

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

In re the Matter of the Application of CNX :
Gas Company LLC, for Unit Operation :
 : Application Date: August 16, 2016
SWITZ7HSU Unit :
 :
 :

APPLICATION FOR UNIT OPERATION PURSUANT TO ORC §1509.28

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APPLICATION

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EXHIBITS

Exhibit 1 Unit Plan
Exhibit 2 Prepared Direct Testimony of John Wyatt (“Geologist”)
Exhibit 3 Prepared Direct Testimony of Tyler Clift (“Reservoir Engineer”)
Exhibit 4 Prepared Direct Testimony of Peter J. Binotto (“Landman”)

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APPLICATION

Pursuant to Ohio Revised Code Section 1509.28, CNX Gas Company LLC (“CNX”), hereby respectfully requests the Chief of the Ohio Department of Natural Resources’ Division of Oil and Gas Resources Management (“Division”) to issue an order authorizing CNX to operate the Unitized Formation and applicable land area in Monroe County, Ohio (hereinafter, the “SWITZ7HSU Unit”) as a unit according to the Unit Plan attached hereto and as more fully described herein. CNX makes this request 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**

CNX is a corporation organized under the laws of the State of Virginia, with its principal office located at 1000 CONSOL Energy Drive, Canonsburg, PA 15317. CNX is registered in good standing as an “owner” with the Division.

CNX 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 SWITZ7HSU Unit is located in Monroe County, Ohio, and consists of fifty-two (52) separate tracts of land. See Exhibits A-1 and A-2 of the Unit Operating Agreement (showing the plat and tract participations, respectively). The total land area in the SWITZ7HSU Unit is approximately 1020.810 acres and, at the time of this Application, CNX has the right to drill on and produce from 51 of the 52 tracts, representing 1017.32 acres of the 1020.810 acre proposed unit – i.e., more than ninety nine percent (99%) of the unit area, above the sixty-five percent (65%) threshold required by Ohio Revised Code § 1509.28.¹

As more specifically described herein, CNX seeks authority to drill and complete up to four horizontal wells in the Unitized Formation from a single well pad located near the northern end of the unit's boundary to efficiently test, develop, and operate the Unitized Formation for oil, natural gas, and related liquids production.

CNX's plan for unit operations (the "Unit Plan") is attached to this Application Exhibit 1. 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, the amount of which is based upon the risks of and costs related to the project; and conforms to industry standards for the drilling and operating of horizontal wells generally used by the Applicant with other interest owners.

III. TESTIMONY

The following pre-filed testimony has been attached to the Application supporting the SWITZ7HSU Unit's formation: (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 production and expenses on a surface acreage basis;² (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 additional costs;³ and (iii) testimony from an operational Landman with firsthand

¹ See Prepared Direct Testimony of Landman, attached as Exhibit 4.

² See Prepared Direct Testimony of Geologist, attached as Exhibit 2.

³ See Prepared Direct Testimony of Reservoir Engineer, attached as Exhibit 3.

knowledge of CNX's Ohio development who describes the project generally, the Unit Plan, efforts to lease unleased owners, and the approvals received for unit development.⁴

IV.
THE CHIEF SHOULD GRANT AN ORDER FOR 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 – when the applicant shows that 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.
- (9) Such other provisions appropriate for engaging in unit operation and for the protection or adjustment of correlative rights.

See ORC 1509.28(A). CNX proposes the following as additional provisions:

- (a) No activity associated with the drilling, completion, or operation of the SWITZ7HSU Unit shall be conducted on the surface of any unleased property without prior written consent of the landowner.
- (b) If an Order is granted, any Unitized party shall participate in unit operations as a non-consenting working interest owner. The mineral owner shall receive a monthly cash payment equal to a one-eighth (1/8) landowner royalty interest calculated on gross revenues. The one-eighth (1/8) royalty interest shall be calculated based on the Unit Participation of the mineral owner's tract. CNX

⁴ See Prepared Direct Testimony of Landman, attached as Exhibit 4.

shall make the royalty payment contemporaneously with those it makes to leased individuals within the Unit Area. In addition to the royalty payment, the non-consenting working interest owner shall have a working interest ownership in the well equal to seven-eighths (7/8) of the Unit Participation of his/her tract. This seven-eighths of his/her Unit Participation shall accrue based upon net production revenue until CNX recovers 500% of the cost of drilling, testing, completing, and producing the initial well, and such other costs as set forth in the Unit Operating Agreement. Once CNX recovers these costs, CNX shall begin making monthly payments on net production revenue for that well equal to seven-eighths (7/8) of the non-consenting working interest owner's Unit Participation. For any subsequent wells drilled in the Unit Area, seven-eighths (7/8) of the non-consenting working interest owner's Unit Participation shall accrue until CNX has recovered 300% of the cost of drilling, testing, completing, and producing the subsequent wells, and such other costs as set forth in the Unit Operating Agreement. Once CNX recovers these costs, CNX shall begin making monthly payments on net production revenue for the subsequent wells equal to seven-eighths (7/8) of the non-consenting working interest owner's Unit Participation. Once a specific cost is charged to a well, that same cost cannot be charged to the subsequent wells in the Unit Area.

(c) Unitized parties shall not incur liability for any personal or property damage associated with any drilling, testing, completing, producing, operating, or plugging activities within the SWITZ7HSU Unit.

(d) If requested by an unleased mineral owner or by the Division, CNX shall provide, not later than thirty (30) days after receipt of the request, any of the following:

- (i) A statement for the preceding month, covering all wells then in production within the Unit Area, depicting all costs incurred, together with the quantity of oil and gas produced, and the amount of proceeds realized from the sale of production during said preceding month; and
- (ii) Any authorization for expenditure (AFE) prepared by CNX; and
- (iii) A statement of all costs and expenses for purposes of Paragraph 9(b).

(10) The Order will become effective when CNX provides the Chief with final written approval of the unit operations from sixty-five percent (65%) of the working interest owners in the Unit Area, and sixty-five percent (65%) of the royalty interest owners in the Unit Area. Upon receipt of these approvals, the Order shall become effective, and unit operations may commence as set forth above. CNX will have six (6) months to provide these required approvals, and, if it does not do so, the Order will be deemed revoked, and the Chief shall provide notice of the revocation to CNX and the unleased mineral interest owners in the Unit Area.

(11) Within twenty-one (21) days of the Order becoming effective, CNX will file a copy of the Order with the Monroe County Recorder's Office.

(12) CNX requests that its Unit Agreement and Unit Operating Agreement are adopted by the Order. In the event of a conflict between the Plan for Unit Operations approved by the Chief and contained in the Order, and CNX's Unit Agreement and Unit Operating Agreement, the Order shall take precedence and the Unit Agreement and Unit Operating Agreement shall conform to the Order.

B. CNX'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 a

depth located from fifty feet above the top of the Utica Shale to fifty feet below the base of the Point Pleasant formation. The formation includes the Utica, Point Pleasant and Lexington formations and any reference in this application to the Utica Formation includes all three of these formations, which are a common source of supply. The evidence presented in 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. Additionally, that evidence establishes that the Unitized Formation is likely to be reasonably uniformly distributed throughout the Unit Area – and thus that it is reasonable for the Unit Plan to allocate unit production and expenses to separately owned tracts on a surface acreage basis.

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 SWITZ7HSU Unit. The Unit Plan contemplates the potential drilling of four (4) horizontal wells from a single well pad, with lateral lengths of approximately 5,320 to 10,500 feet, and with the potential for additional unit wells in the event they are necessary to fully recover the resource. CNX estimates that the ultimate recovery from this unit development, if all unit wells are drilled, could be 91.2 billion cubic feet (Bcf) of natural gas from the Unitized Formation. Because of the location of the unleased tract within the Unit Area, all of the laterals cannot be fully developed absent unit operations, which would reduce the potential recovery from the unit by 11.1 Bcf, to 80.1 Bcf of natural gas.⁵ Thus, the calculations show that unit operations are reasonably necessary to increase substantially the ultimate recover 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 of \$30.1 million, whereas the net present value of the estimated recovery from the same area without unit operations would be \$25.1 million, a \$5 million decrease. See Exhibit 3-A, showing in greater detail the calculations supporting the economic benefit of unitized operation.

⁵ All recoveries and values stated as part of this application are only estimates based on the best information available at this time. They should not be relied upon as guarantees of production or profitability and are subject to change.

The value of the estimated additional recovery attributable to unitization exceeds the estimated additional cost incident to conducting unitization.

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

The Unit Plan proposed by CNX meets the requirements set forth in Ohio Revised Code § 1509.28. The unit area is described in the Unit Agreement 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 Agreement at Article 3, with greater specificity throughout the Unit Agreement and Unit Operating Agreement. Unit production and unit expenses are allocated on a surface acreage basis as set forth in the Unit Agreement 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 Agreement. 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 XVI of the Unit Operating Agreement, with each person having a vote that has a value corresponding to the percentage of unit expenses chargeable against that person’s interest. Commencement and termination of operations are addressed in Articles 11 and 12 of the Unit Agreement.

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. Accordingly, CNX respectfully requests that the Division schedule a hearing at an available hearing room located at the Division’s Columbus complex at the earliest possible date 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 additional costs. CNX respectfully submits that the Application meets this

standard, and that the terms and conditions of the Unit Plan are just and reasonable and satisfy the requirements of Ohio Revised Code § 1509.28(B). CNX therefore asks the Chief to issue an order authorizing CNX to operate the SWITZ7HSU Unit according to the Unit Plan attached hereto.

Respectfully submitted,

/s/ J. Kevin West

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**UNIT PLAN
SWITZ7HSU UNIT
SWITZERLAND TOWNSHIP, MONROE COUNTY, OHIO**

The following shall constitute the Plan for Unit Operations applicable to the SWITZ7HSU Unit, in Switzerland Township, Monroe 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 therein, 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, 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, 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.

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 and the Unit Operating Agreement for or on account of Unit Operations, but shall not include post-production costs attributable to Royalty Owner interests.

Unitized Formation means the subsurface portion of the Unit Area located from fifty feet above the top of the Utica Shale to fifty feet below the base of the Point Pleasant formation.

Unit Operating Agreement means the modified A.A.P.L. Form 610-1989 Model Form Operating Agreement for the SWITZ7HSU Unit, which is attached hereto and incorporated herein by reference as if fully rewritten herein and to which all Working Interest owners are deemed to be parties; provided, however, that in the event two or more 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. The Unit Operating Agreement is hereby confirmed and by reference made a part of this Plan. In the event of a conflict between such agreements, the terms of the Unit Operating Agreement shall govern.

Unit Operations are all operations conducted pursuant to this Plan and the Unit Operating Agreement.

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.

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 and whose owner, under an Order by the Chief, either chooses to be treated as a Working Interest Owner or who is awarded a working interest by such Order shall be regarded as a Working Interest to the extent of seven-eighths (7/8) thereof and a Royalty Interest to the extent of the remaining one-eighth (1/8) thereof. Upon reaching a Unitization Order's prescribed payout period on a specific well, the owner of a Working Interest free of a lease or other instrument and created by virtue of the Unitization Order shall receive monthly payments on net production revenue equal to seven-eighths (7/8) of the owner's Unit Participation, while continuing the one-eighth (1/8) Royalty Interest. 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 and the Unit Operating Agreement.

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.

Operations. If an order is issued granting Unit Operator the authority to conduct Unit Operations, the operations conducted pursuant to the order of the chief shall constitute a fulfillment of all the express or implied obligations of each lease or contract covering lands in the unit area to the extent of that compliance with such obligations cannot be had because of the order of the chief.

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. It is agreed that each lease shall remain in full force and effect from the date of execution hereof 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. Working Interest Owners reserve the right to elect, but shall not have the obligation, to use for injection and/or operational purposes any nonproducing or abandoned wells or dry holes, and any other wells completed in the Unitized Formation.

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 and the Unit Operating Agreement.

Unit Expenses. Except as otherwise provided in the Unit Operating Agreement, Unit Expenses shall be allocated to each Tract in the proportion that the surface acres of each Tract bears to the surface acres of the Unit Area, and shall be paid by the respective 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 bears to the total surface acreage of the Unit Area. The Tract Participation of each Tract has been calculated as follows: SURFACE ACRES IN EACH TRACT DIVIDED BY THE TOTAL SURFACE ACRES WITHIN THE UNIT AREA. The Tract Participations as shown in Exhibit A-2 to the Unit Operating Agreement are accepted and approved as being fair and equitable.

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.

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.

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.

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. 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.

Unitized 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 Unit, 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 Unit, owned by an interest owner identified in Exhibit A-3 to the Unit Operating Agreement.

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 respective heirs, devisees, legal representatives, successors, and assigns of the parties hereto, and shall constitute a covenant running with the lands, leases, and interests conveyed hereby.

Waiver of Rights of Partition. Each party to this Plan understands and acknowledges, and is hereby deemed to covenant and agree, that during the term of this Plan it will not 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, and to that extent waives the benefits of all laws authorizing such partition.

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, and operations may commence hereunder, as of 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 or the Unit Operating Agreement 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, the Unit Operating Agreement, 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 ninety (90) consecutive days, or so long as other Unit Operations are conducted without a cessation of more than ninety (90) 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. All decisions, determinations, or approvals by Working Interest Owners hereunder shall be made pursuant to the voting procedure of the Unit Operating Agreement unless otherwise provided herein.

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 or the Unit Operating Agreement shall be in accordance with Ohio law.

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

OPERATING AGREEMENT

THIS AGREEMENT, entered into by and between CNX Gas Company LLC 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. See also Article XVI.A.1.

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. See also Article XVI.A.2.

E. 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.

F. 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.

G. The term "Drillsite" shall mean the Oil and Gas Lease or Oil and Gas Interest on which a proposed well is to be located.

H. The term "Initial Well" shall mean the well required to be drilled by the parties hereto as provided in Article VI.A.

I. 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.

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

K. 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.

L. 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.

M. 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.

N. 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. See also Article XVI.A.3.

O. 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.

P. 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.

Q. 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. See also Article XVI.A.4.

R. 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.

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.

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 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,
(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.

X G. Exhibit "G," Tax Partnership.

X H. Notice of JOA - Model Form Recording Supplement to Operating Agreement and Financing Agreement.

X I. Other: Well Data Sheet

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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 | ~~Articles I through XVI~~ ^{Articles I through XVI} of this agreement, the provisions in ~~the body~~ ^{Articles I through XVI} of this agreement shall prevail.

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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~~ ^{Production Burdens} as described hereafter.

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14 | ~~Regardless of which party has contributed~~ ^{With respect to} any Oil and Gas Lease or Oil and Gas Interest on which royalty or other
15 | ~~burdens~~ ^{Production 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~~ ^{existing Production Burdens} on its share of the production from ~~the Contract Area up to, but not in excess of,~~
17 | ~~_____~~ ^{acreage contributed by such party to} and shall indemnify, defend and hold the other parties free from any liability therefor.

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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.~~

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~~ ^{Production Burdens} attributable to such higher price.

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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:** See also Article XVI.C.

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~~ ^{Production Burden} payable out of production attributable to its working
36 | interest hereunder, such ~~burden~~ ^{Production 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~~ ^{Production Burden}
38 | payable out of production created prior to the date of this agreement, and such ~~burden~~ ^{Production Burden} is not shown on Exhibit "A," such
39 | ~~burden~~ ^{Production Burden} also shall be deemed a Subsequently Created Interest to the extent such ~~burden~~ ^{Production Burdens} causes the ~~burdens~~ ^{Production Burdens} on such party's
40 | Lease or Interest to exceed the amount stipulated in Article III.B. above.

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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.

50 | **ARTICLE IV.**
51 | **TITLES**

52 | **A. Title Examination:**

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

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

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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 ^{Operator.} ~~examining attorney or title has been accepted by~~
5 ~~all of the Drilling Parties in such well.~~

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6 **B. Loss or Failure of Title:** See also Article XVI.DD.

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 ^{Production Burdens} ~~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;

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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 calculated on an acreage basis, for the development and operating costs previously paid on account of such Lease or Interest,
51 it shall be reimbursed for unrecovered actual costs previously paid by it (but not for its share of the cost of any dry hole
52 previously drilled or wells previously abandoned) from so much of the following as is necessary to effect reimbursement:

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

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

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

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, ^{and Article XVI.DD.} ~~and Article XVI.DD.~~ 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.

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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:

CNX Gas Company LLC 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 ~~or any of their respective officers, employees, or agents for any Claims, whether or not due to the negligence of Operator.~~ regulation, 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. See also Article XVII.D.

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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 V.A. or material failure or inability to perform its obligations under this agreement.

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~~Subject to Article VIII.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 ~~affiliate,~~ subsidiary, parent or successor corporation shall not be the basis for removal of Operator.

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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~~ the party or parties 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.

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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,~~ and Completion 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 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.

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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 of contractors and suppliers and wages and salaries for services rendered or performed, and for materials supplied on, to or in 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, permit each Consenting Party
12 or its duly authorized representative, at the Consenting Party'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 upon request copies of any
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 Consenting Party 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." See also Article XVI.E.

23 6. Filing and Furnishing Governmental Reports: Operator will file, and upon written request promptly furnish copies to
24 each requesting 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 Consenting Parties 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 Consenting Parties such reports, test results and notices regarding the progress of operations on the well
32 as the Consenting Parties 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 The rights of a Non-Operator as set forth in Articles V.D.5, V.D.6 and V.D.7 shall only apply in favor of those Non-Operator parties who
37 are Consenting Parties with respect to a proposed operation, until such time as the Consenting Parties are no longer entitled to the Non-
38 Consenting Party's share of production, or the proceeds therefrom, attributable to the proposed operation in which the non-
39 Consenting Parties did not participate.

40 8. Cost Estimates: Upon request of any Consenting Party, Operator shall furnish estimates of current and cumulative costs
41 incurred for the joint account at reasonable intervals during the conduct of any operation pursuant to this agreement.
42 Operator shall not be held liable for errors in such estimates so long as the estimates are made in good faith.

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

50 In the event automobile liability insurance is specified in said Exhibit "D," or subsequently receives the approval of the
51 parties, no direct charge shall be made by Operator for premiums paid for such insurance for Operator's automotive
52 equipment. See also Article XVI.G.

53 **ARTICLE VI.**
54 **DRILLING AND DEVELOPMENT**

55 **A. Initial Well:**

56 On or before the _____ day of _____, _____, Operator shall commence operations for the drilling of the Initial
57 Well at the following location:

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62 and shall thereafter continue the drilling of the well with due diligence to
63 For a Vertical Well: a total depth of _____ feet
64 _____ or to a depth sufficient to test the _____ formation, whichever is the lesser depth.
65 See also Article XVI.G.G.
66 For a Horizontal Well: a total vertical depth of _____ feet
67 _____) or to a depth sufficient to penetrate the _____ formation, whichever is the lesser depth, then drill
68 Lateral(s) in the _____ formation in a _____ direction to a target
69 terminus of approximately _____ feet (_____) Total Measured Depth sufficient in
70 Operator's sole opinion to test the _____ formation. The bottom hole location shall be located at approximately
71 See also Article XVI.G.G.

71 The drilling of the Initial Well to test and produce the Utica and Point Pleasant formations and the participation therein by all parties is
72 obligatory, subject to _____ Article _____ V.I.C.1. as _____ to participation
73 in Completion operations and Article V.I.F. as to termination of operations and Article XI as to occurrence of force majeure.

74 **B. Subsequent Operations:** _____

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1 1. Proposed Operations: If any party hereto should desire to drill any well on the Contract Area other than the Initial Well, or
2 if any party should desire to Rework, Sidetrack, Deepen, Recomplete or Plug Back a dry hole or a well no longer capable of
3 producing in paying quantities in which such party has not otherwise relinquished its interest in the proposed objective Zone under
4 this agreement, the party desiring to drill, Rework, Sidetrack, Deepen, Recomplete or Plug Back such a well shall give written
5 notice of the proposed operation to the parties who have not otherwise relinquished their interest in such objective Zone
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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
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, ^{inclusive} ~~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 also Article XVII.2 and XVIJ.2.

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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: See also Article XVII. and Article XVI.L.HH.

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 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, who may decline, 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, 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 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 within the time required shall be deemed an election under (i). ^{of this paragraph} In the event a
51 drilling rig is on location, notice ^{inclusive} ~~may~~ be given by telephone, and the time permitted for such a response shall not exceed a
52 total of forty-eight (48) hours ^{inclusive} ~~exclusive~~ of Saturday, Sunday and legal holidays). The proposing party, 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 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.

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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,

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

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

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

28 (c) Reworking, Recompleting or Plugging Back. An election not to participate in the drilling, Sidetracking or
29 Deepening of a well shall be deemed an election not to participate in any Reworking or Plugging Back operation proposed in
30 such a well, or portion thereof, to which the initial non-consent election applied that is conducted at any time prior to full
31 recovery by the Consenting Parties of the Non-Consenting Party's recoupment amount. Similarly, an election not to
32 participate in the Completing or Recompleting of a well shall be deemed an election not to participate in any Reworking
33 operation proposed in such a well, or portion thereof, to which the initial non-consent election applied that is conducted at
34 any time prior to full recovery by the Consenting Parties of the Non-Consenting Party's recoupment amount. Any such
35 Reworking, Recompleting or Plugging Back operation conducted during the recoupment period shall be deemed part of the
36 cost of operation of said well and there shall be added to the sums to be recouped by the Consenting Parties 300 % of
37 that portion of the costs of the Reworking, Recompleting or Plugging Back operation which would have been chargeable to
38 such Non-Consenting Party had it participated therein. If such a Reworking, Recompleting or Plugging Back operation is
39 proposed during such recoupment period, the provisions of this Article VI.B. shall be applicable as between said Consenting
40 Parties in said well.

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

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

50 Within ~~ninety~~^{ninety}-(99)90 days after the completion of any operation under this Article, the party conducting the operations
51 for the Consenting Parties shall furnish each Non-Consenting Party with an inventory of the equipment in and connected to
52 the well, and an itemized statement of the cost of drilling, Sidetracking, Deepening, Plugging Back, testing, Completing,
53 Recompleting, and equipping the well for production; or, at its option, the operating party, in lieu of an itemized statement
54 of such costs of operation, may submit a detailed statement of monthly billings. Each ~~month~~^{quarter} thereafter, during the time the
55 Consenting Parties are being reimbursed as provided above, the party conducting the operations for the Consenting Parties
56 shall furnish the Non-Consenting Parties with an itemized statement of all costs and liabilities incurred in the operation of
57 the well, together with a statement of the quantity of Oil and Gas produced from it and the amount of proceeds realized from
58 the sale of the well's working interest production during the preceding month. In determining the quantity of Oil and Gas
59 produced during any month, Consenting Parties shall use industry accepted methods such as but not limited to metering or
60 periodic well tests. Any amount realized from the sale or other disposition of equipment newly acquired in connection with
61 any such operation which would have been owned by a Non-Consenting Party had it participated therein shall be credited
62 against the total unreturned costs of the work done and of the equipment purchased in determining when the interest of such
63 Non-Consenting Party shall revert to it as above provided; and if there is a credit balance, it shall be paid to such Non-
64 Consenting Party.

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

73 3. Stand-By Costs. When a well which has been drilled or Deepened has reached its authorized depth and all tests have
74 been completed and the results thereof furnished to the parties, or when operations on the well have been otherwise

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1 terminated pursuant to Article VI.F., stand-by costs incurred pending response to a party's notice proposing a Reworking,
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1 Sidetracking, Deepening, Re-completing, 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. This Article VI.B.4. shall not apply to Deepening operations within an existing Lateral of a Horizontal Well or
Multi-lateral 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." This Article VI.B.5. shall not apply to
operations in an existing Lateral of a Horizontal Well or Multi-lateral Well. Drilling
operations conducted in a Horizontal Well or Multi-lateral Well that are intended to recover
generation 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.

62 6. Order of Preference of Operations. Except as otherwise specifically provided in this agreement, if any party desires to
63 propose the conduct of an operation that conflicts with a proposal that has been made by a party under this Article VI, such
64 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
65 an operation on a well where no drilling rig is on location, or twenty-four (24) hours, exclusive of Saturday, Sunday and legal
66 holidays, from delivery of the initial proposal, if a drilling rig is on location for the well on which such operation is to be
67 conducted, to deliver to all parties entitled to participate in the proposed operation such party's alternative proposal, such
68 alternate proposal to contain the same information required to be included in the initial proposal. Each party receiving such
69 proposals shall elect by delivery of notice to Operator within five (5) days after expiration of the proposal period, or within
70 twenty-four (24) hours (exclusive of Saturday, Sunday and legal holidays) if a drilling rig is on location for the well that is the
71 subject of the proposals, to participate in one of the competing proposals. Any party not electing within the time required
72 shall be deemed not to have voted. If all voting parties vote for the same proposed operation, then Operator shall proceed
with such operation. If all voting parties do not unanimously agree on which proposed operation to pursue, then the operation
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1 | ~~interest of the parties voting shall have priority over all other competing proposals; in the case of a tie vote, the~~
2 | ~~shall be selected by Operator in accordance with the provisions of Article XVI.H-1 and H-2.~~
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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. See also Article XVI.H-1 and H-2.

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 unless agreed to by all consenting
10 | parties in the producing well.

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

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

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

18 | (a) ~~For the Initial Well and any subsequent Horizontal Well or Multi-lateral Well,
19 | Option No. 1: / ~~shall necessary expenditures for the drilling, Deepening or Sidetracking, testing, Completing and~~
20 | ~~equipping of the well, including necessary tankage and/or surface facilities.~~~~

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

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

64 | **D. Other Operations: See Article XVII.**

65 | ~~Operator shall not undertake any single project reasonably estimated to require an
66 | expenditure in excess of _____ Dollars (\$ _____) except in
67 | connection with _____ the
68 | drilling, Sidetracking, Reworking, Deepening, Completing, Recompleting or Plugging Back of a
69 | well that has been previously
70 | authorized by or pursuant to this agreement; provided, however, that, in case of explosion,
71 | fire, flood or other sudden
72 | emergency, whether of the same or different nature, Operator may take such steps and incur
73 | such expenses as in its opinion
74 | are required to deal with the emergency to safeguard life and property but Operator, as
75 | promptly as possible, shall report the
76 | emergency to the other parties. If Operator prepares an AFE for its own use, Operator shall
77 | furnish any Non-Operator so
78 | requesting an information copy thereof for any single project costing in excess of _____ Dollars
79 | (\$ _____). Any party who has not relinquished its interest in a well shall have the right to propose that
80 | Operator perform repair work or undertake the installation of artificial lift equipment or
81 | ancillary production facilities such as
82 | salt water disposal wells or to conduct additional work with respect to a well drilled
83 | hereunder or other similar project (but
84 | not including the installation of gathering lines or other transportation or marketing
85 | facilities, the installation of which shall~~

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1 ~~be governed by separate agreement between the parties) reasonably estimated to require an~~
2 ~~expenditure in excess of the~~
3 ~~amount first set forth above in this Article VI.D. (except in connection with an operation~~
4 ~~required to be proposed under~~
5 ~~Articles VI.B.1. or VI.C.1. Option No. 2, which shall be governed exclusively by those~~
6 ~~Articles).~~ Operator shall deliver such
7 ~~proposal to all parties entitled to participate therein. If within thirty (30) days thereof~~
8 ~~Operator secures the written consent~~
9 ~~of any party or parties owning at least _____ % of the interests of the parties~~
10 ~~entitled to participate in such operation,~~
11 ~~each party having the right to participate in such project shall be bound by the terms of~~
12 ~~such proposal and shall be obligated~~
13 ~~to pay its proportionate share of the costs of the proposed project as if it had consented to~~
14 ~~such project pursuant to the terms~~
15 ~~of the proposal.~~

E. Abandonment of Wells:

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

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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, Sidetracking, / 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.

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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 who then have an interest in the well. 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 thirty (30) / ~~sixty (60)~~ days of delivery of notice of proposed
20 abandonment shall be deemed an election to consent to the proposal. If, within thirty (30) / ~~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.

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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 and restoring the surface; provided, however, that in the event
31 the estimated plugging and abandoning and surface restoration 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.

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

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51 3. Abandonment of Non-Consent Operations: The provisions of Article VI.E.1. or VI.E.2. above shall be applicable as
52 between Consenting Parties in the event of the proposed abandonment of any well excepted from said Articles; provided,
53 however, no well shall be permanently plugged and abandoned unless and until all parties having the right to conduct further
54 operations therein have been notified of the proposed abandonment and afforded the opportunity to elect to take over the well
55 in accordance with the provisions of this Article VI.E.; and provided further, that Non-Consenting Parties who own an interest
56 in a portion of the well shall pay their proportionate shares of abandonment and surface restoration cost for such well as
57 provided in Article VI.B.2. (D). If Operator does not receive a written response from any Non-Operator within thirty (30) days after
58 Operator, then that Non-Operator shall be deemed to have consented to the proposal. / ~~delivering notice of a proposed abandonment to such Non-~~

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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 _____% 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.~~

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66 G. Taking Production in Kind: See also Article XVI.M.

67 Option No. 1: Gas Balancing Agreement Attached

68 Each party shall have the right to / ~~take in kind~~ or separately dispose of its proportionate share of all Oil and Gas produced from the
69 Contract Area, exclusive of / (a) production which may be used in development and producing
70 operations and / (b) in preparing and / ~~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.
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Each party shall execute such division orders and contracts as may be necessary for the sale of its interest in
~~and Article VI.B., and Article XVI.K., R.,~~
production from the Contract Area, and, except as provided in Article VII.B., / shall be entitled to receive payment

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

~~▲ If any party fails to make the arrangements necessary to take in kind or separately dispose of its proportionate share of the Oil produced from the Contract Area, Operator shall have the right, subject to the revocation at will by the party owning it, but not the obligation, to purchase such Oil or sell it to others at any time and from time to time, for the account of the non-taking party. Any such purchase or sale by Operator may be terminated by Operator upon at least ten (10) days written notice to the owner of said production and shall be subject always to the right of the owner of the production upon at least ten (10) days written notice to Operator to exercise at any time its right to take in kind, or separately dispose of, its share of all Oil not previously delivered to a purchaser. Any purchase or sale by Operator of any other party's share of Oil 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 (1) year.~~

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

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

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

~~■ **Option No. 2: No Gas Balancing Agreement:**~~

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

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

~~—If any party fails to make the arrangements necessary to take in kind or separately dispose of its proportionate share of the Oil and/or Gas produced from the Contract Area, Operator shall have the right, subject to the revocation at will by the party owning it, but not the obligation, to purchase such Oil and/or Gas or sell it to others at any time and from time to time, for the account of the non-taking party. Any such purchase or sale by Operator may be terminated by Operator upon at least ten (10) days written notice to the owner of said production and shall be subject always to the right of the owner of the production upon at least ten (10) days written notice to Operator to exercise its right to take in kind, or separately dispose of, its share of all Oil and/or Gas not previously delivered to a purchaser; provided, however, that the effective date of any such revocation may be deferred at Operator's election for a period not to exceed ninety (90) days if Operator has committed such production to a purchase contract having a term extending beyond such ten (10)-day period. Any purchase or sale by Operator of any other party's share of Oil and/or Gas 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 (1) year.~~

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

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

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**ARTICLE VII.
EXPENDITURES AND LIABILITY OF PARTIES**

A. Liability of Parties: See also Article XVI.G. and N.

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

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

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

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

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

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

61 **C. Advances:** See also Article XVI.D.1 and P.

62 ~~Notwithstanding any provision of this agreement, or any exhibit hereto, to the contrary,~~
63 ~~Operator, at its election, shall have the right from time to time to demand and receive from one or more of the other~~
64 ~~parties payment in advance of their respective shares of the estimated amount of the expense to be incurred in operations~~
65 ~~hereunder during the next succeeding month, which right may be exercised only by submission to each such party of an~~
66 ~~itemized statement of such estimated expense, together with an invoice for its share thereof. Each such statement and invoice~~
67 ~~for the payment in advance of estimated expense shall be submitted on or before the 20th day of the next preceding month,~~
68 ~~thirty (30) days after such estimate and a cash call~~

69 ~~then such party shall be subject to Articles XVI.R. and XVI.AA. and any other remedies provided for in this agreement, and~~
70 ~~invoice is received. If any party fails to pay its share of said estimate within said time, the amount due shall bear interest as~~
71 ~~provided in Exhibit "C" until paid. Proper adjustment shall be made, monthly between advances and actual expense to the end~~
72 ~~that each party shall bear and pay its proportionate share of actual expenses incurred, and no more. Any excess funds remaining at the time~~
73 ~~of such adjustment shall be promptly returned to the advancing party.~~

74 **D. Defaults and Remedies:** See Article XVI.R.

75 If any party fails to discharge any financial obligation under this agreement, including without limitation the failure to
76 make any advance under the preceding Article VII.C. or any other provision of this agreement, within the period required for

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1 such payment hereunder, then in addition to the remedies provided in Article VII.B. or elsewhere in this agreement, the
2 remedies specified below shall be applicable. For purposes of this Article VII.D., all notices and elections shall be delivered

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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.

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

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

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

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

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

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

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

61 **F. Taxes:** See also Article XVLS.

62 Beginning with the first calendar year after the effective date hereof, Operator shall render for ad valorem taxation all
63 property subject to this agreement which by law should be rendered for such taxes, and it shall pay all such taxes assessed
64 thereon before they become delinquent. Prior to the rendition date, each Non-Operator shall furnish Operator information as
65 to ~~Production Burdens~~ burdens (to include, but not be limited to, royalties, overriding royalties and production payments) on Leases and Oil and
66 Gas Interests contributed by such Non-Operator. If the assessed valuation of any Lease is reduced by reason of its being
67 subject to outstanding excess royalties, overriding royalties or production payments, the reduction in ad valorem taxes
68 resulting therefrom shall inure to the benefit of the owner or owners of such Lease, and Operator shall adjust the charge to
69 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
70 upon separate valuations of each party's working interest, then notwithstanding anything to the contrary herein, charges to
71 the joint account shall be made and paid by the parties hereto in accordance with the tax value generated by each party's
72 working interest. Operator shall bill the other parties for their proportionate shares of all tax payments in the manner
73 provided in Exhibit "C."
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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; ~~however, no consent shall be necessary to release a Lease that has expired or otherwise~~
14 ~~terminated.~~

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

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

39 **B. Renewal or Extension of Leases:** See also Article XVI.T.

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 ~~who participated in the ownership of the Lease or Leases being renewed or replaced~~
42 shall be notified promptly upon such acquisition or, in the case of a replacement Lease taken before expiration of an existing Lease,
43 promptly upon expiration of the existing Lease. The parties notified shall have the right for a period of thirty (30) days following
44 delivery of such notice in which to elect to participate in the ownership of the renewal or replacement Lease, insofar as such Lease
45 affects lands within the Contract Area, by paying to the party who acquired it their proportionate shares of the acquisition cost
46 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
47 parties in the Contract Area. Each party who participates in the purchase of a renewal or replacement Lease shall be given an
48 assignment of its proportionate interest therein by the acquiring party; without warranty of title, except as to acts by, through or under
49 the acquiring party.

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

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

58 The provisions of this Article shall apply to renewal or replacement Leases whether they are for the entire interest covered by
59 the expiring Lease or cover only a portion of its area or an interest therein. ~~Any renewal or replacement Lease taken before the~~
60 ~~expiration of its predecessor Lease~~ (except to the extent such Lease is renewed or extended pursuant to Article XVI.T. by the party who contributed such Lease)
61 , or taken or contracted for or becoming effective within six (6) months after the expiration of the
62 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
63 the renewal or replacement Lease becomes effective; but any Lease taken or contracted for more than six (6) months after the
64 expiration of an existing Lease shall not be deemed a renewal or replacement Lease and shall not be subject to the provisions of this
65 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~~ receives ~~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 a well drilled
74 inside Contract Area.

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

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10 ~~1. the entire interest of the party in all Oil and Gas Leases, Oil and Gas Interests, wells, equipment and production; or~~

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11 ~~2. an equal undivided percent of the party's present interest in all Oil and Gas Leases, Oil and Gas Interests, wells,~~
12 ~~equipment and production in the Contract Area.~~

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13 ~~Every sale, encumbrance, transfer or other disposition made by any party shall be made~~
14 ~~expressly subject to this agreement~~

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15 ~~and shall be made without prejudice to the right of the other parties, and any transferee of an ownership interest in any Oil and~~
16 ~~Gas Lease or Interest shall be deemed a party to this agreement as to the interest conveyed~~
17 ~~from and after the effective date of~~

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18 ~~the transfer of ownership; provided, however, that the other parties shall not be required to recognize any such sale,~~

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19 ~~encumbrance, transfer or other disposition for any purpose hereunder until thirty (30) days~~
20 ~~after they have received a copy of the~~

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21 ~~instrument of transfer or other satisfactory evidence thereof in writing from the transferor or transferee.~~

22 ~~No assignment or other~~
23 ~~disposition of interest by a party shall relieve such party of obligations previously~~
24 ~~incurred by such party hereunder with respect~~

25 ~~to the interest transferred, including without limitation the obligation of a party to pay all~~
26 ~~costs attributable to an operation~~

27 ~~conducted hereunder in which such party has agreed to participate prior to making such~~
28 ~~assignment, and the lien and security~~

29 ~~interest granted by Article VII.B. shall continue to burden the interest transferred to~~
30 ~~secure payment of any such obligations.~~

31 ~~See also Article XVI.P. and V.~~

32 ~~If, at any time the interest of any party is divided among and owned by four (two or more co-owners, Operator, at its discretion,~~

33 ~~may require such co-owners to appoint a single trustee or agent with full authority to receive notices, approve expenditures,~~

34 ~~receive billings for and approve and pay such party's share of the joint expenses, and to deal generally with, and with power to~~

35 ~~bind, the co-owners of such party's interest within the scope of the operations embraced in~~
36 ~~this agreement. This trustee shall further receive and disburse all moneys due to said co-~~
37 ~~owners. However, all such co-~~

38 ~~owners shall have the right to enter into and execute all contracts or agreements for the~~
39 ~~disposition of their respective shares of~~

40 ~~the Oil and Gas produced from the Contract Area and they shall have the right to receive,~~
41 ~~separately, payment of the sale~~

42 ~~proceeds thereof.~~

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

44 If permitted by the laws of the state or states in which the property covered hereby is located, each party hereto owning an

45 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

46 undivided interest therein.

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

48 (Optional; Check if applicable.)

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49 Should any party desire to sell all or any part of its interests under this agreement, or its rights and interests in the Contract

50 Area, it shall promptly give written notice to the other parties, with full information concerning its proposed disposition, which

51 shall include the name and address of the prospective transferee (who must be ready, willing and able to purchase), the purchase

52 price, a legal description sufficient to identify the property, and all other terms of the offer. The other parties shall then have an

53 optional prior right, for a period of ten (10) days after the notice is delivered, to purchase for the stated consideration on the

54 same terms and conditions the interest which the other party proposes to sell; and, if this optional right is exercised, the

55 purchasing parties shall share the purchased interest in the proportions that the interest of each bears to the total interest of all

56 purchasing parties. However, there shall be no preferential right to purchase in those cases where any party wishes to mortgage

57 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,

58 or to dispose of its interests by merger, reorganization, consolidation, or by sale of all or substantially all of its Oil and Gas assets

59 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

60 company in which such party owns a majority of the stock.

**ARTICLE IX.
INTERNAL REVENUE CODE ELECTION**

61 If, for federal income tax purposes, this agreement and the operations hereunder are regarded as a partnership, and if the

62 parties have not otherwise agreed to form a tax partnership pursuant to Exhibit "G" or other agreement between them, each

63 party hereby affected elects to be excluded from the application of all of the provisions of Subchapter "K," Chapter 1, Subtitle

64 "A," of the Internal Revenue Code of 1986, as amended ("Code"), as permitted and authorized by Section 761 of the Code and

65 the regulations promulgated thereunder. Operator is authorized and directed to execute on behalf of each party hereby affected

66 such evidence of this election as may be required by the Secretary of the Treasury of the United States or the Federal Internal

67 Revenue Service, including specifically, but not by way of limitation, all of the returns, statements, and the data required by

68 Treasury Regulation §1.761. Should there be any requirement that each party hereby affected give further evidence of this

69 election, each such party shall execute such documents and furnish such other evidence as may be required by the Federal Internal

70 Revenue Service or as may be necessary to evidence this election. No such party shall give any notices or take any other action

71 inconsistent with the election made hereby. If any present or future income tax laws of the state or states in which the Contract

72 Area is located or any future income tax laws of the United States contain provisions similar to those in Subchapter "K," Chapter

73 1, Subtitle "A," of the Code, under which an election similar to that provided by Section 761 of the Code is permitted, each party

74 hereby affected shall make such election as may be permitted or required by such laws. In making the foregoing election, each

such party states that the income derived by such party from operations hereunder can be adequately determined without the

computation of partnership taxable income.

**ARTICLE X.
CLAIMS AND LAWSUITS**

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Operator may settle any single uninsured third party damage claim or suit arising from operations hereunder if the expenditure does not exceed Fifty Thousand Dollars (\$ 50,000.00) and if the payment is in complete settlement of such claim or suit. If the amount required for settlement exceeds the above amount, the parties hereto shall assume and take over by the affirmative vote of the party or parties owning a majority interest based on ownership as shown on Exhibit "A" the further handling of the claim or suit, unless such authority is delegated to Operator. at All costs and expenses of handling settling, or otherwise discharging such claim or suit shall be a the joint expense of the parties participating in the operation from which the 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 hereunder over which such individual has no control because of the rights given Operator by this agreement, such party shall 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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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.

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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,
38 | this agreement shall not be severable, but rather must be assumed or rejected in its entirety, and the failure of any party to
39 | this agreement to comply with all of its financial obligations provided herein shall be a material default.

40 | **ARTICLE XVI.**
41 | **OTHER PROVISIONS**

42 | **A. Supplements to Definitions:**

43 | 1. An AFE is only an estimate of the costs of a proposed operation; in no way shall a party's execution of an AFE limit its liability
44 | for the costs actually incurred in accordance with this Operating Agreement in connection with that operation. An AFE for a Horizontal
45 | Well or Multi-lateral Well shall clearly stipulate that the well being proposed is a Horizontal Well or a Multi-Lateral Well and shall include
46 | all Completion operations for the proposed Horizontal Well or Multi-lateral Well.

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47 | 2. When used in connection with a Multi-lateral Well or Horizontal Well, the term "Deepen" shall mean an operation whereby a
48 | Lateral is drilled to a horizontal distance greater than the distance set forth in the well proposal approved by the Consenting Parties, or to a
49 | horizontal distance greater than the horizontal distance to which the Lateral was previously drilled.

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50 | 3. When used in connection with a Horizontal Well or Multi-lateral Well, the term "Plug Back" shall mean an operation to test or
51 | Complete the well at (a) a stratigraphically shallower geological horizon in the same Zone, or (b) a shallower Zone, than which the
52 | operation has been or is being Completed, and which is not within an existing Lateral.

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53 | 4. When used in connection with a Horizontal Well or Multi-lateral Well, the term "Sidetrack" shall mean the intentional deviation
54 | of a well outside the existing Lateral(s) so as to change the Zone or the radial direction of a Lateral as originally proposed.

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55 | **B. Additional Definitions:**

56 | 1. The term "Horizontal Well" shall mean a well containing a single Lateral that is drilled, Completed, or Recompleted in a manner
57 | in which the horizontal component of the Completion interval (a) extends at least one hundred feet (100') in the objective Zone and (b)
58 | exceeds the vertical component of the Completion interval in the objective Zone.

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

61 | 3. The term "Multi-lateral Well" shall mean a well that contains more than one Lateral that is drilled, Completed or Recompleted in
62 | a manner in which the horizontal component of the completion interval of each Lateral (a) extends at least one hundred feet (100') in the
63 | objective Zone(s) and (b) exceeds the vertical component of the completion interval in the objective Zone(s).

64 | 4. The term "Production Burdens" shall mean all royalties, overriding royalties, production payments, net profits interests, and
65 | similar non-cost bearing interests or rights in, carved from, burdening or attributable to any Oil and Gas Lease or Oil and Gas Interest.

66 | 5. The term "Total Measured Depth" shall mean, when used in connection with a Multi-Lateral Well or Horizontal Well, the
67 | distance from the surface of the Earth to the terminus of the wellbore, as measured along the wellbore. Each Lateral taken together with a
68 | common vertical wellbore shall be considered a single wellbore and shall have a corresponding Total Measured Depth. Notwithstanding
69 | the foregoing, in the case of a Multi-lateral Well, if the production from each Lateral is to be commingled in the common vertical wellbore,
70 | then the Laterals and vertical wellbore shall be considered collectively as one wellbore. If a proposed operation is the drilling of, or any
71 | then the Laterals and vertical wellbore shall be considered collectively as one wellbore. If a proposed operation is the drilling of, or any
72 | then the Laterals and vertical wellbore shall be considered collectively as one wellbore. If a proposed operation is the drilling of, or any
73 | then the Laterals and vertical wellbore shall be considered collectively as one wellbore. If a proposed operation is the drilling of, or any
74 | then the Laterals and vertical wellbore shall be considered collectively as one wellbore. If a proposed operation is the drilling of, or any

operation on, a Horizontal Well or Multi-Lateral Well, then the terms "depth" and "total depth" wherever used in this Operating Agreement shall be deemed to read "Total Measured Depth" insofar as those terms apply to such Horizontal Well or Multi-lateral Well.

6. The term "Vertical Well" shall mean a well drilled, Completed or Recompleted that is neither a Horizontal Well nor a Multi-lateral Well.

7. The term "well" shall mean and include all wells, however drilled, whether vertically, horizontally, directionally or otherwise, in an endeavor to obtain the production of Oil and Gas.

C. Subsequently Created Interests:

If a Burdened Party elects to abandon any well under the provisions of Article VI.E. or elects to surrender a Lease (or any portion thereof or undivided interest therein) under the provisions of Article VIII.A., and, as a result thereof, becomes obligated to assign all or a portion of such Lease or Interest, or any undivided interest therein, to one or more of the other parties, then the interest assigned shall be free and clear of such Subsequently Created Interest and such Burdened Party shall indemnify, defend and hold harmless the assignees and their respective successors in interest from any and all claims and demands for payment asserted by the owners of the Subsequently Created Interest.

D. Operator Liability:

1. Operator shall not have any obligation or duty (i) to perform any of its obligations under this Operating Agreement or to continue any work (including any operation), or (ii) to incur any expenditure or indebtedness hereunder for the Joint Account, until all funds requested of Non-Operators pursuant to cash calls or requested payment advances given in accordance with the applicable provisions hereof have been received by Operator.

2. Without limiting any other provision of this Operating Agreement (to the extent such other provision is not contrary to this Article XVII.D.2), Operator shall not be liable to the other parties for any failure of Operator, except such failures as may result from Operator's willful misconduct, to comply with the requirements of any Federal, state, tribal or local ordinance, statute, law, rule, regulation or procedure, pertaining to the establishment of prices for Oil and Gas or other minerals, or for any one or more of any of them or any constituent or product thereof, or to the classification of wells for such purpose, or pertaining to any other matter related to the regulation of entitlements, supply, demand, allocation, delivery, contracting for or pricing of Oil and Gas or other minerals, or any constituent or product thereof. Any liability for refund of sums obtained because any of the parties have been paid amounts in excess of lawful prices shall be borne severally by those parties to the same extent that such excess funds were paid to them.

3. As used in Article V.A., the term "Claims" shall mean, collectively, any and all losses sustained, liabilities incurred, or claims accrued by any party to this Operating Agreement other than Operator (and by any third party by, through or under any party to this Operating Agreement other than Operator); whether based on Operator's physical conduct on the Contract Area or Operator's performance of administrative, accounting, or any other contractual duties pursuant to this Operating Agreement or any exhibit hereto; whether sounding in tort (including strict liability), contract, or statutory law; and whether governed by federal, state, local, or tribal laws or rules.

E. Access to Contract Area and Information; Confidentiality:

1. No Non-Consenting Party under Article VI.B. or Article VI.C.1. (Option 2), shall have access to the well site with respect to the applicable operation, and such Non-Consenting Party shall not be entitled to receive, and shall not be given or provided with any information relating to that operation, including any notices, applications, reports, or similar information under Article V.D.6, until the Consenting Parties have recouped the non-consent penalty provided for in Article VI.B. with respect to that operation.

2. Except as otherwise specifically provided in this Article XVI.E., all information obtained pursuant to this Operating Agreement, including all geophysical, geological, and engineering data, well information, and all other records and reports pertaining to the Contract Area or the operations thereon (collectively, the "Confidential Information") shall be the sole and confidential property of the parties receiving it pursuant to this Operating Agreement, and the parties agree, and do hereby bind themselves, their successors and assigns, to accept and keep the Confidential Information confidential and for the exclusive use of the parties concerned for the term of this Operating Agreement. If any portion of the Confidential Information becomes generally available to the public while this Operating Agreement is still in force, and such availability is not a result of a breach of this Operating Agreement, then at that time the confidentiality provisions of this Article XVI.E. shall cease to apply to that portion of the Confidential Information that has become generally available to the public.

3. Any party may disclose Confidential Information, without the consent of any other party, (a) to any governmental authority when lawfully required by such governmental authority, (b) to lenders, investors and financial institutions in connection with a bona fide financial transaction, (c) to bona fide consultants and accredited engineering firms for the purpose of evaluation on a confidential basis, (d) to financially responsible third parties with whom a party is engaged in a bona fide effort to sell all or part of its interest in the Contract Area in accordance with this Operating Agreement, (e) pursuant to Article XVI.U., or (f) to third parties with whom a party is engaged in a bona fide effort to (i) effect a merger or consolidation, (ii) sell all or a controlling part of its stock or other equity capital, or (iii) sell all or substantially all of its assets, (g) or to any parent, subsidiary or joint venture partner with an interest in the Contract Area; provided that any third party who is permitted access to Confidential Information pursuant to provisions (b), (c), (d), or (f), of this paragraph (collectively, the "Permitted Third Parties"), shall agree in writing prior to that access not to communicate such information to anyone and to make no use of such information adverse to the parties hereto; and provided further that the party disclosing the Confidential Information shall indemnify and hold the other parties hereto harmless against losses resulting from its disclosure to non-governmental third parties.

4. Operator makes no representations or warranties, express, statutory or implied, as to the accuracy, quality, or completeness of the Confidential Information. Operator shall not be liable to any other party or to any Permitted Third Party in contract, tort, securities laws or otherwise as a result of such other party's (or such Permitted Third Party's) use or disclosure of the Confidential Information, or errors therein or omissions therefrom. Each party accepts the Confidential Information "as is, where is, with all faults", and agrees that neither it nor any of its affiliates, representatives, owners, successors, or assigns shall rely upon the Confidential Information without first satisfying itself as to, and making independent verification of, the accuracy and completeness of such Confidential Information.

5. Operator shall not be required to provide any party with any corings or information pertaining thereto unless such party has paid its proportionate share of the cost of obtaining such corings and information. Similarly, Operator will send to all Non-Operators an election, or include in the original well election proposal, for all coring, specialty geophysical logging, pressure analysis, or other non-standard tests and analysis and information pertaining thereto. If Non-Operator elects to participate, then Non-Operator will receive all data and any related analysis.

G. Non-Operator Liability for Site Visits:

Each Non-Operator shall indemnify, defend and hold harmless Operator from and against any and all liability in excess of insurance coverage carried for the joint account for injury to such Non-Operator's officers, employees, invitees and/or agents, resulting

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from or in any way relating to the presence of any such officers, employees, invitees and/or agents at or in the vicinity of any well location or production facility on the Contract Area or from any such person's traveling to or from such location or facility.

H-1. Priority of Operations for Vertical Wells:

When a vertical well has been authorized under the terms of this Operating Agreement and there is more than one operation proposed in connection with said vertical well and all the parties participating in the well cannot agree upon the sequence and timing of further operations regarding the well, the following elections shall control in the order enumerated, as follows:

1. Prior to reaching the objective depth:
 - a. Drilling a well to its objective depth shall have first priority over all other operations and proposals; and
 - b. In the event that impenetrable or other conditions or mechanical difficulties prevent reaching the objective depth, a proposal to Sidetrack in an effort to reach the objective depth shall have priority over a proposal to attempt a Completion in a Zone already reached.
2. After the objective depth has been reached:
 - a. An election to do additional logging, coring or testing;
 - b. An election to attempt to Complete the well at either the objective depth or objective Zone;
 - c. An election to Deepen said well, in descending order;
 - d. An election to Plug Back and attempt to Complete said well, in ascending order;
 - e. An election to Sidetrack the well;
 - f. An election to drill a horizontal well, with priority given first to a lateral drain hole at the objective depth, and then to objectives in ascending order above the authorized depth, and then to objectives in descending order below the objective depth; and
 - g. An election to plug and abandon.

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H-2. Priority of Operations for Horizontal Wells:

When a horizontal well has been authorized under the terms of this Operating Agreement and there is more than one operation proposed in connection with said horizontal well and all the parties participating in the well cannot agree upon the sequence and timing of further operations regarding the well, the following elections shall control in the order enumerated, as follows:

1. Prior to reaching the objective depth:
 - a. Drilling a well to its objective depth and lateral length shall have first priority over all other operations and proposals; and
 - b. In the event that impenetrable or other conditions or mechanical difficulties prevent reaching the objective depth or lateral length, a proposal to Sidetrack in an effort to reach the objective depth or lateral length shall have priority over a proposal to attempt a Completion in a Zone already reached.
2. After the objective depth has been reached:
 - a. An election to add additional logging, coring or testing;
 - b. An election to attempt to Complete the well at either the objective depth or objective Zone;
 - c. An election to extend the length of the lateral drain hole for a specified number of feet in the direction it is drilling, with priority given to the shortest additional length proposed by any of the participating parties;
 - d. An election to drill a new lateral drain hole in a different direction at the objective depth;
 - e. An election to drill a new lateral drain hole at a different depth, with priority given in ascending order to objectives below the objective depth;
 - f. An election to Plug Back and attempt to Complete the said well at a depth shallower than the objective depth, in ascending order;
 - g. An election to Deepen the well below the objective depth;
 - h. An election to Sidetrack the well; or
 - i. An election to plug and abandon.

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It is further provided, however, that if, at the time the Consenting Parties are considering any of the above elections, the hole is in such a condition that a reasonably prudent Operator would not conduct the operations contemplated by the particular election involved for fear of placing the hole in jeopardy or losing the hole prior to Completing the Horizontal or Multi-lateral Well in the objective formation, such election shall be eliminated from priorities hereinabove set forth.

I. Operations by Less Than All Parties:

1. Subject to the provisions below in this Article XVII, Article VI.B.2 shall apply separately to each separate Completion or Recompletion attempt undertaken in the same well, and an election to become a Non-Consenting Party as to one Completion or Recompletion attempt in a well shall not prevent a party from becoming a Consenting Party in subsequent Completion or Recompletion attempts in such well; provided that:

- a. With respect to a subsequent Completion or Recompletion attempt that is in the same Zone as a previous Completion or Recompletion attempt, a party who non-consented to the previous operation may only consent to the subsequent Completion or Recompletion attempt if the Consenting Parties to the previous operation have finished recouping the amounts set forth in Article VI.B.2(b)(i) and (ii).
- b. With respect to a subsequent Completion or Recompletion attempt that is in a different Zone than a previous Completion or Recompletion attempt, a party who non-consented to the previous operation may only consent to the subsequent Completion or Recompletion attempt if such party pays its proportionate share of the cost of salvable materials and equipment installed in the well pursuant to the previous Completion or Recompletion attempt, insofar and only insofar as such materials and equipment benefit the Zone in which such party elects to participate in a subsequent Completion or Recompletion attempt.
- c. Any recoupment of costs (other than recoupment of costs from a party in default under any provision of this Operating Agreement) by a Consenting Party for a Completion or Recompletion attempt shall be made solely from the production attributable to the Zone in which such Completion or Recompletion attempt was made.

2. Operator may commence any proposed operation prior to the expiration of the thirty (30)-day notice period set forth in Articles VI.B.1. and VI.B.2, in which case the provisions of Article VI.B.2 shall nevertheless apply. No party may change the election it has made to any notification under Article VI.B.1 or VI.B.2 after the notifying or proposing party's receipt of that election

J. Proposing and Participating in Operations:

1. Only a party not in default or who is not a Non-Consenting Party, may propose the drilling, Completing, Recompleting, Reworking, Deepening, Sidetracking, Plugging Back or any other operation in or pertaining to a well.

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2. No party may elect to participate in only part of a proposed operation. When an operation is proposed pursuant to Article VI.B, each non-proposing party must elect either to participate in the entire proposed operation or to go non-consent with respect to the entire proposed operation. It is understood by the parties that there will be drilling and completion elections on all vertical wells.

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K. Non-Consenting Party Gas Sales:

Non-Consenting parties will not enter into oil, gas, or liquids sales contracts until the non-participation penalty is recovered.

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L. Other Operations:

Notwithstanding anything herein to the contrary, it is expressly understood and agreed that Operator may undertake without any Non-Operator's consent any single project (including a Rework) to maintain, restore, continue, increase, or improve production from any well or wells drilled and/or operated under this Operating Agreement so long as such single project is not reasonably estimated to require, with respect to any well, an expenditure in excess of Fifty Thousand Dollars (\$50,000), and may charge and collect the cost of the project as a joint expense, except that if any such well has been drilled pursuant to Article VI.B.2, then expenses with respect to that well shall be apportioned pursuant to the provisions of Article VI.B.2; provided, however, that, in case of explosion, fire, flood or other sudden emergency, whether of the same or different nature, Operator may take any actions and incur any expenses as in its opinion are required to deal with the emergency to safeguard life or property, but Operator, as promptly as reasonably possible, shall report the emergency to the other parties. Operator shall provide each Non-Operator with a copy of Operator's Cost for said project.

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M. Take in Kind:

Notwithstanding the provisions of Article VI.G. and the provisions of Exhibit "E", in the event any party shall fail to make the arrangements necessary to take in kind or separately dispose of its proportionate share of the Oil and Gas produced from the Contract Area, Operator shall purchase such Oil and Gas or sell it to others for the account of the non-taking party, and Operator will market that Oil and Gas on the same terms that Operator markets its own share of such production. In so doing, Operator shall not enter into any agreement to sell any other party's share of Oil and Gas for a period in excess of one (1) year without the prior written consent of such other party. Except to the extent that such Oil and Gas has been committed to a sales agreement with a term of longer than sixty (60) days, in accordance with this Article XVI.M, any such purchase or sale by Operator of any other party's share of Oil and Gas shall be subject to the right of the owner of the production to exercise at any time its right to take in kind or separately dispose of its share of all Oil and Gas not previously delivered to a purchaser by the giving of written notice thereof to Operator at least sixty (60) days prior to its requested taking (the "Taking Date"); such notice shall be deemed effective on the first day of the next month following the Taking Date. Notwithstanding anything herein to the contrary, the Operator is expressly responsible for paying all distributions to the net revenue interest owners of record for all oil, gas, or liquids that Operator markets on behalf of itself or the Non-Operator within the unit or contract area. Should Non-Operator choose to take production in kind, then Non-Operator is expressly responsible for paying all distributions to the net revenue interest owners of record for all oil, gas, or liquids that Non-Operator markets.

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N. Liability of Non-Consenting Parties:

Notwithstanding anything herein to the contrary, any party who elects or is deemed to have elected not to participate in any proposed operation, as set out in this Operating Agreement, shall not be relieved of (i) any obligation accruing prior to its election or deemed election not to participate or (ii) any obligation with respect to any other operation in which such party is participating or has participated.

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P. Designated Co-Owner:

1. Notwithstanding anything in this Operating Agreement to the contrary, including the accounting procedure attached hereto as Exhibit "C", if at any time the interest of any party (the "Selling Party") is divided among and owned by two or more co-owners (each a "Co-Owner"), then Operator may, in Operator's sole discretion, continue to issue all notices, statements and billings to the Selling Party for the entire interest credited to Selling Party on Exhibit "A" (the "Original Interest"), until such time as (a) Selling Party has designated a single qualified Co-Owner (a "Designated Co-Owner") to receive all such notices, statements, and billings relating to the Original Interest in accordance with the provisions of this Article XVI.P. Selling Party or (upon valid designation) the Designated Co-Owner, must (i) have full authority to receive notices (including but not limited to notices of elections concerning proposed operations), approve expenditures, receive billings, and approve and pay joint expenses with respect to the Original Interest on behalf of all Co-Owners; (ii) have the power to bind all Co-Owner's in its dealings and correspondence with Operator regarding the Original Interest; (iii) distribute to the other Co-Owners in a timely manner all notices, statements, and billings received from Operator; (iv) make prompt payment to Operator for all billings and advanced payments relating to the Original Interest; and (v) be responsible for any sub-billings to other Co-Owners regarding the Original Interest.

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2. In order to qualify a Co-Owner as a Designated Co-Owner, Selling Party shall furnish to Operator such information as may be reasonably requested by Operator, including the following information:

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a. The name of the proposed Designated Co-Owner along with its written consent to (i) receive all notices, statements, billings, and other communications relating to the Original Interest on behalf of all Co-Owners, and (ii) handle any necessary sub-billings attributable to the Original Interest; and

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b. The documents required for a transfer pursuant to Article XVI.V.

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3. This Article XVI.P. shall not affect each Co-Owner's right to elect to participate or not participate in any proposed operation according to the terms of this Operating Agreement. However, Operator shall deliver all election notices relating to the Original Interest to the Designated Co-Owner, and Operator shall have no liability for any Co-Owner's failure to receive such election notice, or for any Co-Owner's failure to timely respond to such election notice.

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4. All Co-Owners shall have the right to enter into and execute all contracts or 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 therefrom.

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Q. Billings to Direct Account:

All expenses (including salaries, wages and expenses of unaffiliated third-party personnel; legal, expert and consultant fees; and administrative filing fees and court costs) shall be direct charges, borne by the Joint Account as provided in Exhibit "C" and shall not be included in administrative overhead (under Part III in Exhibit "C") if incurred for obtaining spacing, location exception, pooling or other permits, orders or rulings from state regulatory bodies or courts deemed by the Operator, in its sole judgment, as necessary.

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R. Intentionally Omitted –

S. Taxes:

Operator shall pay or be responsible for the payment of all applicable severance, production and similar taxes due on all production for which Operator is disbursing one hundred percent (100%) of the proceeds, except to the extent those taxes are paid by the purchaser of such production. Any Non-Operator separately producing and either selling Oil and Gas or taking delivery of Oil and Gas in kind shall be responsible for the payment of all applicable severance, production and similar taxes due on that production that Operator is not disbursing in accordance with Article VII.F. Where any party is separately producing and either selling or taking delivery of Oil and Gas in kind, Operator shall have the right to render to the taxing authority the ad valorem taxes on wells within the Contract Area in the name of each party and to provide in such rendition for direct payment by each party of its share of such ad valorem tax. In rendering the property for ad valorem tax purposes, Operator shall base its values for such purpose upon the price received for the sale of Oil and Gas by each party taking or separately disposing of its share of Oil and Gas.

The foregoing provisions of this Article XVI.S. are subject to any applicable laws or regulations imposing different obligations on Operator or any Non-Operator with respect to the responsibility for reporting and payment of severance taxes.

T. Renewal or Extension of Leases:

Notwithstanding anything herein to the contrary, each party committing any Lease or Leases or any undivided interest therein or portion thereof to this Operating Agreement shall have the sole option prior to the expiration of each such Lease to renew or extend such Lease with respect to all of such party's interest therein and to bear the renewal or extension costs and expenses incurred in connection therewith and thereby retain its interest and title in said Lease. If any such party does not timely exercise its option and procure a renewal or extension of its interest in such Lease, then any replacement Lease taken covering such interest will thereafter be subject to the terms of Article VIII.B. The provisions of this Article XVI.T. shall apply only to Leases or portions of Leases located in the Contract Area.

U. Public Announcement:

No public announcement or statement regarding operations hereunder shall be made or released without the prior written approval of the consenting parties, such approval not to be unreasonably withheld, Operator unless required by law or an applicable Stock Exchange and, then, in such instance, only to the extent required. Any party making a public announcement as required by law or applicable Stock Exchange shall immediately furnish the other parties with a full transcript of such public announcement or statement.

V. Assignments and Transfers:

1. The terms of this Operating Agreement shall be binding upon the parties, and their respective successors and permitted assigns. Notwithstanding the parties' differing ownership, if any, in any wells covered hereby, there shall be only one designated Operator of the Contract Area at any given time.

a. Any party may assign, transfer or otherwise dispose of all or a portion of such party's interest covered by this Operating Agreement in all or any portion of the Contract Area and as to any or all depths. Any party may mortgage, pledge, hypothecation or grant of a lien or security interest in all or a portion of its interest in the Oil and Gas Leases, Oil and Gas Interests, any equipment or facilities, or its share of Oil and Gas production from the Contract Area; provided, however, that any mortgage, pledge, lien, security interest and other encumbrance arising from such financing transaction shall be expressly subordinated to the rights of the other parties to this Operating Agreement, and the assigning party shall ensure that any lien, security interest or other encumbrance shall be without prejudice to the terms of this Operating Agreement.

2. Except as otherwise provided in this Operating Agreement, and in addition to the requirements set forth in Article VIII.D., no assignment or other transfer of an interest in this Operating Agreement shall be binding and effective with respect to Operator or any other party until (i) the assignor or assignee provides Operator with a photocopy of a recorded, fully executed assignment instrument; (ii) the assignor provides Operator with written notice of the percentage of the entire interest credited to assignor on Exhibit "A" hereto assigned to such assignee; and (iii) the assignee provides Operator with a fully executed counterpart of this Operating Agreement or another instrument in which assignee agrees to assume and become liable for the obligations of the assignor hereunder with respect to the interest assigned. Any out-of-pocket costs incurred by Operator attributable to any such assignment shall be the sole obligation of the assignor, who shall promptly reimburse Operator for those costs.

3. Any party who fails to comply with any of the provisions of this Article XVI.V. shall indemnify, defend and hold the other parties harmless from and against any and all claims or causes of action asserted by any person or entity whomsoever, and for any expenses and losses sustained by those other parties, as a result of the failure of such party to comply with the provisions of this Article XVI.V.

4. Any party who assigns, transfers, or otherwise disposes of all or a portion of its interest in the Contract Area, so long as such assignment, transfer or other disposition fully satisfies the requirements of Article VIII.D., this Article XVI.V. and Article XVI.P., shall be relieved of all costs and liabilities associated with the plugging, abandonment, and remediation of any wells then existing or thereafter drilled on the assigned Leasehold or Oil and Gas Interests.

W. Controlling Language:

In the event of any conflict between any of the provisions of this Article XVI. and any other provision of this Operating Agreement, the provisions of this Article XVI. shall control and prevail.

X. JOA Preparation:

Each party further acknowledges and agrees that such party has been represented or had the opportunity to be represented by attorneys of its own choosing and therefore, for the purposes of construing this Operating Agreement, each party shall be deemed to have participated equally in the preparation and drafting of this Operating Agreement. If any ambiguity is contained in this Operating Agreement, no weight shall be given in favor or against any party in resolving that ambiguity on account of that party's drafting of this Agreement.

Y. Overhead - Environmental Response:

Unless due to Operator's willful misconduct or gross negligence, Non-Operators shall compensate Operator for overhead costs incurred by Operator in responding to any Environmental Claim or any Environmental Condition with regard to or arising from the Contract Area, or in connection with any operations or activities governed by this Operating Agreement occurring outside of the Contract Area (e.g., transportation or disposal of substances) ("Outside Operations"). The term "Environmental Claim" means any action, suit, investigation, proceeding, demand, claim or written notice by any person or entity alleging or inquiring as to potential liability arising out of any Environmental Law with respect to the Contract Area or any operations or activities conducted pursuant to this Operating

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Agreement, including Outside Operations; and the term "Environmental Condition" means any existing or threatened condition with respect to the soil, subsurface, surface waters, ground waters, atmosphere or other environmental media, whether or not the condition is yet discovered, which could result in any damage, loss, cost, expense, claim, demand, order, lien or liability under any Environmental Law to or against the Contract Area or against any one or more of the parties with respect to the Contract Area or any operations or activities conducted pursuant to this Operating Agreement, including Outside Operations. The term "Environmental Law" means all applicable federal, state, tribal, and local laws in effect at any time during the term of this Operating Agreement, including the common law, relating to the protection of the public health or welfare, wildlife and/or the environment, including those laws relating to the storage, handling, release, threatened release, and/or use of chemicals and other hazardous substances or hazardous materials, those relating to the generation, processing, treatment, storage, transportation, disposal, or other management thereof, including the Comprehensive Environmental Response, Compensation and Liability Act of 1980, as amended (42 U.S.C. §§ 9601 et. seq.), the Resource Conservation and Recovery Act of 1976 (42 U.S.C. § 6901 et. seq.), the Clean Water Act (33 U.S.C. §§ 466 et. seq.), the Safe Drinking Water Act (14 U.S.C. §§ 1401-1450), the Hazardous Materials Transportation Act (49 U.S.C. §§ 1801 et. seq.), the Oil Pollution Act (33 U.S.C. §§ 2701 et. seq.), the Toxic Substance Control Act (15 U.S.C. §§ 2601-2629), the Clean Air Act (42 U.S.C. § 7401 et. seq.) as amended, and the Clean Air Act Amendments of 1990, Hazardous Materials Transportation Act (49 U.S.C §§ 5101 et seq.), and all state and local environmental laws. The overhead rate for amounts in excess of \$25,000.00 are as follows:

- 1. 5% of total costs through \$100,000.00; plus
2. 3% of total costs in excess of \$100,000.00, but less than \$1,000,000.00; plus
3. 2% of total costs in excess of \$1,000,000.00.

Z. Headings for Convenience Only:

The headings and titles in this Operating Agreement are for guidance and convenience of reference only and do not limit or otherwise affect or interpret the provisions of this Operating Agreement.

BB. Insurance:

At all times while operations are conducted under this Operating Agreement, Operator shall comply with the workers compensation law of the state in which those operations are being conducted. Operator shall carry or provide insurance for the benefit of the joint account of the parties as outlined in Exhibit "D". Operator shall require all contractors engaged by it with respect to any of those operations to comply with the workers compensation law of the state where those operations are being conducted. Non-Operators shall have the right to elect out of Operator's Control of Well Insurance. In the event a Non-Operator does so elect, Non-Operator will provide a copy of the insurance certificate evidencing said coverage and Operator will not charge the Non-Operators joint account for said insurance.

CC. Payment of Rentals:

Except as expressly provided in this Operating Agreement or otherwise agreed upon in writing by Operator, Operator does not have any obligation to make any payments of delay rentals or shut-in royalties, or any similar payment with respect to any other party's interest in any Lease.

DD. Joint Loss:

If a Lease is not jointly owned by any of the parties, then aAny loss of a Lease or Interest for failure to perpetuate such Lease or Interest by production in paying quantities shall be deemed a loss through failure of title, not a joint loss.- If a Lease is jointly owned by any of the parties, then any loss of a Lease or Interest for failure to perpetuate such Lease or Interest by production in paying quantities shall be deemed a joint loss, with respect to the parties to that lease:

EE. References:

Each reference made in this Operating Agreement to an Article refers to the applicable Article in this Operating Agreement, unless the context clearly indicates otherwise. The words "this Article", refers only to the Article hereof in which those words occur. Each reference made in this Operating Agreement to an Exhibit or Schedule refers to the applicable Exhibit or Schedule attached hereto, unless the context clearly indicates otherwise. Each Exhibit and Schedule attached hereto is made a part hereof.

FF. Related Definitional Matters:

As used in this Operating Agreement, (i) any pronoun in masculine, feminine or neuter gender shall be construed to include all other genders, (ii) the term "including" shall be construed to be expansive rather than limiting in nature and to mean "including without limitation", except where the context expressly otherwise requires, (iii) each term defined in this Operating Agreement in the singular shall include the plural of that term, and each term defined in this Operating Agreement in the plural shall include the singular of that term, and (iv) the words "this Operating Agreement", "this agreement", "herein", "hereby", "hereunder", and "hereof", and words of similar import refer to this Operating Agreement as a whole and not to any particular part of this Operating Agreement unless the context clearly or expressly provides or indicates otherwise.

GG. Adverse Drilling Conditions:

- 1. Operator shall have the right to cease drilling the Initial Well and any subsequent well at any time, regardless of whether it has reached the objective Zone or the objective Total Measured Depth, if further drilling or Completion of such well is rendered impractical by mechanical difficulties, encountering practically impenetrable substances, or any other adverse condition.
2. Any Horizontal Well or Multi-lateral Well drilled pursuant to this Operating Agreement shall be deemed to have reached its objective Total Measured Depth so long as Operator has drilled such well to the objective Zone(s) and has drilled each Lateral horizontally in the objective Zone(s) for a distance that is equal to or greater than fifty percent (50%) of the proposed length for such Lateral.

HH. Participation by Less Than All Parties

For the initial well drilled on a well pad, the recoupment percentage for non-participation shall be 200% for VI.2.b.i. and 500% for VI.2.b.ii. All subsequent wells drilled from the same well pad shall have the recoupment percentage for non-participation of 100% for VI.2.b.i. and 300% for VI.2.b.ii.

II. Re-Allocation of Shared Facility Costs

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

1 All wells drilled from a common drilling location or pad, whether in the same unit or contract area or not in the same unit or
2 contract area, will share proportionally all common expenditures for items including, but not limited to, pad construction, joint production
3 facilities, road construction and maintenance costs, pipeline construction and maintenance costs, and all other common or shared facility
4 costs whether. As subsequent wells are drilled, the Operator shall re-allocate the costs as described above to each well and to the account of
5 the working interest owners thereof.
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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 A.A.P.L. 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
7 | Articles _____, have been made to the form.

6 | **ATTEST OR WITNESS:**

OPERATOR

7 | _____
8 | _____ **CNX Gas Company LLC**

9 | _____ By _____

10 | _____ Type or print name

11 | _____ Title _____

12 | _____ Date _____

13 | _____ Tax ID or S.S. No. _____

14 | **NON-OPERATORS**

16 | _____
17 | _____

18 | _____ By _____

19 | _____ Type or print name

20 | _____ Title _____

21 | _____ Date _____

22 | _____ Tax ID or S.S. No. _____

24 | _____
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26 | _____ By _____

27 | _____ Type or print name

28 | _____ Title _____

29 | _____ Date _____

30 | _____ Tax ID or S.S. No. _____

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34 | _____ By _____

35 | _____ Type or print name

36 | _____ Title _____

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_____ Date _____
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ACKNOWLEDGMENTS

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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.

Individual acknowledgment:

State of _____)

_____) ss.

County of _____)

This instrument was acknowledged before me on

_____ by _____

(Seal, if any) _____

_____ Title (and Rank) _____

_____ My commission expires: _____

Acknowledgment in representative capacity:

State of _____)

_____) ss.

County of _____)

This instrument was acknowledged before me on

_____ by _____ as

_____ of _____.

(Seal, if any) _____

_____ Title (and Rank) _____

_____ My commission expires: _____

Acknowledgment in representative capacity:

State of _____)

_____) ss.

County of _____)

This instrument was acknowledged before me on

_____ by _____ as

_____ of _____.

(Seal, if any) _____

_____ Title (and Rank) _____

_____ My commission expires: _____

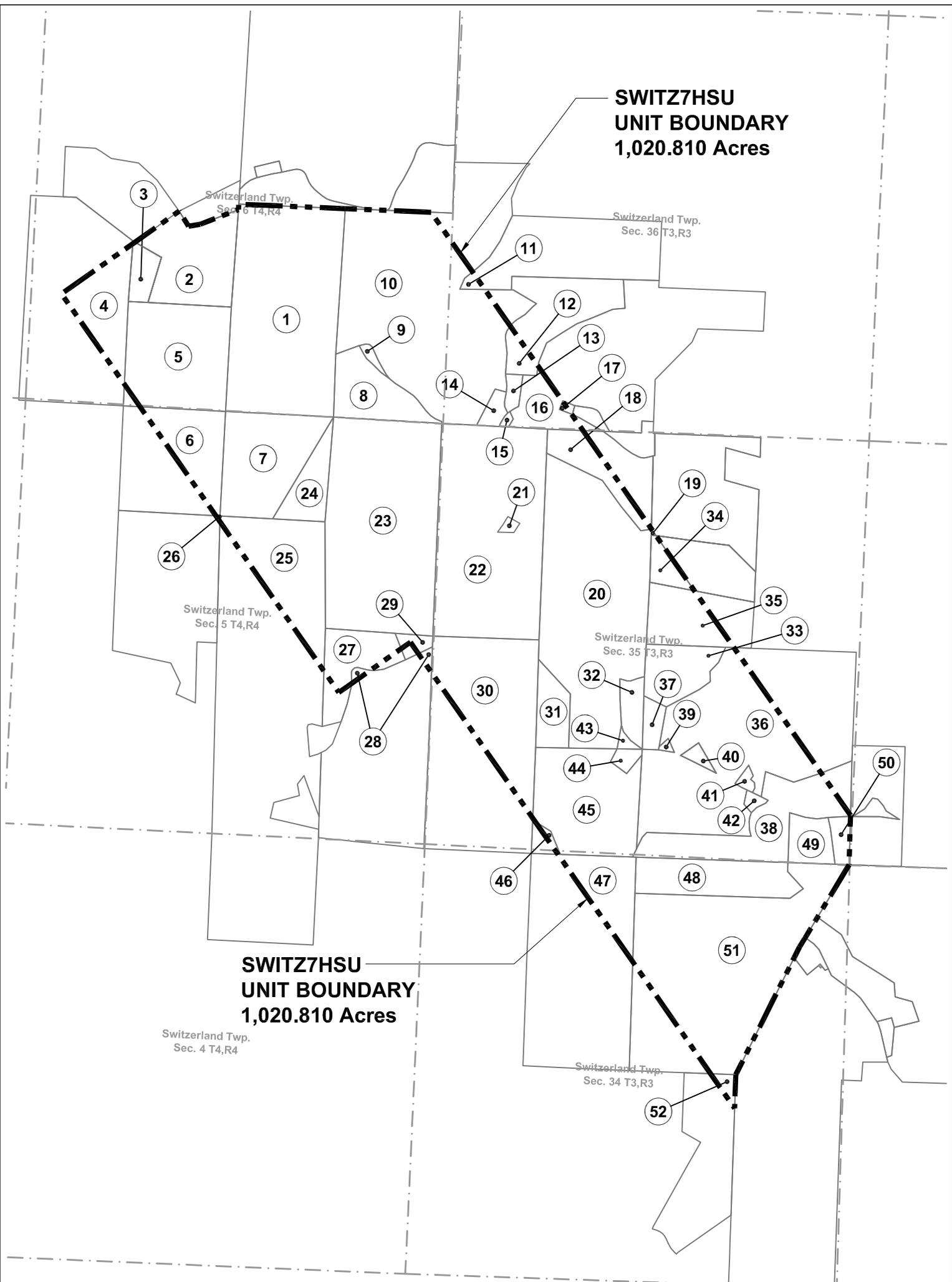
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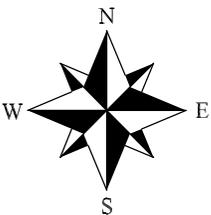
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UNIT BOUNDARY
1,020.810 Acres**



**SWITZ7HSU
UNIT BOUNDARY
1,020.810 Acres**

LEGEND

-  UNIT BOUNDARY
-  SECTION LINE



Monroe Project Area
SWITZ7HSU UNIT
 Horizontal Utica Formation Wells
 Unitized Development Agreement
 Unit Plan - Exhibit A-1
Final Title Mapping
 Switzerland Township,
 Monroe County, OH



1000 Consol Energy Drive
 Canonsburg, PA. 15317-6506

This map is property of CNX Gas LLC and contains information that is proprietary and confidential in nature and may not be copied or reproduced without prior written consent.
 © Copyright CNX Gas LLC 2016

Orig. Date: 08/11/16 Prepared by: WT

Rev. Date: 10/02/16 Checked by:

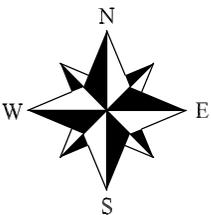
Rev. Date: Rev. Date:

Comments:



Exhibit A-1
Surface and Mineral Ownership Interests
SWITZ7HSU Unit

Tract No.	Unit Acreage	Auditor's Parcel No.	Surface Owner Name	Deed Volume & Page	Deed Acreage	Calculated Acreage	Mineral Owner	Deed Volume & Page
1	80.816	16-28003005.0000	Waldo C. Forni	OR Vol 48 Pg 384	79.620	80.820	Triple J Acres, LLC	OR Vol 302 Pg 308
2	25.700	16-28003006.0000	Helen L. Roberts	OR Vol 299 Pg 546	48.570	48.830	Helen L. Roberts	OR Vol 299 Pg 546
3	4.870	p/o 16-28003009.0000	Victor L. Roberts & Linda G. Roberts	Deed Vol 175 Pg 735	4.470	4.880	Bounty Minerals, LLC	OR Vol 269 Pg 65
3	"	p/o 16-28003009.0000	Victor L. Roberts & Linda G. Roberts	Deed Vol 175 Pg 735	"	"	Bounty Minerals II Acquisitions, LLC	OR Vol 269 Pg 65
4	17.117	p/o 16-28003009.0000	Victor L. Roberts & Linda G. Roberts	Deed Vol 175 Pg 735	Unknown	73.340	Bounty Minerals, LLC	OR Vol 269 Pg 65
4	"	p/o 16-28003009.0000	Victor L. Roberts & Linda G. Roberts	Deed Vol 175 Pg 735	"	"	Bounty Minerals II Acquisitions, LLC	OR Vol 269 Pg 65
5	38.269	16-28003001.0000	Victor L. Roberts & Linda G. Roberts	OR Vol 27 Pg 162	38.930	38.930	Bounty Minerals, LLC	OR Vol 269 Pg 65
5	"	16-28003001.0000	Victor L. Roberts & Linda G. Roberts	OR Vol 27 Pg 162	"	"	Bounty Minerals II Acquisitions, LLC	OR Vol 269 Pg 65
6	17.020	16-28014016.0000	Victor L. Roberts & Linda G. Roberts	OR Vol 27 Pg 162	38.640	38.640	Bounty Minerals, LLC	OR Vol 269 Pg 65
6	"	16-28014016.0000	Victor L. Roberts & Linda G. Roberts	OR Vol 27 Pg 162	"	"	Bounty Minerals II Acquisitions, LLC	OR Vol 269 Pg 65
7	30.491	16-28014005.0000	Waldo C. Forni	OR Vol 48 Pg 384	30.380	30.490	Triple J Acres, LLC	OR Vol 302 Pg 308
8	16.061	16-28003004.0000	Dale E. Forni & Stella E. Forni	Deed Vol 155 Pg 542	15.000	16.060	Dale E. Forni	Deed Vol 155 Pg 542
8	"	16-28003004.0000	Dale E. Forni & Stella E. Forni	Deed Vol 155 Pg 542	"	"	Stella E. Forni	Deed Vol 155 Pg 542
9	0.988	16-28003010.0000	Jerry D. Forni	OR Vol 151 Pg 652	0.930	0.990	Jerry D. Forni	OR Vol 151 Pg 652
10	92.712	16-28003003.0000	Kevin B. McKee & Monica C. McKee	OR Vol 20 Pg 472	118.590	117.320	Paul S. Dangel & Thomas Neil Rubel, Life Tenants	OR Vol 194 Pg 905
10	"	16-28004015.0000	Kevin B. McKee & Monica C. McKee	OR Vol 20 Pg 472	"	"	Kevin B. McKee & Monica C. McKee, Remaindermen	OR Vol 20 Pg 472
11	0.884	p/o 16-28004005.0000	Larry E. Baumberger & Bobby Jo Baumberger	OR Vol 152 Pg 202	37.000	38.420	Larry E. Baumberger & Bobby Jo Baumberger	OR Vol 152 Pg 202
12	3.541	p/o 16-28004005.0000	Larry E. Baumberger & Bobby Jo Baumberger	OR Vol 152 Pg 202	23.610	23.260	Larry E. Baumberger & Bobby Jo Baumberger	OR Vol 152 Pg 202
12	"	16-28004011.0000	Larry E. Baumberger & Bobby Jo Baumberger	OR Vol 152 Pg 202	"	"	Larry E. Baumberger & Bobby Jo Baumberger	OR Vol 152 Pg 202
13	1.897	16-28004016.0000	50488 German Ridge, LLC	OR Vol 272 Pg 269	1.900	1.900	50488 German Ridge, LLC	OR Vol 272 Pg 269
14	2.476	16-28004014.0000	Ronald Daniel & Susan Lynn Hendershot	Deed Vol 211 Pg 338	2.480	2.480	Ronald Daniel Hendershot & Susan Lynn Hendershot	Deed Vol 211 Pg 338
15	0.441	16-28004012.0000	Switzerland Township Trustees	Deed Vol 109 Pg 20	0.440	0.440	Switzerland Township Trustees	Deed Vol 109 Pg 20
15	"	16-28004012.1000	Switzerland Township Trustees	Deed Vol 109 Pg 20	"	"	Switzerland Township Trustees	Deed Vol 109 Pg 20
16	8.925	16-28004008.0000	50488 German Ridge, LLC	OR Vol 272 Pg 269	71.590	71.600	50488 German Ridge, LLC	OR Vol 272 Pg 269
17	0.199	16-28004013.1000	Debra Stack & Thomas Stack	Deed Vol 207 Pg 133	0.450	0.440	Debra J. Stack & Thomas J. Stack	Deed Vol 207 Pg 133
18	9.523	16-28013010.0000	50488 German Ridge, LLC	OR Vol 272 Pg 269	18.190	18.850	50488 German Ridge, LLC	OR Vol 272 Pg 269
18	"	16-28013010.0000	50488 German Ridge, LLC	OR Vol 272 Pg 269	"	"	James Schnegg	Deed Rec 118/20
18	"	16-28013010.0000	50488 German Ridge, LLC	OR Vol 272 Pg 269	"	"	Marjorie Baumberger	Deed Rec 118/20
18	"	16-28013010.0000	50488 German Ridge, LLC	OR Vol 272 Pg 269	"	"	Donald Schnegg	Deed Rec 118/20
18	"	16-28013010.0000	50488 German Ridge, LLC	OR Vol 272 Pg 269	"	"	Wanda Rush	Deed Rec 118/20
19	0.052	p/o 16-28013014.0000	Thomas Dunn & Joyce A. Dunn	OR Vol 123 Pg 920	37.870	38.130	Thomas Dunn & Joyce A. Dunn	OR Vol 123 Pg 920
20	86.942	16-28013006.0000	Glenn R. Darrah, et al.	OR Vol 182 Pg 368	87.000	86.940	Glenn R. Darrah & Kathie D. Darrah	OR Vol 182 Pg 368
20	"	16-28013006.0000	Glenn R. Darrah, et al.	OR Vol 182 Pg 368	"	"	Roger E. Darrah & Susan D. Darrah	OR Vol 182 Pg 368
20	"	16-28013006.0000	Glenn R. Darrah, et al.	OR Vol 182 Pg 368	"	"	James Schnegg	Deed Rec 118/20
20	"	16-28013006.0000	Glenn R. Darrah, et al.	OR Vol 182 Pg 368	"	"	Marjorie Baumberger	Deed Rec 118/20
20	"	16-28013006.0000	Glenn R. Darrah, et al.	OR Vol 182 Pg 368	"	"	Donald Schnegg	Deed Rec 118/20
20	"	16-28013006.0000	Glenn R. Darrah, et al.	OR Vol 182 Pg 368	"	"	Wanda Rush	Deed Rec 118/20
21	0.734	16-28003018.0000	Waldo C. Forni	OR Vol 48 Pg 134	0.770	0.730	Triple J Acres, LLC	OR Vol 211 Pg 739
22	80.800	16-28003002.0000	Dale E. Forni & Stella E. Forni	Deed Vol 155 Pg 542	79.510	80.800	Dale E. Forni	Deed Vol 155 Pg 542
22	"	16-28003002.0000	Dale E. Forni & Stella E. Forni	Deed Vol 155 Pg 542	"	"	Stella E. Forni	Deed Vol 155 Pg 542
23	84.719	p/o 16-28014003.0000	Dale E. Forni & Stella E. Forni	Deed Vol 155 Pg 542	80.000	84.720	Dale E. Forni	Deed Vol 155 Pg 542
23	"	p/o 16-28014003.0000	Dale E. Forni & Stella E. Forni	Deed Vol 155 Pg 542	"	"	Stella E. Forni	Deed Vol 155 Pg 542
24	10.004	p/o 16-28014003.0000	Dale E. Forni & Stella E. Forni	Deed Vol 155 Pg 542	10.000	10.000	Dale E. Forni	Deed Vol 155 Pg 542
24	"	p/o 16-28014003.0000	Dale E. Forni & Stella E. Forni	Deed Vol 155 Pg 542	"	"	Stella E. Forni	Deed Vol 155 Pg 542
25	29.842	16-28014007.0000	Susan J. Brewster	OR Vol 58 Pg 320	157.860	157.850	Susan J. Brewster	OR Vol 58 Pg 320
25	"	16-28019007.0000	Susan J. Brewster	OR Vol 204 Pg 628	"	"	Susan J. Brewster	OR Vol 204 Pg 628
26	0.043	16-28014018.0000	James E. Wilson, John E. Wilson, Charles E. Wilson & Daniel E. Wilson	OR Vol 30 Pg 188	55.760	55.740	Charles E. Wilson	OR Vol 30 Pg 188
26	"	16-28014018.0000	James E. Wilson, John E. Wilson, Charles E. Wilson & Daniel E. Wilson	OR Vol 215 Pg 82	"	"	James E. Wilson	OR Vol 215 Pg 82
26	"	16-28014018.0000	James E. Wilson, John E. Wilson, Charles E. Wilson & Daniel E. Wilson	OR Vol 30 Pg 188	"	"	Daniel E. Wilson	OR Vol 30 Pg 188
26	"	16-28014018.0000	James E. Wilson, John E. Wilson, Charles E. Wilson & Daniel E. Wilson	OR Vol 215 Pg 82	"	"	John E. Wilson	OR Vol 215 Pg 82
26	"	16-28014018.0000	James E. Wilson, John E. Wilson, Charles E. Wilson & Daniel E. Wilson	OR Vol 30 Pg 188	"	"	Springbok Energy Partners, LLC	OR Vol 314 Pg 273
26	"	16-28014018.0000	James E. Wilson, John E. Wilson, Charles E. Wilson & Daniel E. Wilson	OR Vol 215 Pg 82	"	"	Global 7 Resources, LLC	OR Vol 314 Pg 273
27	10.815	16-28014012.0000	Alan R. Baldwin & Bob E. Baldwin	OR Vol 142 Pg 397	13.500	15.200	Alan R. Baldwin & Bob E. Baldwin	OR Vol 142 Pg 397
28	1.191	16-28014002.0000	Shane T. Stack	OR Vol 322 Pg 841	63.290	63.040	Debra Stack	OR Vol 322 Pg 836
28	"	16-28014002.0000	Shane T. Stack	OR Vol 322 Pg 841	"	"	James Dangel	OR Vol 322 Pg 836
28	"	16-28014002.0000	Shane T. Stack	OR Vol 322 Pg 841	"	"	Darrell Rubel	OR Vol 322 Pg 836
28	"	16-28014002.0000	Shane T. Stack	OR Vol 322 Pg 841	"	"	Eric Rubel	OR Vol 322 Pg 836
28	"	16-28014002.0000	Shane T. Stack	OR Vol 322 Pg 841	"	"	Shane T. Stack	OR Vol 322 Pg 836
29	1.671	16-28014004.0000	Paul D. Forni	OR Vol 19 Pg 294	2.210	2.270	Paul D. Forni	OR Vol 19 Pg 294
29	"	16-28014004.0000	Paul D. Forni	OR Vol 24 Pg 912	"	"	Paul D. Forni	OR Vol 24 Pg 912
30	41.483	p/o 16-28013001.0000	Gary L. Baumberger & Marjorie A. Baumberger	OR Vol 59 Pg 36	79.940	82.500	Gary L. Baumberger & Marjorie A. Baumberger	OR Vol 59 Pg 36
31	8.508	p/o 16-28013001.0000	Gary L. Baumberger & Marjorie A. Baumberger	OR Vol 59 Pg 36	9.500	8.510	Gary L. Baumberger & Marjorie A. Baumberger	OR Vol 59 Pg 36
32	5.059	p/o 16-28013008.0000	Larry E. Baumberger & Bobby Jo Baumberger	OR Vol 152 Pg 202	5.000	5.060	Larry E. Baumberger & Bobby Jo Baumberger	OR Vol 152 Pg 202
33	13.072	p/o 16-28013008.0000	Larry E. Baumberger & Bobby Jo Baumberger	OR Vol 152 Pg 202	13.230	13.070	Larry E. Baumberger & Bobby Jo Baumberger	OR Vol 152 Pg 202
34	4.289	p/o 16-28013014.0000	Thomas Dunn & Joyce A. Dunn	OR Vol 123 Pg 920	18.000	18.060	Thomas Dunn & Joyce A. Dunn	OR Vol 123 Pg 920
35	13.830	p/o 16-28013008.0000	Larry E. Baumberger & Bobby Jo Baumberger	OR Vol 152 Pg 202	20.000	20.630	Larry E. Baumberger & Bobby Jo Baumberger	OR Vol 152 Pg 202
36	68.425	p/o 16-28013007.0000	Zolar Marus & Sarah Michaelyn Marus	OR Vol 225 Pg 267	Unknown	101.400	Zolar Marus & Sarah Michaelyn Marus	OR Vol 225 Pg 267
37	3.480	16-28013003.0000	Yotsai Ou Yang	OR Vol 144 Pg 176	3.250	3.480	Yotsai Ou Yang	OR Vol 144 Pg 176
38	27.575	p/o 16-28013007.0000	Zolar Marus & Sarah Michaelyn Marus	OR Vol 225 Pg 267	30.040	30.570	Zolar Marus & Sarah Michaelyn Marus	OR Vol 225 Pg 267
39	0.420	16-28013021.0000	Christine Glotfelty	OR Vol 188 Pg 752	0.520	0.420	Christine Glotfelty	OR Vol 188 Pg 752
39	"	16-28013021.0000	Christine Glotfelty	OR Vol 168 Pg 795	"	"	Christine Glotfelty	OR Vol 168 Pg 795
40	1.381	16-28013004.0000	Douglas Nippert	OR Vol 63 Pg 238	1.440	1.380	Douglas Nippert	OR Vol 63 Pg 238
40	"	16-28013004.0000	Douglas Nippert	OR Vol 63 Pg 848	"	"	Douglas Nippert	OR Vol 63 Pg 848
41	1.002	16-28013028.0000	Lloyd R. Burian	OR Vol 114 Pg 237	1.020	1.000	Lloyd R. Burian	OR Vol 114 Pg 237
42	1.027	16-28013023.0000	Alfred C. Nippert & Sharon R. Nippert	OR Vol 182 Pg 762	1.030	1.030	Ben G. Nippert	OR Vol 182 Pg 762
43	0.853	16-28013017.1000	Richard Lee Ice & Kimberly Raynell Ice	OR Vol 137 Pg 668	1.000	0.850	Richard Lee Ice	OR Vol 137 Pg 668
43	"	16-28013017.1000	Richard Lee Ice & Kimberly Raynell Ice	OR Vol 137 Pg 668	"	"	Kimberly R. Ice	OR Vol 137 Pg 668
44	1.786	16-28013017.0000	Richard Lee Ice & Kimberly Raynell Ice	OR Vol 137 Pg 668	1.820	1.790	Richard Lee Ice	OR Vol 137 Pg 668
44	"	16-28013017.0000	Richard Lee Ice & Kimberly Raynell Ice	OR Vol 137 Pg 668	"	"	Kimberly R. Ice	OR Vol 137 Pg 668
45	36.799	p/o 16-28013025.0000	Zolar Marus & Sarah Michaelyn Marus	OR Vol 225 Pg 267	Unknown	36.820	Zolar Marus & Sarah Michaelyn Marus	OR Vol 225 Pg 267
46	0.618	p/o 16-28013001.0000	Gary L. Baumberger & Marjorie A. Baumberger	OR Vol 59 Pg 36	2.500	2.330	Gary L. Baumberger & Marjorie A. Baumberger	OR Vol 59 Pg 36
47	14.799	16-28020001.0000	Gary L. Baumberger & Marjorie A. Baumberger	OR Vol 59 Pg 36	82.040	81.580	Gary L. Baumberger & Marjorie A. Baumberger	OR Vol 59 Pg 36
48	20.593	16-28020008.0000	Zolar Marus & Sarah Michaelyn Marus	OR Vol 225 Pg 267	20.680	20.590	Zolar Marus & Sarah Michaelyn Marus	OR Vol 225 Pg 267
49	7.282	p/o 16-28013007.0000	Zolar Marus & Sarah Michaelyn Marus	OR Vol 225 Pg 267	7.000	7.280	Zolar Marus & Sarah Michaelyn Marus	OR Vol 225 Pg 267
50	3.088	16-28013005.0000	Eureka Hunter Pipeline, LLC	OR Vol 325 Pg 332	3.630	3.090	Christine K. Glotfelty	OR Vol 208 Pg 31 Estate 2014 ER 9997 OR Vol 293 Pg 680
50	"	16-28013005.0000	Eureka Hunter Pipeline, LLC	OR Vol 325 Pg 332	"	"	Douglas Nippert	OR Vol 208 Pg 31 Estate 2014 ER 9997 OR Vol 293 Pg 680
50	"	16-28013005.0000	Eureka Hunter Pipeline, LLC	OR Vol 325 Pg 332	"	"	Daniel Nippert	OR Vol 208 Pg 31 Estate 2014 ER 9997 OR Vol 293 Pg 680
50	"	16-28013005.0000	Eureka Hunter Pipeline, LLC	OR Vol 325 Pg 332	"	"	David Nippert	OR Vol 208 Pg 31 Estate 2014 ER 9997 OR Vol 293 Pg 680
51	85.163	16-28020004.0000	Zolar Marus & Sarah Michaelyn Marus	OR Vol 225 Pg 267	101.620	101.250	ID & Elf, LLC	OR Vol 202 Pg 170
52	1.535	16-28020021.0000	Gary J. Scotton & Theresa A. Scotton	OR Vol 235 Pg 905	31.950	31.950	Bruner Land Company, Inc.	OR Vol 223 Pg 976
TOTAL UNIT ACRES		1020.810						
TOTAL CALCULATED TRACT ACRES						1777.750		



Monroe Project Area
SWITZ7HSU UNIT
Horizontal Utica Formation Wells
Development Agreement
Unit Plan - Exhibit A-1
Final Title Mapping
 Switzerland Township,
 Monroe County, OH



1000 Consol Energy Drive
 Canonsburg, PA. 15317-6506

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 prior written consent.
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Orig. Date: 08/11/16 Prepared by: WT
 Rev. Date: 10/02/16 Checked by:
 Rev. Date: Rev. Date:

Comments:

EXHIBIT "A"

LANDS SUBJECT TO CONTRACT:

See attached Exhibit A-1
Monroe County, Ohio, containing 1020.810 acres, more or less

RESTRICTIONS AS TO DEPTHS, FORMATIONS AND SUBSTANCES:

This agreement covers rights to the Unitized Formation, described as that portion of the Unit Area from fifty feet above the top of the Utica Shale to fifty feet below the base of the Point Pleasant Formation (as more particularly defined in Article 1 of the Unit Plan).

INTERESTS OF THE PARTIES TO THIS AGREEMENT:

<u>OPERATOR</u>	<u>WI</u>
CNX Gas Company LLC	99.65909%
Unleased	<u>00.34091%</u>
	100.00000%

ADDRESSES OF PARTIES FOR NOTICE PURPOSES:

**CNX Gas Company LLC
10000 Consol Energy Drive
Cannonsburg, PA 15317**

Exhibit A-1

Surface and Mineral Ownership Interests

SWITZ7HSU Unit

Tract No.	Unit Acreage	Auditor's Parcel No.	Surface Owner Name	Deed Volume & Page	Deed Acreage	Calculated Acreage	Mineral Owner	Deed Volume & Page
1	80.816	16-28003005.0000	Waldo C. Forni	OR Vol 48 Pg 384	79.620	80.820	Triple J Acres, LLC	OR Vol 302 Pg 308
2	25.700	16-28003006.0000	Helen L. Roberts	OR Vol 299 Pg 546	48.570	48.830	Helen L. Roberts	OR Vol 299 Pg 546
3	4.870	p/o 16-28003009.0000	Victor L. Roberts & Linda G. Roberts	Deed Vol 175 Pg 735	4.470	4.880	Bounty Minerals, LLC	OR Vol 269 Pg 65
3	"	p/o 16-28003009.0000	Victor L. Roberts & Linda G. Roberts	Deed Vol 175 Pg 735	"	"	Bounty Minerals II Acquisitions, LLC	OR Vol 269 Pg 65
4	17.117	p/o 16-28003009.0000	Victor L. Roberts & Linda G. Roberts	Deed Vol 175 Pg 735	Unknown	73.340	Bounty Minerals, LLC	OR Vol 269 Pg 65
4	"	p/o 16-28003009.0000	Victor L. Roberts & Linda G. Roberts	Deed Vol 175 Pg 735	"	"	Bounty Minerals II Acquisitions, LLC	OR Vol 269 Pg 65
5	38.269	16-28003001.0000	Victor L. Roberts & Linda G. Roberts	OR Vol 27 Pg 162	38.930	38.930	Bounty Minerals, LLC	OR Vol 269 Pg 65
5	"	16-28003001.0000	Victor L. Roberts & Linda G. Roberts	OR Vol 27 Pg 162	"	"	Bounty Minerals II Acquisitions, LLC	OR Vol 269 Pg 65
6	17.020	16-28014016.0000	Victor L. Roberts & Linda G. Roberts	OR Vol 27 Pg 162	38.640	38.640	Bounty Minerals, LLC	OR Vol 269 Pg 65
6	"	16-28014016.0000	Victor L. Roberts & Linda G. Roberts	OR Vol 27 Pg 162	"	"	Bounty Minerals II Acquisitions, LLC	OR Vol 269 Pg 65
7	30.491	16-28014005.0000	Waldo C. Forni	OR Vol 48 Pg 384	30.380	30.490	Triple J Acres, LLC	OR Vol 302 Pg 308
8	16.061	16-28003004.0000	Dale E. Forni & Stella E. Forni	Deed Vol 155 Pg 542	15.000	16.060	Dale E. Forni	Deed Vol 155 Pg 542
8	"	16-28003004.0000	Dale E. Forni & Stella E. Forni	Deed Vol 155 Pg 542	"	"	Stella E. Forni	Deed Vol 155 Pg 542
9	0.988	16-28003010.0000	Jerry D. Forni	OR Vol 151 Pg 652	0.930	0.990	Jerry D. Forni	OR Vol 151 Pg 652
10	92.712	16-28003003.0000 16-28004015.0000	Kevin B. McKee & Monica C. McKee	OR Vol 20 Pg 472	118.590	117.320	Paul S. Dangel & Thomas Neil Rubel, Life Tenants	OR Vol 194 Pg 905
10	"	16-28003003.0000 16-28004015.0000	Kevin B. McKee & Monica C. McKee	OR Vol 20 Pg 472	"	"	Kevin B. McKee & Monica C. McKee, Remaindermen	OR Vol 20 Pg 472
11	0.884	p/o 16-28004005.0000	Larry E. Baumberger & Bobby Jo Baumberger	OR Vol 152 Pg 202	37.000	38.420	Larry E. Baumberger & Bobby Jo Baumberger	OR Vol 152 Pg 202
12	3.541	p/o 16-28004005.0000 16-28004011.0000	Larry E. Baumberger & Bobby Jo Baumberger	OR Vol 152 Pg 202	23.610	23.260	Larry E. Baumberger & Bobby Jo Baumberger	OR Vol 152 Pg 202
13	1.897	16-28004016.0000	50488 German Ridge, LLC	OR Vol 272 Pg 269	1.900	1.900	50488 German Ridge, LLC	OR Vol 272 Pg 269
14	2.476	16-28004014.0000	Ronald Daniel & Susan Lynn Hendershot	Deed Vol 211 Pg 338	2.480	2.480	Ronald Daniel Hendershot & Susan Lynn Hendershot	Deed Vol 211 Pg 338
15	0.441	16-28004012.0000 16-28004012.1000	Switzerland Township Trustees	Deed Vol 109 Pg 20	0.440	0.440	Switzerland Township Trustees	Deed Vol 109 Pg 20
16	8.925	16-28004008.0000	50488 German Ridge, LLC	OR Vol 272 Pg 269	71.590	71.600	50488 German Ridge, LLC	OR Vol 272 Pg 269
17	0.199	16-28004013.1000	Debra Stack & Thomas Stack	Deed Vol 207 Pg 133	0.450	0.440	Debra J. Stack & Thomas J. Stack	Deed Vol 207 Pg 133
18	9.523	16-28013010.0000	50488 German Ridge, LLC	OR Vol 272 Pg 269	18.190	18.850	50488 German Ridge, LLC	OR Vol 272 Pg 269
18	"	16-28013010.0000	50488 German Ridge, LLC	OR Vol 272 Pg 269	"	"	James Schnegg	Deed Rec 118/20
18	"	16-28013010.0000	50488 German Ridge, LLC	OR Vol 272 Pg 269	"	"	Marjorie Baumberger	Deed Rec 118/20
18	"	16-28013010.0000	50488 German Ridge, LLC	OR Vol 272 Pg 269	"	"	Donald Schnegg	Deed Rec 118/20
18	"	16-28013010.0000	50488 German Ridge, LLC	OR Vol 272 Pg 269	"	"	Wanda Rush	Deed Rec 118/20
19	0.052	p/o 16-28013014.0000	Thomas Dunn & Joyce A. Dunn	OR Vol 123 Pg 920	37.870	38.130	Thomas Dunn & Joyce A. Dunn	OR Vol 123 Pg 920
20	86.942	16-28013006.0000	Glenn R. Darrah, et al.	OR Vol 182 Pg 368	87.000	86.940	Glenn R. Darrah & Kathie D. Darrah	OR Vol 182 Pg 368
20	"	16-28013006.0000	Glenn R. Darrah, et al.	OR Vol 182 Pg 368	"	"	Roger E. Darrah & Susan D. Darrah	OR Vol 182 Pg 368
20	"	16-28013006.0000	Glenn R. Darrah, et al.	OR Vol 182 Pg 368	"	"	James Schnegg	Deed Rec 118/20
20	"	16-28013006.0000	Glenn R. Darrah, et al.	OR Vol 182 Pg 368	"	"	Marjorie Baumberger	Deed Rec 118/20

Tract No.	Unit Acreage	Auditor's Parcel No.	Surface Owner Name	Deed Volume & Page	Deed Acreage	Calculated Acreage	Mineral Owner	Deed Volume & Page
20	"	16-28013006.0000	Glenn R. Darrah, et al.	OR Vol 182 Pg 368	"	"	Donald Schnegg	Deed Rec 118/20
20	"	16-28013006.0000	Glenn R. Darrah, et al.	OR Vol 182 Pg 368	"	"	Wanda Rush	Deed Rec 118/20
21	0.734	16-28003018.0000	Waldo C. Forni	OR Vol 48 Pg 134	0.770	0.730	Triple J Acres, LLC	OR Vol 211 Pg 739
22	80.800	16-28003002.0000	Dale E. Forni & Stella E. Forni	Deed Vol 155 Pg 542	79.510	80.800	Dale E. Forni	Deed Vol 155 Pg 542
22	"	16-28003002.0000	Dale E. Forni & Stella E. Forni	Deed Vol 155 Pg 542	"	"	Stella E. Forni	Deed Vol 155 Pg 542
23	84.719	p/o 16-28014003.0000	Dale E. Forni & Stella E. Forni	Deed Vol 155 Pg 542	80.000	84.720	Dale E. Forni	Deed Vol 155 Pg 542
23	"	p/o 16-28014003.0000	Dale E. Forni & Stella E. Forni	Deed Vol 155 Pg 542	"	"	Stella E. Forni	Deed Vol 155 Pg 542
24	10.004	p/o 16-28014003.0000	Dale E. Forni & Stella E. Forni	Deed Vol 155 Pg 542	10.000	10.000	Dale E. Forni	Deed Vol 155 Pg 542
24	"	p/o 16-28014003.0000	Dale E. Forni & Stella E. Forni	Deed Vol 155 Pg 542	"	"	Stella E. Forni	Deed Vol 155 Pg 542
25	29.842	16-28014007.0000 16-28019007.0000	Susan J. Brewster	OR Vol 58 Pg 320 OR Vol 204 Pg 628	157.860	157.850	Susan J. Brewster	OR Vol 58 Pg 320 OR Vol 204 Pg 628
26	0.043	16-28014018.0000	James E. Wilson, John E. Wilson, Charles E. Wilson & Daniel E. Wilson	OR Vol 30 Pg 188 OR Vol 215 Pg 82	55.760	55.740	Charles E. Wilson	OR Vol 30 Pg 188 OR Vol 215 Pg 82
26	"	16-28014018.0000	James E. Wilson, John E. Wilson, Charles E. Wilson & Daniel E. Wilson	OR Vol 30 Pg 188 OR Vol 215 Pg 82	"	"	James E. Wilson	OR Vol 30 Pg 188 OR Vol 215 Pg 82
26	"	16-28014018.0000	James E. Wilson, John E. Wilson, Charles E. Wilson & Daniel E. Wilson	OR Vol 30 Pg 188 OR Vol 215 Pg 82	"	"	Daniel E. Wilson	OR Vol 30 Pg 188 OR Vol 215 Pg 82
26	"	16-28014018.0000	James E. Wilson, John E. Wilson, Charles E. Wilson & Daniel E. Wilson	OR Vol 30 Pg 188 OR Vol 215 Pg 82	"	"	John E. Wilson	OR Vol 30 Pg 188 OR Vol 215 Pg 82
26	"	16-28014018.0000	James E. Wilson, John E. Wilson, Charles E. Wilson & Daniel E. Wilson	OR Vol 30 Pg 188 OR Vol 215 Pg 82	"	"	Springbok Energy Partners, LLC	OR Vol 314 Pg 273
26	"	16-28014018.0000	James E. Wilson, John E. Wilson, Charles E. Wilson & Daniel E. Wilson	OR Vol 30 Pg 188 OR Vol 215 Pg 82	"	"	Global 7 Resources, LLC	OR Vol 314 Pg 273
27	10.815	16-28014012.0000	Alan R. Baldwin & Bob E. Baldwin	OR Vol 142 Pg 397	13.500	15.200	Alan R. Baldwin & Bob E. Baldwin	OR Vol 142 Pg 397
28	1.191	16-28014002.0000	Shane T. Stack	OR Vol 322 Pg 841	63.290	63.040	Debra Stack	OR Vol 322 Pg 836
28	"	16-28014002.0000	Shane T. Stack	OR Vol 322 Pg 841	"	"	James Dangel	OR Vol 322 Pg 836
28	"	16-28014002.0000	Shane T. Stack	OR Vol 322 Pg 841	"	"	Darrell Rubel	OR Vol 322 Pg 836
28	"	16-28014002.0000	Shane T. Stack	OR Vol 322 Pg 841	"	"	Eric Rubel	OR Vol 322 Pg 836
28	"	16-28014002.0000	Shane T. Stack	OR Vol 322 Pg 841	"	"	Shane T. Stack	OR Vol 322 Pg 836
29	1.671	16-28014004.0000	Paul D. Forni	OR Vol 19 Pg 294 OR Vol 24 Pg 912	2.210	2.270	Paul D. Forni	OR Vol 19 Pg 294 OR Vol 24 Pg 912
30	41.483	p/o 16-28013001.0000	Gary L. Baumberger & Marjorie A. Baumberger	OR Vol 59 Pg 36	79.940	82.500	Gary L Baumberger & Marjorie A. Baumberger	OR Vol 59 Pg 36
31	8.508	p/o 16-28013001.0000	Gary L. Baumberger & Marjorie A. Baumberger	OR Vol 59 Pg 36	9.500	8.510	Gary L Baumberger & Marjorie A. Baumberger	OR Vol 59 Pg 36
32	5.059	p/o 16-28013008.0000	Larry E. Baumberger & Bobby Jo Baumberger	OR Vol 152 Pg 202	5.000	5.060	Larry E. Baumberger & Bobby Jo Baumberger	OR Vol 152 Pg 202
33	13.072	p/o 16-28013008.0000	Larry E. Baumberger & Bobby Jo Baumberger	OR Vol 152 Pg 202	13.230	13.070	Larry E. Baumberger & Bobby Jo Baumberger	OR Vol 152 Pg 202
34	4.289	p/o 16-28013014.0000	Thomas Dunn & Joyce A. Dunn	OR Vol 123 Pg 920	18.000	18.060	Thomas Dunn & Joyce A. Dunn	OR Vol 123 Pg 920
35	13.830	p/o 16-28013008.0000	Larry E. Baumberger & Bobby Jo Baumberger	OR Vol 152 Pg 202	20.000	20.630	Larry E. Baumberger & Bobby Jo Baumberger	OR Vol 152 Pg 202
36	68.425	p/o 16-28013007.0000	Zolar Marus & Sarah Michaelyn Marus	OR Vol 225 Pg 267	Unknown	101.400	Zolar Marus & Sarah Michaelyn Marus	OR Vol 225 Pg 267
37	3.480	16-28013003.0000	Yotsai Ou Yang	OR Vol 144 Pg 176	3.250	3.480	Yotsai Ou Yang	OR Vol 144 Pg 176
38	27.575	p/o 16-28013007.0000	Zolar Marus & Sarah Michaelyn Marus	OR Vol 225 Pg 267	30.040	30.570	Zolar Marus & Sarah Michaelyn Marus	OR Vol 225 Pg 267

Tract No.	Unit Acreage	Auditor's Parcel No.	Surface Owner Name	Deed Volume & Page	Deed Acreage	Calculated Acreage	Mineral Owner	Deed Volume & Page
39	0.420	16-28013021.0000	Christine Glotfelty	OR Vol 188 Pg 752 OR Vol 168 Pg 795	0.520	0.420	Christine Glotfelty	OR Vol 188 Pg 752 OR Vol 168 Pg 795
40	1.381	16-28013004.0000	Douglas Nippert	OR Vol 63 Pg 238 OR Vol 63 Pg 848	1.440	1.380	Douglas Nippert	OR Vol 63 Pg 238 OR Vol 63 Pg 848
41	1.002	16-28013028.0000	Lloyd R. Burian	OR Vol 114 Pg 237	1.020	1.000	Lloyd R. Burian	OR Vol 114 Pg 237
42	1.027	16-28013023.0000	Alfred C. Nippert & Sharon R. Nippert	OR Vol 182 Pg 762	1.030	1.030	Ben G. Nippert	OR Vol 182 Pg 762
43	0.853	16-28013017.1000	Richard Lee Ice & Kimberly Raynell Ice	OR Vol 137 Pg 668	1.000	0.850	Richard Lee Ice	OR Vol 137 Pg 668
43	"	16-28013017.1000	Richard Lee Ice & Kimberly Raynell Ice	OR Vol 137 Pg 668	"	"	Kimberly R. Ice	OR Vol 137 Pg 668
44	1.786	16-28013017.0000	Richard Lee Ice & Kimberly Raynell Ice	OR Vol 137 Pg 668	1.820	1.790	Richard Lee Ice	OR Vol 137 Pg 668
44	"	16-28013017.0000	Richard Lee Ice & Kimberly Raynell Ice	OR Vol 137 Pg 668	"	"	Kimberly R. Ice	OR Vol 137 Pg 668
45	36.799	p/o 16-28013025.0000	Zolar Marus & Sarah Michaelyn Marus	OR Vol 225 Pg 267	Unknown	36.820	Zolar Marus & Sarah Michaelyn Marus	OR Vol 225 Pg 267
46	0.618	p/o 16-28013001.0000	Gary L. Baumberger & Marjorie A. Baumberger	OR Vol 59 Pg 36	2.500	2.330	Gary L. Baumberger & Marjorie A. Baumberger	OR Vol 59 Pg 36
47	14.799	16-28020001.0000	Gary L. Baumberger & Marjorie A. Baumberger	OR Vol 59 Pg 36	82.040	81.580	Gary L. Baumberger & Marjorie A. Baumberger	OR Vol 59 Pg 36
48	20.593	16-28020008.0000	Zolar Marus & Sarah Michaelyn Marus	OR Vol 225 Pg 267	20.680	20.590	Zolar Marus & Sarah Michaelyn Marus	OR Vol 225 Pg 267
49	7.282	p/o 16-28013007.0000	Zolar Marus & Sarah Michaelyn Marus	OR Vol 225 Pg 267	7.000	7.280	Zolar Marus & Sarah Michaelyn Marus	OR Vol 225 Pg 267
50	3.088	16-28013005.0000	Eureka Hunter Pipeline, LLC	OR Vol 325 Pg 332	3.630	3.090	Christine K. Glotflety	OR Vol 208 Pg 31 Estate 2014 ER 9997 OR Vol 293 Pg 680
50	"	16-28013005.0000	Eureka Hunter Pipeline, LLC	OR Vol 325 Pg 332	"	"	Douglas Nippert	OR Vol 208 Pg 31 Estate 2014 ER 9997 OR Vol 293 Pg 680
50	"	16-28013005.0000	Eureka Hunter Pipeline, LLC	OR Vol 325 Pg 332	"	"	Daniel Nippert	OR Vol 208 Pg 31 Estate 2014 ER 9997 OR Vol 293 Pg 680
50	"	16-28013005.0000	Eureka Hunter Pipeline, LLC	OR Vol 325 Pg 332	"	"	David Nippert	OR Vol 208 Pg 31 Estate 2014 ER 9997 OR Vol 293 Pg 680
51	85.163	16-28020004.0000 16-28020023.0000	Zolar Marus & Sarah Michaelyn Marus	OR Vol 225 Pg 267	101.620	101.250	ID & Elf, LLC	OR Vol 202 Pg 170
52	1.535	16-28020021.0000	Gary J. Scotton & Theresa A. Scotton	OR Vol 235 Pg 905	31.950	31.950	Bruner Land Company, Inc.	OR Vol 223 Pg 976
TOTAL UNIT ACRES	1020.810							
TOTAL CALCULATED TRACT ACRES						1777.750		

Exhibit A-2

All Mineral Interests

SWITZ7HSU Unit

Tract	Current Mineral Owner	Leased/Fee Yes or No	Current Mineral Owner Interest in Tract	Total Acres in Unit	Current Mineral Owner Acres in Unit	Tract Participation	CNX Working Interest	Unleased Mineral Interest	Parcel ID	Township	Current Mineral Owner Address
1	Triple J Acres, LLC	Yes	100.00%	80.816	80.816	7.91685%	100.00%	0.00%	16-28003005.0000	Switzerland	c/o Jerry D. Forni 49761 TH 913 Beallsville, OH 43716
2	Helen L. Roberts	Yes	100.00%	25.700	25.700	2.51761%	100.00%	0.00%	16-28003006.0000	Switzerland	543 James Ave Akron, OH 44312
3	Bounty Minerals, LLC	Yes	20.00%	4.870	0.974	0.09541%	100.00%	0.00%	p/o 16-28003009.0000	Switzerland	8851 Camp Bowie West Suite 100 Fort Worth, TX 76116
3	Bounty Minerals II Acquisitions, LLC	Yes	80.00%	"	3.896	0.38166%	100.00%	0.00%	p/o 16-28003009.0000	Switzerland	8851 Camp Bowie West Suite 100 Fort Worth, TX 76116
4	Bounty Minerals, LLC	Yes	20.00%	17.117	3.423	0.33536%	100.00%	0.00%	p/o 16-28003009.0000	Switzerland	8851 Camp Bowie West Suite 100 Fort Worth, TX 76116
4	Bounty Minerals II Acquisitions, LLC	Yes	80.00%	"	13.694	1.34144%	100.00%	0.00%	p/o 16-28003009.0000	Switzerland	8851 Camp Bowie West Suite 100 Fort Worth, TX 76116
5	Bounty Minerals, LLC	Yes	20.00%	38.269	7.654	0.74978%	100.00%	0.00%	16-28003001.0000	Switzerland	8851 Camp Bowie West Suite 100 Fort Worth, TX 76116
5	Bounty Minerals II Acquisitions, LLC	Yes	80.00%	"	30.615	2.99911%	100.00%	0.00%	16-28003001.0000	Switzerland	8851 Camp Bowie West Suite 100 Fort Worth, TX 76116
6	Bounty Minerals, LLC	Yes	20.00%	17.020	3.404	0.33346%	100.00%	0.00%	16-28014016.0000	Switzerland	8851 Camp Bowie West Suite 100 Fort Worth, TX 76116
6	Bounty Minerals II Acquisitions, LLC	Yes	80.00%	"	13.616	1.33384%	100.00%	0.00%	16-28014016.0000	Switzerland	8851 Camp Bowie West Suite 100 Fort Worth, TX 76116
7	Triple J Acres, LLC	Yes	100.00%	30.491	30.491	2.98694%	100.00%	0.00%	16-28014005.0000	Switzerland	c/o Jerry D. Forni 49761 TH 913 Beallsville, OH 43716
8	Dale E. Forni	Yes	50.00%	16.061	8.031	0.78668%	100.00%	0.00%	16-28003004.0000	Switzerland	50095 German Ridge Rd Beallsville, Ohio 43716
8	Stella E. Forni	Yes	50.00%	"	8.031	0.78668%	100.00%	0.00%	16-28003004.0000	Switzerland	50095 German Ridge Rd Beallsville, Ohio 43716

Tract	Current Mineral Owner	Leased/Fee Yes or No	Current Mineral Owner Interest in Tract	Total Acres in Unit	Current Mineral Owner Acres in Unit	Tract Participation	CNX Working Interest	Unleased Mineral Interest	Parcel ID	Township	Current Mineral Owner Address
9	Jerry D. Forni	Yes	100.00%	0.988	0.988	0.09679%	100.00%	0.00%	16-28003010.0000	Switzerland	49761 Township Hwy 913 Beallsville, OH 43716
10	1) Paul S. Dangel & 2) Thomas Neil Rubel, Life Tenants	Yes	100.00%	92.712	92.712	9.08220%	100.00%	0.00%	16-28003003.0000 16-28004015.0000	Switzerland	1) 108 German Hill Rd Powhatan Pt, OH 43942 2) 45021 Belmont-Centerville Rd Belmont, OH 43718
10	Kevin B. McKee & Monica C. McKee, Remaindermen	Yes	0.00%	"	0.000	0.00000%	100.00%	0.00%	16-28003003.0000 16-28004015.0000	Switzerland	49758 Township Rd 913 Beallsville, OH 43716
11	Larry E. Baumberger & Bobby Jo Baumberger	Yes	100.00%	0.884	0.884	0.08660%	100.00%	0.00%	p/o 16-28004005.0000	Switzerland	28649 State Rte 556 Beallsville, OH 43716
12	Larry E. Baumberger & Bobby Jo Baumberger	Yes	100.00%	3.541	3.541	0.34688%	100.00%	0.00%	p/o 16-28004005.0000 16-28004011.0000	Switzerland	28649 State Rte 556 Beallsville, OH 43716
13	50488 German Ridge, LLC	Yes	100.00%	1.897	1.897	0.18583%	100.00%	0.00%	16-28004016.0000	Switzerland	50488 German Ridge Powhatan Point, OH 43942
14	Ronald Daniel Hendershot & Susan Lynn Hendershot	Yes	100.00%	2.476	2.476	0.24255%	100.00%	0.00%	16-28004014.0000	Switzerland	50404 German Ridge Rd Beallsville, OH 43716
15	Switzerland Township Trustees	Yes	100.00%	0.441	0.441	0.04320%	100.00%	0.00%	16-28004012.0000 16-28004012.1000	Switzerland	50830 German Ridge Rd Powhatan Pt, OH 43942
16	50488 German Ridge, LLC	Yes	100.00%	8.925	8.925	0.87431%	100.00%	0.00%	16-28004008.0000	Switzerland	50488 German Ridge Powhatan Point, OH 43942
17	Debra J. Stack & Thomas J. Stack	Yes	100.00%	0.199	0.199	0.01949%	100.00%	0.00%	16-28004013.1000	Switzerland	50538 German Ridge Rd Powhatan Pt, OH 43942
18	50488 German Ridge, LLC	Yes	50.00%	9.523	4.762	0.46644%	100.00%	0.00%	16-28013010.0000	Switzerland	50488 German Ridge Powhatan Point, OH 43942
18	James Schnegg	Yes	10.42%	"	0.992	0.09718%	100.00%	0.00%	16-28013010.0000	Switzerland	141 Whieldon Lane Worthington, OH 43085
18	Marjorie Baumberger	Yes	10.42%	"	0.992	0.09718%	100.00%	0.00%	16-28013010.0000	Switzerland	50037 German Ridge Rd Beallsville, OH 43716
18	Donald Schnegg	Yes	10.42%	"	0.992	0.09718%	100.00%	0.00%	16-28013010.0000	Switzerland	52104 TH 714 Beallsville, OH 43716
18	Wanda Rush	Yes	18.75%	"	1.786	0.17492%	100.00%	0.00%	16-28013010.0000	Switzerland	43737 W Union Rd Sardis, OH 43946
19	Thomas Dunn & Joyce A. Dunn	Yes	100.00%	0.052	0.052	0.00509%	100.00%	0.00%	p/o 16-28013014.0000	Switzerland	50830 German Ridge Rd Powhatan Pt, OH 43942
20	Glenn R. Darrah & Kathie D. Darrah	Yes	25.00%	86.942	21.735	2.12919%	100.00%	0.00%	16-28013006.0000	Switzerland	44863 State Rte 78 Woodsfield, OH 43793
20	Roger E. Darrah & Susan D. Darrah	Yes	25.00%	"	21.735	2.12919%	100.00%	0.00%	16-28013006.0000	Switzerland	44863 State Rte 78 Woodsfield, OH 43793
20	James Schnegg	Yes	10.42%	"	9.057	0.88721%	0.00%	100.00%	16-28013006.0000	Switzerland	141 Whieldon Lane Worthington, OH 43085
20	Marjorie Baumberger	Yes	10.42%	"	9.057	0.88721%	0.00%	100.00%	16-28013006.0000	Switzerland	50037 German Ridge Rd Beallsville, OH 43716

Tract	Current Mineral Owner	Leased/Fee Yes or No	Current Mineral Owner Interest in Tract	Total Acres in Unit	Current Mineral Owner Acres in Unit	Tract Participation	CNX Working Interest	Unleased Mineral Interest	Parcel ID	Township	Current Mineral Owner Address
20	Donald Schnegg	Yes	10.42%	"	9.057	0.88721%	0.00%	100.00%	16-28013006.0000	Switzerland	52104 TH 714 Beallsville, OH 43716
20	Wanda Rush	Yes	18.75%	"	16.302	1.59693%	0.00%	100.00%	16-28013006.0000	Switzerland	43737 W Union Rd Sardis, OH 43946
21	Triple J Acres, LLC	Yes	100.00%	0.734	0.734	0.07190%	100.00%	0.00%	16-28003018.0000	Switzerland	c/o Jerry D. Forni 49761 TH 913 Beallsville, OH 43716
22	Dale E. Forni	Yes	50.00%	80.800	40.400	3.95764%	100.00%	0.00%	16-28003002.0000	Switzerland	50095 German Ridge Rd Beallsville, Ohio 43716
22	Stella E. Forni	Yes	50.00%	"	40.400	3.95764%	100.00%	0.00%	16-28003002.0000	Switzerland	50095 German Ridge Rd Beallsville, Ohio 43716
23	Dale E. Forni	Yes	50.00%	84.719	42.360	4.14960%	100.00%	0.00%	p/o 16-28014003.0000	Switzerland	50095 German Ridge Rd Beallsville, Ohio 43716
23	Stella E. Forni	Yes	50.00%	"	42.360	4.14960%	100.00%	0.00%	p/o 16-28014003.0000	Switzerland	50095 German Ridge Rd Beallsville, Ohio 43716
24	Dale E. Forni	Yes	50.00%	10.004	5.002	0.49000%	100.00%	0.00%	p/o 16-28014003.0000	Switzerland	50095 German Ridge Rd Beallsville, Ohio 43716
24	Stella E. Forni	Yes	50.00%	"	5.002	0.49000%	100.00%	0.00%	p/o 16-28014003.0000	Switzerland	50095 German Ridge Rd Beallsville, Ohio 43716
25	Susan J. Brewster	Yes	100.00%	29.842	29.842	2.92336%	100.00%	0.00%	16-28014007.0000 16-28019007.0000	Switzerland	2123 Gates Ave Stsboro, OH 44241
26	Charles E. Wilson	Yes	25.00%	0.043	0.011	0.00105%	100.00%	0.00%	16-28014018.0000	Switzerland	1211 Rose Anna Delphos, OH 45833
26	James E. Wilson	Yes	25.00%	"	0.011	0.00105%	100.00%	0.00%	16-28014018.0000	Switzerland	1905 Willowhill Ln Toledo, OH 43615
26	Daniel E. Wilson	Yes	25.00%	"	0.011	0.00105%	100.00%	0.00%	16-28014018.0000	Switzerland	208 N. Westminister St P.O. Box 293 Waynesfield, OH 45896
26	John E. Wilson	Yes	12.50%	"	0.005	0.00053%	100.00%	0.00%	16-28014018.0000	Switzerland	1141 Marigold St NW Hartville, OH 44632
26	Springbok Energy Partners, LLC	Yes	12.25%	"	0.005	0.00052%	100.00%	0.00%	16-28014018.0000	Switzerland	5950 Berkshire Ln, Ste 1250 Dallas, TX 75225
26	Global 7 Resources, LLC	Yes	0.25%	"	0.000	0.00001%	100.00%	0.00%	16-28014018.0000	Switzerland	P.O. Box 720072 Dallas, TX 75372
27	Alan R. Baldwin & Bob E. Baldwin	Yes	100.00%	10.815	10.815	1.05945%	100.00%	0.00%	16-28014012.0000	Switzerland	51415 Case Ridge Rd Clarington, OH 43915
28	Debra Stack	Yes	20.00%	1.191	0.238	0.02333%	100.00%	0.00%	16-28014002.0000	Switzerland	50538 German Ridge Rd Powhatan Pt OH 43972
28	James Dangel	Yes	20.00%	"	0.238	0.02333%	100.00%	0.00%	16-28014002.0000	Switzerland	7663 Judy Ave Apple Creek, OH 44606

Tract	Current Mineral Owner	Leased/Fee Yes or No	Current Mineral Owner Interest in Tract	Total Acres in Unit	Current Mineral Owner Acres in Unit	Tract Participation	CNX Working Interest	Unleased Mineral Interest	Parcel ID	Township	Current Mineral Owner Address
28	Darrell Rubel	Yes	20.00%	"	0.238	0.023333%	100.00%	0.00%	16-28014002.0000	Switzerland	5592 Spoken Drive Westerville, OH 43081
28	Eric Rubel	Yes	20.00%	"	0.238	0.023333%	100.00%	0.00%	16-28014002.0000	Switzerland	45021 Belmont Centerville Rd Belmont, OH 43718
28	Shane T. Stack	Yes	20.00%	"	0.238	0.023333%	100.00%	0.00%	16-28014002.0000	Switzerland	56 Dogwood Drive Triadelphia, WV 26059
29	Paul D. Forni	Yes	100.00%	1.671	1.671	0.16369%	100.00%	0.00%	16-28014004.0000	Switzerland	49960 German Ridge Rd Beallsville, OH 43716
30	Gary L Baumberger & Marjorie A. Baumberger	Yes	100.00%	41.483	41.483	4.06373%	100.00%	0.00%	p/o 16-28013001.0000	Switzerland	50037 German Ridge Rd Beallsville, OH 43716
31	Gary L Baumberger & Marjorie A. Baumberger	Yes	100.00%	8.508	8.508	0.83346%	100.00%	0.00%	p/o 16-28013001.0000	Switzerland	50037 German Ridge Rd Beallsville, OH 43716
32	Larry E. Baumberger & Bobby Jo Baumberger	Yes	100.00%	5.059	5.059	0.49559%	100.00%	0.00%	p/o 16-28013008.0000	Switzerland	28649 State Rte 556 Beallsville, OH 43716
33	Larry E. Baumberger & Bobby Jo Baumberger	Yes	100.00%	13.072	13.072	1.28055%	100.00%	0.00%	p/o 16-28013008.0000	Switzerland	28649 State Rte 556 Beallsville, OH 43716
34	Thomas Dunn & Joyce A. Dunn	Yes	100.00%	4.289	4.289	0.42016%	100.00%	0.00%	p/o 16-28013014.0000	Switzerland	50830 German Ridge Rd Powhatan Pt, OH 43942
35	Larry E. Baumberger & Bobby Jo Baumberger	Yes	100.00%	13.830	13.830	1.35481%	100.00%	0.00%	p/o 16-28013008.0000	Switzerland	28649 State Rte 556 Beallsville, OH 43716
36	Zolar Marus & Sarah Michaelyn Marus	Yes	100.00%	68.425	68.425	6.70301%	100.00%	0.00%	p/o 16-28013007.0000	Switzerland	50870 Boltz Hill Rd Clarington, OH 43915
37	Yotsai Ou Yang	No	100.00%	3.480	3.480	0.34091%	0.00%	100.00%	16-28013003.0000	Switzerland	101 W 72nd St Apt. 4N New York, NY 10023
38	Zolar Marus & Sarah Michaelyn Marus	Yes	100.00%	27.575	27.575	2.70129%	100.00%	0.00%	p/o 16-28013007.0000	Switzerland	50870 Boltz Hill Rd Clarington, OH 43915
39	Christine Glotfelty	Yes	100.00%	0.420	0.420	0.04114%	100.00%	0.00%	16-28013021.0000	Switzerland	51400 Boltz Hill Rd Clarington, OH 43915
40	Douglas Nippert	Yes	100.00%	1.381	1.381	0.13528%	100.00%	0.00%	16-28013004.0000	Switzerland	51316 Country Rd 37 Clarington, OH 43915
41	Lloyd R. Burian	Yes	100.00%	1.002	1.002	0.09816%	100.00%	0.00%	16-28013028.0000	Switzerland	51260 Boltz Hill Rd Clarington, OH 43915
42	Ben G. Nippert	Yes	100.00%	1.027	1.027	0.10061%	100.00%	0.00%	16-28013023.0000	Switzerland	100 Anson St New Martinsville, WV 26155
43	Richard Lee Ice	Yes	50.00%	0.853	0.427	0.04178%	100.00%	0.00%	16-28013017.1000	Switzerland	51453 Boltz Hill Rd Clarington, OH 43915
43	Kimberly R. Ice	Yes	50.00%	"	0.427	0.04178%	100.00%	0.00%	16-28013017.1000	Switzerland	51453 Boltz Hill Rd Clarington, OH 43915
44	Richard Lee Ice	Yes	50.00%	1.786	0.893	0.08748%	100.00%	0.00%	16-28013017.0000	Switzerland	51453 Boltz Hill Rd Clarington, OH 43915

Tract	Current Mineral Owner	Leased/Fee Yes or No	Current Mineral Owner Interest in Tract	Total Acres in Unit	Current Mineral Owner Acres in Unit	Tract Participation	CNX Working Interest	Unleased Mineral Interest	Parcel ID	Township	Current Mineral Owner Address
44	Kimberly R. Ice	Yes	50.00%	"	0.893	0.08748%	100.00%	0.00%	16-28013017.0000	Switzerland	51453 Boltz Hill Rd Clarington, OH 43915
45	Zolar Marus & Sarah Michaelyn Marus	Yes	100.00%	36.799	36.799	3.60488%	100.00%	0.00%	p/o 16-28013025.0000	Switzerland	50870 Boltz Hill Rd Clarington, OH 43915
46	Gary L. Baumberger & Marjorie A. Baumberger	Yes	100.00%	0.618	0.618	0.06054%	100.00%	0.00%	p/o 16-28013001.0000	Switzerland	50037 German Ridge Rd Beallsville, OH 43716
47	Gary L. Baumberger & Marjorie A. Baumberger	Yes	100.00%	14.799	14.799	1.44973%	100.00%	0.00%	16-28020001.0000	Switzerland	50037 German Ridge Rd Beallsville, OH 43716
48	Zolar Marus & Sarah Michaelyn Marus	Yes	100.00%	20.593	20.593	2.01732%	100.00%	0.00%	16-28020008.0000	Switzerland	50870 Boltz Hill Rd Clarington, OH 43915
49	Zolar Marus & Sarah Michaelyn Marus	Yes	100.00%	7.282	7.282	0.71336%	100.00%	0.00%	p/o 16-28013007.0000	Switzerland	50870 Boltz Hill Rd Clarington, OH 43915
50	Christine K. Glotflety	Yes	25.00%	3.088	0.772	0.07563%	100.00%	0.00%	16-28013005.0000	Switzerland	51400 Boltz Hill Rd Clarington, OH 43915
50	Douglas Nippert	Yes	25.00%	"	0.772	0.07563%	100.00%	0.00%	16-28013005.0000	Switzerland	51316 CR 37 Clarington, OH 43915
50	Daniel Nippert	Yes	25.00%	"	0.772	0.07563%	100.00%	0.00%	16-28013005.0000	Switzerland	150 East Governor Road Hershey, PA 17033
50	David Nippert	Yes	25.00%	"	0.772	0.07563%	100.00%	0.00%	16-28013005.0000	Switzerland	51394 TH 185 Beallsville, OH 43716
51	ID & Elf, LLC	Yes	100.00%	85.163	85.163	8.34269%	100.00%	0.00%	16-28020004.0000 16-28020023.0000	Switzerland	45192 SR 800 Woodsfield, OH 43793
52	Bruner Land Company, Inc.	Yes	100.00%	1.535	1.535	0.15037%	100.00%	0.00%	16-28020021.0000	Switzerland	P.O. Box 98 Byesville, OH 43723
	TOTAL LEASED ACRES IN UNIT			1017.330	1017.330	99.65909%	99.65909%				
	TOTAL UNLEASED ACRES IN UNIT			3.480	3.480	0.34091%	0.34091%				
	TOTAL UNIT ACRES			1020.810	1020.810	100.00%	100.00%				

Exhibit A-3											
Unleased Mineral Interests											
SWITZ7HSU Unit											
Tract	Current Mineral Owner	Leased/Fee Yes or No	Current Mineral Owner Interest in Tract	Total Acres in Unit	Current Mineral Owner Acres in Unit	Tract Participation	CNX Working Interest	Unleased Mineral Interest	Parcel ID	Township	Current Mineral Owner Address
37	Yotsai Ou Yang	No	100.00%	3.480	3.480	0.34091%	0.00%	100.00%	16-28013003.0000	Switzerland	101 W 72nd St Apt. 4N New York, NY 10023
TOTAL UNLEASED ACRES IN UNIT				3.480	3.480	0.34091%					
TOTAL UNIT ACRES				1020.810	1020.810	100.00%					

**OIL AND GAS LEASE
(PAID-UP LEASE – OHIO)**

Lease No. _____

THIS OIL AND GAS LEASE (this "**Lease**") is made and entered into effective as of the _____ day of _____, 20____ (the "**Effective Date**"), by _____ and _____ between _____, with _____ an address at _____ (**[collectively, "Lessor"**]), and **CNX GAS COMPANY LLC**, a Virginia limited liability company, with an address at CNX Center, 1000 CONSOL Energy Drive, Canonsburg, Pennsylvania 15317-6506 ("**Lessee**") (each a "**Party**," and together the "**Parties**").

In consideration of the mutual covenants and agreements contained herein and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged by Lessor, the Parties agree as follows:

1. LEASE GRANT. Lessor hereby grants and leases exclusively to Lessee, its successors and assigns, all the oil, gas, and their liquid and/or gaseous constituents, whether hydrocarbon or non-hydrocarbon and all other substances produced therewith (collectively, whether any of the foregoing, the "**Leased Oil/Gas**") from all subsurface strata, formations, voids, and zones underlying the Leased Premises (as defined in **Section 2** of this Lease), together with a non-exclusive subsurface easement through all formations for the purpose of accessing, exploring, developing, and producing the Leased Oil/Gas. Lessor hereby grants and leases exclusively to Lessee all rights necessary, convenient, or incident to explore, drill, develop, produce, treat, transport and market Leased Oil/Gas and otherwise operate on and about the Leased Premises and any lands pooled or unitized therewith (being a Unit as defined and discussed in **Section 7** of this Lease) using all available methods and techniques under current and future technology, including, without limitation, the following rights: to have full and free access over and through the Leased Premises; to conduct geological, geophysical, core drilling and other exploratory work; to drill, re-drill, lengthen, re-work, stimulate, fracture, plug, remove and/or abandon vertical or horizontal wells, and to inject under pressure water, air, brine and other fluids and substances (including, without limitation, non-domestic water from the Leased Premises, free of cost) into subsurface strata and/or withdraw the same therefrom; to erect and operate drill sites and drilling rigs and related facilities to treat, separate, compress, dehydrate, process, gather, and measure and shut-in Leased Oil/Gas, together with all other equipment, structures and facilities that Lessee deems desirable for use in its operations; to construct, use and operate roads, utility lines, canals, impoundments and pits; to install and operate pipelines, tanks, pumps, compressors, condensers and other equipment and facilities for use in transporting Leased Oil/Gas from the Leased Premises and from other lands, over and through the Leased Premises (all of the foregoing activities are collectively referred to herein as "**Operations**"); and to have and enjoy all rights and privileges reasonably necessary or appropriate to effectuate the purposes of this Lease.

2. LEASED PREMISES. The premises being leased hereunder is located in _____ Township, in the County of _____, in the State of Ohio, Property Tax Parcel Identification No. _____, **[and is bounded formerly or currently as follows:**

On the North by lands of _____ ;
On the East by lands of _____ ;
On the South by lands of _____ ;
On the West by lands of _____ ;]

including lands acquired by _____ from _____ by instrument dated _____, _____ and recorded in Book _____, Page _____, as Instrument No. _____, containing approximately _____ acres, for all purposes of this Lease whether actually more or less and whether the tax map is correct, including small strips or parcels of contiguous land covered under Lessor's source of title (collectively, the "**Leased Premises**").

3. LEASE TERM.

A. Primary Term. This Lease shall remain in force for a term of five (5) years following the Effective Date (the "**Primary Term**"). Lessee shall have the recurring option to extend the Primary Term for five (5) additional one (1) year periods (the "**Extension Option**") by paying to Lessor an annual installment payment equal to the sum per net acre specified in the Order of Payment (as defined and discussed in **Section 4(A)** of this Lease) for each net acre of the Leased Premises then covered by this Lease and not being maintained by other Lease provisions, divided by the number of years of the Primary Term (not as extended), the first of which installments shall be due on or before the expiration of the Primary Term and the balance of which installments shall be due on subsequent anniversaries thereof (subject to Lessee's right to elect not to exercise the Extension Option for any such period). If so extended through Lessee's exercise of the Extension Option, all references herein to the Primary Term shall mean the Primary Term as so extended.

B. Secondary Term. This Lease shall remain in full force and continue following the Primary Term as to the entirety of the Leased Premises for so long thereafter as any of the following circumstances exist (such period, the "**Secondary Term**"): (i) Lessee is conducting any Operations on the Leased Premises or any lands pooled or unitized therewith (being a Unit as defined and discussed in **Section 7** of this Lease); (ii) any of the Leased Oil/Gas are being produced from the Leased Premises or any lands pooled or unitized therewith (being a Unit); (iii) any well on the Leased Premises or on any lands pooled or unitized therewith (being a Unit) is Shut-In (as defined and discussed in **Section 4(C)** of this Lease); or (iv) this Lease is otherwise extended by Force Majeure (as defined and discussed in **Section 10(A)** of this Lease), Equitable Tolling (as defined and discussed in **Section 10(B)** of this

Lease), or other terms hereof. The Primary Term (as it may be extended hereunder) and the Secondary Term are collectively referred to herein as the “**Term**.”

C. Dry Hole and Cessation of Production. At any time during the Term, if on the Leased Premises or any Unit: (i) prior to discovery of Leased Oil/Gas, a well or wells not capable of producing in paying quantities is drilled (a “**Dry Hole**”), or (ii) all production of the Leased Oil/Gas (whether or not in paying quantities) ceases for any cause or reason whatsoever (“**Cessation of Production**”), then this Lease shall remain in force and shall not terminate if Lessee either commences and pursues any Operations, or otherwise obtains or restores production on the Leased Premises or on any Unit within ninety (90) days after completion of Operations on such Dry Hole or after such Cessation of Production, as the case may be, whether or not such ninety (90) days extends beyond the Primary Term; **provided, however**, that notwithstanding the foregoing, if the Dry Hole or Cessation of Production occurs within the Primary Term, no action, Operations, production or any payment by Lessee whatsoever shall be required during the Primary Term.

D. Disputes Concerning Extension. If there is ever any dispute concerning the extension of this Lease beyond the Primary Term by reason of any of the alternative circumstances specified herein, the payment to Lessor of prescribed payments provided for herein shall be conclusive evidence that this Lease has been extended beyond the Primary Term.

4. PAYMENTS TO LESSOR.

A. Bonus Payment. Lessee agrees to pay Lessor, in accordance with and subject to the terms and conditions of that certain Order of Payment between the Parties delivered in connection with the execution of this Lease (the “**Order of Payment**”), the sum per net acre of the Leased Premises specified in the Order of Payment (the “**Bonus Payment**”). This Lease is a “paid-up” lease, and upon payment of the Bonus Payment, no further rental payments shall be due to Lessor during the initial Primary Term, and Lessee shall have the right and privilege to drill and operate or not to drill or operate for Leased Oil/Gas during the Primary Term.

B. Production Royalty. Lessee shall pay to Lessor the following royalties on production of Leased Oil/Gas from the Leased Premises (the “**Production Royalty**”), proportionate to Lessor’s percentage of ownership of such Leased Oil/Gas and subject to adjustments hereunder due to the Pooling Ratio (as defined and discussed in **Section 8** hereof) or Shut-In, as applicable:

(i) **Oil.** Lessee shall pay Lessor a royalty equal to twelve and one half percent (12.5%) of the gross proceeds received by Lessee for all oil produced and marketed from the Leased Premises, minus any and all Deductions (as defined below).

(ii) **Gas.** Lessee shall pay Lessor a royalty equal to twelve and one half percent (12.5%) of the gross proceeds received by Lessee for the sale of all gas, including casinghead gas or natural gas liquids and all other gaseous, vaporous and liquid hydrocarbons or any combination thereof, produced and marketed from the Leased Premises, minus any and all Deductions. At Lessee’s election, the volumes, sales price and/or the value of any Deductions may be determined on an allocated well, field-wide or Unit-wide basis, or other reasonable and prudent determination of the volume and value of the gas and its constituents produced and sold from the Leased Premises or any Unit.

“**Deductions**” means Lessor’s share of any reasonable costs incurred or allocated between the wellhead and the point of sale, including: (a) all costs actually incurred by Lessee, including, without limitation, those paid to third parties (whether or not affiliated with Lessee), and all losses of produced volumes whether by use as fuel, line loss, flaring, venting or otherwise from and after the wellhead to the point of sale by Lessee; and (b) all costs of heating, treating, sweetening, gathering, separating (other than condensate separated at the well), dehydrating, compressing, metering, processing, manufacturing, transporting and trucking (from and after the wellhead to the point of sale), marketing, and blending, and the sales charges, commissions and fees paid to third parties (whether or not affiliated with Lessee). In the event that any extraneous substance (being any substance that is obtained from sources other than the Leased Premises or lands in a Unit) is injected into subsurface strata in connection with secondary, tertiary, or other enhanced recovery operations hereunder, then any like substance thereafter produced hereunder or contained in the Leased Oil/Gas thereafter produced hereunder from such strata shall be deemed to be part of the extraneous substance so injected until the total volume thereof equals the total volume of the extraneous substance so injected, and no Production Royalty shall be payable hereunder on any such extraneous substance.

(iii) **Taxes.** Lessor agrees to pay any and all taxes levied or assessed upon its interest in the production of Leased Oil/Gas from the Leased Premises, and Lessee is hereby authorized to pay such taxes and assessments on behalf of Lessor and to deduct the amount so paid from any monies payable to Lessor hereunder.

(iv) **Payments.** Production Royalties shall be paid monthly to Lessor no later than the last day of the third calendar month following the calendar month in which production occurred; **provided, however**, that Lessee, at its discretion, may withhold any payments until the total due to Lessor equals or exceeds One Hundred Dollars (\$100).

C. Shut-In. If at any time during the Term, production from a well is interrupted or shall cease or Lessee shall elect not to market, produce or sell the production from a well that is capable of producing (“**Shut-In**”) for a period of ninety (90) consecutive days or longer, and there is no other producing well on the Leased Premises or any Unit and no circumstances of Force Majeure or Equitable Tolling exist, a shut-in rental shall thereafter accrue at the rate of Five Dollars (\$5.00) per net acre per year (“**Shut-In Rental**”). Shut-In Rental need not be paid and will not accrue during the Primary Term. Shut-In Rentals shall be payable twelve (12) months following the time such well is Shut-In and annually thereafter until such time as production is re-established (or Lessee surrenders this Lease),

subject to proration for any partial year that a well resumes actual production. Lessee shall have the right to elect at any time and from time to time during the Term to interrupt or not to market, produce or sell the production from any well that is capable of producing Leased Oil/Gas on the Leased Premises or any Unit. Lessee shall be under no obligation whatsoever to produce or market any Leased Oil/Gas from any such Shut-In well, and the Shut-In Rental shall be a full and adequate substitute for the Production Royalty. If a Shut-In occurs, any Shut-In well shall nonetheless be deemed to be a producing well and shall serve to maintain this Lease in full force and effect.

D. Recoupment. In the event that Lessee makes any over-payment of the Bonus Payment, Production Royalties, Shut-In Rental or any other sums paid to Lessor under this Lease due to miscalculation of the amount payable, to Lessor owning less than the entire undivided ownership of the Leased Oil/Gas (as further discussed in **Section 11(C)** hereof), or to breach of this Lease by Lessor, Lessee shall have the right, without limitation of any other rights and remedies of Lessee under this Lease or applicable law, to recover any such over-payment from Lessor or to recoup any such over-payment against any subsequent payments due to Lessor hereunder.

5. DIVISION ORDERS. Upon request by Lessee from time to time, Lessor shall execute one (1) or more Division Orders certifying Lessor's interest in production of the Leased Oil/Gas.

6. PAYMENTS. Lessee shall make or tender all payments due under this Lease to Lessor at Lessor's last known address. Payments may be tendered by first class mail, electronically (subject to Lessor's delivery of appropriate electronic payment instructions) or any comparable method, and payment shall be deemed complete upon mailing, dispatch or deposit (as the case may be).

7. POOLING/UNITIZATION RIGHT; UNIT DECLARATION. Lessor grants to Lessee, and Lessee may exercise in Lessee's sole judgment, at any time and from time to time during the Term, Pooling Rights (as defined below) under this Lease. "**Pooling Rights**" include Lessee's right, but not the obligation, to pool, unitize or combine into one (1) or more separate drilling or production unit(s) or pool(s), plans or agreements the Leased Premises or any part thereof or any strata therein with any other lands, leases, pool(s), unit(s) or interests held by Lessee or any third party (each a "**Unit**"), whether before or after drilling, when in Lessee's sole judgment it is necessary or advisable to create such Units. Lessee is hereby designated as the applicant for drilling permits and other permits with respect to Units. Creation of a Unit in one (1) or more instances shall not exhaust Lessee's Pooling Rights, and Lessee shall have the recurring right but not the obligation to revise in any manner and at any time the size, shape, or conditions of operation of any Unit formed by expansion or contraction or both, including, without limitation, the drilling of multiple wells or laterals within said Unit. Said Pooling Rights may be exercised as to any one (1) or more depths, strata or formations, through any type of wells and any combination of any drilling or recovery techniques, whether now known or developed in the future. Lessee may create contiguous Units which utilize the same surface pads and facilities. Within a reasonable time after the creation or revision of any Unit hereunder by Lessee, Lessee shall file of record a written declaration describing the Unit or revised Unit and stating the effective date of creation or revision of the Unit (a "**Unit Declaration**"). At any time that any Unit is not being operated as aforesaid, the Unit Declaration relative to such Unit may be surrendered and canceled of record by Lessee. Such cancellation or surrender shall not cause a surrender or cancellation of this Lease. The exercising of Pooling Rights and the provisions hereof shall not operate to transfer title of any interest in the Leased Premises.

8. EFFECT OF POOLING OPERATIONS. Any Operations anywhere on a Unit that includes all or any part of the Leased Premises shall be treated for all purposes of this Lease (except for the determination of production for the calculation of any Production Royalties to be paid to Lessor) as if said activities were conducted on well(s) or lateral portion(s) thereof located on the Leased Premises, whether or not such activities, well(s) or laterals are on the Leased Premises. Notwithstanding anything contained in this Lease to the contrary, when any portion(s) of the Leased Premises is committed to a Unit, this Lease with respect to such portion(s) of the Leased Premises shall be subject to the terms and conditions of the Unit order or Unit Declaration, including any formula prescribed therein for the allocation of net proceeds, sales price, deductions, production and the payment of the Production Royalty or Shut-In Rental from the Unit. Notwithstanding anything herein to the contrary, if Lessee exercises its Pooling Rights, then production for calculating the Production Royalty and any Shut-In Rental shall be calculated and adjusted based on any method determined by Lessee in good faith, including utilizing the proportion that the net acreage of the Leased Premises contained in the Unit bears to the total acreage in the Unit (the "**Pooling Ratio**").

9. LAWS. Each of Lessee and Lessor shall comply in all material respects, with respect to its respective operations on and use of the Leased Premises, with all applicable federal, state and local laws and ordinances, and all rules, regulations, orders and decrees of all governmental bodies and agencies having jurisdiction over such operations (collectively, "**Laws**"). Lessee shall not be deemed to be in breach of this Lease, or held liable for damages hereunder, with respect to any failure of Lessee to comply with the provisions of this Lease if such compliance is effectively prevented by Laws.

10. FORCE MAJEURE; EQUITABLE TOLLING.

A. Force Majeure. "**Force Majeure**" means any one (1) or more of the following events or circumstances: past, present or future Laws; lack of easements or access; war, sabotage, terrorism, rebellion, insurrection, riot or armed hostilities; inability to obtain permits, authorizations, utilities or other approvals or services; any coal, stone, or other mining or drilling or related activities; labor disturbance, strike, or shortage of labor, equipment, water or other materials; weather, fire, explosion, flood, or other "act of God"; lack of pipelines to transport Leased Oil/Gas from the Leased Premises or any Unit; and any other event or circumstance or act of third parties beyond the reasonable control of Lessee. If any activity, production or Operations permitted or required hereunder, or the performance by Lessee of any covenant, agreement or requirement hereunder (in each case including on, from or with respect to any lands in a Unit), or Lessee's enjoyment of the benefits of this Lease, may be interrupted or delayed, directly or indirectly, by reason of circumstances of Force Majeure, then Lessee shall be relieved from such obligations without

liability during the duration of such circumstances of Force Majeure, and this Lease shall not expire, terminate or be subject to forfeiture because of such interruption or delay, and the Term shall automatically be extended during such period of Force Majeure and for a period of six (6) months following the end thereof.

B. Equitable Tolling. The Parties agree that it is in their mutual interest not to require Lessee to engage in Operations or production of Leased Oil/Gas during any period of time in which the validity of this Lease or Lessee's rights hereunder are challenged, contested or disputed. If any activity, production or Operations permitted or required hereunder, or the performance by Lessee of any covenant, agreement or requirement hereunder (in each case including on, from or with respect to any lands in a Unit), or Lessee's enjoyment of the benefits of this Lease, may be interrupted or delayed, directly or indirectly, by reason of acts or judicial, arbitration, administrative or regulatory proceedings of Lessor or any third party that inhibit Lessee's access to the Leased Premises or other lands in a Unit, its Operations or production, or if Lessor or any third party should file judicial or arbitration claims or counterclaims or file or record documents challenging the validity or enforceability of this Lease, seeking avoidance of or relief from Lessor's obligations hereunder, or repudiating Lessee's enjoyment of the benefits of this Lease or its entitlement to the Leased Oil/Gas under this Lease, then this Lease shall not expire, terminate or be subject to forfeiture because of such interruption or delay or because of the passage of time during which such matters are being adjudicated or addressed (regardless of whether such claims or counterclaims are subsequently settled or otherwise withdrawn) or such documents remain filed or of record, and the Term shall automatically be tolled and extended during such period (including the pendency of any such judicial, arbitration, administrative or regulatory proceeding) and for a period of six (6) months following the end thereof ("**Equitable Tolling**").

11. TITLE.

A. Warranty. Lessor warrants title to the Leased Premises and the Leased Oil/Gas and agrees to defend the same to Lessee and Lessee's successors and assigns, forever, against the lawful claims and demands of all persons claiming by, through, or under Lessor, but against none other. Lessor further represents and warrants that on the Effective Date, (i) the Leased Premises are free from all liens and encumbrances made by Lessor, (ii) Lessor is not currently receiving any bonus, rental, production royalty or other payment as the result of any prior oil and/or gas lease covering any or all of the Leased Premises, and (iii) there are no producing wells or gas storage facilities currently existing on the Leased Premises. Should any third party having title to the Leased Premises or any portion thereof fail to execute this Lease, this Lease shall nevertheless be binding upon all parties who do execute it as Lessor.

B. Liens. Lessee may, at its option, pay, discharge or redeem any overdue tax, mortgage, encumbrance, or other lien existing, levied or assessed on or against the Leased Premises or Lessor's ownership of any Leased Oil/Gas, including interest, penalties and fees, and deduct a proportionate share of the amount so paid from the Production Royalties, Shut-In Rentals, Bonus Payment or other sums due to Lessor under this Lease.

C. Lesser Interest. If Lessor owns less than the entire undivided ownership of the Leased Oil/Gas, then the Production Royalties, Shut-In Rentals, Bonus Payment and other sums due to Lessor under this Lease shall be reduced or adjusted to the proportion of Lessor's interest in any such Leased Oil/Gas, and any over-payments resulting therefrom shall be subject to recovery or recoupment pursuant to **Section 4(D)** hereof.

D. Ownership Change. Lessee shall not be bound by or recognize any change of ownership of the Leased Oil/Gas or the Leased Premises, or in the right of other parties to receive rentals, Production Royalties, Shut-In Rentals, the Bonus Payment or other payments hereunder, or of Lessor's address, until thirty (30) days after Lessee has been furnished with evidence satisfactory to Lessee, in its sole discretion, of such change of ownership or right of others to receive payments or of address. Pending the receipt of such evidence, Lessee may elect either to continue to make or to withhold payments as if such change had not occurred.

E. Entireties. If Lessor shall now or hereafter own the Leased Premises in severalty or in separate tracts, the Leased Premises nevertheless shall be developed and operated as one lease, and all Production Royalties, Shut-In Rentals, Bonus Payment or other sums due to Lessor under this Lease shall be treated as an entirety and shall be divided among, and paid to, such separate owners in the proportion that the acreage owned by each such separate owner bears to the entire leased acreage of the Leased Premises.

12. CURE RIGHTS. If Lessor believes that Lessee is in default of any of its obligations under this Lease, Lessor shall not exercise any right or remedy or institute any legal action against Lessee unless and until Lessee has received prior written notice from Lessor fully describing the alleged default or other demand, and then only if Lessee fails or refuses to commence actions to materially remedy the alleged default or other demand within ninety (90) days after receipt of such notice. Lessee reserves the right to dispute the alleged default or other demand. This Lease shall be construed against termination, forfeiture, cancellation or expiration and in favor of giving effect to the continuation of this Lease where the circumstances exist to maintain this Lease in effect under any of the alternative mechanisms set forth herein. Notwithstanding any other provisions of this Lease to the contrary, Lessor hereby expressly acknowledges and agrees that payments and other obligations of Lessee under this Lease are special covenants and not conditions to Lessee's occupancy and enjoyment of the Leased Premises and its rights under this Lease, and that no breach on the part of Lessee, and no failure of Lessee to cure any such breach, shall afford Lessor the right to terminate this Lease or evict Lessee from the Leased Premises or otherwise interfere with its quiet use and enjoyment of the Leased Premises, and Lessor hereby irrevocably waives such rights.

13. SURRENDER. Lessee may surrender this Lease or the Leased Premises to Lessor, in whole or in part (including, without limitation, any depth or formation), at any time and from time to time, by recording a release or an instrument of surrender or by delivery to Lessor of a duly executed surrender thereof in person or by mail. Upon such recording or delivery, this Lease shall be null and void as to that part or formation of the Leased Premises

surrendered; and Lessee thereupon shall be released and discharged from all obligations, covenants and conditions as to the part of the Leased Premises surrendered; and thereafter the rentals and other sums payable hereunder shall be proportionately reduced. Notwithstanding any surrender by Lessee, Lessee shall retain and/or have reasonable and convenient easements for pipelines, pole lines, roadways and other facilities through and over the portions of the Leased Premises surrendered for the purpose of Operations and reclamation on the portions of the Leased Premises retained, and/or on other lands.

14. RIGHT OF FIRST REFUSAL TO LEASE. In the event that Lessor receives from any third party any bona fide offer to grant an additional oil and/or gas lease covering all or part of the Leased Premises within the Term, Lessor shall provide Lessee with a written notice of such offer by certified mail, including the proposed lessee's name, bonus consideration and royalty consideration, and a true, correct and complete copy of the proposed lease. Lessee shall have ninety (90) days following receipt of such written notice to elect to exercise a right of first refusal, in Lessee's sole and absolute discretion, to enter into an oil and gas lease with Lessor on the same terms and conditions as set forth in the proposed lease. Should Lessee so elect, Lessee shall notify Lessor in writing within such ninety (90) day period and submit therewith a lease with Lessee containing the same terms and conditions and, if so desired by Lessee, a memorandum of such lease for recordation. Within ten (10) days after receipt of such signed lease and memorandum of lease (if any) back from Lessor, Lessor shall counter-sign and return such lease and memorandum of lease (if any) to Lessee together with the bonus payment required under such lease. No single exercise of the foregoing right of first refusal shall exhaust any rights granted hereunder to subsequent offers covering all or any part of the Leased Premises. Any additional lease granted to any third party by Lessor in violation of the provisions of this **Section 14** shall be null and void. The provisions of this **Section 14** shall not be deemed to waive, nullify or otherwise affect Lessee's right to extend the Primary Term pursuant to **Section 3(A)** of this Lease.

15. LEASE DEVELOPMENT. There is no covenant on the part of Lessee to develop the Leased Premises within a certain period of time or at all, and there shall be no leasehold forfeiture or damages hereunder for any implied covenant to produce, **and any such covenant that might otherwise be implied is hereby disclaimed and rejected by Lessee.** The Production Royalties, Shut-In Rentals, Bonus Payment and other sums due to Lessor under this Lease are and shall be accepted by Lessor as full and adequate consideration for all of the rights and privileges granted to Lessee herein.

16. GENERAL PROVISIONS.

A. Construction. This Lease shall be construed as a whole and in accordance with the fair meaning of its language. The language of this Lease (including, without limitation, **Section 3** hereof) shall never be read as language of special limitation. Capitalized terms or defined terms used in this Lease shall have the meanings set forth herein except as otherwise clearly indicated.

B. Severability. Should any provision of this Lease be held, ruled or otherwise rendered invalid or unenforceable for any reason, the remaining Lease parts or provisions shall remain in full force and effect.

C. Binding Effect; Assignment. This Lease shall be binding upon and inure to the benefit of the Parties and their respective heirs, successors and assigns. This Lease may be assigned, pledged or otherwise transferred by Lessee in whole or in part, whereupon the assignee or transferee shall thereafter be solely liable for all payments and obligations imposed under this Lease or by Laws or otherwise with respect to that portion of this Lease so assigned or transferred. If any assignee or transferee of Lessee hereunder shall default in its proportional share of payments to be made or other obligations with respect to any portion of this Lease so assigned or transferred, such default shall not operate to defeat or affect the rights of Lessee with respect to any portion of this Lease retained by Lessee.

D. Lease Execution. This Lease shall not be considered fully executed or binding on Lessee until Lessee's authorized corporate representative has signed this Lease.

E. Notices. All notices and/or payments under this Lease shall be directed to each Party at its address set forth on the first page of this Lease or to such other address as such Party may designate by written notice to the other Party, and, except as herein otherwise provided, the deposit in the mail of any written notice so addressed with postage prepaid shall be notice of the contents of such writing.

F. Entire Contract. This Lease, the Lease Memorandum (if any) discussed in **Section 16(G)** hereof, and the Order of Payment contain the entire understanding and agreement between Lessor and Lessee with respect to the subject matter hereof, and no verbal warranties, representations or promises have been made or relied upon by Lessor or Lessee supplementing, modifying or as an inducement to this Lease. The Parties agree that except as expressly stated in this Lease, the Lease Memorandum (if any) and the Order of Payment, no covenants, obligations or conditions to be paid or performed on the part of Lessee whatsoever shall be read into or implied in this Lease; and Lessee shall not be in default hereunder with respect to any covenant, obligation or condition not expressly set forth in this Lease.

G. Recording; Further Assurances. Lessee may record this Lease or a memorandum of this Lease (a "**Lease Memorandum**"), and upon request, Lessor agrees to execute and deliver to Lessee, without additional compensation, any such Lease Memorandum and other affidavits, ratifications, amendments, permit applications and other instruments as may be required or reasonably requested by Lessee to carry out the purposes of this Lease.

H. No Third Party Beneficiaries. This Lease shall not be construed to create any rights or remedies in any third parties or the general public.

I. Essence of Bargain. Lessor acknowledges and agrees that the rights of Lessee under this Lease are the result of bargained-for exchange and are of the essence of Lessee's bargain for the consideration provided to Lessor under and in connection with this Lease.

J. Governing Law. This Lease shall be governed by and construed in accordance with the laws of the State of Ohio without regard to its conflicts of law provisions.

K. Amendment of Description of Leased Premises. The Parties acknowledge that the information in **Section 2** hereof describing the Leased Premises, including the legal description of the lands, the estates and the total acreage to be covered by this Lease (the "**Lease Information**"), was obtained from public records of the county in which the Leased Premises is located but may not accurately reflect the lands and the total acreage intended to be covered by this Lease. Accordingly, after Lessee completes its due diligence concerning the title and ownership of the Leased Premises, if Lessee determines that there is a material discrepancy in the Lease Information, Lessor hereby agrees to execute any documents requested by Lessee, including a new lease agreement, to more accurately reflect the lands, estates and interests to be covered by this Lease. Lessor hereby agrees that Lessee may make corrections or additions to this Lease, the Lease Memorandum (if any), any Unit Declaration(s), and the Order of Payment (the "**Related Documents**"), to more accurately reflect the lands, estates and acreage to be covered by this Lease, including chain-of-title, deed references and ownership interests of record, without further action by Lessor, and Lessee may notify Lessor of such corrections or additions by providing Lessor with a copy of the recorded Lease, Lease Memorandum or Unit Declaration, whereupon Lessor shall be deemed to have consented to and be bound by the same; and for this purpose, Lessor hereby appoints Lessee as Lessor's true and lawful attorney-in-fact to make such corrections or additions to this Lease and the Related Documents and to file them of record.

L. Counterparts. This Lease and any documents associated herewith may be executed by the Parties in any number of counterparts, each having the same validity and all of which shall constitute but one and the same such instrument.

[SIGNATURE AND NOTARY PAGE(S) FOLLOW]

IN WITNESS WHEREOF, the Parties, intending to be legally bound, have executed this Lease effective as of the Effective Date (whether executed by either Party on, before or after the Effective Date).

LESSOR:

[NAME]

Name: _____

Date: _____, 20____

LESSEE:

CNX GAS COMPANY LLC

By: _____

Name: _____

Title: _____

Date: _____, 20____

ACKNOWLEDGMENTS

[Individual Lessor]

STATE/Commonwealth of _____
COUNTY OF _____

The foregoing instrument was acknowledged before me on the ____ day of _____, 20__ by _____, whose name(s) is signed hereto, in my said State.

In witness hereof, I hereunto set my hand and official seal.

(Notarial Seal)

NOTARY PUBLIC
My commission expires _____

[Corporate Lessor]

STATE/Commonwealth of _____
COUNTY OF _____

The foregoing instrument was acknowledged before me on the ____ day of _____, 20__ by _____ [name of officer or representative], who acknowledged himself/herself to be the _____ of _____, a _____ [state of domicile] _____, and that he/she as such, being authorized to do so, executed the foregoing instrument on behalf of said _____, in my said State.

In witness hereof, I hereunto set my hand and official seal.

(Notarial Seal)

NOTARY PUBLIC
My commission expires _____

[Lessee]

STATE/Commonwealth of _____
COUNTY OF _____

The foregoing instrument was acknowledged before me on the _____ day of _____, 20__ by _____ [name of officer or representative], who acknowledged himself/herself to be the _____ [title of officer or representative] of CNX Gas Company LLC, a Virginia limited liability company, and that he/she as such, being authorized to do so, executed the foregoing instrument on behalf of the company, in my said State.

In witness hereof, I hereunto set my hand and official seal.

(Notarial Seal)

NOTARY PUBLIC
My commission expires _____

Prepared by/Return to:

CNX Gas Company LLC
CNX Center
1000 CONSOL Energy Drive
Canonsburg, PA 15317-6506



EXHIBIT "C" ACCOUNTING PROCEDURE JOINT OPERATIONS

1 | Attached to and made part of that certain Operating Agreement dated _____ by and between CNX Gas Company
2 | LLC as Operator, and _____, as Non-Operator
3 | _____
4 | _____

I. GENERAL PROVISIONS

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

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

1. DEFINITIONS

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

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

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

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

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

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

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

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

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

61 | "Joint Account" ^{or incurred} means the account showing the charges paid / and credits received in the conduct of the Joint Operations that are to be
62 | shared by the Parties, but does not include proceeds attributable to hydrocarbons and by-products produced under the Agreement.

64 | "Joint Operations" means all operations ~~necessary or proper~~ ^{Authorized under this agreement or corresponding JOA} for the exploration, appraisal, development, production, protection,
65 | maintenance, repair, abandonment, and restoration of the Joint Property.

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

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

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

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

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

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

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

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

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

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

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

50 2. STATEMENTS AND BILLINGS

51 ~~monthly~~
52 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
53 preceding month. Such bills shall be accompanied by statements that identify the AFE (authority for expenditure), lease or facility, and all
54 charges and credits summarized by appropriate categories of investment and expense. Controllable Material shall be separately identified
55 and fully described in detail, or at the Operator’s option, Controllable Material may be summarized by major Material classifications.
56 Intangible drilling costs, audit adjustments, and unusual charges and credits shall be separately and clearly identified.
57

58 The Operator may make available to Non-Operators any statements and bills required under Section I.2 and/or Section I.3.A (*Advances
59 and Payments by the Parties*) via email, electronic data interchange, internet websites or other equivalent electronic media in lieu of paper
60 copies. The Operator shall provide the Non-Operators instructions and any necessary information to access and receive the statements and
61 bills within the timeframes specified herein. A statement or billing shall be deemed as delivered twenty-four (24) hours (exclusive of
62 weekends and holidays) after the Operator notifies the Non-Operator that the statement or billing is available on the website and/or sent via
63 email or electronic data interchange transmission. Each Non-Operator individually shall elect to receive statements and billings
64 electronically, if available from the Operator, or request paper copies. Such election may be changed upon thirty (30) days prior written
65 notice to the Operator.
66

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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 fifteen (15) 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 ~~fifteen (15)~~ ^{thirty (30)} days of receipt of such written request.

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8
9 ~~thirty (30)~~
10 B. Except as provided below, each Party shall pay its proportionate share of all bills in full within ~~fifteen (15)~~ days of receipt date. If
11 payment is not made within such time, the unpaid balance shall bear interest compounded monthly at the prime rate published by the
12 *Wall Street Journal* on the first day of each month the payment is delinquent, plus three percent (3%), per annum, or the maximum
13 contract rate permitted by the applicable usury Laws governing the Joint Property, whichever is the lesser, plus attorney's fees, court
14 costs, and other costs in connection with the collection of unpaid amounts. If the *Wall Street Journal* ceases to be published or
15 discontinues publishing a prime rate, the unpaid balance shall bear interest compounded monthly at the prime rate published by the
16 Federal Reserve plus three percent (3%), per annum. Interest shall begin accruing on the first day of the month in which the payment
17 was due. Payment shall not be reduced or delayed as a result of inquiries or anticipated credits unless the Operator has agreed.
18 Notwithstanding the foregoing, the Non-Operator may reduce payment, provided it furnishes documentation and explanation to the
19 Operator at the time payment is made, to the extent such reduction is caused by:

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- 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
32 A. Payment of any such bills shall not prejudice the right of any Party to protest or question the correctness thereof; however, all bills
33 and statements, including payout statements, rendered during any calendar year shall conclusively be presumed to be true and correct,
34 with respect only to expenditures, after twenty-four (24) months following the end of any such calendar year, unless within said
35 period a Party takes specific detailed written exception thereto making a claim for adjustment. The Operator shall provide a response
36 to all written exceptions, whether or not contained in an audit report, within the time periods prescribed in Section I.5 (*Expenditure*
37 *Audits*).

38
39 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
40 twenty-four (24) month period following the end of the calendar year in which the original charge appeared or should have appeared
41 on the Operator's Joint Account statement or payout statement. Adjustments that may be made beyond the twenty-four (24) month
42 period are limited to adjustments resulting from the following:

- 43
44 (1) a physical inventory of Controllable Material as provided for in Section V (*Inventories of Controllable Material*), or
45 (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
46 Operator relating to another property, or
47 (3) a government/regulatory audit, or
48 (4) a working interest ownership or Participating Interest adjustment.

49
50 **5. EXPENDITURE AUDITS**

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

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

7
8 A timely filed written exception or audit report containing written exceptions (hereinafter "written exceptions") shall, with respect to
9 the claims made therein, preclude the Operator from asserting a statute of limitations defense against such claims, and the Operator
10 hereby waives its right to assert any statute of limitations defense against such claims for so long as any Non-Operator continues to
11 comply with the deadlines for resolving exceptions provided in this Accounting Procedure. If the Non-Operators fail to comply with
12 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
13 the claims brought by the Non-Operators shall lapse, and such claims shall then be subject to the applicable statute of limitations,
14 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
15 I.5.C.

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

22
23 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
24 shall reply to the lead audit company's follow-up response within ninety (90) days of receipt; provided, however, each Non-Operator
25 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
26 adequately fulfilling its duties. Unless otherwise provided for in Section I.5.E, if the Operator fails to provide substantive response
27 to an exception within this ninety (90) day period, the Operator will owe interest on that exception or portion thereof, if ultimately
28 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
29 Payments by the Parties*).

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

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

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

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

60
61 **6. APPROVAL BY PARTIES**

62
63 A. GENERAL MATTERS

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



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

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

B. AMENDMENTS

If the Agreement to which this Accounting Procedure is attached contains no contrary provisions in regard thereto, this Accounting Procedure can be amended by an affirmative vote of two (2) or more Parties, one of which is the Operator, having a combined working interest of at least sixty five percent (65 %), which approval shall be binding on all Parties, provided, however, approval of at least one (1) Non-Operator shall be required.

C. AFFILIATES

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 other, then such Affiliates shall be combined and treated as a single Party having the combined working interest or Participating Interest of such Affiliates.

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

II. DIRECT CHARGES

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

1. RENTALS AND ROYALTIES

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

2. LABOR

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

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

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

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

B. Operator's cost of holiday, vacation, sickness, and disability benefits, and other customary allowances paid to employees whose salaries and wages are chargeable to the Joint Account under Section II.2.A, excluding severance payments or other termination 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 amount of salaries and wages chargeable to the Joint Account under Section II.2.A. If percentage assessment is used, the rate shall be based on the Operator's cost experience.

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



- 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.

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23 3. MATERIAL

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

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.

48 5. SERVICES

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

52 The costs of third party Technical Services are chargeable to the extent excluded from the overhead rates under Section III (*Overhead*).
53 ~~Notwithstanding anything herein or in the Agreement to the contrary, water supply and water disposal costs and expenses are specifically
54 excluded from the overhead rate and will be charged directly to the Joint Account.~~

57 6. EQUIPMENT AND FACILITIES FURNISHED BY OPERATOR

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

- 59 A. The Operator shall charge the Joint Account for use of Operator-owned equipment and facilities, including but not limited to
60 production facilities, ~~Shore Base Facilities, Offshore Facilities,~~ and Field Offices, at rates commensurate with the costs of ownership
61 and operation. The cost of Field Offices shall be chargeable to the extent the Field Offices provide direct service to personnel who
62 are chargeable pursuant to Section II.2.A (*Labor*). Such rates may include labor, maintenance, repairs, other operating expense,
63 insurance, taxes, depreciation using straight line depreciation method, and interest on gross investment less accumulated depreciation
64 not to exceed ~~eight~~ percent (~~8~~%) per annum; provided, however, depreciation shall not be charged when the
65
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
5 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
6 of the Joint Property, less twenty percent (20%). If equipment and facilities are charged under this Section II.6.B, the Operator shall
7 adequately document and support commercial rates and shall periodically review and update the rate and the supporting
8 documentation. For automotive equipment, the Operator may elect to use rates published by the Petroleum Motor Transport
9 Association (PMTA) or such other organization recognized by COPAS as the official source of rates.

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 \$ 50,000.00. 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 \$ 100,000.00 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
31 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
32 result of such omission shall be the amount established as the Operator's expenditure limitation in the Agreement. If the Agreement
33 does not contain an Operator's expenditure limitation, the amount deemed adopted by the Parties as a result of such omission shall be
34 zero dollars (\$ 0.00).

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

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

40
41 The Operator shall furnish the Non-Operator written notice of damages or losses incurred as soon as practicable after a report has been
42 received by the Operator.
43

44 **9. LEGAL EXPENSE**

45
46 Recording fees and costs of handling, settling, or otherwise discharging litigation, claims, and liens incurred in or resulting from
47 operations under the Agreement, or necessary to protect or recover the Joint Property, to the extent permitted under the Agreement. Costs
48 of the Operator's or Affiliate's legal staff or outside attorneys, including fees and expenses, are not chargeable unless approved by the
49 Parties pursuant to Section I.6.A (*General Matters*) or otherwise provided for in the Agreement.
50

51 ~~Notwithstanding the foregoing paragraph, costs for procuring abstracts, fees paid to outside attorneys for title examinations and/or outside landmen (including~~
52 preliminary, supplemental, shut-in royalty opinions, division order title opinions), and curative work shall be chargeable to the extent
53 permitted as a direct charge in the Agreement.
54

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55
56 **10. TAXES AND PERMITS**

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

61
62 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
63 notwithstanding any contrary provisions, the charges to the Parties will be made in accordance with the tax value generated by each Party's
64 working interest.
65
66



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 **11. INSURANCE**

10
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 **13. ECOLOGICAL, ENVIRONMENTAL, AND SAFETY**

30
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
37 Costs to provide or have available pollution containment and removal equipment plus actual costs of control and cleanup and resulting
38 responsibilities of oil and other spills as well as discharges from permitted outfalls as required by applicable Laws, or other pollution
39 containment and removal equipment deemed appropriate by the Operator for prudent operations, are directly chargeable.
40

41 **14. ABANDONMENT AND RECLAMATION**

42
43 Costs incurred for abandonment and reclamation of the Joint Property, including costs required by lease agreements or by Laws.
44

45 **15. OTHER EXPENDITURES**

46
47 Any other expenditure not covered or dealt with in the foregoing provisions of this Section II (*Direct Charges*), or in Section III
48 (*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
49 Joint Operations. Charges made under this Section II.15 shall require approval of the Parties, pursuant to Section I.6.A (*General Matters*).
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
57 Functions included in the overhead rates regardless of whether performed by the Operator, Operator's Affiliates or third parties and regardless
58 of location, shall include, but not be limited to, costs and expenses of:
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:

- Horizontal Drilling / Well Rate per month \$14,000.00 (prorated for less than a full month)
- Horizontal Producing / Well Rate per month \$1,400.00

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(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.



- 1 (b) Charges for any well undergoing any type of workover, recompletion, and/or abandonment for a period of five (5) or more
2 consecutive work-days shall be made at the Drilling Well Rate. Such charges shall be applied for the period from date
3 operations, with rig or other units used in operations, commence through date of rig or other unit release, except that no charges
4 shall be made during suspension of operations for fifteen (15) or more consecutive calendar days.
- 5 (3) Application of Overhead—Producing Well Rate shall be as follows:
6
- 7 (a) An active well that is produced, injected into for recovery or disposal, or used to obtain water supply to support operations for
8 any portion of the month shall be considered as a one-well charge for the entire month.
- 9 (b) Each active completion in a multi-completed well shall be considered as a one-well charge provided each completion is
10 considered a separate well by the governing regulatory authority.
- 11 (c) A one-well charge shall be made for the month in which plugging and abandonment operations are completed on any well,
12 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
13 or not the well has produced.
- 14 (d) An active gas well shut in because of overproduction or failure of a purchaser, processor, or transporter to take production shall
15 be considered as a one-well charge provided the gas well is directly connected to a permanent sales outlet.
- 16 (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
17 charge.
- 18 (4) The well rates shall be adjusted on the first day of April each year following the effective date of the Agreement; provided,
19 however, if this Accounting Procedure is attached to or otherwise governing the payout accounting under a farmout agreement, the
20 rates shall be adjusted on the first day of April each year following the effective date of such farmout agreement. The adjustment
21 shall be computed by applying the adjustment factor most recently published by COPAS. The adjusted rates shall be the initial or
22 amended rates agreed to by the Parties increased or decreased by the adjustment factor described herein, for each year from the
23 effective date of such rates, in accordance with COPAS MFI-47 (“Adjustment of Overhead Rates”).

30 C. ~~OVERHEAD—PERCENTAGE BASIS~~

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

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

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

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

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

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

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

49 2. ~~OVERHEAD—MAJOR CONSTRUCTION AND CATASTROPHE~~

50 To compensate the Operator for overhead costs incurred in connection with a Major Construction project or Catastrophe, the Operator
51 shall either negotiate a rate prior to the beginning of the project, or shall charge the Joint Account for overhead based on the following
52 rates for any Major Construction project in excess of the Operator’s expenditure limit under the Agreement, or for any Catastrophe
53 regardless of the amount. If the Agreement to which this Accounting Procedure is attached does not contain an expenditure limit, Major
54 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 I (1) 7 % of total costs if such costs are less than \$100,000; plus
11
12 I (2) 5 % of total costs in excess of \$100,000 but less than \$1,000,000; plus
13
14 I (3) 4 % 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 I (1) 5 % of total costs if such costs are less than \$100,000; plus
19
20 I (2) 3 % of total costs in excess of \$100,000 but less than \$1,000,000; plus
21
22 I (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.

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 46 IV. MATERIAL PURCHASES, TRANSFERS, AND DISPOSITIONS

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

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.



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

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

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

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

60
61 **C. TAXES**

62
63 Sales and use taxes shall be added to the Material transfer price using either the method contained in the COPAS Computerized
64 Equipment Pricing System (CEPS) or the applicable tax rate in effect for the Joint Property at the time and place of transfer. In either
65 case, the Joint Account shall be charged or credited at the rate that would have governed had the Material been a direct purchase.
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 1.6.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").



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 **B. SHOP-MADE ITEMS**

40 Items fabricated by the Operator's employees, or by contract laborers under the direction of the Operator, shall be priced using the
41 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
42 scrap or junk account, the Material shall be priced at either twenty-five percent (25%) of the current price as determined in Section
43 IV.2.A (*Pricing*) or scrap value, whichever is higher. In no event shall the amount charged exceed the value of the item
44 commensurate with its use.
45

46 **C. MILL REJECTS**

47 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
48 Section IV.2 (*Transfers*). Line pipe converted to casing or tubing with casing or tubing couplings attached shall be priced as K-55/J-
49 55 casing or tubing at the nearest size and weight.
50

51 **V. INVENTORIES OF CONTROLLABLE MATERIAL**

52 The Operator shall maintain records of Controllable Material charged to the Joint Account, with sufficient detail to perform physical inventories.
53

54 Adjustments to the Joint Account by the Operator resulting from a physical inventory of Controllable Material shall be made within twelve (12)
55 months following the taking of the inventory or receipt of Non-Operator inventory report. Charges and credits for overages or shortages will be
56 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
57 physical inventory unless the inventorying Parties can provide sufficient evidence another Material condition applies.
58



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 a part of that certain Joint Operating Agreement dated _____, by and between CNX Gas Company LLC as Operator and _____ as Non-Operator.

INSURANCE AND INDEMNITY

1. At all times while operations are conducted under this Agreement, Operator shall maintain for the benefit of all parties insurance of the types and in the maximum amounts shown below. A proportionate part of the premiums, determined on an equitable basis consistent with Operator's accounting practices, will be charged to the Joint Account.
 - (a) Workers' compensation insurance in full compliance with all applicable state and federal laws and regulations.
 - (b) Employer's liability insurance covering injury or death to any employee who may be outside the scope of the workers' compensation statute of the state in which the work is performed in the limits of \$1,000,000 per accident.
 - (c) Comprehensive general liability insurance for completed operations and broad form contractual liability as respects any contract into which Operator may enter under the terms of this Agreement with limits per occurrence of \$1,000,000 for bodily injury and \$1,000,000 for property damage.
 - (d) Automobile liability insurance covering owned, non-owned and hired automotive equipment with limits for bodily injury of \$1,000,000 per person and \$1,000,000 per occurrence and for property damage of \$1,000,000.
 - (e) Operator shall carry Operator's extra expense insurance, with respect to drilling of new wells and major workovers, covering the costs of controlling a blowout, the costs of redrilling the well, certain other related costs, seepage and pollution liability. The limits for this insurance will vary according to depth and location of the well. Non-Operators not wishing to be covered under this policy must notify Operator prior to spud date and each Non-Operator who declines coverage agrees to be responsible for his proportionate share of the losses covered by the policy, anything in this Agreement to the contrary notwithstanding.
2. Non-Operators shall be named as additional insured on the liability insurance policies but only with respect to the performance of all work hereunder.
3. All insurance shall be maintained in force during the term of this Agreement and must provide that it may not be canceled, altered or amended without 30 days prior written notice to all parties. Operator agrees to have its insurance carrier furnish certificates to Non-Operators of insurance evidencing the insurance coverages.
4. Operator and Non-Operators mutually agree to waive subrogation in favor of each other on all insurance carried by each party and/or to obtain waivers from the insurance carrier if required by the insurance contract. If a waiver is not obtained, the party failing to do so shall indemnify the other party for any claim by an insurance carrier arising out of subrogation.
5. Non-Operators Agree that the limits and coverage carried by Operator are adequate and they shall hold Operator harmless if any claim exceeds the limits or is not covered

INSTRUCTIONS FOR USE OF GAS BALANCING AGREEMENT FORM

7 GENERAL

8 This Gas Balancing Agreement form is intended to be used as Exhibit "E" to the 1977, 1982 and 1989 A.A.P.L. Form
9 610 Model Form Operating Agreements. It is also generally suitable for use with other forms of operating agreements.
10 However, before using this form, both it and the operating agreement in question should be reviewed and revised as required
11 to ensure consistency.

12 If this form is used as an exhibit to an A.A.P.L. Form 610 Model Form Operating Agreement or other operating
13 agreement, the provisions in Section 15 (Counterparts), the "IN WITNESS WHEREOF" paragraph on page 6 and the
14 signature lines and acknowledgments on page 7 should be omitted.

15 This Gas Balancing Agreement may also be executed as a separate agreement for properties covered by an existing
16 operating agreement where there is no gas balancing agreement or where the one employed is deemed inadequate. In that
17 event, the properties subject to the form will have to be described, and the provisions of Section 15 (Counterparts), the "IN
18 WITNESS WHEREOF" on page 6 and the signature lines and acknowledgments will have to be employed.

19 The description of the area covered by the Agreement may be included in the definition of the Balancing Area in Section
20 1.02. Care should be taken in drafting this description, however, because it may be desirable to cover more than one Balancing
21 Area. Such a definition might, for example, read as follows:

22 Each well subject to that Operating Agreement dated _____,
23 covering _____ that produces gas or is allocated a share of gas
24 production. If a single well is completed in two or more reservoirs, such well shall be
25 considered a separate well with respect to, but only with respect to, each reservoir from
26 which the gas production is not commingled in the wellbore.

27 This Gas Balancing Agreement contains both "alternative" and "optional" provisions. In the case of alternative
28 provisions, it will generally be necessary to select one alternative in order to make the Gas Balancing Agreement effective.
29 Provisions which are designated as optional (or as Option 1, 2, etc.) may or may not be used. **Note that, in order for an
30 Alternative or Option to be selected and effective, it must be checked. If, however, an Alternative is not selected,
31 "Alternative 1" in each instance will be deemed to have been adopted by the Parties, but if an Option is not selected, it
32 will not form a part of the Gas Balancing Agreement. See Section 12.6.**

33 **HEADING** - Indicate the applicable Operating Agreement and other information. If the Gas Balancing Agreement is to be
34 used without an Operating Agreement, the heading on page 1 should be modified appropriately, and the following references
35 to the "Operating Agreement" should be deleted or modified appropriately: Section 1.12; Section 7.1; Section 9; Section 12.4;
36 Section 13.1; and Section 13.2.

37 **SECTION 1.02** - Select the Balancing Area to be used, or insert a description of the Balancing Area. As a general rule, the
38 use of a mineral lease as a Balancing Area will only be appropriate in certain situations involving offshore wells.

39 **SECTION 1.16** - This definition should be used only if one of the optional seasonal limitation provisions in Section 4.2 is
40 employed. The specific months during which makeup is to be restricted should be included, e.g., "the months of November,
41 December, and the following January and February."

42 **SECTION 2.1** - The parties should decide whether the basis of balancing in the Balancing Area will be in Mcfs or MMBtus.
43 One of the two Alternatives stipulated **MUST** be selected to avoid an automatic election that Alternative 1 applies.

44 **SECTION 2.2** - Since most gas is now decontrolled, the primary purpose of this provision is to provide for separate
45 application of the form to different price categories in the event that price controls are imposed in the future by
46 governmental entity.

47 **SECTION 3.5** - This provision is intended to limit Overproduction in order to keep a Party from getting too far out of
48 balance. It should be noted that this Section will only have an impact if a Party owns less than a 1/3 working interest in the
49 Balancing Area, since under it a party owning a 1/3 interest will be entitled to take 300%, $x \frac{1}{3} = 100\%$.

50 **SECTION 4.1** - Select the number of days' notification that an Underproduced Party must give prior to making up Gas. Also,
51 indicate the percentage of each Overproduced Parties' Gas that Underproduced Parties will be allowed to make up. The
52 percentages should be identical.

53 **SECTION 4.2** - The form sets out two Options for imposing seasonal limitations on making up Gas. It should be noted that
54 it is NOT required that any seasonal limitation be included. If Option 1 is selected, select the number of months prior to the
55 Winter Period that will be used to determine how much Gas an Underproduced Party may make up during the Winter
56 Period. This number and the number of months in the Winter Period (as defined in Section 1.16) should add up to 12 or
57 less. If Option 2 is selected, indicate the percentage of an Overproduced Party's Gas that an Underproduced Party may make
58 up during the Winter Period. This percentage should be lower than the percentage set out in Section 4.1.

59 **SECTION 4.3** - Select the percentage of an Overproduced Party's Gas which it should be required to make available for make
60 up once it has produced all of its share of ultimately recoverable reserves. This percentage should be greater than the
61 percentage set out in Section 4.1.

62 **SECTION 6.2** - One of the two Alternatives stipulated **MUST** be selected as the basis upon which Royalty is to be calculated
63 and paid in order to avoid an automatic election that Alternative 1 applies.

64 **SECTION 7.3** - One of the two Alternatives stipulated for payment of amounts due under a cash settlement **MUST** be
65 selected in order to avoid an automatic election that Alternative 1 applies. Note that Section 7.3.1 is optional, and may
66 **ONLY** be used with Section 7.3, Alternative 2.

67 **SECTION 7.4** - One of the two alternatives stipulated for determining proceeds received by an Overproduced Party for cash
68 settlement purposes **MUST** be selected in order to avoid an automatic election that Alternative 1 applies.

69 **SECTION 7.5.1 through 7.5.2** - Before selecting any of these provisions, the Parties should review the relevant gas processing
70 arrangements for the Gas. Section 7.5.2, Option 1, contemplates that all wellhead MMBtus of Overproduction(will be valued
71 at the gas price per MMBtu received by the Overproduced Party, without regard to whether any of the gas may have been
72 processed. Section 7.5.2, Option 2, on the other hand, would include any enhanced or impaired values resulting from
73 processing in calculating a valuation for the Overproduction. Note that if Section 7.5.2, Option 1, is selected, and residue gas
74 to be sold on an MMBtu basis, it will be necessary to measure the number of MMBtus produced at the well (even if the

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

1 parties have elected to balance on Mcfs), in order to determine the total value of Overproduction.
2 SECTION 7.7 - Select the interest rate payable for unpaid amounts owed pursuant to a cash settlement.
3 SECTION 7.9 - In the event that the parties anticipate that Overproduction may be subject to a potential refund by an
4 appropriate governmental authority, the Parties may choose this provision.
5 SECTION 7.10- If the Parties adopt this provision, an Overproduced Party may make a cash settlement with Underproduced
6 Parties for all or part of outstanding gas imbalances as often as once every twenty-four (24) months.
7 SECTION 8 - Select the number of days' prior notification required for well tests, as well as the length of such tests.
8 SECTION 12.9 - Select the appropriate method for computing and reporting income to the Internal Revenue Service based
9 on the "entitlements" or "sales" methods.
10 SECTION 13 - The purpose of this Section is to stipulate the rights of Parties in the event that any Party sells, exchanges,
11 transfers or assigns its interest in the Balancing Area. Section 13.2 gives the Underproduced Party an option to demand a
12 cash settlement if an Overproduced Party sells its interest, and the number of days' notice and response should be selected to
13 implement this procedure.
14 SECTION 14 - This provision is intended to provide the Parties an opportunity to modify or supplement any of the Gas
15 balancing Agreement's provisions.
16 SECTION 15 - This provision is to be utilized ONLY if the Gas Balancing Agreement is NOT agreed to contemporaneously
17 with the execution of an A.A.P.L. Form 610 Model Form Operating Agreement or another suitable operating agreement. If
18 the Gas Balancing Agreement is agreed to contemporaneously with any such operating agreement, Section 15 should be
19 omitted. Otherwise, the Parties must determine the appropriate Percentage Interest which must execute the form to make it
20 effective and the date by which such interests must execute it.
21 SIGNATURE ELEMENT - The "IN WITNESS WHEREOF," signature and attest/witness elements are ONLY to be utilized
22 if the Gas Balancing Agreement is NOT agreed to contemporaneously with the execution of an A.A.P.L. Form 610 Model
23 Form Operating Agreement or another suitable operating agreement. If the Gas Balancing Agreement is agreed to
24 contemporaneously with any such operating agreement, the "IN WITNESS WHEREOF," signature and attest/witness
25 elements should be omitted. Otherwise, these items should be completed in an appropriate fashion, and any appropriate
26 amendment made to the heading of the Gas Balancing Agreement.

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

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

10 **OPERATING AGREEMENT DATED** _____

11 **BY AND BETWEEN** CNX Gas Company LLC as Operator ,

12 **AND** _____ **, as Non-Operator** ("OPERATING AGREEMENT")

13 **RELATING TO THE** _____ **AREA,**

14 Monroe **COUNTY/PARISH, STATE OF** Ohio

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15
16 **1. DEFINITIONS**

17 The following definitions shall apply to this Agreement:

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

22 1.02 "Balancing Area" shall mean (select one):

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

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

27

28 _____
29 _____
30 _____

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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64 **2. BALANCING AREA**

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

68 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
69 maximum lawful prices, any Gas not subject to price controls shall be considered as produced from a single Balancing Area
70 and Gas subject to each maximum lawful price category shall be considered produced from a separate Balancing Area.

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

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

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

3 3.2 Each Party shall make a reasonable, good faith effort to take its Full Share of Current Production each month, to the
4 extent that such production is required to maintain leases in effect, to protect the producing capacity of a well or reservoir, to
5 preserve correlative rights, or to maintain oil production.

6 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
7 right of the other Parties to make up for Underproduction as provided herein), the other Parties shall be entitled to take any
8 Gas which such Party fails to take. To the extent practicable, such Gas shall be made available initially to each Underproduced
9 Party in the proportion that its Percentage Interest in the Balancing Area bears to the total Percentage Interests of all
10 Underproduced Parties desiring to take such Gas. If all such Gas is not taken by the Underproduced Parties, the portion not
11 taken shall then be made available to the other Parties in the proportion that their respective Percentage Interests in the
12 Balancing Area bear to the total Percentage Interests of such Parties.

13 3.4 All Gas taken by a Party in accordance with the provisions of this Agreement, regardless of whether such Party is
14 underproduced or overproduced, shall be regarded as Gas taken for its own account with title thereto being in such taking
15 Party.

16 3.5 Notwithstanding the provisions of Section 3.3 hereof, no Overproduced Party shall be entitled in any month to take any
17 Gas in excess of three hundred percent (300%) of its Percentage Interest of the Balancing Area's then-current Maximum
18 Monthly Availability; provided, however, that this limitation shall not apply to the extent that it would preclude production
19 that is required to maintain leases in effect, to protect the producing capacity of a well or reservoir, to preserve correlative
20 rights, or to maintain oil production. "Maximum Monthly Availability" shall mean the maximum average monthly rate of
21 production at which Gas can be delivered from the Balancing Area, as determined by the Operator, considering the maximum
22 efficient well rate for each well within the Balancing Area, the maximum allowable(s) set by the appropriate regulatory agency,
23 mode of operation, production facility capabilities and pipeline pressures.

24 3.6 In the event that a Party fails to make arrangements to take its Full Share of Current Production required to be
25 produced to maintain leases in effect, to protect the producing capacity of a well or reservoir, to preserve correlative rights, or
26 to maintain oil production, the Operator may sell any part of such Party's Full Share of Current Production that such Party fails
27 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
28 reasonable marketing, compression, treating, gathering or transportation costs incurred directly in connection with the sale of
29 such Full Share of Current Production. In making the sale contemplated herein, the Operator shall be obligated only to obtain
30 such price and conditions for the sale as are reasonable under the circumstances and shall not be obligated to share any of its
31 markets. Any such sale by Operator under the terms hereof shall be only for such reasonable periods of time as are consistent
32 with the minimum needs of the industry under the particular circumstances, but in no event for a period in excess of one
33 year. Notwithstanding the provisions of Article 3.4 hereof, Gas sold by Operator for a Party under the provisions hereof shall
34 be deemed to be Gas taken for the account of such Party.

35 **4. IN-KIND BALANCING**

36 4.1 Effective the first day of any calendar month following at least Thirty (30) days' prior
37 written notice to the Operator, any Underproduced Party may begin taking, in addition to its Full Share of Current
38 Production and any Makeup Gas taken pursuant to Section 3.3 of this Agreement, a share of current production determined
39 by multiplying Twenty percent (20 %) of the Full Shares of Current Production of all Overproduced Parties by
40 a fraction, the numerator of which is the Percentage Interest of such Underproduced Party and the denominator of which
41 is the total of the Percentage Interests of all Underproduced Parties desiring to take Makeup Gas. In no event will an
42 Overproduced Party be required to provide more than Twenty percent (20 %) of its Full Share of Current
43 Production for Makeup Gas. The Operator will promptly notify all Overproduced Parties of the election of an Underproduced
44 Party to begin taking Makeup Gas.

45 4.2 (Optional - Seasonal Limitation on Makeup - Option 1) Notwithstanding the provisions of Section 4.1, the
46 average monthly amount of Makeup Gas taken by an Underproduced Party during the Winter Period pursuant to Section 4.1
47 shall not exceed the average monthly amount of Makeup Gas taken by such Underproduced Party during the
48 _____ (_____) months immediately preceding the Winter Period.

49 4.2 (Optional - Seasonal Limitation on Makeup - Option 2) Notwithstanding the provisions of Section 4.1, no
50 Overproduced Party will be required to provide more than Fifteen percent (15 %) of its Full Share
51 of Current Production for Makeup Gas during the Winter Period.

52 4.3 (Optional) Notwithstanding any other provision of this Agreement, at such time and for so long as Operator, or
53 (insofar as concerns production by the Operator) any Underproduced Party, determines in good faith that an Overproduced
54 Party has produced all of its share of the ultimately recoverable reserves in the Balancing Area, such Overproduced Party may
55 be required to make available for Makeup Gas, upon the demand of the Operator or any Underproduced Party, up to
56 _____ percent (_____ %) of such Overproduced Party's Full Share of Current Production.

57 **5. STATEMENT OF GAS BALANCES**

58 5.1 The Operator will maintain appropriate accounting on a monthly and cumulative basis of the volumes of Gas that each
59 Party is entitled to receive and the volumes of Gas actually taken or sold for each Party's account. Within forty-five (45) days
60 after the month of production, the Operator will furnish a statement for such month showing (1) each Party's Full Share of
61 Current Production, (2) the total volume of Gas actually taken or sold for each Party's account, (3) the difference between
62 the volume taken by each Party and that Party's Full Share of Current Production, (4) the Overproduction or
63 Underproduction of each Party, and (5) other data as recommended by the provisions of the Council of Petroleum
64 Accountants Societies Bulletin No.24, as amended or supplemented hereafter. Each Party taking Gas will promptly provide to
65 the Operator any data required by the Operator for preparation of the statements required hereunder.

66 5.2 If any Party fails to provide the data required herein for four (4) consecutive production months, the Operator, or
67 where the Operator has failed to provide data, another Party, may audit the production and Gas sales and transportation
68 volumes of the non-reporting Party to provide the required data. Such audit shall be conducted only after reasonable notice and
69 during normal business hours in the office of the Party whose records are being audited. All costs associated with such audit
70 will be charged to the account of the Party failing to provide the required data.

71 **6. PAYMENTS ON PRODUCTION**

72 6.1 Each Party taking Gas shall pay or cause to be paid all production and severance taxes due on all volumes of Gas
73 actually taken by such Party.

74 6.2 (Alternative 1 - Entitlements) Each Party shall pay or cause to be paid all Royalty due with respect to Royalty

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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

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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 Intentionally Omitted Interest compounded at the rate of _____ percent (_____ %) 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.

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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 Seven (7) days' prior written notice to the Operator and shall last no longer than Twenty-Four (24) 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

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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
32 working interest in the Balancing Area when such Party is an Underproduced or Overproduced Party, the assignment or other
33 act of transfer shall, insofar as the Parties hereto are concerned, include all interest of the assigning or transferring Party in the
34 Gas, all rights to receive or obligations to provide or take Makeup Gas and all rights to receive or obligations to make any
35 monetary payment which may ultimately be due hereunder, as applicable. Operator and each of the other Parties hereto shall
36 thereafter treat the assignment accordingly, and the assigning or transferring Party shall look solely to its assignee or other
37 transferee for any interest in the Gas or monetary payment that such Party may have or to which it may be entitled, and shall
38 cause its assignee or other transferee to assume its obligations hereunder.

39 13.2 (**Optional - Cash Settlement Upon Assignment**) Notwithstanding anything in this Agreement (including but not
40 limited to the provisions of Section 13.1 hereof) or in the Operating Agreement to the contrary, and subject to the provisions
41 of Section 13.3 hereof, in the event an Overproduced Party intends to sell, assign, exchange or otherwise transfer any of its
42 interest in a Balancing Area, such Overproduced Party shall notify in writing the other working interest owners who are
43 Parties hereto in such Balancing Area of such fact at least _____ (_____) days prior to closing the
44 transaction. Thereafter, any Underproduced Party may demand from such Overproduced Party in writing, within
45 _____ (_____) days after receipt of the Overproduced Party's notice, a cash settlement of its
46 Underproduction from the Balancing Area. The Operator shall be notified of any such demand and of any cash settlement
47 pursuant to this Section 13, and the Overproduction and Underproduction of each Party shall be adjusted accordingly. Any cash
48 settlement pursuant to this Section 13 shall be paid by the Overproduced Party on or before the earlier to occur (i) of sixty (60)
49 days after receipt of the Underproduced Party's demand or (ii) at the closing of the transaction in which the Overproduced
50 Party sells, assigns, exchanges or otherwise transfers its interest in a Balancing Area on the same basis as otherwise set forth in
51 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
52 after the Overproduced Party's sale, assignment, exchange or transfer of its interest in the Balancing Area for any amounts not
53 paid. Provided, however, if any Underproduced Party does not so demand such cash settlement of its Underproduction from the
54 Balancing Area, such Underproduced Party shall look exclusively to the assignee or other successor in interest of the
55 Overproduced Party giving notice hereunder for the satisfaction of such Underproduced Party's Underproduction in accordance
56 with the provisions of Section 13.1 hereof.

57 13.3 The provisions of this Section 13 shall not be applicable in the event any Party mortgages its interest or disposes of its
58 interest by merger, reorganization, consolidation or sale of substantially all of its assets to a subsidiary or parent company, or to
59 any company in which any parent or subsidiary of such Party owns a majority of the stock of such company.

60 **14. OTHER PROVISIONS**

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1 **15. COUNTERPARTS**

2 This Agreement may be executed in counterparts, each of which when taken with all other counterparts shall constitute
3 a binding agreement between the Parties hereto; provided, however, that if a Party or Parties owning a Percentage Interest in
4 the Balancing Area equal to or greater than a _____ percent (_____%) therein fail(s) to execute this
5 Agreement on or before _____, this Agreement shall not be binding upon any Party and shall be of
6 no further force and effect.

7 IN WITNESS WHEREOF, this Agreement shall be effective as of the _____ day of _____, _____.

8

9

10 **ATTEST OR WITNESS:**

OPERATOR

11

CNX Gas Company LLC

12

BY: _____

13

14

Type or print name

15

Title _____

16

Date _____

17

Tax ID or S.S. No. _____

18

19

NON-OPERATORS

20

21

BY: _____

22

23

Type or print name

24

Title _____

25

Date _____

26

Tax ID or S.S. No. _____

27

28

29

BY: _____

30

31

Type or print name

32

Title _____

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Date _____

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Tax ID or S.S. No. _____

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ACKNOWLEDGMENTS

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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.

Individual acknowledgment:

State of _____)

_____) ss.

County of _____)

This instrument was acknowledged before me on _____
_____ by _____

(Seal, if any) _____

Title (and Rank) _____

My commission expires: _____

Acknowledgment in representative capacity:

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 "F"

Attached to and made part of that certain Joint Operating Agreement dated _____
_____, by and between CNX Gas Company LLC as Operator and _____
_____ as Non-Operator.

NONDISCRIMINATION: In Performance of this contract, Operator shall not engage in any conduct or practice which violates any applicable law, order or regulation prohibiting discrimination against any person by reason of his race, religion, color, sex, national origin or age. The Operator further agrees to comply fully with the non-discrimination provision of Section 202, Executive Order No. 11246 (30 FR 12139) as amended, which are hereby included in this contract by reference.

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

In re the Matter of the Application of :
CNX Gas Company LLC, for :
Unit Operation : Application Date: August 16, 2016
:
SWITZ7HSU Unit :

**PREPARED TESTIMONY OF JOHN WYATT
ON BEHALF OF CNX GAS COMPANY, LLC (“CNX”)
(GEOLOGIST)**

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Vincent I. Holzhall (0074901)
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Attorneys for Applicant,
CNX Gas Company, LLC

PREPARED TESTIMONY OF JOHN WYATT

1 **INTRODUCTION**

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

3 A1. My name is John Wyatt and my business address is 1000 CONSOL Energy Drive,
4 Canonsburg, Pennsylvania 15317. I am a Geologist with CNX.

5 **Q2. What is your educational background?**

6 A2. I received both a Bachelor of Science and a Master's degree in Geoscience from the
7 Virginia Polytechnic Institute and State University.

8 **Q3. Would you briefly describe your professional experience?**

9 A3. I have worked for CNX as a geologist since 2010.

10 **Q4. Do you have experience in other shale basins?**

11 A4. I started working on shallow oil and gas wells in the Illinois Basin, then I moved to
12 the Marcellus Shale in the Appalachian Basin in Pennsylvania. Most recently, I
13 have been part of the CNX team that has drilled and completed over 40 laterals in
14 the Utica Shale in the Ohio portion of the Appalachian Basin to date.

15 **Q5. What do you do as a Geologist for CNX?**

16 A5. I am responsible for building and maintaining the Utica Earth Model. This
17 incorporates geophysics, petrophysics, geomechanics, structure, facies and
18 stratigraphy into a 3D visual representation of the subsurface. I design and
19 coordinate data gathering from wireline logging and core analysis that feeds the
20 model and use it to drive exploration and development of the best areas first. I
21 create the geological prognosis and geological overviews for drilling. I work with
22 completions and engineering to model completion designs and reservoir
23 production. I also build the initial lateral layouts and supervise geosteering of
24 laterals.

25 **Q6. Are you a member of any professional associations?**

26 A6. Yes. I am a member of the American Association of Petroleum Geologists and the
27 Society of Petroleum Engineers.

28 **Q7. What is the purpose of your testimony today?**

29 A7. I am testifying in support of the *Application of CNX Gas Company, LLC for Unit*
30 *Operation* filed with respect to the SWITZ7HSU Unit. My testimony will show

1 that the Unitized Formation described in the Application is part of a pool and thus
2 an appropriate subject of unitization. Additionally, my testimony will support the
3 Unit Plan's allocation of unit production and expenses to separately owned tracts
4 on a surface-acreage basis, based on the unit area's nearly uniform thickness and
5 substantially identical geological characteristics throughout.

6 **UNITIZED FORMATION IS PART OF A POOL.**

7 **Q8. To begin, would you tell me what a "pool" is?**

8 A8. In common usage, a pool is understood to be an accumulation of hydrocarbons
9 trapped in the pore spaces of a rock unit. This is consistent with the Ohio statutory
10 definition of a pool as "an underground reservoir containing a common
11 accumulation of oil or gas, or both, but does not include a gas storage reservoir."

12 **Q9. Is this definition understood the same way for conventional and
13 unconventional resources?**

14 A9. No, it is not. In a conventional reservoir, the reservoir rock has enough porosity
15 (the void space in the rock) and permeability (the measure of how well connected
16 the pores are) to flow oil and gas under the natural reservoir energy. In
17 unconventional reservoirs, while there is sufficient porosity to hold oil and gas, the
18 reservoir lacks permeability so that oil and gas cannot flow naturally from one pore
19 to another and into the well bore. Modern hydraulic fracturing techniques create
20 permeability within the unconventional reservoir rock by cracking the rock and
21 filling the fractures with sand. These fractures allow the entrapped hydrocarbons to
22 flow from the pore spaces in the reservoir rock into the sand-filled fractures and
23 then into the well bore.

24 **Q10. How is the Unitized Formation defined for the SWITZ7HSU Unit?**

25 A10. It is defined as the subsurface portion of the Unit located from fifty (50) feet above
26 the top of the Utica formation to fifty (50) feet below the base of the Point Pleasant
27 formation, an interval believed to be approximately 10,005 feet true vertical depth
28 (TVD) to 10,306 feet TVD (calculated from the surface elevation of the pad at
29 1,191'). We refer to this as the "Utica Formation" although it is actually comprised
30 of three constituent members: the Utica Shale, the Point Pleasant and the
31 Lexington. The Utica Formation is a common source of supply.

1 **Q11. Is the Unitized Formation considered to be a conventional or unconventional**
2 **resource, and why?**

3 A11. The Unitized Formation is considered an unconventional resource since the
4 reservoir rock contains insufficient permeability to flow hydrocarbons without
5 hydraulic fracturing.

6 **Q12. Generally, what kind of analysis, including what type of data, would a**
7 **geologist review in order to assess whether an unconventional resource is a**
8 **pool or part of a pool?**

9 A12. A geologist would use wireline logs to determine the thickness, porosity,
10 hydrocarbon content and geographic distribution of an unconventional resource.
11 Additionally, core samples are taken from wells and analyzed for porosity,
12 permeability, mineral content and hydrocarbon saturations.

13 **Q13. Did you do that here with respect to the SWITZ7HSU Unit?**

14 A13. Yes.

15 **Q14. Do you have an opinion on whether or not the Unitized Formation**
16 **contemplated by the SWITZ7HSU Unit constitutes a pool or part of a pool?**

17 A14. Based on my knowledge and professional experience, it is my opinion that the
18 Unitized Formation qualifies as part of a pool.

19 **Q15. Why?**

20 A15. My interpretation of the geologic data that I mentioned above, such as wireline well
21 logs, indicates that Utica Formation should be present and continuous across the
22 SWITZ7HSU Unit. This indicates to me that the Unitized Formation is part of a
23 pool. See Exhibits 2-A and 2-B, attached hereto, for more detail.

24 **Q16. And is this a commonly accepted method of analysis in your profession for**
25 **determining whether a pool or part of a pool exists?**

26 A16. Yes.

27 **Q17. The definition of the Unitized Formation above references the Utica,**
28 **Lexington and Point Pleasant formations. Do you anticipate production from**
29 **all three of these formations?**

30 A17. Yes. The Utica Formation is considered a continuous section of hydrocarbon
31 bearing rock. Accordingly, we anticipate producing hydrocarbons from all of its

1 constituent members – the Utica, Point Pleasant and Lexington. Further, it will be
2 impossible to identify whether the hydrocarbons were originally in place in the
3 Utica, the Point Pleasant or the Lexington.

4 **ALLOCATION METHODOLOGY**

5 **Q18. Production and expenses are allocated to the separate tracts in the**
6 **SWITZ7HSU Unit under the Unit Plan on a surface-acreage basis. Do you**
7 **have an opinion on whether that allocation method is appropriate, given your**
8 **education and professional experience?**

9 A18. Yes. In my opinion, that allocation method is appropriate and consistent with that
10 of other states that have pooling and unitization rules in their oil and gas statutes.

11 **Q19. Why?**

12 A19. It is appropriate here because the Utica and Point Pleasant formations are expected
13 to be of similar thickness and productive quality across the unit.

14 **Q20. In your experience, is this a common method for allocating production and**
15 **expenses?**

16 A20. Yes. It is common in other states and basins with similar reservoirs to allocate
17 production and expenses on a surface-acreage basis.

18 **Q21. Have you seen this allocation method used in other states and basins basins?**

19 A21. Yes. This method of allocation is commonly used.

20 **Q22. Does this conclude your testimony?**

21 A22. Yes.

22

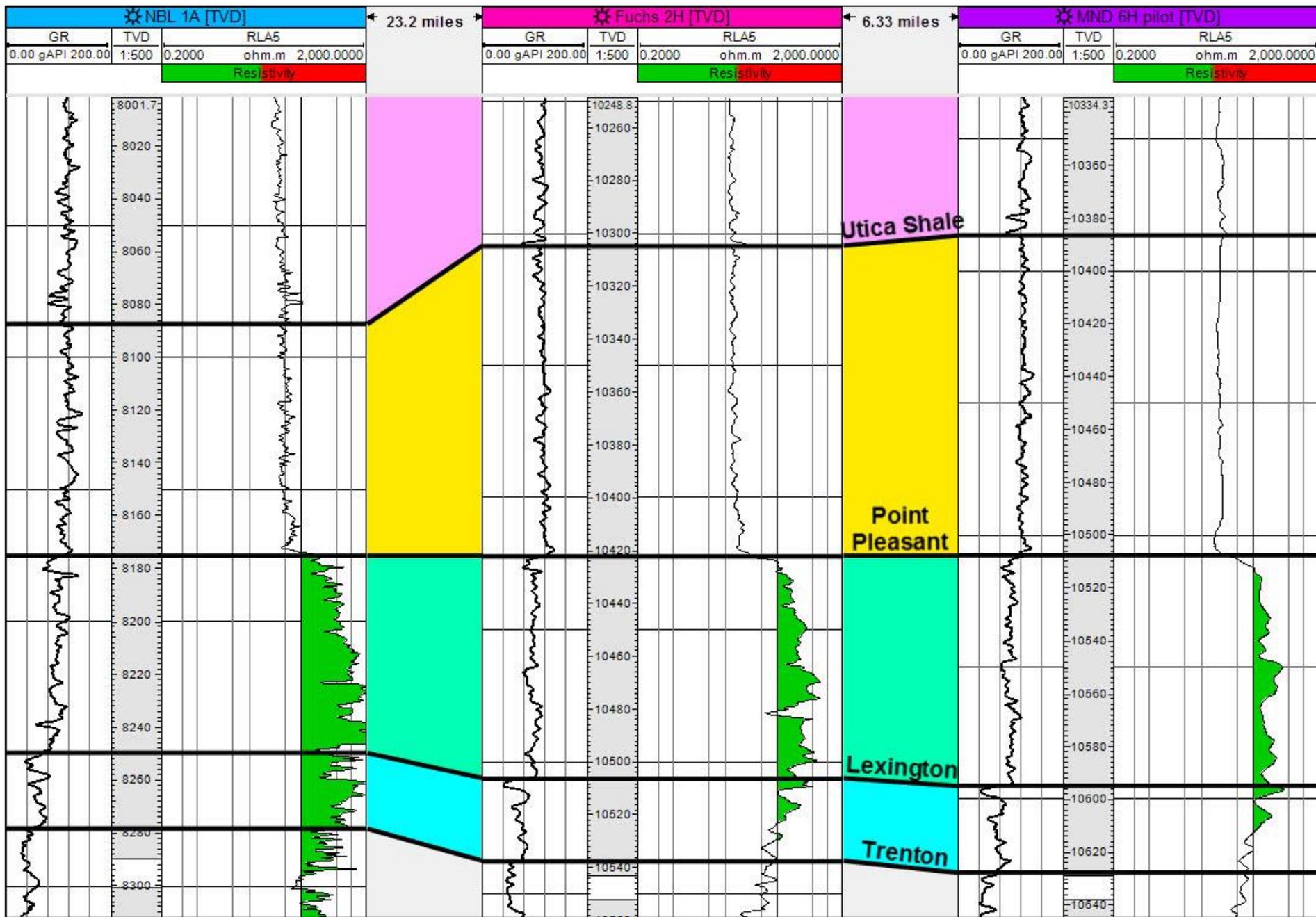


Exhibit 2-A

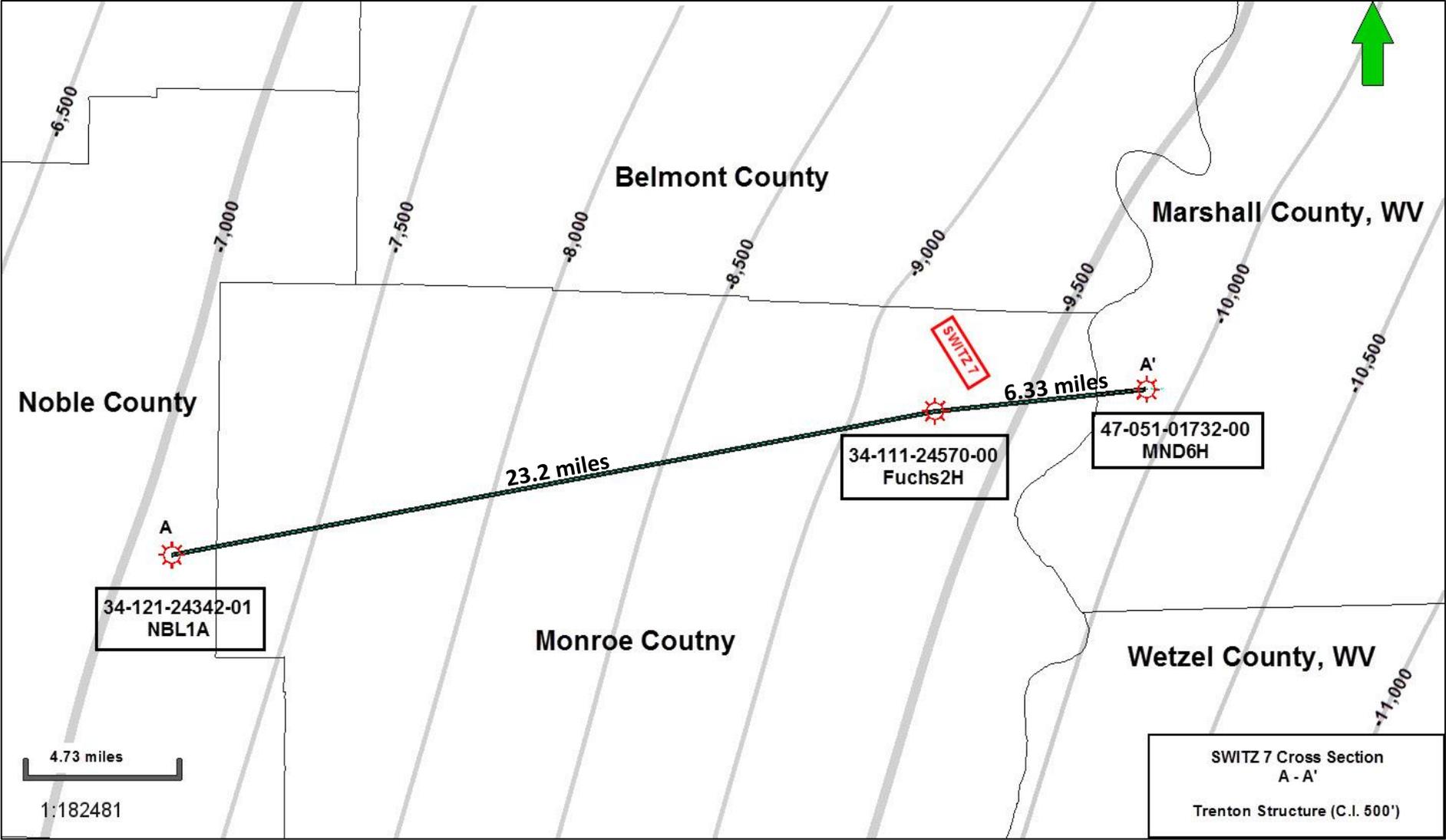


Exhibit 2-B

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

In re the Matter of the Application of :
CNX Gas Company LLC, for :
Unit Operation : Application Date: August 16, 2016
:
SWITZ7HSU Unit :

**PREPARED TESTIMONY OF TYLER CLIFT
ON BEHALF OF CNX GAS COMPANY, LLC (“CNX”)
(ENGINEER)**

J. Kevin West (0091520)
Vincent I. Holzhall (0074901)
Steptoe & Johnson PLLC
Huntington Center
41 South High Street, Suite 2200
Columbus, Ohio 43215
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Attorneys for Applicant,
CNX Gas Company, LLC

PREPARED TESTIMONY OF TYLER CLIFT

1 **INTRODUCTION.**

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

3 A1. My name is Tyler Clift. I am a Senior Reservoir Engineer for CNX. My business
4 address is 1000 CONSOL Energy Drive, Canonsburg, PA 15317.

5 **Q2. What are your job responsibilities as Senior Reservoir Engineer?**

6 A2. I am responsible for quantifying hydrocarbon volumes in the Utica/Point Pleasant
7 and Marcellus Shale formations. This work is utilized in reserve/resources
8 estimation, opportunity assessment, and development optimization activities. In
9 addition, I coordinate data gathering activities, such as well testing, PVT analysis,
10 and pressure/temperature measurements, all of which are performed in order to
11 better understand the reservoir and forecast well performance more accurately.
12 Some of the tools I use to estimate reserves include decline curve analysis, rate
13 transient analysis, reservoir modeling/simulation, and volumetric calculations.

14 **Q3. What is your educational background?**

15 A3. I earned a Bachelor of Science in Petroleum and Natural Gas Engineering with a
16 minor in Geology from West Virginia University.

17 **Q4. Would you briefly describe your professional experience?**

18 A4. I have worked in the oil and gas industry for approximately 10 years, all of which
19 has been focused on unconventional and conventional natural gas field
20 development in the Appalachian Basin. I have been at CNX for six years now.
21 Prior to joining CNX, I worked for Dominion Exploration in reserves and reservoir
22 engineering.

23 **Q5. What is the purpose of your testimony today?**

24 A5. I am testifying in support of the *Application of CNX Gas Company, LLC for Unit*
25 *Operation* filed with respect to the SWITZ7HSU Unit. My testimony addresses the
26 following: (i) that unit operations for the SWITZ7HSU Unit are reasonably
27 necessary to increase substantially the recovery of oil and gas; and (ii) that the
28 value of the estimated additional recovery due to unit operations exceeds its
29 estimated additional costs.

30

1 **UNIT OPERATIONS ARE REASONABLY NECESSARY TO INCREASE**
2 **SUBSTANTIALLY THE RECOVERY OF OIL AND GAS.**

3 **Q6. I'd like to begin by addressing whether unit operations in the SWITZ7HSU**
4 **Unit are reasonably necessary to increase substantially the recovery of oil and**
5 **gas from those properties. Would you describe briefly how CNX anticipates**
6 **developing the SWITZ7HSU Unit?**

7 A6. The actual total number of wells will be dependent on production results.
8 However, CNX anticipates drilling up to four wells of approximately 5,320' to
9 10,500' in lateral length running from the northwest to the southeast. The
10 SWITZ7HSU Unit will be drilled from a well pad located on lands within the unit
11 near the northern boundary.

12 **Q7. Do you have an opinion on whether unit operations in the SWITZ7HSU Unit**
13 **are reasonably necessary to increase substantially the recovery of oil and gas**
14 **from those properties, and if so, what is your opinion?**

15 A7. Yes. It is my opinion that unit operations are reasonably necessary to increase
16 substantially the recovery of oil and gas from the unit. Given the location of the
17 unleased acreage and the applicable regulatory setbacks, one of the laterals could
18 not be fully developed without unitization. As a result, the minerals associated
19 with the acreage depicted within the bubble on Exhibit 4-B would be stranded and
20 presumably would never be developed. Should an order authorizing unit
21 operations be granted, we would be able to develop all of the resources within the
22 proposed unit, which will result in a substantial increase in recovery of oil and gas
23 as compared with the abbreviated development scenario.

24 **Q8. Have you made an estimate of the production you anticipate from the**
25 **proposed unit operations?**

26 A8. Yes. The estimated ultimate recovery from the proposed SWITZ7HSU Unit
27 development could be as much as 91.2 billion cubic feet (Bcf). This estimate is
28 presented in greater detail on the attached Exhibit 3-A, which includes an estimate
29 of the recoverable reserves for each of the SWITZ7HSU Unit wells.

30 **Q9. Have you made an estimate of the production you anticipate without an order**
31 **authorizing unit operations?**

1 A9. Yes. The estimated ultimate recovery from the SWITZ7HSU Unit without an order
2 authorizing unit operations is 80.1 Bcf.

3 **Q10. Are the estimates that you made based on good engineering practices and**
4 **accepted methods in the industry?**

5 A10. Yes. They are based on initial results from analog wells in the area, rate transient
6 analysis of these existing wells, and volumetric analysis of the area.

7 **Q11. Can you calculate the production from these wells ahead of time with**
8 **mathematical certainty?**

9 A11. No. It is impossible to predict the well performance with mathematical certainty.
10 But reasonable estimates can be made with the engineering practices previously
11 mentioned.

12 **Q12. Is horizontal drilling technology, including hydraulic fracturing the formation,**
13 **required to economically develop unconventional resources?**

14 A12. Yes.

15 **Q13. Is horizontal drilling common in the oil and gas industry?**

16 A13. Yes. It has been common in the industry for the last few decades and it has become
17 particularly common in the last five to ten years.

18 **Q14. In your professional opinion, would it be economic to develop the**
19 **SWITZ7HSU Unit using vertical drilling?**

20 A14. No. In a vertical well, the area of the well exposed to the producing reservoir will
21 be considerably less than in a horizontal well, thus reducing the production and
22 ultimate recovery of the well. When you take into account that reduction of
23 reserves together with the capital investment required for a vertical well, the
24 development of the area using vertical technology becomes uneconomical.

25 **VALUE OF ESTIMATED ADDITIONAL RECOVERY EXCEEDS ITS**
26 **ESTIMATED ADDITIONAL COSTS**

27 **Q15. Let's turn to the financial side of the project. Generally, in your professional**
28 **experience, how would the economics of a development project such as the**
29 **development of the SWITZ7HSU Unit be evaluated?**

30 A15. First you need to estimate the production profile expected of the horizontal wells.
31 You do that by taking into account accepted practices in the industry and using analog

1 wells in the vicinity. You also need to estimate the total capital expenditure required for
2 the drilling, completion and production of the well. When you combine those two
3 estimates with the expected cost of operating the well during its life and the expected gas
4 prices, you can evaluate the economics.

5 **Q16. Did you do that here?**

6 A16. Yes.

7 **Q17. Would you walk us through your economic evaluation for the SWITZ7HSU**
8 **Unit's development?**

9 A17. I work in cooperation with the drilling and completion engineers, as well as with
10 the geologist, all of whom determine the expected depth and pay of the area. Once
11 I understand the depth of the formation and the total lateral length that we need to
12 recover the reserves, I use the latest figures from recent wells regarding the cost of
13 drilling per foot with any future estimated cost savings in order to calculate total
14 capital cost. I have attached a list of wells I relied upon for my calculations as
15 Exhibit 3-D. I used data from those wells to generate a type curve, found in
16 Exhibit 3-E. In making cost estimates, the capital cost of building the well pads is
17 distributed equally among the wells. I estimate that, based on the lateral lengths of
18 these wells, the cost of drilling in the SWITZ7HSU Unit will be between
19 \$7,500,000 and \$10,300,000 for each well, for a total Capital Expenditure of
20 \$37,200,000. Without unitization, the Capital Costs of abbreviated development
21 are \$35,000,000. We believe that the AFIT Net Present Value discounted at 10%
22 for each of these wells is between \$3,400,000 and \$9,800,000, or a total Net
23 Present Value of \$30,100,000 in the unitized scenario. Without unitization, under
24 the abbreviated development, AFIT Net Present Value discounted at 10% would be
25 \$25,100,000. Thus, for an additional \$2.2 million in Capital Expenditure, we see a
26 \$5 million increase in Net Present Value. For additional details regarding the
27 estimates for the wells within the SWITZ7HSU Unit, see attached Exhibit 3-A.

28 **Q18. How did you estimate the anticipated revenue stream?**

29 A18. The anticipated revenue stream is calculated by multiplying the expected gas
30 production stream by the expected pricing at that point in time. The industry
31 standard in estimating future gas prices is using the NYMEX forward strip

1 estimates. The well will continue to produce beyond the NYMEX strip estimates,
2 so the last point in the NYMEX strip is escalated at 3% to mimic inflation. To
3 normalize the NYMEX estimates to the actual sales point the wells will flow to, a
4 basis is added or subtracted from the future NYMEX estimates. This calculated
5 revenue stream is then shrunk down by CAPEX / taxes / OPEX / etc.

6 **Q19. What about anticipated operating expenses?**

7 A19. Again, I rely upon the information we have from the wells we have already drilled
8 and operate in the area along with any cost saving measures we plan to make on
9 future wells. Operating expenses are broken up into two categories: fixed and
10 variable. Fixed operating expenses are independent of how much gas the well
11 makes. For example, road maintenance must be done to access the well regardless
12 of how much gas it produces. Variable operating expenses are tied directly to how
13 much gas the well produces. For example, a well that makes very little gas will
14 require less general maintenance than a well making a lot of gas. Here, as shown on
15 Exhibit 3-B, the estimated fixed operating expense for each well in the unit is
16 \$476.82 per month. Variable operating expense is anticipated to be \$0.11/MCF.
17 Also within the operating expenses section of the economic model are the charges
18 paid to move the gas to a sales point. This gathering fee is another \$0.22/MCF.

19 **Q20. Based on this information and your professional judgment, does the value of**
20 **the estimated additional recovery from the operations proposed for the**
21 **SWITZ7HSU Unit exceed its estimated additional costs, and if so, would you**
22 **explain why?**

23 A20. Yes. As indicated on Exhibit 3-A, the value of the additional recovery under unit
24 operations, when compared to the associated additional costs, demonstrates that the
25 proposed unitized operation makes sense because the value of the additional
26 recovery exceeds the additional costs.

27 **Q21. And your opinions are based on your education and professional experience?**

28 A21. Yes.

29 **Q22. Does this conclude your testimony?**

30 A22. Yes.

31

Ex. 3-A Economic Summary

CASE 1 (OPTIMUM DEVELOPMENT)				
WELL NAME	COMPLETED LATERAL LENGTH (FT)	GROSS CAPEX (\$MM)	NET AFIT PV10 (\$MM)	GROSS GAS (BCF)
SWITZ7B	5,320	7.5	3.4	13.8
SWITZ7D	10,500	10.3	9.8	27.9
SWITZ7F	10,000	10.0	9.1	26.2
SWITZ7H	8,967	9.4	7.8	23.3
TOTAL	34,787	37.2	30.1	91.2

PRICING ASSUMPTIONS

NYMEX GAS PRICING THROUGH 2021, THEN ESCALATED 3% BASIS SUBTRACTED OFF GAS PRICE

CASE 2 (FULL DEVELOPMENT, SHORTENED LATERAL)				
WELL NAME	COMPLETED LATERAL LENGTH (FT)	GROSS CAPEX (\$MM)	NET AFIT PV10 (\$MM)	GROSS GAS (BCF)
SWITZ7B	5,320	7.5	3.4	13.8
SWITZ7D	10,500	10.3	9.8	27.9
SWITZ7F	6,062	7.8	4.1	15.1
SWITZ7H	8,967	9.4	7.8	23.3
TOTAL	30,849	35.0	25.1	80.1

DIFFERENCE				
WELL NAME	COMPLETED LATERAL LENGTH (FT)	GROSS CAPEX (\$MM)	NET AFIT PV10 (\$MM)	GROSS GAS (BCF)
SWITZ7B	-	-	-	-
SWITZ7D	-	-	-	-
SWITZ7F	3,938	2.2	5.0	11.1
SWITZ7H	-	-	-	-
TOTAL	3,938	2.2	5.0	11.1

Ex. 3-B Unit Costs

OPEX ESTIMATES	UNITS	COST
FIXED OPEX	\$/WELL/MONTH	\$ 476.82
VARIABLE OPEX	\$/MCF	\$ 0.11
GATHERING	\$/MCF	\$ 0.22

OPEX ESCALATED 3%

Ex. 3-C NYMEX and BASIS

Date	NYMEX	M2 Basis (7-19-16)	Realized Price (\$/mmbtu)
6/1/2016	1.963	-0.613	1.35
7/1/2016	2.917	-0.947	1.97
8/1/2016	2.728	-1.3125	1.4155
9/1/2016	2.689	-1.2875	1.4015
10/1/2016	2.73	-1.2625	1.4675
11/1/2016	2.909	-1.0325	1.8765
12/1/2016	3.18	-0.925	2.255
1/1/2017	3.312	-0.8025	2.5095
2/1/2017	3.302	-0.7375	2.5645
3/1/2017	3.254	-0.7925	2.4615
4/1/2017	3.009	-0.7125	2.2965
5/1/2017	2.982	-0.81	2.172
6/1/2017	3.015	-0.8775	2.1375
7/1/2017	3.046	-0.8575	2.1885
8/1/2017	3.053	-0.9125	2.1405
9/1/2017	3.031	-1.0325	1.9985
10/1/2017	3.055	-0.9925	2.0625
11/1/2017	3.111	-0.685	2.426
12/1/2017	3.247	-0.6525	2.5945
1/1/2018	3.345	-0.6125	2.7325
2/1/2018	3.309	-0.5575	2.7515
3/1/2018	3.232	-0.615	2.617
4/1/2018	2.859	-0.5075	2.3515
5/1/2018	2.824	-0.5875	2.2365
6/1/2018	2.85	-0.6275	2.2225
7/1/2018	2.88	-0.615	2.265
8/1/2018	2.889	-0.665	2.224
9/1/2018	2.87	-0.765	2.105
10/1/2018	2.891	-0.7575	2.1335
11/1/2018	2.961	-0.5925	2.3685
12/1/2018	3.107	-0.57	2.537
1/1/2019	3.224	-0.5	2.724
2/1/2019	3.193	-0.4475	2.7455
3/1/2019	3.128	-0.5	2.628
4/1/2019	2.859	-0.3675	2.4915
5/1/2019	2.848	-0.4225	2.4255
6/1/2019	2.878	-0.585	2.293
7/1/2019	2.914	-0.63	2.284
8/1/2019	2.927	-0.7	2.227
9/1/2019	2.913	-0.795	2.118
10/1/2019	2.93	-0.7875	2.1425
11/1/2019	3	-0.5175	2.4825
12/1/2019	3.146	-0.515	2.631
1/1/2020	3.266	-0.41	2.856
2/1/2020	3.236	-0.3175	2.9185
3/1/2020	3.171	-0.4525	2.7185
4/1/2020	2.896	-0.1625	2.7335
5/1/2020	2.889	-0.255	2.634
6/1/2020	2.921	-0.455	2.466
7/1/2020	2.958	-0.5975	2.3605
8/1/2020	2.986	-0.6025	2.3835
9/1/2020	2.987	-0.805	2.182
10/1/2020	3.017	-0.8025	2.2145
11/1/2020	3.089	-0.4225	2.6665
12/1/2020	3.235	-0.3925	2.8425
1/1/2021	3.367	-0.3175	3.0495
2/1/2021	3.337	-0.255	3.082
3/1/2021	3.272	-0.39	2.882
4/1/2021	3.007	-0.1	2.907
5/1/2021	3.002	-0.19	2.812

Ex. 3-C NYMEX and BASIS

6/1/2021	3.034	-0.3825	2.6515
7/1/2021	3.071	-0.53	2.541
8/1/2021	3.104	-0.535	2.569
9/1/2021	3.105	-0.7525	2.3525
10/1/2021	3.139	-0.735	2.404

Ex. 3-D Offset Wells

WELL NAME	API NUMBER	OPERATOR
SHROYER 2H	34111244160000	ECLIPSE
SHROYER 4H	34111244150100	ECLIPSE
SWITZ6B	34111244510000	CONSOL
SWITZ6D	34111245050000	CONSOL
SWITZ6F	34111245030000	CONSOL
SWITZ6H	34111244510100	CONSOL

Ex. 3-E Type Curve

LL	3,500	4,000	4,500	5,000	5,500	6,000	6,500	7,000	7,500	8,000	8,500	9,000	9,500	10,000	10,500	11,000	11,500	12,000	12,500
IP (MCF/D)	8,000	9,036	10,071	11,107	12,143	13,179	14,214	15,250	16,286	17,321	18,357	19,393	20,429	21,464	22,500	23,625	24,750	25,875	27,000
b	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
De %	61	60	59	58.5	58	57.5	57	57.5	56.5	56.5	56	56	56	55.5	55	55.5	55.5	55.5	55.5
Dmin %	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
1st MONTH CONSTRAINT															21,000	21,000	21,000	21,000	21,000

TYPE CURVES REPRESENT PERF TO PERF LATERAL LENGTH
 LL ARE ROUNDED TO NEAREST 500' INCREMENT TO APPLY TYPE CURVE

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

In re the Matter of the Application of :
CNX Gas Company LLC for :
Unit Operation : Application Date: August 16, 2016
:
SWITZ7HSU Unit :

**PREPARED TESTIMONY OF PETER J. BINOTTO
ON BEHALF OF CNX GAS COMPANY LLC (“CNX”)
(LANDMAN)**

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Attorneys for Applicant,
CNX Gas Company LLC

PREPARED TESTIMONY OF PETER BINOTTO

1 **INTRODUCTION.**

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

3 A1. My name is Peter J. Binotto and I am Director of Land Acquisitions for CNX.

4 **Q2. What is your educational background?**

5 A2. I received a Bachelor of Science Degree in Economics and Finance from Penn
6 State University.

7 **Q3. Would you briefly describe your professional experience?**

8 A3. I am currently CNX's Director of Land Acquisitions. I have worked as a land
9 agent, land supervisor and land manager before being named CNX's Director of
10 Land Acquisitions. I have worked on both surface and subsurface focused projects
11 within CBM, conventional and unconventional plays.

12 **Q4. How long have you worked for CNX?**

13 A4. I have worked for CNX for more than ten years.

14 **Q5. What are your job responsibilities as Director of Land Acquisitions for CNX?**

15 A5. I manage a group of 8 land professionals and 5 land technicians. I am responsible
16 for the oversight of acquisition of oil and gas and surface rights in Ohio, West
17 Virginia, and Pennsylvania, which is focused on both Marcellus and Utica
18 development. This includes being responsible for land negotiations (leases, rights
19 of way, surface use agreements, etc.) and addressing land curatives for the
20 company's drills schedule, capital budgets, and leasehold management. I am also
21 involved in joint venture coordination, divestitures, and other acquisition-focused
22 matters."

23 **Q6. Are you a member of any professional associations?**

24 A6. Yes, I am a member of the American Association of Professional Landmen
25 (AAPL) and the Michael Late Benedum Chapter of the AAPL. I am also a
26 Registered Professional Landman.

27 **Q7. What is the purpose of your testimony today?**

28 A7. I am testifying in support of the *Application of CNX Gas Company LLC for Unit*
29 *Operation* filed with respect to the SWITZ7HSU Unit. The proposed unit consists
30 of 52 separate tracts of land totaling approximately 1020.810 acres in Monroe

1 County, Ohio. In particular, I will describe the efforts made by CNX to put the
2 Unit together and the Unit Plan that CNX is proposing.

3 **EFFORTS MADE BY CNX TO LEASE UNIT TRACTS.**

4 **Q8. The Application submitted by CNX indicates that it owns the oil and gas rights**
5 **to approximately 1017.330 acres of the proposed 1020.810 acre unit. Would**
6 **you describe how CNX acquired those rights?**

7 A8. CNX acquired its acreage position in Monroe County by a combination of organic
8 leasing and acquisition of leases from other operators. However, the majority of
9 the acreage was leased directly from the oil and gas owners in 2012 when CNX
10 negotiated with a handful of larger landowner groups.

11 **Q9. And that represents what percentage of the unit acreage?**

12 A9. As reflected on Exhibit A-2 to the Unit Operating Agreement, that's more than
13 99% of the Unit.

14 **Q10. Are there other operators in the unit, and if so, have they agreed to participate**
15 **in its development?**

16 A10. No. There are no other operators in the proposed Unit.

17 **Q11. So then, is it accurate to say that the owners of more than ninety-nine percent**
18 **(99%) of the unit have approved the filing of this Application?**

19 A11. Yes.

20 **Q12. How many unleased mineral owners are there in the Unit?**

21 A12. There is one (1) unleased mineral owner in the Unit. The interest controlled by that
22 unleased mineral owners represents 3.48 acres or 0.34% of the Unit. See Exhibit
23 A-3.

24 **Q13. Have affidavits detailing CNX's efforts to obtain leases from the unleased**
25 **mineral owners been prepared?**

26 A13. Yes. Please refer to attached Exhibit 4-D.

27 **Q14. Do you have an exhibit to your testimony that illustrates the leased and**
28 **unleased tracts within the Unit?**

29 A14. Yes. Exhibit 4-B is a plat showing each of the tracts in the Unit. The unleased
30 tracts appear in red whereas the leased tracts appear in yellow.

31 **Q15. Do you have an aerial plat of the Unit?**

1 A15. Yes. Attached Exhibit 4-A is an aerial plat of the Unit.

2 **UNIT PLAN PROVISIONS.**

3 **Q16. Would you generally describe the development plan for the Unit?**

4 A16. CNX plans to develop the Unit from a well pad located within the unit. From this
5 well pad, CNX intends to drill up to four (4) horizontal wells with projected lateral
6 lengths of approximately 5,320' to 10,500', as depicted on Exhibits 4-A and 4-B.

7 **Q17. Does CNX have a specific timeline for drilling the wells in the Unit?**

8 A17. CNX plans to drill the initial well in mid-2017. Upon evaluating the results of the
9 first well, CNX anticipates drilling the subsequent wells within 12 months of the
10 effective date of an order authorizing unit operations, depending on results, rig
11 availability, and the availability of markets for the hydrocarbons.

12 **Q18. Does CNX have any other development activity in the immediate area?**

13 A18. Yes. Please see attached Exhibit 4-C, which depicts the units bordering the Unit.

14 **Q19. Are you familiar with the Unit Plan proposed by CNX for the Unit?**

15 A19. Yes. The Unit Plan proposed by CNX is attached to the Application and consists
16 of an initial document that establishes the non-operating relationship between the
17 parties in the Unit, and an operating agreement and related exhibits that establish
18 how the Unit is going to be explored, developed and produced.

19 **Q20. Turning first to the body of the Unit Plan, marked as Attachment 1 to the
20 Application. Would you describe briefly what it does?**

21 A20. Yes. The general intent of the Unit Plan is to effectively combine the oil and gas
22 rights and interests in the Unit in a uniform manner so that they can be developed
23 as though each of the tracts were covered by a single lease.

24 **Q21. Are all of the oil and gas rights in the proposed unit combined?**

25 A21. No. The Unit Plan only unitizes the oil and gas rights in and related to the Unitized
26 Formation.

27 **Q22. How would production from the Unit be allocated?**

28 A22. On a surface-acreage basis consistent with Article 4 and Article 5 of the Unit Plan.

29 **Q23. Why use a surface-acreage basis as the method of allocation?**

30 A23. We believe it is the most efficient and fair manner in which the landowners,
31 Unleased Mineral Owners and the other operators can share in production from the

1 Unit.

2 **Q24. Would you go through an example from Exhibit A-2 to the Unit Operating**
3 **Agreement to illustrate what you mean?**

4 A24. Yes. If you refer to Exhibit A-2 of the Unit Operating Agreement, the column
5 entitled "Surface Acres in Unit" reflects the number of surface acres in each tract
6 included within the Unit. The column entitled "Tract Participation" shows the
7 related tract participation of each tract, which is calculated by taking the number of
8 surface acres in each tract included within the unit and dividing it by the total
9 number of surface acres in the unit. For example, if you refer to Tract 1 on Exhibit
10 A-2 to the Unit Operating Agreement, it shows that the Triple J Acres is the current
11 mineral owner of 80.816 acres in the 1020.810 acre Unit. This equates to a Tract
12 Participation of 7.92% ($80.816/1020.810 * 100 = 7.92$).

13 **Q25. What does that mean in terms of production allocated to that particular tract?**

14 A25. It would mean that approximately 7.92% of all production from the Unit would be
15 allocated to Tract 1.

16 **Q26. Does it work the same way for an unleased mineral interest, that is, for the**
17 **tract of a person who did not lease the property in the unit?**

18 A26. Yes.

19 **Q27. In your experience, is that an unusual way to allocate production in a unit?**

20 A27. No. In my experience, surface-acreage allocation is both fair and customary for
21 horizontal shale development. It is also the standard practice exercised in the
22 industry as a whole.

23 **Q28. How are unit expenses allocated?**

24 A28. Like production in the unit, generally on a surface-acreage basis. Article 3 of the
25 Unit Plan provides that expenses, unless otherwise allocated in the Unit Operating
26 Agreement, will be allocated to each tract of land within the Unit in the proportion
27 that the surface acres of each tract included within the unit bears to the surface
28 acres of the entire unit.

29 **Q29. Who pays the unit expenses?**

30 A29. According to the terms of the proposed Unit Plan, the working interest owners.

31 **Q30. Do the royalty owners pay any portion of the unit expenses?**

1 A30. No, unless the terms and conditions of the royalty owner's oil and gas lease dictate
2 otherwise. Royalty interest owners are responsible only for their proportionate
3 share of taxes and post-production costs allowable by the lease, payable only from
4 their share of the proceeds from sales of production from the unit area.

5 **Q31. Let's turn to the Unit Operating Agreement. It appears to be based upon**
6 **A.A.P.L. Form 610 – 1989 Model Form Operating Agreement, is that correct?**

7 A31. Yes. We typically use a modified version of the 1989. The Form 610, together
8 with its exhibits, is a commonly used form in the industry and is frequently
9 modified to fit the needs of the parties and circumstances.

10 **Q32. Turning to the Unit Operating Agreement in particular, does it address how**
11 **unit expenses are determined and paid?**

12 A32. Yes. Article III of the Unit Operating Agreement provides that all costs and
13 liabilities incurred in operations shall be borne and paid proportionately by the
14 Working Interest Owners, according to their Unit Participation percentages.
15 Moreover, the Unit Operating Agreement has attached to it an accounting
16 procedure identified as Exhibit C that offers greater details regarding how unit
17 expenses are determined and paid.

18 **Q33. That's commonly referred to as the COPAS?**

19 A33. Yes. COPAS stands for the Council of Petroleum Accountants Societies and is a
20 commonly used form in the industry.

21 **Q34. Will there be in-kind contributions made by owners in the unit area for unit**
22 **operations, such as contributions of equipment?**

23 A34. No. CNX does not anticipate any in-kind contributions for Unit Operations.

24 **Q35. Are there times when a working interest owner in the unit chooses not to – or**
25 **cannot – pay their allocated share of the unit expenses?**

26 A35. Yes, such a situation is not uncommon in the industry. The Unit Operating
27 Agreement gives working interest owners the flexibility to decline participation in
28 any operation that they either cannot afford or believe is not likely to be profitable.
29 The remaining parties can then proceed at their own risk and expense.

1 **Q36. Generally, how is the working interest accounted for when an owner chooses**
2 **not to participate in an operation?**

3 A36. A working interest owner who cannot or chooses not to participate in an operation
4 is considered a non-consenting party. If the remaining working interest owners
5 decide to proceed with the operation, the consenting parties alone will bear the full
6 cost and expense of the operations. A non-consenting party is deemed to have
7 relinquished its interest in that operation until the well revenues pay out the costs
8 that would have been attributed to that party, plus a prescribed risk penalty or non-
9 consent penalty.

10 **Q37. Can a working interest owner choose to go non-consent in the initial well in**
11 **the Unit?**

12 A37. Yes. If a working interest owner chooses not to participate in the unit's initial well,
13 Article XVI(C) of the Unit Operating Agreement provides that the working interest
14 owner shall be deemed to have relinquished its working interest to the other parties
15 in the unit, in proportion to their respective working interests, with a back-in
16 provision and risk factor of 200% for the costs set forth in Article VI.2.b.i of the
17 Unit Operating Agreement, and 500% for the costs set forth in Article VI.2.b.ii. of
18 the Unit Operating Agreement.

19 **Q38. Does the Unit Operating Agreement treat the initial well and subsequent**
20 **operations differently in terms of going non-consent, and if so, why?**

21 A38. Yes. Subsequent operations have a smaller risk factor of 100% and 300% for the
22 costs in Articles VI.2.b.i and VI.2.b.ii, respectively. Generally speaking, this is
23 common practice in the industry and reflects the de-risked nature of subsequent
24 wells.

25 **Q39. But if the working interest owner still has a royalty interest in the unit, that**
26 **royalty interest would remain in place and be paid?**

27 A39. Yes. That royalty interest would still be paid according to the terms and conditions
28 of the agreement that give rise to the royalty.

29 **Q40. Where are the risk factors for subsequent operations set out in the Unit**
30 **Operating Agreement?**

31 A40. They are set out in Article VI.B of the Unit Operating Agreement.

1 **Q41. I believe you've already described generally the documents in Exhibits A and**
2 **C to the Unit Operating Agreement. Let's turn therefore to Exhibit B of the**
3 **Unit Operating Agreement. What is it?**

4 A41. Exhibit B is a standard oil and gas lease form that is attached to the joint operating
5 agreement to govern any unleased interests owned by the parties. Article III.A of
6 the Unit Operating Agreement provides that if any party owns or acquires an oil
7 and gas interest in the Contract Area, then that interest shall be treated for all
8 purposes of the Unit Operating Agreement as if it were covered by the form of
9 lease attached as Exhibit "B."

10 **Q42. Does this oil and gas lease contain standard provisions that CNX uses in**
11 **connection with its operations in Ohio?**

12 A42. It is a standard agreement CNX has used in the State of Ohio.

13 **Q43. Based upon your education and professional experience, do you view the terms**
14 **of Exhibit B as reasonable?**

15 A43. Yes.

16 **Q44. Moving on to Exhibit D of the Unit Operating Agreement, would you describe**
17 **what it is?**

18 A44. Yes. Exhibit D is the insurance exhibit to the Unit Operating Agreement. It sets
19 forth coverage amounts and limitations, and the insurance terms for operations
20 conducted under the Unit Operating Agreement. For example, it requires that
21 operator shall comply with all applicable federal and state insurance and Worker's
22 Compensation Laws.

23 **Q45. Based upon your education and professional experience, do you view the terms**
24 **of Exhibit D as reasonable?**

25 A45. Yes.

26 **Q46. Would you next describe to the Division Exhibit E of the Unit Operating**
27 **Agreement?**

28 A46. Yes. Exhibit E is the Gas Balancing Agreement, which further details the rights
29 and obligations of the parties with respect to marketing and selling any production
30 from the Contract Area.

31 **Q47. What is Exhibit F to the Unit Operating Agreement?**

1 A47. Exhibit F is our company's Nondiscrimination Policy.

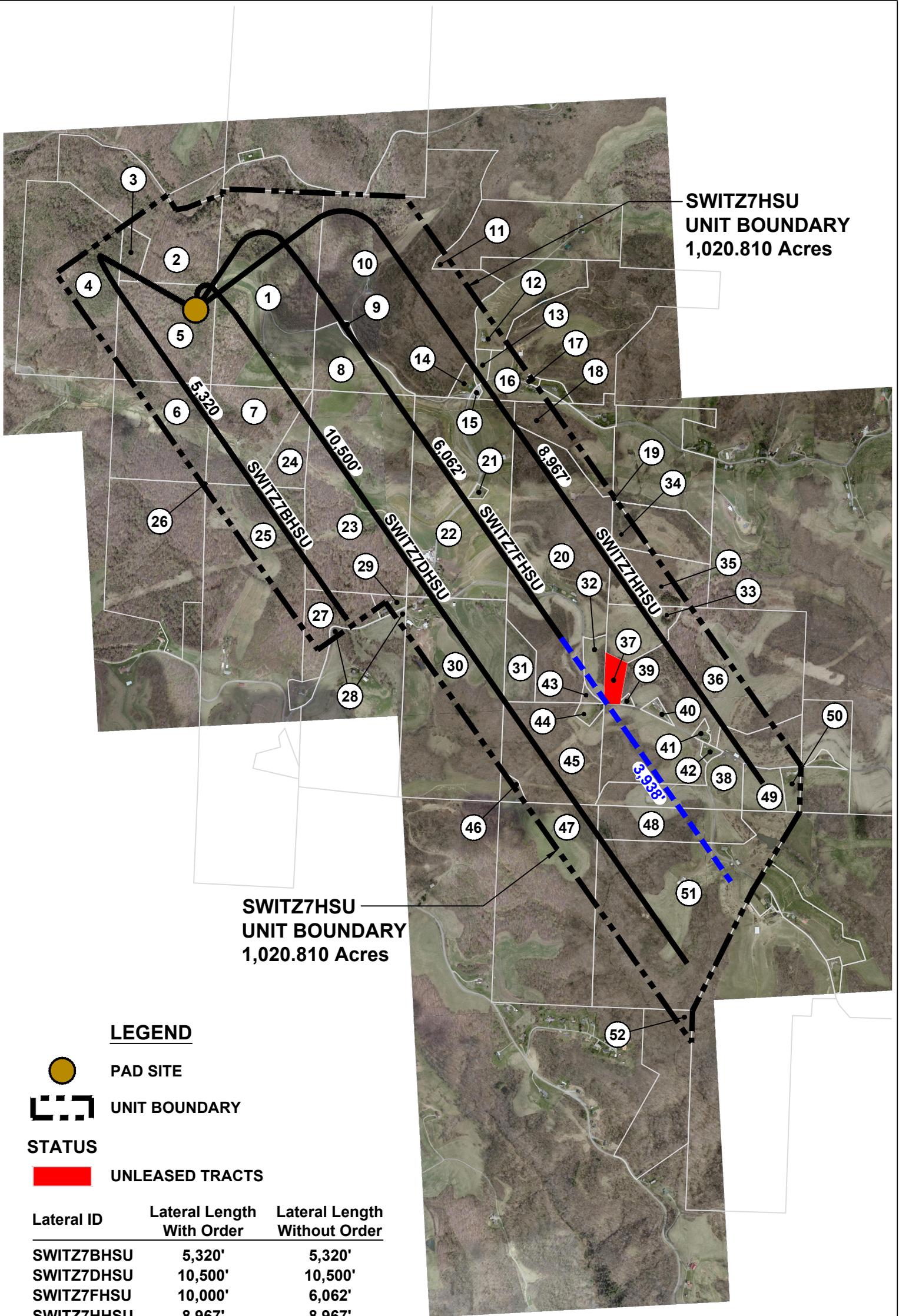
2 **Q48. In your professional opinion, given your education and experience, are the**
3 **terms of the Unit Plan, including the terms of the exhibits just discussed, just**
4 **and reasonable?**

5 A48. Yes.

6 **Q48. Does this conclude your testimony?**

7 A48. Yes.

8



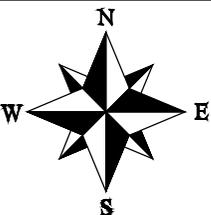
**SWITZ7HSU
UNIT BOUNDARY
1,020.810 Acres**

**SWITZ7HSU
UNIT BOUNDARY
1,020.810 Acres**

LEGEND

-  PAD SITE
-  UNIT BOUNDARY
- STATUS**
-  UNLEASED TRACTS

Lateral ID	Lateral Length With Order	Lateral Length Without Order
SWITZ7BHSU	5,320'	5,320'
SWITZ7DHSU	10,500'	10,500'
SWITZ7FHSU	10,000'	6,062'
SWITZ7HHSU	8,967'	8,967'



Monroe Project Area
SWITZ7HSU UNIT
 Horizontal Utica Formation Wells
 Unitized Development Agreement
 Exhibit 4-A
Final Title Mapping
 Switzerland Township,
 Monroe County, OH



1000 Consol Energy Drive
 Canonsburg, PA. 15317-6506

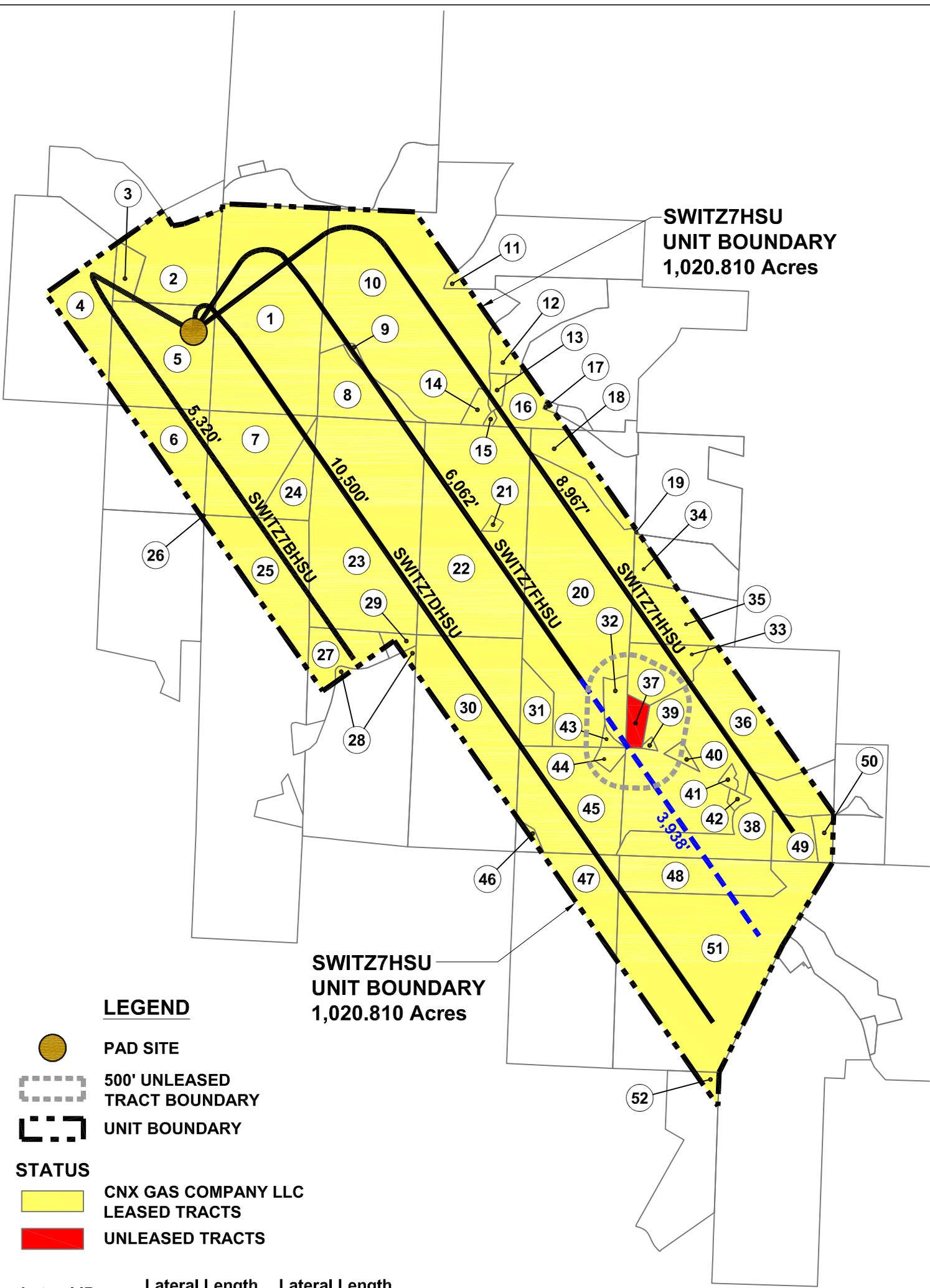
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Rev. Date:	Rev. Date:

Comments:



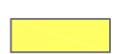
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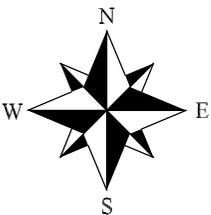
**SWITZ7HSU
UNIT BOUNDARY
1,020.810 Acres**

**SWITZ7HSU
UNIT BOUNDARY
1,020.810 Acres**

LEGEND

-  PAD SITE
-  500' UNLEASED TRACT BOUNDARY
-  UNIT BOUNDARY
- STATUS**
-  CNX GAS COMPANY LLC LEASED TRACTS
-  UNLEASED TRACTS

Lateral ID	Lateral Length With Order	Lateral Length Without Order
SWITZ7BHSU	5,320'	5,320'
SWITZ7DHSU	10,500'	10,500'
SWITZ7FHSU	10,000'	6,062'
SWITZ7HHSU	8,967'	8,967'



Monroe Project Area
Horizontal Utica Formation Wells
Unitized Development Agreement
Exhibit 4-B
Final Title Mapping
Switzerland Township,
Monroe County, OH



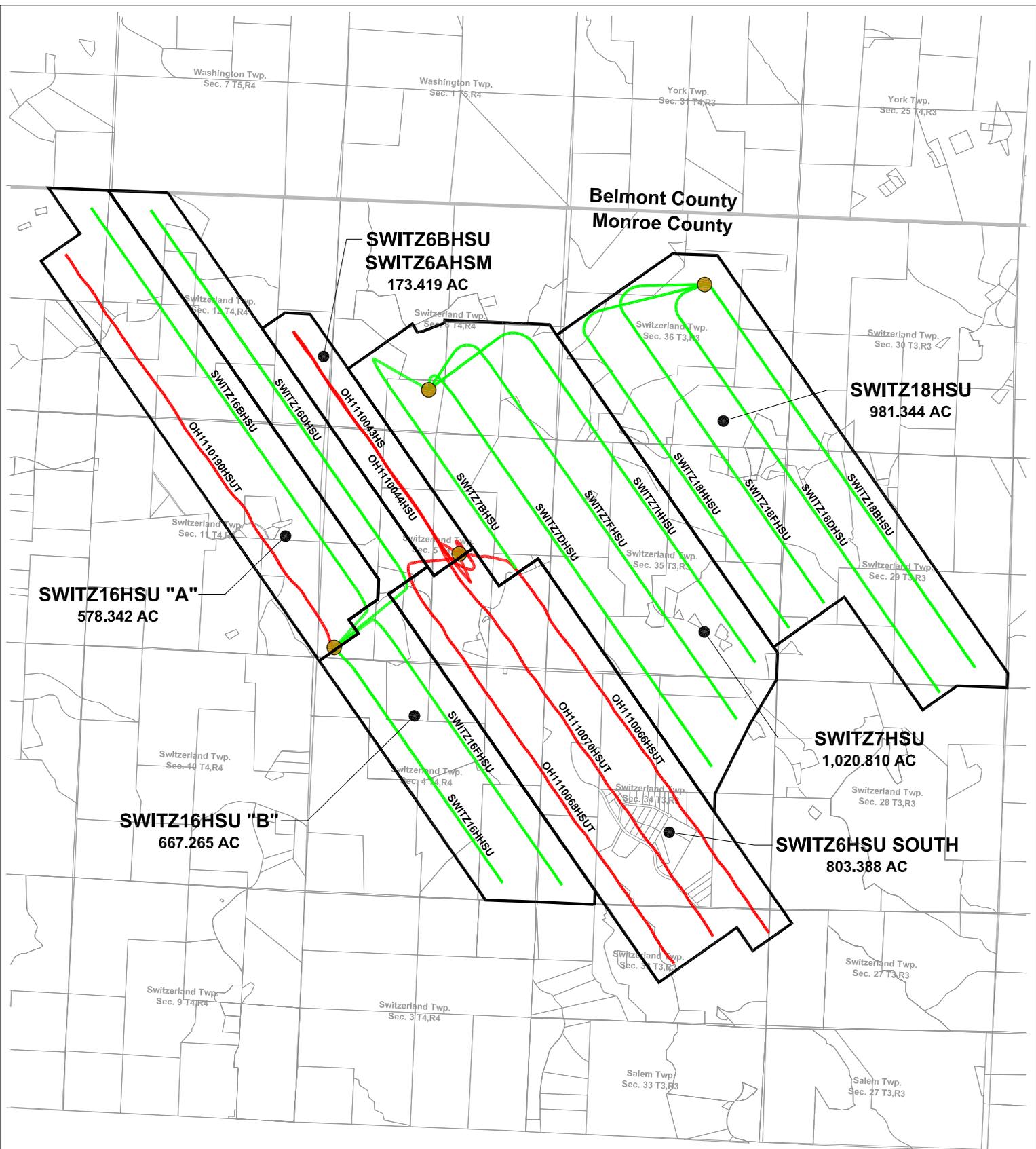
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Rev. Date:	Rev. Date:

Comments:

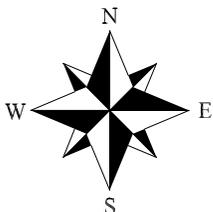


(Scale in feet)



LEGEND

-  CNX GAS COMPANY LLC PAD LOCATION
-  CNX GAS COMPANY LLC UNIT BOUNDARY
-  DRILLED HORIZONTAL WELL BORE
-  PROPOSED HORIZONTAL WELL BORE



Monroe Project Area
 SWITZ7HSU UNIT
 Horizontal Utica Formation Wells
 Unitized Development Agreement
 Exhibit 4-C
Final Title Mapping
 Switzerland Township,
 Monroe County, OH



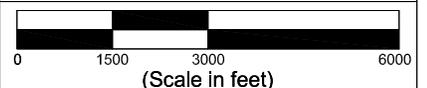
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Comments:



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

In re the Matter of the Application of CNX :
Gas Company LLC, for Unit Operation :
 : Application Date: August 16, 2016
SWITZ7HSU Unit :
 :

AFFIDAVIT OF LEASE EFFORTS

I, Peter J. Binotto, being first duly cautioned and sworn, do hereby depose and state as follows:

1. Affiant, Peter J. Binotto, is employed by CNX Gas Company LLC ("CNX") as Director of Land Acquisitions. Affiant's job responsibilities include managing field land brokers, negotiating lease acquisitions, and resolving land curative matters for CNX's operations in the Utica Shale.
2. As a result of his job responsibilities, Affiant has personal knowledge of the matters set forth in this affidavit, including the Attachment hereto, and the following information is true to the best of Affiant's knowledge and belief.
3. CNX has made diligent efforts to voluntarily lease all of the oil and gas interests within the proposed SWITZ7HSU Unit and, as of the date of this affidavit, had leased more than 99 % of those interests.
4. Despite CNX's efforts, one (1) tract remain unleased.
5. The Attachment documents, in summary form, show CNX's efforts to lease each unleased tract.
6. CNX remains willing to enter into voluntary lease agreements before the hearing on the Unit Application for the SWITZ7HSU Unit and continues its efforts to negotiate voluntary lease agreements where possible.

Further sayeth Affiant naught.

Dated this 4TH day of OCTOBER, 2016



Peter J. Binotto
Director of Land Acquisitions
CNX Gas Company LLC

State of Pennsylvania)
)
County of Washington)
)

Sworn to and subscribed before me this 4th day of October, 2016.

Notary Public



COMMONWEALTH OF PENNSYLVANIA
NOTARIAL SEAL
Sara M. Micoli, Notary Public
Cecil Twp., Washington County
My Commission Expires March 11, 2019
MEMBER, PENNSYLVANIA ASSOCIATION OF NOTARIES

[Attachment: summary of lease efforts]

SUMMARY OF LEASE EFFORTS

Tract 37: Parcel ID 16-28013003.0000

Yotsai Ou Yang

Yotsai Ou Yang (Mr. Yang) contact attempts commencing March 19, 2014 continuing until June 10, 2016

New York City (NYC) Residence: 101 West 72nd Street, Apt. 4n, New York, NY 10023

- March 19, 2014, Jeff Riggans sent identical initial contact letters via Certified Mail to two addresses obtained from the Monroe County Tax office, Post Office records show Mr. Yang signed for the letter sent to his NYC residence on March 24, 2014
- May 5, 2014, Jeff Riggans mailed a lease packet and offer letter to Mr. Yang at his NYC residence
- October 10, 2014, Mr. Yang had not responded to lease packet and offer letter sent May 5, 2014 so a follow-up letter was sent via Certified Mail from Jeff Riggans to Mr. Yang, said letter went unclaimed and was returned
- January 22, 2014, Jeff Riggans sent a second follow-up letter via Certified Mail to Mr. Yang, said letter also went unclaimed and was returned
- On or about March 30, 2015 Rob Conley visited Mr. Yang at his NYC residence, Rob and Mr. Yang were unable to reach a lease agreement
- April 8, 2015, Rob Conley left a message on Mr. Yang's answering machine
- April 15, 2015, Rob Conley left a message on Mr. Yang's answering machine
- April 20, 2015, Rob Conley left a message on Mr. Yang's answering machine
- April 24, 2015, Rob Conley left a message on Mr. Yang's answering machine
- April 29, 2015, Rob Conley missed a call from Mr. Yang, no message
- April 30, 2015, Rob Conley left a message on Mr. Yang's answering machine
- June 8, 2015, Jeff Riggans mailed a revised lease packet and offer letter to Mr. Yang with an increased offer, Mr. Yang never responded
- On or about November 24, 2015, Doug Smith spoke with Mr. Yang on the phone, Mr. Yang was undecided and stated he would be in contact after the new year
- January 19, 2016, Doug Smith left a message on Mr. Yang's answering machine
- February 1, 2016, Doug Smith left a message on Mr. Yang's answering machine
- February 16, 2016, Doug Smith left a message on Mr. Yang's answering machine
- March 22, 2016, Doug Smith left a message on Mr. Yang's answering machine
- May 20, 2016, Doug Smith called, no voicemail available
- June 11, 2016, Doug Smith met with Mr. Yang in person at his NYC residence, the conversation ended without the parties reaching a lease agreement

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

In re the Matter of the Application of CNX :
Gas Company LLC, for Unit Operation :
 : Application Date: August 16, 2016
SWITZ7HSU Unit :
 :
 :

AFFIDAVIT OF LEASE VALIDITY

I, Peter J. Binotto, being first duly cautioned and sworn, do hereby depose and state as follows:

1. My name is Peter J. Binotto and I am the Director of Land Acquisitions for CNX Gas Company LLC (the "Applicant"). My day-to-day responsibilities include managing field land brokers, negotiating lease acquisitions, and resolving land curative matters for the Applicant's operations in the Utica Shale.
2. As a result of my job responsibilities, I have personal knowledge of the matters set forth in this affidavit, including the Attachment referenced herein, and the following information is true to the best of my knowledge and belief.
3. 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 Unitized Formation and applicable land area, identified as the SWITZ7HSU Unit ("Unit"), according to the Unit Plan attached thereto (the "Application") (as those terms are used and defined therein).
4. The Unit is located in Monroe County, Ohio, and consists of fifty-two (52) separate tracts of land covering approximately 1020.810 acres.

5. To my knowledge the Applicant holds a valid lease agreement pertaining to all of the Applicant's acreage that is held under lease, as described in Exhibit A-2 of the Unit Operating Agreement attached to the Application ("Attachment").

Further sayeth Affiant naught.

Dated this 15th day of August, 2016

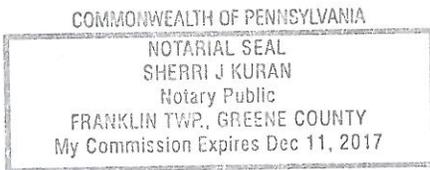


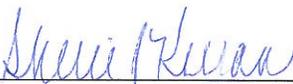
Peter J. Binotto
Director of Land Acquisitions
CNX Gas Company LLC

COMMONWEALTH OF PENNSYLVANIA
COUNTY OF WASHINGTON

Personally appeared before me, the undersigned authority, **Peter J. Binotto** who acknowledged himself to be The Director of Land Acquisitions of CNX Gas Company LLC and that he, being authorized to do so, executed the forgoing instrument for the purpose contained therein.

Sworn to and subscribed before me this 15th day of August, 2016.
(Notarial Seal)





Notary Public
My Commission Expires: 12-11-17

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

In re the Matter of the Application of CNX :
Gas Company LLC, for Unit Operation :
 : Application Date: August 16, 2016
SWITZ7HSU Unit :
 :

AFFIDAVIT OF OWNERSHIP

I, Peter Binotto, being first duly cautioned and sworn, do hereby depose and state as follows:

1. My name is Peter J. Binotto and I am the Director of Land Acquisitions for CNX Gas Company LLC (the "Applicant"). My day-to-day responsibilities include managing field land brokers, negotiating lease acquisitions, and resolving land curative matters for the Applicant's operations in the Utica Shale.
2. As a result of my job responsibilities, I have personal knowledge of the matters set forth in this affidavit, including the Attachment referenced herein, and the following information is true to the best of my knowledge and belief.
3. Pursuant to Ohio Revised Code §1509.28, the Applicant is filing herewith an application with the Chief of the Division of Oil and Gas Resources Management requesting an order authorizing the Applicant to operate the Unitized Formation and applicable land area, identified as the SWITZ7HSU Unit, according to the Unit Plan attached thereto (the "Application") (as those terms are used and defined therein). The SWITZ7HSU Unit is located in Monroe County, Ohio, and consists of approximately fifty-two (52) separate tracts of land covering approximately 1020.810 acres.

4. As of the Application Date set forth above, the Applicant is the owner, as that term is defined in Ohio Revised Code §1509.01(K), of at least 65% of the land overlying the Unitized Formation that is the subject of the unitization request set forth in the Application.

Further sayeth Affiant naught.

Dated this 15th day of August, 2016

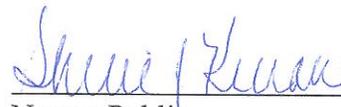
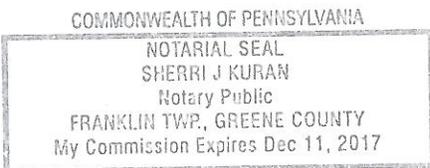


Peter J. Binotto
Director of Land Acquisitions
CNX Gas Company LLC

COMMONWEALTH OF PENNSYLVANIA
COUNTY OF WASHINGTON

Personally appeared before me, the undersigned authority, **Peter J. Binotto** who acknowledged himself to be The Director of Land Acquisitions of CNX Gas Company LLC and that he, being authorized to do so, executed the forgoing instrument for the purpose contained therein.

Sworn to and subscribed before me this 15th day of August, 2016.
(Notarial Seal)



Notary Public
My Commission Expires: 12.11.17