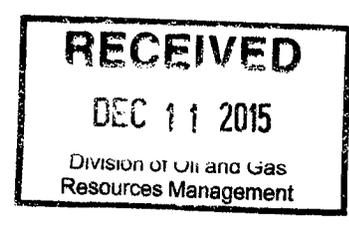


**STATE OF OHIO  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL AND GAS RESOURCES MANAGEMENT**

In re the Matter of the Application of Eclipse  
Resources I, LP for Unit Operation  
  
Hannahs Unit

Application Date: December 11, 2015



---

**APPLICATION OF ECLIPSE RESOURCES I, LP ("ECLIPSE")  
FOR UNIT OPERATION**

---

W. Jonathan Airey (0017437)  
Gregory D. Russell (0059718)  
J. Taylor Airey (0081092)  
Ilya Batikov (0087968)  
VORYS, SATER, SEYMOUR AND PEASE LLP  
52 East Gay Street  
P. O. Box 1008  
Columbus, Ohio 43216-1008

Attorneys for Applicant,  
Eclipse Resources I, LP

TABLE OF CONTENTS

APPLICATION

I. APPLICANT INFORMATION.....1

II. PROJECT DESCRIPTION.....2

III. TESTIMONY .....2

IV. THE CHIEF SHOULD GRANT THIS APPLICATION .....3

    A. Legal Standard .....3

    B. Eclipse’s Application Meets this Standard .....4

        i. *The Unitized Formation is Part of a Pool* .....4

        ii. *Unit Operations Are Reasonably Necessary to Increase Substantially the Ultimate Recovery of Oil and Gas* .....5

        iii. *The Value of Additional Recovery Exceeds Its Additional Costs* .....5

        iv. *The Unit Plan Meets the Requirements of Ohio Revised Code § 1509.28* .....5

V. HEARING.....6

VI. CONCLUSION.....6

EXHIBITS

- Attachment 1 Unit Plan
- Attachment 2 Prepared Direct Testimony of Valerie Beckham-Feller (“Geologist”)
- Attachment 3 Prepared Direct Testimony of Mark Spears (“Reservoir Engineer”)
- Attachment 4 Prepared Direct Testimony of Austin Graybill (“Landman”)

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

In re the Matter of the Application of :  
Eclipse Resources I, LP for Unit Operation : Application Date: December 11, 2015  
: :  
Hannahs Unit :

**APPLICATION**

Pursuant to Ohio Revised Code Section 1509.28, Eclipse Resources I, LP (“Eclipse”), hereby respectfully requests the Chief of the Division of Oil and Gas Resources Management (“Division”) for an order authorizing Eclipse to operate the Unitized Formation and applicable land area in Monroe and Noble Counties, Ohio (hereinafter, the “Hannahs Unit”) as a unit according to the Unit Plan attached hereto and as more fully described herein. Eclipse 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**

Eclipse is a corporation organized under the laws of the State of Delaware, with its principal office located at 2121 Old Gatesburg Road, Suite 110, State College, Pennsylvania 16803. Eclipse is registered in good standing as an “owner” with the Division.

Eclipse 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:

W. Jonathan Airey  
Gregory D. Russell  
J. Taylor Airey  
Ilya Batikov  
Vorys, Sater, Seymour and Pease LLP  
52 E. Gay Street  
P. O. Box 1008  
Columbus, Ohio 43216-1008  
Tel. (614) 464-6400  
E-mail: [wjairey@vorys.com](mailto:wjairey@vorys.com)  
[gdrussell@vorys.com](mailto:gdrussell@vorys.com)  
[jtairey@vorys.com](mailto:jtairey@vorys.com)  
[ibatikov@vorys.com](mailto:ibatikov@vorys.com)

Anthony Jesko  
Staff Attorney  
Eclipse Resources I, LP  
2121 Old Gatesburg Road, Suite 110  
State College, Pennsylvania 16803  
Tel. (814) 409-7060  
E-mail: [TJesko@EclipseResources.com](mailto:TJesko@EclipseResources.com)

## II. PROJECT DESCRIPTION

The Hannahs Unit is located in Monroe and Noble Counties, Ohio, and consists of thirty-seven (37) separate tracts of land. See Exhibits A-1 and A-2 of the Unit Operating Agreement (showing the plat and tract participations, respectively). The total land area in the Hannahs Unit is approximately 678 acres and, at the time of this Application, Eclipse and its working interest partners have the right to drill on and produce from approximately 592 acres of the proposed unit – i.e., approximately eighty-seven percent (87%) of the unit area, well above the sixty-five percent (65%) threshold required by Ohio Revised Code § 1509.28. Eclipse seeks this unit order to include three (3) unleased tracts consisting of approximately 86 acres within the Unit Area.<sup>1</sup> As more specifically described herein, Eclipse 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) below the top of the Trenton formation, from one well pad located on the northern portion of the Hannahs Unit, to efficiently test, develop, operate and produce the Unitized Formation for oil, natural gas, and related liquids production.

Eclipse'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, which determines reimbursement 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 Hannahs Unit's formation: (i) testimony from a Geologist establishing that the Unitized Formation is part of a pool and supporting the Unit Plan's recommended allocation of unit production and expenses on a surface acreage basis;<sup>2</sup> (ii) testimony from a Reservoir Engineer establishing that unitization is reasonably necessary to increase substantially the recovery of oil and gas, and that the value of the estimated additional resource recovery from unit operations exceeds its

---

<sup>1</sup> Note two of these tracts do not have permanent parcel numbers assigned and Eclipse has been unable to determine the current mineral owner. The efforts of Eclipse to determine ownership of these tracts are detailed in Attachment 4 Exhibit AG-2.

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

estimated additional costs;<sup>3</sup> and (iii) testimony from a Landman describing the project generally and the terms of the Unit Plan.<sup>4</sup>

IV.  
THE CHIEF SHOULD GRANT THIS APPLICATION

A. Legal Standard

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

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

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

Eclipse further proposes the following additional provisions in the event that the Division issues an order authorizing unitization of the Hannahs Unit:

---

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

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

Eclipse shall present unitized parties with the option to:

- (a) elect to enter into an oil and gas lease identical to the *Oil and Gas Lease Paid Up Gas Lease* attached as Exhibit B of the Unit Operating Agreement, for a lease bonus payment of six thousand dollars (\$6,000) per net mineral acre, and a royalty rate on production of twenty percent (20%); or
- (b) be deemed to be a non-consenting working interest owner receiving a royalty on production of twelve and one-half percent (12.5%), and a working interest of eighty seven and one-half percent (87.5%), subject to the terms and conditions of the Unit Plan and the Unit Operating Agreement.

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

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

B. Eclipse'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) below the top of the Trenton formation, within the Hannahs 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>5</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>6</sup>

---

<sup>5</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>6</sup> *Id.*

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 Hannahs Unit. The Unit Plan contemplates the potential drilling of as many as four (4) horizontal wells, with laterals in approximate length of between 9,200 feet and 9,500 feet.<sup>7</sup> Eclipse estimates that the ultimate recovery from this unit development, if all unit wells are drilled, could be as much as 51.3 (Bcf) of natural gas, 298.1 thousand barrels of oil, and 3,076.2 thousand barrels of natural gas liquids from the Unitized Formation.<sup>8</sup> Moreover, absent unit operations there would likely be no development of the Unitized Formation (the evidence shows that absent unit operations vertical and horizontal development of the unit are both likely to be uneconomic).<sup>9</sup>

The evidence thus shows that the contemplated unit operations are reasonably necessary to increase substantially the recovery of oil and gas from the Unitized Formation.

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

The evidence shows that the estimated recovery from unit operations has a net present value in excess of \$9.2 million.<sup>10</sup> Absent unit operations, the estimated recovery from the possible development of the unit area has a net present value of negative \$3.8 million. Thus the increase of present value of development of the Hannahs Unit associated with unit operations is in excess of \$13 million for an associated increase in development costs of approximately \$8 million. Moreover, see Attachment 3 – Exhibit MS-3, 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, particularly where there is likely to be no recovery absent unit operations.

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

The Unit Plan proposed by Eclipse meets the requirements set forth in Ohio Revised Code § 1509.28. The unit area is described in the Unit Plan at Article 1, as well as on Exhibits A-1 and A-2 to the Unit Operating Agreement. The nature of the contemplated unit operations

---

<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> *Id.*

<sup>9</sup> *Id.*

<sup>10</sup> *Id.*

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

#### V. HEARING

Ohio Revised Code § 1509.28 requires the Chief to hold a hearing to consider this Application, when requested by sixty-five percent (65%) of the owners of the land area underlying the proposed unit. Ohio Rev. Code § 1509.28(A). That threshold level is met here. See Attachment 4 – Exhibit AG-1. Accordingly, Eclipse respectfully requests that the Division schedule a hearing at an available hearing room located at the Division's Columbus complex on or before April 13, 2016 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. Eclipse respectfully submits that the Application meets this standard, and that the terms and conditions of the Unit Plan are just and reasonable and satisfy the requirements of Ohio Revised Code § 1509.28(B). Eclipse therefore asks the Chief to issue an order authorizing Eclipse to operate the Hannahs Unit according to the Unit Plan attached hereto.

---

<sup>11</sup> See Attachment 4 generally.

Respectfully submitted,



---

W. Jonathan Airey (0017437)  
Gregory D. Russell (0059718)  
J. Taylor Airey (0081092)  
Ilya Batikov (0087968)  
Vorys, Sater, Seymour and Pease LLP  
52 East Gay Street  
P. O. Box 1008  
Columbus, Ohio 43216-1008

Attorneys for Applicant,  
Eclipse Resources I, LP

**PLAN FOR UNIT OPERATIONS**  
**THE HANNAHS UNIT**  
**BEAVER, MARION AND SENECA TOWNSHIPS**  
**MONROE AND NOBLE COUNTIES, OHIO**

The following shall constitute the Plan for Unit Operations applicable to the Hannahs Unit in Beaver, Marion and Seneca Townships, Monroe and Noble Counties, 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 Hannahs Unit, Beaver, Marion and Seneca Townships, Monroe and Noble Counties, 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 top of the Trenton formation, believed to be approximately 7,755 feet subsurface to 8,080 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 Hannahs 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 Hannahs 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 Hannahs 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.

**MODEL FORM OPERATING AGREEMENT**

OPERATING AGREEMENT

DATED

\_\_\_\_\_, 2015,  
Year

OPERATOR Eclipse Resources I, LP

CONTRACT AREA See Exhibit "A" attached hereto for the description of the Contract Area.

HANNAHS UNIT

COUNTIES OR PARISH \_\_\_\_\_, STATE OF \_\_\_\_\_  
OF Noble and Monroe Ohio

**TABLE OF CONTENTS**

<u>Article</u>	<u>Title</u>	<u>Page</u>
<b>I.</b>	<b><u>DEFINITIONS</u></b> .....	1
<b>II.</b>	<b><u>EXHIBITS</u></b> .....	12
<b>III.</b>	<b><u>INTERESTS OF PARTIES</u></b> .....	23
	A. OIL AND GAS INTERESTS: .....	23
	B. INTERESTS OF PARTIES IN COSTS AND PRODUCTION:.....	23
	C. SUBSEQUENTLY CREATED INTERESTS: .....	23
<b>IV.</b>	<b><u>TITLES</u></b> .....	23
	A. TITLE EXAMINATION: .....	23
	B. LOSS OR FAILURE OF TITLE:.....	35
	1. Failure of Title.....	35
	2. Loss by Non-Payment or Erroneous Payment of Amount Due.....	35
	3. Other Losses.....	35
	4. Curing Title.....	35
<b>V.</b>	<b><u>OPERATOR</u></b> .....	46
	A. DESIGNATION AND RESPONSIBILITIES OF OPERATOR: .....	46
	B. RESIGNATION OR REMOVAL OF OPERATOR AND SELECTION OF SUCCESSOR: .....	46
	1. Resignation or Removal of Operator.....	46
	2. Selection of Successor Operator.....	46
	3. Effect of Bankruptcy .....	46
	C. EMPLOYEES AND CONTRACTORS: .....	46
	D. RIGHTS AND DUTIES OF OPERATOR: .....	46
	1. Competitive Rates and Use of Affiliates .....	46
	2. Discharge of Joint Account Obligations.....	46
	3. Protection from Liens.....	46
	4. Custody of Funds .....	57
	5. Access to Contract Area and Records .....	57
	6. Filing and Furnishing Governmental Reports .....	57
	7. Drilling and Testing Operations .....	57
	8. Cost Estimates .....	57
	9. Insurance .....	57
<b>VI.</b>	<b><u>DRILLING AND DEVELOPMENT</u></b> .....	57
	A. INITIAL WELL: .....	57
	B. SUBSEQUENT OPERATIONS: .....	57
	1. Proposed Operations .....	57
	2. Operations by Less Than All Parties .....	68
	3. Stand-By Costs.....	79
	4. Deepening .....	810
	5. Sidetracking.....	810
	6. Order of Preference of Operations .....	810
	7. Conformity to Spacing Pattern.....	911
	8. Paying Wells .....	911
	C. COMPLETION OF WELLS; REWORKING AND PLUGGING BACK:.....	911
	1. Completion.....	911
	2. Rework, Recomplete or Plug Back .....	911
	D. OTHER OPERATIONS:.....	911
	E. ABANDONMENT OF WELLS:.....	911
	1. Abandonment of Dry Holes .....	911
	2. Abandonment of Wells That Have Produced.....	1012
	3. Abandonment of Non-Consent Operations .....	1012
	F. TERMINATION OF OPERATIONS:.....	1012
	G. TAKING PRODUCTION IN KIND:.....	1012
	(Option 1) Gas Balancing Agreement .....	1012
	(Option 2) No Gas Balancing Agreement.....	11
<b>VII.</b>	<b><u>EXPENDITURES AND LIABILITY OF PARTIES</u></b> .....	1113
	A. LIABILITY OF PARTIES: .....	1113
	B. LIENS AND SECURITY INTERESTS:.....	1214
	C. ADVANCES: .....	1214
	D. DEFAULTS AND REMEDIES:.....	1214
	1. Suspension of Rights.....	1315
	2. Suit for Damages.....	1315
	3. Deemed Non-Consent .....	1315
	4. Advance Payment.....	1315
	5. Costs and Attorneys' Fees.....	1315
	E. RENTALS, SHUT-IN WELL PAYMENTS AND MINIMUM ROYALTIES: .....	1315
	F. TAXES: .....	1315
<b>VIII.</b>	<b><u>ACQUISITION, MAINTENANCE OR TRANSFER OF INTEREST</u></b> .....	1416
	A. SURRENDER OF LEASES: .....	1416
	B. RENEWAL OR EXTENSION OF LEASES:.....	1416
	C. ACREAGE OR CASH CONTRIBUTIONS:.....	1416

**TABLE OF CONTENTS**

D. ASSIGNMENT; MAINTENANCE OF UNIFORM INTEREST: ..... 1517  
E. WAIVER OF RIGHTS TO PARTITION: ..... 1517  
F. ~~PREFERENTIAL RIGHT TO PURCHASE:..... 15~~  
**IX. INTERNAL REVENUE CODE ELECTION**..... 1517  
**X. CLAIMS AND LAWSUITS**..... 1517  
**XI. FORCE MAJEURE**..... 1618  
**XII. NOTICES**..... 1618  
**XIII. TERM OF AGREEMENT**..... 1618  
**XIV. COMPLIANCE WITH LAWS AND REGULATIONS**..... 1618  
A. LAWS, REGULATIONS AND ORDERS:..... 1618  
B. GOVERNING LAW: ..... 1618  
C. REGULATORY AGENCIES: ..... 1618  
**XV. MISCELLANEOUS**..... 1719  
A. EXECUTION: ..... 1719  
B. SUCCESSORS AND ASSIGNS:..... 1719  
C. COUNTERPARTS:..... 1719  
D. SEVERABILITY ..... 1719  
**XVI. OTHER PROVISIONS** ..... 1719

OPERATING AGREEMENT

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

WITNESSETH:

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

NOW, THEREFORE, it is agreed as follows:

ARTICLE I.  
DEFINITIONS

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

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

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

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

D. The term "Deepen" shall mean a single operation whereby a well is drilled to an objective Zone below the deepest Zone in which the well was previously drilled, or below the Deepest Zone proposed in the associated AFE, whichever is the lesser.

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~~ <sup>or more wells</sup> / 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. See also Article XVI.K.~~ **Operator in its sole discretion so long as consistent with any restrictions in the Oil and Gas Leases or by applicable law.**

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. <sup>except as provided in Article I.Y.</sup>

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

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

Q. The term "Sidetrack" shall mean / the directional control and intentional deviation of a well from vertical so as to change the bottom hole location <sup>in the case of Vertical Wells,</sup> and, **in the case of Horizontal Wells (defined hereinafter), an operation by which a lateral wellbore is drilled off of the horizontal wellbore, in each case unless done to straighten the hole or drill around junk in the hole** / to overcome other mechanical difficulties. <sup>or</sup>

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.

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

T. The term "Vertical Well" shall mean any well other than a "Horizontal Well".

U. The term "Horizontal Well" shall mean a well containing a single Lateral in which the wellbore deviates at an angle of at least eighty degrees (80°) from true vertical and with a horizontal projection exceeding one hundred feet (100') measured from the initial point of penetration into a specific geological interval.

V. The term "Multi-lateral Well" shall mean a Horizontal Well which contains more than one Lateral.

W. The term "Total Measured Depth," when used in connection with a Multi-lateral or Horizontal Well, shall mean the distance from the surface of the ground to the terminus of the wellbore, as measured along the wellbore. Each Lateral taken together with the common vertical wellbore shall be considered a single wellbore and shall have a corresponding Total Measured Depth. When the proposed operation(s) is the drilling of, or operation on, a Multi-lateral or Horizontal Well, the term "depth" or "total depth" wherever used in the Agreement shall be deemed to read "Total Measured Depth" insofar as it applies to such well.

X. 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 participating parties. This shall include reentry of a Vertical Well to convert the well to a Horizontal Well. See also Article XVI.E.2.

Y. For the purposes of this Agreement, as to a Multi-lateral or Horizontal 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.



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

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

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

15 Regardless of which party has contributed any Oil and Gas Lease or Oil and Gas Interest on which royalty or other  
 16 burdens may be payable and except as otherwise expressly provided in this agreement, each party shall pay or deliver, or  
 17 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 those burdens set  
 18 forth in such Oil and Gas Lease(s) or Oil and Gas interest(s) contributed hereto and shall indemnify, defend and hold the other parties free  
 19 from any liability therefor.

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

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

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

34 **C. Subsequently Created Interests:**

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

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

53 **ARTICLE IV.**  
 54 **TITLES**

55 **A. Title Examination:**

56 Title examination shall be made on the  ~~/ Drillsite~~ of any proposed well prior to commencement of drilling operations and, /  
 57 ~~if a majority in interest of the Drilling Parties so requests or~~ Operator so elects, title examination shall be made on the entire  
 58 Drilling Unit, or maximum anticipated Drilling Unit, of the well. The opinion will include the ownership of the working  
 59 interest, minerals, royalty, overriding royalty and production payments under the applicable Leases. Each party contributing  
 60 Leases and/or Oil and Gas Interests to be included in the Drillsite or Drilling Unit, if appropriate, shall furnish to Operator  
 61 all abstracts (including federal lease status reports), title opinions, title papers and curative material in its possession free of  
 62 charge. All such information not in the possession of or made available to Operator by the parties, but necessary for the  
 63 examination of the title, shall be obtained by Operator. Operator shall cause title to be examined by attorneys on its staff or  
 64 by outside attorneys. Copies of all title opinions shall be furnished to each Drilling Party. Costs incurred by Operator in  
 65 ~~procuring abstracts, fees paid outside attorneys /~~ **and field landmen and title specialists** for title examination (including preliminary, supplemental, shut-in royalty  
 66 opinions and division order title opinions) and other direct charges as provided in Exhibit "C" shall be borne by the Drilling  
 67 Parties in the proportion that the interest of each Drilling Party bears to the total interest of all Drilling Parties as such  
 68 interests appear in Exhibit "A." Operator shall make no charge for services rendered by its staff attorneys or other personnel  
 69 in the performance of the above functions: **that exceeds prevailing rates in the area. Operator may use staff field landmen and title**  
 70 **specialists for abstracting and staff attorneys for title examination if such personnel are employed specifically for this purpose and**  
 71 **are billed at rates no higher than third party rates billed for similar services in the state where the services are rendered. Operator**  
 72 **may also charge a reasonable digital abstracting fee per tract if Operator has imaged and indexed the county records in which the**  
 73 **Contract Area is located.**

74 Each party shall be responsible for securing curative matter and pooling amendments or agreements required in  
 connection with Leases or Oil and Gas Interests contributed by such party. Operator shall be responsible for the preparation  
 and recording of pooling designations or declarations and communitization agreements as well as the conduct of hearings

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

1 before governmental agencies for the securing of spacing or pooling orders or any other orders necessary or appropriate to  
2 the conduct of operations hereunder. This shall not prevent any party from appearing on its own behalf at such hearings.  
3 Costs incurred by Operator, including fees paid to outside attorneys, which are associated with hearings before governmental  
4 agencies, and which costs are necessary and proper for the activities contemplated under this agreement, shall be direct  
5 charges to the joint account and shall not be covered by the administrative overhead charges as provided in Exhibit "C."

6  
7 **[REMAINDER OF PAGE INTENTIONALLY LEFT BLANK]**  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25  
26  
27  
28  
29  
30  
31  
32  
33  
34  
35  
36  
37  
38  
39  
40  
41  
42  
43  
44  
45  
46  
47  
48  
49  
50  
51  
52  
53  
54  
55  
56  
57  
58  
59  
60  
61  
62  
63  
64  
65  
66  
67  
68  
69  
70  
71  
72  
73  
74

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

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

3 No well shall be drilled on the Contract Area until after (1) the title to the Drillsite / ~~Drilling Unit~~, <sup>and wellbore path have</sup> if appropriate, has  
4 been examined as above provided, and (2) the title has been approved by the examining attorney / <sup>engaged or employed by the operator</sup> or title has been accepted by  
5 all of the ~~Drilling Parties in such well.~~ **the Operator.**

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

ARTICLE V.  
OPERATOR

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

Eclipse Resources I, LP 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~~ **their officers, employees or agents,** except such as may result from gross negligence or willful misconduct.

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

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

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

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

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

**C. Employees and Contractors:**

The number of employees or contractors used by Operator in conducting operations hereunder, their selection, and the hours of labor and the compensation for services performed shall be determined 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 /,~~ **operations conducted in state where the services were rendered** ~~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.~~ **conducted** ~~state where the services were rendered~~

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, except as otherwise provided herein, permit each ~~Non-Operator~~ <sup>Consenting Party</sup>  
12 or its duly authorized representative, at the ~~Non-Operator's~~ <sup>Consenting Party's</sup> 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~~ <sup>Consenting Party</sup> 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~~ <sup>Consenting Party</sup> 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~~ <sup>each Consenting Party</sup> of the date on which the well is spudded, or the date on which  
30 drilling operations are commenced.

31 (b) Operator will send to ~~Non-Operators~~ <sup>each Consenting Party</sup> such reports, test results and notices regarding the progress of operations on the  
32 well as the ~~Non-Operators~~ <sup>Consenting Parties</sup> 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  
50 **ARTICLE VI.**  
**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 non-  
53 appealable unitization order,  
54  
55  
56  
57  
58

59 and shall thereafter continue the drilling of the well with due diligence to a depth sufficient in the Operator's reasonable opinion, to  
60 adequately test the Utica / Point Pleasant formation with the Initial Well.  
61  
62  
63  
64

65 The drilling of the Initial Well and the participation therein by all parties, other than the Unleased Mineral Owners, is obligatory, subject to  
66 Article VI.C.1. as to participation  
67 in Completion operations and Article VI.F. as to termination of operations and Article XI as to occurrence of force majeure.

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 ~~other~~ <sup>than</sup> the Initial Well, or  
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 telephone and the response period shall be limited to forty-  
 6 eight (48) hours, <sup>inclusive</sup> ~~exclusive~~ of Saturday, Sunday and legal holidays. Failure of a party to whom such notice is delivered to reply  
 7 within the period above fixed shall constitute an election by that party not to participate in the cost of the proposed operation.  
 8 Any proposal by a party to conduct an operation conflicting with the operation initially proposed shall be delivered to all parties  
 9 within the time and in the manner provided in Article VI.B.6. **No Party may elect to participate in any well proposed pursuant to this  
 Agreement with less than its full and undivided working interest in the Contract Area.**

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

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

27 (a) Determination of Participation. If any party to whom such notice is delivered as provided in Article VI.B.1. or  
 28 VI.C.1. (Option No. 2) elects not to participate in the proposed operation, then, in order to be entitled to the benefits of this  
 29 Article, the party or parties giving the notice and such other parties as shall elect to participate in the operation shall, no  
 30 later than ninety (90) days after the expiration of the notice period of thirty (30) days (or as promptly as practicable after the  
 31 expiration of the forty-eight (48) hour period when a drilling rig is on location, as the case may be) actually commence the  
 32 proposed operation \* and complete it with due diligence. Operator shall perform all work for the account of the Consenting  
 33 Parties; provided, however, if no drilling rig or other equipment is on location, and if Operator is a Non-Consenting Party,  
 34 the Consenting Parties shall either: (i) request Operator to perform the work required by such proposed operation for the  
 35 account of the Consenting Parties, or (ii) designate one of the Consenting Parties as Operator to perform such work. The  
 36 rights and duties granted to and imposed upon the Operator under this agreement are granted to and imposed upon the party  
 37 designated as Operator for an operation in which the original Operator is a Non-Consenting Party. Consenting Parties, when  
 38 conducting operations on the Contract Area pursuant to this Article VI.B.2., shall comply with all terms and conditions of this  
 39 agreement. **\*Nothing contained herein shall prohibit Operator from actually commencing the proposed operation before the  
 expiration of the notice period, nor shall such commencement affect in any way the validity of a party's election or deemed election.**

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

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

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

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

7 (i) 200 % of each such Non-Consenting Party's share of the cost of any newly acquired surface equipment  
8 beyond the wellhead connections (including but not limited to stock tanks, separators, treaters, pumping equipment and  
9 piping), plus ~~100%~~<sup>200%</sup> of each such Non-Consenting Party's share of the cost of operation of the well commencing with first  
10 production and continuing until each such Non-Consenting Party's relinquished interest shall revert to it under other  
11 provisions of this Article, it being agreed that each Non-Consenting Party's share of such costs and equipment will be that  
12 interest which would have been chargeable to such Non-Consenting Party had it participated in the well from the beginning  
13 of the operations; and

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

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

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

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

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

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

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

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

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

16 4. Deepening: If less than all parties elect to participate in a drilling, Sidetracking, or Deepening operation proposed  
 17 pursuant to Article VI.B.1., the interest relinquished by the Non-Consenting Parties to the Consenting Parties under Article  
 18 VI.B.2. shall relate only and be limited to the lesser of (i) the total depth actually drilled or (ii) the objective depth or Zone  
 19 of which the parties were given notice under Article VI.B.1. (~~Except as provided in Article VI.E.2, such~~ / ~~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. Except as otherwise specifically provided in this agreement, if any party, other than an  
 63 Unleased Mineral Owner, desires to  
 64 propose the conduct of an operation that conflicts with a proposal that has been made by a party under this Article VI, such  
 65 party shall have fifteen (15) days from delivery of the initial proposal, in the case of a proposal to drill a well or to perform  
 66 an operation on a well where no drilling rig is on location, or twenty-four (24) hours, exclusive of Saturday, Sunday and legal  
 67 holidays, from delivery of the initial proposal, if a drilling rig is on location for the well on which such operation is to be  
 68 conducted, to deliver to all parties entitled to participate in the proposed operation such party's alternative proposal, such  
 69 alternate proposal to contain the same information required to be included in the initial proposal. Each party receiving such  
 70 proposals shall elect by delivery of notice to Operator within five (5) days after expiration of the proposal period, or within  
 71 twenty-four (24) hours (exclusive of Saturday, Sunday and legal holidays) if a drilling rig is on location for the well that is the  
 72 subject of the proposals, to participate in one of the competing proposals. Any party not electing within the time required  
 73 shall be deemed not to have voted. The proposal receiving the vote of parties owning the largest aggregate percentage  
 74 interest of the parties voting shall have priority over all other competing proposals; in the case of a tie vote, the

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

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

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

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

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

- 18  Option No. 1: All necessary expenditures for the drilling, Deepening, equipping of the well, including tankage and/or surface  
 19 facilities. **For Horizontal Wells and Multi-Lateral Wells, all**  
 20 **See also Article XVI.E.**
- 21  Option No. 2: All necessary expenditures for the drilling, Deepening or Sidetracking and testing of the well. When  
 22 such well has reached its authorized depth, and all logs, cores and other tests have been completed, and the results  
 23 thereof furnished to the parties, Operator shall give immediate notice to the Non-Operators having the right to  
 24 participate in a Completion attempt whether or not Operator recommends attempting to Complete the well,  
 25 together with Operator's AFE for Completion costs if not previously provided. The parties receiving such notice  
 26 shall have forty-eight (48) hours (exclusive of Saturday, Sunday and legal holidays) in which to elect by delivery of  
 27 notice to Operator to participate in a recommended Completion attempt or to make a Completion proposal with an  
 28 accompanying AFE. Operator shall deliver any such Completion proposal, or any Completion proposal conflicting  
 29 with Operator's proposal, to the other parties entitled to participate in such Completion in accordance with the  
 30 procedures specified in Article VI.B.6. Election to participate in a Completion attempt shall include consent to all  
 31 necessary expenditures for the Completing and equipping of such well, including necessary tankage and/or surface  
 32 facilities but excluding any stimulation operation not contained on the Completion AFE. Failure of any party  
 33 receiving such notice to reply within the period above fixed shall constitute an election by that party not to  
 34 participate in the cost of the Completion attempt; provided, that Article VI.B.6. shall control in the case of  
 35 conflicting Completion proposals. If one or more, but less than all of the parties, elect to attempt a Completion, the  
 36 provision of Article VI.B.2. hereof (the phrase "Reworking, Sidetracking, Deepening, Recompleting or Plugging  
 37 Back" as contained in Article VI.B.2. shall be deemed to include "Completing") shall apply to the operations  
 38 thereafter conducted by less than all parties; provided, however, that Article VI.B.2. shall apply separately to each  
 39 separate Completion or Recompletion attempt undertaken hereunder, and an election to become a Non-Consenting  
 40 Party as to one Completion or Recompletion attempt shall not prevent a party from becoming a Consenting Party  
 41 in subsequent Completion or Recompletion attempts regardless whether the Consenting Parties as to earlier  
 42 Completions or Recompletion have recouped their costs pursuant to Article VI.B.2.; provided further, that any  
 43 recoupment of costs by a Consenting Party shall be made solely from the production attributable to the Zone in  
 44 which the Completion attempt is made. Election by a previous Non-Consenting party to participate in a subsequent  
 45 Completion or Recompletion attempt shall require such party to pay its proportionate share of the cost of salvable  
 46 materials and equipment installed in the well pursuant to the previous Completion or Recompletion attempt,  
 47 insofar and only insofar as such materials and equipment benefit the Zone in which such party participates in a  
 48 Completion attempt. **See also Article XVI.E.**

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

53 **D. Other Operations:**

54 Operator shall not undertake any single project reasonably estimated to require an expenditure in excess of Fifty Thousand  
 55 \_\_\_\_\_ Dollars (\$ 50,000.00 ) except in connection with the  
 56 drilling, Sidetracking, Reworking, Deepening, Completing, Recompleting or Plugging Back of a well that has been previously  
 57 authorized by or pursuant to this agreement; provided, however, that, in case of explosion, fire, flood or other sudden  
 58 emergency, whether of the same or different nature, Operator may take such steps and incur such expenses as in its opinion  
 59 are required to deal with the emergency to safeguard life and property but Operator, as promptly as possible, shall report the  
 60 emergency to the other parties. If Operator prepares an AFE for its own use, Operator shall furnish any Non-Operator so  
 61 requesting an information copy thereof for any single project costing in excess of Fifty Thousand Dollars  
 62 (\$50,000.00). Any party who has not relinquished its interest in a well shall have the right to propose that  
 63 Operator perform repair work or undertake the installation of artificial lift equipment or ancillary production facilities such as  
 64 salt water disposal wells or to conduct additional work with respect to a well drilled hereunder or other similar project (but  
 65 not including the installation of gathering lines or other transportation or marketing facilities, the installation of which shall  
 66 be governed by separate agreement between the parties) reasonably estimated to require an expenditure in excess of the  
 67 amount first set forth above in this Article VI.D. (except in connection with an operation required to be proposed under  
 68 Articles VI.B.1. or VI.C.1. Option No. 2, which shall be governed exclusively by those Articles). Operator shall deliver such  
 69 proposal to all parties entitled to participate therein. If within thirty (30) days thereof Operator secures the written consent  
 70 of any party or parties owning at least 80 % of the interests of the parties entitled to participate in such operation,  
 71 each party having the right to participate in such project shall be bound by the terms of such proposal and shall be obligated  
 72 to pay its proportionate share of the costs of the proposed project as if it had consented to such project pursuant to the terms  
 73 of the proposal.

74 **E. Abandonment of Wells:**

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

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

15 2. Abandonment of Wells That Have Produced: Except for any well in which a Non-Consent operation has been  
 16 conducted hereunder for which the Consenting Parties have not been fully reimbursed as herein provided, any well which has  
 17 been completed as a producer shall not be plugged and abandoned without the consent of all parties ~~who participated in the cost of drilling the well~~. If all parties consent to  
 18 such abandonment, the well shall be plugged and abandoned in accordance with applicable regulations and at the cost, risk  
 19 and expense of all the parties hereto. Failure of a party to reply within 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.~~ with respect to the well, including the costs of plugging and abandoning the well and restoring the surface. 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; provided, however, that in the event  
 31 the estimated plugging and abandoning and surface restoration costs and the estimated cost of salvaging are higher than the  
 32 value of the well's salvable material and equipment, each of the abandoning parties shall tender to the parties continuing  
 33 operations their proportionate shares of the estimated excess cost. Each abandoning party shall assign to the non-abandoning  
 34 parties, without warranty, express or implied, as to title or as to quantity, or fitness for use of the equipment and material, all  
 35 of its interest in the wellbore of the well and related equipment, together with its interest in the Leasehold insofar and only  
 36 insofar as such Leasehold covers the right to obtain production from that wellbore in the Zone then open to production. If the  
 37 interest of the abandoning party is or includes an Oil and Gas Interest, such party shall execute and deliver to the non-  
 38 abandoning party or parties an oil and gas lease, limited to the wellbore and the Zone then open to production, for a term of  
 39 one (1) year and so long thereafter as Oil and/or Gas is produced from the Zone covered thereby, such lease to be on the form  
 40 attached as Exhibit "B." The assignments or leases so limited shall encompass the Drilling Unit upon which the well is located.  
 41 The payments by, and the assignments or leases to, the assignees shall be in a ratio based upon the relationship of their  
 42 respective percentage of participation in the Contract Area to the aggregate of the percentages of participation in the Contract  
 43 Area of all assignees. There shall be no readjustment of interests in the remaining portions of the Contract Area.

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

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

58 **F. Termination of Operations:**

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

62 **ARTICLE VII.**

63 **EXPENDITURES AND LIABILITY OF PARTIES**

64 **A. Liability of Parties:**

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

**B. Liens and Security Interests:**

Each party grants to the other parties hereto a lien upon any interest it 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 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 therewith, to secure performance of all of its obligations under this agreement including but not limited to payment of expense, interest and fees, the proper disbursement of all monies paid hereunder, the assignment or relinquishment of interest in Oil and Gas Leases as required hereunder, and the proper performance of operations hereunder. Such lien and security interest granted by each party hereto shall include such party's leasehold interests, working interests, operating rights, and royalty and overriding royalty interests in the Contract Area now owned or hereafter acquired and in lands pooled or unitized therewith or otherwise becoming subject to this agreement, the Oil and Gas when extracted therefrom and equipment situated thereon or used or obtained for use in connection therewith (including, without limitation, all wells, tools, and tubular goods), and accounts (including, without limitation, accounts arising from gas imbalances or from the sale of Oil and/or Gas at the wellhead), contract rights, inventory and general intangibles relating thereto or arising therefrom, and all proceeds and products of the foregoing. Notwithstanding anything contained in this agreement to the contrary, Article VII.B. shall not apply to Unleased Mineral Owners.

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

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 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 Oil and Gas Leases and Interests covered by this agreement by, through or under such party. All parties acquiring an interest in Oil and Gas Leases and Oil and Gas Interests covered by this agreement, whether by assignment, merger, mortgage, operation of law, or otherwise, shall be deemed to have taken subject to the lien and security interest granted by this Article VII.B. as to all obligations attributable to such interest hereunder whether or not such obligations arise before or after such interest is acquired.

To the extent that parties have a security interest under the Uniform Commercial Code of the state in which the Contract Area is situated, they 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 a party for the secured indebtedness shall not be deemed an election of remedies or otherwise affect the lien rights or 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 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 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 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 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 amount due as a result of the default, and all parties waive any recourse available against purchasers for releasing production proceeds as provided in this paragraph.

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 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 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 described in Article VII.B., and each paying party may independently pursue any remedy available hereunder or otherwise.

If any party does not perform all of its obligations hereunder, and the failure to perform subjects such party to foreclosure or execution proceedings pursuant to the provisions of this agreement, to the extent allowed by governing law, the defaulting party waives any available right of redemption 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 stay execution or to require a marshaling of assets or sale in inverse order of alienation / and any required bond in the event a receiver is appointed. In addition, to the extent permitted by applicable law, each party hereby grants to the other parties a power of sale as to any property that is subject to the lien and security rights granted hereunder, such power to be exercised in the manner provided by applicable law or otherwise in a commercially reasonable manner and upon reasonable notice.

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 Contract Area is situated to enforce the obligations of each party hereunder. Without limiting the generality of the foregoing, to the extent permitted 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 Contract Area is situated in order to secure the payment to Operator of any sum due hereunder for services performed or materials supplied by Operator.

**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, except an Unleased Mineral Owner, 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 within fifteen (15) 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

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

1 remedies specified below shall be applicable. For purposes of this Article VII.D., all notices and elections shall be delivered  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25  
26  
27  
28  
29  
30  
31  
32  
33  
34  
35  
36  
37  
38  
39  
40  
41  
42  
43  
44  
45  
46  
47  
48  
49  
50  
51  
52  
53  
54  
55  
56  
57  
58  
59  
60  
61  
62  
63  
64  
65  
66  
67  
68  
69  
70  
71  
72  
73  
74

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

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

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

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

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

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

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

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

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

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

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

62 **F. Taxes:**

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

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 and assessments imposed upon or  
 8 with respect 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, other than Unleased Mineral Owners, consent thereto; however, no consent shall be necessary to release a  
 14 lease which has expired or otherwise terminated in accordance with its terms.

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

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

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

41 If any party, except an Unleased Mineral Owner, secures a renewal or replacement of an Oil and Gas Lease or Interest subject to this  
 42 agreement, then all other parties shall be notified promptly upon such acquisition or, in the case of a replacement Lease taken before expiration of an existing Lease,  
 43 promptly upon expiration of the existing Lease. The parties notified shall have the right for a period of thirty (30) days following  
 44 delivery of such notice in which to elect to participate in the ownership of the renewal or replacement Lease, insofar as such Lease  
 45 affects lands within the Contract Area, by paying to the party who acquired it their proportionate shares of the acquisition cost  
 46 allocated to that part of such Lease within the Contract Area, which shall be in proportion to the interest held at that time by the  
 47 parties in the Contract Area. Each party who participates in the purchase of a renewal or replacement Lease shall be given an  
 48 assignment of its proportionate interest therein by the acquiring party, ~~without warranty of title, except as to acts by, through or under the acquiring party.~~

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

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

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

65 The provisions in this Article shall <sup>not</sup> also be applicable to extensions of Oil and Gas Leases.

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

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

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

1 provisions shall also be applicable to optional rights to earn acreage outside the Contract Area which are in support of well drilled  
2 inside Contract Area.

3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25  
26  
27  
28  
29  
30  
31  
32  
33  
34  
35  
36  
37  
38  
39  
40  
41  
42  
43  
44  
45  
46  
47  
48  
49  
50  
51  
52  
53  
54  
55  
56  
57  
58  
59  
60  
61  
62  
63  
64  
65  
66  
67  
68  
69  
70  
71  
72  
73  
74

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

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

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

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

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

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

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

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

30 If permitted by the laws of the state or states in which the property covered hereby is located, each party hereto owning an  
31 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  
32 undivided interest therein.

33 **F. Preferential Right to Purchase**

34  (Optional: Check if applicable)

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

47 **ARTICLE IX.**

48 **INTERNAL REVENUE CODE ELECTION**

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

65 **ARTICLE X.**

66 **CLAIMS AND LAWSUITS**

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

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25  
26  
27  
28  
29  
30  
31  
32  
33  
34  
35  
36  
37  
38  
39  
40  
41  
42  
43  
44  
45  
46  
47  
48  
49  
50  
51  
52  
53  
54  
55  
56  
57  
58  
59  
60  
61  
62  
63  
64  
65  
66  
67  
68  
69  
70  
71  
72  
73  
74

**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. 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 \_\_\_\_\_ 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

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

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

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

13 **A. Execution:**

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

29 **B. Successors and Assigns:**

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

33 **C. Counterparts:**

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

36 **D. Severability:**

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

40  
41 **ARTICLE XVI.**

42  
43 **OTHER PROVISIONS**

44  
45  
46 **A. Conflicts:**

47 Notwithstanding anything herein contained to the contrary, it is understood and agreed that if there is any conflict between any  
48 part of or all of the terms and provisions of Article XVI and any other terms and provisions of this agreement, the terms and  
49 provisions of this Article XVI shall prevail and control.

50  
51 **B. Priority of Operations:**

52 If at any time there is more than one operation proposed in connection with any well subject to this agreement and if the  
53 Consenting Parties do not agree on the sequence of proposed operations, such proposed operations shall be conducted in the  
54 following sequence:

55 **First:** testing, coring or logging;

56 **Second:** completion attempts without plugging back in ascending order from  
57 deepest to shallowest depths;

58 **Third:** sidetracking in the order of least deviation from the original bottom hole location to the greatest deviation;

59 **Fourth:** deepening of a well below the authorized depth in descending order from shallowest to deepest depths;

60 **Fifth:** plugging back and completion attempts in ascending order from deepest to shallowest depths.

61  
62 **C. Netting and Setoff:**

63 Except for any payments related to charges on any joint interest billing that a Non-Operator has disputed in good faith, in the  
64 event that Non-Operator does not remit payment for any operating costs or charges assessable to Non-Operators and permitted  
65 under this Operating Agreement within forty five (45) days after the date payment is due, Operator is authorized to deduct such  
66 costs or charges, and to remit to such Non-Operators their respective net share of any proceeds attributable to the interest of such  
67 Non-Operators being received directly from any purchasers of production from the Contract Area. The foregoing provisions shall  
68 not diminish Operator's lien rights contained within this agreement.

69  
70 **D. [This has intentionally been left blank.]**

71  
72  
73 **E. Horizontal Wells:**

1 1. Notwithstanding anything contained herein to the contrary, (i) the provisions of Article VI.C.I Option No. 1 shall apply to  
2 any Horizontal Well or Multi-lateral Well proposed hereunder, and (ii) the provisions of Article VI.C.1. Option No. 2 shall apply to  
3 all other wells proposed hereunder that are not expressly proposed as Horizontal Wells or Multi-lateral Wells. To be effective as a  
4 Horizontal Well Proposal, such proposal must include an AFE, the corresponding anticipated Unit and Contract Area size and  
5 dimensions within which the well will be drilled, and other accompanying documents that clearly indicate the well being proposed is  
6 a Horizontal Well or Multi-lateral Well . As to any possible conflicts that may arise during the completion phase of a Horizontal  
7 Well or Multi-lateral Well, priority shall be given first to a Lateral drain hole of the authorized depth, and then to objective  
8 formations in ascending order above the authorized depth, and then to objective formations in descending order below the  
9 authorized depth.

10 2. Operator shall have the right to cease drilling a Horizontal Well or Multi-lateral Well at any time, for any reason, and such  
11 Horizontal Well or Multi-lateral Well shall be deemed to have reached its objective depth so long as Operator has drilled such  
12 Horizontal Well or Multi-lateral Well to the objective formation and has drilled laterally in the objective formation for a distance  
13 which is at least equal to fifty percent (50%) of the length of the total horizontal drainhole displacement (displacement from true  
14 vertical) proposed for the operation. In like manner, Operator may continue drilling to extend a proposed lateral in a Horizontal  
15 Well or Multi-lateral Well up to 10% longer than the length proposed in the proposal approved by the Parties if in Operator's sole  
16 judgment, it would be reasonably prudent to do so.

17  
18 **F. Sidetracking:**

19 Notwithstanding the provisions of Article VI.B(5), "Sidetracking", such paragraph shall not be applicable to operations in the  
20 lateral portion of a Horizontal Well or Multi-lateral Well. Drilling operations which are intended to recover penetration of the  
21 target interval which are conducted in a Horizontal Well or Multi-lateral Well shall be considered as included in the original  
22 proposed drilling operations.  
23

24 **G. Further Assurances:**

25 In connection with this agreement, the parties, except Unleased Mineral Owners, agree to execute and deliver such additional  
26 documents and instruments and to perform such additional acts as may be necessary or appropriate to effectuate, carry out, and perform  
27 all the terms, provisions and conditions of this agreement. Without limiting the generality of the foregoing, the parties, except Unleased  
28 Mineral Owners, agree to execute and deliver to Operator one or more Recording Supplement to Operating Agreement and Financing  
29 Statement in the form of Exhibit "H" in recordable form, giving notice of the existence of this Operating Agreement, which Operator  
30 shall cause to be recorded in the county or counties in which any portion of the Contract Area is located.  
31

32 **H. Covenants Running with the Land:**

33 The terms, provisions, covenants and conditions of this agreement shall be deemed to be covenants running with the lands, the  
34 lease or leases and leasehold estate covered hereby, and all of the terms, provisions, covenants and conditions of this agreement shall  
35 be binding upon and inure to the benefit of the parties hereto, their respective successors and assigns.  
36

37 **I. Headings:**

38 All headings in this agreement are for reference purposes only and have no binding effect on the terms, conditions or  
39 provisions of this agreement.  
40

41 **J. Indemnity for Access to Contract Area:**

42 Each Non-Operator, except Unleased Mineral Owners, shall indemnify and hold Operator harmless against any and all liability  
43 in excess of insurance coverage carried for the joint account for injury to each such Non-Operator's officers, employees and/or  
44 agents resulting from and in any way relating to such officers', employees', and/or agents' presence on the Contract Area. The  
45 Non-Operators indemnity to Operator shall also apply to any other person whose presence on the Contract Area is at the insistence  
46 of such Non-Operator.  
47

48 **K. Contract Area and Drilling Unit:**

49 "Contract Area" shall mean the lands shown on the plat attached as Exhibit "A-1".  
50

51  
52 L. [This has intentionally been left blank.]  
53

54  
55 M. [This has intentionally been left blank.]  
56

57  
58 N. [This has intentionally been left blank.]  
59

60  
61 **O. Additional Definitions:**

62 In addition to those set out in this agreement, the definitions set forth in the Unit Plan for the Wells Collins Unit are hereby adopted  
63 and incorporated as if fully rewritten herein.  
64

65 **P. Non-Consenting of Initial Well**

66 In the event a Party elects not to participate (a Non-Consenting Party) in the Initial Well proposed in the Contract Area  
67 pursuant to Article VI.A., upon the timely commencement of actual drilling operations on such Well, such Non-Consenting Party  
68 shall be deemed to have relinquished to the Consenting Parties, and the Consenting Parties shall own and be entitled to receive, in  
69 proportion to their respective interests, all of such Non-Consenting Party's interest in the well and share of production therefrom  
70 until the proceeds of the sale of such interests, calculated at the well (after deducting production taxes, assessments, excise taxes,  
71 royalty, overriding royalty and other interests not otherwise excepted in this agreement, payable out of or measured by the  
72 production from such well accruing with respect to such interest until it reverts) shall equal the total of the following: a) 300% of  
73 such Non-Consenting Party's share of the cost of any newly acquired surface equipment beyond the wellhead connections  
74 (including, but not limited to, stock tanks, separators, treaters, pumping equipment and piping), plus 300% of such Non-Consenting

1 Party's share of the cost of the operation of the well commencing with first production and continuing until such Non-Consenting  
2 Party's relinquished interest shall revert to it under other provisions of this Article, it being agreed that such Non-Consenting  
3 Party's share of such costs and equipment will be that interest that would have been chargeable to such Non-Consenting Party had  
4 it participated in the well from the beginning of the operations; and b) 300% of that portion of the costs and expenses of drilling,  
5 testing and completing, after deducting any cash contributions received under Article III.C., and 300% of that portion of the cost of  
6 newly acquired equipment in the well (to and including wellhead connections) which would have been chargeable to such Non-  
7 Consenting Party if it had participated therein.  
8

9  
10 **Q. Carried Interests:**

11 In the event a drilling unit is formed as a result of an order by the Ohio Department of Natural Resources ("ODNR") granting a  
12 mandatory pool or a unitization, and as a result of such order, the Oil and Gas Interests and/or Oil and Gas Leases of third parties will be  
13 included in the Drilling Unit whose well costs are to be carried by the Joint Account during a payout recoupment period, the Consenting  
14 Parties shall have the option to share, in proportion to their respective interest in the Drilling Unit, the mandatory pooling or unitization  
15 expenses associated with pursuing the order, as well as the well cost obligations and any non-consent penalties prescribed by ODNR of such  
16 carried third party Oil and Gas Interests and/or Oil and Gas Leases during such payout period. An election to acquire and participate with a  
17 proportionate share of mandatorily pooled or unitized acreage shall be made in writing to the Operator within thirty (30) days from the date of  
18 such pooling order.  
19

20 [REMAINDER OF PAGE INTENTIONALLY LEFT BLANK]  
21  
22  
23  
24  
25  
26  
27  
28  
29  
30  
31  
32  
33  
34  
35  
36  
37  
38  
39  
40  
41  
42  
43  
44  
45  
46  
47  
48  
49  
50  
51  
52  
53  
54  
55  
56  
57  
58  
59  
60  
61  
62  
63  
64  
65  
66  
67  
68  
69  
70  
71  
72  
73  
74

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

4 **Eclipse Resources I, LP**, who has prepared and circulated this form for execution, represents and warrants  
5 that the form was printed from and, with the exception(s) listed below, is identical to the AAPL Form 610-1989 Model Form  
6 Operating Agreement, as published in computerized form by Forms On-A-Disk, Inc. No changes, alterations, or  
7 modifications, other than those made by strikethrough and/or insertion and that are clearly recognizable as changes. ~~in~~  
8 Articles \_\_\_\_\_, ~~have been made to the form.~~  
9

10  
11 **OPERATOR**

12 **ATTEST OR WITNESS**

**Eclipse Resources I, LP**  
A Delaware limited partnership

13  
14  
15  
16  
17  
18 By: Marty L. Byrd

19  
20 Title: Vice President, Land  
21 Address: 2121 Old Gatesburg, Suite 110, State College, PA 16803  
22  
23

24  
25 **NON-OPERATORS**

26 **ATTEST OR WITNESS**

**Eclipse Resources - Ohio, LLC**  
A Delaware limited liability company

27  
28  
29  
30  
31 By: Marty L. Byrd

32  
33 Title: Vice President, Land  
34 Address: 2121 Old Gatesburg, Suite 110, State College, PA 16803  
35  
36

37 **ATTEST OR WITNESS**

38  
39  
40  
41  
42 By: \_\_\_\_\_

43  
44 Title: \_\_\_\_\_  
45 Address: \_\_\_\_\_  
46  
47

48 **ATTEST OR WITNESS**

49  
50  
51  
52  
53 By: \_\_\_\_\_

54  
55 Title: \_\_\_\_\_  
56 Address: \_\_\_\_\_  
57

58 **ATTEST OR WITNESS**

59  
60  
61  
62  
63 By: \_\_\_\_\_

64  
65 Title: \_\_\_\_\_  
66 Address: \_\_\_\_\_  
67  
68  
69  
70  
71  
72  
73  
74

**ACKNOWLEDGMENT**

COMMONWEALTH OF PENNSYLVANIA )  
 ) §  
COUNTY OF CENTRE )

On this, the \_\_\_ day of \_\_\_\_\_, 20\_\_\_, before me \_\_\_\_\_, the undersigned officer, personally appeared Marty L. Byrd, who acknowledged himself to be the Vice President, Land of Eclipse Resources I, LP a Delaware limited partnership, and that he as such Vice President, Land, being authorized to do so, executed the foregoing instrument for the purpose therein contained by signing the name of the limited partnership by himself as Vice President, Land.

IN WITNESS WHEREOF, I hereunto set my hand and official seal.  
My Commission Expires: \_\_\_\_\_  
Signature/Notary Public: \_\_\_\_\_  
Name/Notary Public (print): \_\_\_\_\_

COMMONWEALTH OF PENNSYLVANIA )  
 ) §  
COUNTY OF CENTRE )

On this, the \_\_\_ day of \_\_\_\_\_, 20\_\_\_, before me \_\_\_\_\_, the undersigned officer, personally appeared Marty L. Byrd, who acknowledged himself to be the Vice President, Land of Eclipse Resources – Ohio, LLC a Delaware limited liability company, and that he as such Vice President, Land, being authorized to do so, executed the foregoing instrument for the purpose therein contained by signing the name of the limited liability company by himself as Vice President, Land.

IN WITNESS WHEREOF, I hereunto set my hand and official seal.  
My Commission Expires: \_\_\_\_\_  
Signature/Notary Public: \_\_\_\_\_  
Name/Notary Public (print): \_\_\_\_\_

STATE OF \_\_\_\_\_ )  
 ) §  
COUNTY OF \_\_\_\_\_ )

On this, the \_\_\_ day of \_\_\_\_\_, 20\_\_\_, before me \_\_\_\_\_, the undersigned officer, personally appeared \_\_\_\_\_, who acknowledged himself to be the \_\_\_\_\_ of \_\_\_\_\_, a \_\_\_\_\_ Corporation, and that he as such \_\_\_\_\_, being authorized to do so, executed the foregoing instrument for the purpose therein contained by signing the name of the corporation by himself as \_\_\_\_\_.

IN WITNESS WHEREOF, I hereunto set my hand and official seal.  
My Commission Expires: \_\_\_\_\_  
Signature/Notary Public: \_\_\_\_\_  
Name/Notary Public (print): \_\_\_\_\_

STATE OF \_\_\_\_\_ )  
 ) §  
COUNTY OF \_\_\_\_\_ )

On this, the \_\_\_ day of \_\_\_\_\_, 20\_\_\_, before me \_\_\_\_\_, the undersigned officer, personally appeared \_\_\_\_\_, who acknowledged himself to be the \_\_\_\_\_ of \_\_\_\_\_, a \_\_\_\_\_ Corporation, and that he as such \_\_\_\_\_, being authorized to do so, executed the foregoing instrument for the purpose therein contained by signing the name of the corporation by himself as \_\_\_\_\_.

IN WITNESS WHEREOF, I hereunto set my hand and official seal.  
My Commission Expires: \_\_\_\_\_  
Signature/Notary Public: \_\_\_\_\_  
Name/Notary Public (print): \_\_\_\_\_

STATE OF \_\_\_\_\_ )  
 ) §  
COUNTY OF \_\_\_\_\_ )

On this, the \_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_, before me \_\_\_\_\_, the undersigned officer, personally appeared \_\_\_\_\_, who acknowledged himself to be the \_\_\_\_\_ of \_\_\_\_\_, a \_\_\_\_\_ Corporation, and that he as such \_\_\_\_\_, being authorized to do so, executed the foregoing instrument for the purpose therein contained by signing the name of the corporation by himself as \_\_\_\_\_.

IN WITNESS WHEREOF, I hereunto set my hand and official seal.

My Commission Expires: \_\_\_\_\_

Signature/Notary Public: \_\_\_\_\_

Name/Notary Public (print): \_\_\_\_\_

This document prepared by:  
Eclipse Resources I, LP  
2121 Old Gatesburg Road, St. 110  
State College, PA 16803

**EXHIBIT "A"**

Attached to and made a part of that certain Unit Operating Agreement for the Hannahs Unit by Eclipse Resources I, LP as Operator.

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

The Contract Area is the Unit shown on Exhibit "A-1" attached hereto.

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

Limited to the Utica / Point Pleasant Shale formations.

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

Eclipse Resources I, LP and  
Eclipse Resources – Ohio, LLC  
2121 Old Gatesburg Road, Suite 110  
State College, PA 16803  
Attention: Marty L. Byrd, Vice President, Land  
814-308-9754

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

**4. Percentages or fractional interests of parties to this agreement:**

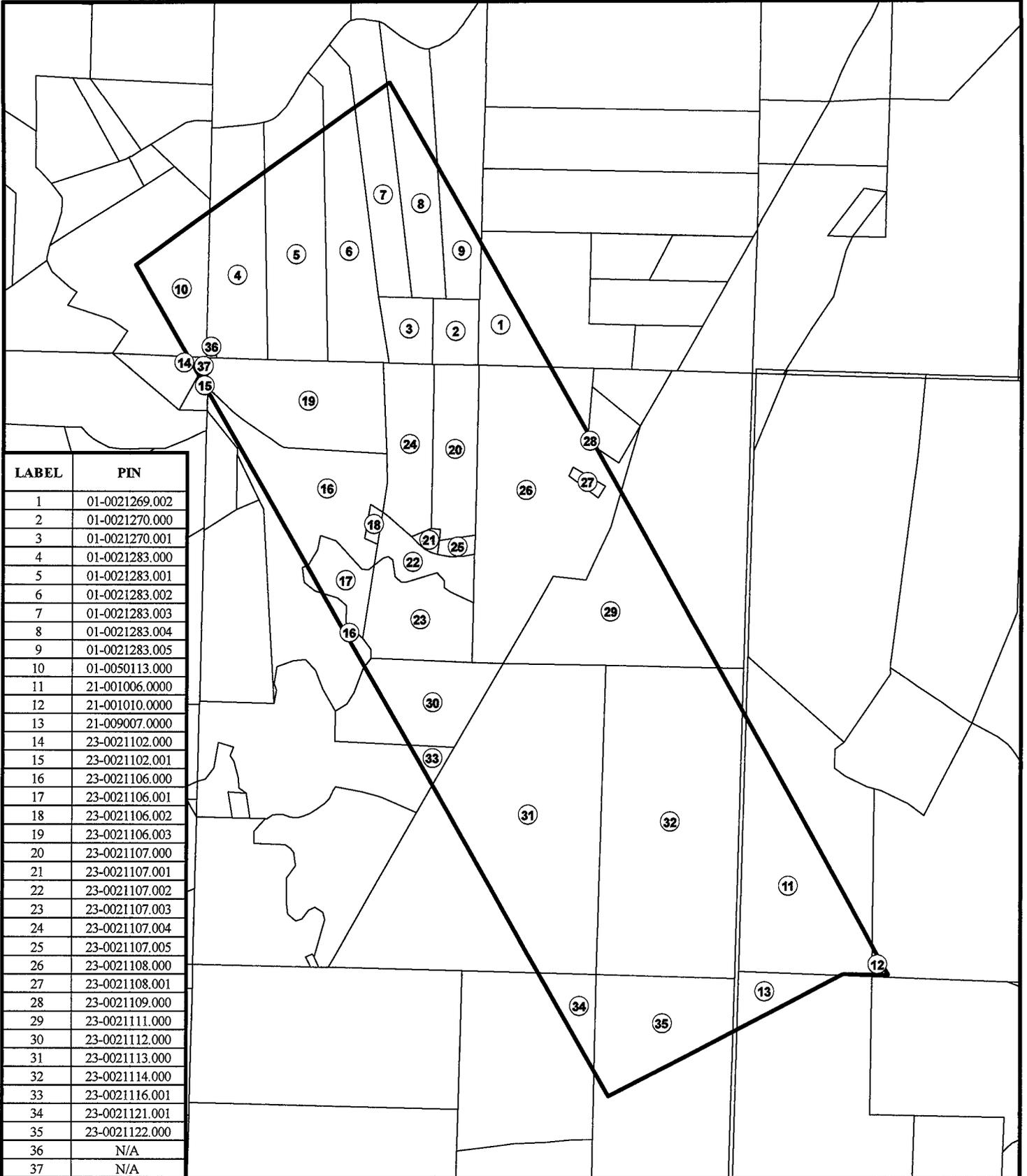
	<u>Working Interest</u>
Eclipse Resources I, LP	52.5350881%*
Eclipse Resources – Ohio, LLC	34.7809103%*
Unitized Parties	12.6840015%*
<b>TOTAL:</b>	<b>100.000000%</b>

**5. Oil and Gas Leases and/or Oil and Gas Interests subject to this agreement:**

See Exhibit "A-2"

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

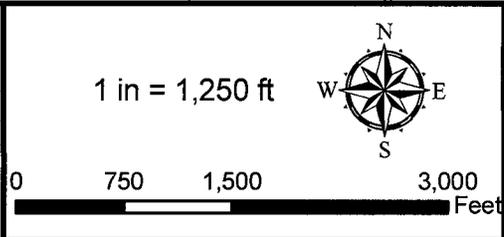
End of Exhibit "A"



LABEL	PIN
1	01-0021269.002
2	01-0021270.000
3	01-0021270.001
4	01-0021283.000
5	01-0021283.001
6	01-0021283.002
7	01-0021283.003
8	01-0021283.004
9	01-0021283.005
10	01-0050113.000
11	21-001006.0000
12	21-001010.0000
13	21-009007.0000
14	23-0021102.000
15	23-0021102.001
16	23-0021106.000
17	23-0021106.001
18	23-0021106.002
19	23-0021106.003
20	23-0021107.000
21	23-0021107.001
22	23-0021107.002
23	23-0021107.003
24	23-0021107.004
25	23-0021107.005
26	23-0021108.000
27	23-0021108.001
28	23-0021109.000
29	23-0021111.000
30	23-0021112.000
31	23-0021113.000
32	23-0021114.000
33	23-0021116.001
34	23-0021121.001
35	23-0021122.000
36	N/A
37	N/A



**Exhibit "A-1"**  
**Hannahs Unit**  
 Marion & Beaver Townships  
 Noble County, OH &  
 Seneca Township,  
 Monroe County, OH  
 Total Area ≈678.005 acres



Date: 9/30/2015  
 Coordinate System: NAD 1927 UTM Zone 17N  
 Projection: Transverse Mercator  
 Datum: North American 1927  
 False Easting: 500,000.0000  
 False Northing: 0.0000  
 Central Meridian: -81.0000  
 Scale Factor: 0.9996  
 Latitude Of Origin: 0.0000  
 Units: Meter

**EXHIBIT "A-2"**  
**Tracts Within The Contract Area**

Hannahs Unit  
Marion, Beaver, and Seneca Townships  
Noble and Monroe Counties, Ohio

Tract Number <sup>1</sup>	Current Mineral Owner	Leased Yes/No	Total Acres in Unit	Current Mineral Owner Interest In Tract	Tract Participation	Eclipse Resources I, LP Working Interest	Eclipse Resources - Ohio, LLC Working Interest	Parcel Identification Number	Township	County	State	Address	City	State	Zip Code
1	LL&B Headwater II, LP Point of Contact: Gordon Deen	Yes	10.026459	100.000000%	0.014788		1.000000	01-0021269.002	Beaver	Noble	Ohio	9433 Bees Caves Road Building III, Suite 150	Austin	Texas	78703
2	LL&B Headwater II, LP Point of Contact: Gordon Deen	Yes	6.758025	100.000000%	0.009968		1.000000	01-0021270.000	Beaver	Noble	Ohio	9433 Bees Caves Road Building III, Suite 150	Austin	Texas	78703
3	Mahlon Byler and Esther Byler, for their joint lives, remainder to the survivor of them	Yes	7.277239	100.000000%	0.010733	1.000000		01-0021270.001	Beaver	Noble	Ohio	27520 Grant Moore Road	Quaker City	Ohio	43773
4	Reuben R. Byler and Mary Ann M. Byler, for their joint lives, the remainder to the survivor of them	Yes	21.613363	100.000000%	0.031878	1.000000		01-0021283.000	Beaver	Noble	Ohio	26734 Grant Moore Road	Quaker City	Ohio	43773
5	Reuben R. Byler and Mary Ann M. Byler, for their joint lives, the remainder to the survivor of them	Yes	28.241844	100.000000%	0.041654	1.000000		01-0021283.001	Beaver	Noble	Ohio	26734 Grant Moore Road	Quaker City	Ohio	43773
6	Donald Boddy, unmarried, and Barbara Boddy, unmarried, for their joint lives, remainder to the survivor of them	Yes	25.275304	100.000000%	0.037279	1.000000		01-0021283.002	Beaver	Noble	Ohio	53458 Palestine Ridge Road	Quaker City	Ohio	43773
7	Sterling Pankratz	Yes	15.468247	50.000000%	0.022814	1.000000		01-0021283.003	Beaver	Noble	Ohio	12733 Lagoon Drive	Curtice	Ohio	43412
7	Jim Whitmer	Yes		50.000000%		1.000000		01-0021283.003	Beaver	Noble	Ohio	6521 Ridge Plaza Drive	Ridgeville	Ohio	44039
8	Sterling Pankratz	Yes	15.115875	50.000000%	0.022295	1.000000		01-0021283.004	Beaver	Noble	Ohio	12733 Lagoon Drive	Curtice	Ohio	43412
8	Jim Whitmer	Yes		50.000000%		1.000000		01-0021283.004	Beaver	Noble	Ohio	6521 Ridge Plaza Drive	Ridgeville	Ohio	44039
9	Richard G. Cline, married	Yes	7.899674	16.666700%	0.011651	1.000000		01-0021283.005	Beaver	Noble	Ohio	5819 Antioch Church Road East	Lenior City	Tennessee	37772
9	Kim H. Cline	Yes		16.666700%		1.000000		01-0021283.005	Beaver	Noble	Ohio	5819 Antioch Church Road East	Lenior City	Tennessee	37772
9	Isaac W. Cline	Yes		16.666700%		1.000000		01-0021283.005	Beaver	Noble	Ohio	1432 Maymont Court	Charlottesville	Virginia	22911
9	Matthew Hawkins Cline	Yes		16.666700%		1.000000		01-0021283.005	Beaver	Noble	Ohio	5819 Antioch Church Road East	Lenior City	Tennessee	37772
9	Marcia A. Cline	Yes		16.666700%		1.000000		01-0021283.005	Beaver	Noble	Ohio	5819 Antioch Church Road East	Lenior City	Tennessee	37772
9	Kelsey Lynn Cline	Yes		16.666700%		1.000000		01-0021283.005	Beaver	Noble	Ohio	5819 Antioch Church Road East	Lenior City	Tennessee	37772
10	Roman M. Troyer and Elizabeth J. Troyer, husband and wife, for their joint lives, remainder to the survivor of them	Yes	13.798981	100.000000%	0.020352	1.000000		01-0050113.000	Beaver	Noble	Ohio	26923 Grant Moore Road	Quaker City	Ohio	43773
11	Bradley H. Hannahs, single	Yes	42.512106	100.000000%	0.062702	1.000000		21-001006.0000	Seneca	Monroe	Ohio	52411 Batesville Road	Summerfield	Ohio	43788
12	Daniel A. Byler and Rose G. Byler, husband and wife, for their joint lives, remainder to the survivor of them	Yes	0.534897	100.000000%	0.000789		1.000000	21-001010.0000	Seneca	Monroe	Ohio	28770 Miltonsburg Calais Road	Summerfield	Ohio	43788
13	Thomas Neil Rubel	Yes	6.622324	50.000000%	0.009767	1.000000		21-009007.0000	Seneca	Monroe	Ohio	45021 Belmont-Centerville Road	Belmont	Ohio	43718
13	Marvin Dale Van Fossen and Janet Marlene Van Fossen, Trustees of the Van Fossen Family Revocable Living Trust dated April 30, 2014	Yes		50.000000%		1.000000		21-009007.0000	Seneca	Monroe	Ohio	45021 Belmont-Centerville Road	Belmont	Ohio	43718
14	Roman M. Troyer and Elizabeth J. Troyer, husband and wife, for their joint lives, remainder to the survivor of them	Yes	0.239830	100.000000%	0.000354	1.000000		23-0021102.000	Marion	Noble	Ohio	26923 Grant Moore Road	Quaker City	Ohio	43773
15	Roman M. Troyer and Elizabeth J. Troyer, husband and wife, for their joint lives, remainder to the survivor of them	Yes	0.158172	100.000000%	0.000233	1.000000		23-0021102.001	Marion	Noble	Ohio	26923 Grant Moore Road	Quaker City	Ohio	43773
16	Kenneth C. McVicker	Yes	30.055685	100.000000%	0.044330		1.000000	23-0021106.000	Marion	Noble	Ohio	619 E. Cross Street	Summerfield	Ohio	43788

Tract Number <sup>1</sup>	Current Mineral Owner	Leased Yes/No	Total Acres in Unit	Current Mineral Owner Interest In Tract	Tract Participation	Eclipse Resources I, LP Working Interest	Eclipse Resources - Ohio, LLC Working Interest	Parcel Identification Number	Township	County	State	Address	City	State	Zip Code
17	Kenneth C. McVicker	Yes	7.329991	100.000000%	0.010811		1.000000	23-0021106.001	Marion	Noble	Ohio	619 E. Cross Street	Summerfield	Ohio	43788
18	Kenneth C. McVicker	Yes	1.022379	100.000000%	0.001508		1.000000	23-0021106.002	Marion	Noble	Ohio	619 E. Cross Street	Summerfield	Ohio	43788
19	Kenneth C. McVicker	Yes	30.827047	100.000000%	0.045467		1.000000	23-0021106.003	Marion	Noble	Ohio	619 E. Cross Street	Summerfield	Ohio	43788
20	LL&B Headwater II, LP Point of Contact: Gordon Deen	Yes	17.123191	100.000000%	0.025255		1.000000	23-0021107.000	Marion	Noble	Ohio	9433 Bees Caves Road Building III, Suite 150	Austin	Texas	78703
21	Mahlon R. Byler and Esther M. Byler, husband and wife	Yes	1.022205	100.000000%	0.001508	1.000000		23-0021107.001	Marion	Noble	Ohio	27520 Grant Moore Road	Quaker City	Ohio	43773
22	Kenneth C. McVicker	Yes	8.174503	100.000000%	0.012057		1.000000	23-0021107.002	Marion	Noble	Ohio	619 E. Cross Street	Summerfield	Ohio	43788
23	Kenneth C. McVicker	Yes	19.224367	100.000000%	0.028354		1.000000	23-0021107.003	Marion	Noble	Ohio	619 E. Cross Street	Summerfield	Ohio	43788
24	Mahlon Byler and Esther Byler, for their joint lives, remainder to the survivor of them	Yes	17.678553	100.000000%	0.026074	1.000000		23-0021107.004	Marion	Noble	Ohio	27520 Grant Moore Road	Quaker City	Ohio	43773
25	Mahlon Byler and Esther Byler, for their joint lives, remainder to the survivor of them	Yes	1.455370	100.000000%	0.002147	1.000000		23-0021107.005	Marion	Noble	Ohio	27520 Grant Moore Road	Quaker City	Ohio	43773
26	LL&B Headwater II, LP Point of Contact: Gordon Deen	Yes	65.380183	100.000000%	0.096430		1.000000	23-0021108.000	Marion	Noble	Ohio	9433 Bees Caves Road Building III, Suite 150	Austin	Texas	78703
27	Adam A. Miller and Clara J. Miller, husband and wife, for their joint lives, remainder to the survivor of them	Yes	0.966001	100.000000%	0.001425	1.000000		23-0021108.001	Marion	Noble	Ohio	52737 State Route 513	Quaker City	Ohio	43773
28	James L. Morris and Marie Morris, husband and wife, for their joint lives, remainder to the survivor of them	Yes	0.103745	100.000000%	0.000153	1.000000		23-0021109.000	Marion	Noble	Ohio	52857 Batesville Road	Quaker City	Ohio	43773
29	Myron Roe and Treva Kirkbride, for their joint lives, remainder to the survivor of them	Yes	40.465451	100.000000%	0.059683		1.000000	23-0021111.000	Marion	Noble	Ohio	53702 Batesville Road	Quaker City	Ohio	43773
30	Bradley H. Hannahs, single	Yes	18.081203	100.000000%	0.026668	1.000000		23-0021112.000	Marion	Noble	Ohio	52411 Batesville Road	Summerfield	Ohio	43788
31	Bradley H. Hannahs, single, Life Estate, and Matthew Hannahs and Alison Hannahs, husband and wife, Remainderman	No	85.428259	100.000000%	0.126000			23-0021113.000	Marion	Noble	Ohio	52411 Batesville Road	Summerfield	Ohio	43788
32	Bradley H. Hannahs, single	Yes	95.299550	100.000000%	0.140559	1.000000		23-0021114.000	Marion	Noble	Ohio	52411 Batesville Road	Summerfield	Ohio	43788
33	Scott Kenneth Campbell and Tara Lynn Voda, for their joint lives, remainder to the survivor of them	Yes	2.019745	100.000000%	0.002979		1.000000	23-0021116.001	Marion	Noble	Ohio	52445 C. Stevens Road	Summerfield	Ohio	43788
34	Norma Hannahs, single, Life Estate, and Christopher A. Hannahs, Remaindermen	Yes	6.381505	100.000000%	0.009412		1.000000	23-0021121.001	Marion	Noble	Ohio	51620 Richard Clark Road	Summerfield	Ohio	43788
35	Ralph C. Tescar and Barbara A. Tescar as Trustees of The Ralph C. Tescar and Barbara A. Tescar Revocable Living Family Trust dated December 21, 2004	Yes	27.853500	33.330000%	0.041082	1.000000		23-0021122.000	Marion	Noble	Ohio	866 Starlight Drive	Seven Hills	Ohio	44131
35	Mark A. Tescar and Patricia Tescar, husband and wife, for their joint lives, remainder to the survivor of them	Yes		33.330000%		1.000000		23-0021122.000	Marion	Noble	Ohio	3731 Fernwood Drive	Brunswick	Ohio	44212
35	David Kostura and Stacey E. Kostura, husband and wife, for their joint lives, remainder to the survivor of them	Yes		33.330000%		1.000000		23-0021122.000	Marion	Noble	Ohio	2970 Elmer Drive	Brunswick	Ohio	44212
36	Mineral Owner Unknown	No	0.233364	100.000000%	0.000344			N/A	Beaver	Noble	Ohio	Address Unknown			
37	Mineral Owner Unknown	No	0.336495	100.000000%	0.000496			N/A	Marion	Noble	Ohio	Address Unknown			

1.000000000

Total Unleased Acres		85.998118
Total Unit Acres		678.004632

<sup>1</sup> Tract numbers shaded red reflect unleased tracts.

**EXHIBIT "A-3"**  
**Unleased Acreage to be Unitized in the Contract Area**

Hannahs Unit  
 Marion, Beaver, and Seneca Townships  
 Noble and Monroe Counties, Ohio

Tract Number <sup>1</sup>	Current Mineral Owner	Total Acres in Unit	Current Mineral Owner Interest in Tract	Tract Participation	Unleased Working Interest	Parcel Identification Number	Township	County	State	Address	City	State	Zip Code
31	Bradley H. Hannahs, single, Life Estate, and Matthew Hannahs and Alison Hannahs, husband and wife, Remainderman	85.428259	100.000000%	0.126000	1.000000	23-0021113.000	Marion	Noble	Ohio	52411 Batesville Road	Summerfield	Ohio	43788
36	Mineral Owner Unknown	0.233364	100.000000%	0.000344	1.000000	N/A	Beaver	Noble	Ohio	Address Unknown			
37	Mineral Owner Unknown	0.336495	100.000000%	0.000496	1.000000	N/A	Marion	Noble	Ohio	Address Unknown			

Total Unleased Acreage to be Unitized	85.998118
Total Leased Acreage	592.006514
Total Unit Acres	678.004632

<sup>1</sup> Tract numbers shaded red reflect unleased tracts.

## EXHIBIT "B"

Attached to and made a part of that certain Unit Operating Agreement for the Hannahs Unit by Eclipse Resources I, LP, as Operator.

### OIL AND GAS LEASE (PAID UP LEASE)

This lease (hereinafter referred to as the "Lease") dated this \_\_\_\_ day of \_\_\_\_\_, 20\_\_ (the "Lease Date"), by and between \_\_\_\_\_, with an address at \_\_\_\_\_, (hereinafter called "Lessor") and **ECLIPSE RESOURCES I, LP**, a Delaware limited partnership, with its principal address at 2121 Old Gatesburg Road, Suite 110, State College, Pennsylvania 16803 (hereinafter called "Lessee").

WITNESSETH, that for and in consideration of the premises and mutual benefits contained herein, the Lessor and Lessee, intending to be legally bound, agree as follows:

1. **LEASING CLAUSE:** Lessor, in consideration of the covenants, agreements, obligations and consideration set forth herein, hereby leases and lets exclusively to Lessee, and its successors and assigns, all the oil and gas (including, but not limited to, coal seam gas, coalbed methane gas, coalbed gas, methane gas, gob gas, occluded methane/natural gas and all associated natural gas and other hydrocarbons and non-hydrocarbons contained in, associated with, emitting from, or produced/originating within any formation, gob area, mined-out area, coal seam, and all communicating zones), and their liquid or gaseous constituents, whether hydrocarbon or non-hydrocarbon, contained in, associated with, emitting from, or underlying the Leasehold (as hereinafter defined), together with exclusive rights to enter into, in, on and upon said lands herein leased at all times and on one or more occasions for the purposes set forth herein and together further with such exclusive rights as may be necessary or convenient for Lessee, at its election, to explore for, drill for, develop, produce, measure, and market production of oil and gas and their liquid or gaseous constituents, whether hydrocarbon or non-hydrocarbon, from the Leasehold, and from adjoining lands, using methods and techniques which are not restricted to current technology, including the right to inject air, gas, water, and other substances from whatever source into any subsurface strata, except potable water strata; to conduct geophysical, seismic and other exploratory tests; to drill, maintain, operate, rework, stimulate, complete, cease to operate, plug, abandon, and remove wells; to use or install roads, electric power and telephone facilities, and to construct one or more pipelines with appurtenant facilities (including data acquisition, compression and collection facilities) for use in the measurement, production and transportation of oil, gas, water or other products to or from the Leasehold or to or from neighboring lands across the Leasehold; and to operate, maintain, repair, and remove materials and equipment.

2. **DESCRIPTION:** "See Schedule I attached hereto and made a part hereof."

3. **LEASE TERM:** This Lease shall remain in force for a primary term of five (5) years from the Lease Date (the "**Primary Term**"), and shall continue beyond the Primary Term (or any extension thereof) as to the entirety of the Leasehold for so long thereafter as any one or more of the following is satisfied: (i) operations are conducted on the Leasehold or lands pooled or unitized therewith in search of oil, gas, or their constituents, or (ii) a well deemed by Lessee to be capable of production is located on the Leasehold or lands pooled or unitized therewith, or (iii) oil or gas, or their constituents, are produced from the Leasehold or lands pooled or unitized therewith, or (iv) if the Leasehold or lands pooled or unitized therewith is used for underground storage of gas, or for the protection of stored gas, or (v) if prescribed payments hereunder are made, or (vi) if Shut-in Royalties provided hereunder are paid or (vii) Lessee's operations are delayed, postponed, prevented or interrupted as a result of (A) any coal, stone or other mining or mining related operation under any existing and effective lease, permit or authorization covering such operations on the Leasehold or on other lands affecting the Leasehold or (B) any laws, rules, regulations, orders, or drilling or well permitting moratoriums enacted or promulgated by any governmental body or regulatory authority (and such delay will automatically extend the primary or secondary term of this Lease without additional compensation or performance by Lessee for a period of time equal to any such delay, postponement, prevention or interruption). If there is any dispute concerning the extension of this Lease beyond the Primary Term by reason of any of the alternative mechanisms specified herein, the payment to the Lessor of the prescribed payments provided herein shall be conclusive evidence that the Lease has been extended beyond the Primary Term. Should Lessor or any other person bring any action in law that challenges the continued effectiveness of this Lease, and upon litigation or other resolution thereof the continued validity of this Lease is upheld, the term of this Lease (whether primary or secondary) shall be continued for the full period between the date of the filing of the claim to a date six months after the date of the final resolution thereof that is no longer subject to appeal.

4. NO AUTOMATIC TERMINATION OR FORFEITURE:

(A) CONSTRUCTION OF LEASE: The language of this Lease shall never be read or construed as language of special limitation. This Lease shall be construed against termination, forfeiture, cancellation or expiration and in favor of giving effect to the continuation of this Lease where the circumstances exist to maintain this Lease in effect under any of the alternative mechanisms set forth herein. In connection therewith, (i) a well shall be deemed to be capable of production if it has the capacity to produce a profit over operating costs, without regard to any capital costs to drill or equip the well, or to deliver the oil or gas to market, and (ii) the Lessee shall be deemed to be conducting operations in search of oil or gas, or their constituents, if the Lessee is engaged in geophysical and other exploratory work, including, but not limited to, activities to drill an initial well, to drill a new well, or to rework, stimulate, deepen, sidetrack, frac, plug back in the same or different formation or repair a well or equipment on the Leasehold or any lands pooled or unitized therewith (such activities shall include, but not be limited to, performing any preliminary or preparatory work necessary for drilling, conducting internal technical analysis to initiate and/or further develop a well, obtaining permits and approvals associated therewith and may include reasonable gaps in activities provided that there is a continuum of activities showing a good faith effort to develop a well or that the cessation or interruption of activities was beyond the control of Lessee, including interruptions caused by the acts of third parties over whom Lessee has no control or regulatory delays associated with any approval process required for conducting such activities).

(B) LIMITATION OF FORFEITURE: This lease shall never be subject to a civil or equity action, arbitration or other proceeding to enforce a claim of termination, cancellation, expiration of forfeiture due to any action or inaction by the Lessee, including, but not limited to, making or the failure to make any prescribed payments, authorized or required under the terms of this Lease, unless the Lessee has received written notice of Lessor's claim and a demand for performance and thereafter fails or refuses to satisfy or to provide reasonable justification for its act or omission in response to Lessor's demand within 60 days from the receipt thereof. If Lessee timely responds to Lessor's demand, but in good faith disagrees with Lessor's position and set forth the reasons therefore, such a response shall be deemed to satisfy this provision, this Lease shall continue in full force and effect and no further damages (or other claims for relief) will accrue in Lessor's favor during the pendency of this dispute, other than claims for undisputed on-going payments that may be due under the terms of this Lease during the pendency of this dispute and any effort by the parties to resolve the dispute.

5. PAYMENTS TO LESSOR. Subject to the terms and conditions set forth herein, Lessee covenants to pay Lessor, proportionate to Lessor's percentage of ownership, as follows:

(A) ADVANCED DELAY RENTALS: This Lease shall automatically become null and void and terminate, and all rights of either Lessor or Lessee hereunder shall cease and terminate, unless, within 120 days from the Lease Date, Lessee elects to pay, in proportion to Lessor's percentage of ownership of the oil and gas and related interests in the Leasehold, as pre-paid advanced delay rentals, the sum of \_\_\_\_\_ (\$ \_\_\_\_\_) per net mineral acre of the Leasehold, subject to adjustment pursuant to Section 12 hereof (the "Advanced Delay Rental Payment"). Lessor acknowledges and agrees that Lessee may elect not to pay the Advanced Delay Rental Payment for any reason whatsoever and allow the Lease to terminate without liability to the Lessor. Notwithstanding anything contained anywhere in this Lease or any public law to the contrary, should Lessee elect to pay the Advanced Delay Rental Payment, the parties hereto stipulate and agree that this is a "Paid Up" Lease with no further delay rental or delay in marketing payments due to Lessor during the Primary Term hereof, and that any and all bonuses and delay rentals due or payable hereunder have been prepaid to Lessor for the purpose of keeping this Lease in effect during and for the entirety of the Primary Term. In accepting the bonuses and delay rentals, Lessor and Lessee stipulate and agree that it is deemed for all purposes that all delay rentals have been timely paid on the anniversary date of this Lease on any annual basis, regardless of when same shall have been actually tendered to Lessor.

(B) **ROYALTY:** To pay Lessor as a royalty, less all taxes, assessments, and adjustments on production from the Leasehold (a "Royalty"), as follows:

1. **OIL.** To pay Lessor an amount equal to \_\_\_\_\_ percent (\_\_\_\_ %) of the revenue realized by Lessee (after deducting any severance, ad valorem and any other applicable taxes) for all oil and any constituents thereof produced and marketed from the Leasehold, less the cost to transport or market the oil to the point of sale.

2. **GAS.** To pay Lessor on actual volumes of gas sold from said land, an amount equal to \_\_\_\_\_ percent (\_\_\_\_ %) of the net amount realized by Lessee, computed at the wellhead. As used in this lease, the term "net amount realized by Lessee, computed at the wellhead" shall mean the gross proceeds received by Lessee from the sale of oil and gas minus post-production costs incurred by Lessee between the wellhead and the point of sale. As used in this Lease, the term "post-production costs" shall mean all costs and expenses of (a) treating and processing oil and/or gas, and (b) separating liquid hydrocarbons from gas, other than condensate separated at the well, and (c) transporting oil and/or gas, including but not limited to transportation between the wellhead and any production or treating facilities, and transportation to the point of sale, and (d) compressing gas for transportation and delivery purposes, and (e) metering oil and/or gas to determine the amount sold and/or the amount used by Lessee) and (f) sales charges, commissions and fees paid to third parties (whether or not affiliated) in connection with the sale of the gas, and (g) any and all other costs and expenses of any kind or nature incurred in regard to the gas, or the handling thereof, between the wellhead and the point of sale. Lessee may use its own pipelines and equipment to provide such treating, processing, separating, transportation, compression and metering services, or it may engage others to provide such services; and if Lessee uses its own pipelines and/or equipment, post-production costs shall include without limitation reasonable depreciation and amortization expenses relating to such facilities, together with Lessee's cost of capital and a reasonable return on its investment in such facilities.

(C) **SHUT-IN ROYALTY:** In the event that production of oil, gas, or their constituents is interrupted and not marketed for a period of more than twelve months, or should Lessee elect to shut in a producing well for a period of more than twelve (12) months, and there is no producing well on the Leasehold or lands pooled or unitized therewith, Lessee shall thereafter, as royalty for constructive production, pay to Lessor an annual shut-in royalty equal to Ten Dollars (\$10.00) per net mineral acre of the Leasehold (proportionally reduced to Lessor's percentage of ownership in the Leasehold) until such time as production is re-established or Lessee surrenders the Lease (a "Shut-In Royalty") and this Lease shall thereafter remain in full force and effect. During such shut-in, Lessee shall have the right to rework, stimulate, or deepen any well on the Leasehold or to drill a new well on the Leasehold in an effort to re-establish production, whether from an original producing formation or from a different formation. In the event that the production from the only producing well on the Leasehold is interrupted for a period of less than twelve months or Lessee elects to shut in a producing well for a period of less than twelve months, this Lease shall remain in full force and effect without payment of delay rental, Royalty or Shut-in Royalty.

(D) **ADDITIONAL PROVISIONS:** Prior to payment of Royalty, Lessor may be required to execute a Division Order certifying Lessor's interest in production. Lessee may pay all taxes and fees levied upon the oil and gas as produced, including, without limitation, severance taxes and privilege and surveillance fees, and deduct a proportionate share of the amount so paid from any monies payable to Lessor hereunder. Lessee may withhold Royalty payment until such time as the total withheld exceeds fifty dollars (\$50.00).

6. **EQUIPMENT; DAMAGES:** Lessee shall have the right at any time during the term of this Lease or after the expiration or termination thereof to remove all equipment, machinery, fixtures, pipelines, buildings, and other structures placed on the Leasehold by Lessee, including the right to pull and remove all casing and tubing. Lessee will remove unnecessary equipment and materials and reclaim all disturbed lands at the completion of activities, and Lessee agrees to repair any damaged improvements to the land and pay for the loss of growing crops or marketable timber. Lessee shall bury all permanent pipelines below plow depth through cultivated areas upon request of Lessor owning an interest in the surface. Damages shall be calculated at current marketable value only; in no instance shall estimates of future values be considered. Any timber cut by Lessee in preparing access roads, right-of-ways, or locations will be stacked in an orderly manner in locations to be mutually agreed upon by Lessee and Lessor and will not be subject to damage reimbursement to Lessor by Lessee. Any injury to Lessee's workers or damages to Lessee's property that are caused by Lessor, whether intentional or not, shall be recoverable by Lessee from any royalty payments or any other payments to Lessor that are due or becoming due.

7. **MANNER OF PAYMENT:** Lessee shall make or tender all payments due hereunder by check, payable to Lessor, at Lessor's last known address, and Lessee may withhold any payment pending notification by Lessor of a change in address. Payment may be tendered by mail or any comparable method (e.g. Federal Express), and payment is deemed complete upon mailing or dispatch. Where the due date for any payment specified herein falls on a holiday, Saturday or Sunday, payment tendered (mailed or dispatched) on the next business day is timely.

8. **CHANGE IN LAND OWNERSHIP:** Lessee shall not be bound by any change in the ownership of the Leasehold until furnished with such documentation as Lessee may reasonably require. Pending the receipt of documentation, Lessee may elect either to continue to make or withhold payments as if such change had not occurred.

9. TITLE DISPUTES: Lessor covenants and agrees that if Lessor's title to the Leasehold shall come into dispute or litigation, or if, in the judgment of Lessee, there are bona fide adverse claims to the rentals, royalties, rights or privileges of Lessor herein provided for, Lessee, at its option, may withhold such rights or privileges or the payment of said rentals or royalties to all persons until final adjudication or other settlement of such dispute, litigation or claims.

10. LIENS: Lessee may at its option pay and discharge any past due taxes, mortgages, judgments, or other liens and encumbrances on or against any land or interest included in the Leasehold; and Lessee shall be entitled to recover from the debtor, with legal interest and cost, by deduction from any future payments to Lessor or by any other lawful means.

11. CHARACTERIZATION OF PAYMENTS: Payments set forth herein are covenants, not special limitations, regardless of the manner in which these payments may be invoked. Except as provided in Section 5(a) of this Lease, any failure on the part of the Lessee to timely or otherwise properly tender payment can never result in an automatic termination, expiration, cancellation, or forfeiture of this Lease. Lessor recognizes and acknowledges that oil and gas lease payments, in the form of rental, bonus and royalty, can vary depending on multiple factors and that this Lease is the product of good faith negotiations. Lessor hereby agrees that the payment terms, as set forth herein, and any rentals and other payments paid or to be paid to Lessor constitute full consideration for the Leasehold. Lessor further agrees that such payment terms and bonus payments are final and that Lessor will not seek to amend or modify the lease payments, or seek additional consideration based upon any differing terms which Lessee has or will negotiate with any other lessor/oil and gas owner.

12. PAYMENT REDUCTIONS AND CORRECTIONS: If it is determined that Lessor owns a lesser interest in the oil and gas than the entire undivided fee simple estate, then the rentals (including, without limitation, the Advanced Delay Rental Payment), royalties and shut-in royalties payable hereunder shall be paid to Lessor only in the proportion which Lessor's interest bears to the whole and undivided fee. If it is determined that Lessor does not have sufficient title to all or any portion of the oil and gas contained in, associated with, emitting from, or underlying the Leasehold, Lessor agrees on demand made to refund to Lessee any rental (including, without limitation, the Advanced Delay Rental Payment) or royalty previously paid Lessor, and to release Lessee from the payment of any future rental (including, without limitation, the Advanced Delay Rental Payment) or royalty, in proportion to the amount of acreage affected by the insufficient title. If it is determined that the quantity of acreage of land of the Leasehold recited herein is in excess of the true quantity of acreage of land, Lessor agrees on demand made to refund to Lessee any rental previously paid (including, the Advanced Delay Rental Payment), and to release Lessee from the payment of any future rental (including, the Advanced Delay Rental Payment), in the proportion that the excess of recited acreage over the true acreage in the Leasehold bears to the recited acreage. If the recited acreage is found to be less than the true quantity of acreage of land in the Leasehold, Lessee on demand made shall pay to Lessor the arrears in rental payments on the basis of excess of the true quantity of acreage over the said recited acreage and shall thereafter pay any rentals on the basis of the true quantity of acreage.

13. HORIZONTAL DRILLING. Lessor consents and agrees to the use of a horizontal well on and under the Leasehold and Lessor specifically: (i) grants to Lessee the right, in Lessee's sole and absolute discretion, to use the Leasehold as the site of the vertical bore for such horizontal well, whether or not that bore intersects the target formation upon the Leasehold, (ii) grants to Lessee the right, in Lessee's sole and absolute discretion, to horizontally drill through the Leasehold whether or not that bore intersects the target formation upon the Leasehold, whether or not any completion or stimulation is performed upon the Leasehold and whether or not production is obtained or maintained upon the Leasehold, and (iii) grants to the Lessee the right to perform such completions and simulations in and from any horizontal bore as Lessee may, in Lessee's sole and absolute discretion, determine. Any vertical or horizontal bore made upon the Leasehold as part of a horizontal well, the vertical bore of which is on the Leasehold or any other premises, shall be, and shall be deemed to be, a well drilled upon the Leasehold for all purposes of this Lease.

14. UNITIZATION AND POOLING: Lessor grants Lessee the right to pool, unitize or combine all or parts of the Leasehold with other lands, whether contiguous or not contiguous, leased or unleased, whether owned by Lessee or by others, at a time before or after drilling to create drilling or production units either by contract right or pursuant to governmental authorization. Pooling or unitizing in one or more instances shall not exhaust Lessee's pooling and unitizing rights hereunder, and Lessee is granted the right to change the size, shape, and conditions of operation or payment of any unit created. Lessor agrees to accept and receive out of the production or the revenue realized from the production of such unit, such proportional share of the Royalty from each unit well as the number of Leasehold acres included in the unit bears to the total number of acres in the unit. Otherwise, as to any part of the unit, drilling, operations in preparation for drilling, production, or shut-in production for the unit, or payment of Royalty, Shut-in Royalty, or delay rental attributable to any part of the unit (including non-Leasehold land) shall have the same effect upon the terms of this Lease as if a well were located on, or the subject activity attributable to, the Leasehold. In the event of conflict or inconsistency between the Leasehold acres ascribed to the Lease and the local property tax assessment calculation of the lands covered by the Lease, Lessee may, at its option, rely on the latter as being determinative for the purposes of this paragraph.

15. FACILITIES; SEISMIC: Lessee shall not drill a well within 200 feet of any structure located on the Leasehold without Lessor's prior written consent. Lessor shall not erect any building or structure or plant any trees within 200 feet of a well or within 25 feet of a pipeline without Lessee's written consent. Lessor shall not improve, modify, degrade, or restrict roads and facilities built by Lessee without Lessee's written consent. Lessor grants to Lessee and Lessee's geophysical agents and contractors the exclusive right and permission to conduct one or more seismic operations across the Leasehold. Lessee and Lessee's geophysical agents and contractors are hereby

granted, for both personnel and equipment, access to the Leasehold Premises for the purpose of conducting the seismic operations on the Leasehold, including, but not limited to, surveying, and the acquisition of seismic data. Lessee agrees to protect Lessor from any and all claims and damages that may result from the seismic operations conducted hereunder. Lessee and Lessee's geophysical agents or contractors will conduct seismic operations in such a manner as to leave the surface of the land in as near the original condition as reasonably possible.

16. TITLE AND INTERESTS; AFFIDAVIT OF NO PRODUCTION: Lessor hereby warrants generally and agrees to defend title to the Leasehold and covenants that Lessee shall have quiet enjoyment hereunder and shall have benefit of the doctrine of after acquired title. Should any person having title to the Leasehold fail to execute this Lease, the Lease shall nevertheless be binding upon all persons who do execute it as Lessor. Lessor hereby warrants that Lessor is not currently receiving any bonus, rental, or royalty as a result of any other oil and gas lease covering any or all of the Leasehold, and that there are no producing or shut-in wells currently existing on the Leasehold, or upon other lands with the boundaries of a drilling or production unit utilizing all or a part of the Leasehold.

17. LEASE DEVELOPMENT: Lessor and Lessee agree that, except as expressly stated herein, no implied covenants, obligations or conditions whatsoever shall be read into this Lease, including any covenants or conditions relating to the development, extraction or exploration of the Leasehold or the Oil and Gas within a certain time frame, or relating to the marketing of production, or requiring Lessee to drill a well or wells or to continue drilling on the Leasehold, or fixing the measure of diligence necessary on Lessee's part, or relating to the production of any wells or offsets wells, or relating to the prevention of drainage, or relating to any other operations of Lessee hereunder, or relating to anything to be done by the Lessee including the plugging and abandoning of any wells at any time for any reason. There shall be no Lease forfeiture, termination, expiration, damages or cancellation for (i) failure to comply with any implied covenants or (ii) for failure to comply with obligations if compliance is effectively prevented by any of the conditions set forth in subparagraph vi of the Lease Term paragraph or Force Majeure paragraph of this lease.. The consideration paid and the provisions herein, including any prescribed payments, constitute full compensation for the privileges herein granted.

18. EXTENSION OF TERM: Lessor hereby grants unto Lessee, its successors and assigns, the exclusive option and right to extend this Lease beyond the Primary Term for one additional term of five (5) years by paying to Lessor at any time before the expiration of the Primary Term, or within one hundred at 120 days following the expiration of the Primary Term, a payment in an amount equal to the Advanced Delay Rental Payment.

19. RIGHT OF FIRST REFUSAL: If, at any time within the Primary Term of this Lease or any continuation or extension thereof, Lessor receives any bona fide offer, acceptable to Lessor, to grant an additional lease (a "Top Lease") covering all or part of the Leasehold, Lessee shall have the continuing option, by meeting any such offer, to acquire such Top Lease on equivalent terms and conditions. Any offer must be in writing and must set forth the proposed Lessee's name, bonus consideration and royalty consideration to be paid for such Top Lease, and include a copy of the lease form to be utilized reflecting all pertinent and relevant terms and conditions of the Top Lease. Lessee shall have fifteen (15) days after receipt from Lessor of a complete copy of any such offer to advise Lessor in writing of its election to enter into an oil and gas lease with Lessor on equivalent terms and conditions. If Lessee fails to notify Lessor within the aforesaid fifteen (15) day period of its election to meet any such bona fide offer, Lessor shall have the right to accept said offer. Any Top Lease granted by Lessor in violation of this provision shall be null and void.

20. ARBITRATION: In the event of a disagreement between Lessor and Lessee concerning this Lease, performance hereunder, or damages alleged to have been caused by Lessee's operations, the resolution of all such disputes shall be determined by arbitration in accordance with the Commercial Arbitration Rules of the American Arbitration Association. Arbitration shall be conducted before a single arbitrator, with at least ten years' experience in oil and gas law in Ohio, regardless of the amount in controversy, and the arbitrator shall be appointed within 14 days after the arbitration is requested. Such arbitration shall be conducted in Columbus, Ohio unless another location is agreed to in writing by the Lessor and Lessee. All fees and costs associated with the arbitration shall be borne equally by Lessor and Lessee. The arbitrator shall be required by the arbitration agreement to make an award within 30 days following the last day of arbitration hearings conducted in the matter. The award rendered by the arbitrator shall be final and judgment upon the arbitration award may be entered in any court having jurisdiction thereof.

21. ENTIRE CONTRACT. This Lease (including an addendum attached hereto, if any) sets forth the entire agreement and understanding between the parties as to the subject matter hereof, and supersedes, integrates and merges all prior discussions, correspondence, negotiations, understandings or agreements. No oral warranties, representations or promises have been made or relied upon by either party as an inducement to or modification of this Lease This Lease is the result of negotiations between the parties and each party has been given the opportunity to consult with legal counsel. Any rule of contract construction that an instrument is to be construed more strictly against the drafter shall not apply to this Lease. This Lease shall be construed as a whole and in accordance with the fair meaning of its language.

22. SURRENDER. Lessee, at any time, and from time to time, may surrender and cancel this Lease as to all or any part of the Leasehold by written notice to the Lessor or by placing the surrender thereof on record in the proper county, either of which shall constitute a full and legal surrender of this Lease as to all the Leasehold or such portion thereof as said surrender shall indicate and shall be a cancellation of all liabilities under same of each and all parties hereto to the extent indicated on the surrender, and the rentals herein provided shall be reduced in

proportion to the acreage surrendered. At and after the termination or surrender of all or a portion of this Lease, (i) ownership of any such pipelines, pole lines, roadways and other facilities laid or constructed during the term of this Lease shall not revert to Lessor, and at Lessee's option and without any fee payable to Lessor, Lessee shall continue to have the right of unlimited access to operate, maintain or remove said pipelines, poles, roadways and facilities; but (ii) Lessee shall not be entitled to lay and maintain additional pipelines across the Leasehold without specific written consent of Lessor.

23. **SUCCESSORS.** All rights, duties and liabilities herein benefit and bind Lessor and Lessee and their heirs, successors and assigns.

24. **FORCE MAJEURE:** When drilling, reworking, fracturing, stimulating, or other operations hereunder, or Lessee's fulfillment of its obligations hereunder, are prevented or delayed by such laws, rules, regulations or orders, or by inability to obtain or delay in obtaining for any reason any and all necessary permits (including, without limitation, an inability to obtain well permits as a result of objections of owners of coal rights), equipment, services, material, water, electricity, fuel, access or easements, or by fire, flood, adverse weather conditions, war, sabotage, rebellion, insurrection, riot, strike or labor disputes, or by inability to obtain a satisfactory market for production or failure of purchasers or carriers to take or transport such production, or by any other cause not reasonably within Lessee's control, including any periods of depressed natural gas pricing, this Lease shall not terminate because of such prevention or delay, and, at Lessee's option, the period of such prevention or delay shall be added to the term hereof. Lessee shall not be liable for breach of any provisions, covenants or implied covenants of this Lease when drilling, production, or other operations are so prevented or delayed.

25. **SEVERABILITY:** This Lease is intended to be in conformity with all laws, rules, regulations and orders and interpreted as such. If any court of competent jurisdiction holds any provision of this Lease invalid or unenforceable (including, without limitation, under any applicable minimum royalty statute), this Lease and the other provisions of this Lease will nevertheless remain in full force and effect. Any provision of the Lease held invalid or unenforceable only in part or degree will remain in full force and effect to the extent not held invalid or unenforceable.

26. **GOVERNING LAW:** This Lease and enforcement hereunder shall be governed by the laws of the State of Ohio, without regard to conflicts of law principles that might refer the interpretation hereof to the laws of another state. Further, subject to the arbitration requirements of Section 20 of this Lease, the parties consent to the sole and exclusive jurisdiction in the state and federal courts that have jurisdiction over the county in which the Leasehold is located for all claims related to enforcement of this Lease. NOTWITHSTANDING ANYTHING IN THIS LEASE TO THE CONTRARY, NEITHER LESSOR NOR LESSEE (OR ITS PARTNERS, OFFICERS, EMPLOYEES, DIRECTORS OR MANAGERS OR ITS OR THEIR RESPECTIVE SUBSIDIARIES OR AFFILIATES) SHALL BE LIABLE FOR PUNITIVE, INDIRECT, INCIDENTAL, EXEMPLARY OR CONSEQUENTIAL LOSSES OR DAMAGES WHATSOEVER FOR ANY MATTER RELATING TO OR ARISING OUT OF THIS LEASE, INCLUDING LOSS OF PROFITS, WHETHER BASED UPON BREACH OF CONTRACT, BREACH OF WARRANTY, TORT LIABILITY (INCLUDING NEGLIGENCE AND STRICT LIABILITY), STRICT LIABILITY, OR OTHER LEGAL THEORY, EXCEPT TO THE EXTENT OF THE EXPRESS REMEDIES PROVIDED FOR HEREIN. NOTHING CONTAINED IN THIS LEASE SHALL BE CONSTRUED TO RELIEVE EITHER PARTY OF ITS OBLIGATION TO MITIGATE DAMAGES FOR THE OTHER PARTY'S BREACH. THE TOTAL MONETARY AMOUNT FOR LOSSES AND DAMAGES, FOR ANY MATTER RELATING TO OR ARISING OUT OF A BREACH OF THIS LEASE THAT LESSEE SHALL BE OBLIGATED TO PAY TO LESSOR SHALL NOT EXCEED AN AMOUNT EQUAL TO THE ACTUAL, DIRECT LOSSES OR DAMAGES SUSTAINED BY LESSOR FOR SUCH MATTER.

27. **EFFECTIVENESS:** This Lease shall be effective only upon the due execution of this Lease by both Lessor and Lessee. **LESSOR ACKNOWLEDGES AND AGREES THAT ANY PERSON OR PERSONS NEGOTIATING THE TERMS AND CONDITIONS OF THIS LEASE ON BEHALF OF LESSEE IS AN INDEPENDENT CONTRACTOR OF LESSEE AND NOT ITS AGENT OR EMPLOYEE, THAT SUCH PERSON OR PERSONS HAVE NO AUTHORITY TO BIND LESSEE TO THE LEASE OR OTHERWISE, AND THAT THIS LEASE OR ANY OTHER PROMISE OR AGREEMENT SHALL NOT BE BINDING UPON LESSEE UNTIL THIS LEASE IS ACCEPTED BY LESSEE ONLY AS EVIDENCED BY THE DUE EXECUTION OF THIS LEASE BY AN OFFICER OR OTHER AUTHORIZED PERSON OF LESSEE. LESSOR FURTHER ACKNOWLEDGES AND AGREES THAT LESSEE MAY DECLINE TO ACCEPT AND EXECUTE THIS LEASE FOR ANY REASON WHATSOEVER IN ITS SOLE AND COMPLETE DISCRETION, AND IN THE EVENT LESSEE ELECTS NOT TO ACCEPT THIS LEASE, LESSEE SHALL HAVE NO OBLIGATION OR LIABILITY TO LESSOR HEREUNDER WHATSOEVER, INCLUDING, WITHOUT LIMITATION, TO MAKE THE ADVANCED DELAY RENTAL PAYMENT PRESCRIBED IN SECTION 5(A) OF THIS LEASE.**

28. **HEADINGS:** The headings and titles used in this Lease are inserted for convenience only and shall be disregarded in construing terms, conditions and provisions of this Agreement.

29. **NO THIRD PARTY BENEFICIARIES.** Nothing in this Lease shall provide any benefit to any third party or entitle any third party to any claim, cause of action, remedy or right of any kind, it being the intent of the parties hereto that this Lease shall not be construed as a third-party beneficiary contract.



**STATE OF OHIO**  
**COUNTY OF \_\_\_\_\_**

§  
§  
§

On this \_\_\_ day of \_\_\_\_\_, 20\_\_, before me, the undersigned officer, personally appeared \_\_\_\_\_, who acknowledged himself/herself to be the \_\_\_\_\_ of \_\_\_\_\_, a \_\_\_\_\_ of the State of \_\_\_\_\_, and that he/she, as such officer, being authorized to do so, executed the foregoing instrument for the purposes therein contained by signing the name of the company by himself/herself as such officer.

IN WITNESS WHEREOF, I hereunto set my hand and official seal.

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

My commission expires:

**LESSEE ACKNOWLEDGMENT**

**COMMONWEALTH OF PENNSYLVANIA**  
**COUNTY OF CENTRE**

§  
§  
§

On this \_\_\_\_\_ day of \_\_\_\_\_ 20\_\_, before me, the undersigned officer, personally appeared Marty L. Byrd, who acknowledged himself to be the Vice President, Land, of Eclipse Resources I, LP, a Delaware limited partnership, and that he, as such officer, being authorized to do so on behalf of the limited partnership, executed the foregoing instrument for the purposes therein contained by signing the name of the limited partnership by himself as such officer.

IN WITNESS WHEREOF, I hereunto set my hand and official seal.

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

My commission expires:



## Exhibit " C "

### ACCOUNTING PROCEDURE JOINT OPERATIONS

Attached to and made part of that certain Unit Operating Agreement for the Hannahs Unit by Eclipse Resources I, LP, as Operator.

#### I. GENERAL PROVISIONS

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

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

#### 1. DEFINITIONS

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

## 50 51   2. STATEMENTS AND BILLINGS

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

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

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25  
26  
27  
28  
29  
30  
31

### 3. ADVANCES AND PAYMENTS BY THE PARTIES

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

### 4. ADJUSTMENTS

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

### 5. EXPENDITURE AUDITS

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

62  
63  
64  
65  
66

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

1 those Non-Operators approving such audit.

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

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

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

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

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

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

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

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

## 60 6. APPROVAL BY PARTIES

### 61 A. GENERAL MATTERS

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

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

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

**B. AMENDMENTS**

If the Agreement to which this Accounting Procedure is attached contains no contrary provisions in regard thereto, this Accounting Procedure can be amended by an affirmative vote of two (2) or more Parties, one of which is the Operator, having a combined working interest of at least fifty percent (50 %), which approval shall be binding on all Parties, provided, however, approval of at least one (1) Non-Operator shall be required.

**C. AFFILIATES**

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

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

**II. DIRECT CHARGES**

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

**1. RENTALS AND ROYALTIES**

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

**2. LABOR**

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

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

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

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

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

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

- 1 D. Personal Expenses of personnel whose salaries and wages are chargeable to the Joint Account under Section II.2.A when the  
2 expenses are incurred in connection with directly chargeable activities.
- 3
- 4 E. Reasonable relocation costs incurred in transferring to the Joint Property personnel whose salaries and wages are chargeable to the  
5 Joint Account under Section II.2.A. Notwithstanding the foregoing, relocation costs that result from reorganization or merger of a  
6 Party, or that are for the primary benefit of the Operator, shall not be chargeable to the Joint Account. Extraordinary relocation  
7 costs, such as those incurred as a result of transfers from remote locations, such as Alaska or overseas, shall not be charged to the  
8 Joint Account unless approved by the Parties pursuant to Section I.6.A (*General Matters*).
- 9
- 10 F. Training costs as specified in COPAS MFI-35 ("Charging of Training Costs to the Joint Account") for personnel whose salaries and  
11 wages are chargeable under Section II.2.A. This training charge shall include the wages, salaries, training course cost, and Personal  
12 Expenses incurred during the training session. The training cost shall be charged or allocated to the property or properties directly  
13 benefiting from the training. The cost of the training course shall not exceed prevailing commercial rates, where such rates are  
14 available.
- 15
- 16 G. Operator's current cost of established plans for employee benefits, as described in COPAS MFI-27 ("Employee Benefits Chargeable  
17 to Joint Operations and Subject to Percentage Limitation"), applicable to the Operator's labor costs chargeable to the Joint Account  
18 under Sections II.2.A and B based on the Operator's actual cost not to exceed the employee benefits limitation percentage most  
19 recently recommended by COPAS.
- 20
- 21 H. Award payments to employees, in accordance with COPAS MFI-49 ("Awards to Employees and Contractors") for personnel whose  
22 salaries and wages are chargeable under Section II.2.A.

23 **3. MATERIAL**

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

29  
30 **4. TRANSPORTATION**

- 31  
32 A. Transportation of the Operator's, Operator's Affiliate's, or contractor's personnel necessary for Joint Operations.
- 33
- 34 B. Transportation of Material between the Joint Property and another property, or from the Operator's warehouse or other storage point  
35 to the Joint Property, shall be charged to the receiving property using one of the methods listed below. Transportation of Material  
36 from the Joint Property to the Operator's warehouse or other storage point shall be paid for by the Joint Property using one of the  
37 methods listed below:
- 38
- 39 (1) If the actual trucking charge is less than or equal to the Excluded Amount the Operator may charge actual trucking cost or a  
40 theoretical charge from the Railway Receiving Point to the Joint Property. The basis for the theoretical charge is the per  
41 hundred weight charge plus fuel surcharges from the Railway Receiving Point to the Joint Property. The Operator shall  
42 consistently apply the selected alternative.
- 43
- 44 (2) If the actual trucking charge is greater than the Excluded Amount, the Operator shall charge Equalized Freight. Accessorial  
45 charges such as loading and unloading costs, split pick-up costs, detention, call out charges, and permit fees shall be charged  
46 directly to the Joint Property and shall not be included when calculating the Equalized Freight.

47  
48 **5. SERVICES**

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

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

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

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

- 59
- 60 A. The Operator shall charge the Joint Account for use of Operator-owned equipment and facilities, including but not limited to  
61 production facilities, Shore Base Facilities, Offshore Facilities, and Field Offices, at rates commensurate with the costs of ownership  
62 and operation. The cost of Field Offices shall be chargeable to the extent the Field Offices provide direct service to personnel who  
63 are chargeable pursuant to Section II.2.A (*Labor*). Such rates may include labor, maintenance, repairs, other operating expense,  
64 insurance, taxes, depreciation using straight line depreciation method, and interest on gross investment less accumulated depreciation  
65 not to exceed \_\_\_\_\_ ten \_\_\_\_\_ percent (\_\_\_\_ 10 \_\_\_\_%) per annum; provided, however, depreciation shall not be charged when the  
66

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

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

10  
11 **7. AFFILIATES**

- 12  
13 A. Charges for an Affiliate's goods and/or services used in operations requiring an AFE or other authorization from the Non-Operators  
14 may be made without the approval of the Parties provided (i) the Affiliate is identified and the Affiliate goods and services are  
15 specifically detailed in the approved AFE or other authorization, and (ii) the total costs for such Affiliate's goods and services billed  
16 to such individual project do not exceed \$ 50,000.00. If the total costs for an Affiliate's goods and services charged to such  
17 individual project are not specifically detailed in the approved AFE or authorization or exceed such amount, charges for such  
18 Affiliate shall require approval of the Parties, pursuant to Section I.6.A (*General Matters*).
- 19  
20 B. For an Affiliate's goods and/or services used in operations not requiring an AFE or other authorization from the Non-Operators,  
21 charges for such Affiliate's goods and services shall require approval of the Parties, pursuant to Section I.6.A (*General Matters*), if the  
22 charges exceed \$ 50,000.00 in a given calendar year.
- 23  
24 C. The cost of the Affiliate's goods or services shall not exceed average commercial rates prevailing in the area of the Joint Property,  
25 unless the Operator obtains the Non-Operators' approval of such rates. The Operator shall adequately document and support  
26 commercial rates and shall periodically review and update the rate and the supporting documentation; provided, however,  
27 documentation of commercial rates shall not be required if the Operator obtains Non-Operator approval of its Affiliate's rates or  
28 charges prior to billing Non-Operators for such Affiliate's goods and services. Notwithstanding the foregoing, direct charges for  
29 Affiliate-owned communication facilities or systems shall be made pursuant to Section II.12 (*Communications*).

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

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

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

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

44  
45 **9. LEGAL EXPENSE**

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

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

55  
56  
57 **10. TAXES AND PERMITS**

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

62  
63 If ad valorem taxes paid by the Operator are based in whole or in part upon separate valuations of each Party's working interest, then  
64 notwithstanding any contrary provisions, the charges to the Parties will be made in accordance with the tax value generated by each Party's  
65 working interest.

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

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

9  
10 **11. INSURANCE**

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

18  
19 **12. COMMUNICATIONS**

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

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

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

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

40  
41 **14. ABANDONMENT AND RECLAMATION**

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

44  
45 **15. OTHER EXPENDITURES**

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

50  
51 **III. OVERHEAD**

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

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

- 58  
59
- 60 • warehousing, other than for warehouses that are jointly owned under this Agreement
  - 61 • design and drafting (except when allowed as a direct charge under Sections II.13, III.1.A(ii), and III.2, Option B)
  - 62 • inventory costs not chargeable under Section V (*Inventories of Controllable Material*)
  - 63 • procurement
  - 64 • administration
  - 65 • accounting and auditing
  - 66 • gas dispatching and gas chart integration

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

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

**1. OVERHEAD—DRILLING AND PRODUCING OPERATIONS**

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

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

**A. TECHNICAL SERVICES**

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

- (Alternative 1 – **Direct**) shall be charged **direct** to the Joint Account.
- (Alternative 2 – **Overhead**) shall be covered by the **overhead** rates.

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

- (Alternative 1 – **All Overhead**) shall be covered by the **overhead** rates.
- (Alternative 2 – **All Direct**) shall be charged **direct** to the Joint Account.
- (Alternative 3 – **Drilling Direct**) shall be charged **direct** to the Joint Account, **only** to the extent such Technical Services are directly attributable to drilling, re-drilling, deepening, or sidetracking operations, through completion, temporary abandonment, or abandonment if a dry hole. Off-site Technical Services for all other operations, including workover, recompletion, abandonment of producing wells, and the construction or expansion of fixed assets not covered by Section III.2 (*Overhead - Major Construction and Catastrophe*) shall be covered by the overhead rates.

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

**B. OVERHEAD—FIXED RATE BASIS**

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

Drilling Well Rate per month \$ 13,350.00 (prorated for less than a full month)

Producing Well Rate per month \$ 1,335

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

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

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

23  
24  
25  
26  
27  
28  
29  
30  
31 ~~C. OVERHEAD—PERCENTAGE BASIS~~

- 32 (1) ~~Operator shall charge the Joint Account at the following rates:~~
- 33 (a) ~~Development Rate \_\_\_\_\_ percent (\_\_\_\_\_) % of the cost of development of the Joint Property, exclusive of costs~~  
34 ~~provided under Section II.9 (Legal Expense) and all Material salvage credits.~~
- 35 (b) ~~Operating Rate \_\_\_\_\_ percent (\_\_\_\_\_) % of the cost of operating the Joint Property, exclusive of costs~~  
36 ~~provided under Sections II.1 (Rentals and Royalties) and II.9 (Legal Expense); all Material salvage credits; the value~~  
37 ~~of substances purchased for enhanced recovery; all property and ad valorem taxes, and any other taxes and assessments that~~  
38 ~~are levied, assessed, and paid upon the mineral interest in and to the Joint Property.~~
- 39 (2) ~~Application of Overhead—Percentage Basis shall be as follows:~~
- 40 (a) ~~The Development Rate shall be applied to all costs in connection with:~~
- 41 [i] ~~drilling, redrilling, sidetracking, or deepening of a well~~
- 42 [ii] ~~a well undergoing plugback or workover operations for a period of five (5) or more consecutive work days~~
- 43 [iii] ~~preliminary expenditures necessary in preparation for drilling~~
- 44 [iv] ~~expenditures incurred in abandoning when the well is not completed as a producer~~
- 45 [v] ~~construction or installation of fixed assets, the expansion of fixed assets and any other project clearly discernible as a~~  
46 ~~fixed asset, other than Major Construction or Catastrophe as defined in Section III.2 (Overhead Major Construction~~  
47 ~~and Catastrophe).~~
- 48 (b) ~~The Operating Rate shall be applied to all other costs in connection with Joint Operations, except those subject to Section III.2~~  
49 ~~(Overhead Major Construction and Catastrophe).~~

50  
51  
52  
53  
54  
55  
56  
57 **2. OVERHEAD—MAJOR CONSTRUCTION AND CATASTROPHE**

58 To compensate the Operator for overhead costs incurred in connection with a Major Construction project or Catastrophe, the Operator  
59 shall either negotiate a rate prior to the beginning of the project, or shall charge the Joint Account for overhead based on the following  
60 rates for any Major Construction project in excess of the Operator’s expenditure limit under the Agreement, or for any Catastrophe  
61 regardless of the amount. If the Agreement to which this Accounting Procedure is attached does not contain an expenditure limit, Major  
62 Construction Overhead shall be assessed for any single Major Construction project costing in excess of \$100,000 gross.  
63  
64  
65  
66



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

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

7  
8 A. If the Operator absorbs the engineering, design and drafting costs related to the project:

- 9  
10 (1) 5.00 % of total costs if such costs are less than \$100,000; plus  
11  
12 (2) 3.00 % of total costs in excess of \$100,000 but less than \$1,000,000; plus  
13  
14 (3) 2.00 % of total costs in excess of \$1,000,000.

15  
16 B. If the Operator charges engineering, design and drafting costs related to the project directly to the Joint Account:

- 17  
18 (1) 5.00 % of total costs if such costs are less than \$100,000; plus  
19  
20 (2) 3.00 % of total costs in excess of \$100,000 but less than \$1,000,000; plus  
21  
22 (3) 2.00 % of total costs in excess of \$1,000,000.

23  
24 Total cost shall mean the gross cost of any one project. For the purpose of this paragraph, the component parts of a single Major  
25 Construction project shall not be treated separately, and the cost of drilling and workover wells and purchasing and installing pumping  
26 units and downhole artificial lift equipment shall be excluded. For Catastrophes, the rates shall be applied to all costs associated with each  
27 single occurrence or event.

28  
29 On each project, the Operator shall advise the Non-Operator(s) in advance which of the above options shall apply.

30  
31 For the purposes of calculating Catastrophe Overhead, the cost of drilling relief wells, substitute wells, or conducting other well operations  
32 directly resulting from the catastrophic event shall be included. Expenditures to which these rates apply shall not be reduced by salvage or  
33 insurance recoveries. Expenditures that qualify for Major Construction or Catastrophe Overhead shall not qualify for overhead under any  
34 other overhead provisions.

35  
36 In the event of any conflict between the provisions of this Section III.2 and the provisions of Sections II.2 (*Labor*), II.5 (*Services*), or II.7  
37 (*Affiliates*), the provisions of this Section III.2 shall govern.

38  
39 **3. AMENDMENT OF OVERHEAD RATES**

40  
41 The overhead rates provided for in this Section III may be amended from time to time if, in practice, the rates are found to be insufficient  
42 or excessive, in accordance with the provisions of Section I.6.B (*Amendments*).

43  
44  
45 **IV. MATERIAL PURCHASES, TRANSFERS, AND DISPOSITIONS**

46  
47 The Operator is responsible for Joint Account Material and shall make proper and timely charges and credits for direct purchases, transfers, and  
48 dispositions. The Operator shall provide all Material for use in the conduct of Joint Operations; however, Material may be supplied by the Non-  
49 Operators, at the Operator's option. Material furnished by any Party shall be furnished without any express or implied warranties as to quality,  
50 fitness for use, or any other matter.

51  
52 **1. DIRECT PURCHASES**

53  
54 Direct purchases shall be charged to the Joint Account at the price paid by the Operator after deduction of all discounts received. The  
55 Operator shall make good faith efforts to take discounts offered by suppliers, but shall not be liable for failure to take discounts except to  
56 the extent such failure was the result of the Operator's gross negligence or willful misconduct. A direct purchase shall be deemed to occur  
57 when an agreement is made between an Operator and a third party for the acquisition of Material for a specific well site or location.  
58 Material provided by the Operator under "vendor stocking programs," where the initial use is for a Joint Property and title of the Material  
59 does not pass from the manufacturer, distributor, or agent until usage, is considered a direct purchase. If Material is found to be defective  
60 or is returned to the manufacturer, distributor, or agent for any other reason, credit shall be passed to the Joint Account within sixty (60)  
61 days after the Operator has received adjustment from the manufacturer, distributor, or agent.

1     2.   TRANSFERS

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

9     A.   PRICING

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

- 12  
13  
14  
15  
16  
17  
18  
19     (1)   Using published prices in effect on date of movement as adjusted by the appropriate COPAS Historical Price Multiplier (HPM) or prices provided by the COPAS Computerized Equipment Pricing System (CEPS).
- 20  
21  
22         (a)   For oil country tubulars and line pipe, the published price shall be based upon eastern mill carload base prices (Houston, Texas, for special end) adjusted as of date of movement, plus transportation cost as defined in Section IV.2.B (*Freight*).
- 23  
24  
25         (b)   For other Material, the published price shall be the published list price in effect at date of movement, as listed by a Supply Store nearest the Joint Property where like Material is normally available, or point of manufacture plus transportation costs as defined in Section IV.2.B (*Freight*).
- 26  
27  
28  
29     (2)   Based on a price quotation from a vendor that reflects a current realistic acquisition cost.
- 30  
31     (3)   Based on the amount paid by the Operator for like Material in the vicinity of the Joint Property within the previous twelve (12) months from the date of physical transfer.
- 32  
33  
34     (4)   As agreed to by the Participating Parties for Material being transferred to the Joint Property, and by the Parties owning the Material for Material being transferred from the Joint Property.

35  
36  
37    B.   FREIGHT

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

- 40  
41  
42     (1)   Transportation costs for oil country tubulars and line pipe shall be calculated using the distance from eastern mill to the Railway Receiving Point based on the carload weight basis as recommended by the COPAS MFI-38 ("Material Pricing Manual") and other COPAS MFIs in effect at the time of the transfer.
- 43  
44  
45     (2)   Transportation costs for special mill items shall be calculated from that mill's shipping point to the Railway Receiving Point. For transportation costs from other than eastern mills, the 30,000-pound interstate truck rate shall be used. Transportation costs for macaroni tubing shall be calculated based on the interstate truck rate per weight of tubing transferred to the Railway Receiving Point.
- 46  
47  
48     (3)   Transportation costs for special end tubular goods shall be calculated using the interstate truck rate from Houston, Texas, to the Railway Receiving Point.
- 49  
50  
51     (4)   Transportation costs for Material other than that described in Sections IV.2.B.(1) through (3), shall be calculated from the Supply Store or point of manufacture, whichever is appropriate, to the Railway Receiving Point

52  
53  
54  
55     Regardless of whether using CEPS or manually calculating transportation costs, transportation costs from the Railway Receiving Point to the Joint Property are in addition to the foregoing, and may be charged to the Joint Account based on actual costs incurred. All transportation costs are subject to Equalized Freight as provided in Section II.4 (*Transportation*) of this Accounting Procedure.

56  
57  
58    C.   TAXES

59  
60  
61     Sales and use taxes shall be added to the Material transfer price using either the method contained in the COPAS Computerized Equipment Pricing System (CEPS) or the applicable tax rate in effect for the Joint Property at the time and place of transfer. In either case, the Joint Account shall be charged or credited at the rate that would have governed had the Material been a direct purchase.

1 D. CONDITION

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

15 (2) Condition "B" – Used Material in sound and serviceable condition and suitable for reuse without reconditioning shall be priced  
16 by multiplying the price determined in Sections IV.2.A (*Pricing*), IV.2.B (*Freight*), and IV.2.C (*Taxes*) by seventy-five percent  
17 (75%).  
18

19 Except as provided in Section IV.2.D(3), all reconditioning costs required to return the Material to Condition "B" or to correct  
20 handling, transportation or other damages will be borne by the divesting property.  
21

22 If the Material was originally charged to the Joint Account as used Material and placed in service for the Joint Property, the  
23 Material will be credited at the price determined in Sections IV.2.A (*Pricing*), IV.2.B (*Freight*), and IV.2.C (*Taxes*) multiplied  
24 by sixty-five percent (65%).  
25

26 Unless otherwise agreed to by the Parties that paid for such Material, used Material transferred from the Joint Property that was  
27 not placed in service on the property shall be credited as charged without gain or loss.  
28

29 (3) Condition "C" – Material that is not in sound and serviceable condition and not suitable for its original function until after  
30 reconditioning shall be priced by multiplying the price determined in Sections IV.2.A (*Pricing*), IV.2.B (*Freight*), and IV.2.C  
31 (*Taxes*) by fifty percent (50%).  
32

33 The cost of reconditioning may be charged to the receiving property to the extent Condition "C" value, plus cost of  
34 reconditioning, does not exceed Condition "B" value.  
35

36 (4) Condition "D" – Material that (i) is no longer suitable for its original purpose but useable for some other purpose, (ii) is  
37 obsolete, or (iii) does not meet original specifications but still has value and can be used in other applications as a substitute for  
38 items with different specifications, is considered Condition "D" Material. Casing, tubing, or drill pipe used as line pipe shall be  
39 priced as Grade A and B seamless line pipe of comparable size and weight. Used casing, tubing, or drill pipe utilized as line  
40 pipe shall be priced at used line pipe prices. Casing, tubing, or drill pipe used as higher pressure service lines than standard line  
41 pipe, e.g., power oil lines, shall be priced under normal pricing procedures for casing, tubing, or drill pipe. Upset tubular goods  
42 shall be priced on a non-upset basis. For other items, the price used should result in the Joint Account being charged or credited  
43 with the value of the service rendered or use of the Material, or as agreed to by the Parties pursuant to Section 1.6.A (*General*  
44 *Matters*).  
45

46 (5) Condition "E" – Junk shall be priced at prevailing scrap value prices.  
47

48 E. OTHER PRICING PROVISIONS

49 (1) Preparation Costs

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

58 (2) Loading and Unloading Costs

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

1     **3. DISPOSITION OF SURPLUS**

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

4  
5     Dispositions for the purpose of this procedure are considered to be the relinquishment of title of the Material from the Joint Property to  
6     either a third party, a Non-Operator, or to the Operator. To avoid the accumulation of surplus Material, the Operator should make good  
7     faith efforts to dispose of surplus within twelve (12) months through buy/sale agreements, trade, sale to a third party, division in kind, or  
8     other dispositions as agreed to by the Parties.

9  
10     Disposal of surplus Materials shall be made in accordance with the terms of the Agreement to which this Accounting Procedure is  
11     attached. If the Agreement contains no provisions governing disposal of surplus Material, the following terms shall apply:

- 12  
13     • The Operator may, through a sale to an unrelated third party or entity, dispose of surplus Material having a gross sale value that  
14     is less than or equal to the Operator's expenditure limit as set forth in the Agreement to which this Accounting Procedure is  
15     attached without the prior approval of the Parties owning such Material.
- 16  
17     • If the gross sale value exceeds the Agreement expenditure limit, the disposal must be agreed to by the Parties owning such  
18     Material.
- 19  
20     • Operator may purchase surplus Condition "A" or "B" Material without approval of the Parties owning such Material, based on  
21     the pricing methods set forth in Section IV.2 (*Transfers*).
- 22  
23     • Operator may purchase Condition "C" Material without prior approval of the Parties owning such Material if the value of the  
24     Materials, based on the pricing methods set forth in Section IV.2 (*Transfers*), is less than or equal to the Operator's expenditure  
25     limitation set forth in the Agreement. The Operator shall provide documentation supporting the classification of the Material as  
26     Condition C.
- 27  
28     • Operator may dispose of Condition "D" or "E" Material under procedures normally utilized by Operator without prior approval  
29     of the Parties owning such Material.
- 30

31     **4. SPECIAL PRICING PROVISIONS**

32     **A. PREMIUM PRICING**

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

40  
41     **B. SHOP-MADE ITEMS**

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

48  
49     **C. MILL REJECTS**

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

54  
55  
56                     **V. INVENTORIES OF CONTROLLABLE MATERIAL**

57  
58  
59     The Operator shall maintain records of Controllable Material charged to the Joint Account, with sufficient detail to perform physical inventories.

60  
61     Adjustments to the Joint Account by the Operator resulting from a physical inventory of Controllable Material shall be made within twelve (12)  
62     months following the taking of the inventory or receipt of Non-Operator inventory report. Charges and credits for overages or shortages will be  
63     valued for the Joint Account in accordance with Section IV.2 (*Transfers*) and shall be based on the Condition "B" prices in effect on the date of  
64     physical inventory unless the inventorying Parties can provide sufficient evidence another Material condition applies.

1 **1. DIRECTED INVENTORIES**

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

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

13 A. A per diem rate for each inventory person, representative of actual salaries, wages, and payroll burdens and benefits of the personnel  
14 performing the inventory or a rate agreed to by the Parties pursuant to Section I.6.A (*General Matters*). The per diem rate shall also  
15 be applied to a reasonable number of days for pre-inventory work and report preparation.  
16

17 B. Actual transportation costs and Personal Expenses for the inventory team.  
18

19 C. Reasonable charges for report preparation and distribution to the Non-Operators.  
20

21 **2. NON-DIRECTED INVENTORIES**

22 A. OPERATOR INVENTORIES

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

26 B. NON-OPERATOR INVENTORIES

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

32 C. SPECIAL INVENTORIES

33 The expense of conducting inventories other than those described in Sections V.1 (*Directed Inventories*), V.2.A (*Operator*  
34 *Inventories*), or V.2.B (*Non-Operator Inventories*), shall be charged to the Party requesting such inventory; provided, however,  
35 inventories required due to a change of Operator shall be charged to the Joint Account in the same manner as described in Section  
36 V.1 (*Directed Inventories*).  
37  
38  
39  
40  
41  
42  
43  
44  
45  
46  
47  
48  
49  
50  
51  
52  
53  
54  
55  
56  
57  
58  
59  
60  
61  
62  
63  
64  
65  
66

## EXHIBIT "D"

Attached to and made a part of that certain Unit Operating Agreement for the Hannahs Unit by Eclipse Resources I, LP., as Operator.

1. Operator shall procure and maintain, at all times while conducting operations under this Agreement, the following insurance coverages with limits not less than those specified below:

A. Workers' Compensation Employer's Liability	Statutory \$1,000,000 Each Accident
B. General Liability including bodily injury and property damage liability	\$5,000,000 Combined Single Limit
C. Auto Liability	\$1,000,000 Combined Single Limit
D. Excess or Umbrella Liability	\$20,000,000 Combined Single Limit
E. Cost of Well Control and Care, Custody and Control	\$5,000,000 Each Occurrence and \$250,000 CCC
F. Pollution Liability	\$20,000,000 Combined Single Limit

2. The insurance described in 1. above shall include Non-Operator as additional insured (except Workers' Compensation) and shall include a waiver by the insurer of all rights of subrogation in favor of Non-Operator. Such insurance shall be carried at the joint expense of the parties hereto and all premiums and other costs and expenses related thereto shall be charged to the Joint Account in accordance with the Accounting Procedure attached as Exhibit "C" to this Agreement, unless prior to spud a party hereto who desires to provide its own insurance or self-insurance provides Operator with a certificate of insurance evidencing such individual coverage.

3. Operator shall endeavor to have its contractors and subcontractors comply with applicable Workers' Compensation laws, rules and regulations and carry such insurance as Operator may deem necessary.

4. Operator shall not be liable to Non-Operator for loss suffered because of insufficiency of the insurance procured and maintained for the Joint Account nor shall Operator be liable to Non-Operator for any loss occurring by reason of Operator's inability to procure or maintain the insurance provided for herein. If, in Operator's opinion, at any time during the term of this Agreement, Operator is unable to procure or maintain said insurance on commercially reasonable terms, or Operator reduces the limits of insurance, Operator shall promptly so notify Non-Operator in writing.

5. In the event of loss not covered by the insurance provided for herein, such loss shall be charged to the Joint Account and borne by the parties in accordance with their respective percentage of participation as determined by this Agreement.

6. Any party hereto may individually and at its own expense procure such additional insurance as it desires; provided, however, such party shall provide Operator with a certificate of insurance evidencing such coverage before spud of the well and such coverage shall include a waiver by the insurer of all rights of subrogation in favor of the parties hereto.

End of Exhibit "D"

## EXHIBIT "E"

Attached to and made a part of that certain Unit Operating Agreement  
for the Hannahs Unit by Eclipse Resources I, LP, as Operator.

### Gas Balancing Agreement

#### I. DEFINITIONS:

For the purposes of this Gas Balancing Agreement ("GBA") the following terms shall be defined as follows:

(a) "Affiliate" shall have the meaning ascribed to such term in the Operating Agreement.

(b) The "Allowable" is the maximum rate of Gas production from each Gas Well permitted from time to time by the regulatory authority having jurisdiction.

(c) "Balance" is the condition occurring when a party has utilized, sold or disposed of a Quantity of Gas equal to the same percentage of the cumulative Gas production as such party's Percentage Ownership during the period of such cumulative Gas production.

(d) "Deliverability" shall mean the maximum sustainable daily Gas withdrawal from a Gas Well which may be accomplished without detriment to ultimate recovery of reserves as determined by Operator acting in good faith and taking into account relevant operational factors including, but not limited to, pipeline capacity and pressure and the maximum producing capability of the Gas Well based on data reported to the appropriate governmental agency having jurisdiction.

(e) "Gas" shall mean all gaseous hydrocarbons produced from each Gas Well but shall not include liquid hydrocarbons.

(f) "Gas Well" shall mean each well subject to the Operating Agreement that produces gas. If a single Gas Well is completed in two or more reservoirs, such Gas Well will be considered a separate Gas Well with respect to, but only as to, each reservoir from which the Gas production is not commingled in the well bore.

(g) "MMBtu" shall mean one million British thermal units.

(h) "Operating Agreement" means the operating agreement between the Parties to which this GBA is attached.

(i) "Operator" means the Party designated as operator under the Operating Agreement.

(j) "Overproduced" is the condition occurring when a party has utilized, disposed of or sold a greater Quantity of Gas from a particular Gas Well at any given time (individually or through its gas purchaser) than if such party were in Balance.

(k) "parties" means the legal entities that are signatory to the Operating Agreement, or their successors and assigns. Parties shall be referred to individually as a party.

(l) "Percentage Ownership" is the percentage interest of each party in each Gas Well as set forth in or determined in accordance with the provisions of the Operating Agreement, as such interest may change from time to time.

(m) "Percentage of Proceeds Sale" means a sale of Gas processed in a gas processing plant the price for which is computed as a percentage of the proceeds from the resale of residue gas and natural gas liquids attributable to such Gas.

(n) "Quantity" shall mean the number of units of Gas expressed in MMBtus.

(o) "Underproduced" is the condition occurring when a party has utilized, disposed of or sold a lesser Quantity of Gas from a particular Well at any given time (individually or through its gas purchaser) than if such party were in Balance.

## II. APPLICATION OF THIS AGREEMENT

The provisions of this GBA shall be separately applicable to each Gas Well to the end that Gas production from one Gas Well may not be utilized for the purposes of balancing underproduction of Gas from any other Gas Well.

## III. OVERPRODUCTION

### A. Right to Take All Gas Produced

Subject to the other provisions herein, during any period when any party hereto is not marketing or otherwise disposing of or utilizing its Percentage Ownership of the Allowable or Deliverability, as applicable, of Gas from any Gas Well, the other parties shall be entitled--but shall not have the obligation--to take, in addition to their own Percentage Ownership of Gas, that portion of such other party's Percentage Ownership of Gas which said party is not marketing, utilizing or otherwise disposing of, and shall be entitled to take such Gas production and deliver same to its or their purchasers in accordance with the provisions herein. Each such taking party shall have the right to take its pro rata portion of each such non-taking party's share, said pro rata portion being based on the ratio of its Percentage Ownership to the Percentage Ownership of all parties in the same balancing status (either Overproduced or Underproduced) who elect to take such non-taking party's share of gas; provided, however, an Underproduced party desiring to take a non-taking party's share of Gas shall take precedence over an Overproduced party which wishes to take such non-taking party's Gas, and an Overproduced party shall be entitled to take a non-taking party's share of Gas only to the extent that an Underproduced party has elected not to take said Gas. The Gas of a party not taking its production shall be allocated to a taking party hereunder prior to calculation of percentage entitlement to make up Gas from an Overproduced party under Article IV, below.

Notwithstanding the foregoing, all parties shall share in and own the liquid hydrocarbons recovered from Gas by primary separation equipment in accordance with their respective Percentage Ownership, which liquid hydrocarbon ownership shall be unaffected by this GBA. One or more parties may arrange to have their Gas processed in a gas processing plant for the recovery of liquefiable hydrocarbons. Nothing in this GBA shall afford a basis for balancing any liquefiable hydrocarbons recovered from a Gas processing plant. Each party taking Gas shall own all of the Gas delivered to its purchaser.

### B. Limitation on Overproduced Party's Right to Take Gas

Notwithstanding the provisions of Article III.A., above, if during any time and from time to time an Overproduced party shall have taken more than one hundred percent (100%) of such party's Percentage Ownership share of the estimated ultimate recoverable reserves for a Gas Well as determined by Operator acting in good faith, said Overproduced party shall not, after receipt of written notice of said fact from Operator, be entitled to take, sell or otherwise dispose of Gas from such Gas Well until such time as said party is no longer Overproduced; provided, however, said Overproduced party may take Gas from such Gas Well without restriction if and for so long as the other parties are not taking Gas from such Gas Well their full share of the Gas or as otherwise authorized by all of the Underproduced parties. Also, no Overproduced party shall at any time be entitled to take, sell or otherwise dispose of more than 300% of its Percentage Ownership of the Allowable from a Gas Well or, if there is no Allowable established, of the Deliverability of a Gas Well.

C. Credit For Gas in Storage

Each party who markets less than its Percentage Ownership of the Gas produced shall be credited with Gas in storage equal to its Percentage Ownership share of the Gas produced, less the Gas actually marketed and taken by said party, and less such Party's Percentage Ownership share of the Gas, vented, used or lost in lease operations.

IV. RIGHT OF UNDERPRODUCED PARTY TO MAKE UP PRODUCTION

Any Underproduced party may commence making up its underproduction provided it has given written notice to the Operator not later than the fifth day of the month preceding the month in which it wishes to commence making up its underproduction, or within such other time as Operator may from time to time reasonably establish.

In addition to its Percentage Ownership and its rights to a non-taking party's Gas under Article III, above, each Underproduced party will be entitled to take up to an additional twenty-five percent (25%) of the monthly Quantity of each Overproduced party's Percentage Ownership in Gas produced during any month; provided, however, nothing in this Article IV shall reduce the right of any Overproduced party to take a Quantity of Gas available for sale during any month less than seventy-five percent (75%) of its Percentage Ownership in Gas produced in said month.

If at any time more than one Underproduced party is taking a Quantity of Gas in excess of its Percentage Ownership in Gas production in order to balance its Gas production account ("Makeup"), then each such Underproduced party shall be entitled to take such Makeup in proportion that its Percentage Ownership bears to the total Percentage Ownership of all Underproduced parties desiring to take Makeup from the Well. Any portion of the Makeup to which an Underproduced party is entitled and which is not taken by such Underproduced party may be taken by any other Underproduced party in the proportion that its Percentage Ownership bears to the total Percentage Ownership of all Underproduced parties desiring to take such untaken portion of Makeup.

V. MONTHLY DATA AND STATEMENTS TO BE PROVIDED

The Operator will establish and maintain a current Gas account which shows the Gas balance which exists for all the parties and will furnish each of these parties a monthly statement showing the total Quantity of Gas sold and taken in kind and the current and cumulative over and under account of each party within ninety (90) days following the end of each applicable month. Operator shall not incur any liability to any party for errors in the data provided by each party or third parties or for other matters pertaining to gas balancing statements (e.g., transporter's allocation of Gas). Each party shall be responsible for promptly providing written notification to Operator of any error(s) or inaccuracy(ies) contained in any gas balancing statement which it receives.

VI. PAYMENT OF ROYALTIES AND PRODUCTION TAXES

At all times while Gas is produced from a Well, each party hereto will make, or cause to be made, settlement with respective royalty owners to whom each is accountable in accordance with the actual volumes of Gas taken by such party. Upon written request from any party, any other party shall provide on a monthly basis, any additional information which such requesting party may require in order to comply with its obligation to pay royalty pursuant to the terms hereof including, without limitation, name, address, decimal interest, tax identification and, to the extent it has same, title opinions and abstracts of ownership. The term "royalty owner" includes owners of royalty, overriding royalties, production payments and similar interests. Each party agrees to indemnify and hold harmless each other party from any and all claims asserted by its royalty owners and its Gas Purchasers for which said indemnifying party is responsible. Each party producing and/or delivering Gas to its purchaser shall pay, or cause to be paid, any and all production, severance and other similar taxes due on such Gas in accordance with the actual volumes of Gas taken by such party.

## VII. CASH SETTLEMENTS

### A. Events Occasioning Cash Settlements

A cash settlement of any imbalance of Gas production: (i) shall be made when production from a Gas Well permanently ceases or the Operating Agreement otherwise terminates (each being referred to herein as "Termination"); and (ii) shall be made by an Overproduced party at the request and option of any Underproduced party or parties upon the sale, transfer, assignment, mortgage or other disposition to an unaffiliated entity (herein individually or collectively referred to as a "Transfer"), by an Overproduced party of all or any portion of its Percentage Ownership in any Gas Well unless (x) the Transfer documentation clearly provides that the assignee has expressly assumed the gas balance position of, and the liability for gas imbalances from, the assignor, and (y) the assignee is not a known credit risk and the assignor has provided to the other parties evidence of the creditworthiness of assignee prior to the date that the applicable Transfer becomes effective taking into account the potential liability associated with the applicable gas imbalance. (A cash settlement pursuant to clause (ii) above may hereinafter be referred to as an "Optional Cash Settlement".) The parties acknowledge that a cash settlement may be made on more than one occasion pursuant to the terms of this GBA.

### B. Notification of Proposed Transfer By Overproduced Party

When an Overproduced party elects to Transfer all or a portion of its Percentage Ownership (except to an Affiliate, or where the liability for prior period gas imbalances is assumed by an assignee), it shall give notice to all other parties to the Operating Agreement of its intended Transfer and the anticipated closing date. Each Underproduced party shall have fifteen (15) days from the receipt of such notice in which to elect to receive a cash settlement from the transferring party for the transferring party's share of overproduction allocable to the Underproduced party. Such election shall be made in writing and sent to the transferring party and Operator. An Underproduced party's election not to request a cash settlement at the time of Transfer by an Overproduced party shall not, subject to the provisions of Article VII.E, below, preclude said Underproduced party from sharing in cash settlement at Termination or from requesting a cash settlement upon subsequent Transfer by an Overproduced party.

### C. Quantity of Gas

Within one hundred twenty (120) days after Termination, Operator shall provide a statement captioned "Final Quantity Statement" showing on a party-by-party basis the net unrecouped underproduction, the overproduction and the months and years in which such underproduction and overproduction occurred. Quantities of Gas for which settlement is due shall be determined by accruing the monthly overproduction and underproduction in the order of accrual of said overproduction and underproduction; i.e. makeup Quantities taken by an Underproduced party shall be applied against the oldest overproduction and underproduction then outstanding. In the event an Optional Cash Settlement is requested, Operator shall provide to the parties, within fifteen business days, an Interim Quantity Statement through the end of the last quarter for which Operator has production data, which shall contain similar information as would be contained within a Final Quantity Statement.

### D. Pricing

#### 1. For Overproduction Sold

The amount to be paid by an Overproduced party to an Underproduced party for such Underproduced party's Gas upon cash settlement shall, where the Overproduced party has sold the Gas to an unaffiliated third party, be based upon the price received by the Overproduced party at the time such overproduction occurred (the "price received") shall be the gross proceeds received, less the following:

- (a) production and/or severance taxes attributable to said Gas production paid by the Overproduced party;
- (b) royalties, if any, paid by the Overproduced party to an Underproduced party's royalty owner(s) to the extent said payments amounted to a discharge of said Underproduced party's royalty obligation;
- (c) any other payments made by the Overproduced party to obligees of the Underproduced party to the extent said payments by the Overproduced party were required by law and/or amounted to discharge of the obligations of the Underproduced party; and
- (d) all reasonable costs and expenses incurred to third parties in connection with the sale of said Gas; e.g., gathering, transportation, compression, storage, marketing and similar fees.

In the event sales by the Overproduced party were made to an Affiliate and the price paid by such Affiliate was less than the prevailing market price in the area of the Well at the time of the sale, then the price received shall be deemed to be the Dominion Transmission Inc. South Point Index price found inside the Federal Energy Regulatory Commission's Gas Market Report for the applicable month of overproduction, calculated from a pricing bulletin published at the time such overproduction occurred, less those items set forth in a-d above (the "Adjusted South Point Index Price"). Any Underproduced party that is entitled to payment with respect to the applicable cash settlement may, based upon competent evidence, object that sales by the Overproduced party to an Affiliate were at a price less than the prevailing market price in the area of the Well at the time of the sale, in which case the Adjusted South Point Index Price shall be used to price such sales in accordance with the prior sentence.

2. For Overproduction Taken or Utilized and Not Sold

If there is no actual sale to establish the amount received by the Overproduced party because the Overproduced party took such Gas for its own purposes instead of selling it, the amount to be paid by an Overproduced party to an Underproduced party for such Underproduced party's Gas upon cash settlement shall be based upon the Adjusted South Point Index Price.

3. Proceeds for Liquefiable Hydrocarbons Not Included

The parties agree that the terms "price received by an Overproduced party" and "weighted average price received" shall not include any compensation received by a party for liquid hydrocarbons derived from processing its Gas in a Gas processing plant, unless the overproduction for which the Overproduced party is accounting was sold under a Percentage of Proceeds Sale.

E. Calculation, Collection and Distribution of Payments

1. For Cash Settlements at Termination

In the event of a cash settlement at Termination, within ten (10) days after receipt of the Final Quantity Statement from the Operator, each Overproduced party shall furnish to the Operator and the other parties a statement showing the price received for its overproduction on a monthly basis. Within ten (10) days after receipt of such pricing information from all parties, Operator shall submit to each party a statement showing the calculations and the total amount to be paid by each Overproduced party and to be received by each Underproduced party. Cash settlement shall be calculated on the "FIFO" accounting method.

Within twenty (20) days after receipt of said statement from Operator by an Overproduced party, the Overproduced party shall pay all amounts due and owing as

reflected on such statement to the Underproduced parties. In the event that all sums due and owing are not paid by an Overproduced party to the applicable Underproduced parties within the time periods set forth in this provision, interest shall accumulate on such unpaid amounts as provided herein. The amount to be received by each Underproduced party shall be determined by apportioning the total amount to be received by all Underproduced parties from all Overproduced parties among all Underproduced parties in proportion to the total sum to be received by each Underproduced party as a percent of the total sum to be received by all Underproduced parties. The amount to be paid by each Overproduced party to each Underproduced party shall be determined by apportioning the total amount to be paid by all Overproduced parties to each such Underproduced party among all Overproduced parties in proportion to the total sum to be paid by each such Overproduced party to all Underproduced parties as a percent of the total sum to be paid by all Overproduced parties to all Underproduced parties.

2. Optional Cash Settlement Pursuant to Article VII.A.(ii) from an Overproduced party Who Seeks to Transfer an Interest

In the event of a request for an Optional Cash Settlement by an Underproduced party pursuant to Article VII.A.(ii) from an Overproduced party who wishes to Transfer all or a portion of its Percentage Ownership, within twenty (20) working days after receipt of Operator's Interim Quantity Statement, the Overproduced party from whom cash settlement is sought shall provide to Operator a statement showing the price received for its overproduction on a monthly basis. Within ten (10) working days after receipt of such pricing information, Operator shall: (a) calculate the total amount due and owing by the Overproduced party and the total amount to be received by each Underproduced party requesting cash settlement based on the "FIFO" accounting method; and (b) provide the Overproduced party and each such Underproduced party with a statement showing the calculations and the total sum to be paid to said Underproduced party. The Overproduced party shall pay to each such Underproduced party the total amount due and owing as reflected in said statement within twenty (20) working days after receipt of said statement. In the event that all sums due and owing are not paid by an Overproduced party to the applicable Underproduced parties within the time periods set forth in this provision, interest shall accumulate on such unpaid amounts as provided herein.

The parties acknowledge that production and sales data may not be available for a brief period immediately preceding the closing date and prior to the effective date of the Transfer, and the transferring Overproduced party agrees to cash settle for any Gas produced during said period promptly after closing. In the event that said transferring Overproduced party for any reason fails to make all cash settlement payments required under this GBA, the transferee shall be obligated to make said payments.

3. Procedures Applicable to All Cash Settlements

For purposes of all price calculations the overproduction of each Overproduced party shall be apportioned to each Underproduced party in proportion to each Underproduced party's underproduction as a percent of the sum of the underproduction of all Underproduced parties. Overproduced volumes shall be matched to Underproduced volumes based on the order in which the overproduction and underproduction arose. The parties recognize that the months of overproduction by an Overproduced party may not coincide with the months of underproduction by an Underproduced party.

4. Amount Subject to Refund May Be Withheld.

In the event that any portion of the price actually received by an Overproduced party shall be subject to possible refund pursuant to rules and regulations issued by the Federal Energy Regulatory Commission ("FERC"), any state, administrative agency or successor governmental authority having jurisdiction, or any court order, the amount which may be ultimately required to be refunded by FERC or any other entity may be withheld without interest by the Overproduced party until such time as a final determination is made with respect thereto or until the party to whom payment is to be made provides a bond or other security to indemnify the party obligated to make such payments in form satisfactory to the

latter.

#### F. Operator's Liability

Except as otherwise provided herein, Operator is obligated to administer the provisions of this GBA, but shall have no liability to the other parties for losses sustained or liability incurred which arise out of or in connection with the performance of Operator's duties hereunder except such as may result from Operator's gross negligence or willful misconduct.

#### VIII. OPERATING EXPENSES

The operating expenses are to be borne as provided in the Operating Agreement, regardless of whether all parties are selling or using Gas or whether the sales and use of each are in proportion to their Percentage Ownership.

#### IX. DELIVERABILITY TESTS

Nothing herein shall be construed to deny any party the right from time to time to produce and take or deliver to the purchaser its full share of the Gas production to meet the deliverability test required by its purchaser. Also, nothing herein shall: (a) require the Operator to produce a Gas Well in excess of its deliverability or the applicable maximum allowable rate where such rate is established by regulatory authority having jurisdiction from time to time; or (b) prevent an Operator from operating the Gas Well in order to conduct such tests as may be required by any applicable regulatory authority from time to time.

#### X. NOMINATIONS

For each party wishing to sell, utilize or dispose of Gas from a Gas Well subject to this GBA, Operator shall provide each party an initial nomination by well/delivery point(s) six working days prior to the beginning of each month. Operator shall provide each party a revised nomination by well/delivery point as necessary during the month to reflect any change in production. Allocation of gas production in any month in which the total nominations vary from the total production shall be by the Operator according to such procedures as Operator from time to time may reasonably establish. Each non-operator party agrees to indemnify Operator for any charges or penalties incurred because of over or underdeliveries as compared to its nominations, except where such charges or penalties are solely attributable to action taken by Operator in total disregard of such nominations.

#### XI. TERM

This GBA shall remain in full force and effect for so long as the Operating Agreement is in effect and thereafter until the gas balance accounts are settled in full.

#### XII. SUCCESSORS AND ASSIGNS

The terms, covenants and conditions of this GBA shall be binding upon and shall inure to the benefit of the parties hereto and their respective legal representatives, successors and assigns. The parties hereto agree to give notice of the existence of this GBA to any successor in interest and to make any transfer of any interest subject to the Operating Agreement, or any part thereof, expressly subject to the terms of this GBA.

### XIII. AUDITS

Any Underproduced party shall have the right for a period of two (2) years after receipt of payment pursuant to a final accounting and after giving written notice to all parties, to audit an Overproduced party's accounts and records relating to such payment. The party conducting such audit shall bear its costs of the audit.

### XIV. MISCELLANEOUS

A. No assignment shall relieve the assignor from any obligation to the other parties with respect to any overproduction taken by assignor to such assignment.

B. Any amount remaining unpaid under the GBA more than thirty (30) days after it is due shall bear interest (commencing the day after said payment was due) at the rate set forth in the Accounting Procedure (Exhibit C to the Operating Agreement).

C. Unless the context otherwise clearly indicates, words used in the singular include the plural, and the plural includes the singular.

D. Each party agrees to maintain the necessary records and documents to enable the gas balancing and cash settlements contemplated hereby to be made.

E. If any party hereto fails to timely provide to Operator the data required hereby to enable gas balancing statements and cash settlements to be promptly made, Operator, or any other party, without prejudice to other remedies, is authorized to audit the records of the non-providing party and such audit shall be at the expense of the audited party.

F. To the extent permitted by law, this GBA shall be in lieu of and take precedence over any law, statute, rule or regulation requiring Gas balancing, revenue sharing or marketing of Gas.

G. In the event that any party is in default of any payment required by this GBA or fails to provide information required under this GBA, Operator is authorized--but not required--upon thirty (30) days notification to said defaulting party, without prejudice to any other remedies it may have, to curtail said party's Gas production from any and all Gas Wells subject to this GBA and such gas may be taken by the other parties in accordance with III.B. above.

H. In the event of a conflict between the terms of this GBA and the Operating Agreement, the terms of this GBA shall govern except where the conflict is between Article VI of this GBA and the Operating Agreement, in which event the Operating Agreement shall govern.

I. Nothing in this GBA shall be construed as precluding cash balancing at any time as may be agreed by the parties.

J. Nothing contained in this GBA shall require an Overproduced Party to pay to an Underproduced Party a sum which would be violative of any law, rule or regulation.

End of Exhibit "E"

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

In re the Matter of the Application of :  
Eclipse Resources I, LP, for :  
Unit Operation : Application Date: December 11, 2015  
:  
Hannahs Unit :

---

**PREPARED TESTIMONY OF VALERIE BECKHAM-FELLER ON BEHALF OF  
ECLIPSE RESOURCES I, LP (“ECLIPSE”)  
(GEOLOGIST)**

---

W. Jonathan Airey (0017437)  
Gregory D. Russell (0059718)  
J. Taylor Airey (0081092)  
Ilya Batikov (0087968)  
VORYS, SATER, SEYMOUR AND PEASE LLP  
52 East Gay Street  
P. O. Box 1008  
Columbus, Ohio 43216-1008

Attorneys for Applicant,  
Eclipse Resources I, LP

**PREPARED DIRECT TESTIMONY OF VALERIE BECKHAM-FELLER**

**INTRODUCTION**

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

A1. My name is Valerie Beckham-Feller, and I am a Geologic Coordinator for Eclipse Resources I, LP. My business address is 2121 Old Gatesburg Road, State College, Pennsylvania 16803.

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

A2. I received my undergraduate degree in Geological Sciences from Indiana University in 2006 and my Master's degree in Geological Sciences from the University of Arkansas in 2008. I completed two years of post-Master's coursework in Geological Sciences at West Virginia University from 2011-2013.

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

A3. I worked for Core Laboratories as a Geologist for two and a half years in Houston. I joined Eclipse Resources in July 2013. I have worked approximately five years in unconventional shale resources plays, including more than two years in the Utica/Point Pleasant formation.

**Q4. What do you do as a Geologist for Eclipse?**

A4. I work on the evaluation of shale resource plays in the Appalachian Basin, including the Utica / Point Pleasant formation. Specifically, I use subsurface data from wells, and other data, to evaluate the potential of the Utica / Point Pleasant formation.

**Q5. What types of subsurface data are you analyzing?**

A5. I analyze well log information from previously drilled wells and available seismic data.

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

A6. Yes, I am a member of the American Association of Petroleum Geologists and the Geological Society of America.

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

A7. I am testifying in support of the *Application of Eclipse Resources I, LP for Unit Operation* filed with respect to the Hannahs Unit, consisting of thirty-seven (37) separate tracts of land totaling approximately 678 acres in Noble and Monroe

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

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

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

A8. A pool is understood to be an accumulation of hydrocarbons trapped within the pores of a rock. This is consistent with the Ohio statutory definition defining a pool as "an underground reservoir containing a common accumulation of oil or gas, or both, but does not include a gas storage reservoir."

**Q9. How is the Unitized Formation defined for the Hannahs Unit?**

A9. It is defined as the subsurface portion of the Hannahs Unit located between fifty (50') above the top of the Utica formation to fifty (50') below the top of the Trenton formation. The measured depth is believed to be approximately 7,755' to 8,080' true vertical depth ("TVD") from the surface.

**Q10. Do you have an opinion on whether or not the Unitized Formation contemplated by the Hannahs Unit constitutes a pool or part of a pool?**

A10. Yes. It is my opinion, based on my education and professional experience that the Unitized Formation under the Hannahs Unit qualifies as part of a pool.

**Q11. Why?**

A11. My evaluation of the subsurface data indicates that the Utica / Point Pleasant formation is present under the Hannahs Unit. Because there is no impermeable layer separating the Utica and Point Pleasant formation, they are indeed a pool. The Utica / Point Pleasant formation is an unconventional reservoir which has streaks of better and worse porosity throughout the section. Microseismic data indicates that we do stimulate the Utica and Point Pleasant formation. Fracture stimulation of the section should connect much of this porosity, and it is reasonable to assume that all of it will contribute to the resulting production.

**Q12. When you refer to the Utica / Point Pleasant formation, to what are you referring?**

A12. The Utica / Point Pleasant formation is the term used to describe the subsurface formation from the top of the Utica formation to the top of the Trenton formation.

**Q13. Is your opinion based on your education and professional experience?**

A13. Yes, my opinion is based on my education and professional experience.

**Q14. And is this a commonly accepted method of analysis in your profession for determining whether a pool or part of a pool exists?**

A14. Yes, this is a commonly accepted industry approach in defining what is part of a pool.

#### **ALLOCATION METHODOLOGY**

**Q15. Production and expenses are allocated to the separate tracts in the Hannahs Unit under the Unit Plan on a surface-acreage basis. Do you have an opinion on whether that allocation method is appropriate, given your education and professional experience?**

A15. I do. In my opinion, that allocation methodology is appropriate.

**Q16. Why?**

A16. Because the Utica / Point Pleasant formation is expected to be similar in thickness and productive quality throughout the entirety of the Hannahs Unit.

**Q17. Do you have any exhibits to help explain your testimony?**

A17. Yes, I have attached two (2) exhibits to my testimony. Exhibit VB-1 shows a cross section map of the location of the Hannahs well pad and surrounding wells while Exhibit VB-2 is a wireline log from two (2) wells close in proximity to the Hannahs Unit. As you can see from the cross-section of wireline logs, the Utica / Point Pleasant formation is similar in thickness and character under the Hannahs Unit. Therefore, I expect similar production and gas in place of the Utica / Point Pleasant formation under the entire Hannahs Unit.

**Q18. In your experience, is this a common method for allocating production and expenses?**

A18. Yes, this is a commonly accepted practice in the industry, especially in shale plays.

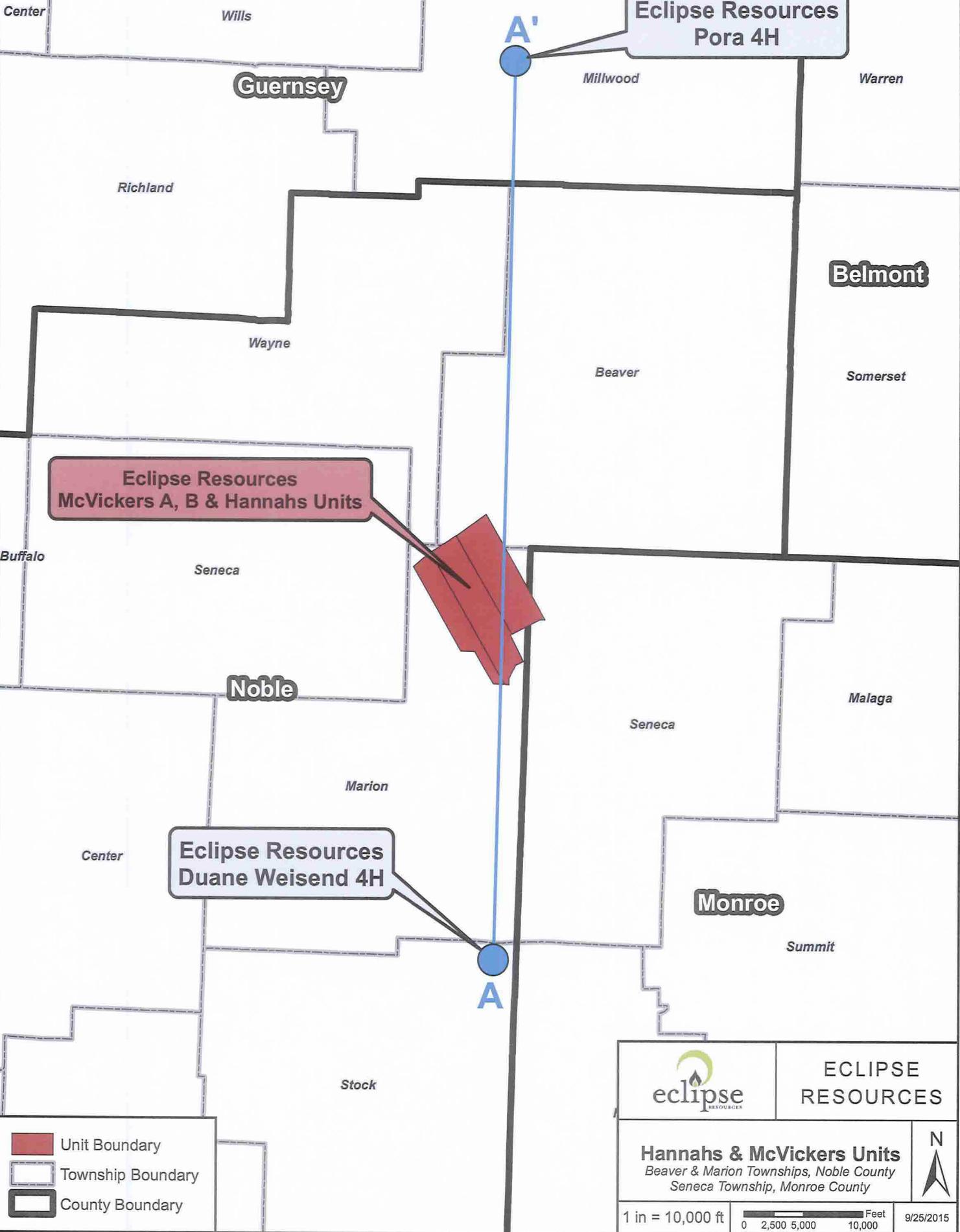
**Q19. Have you seen this allocation method used in other shale basins?**

A19. Yes, in the Marcellus.

**Q20. Does this conclude your testimony?**

A20. Yes.

EXHIBIT VB-1



Eclipse Resources  
Pora 4H

Eclipse Resources  
McVickers A, B & Hannahs Units

Eclipse Resources  
Duane Weisend 4H

-  Unit Boundary
-  Township Boundary
-  County Boundary

	<b>ECLIPSE RESOURCES</b>
---	------------------------------

**Hannahs & McVickers Units**  
 Beaver & Marion Townships, Noble County  
 Seneca Township, Monroe County



1 in = 10,000 ft  Feet 9/25/2015



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

In re the Matter of the Application of :  
Eclipse Resources I, LP for Unit :  
Operation : Application Date: December 11, 2015  
:  
Hannahs Unit :

---

**PREPARED TESTIMONY OF MARK SPEARS  
ON BEHALF OF ECLIPSE RESOURCES I, LP (“ECLIPSE”)  
(RESERVOIR ENGINEER)**

---

W. Jonathan Airey (0017437)  
Gregory D. Russell (0059718)  
J. Taylor Airey (0081092)  
Ilya Batikov (0087968)  
VORYS, SATER, SEYMOUR AND PEASE LLP  
52 East Gay Street  
P. O. Box 1008  
Columbus, Ohio 43216-1008

Attorneys for Applicant,  
Eclipse Resources I, LP

PREPARED DIRECT TESTIMONY OF MARK SPEARS

1 INTRODUCTION.

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

3 A1. My name is Mark Spears. I am currently the Vice President of Reservoir  
4 Engineering for Eclipse Resources.

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

6 A2. I received a Bachelor in Science Degree in Petroleum and Natural Gas Engineering  
7 from West Virginia University in 1981. I also received a Master of Business  
8 Administration from The University of Texas at Austin in 1992.

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

10 A3. After graduating from WVU, I began my career with Cities Service Oil and Gas in  
11 June of 1981 in Oklahoma City, Oklahoma. I worked there as a Drilling and  
12 Completions Engineer for five and one half years. I then accepted a position as  
13 Director of the Petroleum Engineering Technology Department at Glenville State  
14 College in Glenville, West Virginia. I taught classes in all aspects of oil and gas  
15 development – from Drilling to Reservoir Engineering to Surface Facilities to Oil  
16 and Gas Leasing, etc. I held that position for three and one half years before  
17 deciding to go back to school to pursue my MBA at The University of Texas. After  
18 graduating from U.T., I accepted a position as a financial analyst for Destec  
19 Energy, a natural gas cogeneration developer. At Destec, I worked my way into the  
20 position of Manager, Natural Gas Reserves, where I managed the company's  
21 interest in natural gas investments with operating oil and gas companies. When  
22 Destec merged with another company, I became a founding member of a small oil  
23 and gas operating company, named Fleet Energy and became the Vice President of  
24 Engineering and Operations. At Fleet, we developed a coalbed methane field in  
25 Utah and then sold it off. Soon afterwards, I took a job at Energy Corporation of  
26 America ("ECA"), an independent oil and gas company in Charleston, West  
27 Virginia, as a Senior Petroleum Engineer. While at ECA, I worked my way to the  
28 Manager of Reservoir Engineering and Manager of Asset Development, where I  
29 was in charge of evaluating the quantity and value of the Company's oil and gas  
30 reserves and in leading the Company's efforts to develop its oil and gas assets.

1 After nearly ten years at ECA, I accepted a position at Stone Energy in  
2 Morgantown, West Virginia as the Asset Manager of its Marcellus and Utica  
3 properties in Appalachia. At Stone, I was responsible for evaluating the value of its  
4 oil and gas reserves, and for leading the development efforts of those reserves.  
5 After a little over four years at Stone, I accepted my current position as Vice  
6 President, Reservoir Engineering at Eclipse Resources.

7 **Q4. What do you do as Vice President of Reservoir Engineering for Eclipse?**

8 A4. I am responsible for leading a team of Reservoir Engineers and engineering  
9 technicians to estimate the quantity and value of the Company's current oil and gas  
10 reserves and evaluate any future acquisitions and divestments of producing assets.  
11 The Reservoir Engineering Department also estimates the amounts of oil and gas  
12 production expected to be produced from our wells over various periods of time,  
13 either on a daily basis, a monthly basis or over the life of the wells.

14 **Q5. Are you a member of any professional associations?**

15 A5. I am a member of the Society of Petroleum Engineers and am on the Board of  
16 Directors for the Independent Oil and Gas Association of West Virginia.

17 **Q6. What is the purpose of your testimony today?**

18 A6. I am testifying in support of the *Application of Eclipse Resources I, LP for Unit*  
19 *Operation* filed with respect to the Hannahs Unit, consisting of thirty-seven (37)  
20 separate tracts of land totaling approximately 678 acres in Noble and Monroe  
21 Counties, Ohio. My testimony addresses the following: (i) that unit operations for  
22 the Hannahs Unit are reasonably necessary to increase substantially the recovery of  
23 oil and gas; and (ii) that the value of the estimated additional recovery due to unit  
24 operations exceeds its estimated additional costs.

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

27 **Q7. I'd like to begin by addressing whether unit operations in the Hannahs Unit**  
28 **are reasonably necessary to increase substantially the recovery of oil and gas**  
29 **from those properties. Would you describe briefly how Eclipse anticipates**  
30 **developing the Hannahs Unit?**

31 A7. Eclipse plans to drill four (4) lateral wells from one (1) pad site situated in the

1 northern portion of the Hannahs Unit. The development plan for the Hannahs Unit  
2 is demonstrated in Exhibit MS-1, Eclipse plans for these laterals to be between  
3 approximately 9,200 and 9,500 feet in length.

4 **Q8. Do you have an opinion on whether unit operations in the Hannahs Unit are**  
5 **reasonably necessary to increase substantially the recovery of oil and gas from**  
6 **those properties, and if so, what is your opinion?**

7 A8. Yes. It is my opinion that unit operations are reasonably necessary to increase  
8 substantially the recovery of oil and gas from the unit properties. I estimate that  
9 production from four horizontal wells in the Hannahs Unit could be as much as  
10 51.3 Bcf of natural gas; 298.1 MBbls of oil; and, 3,076.2 Mbbbls of natural gas  
11 liquids. These estimates are based on Eclipse's flow tests in the area, limited  
12 competitor production data, public investor press releases, and reasonable  
13 engineering assumptions derived from studying other shale reservoirs. Further, my  
14 estimations of the production without an order granting unitized operations on the  
15 Hannahs Unit are detailed on Exhibit MS-3 attached hereto. Due to the location of  
16 the unleased parcels in the unit and the 500 foot spacing requirement, three of  
17 Hannahs Unit horizontal well laterals would be a total of 16,785 feet shorter. This  
18 would result in approximately 48% less production than the proposed Hannahs  
19 Unit.

20 **Q9. Are the estimates that you made based on good engineering practices and**  
21 **accepted methods in the industry?**

22 A9. Yes.

23 **Q10. Can you calculate the production from these wells ahead of time with**  
24 **mathematical certainty?**

25 A10. Projecting production during early phases of development of a shale formation,  
26 such as the Utica / Point Pleasant, is especially difficult.

27 **Q11. Is horizontal drilling technology, including hydraulic fracturing the formation,**  
28 **required to economically develop unconventional resources?**

29 A11. Yes.

30 **Q12. Is horizontal drilling common in the oil and gas industry?**

31 A12. Yes.

1 **Q13. Is it fair to say that horizontal wells are commonly used to develop shale**  
2 **formations like the Unitized Formation today?**

3 A13. Yes.

4 **Q14. In your professional opinion, would it be economic to develop the Hannahs**  
5 **Unit using vertical drilling?**

6 A14. No. You simply cannot get the volume of production that you would need to make  
7 the development economic. Horizontal drilling combined with multi-stage  
8 hydraulic fracturing increases the reservoir contact with the well bore, which  
9 increases the volume you can produce. Substantial exposure to the reservoir using  
10 horizontal wells is essential to economically and effectively develop  
11 unconventional shale reservoirs like the Utica / Point Pleasant.

12 **VALUE OF ESTIMATED ADDITIONAL RECOVERY EXCEEDS ITS**  
13 **ESTIMATED ADDITIONAL COSTS**

14 **Q15. Let's turn to the financial side of the project. Generally, in your professional**  
15 **experience, how would the economics of a development project such as the**  
16 **development of the Hannahs Unit be evaluated?**

17 A15. Generally, an economic evaluation is performed by predicting oil, natural gas, and  
18 natural gas liquids production and applying the appropriate commodity price deck  
19 to calculate revenue. Capital costs, operating expenses, royalty burden, and taxes  
20 would then be applied to perform an economic evaluation.

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

22 A16. Yes.

23 **Q17. Would you walk us through your economic evaluation, beginning with your**  
24 **estimate of the anticipated revenue stream from the Hannahs Unit's**  
25 **development?**

26 A17. Of course. The production stream I used, previously discussed, was first netted for  
27 a 17.8% royalty burden. I then applied a flat price for natural gas as well as a flat  
28 price for oil, subtracting any anticipated basis differential and correcting for heat  
29 value content in the natural gas. For natural gas liquids, I then applied a price of  
30 36% of the flat price applied to oil. This natural gas price is based on individual  
31 product pricing, subtracting out any additional fees for transportation, fractionation,

1 and marketing.

2 **Q18. What about anticipated capital and operating expenses?**

3 A18. Capital costs are associated with the construction, drilling, completion, and  
4 facilities. Operations engineers provided detailed cost estimates for the proposed  
5 wells included in the Hannahs Unit. Monthly operating expenses were estimated  
6 from our experience in other Utica / Point Pleasant Shale wells and our contractual  
7 fees with associated service providers. The cost per well is explained on the  
8 attached Exhibit MS-3.

9 **Q19. Based on this information and your professional judgment, does the value of  
10 the estimated recovery from the operations proposed for the Hannahs Unit  
11 exceed its estimated costs?**

12 A19. Yes.

13 **Q20. Did you assess the development of the area covering the Hannahs Unit if unit  
14 operations do not occur?**

15 A20. Yes. The attached Exhibit MS-2 depicts the possible development of the unit area  
16 covering the Hannahs Unit if the proposed unit operations do not occur. As shown  
17 on the attached exhibit, in the absence of unit operations, the unit wells are  
18 significantly shortened. The development of the Hannahs Unit area depicted on  
19 Exhibit MS-2 would be uneconomic as detailed on Exhibit MS-3.

20 **Q21. Do you have an opinion as to whether the value of the estimated additional  
21 recovery from the proposed Hannahs Unit operations – compared to the  
22 estimated recovery if unit operations do not occur – exceeds the operation's  
23 estimated additional costs?**

24 A21. I do. The proposed unit operations add approximately \$8.0 million to the unit  
25 development costs. As a result of that increased expenditure the net present value  
26 (PV-10) of the project increases approximately \$13 million from an estimated  
27 negative \$3.8 million to an estimated \$9.2 million.

28 **Q22. Would you explain?**

29 A22. Yes. In my professional opinion, through the proposed unitization, the recovered  
30 reserves increase by approximately 91%. As a result, the PV-10 increases by  
31 approximately \$13 million, which more than offsets the increase in cost of

1 approximately \$8.0 million.

2 **Q23. And your opinions are based on your education and professional experience?**

3 A23. Yes.

4 **Q24. Does this conclude your testimony?**

5 A24. Yes.



**ECLIPSE  
RESOURCES**

**Hannahs Unit**

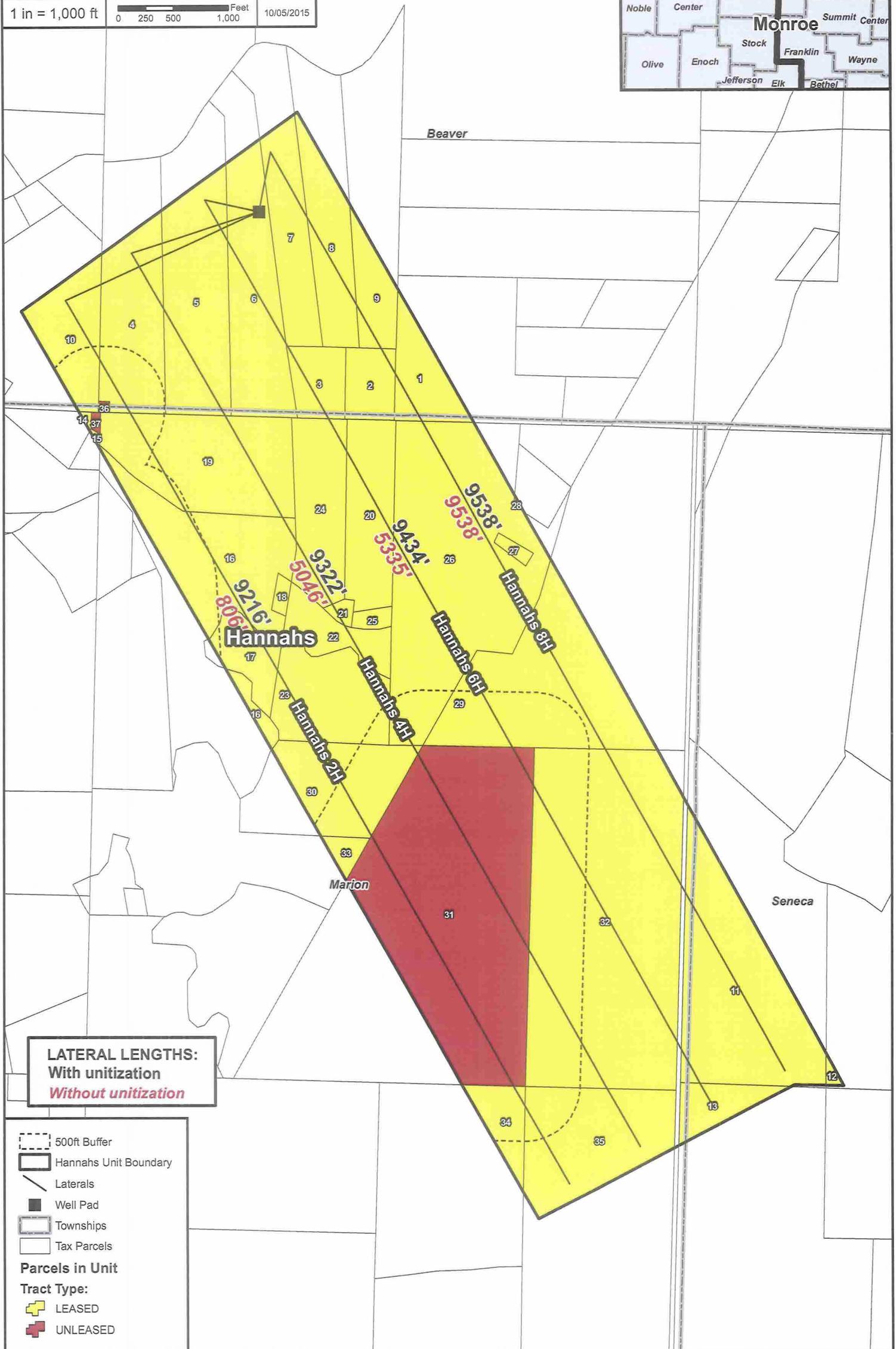
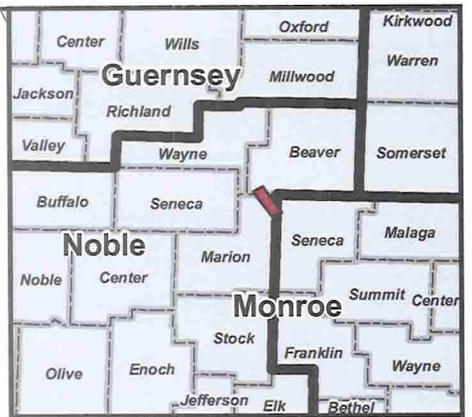
≈ 678.005 acres  
Beaver & Marion Townships, Noble County  
Seneca Township, Monroe County



1 in = 1,000 ft



10/05/2015



**LATERAL LENGTHS:**  
With unitization  
*Without unitization*

- 500ft Buffer
  - Hannahs Unit Boundary
  - Laterals
  - Well Pad
  - Townships
  - Tax Parcels
- Parcels in Unit**
- Tract Type:**
- LEASED
  - UNLEASED



ECLIPSE  
RESOURCES

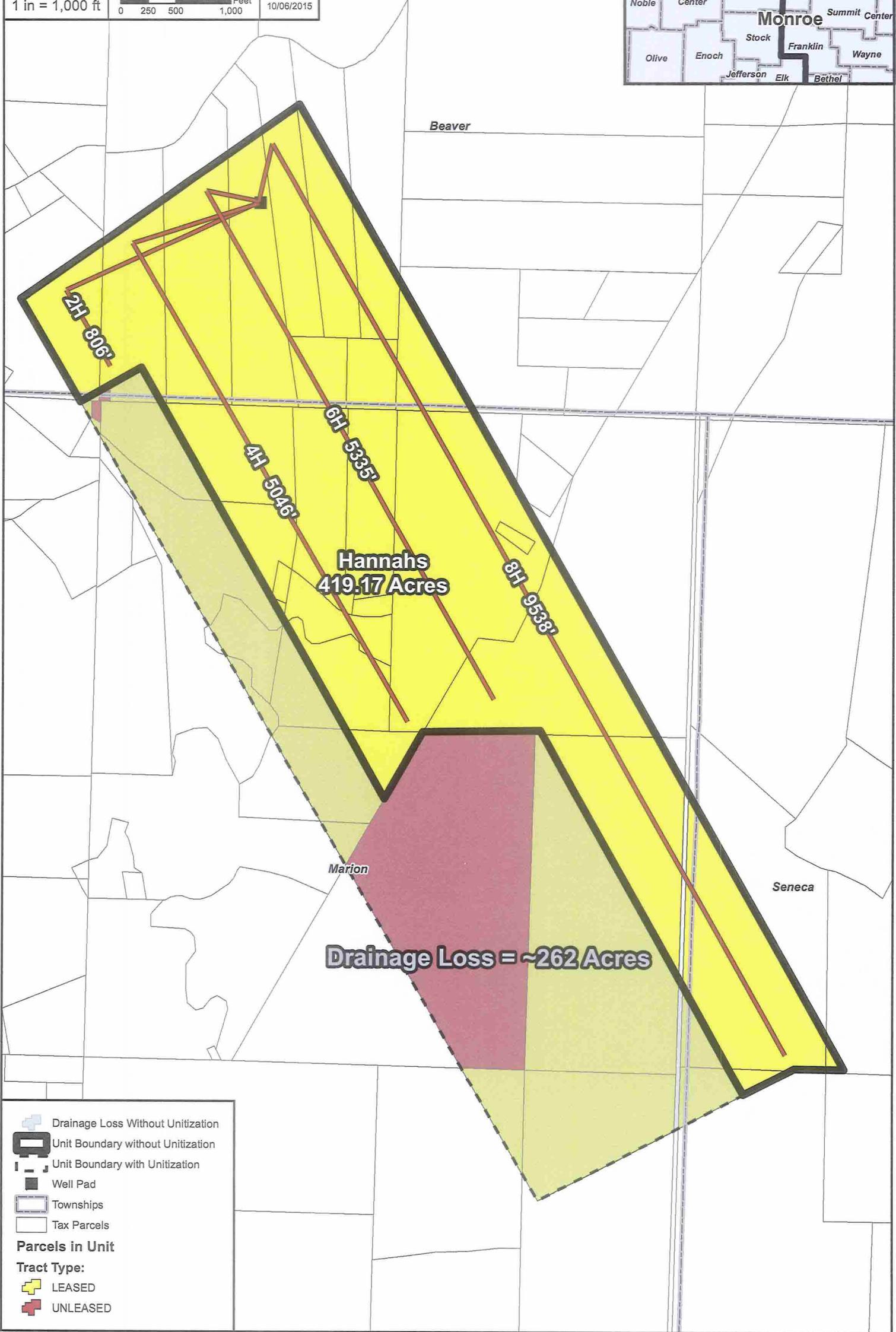
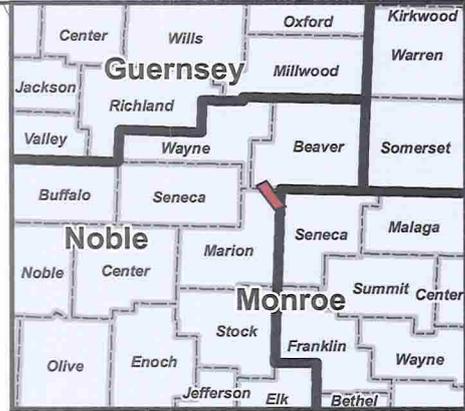
Hannahs Unit  
Without Unitization



1 in = 1,000 ft



10/06/2015



Hannahs  
419.17 Acres

Drainage Loss = ~262 Acres

Drainage Loss Without Unitization

Unit Boundary without Unitization

Unit Boundary with Unitization

Well Pad

Townships

Tax Parcels

**Parcels in Unit**

**Tract Type:**

LEASED

UNLEASED

**EXHIBIT "MS-3"**  
**HANNAHS UNIT**  
**NOBLE COUNTY, OHIO**

<b>Well Information</b>				
<b>Well Name</b>	<b>Unitized</b>		<b>Non-Unitized</b>	
	<b>Lateral Length (ft)</b>	<b>Dev. Cost (\$M)</b>	<b>Lateral Length (ft)</b>	<b>Dev. Cost (\$M)</b>
Hannahs 2H	9,216	8,945.03	806	4,313.82
Hannahs 4H	9,322	7,525.16	5,046	5,920.86
Hannahs 6H	9,434	7,618.03	5,335	6,055.51
Hannahs 8H	9,538	8,559.14	9,538	8,324.38
<b>Totals</b>	<b>37,510</b>	<b>32,647.36</b>	<b>20,725</b>	<b>24,614.57</b>

<b>Unitized Hannahs</b>				
<b>Well Name</b>	<b>Gas (Bcf)</b>	<b>Oil (Mbbls)</b>	<b>NGLs (Mbbls)</b>	<b>PV(10) (\$M)</b>
Hannahs 2H	12.6	73.1	754.8	2,741.36
Hannahs 4H	12.7	74.1	764.3	2,403.44
Hannahs 6H	12.9	75.0	774.0	2,424.43
Hannahs 8H	13.1	75.9	783.1	1,638.61
<b>Totals</b>	<b>51.3</b>	<b>298.1</b>	<b>3,076.2</b>	<b>9,207.84</b>

<b>Non-Unitized Hannahs</b>				
<b>Well Name</b>	<b>Gas (Bcf)</b>	<b>Oil (Mbbls)</b>	<b>NGLs (Mbbls)</b>	<b>PV(10) (\$M)</b>
Hannahs 2H	0.4	3.1	26.8	(4,007.92)
Hannahs 4H	6.5	37.9	387.3	(950.01)
Hannahs 6H	6.9	40.3	413.0	(742.53)
Hannahs 8H	13.1	75.9	783.1	1,855.45
<b>Totals</b>	<b>26.8</b>	<b>157.2</b>	<b>1,610.2</b>	<b>(3,845.01)</b>

**EXHIBIT "MS-3"**  
**HANNAHS UNIT**  
**NOBLE COUNTY, OHIO**

	<b>Gas Price (\$/mcf)</b>	<b>Oil Price \$/BBL<sup>1</sup></b>
Flat	4.0	60.0

<sup>1</sup> The price applied to NGL's was 36% of the price of oil per barrel.

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

In re the Matter of the Application of :  
Eclipse Resources I, LP for Unit :  
Operation : Application Date: December 11, 2015  
:  
Hannahs Unit :

---

**PREPARED TESTIMONY OF AUSTIN GRAYBILL  
ON BEHALF OF ECLIPSE RESOURCES I, LP (“ECLIPSE”)  
(LANDMAN)**

---

W. Jonathan Airey (0017437)  
Gregory D. Russell (0059718)  
J. Taylor Airey (0081092)  
Ilya Batikov (0087968)  
VORYS, SATER, SEYMOUR AND PEASE LLP  
52 East Gay Street  
P. O. Box 1008  
Columbus, Ohio 43216-1008

Attorneys for Applicant,  
Eclipse Resources I, LP

PREPARED DIRECT TESTIMONY OF AUSTIN GRAYBILL

1 INTRODUCTION.

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

3 A1. My name is Austin Graybill and I am a Landman for Eclipse Resources I, LP.

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

5 A2. I have a Bachelor of Science degree from the Pennsylvania State University at State  
6 College, Pennsylvania.

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

8 A3. I have more than nine years of professional experience as a landman, and I started  
9 working with Eclipse in April 2013. My entire career as a landman has been spent  
10 working in the Marcellus and Utica Shale.

11 **Q4. What do you do as a Landman for Eclipse?**

12 A4. I am responsible for managing land assets in Ohio, specifically in Noble and Mon-  
13 roe Counties. My daily responsibilities include unit formation, lease analysis, creat-  
14 ing and obtaining joint operating agreements from competitors. I also contact vari-  
15 ous landowners, working interest competitors and partners to negotiate oil and gas  
16 leases and/or working interest approvals.

17 **Q5. Are you a member of any professional associations?**

18 A5. Yes. I am a member of the American Association of Professional Landmen.

19 **Q6. What is the purpose of your testimony today?**

20 A6. I am testifying in support of the Application of Eclipse Resources I, LP for Unit  
21 Operation filed with respect to the Hannahs Unit, consisting of thirty-seven (37)  
22 separate tracts of land totaling approximately 678 acres in Monroe and Noble  
23 Counties, Ohio. In particular, I will describe the efforts made by Eclipse to put the  
24 Hannahs Unit together and the Unit Plan that Eclipse is proposing.

25 **EFFORTS MADE BY ECLIPSE TO LEASE UNIT TRACTS.**

26 **Q7. The Application submitted by Eclipse indicates that it owns the oil and gas**  
27 **rights to more than 592 acres of the proposed 678 acre unit. Would you de-**  
28 **scribe how Eclipse acquired those rights?**

29 A7. Eclipse acquired the vast majority of the oil and gas rights from an acquisition in  
30 July of 2013, between Eclipse and The Oxford Oil Company. Additional leasing ef-

1           forts have been made to acquire oil and gas leases on tracts of unleased land which  
2           have persisted for several months. Title to the Eclipse interest in the unit is held by  
3           Eclipse Resources I, LP and Eclipse Resources Ohio, LLC, holding 52.5350881%  
4           and 34.7809103% respectively. Eclipse Resources I, LP is the applicant for all pur-  
5           poses of this application as it will be the entity permitting wells within the unit.  
6           That having been said, Eclipse Resources I, LP and Eclipse Resources Ohio join  
7           and support the making of this application.

8   **Q8. The interest of Eclipse represents 87.3159985% of the unit acreage?**

9   A8. Yes. Eclipse now holds leases for approximately 592 acres, or 87.315998% of the  
10       unit. This information is reflected on Exhibit A-2 to the Unit Operating Agreement.

11   **Q9. Are there other operators in the unit, and if so, have they agreed to participate**  
12       **in its development?**

13   A9. No.

14   **Q10. How many unleased mineral owners are there in the Hannahs Unit?**

15   A10. There are three (3) unleased mineral owners in the Hannahs Unit, owning interests  
16       in three (3) tracts being Tracts 31, 36 and 37 which represent 12.684% of the over-  
17       all unit.

18   **Q11. Who are the Unleased Mineral Owners?**

19   A11. The Unleased Mineral Owners for Tract 31 are Bradley H. Hannahs, single, life  
20       tenant and Matthew Hannahs and Alison Hannahs, husband and wife, remainder-  
21       man. The ownership of Tracts 36 and 37 is unknown.

22   **Q12. Can you expand on the issues surrounding Tract 36 and Tract 37?**

23   A12. Yes. Tracts 36 and 37 were created by reservations in separate deeds near the turn  
24       of the 20<sup>th</sup> century. The deeds creating the tracts are the last documents of record  
25       regarding these tracts; however, subsequent conveyances of the surrounding lands  
26       expect Tracts 36 and 37 from those conveyances. Tracts 36 and 37 appear to be an  
27       old cemetery and a parcel that was formerly used as a church. Despite diligent ef-  
28       forts, Eclipse has not been able to identify anyone claiming ownership of either  
29       parcel.

30   **Q13. Have you prepared an affidavit detailing Eclipse's efforts to obtain leases from**  
31       **the unleased mineral owners?**

1 A13. Yes, Affidavits of Contacts were prepared in conjunction with this Application and  
2 are attached as Exhibit AG-2 to this testimony, detailing the efforts of Eclipse to  
3 obtain voluntary lease agreements from each of the Unleased Mineral Owners.

4 **Q14. Do you have an exhibit to your testimony that illustrates the leased and un-**  
5 **leased tracts as well as the tracts covered by non-conforming leases within the**  
6 **Hannahs Unit?**

7 A14. Yes. As indicated in Exhibit AG-3, which is a color-coded plat map showing the  
8 leased and unleased tracts, Tracts 31, 36 and 37 remain open and unleased and are  
9 depicted as the tracts indicated in red while the tracts subject to a lease agreement  
10 are indicated in yellow.

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

12 A15. Yes, an aerial plat of the Hannahs Unit is attached as Exhibit AG-4 to my testimo-  
13 ny.

14 **UNIT PLAN PROVISIONS.**

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

16 A16. Yes. As shown in Exhibit AG-3, Eclipse intends to develop the Hannahs Unit by  
17 drilling four laterals of between approximately 9,200 and 9,500 feet in lateral  
18 length from a single well pad located on the northern portion of the unit. The ap-  
19 proximate locations of the laterals are depicted on Exhibit AG-3.

20 **Q17. Does Eclipse have a specific timeline for drilling the wells in the Hannahs**  
21 **Unit?**

22 A17. We anticipate drilling the initial well within 12 months of an approved, effective,  
23 non-appealable final order for the Hannahs Unit. Depending on results, rig availa-  
24 bility and an available market for the hydrocarbons, Eclipse would expect to drill  
25 the remaining wells within 3 to 5 years.

26 **Q18. Does Eclipse have any other development activity in the immediate area?**

27 A18. Yes. To the east of the Hannahs is the Roe A and Roe C Units, which have been  
28 permitted. To the west of the Hannahs Unit is the McVickers B Unit which is also  
29 the subject of a unitization application. To the north of the Hannahs Unit are the  
30 permitted Antero Roman and Notchtrop units. To the south of the Hannahs Unit are

1 the producing Antero Et Rubel 1 Unit. These units are demonstrated on attached  
2 Exhibit AG-5.

3 **Q19. Are you familiar with the Unit Plan proposed by Eclipse for the Hannahs**  
4 **Unit?**

5 A19. Yes. The Unit Plan proposed by Eclipse is attached to the Application and consists  
6 of an initial document that establishes the non-operating relationship between the  
7 parties in the unit, and an operating agreement and related exhibits that establish  
8 how the unit is going to be explored, developed and produced.

9 **Q20. Turning first to the body of the Unit Plan, marked as Attachment 1 to the Ap-**  
10 **plication, would you describe briefly what it does?**

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

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

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

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

18 A22. On a surface-acreage basis. Under Article 4 of the Unit Plan, every tract is assigned  
19 a tract participation percentage based on surface acreage as shown on Exhibit A-2  
20 to the Unit Operating Agreement. Article 5 of the Unit Plan allocates production  
21 based on that tract participation.

22 **Q23. Would you go through an example from Exhibit A-2 to the Unit Operating**  
23 **Agreement to illustrate what you mean?**

24 A23. Yes. If you look at the fourth (4th) column on Exhibit A-2 to the Unit Operating  
25 Agreement, the column entitled "Total Acres in Unit", it shows the number of sur-  
26 face acres in each tract that fall within the Hannahs Unit. The sixth (6th) column  
27 labeled "Tract Participation" shows the related tract participation of each tract,  
28 which is calculated by dividing the total number of surface acres in the tract in the  
29 unit by the total number of surface acres in the Hannahs Unit. On the same exhibit,  
30 if you were to refer to Tract 19, you will see that "Kenneth C. McVicker" owns a

1 tract of land in which 30.827047 acres of said tract are within the Hannahs Unit,  
2 which equates to a Tract Participation of 0.045467 (30.827047/678.004632).

3 **Q24. What does that mean in terms of production allocated to that particular tract?**

4 A24. It means that 0.045467 or 4.5467% of the production in the unit would be allocated  
5 to the Tract 19.

6 **Q25. Does it work the same way for an unleased mineral interest, that is, for the  
7 tract of a person who did not lease the property in the unit?**

8 A25. Yes.

9 **Q26. In your experience, is that an unusual way to allocate production in a unit?**

10 A26. No. In my experience this is the generally accepted method to allocate production  
11 in a unit.

12 **Q27. How are unit expenses allocated?**

13 A27. Expenses are allocated in the same manner as production in the unit, on a sur-  
14 face-acreage basis. Article 3 of the Unit Plan provides that expenses, unless other-  
15 wise allocated in the Unit Operating Agreement, will be allocated to each tract of  
16 land within the unit in the proportion that the surface acres of each tract bears to the  
17 surface acres of the entire unit.

18 **Q28. Who pays the unit expenses?**

19 A28. According to the terms of the proposed Unit Plan, the working interest owners.

20 **Q29. Do the royalty owners pay any part of the unit expenses?**

21 A29. No, unless the terms and conditions of the royalty owner's oil and gas lease dictate  
22 otherwise. Royalty interest owners are responsible only for their proportionate  
23 share of taxes and post-production costs, payable only from their share of the pro-  
24 ceeds from sales of production from the unit area.

25 **Q30. Let's turn to the Unit Operating Agreement. It appears to be based upon**

26 **A.A.P.L. Form 610 – Model Form Operating Agreement, is that correct?**

27 A30. Yes. We typically use a modified version of the 1989 agreement. The Form 610,  
28 together with its exhibits, is a commonly used form in the industry and is frequently  
29 modified to fit the needs of the parties and circumstances.

30 **Q31. Would it be fair to say that you are familiar with the custom and usage of the  
31 Form 610 and other similar agreements in the industry?**

1 A31. Yes.

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

4 A32. Yes. Article III of the Unit Operating Agreement provides that all costs and liabili-  
5 ties incurred in operations shall be borne and paid proportionately by the working  
6 interest owners, according to their Unit Participation percentages. Those percent-  
7 ages can be found in Exhibit A-2 to the Unit Operating Agreement. Moreover, the  
8 Unit Operating Agreement has attached to it an accounting procedure identified as  
9 Exhibit C that offers great detail regarding how unit expenses are determined and  
10 paid.

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

12 A33. Yes, it stands for the Council of Petroleum Accountants Societies and is a com-  
13 monly used form in the industry.

14 **Q34. Based upon your education and professional experience, do you view the terms**  
15 **of Exhibit C as reasonable?**

16 A34. Yes.

17 **Q35. Will there be in-kind contributions made by owners in the unit area for unit**  
18 **operations, such as contributions of equipment?**

19 A35. No.

20 **Q36. Are there times when a working interest owner in the unit chooses not to – or**  
21 **cannot – pay their allocated share of the unit expenses?**

22 A36. Yes, such a situation is not uncommon in the industry. The agreements allow work-  
23 ing interest owners the flexibility to decline to participate in an operation that they  
24 either cannot afford or believe is not likely to be profitable. The remaining parties  
25 can then proceed at their own risk and expense.

26 **Q37. Generally, how is the working interest accounted for when an owner chooses**  
27 **not to participate in an operation?**

28 A37. A working interest owner who cannot or chooses not to participate in an operation  
29 is considered a non-consenting party. If the remaining working interest owners de-  
30 cide to proceed with the operation, the consenting parties bear the full cost and ex-  
31 pense of the operations. A non-consenting party is deemed to have relinquished its

1 interest in that operation until the well revenues pay out the costs that would have  
2 been attributed to that party, plus a prescribed risk penalty or non-consent penalty.

3 **Q38. Can a working interest owner choose to go non-consent in the initial well in**  
4 **the Hannahs Unit?**

5 A38. Under the terms of Article VI of the Unit Operating Agreement, the only party that  
6 can choose not to participate in the unit's initial well is an Unleased Mineral Own-  
7 er. Article XVI.P of the Unit Operating Agreement provides that the Unleased  
8 Mineral Owner shall be deemed to have relinquished its working interest to the  
9 other parties in the unit, with a back-in provision and risk factor of 300%.

10 **Q39. Does the Unit Operating Agreement treat the initial well and subsequent oper-**  
11 **ations differently in terms of going non-consent, and if so, why?**

12 A39. Yes. Subsequent operations have a smaller risk factor of 200%. A lack of infor-  
13 mation as to whether the well will be economic makes the participation in the ini-  
14 tial well a riskier endeavor than subsequent operations. Information gained from  
15 the initial well reduces the risk factor going forward. Therefore, it is common for  
16 joint operating agreements to distinguish risk factors between initial and subse-  
17 quent operations.

18 **Q40. But if the working interest owner still has a royalty interest in the unit, that**  
19 **royalty interest would remain in place and be paid?**

20 A40. Yes. That royalty interest would still be paid.

21 **Q41. Where are the risk factors for subsequent operations set out in the Unit Oper-**  
22 **ating Agreement?**

23 A41. They are set out in Article VI.B of the Unit Operating Agreement.

24 **Q42. Are the percentages included in the Unit Operating Agreement unusual?**

25 A42. No, not for joint operating agreements used in horizontal drilling programs. Be-  
26 cause of the significant costs associated with drilling horizontally through the Utica  
27 Shale (often in excess of \$10,000,000 to plan, drill, and complete) and because the  
28 Utica Shale is an unconventional play (where uneven geological performance is  
29 likely), it is common for companies to incorporate into their joint operating agree-  
30 ments a risk factor that is proportionate to the substantial financial commitment,

1 and these percentages are frequently much higher than those contained in the Joint  
2 Operating Agreement.

3 **Q43. I believe you've already described generally the documents in Exhibits A and**  
4 **C to the Unit Operating Agreement. Let's turn therefore to Exhibit B of the**  
5 **Unit Operating Agreement. What is it?**

6 A43. Exhibit B is a standard oil and gas lease form that is attached to the joint operating  
7 agreement to govern any unleased interests owned by the parties. Article III.A of  
8 the Unit Operating Agreement provides that if any party owns or acquires an oil  
9 and gas interest in the Contract Area, then that interest shall be treated for all pur-  
10 poses of the Unit Operating Agreement as if it were covered by the form of lease  
11 attached as Exhibit "B."

12 **Q44. Does this oil and gas lease contain standard provisions that Eclipse uses in**  
13 **connection with its operations in Ohio?**

14 A44. Yes.

15 **Q45. Moving on to Exhibit D of the Unit Operating Agreement, would you describe**  
16 **what it is?**

17 A45. Yes, Exhibit D is the insurance exhibit to the joint operating agreement. It sets forth  
18 coverage amounts and limitations, and the insurance terms for operations conduct-  
19 ed under the Unit Operating Agreement. For example, it requires insurance cover-  
20 age for Worker's Compensation, General Liability, Auto Liability, Excess Liabil-  
21 ity, Cost of Well Control and Care, and Pollution Liability.

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

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

27 **Q47. In your professional opinion, given your education and experience, are the**  
28 **terms of the Unit Plan, including the terms of the exhibits just discussed, just**  
29 **and reasonable?**

30 A47. Yes.

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

1 A48. Yes.

2

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

In re the Matter of the Application of :  
Eclipse Resources I, LP, for Unit Operation :  
 : Application Date: December 11, 2015  
Hannahs Unit :  
 :

**LEASE AFFIDAVIT**

I, Austin E. Graybill, being first duly cautioned and sworn, do hereby depose and state as follows:

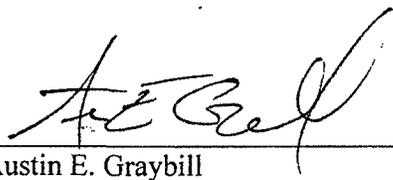
1. My name is Austin E. Graybill and I am a District Landman with Eclipse Resources I, LP (the "Applicant"). My day-to-day responsibilities include overseeing and directing lease acquisition for the Applicant in the State of Ohio.

2. As a result of my responsibilities, I have personal knowledge of the matters set forth in this affidavit and the following information is true to the best of my knowledge and belief.

3. Pursuant to Ohio Revised Code § 1509.28, the Applicant is filing herewith an application with the Chief of the Division of Oil and Gas Resources Management requesting an order authorizing the Applicant to operate the Unitized Formation and applicable land area, identified as the Hannahs Unit, according to the Unit Plan attached thereto (the "Application") (as those terms are used and defined therein). The Hannahs Unit is located in Noble and Monroe Counties, Ohio and consists of thirty-seven (37) separate tracts of land totaling approximately 678 acres.

4. To the best of my knowledge and belief, the Applicant holds a valid lease agreement for all of the acreage that the Applicant claims to have under lease in the Hannahs Unit, as outlined on Exhibit A-2 of the Unit Operating Agreement attached to the Application.

Further Affiant sayeth naught.

  
Austin E. Graybill

Commonwealth  
~~STATE OF~~ Pennsylvania )  
COUNTY OF Centre ) SS  
)

Sworn to and subscribed before me this 10<sup>th</sup> day of December, 2015.

COMMONWEALTH OF PENNSYLVANIA  
NOTARIAL SEAL  
Kennette D. Watson, Notary Public  
Ferguson Twp., Centre County  
My Commission Expires Sept. 11, 2018  
MEMBER, PENNSYLVANIA ASSOCIATION OF NOTARIES

Kennette D. Watson  
Notary Public



Commonwealth  
~~STATE OF~~ Pennsylvania )  
 ) SS  
COUNTY OF Centre )

Sworn to and subscribed before me this 10<sup>th</sup> day of December, 2015.

**COMMONWEALTH OF PENNSYLVANIA**  
NOTARIAL SEAL  
Kennette D. Watson, Notary Public  
Ferguson Twp., Centre County  
My Commission Expires Sept. 11, 2018  
**MEMBER, PENNSYLVANIA ASSOCIATION OF NOTARIES**

Kennette D. Watson  
Notary Public

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

In re the Matter of the Application of Eclipse :  
 Resources I, LP for : Application Date: December 11, 2015  
 Unit Operation :  
 :  
 :  
Hannahs Unit :

**AFFIDAVIT OF AUSTIN E. GRAYBILL  
(CONTACTS – UNLEASED MINERAL OWNERS AND UNCOMMITTED  
WORKING INTEREST OWNERS)**

I, Austin E. Graybill, being first duly cautioned and sworn, do hereby depose and state as follows:

1. My name is Austin E. Graybill and I am a District Landman with Eclipse Resources I, LP (“Applicant”). My day-to-day responsibilities include overseeing and directing lease acquisition for Applicant in the State of Ohio.

2. As part of those responsibilities, I work with and supervise both employees and contractors representing Applicant who contact landowners and obtain oil and gas leases on behalf of Applicant, including individuals from Holland Land Services (“Contractor”).

3. I have reports of contacts and attempts to contact that Applicant has made to lease unleased lands within the Hannahs Unit. Further, I have personal knowledge of contacts that I have made and attempted to make on behalf of Applicant to lease unleased lands within the Hannahs Unit. Those efforts are detailed below.

4. Regarding the following tract, the following contacts were made or attempted:

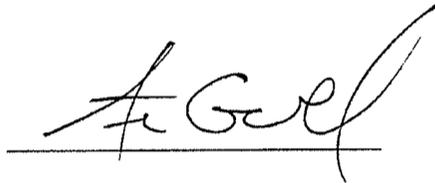
**Parcel No. N/A (Tract 36 and Tract 37)  
 Owner’s Name: Unknown (“Current Owners”)**

<u>Date</u>	<u>Eclipse</u> <u>Representative</u>	<u>Landowner</u> <u>Representative</u>	<u>Method</u>	<u>Address</u> of <u>Response</u> <u>Contact</u>
-------------	---	---	---------------	---

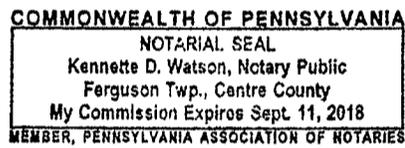
6/11/2015	Robert Tilley	N/A	Email	N/A	Robert Tilley, in-house title landman for Eclipse, was reviewing title within the unit and discovered two small tracks without parcel numbers. He drafted an email to Contractor instructing them to investigate.
6/11/2015	Contractor	N/A	Email	N/A	Contractor reviewed tax map and it depicted the two tracks as a church and cemetery. Contractor ran title on both tracks back to patent and found no conveyances in either to a church or cemetery.
6/15/2015	Robert Tilley	N/A	Phone Call	N/A	Called the Noble County Auditor's office and they stated that they had no record of either property.
6/15/2015	Luke Bates	N/A	Phone Call	N/A	Received a request from Robert Tilley to do a field inspection on above mentioned tract of land.
6/30/2015	Contractor	N/A	In-Person	N/A	Contractor conducted an in-person site inspection of the tracks of land, and discovered i) one was an old cemetery which was being maintained and ii) the other was an old foundation of a building. Contractor spoke with the surrounding neighbors and they told him that they thought the township maintained the property.
12/23/2013	Contractor	N/A	In-Person	N/A	Contractor spoke with a Township Trustee from each of the boarding townships.

Both trustees indicated  
that their respective  
township does not  
maintain either  
property.

Further sayeth Affiant naught.



Sworn to and subscribed before me this 10<sup>th</sup> day of December, 2015.



Notary Public

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

In re the Matter of the Application of Eclipse       :  
Resources I, LP for                                        :  
Unit Operation    :  
   :  
Hannahs Unit and McVickers B Unit             :

Application Date: December 11, 2015

**AFFIDAVIT OF AUSTIN E. GRAYBILL  
(CONTACTS – UNLEASED MINERAL OWNERS AND NON-CONFORMING LEASE  
INTEREST OWNERS)**

I, Austin E. Graybill, being first duly cautioned and sworn, do hereby depose and state as follows:

1. My name is Austin E. Graybill and I am a District Landman with Eclipse Resources I, LP (“Applicant”). My day-to-day responsibilities include overseeing and directing lease acquisition for Applicant in the State of Ohio.

2. As part of those responsibilities, I work with and supervise both employees and contractors representing Applicant who contact landowners and obtain oil and gas leases on behalf of Applicant, including individuals from Holland Land Services (“Contractor”).

3. I have reports of contacts and attempts to contact that Applicant has made to lease unleased lands within the Hannahs Unit and the McVickers B Unit. Further, I have personal knowledge of contacts that I have made and attempted to make on behalf of Applicant to lease unleased lands within the Hannahs Unit and the McVickers B Unit. Those efforts are detailed below.

4. Regarding the following tract, the following contacts were made or attempted:

**Parcel No. 23-0021113.000 (Tract 31 Hannahs Unit  
also Tract 23 McVickers B Unit)  
Owner’s Name: Bradley Hannahs, Matthew  
Hannahs, and Alison Hannahs  
 (“Current Owners”)**

<u>Date</u>	<u>Eclipse Representative</u>	<u>Landowner Representative</u>	<u>Method</u>	<u>Address of Contact</u>	<u>Response</u>
11/25/2013	Contractor	Bradley Hannahs	In-Person	52411 Batesville Rd. Summerfield, Oh 43788	Contacted Bradley Hannahs and he stated that he has multiple offers, running offers the \$7k-\$7.5k per acre, and simply will not sign at this time.
12/16/2013	Keith Zeigler	Bradley Hannahs	In-Person	52411 Batesville Rd. Summerfield, Oh 43788	Left business card at Mr. Hannahs' home.
12/23/2013	Keith Zeigler	Alison Hannahs	Phone Call	148 Squire Lane Hebron, Oh 43025	Spoke with Alison Hannahs and she said that her husband (Matthew Hannahs) and father-in-law (Bradley Hannahs) have not come to a decision about leasing. She said they will call back. I was attempting to set up an appt. with them but they have not returned calls.
1/13/14	Keith Zeigler	Matthew Hannahs	Phone Call	148 Squire Lane Hebron, Oh 43025	Spoke with Matthew Hannahs, they are interested in leasing but are in no hurry, I explained that their tract falls within our planed well units. Matthew has also informed me that Antero has contacted them and offered \$7,300 per acre.
1/20/2014	Contractor	Matthew Hannahs	Phone Call	148 Squire Lane Hebron, Oh 43025	Spoke with Matthew Hannahs he and his father (Bradley Hannahs) are discussing and weighting out their options however, they are not in any hurry to sign with anyone.
1/27/2014	Contactor	Matthew	Phone Call	148 Squire Lane	Spoke with Matthew

		Hannahs		Hebron, Oh 43025	and no change since last week. They are weighing out their options, and in no hurry to sign with anyone.
2/3/2014	Contractor	Bradley Hannahs	Phone Call	52411 Batesville Rd. Summerfield, Oh 43788	Spoke with Bradley Hannahs and they are in no hurry to sign with anyone. Asked if there is something in the language or how much of a signing bonus it would take, he indicated they are still weighing out all options and are not sure at this time.
4/11/2014	Keith Zeigler	Bradley Hannahs	In-Person	52411 Batesville Rd. Summerfield, Oh 43788	Spoke with Bradley Hannahs, he indicated that before he leases with anybody, he is trying to get all of his acreage that is currently being held by old wells, as well as his cousin's property, straightened out. For all of his acreage, he is requiring a non-surface lease.
4/25/2014	Keith Zeigler	Bradley Hannahs	Phone Call	52411 Batesville Rd. Summerfield, Oh 43788	Two phone calls were unreturned last week to Brad and family seeking an update.
4/25/2014	Keith Zeigler	Bradley Hannahs	Phone Call	52411 Batesville Rd. Summerfield, Oh 43788	Mr. Hannah's remains unchanged in his viewpoint that he will not be leasing any more acreage until his HBP acreage is sorted out. Most of his HBP acreage appears owned by Antero. He claims to have a non-surface lease agreement in place with Antero already, but is not signing anything until his other acreage is figured out.

6/20/2014	Keith Zeigler	Bradley Hannahs	Phone Call	52411 Batesville Rd. Summerfield, Oh 43788	Attempting to set a meeting with Bradley Hannahs where Matthew Berkeley (Eclipse Landman) will be joining. Currently in negotiations with Norma Hannahs and her sons, close relatives of Brad's, that Brad would like to see taken care of first with the amendment/ratification.
8/1/2014	Keith Zeigler	Bradley Hannahs	Phone Call	52411 Batesville Rd. Summerfield, Oh 43788	Spoke with Bradley Hannahs twice last week. He showed me a lease that Antero is offering, because he wants the form of any lease he signs to look the exact same as the Antero lease. The Antero lease is at 21% royalty, and he threw out \$10,000/acre. He prefers Antero to Eclipse right now for his two smaller Beaver Twp. tracts because those tracts are HBP by a lease Antero owns for 48 acres. He is leaning towards signing the Beaver Twp. parcels with whoever owns the rights to his other 48 HBP acres. I've let him know, and will reiterate, that this acreage will be coming to us in a trade. He is expecting non-surface for all of his property, including the 135 acre open tract.
8/8/2014	Keith Zeigler	Bradley Hannahs	Phone Call	52411 Batesville Rd. Summerfield, Oh 43788	Spoke with Bradley Hannahs and let him know that we expect to get his acreage in the Antero trade. For an amendment he is seeking \$2500k/16% royalty for his HBP acreage. For a new

					lease he requested \$10k per acre and a 21% royalty.
9/26/2014	Keith Zeigler	Bradley Hannahs	Phone Call	52411 Batesville Rd. Summerfield, Oh 43788	Spoke with Bradley Hannahs who is still waiting for Antero to amend the acreage he owns. He indicated again that he is willing to amend for \$2,500 an acre and a 16% royalty. He again indicated a new lease would require \$10,000/acre and a 21% royalty. He's expecting non-surface as well.
10/17/2014	Keith Zeigler	Bradley Hannahs	In-person	52411 Batesville Rd. Summerfield, Oh 43788	Spoke with Bradley Hannahs, during the evening at his farm. He told me that he still has not spoken to Antero about his HBP acreage.
11/17/2014	Keith Zeigler	Bradley Hannahs	In-Person	52411 Batesville Rd. Summerfield, Oh 43788	Matt Berkeley and I met with Bradley Hannahs and had a productive discussion regarding a lease amendment for the lease Antero owns. He seems agreeable to work on the lease for his open acreage as well once he completes the amendment.
8/4/2015	Luke Bates	Bradley Hannahs	Phone Call	52411 Batesville Rd. Summerfield, Oh 43788	Left a voicemail seeking an update.
8/4/2015	Luke Bates	Matthew Hannahs	Phone Call	148 Squire Lane Hebron, Oh 43025	Left a voicemail seeking an update.
8/12/2015	Luke Bates	Bradley Hannahs	Phone Call	52411 Batesville Rd. Summerfield, Oh 43788	Left a voicemail seeking an update.
8/12/2015	Luke Bates	Matthew Hannahs	Phone Call	148 Squire Lane Hebron, Oh 43025	Called and left a voicemail.
8/13/2015	Luke Bates	Bradley Hannahs	In-person	52411 Batesville Rd. Summerfield, Oh 43788	Prepared documents and went to Bradley Hannahs' home at what

					is usually the best time to find him at home. There was no response.
8/14/2015	Luke Bates	Bradley Hannahs	In person	52411 Batesville Rd. Summerfield, Oh 43788	Stopped by Bradly Hannahs' house. No answer.
8/15/2015	Luke Bates	Matthew Hannahs	Phone Call	148 Squire Lane Hebron, Oh 43025	Received a call from Matthew Hannahs and discussed leasing the property with him. He's very concerned with the lease form but said he is interested in leasing. Said he would be meeting with Bradley Hannahs that Sunday (8/16) and would discuss with him and get back to me. He asked that I email him a lease and some maps of the development plans. I told him I would email him the lease, but that I would very likely not be able to send him any maps, as they are proprietary. I asked to meet with him in person in the near future to review, but he declined and indicated that we could set up a later time.
8/18/2015	Luke Bates	Matthew Hannahs	E-mail	148 Squire Lane Hebron, Oh 43025	Emailed a copy of the lease and memo, and asked to set up a time to meet.
8/19/2015	Luke Bates	Bradley Hannahs	In -person	52411 Batesville Rd. Summerfield, Oh 43788	Stopped by and found Bradley Hannahs outside at his home and spoke to him for about 45 minutes. He indicated that he was unlikely to sign with Eclipse and refused to schedule a time to discuss and look at development plans. He asked me not to come

					back.
8/25/2015	Luke Bates	Matthew Hannahs	Phone Call	148 Squire Lane Hebron, Oh 43025	No answer.
8/28/2015	Luke Bates	Bradley Hannahs	Phone Call	52411 Batesville Rd. Summerfield, Oh 43788	No answer.
8/28/2015	Luke Bates	Matthew Hannahs	Phone Call	148 Squire Lane Hebron, Oh 43025	No answer
8/28/2015	Luke Bates	Matthew Hannahs	E-mail	148 Squire Lane Hebron, Oh 43025	Emailed Matthew Hannahs requesting an update.
8/31/2015	Luke Bates	Matthew Hannahs	E-Mail	148 Squire Lane Hebron, Oh 43025	Received an email from Matthew Hannahs stating: "Luke I did get the email and at this time I don't believe I have been provided enough information or the correct lease to even begin talking. You can call me but I would suggest something viable before you do so you aren't wasting my time and yours"
8/31/2015	Luke Bates	Matthew Hannahs	E-Mail	148 Squire Lane Hebron, Oh 43025	Requested an in person meeting.
9/2/2015	Luke Bates	Bradley Hannahs	Phone Call	52411 Batesville Rd. Summerfield, Oh 43788	Left a voicemail message requesting an update.
9/10/2015	Austin Graybill	E. Bradley Hannahs, Matthew Hannahs and Alison Hannahs	Letter via U.S. Certified Mail	52411 Batesville Rd. Summerfield, Oh 43788; and 148 Squire Lane Hebron, Oh 43025	Sent letter along with copies of oil and gas lease and memorandum of lease. The letter stated that if we cannot reach an agreement as to lease, then Eclipse will seek other options including unitization.

**Parcel No. 23-0021115.001 (Tract 25 McVickers B Unit)**

**Owner's Name: Bradley H. Hannahs**

<u>Date</u>	<u>Eclipse Representative</u>	<u>Landowner Representative</u>	<u>Method</u>	<u>Address of Contact</u>	<u>Response</u>
11/25/2013	Contractor	Bradley Hannahs	In-Person	52411 Batesville Rd. Summerfield, Oh 43788	Contacted Bradley Hannahs and he stated that he has multiple offers, running offers the \$7k-\$7.5k per acre, and simply will not sign at this time.
12/16/2013	Keith Zeigler	Bradley Hannahs	In-Person	52411 Batesville Rd. Summerfield, Oh 43788	Left business card at Mr. Hannahs' home.
12/23/2013	Keith Zeigler	Alison Hannahs	Phone Call	148 Squire Lane Hebron, Oh 43025	Spoke with Alison Hannahs and she said that her husband (Matthew Hannahs) and father-in-law (Bradley Hannahs) have not come to a decision about leasing. She said they will call back. I was attempting to set up an appt. with them but they have not returned calls.
1/13/14	Keith Zeigler	Matthew Hannahs	Phone Call	148 Squire Lane Hebron, Oh 43025	Spoke with Matthew Hannahs, they are interested in leasing but are in no hurry, I explained that their tract falls within our planned well units. Matthew has also informed me that Antero has contacted them and offered \$7,300 per acre.
1/20/2014	Contractor	Matthew Hannahs	Phone Call	148 Squire Lane Hebron, Oh 43025	Spoke with Matthew Hannahs he and his father (Bradley Hannahs) are discussing and weighting out their options however, they are not in any hurry to sign with anyone.
1/27/2014	Contactor	Matthew Hannahs	Phone Call	148 Squire Lane Hebron, Oh 43025	Spoke with Matthew and no change since last week. They are

					weighing out their options, and in no hurry to sign with anyone.
2/3/2014	Contractor	Bradley Hannahs	Phone Call	52411 Batesville Rd. Summerfield, Oh 43788	Spoke with Bradley Hannahs and they are in no hurry to sign with anyone. Asked if there is something in the language or how much of a signing bonus it would take, he indicated they are still weighing out all options and are not sure at this time.
4/11/2014	Keith Zeigler	Bradley Hannahs	In-Person	52411 Batesville Rd. Summerfield, Oh 43788	Spoke with Bradley Hannahs, he indicated that before he leases with anybody, he is trying to get all of his acreage that is currently being held by old wells, as well as his cousin's property, straightened out. For all of his acreage, he is requiring a non-surface lease.
4/25/2014	Keith Zeigler	Bradley Hannahs	Phone Call	52411 Batesville Rd. Summerfield, Oh 43788	Two phone calls were unreturned last week to Brad and family seeking an update.
4/25/2014	Keith Zeigler	Bradley Hannahs	Phone Call	52411 Batesville Rd. Summerfield, Oh 43788	Mr. Hannah's remains unchanged in his viewpoint that he will not be leasing any more acreage until his HBP acreage is sorted out. Most of his HBP acreage appears owned by Antero. He claims to have a non-surface lease agreement in place with Antero already, but is not signing anything until his other acreage is figured out.
6/20/2014	Keith Zeigler	Bradley Hannahs	Phone Call	52411 Batesville Rd. Summerfield,	Attempting to set a meeting with Bradley

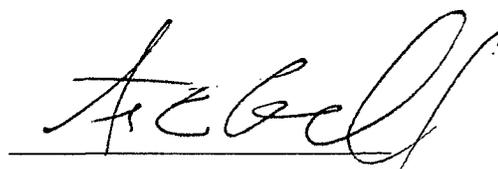
				Oh 43788	Hannahs where Matthew Berkeley (Eclipse Landman) will be joining. Currently in negotiations with Norma Hannahs and her sons, close relatives of Brad's, that Brad would like to see taken care of first with the amendment/ratification.
8/1/2014	Keith Zeigler	Bradley Hannahs	Phone Call	52411 Batesville Rd. Summerfield, Oh 43788	Spoke with Bradley Hannahs twice last week. He showed me a lease that Antero is offering, because he wants the form of any lease he signs to look the exact same as the Antero lease. The Antero lease is at 21% royalty, and he threw out \$10,000/acre. He prefers Antero to Eclipse right now for his two smaller Beaver Twp. tracts because those tracts are HBP by a lease Antero owns for 48 acres. He is leaning towards signing the Beaver Twp. parcels with whoever owns the rights to his other 48 HBP acres. I've let him know, and will reiterate, that this acreage will be coming to us in a trade. He is expecting non-surface for all of his property, including the 135 acre open tract.
8/8/2014	Keith Zeigler	Bradley Hannahs	Phone Call	52411 Batesville Rd. Summerfield, Oh 43788	Spoke with Bradley Hannahs and let him know that we expect to get his acreage in the Antero trade. For an amendment he is seeking \$2500k/16% royalty for his HBP acreage. For a new lease he requested \$10k per acre and a 21%

					royalty.
9/26/2014	Keith Zeigler	Bradley Hannahs	Phone Call	52411 Batesville Rd. Summerfield, Oh 43788	Spoke with Bradley Hannahs who is still waiting for Antero to amend the acreage he owns. He indicated again that he is willing to amend for \$2,500 an acre and a 16% royalty. He again indicated a new lease would require \$10,000/acre and a 21% royalty. He's expecting non-surface as well.
10/17/2014	Keith Zeigler	Bradley Hannahs	In-person	52411 Batesville Rd. Summerfield, Oh 43788	Spoke with Bradley Hannahs, during the evening at his farm. He told me that he still has not spoken to Antero about his HBP acreage.
11/17/2014	Keith Zeigler	Bradley Hannahs	In-Person	52411 Batesville Rd. Summerfield, Oh 43788	Matt Berkeley and I met with Bradley Hannahs and had a productive discussion regarding a lease amendment for the lease Antero owns. He seems agreeable to work on the lease for his open acreage as well once he completes the amendment.
8/4/2015	Luke Bates	Bradley Hannahs	Phone Call	52411 Batesville Rd. Summerfield, Oh 43788	Left a voicemail seeking an update.
8/4/2015	Luke Bates	Matthew Hannahs	Phone Call	148 Squire Lane Hebron, Oh 43025	Left a voicemail seeking an update.
8/12/2015	Luke Bates	Bradley Hannahs	Phone Call	52411 Batesville Rd. Summerfield, Oh 43788	Left a voicemail seeking an update.
8/12/2015	Luke Bates	Matthew Hannahs	Phone Call	148 Squire Lane Hebron, Oh 43025	Called and left a voicemail.
8/13/2015	Luke Bates	Bradley Hannahs	In-person	52411 Batesville Rd. Summerfield, Oh 43788	Prepared documents and went to Bradley Hannahs' home at what is usually the best time to find him at home.

					There was no response.
8/14/2015	Luke Bates	Bradley Hannahs	In person	52411 Batesville Rd. Summerfield, Oh 43788	Stopped by Bradly Hannahs' house. No answer.
8/15/2015	Luke Bates	Matthew Hannahs	Phone Call	148 Squire Lane Hebron, Oh 43025	Received a call from Matthew Hannahs and discussed leasing the property with him. He's very concerned with the lease form but said he is interested in leasing. Said he would be meeting with Bradley Hannahs that Sunday (8/16) and would discuss with him and get back to me. He asked that I email him a lease and some maps of the development plans. I told him I would email him the lease, but that I would very likely not be able to send him any maps, as they are proprietary. I asked to meet with him in person in the near future to review, but he declined and indicated that we could set up a later time.
8/18/2015	Luke Bates	Matthew Hannahs	E-mail	148 Squire Lane Hebron, Oh 43025	Emailed a copy of the lease and memo, and asked to set up a time to meet.
8/19/2015	Luke Bates	Bradley Hannahs	In -person	52411 Batesville Rd. Summerfield, Oh 43788	Stopped by and found Bradley Hannahs outside at his home and spoke to him for about 45 minutes. He indicated that he was unlikely to sign with Eclipse and refused to schedule a time to discuss and look at development plans. He asked me not to come back.

8/25/2015	Luke Bates	Matthew Hannahs	Phone Call	148 Squire Lane Hebron, Oh 43025	No answer.
8/28/2015	Luke Bates	Bradley Hannahs	Phone Call	52411 Batesville Rd. Summerfield, Oh 43788	No answer.
8/28/2015	Luke Bates	Matthew Hannahs	Phone Call	148 Squire Lane Hebron, Oh 43025	No answer
8/28/2015	Luke Bates	Matthew Hannahs	E-mail	148 Squire Lane Hebron, Oh 43025	Emailed Matthew Hannahs requesting an update.
8/31/2015	Luke Bates	Matthew Hannahs	E-Mail	148 Squire Lane Hebron, Oh 43025	Received an email from Matthew Hannahs stating: "Luke I did get the email and at this time I don't believe I have been provided enough information or the correct lease to even begin talking. You can call me but I would suggest something viable before you do so you aren't wasting my time and yours"
8/31/2015	Luke Bates	Matthew Hannahs	E-Mail	148 Squire Lane Hebron, Oh 43025	Requested an in person meeting.
9/2/2015	Luke Bates	Bradley Hannahs	Phone Call	52411 Batesville Rd. Summerfield, Oh 43788	Left a voicemail message requesting an update.
9/10/2015	Austin Graybill	E. Bradley Hannahs, Matthew Hannahs and Alison Hannahs	Letter via U.S. Certified Mail	52411 Batesville Rd. Summerfield, Oh 43788; and 148 Squire Lane Hebron, Oh 43025	Sent letter along with copies of oil and gas lease and memorandum of lease. The letter stated that if we cannot reach an agreement as to lease, then Eclipse will seek other options including unitization.

Further sayeth Affiant naught.



Sworn to and subscribed before me this 10<sup>th</sup> day of December, 2015.

Kennette D. Watson  
Notary Public

COMMONWEALTH OF PENNSYLVANIA  
NOTARIAL SEAL  
Kennette D. Watson, Notary Public  
Ferguson Twp., Centre County  
My Commission Expires Sept. 11, 2018  
MEMBER, PENNSYLVANIA ASSOCIATION OF NOTARIES



**ECLIPSE  
RESOURCES**

**Hannahs Unit**

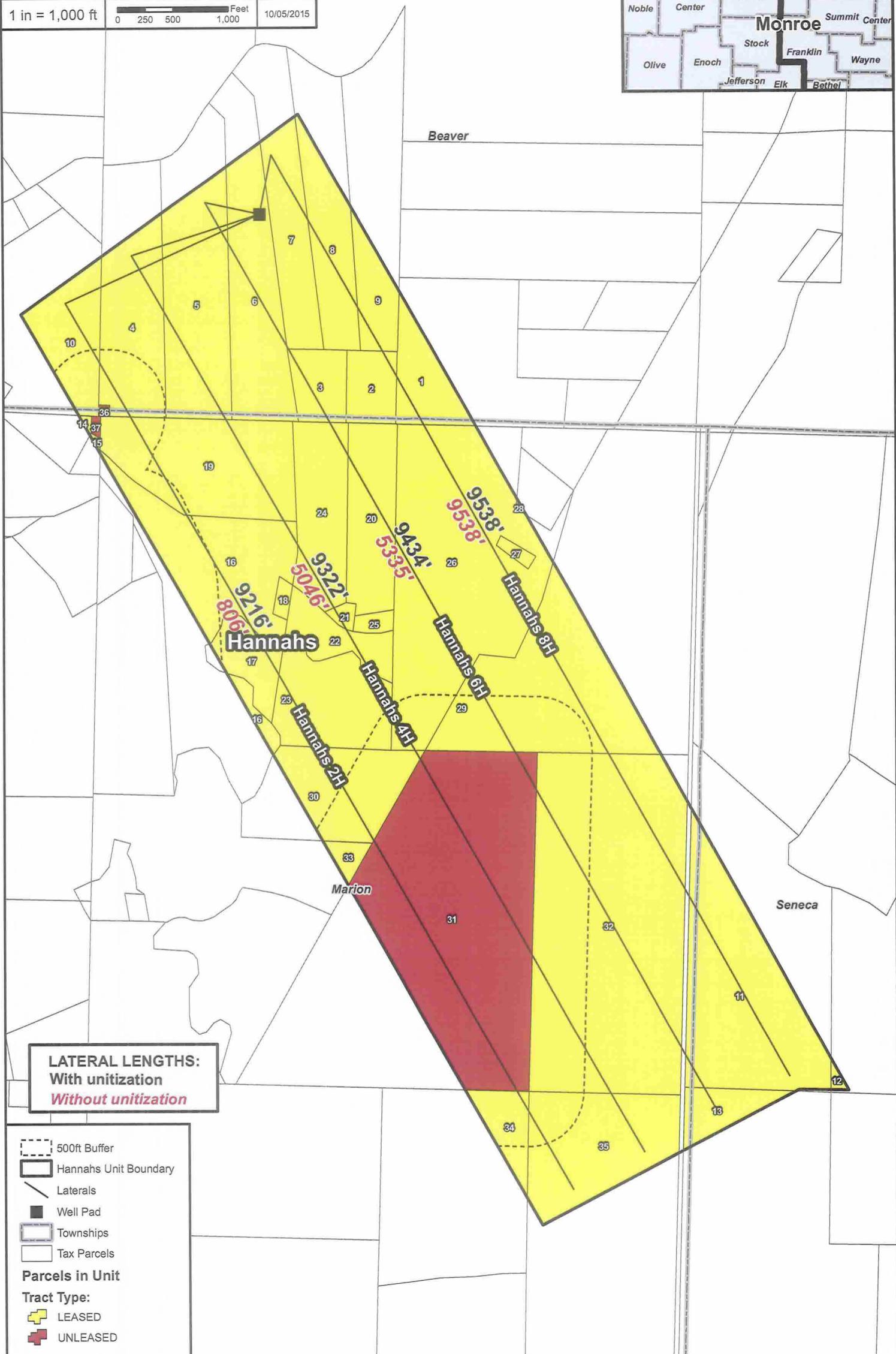
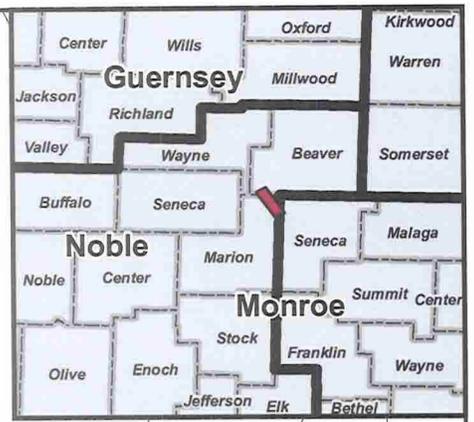
≈ 678.005 acres  
Beaver & Marion Townships, Noble County  
Seneca Township, Monroe County



1 in = 1,000 ft



10/05/2015



**LATERAL LENGTHS:**  
With unitization  
*Without unitization*

- 500ft Buffer
- Hannahs Unit Boundary
- Laterals
- Well Pad
- Townships
- Tax Parcels
- Parcels in Unit**
- Tract Type:**
- LEASED
- UNLEASED



**ECLIPSE  
RESOURCES**

**Hannahs Unit**

≈ 678,005 acres

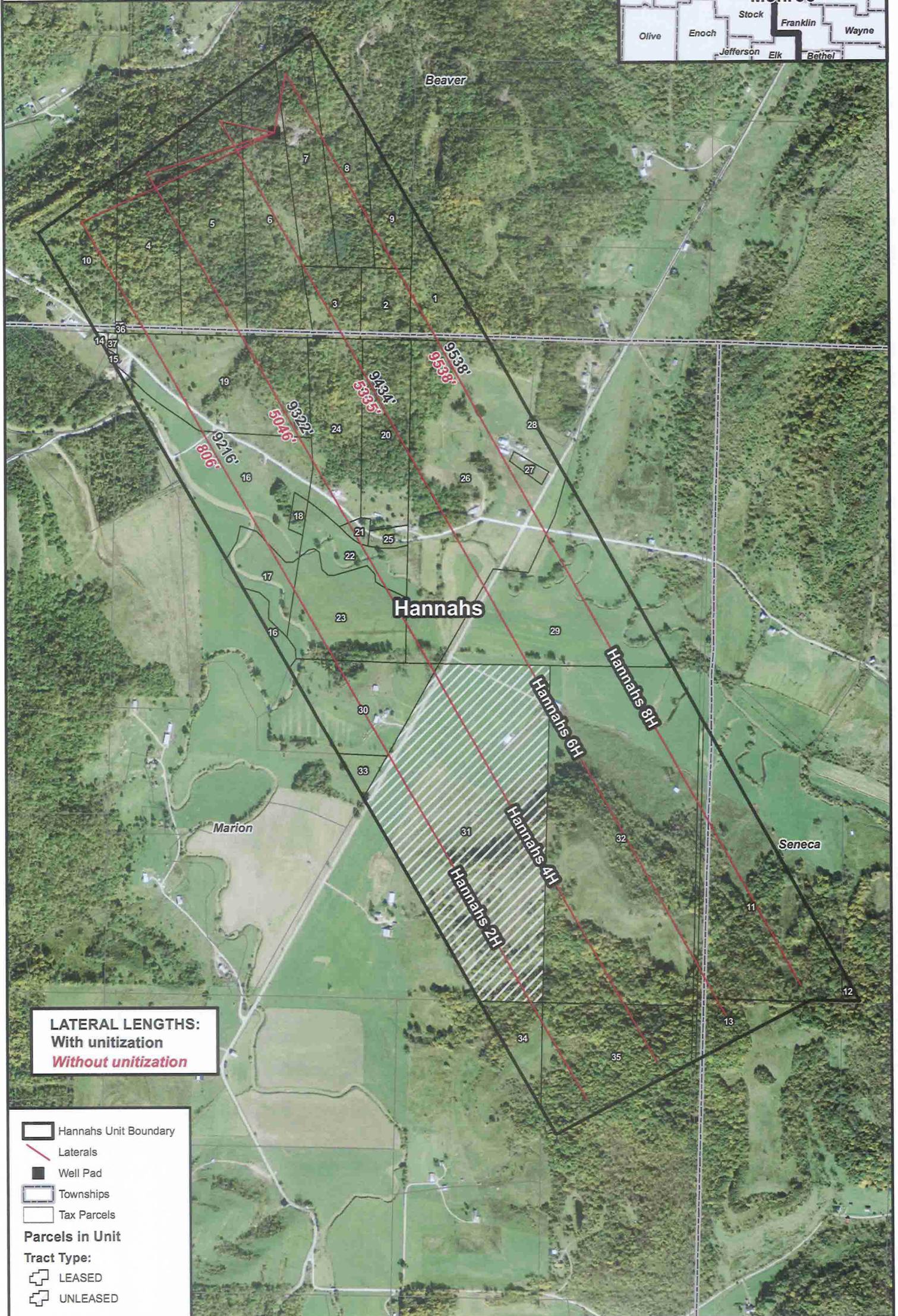
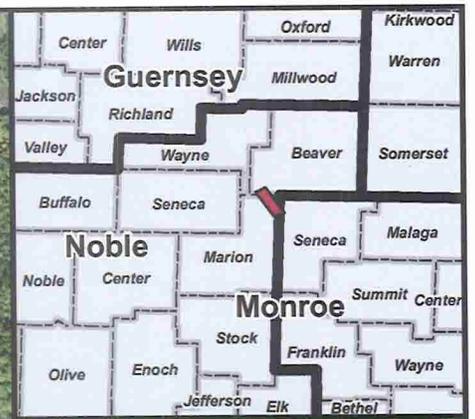
Beaver & Marion Townships, Noble County  
Seneca Township, Monroe County



1 in = 1,000 ft



10/05/2015



**LATERAL LENGTHS:**  
With unitization  
*Without unitization*

- Hannahs Unit Boundary
- Laterals
- Well Pad
- Townships
- Tax Parcels
- Parcels in Unit**
- Tract Type:**
- LEASED
- UNLEASED

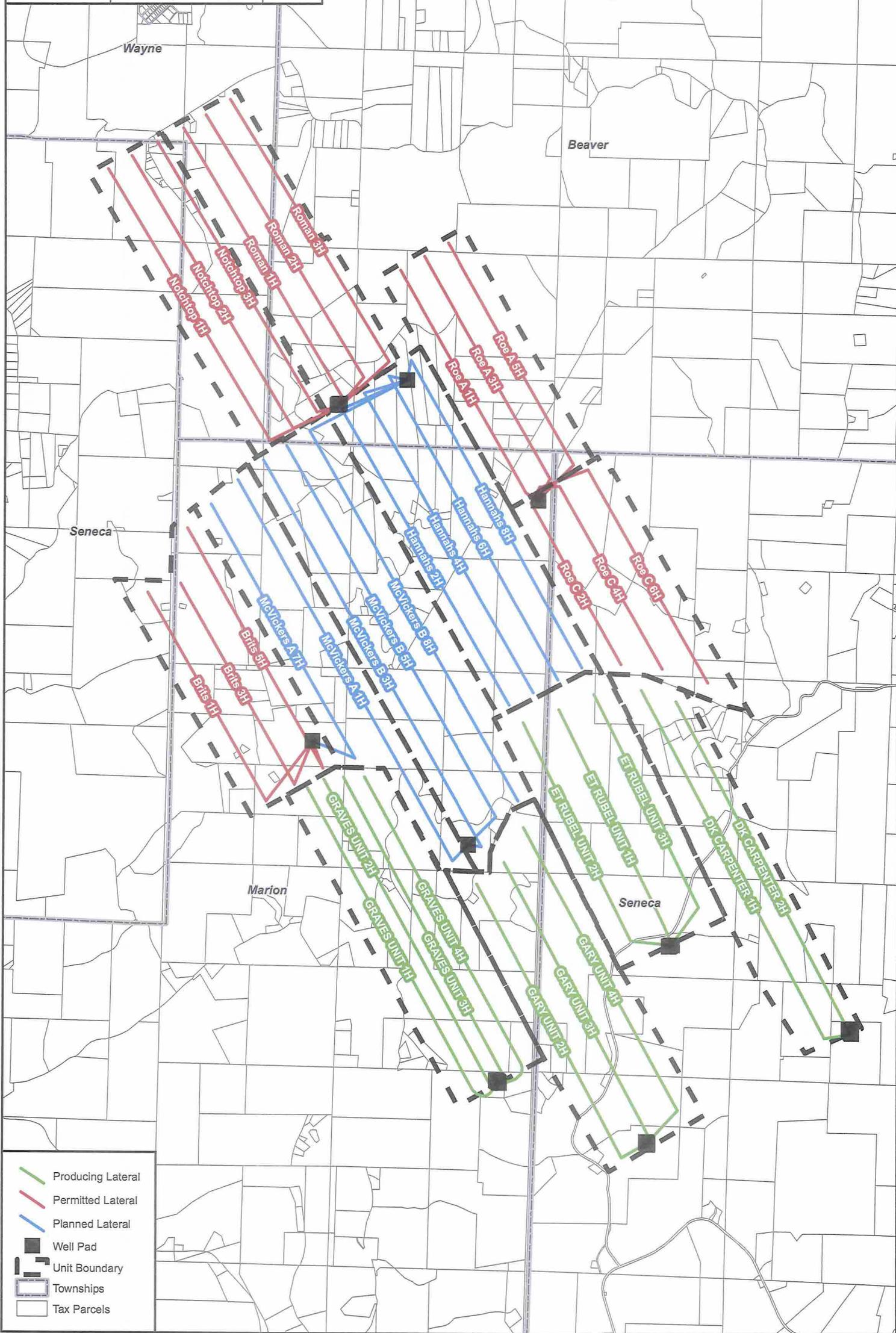


# ECLIPSE RESOURCES

**McVickers A & B  
& Hannahs Units**  
Beaver & Marion Townships, Noble County  
Seneca Township, Monroe County



1 in = 3,000 ft    0 750 1,500 3,000 Feet    10/6/2015



- Producing Lateral
- Permitted Lateral
- Planned Lateral
- Well Pad
- Unit Boundary
- Townships
- Tax Parcels

