

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

In re the Matter of the Application of R.E.  
Gas Development, LLC for Unit Operation

Application Date: May 13, 2014

Grunder North Unit

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**APPLICATION OF R.E. GAS DEVELOPMENT, LLC ("REX")  
FOR UNIT OPERATION**

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Attachment 1 Unit Plan

Attachment 2 Prepared Direct Testimony of David Pratt (“Geologist”)

Attachment 3 Prepared Direct Testimony of Luis Rodriguez (“Reservoir Engineer”)

Attachment 4 Prepared Direct Testimony of David Rogers (“Landman”)

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Gas Development, LLC for Unit Operation : Application Date: May 13, 2014  
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Grunder North Unit :

**APPLICATION**

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

I.  
APPLICANT INFORMATION

Rex is a corporation organized under the laws of the State of Delaware, with its principal office located at 366 Walker Drive, State College, Pennsylvania 16801. Rex is registered in good standing as an “owner” with the Division.

Rex 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 Grunder North Unit is located in Carroll County, Ohio, and consists of one hundred twenty-five (125) separate tracts of land. See Exhibit A-1 and Exhibit A-2 to the Unit Operating Agreement (showing the plat and tract participations, respectively). The total land area in the Grunder North Unit is approximately 593 acres and, at the time of this Application, Rex and other working interest owners participating in this Application have the right to drill on and produce from approximately 522 acres of the proposed unit – i.e., approximately eighty-seven percent (88%) of the unit area, well above the sixty-five percent (65%) threshold required by Ohio Revised Code § 1509.28. As more specifically described herein, Rex seeks authority to drill and complete one or more horizontal wells in the Unitized Formation, defined to be fifty (50) feet above the top of the Utica formation to fifty (50) feet below the base of the Point Pleasant formation, from one well pad located on lands outside the Grunder North Unit and off the central southern portion of the Grunder North Unit, to efficiently test, develop, operate and produce the Unitized Formation for oil, natural gas, and related liquids production.

Rex's plan for unit operations (the "Unit Plan") is attached to this Application as Attachment 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, and which determines reimbursement, in part, based upon the costs of and risks related to the project; and conforms to industry standards for the drilling and operating of horizontal wells.

## III. TESTIMONY

The following pre-filed testimony has been attached to the Application supporting the creation of the Grunder North Unit: (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;<sup>1</sup> (ii) testimony from a Reservoir Engineer establishing that unitization is reasonably necessary to increase substantially the recovery of oil and gas, and that the value of the estimated additional resource recovery from unit operations ex-

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<sup>1</sup> See Attachment 2.

ceeds its estimated additional costs;<sup>2</sup> and (iii) testimony from a Landman describing the project generally and the terms of the Unit Plan.<sup>3</sup>

IV.  
THE CHIEF SHOULD GRANT THIS APPLICATION

A. Legal Standard

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

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

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

See Ohio Rev. Code § 1509.28(A). The Chief’s order becomes effective once approved in writing by those owners who will be responsible for paying at least sixty-five percent of the costs of the unit’s operations and by royalty and unleased fee-owners of sixty-five percent of the unit’s acreage. Once effective, production that is “allocated to a separately owned tract shall be

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<sup>2</sup> See Attachment 3.

<sup>3</sup> See Attachment 4.

deemed, for all purposes, to have been actually produced from the tract, and all operations \*\*\* [conducted] upon any portion of the unit area shall be deemed for all purposes the conduct of such operations and production from any lease or contract for lands any portion of which is included in the unit area.” Ohio Rev. Code § 1509.28(B)(2).

B. Rex’s Application Meets this Standard

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

The “Unitized Formation” consists of the subsurface portion of the Unit Area (i.e., the lands shown on Exhibit A-1 and identified in Exhibit A-2 to the Unit Operating Agreement) at an approximate depth of fifty (50) feet above the top of the Utica formation to fifty (50) feet below the base of the Point Pleasant formation, believed to be approximately 7,379’ to 7,670’ TVD (true vertical depth) within the Grunder North Unit. The evidence presented with this Application establishes that the Unitized Formation is part of a pool and, thus, an appropriate subject of unit operation under Ohio Rev. Code § 1509.28.<sup>4</sup> Additionally, that evidence establishes that the Unitized Formation is likely to be reasonably uniformly distributed throughout the Unit Area and thus, it is reasonable for the Unit Plan to allocate unit production and expenses to separately owned tracts on a surface acreage basis.<sup>5</sup>

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

The evidence presented in this Application establishes that unit operations are reasonably necessary to increase substantially the ultimate recovery of oil and gas from the lands making up the Grunder North Unit. The Unit Plan contemplates the potential drilling of as many as four (4) horizontal wells, with laterals in approximate length of 5,600 feet.<sup>6</sup> Rex estimates that the ultimate recovery from this unit development, if all unit wells are drilled, could be as much as between 14 and 16 billion cubic feet equivalent (Bcfe) of natural gas from the Unitized Formation.<sup>7</sup> Because of the location of the unleased tracts within the Unit Area, only one of the four contemplated wells can be drilled absent unit operations. The evidence will further show that absent unit operations it is possible drill only one horizontal well within the Grunder North Unit, recovering between 3.5 and 4.0 Bcfe of natural gas.<sup>8</sup>

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<sup>4</sup> A “pool” is defined under Ohio law as “an underground reservoir containing a common accumulation of oil or gas, or both, but does not include a gas storage reservoir.” Ohio Rev. Code § 1509.01(E). See also Attachment 2.

<sup>5</sup> *Id.*

<sup>6</sup> See Attachment 3.

<sup>7</sup> See Attachment 3. We emphasize that these are only estimates, and like the rest of the estimates set forth in this Application, they should be treated as simply estimates based upon the best information available at the time.

<sup>8</sup> See Attachment 3 - Exhibit LR-2.

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 between \$2,400,000 to \$4,000,000 and that the recovery from the single well which could be drilled absent unit operations has an estimated net present value between \$0.00 to \$350,000.<sup>9</sup> Moreover, see Attachment 3 – Exhibit LR-2, showing for each proposed well the estimated value of the well’s production and the estimated drilling and operating costs (incorporated here as if fully rewritten herein). The evidence accordingly establishes that the value of the estimated additional recovery exceeds the estimated additional costs incident to conducting unit operations.

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

The Unit Plan proposed by Rex meets the requirements set forth in Ohio Revised Code § 1509.28. The unit area is described in the Unit Plan at Article 1, as well as on Exhibit A-1 and Exhibit A-2 to the Unit Operating Agreement. The nature of the contemplated unit operations can be found generally in the Unit Plan at Article 3, with greater specificity throughout, including the Unit Operating Agreement. Unit production and unit expenses are allocated on a surface acreage basis as set forth in the Unit Plan at Articles 3 through 5 (generally), except where otherwise allocated by the Unit Operating Agreement. Payment of unit expenses is addressed generally in Article 3 of the Unit Plan. The Unit Plan provides for payment of costs by other working interest owners in the event a participant is unable to meet its financial obligations related to the unit - see, e.g., Article VI of the Unit Operating Agreement. Voting provisions related to the supervision and conduct of unit operations are set forth in Article 14 of the Unit Plan, with each person having a vote that has a value corresponding to the percentage of unit expenses chargeable against that person’s interest. And the commencement and termination of operations are addressed in Articles 11 and 12 of the Unit Plan.<sup>10</sup>

V.  
HEARING

Ohio Revised Code § 1509.28 requires the Chief to hold a hearing to consider this Application, when requested by sixty-five percent (65%) of the owners of the land area underlying the proposed unit. Ohio Rev. Code § 1509.28(A). That threshold level is met here. See Attachment 4 – Exhibit DR-1. Accordingly, Rex respectfully requests that the Division schedule a hearing at

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<sup>9</sup> See Attachment 3. We emphasize that these are only estimates, and like the rest of the estimates set forth in this Application, they should be treated as simply estimates based upon the best information available at the time.

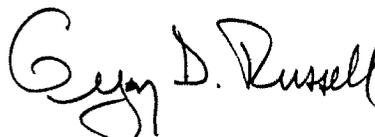
<sup>10</sup> See Attachment 4 generally.

an available hearing room located at the Division's Columbus complex on or before September 10, 2014 to consider the Application filed herein.

VI.  
CONCLUSION

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

Respectfully submitted,



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R.E. Gas Development, LLC

**PLAN FOR UNIT OPERATIONS**  
**THE GRUNDER NORTH UNIT**  
**HARRISON, WASHINGTON AND CENTER TOWNSHIPS**  
**CARROLL COUNTY, OHIO**

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

**ARTICLE 1: DEFINITIONS**

As used in this Plan for Unit Operations:

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

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

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

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

**Plan** means this Plan for Unit Operations for the Grunder North Unit, Harrison, Washington and Center Townships, Carroll County, Ohio, including, unless otherwise expressly mentioned, any and all attachments and exhibits hereto.

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

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

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

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

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

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

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

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

**Unitized Formation** means the subsurface portion of the Unit Area located from 50' feet above the top of the Utica formation to 50' feet below the base of the Point Pleasant formation, believed to be approximately 7,379 feet subsurface to 7,670 feet subsurface TVD ("True Vertical Depth").

**Unit Operating Agreement** means the modified A.A.P.L. Form 610-1989 Model Form Operating Agreement that is attached hereto as Exhibit 1 and incorporated herein by reference as if fully re-written herein and to which all Working Interest Owners are deemed to be parties; provided, however, that in the event 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. In the event of a conflict between the terms of the Unit Operating Agreement and the other terms of this Plan, excluding the Unit Operating Agreement, such other terms of this Plan shall govern.

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

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

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

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

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

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

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

## ARTICLE 2: CREATION AND EFFECT OF UNIT

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

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

**Continuation of Leases and Term Interests.** Unit Operations conducted upon any part of the Unit Area or production of Unitized Substances from any part of the Unitized Formation, except for the purpose of determining payments to Royalty Owners, shall be considered as operations upon or production from each portion of each Tract, and such production or operations shall continue in effect each lease or term, mineral or Royalty Interest, as to all Tracts and formations covered or affected by this Plan just as if such Unit Operations had been

conducted and a well had been drilled on and was producing from each portion of each Tract. Each lease shall remain in full force and effect from the date of execution 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.

### ARTICLE 3: UNIT OPERATIONS

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

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

### ARTICLE 4: TRACT PARTICIPATIONS

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

### ARTICLE 5: ALLOCATION OF UNITIZED SUBSTANCES

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

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

### ARTICLE 6: USE OR LOSS OF UNITIZED SUBSTANCES

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

**Royalty Payments.** No royalty, overriding royalty, production, or other payments shall be payable on account of Unitized Substances used, lost, or consumed in Unit Operations,

including without limitation the testing of the productivity of any wells drilled in the Unit Area. Royalty payments shall be made to Unleased Mineral Owners beginning with the initial distribution date for production of Unitized Substances from any well within the Grunder North Unit.

#### ARTICLE 7: TITLES

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

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

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

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

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

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

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

**Unleased Property.** Notwithstanding anything in this Article 8 to the contrary, and except where otherwise authorized by the Division, there shall be no Unit Operations conducted on the surface of any property located within the Grunder North 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 Grunder North Unit, owned by a non-consenting Unleased Mineral Owner.

#### ARTICLE 9: CHANGE OF TITLE

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

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

#### ARTICLE 10: RELATIONSHIPS OF PERSONS

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

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

#### ARTICLE 11: EFFECTIVE DATE

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

#### ARTICLE 12: TERM

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

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

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

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

#### ARTICLE 13: APPROVAL

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

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

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

#### ARTICLE 14: MISCELLANEOUS

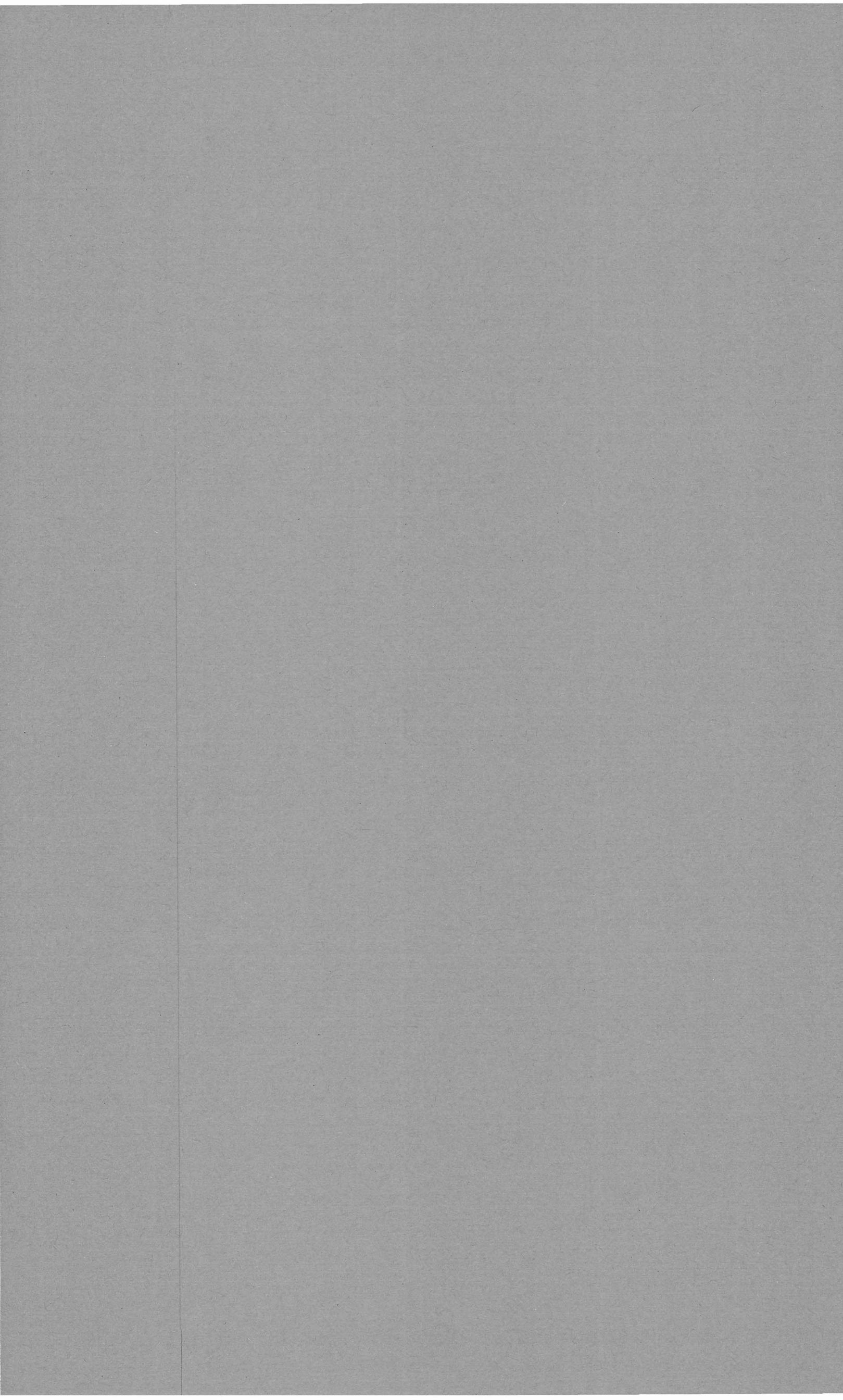
**Determinations by Working Interest Owners.** Each Working Interest Owner shall have a voting interest equal to its Unit Participation. All decisions, determinations, or approvals by Working Interest Owners hereunder shall be made by the affirmative vote of one or more parties having a combined voting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

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

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

**Grunder North Unit  
Harrison, Washington and Center Townships  
Carroll County, Ohio**

This instrument prepared by: W. Jonathan Airey, Gregory D. Russell, J. Taylor Airey and James A. Carr, Vorys,  
Sater, Seymour and Pease LLP, 52 East Gas Street, P. O. Box 1008, Columbus, Ohio 43216



**MODEL FORM OPERATING AGREEMENT**

**UNIT NAME: GRUNDER NORTH UNIT**

OPERATING AGREEMENT

DATED

April 7 , 2014 ,  
year

OPERATOR R.E. GAS DEVELOPMENT, LLC

CONTRACT AREA The lands shown on the plat attached hereto as Exhibit "A-1" and described on Exhibit "A-2" and covering the "Unitized Formation".

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COUNTY OR PARISH OF CARROLL , STATE OF OHIO

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OPERATING AGREEMENT

THIS AGREEMENT, entered into by and between R.E. GAS DEVELOPMENT, 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.

B. The term "Completion" or "Complete" shall mean a single operation intended to complete a well as a / 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.

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.

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 / 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.

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:

- 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. B. Exhibit "B," Form of Lease. C. Exhibit "C," Accounting Procedure. D. Exhibit "D," Insurance. E. Exhibit "E," Gas Balancing Agreement. H Exhibit "H" Memorandum of Operating Agreement and Financing Statement.

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

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

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

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

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

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

14 Regardless of which party has contributed any Oil and Gas Lease or Oil and Gas Interest on which royalty or other  
 15 burdens may be payable and except as otherwise expressly provided in this agreement, each party shall pay or deliver, or  
 16 cause to be paid or delivered, all burdens on its share of the production from the Contract Area up to, / but not in excess of,  
 17 16.5 % and shall indemnify, defend and hold the other parties free from any liability therefor.

18 Except as otherwise expressly provided in this agreement, if any party has contributed hereto any Lease or Interest which is  
 19 burdened with any royalty, overriding royalty, production payment or other burden on production in excess of the amounts  
 20 stipulated above, such party so burdened shall assume and alone bear all such excess obligations and shall indemnify, defend  
 21 and hold the other parties hereto harmless from any and all claims attributable to such excess burden. However, so long as  
 22 the Drilling Unit for the productive Zone(s) is identical with the Contract Area, each party shall pay or deliver, or cause to  
 23 be paid or delivered, all burdens on production from the Contract Area due under the terms of the Oil and Gas Lease(s)  
 24 which such party has contributed to this agreement, and shall indemnify, defend and hold the other parties free from any  
 25 liability therefor.

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

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

32 **C. Subsequently Created Interests:**

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

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

49 **ARTICLE IV.**  
 50 **TITLES**

51 **A. Title Examination:**

52 Title examination shall be made on the Drillsite of any proposed well prior to commencement of drilling operations and,  
 53 title examination shall be made on surface of the entire  
 54 Drilling Unit, or maximum anticipated Drilling Unit, of the well. The opinion will include the ownership of the / working  
 55 interest, minerals, royalty, overriding royalty and production payments under the applicable Leases. Each party other than an Unleased  
 56 Mineral Owner, 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. Copies of all title opinions shall be furnished to each Drilling Party. Costs incurred by Operator in  
 62 procuring abstracts, fees paid outside attorneys 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.

67 Each party / other than an Unleased Mineral Owner 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."

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

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

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

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

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

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

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

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

(e) Any liability to account to a person not a party to this agreement for prior production of Oil and Gas which arises by the parties whose lease or interest is affected by the title failure, other than Unleased Mineral Owners, in the same proportions in which they bear such title failure and such party or parties affected by such title failure, other than Unleased Mineral Owners, hereby agree to by reason of title failure shall be borne / indemnify, defend and hold harmless all other parties hereto for any such liability to account;

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

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

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

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

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

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

3. Other Losses: All losses of Leases or Interests committed to this agreement, other than those set forth in Articles IV.B.1. and IV.B.2. above, shall be joint losses and shall be borne by all parties in proportion to their interests shown on Exhibit "A." This shall include but not be limited to the loss of any Lease or Interest through failure to develop or because express or implied covenants have not been performed (other than performance which requires only the payment of money), 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 readjustment of interests in the remaining portion of the Contract Area on account of any joint loss.

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 Lease or Interest acquired by any party hereto (other than the party whose interest has failed or was lost) during the ninety (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 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. shall not apply to such acquisition.

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**ARTICLE V.  
OPERATOR**

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

R.E. GAS DEVELOPMENT, 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 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.

**B. Resignation or Removal of Operator and Selection of Successor: SEE ARTICLE XVI. OTHER PROVISIONS**

**C. Employees and Contractors:**

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

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

1. Competitive Rates and Use of Affiliates: All wells drilled on the Contract Area shall be drilled on a competitive contract basis at the usual rates prevailing in the area. If it so desires, Operator may employ its own tools and equipment in the drilling of wells, but its charges therefor shall not exceed the prevailing rates in the area and the rate of such charges shall be agreed upon by the parties in writing before drilling operations are commenced, and such work shall be performed by Operator under the same terms and conditions as are customary and usual in the area in contracts of independent contractors who are doing work of a similar nature. All work performed or materials supplied by affiliates or related parties of Operator shall be performed or supplied at competitive rates, pursuant to written agreement, and in accordance with customs and standards prevailing in the industry.
2. Discharge of Joint Account Obligations: Except as herein otherwise specifically provided, Operator shall promptly pay and discharge expenses incurred in the development and operation of the Contract Area pursuant to this agreement and shall charge each of the parties hereto with their respective proportionate shares upon the expense basis provided in Exhibit "C." Operator shall keep an accurate record of the joint account hereunder, showing expenses incurred and charges and credits made and received.
3. Protection from Liens: Operator shall pay, or cause to be paid, as and when they become due and payable, all accounts 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

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, <sup>In Article XVI, consenting</sup> except as otherwise provided / herein, permit each / Non-Operator  
 12 or its duly authorized representative, <sup>and subject to the Non-Operator or its duly authorized representative complying with Operator's safety policies</sup> at the Non-Operator's sole risk and cost, / full and free access at all reasonable times to  
 13 all operations of every kind and character being conducted for the joint account on the Contract Area and to the records of  
 14 operations conducted thereon or production therefrom, including Operator's books and records relating thereto. Such access  
 15 rights shall not be exercised in a manner interfering with Operator's conduct of an operation hereunder and shall not obligate  
 16 Operator to furnish any geologic or geophysical data of an interpretive nature unless the cost of preparation of such  
 17 interpretive data was charged to the joint account. Operator will furnish to each Non-Operator 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 Non-Operator seeking the  
 21 information. Any audit of Operator's records relating to amounts expended and the appropriateness of such expenditures  
 22 shall be conducted in accordance with the audit protocol specified in Exhibit "C."

23 6. Filing and Furnishing Governmental Reports: Operator will file, and upon written request promptly furnish copies to  
 24 each requesting 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 Non-Operators of (a) the date on which the well is spudded, or the date on which  
 30 drilling operations are commenced.

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

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

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

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

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

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

51 **A. Initial Well:**

52 Operator anticipates commencing the drilling of the Initial Well within one (1) year of the effective date of a final and non-  
 53 appealable Unitization Order issued by the Division of Oil and Gas Resources Management

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 60 and shall thereafter continue the drilling of the well with due diligence to depth sufficient, in Operator's reasonable opinion, to adequately  
 61 test the Unitized Formation.

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 67 SEE ADDITIONAL REFERENCE TO THE INITIAL WELL IN ARTICLE XVI. OTHER PROVISIONS.

68 **B. Subsequent Operations:**

69 1. Proposed Operations: If any party hereto, except an Unleased Mineral Owner, should desire to drill any well on the Contract  
 70 Area <sup>other</sup> than <sup>the</sup> Initial Well, <sup>or</sup>  
 71 if any party should desire to Rework, Sidetrack, Deepen, Recomplete or Plug Back a dry hole or a well no longer capable of  
 72 producing in paying quantities in which such party has not otherwise relinquished its interest in the proposed objective Zone under  
 73 this agreement, the party desiring to drill, Rework, Sidetrack, Deepen, Recomplete or Plug Back such a well shall give written  
 74 notice of the proposed operation to the parties who have not otherwise relinquished their interest in such objective Zone

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 <sup>and confirmed with some form of facsimile/electronic mail transmission within 24 hours of the telephone notice</sup> telephone / and the response period shall be limited to forty-  
 6 eight (48) hours, exclusive of Saturday, Sunday and legal holidays. Failure of a party to whom such notice is delivered to reply  
 7 within the period above fixed shall constitute an election by that party not to participate in the cost of the proposed operation.  
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9 If all parties to whom such notice is delivered elect to participate in such a proposed operation, the parties shall be  
 10 contractually committed to participate therein provided such operations are commenced within the time period hereafter set  
 11 forth, and Operator shall, no later than <sup>one hundred eighty (180)</sup> days after expiration of the notice period of thirty (30) days (or as  
 12 promptly as practicable after the expiration of the forty-eight (48) hour period when a drilling rig is on location, as the case  
 13 may be), actually commence the proposed operation and thereafter complete it with due diligence at the risk and expense of  
 14 the parties participating therein; provided, however, said commencement date may be extended upon written notice of same  
 15 by Operator to the other parties, <sup>reasonable</sup> for a / period of / if, in the sole opinion of Operator, such <sup>time</sup>  
 16 additional time is reasonably necessary to obtain permits from governmental authorities, surface rights (including rights-of-  
 17 way) or appropriate drilling equipment, or to complete title examination or curative matter required for title approval or  
 18 acceptance. If the actual operation has not been commenced within the time provided (including any extension thereof as  
 19 specifically permitted herein or in the force majeure provisions of Article XI) and if any party hereto still desires to conduct  
 20 said operation, written notice proposing same must be resubmitted to the other parties in accordance herewith as if no prior  
 21 proposal had been made. Those parties that did not participate in the drilling of a well for which a proposal to Deepen or  
 22 Sidetrack is made hereunder shall, if such parties desire to participate in the proposed Deepening or Sidetracking operation,  
 23 reimburse the Drilling Parties in accordance with Article VI.B.4. in the event of a Deepening operation and in accordance  
 24 with Article VI.B.5. in the event of a Sidetracking operation.

## 25 2. Operations by Less Than All Parties:

26 (a) Determination of Participation. If any party to whom such notice is delivered as provided in Article VI.B.1. or  
 27 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  
 28 Article, the party or parties giving the notice and such other parties as shall elect to participate in the operation shall, no  
 29 later than ninety (90) days after the expiration of the notice period of thirty (30) days (or as promptly as practicable after the  
 30 expiration of the forty-eight (48) hour period when a drilling rig is on location, as the case may be) actually commence the  
 31 proposed operation and complete it with due diligence.; provided however, said commencement date may be extended, upon written notice  
 32 of same by Operator to the other parties, for a reasonable period if, in the sole opinion of Operator, such additional time is reasonably  
 33 necessary to obtain permits from governmental authorities, surface rights (including rights-of-way) or appropriate drilling equipment, or to  
 34 complete title examination or curative matter required for title approval or acceptance. Operator shall perform all work for the account of  
 35 the Consenting Parties; provided, however, if no drilling rig or other equipment is on location, and if Operator is a Non-Consenting Party,  
 36 the Consenting Parties shall either: (i) request Operator to perform the work required by such proposed operation for the  
 37 account of the Consenting Parties, or (ii) designate one of the Consenting Parties as Operator to perform such work. The  
 38 rights and duties granted to and imposed upon the Operator under this agreement are granted to and imposed upon the party  
 39 designated as Operator for an operation in which the original Operator is a Non-Consenting Party. Consenting Parties, when  
 40 conducting operations on the Contract Area pursuant to this Article VI.B.2., shall comply with all terms and conditions of this  
 41 agreement.

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

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

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1 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, (after deducting  
 4 applicable ad valorem, production, severance, and excise taxes, and assessments  
 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) 125 % of each such Non-Consenting Party's share of the cost of any newly acquired surface equipment  
 8 beyond the wellhead connections (including but not limited to stock tanks, separators, treaters, pumping equipment and  
 9 piping), plus <sup>125</sup>/<sub>1000</sub> of each such Non-Consenting Party's share of the cost of operation of the well commencing with first  
 10 production and continuing until each such Non-Consenting Party's relinquished interest shall revert to it under other  
 11 provisions of this Article, it being agreed that each Non-Consenting Party's share of such costs and equipment will be that  
 12 interest which would have been chargeable to such Non-Consenting Party had it participated in the well from the beginning  
 13 of the operations; and

14 (ii) 200 % of (a) that portion of the costs and expenses of drilling, Reworking, Sidetracking, Deepening,  
 15 Plugging Back, testing, Completing, and ReCompleting, after deducting any cash contributions received under Article VIII.C.,  
 16 and of (b) that portion of the cost of newly acquired equipment in the well (to and including the wellhead connections),  
 17 which would have been chargeable to such Non-Consenting Party if it had participated therein.

18 (c) Reworking, ReCompleting or Plugging Back. An election not to participate in the drilling, Sidetracking or  
 19 Deepening of a well shall be deemed an election not to participate in any Reworking or Plugging Back operation proposed in  
 20 such a well, or portion thereof, to which the initial non-consent election applied that is conducted at any time prior to full  
 21 recovery by the Consenting Parties of the Non-Consenting Party's recoupment amount. Similarly, an election not to  
 22 participate in the Completing or ReCompleting of a well shall be deemed an election not to participate in any Reworking  
 23 operation proposed in such a well, or portion thereof, to which the initial non-consent election applied that is conducted at  
 24 any time prior to full recovery by the Consenting Parties of the Non-Consenting Party's recoupment amount. Any such  
 25 Reworking, ReCompleting or Plugging Back operation conducted during the recoupment period shall be deemed part of the  
 26 cost of operation of said well and there shall be added to the sums to be recouped by the Consenting Parties 200 % of  
 27 that portion of the costs of the Reworking, ReCompleting or Plugging Back operation which would have been chargeable to  
 28 such Non-Consenting Party had it participated therein. If such a Reworking, ReCompleting or Plugging Back operation is  
 29 proposed during such recoupment period, the provisions of this Article VI.B. shall be applicable as between said Consenting  
 30 Parties in said well.

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

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

40 Within <sup>one hundred eighty (180)</sup>/<sub>days</sub> after the completion of any operation under this Article, the party conducting the operations  
 41 for the Consenting Parties shall furnish each Non-Consenting Party with an inventory of the equipment in and connected to  
 42 the well, and an itemized statement of the cost of drilling, Sidetracking, Deepening, Plugging Back, testing, Completing,  
 43 ReCompleting, and equipping the well for production; or, at its option, the operating party, in lieu of an itemized statement  
 44 of such costs of operation, may submit a detailed statement of monthly billings. Each / thereafter, during the time the  
 45 Consenting Parties are being reimbursed as provided above, the party conducting the operations for the Consenting Parties  
 46 shall furnish the Non-Consenting Parties with an itemized statement of all costs and liabilities incurred in the operation of  
 47 the well, together with a statement of the quantity of Oil and Gas produced from it and the amount of proceeds realized from  
 48 the sale of the well's working interest production during the preceding <sup>year</sup>/<sub>year</sub>. In determining the quantity of Oil and Gas  
 49 produced, Consenting Parties shall use industry accepted methods such as but not limited to metering or  
 50 periodic well tests. Any amount realized from the sale or other disposition of equipment newly acquired in connection with  
 51 any such operation which would have been owned by a Non-Consenting Party had it participated therein shall be credited  
 52 against the total unreturned costs of the work done and of the equipment purchased in determining when the interest of such  
 53 Non-Consenting Party shall revert to it as above provided; and if there is a credit balance, it shall be paid to such Non-  
 54 Consenting Party.

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

63 3. Stand-By Costs: When a well which has been drilled or Deepened has reached its authorized depth and all tests have  
 64 been completed and the results thereof furnished to the parties, or when operations on the well have been otherwise  
 65 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, Recompleting, Plugging Back or Completing operation in such a well (including the period required  
 2 under Article VI.B.6. to resolve competing proposals) shall be charged and borne as part of the drilling or Deepening  
 3 operation just completed. Stand-by costs subsequent to all parties responding, or expiration of the response time permitted,  
 4 whichever first occurs, and prior to agreement as to the participating interests of all Consenting Parties pursuant to the terms  
 5 of the second grammatical paragraph of Article VI.B.2. (a), shall be charged to and borne as part of the proposed operation,  
 6 but if the proposal is subsequently withdrawn because of insufficient participation, such stand-by costs shall be allocated  
 7 between the Consenting Parties in the proportion each Consenting Party's interest as shown on Exhibit "A" bears to the total  
 8 interest as shown on Exhibit "A" of all Consenting Parties.

9 In the event that notice for a Sidetracking <sup>or Deepening</sup> / 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 / the estimated <sup>shall be paid</sup> 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.

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

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

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

62 6. Order of Preference of Operations.  
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2 7. Conformity to Spacing Pattern. Notwithstanding the provisions of this Article VI.B.2., it is agreed that no wells shall be  
3 drilled to or Completed in or produced from a Zone from which a well located elsewhere on the Contract  
4 or such well has been approved as an exception to the then-existing spacing pattern for such Zone by the appropriate regulatory  
5 agency Area is producing, unless such well conforms to the then-existing well spacing pattern for such Zone /.

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

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

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

13  Option No. 1: / All necessary expenditures for the drilling, Deepening or Sidetracking, testing, Completing and  
14 equipping of the well, including necessary tankage and/or surface facilities.

15  Option No. 2: / All necessary expenditures for the drilling, Deepening or Sidetracking and testing of the well. When  
16 such well has reached its authorized depth, and all logs, cores and other tests have been completed, and the results  
17 thereof furnished to the parties, Operator shall give immediate notice to the Non-Operators having the right to  
18 participate in a Completion attempt whether or not Operator recommends attempting to Complete the well,  
19 together with Operator's AFE for Completion costs if not previously provided. The parties receiving such notice  
20 shall have forty-eight (48) hours (exclusive of Saturday, Sunday and legal holidays) in which to elect by delivery of  
21 notice to Operator to participate in a recommended Completion attempt. Operator shall deliver any such Completion proposal,  
22 to the other parties entitled to participate. Election to participate in a Completion attempt shall include consent to all  
23 necessary expenditures for the Completing and equipping of such well, including necessary tankage and/or surface  
24 facilities but excluding any stimulation operation not contained on the Completion AFE. Failure of any party  
25 receiving such notice to reply within the period above fixed shall constitute an election by that party not to  
26 participate in the cost of the Completion attempt;. If one or more, but less than all of the parties, elect to attempt a Completion,  
27 the

28 provision of Article VI.B.2. hereof (the phrase "Reworking, Sidetracking, Deepening, Recompleting or Plugging  
29 Back" as contained in Article VI.B.2. shall be deemed to include "Completing") shall apply to the operations  
30 thereafter conducted by less than all parties; provided, however, that Article VI.B.2. shall apply separately to each  
31 separate Completion or Recompletion attempt undertaken hereunder, and an election to become a Non-Consenting  
32 Party as to one Completion or Recompletion attempt shall not prevent a party from becoming a Consenting Party  
33 in subsequent Completion or Recompletion attempts regardless whether the Consenting Parties as to earlier  
34 Completions or Recompletion have recouped their costs pursuant to Article VI.B.2.; provided further, that any  
35 recoupment of costs by a Consenting Party shall be made solely from the production attributable to the Zone in  
36 which the Completion attempt is made. Election by a previous Non-Consenting party to participate in a subsequent  
37 Completion or Recompletion attempt shall require such party to pay its proportionate share of the cost of salvable  
38 materials and equipment installed in the well pursuant to the previous Completion or Recompletion attempt,  
39 insofar and only insofar as such materials and equipment benefit the Zone in which such party participates in a  
40 Completion attempt.

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

45 **D. Other Operations:**

46 Operator shall not undertake any single project reasonably estimated to require an expenditure in excess of \_\_\_\_\_  
47 One Hundred Fifty Thousand Dollars (\$ 150,000.00 ) except in connection with the  
48 drilling, Sidetracking, Reworking, Deepening, Completing, Recompleting or Plugging Back of a well that has been previously  
49 authorized by or pursuant to this agreement; provided, however, that, in case of explosion, fire, flood or other sudden  
50 emergency, whether of the same or different nature, Operator may take such steps and incur such expenses as in its opinion  
51 are required to deal with the emergency to safeguard life and property but Operator, as promptly as possible, shall report the  
52 emergency to the other parties. If Operator prepares an AFE for its own use, Operator shall furnish any Non-Operator so  
53 requesting an information copy thereof for any single project costing in excess of One Hundred Fifty Thousand Dollars  
54 (\$ 150,000.00 ). Any party who has not relinquished its interest in a well shall have the right to propose that  
55 Operator perform repair work or undertake the installation of artificial lift equipment or ancillary production facilities such as  
56 salt water disposal wells or to conduct additional work with respect to a well drilled hereunder or other similar project (but  
57 not including the installation of gathering lines or other transportation or marketing facilities, the installation of which shall  
58 be governed by separate agreement between the parties) reasonably estimated to require an expenditure in excess of the  
59 amount first set forth above in this Article VI.D. (except in connection with an operation required to be proposed under  
60 Articles VI.B.1. or VI.C.1. Option No. 2, which shall be governed exclusively by those Articles). Operator shall deliver such  
61 proposal to all parties entitled to participate therein. If within thirty (30) days thereof Operator secures the written consent  
62 of any party or parties owning at least 50 % of the interests of the parties entitled to participate in such operation,  
63 each party having the right to participate in such project shall be bound by the terms of such proposal and shall be obligated  
64 to pay its proportionate share of the costs of the proposed project as if it had consented to such project pursuant to the terms  
65 of the proposal.

66 **E. Abandonment of Wells:**

67 1. Abandonment of Dry Holes: Except for any well drilled or Deepened pursuant to Article VI.B.2., any well which has  
68 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 or Deepening such well. Any party who objects to  
 6 plugging and abandoning such well by notice delivered to Operator within forty-eight (48) hours (exclusive of Saturday,  
 7 Sunday and legal holidays) after delivery of notice of the proposed plugging shall take over the well as of the end of such  
 8 forty-eight (48) hour notice period and conduct further operations in search of Oil and/or Gas subject to the provisions of  
 9 Article VI.B.; failure of such party to provide proof reasonably satisfactory to Operator of its financial capability to conduct  
 10 such operations or to take over the well within such period or thereafter to conduct operations on such well or plug and  
 11 abandon such well shall entitle Operator to retain or take possession of the well and plug and abandon the well. The party  
 12 taking over the well shall indemnify Operator (if Operator is an abandoning party) and the other abandoning parties against  
 13 liability for any further operations conducted on such well except for the costs of plugging and abandoning the well and  
 14 restoring the surface, for which the abandoning parties shall remain proportionately liable.

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

28 Parties taking over a well as provided herein shall tender to each of the other parties its proportionate share of the value of  
 29 the well's salvable material and equipment, determined in accordance with the provisions of Exhibit "C," less the estimated cost  
 30 of salvaging and the estimated cost of plugging and abandoning and restoring the surface;. Each abandoning party shall assign to the non-  
 31 abandoning  
 32 parties, without warranty, express or implied, as to title or as to quantity, or fitness for use of the equipment and material, all  
 33 of its interest in the wellbore of the well and related equipment, together with its interest in the Leasehold insofar and only  
 34 insofar as such Leasehold covers the right to obtain production from that wellbore in the Zone then open to production. If the  
 35 interest of the abandoning party is or includes an Oil and Gas Interest, such party shall execute and deliver to the non-  
 36 abandoning party or parties an oil and gas lease, limited to the wellbore and the Zone then open to production, for a term of  
 37 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  
 38 attached as Exhibit "B." The assignments or leases so limited shall encompass the Drilling Unit upon which the well is located.  
 39 The payments by, and the assignments or leases to, the assignees shall be in a ratio based upon the relationship of their  
 40 respective percentage of participation in the Contract Area to the aggregate of the percentages of participation in the Contract  
 41 Area of all assignees. There shall be no readjustment of interests in the remaining portions of the Contract Area.

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

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

#### 56 F. Termination of Operations:

57 Upon the commencement of an operation for the drilling, Reworking, Sidetracking, Plugging Back, Deepening, testing,  
 58 Completion or plugging of a well, including but not limited to the Initial Well, such operation shall not be terminated without  
 59 consent of parties bearing \_\_\_\_\_ 80 \_\_\_\_\_ % of the costs of such operation; provided, however, that in the event granite or other  
 60 practically impenetrable substance or condition in the hole is encountered which renders further operations impractical,  
 61 Operator may discontinue operations and give notice of such condition in the manner provided in Article VI.B.1, and the  
 62 provisions of Article VI.B. or VI.E. shall thereafter apply to such operation, as appropriate.

#### 63 G. Taking Production in Kind:

##### 64 Option No. 1: Gas Balancing Agreement Attached

65 Each party, other than an Unleased Mineral Owner, shall have the right to take in kind or separately dispose of its proportionate  
 66 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  
 67 treating Oil and Gas for marketing purposes and production unavoidably lost. Any extra expenditure incurred in the taking  
 68 in kind or separate disposition by any party of its proportionate share of the production shall be borne by such party. Any  
 69 party taking its share of production in kind shall be required to pay for only its proportionate share of such part of  
 70 Operator's surface facilities which it uses.

71 Each party shall execute such division orders and contracts as may be necessary for the sale of its interest in  
 72 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 <sup>thirty (30)</sup> / 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 <sup>thirty (30)</sup> / days written notice to Operator to exercise at any time 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 thirty (30) day period, 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 <sup>thirty (30)</sup> at least / 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 any Gas balancing agreement between the parties hereto, 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.

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

**A. Liability of Parties:**

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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**B. Liens and Security Interests:**

See Article XVI.

~~With the exception of situations where the party is an Unleased Mineral Owner each~~

**C. Advances:**

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

**D. Defaults and Remedies:**

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

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

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

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

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

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

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

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 and assessments assessed  
 64 thereon before they become delinquent. Prior to the rendition date, each Non-Operator shall furnish Operator information as  
 65 to 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.

14 However, should any party, except an Unleased Mineral Owner, desire to surrender its interest in any Lease or in any portion thereof,  
 15 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.

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

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

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

46 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  
 47 by the parties who elect to participate therein, in a ratio based upon the relationship of their respective percentage of participation in  
 48 the Contract Area to the aggregate of the percentages of participation in the Contract Area of all parties participating in the  
 49 purchase of such renewal or replacement Lease. The acquisition of a renewal or replacement Lease by any or all of the parties hereto  
 50 shall not cause a readjustment of the interests of the parties stated in Exhibit "A," but any renewal or replacement Lease in which  
 51 less than all parties elect to participate shall not be subject to this agreement but shall be deemed subject to a separate Operating  
 52 Agreement in the form of this agreement.

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

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

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

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

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

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 Disposition of

4 **D. Interest:**

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

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

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

24 If permitted by the laws of the state or states in which the property covered hereby is located, each party hereto owning an  
 25 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  
 26 undivided interest therein.

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

28  (Optional; Check if applicable.)

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

41 **ARTICLE IX.**

42 **INTERNAL REVENUE CODE ELECTION**

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

59 **ARTICLE X.**

60 **CLAIMS AND LAWSUITS**

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

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

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

**ARTICLE XII.  
NOTICES**

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

**ARTICLE XIII.  
TERM OF AGREEMENT**

The term of this agreement shall be as provided in the Unit Plan.

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

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

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

**B. Governing Law:**

This agreement and all matters pertaining hereto, including but not limited to matters of performance, non-performance, breach, remedies, procedures, rights, duties, and interpretation or construction, shall be governed and determined by the law of the state in which the Contract Area is located. If the Contract Area is in two or more states, the law of the state of OHIO shall govern.

**C. Regulatory Agencies:**

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

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

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

**ARTICLE XV.  
MISCELLANEOUS**

**A. Execution:**

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

**B. Successors and Assigns:**

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

**C. Counterparts:**

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

**D. Severability:**

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

**ARTICLE XVI.  
OTHER PROVISIONS**

In the event of a conflict between the terms and provisions of this Article XVI and the other terms and conditions in this Operating Agreement, the terms and conditions of this Article XVI shall prevail.

**A. Additional Definitions**

a. The term "lateral" shall mean that portion of a well bore that deviates from an approximate vertical orientation to an approximate horizontal orientation and thereafter all portions of the well bore beyond such deviation to total depth.

b. The term "horizontal well" shall mean a well drilled, completed or recompleted in a manner in which the horizontal component of the completion interval in the objective formation(s) exceeds the vertical component thereof and which horizontal component exceeds a minimum of one hundred feet (100') in the objective formation(s).

c. The term "multi-lateral well" shall mean a well which contains more than one (1) lateral and in which the well bores deviate from approximate vertical orientation to approximate horizontal orientation in order to drill within and test a specific geological interval, utilizing deviation equipment, services and technology. This shall include similar operations in the re-entry of an existing well bore.

d. The term "total depth" applied to all multi-lateral or horizontal wells drilled pursuant to this agreement, shall mean the distance from the surface of the ground to the terminus of the well bore. Each lateral taken together with the common vertical well bore shall be considered a single well bore and shall have a corresponding total depth. The term "depth" wherever used in the agreement shall be deemed to read "total depth" insofar as it applies to such well.

e. The term "deepen" when used in conjunction with a multi-lateral or horizontal well shall mean an operation whereby a lateral is drilled to a distance greater than the distance set out in the well proposal approved by the Consenting Parties, or to a horizontal distance greater than the horizontal distance to which the lateral was previously drilled.

f. For the purposes of this agreement, as to a horizontal or multi-lateral well, the term "plug back" shall mean an operation to test or complete the well at a stratigraphically shallower geological horizon in which the operation has been or is being completed and which is not within an existing lateral.

g. In addition to the above, the definitions set forth in the Unit Plan for the Grunder North Unit are hereby adopted and incorporated as if fully rewritten herein.

h. The term "Unitized Formation" means that portion of the subsurface underlying the Unit Area as to those formations from the 50' above the top of the Utica formation or the stratigraphic equivalent thereof, to 50' below the base of the Point Pleasant formation or the stratigraphic equivalent thereof.

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

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1 a. Resignation or Removal of Operator: Operator may resign at any time by giving written notice thereof to Non-Operators. If Operator  
2 terminates its legal existence, no longer owns an interest hereunder in the Contract Area, or is no longer capable of serving as  
3 Operator, Operator shall be deemed to have resigned without any action by Non-Operators, except the selection of a successor.  
4 Operator may be removed if it fails or refuses to carry out its duties hereunder, or becomes insolvent, bankrupt or is placed in  
5 receivership, by the affirmative vote of two (2) or more Non-Operators owning a majority interest based on ownership as shown on  
6 Exhibit "A" remaining after excluding the voting interest of Operator. Such resignation or removal shall not become effective until  
7 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  
8 resignation by Operator or action by the Non-Operators to remove Operator, unless a successor Operator has been selected and  
9 assumes the duties of Operator at an earlier date. Operator, after the effective date of resignation or removal, shall be bound by the  
10 terms hereof as a Non-Operator. A change of corporate name or structure or transfer of Operator's interest to any single subsidiary,  
11 parent or successor corporation shall not be the basis for removal of Operator.

12 b. Selection of Successor Operator: Upon the resignation or removal of Operator, a successor Operator shall be selected by the parties.  
13 The successor Operator shall be selected from the parties owning an interest in the Contract Area at the time such successor  
14 Operator is selected. The successor Operator shall be selected by the affirmative vote of two (2) or more parties owning a majority  
15 interest based on ownership as shown on Exhibit "A"; provided, however, if an Operator which has been removed fails to vote or votes  
16 only to succeed itself, the successor Operator shall be selected by the affirmative vote of two (2) or more parties owning a majority interest  
17 based on ownership as shown on Exhibit "A" remaining after excluding the voting interest of the Operator that was removed.

18 c. Effect of Bankruptcy: If Operator becomes insolvent, bankrupt or is placed in receivership, it shall be deemed to have resigned without  
19 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  
20 against Operator, and the removal of Operator is prevented by the federal bankruptcy court, all Non-Operators and Operator shall form  
21 an interim operating committee to serve until Operator has elected to reject or resume this agreement pursuant to the Bankruptcy Code,  
22 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  
23 as Operator without any action by Non-Operators, except the selection of a successor. During the period of time the operating committee  
24 controls operations, all actions shall require the approval of two (2) or more parties owning a majority interest based on ownership as  
25 shown in Exhibit "A". In the event there are only two (2) parties to this agreement, during the period of time the operating committee  
26 controls operations, a third party acceptable to Operator, Non-Operator and the federal bankruptcy court shall be selected as a member  
27 of the operating committee, and all actions shall require the approval of two (2) members of the operating committee without regard for  
28 their interest in the Contract Area based on Exhibit "A".  
29

30 C. Non-Consenting of Initial Well

31 In the event a Party elects not to participate (a Non-Consenting Party) in the Initial Well proposed in the Contract Area pursuant to Article  
32 VI.A., upon the timely commencement of actual drilling operations on such Well, such Non-Consenting Party shall be deemed to have  
33 relinquished to the Consenting Parties, and the Consenting Parties shall own and be entitled to receive, in proportion to their respective interests  
34 all of such Non-Consenting Party's interest in the well and share of production therefrom until the proceeds of the sale of such interests,  
35 calculated at the well (after deducting production taxes, excise taxes and assessments, royalty, overriding royalty and other interests not excepted by Article  
36 III.D. payable out of or measured by the production from such well accruing with respect to such interest until it reverts) shall equal the total  
37 of the following: a) 125% of such Non-Consenting Party's share of the cost of any newly acquired surface equipment beyond the wellhead  
38 connections (including, but not limited to, stock tanks, separators, treaters, pumping equipment and piping), plus 125% of such Non-Consenting  
39 Party's share of the cost of the operation of the well commencing with first production and continuing until such Non-Consenting Party's  
40 relinquished interest shall revert to it under other provisions of this Article, it being agreed that such Non-Consenting Party's share of such costs  
41 and equipment will be that interest that would have been chargeable to such Non-Consenting Party had it participated in the well from the  
42 beginning of the operations; and b) 300% of that portion of the costs and expenses of drilling, testing and completing, after deducting any cash  
43 contributions received under Article III.C., and 300% of that portion of the cost of newly acquired equipment in the well (to and including  
44 wellhead connections) which would have been chargeable to such Non-Consenting Party if it had participated therein.  
45

46 D. Sequence of Further Operations

47 In the event a well drilled under the terms of this Operating Agreement has achieved the authorized depth or the objective formation and the parties  
48 participating in such well cannot agree on the sequence and timing of further operations regarding such well, the following elections shall control in  
49 the order detailed below:

- 50 a. An election to conduct additional logging, coring or testing operations;  
51 b. An election to attempt to complete the well at the thus achieved authorized depth or objective depth;  
52 c. An election to further extend the lateral length;  
53 d. An election to drill a new lateral to a different direction;  
54 e. An election to plug back and attempt a completion at a depth above the objective depth;  
55 f. An election to deepen the well;  
56 g. An election to sidetrack the well; and  
57 h. An election to plug and abandon the well.  
58

59 E. Subsequent Operation Proposal Prior to Recovery of Costs and Penalties

60 Notwithstanding anything to the contrary in Article VI.B.2 and VII.D.2, the share of production from a well which a Non-Consenting Party shall be  
61 deemed to have relinquished to the Consenting Party in any reworking, deepening, plugging back or completion of a well (as such items are defined  
62 and used in Article VI.B.2 and VII.D) shall be the Non-Consenting Party's share of production only from the interval or intervals of the formation or  
63 formations from which production is obtained or increased as a result of the operation in which the Non-Consenting Party did not participate. In the  
64 event a subsequent operation is proposed for such well by the Consenting Party prior to the recovery of all costs and penalties recoverable from the  
65 relinquished interest of the Non-Consenting Party in said interval or formation, the Non-Consenting Party shall be entitled to participate therein to the  
66 extent of its interest prior to relinquishment.  
67

68 F. Estimates

69 Non-Operators hereby acknowledge that Operator's estimate of well costs contained in any Authority for Expenditure are estimated costs and are,  
70 therefore, subject to adjustments as actual conditions dictate. Non-Operators shall be liable for their pro-rata share of all costs, irrespective of whether  
71 or not actual costs are greater or lesser than the estimated costs shown on the Authority for Expenditure.  
72

73 G. Invalid Provisions

74 In the event any provision contained in this Operating Agreement is contrary to any law, rule, regulation or order and is held to be invalid, void, illegal

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1 or unenforceable, the parties shall either modify the provisions to properly conform with such law, rule, regulation or order, or delete such provision  
2 from this Operating Agreement, and in either case the remaining provisions hereof shall remain unaffected and will continue in force and effect.  
3

4 H. Agreement Binding on Heirs, Representative, Successors and Assigns

5 This Agreement shall be binding upon the heirs and personal representatives (if applicable) and upon the successors and assigns of the parties hereto.  
6 In the event any party, other than an Unleased Mineral Owner, hereunder assigns its interest in the Contract Area such assignment shall specifically  
7 provide that the Assignor shall remain subject to the terms and conditions of this Agreement. No such assignment shall relieve the Assignor  
8 thereunder of any accrued liability hereunder notwithstanding the subsequent acts or conduct of Operator in dealing with the Assignee or Assignees of  
9 such party unless Operator shall expressly release the Assignor from any such liability in writing.

10 I. Prepayment of Costs and Expenses

11 **Notwithstanding any other provisions of this agreement, and without prejudice to any other rights of the Operator, Operator will have**  
12 **the right to request and receive from each Non-Operator, other than from an Unleased Mineral Owner, payment in advance of its**  
13 **respective share of (i) all or part of the completed well cost for an Initial Well to which such Non-Operator has consented or is deemed to**  
14 **have consented, and (ii) the cost of any drilling and completion, reworking, recompletion, sidetracking, deepening, plugging back**  
15 **operation or any other operation hereunder to which such Non-Operator has consented or is deemed to have consented hereunder (any**  
16 **such operation under clause (i) or (ii) being herein called a “Drilling Operation”).**  
17

18 A Non-Operator receiving a request for advance payment will within thirty (30) days of the receipt of such request in all other cases, pay to operator  
19 in cash the full amount of such request. Operator will credit the amount to the Non-Operator’s account for the payment of such Non-Operator’s share  
20 of costs of such Drilling Operation and, following the end of each month, Operator will charge such account with such Non-Operator’s share of actual  
21 costs incurred during such month.

22 Payment of an advance will not relieve a Non-Operator of the obligation to pay such Non-Operator’s share of the actual cost of a Drilling Operation  
23 and, when the actual costs have been determined, Operator will adjust the accounts of the parties by refunding any net amounts due or invoicing the  
24 parties for additional sums owing, which additional sums shall be paid in accordance with the accounting procedure proscribed in the Agreement.  
25

26 J. Confidentiality

27 Any information forwarded to or obtained by a Non-Operator concerning the wells and operations in the Contract Area shall be maintained as  
28 confidential by the Non-Operator and shall not be disclosed by the Non-Operator without the prior written consent of the Operator.

29 K. Further Assurances

30 In connection with this agreement, the parties agree to execute and deliver such additional documents and instruments and to perform such additional  
31 acts as may be necessary or appropriate to effectuate, carry out, and to perform all the terms, provision and conditions of this agreement.  
32

33 L. New Releases

34 Except for Operator, any party hereto or any related party desiring to issue a news release concerning operations conducted within the Contract Area  
35 shall provide the other party(ies) hereto with copies of the proposed release and no such news release shall be issued without first obtaining the written  
36 consent of all parties thereto. Notwithstanding the foregoing sentence, no prior consent shall be required for any news release(s) issued by Operator, or  
37 required by law and/or the Securities and Exchange Commission.

38 M. Netting and Setoff

39 **Except for any payments related to charges on any joint interest billing that a Non-Operator has disputed in good faith, Operator is**  
40 **authorized to deduct such operating costs and charges assessable to Non-Operators and permitted under this Operating Agreement,**  
41 **and to remit to such non-Operators their respective net share of any proceeds attributable to the interest of such Non-Operators**  
42 **being received directly from any purchasers of production from the Contract Area. Operator may also withhold any money payable**  
43 **by it to a Non-Operator hereunder and apply same to the payment of any obligation owed by a Non-Operator to the Operator or to**  
44 **any other Non-Operators hereunder. The foregoing provision shall additionally not diminish Operator’s lien rights contained**  
45 **within this agreement.**  
46

47 To the extent that an Unleased Mineral Owner is a Non-Consenting Party hereunder, any related financial obligation owed by such Unleased Mineral  
48 Owner hereunder shall be paid out of such owner’s proportionate share of Working Interest revenues only. This payment method shall continue even  
49 after such owner’s relinquished interest reverts back to it; provided, however, that nothing in this Article XVI.M shall prevent Operator from  
50 reserving, and Operator shall be allowed to reserve, reasonable amounts from such owner’s proportionate share of Working Interest revenues to pay  
51 for such owner’s share of anticipated plugging abandonment and reclamation costs.

52 N. Headings

53 **All headings in this agreement are for reference purposes only and have no binding effect on the terms, conditions or**  
54 **provisions of this agreement.**  
55

56 O. Liens and Security Interests

57 With the exception of situations where the party is an Unleased Mineral Owner, each party grants to the other parties hereto a lien upon any interest it  
58 now owns or hereafter acquires in Oil and Gas Leases and Oil and Gas Interests in the Contract Area, and a security interest and/or purchase money  
59 security interest in any interest it now owns or hereafter acquires in the personal property and fixtures on or used or obtained for use in connection  
60 therewith, to secure performance of all of its obligations under this agreement including but not limited to payment of expense, interest and fees, the  
61 proper disbursement of all monies paid hereunder, the assignment or relinquishment of interest in Oil and Gas Leases as required hereunder, and the  
62 property performance of operations hereunder. Operator does hereby grant, bargain, sell, mortgage, assign, transfer, convey and pledge to Non-  
63 Operator all of Operator’s right title and interest in and to the real and personal property, rights, titles, interests and estates making up Mortgaged  
64 Property and Collateral. Non-Operator does hereby grant, bargain, sell, mortgage, assign, transfer, and pledge to Operator all of Non-Operator’s  
65 right title and interest in and to the real and personal property, rights, titles, interests and estates making up Mortgaged Property and Collateral.

66 “Mortgaged Property” shall mean, collectively, the following real property located in the State of Ohio, (1) the Oil and Gas Leases, Oil and Gas  
67 Interests and other interests comprising the Contract Area, including operating rights, working interests, royalty interests, overriding royalty  
68 interests, non-participating royalty interests, production payments, net profits interests, or any other interest measured by or payable out of  
69 production of hydrocarbons, and all renewals and extension thereof (collectively, the “Oil and Gas Property”) (2) the oil and gas in, on, under, and  
70 that may be produced from the Oil and Gas Property, including, without limitation, all contractual rights, operating rights, leasehold interests,  
71 working interests, royalty interests, overriding royalty interests, non-participating royalty interests, mineral interests, production payments, net  
72 profits interests, or any other interest measured by or payable out of production of hydrocarbons (as such interests may be enlarged by the discharge  
73 of any payments out of production or by the removal of any charges or encumbrances), and all other as-extracted collateral, (3) all wells (oil, gas,  
74 oil/gas injection, water or disposal), equipment, machinery and appurtenances, including fixtures, located upon and used in connection with such Oil

1 and Gas Property, (4) all easements, rights of way and other real property interests located upon and primarily used in connection with the Oil and  
2 Gas Property, (5) all permits, licenses, and servitudes used in connection with the Oil and Gas Property and (6) all geological, geophysical,  
3 engineering, accounting, title, legal and other technical and business data relating to the other Mortgaged Property.

4  
5 “Collateral” shall mean, collectively: (A) all equipment, accounts, contract rights, general intangibles, chattel paper, commercial tort claims,  
6 documents, instruments, goods, inventory, insurance contracts, insurance proceeds, inventory, hydrocarbons, as-extracted collateral, operating rights,  
7 working interests, royalty interests, overriding royalty interests, non-participating royalty interests, production payments, net profits interests, or any  
8 other interest measured by or payable out of production of hydrocarbons (as such interests may be enlarged by the discharge of any payments out of  
9 production or by the removal of any charges or encumbrances) and fixtures of any kind and character to the extent such items relate to the Mortgaged  
10 Property or are attributable to the Mortgaged Properties, or used in connection with the ownership, use or exploitation of the Mortgaged property and  
11 (B) all the proceeds and products of the items described in preceding clause (A), and all substitutions therefor, replacements thereof, or accessions  
12 thereto, all of which, whether now owned or hereafter acquired, whether now or hereafter acquired by operation of law or otherwise.

13 To perfect the lien and security agreement provided herein, each party hereto shall execute and acknowledge an instrument in the form attached  
14 Exhibit “H” and/or any UCC financing statement prepared and submitted by any party hereto in conjunction herewith or at any time following  
15 execution hereof, and each party is authorized to file an instrument in the form attached Exhibit “H” executed herewith as a lien or mortgage in the  
16 applicable real estate records and to file UCC financing statements with the proper officer(s) under the Uniform Commercial Code where such party  
17 deems reasonably appropriate to perfect the security interests and liens granted hereunder. Any party may file an instrument in the form attached  
18 Exhibit “H” executed herewith, or such other documents as it deems necessary as a lien or mortgage in the applicable real estate records and/or a  
19 UCC financing statement with the proper officer under the Uniform Commercial Code.

20  
21 Each party represents and warrants to the other parties hereto that the lien and security interest granted by such party to the other parties shall be a  
22 [first and prior] lien, and each party hereby agrees to maintain the priority of said lien and security interest against all persons acquiring an interest in  
23 the Collateral and Mortgaged Property covered by this agreement by, through or under such party. All parties acquiring an interest in the Collateral  
24 and Mortgaged Property covered by this agreement, whether by assignment, merger, mortgage, operation of law, or otherwise, shall be deemed to  
25 have taken subject to the lien and security interest granted by the Article XVI.O. as to all obligations attributable to such interest hereunder whether  
26 or not such obligations arise before or after such interest is acquired.

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

36  
37 If any party fails to pay its share of cost within one hundred twenty (120) days after rendition of a statement therefor by Operator, the non-defaulting  
38 parties, including Operator, shall upon request by operator, pay the unpaid amount in the proportion that the interest of each such party bears to the  
39 interest of all such parties. The amount paid by each party so paying its share of the unpaid amount shall be secured by the liens and security rights  
40 described in Article XVI.O. , and each paying party may independently pursue any remedy available hereunder or otherwise.

41 If any party does not perform all of its obligations hereunder, and the failure to perform subjects such party to foreclosure or execution proceedings  
42 pursuant to the provisions of this agreement, to the extent allowed by governing law, the defaulting party waives any available right of redemption  
43 from and after the date of judgment, any required valuation or appraisal of the mortgaged or secured property prior to sale, any available right to  
44 stay execution or to require a marshaling of assets and any required bond in the event a receiver is appointed.

45  
46 Each party agrees that the other parties shall be entitled to utilize the provisions of Oil and Gas lien law or other lien law of any state in which the  
47 Contract Area is situated to enforce the obligations of each party hereunder. Without limiting the generality of the foregoing, to the extent permitted  
48 by applicable law, Non-Operators agree that Operator may invoke or utilize the mechanics’ or materialmen’s lien law of the state in which the  
49 Contract Area is situated in order to secure the payment to the Operator of any sum due hereunder for services performed or materials supplied by  
50 Operator.

51 [REMAINDER OF PAGE LEFT INTENTIONALLY BLANK]  
52 [SIGNATURE BLOCKS ON PAGE 18]  
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1 IN WITNESS WHEREOF, this agreement shall be effective as of the \_\_\_\_\_ day of \_\_\_\_\_,  
2 \_\_\_\_\_.

3 **ATTEST OR WITNESS:**

**OPERATOR**

4 \_\_\_\_\_  
5 \_\_\_\_\_  
6 \_\_\_\_\_  
7 \_\_\_\_\_

By \_\_\_\_\_

Type or print name

Title \_\_\_\_\_

Date \_\_\_\_\_

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

12 **NON-OPERATORS**

13 \_\_\_\_\_  
14 \_\_\_\_\_  
15 \_\_\_\_\_

By \_\_\_\_\_

Type or print name

Title \_\_\_\_\_

Date \_\_\_\_\_

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

16 \_\_\_\_\_  
17 \_\_\_\_\_  
18 \_\_\_\_\_

By \_\_\_\_\_

Type or print name

Title \_\_\_\_\_

Date \_\_\_\_\_

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

19 \_\_\_\_\_  
20 \_\_\_\_\_  
21 \_\_\_\_\_

By \_\_\_\_\_

Type or print name

Title \_\_\_\_\_

Date \_\_\_\_\_

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 "A"

Attached to and made a part of that certain Unit Operating Agreement for the Grunder North Unit

### I. Identification of Lands Subject to this Agreement:

593.9571 acres of land, more or less, located in Center, Harrison and Washington Townships, Carroll County, Ohio, as such lands are depicted in Exhibit "A-1" and as particularly defined in the Unit Plan.

### II. Restrictions, if any, as to Depths, Formations or Substances:

This Agreement covers rights for the Unitized Formation, described as that portion of the Utica / Point Pleasant formation found in the subsurface portion of the Grunder North Unit at an approximate depth of fifty (50) feet above the top of the Utica formation to fifty (50) feet below the base of the Point Pleasant formation, believed to be approximately 7,379 feet subsurface to 7,670 feet subsurface TVD ("True Vertical Depth").

### III. Parties to Agreement with Addresses and Telephone Numbers for Notice Purposes:

#### Operator:

R.E. Gas Development, L.L.C.  
Attention: F. Scott Hodges,  
Senior Vice President, Land & Business Development  
366 Walker Drive  
State College, PA 16801  
Telephone: 814-278-7279  
Fax: 814-278-7286  
Email: fshodges@rexenergycorp.com

#### Non-Operator(s):

Chesapeake Exploration, LLC & CHK Utica, LLC  
Attention: Jeff Pinter, Operations Land Manager-Utica District  
P. O. Box 18496  
Oklahoma City, Oklahoma 73154-0496  
Telephone: 405-935-1282  
Fax: 405-849-1282  
Email:

TOTAL E&P USA, Inc.  
Attention: Fabien Colmet Daage  
1201 Louisiana, Suite 1800  
Houston, TX 77002  
Telephone: 713-647-3394  
Fax:  
Email:

Belden & Blake Corporation  
c/o EnerVest Operating, LLC  
Attention: James D. McKinney, Senior Vice President & General Manager  
300 Capitol Street, Suite 200  
Charleston, WV 25301  
Telephone: 304-343-5505  
Fax: 304-343-5525  
Email:

**IV. Percentage or Fractional Interests of Parties to this Agreement:**

*As to the Unitized Formation:*

	Before Payout Working Interest	After Payout Working Interest
R.E. Gas Development, LLC	.85113521	.85113521
Chesapeake Exploration, LLC	.00294786	.00294786
CHK Utica, LLC	.01782334	.01782334
TOTAL E&P USA, Inc.	.00724732	.00724732
Belden & Blake Corporation	.00108678	.00108678
Unleased	.11975949	.11975949
<b>TOTAL:</b>	<b>100.00000000%</b>	<b>100.00000000%</b>

\*It is understood by the Parties hereto that the working interests listed in this agreement (an any attachments hereto) are estimates only and are subject to change based upon final verification of title, due diligence or surveying work that may be performed upon the approval by the Division. The Parties' interests shall be modified accordingly in order to accurately reflect the actual interest owned by the Parties in the Contract Area.

**V. Oil and Gas Lease(s) and/or Oil and Gas Interests Subject to this Agreement (including Burdens on Production):**

Please refer to Exhibits "A-2", "A-3" and "A-4" for a list of the oil and gas leases and interests subject to this agreement



Exhibit "A-1"

Grunder North Unit

Unit Acres: 593.9571

Grunder North Unit  
Center/Washington/  
Harrison Township  
Carroll County, OH

 Unit



1 inch = 1.000 feet

**REX ENERGY**  
366 Walker Drive  
State College, PA 16801  
Phone: (814) 278-7267 Fax: (814) 278-7286  
www.RexEnergy.com

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Tract	Current Mineral Owner	Parcel ID
1	AARON L & SARAH B MILLER	34-0000044.010
2	WILLIAM H JR & JANET D GRIMES	15-0000332.000
3	HELEN M & JACK L MAFFETT	15-0000502.000
4	CASTALIA INVESTMENT COMPANY LLC	34-0000315.001
5	FLOYD D & LORRAINE A SKINNER	15-0000767.000
6	WAYNE A & LISA M SHAW	15-00005106.000
7	PATRICIA A & JAMES D CALE AND RONALD & JOANNE DENNIS	15-0000159.000
8	MICHAEL E & PEGGY L MILLER CHRISTNER	15-0000578.000
9	MICHAEL E & PEGGY L MILLER CHRISTNER	15-0000579.000
10	LOIS J SWEAT	15-0000586.000
11	LOIS J SWEAT	15-0000587.000
12	JOSEPH & EVELYN H PETRIME	15-0000695.000
13	DEBORAH ANN & LARRY GEORGE RIGGLE	15-0000580.000
14	DEBORAH ANN & LARRY GEORGE RIGGLE	15-0000581.000
15	HAROLD C & KAREN L CAIN	15-0000585.000
16	WILEY E & LINDA S MORGAN	15-0000583.000
17	WILEY E & LINDA S MORGAN	15-0000582.000
18	KEVIN K & MARTHA L SHIELDS	15-0000584.000
19	VINA M SMITH	15-0000786.000
20	CHRISTOPHER M & JULIE A STAMP	15-0000589.000
21	CHRISTOPHER M & JULIE A STAMP	15-0000590.000
22	VINA M SMITH	15-0000787.000
23	BLACK GOLD HOLDINGS LLC	15-0000675.001
24	ALLEN H & BETTY J BABE	15-0000568.000
25	BLACK GOLD HOLDINGS LLC	15-0000591.001
26	DAVID W & SYLVIA J MORRISON	15-0000456.000
27	CHRISTOPHER M & JULIE A STAMP	15-0000588.000
28	GREGORY PASQUALE	15-0000046.000
29	ALLEN H & BETTY J BABE	15-0000569.000
30	JEFFREY L BORY	15-0000452.000
31	CASON R & JANICE E LEGGETT	15-0000335.001
32	FLOYD D & LORRAINE A SKINNER	15-0000766.000
33	WILLIAM E & JOAN M ENTERLINE	15-0000259.000
34	RICHARD J & SALLY J SHIFFLETT	15-0000846.000
35	VILLAGE OF CARROLLTON	34-0000119.000
36	BETTY L EDWARDS	15-0000252.000
37	DALE E & LEONA R SNYDER	15-0000553.000
38	WILLIAM E & JOAN M ENTERLINE	15-0000277.000
39	PATRICIA A & JAMES D CALE AND RONALD & JOANNE DENNIS	15-0000160.000
40	KLUSKEY FAMILY REVOCABLE LIVING TRUST DATED JULY 9, 2005	15-0000449.000
41	WILLIAM F & KATHLEEN C HURDLE	34-0000044.009
41	BARBARA K EDWARDS TRUST DATED FEBRUARY 15, 2000	34-0000044.009
42	THOMAS J & JANET S LITZENBERG	15-0000549.000
43	ERIC F & CINDY HANSON	34-0000640.000
44	DOJI J & JAMIE R GRIMES	15-00005049.000
45	DOJI J & JAMIE R GRIMES	15-00005054.000
46	MARY JOHNSON	34-0000639.000
47	VAUGHN E & SUSAN J COGAN	15-0000168.000
48	VILLAGE OF CARROLLTON	34-0000118.000
49	DOJI J & JAMIE R GRIMES	15-00005048.000
50	BARBARA K EDWARDS TRUST DATED FEBRUARY 15, 2000	15-00005118.001
51	WILLIAM L JR & BARBARA L LARIE	15-00005052.000
52	DOJI J & JAMIE R GRIMES	15-00005051.000
53	DOJI J & JAMIE R GRIMES	15-00005050.000
54	WILLIAM E & JOAN M ENTERLINE	15-0000555.001
55	BETTY L EDWARDS	15-0000254.001
56	BARBARA K EDWARDS TRUST DATED FEBRUARY 15, 2000	34-0000044.016
57	NANCY L WESTFALL	15-0000669.000
58	GARY W CRUMP	15-0000141.000
59	VICKI D & GLENN W RIGGS	15-0000377.000
60	BRAD F & ANGELA F SALISBURY	09-0000636.003
61	EARL L & TONYA M BRYAN	15-0000254.000
62	RONALD G ROUDEBUSH, TRUSTEE	15-0000721.000
63	STANLEY ROBERT GEORGE	15-0000306.000
64	MATHEW E & MARISA M VAUGHN	34-0000044.008
65	DALE E & LEONA R SNYDER	15-0000554.000
66	BOARD OF COMMISSIONERS OF CARROLL COUNTY	Not Assigned by County Auditor
67	VICKI D & GLENN W RIGGS	15-0000376.000
68	BARBARA K EDWARDS TRUST DATED FEBRUARY 15, 2000	34-0000044.017
69	SHIRLEY J SEVERN	15-0000685.000
70	BETTY L EDWARDS	15-0000253.000
70	TERRY R EDWARDS	15-0000253.000
71	MARION L & BONNIE S GRIMES	15-0000335.000
72	RICHARD A & DESIREE A STIDOM	15-0000577.000
73	CARROLL COUNTY COAL COMPANY	34-0000316.002
74	GARY L TEETER REVOCABLE TRUST DATED AUGUST 2, 2011	15-0000886.000
75	SHAUN W & REGINA S FISH	15-0000025.000
76	JOY L REED	15-0004974.000
77	BARBARA K EDWARDS TRUST DATED FEBRUARY 15, 2000	15-00005118.002
78	WILLIAM F & KATHLEEN C HURDLE	34-0000044.002
78	BARBARA K EDWARDS TRUST DATED FEBRUARY 15, 2000	34-0000044.002
79	BARBARA K EDWARDS TRUST DATED FEBRUARY 15, 2000	15-00005118.000
80	WILLIAM F & KATHLEEN C HURDLE	34-0000044.003
80	JEFFREY L & TASHIA L FARMER	34-0000044.003
81	WILLIAM H JR & JANET D GRIMES	15-00005053.000
82	CARROLL COUNTY COAL COMPANY	34-0000317.002
83	BRIAN M & DARLENE M KNOTT	15-0000893.007
84	DAVID W HALLETT	15-0000893.005
85	DAVID W HALLETT	15-0000893.006
86	WILLIAM & TIFFANY STRAGAN	34-0000044.004
86	WILLIAM F & KATHLEEN C HURDLE	34-0000044.004
87	DUAL & DONNA MAE MALLERNEE	15-0000509.000
88	CARROLL COUNTY COAL COMPANY	34-0000320.002
89	WILLIAM F & KATHLEEN C HURDLE	34-0000044.013
89	DOROTHY M PLACE	34-0000044.013
90	WAYNE A & LISA M SHAW	15-00005118.004
91	DAVID W HALLETT	15-0000222.000
92	BRET M & KIMBERLY L BARNA	15-0000893.003
93	GEORGE W JOHNSON	34-0000044.014
94	VINA M SMITH	34-0000044.015
95	LASHAWN A HILL	34-0000044.005
95	JESSICA L KING HILL	34-0000044.005
96	LASHAWN A HILL	34-0000044.006
96	JESSICA L KING HILL	34-0000044.006

Tract	Current Mineral Owner	Parcel ID
97	HOLLY E & FREDA A DALTON	34-0000044.007
98	WILLIAM F & KATHLEEN C HURDLE	34-0000044.000
98	LASHAWN A HILL	34-0000044.000
98	JESSICA L KING HILL	34-0000044.000
99	JAMES D & PAMELA S BORING	15-0000455.000
100	DOROTHY M PLACE	15-0005118.003
101	BRET M & KIMBERLY L BARNA	15-0000893.000
102	WHEELING & LAKE ERIE RAILWAY COMPANY	Not Assigned by County Auditor
103	GARY L TEETER	15-0000893.002
104	CASTALIA INVESTMENT LLC	34-0000319.002
105	WAYNESBURG RD LLC	34-0000426.000
106	EUGENE C & SHIRLEY A THOMPSON	15-0000287.000
107	SCOTT K GRUNDER	34-0000374.000
108	SCOTT K & JEFFERY C GRUNDER	34-0000122.000
109	CARROLL COUNTY COAL COMPANY	34-0000325.002
110	WILLIAM H JR & JANET D GRIMES	15-0000337.000
111	JEFFREY L BORY	15-0000453.000
112	HUMBURK, LLC	15-0000893.001
113	GEORGE W JOHNSON	34-0000044.001
114	JOSEPH D & EVA J SHEPPARD	15-0000559.000
115	VILLAGE OF CARROLLTON	34-0000120.000
116	CARROLL COUNTY COAL COMPANY	34-0000326.007
117	JEFFREY L BORY	15-0000454.000
118	MICHAEL J WYNN	34-0000421.000
119	JOHN G & JEAN GEARHART	15-0000892.000
120	GARY L TEETER REVOCABLE TRUST DATED AUGUST 2, 2011	15-0000555.000
121	GARY E & JILL R HENRY	09-0000442.004
122	EUGENE C & SHIRLEY A THOMPSON	15-0000286.000
123	EUGENE C & SHIRLEY A THOMPSON	15-0000287.001
124	WAYNE A HARPER	15-0000692.000
125	STANLEY ROBERT GEORGE	15-0000304.000

Exhibit "A-2"  
Tracts Within The Grunder North Unit Contract Area

Tract	Current Mineral Owner	Leased Yes/No	Surface Acres In Unit	Tract Participation <sup>1</sup>	Current Mineral Owner Working Interest	Current Mineral Owner Unit Participation	R.E. Gas Working Interest <sup>2</sup>	R.E. Gas Unit Participation	CHK Exp. Working Interest <sup>3</sup>	CHK Exp. Unit Participation	CHK Utica Working Interest <sup>4</sup>	CHK Utica Unit Participation	Total E&P Working Interest <sup>5</sup>	Total E&P Unit Participation	B&B Corp. Working Interest <sup>6</sup>	B&B Corp. Unit Participation	Parcel ID	Township	Current Mineral Owner Address
1	Aaron L & Sarah B Miller	Yes	0.0100	0.00001684	0.00000000	0.00000000	1.00000000	0.00001684	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	34-0000044.010	Washington	6072 Mirth Road NE, Mechanicstown, OH 44651
2	William H JR & Janet D Grimes	Yes	0.0110	0.00001852	0.00000000	0.00000000	1.00000000	0.00001852	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	15-0000332.000	Harrison	1196 Brenner Road N.E., Carrollton, OH 44615
3	Helen M & Jack L Maffett	Yes	0.0440	0.00007408	0.00000000	0.00000000	1.00000000	0.00007408	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	15-0000502.000	Harrison	95 Gallo Road NW, Carrollton, OH 44615
4	Castalia Investment Company LLC	Yes	0.0720	0.00012122	0.00000000	0.00000000	1.00000000	0.00012122	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	34-0000315.001	Washington	Scott Brown, Pres., 9717 Chillicothe Road, Kirtland, OH 44094
5	Floyd D & Lorraine A Skinner	Yes	0.0940	0.00015826	0.00000000	0.00000000	1.00000000	0.00015826	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	15-0000767.000	Harrison	2113 Canton Road NW, Carrollton, OH 44615
6	Wayne A & Lisa M Shaw	Yes	0.1010	0.00017005	0.00000000	0.00000000	1.00000000	0.00017005	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	15-0005106.000	Harrison	9330 Briar Road NW, Magnolia, OH 44643
7	Patricia A & James D Cale	Yes	0.1030	0.00017341	0.00000000	0.00000000	0.00000000	0.00000000	0.37500000	0.00006503	0.00000000	0.00000000	0.12500000	0.00002168	0.00000000	0.00000000	15-0000159.000	Harrison	3095 Bernewood Circle NW, Canton, OH 44709
7	Ronald & Joanne Dennis	Yes	0.1030	0.00017341	0.00000000	0.00000000	0.00000000	0.00000000	0.37500000	0.00006503	0.00000000	0.00000000	0.12500000	0.00002168	0.00000000	0.00000000	15-0000159.000	Harrison	3095 Bernewood Circle NW, Canton, OH 44709
8	Michael E & Peggy L Miller Christner	Yes	0.3214	0.00054112	0.00000000	0.00000000	1.00000000	0.00054112	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	15-0000578.000	Harrison	158 Bacon Road NW, Carrollton, OH 44615
9	Michael E & Peggy L Miller Christner	Yes	0.3214	0.00054112	0.00000000	0.00000000	1.00000000	0.00054112	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	15-0000579.000	Harrison	158 Bacon Road NW, Carrollton, OH 44615
10	Lois J Sweat	Yes	0.3214	0.00054112	0.00000000	0.00000000	1.00000000	0.00054112	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	15-0000586.000	Harrison	2274 Pine Road NW, Carrollton, OH 44615
11	Lois J Sweat	Yes	0.3214	0.00054112	0.00000000	0.00000000	1.00000000	0.00054112	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	15-0000587.000	Harrison	2274 Pine Road NW, Carrollton, OH 44615
12	Joseph & Evelyn H Petrim	Yes	0.3222	0.00054245	0.00000000	0.00000000	1.00000000	0.00054245	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	15-0000695.000	Harrison	2288 Pine Street NW, Carrollton, OH 44615
13	Deborah Ann & Larry George Riggle	Yes	0.3214	0.00054112	0.00000000	0.00000000	1.00000000	0.00054112	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	15-0000580.000	Harrison	209 Maple Avenue NW, Carrollton, OH 44615
14	Deborah Ann & Larry George Riggle	Yes	0.3214	0.00054112	0.00000000	0.00000000	1.00000000	0.00054112	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	15-0000581.000	Harrison	209 Maple Avenue NW, Carrollton, OH 44615
15	Harold C & Karen L Cain	Yes	0.3200	0.00053876	0.00000000	0.00000000	1.00000000	0.00053876	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	15-0000585.000	Harrison	1461 State Route 30, Clinton, PA 15026
16	Wiley E & Linda S Morgan	Yes	0.3205	0.00053960	0.00000000	0.00000000	1.00000000	0.00053960	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	15-0000583.000	Harrison	150 Waynesburg Road, Carrollton, OH 44615
17	Wiley E & Linda S Morgan	Yes	0.3211	0.00054061	0.00000000	0.00000000	1.00000000	0.00054061	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	15-0000582.000	Harrison	150 Waynesburg Road, Carrollton, OH 44615
18	Kevin K & Martha L Shields	Yes	0.3214	0.00054112	0.00000000	0.00000000	1.00000000	0.00054112	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	15-0000584.000	Harrison	1133 Academic Drive, Winston Salem, NC 27106
19	Vina M Smith	Yes	0.3200	0.00053876	0.00000000	0.00000000	1.00000000	0.00053876	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	15-0000786.000	Harrison	2273 Pine Street, Carrollton, OH 44615
20	Christopher M & Julie A Stamp	Yes	0.3227	0.00054331	0.00000000	0.00000000	1.00000000	0.00054331	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	15-0000589.000	Harrison	6038 Whinnery Road, Hanoverton, OH 44423
21	Christopher M & Julie A Stamp	Yes	0.3227	0.00054331	0.00000000	0.00000000	1.00000000	0.00054331	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	15-0000590.000	Harrison	6038 Whinnery Road, Hanoverton, OH 44423
22	Vina M Smith	Yes	0.3300	0.00055560	0.00000000	0.00000000	1.00000000	0.00055560	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	15-0000787.000	Harrison	2273 Pine Street, Carrollton, OH 44615
23	Black Gold Holdings LLC	Yes	0.3200	0.00053876	0.00000000	0.00000000	1.00000000	0.00053876	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	15-0000675.001	Harrison	Kenneth J. Joseph, PO Box 607, Carrollton, OH 44615
24	Allen H & Betty J Babe	Yes	0.3250	0.00054718	0.00000000	0.00000000	1.00000000	0.00054718	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	15-0000568.000	Harrison	2035 Alamo Road SE, Carrollton, OH 44615
25	Black Gold Holdings LLC	Yes	0.3200	0.00053876	0.00000000	0.00000000	1.00000000	0.00053876	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	15-0000591.001	Harrison	Kenneth J. Joseph, PO Box 607, Carrollton, OH 44615
26	David W & Sylvia J Morrison	Yes	0.3260	0.00054886	0.00000000	0.00000000	1.00000000	0.00054886	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	15-0000456.000	Harrison	180 Walnut Street NW, Carrollton, OH 44615
27	Christopher M & Julie A Stamp	Yes	0.3387	0.00057024	0.00000000	0.00000000	1.00000000	0.00057024	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	15-0000588.000	Harrison	6038 Whinnery Road, Hanoverton, OH 44423
28	Gregory Pasquale	Yes	0.3590	0.00060442	0.00000000	0.00000000	1.00000000	0.00060442	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	15-0000046.000	Harrison	719 Lincoln Ave, Carrollton, OH 44615
29	Allen H & Betty J Babe	Yes	0.4300	0.00072396	0.00000000	0.00000000	1.00000000	0.00072396	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	15-0000569.000	Harrison	2035 Alamo Road SE, Carrollton, OH 44615
30	Jeffrey L Bory	Yes	0.4380	0.00073743	0.00000000	0.00000000	0.00000000	0.00000000	0.03000000	0.00002212	0.72000000	0.00053095	0.25000000	0.00018436	0.00000000	0.00000000	15-0000452.000	Harrison	2184 Canton Road NW, Carrollton, OH 44615
31	Cason R & Janice E Leggett	Yes	0.4550	0.00076605	0.00000000	0.00000000	0.00000000	0.00000000	0.75000000	0.00057454	0.00000000	0.00000000	0.25000000	0.00019151	0.00000000	0.00000000	15-0000335.001	Harrison	2218 Canton Road, Carrollton, OH 44615
32	Floyd D & Lorraine A Skinner	Yes	0.4940	0.00083171	0.00000000	0.00000000	1.00000000	0.00083171	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	15-0000766.000	Harrison	2113 Canton Road NW, Carrollton, OH 44615

Exhibit "A-2"

Tracts Within The Grunder North Unit Contract Area

Tract	Current Mineral Owner	Leased Yes/No	Surface Acres In Unit	Tract Participation <sup>1</sup>	Current Mineral Owner Working Interest	Current Mineral Owner Unit Participation	R. E. Gas Working Interest <sup>2</sup>	R. E. Gas Unit Participation	CHK Exp. Working Interest <sup>3</sup>	CHK Exp. Unit Participation	CHK Utica Working Interest <sup>4</sup>	CHK Utica Unit Participation	Total E&P Working Interest <sup>5</sup>	Total E&P Unit Participation	B&B Corp. Working Interest <sup>6</sup>	B&B Corp. Unit Participation	Parcel ID	Township	Current Mineral Owner Address
33	William E & Joan M Enterline	Yes	0.5060	0.00085191	0.00000000	0.00000000	1.00000000	0.00085191	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	15-0000259.000	Harrison	2129 Canton Road, Carrollton, OH 44615
34	Richard J & Sally J Shifflett	Yes	0.5070	0.00085360	0.00000000	0.00000000	1.00000000	0.00085360	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	15-0000846.000	Harrison	2137 Canton Road NW, Carrollton, OH 44615
35	Village of Carrollton	Yes	1.0000	0.00168362	0.00000000	0.00000000	1.00000000	0.00168362	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	34-0000119.000	Washington	Dennis Roudebush, Village Admin, 80 Second Street SW, Carrollton, OH 44615
36	Betty L Edwards	Yes	0.6030	0.00101522	0.00000000	0.00000000	1.00000000	0.00101522	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	15-0000252.000	Harrison	43 Gallo Road NW, Carrollton, OH 44615
37	Dale E & Leona R Snyder	Yes	0.6680	0.00112466	0.00000000	0.00000000	1.00000000	0.00112466	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	15-0000553.000	Harrison	2071 Canton Road, Carrollton, OH 44615
38	William E & Joan M Enterline	Yes	0.6750	0.00113645	0.00000000	0.00000000	1.00000000	0.00113645	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	15-0000277.000	Harrison	2129 Canton Road, Carrollton, OH 44615
39	Patricia A & James D Cale	Yes	0.6780	0.00114150	0.00000000	0.00000000	0.00000000	0.00000000	0.37500000	0.00042806	0.00000000	0.00000000	0.12500000	0.00014269	0.00000000	0.00000000	15-0000160.000	Harrison	3095 Bernewood Circle NW, Canton, OH 44709
39	Ronald & Joanne Dennis	Yes	0.6780	0.00114150	0.00000000	0.00000000	0.00000000	0.00000000	0.37500000	0.00042806	0.00000000	0.00000000	0.12500000	0.00014269	0.00000000	0.00000000	15-0000160.000	Harrison	3095 Bernewood Circle NW, Canton, OH 44709
40	Kluskey Family Revocable Living Trust Dated July 9, 2005	Yes	0.5560	0.00093609	0.00000000	0.00000000	1.00000000	0.00093609	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	15-0000449.000	Harrison	James Kluskey & Mabel J. Kluskey, Trustees, 121 Waynesbury Road NW, Carrollton, OH 44615
41	William F & Kathleen C Hurdle	Yes	0.8000	0.00134690	0.00000000	0.00000000	0.50000000	0.00067345	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	34-0000044.009	Washington	1616 Lexington Ave., Mansfield, OH 44907
41	Barbara K Edwards Trust Dated February 15, 2000	Yes	0.8000	0.00134690	0.00000000	0.00000000	0.50000000	0.00067345	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	34-0000044.009	Washington	Barbara K. Edwards, Trustee or successor trustee(s), 86 Arbor Road NE, Minerva, OH 44657
42	Thomas J & Janet S Litzenberg	Yes	0.8520	0.00143445	0.00000000	0.00000000	1.00000000	0.00143445	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	15-0000549.000	Harrison	2119 Canton Road NW, Carrollton, OH 44615
43	Eric F & Cindy Hanson	Yes	0.9200	0.00154893	0.00000000	0.00000000	1.00000000	0.00154893	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	34-0000640.000	Washington	141 Gallo Road, Carrollton, OH 44615
44	Doji J & Jamie R Grimes	Yes	0.9500	0.00159944	0.00000000	0.00000000	1.00000000	0.00159944	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	15-0005049.000	Harrison	205 Clearview Drive NW, Carrollton, OH 44615
45	Doji J & Jamie R Grimes	Yes	0.9587	0.00161409	0.00000000	0.00000000	1.00000000	0.00161409	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	15-0005054.000	Harrison	205 Clearview Drive NW, Carrollton, OH 44615
46	Mary Johnson	Yes	1.0800	0.00181831	0.00000000	0.00000000	1.00000000	0.00181831	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	34-0000639.000	Washington	224 5th Street NW, Carrollton, OH 44615-1106
47	Vaughn E & Susan J Cogan	Yes	0.9090	0.00153041	0.00000000	0.00000000	1.00000000	0.00153041	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	15-0000168.000	Harrison	2109 Canton Road NW, Carrollton, OH 44615
48	Village of Carrollton	Yes	0.5000	0.00084181	0.00000000	0.00000000	1.00000000	0.00084181	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	34-0000118.000	Washington	Dennis Roudebush, Village Admin, 80 Second Street SW, Carrollton, OH 44615
49	Doji J & Jamie R Grimes	Yes	1.0000	0.00168362	0.00000000	0.00000000	1.00000000	0.00168362	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	15-0005048.000	Harrison	205 Clearview Drive NW, Carrollton, OH 44615
50	Barbara K Edwards Trust Dated February 15, 2000	Yes	1.0750	0.00180990	0.00000000	0.00000000	1.00000000	0.00180990	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	15-0005118.001	Harrison	Barbara K. Edwards, Trustee or successor trustee(s), 86 Arbor Road NE, Minerva, OH 44657
51	William L Jr & Barbara L Larie	Yes	1.0930	0.00184020	0.00000000	0.00000000	1.00000000	0.00184020	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	15-0005052.000	Harrison	185 Clearview Drive, Carrollton, OH 44615
52	Doji J & Jamie R Grimes	Yes	1.0930	0.00184020	0.00000000	0.00000000	1.00000000	0.00184020	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	15-0005051.000	Harrison	205 Clearview Drive NW, Carrollton, OH 44615
53	Doji J & Jamie R Grimes	Yes	1.0930	0.00184020	0.00000000	0.00000000	1.00000000	0.00184020	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	15-0005050.000	Harrison	205 Clearview Drive NW, Carrollton, OH 44615
54	William E & Joan M Enterline	Yes	1.1040	0.00185872	0.00000000	0.00000000	1.00000000	0.00185872	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	15-0000555.001	Harrison	2129 Canton Road, Carrollton, OH 44615
55	Betty L Edwards	Yes	1.1560	0.00194627	0.00000000	0.00000000	1.00000000	0.00194627	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	15-0000254.001	Harrison	43 Gallo Road NW, Carrollton, OH 44615
56	Barbara K Edwards Trust Dated February 15, 2000	Yes	1.2230	0.00205907	0.00000000	0.00000000	1.00000000	0.00205907	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	34-0000044.016	Washington	Barbara K. Edwards, Trustee or successor trustee(s), 86 Arbor Road NE, Minerva, OH 44657
57	Nancy L Westfall	Yes	1.3290	0.00223754	0.00000000	0.00000000	1.00000000	0.00223754	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	15-0000669.000	Harrison	3032 Canton Road NW, Carrollton, OH 44615
58	Gary W Crump	Yes	1.4270	0.00240253	0.00000000	0.00000000	1.00000000	0.00240253	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	15-0000141.000	Harrison	2013 Canton Road NW, Carrollton, OH 44615
59	Vicki D & Glenn W Riggs	Yes	1.4510	0.00244294	0.00000000	0.00000000	1.00000000	0.00244294	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	15-0000377.000	Harrison	244 Third Street SE, Carrollton, OH 44615
60	Brad F & Angela F Salisbury	Yes	1.4880	0.00250523	0.00000000	0.00000000	1.00000000	0.00250523	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	09-0000636.003	Center	95 Fourth Street SE, Carrollton, OH 44615
61	Earl L & Tonya M Bryan	Yes	1.5820	0.00266349	0.00000000	0.00000000	1.00000000	0.00266349	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	15-0000254.000	Harrison	6247 Appollo Road NE, Kensington, OH 44427

Exhibit "A-2"

Tracts Within The Grunder North Unit Contract Area

Tract	Current Mineral Owner	Leased Yes/No	Surface Acres In Unit	Tract Participation <sup>1</sup>	Current Mineral Owner Working Interest	Current Mineral Owner Unit Participation	R.E. Gas Working Interest <sup>2</sup>	R.E. Gas Unit Participation	CHK Exp. Working Interest <sup>3</sup>	CHK Exp. Unit Participation	CHK Utica Working Interest <sup>4</sup>	CHK Utica Unit Participation	Total E&P Working Interest <sup>5</sup>	Total E&P Unit Participation	B&B Corp. Working Interest <sup>6</sup>	B&B Corp. Unit Participation	Parcel ID	Township	Current Mineral Owner Address
62	Ronald G Roudebush, Trustee <sup>7</sup>	No	1.6420	0.00276451	1.00000000	0.00276451	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	15-0000721.000	Harrison	2172 Canton Road, Carrollton, OH 44615
63	Stanley Robert George	Yes	1.7210	0.00289752	0.00000000	0.00000000	0.00000000	0.00000000	0.01500000	0.00004346	0.36000000	0.00104311	0.25000000	0.00072438	0.37500000	0.00108657	15-0000306.000	Harrison	252 Waynesburg Road, Carrollton, OH 44615
64	Mathew E & Marisa M Vaughn	Yes	1.8410	0.00309955	0.00000000	0.00000000	1.00000000	0.00309955	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	34-0000044.008	Washington	38 Gallo Road NE, Carrollton, OH 44615
65	Dale E & Leona R Snyder	Yes	1.9000	0.00319888	0.00000000	0.00000000	1.00000000	0.00319888	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	15-0000554.000	Harrison	2071 Canton Road, Carrollton, OH 44615
66	Board of Commissioners of Carroll County, Ohio	Yes	1.9127	0.00322034	0.00000000	0.00000000	1.00000000	0.00322034	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	Not Assigned By Auditor	Harrison	Jeffrey L. Ohler, Commissioner, 119 S Lisbon Street, Suite 201, Carrollton, OH 44615
67	Vicki D & Glenn W Riggs	Yes	2.0000	0.00336725	0.00000000	0.00000000	1.00000000	0.00336725	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	15-0000376.000	Harrison	244 Third Street SE, Carrollton, OH 44615
68	Barbara K Edwards Trust Dated February 15, 2000	Yes	1.8410	0.00309955	0.00000000	0.00000000	1.00000000	0.00309955	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	34-0000044.017	Washington	Barbara K. Edwards, Trustee or successor trustee(s), 86 Arbor Road NE, Minerva, OH 44657
69	Shirley J Severn	Yes	2.1540	0.00362652	0.00000000	0.00000000	1.00000000	0.00362652	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	15-0000685.000	Harrison	7107 Germano Road SE, Carrollton, OH 44615
70	Betty L Edwards	Yes	1.6800	0.00282849	0.00000000	0.00000000	0.50000000	0.00141424	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	15-0000253.000	Harrison	43 Gallo Road NW, Carrollton, OH 44615
70	Terry R Edwards	Yes	1.6800	0.00282849	0.00000000	0.00000000	0.50000000	0.00141424	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	15-0000253.000	Harrison	55 Gallo Road NW, Carrollton, OH 44615
71	Marion L & Bonnie S Grimes	Yes	2.2430	0.00377637	0.00000000	0.00000000	1.00000000	0.00377637	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	15-0000335.000	Harrison	403 Second Street, Amsterdam, OH 43903
72	Richard A & Desiree A Stidom	Yes	1.6090	0.00270895	0.00000000	0.00000000	0.00000000	0.00000000	0.03000000	0.00008127	0.72000000	0.00195044	0.25000000	0.00067724	0.00000000	0.00000000	15-0000577.000	Harrison	11114 Orton Road, Salineville, OH 43945
73	Carroll County Coal Company	Yes	2.4440	0.00411478	0.00000000	0.00000000	1.00000000	0.00411478	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	34-0000316.002	Washington	Scott F. Brown, President, 9717 Chillicothe Road, Kirtland, OH 44094
74	Gary L Teeter Revocable Trust Dated August 2, 2011	Yes	2.0000	0.00336725	0.00000000	0.00000000	0.00000000	0.00000000	0.06000000	0.00020203	0.69000000	0.00232340	0.25000000	0.00084181	0.00000000	0.00000000	15-0000886.000	Harrison	Gary L. Teeter, Trustee, 1070 Waynesburg Road NW, Carrollton, OH 44615
75	Shaun W & Regina S Fish	Yes	2.5000	0.00420906	0.00000000	0.00000000	1.00000000	0.00420906	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	15-0000025.000	Harrison	131 Waynesburg Road, Carrollton, OH 44615
76	Joy L Reed	Yes	2.8540	0.00480506	0.00000000	0.00000000	1.00000000	0.00480506	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	15-0004974.000	Harrison	1171 Lindy Lane NW, Carrollton, OH 44615
77	Barbara K Edwards Trust Dated February 15, 2000	Yes	2.9500	0.00496669	0.00000000	0.00000000	1.00000000	0.00496669	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	15-0005118.002	Harrison	Barbara K. Edwards, Trustee or successor trustee(s), 86 Arbor Road NE, Minerva, OH 44657
78	William F & Kathleen C Hurdle	Yes	2.9540	0.00497342	0.00000000	0.00000000	0.50000000	0.00248671	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	34-0000044.002	Washington	1616 Lexington Ave., Mansfield, OH 44907
78	Barbara K Edwards Trust Dated February 15, 2000	Yes	2.9540	0.00497342	0.00000000	0.00000000	0.50000000	0.00248671	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	34-0000044.002	Washington	Barbara K. Edwards, Trustee or successor trustee(s), 86 Arbor Road NE, Minerva, OH 44657
79	Barbara K Edwards Trust Dated February 15, 2000	Yes	3.1940	0.00537749	0.00000000	0.00000000	1.00000000	0.00537749	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	15-0005118.000	Harrison	Barbara K. Edwards, Trustee or successor trustee(s), 86 Arbor Road NE, Minerva, OH 44657
80	William F & Kathleen C Hurdle	Yes	3.4500	0.00580850	0.00000000	0.00000000	0.50000000	0.00290425	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	34-0000044.003	Washington	1616 Lexington Ave., Mansfield, OH 44907
80	Jeffrey L & Tashia L Farmer	Yes	3.4500	0.00580850	0.00000000	0.00000000	0.00000000	0.00000000	0.02000000	0.00011617	0.36000000	0.00209106	0.12000000	0.00069702	0.00000000	0.00000000	34-0000044.003	Washington	26 Gallo Road, Carrollton, OH 44615
81	William H Jr & Janet D Grimes	Yes	3.8380	0.00646175	0.00000000	0.00000000	1.00000000	0.00646175	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	15-0005053.000	Harrison	1196 Brenner Road N.E., Carrollton, OH 44615
82	Carroll County Coal Company	Yes	4.4400	0.00747529	0.00000000	0.00000000	1.00000000	0.00747529	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	34-0000317.002	Washington	Scott F. Brown, President, 9717 Chillicothe Road, Kirtland, OH 44094
83	Brian M & Darlene M Knott	Yes	4.0000	0.00673449	0.00000000	0.00000000	1.00000000	0.00673449	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	15-0000893.007	Harrison	72 Waynesburg Road NW, Carrollton, OH 44615
84	David W Hallett	Yes	4.0000	0.00673449	0.00000000	0.00000000	1.00000000	0.00673449	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	15-0000893.005	Harrison	114 Waynesburg NW, Carrollton, OH 44615
85	David W Hallett	Yes	4.0000	0.00673449	0.00000000	0.00000000	1.00000000	0.00673449	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	15-0000893.006	Harrison	114 Waynesburg NW, Carrollton, OH 44615
86	William & Tiffany Stragan	Yes	4.0030	0.00673954	0.00000000	0.00000000	0.50000000	0.00336977	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	34-0000044.004	Washington	18 Gallo Road, Carrollton, OH 44615
86	William F & Kathleen C Hurdle	Yes	4.0030	0.00673954	0.00000000	0.00000000	0.50000000	0.00336977	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	34-0000044.004	Washington	18 Gallo Road, Carrollton, OH 44615
87	Dual & Donna Mae Mallernee	Yes	4.3000	0.00723958	0.00000000	0.00000000	1.00000000	0.00723958	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	15-0000509.000	Harrison	13 Gallo Road, Carrollton, OH 44615

Exhibit "A-2"

Tracts Within The Grunder North Unit Contract Area

Tract	Current Mineral Owner	Leased Yes/No	Surface Acres In Unit	Tract Participation <sup>1</sup>	Current Mineral Owner Working Interest	Current Mineral Owner Unit Participation	R.E. Gas Working Interest <sup>2</sup>	R.E. Gas Unit Participation	CHK Exp. Working Interest <sup>3</sup>	CHK Exp. Unit Participation	CHK Utica Working Interest <sup>4</sup>	CHK Utica Unit Participation	Total E&P Working Interest <sup>5</sup>	Total E&P Unit Participation	B&B Corp. Working Interest <sup>6</sup>	B&B Corp. Unit Participation	Parcel ID	Township	Current Mineral Owner Address
88	Carroll County Coal Company	Yes	4.3320	0.00729346	0.00000000	0.00000000	1.00000000	0.00729346	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	34-0000320.002	Washington	Scott F. Brown, President, 9717 Chillicothe Road, Kirtland, OH 44094
89	William F & Kathleen C Hurdle	Yes	4.7110	0.00793155	0.00000000	0.00000000	0.50000000	0.00396577	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	34-0000044.013	Washington	1616 Lexington Ave., Mansfield, OH 44907
89	Dorothy M Place	Yes	4.7110	0.00793155	0.00000000	0.00000000	0.50000000	0.00396577	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	34-0000044.013	Washington	6 Gallo Road, Carrollton, OH 44615
90	Wayne A & Lisa M Shaw	Yes	4.8140	0.00810496	0.00000000	0.00000000	1.00000000	0.00810496	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	15-0005118.004	Harrison	9330 Briar Road NW, Magnolia, OH 44643
91	David W Hallett	Yes	4.8500	0.00816557	0.00000000	0.00000000	1.00000000	0.00816557	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	15-0000222.000	Harrison	114 Waynesburg NW, Carrollton, OH 44615
92	Bret M & Kimberly L Barna	Yes	5.0260	0.00846189	0.00000000	0.00000000	1.00000000	0.00846189	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	15-0000893.003	Harrison	58 Waynesburg Road NW, Carrollton, OH 44615
93	George W Johnson	Yes	5.0440	0.00849220	0.00000000	0.00000000	1.00000000	0.00849220	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	34-0000044.014	Washington	27 Gallo Road NE, Carrollton, OH 44615
94	Vina M Smith	Yes	5.1000	0.00858648	0.00000000	0.00000000	1.00000000	0.00858648	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	34-0000044.015	Washington	2273 Pine Street NW, Carrollton, OH 44615
95	Lashawn A Hill	Yes	5.1000	0.00858648	0.00000000	0.00000000	0.50000000	0.00429324	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	34-0000044.005	Washington	41 Gallo Road NE, Carrollton, OH 44615
95	Jessica L King Hill	Yes	5.1000	0.00858648	0.00000000	0.00000000	0.50000000	0.00429324	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	34-0000044.005	Washington	41 Gallo Road NE, Carrollton, OH 44615
96	Lashawn A Hill	Yes	5.1000	0.00858648	0.00000000	0.00000000	0.50000000	0.00429324	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	34-0000044.006	Washington	41 Gallo Road NE, Carrollton, OH 44615
96	Jessica L King Hill	Yes	5.1000	0.00858648	0.00000000	0.00000000	0.50000000	0.00429324	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	34-0000044.006	Washington	41 Gallo Road NE, Carrollton, OH 44615
97	Holly E & Freda A Dalton	Yes	5.1000	0.00858648	0.00000000	0.00000000	1.00000000	0.00858648	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	34-0000044.007	Washington	57 Gallo Road NE, Carrollton, OH 44615
98	William F & Kathleen C Hurdle	Yes	5.1000	0.00858648	0.00000000	0.00000000	0.50000000	0.00429324	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	34-0000044.000	Washington	1616 Lexington Ave., Mansfield, OH 44907
98	Lashawn A Hill	Yes	5.1000	0.00858648	0.00000000	0.00000000	0.25000000	0.00214662	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	34-0000044.000	Washington	41 Gallo Road NE, Carrollton, OH 44615
98	Jessica L King Hill	Yes	5.1000	0.00858648	0.00000000	0.00000000	0.25000000	0.00214662	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	34-0000044.000	Washington	41 Gallo Road NE, Carrollton, OH 44615
99	James D & Pamela S Boring	Yes	5.9100	0.00995021	0.00000000	0.00000000	1.00000000	0.00995021	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	15-0000455.000	Harrison	130 Waynesburg Road NW, Carrollton, OH 44615
100	Dorothy M Place	Yes	6.4290	0.01082401	0.00000000	0.00000000	1.00000000	0.01082401	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	15-0005118.003	Harrison	6 Gallo Road, Carrollton, OH 44615
101	Bret M & Kimberly L Barna	Yes	6.6754	0.01123886	0.00000000	0.00000000	1.00000000	0.01123886	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	15-0000893.000	Harrison	58 Waynesburg Road NW, Carrollton, OH 44615
102	Wheeling & Lake Erie Railway Company	Yes	7.5830	0.01276692	0.00000000	0.00000000	1.00000000	0.01276692	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	Not Assigned By Auditor	Washington	Larry R. Parsons, CEO, 100 East First Street, Brewster, OH 44613
103	Gary L Teeter Revocable Trust Dated August 2, 2011	Yes	8.5580	0.01440845	0.00000000	0.00000000	0.00000000	0.00000000	0.06400000	0.00092214	0.68600000	0.00988420	0.25000000	0.00360211	0.00000000	0.00000000	15-0000893.002	Harrison	Gary L. Teeter, Trustee, 1070 Waynesburg Road NW, Carrollton, OH 44615
104	Castalia Investment LLC	Yes	8.7330	0.01470308	0.00000000	0.00000000	1.00000000	0.01470308	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	34-0000319.002	Washington	Scott Brown, Pres., 9717 Chillicothe Road, Kirtland, OH 44094
105	Waynesburg RD LLC	Yes	9.5170	0.01602304	0.00000000	0.00000000	1.00000000	0.01602304	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	34-0000426.000	Washington	Michael J Wynn, 101 Waynesburg Road, Carrollton, OH 44615
106	Eugene C & Shirley A Thompson	Yes	11.0540	0.01861077	0.00000000	0.00000000	1.00000000	0.01861077	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	15-0000287.000	Harrison	2318 Canton Road NW, Carrollton, OH 44615
107	Scott K Grunder	Yes	11.2380	0.01892056	0.00000000	0.00000000	1.00000000	0.01892056	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	34-0000374.000	Washington	71 Gallo Road NE, Carrollton, OH 44615
108	Scott K & Jeffery C Grunder	Yes	11.2560	0.01895086	0.00000000	0.00000000	1.00000000	0.01895086	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	34-0000122.000	Washington	111 Gallo Road NE, Carrollton, OH 44615
109	Carroll County Coal Company	Yes	12.0000	0.02020348	0.00000000	0.00000000	1.00000000	0.02020348	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	34-0000325.002	Washington	Scott F. Brown, President, 9717 Chillicothe Road, Kirtland, OH 44094
110	William H Jr & Janet D Grimes	Yes	12.7320	0.02143589	0.00000000	0.00000000	1.00000000	0.02143589	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	15-0000337.000	Harrison	1196 Brenner Road N.E., Carrollton, OH 44615
111	Jeffrey L Bory	Yes	12.6960	0.02137528	0.00000000	0.00000000	1.00000000	0.02137528	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	15-0000453.000	Harrison	2184 Canton Road NW, Carrollton, OH 44615
112	Humburk, LLC	Yes	12.9990	0.02188542	0.00000000	0.00000000	1.00000000	0.02188542	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	15-0000893.001	Harrison	James E. Houseman, Authorized Agent, 5026 Sheffield Avenue, Powell, OH 43065
113	George W Johnson	Yes	14.4200	0.02427785	0.00000000	0.00000000	1.00000000	0.02427785	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	34-0000044.001	Washington	27 Gallo Road NE, Carrollton, OH 44615
114	Joseph D & Eva J Sheppard	Yes	22.4590	0.03781250	0.00000000	0.00000000	1.00000000	0.03781250	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	15-0000559.000	Harrison	3084 Canton Road NW, Carrollton, OH 44615

Exhibit "A-2"

Tracts Within The Grunder North Unit Contract Area

Tract	Current Mineral Owner	Leased Yes/No	Surface Acres In Unit	Tract Participation <sup>1</sup>	Current Mineral Owner Working Interest	Current Mineral Owner Unit Participation	R. E. Gas Working Interest <sup>2</sup>	R. E. Gas Unit Participation	CHK Exp. Working Interest <sup>3</sup>	CHK Exp. Unit Participation	CHK Utica Working Interest <sup>4</sup>	CHK Utica Unit Participation	Total E&P Working Interest <sup>5</sup>	Total E&P Unit Participation	B&B Corp. Working Interest <sup>6</sup>	B&B Corp. Unit Participation	Parcel ID	Township	Current Mineral Owner Address
115	Village of Carrollton	Yes	23.8510	0.04015610	0.00000000	0.00000000	1.00000000	0.04015610	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	34-0000120.000	Washington	Dennis Roudebush, Village Admin, 80 Second Street SW, Carrollton, OH 44615
116	Carroll County Coal Company	Yes	31.6830	0.05334224	0.00000000	0.00000000	1.00000000	0.05334224	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	34-0000326.007	Washington	Scott F. Brown, President, 9717 Chillicothe Road, Kirtland, OH 44094
117	Jeffrey L Bory	Yes	33.5380	0.05646536	0.00000000	0.00000000	1.00000000	0.05646536	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	15-0000454.000	Harrison	2184 Canton Road NW, Carrollton, OH 44615
118	Michael J Wynn	Yes	34.7560	0.05851601	0.00000000	0.00000000	1.00000000	0.05851601	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	34-0000421.000	Washington	101 Waynesburg Road, Carrollton, OH 44615
119	John G & Jean Gearhart	Yes	63.2710	0.10652453	0.00000000	0.00000000	1.00000000	0.10652453	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	15-0000892.000	Harrison	2520 Maplegrove NE, Louisville, OH 44641
120	Gary L Teeter Revocable Trust Dated August 2, 2011	No	69.4900	0.11699498	1.00000000	0.11699498	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	15-0000555.000	Harrison	Gary L. Teeter, Trustee, 1070 Waynesburg Road NW, Carrollton, OH 44615
121	Gary E & Jill R Henry	Yes	0.0024	0.00000404	0.00000000	0.00000000	1.00000000	0.00000404	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	09-0000442.004	Center	603 Garfield Avenue, Carrollton, OH 44615
122	Eugene C & Shirley A Thompson	Yes	0.0021	0.00000354	0.00000000	0.00000000	1.00000000	0.00000354	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	15-0000286.000	Harrison	2318 Canton Road NW, Carrollton, OH 44615
123	Eugene C & Shirley A Thompson	Yes	0.0088	0.00001482	0.00000000	0.00000000	1.00000000	0.00001482	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	15-0000287.001	Harrison	2318 Canton Road NW, Carrollton, OH 44615
124	Wayne A Harper	Yes	0.0010	0.00000168	0.00000000	0.00000000	1.00000000	0.00000168	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	15-0000692.000	Harrison	2167 Canton Road NW, Carrollton, OH 44615
125	Stanley Robert George	Yes	0.0003	0.00000051	0.00000000	0.00000000	0.00000000	0.00000000	0.03000000	0.00000002	0.34000000	0.00000017	0.25000000	0.00000013	0.38000000	0.00000019	15-0000304.000	Harrison	252 Waynesburg Road, Carrollton, OH 44615

<sup>1</sup> "Tract Participation" was calculated by dividing "Surface Acres In Unit" by 593.9571 (unit acreage).

<sup>2</sup> "R. E. Gas" refers to R. E. Gas Development, LLC.

<sup>3</sup> "CHK Exp." refers to Chesapeake Exploration, L.L.C.

<sup>4</sup> "CHK Utica" refers to Chesapeake Utica, L.L.C.

<sup>5</sup> "Total E&P" refers to Total E&P USA, Inc.

<sup>6</sup> "B&B Corp." refers to Belden & Blake Corporation.

<sup>7</sup> Note that the deed conveying Tract 62 does not disclose a trust of record. It simply conveys Tract 62 to "Ronald G. Roudebush, Trustee."

**Exhibit "A-3"**

**Unleased Tracts Within The Grunder North Unit Contract Area**

Tract	Current Mineral Owner	Leased Yes/No	Surface Acres In Unit	Tract Participation <sup>1</sup>	Current Mineral Owner WI	Current Mineral Owner Unit Prt.	Parcel ID	Township	Current Mineral Owner Address
62	Ronald G Roudebush, Trustee <sup>2</sup>	No	1.6420	0.00276451	1.00000000	0.00276451	15-0000721.000	Harrison	2172 Canton Road Carrollton, OH 44615
120	Gary L Teeter Revocable Trust Dated August 2, 2011	No	69.4900	0.11699498	1.00000000	0.11699498	15-0000555.000	Harrison	Gary L. Teeter, Trustee 1070 Waynesburg Road NW Carrollton, OH 44615

<sup>1</sup> "Tract Participation" was calculated by dividing "Surface Acres In Unit" by 593.9571 (unit acreage).

<sup>2</sup> Note that the deed conveying Tract 62 does not disclose a trust of record. It simply conveys Tract 62 to "Ronald G. Roudebush, Trustee."

Total Leased Acres	522.8251
Total Unleased Acres	71.1320
<b>Total Acres</b>	<b>593.9571</b>

Exhibit "A-4"  
Working Interest Owners Within The Grunder North Unit Contract Area

Tract	Current Mineral Owner	Leased Yes/No	Surface Acres In Unit	Current Mineral Owner Working Interest	Current Mineral Owner Net Mineral Acres <sup>1</sup>	R.E. Gas Working Interest <sup>2</sup>	R.E. Gas Net Mineral Acres	CHK Exp. Working Interest <sup>3</sup>	CHK Exp. Net Mineral Acres	CHK Utica Working Interest <sup>4</sup>	CHK Utica Net Mineral Acres	Total E&P Working Interest <sup>5</sup>	Total E&P Net Mineral Acres	B&B Corp. Working Interest <sup>6</sup>	B&B Corp. Net Mineral Acres	Parcel ID	Township	Current Mineral Owner Address
1	Aaron L & Sarah B Miller	Yes	0.0100	0.00000000	0.00000000	1.00000000	0.01000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	34-0000044.010	Washington	6072 Mirth Road NE, Mechanicstown, OH 44651
2	William H Jr & Janet D Grimes	Yes	0.0110	0.00000000	0.00000000	1.00000000	0.01100000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	15-0000332.000	Harrison	1196 Brenner Road N.E., Carrollton, OH 44615
3	Helen M & Jack L Maffett	Yes	0.0440	0.00000000	0.00000000	1.00000000	0.04400000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	15-0000502.000	Harrison	95 Gallo Road NW, Carrollton, OH 44615
4	Castalia Investment Company LLC	Yes	0.0720	0.00000000	0.00000000	1.00000000	0.07200000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	34-0000315.001	Washington	Scott Brown, Pres., 9717 Chillicothe Road, Kirtland, OH 44094
5	Floyd D & Lorraine A Skinner	Yes	0.0940	0.00000000	0.00000000	1.00000000	0.09400000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	15-0000767.000	Harrison	2113 Canton Road NW, Carrollton, OH 44615
6	Wayne A & Lisa M Shaw	Yes	0.1010	0.00000000	0.00000000	1.00000000	0.10100000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	15-0005106.000	Harrison	9330 Briar Road NW, Magnolia, OH 44643
7	Patricia A & James D Cale	Yes	0.1030	0.00000000	0.00000000	0.00000000	0.00000000	0.37500000	0.03862500	0.00000000	0.00000000	0.12500000	0.01287500	0.00000000	0.00000000	15-0000159.000	Harrison	3095 Bernewood Circle NW, Canton, OH 44709
7	Ronald & Joanne Dennis	Yes	0.1030	0.00000000	0.00000000	0.00000000	0.00000000	0.37500000	0.03862500	0.00000000	0.00000000	0.12500000	0.01287500	0.00000000	0.00000000	15-0000159.000	Harrison	3095 Bernewood Circle NW, Canton, OH 44709
8	Michael E & Peggy L Miller Christner	Yes	0.3214	0.00000000	0.00000000	1.00000000	0.32140000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	15-0000578.000	Harrison	158 Bacon Road NW, Carrollton, OH 44615
9	Michael E & Peggy L Miller Christner	Yes	0.3214	0.00000000	0.00000000	1.00000000	0.32140000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	15-0000579.000	Harrison	158 Bacon Road NW, Carrollton, OH 44615
10	Lois J Sweat	Yes	0.3214	0.00000000	0.00000000	1.00000000	0.32140000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	15-0000586.000	Harrison	2274 Pine Road NW, Carrollton, OH 44615
11	Lois J Sweat	Yes	0.3214	0.00000000	0.00000000	1.00000000	0.32140000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	15-0000587.000	Harrison	2274 Pine Road NW, Carrollton, OH 44615
12	Joseph & Evelyn H Petrim	Yes	0.3222	0.00000000	0.00000000	1.00000000	0.32219000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	15-0000695.000	Harrison	2288 Pine Street NW, Carrollton, OH 44615
13	Deborah Ann & Larry George Riggle	Yes	0.3214	0.00000000	0.00000000	1.00000000	0.32140000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	15-0000580.000	Harrison	209 Maple Avenue NW, Carrollton, OH 44615
14	Deborah Ann & Larry George Riggle	Yes	0.3214	0.00000000	0.00000000	1.00000000	0.32140000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	15-0000581.000	Harrison	209 Maple Avenue NW, Carrollton, OH 44615
15	Harold C & Karen L Cain	Yes	0.3200	0.00000000	0.00000000	1.00000000	0.32000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	15-0000585.000	Harrison	1461 State Route 30, Clinton, PA 15026
16	Wiley E & Linda S Morgan	Yes	0.3205	0.00000000	0.00000000	1.00000000	0.32050000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	15-0000583.000	Harrison	150 Waynesburg Road, Carrollton, OH 44615
17	Wiley E & Linda S Morgan	Yes	0.3211	0.00000000	0.00000000	1.00000000	0.32110000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	15-0000582.000	Harrison	150 Waynesburg Road, Carrollton, OH 44615
18	Kevin K & Martha L Shields	Yes	0.3214	0.00000000	0.00000000	1.00000000	0.32140000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	15-0000584.000	Harrison	1133 Academic Drive, Winston Salem, NC 27106
19	Vina M Smith	Yes	0.3200	0.00000000	0.00000000	1.00000000	0.32000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	15-0000786.000	Harrison	2273 Pine Street, Carrollton, OH 44615
20	Christopher M & Julie A Stamp	Yes	0.3227	0.00000000	0.00000000	1.00000000	0.32270000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	15-0000589.000	Harrison	6038 Whinnery Road, Hanoverton, OH 44423
21	Christopher M & Julie A Stamp	Yes	0.3227	0.00000000	0.00000000	1.00000000	0.32270000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	15-0000590.000	Harrison	6038 Whinnery Road, Hanoverton, OH 44423
22	Vina M Smith	Yes	0.3300	0.00000000	0.00000000	1.00000000	0.33000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	15-0000787.000	Harrison	2273 Pine Street, Carrollton, OH 44615
23	Black Gold Holdings LLC	Yes	0.3200	0.00000000	0.00000000	1.00000000	0.32000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	15-0000675.001	Harrison	Kenneth J. Joseph, PO Box 607, Carrollton, OH 44615
24	Allen H & Betty J Babe	Yes	0.3250	0.00000000	0.00000000	1.00000000	0.32500000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	15-0000568.000	Harrison	2035 Alamo Road SE, Carrollton, OH 44615
25	Black Gold Holdings LLC	Yes	0.3200	0.00000000	0.00000000	1.00000000	0.32000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	15-0000591.001	Harrison	Kenneth J. Joseph, PO Box 607, Carrollton, OH 44615
26	David W & Sylvia J Morrison	Yes	0.3260	0.00000000	0.00000000	1.00000000	0.32600000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	15-0000456.000	Harrison	180 Walnut Street NW, Carrollton, OH 44615
27	Christopher M & Julie A Stamp	Yes	0.3387	0.00000000	0.00000000	1.00000000	0.33870000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	15-0000588.000	Harrison	6038 Whinnery Road, Hanoverton, OH 44423
28	Gregory Pasquale	Yes	0.3590	0.00000000	0.00000000	1.00000000	0.35900000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	15-0000046.000	Harrison	719 Lincoln Ave, Carrollton, OH 44615
29	Allen H & Betty J Babe	Yes	0.4300	0.00000000	0.00000000	1.00000000	0.43000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	15-0000569.000	Harrison	2035 Alamo Road SE, Carrollton, OH 44615
30	Jeffrey L Bory	Yes	0.4380	0.00000000	0.00000000	0.00000000	0.00000000	0.03000000	0.01314000	0.72000000	0.31536000	0.25000000	0.10950000	0.00000000	0.00000000	15-0000452.000	Harrison	2184 Canton Road NW, Carrollton, OH 44615
31	Cason R & Janice E Leggett	Yes	0.4550	0.00000000	0.00000000	0.00000000	0.00000000	0.75000000	0.34125000	0.00000000	0.00000000	0.25000000	0.11375000	0.00000000	0.00000000	15-0000335.001	Harrison	2218 Canton Road, Carrollton, OH 44615
32	Floyd D & Lorraine A Skinner	Yes	0.4940	0.00000000	0.00000000	1.00000000	0.49400000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	15-0000766.000	Harrison	2113 Canton Road NW, Carrollton, OH 44615
33	William E & Joan M Enterline	Yes	0.5060	0.00000000	0.00000000	1.00000000	0.50600000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	15-0000259.000	Harrison	2129 Canton Road, Carrollton, OH 44615

## Exhibit "A-4"

## Working Interest Owners Within The Grunder North Unit Contract Area

Tract	Current Mineral Owner	Leased Yes/No	Surface Acres In Unit	Current Mineral Owner Working Interest	Current Mineral Owner Net Mineral Acres <sup>1</sup>	R.E. Gas Working Interest <sup>2</sup>	R.E. Gas Net Mineral Acres	CHK Exp. Working Interest <sup>3</sup>	CHK Exp. Net Mineral Acres	CHK Utica Working Interest <sup>4</sup>	CHK Utica Net Mineral Acres	Total E&P Working Interest <sup>5</sup>	Total E&P Net Mineral Acres	B&B Corp. Working Interest <sup>6</sup>	B&B Corp. Net Mineral Acres	Parcel ID	Township	Current Mineral Owner Address
34	Richard J & Sally J Shifflett	Yes	0.5070	0.00000000	0.00000000	1.00000000	0.50700000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	15-0000846.000	Harrison	2137 Canton Road NW, Carrollton, OH 44615
35	Village of Carrollton	Yes	1.0000	0.00000000	0.00000000	1.00000000	1.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	34-0000119.000	Washington	Dennis Roudebush, Village Admin, 80 Second Street SW, Carrollton, OH 44615
36	Betty L Edwards	Yes	0.6030	0.00000000	0.00000000	1.00000000	0.60300000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	15-0000252.000	Harrison	43 Gallo Road NW, Carrollton, OH 44615
37	Dale E & Leona R Snyder	Yes	0.6680	0.00000000	0.00000000	1.00000000	0.66800000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	15-0000553.000	Harrison	2071 Canton Road, Carrollton, OH 44615
38	William E & Joan M Enterline	Yes	0.6750	0.00000000	0.00000000	1.00000000	0.67500000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	15-0000277.000	Harrison	2129 Canton Road, Carrollton, OH 44615
39	Patricia A & James D Cale	Yes	0.6780	0.00000000	0.00000000	0.00000000	0.00000000	0.37500000	0.25425000	0.00000000	0.00000000	0.12500000	0.08475000	0.00000000	0.00000000	15-0000160.000	Harrison	3095 Bernewood Circle NW, Canton, OH 44709
39	Ronald & Joanne Dennis	Yes	0.6780	0.00000000	0.00000000	0.00000000	0.00000000	0.37500000	0.25425000	0.00000000	0.00000000	0.12500000	0.08475000	0.00000000	0.00000000	15-0000160.000	Harrison	3095 Bernewood Circle NW, Canton, OH 44709
40	Kluskey Family Revocable Living Trust Dated July 9, 2005	Yes	0.5560	0.00000000	0.00000000	1.00000000	0.55600000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	15-0000449.000	Harrison	James Kluskey & Mabel J. Kluskey, Trustees, 121 Waynesbury Road NW, Carrollton, OH 44615
41	William F & Kathleen C Hurdle	Yes	0.8000	0.00000000	0.00000000	0.50000000	0.40000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	34-0000044.009	Washington	1616 Lexington Ave., Mansfield, OH 44907
41	Barbara K Edwards Trust Dated February 15, 2000	Yes	0.8000	0.00000000	0.00000000	0.50000000	0.40000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	34-0000044.009	Washington	Barbara K. Edwards, Trustee or successor trustee(s), 86 Arbor Road NE, Minerva, OH 44657
42	Thomas J & Janet S Litzenberg	Yes	0.8520	0.00000000	0.00000000	1.00000000	0.85200000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	15-0000549.000	Harrison	2119 Canton Road NW, Carrollton, OH 44615
43	Eric F & Cindy Hanson	Yes	0.9200	0.00000000	0.00000000	1.00000000	0.92000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	34-0000640.000	Washington	141 Gallo Road, Carrollton, OH 44615
44	Doji J & Jamie R Grimes	Yes	0.9500	0.00000000	0.00000000	1.00000000	0.95000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	15-0005049.000	Harrison	205 Clearview Drive NW, Carrollton, OH 44615
45	Doji J & Jamie R Grimes	Yes	0.9587	0.00000000	0.00000000	1.00000000	0.95870000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	15-0005054.000	Harrison	205 Clearview Drive NW, Carrollton, OH 44615
46	Mary Johnson	Yes	1.0800	0.00000000	0.00000000	1.00000000	1.08000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	34-0000639.000	Washington	224 5th Street NW, Carrollton, OH 44615-1106
47	Vaughn E & Susan J Cogan	Yes	0.9090	0.00000000	0.00000000	1.00000000	0.90900000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	15-0000168.000	Harrison	2109 Canton Road NW, Carrollton, OH 44615
48	Village of Carrollton	Yes	0.5000	0.00000000	0.00000000	1.00000000	0.50000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	34-0000118.000	Washington	Dennis Roudebush, Village Admin, 80 Second Street SW, Carrollton, OH 44615
49	Doji J & Jamie R Grimes	Yes	1.0000	0.00000000	0.00000000	1.00000000	1.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	15-0005048.000	Harrison	205 Clearview Drive NW, Carrollton, OH 44615
50	Barbara K Edwards Trust Dated February 15, 2000	Yes	1.0750	0.00000000	0.00000000	1.00000000	1.07500000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	15-0005118.001	Harrison	Barbara K. Edwards, Trustee or successor trustee(s), 86 Arbor Road NE, Minerva, OH 44657
51	William L Jr & Barbara L Larie	Yes	1.0930	0.00000000	0.00000000	1.00000000	1.09300000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	15-0005052.000	Harrison	185 Clearview Drive, Carrollton, OH 44615
52	Doji J & Jamie R Grimes	Yes	1.0930	0.00000000	0.00000000	1.00000000	1.09300000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	15-0005051.000	Harrison	205 Clearview Drive NW, Carrollton, OH 44615
53	Doji J & Jamie R Grimes	Yes	1.0930	0.00000000	0.00000000	1.00000000	1.09300000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	15-0005050.000	Harrison	205 Clearview Drive NW, Carrollton, OH 44615
54	William E & Joan M Enterline	Yes	1.1040	0.00000000	0.00000000	1.00000000	1.10400000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	15-0000555.001	Harrison	2129 Canton Road, Carrollton, OH 44615
55	Betty L Edwards	Yes	1.1560	0.00000000	0.00000000	1.00000000	1.15600000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	15-0000254.001	Harrison	43 Gallo Road NW, Carrollton, OH 44615
56	Barbara K Edwards Trust Dated February 15, 2000	Yes	1.2230	0.00000000	0.00000000	1.00000000	1.22300000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	34-0000044.016	Washington	Barbara K. Edwards, Trustee or successor trustee(s), 86 Arbor Road NE, Minerva, OH 44657
57	Nancy L Westfall	Yes	1.3290	0.00000000	0.00000000	1.00000000	1.32900000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	15-0000669.000	Harrison	3032 Canton Road NW, Carrollton, OH 44615
58	Gary W Crump	Yes	1.4270	0.00000000	0.00000000	1.00000000	1.42700000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	15-0000141.000	Harrison	2013 Canton Road NW, Carrollton, OH 44615
59	Vicki D & Glenn W Riggs	Yes	1.4510	0.00000000	0.00000000	1.00000000	1.45100000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	15-0000377.000	Harrison	244 Third Street SE, Carrollton, OH 44615
60	Brad F & Angela F Salisbury	Yes	1.4880	0.00000000	0.00000000	1.00000000	1.48800000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	09-0000636.003	Center	95 Fourth Street SE, Carrollton, OH 44615
61	Earl L & Tonya M Bryan	Yes	1.5820	0.00000000	0.00000000	1.00000000	1.58200000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	15-0000254.000	Harrison	6247 Appollo Road NE, Kensington, OH 44427
62	Ronald G Roudebush, Trustee <sup>7</sup>	No	1.6420	1.00000000	1.64200000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	15-0000721.000	Harrison	2172 Canton Road, Carrollton, OH 44615

## Exhibit "A-4"

## Working Interest Owners Within The Grunder North Unit Contract Area

Tract	Current Mineral Owner	Leased Yes/No	Surface Acres In Unit	Current Mineral Owner Working Interest	Current Mineral Owner Net Mineral Acres <sup>1</sup>	R.E. Gas Working Interest <sup>2</sup>	R.E. Gas Net Mineral Acres	CHK Exp. Working Interest <sup>3</sup>	CHK Exp. Net Mineral Acres	CHK Utica Working Interest <sup>4</sup>	CHK Utica Net Mineral Acres	Total E&P Working Interest <sup>5</sup>	Total E&P Net Mineral Acres	B&B Corp. Working Interest <sup>6</sup>	B&B Corp. Net Mineral Acres	Parcel ID	Township	Current Mineral Owner Address
63	Stanley Robert George	Yes	1.7210	0.00000000	0.00000000	0.00000000	0.00000000	0.01500000	0.02581500	0.36000000	0.61956000	0.25000000	0.43025000	0.37500000	0.64537500	15-0000306.000	Harrison	252 Waynesburg Road, Carrollton, OH 44615
64	Mathew E & Marisa M Vaughn	Yes	1.8410	0.00000000	0.00000000	1.00000000	1.84100000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	34-0000044.008	Washington	38 Gallo Road NE, Carrollton, OH 44615
65	Dale E & Leona R Snyder	Yes	1.9000	0.00000000	0.00000000	1.00000000	1.90000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	15-0000554.000	Harrison	2071 Canton Road, Carrollton, OH 44615
66	Board of Commissioners of Carroll County, Ohio	Yes	1.9127	0.00000000	0.00000000	1.00000000	1.91274420	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	Not Assigned By Auditor	Harrison	Jeffrey L. Ohler, Commissioner, 119 S Lisbon Street, Suite 201, Carrollton, OH 44615
67	Vicki D & Glenn W Riggs	Yes	2.0000	0.00000000	0.00000000	1.00000000	2.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	15-0000376.000	Harrison	244 Third Street SE, Carrollton, OH 44615
68	Barbara K Edwards Trust Dated February 15, 2000	Yes	1.8410	0.00000000	0.00000000	1.00000000	1.84100000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	34-0000044.017	Washington	Barbara K. Edwards, Trustee or successor trustee(s), 86 Arbor Road NE, Minerva, OH 44657
69	Shirley J Severn	Yes	2.1540	0.00000000	0.00000000	1.00000000	2.15400000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	15-0000685.000	Harrison	7107 Germano Road SE, Carrollton, OH 44615
70	Betty L Edwards	Yes	1.6800	0.00000000	0.00000000	0.50000000	0.84000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	15-0000253.000	Harrison	43 Gallo Road NW, Carrollton, OH 44615
70	Terry R Edwards	Yes	1.6800	0.00000000	0.00000000	0.50000000	0.84000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	15-0000253.000	Harrison	55 Gallo Road NW, Carrollton, OH 44615
71	Marion L & Bonnie S Grimes	Yes	2.2430	0.00000000	0.00000000	1.00000000	2.24300000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	15-0000335.000	Harrison	403 Second Street, Amsterdam, OH 43903
72	Richard A & Desiree A Stidom	Yes	1.6090	0.00000000	0.00000000	0.00000000	0.00000000	0.03000000	0.04827000	0.72000000	1.15848000	0.25000000	0.40225000	0.00000000	0.00000000	15-0000577.000	Harrison	11114 Orton Road, Salineville, OH 43945
73	Carroll County Coal Company	Yes	2.4440	0.00000000	0.00000000	1.00000000	2.44400000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	34-0000316.002	Washington	Scott F. Brown, President, 9717 Chillicothe Road, Kirtland, OH 44094
74	Gary L Teeter Revocable Trust Dated August 2, 2011	Yes	2.0000	0.00000000	0.00000000	0.00000000	0.00000000	0.06000000	0.12000000	0.69000000	1.38000000	0.25000000	0.50000000	0.00000000	0.00000000	15-0000886.000	Harrison	Gary L. Teeter, Trustee, 1070 Waynesburg Road NW, Carrollton, OH 44615
75	Shaun W & Regina S Fish	Yes	2.5000	0.00000000	0.00000000	1.00000000	2.50000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	15-0000025.000	Harrison	131 Waynesburg Road, Carrollton, OH 44615
76	Joy L Reed	Yes	2.8540	0.00000000	0.00000000	1.00000000	2.85400000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	15-0004974.000	Harrison	1171 Lindy Lane NW, Carrollton, OH 44615
77	Barbara K Edwards Trust Dated February 15, 2000	Yes	2.9500	0.00000000	0.00000000	1.00000000	2.95000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	15-0005118.002	Harrison	Barbara K. Edwards, Trustee or successor trustee(s), 86 Arbor Road NE, Minerva, OH 44657
78	William F & Kathleen C Hurdle	Yes	2.9540	0.00000000	0.00000000	0.50000000	1.47700000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	34-0000044.002	Washington	1616 Lexington Ave., Mansfield, OH 44907
78	Barbara K Edwards Trust Dated February 15, 2000	Yes	2.9540	0.00000000	0.00000000	0.50000000	1.47700000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	34-0000044.002	Washington	Barbara K. Edwards, Trustee or successor trustee(s), 86 Arbor Road NE, Minerva, OH 44657
79	Barbara K Edwards Trust Dated February 15, 2000	Yes	3.1940	0.00000000	0.00000000	1.00000000	3.19400000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	15-0005118.000	Harrison	Barbara K. Edwards, Trustee or successor trustee(s), 86 Arbor Road NE, Minerva, OH 44657
80	William F & Kathleen C Hurdle	Yes	3.4500	0.00000000	0.00000000	0.50000000	1.72500000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	34-0000044.003	Washington	1616 Lexington Ave., Mansfield, OH 44907
80	Jeffrey L & Tashia L Farmer	Yes	3.4500	0.00000000	0.00000000	0.00000000	0.00000000	0.02000000	0.06900000	0.36000000	1.24200000	0.12000000	0.41400000	0.00000000	0.00000000	34-0000044.003	Washington	26 Gallo Road, Carrollton, OH 44615
81	William H Jr & Janet D Grimes	Yes	3.8380	0.00000000	0.00000000	1.00000000	3.83800000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	15-0005053.000	Harrison	1196 Brenner Road N.E., Carrollton, OH 44615
82	Carroll County Coal Company	Yes	4.4400	0.00000000	0.00000000	1.00000000	4.44000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	34-0000317.002	Washington	Scott F. Brown, President, 9717 Chillicothe Road, Kirtland, OH 44094
83	Brian M & Darlene M Knott	Yes	4.0000	0.00000000	0.00000000	1.00000000	4.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	15-0000893.007	Harrison	72 Waynesburg Road NW, Carrollton, OH 44615
84	David W Hallett	Yes	4.0000	0.00000000	0.00000000	1.00000000	4.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	15-0000893.005	Harrison	114 Waynesburg NW, Carrollton, OH 44615
85	David W Hallett	Yes	4.0000	0.00000000	0.00000000	1.00000000	4.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	15-0000893.006	Harrison	114 Waynesburg NW, Carrollton, OH 44615
86	William & Tiffany Stragan	Yes	4.0030	0.00000000	0.00000000	0.50000000	2.00150000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	34-0000044.004	Washington	18 Gallo Road, Carrollton, OH 44615
86	William F & Kathleen C Hurdle	Yes	4.0030	0.00000000	0.00000000	0.50000000	2.00150000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	34-0000044.004	Washington	18 Gallo Road, Carrollton, OH 44615
87	Dual & Donna Mae Mallernee	Yes	4.3000	0.00000000	0.00000000	1.00000000	4.30000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	15-0000509.000	Harrison	13 Gallo Road, Carrollton, OH 44615

Exhibit "A-4"

Working Interest Owners Within The Grunder North Unit Contract Area

Tract	Current Mineral Owner	Leased Yes/No	Surface Acres In Unit	Current Mineral Owner Working Interest	Current Mineral Owner Net Mineral Acres <sup>1</sup>	R.E. Gas Working Interest <sup>2</sup>	R.E. Gas Net Mineral Acres	CHK Exp. Working Interest <sup>3</sup>	CHK Exp. Net Mineral Acres	CHK Utica Working Interest <sup>4</sup>	CHK Utica Net Mineral Acres	Total E&P Working Interest <sup>5</sup>	Total E&P Net Mineral Acres	B&B Corp. Working Interest <sup>6</sup>	B&B Corp. Net Mineral Acres	Parcel ID	Township	Current Mineral Owner Address
88	Carroll County Coal Company	Yes	4.3320	0.00000000	0.00000000	1.00000000	4.33200000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	34-0000320.002	Washington	Scott F. Brown, President, 9717 Chillicothe Road, Kirtland, OH 44094
89	William F & Kathleen C Hurdle	Yes	4.7110	0.00000000	0.00000000	0.50000000	2.35550000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	34-0000044.013	Washington	1616 Lexington Ave., Mansfield, OH 44907
89	Dorothy M Place	Yes	4.7110	0.00000000	0.00000000	0.50000000	2.35550000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	34-0000044.013	Washington	6 Gallo Road, Carrollton, OH 44615
90	Wayne A & Lisa M Shaw	Yes	4.8140	0.00000000	0.00000000	1.00000000	4.81400000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	15-0005118.004	Harrison	9330 Briar Road NW, Magnolia, OH 44643
91	David W Hallett	Yes	4.8500	0.00000000	0.00000000	1.00000000	4.85000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	15-0000222.000	Harrison	114 Waynesburg NW, Carrollton, OH 44615
92	Bret M & Kimberly L Barna	Yes	5.0260	0.00000000	0.00000000	1.00000000	5.02600000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	15-0000893.003	Harrison	58 Waynesburg Road NW, Carrollton, OH 44615
93	George W Johnson	Yes	5.0440	0.00000000	0.00000000	1.00000000	5.04400000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	34-0000044.014	Washington	27 Gallo Road NE, Carrollton, OH 44615
94	Vina M Smith	Yes	5.1000	0.00000000	0.00000000	1.00000000	5.10000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	34-0000044.015	Washington	2273 Pine Street NW, Carrollton, OH 44615
95	Lashawn A Hill	Yes	5.1000	0.00000000	0.00000000	0.50000000	2.55000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	34-0000044.005	Washington	41 Gallo Road NE, Carrollton, OH 44615
95	Jessica L King Hill	Yes	5.1000	0.00000000	0.00000000	0.50000000	2.55000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	34-0000044.005	Washington	41 Gallo Road NE, Carrollton, OH 44615
96	Lashawn A Hill	Yes	5.1000	0.00000000	0.00000000	0.50000000	2.55000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	34-0000044.006	Washington	41 Gallo Road NE, Carrollton, OH 44615
96	Jessica L King Hill	Yes	5.1000	0.00000000	0.00000000	0.50000000	2.55000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	34-0000044.006	Washington	41 Gallo Road NE, Carrollton, OH 44615
97	Holly E & Freda A Dalton	Yes	5.1000	0.00000000	0.00000000	1.00000000	5.10000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	34-0000044.007	Washington	57 Gallo Road NE, Carrollton, OH 44615
98	William F & Kathleen C Hurdle	Yes	5.1000	0.00000000	0.00000000	0.50000000	2.55000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	34-0000044.000	Washington	1616 Lexington Ave., Mansfield, OH 44907
98	Lashawn A Hill	Yes	5.1000	0.00000000	0.00000000	0.25000000	1.27500000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	34-0000044.000	Washington	41 Gallo Road NE, Carrollton, OH 44615
98	Jessica L King Hill	Yes	5.1000	0.00000000	0.00000000	0.25000000	1.27500000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	34-0000044.000	Washington	41 Gallo Road NE, Carrollton, OH 44615
99	James D & Pamela S Boring	Yes	5.9100	0.00000000	0.00000000	1.00000000	5.91000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	15-0000455.000	Harrison	130 Waynesburg Road NW, Carrollton, OH 44615
100	Dorothy M Place	Yes	6.4290	0.00000000	0.00000000	1.00000000	6.42900000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	15-0005118.003	Harrison	6 Gallo Road, Carrollton, OH 44615
101	Bret M & Kimberly L Barna	Yes	6.6754	0.00000000	0.00000000	1.00000000	6.67540000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	15-0000893.000	Harrison	58 Waynesburg Road NW, Carrollton, OH 44615
102	Wheeling & Lake Erie Railway Company	Yes	7.5830	0.00000000	0.00000000	1.00000000	7.58300000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	Not Assigned By Auditor	Washington	Larry R. Parsons, CEO, 100 East First Street, Brewster, OH 44613
103	Gary L Teeter Revocable Trust Dated August 2, 2011	Yes	8.5580	0.00000000	0.00000000	0.00000000	0.00000000	0.06400000	0.54771200	0.68600000	5.87078800	0.25000000	2.13950000	0.00000000	0.00000000	15-0000893.002	Harrison	Gary L. Teeter, Trustee, 1070 Waynesburg Road NW, Carrollton, OH 44615
104	Castalia Investment LLC	Yes	8.7330	0.00000000	0.00000000	1.00000000	8.73300000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	34-0000319.002	Washington	Scott Brown, Pres., 9717 Chillicothe Road, Kirtland, OH 44094
105	Waynesburg RD LLC	Yes	9.5170	0.00000000	0.00000000	1.00000000	9.51700000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	34-0000426.000	Washington	Michael J Wynn, 101 Waynesburg Road, Carrollton, OH 44615
106	Eugene C & Shirley A Thompson	Yes	11.0540	0.00000000	0.00000000	1.00000000	11.05400000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	15-0000287.000	Harrison	2318 Canton Road NW, Carrollton, OH 44615
107	Scott K Grunder	Yes	11.2380	0.00000000	0.00000000	1.00000000	11.23800000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	34-0000374.000	Washington	71 Gallo Road NE, Carrollton, OH 44615
108	Scott K & Jeffery C Grunder	Yes	11.2560	0.00000000	0.00000000	1.00000000	11.25600000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	34-0000122.000	Washington	111 Gallo Road NE, Carrollton, OH 44615
109	Carroll County Coal Company	Yes	12.0000	0.00000000	0.00000000	1.00000000	12.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	34-0000325.002	Washington	Scott F. Brown, President, 9717 Chillicothe Road, Kirtland, OH 44094
110	William H Jr & Janet D Grimes	Yes	12.7320	0.00000000	0.00000000	1.00000000	12.73200000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	15-0000337.000	Harrison	1196 Brenner Road N.E., Carrollton, OH 44615
111	Jeffrey L Bory	Yes	12.6960	0.00000000	0.00000000	1.00000000	12.69600000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	15-0000453.000	Harrison	2184 Canton Road NW, Carrollton, OH 44615
112	Humburk, LLC	Yes	12.9990	0.00000000	0.00000000	1.00000000	12.99900000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	15-0000893.001	Harrison	James E. Houseman, Authorized Agent, 5026 Sheffield Avenue, Powell, OH 43065
113	George W Johnson	Yes	14.4200	0.00000000	0.00000000	1.00000000	14.42000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	34-0000044.001	Washington	27 Gallo Road NE, Carrollton, OH 44615
114	Joseph D & Eva J Sheppard	Yes	22.4590	0.00000000	0.00000000	1.00000000	22.45900000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	15-0000559.000	Harrison	3084 Canton Road NW, Carrollton, OH 44615

**Exhibit "A-4"**

**Working Interest Owners Within The Grunder North Unit Contract Area**

Tract	Current Mineral Owner	Leased Yes/No	Surface Acres In Unit	Current Mineral Owner Working Interest	Current Mineral Owner Net Mineral Acres <sup>1</sup>	R.E. Gas Working Interest <sup>2</sup>	R.E. Gas Net Mineral Acres	CHK Exp. Working Interest <sup>3</sup>	CHK Exp. Net Mineral Acres	CHK Utica Working Interest <sup>4</sup>	CHK Utica Net Mineral Acres	Total E&P Working Interest <sup>5</sup>	Total E&P Net Mineral Acres	B&B Corp. Working Interest <sup>6</sup>	B&B Corp. Net Mineral Acres	Parcel ID	Township	Current Mineral Owner Address
115	Village of Carrollton	Yes	23.8510	0.00000000	0.00000000	1.00000000	23.85100000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	34-0000120.000	Washington	Dennis Roudebush, Village Admin, 80 Second Street SW, Carrollton, OH 44615
116	Carroll County Coal Company	Yes	31.6830	0.00000000	0.00000000	1.00000000	31.68300000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	34-0000326.007	Washington	Scott F. Brown, President, 9717 Chillicothe Road, Kirtland, OH 44094
117	Jeffrey L Bory	Yes	33.5380	0.00000000	0.00000000	1.00000000	33.53800000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	15-0000454.000	Harrison	2184 Canton Road NW, Carrollton, OH 44615
118	Michael J Wynn	Yes	34.7560	0.00000000	0.00000000	1.00000000	34.75600000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	34-0000421.000	Washington	101 Waynesburg Road, Carrollton, OH 44615
119	John G & Jean Gearhart	Yes	63.2710	0.00000000	0.00000000	1.00000000	63.27100000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	15-0000892.000	Harrison	2520 Maplegrove NE, Louisville, OH 44641
120	Gary L Teeter Revocable Trust Dated August 2, 2011	No	69.4900	1.00000000	69.49000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	15-0000555.000	Harrison	Gary L. Teeter, Trustee, 1070 Waynesburg Road NW, Carrollton, OH 44615
121	Gary E & Jill R Henry	Yes	0.0024	0.00000000	0.00000000	1.00000000	0.00240000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	09-0000442.004	Center	603 Garfield Avenue, Carrollton, OH 44615
122	Eugene C & Shirley A Thompson	Yes	0.0021	0.00000000	0.00000000	1.00000000	0.00210000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	15-0000286.000	Harrison	2318 Canton Road NW, Carrollton, OH 44615
123	Eugene C & Shirley A Thompson	Yes	0.0088	0.00000000	0.00000000	1.00000000	0.00880000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	15-0000287.001	Harrison	2318 Canton Road NW, Carrollton, OH 44615
124	Wayne A Harper	Yes	0.0010	0.00000000	0.00000000	1.00000000	0.00100000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	15-0000692.000	Harrison	2167 Canton Road NW, Carrollton, OH 44615
125	Stanley Robert George	Yes	0.0003	0.00000000	0.00000000	0.00000000	0.00000000	0.03000000	0.00000900	0.34000000	0.00010200	0.25000000	0.00007500	0.38000000	0.00011400	15-0000304.000	Harrison	252 Waynesburg Road, Carrollton, OH 44615
	<b>TOTAL:</b>				<b>71.1320</b>		<b>505.5378</b>		<b>1.7509</b>		<b>10.5863</b>		<b>4.3046</b>		<b>0.6455</b>			

<sup>1</sup>"Net Mineral Acres" was calculated by multiplying "Surface Acres in Unit" by the applicable party's working interest.

<sup>2</sup>"R.E. Gas" refers to R. E. Gas Development, LLC.

<sup>3</sup>"CHK Exp." refers to Chesapeake Exploration, L.L.C.

<sup>4</sup>"CHK Utica" refers to Chesapeake Utica, L.L.C.

<sup>5</sup>"Total E&P" refers to Total E&P USA, Inc.

<sup>6</sup>"B&B Corp." refers to Belden & Blake Corporation.

<sup>7</sup>Note that the deed conveying Tract 62 does not disclose a trust of record. It simply conveys Tract 62 to "Ronald G. Roudebush, Trustee."

**Summary of Exhibit "A-4"**

**Working Interest Owners Within The Grunder North Unit Contract Area**

<b>Working Interest Owner</b>	<b>Committed Yes/No</b>	<b>Total Net Acreage</b>	<b>Address</b>
R. E. Gas Development, LLC	Yes	505.5378	F. Scott Hodges 366 Walker Drive, State College, PA 16801
Chesapeake Exploration, L.L.C.	Yes	1.7509	Jeff Pinter 6100 North Western Avenue, Oklahoma City, OK 73118
CHK Utica, L.L.C.	Yes	10.5863	Jeff Pinter 6100 North Western Avenue, Oklahoma City, OK 73118
Total E&P USA, Inc.	Yes	4.3046	Fabien Colmet Daage 1201 Louisiana, Suite 1800, Houston, TX 77002
Belden & Blake Corporation	Yes	0.6455	James D. McKinney 300 Capital Street, Suite 200, Charleston, WV 25302
Ronald G. Roudebush, Trustee	No	1.642	2172 Canton Road, Carrollton, OH 44615
Gary L. Teeter Revocable Trust dated August 2, 2011	No	69.49	Gary L. Teeter, Trustee, 1070 Waynesburg Road NW, Carrollton, OH 44615
<b>TOTAL:</b>		<b>593.9571</b>	

**EXHIBIT "B"**

Attached to and made a part of that certain Unit Operating Agreement for the Grunder North Unit.

**OIL AND GAS LEASE**

This oil and gas lease (the "Lease") made this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_, between \_\_\_\_\_, herein called "Lessor" (collectively if there is more than one) whose address is \_\_\_\_\_, and R.E. Gas Development, LLC, a Delaware limited liability company, hereinafter called "Lessee", whose address is 366 Walker Drive, State College, PA 16801.

**ARTICLE I. GRANT OF LEASE**

Lessor, in consideration of the payments described herein and the covenants and agreements hereinafter contained, does hereby exclusively lease to the Lessee the land described below, together with the use of the surface thereof to the extent Lessor enjoys such rights, for the purpose of carrying on geophysical and other exploratory work, including core drilling, and the drilling, operating for, and producing, gathering and transporting of all the oil, gas, casinghead gas, casinghead gasoline, condensate, distillate, natural gas liquids, hydrocarbon and non-hydrocarbon minerals or products that may be associated with oil or gas, all other gases and their respective constituent vapors and liquid or gaseous hydrocarbons produced in association therewith other than as reserved unto Lessor herein below (herein called "Lease Products").

**1. Description of the Land Included in this Lease**

The land included in this Lease, herein called the "Leased Premises" is \_\_\_\_\_ acres, more or less, identified as Parcel No. \_\_\_\_\_, located in Section \_\_\_\_\_, Township of \_\_\_\_\_, County of \_\_\_\_\_, State of Ohio, and further described in that certain Deed dated \_\_\_\_\_ recorded [in Book \_\_\_\_\_, Page \_\_\_\_\_,] [as Instrument Number \_\_\_\_\_,] of the \_\_\_\_\_ County, Ohio Deed Records.

**2. Limitations on Grant of Lease**

(a) Lessor's Reserved Rights. Lessor reserves all rights not specifically granted to Lessee in this Lease. Specifically reserved by Lessor are all oil, gas and other mineral rights from the surface to the top of the Queenston Shales, other than such rights allowed to Lessee to drill through such reserved portions as are necessary for Lessee to have access to the Queenston Shales and below.

(b) Lessor Structures and Improvements. Lessor reserves the right to construct any structure or other improvements at any location selected by Lessor anywhere on the Leased Premises provided the exercise of such reserved rights by Lessor does not impair the exercise and enjoyment of rights granted Lessee hereunder. If prior to Lessee coordinating site location for any operations of Lessee's on the Leased Premises pursuant to Article V, Section I(q) of this Lease, Lessor commences construction of a structure or other improvement on the Leased Premises, Lessee will not locate any equipment nor conduct any operations within 300 feet of the proposed structure or improvement (within 500 feet if a habitable structure) without Lessor's prior written permission.

(c) Agricultural Activities. Lessor reserves the right to initiate or continue irrigation and agricultural activities (including timbering) on the Leased Premises. If Lessor decides to conduct agricultural activities on the Leased Premises, Lessee will reasonably accommodate Lessor's agricultural use to the extent practical in light of the rights granted to Lessee hereunder and the potential use of the property for the purposes set forth in the Lease.

(d) Other Minerals Reserved. This Lease does not include and there is hereby excepted and reserved unto Lessor all of the sulfur, coal, lignite, uranium, and other fissionable material, geothermal energy, base and precious metals, rock, stone, gravel, and any other mineral substances (excepting those described above in Article I of this Lease) presently owned by Lessor in, under, or upon the Leased Premises, together with rights of ingress and egress and use of the Leased Premises by Lessor or its lessees or assignees for purposes of exploration for and production and marketing of the materials and minerals reserved hereby, provided such use does not interfere with Lessee's operations on the Leased Premises.

**3. Unitization - Pooled Units**

Subject to any limitations below, Lessee is granted the right, at its option, to pool or unitize any land covered by this Lease with any other contiguous lands included with other leases as to any or all horizons or gas, oil, or other minerals described above in Article I of this Lease in this Lease so as to establish pooled units. No pooled unit for any vertical well with no horizontal drilling component which includes any portion of the Leased Premises shall exceed eighty (80) acres. No pooled unit for any well that includes lateral or horizontal well shall exceed six hundred forty (640) acres plus a ten percent (10%) acreage tolerance. Lessee shall have the right and authority to approve the unit application and any supporting documents required for the unit application, including the plan for unit operations. Lessee shall

## EXHIBIT "B"

furnish to Lessor a copy of the declaration of the unit of which any portion of the Leased Premises shall be a part, including a copy of all plats, maps, and exhibits to such application or declaration. For the purposes of this Lease, operations on and production from any lands which are included in a pooled unit with the Leased Premises shall be considered operations on and production from the Leased Premises. The payment of royalty or other like payments due under this Lease shall be proportionately reduced to such proportional share from, or attributable to, each well as the number of net acres covered by this Lease and included in the unit bears to the total number of acres in the unit.

4. **Unit Configuration**

Insofar as possible, taking into consideration the productive limits of the producing interval, the configuration of the mineral ownership boundaries and the unit configuration for the Leased Premises, the lands included within the drilling unit for a well shall be in the form of a square or rectangle, to the extent reasonably possible. Reasonable efforts shall be made by Lessee in designating drilling units to avoid excluding small or irregular shaped portions of the Leased Premises. Units assigned to wells producing from different zones may overlap, and shall overlap when necessary to comply with the requirements of this section. If a well is producing from more than one formation, its drilling unit's size and configuration shall conform to the limitations set forth herein or the Ohio Department of Natural Resources ("ODNR") (or other government entity with jurisdiction) rules applicable to the well which provides the largest drilling unit (subject to the size limitations stated above). If all or a portion of the Leased Premises is included in a pooled unit, then for purposes of this paragraph all the lands within the pooled unit shall be considered a part of the Leased Premises, and the size and configuration of the drilling unit(s) must conform to the requirements of this paragraph for a drilling unit if such unit is established by Lessee. Lessor specifically recognizes that Lessee, at Lessee's option, may drill multiple wells within a unit provided that such is permitted by the ODNR.

5. **Right of First Refusal**

In the event Lessor chooses to grant any remaining rights reserved b) Lessor under this Lease to any party other than Lessee, then before any such grant, Lessor shall provide Lessee with a written notice setting forth all terms and conditions of such other grant, or a true copy of any lease or other document reflecting such grant. Lessee shall be afforded a period of at least thirty (30) days following receipt of such written notice, during which time Lessee may elect to exercise this right of first refusal to assume the obligations of lessee or grantee under such other proposed grant on the same terms and conditions contained therein. Should Lessee so elect, Lessee shall notify Lessor in writing within such thirty (30) day period, and submit therewith any up-front payments or other considerations described in such proposal, along with a signed lease or grant document accordingly.

6. **Definitions**

(a) **Operations**. "Operations" shall mean only (i) the production of oil, gas or other liquid or gaseous hydrocarbons in paying quantities subsequent to drilling or (ii) the actual drilling, completing, stimulating, reworking, recompleting, deepening, plugging back or repairing of a well in search for or in an endeavor to obtain production of oil or gas, conducted in good faith and with due diligence. As used in the definition above, the term "actual drilling" means the actual entry of the rotating drill bit of the drilling rig into the soil of the Leased Premises or lands pooled therewith (or re-entry into an existing wellbore) and prosecution of such actual drilling operations in good faith and in good workmanlike manner, with reasonable diligence, toward the completion of same as a dry hole or commercially productive well.

(b) **Division Order**. "Division order" shall mean the documents setting forth the proportional ownership of Lessor in Lease Products.

### ARTICLE II. TERM OF LEASE

1. **Primary Term**

This Lease shall become effective on \_\_\_\_\_, 20\_\_ which date will be inserted where provided below the title of this document ("Effective Date"). Except as provided herein, this Lease shall remain in full force and effect for a period of five (5) years from such date (hereinafter referred to as the "Primary Term").

2. **Extension of Primary Term**

This Lease may be extended beyond the Primary Term only under the condition that Operations have been commenced prior to the end of the Primary Term, or by the other terms and conditions contained herein, including, but not limited to, the provisions of Article II, Section 3 below, or if at the expiration of the Primary Term, or any extension thereof, Lessee is then engaged in drilling, deepening, plugging back or reworking operations, then this Lease, as to all acreage covered hereby, shall

## EXHIBIT "B"

remain in full force and effect so long as: (i) the drilling, deepening, plugging back or reworking operations are prosecuted to completion with due diligence; and (ii) no cessation of more than ninety (90) consecutive days occur from the completion of the operations and the commencement of drilling, deepening, plugging back or reworking operations of a different well; and (iii) Lessee continues to commence the drilling, deepening, plugging back or reworking of a well within ninety (90) days after the completion of operations on the prior well.

3. **Option To Renew**

Lessee is hereby given the option to extend by renewal the Primary Term of this Lease for one (1) additional three (3) year period. This option may be exercised by Lessee by notifying Lessor in writing of Lessee's intent to exercise its option and simultaneously therewith paying to Lessor in full, prepaid at any time prior to termination of the Primary Term a lease bonus for the 3 year renewal period equal to the 5 year Primary Term bonus paid by Lessee under Article III, Section 1 herein. Such payment shall be based upon the net acres then covered by this Lease and not at such time being maintained by other provisions hereof. Should this option be exercised, it shall be considered for all purposes as though this Lease originally provided for a Primary Term of eight (8) years.

4. **Shut-In Limitation**

In the event all wells drilled upon the Leased Premises are shut-in, the Lease will continue in force and effect while production is shut-in; provided, however, this Lease may not be maintained in force for any continuous period of time longer than thirty-six (36) consecutive months or forty-eight (48) cumulative months after the expiration of the Primary Term hereof solely by provision of the shut-in royalty clause. The shut-in status of any well shall persist only so long as it is necessary to correct, through the exercise of good faith and due diligence, the condition giving rise to the shut-in of the well.

5. **Cessation of Production.**

If, after the expiration of the Primary Term of this Lease, production on the Leased Premises shall cease from any cause, other than from reasons cited in Section 4 above, this Lease shall not terminate, provided Lessee resumes operations on an existing well or wells to re-establish production or drills a new well within a reasonable amount of time, not more than one hundred and eighty days (180) days from such cessation, and this Lease shall remain in full force and effect during the prosecution of such operations and, if production results therefrom, then as long as production continues thereafter.

6. **Pugh Clause**

(a) As to any acreage of the Leased Premises which is not included within any drilling unit at the expiration of the Primary Term, including any extension of the Primary Term in accordance with Article II, Section 2 and/or Section 3 of this Lease, this Lease shall terminate and be of no further force or effect as to any acreage not within such designated units.

(b) In addition, at the end of the Primary Term or extension thereof, this Lease shall terminate as to all depths and horizons under each drilling unit below two hundred (200) feet below the stratigraphic equivalent of the base (bottom) of the deepest formation from which production of oil or gas in paying quantities is being maintained (or, in the case of a shut-in gas well, can be maintained) in the well on such drilling unit if Lessor makes a demand in writing to Lessee that Lessee commence development of such lower depths and horizons, and Lessee has not within one hundred eighty (180) days following such demand, commenced development efforts at least to the extent of application for a permit for a well into such depths and horizons.

(c) Notwithstanding Article II, Sections 6(a) and (b) above, Lessee may continue to utilize access roads, pipelines, or other surface use in effect at the time of termination described above, with Lessee deemed to hold such rights by surface easement so long as such use by Lessee shall continue. Lessee's rights shall not prevent Lessor from re-leasing rights terminated as described above, so long as Lessee's retained surface rights are not disrupted.

7. **Held by Production**

This Lease may be held in force after the termination of the Primary Term, including any extensions in accordance with Article II, Section 2 and/or Section 3 of this Lease only by terms and conditions contained herein, including but not limited to production from, or operations conducted on the Leased Premises or any units in which the Leased Premises is included.

8. **Partial Releases**

Lessee shall have the right at any time during this Lease to release from the lands covered hereby any lands subject to this Lease and thereby may be relieved of all obligations hereafter accruing as

## EXHIBIT "B"

to the acreage so released, provided that (a) Lessee may not release any portion of this Lease included in a pooled unit so long as operations are being conducted on such unit, and (b) any such partial release must release all depths in and under the lands so released except as provided in Article II, Section 6(b) above.

9. **Termination of Record**

Upon termination of this Lease as to any portion of the Leased Premises, Lessee shall promptly deliver to Lessor a plat showing the designated drilling units around each well and a partial release containing a description (metes and bounds and map) of the acreage and depths not retained, in form suitable for recording. In addition, Lessee shall peaceably surrender the released premises to Lessor and remove any and all facilities, equipment and machinery from the site within 90 days at Lessee's expense if the same are not necessary for continued operations as described in Article II, Section 6(c) above. Further, the affected land shall be reclaimed in accordance with Article V, Section 1(m) of this Lease.

Upon termination of this Lease or any portion thereof, or upon expiration of this Lease, Lessee shall provide Lessor documentation in recordable form of such termination or expiration within thirty (30) days after the date of termination or expiration. Should Lessee fail to provide such documentation, Lessee hereby grants to Lessor the right and authority, after thirty (30) days prior written notice delivered to Lessee by certified mail at the address shown on this lease, or such other address as has been subsequently provided by Lessee to Lessor, to file an affidavit on record reflecting such expiration or termination, which filing shall be binding upon Lessee.

10. **Default**

(a) **Examples of Default.** In addition to any incidents of default described throughout this Lease, the occurrence of any of the following shall be deemed a default:

(i) If any creditor of Lessee, its agents, and/or assigns, shall take any action to execute on, garnish or attach the assets of Lessee located upon the Leased Premises, or

(ii) If a request or petition for liquidation, reorganization, adjustment of debts, arrangement, or similar relief under the bankruptcy, insolvency or similar laws of the United States or any state or territory thereof, or any foreign jurisdiction shall be filed by or against Lessee, or any formal or informal proceeding for the reorganization, dissolution or liquidation or settlement of claims against, or winding up of affairs of Lessee; or the garnishment, attachment, or taking by governmental authority of any collateral or other property of Lessee.

(b) **Notice of Default or Breach of Lease.** In the event Lessor considers that Lessee is in default under this Lease or that Lessee has not complied with its obligations hereunder, both express and implied, including the non-payment of royalty or rent, Lessor shall notify Lessee in writing, setting out specifically in what respects Lessee is in default or Lessee has breached this Lease. Lessee shall then have forty-five (45) days after date of receipt of said notice within which to meet or commence to meet all or any part of the breaches alleged by Lessor, or to correct any default. The service of said notice shall be precedent to the bringing of any claim or action by Lessor on this Lease for any cause, and no such claim or action shall be brought until the lapse of forty-five (45) days after service of such notice on Lessee. Neither the service of said notice nor any acts conducted by Lessee aimed to meet all or any of the alleged breaches or the default shall be deemed an admission or presumption that Lessee has failed to perform all of its obligations hereunder.

(c) **Termination for Default.** Upon the occurrence of the event of default, and after notice thereof and opportunity, but failure, to cure or commence to cure as set forth above, this Lease shall be terminated and the Lessee shall become a tenant at will for the conduct of operations on the Leased Premises. If evicted, Lessee agrees to surrender possession of the Leased Premises, or of the portion of the Leased Premises included in such termination. If Lessee should fail to deliver documents reflecting termination or expiration of this Lease or if Lessee fails to surrender possession of the Leased Premises as required under this Lease, Lessor may institute proceedings necessary to clear title or to take possession, and in that event, in addition to all other relief that may be granted to Lessor, Lessor shall be entitled to recover against Lessee all attorney fees, investigation charges, court costs and expert fees thus expended by Lessor.

(d) **Other Remedies.** Upon default by Lessee, Lessor shall be entitled to exercise any and all remedies available at law, in equity or otherwise, each such remedy being considered cumulative. No single exercise of any remedy set forth herein shall be deemed an election to forego any other remedy.

### ARTICLE III. PAYMENT TO LESSOR

## EXHIBIT "B"

1. **Bonus Payment**

Lessee agrees to pay Lessor a signing bonus of \_\_\_\_\_ (\$0.00) for each net acre contained within the Leased Premises. The bonus payment shall be paid to Lessor by \_\_\_\_\_, subject to Lessee's determination that Lessor has Defensible Title to the Leased Premises ("Due Diligence"). The term "Defensible Title" as used in this Lease shall mean that level of ownership of Lessor which will establish in Lessee the immediate and unconditional ability and right to enjoy the rights granted in the Lease, free and clear of liens and other encumbrances. By Lessor's signing this Lease, Lessor promises to proceed with this Lease and be bound thereby, conditioned only upon Lessee's paying the full amount of the bonus payment (subject to the reduction for title failure) by \_\_\_\_\_. A Memorandum of the Lease shall be recorded upon the signing of this Lease. It is understood by Lessor and Lessee that both parties shall be strictly prohibited from filing of record the Oil and Gas Lease, either partially or in its entirety. All bonus payments made to Lessor under this Lease are non-refundable; however, rentals and royalty payments shall be subject to adjustment for any overpayment or underpayment by Lessee. Failure by Lessee to pay the bonus payment within the time described herein shall render this Lease null and void.

2. **Royalty Payment**

(a) **Percentage.** The royalties payable to the Lessor under this Lease shall be on a well-by-well basis, or, as applicable, on a unit basis. As to each and every well completed as a producer of oil and/or gas on the Leased Premises or on lands pooled therewith, the royalties paid to Lessor shall be \_\_\_\_\_ percent (%) of all Leased Products removed or recovered from the Leased Premises or, at Lessor's option (which shall be presumed to be exercised unless Lessor advises Lessee to the contrary prior to any applicable production month) \_\_\_\_\_ percent (%) of the Proceeds (as hereinafter defined in paragraph (d)) of the total gross production attributable to the applicable well.

(b) **Determination of Royalty Amount.**

Lessee covenants and agrees:

(i) To sell and execute division orders for the sale of all Leased Products produced and saved by Lessee from the Leased Premises, including Lessor's share with Lessee's share and shall pay Lessor royalty (in accordance with paragraph (a) above), where applicable, based on the Proceeds as hereafter defined in Article III, Section 2(d) or Minimum Royalty, as defined in Article III, Section 2(e), whichever is greater: from time to time, at the option of Lessor, to deliver or cause to be delivered to the credit of Lessor, in the pipeline or tanks to which Lessee may connect its wells, percentages (in accordance with paragraph (a) above) of all oil, condensate, casinghead gasoline and liquid hydrocarbons produced and saved from the Leased Premises:

(ii) To pay Lessor on gas and casinghead gas produced from the Leased Premises, percentages of proceeds (in accordance with paragraph (a) above) based on:

(1) the Proceeds paid to Lessee from the sale of such gas and casinghead gas when sold by Lessee in an arms-length sale to an unaffiliated third party, or if sold to an affiliate, the price upon which such gas and casinghead gas was sold so long as such price is not less than that which would be received from a sale to an unaffiliated third party in an arms length transaction considering the volume available, quality, location and length of term of the proposed sale; or,

(2) the market value at the point of use, when used by Lessee.

(iii) To pay Lessor on all other byproducts and/or constituents sold or utilized by Lessee from the Leased Premises, in accordance with paragraph (a), the percentages of the Proceeds received by Lessee.

(c) **Affiliates.** For purposes of this Lease, an "Affiliate of Lessee" is any corporation, firm or other entity in which Lessee, or any parent company, subsidiary or affiliate of Lessee, owns an interest of more than ten percent (10%) whether by stock ownership or otherwise, or over which Lessee or any parent company or Affiliate of Lessee exercises any degree of control, directly or indirectly, by ownership, interlocking directorate, or in any other manner; and any corporation, firm or other entity which owns any interest in Lessee. Whether by stock ownership or otherwise, or which exercises any degree of control, directly or indirectly, over Lessee, by stock ownership, interlocking directorate, or in any other manner

## EXHIBIT "B"

(d) Proceeds. For purposes of this Lease, "Proceeds" means the total consideration paid to or received by Lessee for the Lease Products produced from the Leased Premises or payments for future production or delivery of production at a future time, or sums paid to compromise claims relating to payment obligations associated with the sale of Leased Products. Lessor's royalty shall not be charged directly or indirectly with any expense required to make gas marketable, including but not limited to the following: expenses of production, gathering, dehydration, compression, treating or marketing of gas, oil, or any liquefiable hydrocarbons extracted therefrom, except for the following which shall be charged proportionately to Lessor based upon the same cost or expense amounts paid by Lessee:

(i) Lessee may deduct post-gathering logistical charges necessary to get products to a market point. For purposes of defining post-gathering logistical charges, transportation of gas will be deemed to begin when gas physically leaves the Leased Premises or unit, as applicable. For gas sales, logistical charges shall include transportation fees, processing fees (whether fee for services, or a percentage of liquids), transportation and processing fuels (either in gas or electrical form). For natural gas liquid sales, post-gathering logistical charges shall include transportation (by pipeline, rail or ship) downstream of a gas processing facility and fractionation charges. For oil or condensate sales, post-gathering logistical charges shall include pipeline or trucking costs outside the Leased Premises, or unit, as applicable.

(ii) If gas produced from the Leased Premises is processed for the recovery of liquefiable hydrocarbon products prior to sale, and if such processing plant is not owned by Lessee or any Affiliate of Lessee, Lessor's royalty shall be calculated based upon the consideration paid to Lessee from Lessee's sale of such liquefiable hydrocarbons and residue gas less unaffiliated third party processing expenses, whether as a processing fee charged by such unaffiliated third party processing plant, or a plant retention percentage in value or in kind.

(iii) If gas produced from the Leased Premises is processed for the recovery of liquefiable hydrocarbon products prior to sale, and if such processing plant is owned by Lessee or any Affiliate of Lessee, the price upon which royalty shall be based shall not be less than that which would be obtained from an unaffiliated third party processor in an arms length transaction involving similar gas volumes, quality, location and length of term of the contract.

(iv) Lessee shall pay to the Lessor royalty at the applicable royalty rate as per Article III, Section 2(a) on any monetary settlement received by Lessee from any breach of contract by Lessee's purchaser relating to the marketing, pricing, or taking of oil or gas production from the Leased Premises.

(e) Minimum Royalty. The Minimum Royalty shall be based upon the wellhead price in accordance with the index for the first day of the production month for the Dominion Transmission Inc. - Appalachia Basis Index, published by Platts, Inside FERC. In the event Platts, Inside FERC ceases publication of this index, a similar Appalachia-based index will be used.

(f) When Royalties Must Be Paid. All royalties that may become due hereunder shall commence to be paid on the first well completed on the Leased Premises within one hundred twenty (120) days after the first day of the month following the month during which any well is completed and commences production into a pipeline or oil into transport for sale of such production. On each subsequent well, royalty payments must commence within ninety (90) days after the first day of the month following the month during which any well is completed and commences production into a pipeline for sale or oil into transport of such production. Thereafter, all royalties on oil shall be paid to Lessor on or before the last day of the second month following the month of production, and all royalties on gas shall be paid to Lessor on or before the last day of the third month following the month of production. Royalties not paid when due shall bear interest at the prime rate as published by the Wall Street Journal as of the date payment is first due, plus five percent (5%) per annum.

(g) Delinquency in Payment. If royalty is not paid by the date due, Lessor may give Lessee written notice of nonpayment of royalty, by certified mail, return receipt requested, and if Lessor's royalty is not paid on or before expiration of forty-five (45) days after Lessee's receipt of such notice, interest shall commence accruing on the due date and be payable by Lessee to Lessor on the delinquent balance at the rate of five percent (5%) per annum above prime interest rate (as defined above). However, Lessee may avoid any interest obligation if prior to the expiration of such forty-five (45) days Lessor is furnished an attorney's written opinion citing a bona fide dispute or a good faith question of royalty entitlement (either as to ownership or as to

## EXHIBIT "B"

amount), Lessee pays to Lessor the undisputed portion and Lessee pays the disputed royalty to an escrow account to be administered by a trustee agreed to by both parties or by the American Arbitration Association, if such trustee cannot be found. If practical, such escrow funds shall be invested in interest-bearing accounts pending resolution of the entitlement issue, with the interest to follow the distribution of escrow.

(h) Split Royalties. If, by reason of assignments of undivided interests in Lessee's interest in this lease, more than one (1) party becomes entitled to a portion of Lessee's share of hydrocarbons produced from any well on the Leased Premises, and if any or all of such co-owners elect to take their share of such hydrocarbons in kind, resulting in split-stream deliveries of hydrocarbons to different purchasers, Lessee may, but shall have no obligation to, require the operator of the Leased Premises to pay and account to Lessor for all royalties due on hydrocarbons production from the well or wells from which split-stream deliveries are being made, so that Lessor shall not be required to receive royalties from more than one (1) purchaser or party on the same hydrocarbons stream. However, Lessee agrees to comply with all state oil and gas regulations in the event it is mandated to pay royalties to the Lessor as though there was only a single hydrocarbons stream. Such election, if made, shall not relieve any party otherwise liable for payment of royalties from such liability, and all parties owning an undivided interest in all or any portion of the Leased Premises shall be and remain jointly and severally liable for the payment of all royalties due on production therefrom.

### 3. Audit Rights

Lessee grants to Lessor or Lessor's designee the right at Lessor's expense, to examine, audit, copy or inspect books, records, and accounts of Lessee pertinent to the audit purpose of verifying the accuracy of the reports and statements furnished to Lessor, and for checking the amount of payments lawfully due to Lessor under the terms of this agreement. In exercising this right, Lessor shall give reasonable notice to Lessee of its intended audit and such audit shall be conducted during normal business hours at the office of Lessee at the sole cost and expense of Lessor. Lessor shall not have the right to audit more than once every twenty four (24) month period. However, if the amount of exceptions or deficiencies in royalty payments revealed by the audit equal or exceed 125% of the cost and expense of the audit, then the Lessee shall bear the cost and expense of the audit and all monies due as a result of the audit findings (audit exceptions, costs, and expenses) shall be payable within thirty (30) days of the final determination of the amounts due.

### 4. Security Interest

Lessor hereby retains a security interest in (a) the portion of the oil and gas produced and saved from the Leased Premises or lands pooled therewith associated with the royalty payments due under and pursuant to this Lease, and (b) the portion of the proceeds of sale of such oil and gas and all accounts arising therefrom associated with the royalty payments due under and pursuant to this Lease (the "Collateral"), to secure Lessee's payment of royalties. In the event of default by Lessee, Lessor shall have the right to take possession of the Collateral, and to receive the proceeds attributable thereto and to hold same as security for Lessee's obligations or to apply it on the amounts owing to Lessor hereunder. The Collateral includes the Lease Products to be financed at the wellhead of the wells and accounts from the sale thereof. This Lease, or memorandum thereof, (which shall contain the provisions of this paragraph) when filed in the real property records where the Leased Premises are located, shall constitute a financing statement. Additionally, Lessee agrees to cooperate with any UCC-1 filing requested by the Lessor.

### 5. Payment to Lessor in Lieu of Free Gas

In the event any well is drilled upon the Leased Premises or any portion thereof, and the Lessor is the owner of the surface where the well is located, such Lessor's royalty interest, as provided in Article III, Section 2(a) of this Agreement, shall increase by one-quarter of one percent (0.25%).

### 6. Shut-In and Minimum Royalties

(a) Payment Amount. If after the expiration of the Primary Term, all wells on the Leased Premises capable of producing gas or gas and condensate in paying quantities, are shut-in for any reason and neither gas nor condensate is sold or used off the Leased Premises (which wells are herein sometimes called a "shut-in" gas well), for longer than sixty (60) consecutive days, Lessee shall pay or tender to Lessor, as shut-in gas well royalty, a yearly sum (payable quarterly or at the end of the shut-in period, whichever first occurs) equal to Twenty-Five and 00/100 Dollars (\$25.00), indexed to the Producers Price Index for All Commodities issued for the anniversary month by the U.S. Department of Labor, Bureau of Labor Statistics, and recalculated every five (5) years thereafter, multiplied by the number of acres subject to this Lease at the time such payment is made. The first such payment of shut-in gas well royalty is to be made on or before thirty (30) days after the end of the above referenced sixty (60) day period. Succeeding

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payments may be made annually thereafter on or before the anniversary of the due date of such payment. Notwithstanding the making of such shut-in gas well royalty payments, Lessee shall be and remain under the continuing obligation to (i) use all reasonable efforts to find a market for said gas and to commence or resume marketing same when a market is available, (ii) reasonably develop the Leased Premises, and (iii) drill all such wells on the Leased Premises as may be reasonably necessary to protect same from drainage by wells on adjoining or adjacent lands. Notwithstanding anything to the contrary in this Lease, the obligation under this Article III, Sections 6(a)(ii) and (iii) shall not apply during the Primary Term of this Lease.

(b) Limited Duration. After expiration of the Primary Term, or extension thereof, the portion of the Leased Premises being held by the Lessee solely by the payment of shut-in royalty, shall be released after a period of thirty-six (36) consecutive months or a cumulative total of forty-eight (48) months, unless given written consent by the Lessor to continue the well to be shut-in.

### 7. Surface Damages

In the event any well is drilled upon the Leased Premises or any portion thereof, and the Lessor is the owner of the surface where the well is located, Lessee shall pay to Lessor in consideration for damages to the Leased Premises the sum of Thirty Thousand Dollars (\$30,000.00) prior to commencement of drilling of any well on the Leased Premises, such payment to be considered a "pad" payment. A "pad" for purposes hereof is defined as a preparation designed to facilitate one or more wells in a concentrated surface area and access thereto not to exceed a total of seven (7) acres. If Lessee should locate more than one (1) pad on the Leased Premises, a separate pad payment shall be paid for each pad. Lessee shall not be required to pay any separate per-well payment for additional wells drilled in sequence after the completion of drilling the initial well on a pad. In the event Lessee reclaims the well location pad after drilling the initial well or group of wells as the case may be, and then at any time thereafter returns to the pad for the purpose of drilling an additional well or wells on that pad, Lessee shall pay to Lessor an additional full pad payment. Furthermore, upon prior separate written consent and agreement of Lessor, Lessee shall pay Lessor (a) an amount of at least Ten Thousand Dollars (\$10,000.00) for each post-drilling pit, pond or other in-ground containment excavation in which fluids or liquids pertaining to and involved with operations are to be stored (other than drilling pits) located on the Leased Premises, and (b) in the event Lessee desires a pad to include over seven (7) acres, or if the Lessee adds or includes access areas to the pad that increases the combined pad and access area to over seven (7) acres, Lessee shall pay to Lessor the sum of Seven Thousand Five Hundred Dollars (\$7,500.00), proportionately reduced, per disturbed acre in addition to the pad payment.

### 8. Ad Valorem Taxes.

All taxes (including ad valorem and severance taxes) or assessments on the Lease Products or Lease Products reserves imposed by any local, state or federal entity or governmental unit and attributable to or resulting from the assessment of Lease Products from the Leased Premises shall be paid by the parties hereto in proportion to their interest. Notices of assessments are to be delivered to and the stated undisputed assessment amounts are to be paid by Lessee. Lessee will adjust a subsequent royalty payment of Lessor to account for Lessee's payment of Lessor's share of such taxes and such adjustment will be reflected on a subsequent royalty check stub. All documentation related to any taxes withheld by Lessee shall be available to Lessor upon audit in accordance with the terms of this Lease.

### 9. Property Taxes

In the event real property taxes pertaining to or attributable to the Leased Premises are increased in any manner by reason of the operations of Lessee on the Leased Premises, including, but not limited to any structures or improvements constructed on the Leased Premises, during the term of this Lease, Lessee shall be responsible for the amount of any such tax increase attributable to such operations or improvements. Lessee shall reimburse Lessor for the amount of such increase within thirty (30) days after Lessor provides Lessee with written documentation reflecting such increase and the basis thereof.

### 10. Agricultural Programs

In the event the Leased Premises is subject to any federal, state, local and/or agricultural assistance program (CAUV, CRP or Forest Land Program, including any interest and penalties thereon), and any roll-back or reimbursement or recoupment or retroactive assessment is made against the Leased Premises on account of, arising out of, or relating to the operations of Lessee on the Leased Premises, Lessee shall be responsible for paying any and all of such amounts, but only insofar as such amounts imposed result from operations on the portion of the Leased Premises actually utilized in Lessee's operations. Lessee shall reimburse Lessor for the amount of such increase within thirty (30) days after Lessor provides Lessee with written documentation reflecting such increase and the basis thereof.

### 11. Method of Payments

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All rents and royalties (except payment by gas in-kind at the election of Lessor as may be provided herein) and any and all sums due hereunder from Lessee to Lessor shall be paid at the option of Lessee by one of the following methods:

(a) By check tendered directly from Lessee to Lessor at Lessor's address as stated in this Lease.

(b) As soon as Lessee is capable, and upon written election by Lessor, by direct deposit by depositing the payment to the credit of the Lessor in the bank and account number as provided in writing by Lessor to Lessee prior to such payment (which bank shall continue as depository for all sums payable hereunder until any subsequent written notice otherwise is provided by Lessor to Lessee).

No payment not timely made or not made in the correct amount shall constitute a waiver by Lessor of any rights or remedies of Lessor under this Lease. A payment submitted electronically shall be considered timely paid if such payment is successfully transmitted to Lessor's account on or before the due date. A payment not submitted electronically shall be considered timely paid if delivered to the Lessor on or before the applicable due date or if deposited in a postage paid, properly addressed envelope, package or wrapper with a post office or official depository marked as so deposited by the United States postal service before the applicable due date.

### 12. Due Date

Any payment hereunder from Lessee to Lessor as required under this Lease (such as royalty payments or shut-in fee) shall unless otherwise specifically provided in this Lease be paid within thirty (30) days following the end of the month or annual period which constitutes the period of time on which the payment is based.

### 13. Default

Failure of Lessee to timely pay Lessor any amounts required under this Lease shall be deemed a default by Lessee.

## ARTICLE IV. TITLE ISSUES

### 1. Lessor's Representation Regarding Title to Leased Premises

Lessor makes no representation or warranty as to Lessor's title to the Leased Premises other than that Lessor warrants and represents that Lessor is not aware of any unrecorded encumbrances, or encroachments or conditions affecting title to the Leased Premises other than those that would be observed on a location survey. It shall be Lessee's burden and obligation to assure itself of the quality of title to the Leased Premises. To the extent Lessee's obligations under this Lease are diminished or affected by any title encumbrance on the Leased Premises (including but not limited to any mineral lease or mortgage of record that existed as of the date this Lease became effective) and in the event that by operation of law Lessee is no longer afforded protection under Ohio Revised Code Section 1509.31(D), then Lessee shall have a right to demand Lessor obtain a subordination from the mortgage holder. In connection with any title encumbrance on the Leased Premises referenced in the preceding sentence, Lessee shall: (i) be afforded the right to pay proceeds payable to Lessor under this Lease to the mortgagee; and/or (ii) make payment in full for amounts due mortgagee in the event Lessor defaults in its payments to mortgagee, and deduct such amounts from future payments payable to Lessor pursuant to this Lease.

### 2. Lessor Encumbrances After Lease Effective

Any mortgage, lease, easement, or other interest granted by Lessor voluntarily after this Lease becomes effective shall be subject to this Lease. In the event Lessor should become in default of any obligation of Lessor that is secured by any lien or encumbrance on the Leased Premises during the term of this Lease, Lessee may, at its option, pay and discharge any such obligation on behalf of Lessor after Lessee gives Lessor at least thirty (30) days prior written notice of such intention to pay, and if, after Lessor's receipt of such notice, Lessor makes no arrangement otherwise to address the amount in default. Should Lessee make such payment on behalf of Lessor, or by any other lawful means, Lessee shall, in addition to any other legal remedies, be entitled to recover from Lessor by deduction from any future payments to Lessor, with interest at Ohio's legal rate for judgments and amounts actually paid by Lessee for such obligations.

### 3. Liens against Lessee

In the event any lien or encumbrance (except and not including any lien or encumbrance

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in the nature of a security interest conveyed by Lessee for purposes of financing operations on the Leased Premises) is filed against the Leased Premises out of or pertaining to the operations by Lessee, Lessee shall within forty-five (45) days following the date such lien or encumbrance is recorded cause such lien or encumbrance to be released from record, and Lessee shall provide Lessor written evidence of such release. Lessee's contention that the lien or encumbrance arises from a bona fide dispute shall not be grounds for Lessee's failure or refusal to remove the lien or encumbrance as required herein.

### ARTICLE V. IMPACTS AND EFFECTS

#### 1. Surface Issues

The following provisions shall apply under this Lease:

(a) Compliance with Laws. Lessee shall be responsible for any and all acts or matters arising out of or pertaining to Lessee's operations on the Leased Premises whether reasonably foreseen or unforeseen. All operations conducted by Lessee shall comply with federal, state and local law, statute regulation and/or order, and the terms of this Lease, whichever is stricter. Lessee's failure to comply with any federal, state or local law or any regulation or order of any enforcement agency having jurisdiction over Lessee's operations shall be a default under this Lease.

(b) Degree of Care. Lessee shall at all times use the highest degree of care utilized in standard and prudent operations for shale oil and gas operations within the oil and gas industry in the region where the Leased Premises are located (such region including Ohio, Pennsylvania and West Virginia), and use all reasonable care and safeguards to prevent its operations from:

- (i) causing or contributing to soil erosion;
- (ii) polluting or contaminating any environmental medium including the surface or subterranean soils and/or waters and ambient atmosphere in, on, under, or about the Leased Premises and surrounding properties;
- (iii) decreasing the fertility of the soil;
- (iv) damaging crops, native or cultivated grasses, trees, or pastures;
- (v) harming or in any way injuring animals, whether domestic or wild on the Leased Premises;
- (vi) damaging buildings, roads, structures, improvements, farm implements, gates or fences.
- (vii) Lessee shall dispose of salt water, frac water or liquid waste oil and other waste in accordance with the rules and regulations of the ODNR and all other applicable governmental authorities.

(viii) Lessee shall clean up, remove, remedy and repair any soil or ground water contamination and damage caused by Lessee or release of any contaminant in, on, under, or about the Leased Premises, whether or not caused by the negligence of Lessee. Lessee shall pay to any person beneficially interested in the harmed object all damages caused by Lessee's operations.

(c) Disposal. Lessee shall not use the Leased Premises for the permanent disposal of any drill cuttings, or the storage or disposal of residual wastes without the express written consent and agreement of Lessor. No disposal wells or any other devices or means of disposal of wastes or drilling liquids are permitted on the Leased Premises.

(d) No Underground Gas Storage. Lessee shall have no right to use the Leased Premises or any portion thereof for underground gas, underground oil, or underground brine storage purposes but Lessee shall be permitted surface storage for activities directly associated with the drilling activities conducted on the Leased Premises or on the lands pooled therewith.

(e) Replace Barriers and Drain Tile. Lessee shall promptly replace any barriers, including but not limited to fences, gates and walls removed by Lessee during its operations on the Leased Premises. Lessee shall construct gates on all access roads upon written request from Lessor, and provide an access key or double lock system allowing access by both Lessor and Lessee. Gates are to be closed and locked when Lessee personnel are not on the Leased Premises. Lessee shall promptly replace any drain tile removed or damaged by Lessee during its operations.

(f) Timber. Lessee shall notify Lessor in writing at least forty-five (45) days prior to any removal by Lessee of marketable timber (marketability to be within the discretion of Lessor). At Lessor's option, Lessor may choose to harvest timber, or Lessor may require an appraisal of the timber by a qualified independent appraiser, at Lessee's expense, and Lessee shall pay Lessor the appraised value for the timber identified prior to its removal by Lessee.

EXHIBIT "B"

(g) Use of Surface or Subsurface Water. Lessee is not permitted to use water from Lessor's surface wells, ponds, lakes, springs, creeks, water courses or reservoirs on the Leased Premises without prior written consent and agreement with Lessor, separate from this Lease. With the exception of underground injection for hydraulic fracturing operations and absent any agreement entered into for these purposes by and between Lessor and Lessee, Lessee shall not drill or operate any water well, take water, or inject any substance into the subsurface, or otherwise use or affect water in subsurface water formations. For the avoidance of doubt, this provision is not intended to prevent Lessee from injecting water for hydraulic fracturing operations.

(h) Crops. Lessee will plan its surface operations in a manner that will reduce or minimize intrusion into crop fields. In the event such an intrusion cannot be avoided, Lessee shall compensate Lessor for the damage or loss of growing crops at current market value.

(i) Fencing by Lessee.

Lessee shall

(i) fence all wells and well sites, tank batteries, pits, separators, drip stations, pump engines, and other equipment placed on the Leased Premises with a fence capable of turning livestock;

(ii) keep such fences in good repair; and

(iii) keep all gates and fences closed at all times, or in lieu of gates, install cattle guards.

(j) Pipelines and Excavations.

(i) The top of any pipelines installed in Lessee's operations shall be a minimum of forty-eight (48) inches from the surface where practical in areas subject to agricultural cultivation, and as reasonable with respect to creeks, rivers, ponds, lakes and other water sources, and below local freeze levels in any event. Lessee shall utilize a double ditch method for construction of pipelines as well as any other excavation (such as drilling pits) on the Leased Premises, in which topsoil is segregated from subsoil, and when the excavation is backfilled, the subsoil is replaced first and the topsoil is placed on the top. Lessor shall have the right, subject to forty-five (45) days advance notice to Lessee, to construct and lay drainage and other utility pipes, wires, and lines across or under Lessee pipelines in a manner which does not unreasonably interfere with Lessee's use thereof and Lessor's construction of which strictly complies with Lessee's construction and safety standards.

(ii) any pipeline constructed pursuant to this Lease shall be for transporting oil and/or gas, water or electric power from a well(s) drilled on the Leased Premises or lands pooled therewith to a location off of the Leased Premises or outside the bounds of the unit,

(k) Roads. Roadways or drives constructed by Lessee on the Leased Premises during active drilling or development phases shall not exceed fifty (50) feet in width, or a minimum width required to perform required operations without prior written consent of Lessor, which consent shall not be unreasonably withheld, conditioned or delayed. In the event of a producing well on the Leased Premises, any permanent access road for well servicing purposes shall be a maximum width of twenty (20) feet, or a minimum width required to perform maintenance and other operations without prior written consent of Lessor, which consent shall not be unreasonably withheld, conditioned or delayed.

Lessee agrees to construct or maintain all roads used by it in good repair utilizing shale, gravel, or crushed stone, culverts, and supports as necessary to provide normal use under all reasonable weather conditions, and when such roads are no longer being used, Lessee agrees upon Lessor's request, to remove toppings and to restore the surface as nearly as possible to its former condition. Lessee shall not use shale, gravel or crushed stone from the Leased Premises without the prior written consent of Lessor. Lessee shall prevent its employees, agents and contractors from operating vehicles in a negligent manner or at speeds in excess of 25 miles per hour while on the Leased Premises.

(l) Utilities. Lessee's rights hereunder may include burying or otherwise constructing necessary phone, electric, and data collection lines on the Leased Premises in connection with production from the Leased Premises, but such rights may not be assigned to a utility company, pipeline company, or anyone else who owns no interest in the Leased Premises or is otherwise not contracted or affiliated with Lessee for the purpose of carrying out the rights and obligations under this Lease. The right to use said pipelines terminates when production from the Leased Premises ceases and all wells associated therewith are plugged and abandoned.

## EXHIBIT "B"

(m) Restoration of Leased Premises. On completion of any operations on the Leased Premises, Lessee shall restore the Leased Premises to as near as practicable the pre-drilling conditions, remove all debris, equipment and personal property which Lessee placed on the Leased Premises (except for equipment needed for the operation of producing wells, which shall be removed within six (6) months after a well permanently ceases to produce). For purposes hereof, "completion of operations" shall mean the completion of drilling operations, including initial stimulation, as to equipment and facilities relating to drilling, including any associated pits, tanks (or other excavations or facilities no longer needed for production), or in the event of a dry hole, all such facilities. Lessee shall keep the Leased Premises in a neat and clean condition. "Completion of operations" with respect to a multi-well pad shall not occur until the last well drilled from the pad has been completed.

(n) Hazardous Materials. Lessee shall not use, dispose of or release on the Leased Premises or permit to exist or to be used, disposed of or released on the Leased Premises as a result of its operations any substances (other than (i) those Lessee has been licensed or permitted by applicable public authorities to use on the Leased Premises and (ii) substances commonly used in operations similar to those operations being conducted by Lessee on the Leased Premises) which are defined as "hazardous materials", "toxic substances" or "solid wastes" in federal, state or local laws, statutes or ordinances. Should any pollutant, hazardous material, toxic substances, contaminated waste or solid waste be accidentally released on the Leased Premises, Lessee shall notify Lessor immediately after notifying the applicable governmental body of such event. Lessee shall be responsible for and timely pay costs of clean-up, remediation, and other costs related to and arising from the event, including, but not limited to, penalties.

(o) Firewalling and Maintenance of Production Equipment. Dikes, firewalls or other methods of secondary containment must be constructed and maintained at all times around all tanks, separators and receptacles so as to contain a volume of liquid equal to at least 1.25 times the total volume of such tanks, separators and other receptacles located within the boundaries of the firewall. Lessee shall keep all tanks and other equipment at each well location painted, and shall keep the well site and all roads leading thereto free of noxious weeds and debris.

(p) Pits. Lessee shall have no right to dig any pits other than drilling pits (not storage pits) on the Leased Premises except with Lessor's prior written consent. Any pit so permitted shall: (i) conform to all applicable regulatory requirements (state, local and federal), (ii) be planned to be deep enough to allow at least thirty-six (36) inches of back fill over the liner after grading to surrounding pre-drill contour and (iii) promptly after completion of operations any backfill and the liners shall be removed and the pits shall be drained, prepared for burial, back filled, graded and planted within ninety (90) days (weather permitting). Lessee shall immediately notify Lessor and all applicable regulatory authorities if any pit lining is torn, punctured, or otherwise breached, allowing any fluid contained in a pit or designated to be contained in a pit to seep, leak or overflow through or around the liner.

(q) Mutual Agreement as to Location of Operations. Before commencing surface disturbing operations on the Leased Premises, Lessee and Lessor shall mutually agree in writing on the location of all wells, roads, pipelines, gates, and other equipment so as to minimize disruption of Lessor's use of the Leased Premises. To the degree practicable, operations shall be designed and laid out to be concentrated in a single area so as to avoid unnecessary utilization of surface areas. To the degree practicable, pipelines and roadways are to be within the same corridor. Lessor's agreement shall not be unreasonably withheld, conditioned or delayed assuming the preceding standards are followed. Without a separate written agreement between Lessor and Lessee, no pump stations, tank batteries, pipelines, dryers or separators shall be located on the Leased Premises unless they are for the sole purpose of transporting, processing or treating gas from the Leased Premises or lands pooled or unitized therewith, and those shall not be located nearer than, (and no well shall be drilled nearer than) five hundred (500) feet from any dwelling or residential structure or three hundred (300) feet from any barn or other non-residential structure then on the Leased Premises without the Lessor's written consent. There shall be no compressors located on the Leased Premises, except those for the sole purpose of compressing gas from the Leased Premises and lands pooled therewith, without a prior separate written agreement with Lessor. Any compressor operations permitted hereby shall be designed and installed utilizing means to minimize noise, including but not limited to, sound enclosures and barriers, and electrical motors if reasonably possible.

## 2. Water

## EXHIBIT "B"

As a valuable consideration for granting this Lease, the parties agree as follows:

(a) Water Quality.

(i) Lessee's operations on the Leased Premises shall not adversely affect the water sources on the Leased Premises. Lessee shall test the two closest sources of water supply located on the Leased Premises within 1,500 feet of Lessee's proposed well, pit, pond, pumping or processing facilities installed by Lessee on the Leased Premises or on any unit of which the Leased Premises is a part while this Lease is in effect. Lessee shall conduct tests of such water sources prior to the commencement of construction of such facilities or Lessee operations ("Baseline Testing"), and within nine (9) months of conclusion of completion operations by Lessee, and at any time after operations have commenced while this Lease is in effect should Lessor notify Lessee in writing of documented facts evidencing a degradation in water quality, including, but not limited to, color, smell or taste ("Subsequent Testing"). In the event of release of any hazardous substance, as said term is defined in the Toxic Substances Act and the Comprehensive Environmental Response, Compensation and Liability Act, or oil, gas, or other petroleum products or substances from the pipeline or on the road installed by Lessee on the Leased Premises or the unit of which the Leased Premises is a part, Lessee shall test the two closest sources of water supply located on the Leased Premises within 1,500 feet of the area affected by such release.

(ii) Lessee shall not be responsible for any degradation in water quality resulting from an event of "force majeure" as such term is defined in Article VII, Section 2 of this Lease, natural seasonal variations, or temporary impacts caused thereby, such as an increased turbidity.

(iii) Upon Lessee's receipt of written notice by Lessor to Lessee supported by written determination by an appropriate governmental authority or the ODNR that there has been a material degradation in the quality of Lessor's water, Lessee shall as soon as reasonably practical, but not later than 3 business days of Lessee's receipt of such notice, supply Lessor with an adequate supply of water, potable or non-potable, as applicable, consistent with Lessor's use of the damaged water supply prior to Lessee's operations. Such supply shall be provided until either (a) the quality has been determined to be fully restored, or (b) Lessee demonstrates through Subsequent Testing or other means that the degradation in the water quality was not caused by Lessee's operations, under the standards set forth below.

(iv) Except as a result of an event of force majeure or natural seasonal variations, any degradation in quality of water located on the Leased Premises after any Lessee operations commence on the Leased Premises or the unit of which it is a part will be presumed to be the result of Lessee's operation unless Lessee can prove otherwise, with Lessee having the burden of proof by a preponderance of the evidence. Lessor agrees that Baseline Testing and Subsequent Testing provided for in this Article V, Section 2 shall constitute evidence to satisfy Lessee's burden of proof. Unless jurisdiction for any dispute arising under this Article V, Section 2 is otherwise required to be determined by an appropriate governmental authority, the parties agree that the arbitration provisions of Article VII, Section 1 shall apply to any dispute hereunder. Should a determination be made that the quality of Lessor's water supply was degraded as a result of Lessee's operation, in accordance with the foregoing sentence, Lessee shall take any and all steps to restore water quality to its pre-existing condition and fully compensate Lessor for the damage suffered thereby.

(v) Analysis of samples collected as part of Baseline Testing and Subsequent Testing shall be conducted by an Ohio EPA-certified testing laboratory following at a minimum the protocol and parameters documented in the ODNR's provisions for "Best Management Practices for Pre-drilling Water Sampling", or according to any other validly enacted government promulgated regulations in Ohio whichever is the most rigorous (the "Testing Standard"). Such testing laboratory will not be an Affiliate of Lessee as defined in Article III, Section 3(c). Lessee shall provide to the testing laboratory, in advance of testing, a list of

## EXHIBIT "B"

chemical constituents in order for the testing agent to adequately test the water in accordance with the Testing Standard. Should the testing results indicate the presence of chlorides (> 10% in excess of background levels) and/or dissolved methane (> 1.0 mg/l), then Lessee agrees to test for all chemical constituents currently used on the Leased Premises, which testing may exceed the Testing Standard. Furthermore, at Lessor's request, Lessee shall provide Lessor with a listing of all chemical constituents currently being used on the Leased Premises. Lessee shall pay all costs of testing. Lessor shall be provided complete copies of any and all testing results and data, and shall have full rights to contact the testing lab for inquiry and information.

(b) Water Quantity.

In the event Lessee drills any water wells on the Leased Premises or on any unit of which the Leased Premises is a part, Lessee agrees to conduct a step drawdown test of select water wells drilled by Lessee to be decided at Lessee's discretion. Any drawdown test should be conducted pursuant to the ODNR Division of Soil and Water Resources Fact Sheet 01-62 prior to Lessee's use of such water well. Lessee agrees that the results of any drawdown test conducted by Lessee on water wells drilled by Lessee will establish a maximum safe yield that will not be exceeded by Lessee in its operations. Lessee shall be responsible to Lessor for any diminution of water supply on Leased Premises if Lessee has exceeded the maximum safe yield established by the drawdown test; provided, however, Lessee shall not be responsible in any event for any diminution in water supply resulting from an event of "force majeure" as such term is defined in Article VII, Section 2 of this Lease, and natural seasonal variations. Lessee shall install a meter at each water well drilled by Lessee on the Leased Premises or the unit of which the Leased Premises is a part of, and upon Lessor's written request, Lessee shall make available to Lessor the records of water use from such water well.

Notwithstanding anything to the contrary contained herein, Lessee maintains that there is no causation between the activities to be undertaken by Lessee on the Leased Premises and the quality or quantity of water resources.

3. Notice to Drill

Lessee shall provide at least ten (10) days prior written notice to Lessor before Lessee commences any actual drilling (bit in the ground) on the Leased Premises.

### ARTICLE VI. LIABILITY ISSUES

1. Indemnity

Lessee agrees to defend, indemnify and hold harmless Lessor and Lessor's heirs, successors, representatives, agents and assigns ("Indemnitees"), from and against any and all claims, demands and causes of action for injury (including death) or damage to persons or property or fines or penalties, or environmental matters arising out of, incidental to or resulting from the operations of or for Lessee or Lessee's servants, agents, employees, guests, licensees, invitees or independent contractors, and from and against all costs and expenses incurred by Indemnitees by reason of any such claim or claims, including attorneys' fees; and each assignee of this Lease, or an interest therein, agrees to indemnify and hold harmless Indemnitees in the same manner provided above. Such indemnity shall apply to any claim arising out of operations conducted under or pursuant to this Lease, however caused and whether based upon negligence, contract, statute, strict liability or other grounds or reasons, provided, however, such indemnity shall not apply to claims arising out of the negligence of Lessor, Lessor's guests or invitees not arising out of, incidental to, or resulting from, the operations of or for Lessee.

2. Insurance

(a) A company licensed by the Ohio Department of Insurance to do business in the state shall underwrite all policies required by this Lease. Provided however, such insurance requirements may be met solely or by a combination of self-insurance, primary and excess insurance policies.

(b) Lessee shall assure that Lessee and any person acting on Lessee's behalf under this Lease carries the following insurance with one or more insurance carriers at any and all times such party or person is on or about the Leased Premises or acting pursuant to this Lease, in such amounts as from time to time reasonably required by Lessor.

## EXHIBIT "B"

- (i) Workers Compensation and Employer's Liability Insurance;
- (ii) Commercial General Liability and Umbrella Liability Insurance;  
(\$5,000,000.00 Minimum coverage)
- (iii) Business auto and Umbrella Liability Insurance;  
(\$5,000,000.00 Minimum coverage)
- (iv) Environmental Liability; (\$5,000,000.00 Minimum coverage)

Within six (6) months of the five (5) year anniversary date of this Lease and each subsequent fifth (5th) anniversary, Lessor may request in writing and Lessee shall agree to institute new insurance amounts based on the original insurance amounts indexed to the Producers Price Index for All Commodities, issued for the anniversary month by the U.S. Department of Labor, Bureau of Labor Statistics. Should such index be discontinued and/or replaced, a conversion to a substitute or replacement index shall be accomplished using normally accepted conversion factors. Such adjusted amounts shall be rounded off to the nearest Thousand Dollar (\$1,000) amount. Failure of Lessor to request an adjustment for any five (5) year period shall not preclude a full adjustment at a subsequent five (5) year anniversary if requested.

The Lessee shall cause Certificates of Insurance evidencing the above coverage to be provided promptly upon request to Lessor, or to such other representative of Lessor as Lessor may from time to time designate. The insurance policies required under this section, shall cover the Lessor as additional insured parties with regard to the Leased Premises, and shall reflect that the insurer has waived any right of subrogation against the Lessor. Failure to comply with this Insurance section shall be basis of default and all operations on the Leased Premises shall cease immediately.

### ARTICLE VII. OTHER MATTERS

#### 1. Arbitration

In the event of any dispute arising under this Agreement between the Parties, the party aggrieved shall provide the other party with a written notice in accordance with Article VII, Section 5 ("Dispute Notice"). The Parties shall attempt in the first instance to resolve such dispute through non-binding mediation before a neutral mediator to which all Parties agree to in writing. The Parties agree to attempt to resolve all disputes arising hereunder promptly, equitably and in a good faith manner.

If any dispute arising hereunder has not been resolved within forty-five (45) days after the Dispute Notice, then, at the request of any Party to the dispute, such dispute shall be submitted to binding arbitration in accordance with the AAA Commercial Arbitration Rules then in effect and, to the maximum extent applicable, the Federal Arbitration Act (Title 9 of the United States Code), with a copy provided to the other Parties to the dispute ("Submission Date").

All arbitrators shall be neutral parties who have never been officers, directors or employees of the Parties or their Affiliates. The arbitration will be conducted before a three-member panel of arbitrators that shall consist of an arbitrator appointed by each Party to the dispute and a neutral third arbitrator selected by the Party-appointed arbitrators who shall chair the panel. Each arbitrator shall be selected within thirty (30) days of the Submission Date. Each Party to the arbitration shall bear its own fees, costs and expenses incurred in connection with the arbitration, including attorneys and experts fees. Each Party shall also bear its respective arbitrator's fees (if applicable) and share equally the fees and expenses of the neutral arbitrator.

To the maximum extent practicable, an arbitration hearing hereunder shall be concluded within one hundred eighty (180) days of the Submission Date. Arbitration proceedings shall be conducted in Cleveland, Ohio.

Before the Submission Date or prior to the selection of arbitrators, nothing contained herein shall prevent a Party from applying to a court that would otherwise have jurisdiction for provisional or interim measures. After the arbitrators are selected, they shall have sole jurisdiction to hear such applications, except that any measures ordered by the arbitrators may be immediately and specifically enforced by a court otherwise having jurisdiction over the Parties. The arbitrators shall make specific written findings of fact and conclusions of law after the arbitration hearing. Judgment upon the arbitration award rendered by the arbitrators may be entered in any court having jurisdiction. All Parties agree to keep disputes and arbitration proceedings strictly confidential except for disclosure of information required by applicable law.

#### 2. Force Majeure

**EXHIBIT "B"**

Should Lessee be prevented from complying with any express or implied covenant of this Lease (except payment of money), from conducting drilling (including fracturing) or reworking operations thereon or from producing oil and gas therefrom by reason of inability to obtain or to use equipment or material, or by operation of force majeure (as defined in this Section), any federal or state law or any order, rule or regulation of governmental authority, then while so prevented Lessee's obligation to comply with such covenant shall be suspended, and Lessee shall not be liable in damages for failure to comply therewith; and this Lease shall be extended while and so long as Lessee is prevented by any such force majeure event from conducting drilling or reworking operations on or from producing oil or gas from the Leased Premises. The term "force majeure" means any cause or event not reasonably within the control of the party whose performance is sought to be excused thereby; including acts of God, strikes, lockouts, or other industrial disputes or disturbances, acts of the public enemy, wars, blockades, insurrections, riots, epidemics, landslides, lightning, floods, washouts, droughts, earthquakes, fires, tornadoes, hurricanes, storms, and warnings for any of the foregoing which may necessitate the precautionary shut-down of wells, plants, pipelines, gathering systems, or other related facilities, arrests and restraints of governments and people, civil disturbances, explosions, sabotage, breakage or accidents to equipment, machinery, freezing of wells or lines of pipe, electric power shortages, necessity for compliance with any court order, or any law, statute, ordinance, regulation or order promulgated by a governmental authority having or asserting jurisdiction, inclement weather that necessitates extraordinary measures and expense to construct facilities or maintain operations and any other causes, whether of the kind enumerated herein or otherwise, not reasonably within the control of the party claiming suspension, including any such cause or event occurring with respect to the facilities, services, equipment, goods, supplies or other items necessary to the performance of such party's obligations hereunder. The period of extension by reason of force majeure shall be limited to a cumulative total of forty-eight (48) months. Any delay beyond one hundred twenty (120) days from the date of application to obtain any required permit to drill, complete or re-work a well shall be grounds to invoke force majeure until the permit is granted. If this Lease is subject matter of any lawsuit, arbitration proceeding or action, and Lessee is ordered therein to forego or suspend its operations on the Leased Premises, or Lessee in its discretion foregoes or suspends operations solely by reason of such lawsuit, proceeding or action, then this Lease shall not expire during the pendency of such lawsuit, proceeding or action, or any appeal thereof and the period of the lawsuit, arbitration proceeding or action, or any appeal thereof, shall be added to the term of this Lease.

**3. Governing Law**

This Lease shall be governed in accordance with the laws of the State of Ohio.

**4. Due Diligence**

If oil or gas is discovered on the Leased Premises, Lessee shall develop the Leased Premises as a reasonable and prudent operator and exercise due diligence in drilling such additional well or wells as may be necessary to fully develop the Leased Premises, subject to Article III.6(a) of this Lease Lessee shall protect the oil and gas in and under the Leased Premises from drainage by wells on adjoining or adjacent tracts or leases, including those held by Lessee or any affiliate of Lessee.

**5. Notices**

Notices, consents, or other documents required or permitted by this Lease must be given by personal delivery, facsimile, reputable overnight courier (Federal Express or other), or sent by USPS registered or certified mail, return receipt requested, and postage paid. For purposes of notice, Lessor's information is as follows:

Lessor's information is as follows:

Name  
Address  
  
Telephone

Lessee's information is as follows:

Name	R.E. Gas Development, LLC
Address	366 Walker Drive State College, PA 16801
Attention	F. Scott Hodges, Senior Vice President, Land & Business Development
Telephone	814-278-7279
Email	fshodges@rexenergycorp.com

Either party's notice information may be changed upon prior written notice delivered to the other party.

## EXHIBIT "B"

Lessee shall designate a person who will be a point of contact for Lessor. Lessee shall provide Lessor such person's name, address, telephone number, email address, and facsimile number. Such person shall be knowledgeable as to operations on the Lease, and have sufficient authority from Lessee to reasonably respond and address Lessor concerns.

### 6. Reports and Documents

Upon Lessor's written request, Lessee shall furnish Lessor copies of all title opinions covering the Leased Premises and promptly upon receipt by Lessee, notify Lessor of any judicial proceedings brought to the attention of Lessee affecting its position and rights under the Lease or the interest of Lessor in the Leased Premises as well as copies of all filings, statements, and reports made by Lessee with the ODNR or other government agency pertinent to drilling, completing and equipping wells. Upon Lessor's written request, Lessee shall provide to the Lessor information relevant to the production from the wells on the Leased Premises or on the lands pooled therewith; provided, however, that Lessee shall not be obligated to provide any information whatsoever with respect to marketing arrangements, market strategies or competitive pricing analyses. All information related to production that is provided by Lessee to Lessor that is not readily available to the general public or that is not within the public domain shall remain strictly confidential and Lessor agrees to not provide any such information to any party without the prior written consent of Lessee.

### 7. Assignments

The rights and estate of any party hereto may be assigned from time to time in whole or in part and as to any horizon, subject to the written consent of the Lessor. Lessor's consent shall not be unreasonably withheld, conditioned or delayed. Provided, however, that consent from the Lessor shall not be required in the event of an assignment by Lessee to an affiliate, subsidiary, or internal partner, joint venture partners or in consequence of a merger or amalgamation. All of the covenants, obligations, and considerations of this Lease shall extend to and be binding upon the parties hereto, their heirs, successors, assigns, and successive assigns. No assignment by Lessee (or any assignee of Lessee) of all or any part of or interest in this Lease shall relieve Lessee (or any assignee of Lessee) of any liability for breach of any covenant, warranty or other obligation of Lessee hereunder, whether theretofore or thereafter accrued. Each assignee of all or any portion of the rights of Lessee hereunder agrees to be bound by the provisions of this lease to the same extent as if such assignee were an original party to this Lease. Notwithstanding any assignment by Lessee of a segregated portion of this Lease, default by Lessee or any assignee or subassignee of Lessee in any covenant or condition in this Lease shall constitute default as to the entire Lease. Lessee shall notify Lessor of such assignment and furnish Lessor a true copy of any assignment. Until Lessee, or any assignee of Lessee, has given Lessor written notice of the assignment by such Lessee or assignee of Lessee of all its right and interest under this lease, all notices to Lessee hereunder may be given to the Lessee named herein, despite the assignment of part of the Lease. No change or division in the ownership of the Leased Premises, royalties, or other moneys, or any part thereof, howsoever affected, shall increase the obligations or diminish the rights of Lessee, including, but not limited to, the location and drilling of wells and the measurement of production. Notwithstanding any other actual or constructive knowledge or notice thereof to Lessee, its successors or assigns, no change or division in the ownership of the Leased Premises or of the royalties or other moneys, or the right to receive the same, howsoever effected, shall be binding upon the then record owner of this Lease until thirty (30) days after there has been furnished to such record owner at his or its principal place of business by Lessor or Lessor's heirs, successor, or assigns, notice of such change or division, supported by either originals or copies of the instruments which have been properly filed for record and which evidence such change or division, and of such court records and proceedings, transcripts, or other documents as shall be necessary in the opinion of such record owner to establish the validity of such change or division. If any such change in ownership occurs by reason of the death of the Lessor, Lessee may nevertheless pay or tender such royalties or other moneys, or part thereof, to Lessor or Lessor's estate.

### 8. Authorship

For the purpose of construction, interpretation, arbitration or adjudication, it shall be deemed that Lessee and Lessor contributed equally to the drafting of this instrument.

### 9. Condemnation

Any and all payments made by a Condemnor on account of a taking by eminent domain shall be the property of Lessor, except to the extent such condemnation or taking diminishes the rights granted Lessee hereunder or if such condemnation or taking reduces or otherwise devalues Lessee's interest in the oil and gas estate. In such event, Lessee shall be necessary party to any condemnation proceeding and shall have a right to independently seek compensation for its rights and interest, subject to applicable law.

### 10. Severability

**EXHIBIT "B"**

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

**11. Counterparts**

This letter agreement may be executed in two (2) or more counterparts, each of which shall be deemed an original but all of which together shall constitute one and the same instrument

**12. Release of Dower**

hereby releases any and all rights of dower in and to the Leased Premises.

IN WITNESS WHEREOF, the parties have signed this Lease.

[Signatures and Notary Acknowledgments on Next Pages]

LESSOR:

By:

\_\_\_\_\_  
Name:

By:

\_\_\_\_\_  
Name:

By:

\_\_\_\_\_  
Name:

SPOUSE OF LESSOR:

By:

\_\_\_\_\_  
Name:

ACKNOWLEDGEMENT

STATE OF OHIO )  
 ) ss.  
COUNTY OF \_\_\_\_\_ )

The foregoing instrument was acknowledged before me the \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_ by

\_\_\_\_\_  
Notary Public  
My Commission Expires:

[SEAL]

LESSEE:

R.E. GAS DEVELOPMENT, LLC

\_\_\_\_\_  
By: F. Scott Hodges  
Attorney-in-F act

STATE OF )  
 ) ss.  
COUNTY OF )

The foregoing instrument was acknowledged before me the \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_  
by F. Scott Hodges, Senior Vice President, Land & Business Development, R.E. Gas  
Development, LLC, a Delaware limited liability company, on behalf of the corporation.

\_\_\_\_\_  
Notary Public  
My Commission Expires:

[SEAL]

EXHIBIT "C"

Attached to and made a part of that certain Unit Operating Agreement for the GRUNDER NORTH UNIT

ACCOUNTING PROCEDURE  
JOINT OPERATIONS

I. GENERAL PROVISIONS

1. Definitions

"Joint Property" shall mean the real and personal property subject to the agreement to which this Accounting Procedure is attached.

"Joint Operations" shall mean all operations necessary or proper for the development, operation, protection and maintenance of the Joint Property.

"Joint Account" shall mean the account showing the charges paid and credits received in the conduct of the Joint Operations and which are to be shared by the Parties.

"Operator" shall mean the party designated to conduct the Joint Operations.

"Non-Operators" shall mean the Parties to this agreement other than the Operator.

"Parties" shall mean Operator and Non-Operators.

"First Level Supervisors" shall mean those employees whose primary function in Joint Operations is the direct supervision of other employees and/or contract labor directly employed on the Joint Property in a field operating capacity and shall include the supervisor in charge of the Operations Center and those foremen reporting to him if their primary function in the Joint Operations is the direct supervision of other employees or contract labor directly employed on the Joint Property.

"Technical Employees" shall mean those employees having special and specific engineering, geological or other professional skills, and whose primary function in Joint Operations is the handling of specific operating conditions and problems for the benefit of the Joint Property.

"Personal Expenses" shall mean travel and other reasonable reimbursable expenses of Operator's employees.

"Material" shall mean personal property, equipment or supplies acquired or held for use on the Joint Property.

"Controllable Material" shall mean Material which at the time is so classified in the Material Classification Manual as most recently recommended by the Council or Petroleum Accountants Societies.

2. Statement and Billings

Operator shall bill Non-Operators on or before the last day of each month for their proportionate share of the Joint Account for the preceding month. Such bills will be accompanied by statements which identify the authority for expenditure, lease or facility, and all charges and credits summarized by appropriate classifications of investment and expense except that items of Controllable Material and unusual charges and credits shall be separately identified and fully described in detail.

3. Advances and Payments by Non-Operators

A. Unless otherwise provided for in the agreement, the Operator may require the Non-Operators to advance their share of estimated cash outlay for the succeeding month's operation within fifteen (15) days after receipt of the billing or by the first day of the month for which the advance is required, whichever is later. Operator shall adjust each monthly billing to reflect advances received from the Non-Operators.

B. Each Non-Operator shall pay its proportion of all bills within fifteen (15) days after receipt. If payment is not made within such time, the unpaid balance shall bear interest monthly at the prime rate in effect at J P Morgan Chase & Co on the first day of the month in which delinquency occurs plus 1% or the maximum contract rate permitted by the applicable usury laws in the state in which the Joint Property is located, whichever is the lesser, plus attorney's fees, court costs, and other costs in connection with the collection of unpaid amounts.

4. Adjustments

Payment of any such bills shall not prejudice the right of any Non-Operator to protest or question the correctness thereof, provided, however, all bills and statements rendered to Non-Operators by Operator during any calendar year shall conclusively be presumed to be true and correct after twenty-four (24) months following the end of any such calendar year, unless within the said twenty-four (24) month period a Non-Operator takes written exception thereto and makes claim on Operator for adjustment. No adjustment favorable to Operator shall be made unless it is made within the same prescribed period. The provisions of this paragraph shall not prevent adjustments resulting from a physical inventory of Controllable Material as provided for in Section V.

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5. **Audits**

1 A. A Non-Operator, upon notice in writing to Operator and all other Non-Operators, shall have the right to audit  
2 Operator's accounts and records relating to the Joint Account for any calendar year within the twenty-four  
3 (24) month period following the end of such calendar year; provided, however, the making of an audit shall not  
4 extend the time for the taking of written exception to and the adjustments of accounts as provided for in  
5 Paragraph 4 of this Section I. Where there are two or more Non-Operators, the Non-Operators shall make  
6 every reasonable effort to conduct a joint audit in a manner which will result in a minimum of inconvenience  
7 to the Operator. Operator shall bear no portion of the Non-Operators' audit cost incurred under this  
8 paragraph unless agreed to by the Operator. The audits shall not be conducted more than once each year  
9 without prior approval of Operator, except upon the resignation or removal of the Operator, and shall be made  
10 at the expense of those Non-Operators approving such audit.

11  
12 B. The Operator shall reply in writing to an audit report within 180 days after receipt of such report.  
13

14 **6. Approval By Non-Operators**

15  
16 Where an approval or other agreement of the Parties or Non-Operators is expressly required under other sections of this  
17 Accounting Procedure and if the agreement to which this Accounting Procedure is attached contains no  
18 contrary provisions in regard thereto, Operator shall notify all Non-Operators of the Operator's proposal, and the  
19 agreement or approval of a majority in interest of the Non-Operators shall be controlling on all Non-Operators.  
20

21  
22 **II. DIRECT CHARGES**

23  
24 Operator shall charge the Joint Account with the following items:

25  
26 **1. Ecological and Environmental**

27 and other costs incurred by a reasonably prudent operator or as a matter of prudent operation  
28 Costs incurred for the benefit of the Joint Property as a result of governmental or regulatory requirements / to satisfy  
29 Environmental / <sup>and safety related</sup> considerations applicable to the Joint Operations. Such costs may include surveys of an ecological or  
30 archaeological nature and pollution control procedures as required by applicable laws and regulations.  
31

32 **2. Rentals and Royalties**

33  
34 Lease rentals and royalties paid by Operator for the Joint Operations.  
35

36 **3. Labor**

37  
38 A. (1) Salaries and wages of Operator's field employees directly employed on the Joint Property in the conduct of  
39 Joint Operations.  
40

41 (2) Salaries of First level Supervisors in the field.  
42

43 (3) Salaries and wages of Technical Employees directly employed on the Joint Property if such charges are  
44 excluded from the overhead rates.  
45

46 (4) Salaries and wages of Technical Employees either temporarily or permanently assigned to and directly  
47 employed in the operation or the Joint Property if such charges are excluded from the overhead rates.  
48

49 B. Operator's cost of holiday, vacation, sickness and disability benefits and other customary allowances paid to  
50 employees whose salaries and wages are chargeable to the Joint Account under Paragraph 3A of this Section II.  
51 Such costs under this Paragraph 3B may be charged on a "when and as paid basis" or by "percentage assessment"  
52 on the amount of salaries and wages chargeable to the Joint Account under Paragraph 3A of this Section II. If  
53 percentage assessment is used, the rate shall be based on the Operator's cost experience.  
54

55 C. Expenditures or contributions made pursuant to assessments imposed by governmental authority which are  
56 applicable to Operator's costs chargeable to the Joint Account under Paragraphs 3A and 3B of this Section II.  
57

58 D. Personal Expenses of those employees whose salaries and wages are chargeable to the Joint Account under  
59 Paragraphs 3A and 3B of this Section II.  
60

61 **4. Employee Benefits**

62  
63 Operator's current costs or established plans for employees' group life insurance, hospitalization, pension, retirement,  
64 stock purchase, thrift, bonus, and other benefit plans of a like nature, applicable to Operator's labor cost chargeable to the  
65 Joint Account under Paragraphs 3A and 3B of this Section II shall be Operator's actual cost not to exceed the percent  
66 most recently recommended by the Council of Petroleum Accountants Societies.  
67  
68  
69  
70

5. **Material**

Material purchased or furnished by Operator for use on the Joint Property as provided under Section IV. Only such Material shall be purchased for or transferred to the Joint Property as may be required for immediate use and is reasonably practical and consistent with efficient and economical operations. The accumulation of surplus stocks shall be avoided.

6. **Transportation**

Transportation of employees and Material necessary for the Joint Operations but subject to the following limitations:

A. If Material is moved to the Joint Property from the Operator's warehouse or other properties, no charge shall be made to the Joint Account for a distance greater than the distance from the nearest reliable supply store where like material is normally available or railway receiving point nearest the Joint Property unless agreed to by the Parties.

B. If surplus Material is moved to Operator's warehouse or other storage point, no charge shall be made to the Joint Account for a distance greater than the distance to the nearest reliable supply store where like material is normally available, or railway receiving point nearest the Joint Property unless agreed to by the Parties. No charge shall be made to the Joint Account for moving Material to other properties belonging to Operator, unless agreed to by the Parties.

C. In the application of subparagraphs A and B above, the option to equalize or charge actual trucking cost is available when the actual charge is \$400 or less excluding accessorial charges. The \$400 will be adjusted to the amount most recently recommended by the Council of Petroleum Accountants Societies.

7. **Services**

The cost of contract services, equipment and utilities provided by outside sources, except services excluded by Paragraph 10 of Section II and Paragraph i, ii, and iii, of Section III. The cost of professional consultant services and contract services of technical personnel directly engaged on the Joint Property if such charges are excluded from the overhead rates. The cost of professional consultant services or contract services of technical personnel not directly engaged on the Joint Property shall not be charged to the Joint Account unless previously agreed to by the Parties.

8. **Equipment and Facilities Furnished By Operator**

A. Operator shall charge the Joint Account for use of Operator owned equipment and facilities at rates commensurate with costs of ownership and operation. Such rates shall include costs of maintenance, repairs, other operating expense, insurance, taxes, depreciation, and interest on gross investment less accumulated depreciation not to exceed twelve percent (12%) per annum. Such rates shall not exceed average commercial rates currently prevailing in the immediate area of the Joint Property.

B. In lieu of charges in Paragraph 8A above, Operator may elect to use average commercial rates prevailing in the immediate area of the Joint Property less 20%. For automotive equipment, Operator may elect to use rates published by the Petroleum Motor Transport Association.

9. **Damages and Losses to Joint Property**

All costs or expenses necessary for the repair or replacement of Joint Property made necessary because of damages or losses incurred by fire, flood, storm, theft, accident, or other cause, except those resulting from Operator's gross negligence or willful misconduct. Operator shall furnish Non-Operator written notice of damages or losses incurred as soon as practicable after a report thereof has been received by Operator.

10. **Legal Expense**

Expense of handling, investigating and settling litigation or claims, discharging of liens, payment of judgments and amounts paid for settlement of claims incurred in or resulting from operations under the agreement or necessary to protect or recover the Joint Property. Except that no charge for services of Operator's legal staff or fees or expense of outside attorneys shall be made unless previously agreed to by the Parties. All other legal expense is considered to be covered by the overhead provisions of Section III unless otherwise agreed to by the Parties, except as provided in Section I, Paragraph 3.

11. **Taxes**

All taxes of every kind and nature assessed or levied upon or in connection with the Joint Property, the operation thereof, or the production therefrom, and which taxes have been paid by the Operator for the benefit of the Parties. If the ad valorem taxes are based in whole or in part upon separate valuations of each party's working interest, then notwithstanding anything to the contrary herein, charges to the Joint Account shall be made and paid by the Parties hereto in accordance with the tax value generated by each party's working interest.

12. Insurance

1 Net premiums paid for insurance required to be carried for the Joint Operations for the protection of the Parties. In the  
2 event Joint Operations are conducted in a state in which Operator may act as self-insurer for Worker's Compensation  
3 and/or Employers Liability under the respective state's laws, Operator may, at its election, include the risk under its self-  
4 insurance program and in that event, Operator shall include a charge at Operator's cost not to exceed manual rates.  
5

6 13. Abandonment and Reclamation

7  
8 Costs incurred for abandonment of the Joint Property, including costs required by governmental or other regulatory  
9 authority.  
10

11 14. Communications

12  
13 Cost of acquiring, leasing, installing, operating, repairing and maintaining communication systems, including radio and  
14 microwave facilities directly serving the Joint Property. In the event communication facilities/systems serving the Joint  
15 Property are Operator owned, charges to the Joint Account shall be made as provided in Paragraph 8 of this Section II.  
16

17 15. Other Expenditures

18  
19 Any other expenditure not covered or dealt with in the foregoing provisions of this Section II, or in Section III and which  
20 is of direct benefit to the Joint Property and is incurred by the Operator in the necessary and proper conduct of the Joint  
21 Operations.  
22

23  
24 III. OVERHEAD  
25

26 1. Overhead - Drilling and Producing Operations

27  
28 i. As compensation for administrative, supervision, office services and warehousing costs, Operator shall charge  
29 drilling and producing operations on either:  
30

- 31 ( X ) Fixed Rate Basis, Paragraph IA, or  
32 ( ) Percentage Basis, Paragraph IB  
33

34 Unless otherwise agreed to by the Parties, such charge shall be in lieu of costs and expenses of all offices and  
35 salaries or wages plus applicable burdens and expenses of all personnel, except those directly chargeable under  
36 Paragraph 3A, Section II. The cost and expense of services from outside sources in connection with matters of  
37 taxation, traffic, or accounting shall be considered as included in  
38 the overhead rates provided for in the above selected Paragraph of this Section III unless such cost and expense are  
39 agreed to by the Parties as a direct charge to the Joint Account.  
40

41 ii. The salaries, wages and Personal Expenses of Technical Employees and/or the cost of professional consultant  
42 services and contract services of technical personnel directly employed on the Joint Property:  
43

- 44 ( ) shall be covered by the overhead rates, or  
45 ( X ) shall not be covered by the overhead rates.  
46

47 iii. The salaries, wages and Personal Expenses of Technical Employees and/or costs of professional consultant services  
48 and contract services of technical personnel either temporarily or permanently assigned to and directly employed in  
49 the operation of the Joint Property:  
50

- 51 ( X ) shall be covered by the overhead rates, or  
52 ( ) shall not be covered by the overhead rates.  
53

54 A. Overhead - Fixed Rate Basis

55  
56 (1) Operator shall charge the Joint Account at the following rates per well per month:  
57

58 Drilling Well Rate \$ 15,000  
59 (Prorated for less than a full month)  
60

61 Producing Well Rate \$ 1,500  
62

63 (2) Application of Overhead - Fixed Rate Basis shall be as follows:  
64

65 (a) Drilling Well Rate

66  
67 (1) Charges for drilling wells shall begin on the date the well is spudded and terminate on the date  
68 the drilling rig, completion rig, or other units used in completion of the well is released, whichever  
69  
70

is later, except that no charge shall be made during suspension of drilling or completion operations for fifteen (15) or more consecutive calendar days.

(2) Charges for wells undergoing any type of workover or recompletion for a period of five (5) consecutive work days or more shall be made at the drilling well rate. Such charges shall be applied for the period from date workover operations, with rig or other units used in workover, commence through date of rig or other unit release, except that no charge shall be made during suspension of operations for fifteen (15) or more consecutive calendar days.

(b) Producing Well Rates

(1) An active well either produced or injected into for any portion of the month shall be considered as a one-well charge for the entire month.

(2) Each active completion in a multi-completed well in which production is not commingled down hole shall be considered as a one-well charge providing each completion is considered a separate well by the governing regulatory authority.

(3) An inactive gas well shut in because of overproduction or failure of purchaser to take the production shall be considered as a one-well charge providing the gas well is directly connected to a permanent sales outlet.

(4) A one-well charge shall be made for the month in which plugging and abandonment operations are completed on any well. This one-well charge shall be made whether or not the well has produced except when drilling well rate applies.

(5) All other inactive wells (including but not limited to inactive wells covered by unit allowable, lease allowable, transferred allowable, etc.) shall not qualify for an overhead charge.

(3) The well rates shall be adjusted as of the first day of April each year following the effective date of the agreement to which this Accounting Procedure is attached by the percent increase or decrease published by COPAS

~~B. Overhead - Percentage Basis~~

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

~~(a) Development~~

~~\_\_\_\_\_ Percent (\_\_\_\_%) of the cost of development of the Joint Property exclusive of costs provided under Paragraph 10 of Section II and all salvage credits.~~

~~(b) Operating~~

~~\_\_\_\_\_ Percent (\_\_\_\_%) of the cost of operating the Joint Property exclusive of costs provided under Paragraphs 2 and 10 of Section II, all salvage credits, the value of injected substances purchased for secondary recovery and all taxes and assessments which are levied, assessed and paid upon the mineral interest in and to the Joint Property.~~

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

~~For the purpose of determining charges on a percentage basis under Paragraph 1B of this Section III, development shall include all costs in connection with drilling, redrilling, deepening, or any remedial operations on any or all wells involving the use of drilling rig and crew capable of drilling to the producing interval on the Joint Property; also, preliminary expenditures necessary in preparation for drilling and expenditures incurred in abandoning when the well is not completed as a producer, and original cost of construction or installation of fixed assets, the expansion of fixed assets and any other project clearly discernible as a fixed asset, except Major Construction as defined in Paragraph 2 of this Section III. All other costs shall be considered as operating.~~

2. Overhead - Major Construction

To compensate Operator for overhead costs incurred in the construction and installation of fixed assets, the expansion of fixed assets, and any other project clearly discernible as a fixed asset required for the development and operation of the Joint Property, Operator shall either negotiate a rate prior to the beginning of construction, or shall charge the Joint

Account for overhead based on the following rates for any Major Construction project in excess of \$ 25,000 :

- 1  
2  
3 A. 5 % of first \$100,000 or total cost if less, plus  
4  
5 B. 3 % of costs in excess of \$100,000 but less than \$1,000,000, plus  
6  
7 C. 2 % of costs in excess of \$1,000,000.  
8

9 Total cost shall mean the gross cost of any one project. For the purpose of this paragraph, the component parts of a single  
10 project shall not be treated separately and the cost of drilling and workover wells and artificial lift equipment shall be  
11 excluded.

12  
13 **3. Catastrophe Overhead**

14 To compensate Operator for overhead costs incurred in the event of expenditures resulting from a single occurrence due  
15 to oil spill, blowout, explosion, fire, storm, hurricane, or other catastrophes as agreed to by the Parties, which are  
16 necessary to restore the Joint Property to the equivalent condition that existed prior to the event causing the  
17 expenditures, Operator shall either negotiate a rate prior to charging the Joint Account or shall charge the Joint Account  
18 for overhead based on the following rates:  
19

- 20 A. 5 % of total costs through \$100,000; plus  
21  
22 B. 3 % of total costs in excess of \$100,000 but less than \$1,000,000; plus  
23  
24 C. 2 % of total costs in excess of \$1,000,000.  
25

26 Expenditures subject to the overheads above will not be reduced by insurance recoveries, and no other overhead  
27 provisions of this Section III shall apply.  
28

29  
30 **4. Amendment of Rates**

31 The overhead rates provided for in this Section III may be amended from time to time only by mutual agreement  
32 between the Parties hereto if, in practice, the rates are found to be insufficient or excessive.  
33  
34

35  
36 **IV. PRICING OF JOINT ACCOUNT MATERIAL PURCHASES, TRANSFERS AND DISPOSITIONS**

37 Operator is responsible for Joint Account Material and shall make proper and timely charges and credits for all Material  
38 movements affecting the Joint Property. Operator shall provide all Material for use on the Joint Property; however, at  
39 Operator's option, such Material may be supplied by the Non-Operator. Operator shall make timely disposition of idle and/or  
40 surplus Material, such disposal being made either through sale to Operator or Non-Operator, division in kind, or sale to  
41 outsiders. Operator may purchase, but shall be under no obligation to purchase, interest of Non-Operators in surplus condition  
42 A or B Material. The disposal of surplus Controllable Material not purchased by the Operator shall be agreed to by the Parties.  
43  
44

45 **1. Purchases**

46 Material purchased shall be charged at the price paid by Operator after deduction of all discounts received. In case of  
47 Material found to be defective or returned to vendor for any other reasons, credit shall be passed to the Joint Account  
48 when adjustment has been received by the Operator.  
49

50  
51 **2. Transfers and Dispositions**

52 Material furnished to the Joint Property and Material transferred from the Joint Property or disposed of by the Operator,  
53 unless otherwise agreed to by the Parties, shall be priced on the following basis exclusive of cash discounts:  
54

55 A. New Material (Condition A)

56 (1) Tubular Goods Other than Line Pipe

57  
58 (a) Tubular goods, sized 2 3/8 inches OD and larger, except line pipe, shall be priced at Eastern mill  
59 published carload base prices effective as of date of movement plus transportation cost using the 80,000  
60 pound carload weight basis to the railway receiving point nearest the Joint Property for which  
61 published rail rates for tubular goods exist. If the 80,000 pound rail rate is not offered, the 70,000 pound  
62 or 90,000 pound rail rate may be used. Freight charges for tubing will be calculated from Lorain, Ohio  
63 and casing from Youngstown, Ohio.  
64  
65

66 (b) For grades which are special to one mill only, prices shall be computed at the mill base of that mill plus  
67 transportation cost from that mill to the railway receiving point nearest the Joint Property as provided  
68 above in Paragraph 2.A.(1)(a). For transportation cost from points other than Eastern mills, the 30,000  
69  
70

1 pound Oil Field Haulers Association interstate truck rate shall be used.

2  
3 (c) Special end finish tubular goods shall be priced at the lowest published out-of-stock price, f.o.b. Houston,  
4 Texas, plus transportation cost, using Oil Field Haulers Association interstate 30,000 pound truck rate,  
5 to the railway receiving point nearest the Joint Property.

6  
7 (d) Macaroni tubing (size less than 2 3/8 inch OD) shall be priced at the lowest published out-of-stock prices  
8 f.o.b. the supplier plus transportation costs, using the Oil Field Haulers Association interstate truck rate  
9 per weight of tubing transferred, to the railway receiving point nearest the Joint Property.

10  
11 (2) Line Pipe

12  
13 (a) Line pipe movements (except size 24 inch OD and larger with walls 3/4 inch and over) 30,000 pounds or  
14 more shall be priced under provisions of tubular goods pricing in Paragraph A.(1)(a) as provided above.  
15 Freight charges shall be calculated from Lorain, Ohio.

16  
17 (b) Line Pipe movements (except size 24 inch OD) and larger with walls 3/4 inch and over) less than 30,000  
18 pounds shall be priced at Eastern mill published carload base prices effective as of date of shipment,  
19 plus the percent most recently recommended by COPAS plus transportation costs based on freight rates as set forth under provisions of tubular  
20 goods pricing in Paragraph A.(1)(a) as provided above. Freight charges shall be calculated from Lorain,  
21 Ohio.

22  
23 (c) Line pipe 24 inch OD and over and 3/4 inch wall and larger shall be priced f.o.b. the point of  
24 manufacture at current new published prices plus transportation cost to the railway receiving point  
25 nearest the Joint Property.

26  
27 (d) Line pipe, including fabricated line pipe, drive pipe and conduit not listed on published price lists shall  
28 be priced at quoted prices plus freight to the railway receiving point nearest the Joint Property or at  
29 prices agreed to by the Parties.

30  
31 (3) Other Material shall be priced at the current new price, in effect at date of movement, as listed by a reliable  
32 supply store nearest the Joint Property, or point of manufacture, plus transportation costs, if applicable, to the  
33 railway receiving point nearest the Joint Property.

34  
35 (4) Unused new Material, except tubular goods, moved from the Joint Property shall be priced at the current  
36 new price, in effect on date of movement, as listed by a reliable supply store nearest the Joint Property, or  
37 point of manufacture, plus transportation costs, if applicable, to the railway receiving point nearest the Joint  
38 Property. Unused new tubulars will be priced as provided above in Paragraph 2.A.(1) and (2).

39  
40 B. Good Used Material (Condition B)

41  
42 Material in sound and serviceable condition and suitable for reuse without reconditioning:

43  
44 (1) Material moved to the Joint Property

45  
46 At seventy-five percent (75%) of current new price, as determined by Paragraph A.

47  
48 (2) Material used on and moved from the Joint Property

49  
50 (a) At seventy-five percent (75%) of current new price, as determined by Paragraph A, if Material was  
51 originally charged to the Joint Account as new Material or

52  
53 (b) At sixty-five percent (65%) of current new price, as determined by Paragraph A, if Material was  
54 originally charged to the Joint Account as used Material

55  
56 (3) Material not used on and moved from the Joint Property

57  
58 At seventy-five percent (75%) of current new price as determined by Paragraph A.

59  
60 The cost of reconditioning, if any, shall be absorbed by the transferring property.

61  
62 C. Other Used Material

63  
64 (1) Condition C

65  
66 Material which is not in sound and serviceable condition and not suitable for its original function until  
67 after reconditioning shall be priced at fifty percent (50%) of current new price as determined by  
68 Paragraph A. The cost of reconditioning shall be charged to the receiving property, provided Condition  
69 C value plus cost of reconditioning does not exceed Condition B value.

70

1 (2) Condition D

2 Material, excluding junk, no longer suitable for its original purpose, but usable for some other purpose  
3 shall be priced on a basis commensurate with its use. Operator may dispose of Condition D Material  
4 under procedures normally used by Operator without prior approval of Non-Operators.  
5

6 (a) Casing, tubing, or drill pipe used as line pipe shall be priced as Grade A and B seamless line pipe  
7 of comparable size and weight. Used casing, tubing or drill pipe utilized as line pipe shall be  
8 priced at used line pipe prices.  
9

10 (b) Casing, tubing or drill pipe used as higher pressure service lines than standard line pipe, e.g.  
11 power oil lines, shall be priced under normal pricing procedures for casing, tubing, or drill pipe.  
12 Upset tubular goods shall be priced on a non upset basis.  
13

14 (3) Condition E

15 Junk shall be priced at prevailing prices. Operator may dispose of Condition E Material under  
16 procedures normally utilized by Operator without prior approval of Non-Operators.  
17

18 D. Obsolete Material

19 Material which is serviceable and usable for its original function but condition and/or value of such Material  
20 is not equivalent to that which would justify a price as provided above may be specially priced as agreed to by  
21 the Parties. Such price should result in the Joint Account being charged with the value of the service  
22 rendered by such Material.  
23

24 E. Pricing Conditions

25 (1) Loading or unloading costs may be charged to the Joint Account at the rate of twenty-five cents (25¢)  
26 per hundred weight on all tubular goods movements, in lieu of actual loading or unloading costs  
27 sustained at the stocking point. The above rate shall be adjusted as of the first day of April each year  
28 following January 1, 1985 by the same percentage increase or decrease used to adjust overhead rates in  
29 Section III, Paragraph 1.A.(3). Each year, the rate calculated shall be rounded to the nearest cent and  
30 shall be the rate in effect until the first day of April next year. Such rate shall be published each year  
31 by the Council of Petroleum Accountants Societies.  
32

33 (2) Material involving erection costs shall be charged at applicable percentage of the current knocked-down  
34 price of new Material.  
35

36 3. Premium Prices

37 Whenever Material is not readily obtainable at published or listed prices because of national emergencies, strikes or other  
38 unusual causes over which the Operator has no control, the Operator may charge the Joint Account for the required  
39 Material at the Operator's actual cost incurred in providing such Material, in making it suitable for use, and in moving it  
40 to the Joint Property; provided notice in writing is furnished to Non-Operators of the proposed charge prior to billing  
41 Non-Operators for such Material. Each Non-Operator shall have the right, by so electing and notifying Operator within  
42 ten days after receiving notice from Operator, to furnish in kind all or part of his share of such Material suitable for use  
43 and acceptable to Operator.  
44

45 4. Warranty of Material Furnished By Operator

46 Operator does not warrant the Material furnished. In case of defective Material, credit shall not be passed to the Joint  
47 Account until adjustment has been received by Operator from the manufacturers or their agents.  
48

49 V. INVENTORIES

50 The Operator shall maintain detailed records of Controllable Material.

51 1. Periodic Inventories, Notice and Representation

52 At reasonable intervals, inventories shall be taken by Operator of the Joint Account Controllable Material. Written notice  
53 of intention to take inventory shall be given by Operator at least thirty (30) days before any inventory is to begin so that  
54 Non-Operators may be represented when any inventory is taken. Failure of Non-Operators to be represented at an  
55 inventory shall bind Non-Operators to accept the inventory taken by Operator.  
56

57 2. Reconciliation and Adjustment of Inventories

58 Adjustments to the Joint Account resulting from the reconciliation of a physical inventory shall be made within six  
59 months following the taking of the inventory. Inventory adjustments shall be made by Operator to the Joint Account for  
60

1 overages and shortages, but, Operator shall be held accountable only for shortages due to lack of reasonable diligence.

2  
3 **3. Special Inventories**

4 Special inventories may be taken whenever there is any sale, change of interest, or change of Operator in the Joint  
5 Property. It shall be the duty of the party selling to notify all other Parties as quickly as possible after the transfer of  
6 interest takes place. In such cases, both the seller and the purchaser shall be governed by such inventory. In cases  
7 involving a change of Operator, all Parties shall be governed by such inventory.  
8

9  
10 **4. Expense of Conducting Inventories**

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12 A. The expense of conducting periodic inventories shall not be charged to the Joint Account unless agreed to by the  
13 Parties.

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15 B. The expense of conducting special inventories shall be charged to the Parties requesting such inventories, except  
16 inventories required due to change of Operator shall be charged to the Joint Account.  
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EXHIBIT C-1

TECHNICAL EMPLOYEES EXCLUDED FROM OVERHEAD RATES

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Title	Category
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ASSOCIATE GEOPHYSICIST	Technical Labor
GEOLOGIST	Technical Labor
GEOPHYSICIST	Technical Labor
SR GEOLOGIST	Technical Labor
SR GEOPHYSICIST	Technical Labor
ASSET MANAGER	Technical Labor
ASSOCIATE ASSET MANAGER	Technical Labor
DRILLING ENGINEER I	Technical Labor
DRILLING ENGINEER II	Technical Labor
FIELD ENGINEER	Technical Labor
SR ASSET MANAGER	Technical Labor
SR DRILLING ENGINEER	Technical Labor
SR. ASSET MGR	Technical Labor

## EXHIBIT "D"

Attached to and made a part of that certain Unit Operating Agreement for the Grunder North Unit

### INSURANCE PROVISION

At all times while operations are conducted hereunder, Operator shall comply with all applicable federal and state insurance requirements and Workers' Compensation Laws where the operations are being conducted and include Employer's Liability with a limit of \$1,000,000 including, if applicable, Marine and Voluntary Compensation (including but not limited to General Maritime Law, Jones Act, Transportation, Wages, Maintenance and Cure); provided, however, that Operator may qualify as a self-insurer for liability under the appropriate state and federal workers' compensation laws in which event the only charge that shall be made to the joint account shall be in an amount equivalent to the premium which would have been paid had such insurance been obtained. Operator shall require all contractors engaged in work on or for the contract area to comply with all state and federal workers' compensation laws where the operations are being conducted and to maintain such other insurance as Operator may require.

It is further understood and agreed that Operator is not a warrantor of the financial responsibility of the insurer with whom such insurance is carried, and Operator shall not be liable to any Party for any loss suffered on account of the insufficiency of the insurance carried, or of insurer with whom carried. Operator shall not be liable to any Party for any loss accruing by reason of Operator's inability to procure or maintain the insurance mentioned above. Operator agrees that if at any time during the life of this agreement it is unable to obtain or maintain such insurance it shall immediately notify in writing such Parties of such fact.

No other insurance shall be purchased, or carried, by the Operator for the benefit of the Parties hereto unless mutually agreed in writing by all Parties. Any liability, loss, damage, claim or expense resulting from occurrences not covered by or in the excess of insurance required under this provision shall be borne by parties hereto, other than Unleased Mineral Owners, in the same proportion as their interests may appear at the time of the loss.

Each Party may procure and maintain, at its own cost and expense, such public liability, third party property damage, fire and extended coverage and/or other insurance as it shall determine necessary. Any such insurance so procured and maintained shall inure solely to the benefit of the Party procuring such insurance and such Party, other than an Unleased Mineral Owner, shall indemnify and hold harmless Operator and other Parties to this agreement against any claim of such insurance carrier arising against such other Party by subrogation, or otherwise, in connection with operations hereunder. In addition, any such additional insurance, other than such insurance procured and maintained by an Unleased Mineral Owner, shall contain waiver of subrogation rights in favor of the remaining Parties, but only to the extent of those liabilities assumed by the Party purchasing said insurance.

## EXHIBIT "E"

Attached to and made a part of that certain Unit Operating Agreement for the Grunder North Unit

### Gas Balancing Agreement

The signatory "Party" or "Parties" hereto are also parties to the Operating Agreement dated covering the land and lease(s) described therein as the same may be amended from time to time (the "Operating Agreement").

The Parties recognize that imbalances may occur from time to time between them in their separate disposition of Gas. The Parties hereby agree to handle such Gas imbalances as follows:

#### ARTICLE I - Definitions:

1.01 As used in this Agreement the terms set forth below shall have the following meanings:

(a) "Balance" is the condition existing when a Party has disposed of a cumulative volume of Gas from a Well which is equal to such Party's Percentage Ownership of the total cumulative volume of Gas disposed of by all Parties from such Well.

(b) "Gas" shall mean the total volume of Gas in Btu's available to the Parties to this Agreement at the Measurement Point from a Well remaining after removal of all liquids by primary field separation and the extraction of any liquid hydrocarbons upstream of the Measurement Point less gas vented flared lost or used in joint operations.

(c) "Make-Up Gas" refers to that incremental volume of Gas in excess of a Party's Percentage ownership which an Underproduced Party is entitled to under this Agreement in order to achieve a Balance.

(d) "Measurement Point" shall mean unless otherwise agreed to in writing between the Parties the point at the gas discharge side of the primary field separation facility where a meter for measurement of Gas to be disposed of is installed unless such separation facilities are not installed in which event the point shall be the meter at the wellhead of each Well.

(e) "Operator" shall mean the Operator designated in the Operating Agreement.

(f) "Overproduced" is the condition existing when a Party has disposed of a cumulative volume of Gas from a Well at anytime that is greater than its Percentage Ownership of the total cumulative volume of Gas disposed of by all Parties from such Well Reference to overproduction is to such greater volume.

(g) The "Percentage Ownership" of each party is equal to that Party's working interest in a Well as determined under the terms of the Operating Agreement.

(h) "Underproduced" is the condition occurring when a party has disposed of a cumulative volume of Gas from a Well at anytime that is less than its Percentage Ownership of the total cumulative volume of gas disposed by all Parties from such Well Reference to "underproduction" is to such lesser volume.

(i) "Well" means a well drilled on the lands and leases covered by the Operating Agreement and capable of producing Gas. For the purposes hereof, a Well separately produced and measured for more than one zone will be considered a separate Well for each zone.

(l) To dispose of Gas or Gas disposed of shall mean all methods of disposition of Gas, including taking in kind, delivering in kind to a Lessor, sales to a Party or third Party

or affiliate or gas used by a Party for purposes other than joint operations.

1.02 Terms not defined in this Agreement shall have the meaning commonly ascribed to them in the natural gas sales industry.

## ARTICLE II - Scope and Term

2.01 This Agreement establishes a separate gas balancing agreement for each Well.

2.02 This Agreement shall be effective as of the date of first Gas sales by a Party from any Well or if sooner the date of the Operating Agreement. This Agreement shall terminate separately as to each Well when production from such Well permanently ceases and the Gas accounts for such Well are brought into Balance Pursuant to this Agreement.

## ARTICLE III - Right to Produce and Ownership of Gas

3.01 During any month when a Party does not dispose of its Percentage Ownership of Gas the Parties that dispose of their Percentage Ownership shall be entitled to dispose of all or any portion of such Underproduced Gas. To the extent the Parties desire to dispose of more Underproduced Gas than is available, they shall share in such Gas in the proportion that each such Party's Percentage Ownership bears to the combined Percentage Ownership of all parties desiring to dispose of such Gas. However, unless otherwise approved by all parties, no party shall be entitled to dispose of more than two hundred percent (200%) of its Percentage Ownership of Gas that month.

3.02 Each Party shall own and be entitled to the Gas disposed of by such party pursuant to this Agreement and the proceeds thereof, including constituents contained therein that are recovered downstream from the Measurement Point. If a Party is Underproduced with respect to a Well its underproduction shall be deemed to remain in the reservoir subject to the right of disposal of such Underproduced Gas at a later time.

3.03 Nothing in this Agreement shall require or permit any production from a Well in excess of the maximum efficient rate at which such Well can be produced for a sustained period of time without resulting in underground waste in the form of reduced ultimate recovery of hydrocarbons.

## ARTICLE IV - Make-Up Gas

4.01 Each Underproduced Party in a Well shall have the right to dispose of Make-Up Gas and each Overproduced Party shall have the obligation to furnish Make-Up Gas as follows:

(a) An Underproduced Party shall provide at least twenty (20) days written notice to the Operator of its intent to dispose of Make-Up Gas and specify the period of such make up which in no event shall be less than one calendar month. Make-Up Gas shall not be made available to an Underproduced Party until the first day of the month following timely notice to the Operator.

(b) An Overproduced Party shall not be required to furnish Make-Up Gas unless an Underproduced Party is first disposing of its Percentage Ownership of Gas.

(c) An Overproduced Party shall not be required to provide as Make-Up Gas more than twenty five percent (25%) of its Percentage Ownership of Gas during the month of January, February, March, November and December. For all other months an Overproduced Party shall not be required to provide as Make-Up Gas more than fifty percent (50%) of its Percentage Ownership of the Gas.

(d) If there is more than one Overproduced Party the Make-Up Gas will be furnished by the Overproduced Parties in the proportion that each Overproduced Party's Percentage Ownership in a Well bears to the total Percentage Ownership of all Overproduced Parties

in the Well. Likewise, if there is more than one Underproduced Party exercising its right to dispose of Make-Up Gas in a month, each Underproduced Party will share in the Make-Up Gas in the proportion which its Percentage Ownership in a Well bears to the total percentage Ownership of all Underproduced Parties in that Well disposing of make-Up Gas that month.

4.02 Nothing herein shall be construed to deny any Party the right from time to time to dispose of its Percentage Ownership of Gas in a Well for the purpose of conducting deliverability tests pursuant to its gas purchase contracts.

#### ARTICLE V - Balancing of Gas Accounts

5.01 The Operator shall have the duty of administering the provisions of this Agreement. The Operator shall use its good faith efforts to cause Gas to be delivered as may be required to give effect to the intent that there be a Balance between the Parties in accordance with the provisions hereof. The Operator shall only be liable for its failure to make deliveries of Gas in accordance with the terms of this Agreement if such failure is due to its gross negligence or willful misconduct.

5.02 The Operator shall promptly forward notice to all affected Parties, and each month the Operator will furnish each Party a report showing for the prior month the total volume of gas in Btu's produced from each Well, including the volumes vented, flared lost or used in joint operations; the volume of Gas disposed by each Party; each Party's overproduction or underproduction for the month, and the cumulative overproduction or underproduction of each Party in each Well. In the event that production from each well is not separately measured, then the Operator will allocate production to each Well on the basis of periodic tests or such other methods as are commonly used and accepted in the industry. Make-Up Gas disposed of by an Underproduced Party shall offset underproduction in the order in which such underproduction accrued, i.e. First in, First out.

5.03 During the term of this Agreement and for a period of two (2) years thereafter, each Party shall retain all data, information and records pertaining to the Gas disposed of by such Party in a Well. Each Party shall have the right to audit the records retained hereunder. Any audit shall be conducted at the expense of the Party or Parties desiring such audit after reasonable notice and during normal business hours in the office of the Party whose records are being audited. No more than one audit of a Party shall be conducted in any twelve (12) month period.

#### ARTICLE VI - Cash Settlement of Imbalance

6.01 When production from a Well permanently ceases there shall be a cash settlement between the Parties hereto for any Gas not in Balance. Within sixty (60) days after notice from the Operator that a well has permanently ceased to produce, each Overproduced Party shall pay to the Operator the proceeds received at the Measurement Point for the overproduction which remains accrued to such party, less taxes, royalties and other reasonable charges in fact paid on the overproduced volumes by such Overproduced Party. The Operator shall distribute the total of such amounts so collected among the Underproduced Parties' in the proportion of each such Parties underproduction.

6.02 The price of Gas for cash settlement by an Overproduced Party shall be the price actually or constructively received at the Measurement Point in arm's length transactions for the overproduction, less any taxes, royalties and other reasonable charges in fact paid on the overproduced volumes. If a proportion of an Overproduced Party's Gas production is disposed of for its own use, the price for such Gas will be the price received for any Gas disposed of by such Party in arm's length transactions. During periods when an Overproduced Party disposed of Gas for its own use and had no arm's length gas sales overproduction will be valued at the weighted average price received simultaneously by all Parties for Gas disposed of in arm's length transactions. If no Party sold Gas when the overproduction occurred then the price shall be the last price received by any Party making

sales. A price determined for Gas production not sold by the Overproduced Party shall be deemed to have been constructively received by such Party.

6.03 If any portion of the price which is to be paid to an Underproduced Party is subject to refund by a governmental authority then the Overproduced Party may withhold the amount subject to refund until that portion of the price is finally approved. If any governmental agency requires an Overproduced Party to refund any portion of a price used to make payment hereunder, then the Underproduced parties shall reimburse the Overproduced Parties for such refund including any interest. This Paragraph 6.03 shall survive the termination of this Agreement.

6.04 If an Overproduced Party sells or assigns any or all of its interest to an independent unaffiliated third party which is subject to the terms hereof the selling/assigning party shall immediately make a cash settlement in accordance with this Article VI to any Underproduced Parties in proportion to the volume which each party is underproduced to the total underproduction of all parties in the Well.

#### ARTICLE VII – Cost of Ownership for Liquids

All operating costs, expenses and liabilities shall be borne and paid by the Parties in accordance with the provisions of the Operating Agreement, regardless of which Parties are disposing of Gas from a Well at any given time. Liquid hydrocarbons of a well separated from the Gas upstream of the Measurement Point shall be owned by all parties in accordance with their Percentage Ownership in the Well.

#### ARTICLE VIII - Indemnity

Each Party, other than an Unleased Mineral Owner, hereby indemnifies and agrees to hold the other Parties harmless from all claims, costs and liabilities arising out of the operation of this Agreement and the performance of obligations hereunder by the indemnifying Party.

#### ARTICLE IX – Payment of Lease Burdens

Each Party shall be responsible for and shall pay or cause to be paid all royalties, production payments and other similar burdens on production due on its Percentage Ownership of Gas production from a Well and shall hold the other Parties free from any liability therefor. The Parties disposing of Gas from a Well shall pay or cause to be paid all production, severance, ad valorem or any other taxes, fees or levies on such production.

#### ARTICLE X – Binding Effect

This Agreement shall be binding upon and inure to the benefit of the Parties and their respective successors and assigns. This Agreement may be executed in multiple counterparts.

#### ARTICLE XI - Notices

Any notices or other communications required or permitted hereunder shall be in writing and shall be deemed given only when received by the Party to whom the same is directed at the addresses and in the manner then provided under the Operating Agreement.

IN WITNESS HEREOF the Parties hereto have caused this Agreement to be duly signed and sealed in duplicate originals.

OPERATOR

Company: R.E. Gas Development, LLC

By: \_\_\_\_\_

Its: \_\_\_\_\_

NON-OPERATORS

Company: \_\_\_\_\_

By: \_\_\_\_\_

Its: \_\_\_\_\_

EXHIBIT "H"

Attached to and made a part of that certain Unit Operating Agreement for the Grunder North Unit.

**MEMORANDUM OF OPERATING AGREEMENT  
AND FINANCING STATEMENT**

This Memorandum of Operating Agreement and Financing Statement entered into by and between the undersigned parties, witnesseth, that:

- 1.0 This Memorandum of Operating Agreement and Financing Statement (hereinafter called "Memorandum") shall be effective when the Operating Agreement referred to in Paragraph 2.0 below becomes effective, that being April 7, 2014.
- 2.0 The parties hereto have entered into an Operating Agreement, providing for the development and production of crude oil, natural gas and associated substances from the lands described in Exhibit "A" attached hereto (hereinafter called the "Contract Area"), and designating R.E. Gas Development, LLC, as Operator, to conduct such operations.
- 3.0 The Operating Agreement provides for certain liens and/or security interests to secure payment by the parties of their respective share of costs under the Operating Agreement. The Operating Agreement contains an Accounting Procedure along with other provisions which supplement the lien and/or security interest provisions, including non-consent clauses which provide that parties who elect not to participate in certain operations shall be deemed to have relinquished their interest until the consenting parties are able to recover their costs of such operations plus a specified amount. Should any person or firm desire additional information regarding the Operating Agreement or wish to inspect a copy of the Operating Agreement, said person or firm should contact the Operator.
- 4.0 The purpose of this Memorandum is to more fully describe and implement the liens and/or security interests provided for in the Operating Agreement, and to place third parties on notice thereof.
- 5.0 In consideration of the mutual rights and obligations of the parties hereunder, the parties hereto agree as follows:
  - 5.1 The Operator 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 the Operating Agreement.
  - 5.2 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 costs.
  - 5.3 Each Non-Operator, other than an Unleased Mineral Owner, grants to Operator a lien upon its oil and gas rights in the Contract Area, and a security interest in its share of oil and or gas when extracted and its interest in all equipment, to secure payment of its share of expense, together with interest thereon at the rate provided in the Accounting Procedure referred to in Paragraph 3.0 above. To the extent that Operator has a security interest under the Uniform Commercial Code of the state, Operator shall be entitled to exercise the rights and remedies of a secured party under the Code. The bringing of a suit and the obtaining of judgment by Operator for the secured indebtedness shall not be deemed an election of remedies or otherwise affect the rights or security interest of the payment thereof.
  - 5.4 If any Non-Operator, other than an Unleased Mineral owner, fails to pay its share of costs when due. Operator may require other Non-Operators to pay

their proportionate part of the unpaid share,  
whereupon the other Non-Operators shall be subrogated to Operator's lien and security interest.

5.5 The Operator grants to Non-Operators, **other than Unleased Mineral Owners**, a lien and security interest equivalent to that granted to Operator as described in Paragraph 5.3 above, to secure payment by Operator of its own share of costs when due.

6.0 For purposes of protecting said liens and security interest, the parties hereto, **other than Unleased Mineral Owners**, agree that this Memorandum shall cover all right, title and interest of the debtor(s) in:

6.1 Property Subject to Security Interests:

- (A) All personal property located upon or used in connection with the Contract Area.
- (II) All fixtures on the Contract Area.
- (C) All oil, gas and associated substances of value in, on or under the Contract Area which may be extracted therefrom.
- (D) All accounts resulting from the sale of the items described in subparagraph (C) at the wellhead of every well located on the Contract Area or on lands pooled therewith.
- (E) All items used, useful, or purchased for the production, treatment, storage, transportation, manufacture, or sale of the items described in subparagraph (C).
- (F) All accounts, contract rights, rights under any gas balancing agreement, general intangibles, equipment, inventory, farmout rights, option farmout rights, acreage and/or cash contributions, and conversion rights, whether now owned or existing or hereafter acquired or arising, including but not limited to all interest in any partnership, limited partnership, association, joint venture, or other entity or enterprise that holds, owns, or controls any interest in the Contract Area or in any property encumbered by this Memorandum.
- (G) All severed and extracted oil, gas, and associated substances now or hereafter produced from or attributable to the Contract Area, including without limitation oil, gas and associated substances in tanks or pipelines or otherwise held for treatment, transportation, manufacture, processing or sale.
- (H) All the proceeds and products of the items described in the foregoing paragraphs now existing or hereafter arising, and all substitutions therefor, replacements thereof, or accessions thereto.
- (I) All personal property and fixtures now and hereafter acquired in furtherance of the purposes of this Operating Agreement. Certain of the above-described item are or are to become fixtures on the Contract Area.
- (J) The proceeds and products of collateral are also covered.

6.2 Property Subject to Liens:

- (A) All real property within the Contract Area, including all oil, gas and associated substances of value in, on or under the Contract Area which may be extracted therefrom.
  - (B) All fixtures within the Contract Area.
  - (C) All real property and fixtures now and hereafter acquired in furtherance of the purposes of this Operating Agreement.
- 7.0 The above items will be financed at the wellhead of the well or wells located on the Contract Area, and this Memorandum is to be filed for record in the real estate records of the county or counties in which the Contract Area is located, and in the Uniform Commercial Code records. All parties who have executed the Operating Agreement and all farmers and option farmers who have granted support within the Contract Area are identified on Exhibit "A".
- 8.0 On default of any covenant or condition of the Operating Agreement, in addition to any other remedy afforded by law or the practice of this state, each party to the agreement and any successor to such party by assignment, operation of law, or otherwise, shall have, and is hereby given and vested with, the power and authority to take possession of and sell any interest which the defaulting party has in the subject lands and to foreclose this lien in the manner provided by law.
- 9.0 Upon expiration of the subject Operating Agreement and the satisfaction of all debts, the Operator shall file of record a release and termination on behalf of all parties concerned. Upon the filing of such release and termination, all benefits and obligations under this Memorandum shall terminate as to all parties who have executed or ratified this Memorandum. In addition, the Operator shall have the right to file a continuation statement on behalf of all parties who have executed or ratified this Memorandum.
- 10.0 It is understood and agreed by the parties hereto that if any part, term or provision of this Memorandum is by the courts held to be illegal or in conflict with any law of the state where made, the validity of the remaining portions or provisions shall not be affected, the rights and obligations of the parties shall be construed and enforced as if the Memorandum did not contain the particular part, term or provision held to be invalid.
- 11.0 This Memorandum shall be binding upon and shall inure to the benefit of the parties hereto and to their respective heirs, devisees, legal representatives, successors and assigns. The failure of one or more persons owning an interest in the Contract Area to execute this Memorandum shall not in any manner affect the validity of the Memorandum as to those persons who have executed this Memorandum.
- 12.0 A party having an interest in the Contract Area can ratify this Memorandum by execution and delivery of an instrument of ratification, adopting and entering into this Memorandum, and such ratification shall have the same effect as if the ratifying party had executed this Memorandum or a counterpart thereof. By execution or ratification of this Memorandum, such party hereby consents to its ratification and adoption by any party who may have or may acquire any interest in the Contract Area.
- 13.0 This Memorandum may be executed or ratified in one or more counterparts and all of the executed or ratified counterparts shall together constitute one instrument. For purposes of recording, only one copy of this Memorandum with individual signature pages attached thereto needs to be filed of record.
- 14.0 As reflected above, either or both Operator and Non-Operator(s) become Debtors if they default in their payment obligations under the terms of the Operating

Agreement. Similarly, the non-defaulting party(ies) will be considered secured party(ies).

15.1 The parties hereto agree to execute, acknowledge and deliver or cause to be executed, acknowledged and delivered any instrument, or take any action necessary or appropriate to effectuate the terms of the Operating Agreement or any Exhibit, instrument, certificate or other document pursuant thereto.

Effective as of the \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_

**Non-Operators:**

**Operator:**

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

R.E. Gas Development, LLC

By: \_\_\_\_\_  
**Attorney-in-Fact**

**ACKNOWLEDGMENT**

State of \_\_\_\_\_ }

County of \_\_\_\_\_ }

This instrument was acknowledged before me on this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_ by \_\_\_\_\_, as \_\_\_\_\_ of \_\_\_\_\_, a \_\_\_\_\_ Corporation, on behalf of said corporation.

My Commission Expires: \_\_\_\_\_  
Notary Public

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

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

The forgoing instrument was acknowledged before me this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_, by \_\_\_\_\_

My Commission Expires: \_\_\_\_\_  
Notary Public

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

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

The forgoing instrument was acknowledged before me this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_ by \_\_\_\_\_

My Commission Expires: \_\_\_\_\_  
Notary Public

## **EXHIBIT "A"**

Attached to and made a part of that certain  
Memorandum of Operating Agreement and Financing Statement  
Dated April 7, 2014, by and between  
R.E. Gas Development, LLC, as Operator, and  
Chesapeake Exploration, LLC, et al, as Non-Operators

### **I. Description of Lands Subject to this Agreement:**

593.9571 acres of land, more or less, located in Center, Harrison and Washington Townships, Carroll County, Ohio, as such lands are depicted in Exhibit "A-1" and as particularly defined in the Unit Plan.

### **II. Restrictions as to Depths, Formations or Substances:**

This Agreement covers rights for the Unitized Formation, described as that portion of the Utica Shale / Point Pleasant formation found in the subsurface portion of the Grunder North Unit at an approximate depth of fifty (50) feet above the top of the Utica Shale formation to fifty (50) feet below the base of the Point Pleasant formation, believed to be approximately 7,379 feet subsurface to 7,670 feet subsurface TVD ("True Vertical Depth").

### **III. Percentage or Fractional Interests of Parties to this Agreement\*\*:**

The owners and the interests of the owners are set forth in Exhibit "A-2" attached hereto.

### **IV. Oil and Gas Lease(s) and/or Oil and Gas Interests Subject to this Agreement:**

Please refer to Exhibit "A-2" and Exhibit "A-3" for a list of the oil and gas leases and interests subject to this agreement.

### **V. Addresses of the Parties for Notice Purposes:**

R.E. Gas Development, LLC  
Attn: F. Scott Hodges,  
Senior Vice President, Land & Business Development  
366 Walker Drive  
State College, PA 16801  
Telephone: 814-278-7279  
Fax: 814-278-7286  
Email: fshodges@rexenergycorp.com

Chesapeake Exploration, LLC & CHK Utica, LLC  
Attn: Jeff Pinter, Operations Land Manager-Utica District  
P.O. Box 18496  
Oklahoma City, Oklahoma 73154-0496  
Telephone: 405-935-1282  
Fax: 405-849-1282  
Email:

TOTAL E&P USA, Inc.  
Attn: Fabien Colmet Daage  
201 Louisiana, Suite 1800  
Houston, TX 77002  
Telephone: 713-647-3394  
Fax:  
Email:

Belden & Blake Corporation  
c/o EnerVest Operating, LLC  
Attention: James D. McKinney, Senior Vice President & General Manager  
300 Capital Street, Suite 200  
Charleston, WV 52301  
Telephone: 304-343-5505  
Fax: 304-343-5525  
Email:

The names and addresses of the remaining parties are set forth in Exhibit "A-2" attached hereto.

\*\*It is understood by the parties hereto that the working interests listed in this agreement (and any attachments hereto) are estimates only and are subject to change based upon final verification of title, due diligence, or surveying work that may be performed upon the approval by the Division. The parties' interests shall be modified accordingly in order to accurately reflect the actual interest owned by the parties in the Contract Area.

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

In re the Matter of the Application of :  
R.E. Gas Development, LLC, for :  
Unit Operation : Application Date: May 13, 2014  
:  
Grunder North Unit :

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**PREPARED TESTIMONY OF DAVID PRATT  
ON BEHALF OF R.E. GAS DEVELOPMENT, LLC (“REX”)  
(GEOLOGIST)**

---

W. Jonathan Airey (0017437)  
Gregory D. Russell (0059718)  
J. Taylor Airey (0081092)  
James A. Carr II (0084114)  
VORYS, SATER, SEYMOUR AND PEASE LLP  
52 East Gay Street  
P. O. Box 1008  
Columbus, Ohio 43216-1008

Attorneys for Applicant,  
R.E. Gas Development, LLC

Date: June 24, 2014

## PREPARED TESTIMONY OF DAVID PRATT

### 1 INTRODUCTION

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

3 A1. My name is David Pratt and my business address is 366 Walker Drive, State  
4 College, Pennsylvania 16801. I am Senior Vice President and Exploration Manager  
5 for Rex.

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

7 A2. I received a Bachelor of Science degree in geology from the State University of  
8 New York at Albany in 1974 and a Masters degree in geology from Rice  
9 University in 1978.

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

11 A3. I have worked as a petroleum geologist from 1978 to 1999 for various companies  
12 in Houston, Texas; Midland, Texas; Denver, Colorado; and Pittsburgh,  
13 Pennsylvania. From 2000 to 2007, I was a Mineral Resources Specialist at the New  
14 York State Department of Environmental Conservation, Division of Mineral  
15 Resources, Bureau of Oil and Gas Regulation. Since 2008, I have been employed at  
16 Rex, in State College, Pennsylvania.

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

18 A4. I have worked in the Permian Basin of West Texas, the D-J Basin of Colorado and  
19 Wyoming and the Williston Basin of North Dakota.

20 **Q5. What do you do as a Senior Vice President and Exploration Manager for Rex?**

21 A5. I supervise seven geologists and technicians with respect to our development the  
22 activity in the Illinois and Appalachian basins. I also contribute to the geological  
23 analysis of our various exploration and development projects.

24 **Q6. What type of geological analysis?**

25 A6. Analyzing well log information from previously drilled wells and available seismic  
26 data. From these analyses, I work with my staff to construct geological maps and  
27 cross sections to determine areas of interest for leasing and recommend locations  
28 for the drilling of wells.

29 **Q7. Are you a member of any professional associations?**

30 A7. Yes. I am a member of the American Association of Petroleum Geologists.

1 **Q8. What is the purpose of your testimony today?**

2 A8. I am testifying in support of the *Application of R.E. Gas Development, LLC for*  
3 *Unit Operation* filed with respect to the Grunder North Unit, consisting of one  
4 hundred twenty-five (125) separate tracts of land totaling approximately 593 acres  
5 in Carroll County, Ohio. My testimony will show that the Unitized Formation  
6 described in the Application is part of a pool and thus an appropriate subject of  
7 unitization. Additionally, my testimony will support the Unit Plan's allocation of  
8 unit production and expenses to separately owned tracts on a surface-acreage basis,  
9 based on the unit area's nearly uniform thickness and substantially identical  
10 geological characteristics throughout.

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

12 **Q9. To begin, would you tell me what a "pool" is?**

13 A9. In common usage, a pool is understood to be an accumulation of hydrocarbons  
14 trapped in the pore spaces of a rock unit. This is consistent with the Ohio statutory  
15 definition of a pool as "an underground reservoir containing a common  
16 accumulation of oil or gas, or both, but does not include a gas storage reservoir."

17 **Q10. Is this definition understood the same way for conventional and**  
18 **unconventional resources?**

19 A10. No, it is not. In a conventional reservoir, the reservoir rock has enough porosity  
20 (the measure of the void space in the rock) and permeability (the measure of how  
21 well connected the pores are) to flow oil and gas under the natural reservoir energy.  
22 In unconventional reservoirs, while there is sufficient porosity to hold oil and gas,  
23 the reservoir lacks permeability so that oil and gas cannot flow naturally from one  
24 pore to another and into the well bore. Modern hydraulic fracturing techniques  
25 create permeability within the unconventional reservoir rock by cracking the rock  
26 and filling the fractures with sand. These fractures allow the entrapped  
27 hydrocarbons to flow from the pore spaces in the reservoir rock into the sand-filled  
28 fractures and then into the well bore.

29 **Q11. How is the Unitized Formation defined for the Grunder North Unit?**

30 A11. It is defined as the subsurface portion of the Grunder North Unit located from fifty  
31 (50) feet above the top of the Utica formation to fifty (50) feet below the base of

1 the Point Pleasant formation, an interval believed to be approximately 7,379 feet  
2 true vertical depth (TVD) to 7,670 feet TVD in the subsurface portion of the  
3 Grunder North Unit.

4 **Q12. Is the Unitized Formation considered to be a conventional or unconventional**  
5 **resource, and why?**

6 A12. The Unitized Formation is considered an unconventional resource since the  
7 reservoir rock contains insufficient permeability to flow hydrocarbons without  
8 hydraulic fracturing.

9 **Q13. Generally, what kind of analysis, including what type of data, would a**  
10 **geologist review in order to assess whether an unconventional resource is a**  
11 **pool or part of a pool?**

12 A13. A geologist would use wireline logs to determine the thickness, porosity,  
13 hydrocarbon content and geographic distribution of an unconventional resource.  
14 Additionally, core samples are taken from wells and analyzed for porosity,  
15 permeability, mineral content and hydrocarbon saturations.

16 **Q14. Did you do that here with respect to the Grunder North Unit?**

17 A14. Yes.

18 **Q15. Do you have an opinion on whether or not the Unitized Formation**  
19 **contemplated by the Grunder North Unit constitutes a pool or part of a pool?**

20 A15. Based on my education and professional experience, it is my opinion that the  
21 Unitized Formation qualifies as part of a pool.

22 **Q16. Why?**

23 A16. My interpretation of the geologic data that I mentioned above, such as wireline well  
24 logs, indicates that Utica / Point Pleasant formations should be present across the  
25 Grunder North Unit. This indicates to me that the Unitized Formation is part of a  
26 pool.

27 **Q17. And is this a commonly accepted method of analysis in your profession for**  
28 **determining whether a pool or part of a pool exists?**

29 A17. Yes.

30 **Q18. The definition of the Unitized Formation above references both the Utica and**  
31 **Point Pleasant formations. Do you anticipate production from both**

1           **formations?**

2   A18. Yes. The Utica / Point Pleasant formation is one continuous section of  
3       hydrocarbon bearing rock. Accordingly, we anticipate producing hydrocarbons  
4       from both the Utica formation and the Point Pleasant formation. Further, it will be  
5       impossible to identify whether the hydrocarbons were originally in place in the  
6       Utica or the Point Pleasant.

7   **ALLOCATION METHODOLOGY**

8   **Q19. Production and expenses are allocated to the separate tracts in the Grunder**  
9       **North Unit under the Unit Plan on a surface-acreage basis. Do you have an**  
10       **opinion on whether that allocation method is appropriate, given your**  
11       **education and professional experience?**

12   A19. Yes. In my opinion, and my experience, that allocation method is appropriate and  
13       consistent with that of other states that have pooling and unitization rules in their  
14       oil and gas statutes.

15   **Q20. Why?**

16   A20. It is appropriate here because the Utica and Point Pleasant formations are expected  
17       to be of similar thickness across the unit.

18   **Q21. In your experience, is this a common method for allocating production and**  
19       **expenses?**

20   A21. Yes.

21   **Q22. Have you seen this allocation method used in other shale basins?**

22   A22. Yes. I have seen production and expenses allocated on a surface-acreage basis in  
23       the Permian Basin, the D-J Basin and the Williston Basin.

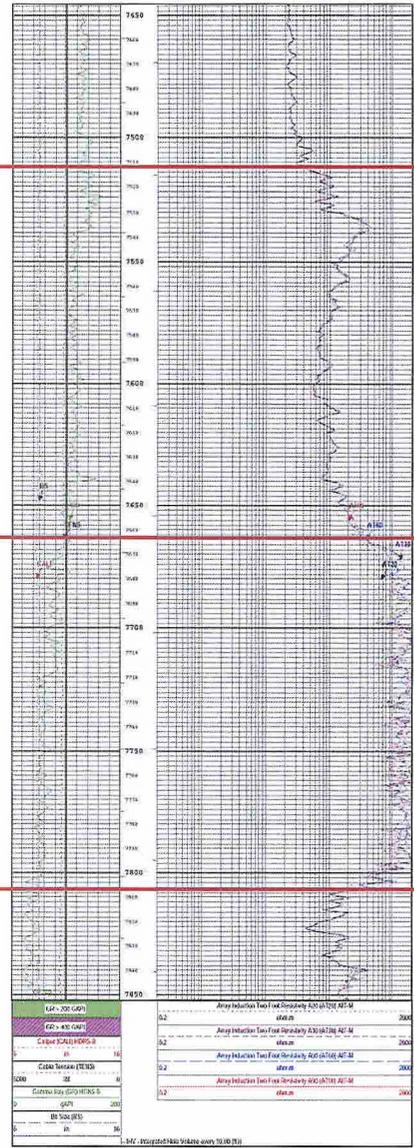
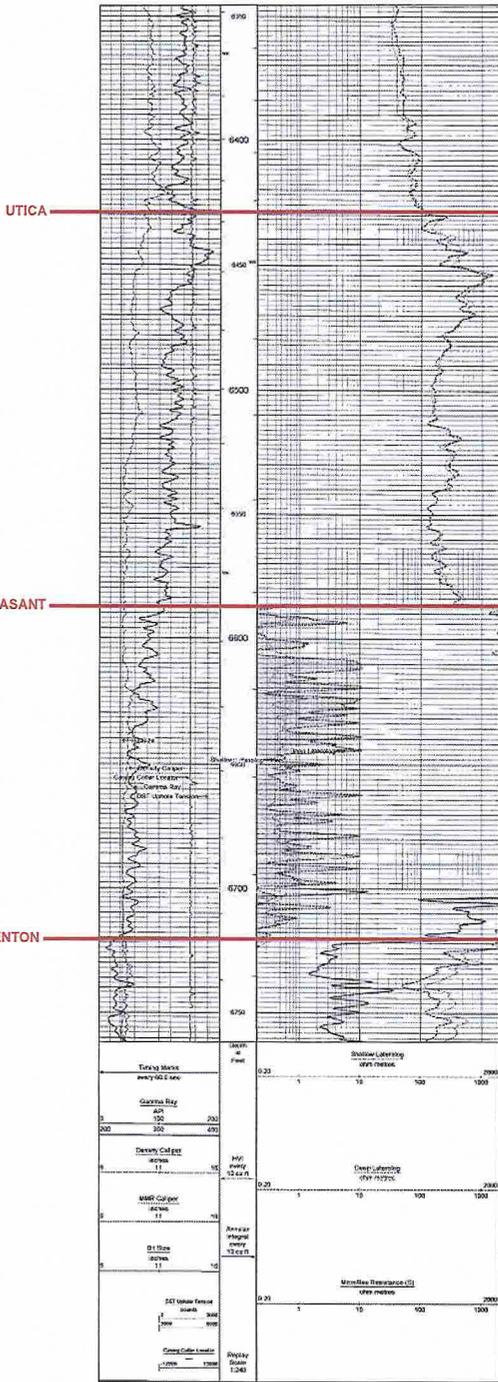
24   **Q23. Does this conclude your testimony?**

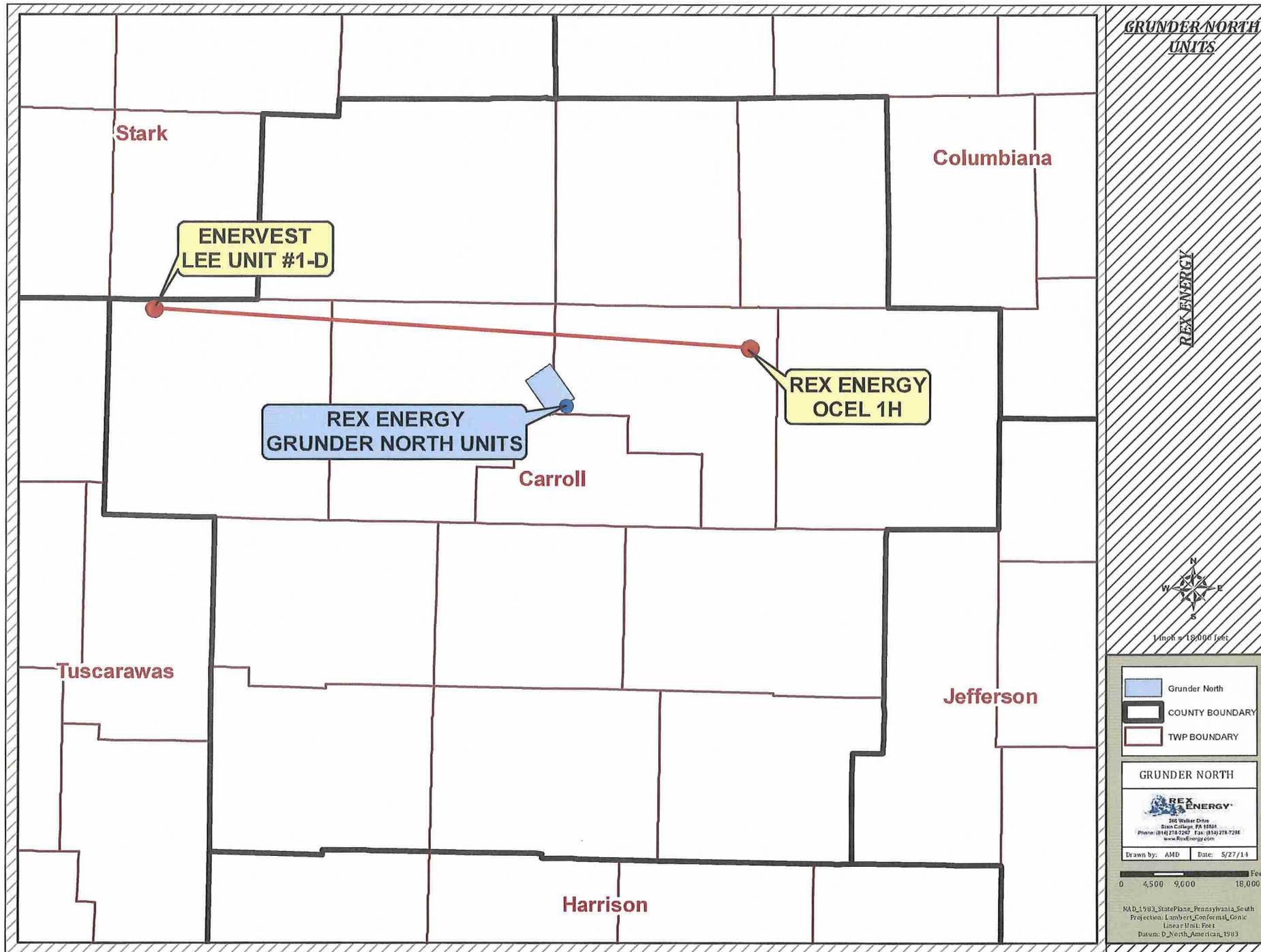
25   A23. Yes.

# GEOLOGIC CROSS-SECTION CARROLL COUNTY, OHIO

LEE UNIT #1-D  
ENERVEST OPERATING, LLC

OCEL 1H  
REX ENERGY





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

In re the Matter of the Application of :  
R.E. Gas Development, LLC for :  
Unit Operation : Application Date: May 13, 2014  
:  
Grunder North Unit :

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**PREPARED TESTIMONY OF LUIS RODRIGUEZ  
ON BEHALF OF R.E. GAS DEVELOPMENT, LLC (“REX”)  
(RESERVOIR ENGINEER)**

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W. Jonathan Airey (0017437)  
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Attorneys for Applicant,  
R.E. Gas Development, LLC

Date: June 24, 2014

**PREPARED TESTIMONY OF LUIS RODRIGUEZ**

1   **INTRODUCTION.**

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

3   A1.   My name is Luis Rodriguez. I am the Vice-President of Reservoir Engineering for  
4       Rex. My business address is 366 Walker Drive, State College, Pennsylvania  
5       16801.

6   **Q2.   What are your job responsibilities as Vice-President of Reservoir  
7       Engineering?**

8   A2.   My job responsibilities include reserves and resources estimation, well  
9       performance analysis and evaluation of appraisals, economic evaluation of  
10      reserves, and planning and optimization for developing the resources at our  
11      disposition.

12  **Q3.   How long have you worked for Rex?**

13  A3.   I have worked for Rex since August 5, 2013.

14  **Q4.   What is your educational background?**

15  A4.   I earned a Bachelor of Science in Petroleum Engineering at the UIS University in  
16      Colombia in 1998. I also earned a Master of Science degree in Petroleum  
17      Engineering from The University of Oklahoma in 2005 and a Master of Business  
18      Administration from Rice University in 2009.

19  **Q5.   Would you briefly describe your professional experience?**

20  A5.   I have worked in the oil and gas industry for 15 years. During that time, I have  
21      worked in varied reservoirs and basins, ranging from the San Jorge Basin in the  
22      Patagonia region of Argentina to the Cano Limon field in the Arauca jungle in  
23      Colombia. My experience in the United States has been mainly in the midcontinent  
24      and California areas, where I have worked as a reservoir engineer in gas fields like  
25      the Hugoton field, Monterey shale and Wolfbone shale basin. For the last 5 years, I  
26      have worked mainly in gas fields and unconventional reservoirs.

27  **Q6.   During your fifteen years in the oil and gas industry, have you worked for any  
28      companies other than Rex?**

29  A6.   Yes. My career started with the Colombian state oil company (Ecopetrol). Since  
30      then I have worked for Repsol-YPF, the Oklahoma Geological Survey, and

1 Occidental Petroleum.

2 **Q7. And is that work similar to the work you now do for Rex?**

3 A7. Yes. That work is similar in terms of evaluating resources in the area and  
4 understanding well behavior.

5 **Q8. Are you a member of any professional associations?**

6 A8. Yes. I am a member of the Society of Petroleum Engineers and the Colombian  
7 Association of Petroleum Engineers.

8 **Q9. What is the purpose of your testimony today?**

9 A9. I am testifying in support of the *Application of R.E. Gas Development, LLC for*  
10 *Unit Operation* filed with respect to the Grunder North Unit, consisting of one  
11 hundred twenty-five (125) separate tracts of land totaling approximately 593 acres  
12 in Carroll County, Ohio. My testimony addresses the following: (i) that unit  
13 operations for the Grunder North Unit are reasonably necessary to increase  
14 substantially the recovery of oil and gas; and (ii) that the value of the estimated  
15 additional recovery due to unit operations exceeds its estimated additional costs.

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

18 **Q10. I'd like to begin by addressing whether unit operations in the Grunder North**  
19 **Unit are reasonably necessary to increase substantially the recovery of oil and**  
20 **gas from those properties. Would you describe briefly how Rex anticipates**  
21 **developing the Grunder North Unit?**

22 A10. The actual total number of wells will be dependent on production results.  
23 However, Rex anticipates drilling up to four wells of approximately 5,600' in  
24 lateral length running from the southeast to the northwest. The Grunder North Unit  
25 will be drilled from a single well pad located on lands outside the unit near the  
26 central southern portion of the Grunder North Unit as shown in Exhibit LR-1.

27 **Q11. Do you have an opinion on whether unit operations in the Grunder North Unit**  
28 **are reasonably necessary to increase substantially the recovery of oil and gas**  
29 **from those properties, and if so, what is your opinion?**

30 A11. Yes. It is my opinion that unit operations are reasonably necessary to increase  
31 substantially the recovery of oil and gas from the unit. Given the location of the

1           unleased tracts and the applicable regulatory setbacks, it is only possible to drill a  
2           single lateral without an order authorizing unit operations. However, should an  
3           order authorizing unit operations be granted, it is possible to drill the four (4) wells  
4           depicted on Exhibit LR-1 which will be accompanied by a substantial increase in  
5           recovery of oil and gas.

6   **Q12. Have you made an estimate of the production you anticipate from the**  
7   **proposed unit operations?**

8   A12. Yes. The estimated ultimate recovery from the proposed Grunder North Unit  
9   development could be as much as between 14 and 16 billion cubic feet equivalent  
10   (Bcfe). This estimate is presented in greater detail on the attached Exhibit LR-2,  
11   which includes an estimate of the recoverable reserves for each of the Grunder  
12   North Unit wells.

13   **Q13. Have you made an estimate of the production you anticipate without an order**  
14   **authorizing unit operations?**

15   A13. Yes. The estimated ultimate recovery from the Grunder North Unit without an  
16   order authorizing unit operations is between 3.5 and 4 Bcfe.

17   **Q14. Are the estimates that you made based on good engineering practices and**  
18   **accepted methods in the industry?**

19   A14. Yes. They are based on initial results from analog wells in the area.

20   **Q15. Can you calculate the production from these wells ahead of time with**  
21   **mathematical certainty?**

22   A15. No. It is impossible at this early stage in the development of the area to calculate  
23   the well performance with mathematical certainty.

24   **Q16. Is horizontal drilling technology, including hydraulic fracturing the formation,**  
25   **required to economically develop unconventional resources?**

26   A16. Yes.

27   **Q17. Is horizontal drilling common in the oil and gas industry?**

28   A17. Yes. It has been common in the industry for the last few decades and it has become  
29   particularly common in the last five to ten years.

30   **Q18. In your professional opinion, would it be economic to develop the Grunder**  
31   **North Unit using vertical drilling?**

1 A18. No. In a vertical well, the area of the well exposed to the producing reservoir will  
2 be considerably less than in a horizontal well, thus reducing the production and  
3 ultimate recovery of the well. When you take into account that reduction of  
4 reserves together with the capital investment required for a vertical well, the  
5 development of the area using vertical technology becomes uneconomical.

6 **VALUE OF ESTIMATED ADDITIONAL RECOVERY EXCEEDS ITS**  
7 **ESTIMATED ADDITIONAL COSTS**

8 **Q19. Let's turn to the financial side of the project. Generally, in your professional**  
9 **experience, how would the economics of a development project such as the**  
10 **development of the Grunder North Unit be evaluated?**

11 A19. First you need to estimate the production profile expected of the horizontal wells.  
12 You do that by taking into account accepted practices in the industry and using  
13 analog wells in the vicinity. You also need to estimate the total capital expenditure  
14 required for the drilling, completion and production of the well. When you  
15 combine those two estimates with the expected cost of operating the well during its  
16 life, you can evaluate the economics.

17 **Q20. Did you do that here?**

18 A20. Yes.

19 **Q21. Would you walk us through your economic evaluation, beginning with your**  
20 **estimate of the anticipated revenue stream from the Grunder North Unit's**  
21 **development?**

22 A21. We estimate that, based on the lateral lengths of these wells, the cost of drilling in  
23 the Grunder North Unit will be between \$7,000,000 and \$10,000,000 for each well.  
24 Once you combine that cost with the cost of operating a typical well in the area, we  
25 believe that the Net Present Value for each of these wells is between \$600,000 and  
26 \$1,000,000. For additional details regarding the estimates for the wells within the  
27 Grunder North Unit, see attached Exhibit LR-2.

28 **Q22. What price scenario did you use for the anticipated revenue stream?**

29 A22. We assumed gas prices to be on average \$4.40/mcf and oil prices to be \$88/bbl for  
30 the first five years of the project. This is consistent with the values on the NYMEX  
31 futures markets during the first week of May 2014. For natural gas liquids,

1 typically the market prices these liquids at a differential with respect to NYMEX  
2 pricing for oil. We have seen in the recent market trends for natural gas liquids  
3 values between 10% and 50% of the NYMEX oil value. We took this variation  
4 into account in making value estimates for the Grunder North Unit.

5 **Q23. What about anticipated capital and operating expenses?**

6 A23. You work in cooperation with the drilling and completion engineers, as well as  
7 with the geologist, all of whom determine the expected depth and pay of the area.  
8 Once you understand the depth of the formation and the total lateral length that you  
9 need to recover the reserves, you use the latest figures from recent wells regarding  
10 the cost of drilling per foot in order to calculate total capital cost. The operating  
11 expenses are calculated in a similar manner. Here, as shown on Exhibit LR-2,  
12 assuming full development of the Grunder North Unit, the estimated capital costs  
13 will range between \$28,000,000 and \$40,000,000 while, the life of well estimated  
14 operating expense for each well in the unit is between \$7,000,000 and \$12,000,000.  
15 In making cost estimates, the capital cost of building the well pad is distributed  
16 equally among the wells. Without unitization, the capital cost of the well pad  
17 construction burdens a single well instead of four wells.

18 **Q24. Based on this information and your professional judgment, does the value of**  
19 **the estimated additional recovery from the operations proposed for the**  
20 **Grunder North Unit exceed its estimated additional costs, and if so, would you**  
21 **explain why?**

22 A24. Yes. As indicated on Exhibit LR-1, there are three additional wells that could be  
23 drilled in the unit if the proposed unit operations are allowed. The value of the  
24 additional recovery from those unit operations, when compared to their associated  
25 additional costs, is reflected in the estimated net present value for each additional  
26 well set forth on Exhibit LR-2. That estimated net present value is between  
27 \$600,000 and \$1,000,000 per well. The fact that this range of numbers is positive  
28 means that the estimated revenue generated from each well exceeds the estimated  
29 costs of drilling and operating that well. And the fact that the total amount when  
30 summed across all of these wells is positive indicates that the value of the estimated  
31 additional recovery from unit operations exceeds its estimated additional costs. If

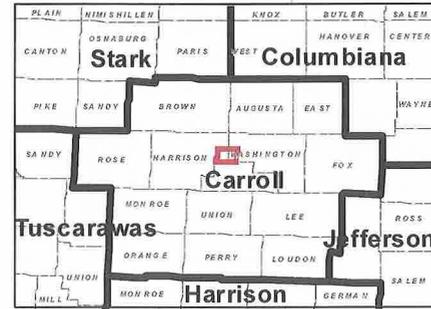
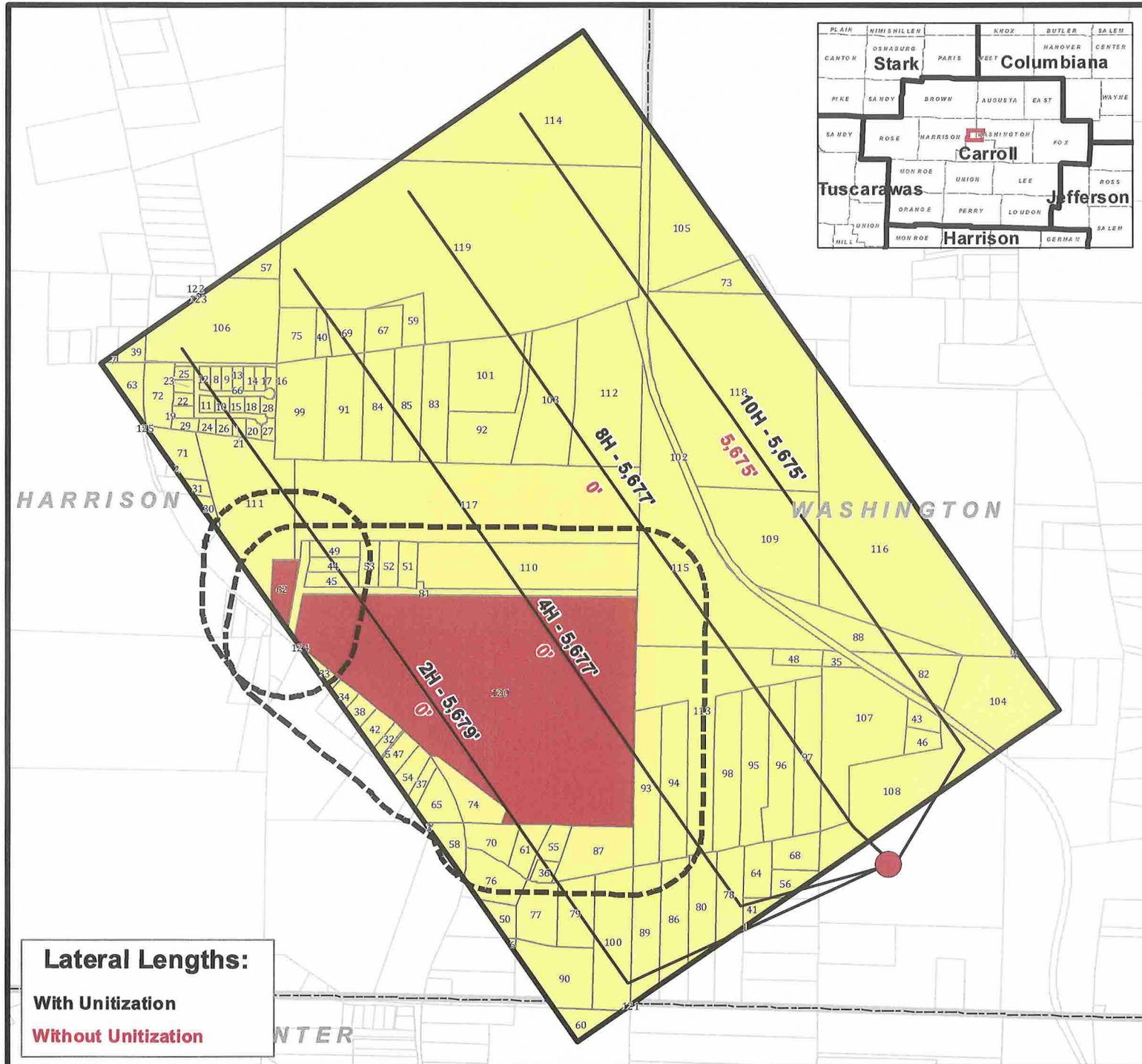
1 an order authorizing unit operations was not granted, economies of scale would be  
2 lost. For instance, the pad construction costs would burden a single well only.  
3 This means a 3-5% reduction in the expected rate of return, not to mention the  
4 waste of the oil and gas resources left in the ground. This means that very likely a  
5 one well scenario would not be executed, stranding all of the resources in the  
6 Grunder North Unit.

7 **Q25. And your opinions are based on your education and professional experience?**

8 A25. Yes.

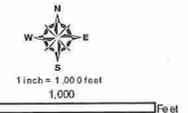
9 **Q26. Does this conclude your testimony?**

10 A26. Yes.



**Grunder North Unit  
Center/Washington/  
Harrison Township  
Carroll County, OH**

-  Pad Site
-  500' Set-Back
-  Laterals
-  Unit Boundary
-  REX/WI Owners
-  OPEN



**REX ENERGY**  
 366 Walker Drive  
 State College, PA 16801  
 Phone: (814) 278-7267 Fax: (814) 278-7286  
 www.RexEnergy.com

NAD\_1983\_StatePlane\_Ohio\_North\_Feet  
 Projection: Lambert\_Conformal\_Conic  
 Linear Unit: Feet  
 Datum: D\_North\_American\_1983  
 R:\Ohio\Warrior\_North\MXD\Units\Grunder North HP3.mxd

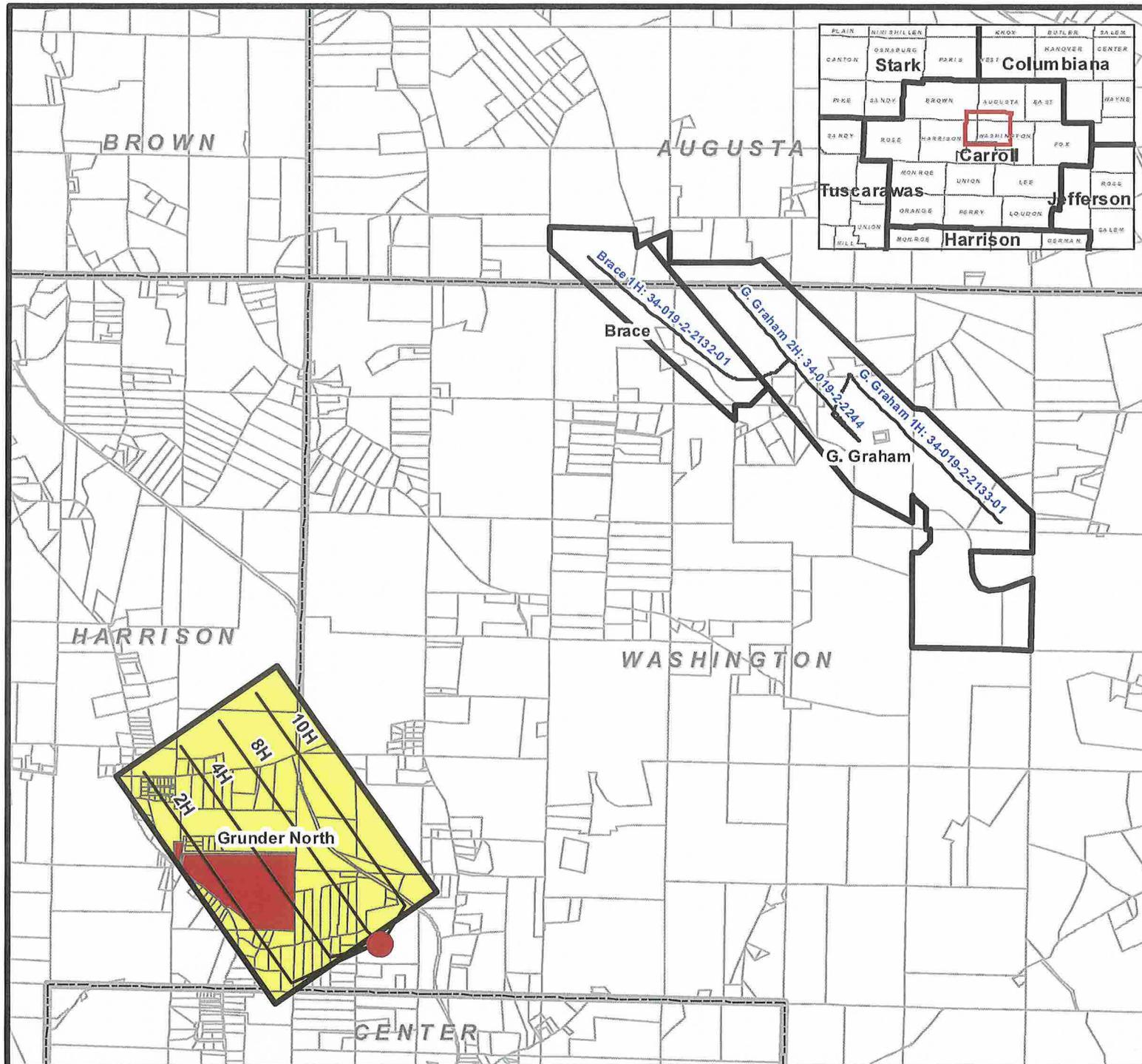
**Lateral Lengths:**  
 With Unitization  
 Without Unitization

Grunder North Exhibit LR-2  
 Grunder North Unit  
 Economics w/ Approved Unitization

	Lateral Length (Feet)	EUR	Capital Cost (\$)	Life of Well Estimated Operating Expense	Net Present Value (\$)
Grunder 2H	5679	3.5 - 4.0 Bcfe	\$7-10 million	\$7-12 million	\$600,000 to 1 million
Grunder 4H	5677	3.5 - 4.0 Bcfe	\$7-10 million	\$7-12 million	\$600,000 to 1 million
Grunder 8H	5677	3.5 - 4.0 Bcfe	\$7-10 million	\$7-12 million	\$600,000 to 1 million
Grunder 10H	5675	3.5 - 4.0 Bcfe	\$7-10 million	\$7-12 million	\$600,000 to 1 million
Total	N/A	14 - 16 Bcfe	\$28-40 million	N/A	\$2.4 to \$4 million

Grunder North Unit  
 Economics w/out Approved Unitization

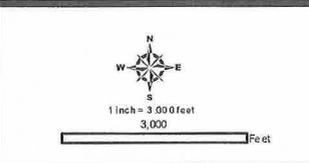
	Lateral Length (Feet)	EUR	Capital Cost (\$)	Life of Well Estimated Operating Expense	Net Present Value (\$)
Grunder 2H	0	0	-	0	\$0
Grunder 4H	0	0	-	0	\$0
Grunder 8H	0	0	-	0	\$0
Grunder 10H	5675	3.5 - 4.0 Bcfe	\$8-10 million	\$7-12 million	\$0 to \$350,000
Total	N/A	3.5 - 4.0 Bcfe	\$8-10 million	N/A	\$0 to \$350,000



### Adjacent Wells

Grunder North Unit  
Center/Washington/  
Harrison Township  
Carroll County, OH

- Pad Site
- Laterals
- ▭ Units
- ▭ REX/WI Owners
- ▭ OPEN



**REX ENERGY**  
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 State College, PA 16801  
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 www.RexEnergy.com

NAD\_1983\_StatePlane\_Ohio\_North\_Feet  
 Projection: Lambert\_Conformal\_Conic  
 Linear Unit: Feet  
 Datum: D\_North\_American\_1983  
 R:\Ohio\Warrio\_North\MXD\Units\  
 Goebler & Grunder Adjacent Wells.mxd

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

In re the Matter of the Application of :  
R.E. Gas Development, LLC for :  
Unit Operation : Application Date: May 13, 2014  
:  
Grunder North Unit :

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**PREPARED TESTIMONY OF DAVID ROGERS  
ON BEHALF OF R.E. GAS DEVELOPMENT, LLC (“REX”)  
(LANDMAN)**

---

W. Jonathan Airey (0017437)  
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J. Taylor Airey (0081092)  
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Columbus, Ohio 43216-1008

Attorneys for Applicant,  
R.E. Gas Development, LLC

Date: June 24, 2014

## PREPARED TESTIMONY OF DAVID ROGERS

1 **INTRODUCTION.**

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

3 A1. My name is David Rogers and I am the Senior Director of Land at Rex.

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

5 A2. I attended Stark Technical College in North Canton, Ohio for two years.

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

7 A3. I have over thirty years of experience in the oil and gas industry. In the first six  
8 years of my career, I was employed as an abstractor and a draftsman. For the past  
9 twenty-four years, I have been employed as a landman.

10 **Q4. How long have you worked for Rex?**

11 A4. I have worked for Rex since May 3, 2010.

12 **Q5. During your thirty years in the oil and gas industry, have you worked for any  
13 companies other than Rex?**

14 A5. Yes. I have worked for Range Resources, Great Lakes Energy Partners LLC,  
15 Lomak Petroleum, Viking Resources and several other companies.

16 **Q6. What are your job responsibilities as Senior Director of Land for Rex?**

17 A6. I am responsible for Rex's leasing programs. My responsibilities include, among  
18 other things, (i) securing landowner approvals for well pads, impoundments, water  
19 lines, and equipment, (ii) resolving landowners' claims for damage, (iii) reviewing  
20 title curative documents, (iv) procuring certain types of rights-of-way, and (v)  
21 overseeing community and landowner relations for the Appalachian Basin.

22 **Q7. Are you a member of any professional associations?**

23 A7. Yes. I am a member of the American Association of Petroleum Landmen and the  
24 Ohio Oil and Gas Association.

25 **Q8. Have you ever been involved in combining or pooling oil and gas interests for  
26 development in Ohio?**

27 A8. Yes. When I was employed as a landman for Range Resources, I appeared before  
28 the Technical Advisory Council of the Division of Oil and Gas Resources  
29 Management on several occasions regarding successful applications for mandatory  
30 pooling orders.

1 **Q9. What is the purpose of your testimony today?**

2 A9. I am testifying in support of the *Application of R.E. Gas Development, LLC for*  
3 *Unit Operation* filed with respect to the Grunder North Unit, consisting of one  
4 hundred twenty-five (125) separate tracts of land totaling approximately 593 acres  
5 in Carroll County, Ohio. In particular, I will describe the efforts made by Rex to  
6 put the Grunder North Unit together and the Unit Plan that Rex is proposing.

7 **EFFORTS MADE BY REX TO LEASE UNIT TRACTS.**

8 **Q10. The Application submitted by Rex indicates that it owns the oil and gas rights**  
9 **to approximately 505 acres of the proposed 593.9571 acre unit. Would you**  
10 **describe how Rex acquired those rights?**

11 A10. Rex has leased over 16,000 acres in Carroll County since June 2011, and inside the  
12 Grunder North Unit, Rex has leased approximately 505 acres.

13 **Q11. And that represents what percentage of the unit acreage?**

14 A11. As reflected on Exhibit A-2 and Exhibit A-4 to the Unit Operating Agreement,  
15 that's approximately 85% of the Grunder North Unit.

16 **Q12. Are there other operators in the unit, and if so, have they agreed to participate**  
17 **in its development?**

18 A12. Yes. There are four other operators in the Grunder North Unit: Chesapeake  
19 Exploration, L.L.C., CHK Utica, L.L.C., Belden & Blake Corporation and Total  
20 E&P USA, Inc. Collectively, they own approximately 17 acres of land, which  
21 represents 2.91% of the total acreage of the Grunder North Unit. Each of the other  
22 four operators have agreed to participate in its development and have agreed to  
23 support this unitization application.

24 **Q13. Is it accurate to say then that the owners of more than eighty-seven percent**  
25 **(87%) of the unit have approved the filing of this Application?**

26 A13. Yes. Please see Exhibit DR-1, which includes working interest approvals from  
27 Chesapeake Exploration, L.L.C., CHK Utica, L.L.C., Belden & Blake Corporation  
28 and Total E&P USA, Inc.

29 **Q14. How many unleased mineral owners are there in the Grunder North Unit?**

30 A14. There are two (2) unleased mineral owners in the Grunder North Unit: Tract 62  
31 and Tract 120. The interest controlled by these unleased mineral owners represents

1 71.132 acres or 11.97595% of the Grunder North Unit.

2 **Q15. Have affidavits detailing Rex's efforts to obtain leases from the unleased**  
3 **mineral owners been prepared?**

4 A15. Yes. Please refer to attached Exhibit DR-2.

5 **Q16. Do you have an exhibit to your testimony that illustrates the leased and**  
6 **unleased tracts within the Grunder North Unit?**

7 A16. Yes. Attached Exhibit DR-3 is a plat showing each of the tracts in the Grunder  
8 North Unit. The unleased tracts appear in red whereas the leased tracts appear in  
9 yellow.

10 **Q17. Do you have an aerial plat of the Grunder North Unit?**

11 A17. Yes. Attached Exhibit DR-5 is an aerial plat of the Grunder North Unit.

12 **UNIT PLAN PROVISIONS.**

13 **Q18. Would you generally describe the development plan for the Grunder North**  
14 **Unit?**

15 A18. Rex plans to develop the Grunder North Unit from a single well pad located on  
16 lands located outside the Unit and off the central southern portion of the Unit.  
17 From this well pad, Rex intends to drill up to four (4) horizontal wells with  
18 projected lateral lengths of approximately 5,600 feet, as depicted on Exhibit DR-3.

19 **Q19. Does Rex have a specific timeline for drilling the wells in the Grunder North**  
20 **Unit?**

21 A19. Rex plans to drill the initial well within twelve (12) months of the effective date of  
22 an order authorizing unit operations. Upon evaluating the results of the first well,  
23 Rex anticipates drilling the subsequent wells within five years of the effective date  
24 of an order authorizing unit operations, depending on results, rig availability, and  
25 the availability of markets for the hydrocarbons.

26 **Q20. Does Rex have any other development activity in the immediate area?**

27 A20. Yes. Please see attached Exhibit DR-6, which depicts the units bordering the  
28 Grunder North Unit.

29 **Q21. Are you familiar with the Unit Plan proposed by Rex for the Grunder North**  
30 **Unit?**

31 A21. Yes. The Unit Plan proposed by Rex is attached to the Application and consists of

1 an initial document that establishes the non-operating relationship between the  
2 parties in the Unit, and an operating agreement and related exhibits that establish  
3 how the Unit is going to be explored, developed and produced.

4 **Q22. Turning first to the body of the Unit Plan, marked as Attachment 1 to the**  
5 **Application. Would you describe briefly what it does?**

6 A22. Yes. The general intent of the Unit Plan is to effectively combine the oil and gas  
7 rights and interests in the Grunder North Unit in a uniform manner so that they can  
8 be developed as though each of the tracts were covered by a single lease.

9 **Q23. Are all of the oil and gas rights in the proposed unit combined?**

10 A23. No. The Unit Plan only unitizes the oil and gas rights in and related to the Unitized  
11 Formation.

12 **Q24. How would production from the Grunder North Unit be allocated?**

13 A24. On a surface-acreage basis consistent with Article 4 and Article 5 of the Unit Plan.

14 **Q25. Why use a surface-acreage basis as the method of allocation?**

15 A25. We believe it is the most efficient and fair manner in which the landowners,  
16 Unleased Mineral Owners and the other operators can share in production from the  
17 Grunder North Unit.

18 **Q26. Would you go through an example from Exhibit A-2 to the Unit Operating**  
19 **Agreement to illustrate what you mean?**

20 A26. Yes. If you refer to Exhibit A-2 of the Unit Operating Agreement, the column  
21 entitled "Surface Acres in Unit" reflects the number of surface acres in each tract  
22 included within the Grunder North Unit. The column entitled "Tract Participation"  
23 shows the related tract participation of each tract, which is calculated by taking the  
24 number of surface acres in each tract included within the unit and dividing it by the  
25 total number of surface acres in the unit. For example, if you refer to Tract 35 on  
26 Exhibit A-2 to the Unit Operating Agreement, it shows that the Village of  
27 Carrollton is the current mineral owner of 1 acre in the 593.9571 acre Grunder  
28 North Unit. This equates to a tract participation of 0.00168362 ( $1/593.9571 =$   
29  $0.00168362$ ).

30 **Q27. What does that mean in terms of production allocated to that particular tract?**

31 A27. It would mean that approximately 0.168362 % of all production from the Grunder

1 North Unit would be allocated to Tract 35.

2 **Q28. Does it work the same way for an unleased mineral interest, that is, for the**  
3 **tract of a person who did not lease the property in the unit?**

4 A28. Yes.

5 **Q29. In your experience, is that an unusual way to allocate production in a unit?**

6 A29. No. In my experience, surface-acreage allocation is both fair and customary for  
7 horizontal shale development. It is also the standard practice exercised in the  
8 industry as a whole.

9 **Q30. How are unit expenses allocated?**

10 A30. Like production in the unit, generally on a surface-acreage basis. Article 3 of the  
11 Unit Plan provides that expenses, unless otherwise allocated in the Unit Operating  
12 Agreement, will be allocated to each tract of land within the Unit in the proportion  
13 that the surface acres of each tract included within the unit bears to the surface  
14 acres of the entire unit.

15 **Q31. Who pays the unit expenses?**

16 A31. According to the terms of the proposed Unit Plan, the working interest owners.

17 **Q32. Do the royalty owners pay any portion of the unit expenses?**

18 A32. No, unless the terms and conditions of the royalty owner's oil and gas lease dictate  
19 otherwise. Royalty interest owners are responsible only for their proportionate  
20 share of taxes and post-production costs, payable only from their share of the  
21 proceeds from sales of production from the unit area.

22 **Q33. Let's turn to the Unit Operating Agreement. It appears to be based upon**  
23 **A.A.P.L. Form 610 – 1989 Model Form Operating Agreement, is that correct?**

24 A33. Yes. We typically use a modified version of the 1989. The Form 610, together  
25 with its exhibits, is a commonly used form in the industry and is frequently  
26 modified to fit the needs of the parties and circumstances.

27 **Q34. Turning to the Unit Operating Agreement in particular, does it address how**  
28 **unit expenses are determined and paid?**

29 A34. Yes. Article III of the Unit Operating Agreement provides that all costs and  
30 liabilities incurred in operations shall be borne and paid proportionately by the  
31 Working Interest Owners, according to their Unit Participation percentages. Those

1 percentages can be found in Exhibit A-2 and Exhibit A-4 to the Unit Operating  
2 Agreement. Moreover, the Unit Operating Agreement has attached to it an  
3 accounting procedure identified as Exhibit C that offers greater details regarding  
4 how unit expenses are determined and paid.

5 **Q35. That's commonly referred to as the COPAS?**

6 A35. Yes. COPAS stands for the Council of Petroleum Accountants Societies and is a  
7 commonly used form in the industry.

8 **Q36. Will there be in-kind contributions made by owners in the unit area for unit  
9 operations, such as contributions of equipment?**

10 A36. No. Rex does not anticipate any in-kind contributions for Unit Operations.

11 **Q37. Are there times when a working interest owner in the unit chooses not to – or  
12 cannot – pay their allocated share of the unit expenses?**

13 A37. Yes, such a situation is not uncommon in the industry. The Unit Operating  
14 Agreement gives working interest owners the flexibility to decline participation in  
15 any operation that they either cannot afford or believe is not likely to be profitable.  
16 The remaining parties can then proceed at their own risk and expense.

17 **Q38. Generally, how is the working interest accounted for when an owner chooses  
18 not to participate in an operation?**

19 A38. A working interest owner who cannot or chooses not to participate in an operation  
20 is considered a non-consenting party. If the remaining working interest owners  
21 decide to proceed with the operation, the consenting parties alone will bear the full  
22 cost and expense of the operations. A non-consenting party is deemed to have  
23 relinquished its interest in that operation until the well revenues pay out the costs  
24 that would have been attributed to that party, plus a prescribed risk penalty or non-  
25 consent penalty.

26 **Q39. Can a working interest owner choose to go non-consent in the initial well in  
27 the Grunder North Unit?**

28 A39. Yes. If a working interest owner chooses not to participate in the unit's initial well,  
29 Article XVI(C) of the Unit Operating Agreement provides that the working interest  
30 owner shall be deemed to have relinquished its working interest to the other parties  
31 in the unit, in proportion to their respective working interests, with a back-in

1 provision and risk factor of 300%.

2 **Q40. Does the Unit Operating Agreement treat the initial well and subsequent**  
3 **operations differently in terms of going non-consent, and if so, why?**

4 A40. Yes. In this case, there are no wells in the unit that could be classified as extremely  
5 high risk. However, there are still operational risks and therefore there is still a risk  
6 factor penalty involved should a party go non-consent. Subsequent operations have  
7 a smaller risk factor of 200%.

8 **Q41. But if the working interest owner still has a royalty interest in the unit, that**  
9 **royalty interest would remain in place and be paid?**

10 A41. Yes. That royalty interest would still be paid according to the terms and conditions  
11 of the agreement that give rise to the royalty.

12 **Q42. Where are the risk factors for subsequent operations set out in the Unit**  
13 **Operating Agreement?**

14 A42. They are set out in Article VI.B of the Unit Operating Agreement.

15 **Q43. I believe you've already described generally the documents in Exhibits A and**  
16 **C to the Unit Operating Agreement. Let's turn therefore to Exhibit B of the**  
17 **Unit Operating Agreement. What is it?**

18 A43. Exhibit B is a standard oil and gas lease form that is attached to the joint operating  
19 agreement to govern any unleased interests owned by the parties. Article III.A of  
20 the Unit Operating Agreement provides that if any party owns or acquires an oil  
21 and gas interest in the Contract Area, then that interest shall be treated for all  
22 purposes of the Unit Operating Agreement as if it were covered by the form of  
23 lease attached as Exhibit "B."

24 **Q44. Does this oil and gas lease contain standard provisions that Rex uses in**  
25 **connection with its operations in Ohio?**

26 A44. It is a standard agreement Rex has used in the State of Ohio.

27 **Q45. Based upon your education and professional experience, do you view the terms**  
28 **of Exhibit B as reasonable?**

29 A45. Yes.

30 **Q46. Moving on to Exhibit D of the Unit Operating Agreement, would you describe**  
31 **what it is?**

1 A46. Yes. Exhibit D is the insurance exhibit to the Unit Operating Agreement. It sets  
2 forth coverage amounts and limitations, and the insurance terms for operations  
3 conducted under the Unit Operating Agreement. For example, it requires that  
4 operator shall comply with all applicable federal and state insurance and Worker's  
5 Compensation Laws.

6 **Q47. Based upon your education and professional experience, do you view the terms  
7 of Exhibit D as reasonable?**

8 A47. Yes.

9 **Q48. Would you next describe to the Division Exhibit E of the Unit Operating  
10 Agreement?**

11 A48. Yes. Exhibit E is the Gas Balancing Agreement, which further details the rights  
12 and obligations of the parties with respect to marketing and selling any production  
13 from the Contract Area.

14 **Q49. In your professional opinion, given your education and experience, are the  
15 terms of the Unit Plan, including the terms of the exhibits just discussed, just  
16 and reasonable?**

17 A49. Yes.

18 **Q50. Does this conclude your testimony?**

19 A50. Yes.

Grunder North  
Exhibit DR-1

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

In re the Matter of the Application of :  
R.E. Gas Development L.L.C. for : Application Date: May 13, 2014  
Unit Operation :

Grunder North Unit

**AFFIDAVIT OF OWNERSHIP**

I, David Rogers, being first duly cautioned and sworn, do hereby depose and state as follows:

1. My name is David Rogers and I am Senior Director of Land with R.E. Gas Development L.L.C. ("Applicant"). My day-to-day responsibilities include (i) securing landowner approvals for well pads, impoundments, water lines, and equipment, (ii) resolving landowners' claims for damage, (iii) reviewing title curative documents, (iv) procuring certain types of rights-of-way, and (v) overseeing community and landowner relations for the Appalachian Basin, for the Applicant in the State of Ohio, and I have personal knowledge of the facts stated herein.

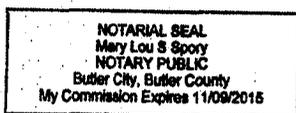
2. Pursuant to Ohio Revised Code § 1509.28, the Applicant has filed an application with the Chief of the Division of Oil and Gas Resources Management requesting an order authorizing Applicant to operate the Unitized Formation and applicable land area, identified as the Grunder North Unit, according to the Unit Plan attached thereto (the "Application") (as those terms are used and defined therein). The Grunder North Unit is located in Carroll County, Ohio, and consists of one hundred and twenty-five (125) separate tracts of land covering approximately 593.425 acres.

3. As of the Application Date set forth above, the Applicant and the Working Interest Owners supporting the Application are the owners, as that term is defined in Ohio Revised Code § 1509.01(K), of at least 65% of the land overlying the Unitized Formation, as outlined in Exhibit A attached hereto.

Further sayeth Affiant naught.

*David Rogers*

Sworn to and subscribed before me this 12 day of May, 2014.



*Mary Lou S Spoy*  
Notary Public

Grunder North  
Exhibit DR-1

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

In re the Matter of the Application of :  
R.E. Gas Development L.L.C. for : Application Date: May 13, 2014  
Unit Operation :

Grunder North Unit

**LEASE AFFIDAVIT**

I, David Rogers, being first duly cautioned and sworn, do hereby depose and state as follows:

1. My name is David Rogers and I am Senior Director, Land with R. E. Gas Development L.L.C. ("Applicant"). My day-to-day responsibilities include (i) securing landowner approvals for well pads, impoundments, water lines and equipment, (ii) resolving landowner claims for damages, (iii) reviewing title curative documents, (iv) procuring certain types of rights of way and overseeing oil and gas leasing, (v) overseeing community and landowner relations for the Appalachia Basin for the Applicant in the State of Ohio, and I have personal knowledge of the facts stated herein.

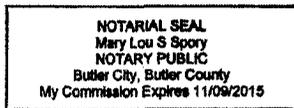
2. Pursuant to Ohio Revised Code § 1509.28, the Applicant has filed an application with the Chief of the Division of Oil and Gas Resources Management requesting an order authorizing Applicant to operate the Unitized Formation and applicable land area, identified as the Grunder North Unit, according to the Unit Plan attached thereto (the "Application") (as those terms are used and defined therein). The Grunder North Unit is located in Carroll County, Ohio, and consists of one hundred twenty-five (125) separate tracts of land covering approximately 593.425 acres.

3. To my knowledge the Applicant holds a valid lease agreement pertaining to all of the Applicant's acreage, as described in Exhibit A-2 and A-4 of the Unit Operating Agreement attached to the Application.

Further sayeth Affiant naught.

*David Rogers*

Sworn to and subscribed before me this 12 day of MAY, 2014.



*Mary Lou S Spory*  
Notary Public



Exhibit 1

TRACT NUMBER	LESSOR	SURFACE ACRES IN UNIT	PARCEL ID NUMBER
63	Stanley Robert George	1.721	15-0000306.000
125	Stanley Robert George	.0003	15-0000304.000

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

In re the Matter of the Application of :  
R.E. Gas Development, LLC for : Application Date: May 13, 2014  
Unit Operation :  
:  
Grunder North Unit

**WORKING INTEREST OWNER APPROVAL**

R.E. Gas Development, LLC ("Applicant") has prepared and/or filed an application asking the Chief of the Division of Oil and Gas Resources Management to issue an order authorizing Applicant to operate the Grunder North Unit, located in Carroll County, Ohio, and consisting of one hundred twenty five (125) separate tracts of land covering approximately 593.9571 acres, according to the Unit Plan attached thereto (the "Application").

Chesapeake Exploration, LLC is the owner (as that term is defined in Ohio Revised Code § 1509.01(K)) of 10 tract(s) of land covering approximately 17.2873 acres contained in the Grunder North Unit, or .29239% of the lands in the unit, all as more specifically described on attached Exhibit 1.

Chesapeake Exploration, LLC hereby approves, and supports the making of, the Application, including without limitation the Unit Plan attached thereto, and acknowledges receipt of full and true copies thereof.

CHESAPEAKE EXPLORATION, L.L.C.  
an Oklahoma limited liability Company

By:   
Dan Weinmeister, Land Manager -Appalachia South

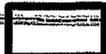
Date: 6/10/2014

Exhibit 1

TRACT NUMBER	LESSOR	SURFACE ACRES IN UNIT	PARCEL ID NUMBER
7	Patricia A. & James D. Cale and Ronald & Joanne Dennis	.103	15-0000159.000
30	Jeffrey I Bory	.438	15-0000452.000
31	Cason R. & Janice E Leggett	.455	15-0000335.001
39	Patricia A. & James D. Cale and Ronald & Joanne Dennis	.678	15-0000160.000
63	Stanley Robert George	1.721	15-0000306.000
72	Richard A. & Desiree A. Stidom	1.609	15-0000577.000
74	Gary L. Teeter Revocable Trust Dated August 2, 2011	2.000	15-0000886.000
80	Jeffrey L. & Tashia L. Farmer	1.725	34-0000044.003
103	Gary L. Teeter	8.558	15-0000893.002
125	Stanley Robert George	.0003	15-0000304.000

# Grunder North Unit - 593.9571 Acres Center/Washington/Harrison Township, Carroll County



-  Unit
-  CHK 50% Interest
-  REX ENERGY - 505.5378 Acres (85.11352%)
-  CHK - 17.2873 Acres (2.91053%)
-  OPEN - 71.1320 Acres (11.97595%)

CENTER

  
 366 Walker Drive  
 State College, PA 16801  
 Phone: (814) 278-7267 Fax: (814) 278-7286  
[www.RexEnergy.com](http://www.RexEnergy.com)

Exhibit A-2

Tract	Current Mineral Owner	% Mineral Ownership	LEASED Yes/No	Surface Area in Unit	Tract Participation	Parcel ID	Township	County	State	Lessor Working Interest	Lessor Unit Participation	Tracts Within the Contract Area										Address	City	State	Zip				
												R.E. Gas Working Interest	R.E. Gas Unit Participation	Cheapeake Exploration Working Interest	Cheapeake Exploration Unit Participation	CHK Utica Working Interest	CHK Utica Unit Participation	TOTAL ERP USA LLC Working Interest	TOTAL ERP USA LLC Unit Participation	Belden & Blake Working Interest	Belden & Blake Unit Participation								
1	AARON L & SARAH B MILLER	1.00000000	Yes	0.0100	0.00016884	34-0002044.010	Washington	Carroll	OH	0%	0.00000000	100%	0.00016884	0%	0.00000000	0%	0.00000000	0%	0.00000000	0%	0.00000000	0%	0.00000000	0%	0.00000000	6072 Mirth Road NE	Mechanicsstown	OH	44651
2	WILLIAM H JR & JANET D GRIMES	1.00000000	Yes	0.0110	0.0001852	15-0003332.000	Harrison	Carroll	OH	0%	0.00000000	100%	0.0001852	0%	0.00000000	0%	0.00000000	0%	0.00000000	0%	0.00000000	0%	0.00000000	0%	0.00000000	1196 Brenner Road N.E.	Carrollton	OH	44615
3	HELEN N & JACK L MAFFETT	1.00000000	Yes	0.0440	0.00007408	15-0005902.000	Harrison	Carroll	OH	0%	0.00000000	100%	0.00007408	0%	0.00000000	0%	0.00000000	0%	0.00000000	0%	0.00000000	0%	0.00000000	0%	0.00000000	95 Gallo Road NW	Carrollton	OH	44615
4	CASTALIA INVESTMENT COMPANY LLC	1.00000000	Yes	0.0720	0.00012122	34-0000315.001	Washington	Carroll	OH	0%	0.00000000	100%	0.00012122	0%	0.00000000	0%	0.00000000	0%	0.00000000	0%	0.00000000	0%	0.00000000	0%	0.00000000	Scott Brown, Pres.	Kirtland	OH	44094
5	FLOYD D & LORRAINE A SKINNER	1.00000000	Yes	0.0940	0.00015826	15-0001767.000	Harrison	Carroll	OH	0%	0.00000000	100%	0.00015826	0%	0.00000000	0%	0.00000000	0%	0.00000000	0%	0.00000000	0%	0.00000000	0%	0.00000000	9717 Chillicothe Road	Kirtland	OH	44094
6	WAYNE A & LISA M SHAW	1.00000000	Yes	0.1010	0.00017005	15-0005106.000	Harrison	Carroll	OH	0%	0.00000000	100%	0.00017005	0%	0.00000000	0%	0.00000000	0%	0.00000000	0%	0.00000000	0%	0.00000000	0%	0.00000000	2113 Canton Road NW	Carrollton	OH	44615
7	PATRICIA A & JAMES D CALE AND RONALD & JOANNE DENNIS	1.00000000	Yes	0.1090	0.00017341	15-0000159.000	Harrison	Carroll	OH	0%	0.00000000	0%	0.00000000	75%	0.00018966	0%	0.00000000	25%	0.00004395	0%	0.00000000	0%	0.00000000	0%	0.00000000	3095 Bernewood Circle NW	Canton	OH	44709
8	MICHAEL E & PEGGY L MILLER CHRISTINE	1.00000000	Yes	0.3214	0.00094112	15-0003578.000	Harrison	Carroll	OH	0%	0.00000000	100%	0.00094112	0%	0.00000000	0%	0.00000000	0%	0.00000000	0%	0.00000000	0%	0.00000000	0%	0.00000000	158 Bacon Road NW	Carrollton	OH	44615
9	MICHAEL E & PEGGY L MILLER CHRISTINE	1.00000000	Yes	0.3214	0.00094112	15-0003579.000	Harrison	Carroll	OH	0%	0.00000000	100%	0.00094112	0%	0.00000000	0%	0.00000000	0%	0.00000000	0%	0.00000000	0%	0.00000000	0%	0.00000000	158 Bacon Road NW	Carrollton	OH	44615
10	LOIS J SWEAT	1.00000000	Yes	0.3214	0.00094112	15-0003586.000	Harrison	Carroll	OH	0%	0.00000000	100%	0.00094112	0%	0.00000000	0%	0.00000000	0%	0.00000000	0%	0.00000000	0%	0.00000000	0%	0.00000000	2274 Pine Road NW	Carrollton	OH	44615
11	LOIS J SWEAT	1.00000000	Yes	0.3214	0.00094112	15-0003587.000	Harrison	Carroll	OH	0%	0.00000000	100%	0.00094112	0%	0.00000000	0%	0.00000000	0%	0.00000000	0%	0.00000000	0%	0.00000000	0%	0.00000000	2274 Pine Road NW	Carrollton	OH	44615
12	JOSEPH & EVELYN H PETRIME	1.00000000	Yes	0.3222	0.00094245	15-0006955.000	Harrison	Carroll	OH	0%	0.00000000	100%	0.00094245	0%	0.00000000	0%	0.00000000	0%	0.00000000	0%	0.00000000	0%	0.00000000	0%	0.00000000	2274 Pine Road NW	Carrollton	OH	44615
13	DEBORAH ANN & LARRY GEORGE RIGGL	1.00000000	Yes	0.3214	0.00094112	15-0000580.000	Harrison	Carroll	OH	0%	0.00000000	100%	0.00094112	0%	0.00000000	0%	0.00000000	0%	0.00000000	0%	0.00000000	0%	0.00000000	0%	0.00000000	2288 Pine Street NW	Carrollton	OH	44615
14	DEBORAH ANN & LARRY GEORGE RIGGL	1.00000000	Yes	0.3214	0.00094112	15-0000581.000	Harrison	Carroll	OH	0%	0.00000000	100%	0.00094112	0%	0.00000000	0%	0.00000000	0%	0.00000000	0%	0.00000000	0%	0.00000000	0%	0.00000000	209 Maple Avenue NW	Carrollton	OH	44615
15	HAROLD C & KAREN L CAIN	1.00000000	Yes	0.3200	0.00093876	15-0005855.000	Harrison	Carroll	OH	0%	0.00000000	100%	0.00093876	0%	0.00000000	0%	0.00000000	0%	0.00000000	0%	0.00000000	0%	0.00000000	0%	0.00000000	1461 State Route 30	Carrollton	OH	44615
16	WILEY E & LINDA S MORGAN	1.00000000	Yes	0.3205	0.00093960	15-0005830.000	Harrison	Carroll	OH	0%	0.00000000	100%	0.00093960	0%	0.00000000	0%	0.00000000	0%	0.00000000	0%	0.00000000	0%	0.00000000	0%	0.00000000	150 Waynesburg Road	Carrollton	OH	44615
17	WILEY E & LINDA S MORGAN	1.00000000	Yes	0.3211	0.00094061	15-0005820.000	Harrison	Carroll	OH	0%	0.00000000	100%	0.00094061	0%	0.00000000	0%	0.00000000	0%	0.00000000	0%	0.00000000	0%	0.00000000	0%	0.00000000	150 Waynesburg Road	Carrollton	OH	44615
18	KEVIN K & MARTHA L SHIELDS	1.00000000	Yes	0.3214	0.00094112	15-0005840.000	Harrison	Carroll	OH	0%	0.00000000	100%	0.00094112	0%	0.00000000	0%	0.00000000	0%	0.00000000	0%	0.00000000	0%	0.00000000	0%	0.00000000	150 Academic Drive	Winston Salem	NC	27106
19	VINA M SMITH	1.00000000	Yes	0.3200	0.00093876	15-0007860.000	Harrison	Carroll	OH	0%	0.00000000	100%	0.00093876	0%	0.00000000	0%	0.00000000	0%	0.00000000	0%	0.00000000	0%	0.00000000	0%	0.00000000	2273 Pine Street	Carrollton	OH	44615
20	CHRISTOPHER M & JULIE A STAMP	1.00000000	Yes	0.3227	0.00094331	15-0005389.000	Harrison	Carroll	OH	0%	0.00000000	100%	0.00094331	0%	0.00000000	0%	0.00000000	0%	0.00000000	0%	0.00000000	0%	0.00000000	0%	0.00000000	6038 Whinery Road	Hanoverton	OH	44423
21	CHRISTOPHER M & JULIE A STAMP	1.00000000	Yes	0.3227	0.00094331	15-0005390.000	Harrison	Carroll	OH	0%	0.00000000	100%	0.00094331	0%	0.00000000	0%	0.00000000	0%	0.00000000	0%	0.00000000	0%	0.00000000	0%	0.00000000	6038 Whinery Road	Hanoverton	OH	44423
22	VINA M SMITH	1.00000000	Yes	0.3300	0.00095560	15-0007870.000	Harrison	Carroll	OH	0%	0.00000000	100%	0.00095560	0%	0.00000000	0%	0.00000000	0%	0.00000000	0%	0.00000000	0%	0.00000000	0%	0.00000000	2273 Pine Street	Carrollton	OH	44615
23	BLACK GOLD HOLDINGS LLC	1.00000000	Yes	0.3200	0.00093876	15-0009575.001	Harrison	Carroll	OH	0%	0.00000000	100%	0.00093876	0%	0.00000000	0%	0.00000000	0%	0.00000000	0%	0.00000000	0%	0.00000000	0%	0.00000000	Kenneth J. Joseph	Carrollton	OH	44615
24	ALLEN H & BETTY J BABE	1.00000000	Yes	0.3250	0.00094718	15-0005680.000	Harrison	Carroll	OH	0%	0.00000000	100%	0.00094718	0%	0.00000000	0%	0.00000000	0%	0.00000000	0%	0.00000000	0%	0.00000000	0%	0.00000000	PC Box 607	Carrollton	OH	44615
25	BLACK GOLD HOLDINGS LLC	1.00000000	Yes	0.3200	0.00093876	15-0005919.001	Harrison	Carroll	OH	0%	0.00000000	100%	0.00093876	0%	0.00000000	0%	0.00000000	0%	0.00000000	0%	0.00000000	0%	0.00000000	0%	0.00000000	2035 Alamo Road SE	Carrollton	OH	44615
26	DAVID W & SYLVIA J MORRISON	1.00000000	Yes	0.3260	0.00094886	15-0004156.000	Harrison	Carroll	OH	0%	0.00000000	100%	0.00094886	0%	0.00000000	0%	0.00000000	0%	0.00000000	0%	0.00000000	0%	0.00000000	0%	0.00000000	PO Box 607	Carrollton	OH	44615
27	CHRISTOPHER M & JULIE A STAMP	1.00000000	Yes	0.3387	0.00095704	15-0005880.000	Harrison	Carroll	OH	0%	0.00000000	100%	0.00095704	0%	0.00000000	0%	0.00000000	0%	0.00000000	0%	0.00000000	0%	0.00000000	0%	0.00000000	180 Walnut Street NW	Carrollton	OH	44615
28	GREGORY PASQUALE	1.00000000	Yes	0.3590	0.00096442	15-0006446.000	Harrison	Carroll	OH	0%	0.00000000	100%	0.00096442	0%	0.00000000	0%	0.00000000	0%	0.00000000	0%	0.00000000	0%	0.00000000	0%	0.00000000	6038 Whinery Road	Hanoverton	OH	44423
29	ALLEN H & BETTY J BABE	1.00000000	Yes	0.4900	0.00092396	15-0003569.000	Harrison	Carroll	OH	0%	0.00000000	100%	0.00092396	0%	0.00000000	0%	0.00000000	0%	0.00000000	0%	0.00000000	0%	0.00000000	0%	0.00000000	719 Lincoln Ave	Carrollton	OH	44615
30	JEFFREY L BORY	1.00000000	Yes	0.4980	0.00097348	15-0004452.000	Harrison	Carroll	OH	0%	0.00000000	0%	0.00000000	3%	0.00000000	0%	0.00000000	0%	0.00000000	0%	0.00000000	0%	0.00000000	0%	0.00000000	2035 Alamo Road SE	Carrollton	OH	44615
31	CASON K & JANICE E LEGGETT	1.00000000	Yes	0.4850	0.00096605	15-0003350.001	Harrison	Carroll	OH	0%	0.00000000	0%	0.00000000	3%	0.00032212	72%	0.00053995	25%	0.00018436	0%	0.00000000	0%	0.00000000	0%	0.00000000	2184 Canton Road NW	Carrollton	OH	44615
32	FLOYD D & LORRAINE A SKINNER	1.00000000	Yes	0.4940	0.00098171	15-0002765.000	Harrison	Carroll	OH	0%	0.00000000	100%	0.00098171	0%	0.00000000	0%	0.00000000	25%	0.00019151	0%	0.00000000	0%	0.00000000	0%	0.00000000	2218 Canton Road	Carrollton	OH	44615
33	WILLIAM E & JOAN M ENTERLINE	1.00000000	Yes	0.5060	0.00095191	15-0002959.000	Harrison	Carroll	OH	0%	0.00000000	100%	0.00095191	0%	0.00000000	0%	0.00000000	0%	0.00000000	0%	0.00000000	0%	0.00000000	0%	0.00000000	2113 Canton Road NW	Carrollton	OH	44615
34	RICHARD J & SALLY J SHIFFLETT	1.00000000	Yes	0.5070	0.00095360	15-0008946.000	Harrison	Carroll	OH	0%	0.00000000	100%	0.00095360	0%	0.00000000	0%	0.00000000	0%	0.00000000	0%	0.00000000	0%	0.00000000	0%	0.00000000	2129 Canton Road	Carrollton	OH	44615
35	VILLAGE OF CARROLLTON	1.00000000	Yes	1.0000</																									

Exhibit A-2																									
Tracts Within the Contract Area																									
Tract	Current Mineral Owner	% Mineral Ownership	LEASED Yes/No	Surface Acres In Unit	Tract Participation	Parcel ID	Township	County	State	Lessor Working Interest	Lessor Unit Participation	R.E. Gas Working Interest	R.E. Gas Unit Participation	Chesapeake Exploration Working Interest	Chesapeake Exploration Unit Participation	CHK Utica LLC Working Interest	CHK Utica LLC Unit Participation	TOTAL E&P USA LLC Working Interest	TOTAL E&P USA LLC Unit Participation	Belden & Blake Working Interest	Belden & Blake Unit Participation	Address	City	State	Zip
66	BOARD OF COMMISSIONERS	1.00000000	Yes	1.9127	0.00322034	MAPLE AVE	Harrison	Carroll	OH	0%	0.00000000	100%	0.00322034	0%	0.00000000	0%	0.00000000	0%	0.00000000	0%	0.00000000	Jeffrey L. Ohler, Commissioner	Carrollton	OH	44615
67	VICKI D & GLENN W RIGGS	1.00000000	Yes	2.0000	0.00336725	15-0000376.000	Harrison	Carroll	OH	0%	0.00000000	100%	0.00336725	0%	0.00000000	0%	0.00000000	0%	0.00000000	0%	0.00000000	119 S Lisbon Street, Suite 201	Carrollton	OH	44615
68	BARBARA K EDWARDS TRUST DATED FEBRUARY 15, 2000	1.00000000	Yes	1.8410	0.00309955	34-000044.017	Washington	Carroll	OH	0%	0.00000000	100%	0.00309955	0%	0.00000000	0%	0.00000000	0%	0.00000000	0%	0.00000000	Barbara K. Edwards, Trustee or successor trustee(s)	Milverna	OH	44657
69	SHIRLEY J SEVERN	1.00000000	Yes	2.1540	0.00362652	15-0000685.000	Harrison	Carroll	OH	0%	0.00000000	100%	0.00362652	0%	0.00000000	0%	0.00000000	0%	0.00000000	0%	0.00000000	86 Arbor Road NE	Carrollton	OH	44615
70	BETTY L EDWARDS	0.50000000	Yes	0.8400	0.00141424	15-0000253.000	Harrison	Carroll	OH	0%	0.00000000	100%	0.00141424	0%	0.00000000	0%	0.00000000	0%	0.00000000	0%	0.00000000	7107 Germane Road SE	Carrollton	OH	44615
71	TERRY R EDWARDS	0.50000000	Yes	0.8400	0.00141424	15-0000253.000	Harrison	Carroll	OH	0%	0.00000000	100%	0.00141424	0%	0.00000000	0%	0.00000000	0%	0.00000000	0%	0.00000000	43 Gallo Road NW	Carrollton	OH	44615
72	MARION L & BONNIE S GRIMES	1.00000000	Yes	2.2490	0.00377637	15-0000395.000	Harrison	Carroll	OH	0%	0.00000000	100%	0.00377637	0%	0.00000000	0%	0.00000000	0%	0.00000000	0%	0.00000000	55 Gallo Road NW	Carrollton	OH	44615
73	RICHARD A & DESIREE A STIDOM	1.00000000	Yes	1.6090	0.00270895	15-0000577.000	Harrison	Carroll	OH	0%	0.00000000	100%	0.00000000	3%	0.00000000	72%	0.00000000	25%	0.00000000	0%	0.00000000	403 Second Street	Amsterdam	OH	43903
74	CARROLL COUNTY COAL COMPANY	1.00000000	Yes	2.4440	0.00411478	34-0000316.002	Washington	Carroll	OH	0%	0.00000000	100%	0.00411478	0%	0.00000000	0%	0.00000000	0%	0.00000000	0%	0.00000000	11114 Orion Road	Sallenville	OH	44944
75	GARY L TEETER REVOCABLE TRUST DATED AUGUST 2, 2011	1.00000000	Yes	2.0000	0.00336725	15-0000886.000	Harrison	Carroll	OH	0%	0.00000000	100%	0.00000000	6%	0.00021390	69%	0.00281154	25%	0.00094181	0%	0.00000000	Scott F. Brown, President	Kirtland	OH	44094
76	SHAUN W & REGINA S FISH	1.00000000	Yes	2.5000	0.00420906	15-0000025.000	Harrison	Carroll	OH	0%	0.00000000	100%	0.00420906	0%	0.00000000	0%	0.00000000	0%	0.00000000	0%	0.00000000	Gary L Teeter, Trustee	Carrollton	OH	44615
77	JOY L REED	1.00000000	Yes	2.8540	0.00480506	15-00004974.000	Harrison	Carroll	OH	0%	0.00000000	100%	0.00480506	0%	0.00000000	0%	0.00000000	0%	0.00000000	0%	0.00000000	1070 Waynesburg Road NW	Carrollton	OH	44615
78	BARBARA K EDWARDS TRUST DATED FEBRUARY 15, 2000	1.00000000	Yes	2.9500	0.00495669	15-0005118.002	Harrison	Carroll	OH	0%	0.00000000	100%	0.00495669	0%	0.00000000	0%	0.00000000	0%	0.00000000	0%	0.00000000	131 Waynesburg Road	Carrollton	OH	44615
79	WILLIAM F & KATHLEEN C HURDLE	0.50000000	Yes	1.4770	0.00248671	34-0000034.002	Washington	Carroll	OH	0%	0.00000000	100%	0.00248671	0%	0.00000000	0%	0.00000000	0%	0.00000000	0%	0.00000000	1171 Lindy Lane NW	Carrollton	OH	44615
80	BARBARA K EDWARDS TRUST DATED FEBRUARY 15, 2000	0.50000000	Yes	1.4770	0.00248671	34-0000044.002	Washington	Carroll	OH	0%	0.00000000	100%	0.00248671	0%	0.00000000	0%	0.00000000	0%	0.00000000	0%	0.00000000	Barbara K. Edwards, Trustee or successor trustee(s)	Milverna	OH	44657
81	BARBARA K EDWARDS TRUST DATED FEBRUARY 15, 2000	0.50000000	Yes	1.4770	0.00248671	34-0000044.002	Washington	Carroll	OH	0%	0.00000000	100%	0.00248671	0%	0.00000000	0%	0.00000000	0%	0.00000000	0%	0.00000000	1616 Lexington Ave	Mansfield	OH	44907
82	BARBARA K EDWARDS TRUST DATED FEBRUARY 15, 2000	1.00000000	Yes	3.1940	0.00597249	15-0005118.002	Harrison	Carroll	OH	0%	0.00000000	100%	0.00597249	0%	0.00000000	0%	0.00000000	0%	0.00000000	0%	0.00000000	Barbara K. Edwards, Trustee or successor trustee(s)	Milverna	OH	44657
83	WILLIAM F & KATHLEEN C HURDLE	0.50000000	Yes	1.7250	0.00290425	34-0000044.003	Washington	Carroll	OH	0%	0.00000000	100%	0.00290425	0%	0.00000000	0%	0.00000000	0%	0.00000000	0%	0.00000000	86 Arbor Road NE	Milverna	OH	44657
84	JEFFREY L & TASHIA L FARMER	0.50000000	Yes	1.7250	0.00290425	34-0000044.003	Washington	Carroll	OH	0%	0.00000000	100%	0.00000000	2%	0.00000000	36%	0.002929106	13%	0.00072055	0%	0.00000000	1616 Lexington Ave	Mansfield	OH	44907
85	WILLIAM H JR & JANET D GRIMES	1.00000000	Yes	3.8380	0.00646175	15-0005053.000	Harrison	Carroll	OH	0%	0.00000000	100%	0.00646175	0%	0.00000000	0%	0.00000000	0%	0.00000000	0%	0.00000000	26 Gallo Road	Carrollton	OH	44615
86	CARROLL COUNTY COAL COMPANY	1.00000000	Yes	4.4400	0.00747529	34-0000317.002	Washington	Carroll	OH	0%	0.00000000	100%	0.00747529	0%	0.00000000	0%	0.00000000	0%	0.00000000	0%	0.00000000	1196 Brenner Road N.E.	Carrollton	OH	44615
87	BRIAN M & DARLENE M KNOTT	1.00000000	Yes	4.0000	0.00673449	15-0000893.007	Harrison	Carroll	OH	0%	0.00000000	100%	0.00673449	0%	0.00000000	0%	0.00000000	0%	0.00000000	0%	0.00000000	Scott F. Brown, President	Kirtland	OH	44094
88	DAVID W HALLETT	1.00000000	Yes	4.0000	0.00673449	15-0000893.005	Harrison	Carroll	OH	0%	0.00000000	100%	0.00673449	0%	0.00000000	0%	0.00000000	0%	0.00000000	0%	0.00000000	9717 Chillicothe Road	Kirtland	OH	44094
89	DAVID W HALLETT	1.00000000	Yes	4.0000	0.00673449	15-0000893.006	Harrison	Carroll	OH	0%	0.00000000	100%	0.00673449	0%	0.00000000	0%	0.00000000	0%	0.00000000	0%	0.00000000	72 Waynesburg Road NW	Carrollton	OH	44615
90	WILLIAM & TIFANY STRAGAN	0.50000000	Yes	2.0015	0.00336977	34-0000044.004	Washington	Carroll	OH	0%	0.00000000	100%	0.00336977	0%	0.00000000	0%	0.00000000	0%	0.00000000	0%	0.00000000	114 Waynesburg NW	Carrollton	OH	44615
91	WILLIAM F & KATHLEEN C HURDLE	0.50000000	Yes	2.0015	0.00336977	34-0000044.004	Washington	Carroll	OH	0%	0.00000000	100%	0.00336977	0%	0.00000000	0%	0.00000000	0%	0.00000000	0%	0.00000000	1616 Lexington Ave	Mansfield	OH	44907
92	DUAL & DONNA MAE MALLERNEE	1.00000000	Yes	4.3000	0.00723958	15-0000509.000	Harrison	Carroll	OH	0%	0.00000000	100%	0.00723958	0%	0.00000000	0%	0.00000000	0%	0.00000000	0%	0.00000000	1196 Brenner Road N.E.	Carrollton	OH	44615
93	CARROLL COUNTY COAL COMPANY	1.00000000	Yes	4.3320	0.00723958	34-0000320.002	Washington	Carroll	OH	0%	0.00000000	100%	0.00723958	0%	0.00000000	0%	0.00000000	0%	0.00000000	0%	0.00000000	Scott F. Brown, President	Kirtland	OH	44094
94	WILLIAM F & KATHLEEN C HURDLE	0.50000000	Yes	2.3555	0.00395977	34-0000044.015	Washington	Carroll	OH	0%	0.00000000	100%	0.00395977	0%	0.00000000	0%	0.00000000	0%	0.00000000	0%	0.00000000	9717 Chillicothe Road	Kirtland	OH	44094
95	DOROTHY M PLACE	0.50000000	Yes	2.3555	0.00395977	34-0000044.015	Washington	Carroll	OH	0%	0.00000000	100%	0.00395977	0%	0.00000000	0%	0.00000000	0%	0.00000000	0%	0.00000000	1616 Lexington Ave	Mansfield	OH	44907
96	WAYNE A & LISA M SHAW	1.00000000	Yes	4.8140	0.00810496	15-0005118.004	Harrison	Carroll	OH	0%	0.00000000	100%	0.00810496	0%	0.00000000	0%	0.00000000	0%	0.00000000	0%	0.00000000	Gallo Road	Carrollton	OH	44615
97	DAVID W HALLETT	1.00000000	Yes	4.8500	0.00816557	15-0000222.000	Harrison	Carroll	OH	0%	0.00000000	100%	0.00816557	0%	0.00000000	0%	0.00000000	0%	0.00000000	0%	0.00000000	9330 Briar Road NW	Magnolia	OH	44649
98	BRET M & KIMBERLY L BARNA	1.00000000	Yes	5.0260	0.00846189	15-0000893.003	Harrison	Carroll	OH	0%	0.00000000	100%	0.00846189	0%	0.00000000	0%	0.00000000	0%	0.00000000	0%	0.00000000	114 Waynesburg NW	Carrollton	OH	44615
99	GEORGE W JOHNSON	1.00000000	Yes	5.0440	0.00849220	34-0000044.014	Washington	Carroll	OH	0%	0.00000000	100%	0.00849220	0%	0.00000000	0%	0.00000000	0%	0.00000000	0%	0.00000000	88 Waynesburg Road NW	Carrollton	OH	44615
100	VINA M SMITH	1.00000000	Yes	5.1000	0.00838648	34-0000044.015	Washington	Carroll	OH	0%	0.00000000	100%	0.00838648	0%	0.00000000	0%	0.00000000	0%	0.00000000	0%	0.00000000	27 Gallo Road NE	Carrollton	OH	44615
101	LASHAWN A HILL	0.50000000	Yes	2.5500	0.00429324	34-0000044.005	Washington	Carroll	OH	0%	0.00000000	100%	0.00429324	0%	0.00000000	0%	0.00000000	0%	0.00000000	0%	0.00000000	2273 Pine Street NW	Carrollton	OH	44615
102	JESSICA L KING HILL	0.50000000	Yes	2.5500	0.00429324	34-0000044.005	Washington	Carroll	OH	0%	0.00000000	100%	0.00429324	0%	0.00000000	0%	0.00000000	0%	0.00000000	0%	0.00000000	41 Gallo Road NE	Carrollton	OH	44615
103	LASHAWN A HILL	0.50000000	Yes	2.5500	0.00429324	34-0000044.006	Washington	Carroll	OH	0%	0.00000000	100%	0.00429324	0%	0.00000000	0%	0.00000000	0%	0.00000000	0%	0.00000000	41 Gallo Road NE	Carrollton	OH	44615
104	JESSICA L KING HILL	0.50000000	Yes	2.5500	0.00429324	34-0000044.007	Washington	Carroll	OH	0%	0.00000000	100%	0.00429324	0%	0.00000000	0%	0.00000000	0%	0.00000000	0%	0.00000000	41 Gallo Road NE	Carrollton	OH	44615
105	HOLLY E & FREDA A DALTON	1.00000000	Yes	5.1000	0.00838648	34-0000044.007	Washington	Carroll	OH	0%	0.000														

Exhibit A-2

Tracts Within the Contract Area																												
Tract	Current Mineral Owner	% Mineral Ownership	LEASED Yes/No	Surface Acres In Unit	Tract Participation	Parcel ID	Township	County	State	Lessor Working Interest	Lessor Unit Participation	R.E. Gas Working Interest	R.E. Gas Unit Participation	Chesapeake Exploration Working Interest	Chesapeake Exploration Unit Participation	CHK Utica LLC Working Interest	CHK Utica LLC Unit Participation	TOTAL E&P USA LLC Working Interest	TOTAL E&P USA LLC Unit Participation	Belden & Blake Working Interest	Belden & Blake Unit Participation	Address	City	State	Zip			
118	MICHAEL J WYNN	1.00000000	Yes	34.7550	0.05851601	34-0000421.000	Washington	Carroll	OH	0%	0.00000000	100%	0.05851601	0%	0.00000000	0%	0.00000000	0%	0.00000000	0%	0.00000000	0%	0.00000000	101 Waynesburg Road	Carrollton	OH	44615	
119	JOHN G & JEAN GEARHART	1.00000000	Yes	63.2710	0.10652452	15-0000892.000	Harrison	Carroll	OH	0%	0.00000000	100%	0.10652452	0%	0.00000000	0%	0.00000000	0%	0.00000000	0%	0.00000000	0%	0.00000000	2520 Maplegrove NE	Louisville	OH	44641	
	GARY L TEETER REVOCABLE TRUST	1.00000000	No	69.4900	0.11699497	15-0000555.000	Harrison	Carroll	OH	100%	0.11699497	0%	0.00000000	0%	0.00000000	0%	0.00000000	0%	0.00000000	0%	0.00000000	0%	0.00000000	Gary L Teeter, Trustee				
120	DATED AUGUST 2, 2011	1.00000000	No	69.4900	0.11699497	15-0000555.000	Harrison	Carroll	OH	100%	0.11699497	0%	0.00000000	0%	0.00000000	0%	0.00000000	0%	0.00000000	0%	0.00000000	0%	0.00000000	1070 Waynesburg Road NW	Carrollton	OH	44615	
121	GARY F & JILL R HENRY	1.00000000	Yes	0.0024	0.00000404	09-0000442.004	Center	Carroll	OH	0%	0.00000000	100%	0.00000404	0%	0.00000000	0%	0.00000000	0%	0.00000000	0%	0.00000000	0%	0.00000000	603 Garfield Avenue	Carrollton	OH	44615	
122	EUGENE C & SHIRLEY A THOMPSON	1.00000000	Yes	0.0021	0.00000354	15-0000286.000	Harrison	Carroll	OH	0%	0.00000000	100%	0.00000354	0%	0.00000000	0%	0.00000000	0%	0.00000000	0%	0.00000000	0%	0.00000000	2318 Canton Road NW	Carrollton	OH	44615	
123	EUGENE C & SHIRLEY A THOMPSON	1.00000000	Yes	0.0088	0.00001482	15-0000287.001	Harrison	Carroll	OH	0%	0.00000000	100%	0.00001482	0%	0.00000000	0%	0.00000000	0%	0.00000000	0%	0.00000000	0%	0.00000000	2318 Canton Road NW	Carrollton	OH	44615	
124	WAYNE A HARPER	1.00000000	Yes	0.0010	0.00000168	15-0000692.000	Harrison	Carroll	OH	0%	0.00000000	100%	0.00000168	0%	0.00000000	0%	0.00000000	0%	0.00000000	0%	0.00000000	0%	0.00000000	2167 Canton Road NW	Carrollton	OH	44615	
125	STANLEY ROBERT GEORGE	1.00000000	Yes	0.0003	0.00000051	15-0000304.000	Harrison	Carroll	OH	0%	0.00000000	0%	0.00000000	3%	0.00000002	94%	0.00000017	25%	0.00000019	36%	0.00000015	0%	0.00000015	252 Waynesburg Road	Carrollton	OH	44615	
				593.9571	1.00000000						0.1197595		0.6511352		0.0029239		0.0176183		0.0072763		0.0010868							

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

In re the Matter of the Application of :  
R.E. Gas Development, LLC for : Application Date: May 13, 2014  
Unit Operation :  
:  
Grunder North Unit

**WORKING INTEREST OWNER APPROVAL**

R.E. Gas Development, LLC ("Applicant") has prepared and/or filed an application asking the Chief of the Division of Oil and Gas Resources Management to issue an order authorizing Applicant to operate the Grunder North Unit, located in Carroll County, Ohio, and consisting of one hundred twenty five (125) separate tracts of land covering approximately 593.9571 acres, according to the Unit Plan attached thereto (the "Application").

TOTAL E&P USA, Inc. is the owner (as that term is defined in Ohio Revised Code § 1509.01(K)) of 6 tract(s) of land covering approximately 15.6133 acres contained in the Grunder North Unit, or .65717 % of the lands in the unit, all as more specifically described on attached Exhibit 1.

TOTAL E&P USA, Inc. hereby approves, and supports the making of, the Application, including without limitation the Unit Plan attached thereto, and acknowledges receipt of full and true copies thereof.

TOTAL E&P USA, Inc.

By:  \_\_\_\_\_  
Jean Fournier  
VP, Finance, Marketing & Corporate Support  
Date: 05/20/2014

Exhibit 1

TRACT NUMBER	LESSOR	SURFACE ACRES IN UNIT	PARCEL ID NUMBER
63	Stanley Robert George	1.721	15-0000306.000
72	Richard A. & Desiree A. Stidom	1.609	15-0000577.000
74	Gary L. Teeter Revocable Trust Dated August 2, 2011	2.000	15-0000886.000
80	Jeffrey L. & Tashia L. Farmer	1.725	34-0000044.003
103	Gary L. Teeter	8.558	15-0000893.002
125	Stanley Robert George	.0003	15-0000304.000

Grunder North  
Exhibit DR-2

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

In re the Matter of the Application of :  
R.E. Gas Development, LLC for : Application Date: May 13, 2014  
Unit Operation :  
:  
Grunder North Unit :

**AFFIDAVIT OF MATT KRAMER  
(CONTACTS – UNLEASED MINERAL OWNERS AND  
UNCOMMITTED WORKING INTEREST OWNERS)**

I, Matt Kramer, being first duly cautioned and sworn, do hereby depose and state as follows:

1. I am a Project Manager for Western Land Services (“Land Company”). R.E. Gas Development, LLC (“Applicant”) has contracted with the Land Company to obtain oil and gas leases in specific units and areas of interest in the State of Ohio.

2. My day-to-day responsibilities include, without limitation, overseeing leasing efforts, resolving issues with landowners, and tracking the efforts of the Land Company to obtain oil and gas leases in the specific units and areas of interest for Applicant in the State of Ohio.

3. As part of those responsibilities, I supervise contractors, including individuals from the Land Company, who contact landowners to obtain oil and gas leases on behalf of Applicant. Further, I too meet and work with landowners to obtain oil and gas leases and curative documents on behalf of Applicant.

4. I have personal knowledge of the contacts that I have made and attempted to make on behalf of Applicant to lease lands and obtain curative documents relating to leased lands within the Grunder North Unit. Those efforts are detailed below.

5. Regarding the following unleased tract, the following contacts were made or attempted:

**Parcel No. 15-0000555.000 (Tract 120)  
Owner’s Name: Gary L. Teeter, Trustee of the Gary L. Teeter Revocable Trust dated August 2, 2011 (“Current Owner”)**

Date	Party Contacted	By Whom	Method	Address of Contact	Response
9/2011	Gary L. Teeter	Matt Kramer	Home Visit	1070 Waynesburg Rd. Carrollton, Ohio 44615	Would not sign curative document.
10/2011	Gary L. Teeter	Matt Kramer	Home Visit	1070 Waynesburg Rd. Carrollton, Ohio 44615	Would not sign curative document.
2/2012	Gary L. Teeter	Matt Kramer	Home Visit	1070 Waynesburg Rd. Carrollton, Ohio 44615	Would not sign curative document.

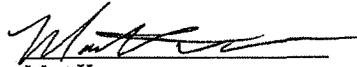
6. There was an oil and gas lease between Image Incorporated (owned by Mr. Teeter) and Applicant which was filed of record by a Memorandum of Oil and Gas Lease dated June 25, 2011, filed of record on February 15, 2012 and recorded in Volume 0079, Page 3705 of the Carroll County Recorders Office. However, there was curative that needed to be initialed on the Memorandum of Oil and Gas Lease. As set forth above, Mr. Teeter would not sign the necessary curative.

7. In February 2012, I learned that there was a second oil and gas lease on the property with Chesapeake in a conversation with Mr. Teeter after Rex recorded their MOL. Rex then formally released the MOL on August 28, 2012, in Volume 0086, Page 0185 of the Carroll County Records. A search of the Carroll County Records shows that Mr. Teeter deeded the Image Incorporated property to Teeter Gary L Revocable Trust in a deed dated 12/16/2011 and filed of record in Volume 0077, Page 4228, and an MOL was signed by Gary L. Teeter, Trustee to Chesapeake Exploration LLC, dated November 30, 2011 by the Teeter, Gary L Revocable Trust, filed of record in Volume 0080, Page 1877 of the Carroll County Records Office, and subsequently released by and instrument signed July 9, 2013 and filed of record in Volume 0095, Page 4813

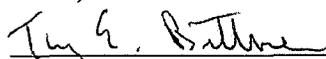
8. Thereafter, the following contacts were made or attempted to obtain a new oil and gas lease from Mr. Teeter:

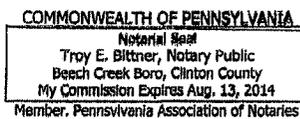
<u>Date</u>	<u>Party Contacted</u>	<u>By Whom</u>	<u>Method</u>	<u>Address of Contact</u>	<u>Response</u>
3/2013	Gary L. Teeter	Paul Meyers	Home Visit	1070 Waynesburg Rd. Carrollton, Ohio 44615	Gary wanted \$5,800/acre.
10/2013	Gary L. Teeter	Paul Meyers	Home Visit	1070 Waynesburg Rd. Carrollton, Ohio 44615	Gary would not sign lease even though we offered him the \$5800/acre he wanted

Further sayeth Affiant naught.

  
Matt Kramer

Sworn to and subscribed before me this 29<sup>th</sup> day of May, 2014.

  
Notary Public



Grunder North  
Exhibit DR-2

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

In re the Matter of the Application of :  
R.E. Gas Development, LLLC for : Application Date: May 13, 2014  
Unit Operation :  
:  
Grunder North Unit :

**AFFIDAVIT OF PAUL MEYERS  
(CONTACTS – UNLEASED MINERAL OWNERS AND  
UNCOMMITTED WORKING INTEREST OWNERS)**

I, Paul Meyers, being first duly cautioned and sworn, do hereby depose and state as follows:

1. I am a Land Agent for Western Land Services (“Land Company”). R.E. Gas Development, LLC (“Applicant”) has contracted with the Land Company to obtain oil and gas leases in specific units and areas of interest in the State of Ohio.

2. My day-to-day responsibilities include, without limitation, obtaining oil and gas leases, rights-of-way, and curative documents and resolving issues with landowners in the specific units and areas of interest for Applicant in the State of Ohio.

3. As part of those responsibilities, I meet and work with landowners to obtain oil and gas leases on behalf of Applicant.

4. I have personal knowledge of the contacts that I have made and attempted to make on behalf of Applicant to lease lands within the Grunder North Unit. Those efforts are detailed below.

5. Regarding the following unleased tract, the following contacts were made or attempted:

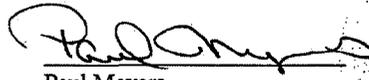
**Parcel No. 15-0000721.000 (Tract 62)**  
**Owner’s Name: Ronald G. Roudebush, Trustee (“Current Owner”)**

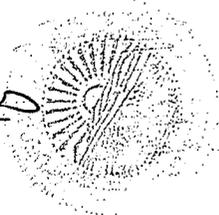
<u>Date</u>	<u>Party Contacted</u>	<u>By Whom</u>	<u>Method</u>	<u>Address of Contact</u>	<u>Response</u>
3/12/2013	Ronald Roudebush	Paul Meyers	Home Visit	10331 New Road N. Jackson, Ohio	Non-responsive.
4/17/2013	Ronald Roudebush	Paul Meyers	Home Visit	10331 New Road N. Jackson, Ohio	At the second visit, he was unresponsive to the offer.

6. During my second visit with Mr. Ronald Roudebush, I obtained the name of his brother, Jay Roudebush, and the following contacts were made or attempted with Mr. Jay Roudebush:

<u>Date</u>	<u>Party Contacted</u>	<u>By Whom</u>	<u>Method</u>	<u>Address of Contact</u>	<u>Response</u>
5/6/2013	Jay Roudebush	Paul Meyers	Home Visit	10331 New Road N. Jackson, Ohio	Rex's offer was not good enough.
7/10/2013	Jay Roudebush	Paul Meyers	Home Visit	10331 New Road N. Jackson, Ohio	They would lease if Rex bought the house.

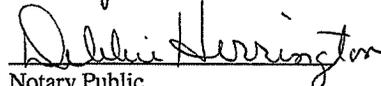
Further sayeth Affiant naught.

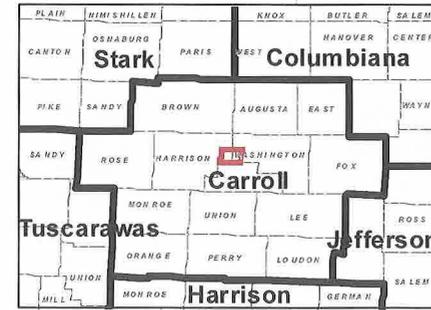
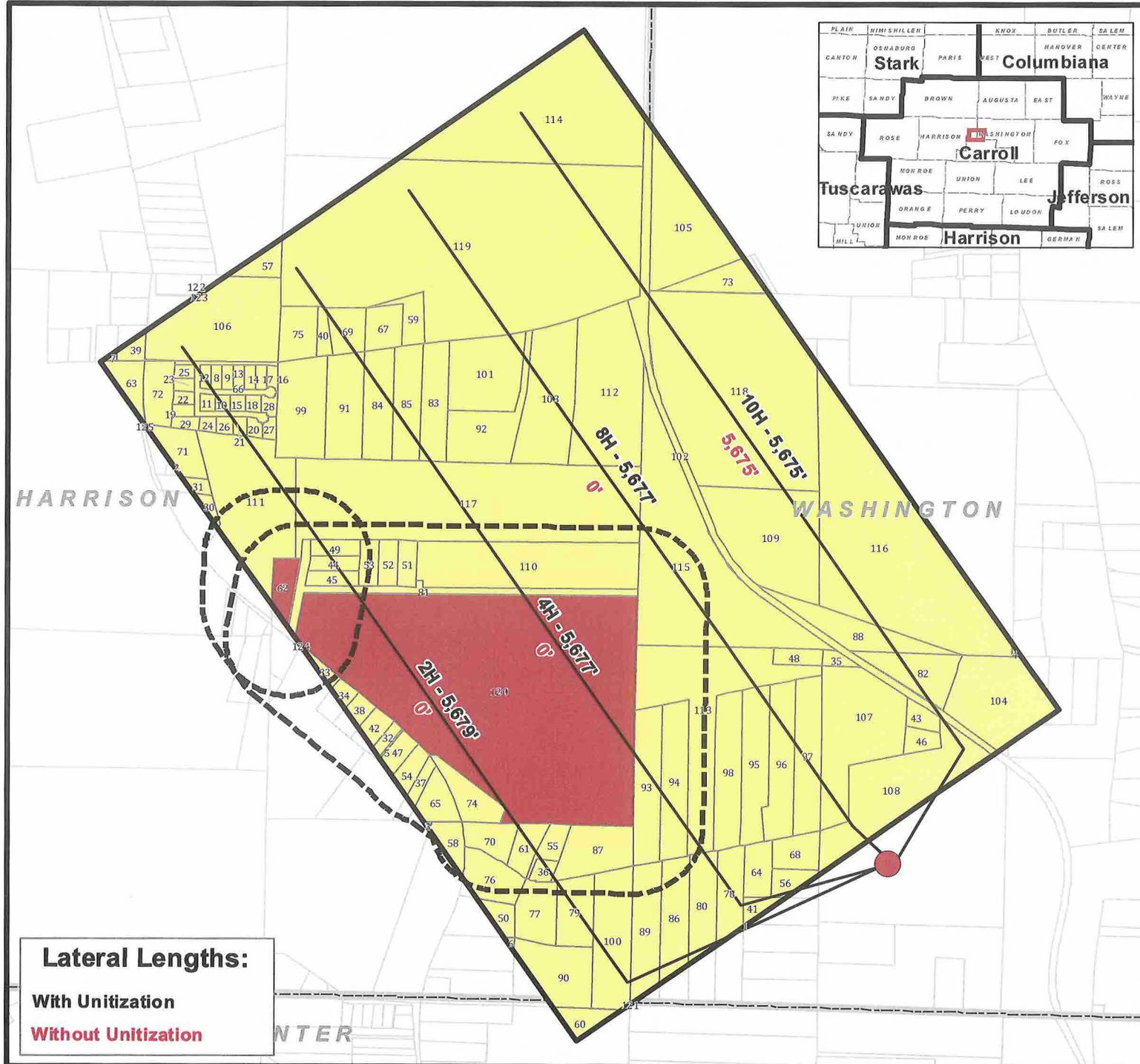
  
Paul Meyers



Sworn to and subscribed before me this 21 day of May, 2014.

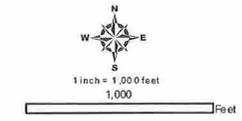
**DEBBIE HERRINGTON**  
NOTARY PUBLIC • STATE OF OHIO  
Recorded in Carroll County  
My commission expires Nov. 17, 2016

  
Notary Public



**Grunder North Unit  
Center/Washington/  
Harrison Township  
Carroll County, OH**

-  Pad Site
-  500' Set-Back
-  Laterals
-  Unit Boundary
-  REX/WI Owners
-  OPEN



**REX ENERGY**<sup>®</sup>  
 366 Walker Drive  
 State College, PA 16801  
 Phone: (814) 278-7267 Fax: (814) 278-7286  
 www.RexEnergy.com

NAD\_1983\_StatePlane\_Ohio\_North\_Feet  
 Projection: Lambert\_Conformal\_Conic  
 Linear Units: Feet  
 Datum: D\_North\_American\_1983  
 R:\Ohio\Warrior\_North\MXD\Units\Grunder North HB3.mxd

**Lateral Lengths:**  
 With Unitization  
 Without Unitization

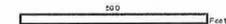


**Grunder North Unit  
Center/Washington/  
Harrison Township  
Carroll County, OH**

-  Laterals
-  Unit Boundary
-  REX/WI Owners
-  OPEN

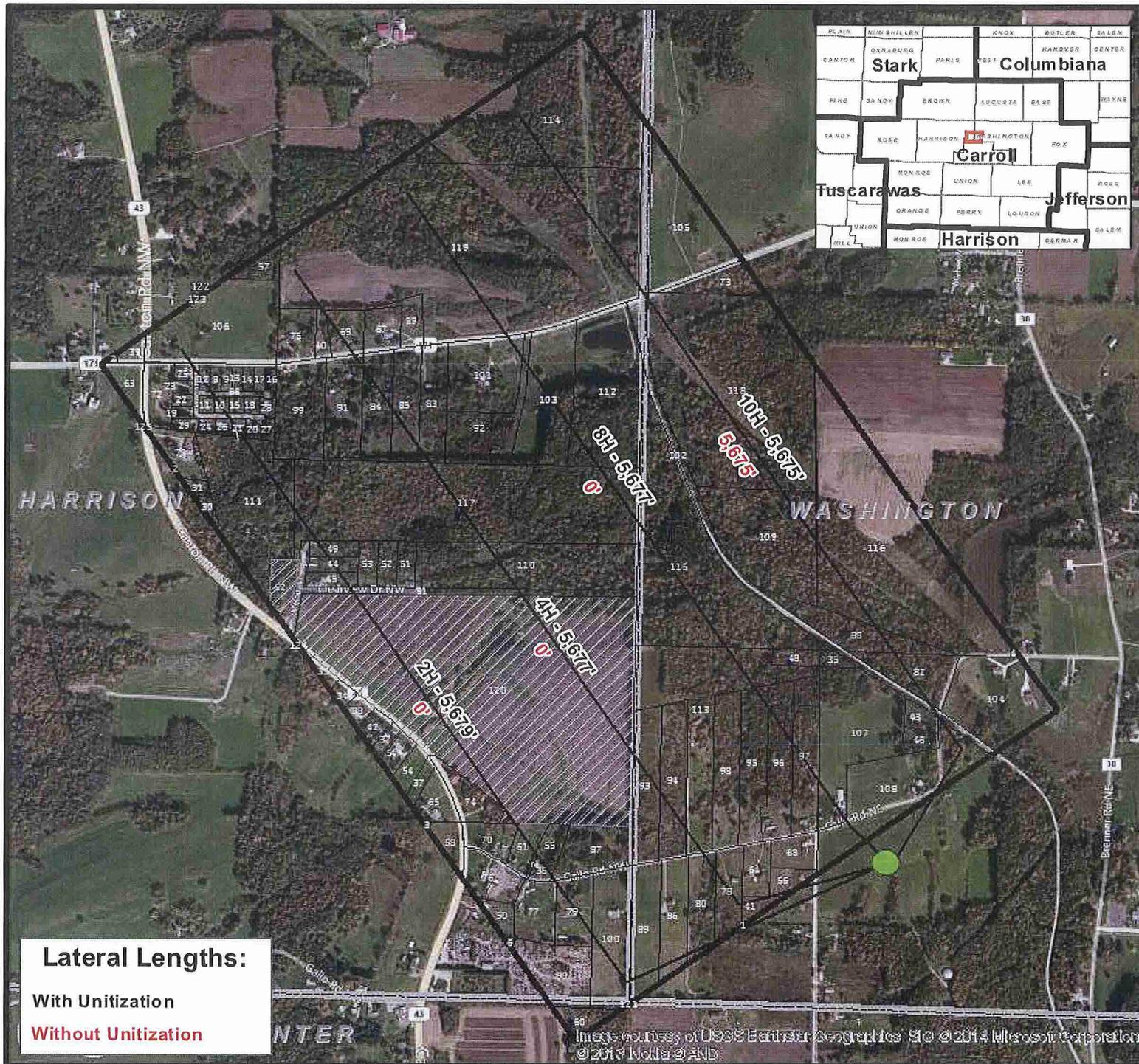


1 inch = 500 feet



366 Walker Drive  
State College, PA 16801  
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www.RexEnergy.com

NAD\_1983\_StatePlane\_Ohio\_North\_Feet  
Projection: Lambert\_Conformal\_Conic  
Linear Unit: Feet  
Datum: D\_North\_American\_1983

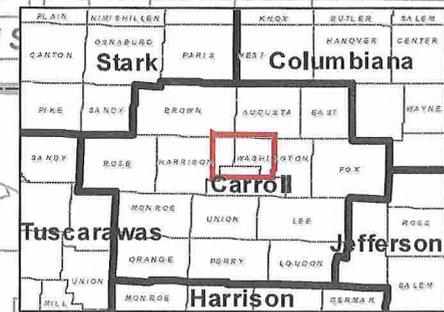
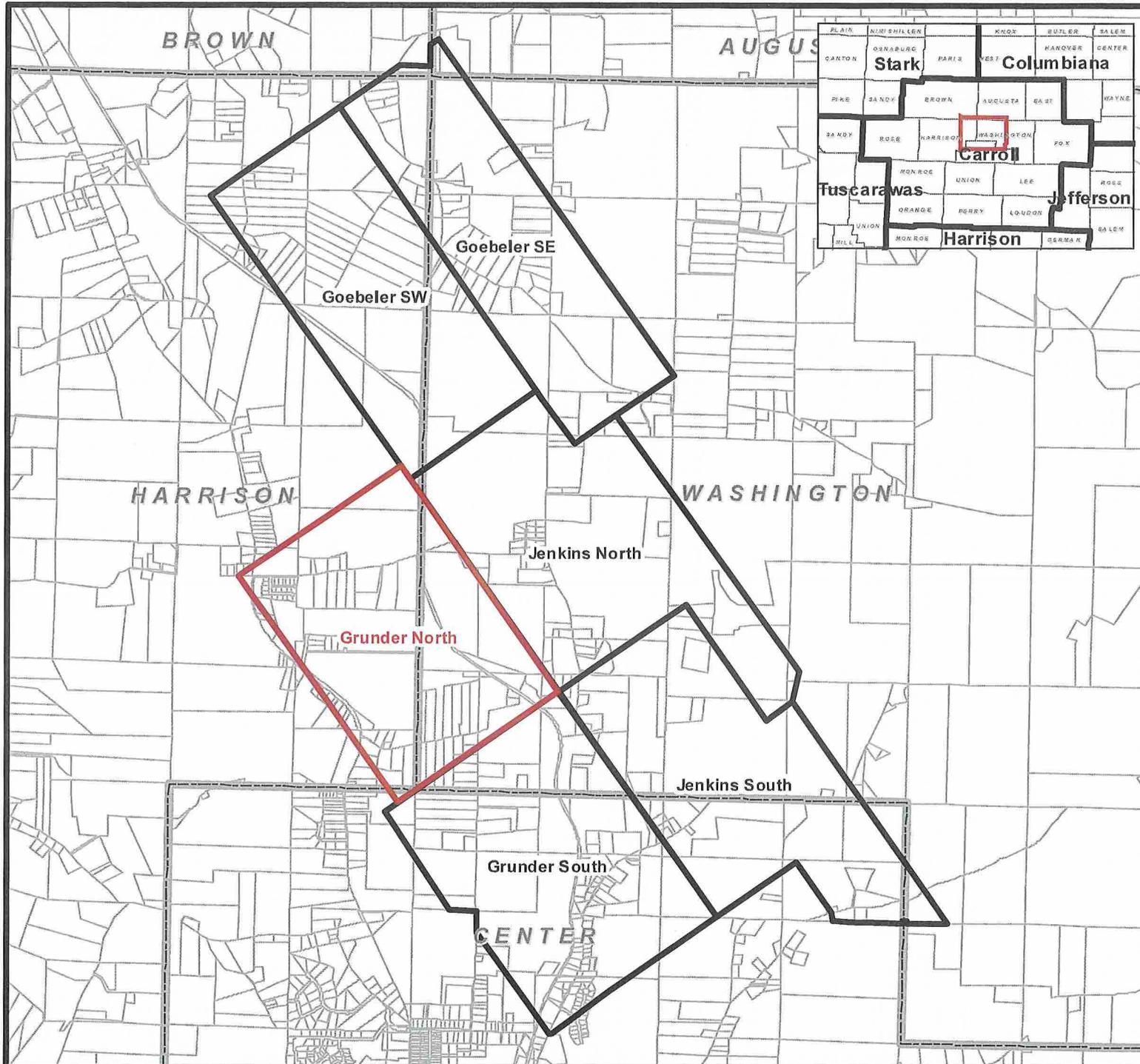


**Grunder North Unit  
 Center/Washington/  
 Harrison Township  
 Carroll County, OH**

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NAD\_1983\_StatePlane\_Ohio\_North\_Feet  
 Projection: Lambert\_Conformal\_Conic  
 Linear Unit: Feet  
 Datum: D\_North\_American\_1983

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**Grunder North Unit  
Washington/Harrison/  
Center Townships  
Carroll County, OH**

-  Grunder North
-  Adjacent Units



1 inch = 3,000 feet  
3,000 Feet

**REX ENERGY**  
366 Walker Drive  
State College, PA 16801  
Phone: (814) 278-7267 Fax: (814) 278-7286  
www.RexEnergy.com

NAD\_1983\_StatePlane\_Ohio\_North\_Feet  
Projection: Lambert\_Conformal\_Conic  
Linear Unit: Feet  
Datum: D\_North\_American\_1983

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

In re the Matter of the Application of :  
R.E. Gas Development, LLC for : Application Date: May 13, 2014  
Unit Operation :  
:  
Grunder North Unit :

**WORKING INTEREST OWNER APPROVAL**

R.E. Gas Development, LLC (“Applicant”) has prepared and/or filed an application asking the Chief of the Division of Oil and Gas Resources Management to issue an order authorizing Applicant to operate the Grunder North Unit, located in Carroll County, Ohio, and consisting of one hundred twenty five (125) separate tracts of land covering approximately 593.9571 acres, according to the Unit Plan attached thereto (the “Application”).

Chesapeake Utica, LLC is the owner (as that term is defined in Ohio Revised Code § 1509.01(K)) of 7 tract(s) of land covering approximately 16.0513 acres contained in the Grunder North Unit, or 1.78183 % of the lands in the unit, all as more specifically described on attached Exhibit 1.

Chesapeake Utica, LLC hereby approves, and supports the making of, the Application, including without limitation the Unit Plan attached thereto, and acknowledges receipt of full and true copies thereof.

**Chesapeake Utica, LLC**  
an Oklahoma limited liability Company

By:   
Dan Weinmeister, Land Manager – Appalachia South *cl*

Exhibit 1

TRACT NUMBER	LESSOR	SURFACE ACRES IN UNIT	PARCEL ID NUMBER
30	Jeffrey L Bory	.438	15-0000452.000
63	Stanley Robert George	1.721	15-0000306.000
72	Richard A. & Desiree A. Stidom	1.609	15-0000577.000
74	Gary L. Teeter Revocable Trust Dated August 2, 2011	2.000	15-0000886.000
80	Jeffrey L. & Tashia L. Farmer	1.725	34-0000044.003
103	Gary L. Teeter	8.558	15-0000893.002
125	Stanley Robert George	.0003	15-0000304.000