER, ET UX	6.7369
3	26-01802.000	IVAN A. MILLER, ET UX	23.00
4	26-03167.000	CAROL L. EVANS, ET VIR (CAROL L. EVANS, ET VIR) (PENELTON P. CLARK, III, ET AL)	12.99
5	26-01651.000	MARGARET JANE HOSKINSON, ET AL	8.70
6	26-00596.000	RODNEY RAY HOSKINSON, ET UX	1.71
7	26-01461.000	MARK A. DUNFEE, ET UX	0.54
8	26-01461.001	DORIS A. WODA, TRUSTEE	0.3515
9	26-01700.001	TABITHA L. WHITE	10.9659
10	26-01700.000	TABITHA L. WHITE	3.43
11	26-01702.000	TABITHA L. WHITE	0.10
12	26-01863.000	JAY S. VAN DYNE, ET UX	7.81
13	26-01354.000	JAY S. VAN DYNE, ET UX	1.51
14	26-03079.000	JAY S. VAN DYNE, ET UX	24.66
15	26-01862.000	HAROLD D. BELL JR., ET UX	5.0
16	26-01700.002	TABITHA L. WHITE	5.00
17	26-01906.000	JAY S. VAN DYNE, ET UX	1.1247
18	26-01870.000	ROBERT E. VIOLET, ET UX	50.3300
19	26-01942.000	ROGER A. BARACK, ET UX	44.1540
20	26-01141.001	MARY JANE PAULEY	3.2486
21	26-01141.004	ELSIE H. FOX	8.5568
22	26-01141.003	PATRICIA A. HARRISON, TRUSTEE OF THE HARRISON KEYSTONE TRUST AGREEMENT	7.0309
23	26-01783.000	PATRICIA A. HARRISON, TRUSTEE OF THE HARRISON KEYSTONE TRUST AGREEMENT	10.9129
24	26-01542.000	THE NARDONE FAMILY TRUST	59.9043
25	26-01755.000	CURTIS RANDALL WALLNER, ET AL	18.318*
26	26-03156.000	DAVID A. JOHNSON, ET AL	12.3515
27	26-01901.000	ROBERT D. WORKMAN, ET UX	30.1366
28	26-01092.000	JAMES E. RIGGS, ET UX	6.8523
29	26-01707.001	JAMES RICHMOND, ET UX	27.05
30	26-01707.000	JAMES RICHMOND, ET UX	1.01
31	26-01900.000	ROBERT DALE WORKMAN, ET UX	10.530
32	26-01661.000	ROSS W. JOHNSON, JR., ET UX	72.6174
TOTAL ACRES			496.346

**LEGEND:**  
 UNLEASED TRACT\* UNLEASED LANDOWNER  
 UNCOMMITTED WORKING INTEREST OWNER

SCALE 1"=1000'  
 0 500' 1000'

02-24-2015  
 REV BY: XTO DATE: 5-8-2015 DESC: FOR UNITIZATION ONLY  
 REV BY: DATE: DESC:  
 REV BY: DATE: DESC:

**MILLER UNIT A**  
 SURVEY PLAT SHOWING PROPOSED WELL  
 State of Ohio, Department of Natural Resources - Division of Oil & Gas Management, Columbus, Ohio

Oil or Gas:  New Location:  Strat: \_\_\_\_\_  
 I hereby certify that all drilling or producing within 1000 feet and all buildings and streams within 200 feet have been shown, that this plat is true and correct and was prepared according to the current State of Ohio, Department of Natural Resources, Division of Oil & Gas Management Specifications.

PRELIMINARY 8 5-8-2015  
 TIMOTHY J. BRIGGS, P.S. # 7495  
 HAMMONTREE & ASSOCIATES, LIMITED

Operator: XTO ENERGY, INC.  
 Address: 502 KEYSTONE DRIVE, WARRENDALE, PA 15086  
 Landowner: Surface Location: IVAN A. & MARY H. MILLER

Oil & Gas: IVAN A. & MARY H. MILLER  
 Coal: Pittsburgh No. 8 Seam of Coal: BELLAIRE CORPORATION  
 All other Coal: IVAN A. & MARY H. MILLER  
 LEASE NAME: MILLER UNIT A  
 County: BELMONT (COAL BEARING)  
 Township: PULTNEY  
 USGS Quad: LANSING, OHIO  
 Urban Area: N/A  
 Proposed Formation: POINT PLEASANT

ROYALTY OWNERSHIP AND ACRESSES SHOWN HEREON ARE PROVIDED BY XTO ENERGY, INC. AND HAVE NOT BEEN SURVEYED TO OHIO BOUNDARY STANDARDS.

Subdivision Civil Township / PLSS  
 Twp/Range: 14,R3 (BELMONT)  
 Otr. Township: N/A  
 Section: 5,6,11,12,18 (PULTNEY)  
 Tract: N/A  
 Lots: N/A  
 Allotment: N/A  
 Fraction: N/A  
 Elevation (NAV088): 1242.50'(GROUND LEVEL)

**HAMMONTREE & ASSOCIATES, LTD.**  
 ENGINEERS, PLANNERS, SURVEYORS  
 5233 STONEHAM ROAD, NORTH CANTON, OH  
 PHN: (330) 499-8817  
 FAX: (330) 499-0149  
 www.hammontree-engineers.com

<b>Unit vs Non-Unit Comparison</b>								
<b>Well Name</b>	<b>Unit Lateral Length (ft)</b>	<b>Estimated Non-Unit Lateral (ft)</b>	<b>Unit Capital Cost (M\$)</b>	<b>Non-Unit Capital Cost (M\$)</b>	<b>Unit Gross EUR (MMCF)</b>	<b>Non-Unit Gross EUR (MMCF)</b>	<b>Unit Net PV 10% (M\$)*</b>	<b>Non-Unit Net PV 10% (M\$)*</b>
Miller A 4H	11,152	2,796	\$12,889	\$8,070	16,676	4,185	\$5,335	-\$3,542
<i>*Net PV calculations assume 100% WI and 81% NRI for both unit scenarios in order to provide a like-for-like comparison</i>								
<b>Unit vs Non-Unit Differences</b>								
<b>Well Name</b>	<b>Lateral (ft)</b>	<b>Capital Cost (M\$)</b>	<b>EUR (MMCF)</b>	<b>Net PV 10% (M\$)</b>				
Miller A 4H	8,356	\$4,819	12,491	\$8,877				

**STATE OF OHIO  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL AND GAS RESOURCES MANAGEMENT**

In re the Matter of the Application of :  
XTO Energy Inc. for Unit Operation :  
 : Application Date: May 18, 2015  
 :  
Miller Unit A :

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**PREPARED TESTIMONY OF DAVID PEARSON  
ON BEHALF OF XTO ENERGY INC. ("XTO")  
(LANDMAN)**

---

Brian R. Boyer (0085678)  
W. Richard Hathaway II (0091868)  
SHERRARD, GERMAN & KELLY, P.C.  
535 Smithfield Street, Suite 300  
Pittsburgh, PA 15222

Attorneys for Applicant,  
XTO Energy Inc.

Date: May 18, 2015

1 **INTRODUCTION**

2 **Q1. Please introduce yourself to the Division.**

3 A1. My name is David Pearson and I am a Senior Staff Landman for XTO Energy Inc. (“XTO”),  
4 based in Fort Worth, Texas.

5 **Q2. What is your educational background?**

6 A2. I have a Bachelor of Science from University of Oklahoma.

7 **Q3. Would you briefly describe your professional experience?**

8 A3. I was an Independent landman for approximately 3 ½ years working primarily in acquisition due  
9 diligence, and have been an in-house landman for 4 years all with XTO.

10 **Q4. What do you do as a Senior Staff Landman for XTO?**

11 A4. My primary responsibilities include lease acquisition, approving title for drilling, and contract  
12 negotiation.

13 **Q5. Are you a member of any professional associations?**

14 A5. Yes. I am a member of the Fort Worth Association of Professional Landmen (FWAPL) and  
15 American Association Professional Landmen (AAPL).

16 **Q6. What is the purpose of your testimony today?**

17 A6. I am testifying in support of the Application of XTO Energy Inc. for Unit Operation filed  
18 regarding the Miller Unit A, comprised of thirty-two (32) tracts of land containing a total of  
19 496.3455 acres in Belmont County, Ohio. More specifically, I will describe XTO’s efforts to  
20 acquire a lease on an 18.318 acre tract owned by Curtis Wallner and Roberta Heil and XTO’s  
21 efforts to include Rice Drilling D LLC’s 28.06 acres of leasehold in the Unit Plan XTO is  
22 proposing.

23 **EFFORTS MADE BY XTO TO LEASE UNIT TRACTS.**

24 **Q7. The Application submitted by XTO indicates that it, and other working interest owners**  
25 **approving the filing of the application, own the oil and gas rights to at least 449.9675 acres**  
26 **of the proposed 496.3455 acre unit. Would you describe how XTO acquired its rights?**

27 A7. XTO acquired its leasehold position in the Miller Unit A through a trade with Paloma Partners,  
28 and by obtaining leases from the land/mineral owners. The balance of XTO’s acreage was  
29 contributed via a Participation Agreement with American Energy Utica.

30 **Q8. Does XTO control a total of approximately 44.927% of the unit acreage?**

31 A8. Yes, that is correct. XTO controls approximately 222.994 net acres or 44.927% of the unit  
32 acreage.

1 **Q9. Are there other operators in the unit?**  
2 A9. Yes. There are three (3) other operators / working interest owners in the unit, two (2) of whom  
3 have approved the filing of this application. American Energy Utica (“AEU”) and Phillips  
4 Exploration (“Phillips”) have approved the filing of this Application and the attached Unit Plan.  
5 Please refer to Exhibits DP-3 & DP-4 to this testimony which provide AEU and Phillip’s  
6 respective approvals of the Miller Unit.

7 **Q10. What percentage of the total acreage of the Miller Unit A is represented by the oil and gas**  
8 **rights held by AEU and what percentage is represented by Phillips?**

9 A10. AEU represents 142.545 net acres or 28.719% and Phillips represents 84.428 acres or 17.010%.

10 **Q11. Given the Working Interest Owner Approvals executed by AEU and Phillips, is it accurate**  
11 **to say that the owners of 90.6561% of the unit have approved the filing of this Application?**

12 A11. Yes.

13 **Q12. How many uncommitted working interest owners are there in the Miller Unit A?**

14 A12. There is one (1) uncommitted working interest owner holding leases on two (2) tracts totaling  
15 28.06 acres.

16 **Q13. Who is the uncommitted working interest owner?**

17 A13. Rice Drilling D LLC (“Rice”).

18 **Q14. Have you prepared an affidavit detailing XTO's efforts to contact the uncommitted working**  
19 **interest owner to get them to participate in the Unit?**

20 A14. Yes. An Affidavit was prepared for this Application and is attached as Exhibit DP-5 to this  
21 testimony.

22 **Q15. How many unleased mineral owners are there in the Miller Unit A?**

23 A15. There are two (2) unleased mineral owners holding one (1) tract totaling 18.318 acres.

24 **Q16. Who are the unleased mineral owner?**

25 A16. Curtis R. Wallner and Roberta K. Heil.

26 **Q17. Have you prepared an affidavit detailing XTO's efforts to obtain leases from the unleased**  
27 **mineral owner?**

28 A17. Yes. An Affidavit was prepared for this Application and is attached as Exhibit DP-6 to this  
29 testimony.

30 **Q18. Do you have an exhibit to your testimony that illustrates the leased, unleased and**  
31 **uncommitted tracts within the Miller Unit A?**

32 A18. Yes. The unleased tract is identified as Unit Tract No. 25 and the uncommitted working interest  
33 tracts are identified as Unit Tract Nos. 29 and 30 on the Miller Unit A Plat attached as Exhibit  
34 DP-7 to this testimony.

1 **Q19. Do you have an aerial plat of the Miller Unit A?**

2 A19. Yes. An aerial plat of the Miller Unit A is attached as Exhibit DP-8 to this testimony.

3 **UNIT PLAN PROVISIONS.**

4 **Q20. Would you describe generally the development plan for the Miller Unit A?**

5 A20. At present, the Miller Unit A is planned to have one (1) wellbore.

6 **Q21. Does XTO have a specific timeline for drilling the well in the Miller Unit A?**

7 A21. Pending approval, we anticipate drilling within 1 year.

8 **Q22. Does XTO have any other development activity in the immediate area?**

9 A22. Yes. XTO has offsetting units planned to the North East and the South West of the Miller Unit  
10 A.

11 **Q23. Are you familiar with the Unit Plan proposed by XTO for the Miller Unit A?**

12 A23. Yes.

13 **Q24. Turning first to the body of the Unit Plan, marked as Attachment 1 to the Application.**  
14 **Would you describe briefly what it does?**

15 A24. The Unit Plan establishes creation of the unit, how unit interests are determined, and sets the  
16 framework for development and production of the unitized substances, including the allocation of  
17 oil and gas production and unit expenses.

18 **Q25. Are all of the oil and gas rights in the proposed unit combined?**

19 A25. No, the unit agreement only unitizes the oil and gas rights at a specific subsurface interval. In this  
20 case that interval is the stratigraphic equivalent of the top of the Utica Shale formation to the  
21 stratigraphic equivalent of the top of the Curdsville Member of the Lexington/Trenton Formation,  
22 which allows for development of the Utica/Point Pleasant.

23 **Q26. How would production from the Miller Unit A be allocated?**

24 A26. Once combined, production is allocated on a surface acreage basis, based on individual tract  
25 acreage divided by the total unit acreage.

26 **Q27. Would you go through an example from Exhibit A-2 to the Unit Operating Agreement to**  
27 **illustrate what you mean?**

28 A27. In this case Unit Tract No. 25, being the Curtis Wallner and Roberta Heil tract is 18.318 acres in a  
29 496.3455 acre unit. The percentage of 18.318 acres out of the 496.3455 acre unit is known as the  
30 tract participation factor, in this case 3.690574%.

31 **Q28. What does that mean in terms of production allocated to that particular tract?**

32 A28. In this case, the Curtis Wallner and Roberta Heil's combined participation factor is 3.690574% or  
33 (1.845287% each), and they would be allocated that percentage of production out of the total  
34 Miller Unit A production.

1 **Q29. In your experience, is that an unusual way to allocation production in a unit?**  
2 A29. No, in my experience, surface acreage allocation is the most common means of allocating unit  
3 production used in our industry.

4 **Q30. How are unit expenses allocated?**  
5 A30. By the same means set out above, expenses are allocated proportionately to the acreage  
6 contributed to the unit.

7 **Q31. Who pays the unit expenses?**  
8 A31. Working Interest owners pay unit expenses.

9 **Q32. Do the royalty owners pay any part of the unit expenses?**  
10 A32. No, royalty owners pay only their proportionate share of taxes.

11 **Q33. Let's turn to the Unit Operating Agreement. It appears to be based upon A.A.P.L. Form**  
12 **610 – Model Form Operating Agreement, is that correct?**  
13 A33. Yes, in this case a modified version of the AAPL Form 610 – 1989.

14 **Q34. Would it be fair to say that you are familiar with the custom and usage of the Form 610 and**  
15 **other similar agreements in the industry?**  
16 A34. Yes, this Joint Operating Agreement is widely used by XTO.

17 **Q35. Turning to the Unit Operating Agreement in particular, does it address how unit expenses**  
18 **are determined and paid?**  
19 A35. Yes, Article III of the Operating Agreement sets out that both costs incurred and production  
20 received is based on the working interest for each owner as set out on the Exhibit A.  
21 Additionally, Exhibit C to the Operating Agreement is an accounting procedure which specifies  
22 how unit expenses are determined and paid.

23 **Q36. That's commonly referred to as the COPAS?**  
24 A36. Yes, it's set out by the Council of Petroleum Accountants Society.

25 **Q37. Based upon your education and professional experience, do you view the terms of Exhibit C**  
26 **as reasonable?**  
27 A37. Yes, this accounting procedure is drafted by dis-interested parties who designed it to be fair to all  
28 parties whether participating as Operator or Non-operator.

29 **Q38. Will there be in-kind contributions made by owners in the unit area for unit operations,**  
30 **such as contributions of equipment?**  
31 A38. No, we do not anticipate any in-kind contributions.

32 **Q39. Are there times when a working interest owner in the unit chooses not to – or cannot – pay**  
33 **their allocated share of the unit expenses?**

1 A39. Yes, this situation can and has occurred. The Operating Agreement was drafted to contemplate  
2 such scenarios.

3 **Q40. Generally, how is the working interest accounted for when an owner chooses not to**  
4 **participate in an operation?**

5 A40. If a working interest owner(s) cannot or elects not to participate they are considered a non-  
6 consenting party. The consenting parties will then bear the full cost and expense of the proposed  
7 operation. The non-consenting party is deemed to have relinquished their rights to any  
8 production from that operation until such time as the consenting parties have recouped their initial  
9 costs plus a penalty set out in the Operating Agreement.

10 **Q41. Can a working interest owner choose to go non-consent in the initial well in the Miller Unit**  
11 **A?**

12 A41. Yes.

13 **Q42. Does the Unit Operating Agreement treat the initial well and subsequent operations**  
14 **differently in terms of going non-consent, and if so, why?**

15 A42. Yes, there is more risk in drilling the initial well because there is less information available about  
16 the specific area being drilled. Drilling subsequent wells, the parties have the benefit of  
17 information acquired from drilling the initial well.

18 **Q43. But if the working interest owner still has a royalty interest in the unit, that royalty interest**  
19 **would remain in place and paid?**

20 A43. Yes, the royalty interest would be paid.

21 **Q44. Where are the risk factors for subsequent operations set out in the Unit Operating**  
22 **Agreement?**

23 A44. Article VI. B.

24 **Q45. Are the percentages included in the Unit Operating Agreement unusual?**

25 A45. No, these are fairly standard in my experience.

26 **Q46. I believe you've already described generally the documents in Exhibits A and C to the Unit**  
27 **Operating Agreement. Let's turn therefore to Exhibit B of the Unit Operating Agreement.**  
28 **What is it?**

29 A46. Exhibit B is XTO's standard oil and gas lease form that is attached to the Operating Agreement.

30 **Q47. Does this oil and gas lease contain standard provisions that XTO uses in connection with its**  
31 **operations in Ohio?**

32 A47. Yes. This lease form is XTO's standard lease for use in Ohio.

33 **Q48. Moving on to Exhibit D of the Unit Operating Agreement, would you describe what it is?**

34 A48. Exhibit D is the Insurance exhibit and sets out the minimum coverage to be maintained.

1 **Q49. Would you next describe to the Division Exhibit E of the Unit Operating Agreement?**

2 A49. Exhibit E is the Gas Balancing Agreement which provides for the marketing of production and  
3 each parties rights and obligations with respect production.

4 **Q50. In your professional opinion, given your education and experience, are the terms of the Unit**  
5 **Plan, including the terms of the exhibits just discussed, just and reasonable?**

6 A50. Yes.

7 **Q51. Does this conclude your testimony?**

8 A51. Yes.

**STATE OF OHIO  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL AND GAS RESOURCES MANAGEMENT  
AFFIDAVIT OF OWNERSHIP**

In re the Matter of the Application of  
XTO Energy Inc. for Unit Operation

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Application Date: May 18, 2015

Miller Unit A

**AFFIDAVIT OF OWNERSHIP**

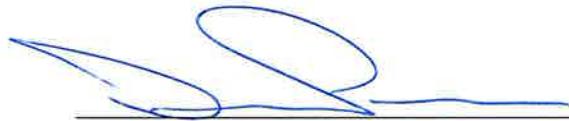
I, David Pearson, being first duly cautioned and sworn, do hereby depose and state as follows:

1. My name is David Pearson and I am a Senior Staff Landman with XTO Energy Inc. ("Applicant"). My day-to-day responsibilities include overseeing and directing lease acquisition for the Applicant in the State of Ohio, and I have personal knowledge of the facts stated herein.

2. Pursuant to Ohio Revised Code § 1509.28, the Applicant has filed an application with the Chief of the Division of Oil and Gas Resources Management requesting an order authorizing Applicant to operate the Unit Formation and applicable land area, identified as the Miller Unit A, according to the Unit Plan attached thereto (the "Application") (as those terms are used and defined therein). The Miller Unit A is located in Pultney Township, Belmont County, Ohio, and consists of thirty-two (32) separate tracts of land covering approximately 496.3455 acres.

3. As of the Application Date set forth above, the Applicant and the Working Interest Owners supporting the Application are the owners, as that term is defined in Ohio Revised Code § 1509.01(K), of at least 65% of the land overlying the Unitized Formation, as outlined in Exhibit A attached hereto.

Further Affiant sayeth naught.

  
\_\_\_\_\_

Sworn to and subscribed before me this 15<sup>th</sup> day of May, 2015.

  
\_\_\_\_\_  
Notary Public



**STATE OF OHIO  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL AND GAS RESOURCES MANAGEMENT**

In re the Matter of the Application of  
XTO Energy Inc. for Unit Operation

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Application Date: May 18, 2015

Miller Unit A

**LEASE AFFIDAVIT**

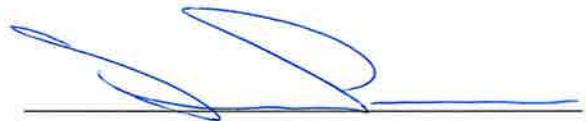
I, David Pearson, being first duly cautioned and sworn, do hereby depose and state as follows:

1. My name is David Pearson and I am a Senior Staff Landman with XTO Energy Inc. ("Applicant"). My day-to-day responsibilities include overseeing and directing lease acquisition for the Applicant in the State of Ohio, and I have personal knowledge of the facts stated herein.

2. Pursuant to Ohio Revised Code § 1509.28, the Applicant has filed an application with the Chief of the Division of Oil and Gas Resources Management requesting an order authorizing Applicant to operate the Unit Formation and applicable land area, identified as the Miller Unit A, according to the Unit Plan attached thereto (the "Application") (as those terms are used and defined therein). The Miller Unit A is located in Pultney Township, Belmont County, Ohio, and consists of thirty-two (32) separate tracts of land covering approximately 496.3455 acres.

3. To my knowledge the Applicant holds valid oil and gas leases (or equitable title thereto) covering all of the Applicant's acreage, being fourteen (14) of the thirty-two (32) tracts, as set forth in greater detail in Exhibit A-2 of the Unit Operating Agreement attached to the Application.

Further Affiant sayeth naught.



Sworn to and subscribed before me this 15<sup>th</sup> day of May, 2015.

Becky L. Swanson  
Notary Public



**STATE OF OHIO  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL AND GAS RESOURCES MANAGEMENT**

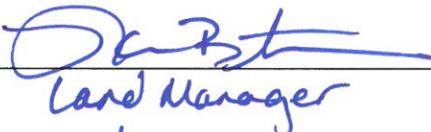
In re the Matter of the Application of :  
XTO Energy Inc. for Unit Operation :  
 : Application Date: May 18, 2015  
 :  
Miller Unit A :

**WORKING INTEREST OWNER APPROVAL**

XTO Energy Inc. ("Applicant") has prepared and/or filed an application asking the Chief of the Division of Oil and Gas Resources Management to issue an order authorizing Applicant to operate the Miller Unit A, located in Belmont County, Ohio, and consisting of thirty-two (32) separate tracts of land covering approximately 496.3455 acres, according to the Unit Plan attached thereto (the "Application").

American Energy – Utica, LLC ("AEU") is the owner of a 40% working interest in and to twenty-two (22) leases covering twenty-five (25) of the thirty-two (32) tracts of land in the Miller Unit A, as more specifically described in Exhibit 1 attached hereto. Said leases cover a total of approximately 356.3634 acres, leaving AEU with an approximate 28.718979% working interest in the Miller Unit A.

AEU hereby approves, and supports the making of, the Application, including without limitation the Unit Plan attached thereto, and acknowledges receipt of full and true copies thereof.

By:   
Land Manager  
Date: 5/18/2015

**EXHIBIT 1**  
**TO WORKING INTEREST OWNER APPROVAL**

Lease No.	Unit Tract No.	Inst. No.	Lessor	Lessee	County	Twp	State	Range-Township-Section	Tax Parcel No(s).	Acres
1	4	OR 65-406	Penelton P. Clark and Katherine J. Clark, husband and wife	Reserve Energy Exploration Company	Belmont	Pultney	OH	3-5-5	26-03167.000	Insofar as said lease covers 12.99 acres out of 40.27 acres
2	5	OR 319-67	Margaret Jane Hoskinson and Delia May Hoskinson, husband and wife	Phillips Exploration, Inc.	Belmont	Pultney	OH	3-5-6	26-01651.000	Insofar as said lease covers 8.7 acres out of 19.54 acres
3	5	OR 319-61	Rodney Ray Hoskinson and Delia May Hoskinson, husband and wife	Phillips Exploration, Inc.	Belmont	Pultney	OH	3-5-6	26-01651.000	Insofar as said lease covers 8.7 acres out of 19.54 acres
4	6	OR 316-429	Rodney Ray Hoskinson and Delia May Hoskinson, husband and wife	Phillips Exploration, Inc.	Belmont	Pultney	OH	3-5-5	26-00596.00	Insofar as said lease covers 1.71 acres out of 1.83 acres
5	7	OR 450-517	Mark A. Dunfee and Jody L. Dunfee, husband and wife	Great River Energy, LLC	Belmont	Pultney	OH	3-5-5	26-01461.000	Insofar as said lease covers 0.54 acres out of 32.56 acres
6	8	OR 483-518	Doris A. Woda, Trustee	XTO Energy Inc.	Belmont	Pultney	OH	3-5-5	26-01461.001	Insofar as said lease covers 0.3515 acres out of 1.0018 acres
7	9, 10, 11, 16	OR 319-85	Tabita L. Shipe, a single woman	Phillips Exploration, Inc.	Belmont	Pultney	OH	3-5-6 3-5-5	26-01700.001 26-01700.000 26-01702.000 26-01700.002	Insofar as said lease covers 19.4959 acres out of 26.26 acres
8	12, 13, 14	OR 112-769	Jay S. Van Dyne and Michele J. Van Dyne, his wife	Mason Dixon Energy, Inc.	Belmont	Pultney	OH	3-5-6 3-5-12	26-01863.000 26-01354.000 26-03079.000	Insofar as said lease covers 33.98 acres out of 57.18 acres
9	15	OR 65-396	Harold D. Bell Jr. and Cathy L. Bell, husband and wife	Reserve Energy Exploration Company	Belmont	Pultney	OH	3-5-6	26-01862.000	Insofar as said lease covers 5.00 acres out of 37.3 acres
10	17	OR 288-554	Jay S. Van Dyne and Michele J. Van Dyne, his wife	XTO Energy Inc.	Belmont	Pultney	OH	3-5-12	26-01906.000	Insofar as said lease covers 1.1247 acres out of 1.0018 acres
11	18	OR 65-833	Robert E. Violet and Loretta L. Violet, husband and wife	Reserve Energy Exploration Company	Belmont	Pultney	OH	3-5-6	26-01870.000	Insofar as said lease covers 50.33 acres out of 143.68 acres
12	20	OR 304-434	Mary Jane Pauley, a single woman	XTO Energy Inc.	Belmont	Pultney	OH	3-5-18	26-01141.001	Insofar as said lease covers 3.2486 acres out of 12.606 acres
13	21	OR 288-622	Elsie H. Fox, single	XTO Energy Inc.	Belmont	Pultney	OH	3-5-18	26-01141.004	Insofar as said lease covers 8.5568 acres out of 12.095 acres
14	22, 23	OR 295-122	Patricia Harrison, a single woman	XTO Energy Inc.	Belmont	Pultney	OH	3-5-18 3-5-12	26-01141.003 26-01783.000	Insofar as said lease covers 17.9438 acres out of 19.3329 acres

15	24	OR 313-771	Emil Nordone and Healy Nardone, husband and wife	XTO Energy Inc.	Belmont	Pultney	OH	3-5-12	26-01542.000	Insofar as said lease covers 59.9043 acres out of 84.741 acres
16	26	OR 65-812	David A. Johnson and Martha Johnson, husband and wife	Reserve Energy Exploration Company	Belmont	Pultney	OH	3-5-11	26-03156.000	Insofar as said lease covers 12.3515 acres out of 65.38 acres
17	26	OR 65-809	Leonard P. Johnson, divorced not remarried and Gregory A. Johnson, divorced and not remarried	Reserve Energy Exploration Company	Belmont	Pultney	OH	3-5-11	26-03156.000	Insofar as said lease covers 12.3515 acres out of 65.38 acres
18	26	OR 65-815	Michael W. Johnson and Carol Bessey, husband and wife	Reserve Energy Exploration Company	Belmont	Pultney	OH	3-5-11	26-03156.000	Insofar as said lease covers 12.3515 acres out of 65.38 acres
19	27	OR 65-842	Robert D. Workman and Ladonna S. Workman, husband and wife	Reserve Energy Exploration Company	Belmont	Pultney	OH	3-5-11	26-01901.000	Insofar as said lease covers 30.1366 acres out of 73.09 acres
20	28	OR 293-796	James E. Riggs and Bobbie M. Riggs, husband and wife	XTO Energy Inc.	Belmont	Pultney	OH	3-5-11	26-01902.000	Insofar as said lease covers 6.8523 acres out of 6.91 acres
21	31	OR 539-1075	Robert Dale Workman and Ladonna Sue Workman, husband and wife	XTO Energy, Inc.	Belmont	Pultney	OH	3-5-5	26-01900.000	Said lease covers 10.53 acres
22	32	OR 523-778	Ross W. Johnson Jr. and Glenda M. Johnson, husband and wife	XTO Energy, Inc.	Belmont	Pultney	OH	3-5-5	26-01661.000	Insofar as said lease covers 72.6174 acres out of 92.50 acres

**STATE OF OHIO  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL AND GAS RESOURCES MANAGEMENT**

In re the Matter of the Application of  
XTO Energy Inc. for Unit Operation

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Application Date: May 18, 2015

Miller Unit A

**WORKING INTEREST OWNER APPROVAL**

XTO Energy Inc. ("Applicant") has prepared and/or filed an application asking the Chief of the Division of Oil and Gas Resources Management to issue an order authorizing Applicant to operate the Miller Unit A, located in Belmont County, Ohio, and consisting of thirty-two (32) separate tracts of land covering approximately 496.3455 acres, according to the Unit Plan attached thereto (the "Application").

Phillips Exploration, LLC is the owner of a 60% working interest in and to eleven (11) leases covering eleven (11) of the thirty-two (32) tracts of land in the Miller Unit A, as more specifically described in Exhibit 1 attached hereto. Said leases cover a total of approximately 140.714 acres, leaving Phillips Exploration, LLC with an approximate 17.010006% working interest in the Miller Unit A.

Phillips Exploration, LLC hereby approves, and supports the making of, the Application, including without limitation the Unit Plan attached thereto, and acknowledges receipt of full and true copies thereof.

By: Edmund S. Ruff, Jr.  
MS

Date: 5/18/15

**EXHIBIT 1**  
**TO WORKING INTEREST OWNER APPROVAL**

Lease No.	Unit Tract No.	Inst. No.	Lessor	Lessee	County	Twp	State	Range-Township-Section	Tax Parcel No(s).	Acres
1	4	OR 65-406	Penelton P. Clark and Katherine J. Clark, husband and wife	Reserve Energy Exploration Company	Belmont	Pultney	OH	3-5-5	26-03167.000	Insofar as said lease covers 12.99 acres out of 40.27 acres
2	5	OR 319-67	Margaret Jane Hoskinson and Delia May Hoskinson, husband and wife	Phillips Exploration, Inc.	Belmont	Pultney	OH	3-5-6	26-01651.000	Insofar as said lease covers 8.7 acres out of 19.54 acres
3	5	OR 319-61	Rodney Ray Hoskinson and Delia May Hoskinson, husband and wife	Phillips Exploration, Inc.	Belmont	Pultney	OH	3-5-6	26-01651.000	Insofar as said lease covers 8.7 acres out of 19.54 acres
4	6	OR 316-429	Rodney Ray Hoskinson and Delia May Hoskinson, husband and wife	Phillips Exploration, Inc.	Belmont	Pultney	OH	3-5-5	26-00596.00	Insofar as said lease covers 1.71 acres out of 1.83 acres
5	9, 10, 11, 16	OR 319-85	Tabita L. Shipe, a single woman	Phillips Exploration, Inc.	Belmont	Pultney	OH	3-5-6 3-5-5	26-01700.001 26-01700.000 26-01702.000 26-01700.002	Insofar as said lease covers 19.4959 acres out of 26.26 acres
6	15	OR 65-396	Harold D. Bell Jr. and Cathy L. Bell, husband and wife	Reserve Energy Exploration Company	Belmont	Pultney	OH	3-5-6	26-01862.000	Insofar as said lease covers 5.00 acres out of 37.3 acres
7	18	OR 65-833	Robert E. Violet and Loretta L. Violet, husband and wife	Reserve Energy Exploration Company	Belmont	Pultney	OH	3-5-6 3-5-12	26-01870.000	Insofar as said lease covers 50.33 acres out of 143.68 acres
8	26	OR 65-812	David A. Johnson and Martha Johnson, husband and wife	Reserve Energy Exploration Company	Belmont	Pultney	OH	3-5-11	26-03156.000	Insofar as said lease covers 12.3515 acres out of 65.38 acres
9	26	OR 65-809	Leonard P. Johnson, divorced not remarried	Reserve Energy Exploration Company	Belmont	Pultney	OH	3-5-11	26-03156.000	Insofar as said lease covers 12.3515 acres out of 65.38 acres
10	26	OR 65-815	Michael W. Johnson and Carol Bessey, husband and wife	Reserve Energy Exploration Company	Belmont	Pultney	OH	3-5-11	26-03156.000	Insofar as said lease covers 12.3515 acres out of 65.38 acres
11	27	OR 65-842	Robert D. Workman and Ladonna S. Workman	Reserve Energy Exploration Company	Belmont	Pultney	OH	3-5-11	26-01901.000	Insofar as said lease covers 30.1366 acres out of 73.09 acres

**STATE OF OHIO  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL AND GAS RESOURCES MANAGEMENT**

In re the Matter of the Application of XTO Energy Inc. for Unit Operation :  
: Application Date: May 18, 2015  
:  
:  
Miller Unit A :

**AFFIDAVIT OF DAVID PEARSON  
(CONTACTS —UNCOMMITTED WORKING INTEREST OWNERS)**

I, David Pearson, being first duly cautioned and sworn, do hereby depose and state as follows:

1. My name is David Pearson and I am a Senior Staff Landman with XTO Energy Inc. ("Applicant"). My day-to-day responsibilities include the negotiation of joint operating and acquisition agreements for Applicant in the State of Ohio.

2. As part of those responsibilities, I am personally responsible for contacting other operators and/or uncommitted working interest owners who hold oil and gas interests within Applicant's proposed drilling units to seek their participation and/or acquire their oil and gas interests.

3. I have personal knowledge of contacts that I have made and attempted to make on behalf of Applicant with other operators and/or uncommitted working interest owners in the West Unit. Those efforts are detailed below.

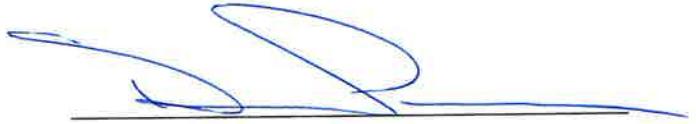
4. Regarding the following tracts, contact was made, including but not limited to, the following:

**Uncommitted Working Interest Owner:** Rice Drilling D LLC  
**Point of Contact:** John Mandich/Matt Eller/Aileen Rice  
**Address:** 400 Woodcliff  
Canonsburg, PA 15317  
**Uncommitted Tracts:** Tax Parcel Nos. 26-01707.000 and 26-01707.001

<u>Date</u>	<u>XTO Contact</u>	<u>Party Contacted</u>	<u>Method</u>	<u>Notes</u>
12/05/2014	David Pearson	Matt Eller John Mandich	Email	Sent preliminary Miller Unit A plan to discuss development of this area.
1/21/2015	David Pearson	Matt Eller	Email and Call	Discussed trade which included Rice's Miller A acreage
2/11/2015	David Pearson	Matt Eller John Mandich	Email	Follow up to regarding proposed unit and plan of development
4/2/2015	David Pearson	Matt Eller, Michael Wilder, John Mandich, Aileen Rice	Email	Sent formal well proposal
4/13/2015	David Pearson	Aileen Rice	Email and FedEx	Sent supplement to well proposal with AFE, well plat, and JOA Spoke with Mr. Mandich, Rice's Business Development Manager, and he indicated that Rice would not elect in this or any other XTO project.
4/13/2015	David Pearson	John Mandich	Phone Call and email	Attempted to confirm via email, and received a return call stating the same.

4/23/2015	David Pearson	Matt Eller, Michael Wilder, John Mandich, Aileen Rice	Email	Provided additional unit information including shapefiles and Working Interest Owner Approval. Received response acknowledging receipt and processing and indicated a response would be forthcoming
5/12/2015	David Pearson	Matt Eller, John Mandich, Aileen Rice	Email	Rice sent email stating they entered into an agreement to whereby another operator would be acquiring their acreage and they would not be making an election or executing a Working Interest Owner approval.

Further Affiant sayeth naught.



Sworn to and subscribed before me this 18th day of May, 2015.

Becky L. Swanson  
Notary Public



**STATE OF OHIO  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL AND GAS RESOURCES MANAGEMENT**

In re the Matter of the Application of  
XTO Energy Inc. for Unit Operation

Application Date: May 18, 2015

Miller Unit A

**AFFIDAVIT OF DAVID PEARSON  
(CONTACTS — UNLEASED MINERAL OWNERS)**

I, David Pearson, being first duly cautioned and sworn, do hereby depose and state as follows:

1. My name is David Pearson and I am a Senior Staff Landman with XTO Energy Inc. ("Applicant"). My day-to-day responsibilities include overseeing and directing lease acquisition for Applicant in the State of Ohio.

2. As part of those responsibilities, I work with and supervise both XTO employees and contractors representing Applicant who contact landowners and obtain oil and gas leases on behalf of Applicant.

3. I have reports of contacts and attempts to contact that Applicant has made to lease unleased lands within the Miller Unit A. Further, I have personal knowledge of contacts that I have made and attempted to make on behalf of Applicant to lease unleased lands within the Miller Unit A. Those efforts are detailed below.

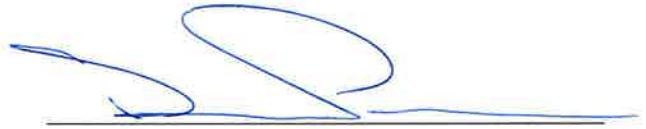
4. Regarding the following tract, the following contacts were made or attempted:

**Owners Name:** Curtis Randall Wallner and Roberta Kay Heil  
**Point of Contact:** Curtis Randall Wallner  
**Address:** 64040 Sand Hill Road, Bellaire, OH 43906  
**Unleased Tract:** Tax Parcel Nos. Tax Parcel No. 26-01755.000

<u>Date</u>	<u>XTO Contact</u>	<u>Party Contacted</u>	<u>Method</u>	<u>Notes</u>
1/17/2014	Dillon Allen, Broker	Curtis Randall Wallner	In Person	Spoke with Mr. Wallner, He stated he has received offers. He was not interested in our offer.
1/22/2014	Dillon Allen, Broker	Curtis Randall Wallner	Telephone	Mr. Wallner stated he had a higher offer.
2/5/2014	Sam Teer, Broker	Curtis Randall Wallner	Telephone	Received a call back from Curtis Wallner, he said that he had sent our lease packet to his attorney and that himself or his attorney would be in contact.
4/3/2014	Brandon Erwin, Broker	Curtis Randall Wallner	Mail	Sent Curtis Wallner and Roberta Heil each a certified letter and lease packet. Letter was signed for on April 4, 2014 by Curtis Randall Wallner.
6/10/2014	Brandon Erwin, Broker	Curtis Randall Wallner	Mail	Sent Curtis Wallner and Roberta Heil each a certified letter and lease packet. Letter was signed for on June 11, 2014 by Curtis Randall Wallner.
8/28/2014	Brandon Erwin, Broker	Curtis Randall Wallner	Mail	Sent Curtis Wallner and Roberta Heil each a certified letter and lease packet. Letter was signed for on September 3, 2014 by Curtis Randall Wallner.

12/16/2014	Josh Holmes	Roberta Heil	In Person	Spoke with Roberta Heil, she informed me that Curtis Wallner was not home, I left a copy of our lease proposal with her.
1/22/2015	Josh Holmes	Curtis Randall Wallner	Telephone	Called Mr. Wallner to follow up on our lease offer. He did not answer, so left a voicemail.
2/12/2015	Travis Edmondson	Curtis Randall Wallner	Telephone	Left a voicemail with Mr. Wallner
2/26/2015	Travis Edmondson	Curtis Randall Wallner	Telephone	Spoke with Mr. Wallner about moving forward, he indicated that Tracey Lancione Lloyd would be representing him in lease discussions.
3/13/2015	Travis Edmondson	Curtis Randall Wallner	Email	Email from Tracey Lloyd stating she would not be doing any additional work with Mr. Wallner.

Further Affiant sayeth naught.



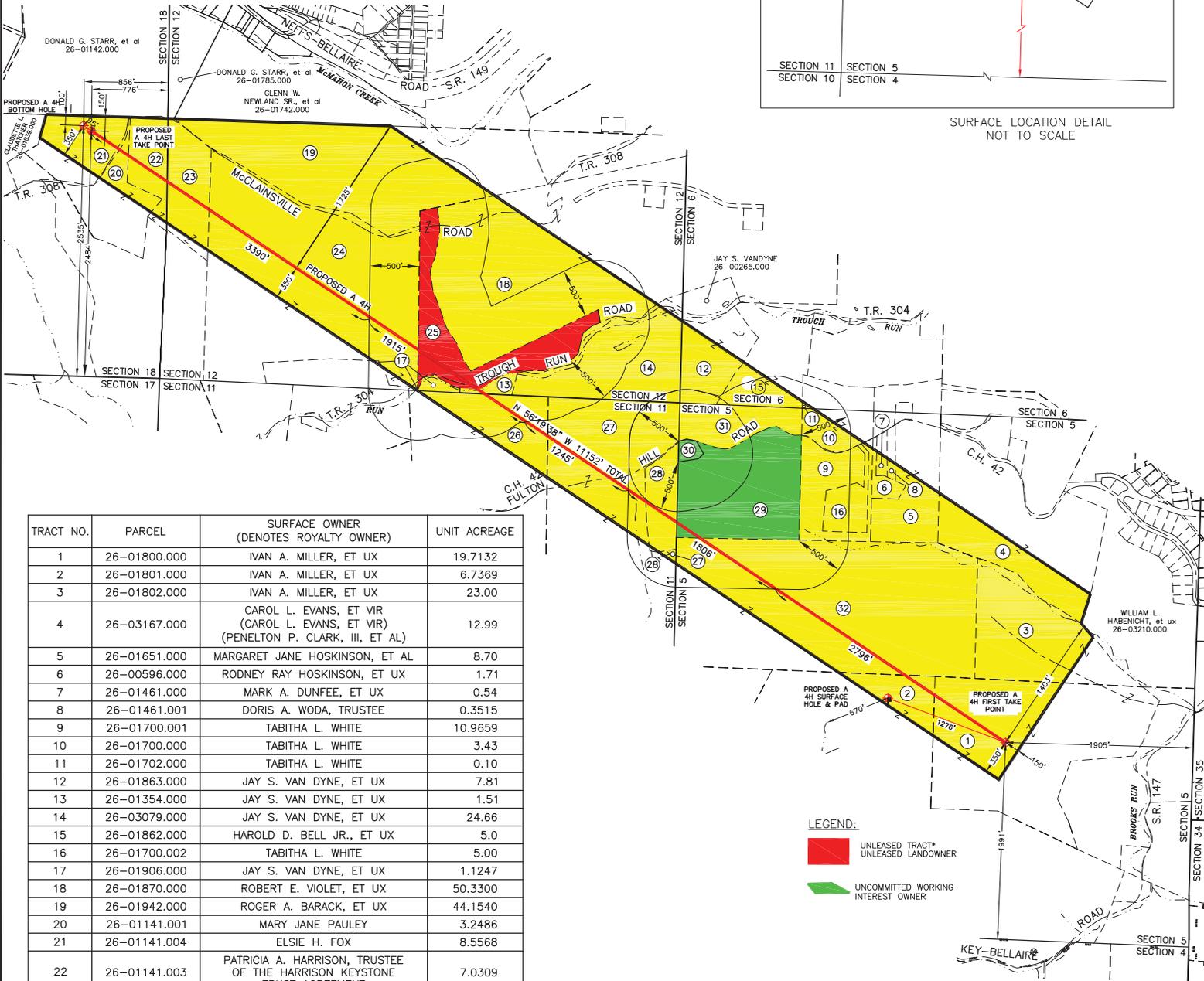
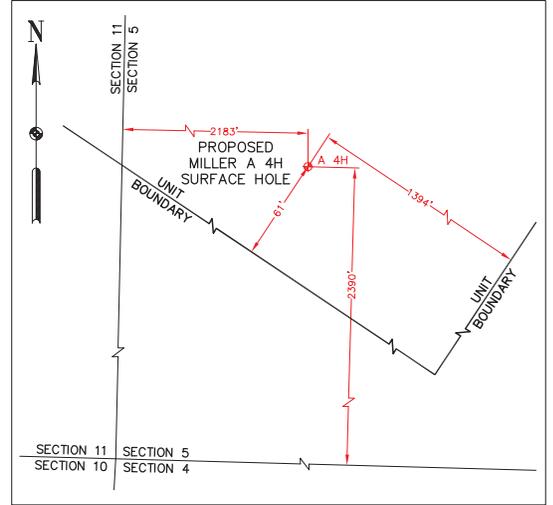
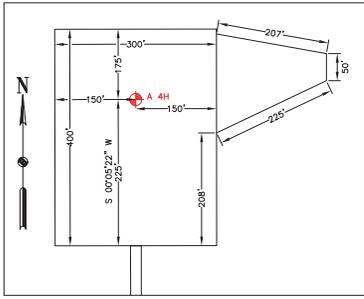
Sworn to and subscribed before me this 15th day of May, 2015.

Becky L. Swanson  
Notary Public



# UNIT PLAT FOR MILLER UNIT A 496.346 ACRES

BASIS OF BEARINGS IS GRID NORTH,  
OHIO STATE PLANE COORDINATE SYSTEM,  
SOUTH ZONE, NAD83.



TRACT NO.	PARCEL	SURFACE OWNER (DENOTES ROYALTY OWNER)	UNIT ACREAGE
1	26-01800.000	IVAN A. MILLER, ET UX	19.7132
2	26-01801.000	IVAN A. MILLER, ET UX	6.7369
3	26-01802.000	IVAN A. MILLER, ET UX	23.00
4	26-03167.000	CAROL L. EVANS, ET VIR (CAROL L. EVANS, ET VIR) (PENELTON P. CLARK, III, ET AL)	12.99
5	26-01651.000	MARGARET JANE HOSKINSON, ET AL	8.70
6	26-00596.000	RODNEY RAY HOSKINSON, ET UX	1.71
7	26-01461.000	MARK A. DUNFEE, ET UX	0.54
8	26-01461.001	DORIS A. WODA, TRUSTEE	0.3515
9	26-01700.001	TABITHA L. WHITE	10.9659
10	26-01700.000	TABITHA L. WHITE	3.43
11	26-01702.000	TABITHA L. WHITE	0.10
12	26-01863.000	JAY S. VAN DYNE, ET UX	7.81
13	26-01354.000	JAY S. VAN DYNE, ET UX	1.51
14	26-03079.000	JAY S. VAN DYNE, ET UX	24.66
15	26-01862.000	HAROLD D. BELL JR., ET UX	5.0
16	26-01700.002	TABITHA L. WHITE	5.00
17	26-01906.000	JAY S. VAN DYNE, ET UX	1.1247
18	26-01870.000	ROBERT E. VIOLET, ET UX	50.3300
19	26-01942.000	ROGER A. BARACK, ET UX	44.1540
20	26-01141.001	MARY JANE PAULEY	3.2486
21	26-01141.004	ELSIE H. FOX	8.5568
22	26-01141.003	PATRICIA A. HARRISON, TRUSTEE OF THE HARRISON KEYSTONE TRUST AGREEMENT	7.0309
23	26-01783.000	PATRICIA A. HARRISON, TRUSTEE OF THE HARRISON KEYSTONE TRUST AGREEMENT	10.9129
24	26-01542.000	THE NARDONE FAMILY TRUST	59.9043
25	26-01755.000	CURTIS RANDALL WALLNER, ET AL	18.318*
26	26-03156.000	DAVID A. JOHNSON, ET AL	12.3515
27	26-01901.000	ROBERT D. WORKMAN, ET UX	30.1366
28	26-01092.000	JAMES E. RIGGS, ET UX	6.8523
29	26-01707.001	JAMES RICHMOND, ET UX	27.05
30	26-01707.000	JAMES RICHMOND, ET UX	1.01
31	26-01900.000	ROBERT DALE WORKMAN, ET UX	10.530
32	26-01661.000	ROSS W. JOHNSON, JR., ET UX	72.6174
TOTAL ACRES			496.346

**LEGEND:**

- UNLEASED TRACT\* UNLEASED LANDOWNER
- UNCOMMITTED WORKING INTEREST OWNER

ROYALTY OWNERSHIP AND ACRESSES SHOWN HEREON ARE PROVIDED BY XTO ENERGY, INC. AND HAVE NOT BEEN SURVEYED TO OHIO BOUNDARY STANDARDS.

SCALE 1"=1000'  
0 500' 1000'

02-24-2015  
REV BY: XTO DATE: 5-8-2015 DESC: FOR UNITIZATION ONLY  
REV BY: \_\_\_\_\_ DATE: \_\_\_\_\_ DESC: \_\_\_\_\_  
REV BY: \_\_\_\_\_ DATE: \_\_\_\_\_ DESC: \_\_\_\_\_

**MILLER UNIT A**  
SURVEY PLAT SHOWING PROPOSED WELL  
State of Ohio, Department of Natural Resources - Division of Oil & Gas Management, Columbus, Ohio

Oil or Gas:  New Location:  Strat: \_\_\_\_\_  
I hereby certify that all drilling or producing within 1000 feet and all buildings and streams within 200 feet have been shown, that this plat is true and correct and was prepared according to the current State of Ohio, Department of Natural Resources, Division of Oil & Gas Management Specifications.

PRELIMINARY 8 5-8-2015  
TIMOTHY J. BRIGGS, P.S. # 7495  
HAMMONTREE & ASSOCIATES, LIMITED

Operator: XTO ENERGY, INC.  
Address: 502 KEYSTONE DRIVE, WARRENDALE, PA 15086  
Landowner: Surface Location: IVAN A. & MARY H. MILLER

Oil & Gas: IVAN A. & MARY H. MILLER

Coal: Pittsburgh No. 8 Seam of Coal: BELLAIRE CORPORATION  
All other Coal: IVAN A. & MARY H. MILLER

LEASE NAME: MILLER UNIT A

County: BELMONT (COAL BEARING)  
Township: PULTNEY  
USGS Quad: LANSING, OHIO  
Urban Area: N/A  
Proposed Formation: POINT PLEASANT

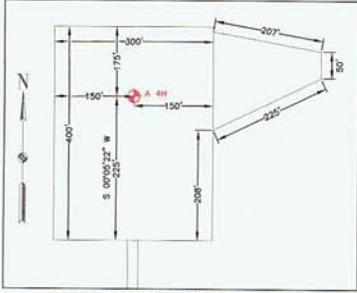
Subdivision Civil Township / PLSS  
Twp/Range: 14,R3 (BELMONT)  
Otr. Township: N/A  
Section: 5,6,11,12,18 (PULTNEY)  
Lots: N/A  
Tract: N/A  
Allotment: N/A  
Fraction: N/A  
Elevation (NAV088): 1242.50'(GROUND LEVEL)

**HAMMONTREE & ASSOCIATES, LTD.**  
ENGINEERS, PLANNERS, SURVEYORS

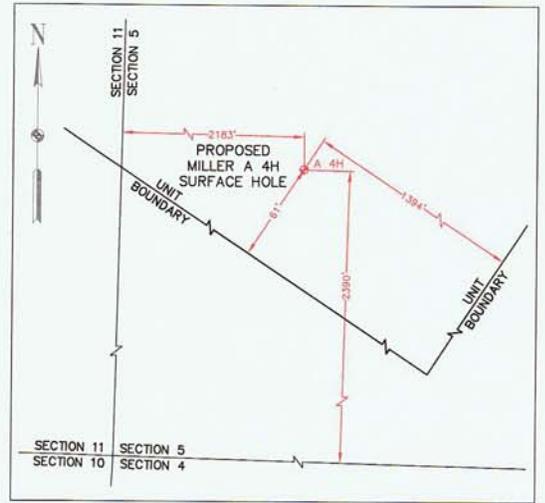
5233 STONEHAM ROAD, NORTH CANTON, OH  
PH: (330) 499-8817  
FAX: (330) 499-0149  
www.hammontree-engineers.com

# UNIT PLAT FOR MILLER UNIT A 496.3455 ACRES

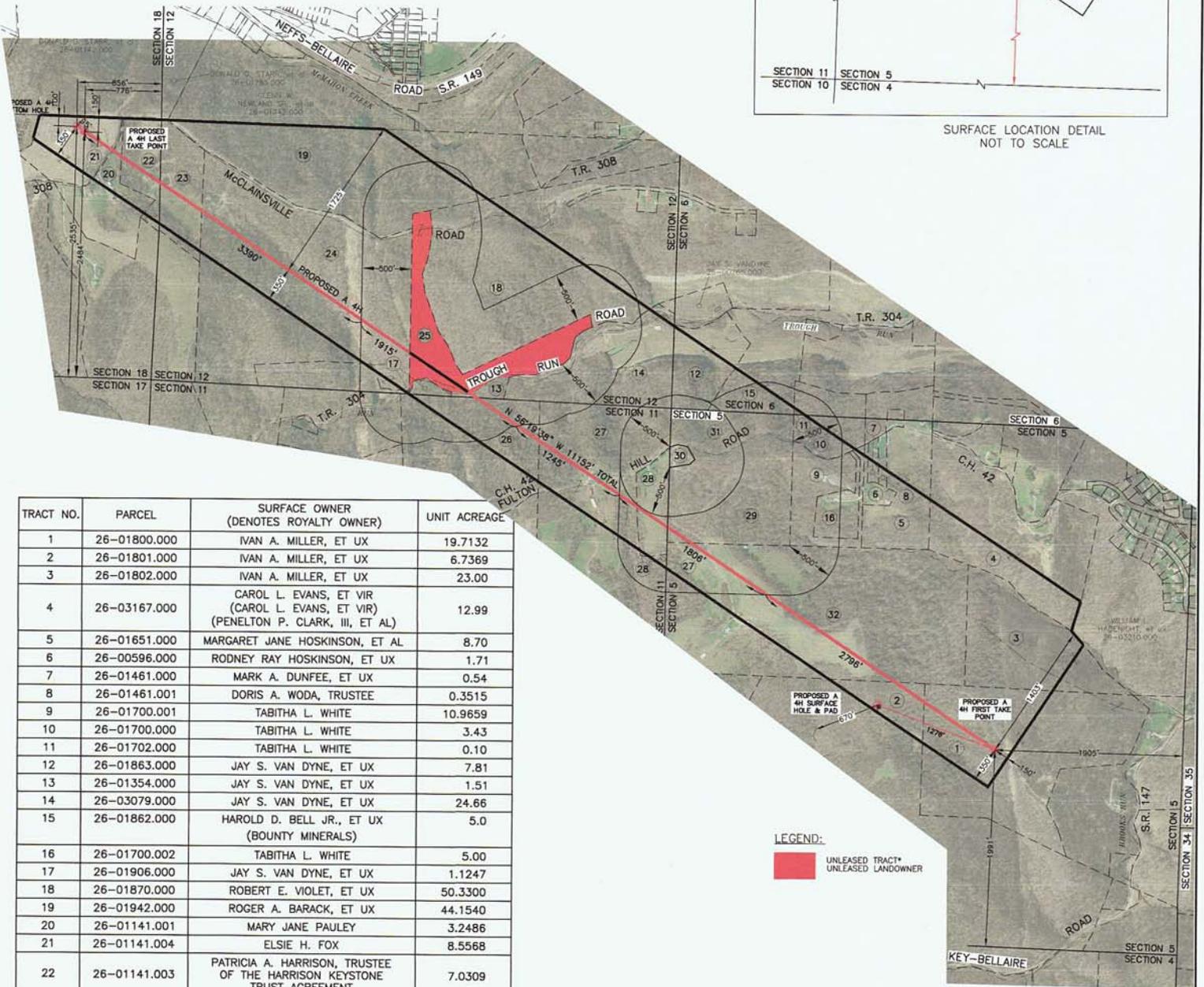
BASIS OF BEARINGS IS GRID NORTH,  
OHIO STATE PLANE COORDINATE SYSTEM,  
SOUTH ZONE, NAD83.



PAD DIMENSION DETAIL  
NOT TO SCALE



SURFACE LOCATION DETAIL  
NOT TO SCALE



TRACT NO.	PARCEL	SURFACE OWNER (DENOTES ROYALTY OWNER)	UNIT ACREAGE
1	26-01800.000	IVAN A. MILLER, ET UX	19.7132
2	26-01801.000	IVAN A. MILLER, ET UX	6.7369
3	26-01802.000	IVAN A. MILLER, ET UX	23.00
4	26-03167.000	CAROL L. EVANS, ET VIR (CAROL L. EVANS, ET VIR) (PENELTON P. CLARK, III, ET AL)	12.99
5	26-01651.000	MARGARET JANE HOSKINSON, ET AL	8.70
6	26-00596.000	RODNEY RAY HOSKINSON, ET UX	1.71
7	26-01461.000	MARK A. DUNFEE, ET UX	0.54
8	26-01461.001	DORIS A. WODA, TRUSTEE	0.3515
9	26-01700.001	TABITHA L. WHITE	10.9659
10	26-01700.000	TABITHA L. WHITE	3.43
11	26-01702.000	TABITHA L. WHITE	0.10
12	26-01863.000	JAY S. VAN DYNE, ET UX	7.81
13	26-01354.000	JAY S. VAN DYNE, ET UX	1.51
14	26-03079.000	JAY S. VAN DYNE, ET UX	24.66
15	26-01862.000	HAROLD D. BELL JR., ET UX (BOUNTY MINERALS)	5.0
16	26-01700.002	TABITHA L. WHITE	5.00
17	26-01906.000	JAY S. VAN DYNE, ET UX	1.1247
18	26-01870.000	ROBERT E. VIOLET, ET UX	50.3300
19	26-01942.000	ROGER A. BARACK, ET UX	44.1540
20	26-01141.001	MARY JANE PAULEY	3.2486
21	26-01141.004	ELSIE H. FOX	8.5568
22	26-01141.003	PATRICIA A. HARRISON, TRUSTEE OF THE HARRISON KEYSTONE TRUST AGREEMENT	7.0309
23	26-01783.000	PATRICIA A. HARRISON, TRUSTEE OF THE HARRISON KEYSTONE TRUST AGREEMENT	10.9129
24	26-01542.000	THE NARDONE FAMILY TRUST	59.9043
25	26-01755.000	CURTIS RANDALL WALLNER, ET AL	18.318*
26	26-03156.000	DAVID A. JOHNSON, ET AL	12.3515
27	26-01901.000	ROBERT D. WORKMAN, ET UX	30.1366
28	26-01092.000	JAMES E. RIGGS, ET UX	6.8523
29	26-01707.001	JAMES RICHMOND, ET UX	27.05
30	26-01707.000	JAMES RICHMOND, ET UX	1.01
31	26-01900.000	ROBERT DALE WORKMAN, ET UX	10.530
32	26-01661.000	ROSS W. JOHNSON, JR., ET UX	72.6174
TOTAL ACRES			496.3455

LEGEND:  
UNRELEASED TRACT\*  
UNRELEASED LANDOWNER

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SCALE 1"=1000'  
0 500' 1000'

STATE OF OHIO  
TIMOTHY J. BRIGGS  
7495  
REGISTERED PROFESSIONAL SURVEYOR

02-24-2015  
REV BY: XTO DATE: 5-8-2015 DESC: UNITIZATION DRAFTING  
REV BY: DATE: DESC:  
REV BY: DATE: DESC:

MILLER UNIT A

SURVEY PLAT SHOWING PROPOSED WELL  
State of Ohio, Department of Natural Resources - Division of Oil & Gas Management, Columbus, Ohio

Oil or Gas:  New Location:  Strat: \_\_\_\_\_  
I hereby certify that all drilling or producing within 1000 feet and all buildings and streams within 200 feet have been shown, that this plat is true and correct and was prepared according to the current State of Ohio, Department of Natural Resources, Division of Oil & Gas Management Specifications.

THOMAS J. BRIGGS, P.S. # 7495  
HMMONTREE & ASSOCIATES, LIMITED

Operator: XTO ENERGY, INC.  
Address: 502 KEYSTONE DRIVE, WARRENDALE, PA 15086  
Landowner: Surface Location: IVAN A. & MARY H. MILLER

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LEASE NAME: MILLER UNIT A

County: BELMONT (COAL BEARING)  
Township: PULTNEY  
USGS Quad: LANSING, OHIO  
Urban Area: N/A  
Proposed Formation: POINT PLEASANT

Subdivision Civil Township / PLS  
Twp/Range: T4,R3 (BELMONT)  
Qtr. Township: N/A  
Section: 5,6,11,12,18 (PULTNEY)  
Lots: N/A  
Tract: N/A  
Allotment: N/A  
Fraction: N/A  
Elevation (NAVD83): 1242.50'(GROUND LEVEL)

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