

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

In re the Matter of the Application of SWN	:	Application Date: April 6, 2023
Production (Ohio), LLC for Unit Operation	:	
	:	
	:	
<u>Emerson Belle A Unit</u>	:	

**APPLICATION OF SWN PRODUCTION (OHIO), LLC
FOR UNIT OPERATION**

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Production (Ohio), LLC for Unit Operation :
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Emerson Belle A Unit :
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APPLICATION

Pursuant to R.C. 1509.28, SWN Production (Ohio), LLC (“SWN”) hereby respectfully requests the Chief of the Division of Oil and Gas Resources Management (“Division”) to issue an order authorizing SWN to operate the Unitized Formation and applicable land area in Monroe County, Ohio (hereinafter, the “Emerson Belle A Unit”) as a unit according to the Unit Plan attached hereto and as more fully described herein. SWN makes this request for, and unitization is necessary for, the purpose of increasing substantially 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

SWN is a limited liability company organized under the laws of the State of Texas, with its principal office located at 10000 Energy Drive, Spring, Texas 77389. SWN is registered as an “owner” with the Division and is in good standing with the Division.

SWN 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:

Gregory D. Russell	Gary Nuckolls
James A. Carr II	Staff Landman
Mark A. Hylton	Southwestern Energy Company
Casey N. Valentine	10000 Energy Drive
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II. PROJECT DESCRIPTION

The Emerson Belle A Unit is located in Monroe County, Ohio, and consists of 51 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 Emerson Belle A Unit is approximately 710.076 acres¹ and, at the time of this Application, SWN has the right to drill on and produce from 620.087 acres of the proposed unit – i.e., more than approximately 87% of the unit area, which is well above the 65% threshold required by R.C. 1509.28. SWN seeks a unit order because there are unleased tracts within the Emerson Belle A Unit, as well as tracts whose ownership may be in question.

Overall, SWN seeks this unit order to allow it to develop the entirety of the Emerson Belle A Unit in accordance with the Unit Plan to protect the correlative rights of all of the interest owners in the unit and prevent the waste of natural resources that would otherwise occur. To effectively and efficiently develop the Unit Area, therefore, SWN seeks authorization from the Division, as more specifically described herein, to drill and complete one (1) horizontal well(s) in the Unitized Formation, from a well pad located outside the southeast corner of the unit to efficiently test, develop, operate and produce the Unitized Formation for oil, natural gas, and related liquids production.

SWN'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 various operating provisions in the event that other entities or persons become owners in the unit, as that term is understood in the Ohio Revised Code, and conforms to industry standards for the drilling and operating of horizontal wells.

¹ Unit acreage was calculated by survey.

III.
THE CHIEF SHOULD GRANT THIS APPLICATION

A Contents of Application

Pursuant to the Division's *Unitization Application Procedural Guideline* (dated February 1, 2022), a unitization application must include the following:

1. A cover letter requesting unitization.
 - See the cover letter and this Application.
2. An affidavit attesting that the applicant is the owner (as defined in Revised Code Section 1509.01(K)) of at least 65% of the land overlying the pool that is the subject of the unitization request.
 - See Exhibit 9.²
3. A summary of the request for unitization that includes all of the following information:
 - A statement describing the reasons why unitization is necessary;
 - A description of the plan for development of the unit;
 - An identification of the geologic formation(s) to be developed;
 - An identification of the amount of acreage included in the unit and how the acreage was determined;
 - An estimate of the value of the recovery and net PV10 of oil and gas for each well proposed to be drilled in the unit area;
 - An estimate of the cost to drill and operate each well in the proposed unit, including an explanation of what costs are included in the estimate; and
 - A designated contact person for the applicant for communication purposes with the Division, including legal counsel for the applicant (if applicable).
 - See entirety of this Application, and in particular Sections II and III(C).
4. A plat map of the unit that identifies the counties, townships, section numbers, parcel boundaries, and all parcels in the unit, including the tract and corresponding parcel number.
 - See Exhibit A-1 to the Unit Operating Agreement.
5. A list identifying all mineral owners in the proposed unit, leased or unleased, that includes the name, current address, parcel number, and respective acreage of each mineral owner. If a mineral owner is a corporation or other business entity, the name of a contact person within that corporation or business.
 - See Exhibit A-2 to the Unit Operating Agreement.
6. A list identifying all unleased mineral owners that includes the name, current address, parcel number, and respective acreage of each unleased mineral owner. If an

² References to Exhibit 1 through Exhibit 11 refer to those exhibits in Attachment 2.

unleased mineral owner is a corporation or other business entity, the name of a contact person within that corporation or business.

- See Exhibit A-3 to the Unit Operating Agreement.

7. A list identifying all consenting working interest owners in the proposed unit that includes the name, current address, parcel number, and respective acreage of each consenting working interest owner. If a consenting working interest owner is a corporation or other business entity, the name of a contact person within that corporation or business.

- See Exhibit A-4 to the Unit Operating Agreement.

8. A list identifying all non-consenting working interest owners in the proposed unit that includes the name, current address, parcel number, and respective acreage of each non-consenting working interest owner. If a non-consenting working interest owner is a corporation or other business entity, the name of a contact person within that corporation or business.

- See Exhibit A-5 to the Unit Operating Agreement.

9. A list identifying all parcels subject to pending ownership litigation.

- See Exhibit A-6 to the Unit Operating Agreement.

10. A mailing list in Microsoft Excel® format containing only the names and addresses of all mineral owners (leased and unleased) and all working interest owners (consenting and non-consenting).

- This list is to be uploaded to the Division's FTP site.

11. A map that shows all of the following:

- The boundary of the proposed unit area;
- The total acreage of the proposed unit area;
- The proposed location of the well pad(s) and wells to be drilled that complies with state setback and spacing requirements;
- The tracts of land within the unit area that are leased to the applicant, shown in yellow;
- The tracts of land within the unit area that are unleased, shown in red;
- The tracts of land within the unit area that are leased to other operators (i.e., non-consenting working interest owners), including an identification of the operators, shown in green;
- A four hundred foot boundary around each property in the unit that is not leased by the applicant or that is not subject to an agreement with the applicant;
- Identification of each tract within the unit area by parcel number of a size that is legible; and
- The scale.

- See Exhibit 3.

12. An aerial photograph of a size that is legible that shows all of the following:

- The boundary of the proposed unit area;
 - The proposed location of the well pad(s) and wells to be drilled;
 - The tracts of land within the proposed unit area that are unleased outlined in red;
 - Identification of each tract within the unit area by tract number and corresponding parcel number of a size that is legible; and
 - The scale.
 - See Exhibit 4.
13. A gamma ray-density or gamma-ray resistivity geophysical type log identifying the proposed geological formations to be produced.
- See Exhibit 2.
14. A cross-section showing the applicable formations that the applicant is proposing to drill into and produce from in the unit area.
- See Exhibit 1 and Exhibit 2.
15. A map showing all existing units adjacent to the unit proposed in the application with an identification of any permitted, drilled, and/or producing wells in the existing units.
- See Exhibit 6.
16. An exhibit showing unitized and non-unitized scenarios for each well proposed to be drilled in the proposed unit area and assuming the spacing requirements of R.C. Chapter 1509 and/or Ohio Admin. Code 1501:9: (a) an estimate of the cost to drill and operate, (b) the value of recovery, and (c) the net PV10 of oil and gas.
- See Exhibit 5.
17. An exhibit showing the locations and distances of the well(s) to the proposed unit area and an identification of the well(s) by name, permit number, lateral length, and production start date that reserve calculations were based upon.
- See Exhibit 7.
18. An affidavit attesting to attempts to lease the unleased mineral owners and the attempts to commit the non-consenting working interest owners and an exhibit in the form of a spreadsheet that shows the attempts to lease the unleased mineral owners and the attempts to commit the non-consenting working interest owners that includes:
- The tract number and parcel number;
 - The mineral owner's name;
 - The dates of all attempts;
 - The address at which the contact was made or attempted;
 - The person who was contacted, how contact was made, and by whom;
 - The response given by the unleased mineral owner when contacted; and
 - Any joint venture or farmout proposal to another operator, if applicable.

- See Exhibit 8.
19. An affidavit attesting that the applicant acted with due diligence to identify all mineral interest owners and their current addresses within the proposed unit.
 - See Exhibit 10.
 20. A copy of a joint operating agreement for working interest partners, if applicable.
 - See Attachment 1.
 21. An affidavit attesting to a valid joint venture or other agreements for the proposed unit that discloses all joint venture partners.
 - Not applicable.
 22. Prefiled testimony of a geologist, an engineer, and a landman.
 - See Attachments 3, 4, and 5.
 23. Any additional information that the applicant determines is beneficial for the Chief to consider in support of its request.
 - See entirety of Application.

SWN has submitted all of the required information.

B. Legal Standard

R.C. 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 R.C. 1509.28(A).

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

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

(8) the time when operations shall commence and the manner in which, and circumstances under which, unit operations will terminate; and

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

See R.C. 1509.28(A). The Chief's order becomes effective once approved in writing by those owners who will be responsible for paying at least sixty-five percent (65%) of the costs of the unit's operations and by royalty and unleased fee-owners of sixty-five percent (65%) 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." R.C. 1509.28(B)(2).

C. SWN'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 a stratigraphic equivalent interval that is from the top of the Utica Shale formation to the top of the Trenton Limestone formation, and frequently referred to as the Utica/Point Pleasant Formation. The evidence presented with this Application and at the hearing will establish that the Unitized Formation is part of a pool and, thus, an appropriate subject of unit operation under R.C. 1509.28.³ Additionally, that evidence will establish 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.

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 Emerson Belle A Unit. The Unit Plan contemplates the drilling of one (1) horizontal

³ 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." R.C. 1509.01(E).

well(s), with a completed lateral length(s) of 22,449'.⁴ SWN estimates that operations under the requested unit order will substantially increase the ultimate resource recovery from this unit if the well(s) is drilled by approximately 22.3 BCFe of natural gas from the Unitized Formation.⁵ Absent an order authorizing unit operations that 22.3 BCFe of natural gas would be stranded, resulting in a waste of natural resources.

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

The evidence presented in this Application establishes that the value of the estimated additional recovery (i.e., the 22.3 BCFe of natural gas referred to above) has an estimated net present value (discounted at a 10% rate) of approximately \$18.141 million and an estimated undiscounted value of \$36.499 million, meaning that the value of that additional resource recovery exceeds the estimated additional costs incident to conducting unit operations to obtain such additional recovery.⁶ See Exhibit 5, which shows for the proposed well(s) the estimated value of the production and the estimated drilling and operating costs (incorporated here as if fully rewritten herein). In particular, it shows that the capital/drilling costs for the well(s) will be approximately \$21.732 million, and that the estimated annual operating cost of the well(s) will be approximately \$8.484 million for the first five (5) years of production.

iv. *The Unit Plan Meets the Requirements of R.C. 1509.28*

The Unit Plan proposed by SWN meets the requirements set forth in R.C. 1509.28. The unit area is described in the Unit Plan at Article 1, as well as on Exhibits A-1 and A-2 to the Unit Operating Agreement. The nature of the contemplated unit operations can be found generally in the Unit Plan at Article 3, with greater specificity throughout, including the Unit Operating Agreement. Unit production and unit expenses are allocated on a surface acreage basis as set forth in the Unit Plan at Articles 3 through 5 (generally), except where otherwise allocated by the Unit Operating Agreement. Payment of unit expenses is addressed generally in Article 3 of the Unit Plan. The Unit Plan provides for payment of costs by other working interest owners in the event a participant is unable to meet its financial obligations related to the unit - see, e.g., Article VI of the Unit Operating Agreement. Voting provisions related to the supervision and conduct of unit operations are set forth in Article 14 of the Unit Plan, with each

⁴ See Exhibit 3.

⁵ See Exhibit 5. 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.

⁶ *Id.*

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.⁷

IV. HEARING

R.C. 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. R.C. 1509.28(A). That threshold level is met here. See Exhibit 9. Accordingly, SWN respectfully requests that the Division schedule a hearing on this Application.

V. CONCLUSION

R.C. 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. SWN 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 R.C. 1509.28(B). SWN therefore asks the Chief to issue an order authorizing SWN to operate the Emerson Belle A Unit according to the Unit Plan attached hereto.

Respectfully submitted,

s/James A. Carr II

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Mark A. Hylton (0088384)

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SWN Production (Ohio), LLC

⁷ See Attachment 1 generally.

PLAN FOR UNIT OPERATIONS
EMERSON BELLE A UNIT
ADAMS, CENTER, AND GREEN TOWNSHIP(S)
MONROE COUNTY, OHIO

The following shall constitute the Plan for Unit Operations applicable to the Emerson Belle A Unit in Adams, Center, and Green Township(s), Monroe County, Ohio, and having as its purpose the unitized management, operation, and development of the Unitized Formation as herein defined, to advance the public welfare and promote conservation, to increase the ultimate recovery of oil, natural gas, and other substances 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 Emerson Belle A Unit, in Adams, Center, and Green Township(s), Monroe County, Ohio, including, unless otherwise expressly mentioned, any and all attachments and exhibits hereto.

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

Royalty Owner is a Person who owns a Royalty Interest.

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

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

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

Unit Area (or “Contract 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 at a stratigraphic equivalent interval that is from the top of the Utica Shale formation to the top of the Trenton Limestone formation, and frequently referred to as the Utica/Point Pleasant Formation.

Unit Operating Agreement means the modified A.A.P.L. Form 610-1989 Model Form Operating Agreement that is attached hereto 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 is determined upon an acreage basis as the proportion that the net surface acreage of an interest owner in a Tract, insofar as the Tract is located within the Unit Area, bears to the total surface acreage of the Unit Area, calculated as follows: INTEREST OWNER NET SURFACE ACRES IN THE TRACT, BEING THE INTEREST OWNER'S DECIMAL INTEREST IN THE TRACT MULTIPLIED BY THE TRACT'S SURFACE ACRES WITHIN THE UNIT AREA, DIVIDED BY THE TOTAL SURFACE ACRES WITHIN THE UNIT AREA. The Tract Participations as shown in Exhibit A-2 to the Unit Operating Agreement are accepted and approved as being fair and equitable.

ARTICLE 5: ALLOCATION OF UNITIZED SUBSTANCES

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

Distribution Within Tracts. The Unitized Substances allocated to each Tract or portion thereof shall be distributed among, or accounted for to, the Persons entitled to share in the production from such Tract or portion thereof in the same manner, in the same proportions, and upon the same conditions as they would have participated and shared in the production from such Tract, or in the proceeds thereof, had this Plan not been entered into, and with the same legal effect. If any Oil and Gas Rights in a Tract hereafter become divided and owned in severalty as to different parts of the Tract, the owners of the divided interests, in the absence of an agreement providing for a different division, shall share in the Unitized Substances allocated to the Tract, or in the proceeds thereof, in proportion to the surface acreage of their respective parts of the Tract. Any royalty or other payment which depends upon per well production or pipeline runs from a well or wells on a Tract shall, after the Effective Date, be determined by dividing the Unitized Substances allocated to the Tract by the number of wells on the Tract capable of producing Unitized Substances on the Effective Date; 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 Emerson Belle A 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. In the event of a possible adverse claim regarding 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 or the proceeds from a sale thereof, Unit Operator 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 may be 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 the Unit Operator, 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 Emerson Belle A 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 Emerson Belle A 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

April 6, 2023

OPERATOR SWN Production (Ohio), LLC

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

EMERSON BELLE A UNIT

COUNTY OR PARISH OF Monroe, STATE OF OHIO

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

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OPERATING AGREEMENT

THIS AGREEMENT, entered into by and between SWN Production (Ohio), LLC, hereinafter designated and referred to as "Operator," and the signatory party or parties other than Operator, sometimes hereinafter referred to individually as "Non-Operator," and collectively as "Non-Operators."

WITNESSETH:

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

NOW, THEREFORE, it is agreed as follows:

ARTICLE I.

DEFINITIONS

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

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

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

C. The term "Contract Area" shall mean all of the lands, Oil and Gas Leases and/or Oil and Gas Interests intended to be Developed and operated for Oil and Gas purposes under this agreement. Such lands, Oil and Gas Leases and Oil and Gas Interests are described in Exhibit "A." **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 / 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 **Operator in its sole discretion so long as consistent with any restrictions in the Oil and Gas Leases or by applicable law.** established by the / pattern of drilling in the Contract Area unless fixed by express agreement of the Drilling Parties. **See also Article XVI.K.**

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

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

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

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

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

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

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

N. The term "Plug Back" shall mean / a single operation whereby a deeper Zone is abandoned in order to attempt a Completion in a shallower Zone.

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

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

Q. The term "Sidetrack" shall mean / the directional control and intentional deviation of a well from vertical so as to change the bottom hole location **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.

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.

Z. The term “affiliate” shall mean any Person that, directly or indirectly, through one or more intermediaries, Controls or is Controlled by, or is under common Control with, another Person.

AA. The term “Control” and its derivatives with respect to any Person shall means the possession, directly or indirectly, of the power, directly or indirectly, to direct or cause the direction of the management or policies of the controlled Person, whether through the ownership of equity interests in or voting rights attributable to the equity interests in such Person, by contract or agency, by the general partner of a Person that is a partnership, or otherwise.

BB. The term “Person” shall mean any individual, corporation, company, partnership, limited partnership, limited liability company, trust, estate, governmental authority or any other entity.

Unless the context otherwise clearly indicates, words used in the singular include the plural, the word "person" includes natural and artificial persons, the plural includes the singular, and any gender includes the masculine, feminine, and neuter.

ARTICLE II.
EXHIBITS

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

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

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

ARTICLE III.
INTERESTS OF PARTIES

A. Oil and Gas Interests:

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

B. Interests of Parties in Costs and Production:

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

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

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

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

C. Subsequently Created Interests:

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

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

ARTICLE IV.
TITLES

A. Title Examination:

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

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1 and recording of pooling designations or declarations and communitization agreements as well as the conduct of hearings before governmental
2 agencies for the securing of spacing or pooling orders or any other orders necessary or appropriate to
3 the conduct of operations hereunder. This shall not prevent any party from appearing on its own behalf at such hearings.
4 Costs incurred by Operator, including fees paid to outside attorneys, which are associated with hearings before governmental
5 agencies, and which costs are necessary and proper for the activities contemplated under this agreement, shall be direct
6 charges to the joint account and shall not be covered by the administrative overhead charges as provided in Exhibit "C." Operator shall make
7 no charge for services rendered by its staff attorneys or other personnel in the performance of the above
8 functions, **except as provided herein.**

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

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

13 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
14 reduction of interest from that shown on Exhibit "A," the party credited with contributing the affected Lease or Interest
15 (including, if applicable, a successor in interest to such party) shall have ninety (90) days from final determination of title
16 failure to acquire a new lease or other instrument curing the entirety of the title failure, which acquisition will not be subject
17 to Article VIII.B., and failing to do so, this agreement, nevertheless, shall continue in force as to all remaining Oil and Gas
18 Leases and Interests; and,

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

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

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

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

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

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

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

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

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

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

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

70 3. Other Losses: All losses of Leases or Interests committed to this agreement, other than those set forth in Articles
71 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
72 Exhibit "A." This shall include but not be limited to the loss of any Lease or Interest through failure to develop or because
73 express or implied covenants have not been performed (other than performance which requires only the payment of money),
74 and the loss of any Lease by expiration at the end of its primary term if it is not renewed or extended. There shall be no

readjustment of interests in the remaining portion of the Contract Area on account of any joint loss.

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

**ARTICLE V.
OPERATOR**

A. Designation and Responsibilities of Operator:

SWN Production (Ohio), LLC shall be the Operator of the Contract Area, and shall conduct and direct and have full control of all operations on the Contract Area as permitted and required by, and within the limits of this agreement. In its performance of services hereunder for the Non-Operators, Operator shall be an independent contractor not subject to the control or direction of the Non-Operators except as to the type of operation to be undertaken in accordance with the election procedures contained in this agreement. Operator shall not be deemed, or hold itself out as, the agent of the Non-Operators with authority to bind them to any obligation or liability assumed or incurred by Operator as to any third party. Operator shall conduct its activities under this agreement as a reasonable prudent operator, in a good and workmanlike manner, with due diligence and dispatch, in accordance with good oilfield practice, and in compliance with applicable law and regulation, but in no event shall it have any liability as Operator to the other parties / ~~for losses sustained or liabilities incurred~~ ^{its} 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, ^{exclusive of Saturdays, Sundays and legal holidays,} / 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 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,~~ ^{or any of its affiliates} / 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 /. ^{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 ~~terms of the Bankruptcy Code or actions of the federal bankruptcy court, then, to the extent allowed by law,~~ ^{bankruptcy laws is filed by or against Operator, and the removal of Operator is prevented by the / federal bankruptcy court,} all Non-Operators and Operator shall comprise an interim operating committee to serve until Operator has elected to reject or assume this agreement pursuant to the Bankruptcy Code, and an election to reject this agreement by Operator as a debtor in possession, or by a trustee in bankruptcy, shall be deemed a resignation as Operator without any action by Non-Operators, except the selection of a successor. During the period of time the operating committee controls operations, all actions shall require the approval of two (2) or more parties owning a majority interest based on ownership as shown on Exhibit "A." In the event there are only two (2) parties to this agreement, during the period of time the operating committee controls operations, a third party acceptable to Operator, Non-Operator and the federal bankruptcy court shall be selected as a member of the operating committee, and all actions shall require the approval of two (2) members of the operating committee without regard for their interest in the Contract Area based on Exhibit "A."

C. Employees and Contractors:

The number of employees or contractors used by Operator in conducting operations hereunder, their selection, and the hours of labor and the compensation for services performed shall be determined 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: ^{operations conducted in} All / wells drilled on the Contract Area shall be drilled / ^{conducted} on a competitive contract basis at the usual rates prevailing in the ^{county area where the services were rendered} /-area. If it so desires, Operator may employ its own tools and equipment in ^{performing such operations} ~~the drilling of wells~~ /, but its charges therefor shall not exceed the prevailing rates in the ^{county area where the services were rendered} / area ~~and the rate of such charges shall be agreed upon by the parties in writing before drilling operations are commenced,~~ and such work shall be performed by Operator under the same terms and conditions as are customary and usual in the area in contracts of independent contractors who are doing work of a similar nature. All work performed or materials supplied by affiliates or related parties of Operator shall be performed or supplied at competitive rates, pursuant to written agreement, and in accordance with customs and standards prevailing in the industry.

2. Discharge of Joint Account Obligations: Except as herein otherwise specifically provided, Operator shall promptly pay and discharge expenses incurred in the development and operation of the Contract Area pursuant to this agreement and shall

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charge each of the parties hereto with their respective proportionate shares upon the expense basis provided in Exhibit "C." Notwithstanding anything contained in this agreement to the contrary, the expenses covered by this Article V.D.2 shall include all costs expenses, and liabilities related to or arising out of any release, protection, defense, indemnification, and/or hold harmless obligations assumed or incurred by Operator in the development and operation of the Contract area. 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 liens and encumbrances resulting therefrom except for those resulting from a bona fide dispute as to services rendered or materials supplied.

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

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

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

7. Drilling and Testing Operations: The following provisions shall apply to each well drilled ~~/ hereunder, including but not limited to the Initial Well:~~ ^{each Consenting Party}

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

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

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

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

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

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

ARTICLE VI.
DRILLING AND DEVELOPMENT

A. Initial Well:

Within eighteen (18) months of the Chief of the Division of Oil and Gas Resources Management, Ohio Department of Natural Resources, issuing an order authorizing unit operations for the Unit Area, Operator shall commence the drilling of the initial Well and shall thereafter continue the drilling of the well with due diligence to a depth sufficient in the Operator's reasonable opinion, to adequately test the Utica / Point Pleasant formation with the Initial Well.

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

B. Subsequent Operations:

1. Proposed Operations: If any party hereto should desire to drill any well on the Contract Area other than the Initial Well, or if any party should desire to Rework, Sidetrack, Deepen, Recomplete or Plug Back a dry hole or a well no longer capable of producing in paying quantities in which such party has not otherwise relinquished its interest in the proposed objective Zone under this agreement, the party desiring to drill, Rework, Sidetrack, Deepen, Recomplete or Plug Back such a well shall give written notice of the proposed operation to the parties who have not otherwise relinquished their interest in such objective Zone under this agreement and to all other parties in the case of a proposal for Sidetracking or Deepening, specifying the work to be

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performed, the location, proposed depth, objective Zone and the estimated cost of the operation. The parties to whom such a notice is delivered shall have thirty (30) days after receipt of the notice within which to notify the party proposing to do the work whether they elect to participate in the cost of the proposed operation. If a drilling rig is on location, notice of a proposal to Rework, Sidetrack, Recomplete, Plug Back or Deepen may be given by telephone / facsimile, email, or similar electronic communication and the response period shall be limited to forty-eight (48) hours, ^{inclusive} / ^{exclusive} of Saturday, Sunday and legal holidays. Failure of a party to whom such notice is delivered to reply within the period above fixed shall constitute an election by that party not to participate in the cost of the proposed operation. Any proposal by a party to conduct an operation conflicting with the operation initially proposed shall be delivered to all parties 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.**

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

2. Operations by Less Than All Parties:

(a) Determination of Participation. If any party to whom such notice is delivered / as provided in Article VI.B.1. or 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 Article, the party or parties giving the notice and such other parties as shall elect to participate in the operation shall, no later than ninety (90) days after the expiration of the notice period of thirty (30) days (or as promptly as practicable after the expiration of the forty-eight (48) hour period when a drilling rig is on location, as the case may be) actually commence the proposed operation * and complete it with due diligence. Operator shall perform all work for the account of the Consenting Parties; provided, however, if no drilling rig or other equipment is on location, and if Operator is a Non-Consenting Party, the Consenting Parties shall either: (i) request Operator to perform the work required by such proposed operation for the account of the Consenting Parties, or (ii) designate one of the Consenting Parties as Operator to perform such work. The rights and duties granted to and imposed upon the Operator under this agreement are granted to and imposed upon the party designated as Operator for an operation in which the original Operator is a Non-Consenting Party. Consenting Parties, when conducting operations on the Contract Area pursuant to this Article VI.B.2., shall comply with all terms and conditions of this 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.**

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

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

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

(i) 500 % of each such Non-Consenting Party's share of the cost of any newly acquired surface equipment beyond the wellhead connections (including but not limited to stock tanks, separators, treaters, pumping equipment and piping), plus ~~100%~~ ^{500%} of each such Non-Consenting Party's share of the cost of operation of the well commencing with first production and continuing until each such Non-Consenting Party's relinquished interest shall revert to it under other provisions of this Article, it being agreed that each Non-Consenting Party's share of such costs and equipment will be that interest which would have been chargeable to such Non-Consenting Party had it participated in the ~~well~~ ^{proposed or operation} from the beginning of the operations; and

(ii) 500 % of (a) that portion of the costs and expenses of drilling, Reworking, Sidetracking, Deepening, Plugging Back, testing, Completing, and Recompleting, after deducting any cash contributions received under Article VIII.C., and of (b) that portion of the cost of newly acquired equipment in the well (to and including the wellhead connections), which would have been chargeable to such Non-Consenting Party if it had participated therein.

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

(c) Reworking, Recompleting or Plugging Back. An election not to participate in the drilling, Sidetracking or Deepening of a well shall be deemed an election not to participate in any Reworking or Plugging Back operation proposed in such a well, or portion thereof, to which the initial non-consent election applied that is conducted at any time prior to full recovery by the Consenting Parties of the Non-Consenting Party's recoupment amount. Similarly, an election not to participate in the Completing or Recompleting of a well shall be deemed an election not to participate in any Reworking operation proposed in such a well, or portion thereof, to which the initial non-consent election applied that is conducted at any time prior to full recovery by the Consenting Parties of the Non-Consenting Party's recoupment amount. Any such Reworking, Recompleting or Plugging Back operation conducted during the recoupment period shall be deemed part of the cost of operation of said well and there shall be added to the sums to be recouped by the Consenting Parties 500 % of that portion of the costs of the Reworking, Recompleting or Plugging Back operation which would have been chargeable to such Non-Consenting Party had it participated therein. If such a Reworking, Recompleting or Plugging Back operation is proposed during such recoupment period, the provisions of this Article VI.B. shall be applicable as between said Consenting Parties in said well.

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

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

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

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

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

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

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

4. Deepening: If less than all parties elect to participate in a drilling, Sidetracking, or Deepening operation proposed pursuant to Article VI.B.1., the interest relinquished by the Non-Consenting Parties to the Consenting Parties under Article 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 of which the parties were given notice under Article VI.B.1. ("Initial Objective"). ~~Except as provided in Article XVI.E.2, such~~ / Such well shall not be Deepened beyond the Initial Objective without first complying with this Article to afford the Non-Consenting Parties the opportunity to participate in the Deepening operation.

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

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

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

The foregoing shall not imply a right of any Consenting Party to propose any Deepening for a Non-Consent Well prior to the drilling of such well to its Initial Objective without the consent of the other Consenting Parties as provided in Article VI.F.

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

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

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

6. Order of Preference of Operations. See Article XVI.B.

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

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

C. Completion of Wells; Reworking and Plugging Back:

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

- ☒ Option No. 1: ~~For Horizontal Wells and Multi-Lateral Wells, all~~ necessary expenditures for the drilling, Deepening, equipping of the well, including tankage and/or surface

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

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

34 **D. Other Operations:**

35 Operator shall not undertake any single project reasonably estimated to require an expenditure in excess of One Hundred
36 Thousand Dollars (\$ 100,000.00) except in connection with the
37 drilling, Sidetracking, Reworking, Deepening, Completing, Recompleting or Plugging Back of a well that has been previously
38 authorized by or pursuant to this agreement; provided, however, that, in case of explosion, fire, flood or other sudden
39 emergency, whether of the same or different nature, Operator may take such steps and incur such expenses as in its opinion
40 are required to deal with the emergency to safeguard life and property but Operator, as promptly as possible, shall report the
41 emergency to the other parties. If Operator prepares an AFE for its own use, Operator shall furnish any Non-Operator so
42 requesting an information copy thereof for any single project costing in excess of One Hundred Thousand Dollars
43 (\$100,000.00). Any party who has not relinquished its interest in a well shall have the right to propose that
44 Operator perform repair work or undertake the installation of artificial lift equipment or ancillary production facilities such as
45 salt water disposal wells or to conduct additional work with respect to a well drilled hereunder or other similar project (but
46 not including the installation of gathering lines or other transportation or marketing facilities, the installation of which shall
47 be governed by separate agreement between the parties) reasonably estimated to require an expenditure in excess of the
48 amount first set forth above in this Article VI.D. (except in connection with an operation required to be proposed under
49 Articles VI.B.1. or VI.C.1. Option No. 2, which shall be governed exclusively by those Articles). Operator shall deliver such
50 proposal to all parties entitled to participate therein. If within thirty (30) days thereof Operator secures the written consent
51 of any party or parties owning at least 51 % of the interests of the parties entitled to participate in such operation,
52 each party having the right to participate in such project shall be bound by the terms of such proposal and shall be obligated
53 to pay its proportionate share of the costs of the proposed project as if it had consented to such project pursuant to the terms
54 of the proposal.

55 **E. Abandonment of Wells:**

56 **1. Abandonment of Dry Holes:** Except for any well drilled or Deepened pursuant to Article VI.B.2., any well which has
57 been drilled or Deepened under the terms of this agreement and is proposed to be completed as a dry hole shall not be plugged and abandoned
58 without the consent of all parties. Should Operator, after diligent effort, be unable to contact any
59 party, or should any party fail to reply within forty-eight (48) hours (exclusive of Saturday, Sunday and legal holidays) after
60 delivery of notice of the proposal to plug and abandon such well, such party shall be deemed to have consented to the
61 proposed abandonment. All such wells shall be plugged and abandoned in accordance with applicable regulations and at the
62 cost, risk and expense of the parties who participated in the cost of drilling, Sidetracking or Deepening such well. Any party who objects to
63 plugging and abandoning such well by notice delivered to Operator within forty-eight (48) hours (exclusive of Saturday,
64 Sunday and legal holidays) after delivery of notice of the proposed plugging shall take over the well as of the end of such
65 forty-eight (48) hour notice period and conduct further operations in search of Oil and/or Gas subject to the provisions of
66 Article VI.B.; failure of such party to provide proof reasonably satisfactory to Operator of its financial capability to conduct
67 such operations or to take over the well within such period or thereafter to conduct operations on such well or plug and
68 abandon such well shall entitle Operator to retain or take possession of the well and plug and abandon the well. The party
69 taking over the well shall indemnify Operator (if Operator is an abandoning party) and the other abandoning parties against
70 liability for any further operations conducted on such well except for the costs of plugging and abandoning the well and
71 restoring the surface, for which the abandoning parties shall remain proportionately liable.

72 **2. Abandonment of Wells That Have Produced:** Except for any well in which a Non-Consent operation has been
73 conducted hereunder for which the Consenting Parties have not been fully reimbursed as herein provided, any well which has
74 been completed as a producer / shall not be plugged and abandoned without the consent of all parties /. If all parties consent to
75 ~~who participated in the cost of drilling the well~~

such abandonment, the well shall be plugged and abandoned in accordance with applicable regulations and at the cost, risk and expense of all the parties hereto. Failure of a party to reply within thirty (30) days of delivery of notice of proposed abandonment shall be deemed an election to consent to the proposal. If, within thirty (30) days after delivery of notice of the proposed abandonment of any well, all parties do not agree to the abandonment of such well, those wishing to continue its operation from the Zone then open to production shall be obligated to take over the well as of the expiration of the applicable notice period and shall indemnify Operator (if Operator is an abandoning party) and the other abandoning parties ~~with respect to the well, including the costs of plugging and abandoning the well and restoring the surface~~ against liability for any further operations ~~on the well conducted by such parties.~~ Failure of such party or parties to provide proof reasonably satisfactory to Operator of their financial capability to conduct such operations or to take over the well within the required period or thereafter to conduct operations on such well shall entitle operator to retain or take possession of such well and plug and abandon the well.

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

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

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

F. Termination of Operations:

Upon the commencement of an operation for the drilling, Reworking, Sidetracking, Plugging Back, Deepening, testing, Completion or plugging of a well, including but not limited to the Initial Well, such operation shall not be terminated without consent of parties bearing 75% of the costs of such operation; provided, however, that in the event granite or other practically impenetrable substance or condition in the hole is encountered which renders further operations impractical, Operator may discontinue operations and give notice of such condition in the manner provided in Article VI.B.1, and the provisions of Article VI.B. or VI.E. shall thereafter apply to such operation, as appropriate.

G. Taking Production in Kind:

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

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

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

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

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

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

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

☐ **Option No. 2: No Gas Balancing Agreement:**

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

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

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

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

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

ARTICLE VII.

EXPENDITURES AND LIABILITY OF PARTIES

A. Liability of Parties:

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

B. Liens and Security Interests: See also Article XVI.DD.

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.

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

1 a lien or mortgage in the applicable real estate records and as a financing statement with the proper officer under the Uniform
2 Commercial Code in the state in which the Contract Area is situated and such other states as Operator shall deem appropriate
3 to perfect the security interest granted hereunder. Any party may file this agreement, the recording supplement executed
4 herewith, or such other documents as it deems necessary as a lien or mortgage in the applicable real estate records and/or a
5 financing statement with the proper officer under the Uniform Commercial Code.

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

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

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

30 If any party does not perform all of its obligations hereunder, and the failure to perform subjects such party to foreclosure
31 or execution proceedings pursuant to the provisions of this agreement, to the extent allowed by governing law, the defaulting
32 party waives any available right of redemption from and after the date of judgment, any required valuation or appraisalment
33 of the mortgaged or secured property prior to sale, any available right / to stay execution or to require a marshaling of assets
34 ~~or sale in inverse order of alienation~~ ^{or moratorium} / and any required bond in the event a receiver is appointed. In addition, to the extent permitted by applicable law, each party
35 hereby grants to the other parties a power of sale as to any property that is subject to the lien and security rights granted
36 hereunder, such power to be exercised in the manner provided by applicable law or otherwise in a commercially reasonable
37 manner and upon reasonable notice.

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

43 **C. Advances:**

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

53 **D. Defaults and Remedies:**

54 If any party fails to discharge any financial obligation under this agreement, including without limitation the failure to
55 make any advance under the preceding Article VII.C. or any other provision of this agreement, within the period required for
56 such payment hereunder, then in addition to the remedies provided in Article VII.B. or elsewhere in this agreement, the
57 remedies specified below shall be applicable. For purposes of this Article VII.D., all notices and elections shall be delivered only by Operator,
58 except that Operator shall deliver any such notice and election requested by a non-defaulting Non-Operator,
59 and when Operator is the party in default, the applicable notices and elections can be delivered by any Non-Operator.
60 Election of any one or more of the following remedies shall not preclude the subsequent use of any other remedy specified
61 below or otherwise available to a non-defaulting party.

62 1. Suspension of Rights: Any party may deliver to the party in default a Notice of Default, which shall specify the default,
63 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
64 or more of the remedies provided in this Article. If the default is not cured within thirty (30) days of the delivery of such
65 Notice of Default, all of the rights of the defaulting party granted by this agreement may upon notice be suspended until the
66 default is cured, without prejudice to the right of the non-defaulting party or parties to continue to enforce the obligations of
67 the defaulting party previously accrued or thereafter accruing under this agreement. If Operator is the party in default, the
68 Non-Operators shall have in addition the right, by vote of Non-Operators owning a majority in interest in the Contract Area
69 after excluding the voting interest of Operator, to appoint a new Operator effective immediately. The rights of a defaulting
70 party that may be suspended hereunder at the election of the non-defaulting parties shall include, without limitation, the right
71 to receive information as to any operation conducted hereunder during the period of such default, the right to elect to
72 participate in an operation proposed under Article VI.B. of this agreement, the right to participate in an operation being
73 conducted under this agreement even if the party has previously elected to participate in such operation, and the right to
74 receive proceeds of production from any well subject to this agreement.

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

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

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

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

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

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

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

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

F. Taxes:

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

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

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

ARTICLE VIII.

ACQUISITION, MAINTENANCE OR TRANSFER OF INTEREST

A. Surrender of Leases:

The Leases covered by this agreement, insofar as they embrace acreage in the Contract Area, shall not be surrendered in whole or in part unless all parties consent thereto; **however, no consent shall be necessary to release a lease which has expired or otherwise terminated in accordance with its terms.**

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

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

B. Renewal or Extension of Leases:

If any party secures a renewal or replacement of an Oil and Gas Lease or Interest subject to this 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, promptly upon expiration of the existing Lease. The parties notified shall have the right for a period of thirty (30) days following delivery of such notice in which to elect to participate in the ownership of the renewal or replacement Lease, insofar as such Lease affects lands within the Contract Area, by paying to the party who acquired it their proportionate shares of the acquisition cost 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 parties in the Contract Area. Each party who participates in the purchase of a renewal or replacement Lease shall be given an 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.}

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 by the parties who elect to participate therein, in a ratio based upon the relationship of their respective percentage of participation in the Contract Area to the aggregate of the percentages of participation in the Contract Area of all parties participating in the purchase of such renewal or replacement Lease. The acquisition of a renewal or replacement Lease by any or all of the parties hereto shall ~~not cause a readjustment of the interests of the parties stated in Exhibit "A" / but and any renewal or replacement Lease in which less than all parties elect to participate shall not be subject to this agreement but shall be deemed subject to a separate Operating Agreement in the form of this agreement.~~ ^{pursuant to Article XVI.L.}

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

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

The provisions in this Article shall ~~not~~ ^{also} be applicable to extensions of Oil and Gas Leases.

C. Acreage or Cash Contributions:

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

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

D. Assignment; Maintenance of Uniform Interest:

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

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

Every sale, encumbrance, transfer or other disposition made by any party shall be made expressly subject to this agreement and shall be made without prejudice to the right of the other parties, and any transferee of an ownership interest in any Oil and Gas Lease or Interest shall be deemed a party to this agreement as to the interest conveyed from and after the effective date of the transfer of ownership; provided, however, that the other parties shall not be required to recognize any such sale,

encumbrance, transfer or other disposition for any purpose hereunder until thirty (30) days after they have received a copy of the instrument of transfer or other satisfactory evidence thereof in writing from the transferor or transferee. No assignment or other disposition of interest by a party shall relieve such party of obligations previously incurred by such party hereunder with respect to the interest transferred, including without limitation the obligation of a party to pay all costs attributable to an operation conducted hereunder in which such party has agreed to participate prior to making such assignment, and the lien and security interest granted by Article VII.B. shall continue to burden the interest transferred to secure payment of any such obligations.

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

E. Waiver of Rights to Partition:

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

F. Preferential Right to Purchase

~~It is~~ (Optional: Check if applicable)

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

ARTICLE IX.

INTERNAL REVENUE CODE ELECTION

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

ARTICLE X.

CLAIMS AND LAWSUITS

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

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, ~~telex,~~ ^{electronic mail,} 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, ^{electronic mail} 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 ^{electronic mail,} 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, ^{electronic mail,} telex, / telecopy or other facsimile within such period. Each party shall have the right to change its address at any time, and from time to time, by giving written notice thereof to all other parties. If a party is not available to receive notice orally or by telephone when a party attempts to deliver a notice required to be delivered within 24 or 48 hours, the notice may be delivered in writing by any other method specified herein and shall be deemed delivered in the same manner provided above for any responsive notice.

ARTICLE XIII.

TERM OF AGREEMENT

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

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

☒ **Option No. 2:** In the event the well described in Article VI.A., or any subsequent well drilled under any provision of this agreement, results in the Completion of a well as a well capable of production of Oil and/or Gas in paying quantities, this agreement shall continue in force so long as any such well is capable of production, and for an additional period of ninety (90) days thereafter; provided, however, if, prior to the expiration of such additional period, one or more of the parties hereto are engaged in drilling, Reworking, Deepening, Sidetracking, Plugging Back, testing or attempting to Complete or Re-complete a well or wells hereunder, this agreement shall continue in force until such operations have been completed and if production results therefrom, this agreement shall continue in force as provided herein. In the event the well described in Article VI.A., or any subsequent well drilled hereunder, results in a dry hole, and no other well is capable of producing Oil and/or Gas from the Contract Area, this agreement shall terminate unless drilling, Deepening, Sidetracking, Completing, Re-completing, Plugging Back or Reworking operations are commenced within ninety (90) days from the date of abandonment of said well. "Abandonment" for such purposes shall mean either (i) a decision by all parties not to conduct any further operations on the well or (ii) the elapse of 180 days from the conduct of any operations on the well, whichever first occurs.

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

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

ARTICLE XIV.

COMPLIANCE WITH LAWS AND REGULATIONS

A. Laws, Regulations and Orders:

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

B. Governing Law:

This agreement and all matters pertaining hereto, including but not limited to matters of performance, non-performance, breach, remedies, procedures, rights, duties, and interpretation or construction, shall be governed and determined by the law of the state 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 orders promulgated under such laws in reference to oil, gas and mineral operations, including the location, operation, or production of wells, on tracts offsetting or adjacent to the Contract Area.

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

ARTICLE XV.

MISCELLANEOUS

A. Execution:

This agreement shall be binding upon each Non-Operator when this agreement or a counterpart thereof has been executed by such Non-Operator and Operator notwithstanding that this agreement is not then or thereafter executed by all of

the parties to which it is tendered or which are listed on Exhibit "A" as owning an interest in the Contract Area or which own, in fact, an interest in the Contract Area. Operator may, however, by written notice to all Non-Operators who have become bound by this agreement as aforesaid, given at any time prior to the actual spud date of the Initial Well but in no event later than five days prior to the date specified in Article VI.A. for commencement of the Initial Well, terminate this agreement if Operator in its sole discretion determines that there is insufficient participation to justify commencement of drilling operations. In the event of such a termination by Operator, all further obligations of the parties hereunder shall cease as of such termination. In the event any Non-Operator has advanced or prepaid any share of drilling or other costs hereunder, all sums so advanced shall be returned to such Non-Operator without interest. In the event Operator proceeds with drilling operations for the Initial Well without the execution hereof by all persons listed on Exhibit "A" as having a current working interest in such well, Operator shall indemnify Non-Operators with respect to all costs incurred for the Initial Well which would have been charged to such person under this agreement if such person had executed the same and Operator shall receive all revenues which would have been received by such person under this agreement if such person had executed the same.

B. Successors and Assigns:

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

C. Counterparts:

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

D. Severability:

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

**ARTICLE XVI.
OTHER PROVISIONS**

A. Conflicts:

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

B. Priority of Operations:

Notwithstanding anything herein to the contrary, it is agreed that where a well shall have been drilled to the objective depth or the objective formation and the Consenting Parties in the well cannot mutually agree upon the sequence and timing of further operations regarding said well, the following elections shall control in the order of priority enumerated hereafter:

1. An election to do additional logging, coring or testing;
2. An election to attempt to complete the well at either the objective depth or objective formation;
3. An election to plug back and attempt to complete said well at an alternate depth or formation;
4. An election to deepen said well;
5. An election to sidetrack said well;
6. An election to plug and abandon said well.

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

C. Netting and Setoff:

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

D. Multiple Billing:

In no event shall Operator be required to make more than four billings for the entire interest credited to each Non-Operator on Exhibit "A". If any Non-Operator to this agreement disposes of any part or all of the interest credited to it on Exhibit "A", hereinafter referred to as "Selling Party," such Selling Party shall be solely responsible for billing its assignee or assignees and shall remain primarily liable to the other Parties for the interest or interests assigned until such time as Selling Party has (1) designated and qualified the assignees to receive the billing for its interest, (2) designated assignees have been approved and accepted by Operator, and (3) has furnished to Operator written notice of the conveyance and photocopy of the recorded assignments by which the transfer is made. The sale or other disposition of any interest in the leases covered by this agreement shall be made specifically subject to the provisions of this Article. Operator's approval shall not be unreasonably withheld.

E. Horizontal Wells:

1. Notwithstanding anything contained herein to the contrary, (i) the provisions of Article VI.C.I Option No. 1 shall apply to any Horizontal Well or Multi-lateral Well proposed hereunder, and (ii) the provisions of Article VI.C.1. Option No. 2 shall apply to all other wells proposed hereunder that are not expressly proposed as Horizontal Wells or Multi-lateral Wells. To be effective as a Horizontal Well Proposal, such proposal must include an AFE, the corresponding anticipated Unit and Contract Area size and dimensions within which the well will be drilled, and other accompanying documents that clearly indicate the well being proposed is a Horizontal Well or Multi-lateral Well. As to any possible conflicts that may arise during the completion phase of a Horizontal Well

or Multi-lateral Well, priority shall be given first to a Lateral drain hole of the authorized depth, and then to objective formations in ascending order above the authorized depth, and then to objective formations in descending order below the authorized depth.

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

F. Sidetracking:

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

G. Further Assurances:

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

H. Covenants Running with the Land:

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

I. Headings:

The headings and captions used in this Agreement are inserted for convenience of reference only and shall not be a part of, or control or affect the meaning of, this Agreement.

J. Indemnity for Access to Contract Area:

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

K. Contract Area and Drilling Unit:

“Contract Area” shall mean a contiguous area in size and configuration as determined by the Operator in order to accommodate anticipated wells, wellbore paths and wellbore lengths located or to be located within the anticipated Drilling Unit. The Contract Area shall be, to the extent practicable, the same as the Drilling Unit, and shall include all Oil and Gas Leases and Oil and Gas Interests within the boundary of the Contract Area, and may include oil and gas leases or oil and gas interests not controlled or owned by the Parties to this Agreement or other interests which cannot be included in the Drilling Unit at the time the Drilling Unit is formed or created but are reasonably anticipated to be controlled or acquired by the Parties in the future. The Parties shall make good faith efforts to include otherwise stranded acreage in a Contract Area where reasonably practical.

L. Working Interest Adjustment:

Any recalculation or adjustment of the Parties’ Exhibit “A” working interests pursuant to Articles VIII.A, VIII.B, XVI.L or XVI.M of this Agreement shall be recalculated or adjusted after written notice is provided to the affected party(ies) of such recalculation or adjustment of working interest. Such recalculation or adjustment shall be made effective as of the date of the lease surrender, renewal, acquisition and/or Contract Area / Drilling Unit Adjustment; provided, however, any such recalculation or adjustment to the Parties’ working interests prior to the date of the first sale of production from such Drilling Unit shall be made effective as of the date first costs were incurred on and for such Drilling Unit.

This Article XVI.L shall not apply to loss or failure of title pursuant to Article IV.B of this Agreement.

M. Contract Area / Drilling Unit Adjustment:

It is recognized by Operator and Non-Operators that it may be prudent and/or necessary to increase or decrease the size of the Drilling Unit or Contract Area. As to variances in the size of the Drilling Unit or Contract Area, in no event shall the Drilling Unit or Contract Area exceed 1,280 acres, unless agreed upon otherwise by Operator and Non-Operators. Without the consent of Operator and Non-Operators, an existing Drilling Unit or Contract Area may not be enlarged or reduced in size. Said consent shall not be unreasonably withheld, delayed, or conditioned if such enlargement or reduction is necessary in order to drill additional wells and/or in order to increase the length of the lateral drain hole for the horizontal well(s). The party proposing an enlargement or reduction to an existing Drilling Unit or Contract area shall notify the other parties in writing, providing a detailed explanation for the Drilling Unit or Contract Area modification proposal. The non-proposing party shall have thirty (30) days from receipt of such notice to make an election as to whether or not it consents to the Drilling Unit or Contract Area modification proposal. However, if a drilling rig is on location, the response period for such Drilling Unit or Contract Area modification proposal shall be limited to forty-eight (48) hours, exclusive of Saturday, Sunday, and legal holidays. Failure of non-proposing party to elect as to the Drilling Unit or Contract Area modification within the election period shall constitute an election of consent as to the Drilling Unit or Contract Area modification. Nothing contained herein shall prevent the party proposing a Drilling Unit or Contract Area modification to do so within the body of a well proposal letter, however, the non-proposing party shall have separate elections as to participation in the well and Drilling Unit or Contract Area modification (unless the ability to drill the proposed well is dependent on the modification of the Drilling Unit or Contract Area, in which case consent to the modification proposal shall not be unreasonably withheld delayed or conditioned). In the event an existing Drilling Unit or Contract Area is enlarged or reduced in size, the Working Interests of the Operator and Non-Operator in (1) new wells previously proposed that have not yet been drilled that are still within the commencement timeframe, and (2) wells previously proposed and commenced within the modified Drilling Unit or Contract Area

shall not change unless agreed to by the Operator and Non-Operators. A new Memorandum of Operating Agreement and modified Declaration and Notice of Pooled Unit shall be prepared and filed of record, if necessary, and this agreement shall be amended with a revised Exhibit “A”.

N. Disputes Concerning Objective Depths:

If, during the drilling of any well being drilled hereunder, a bona fide dispute shall exist as to whether the proposed depth has been reached in such well (as for example, whether a well has been drilled to a depth sufficient to test a particular sand or formation or if the well has reached the stratigraphic equivalent of a particular depth), the opinion of a majority in interest, and not in numbers, of the parties participating in the drilling of such well shall control and be binding upon all parties. If the parties are equally divided, the opinion of the Operator will control.

O. Metering of Production:

In the event of transfer, sale, encumbrance or other disposition of interest within the Contract Area which creates the necessity of separate measurement of production, the party creating the necessity for such measurement shall alone bear the cost of purchase, installation, operation of such facilities and additional administrative and accounting costs incurred by operator relating to such transfer, sale, encumbrance or other disposition.

P. Additional Rights:

If any rights in the Contract Area between the parties hereto are acquired by virtue of the drilling, deepening or completion of a well, a Non-Consenting party in such drilling, deepening, or completing shall not be entitled to any interest in such rights.

Q. Preparation of Exhibit “A”:

The interests of the parties as set forth on Exhibit “A” were calculated based on the best information available to the Operator. If the information is found to have been erroneous, or if a mathematical or typographical error has been made in preparing the exhibits, the interests may be recalculated to reflect the correct interest.

R. Regulatory Expenses:

Notwithstanding anything to the contrary contained in the Operating Agreement of Accounting Procedure (Exhibit “C”) fees for the legal services, title costs, curative work, costs and expenses in connection with preparations and presentations of evidence and exhibits at Government Regulatory or forced unitization hearings, preparation and handling of applications to and hearing before a State, Federal, or Other Regulatory Agencies pertaining to the Contract Area shall not be considered as Administrative Overhead, but Operator shall be entitled to make a direct charge against the joint account for such expenses.

S. Advance Cost of Operations:

Any party electing to participate in any Proposed Operations pursuant to this Operating Agreement, shall, if invoiced by Operator, be obligated to advance its proportionate share of the total estimated costs shown on the proposal for such operation. Operator shall have the right to invoice each Consenting Party for its proportionate share of such costs within thirty (30) days prior to the anticipated commencement date of such operations or promptly following the commencement of operations after the expiration of the election period stated in Article VI.B.1. with respect to a completion operation. Thereafter, the provisions of Article VI.B.2.(a) shall apply with respect to treatment of the proposal and the Non-Consenting Interest. Any Consenting Party electing to carry a portion of the interest of the Non-Consenting Party shall advance its additional share of costs within thirty (30) days following receipt of operator’s invoice therefore. In the event Operator pre-bills the Non-Operator(s) as provided herein (and such amount is actually paid by such Non-Operator(s)), but Operator does not actually commence the operation for which the pre-bill was submitted within sixty (60) days of the stated commencement date, then Operator shall return said pre-bill payment amount to the Non-Operator(s). Any Consenting Party who fails to pay the full amount of its invoice to Operator within thirty (30) business days following receipt of such invoice shall be deemed in default. Operator shall provide written notice of default. Non-Operator(s) shall have five (5) business days from receipt of written notice to make its payment. Failure to make timely payment to cure the default shall deem the non-paying Consenting Party as Non-Consenting Party with respect to such Operation.

T. Confidentiality:

All data, including but not limited to, geophysical, geological or completion data (other than data routinely publicly disclosed by other Oil and Gas producers) acquired by Operator or a Non-Operator under this Operating Agreement as a result of joint operations conducted hereunder shall be kept confidential from parties other than the parties to this Operating Agreement by such Operator or Non-Operator unless the release of such information to a third party is agreed upon by the parties or is required by law. Any permitted release of information to a third party must have the prior written consent of all parties hereto and said third party must agree in writing to be bound by the provisions of this paragraph. Nothing herein shall prohibit any party from disclosing whatever information in such manner as may be required by statute, rule or regulation, including the rules or regulations of any stock exchange on which any securities of such party or any affiliates are traded; nor shall any party be prohibited by the terms hereof from disclosing information acquired under this Agreement to any financial institution or investors providing or proposing financing to the disclosing party. Notwithstanding anything herein to the contrary, a Non-Consenting Party shall not be entitled to any geophysical, geological, completion, drilling, cost, production or other data with respect to any operation or well undertaken under this Agreement that such Non-Consenting Party has not participated in.

U. Terms:

The parties hereto agree that for purposes of this Agreement, any reference to “_____” shall mean _____ (or any successor or permitted assign of such party), and any reference to “SWN” shall mean SWN Production (Ohio), LLC (or any successor or permitted assign of each such party).

V. Revenue Distribution:

Subject to the Operator’s rights to withhold disbursements of royalties, overriding royalties and other payments contained in the provisions of this agreement and applicable law, rule or regulations. Except as otherwise agreed to, Operator will make disbursements of all royalties, overriding royalties and other payments out of, with respect, to production which are attributable to Non-Operator’s contributed Oil and Gas Leases or Oil and Gas Interests in the Contract Area at Non-Operator’s direction provided Non-Operator shall execute such documents as may be necessary in the opinion of Operator to enable Operator to receive all payments for oil, gas or other hydrocarbons directly from the said purchases. In the event, Operator will use its reasonable business efforts to

make disbursements correctly, but shall not be liable for incorrect disbursements except in the event of its gross negligence or willful misconduct.

W. Operator as Disbursing Party for Non-Operators:

1. If a party to this Agreement other than Operator elects not to take in kind its share of production from the Contract Area, and Operator either purchases such production or sells it to others for the account of the non-taking party pursuant to Article VI.G., then Operator shall unilaterally act on behalf of such non-taking party for the purposes of: (a) marketing such non-taking party's share of production produced from the Contract Area; and (b) receiving and disbursing or causing to be disbursed the proceeds received by Operator from the sale of such non-taking party's share of such proceeds; provided, however, that such sale or marketing shall be subject to the terms and conditions of this Section XVII.
2. Prior to Operator purchasing such production or Operator entering into a commitment to deliver such Non-Operator's production to a third party, Operator shall provide to such Non-Operator a report itemizing the terms and conditions, including the price therefor, of the gathering, transportation, treatment, processing, and other similar arrangements on which such Non-Operator's production shall be handled.
3. Operator shall make or cause to be made a disbursement of such Non-Operator's proceeds within 60 days after the end of the month in which Operator receives such proceeds, and should Operator fail to do so due to Operator's own gross negligence, all late payments due to Non-Operator shall bear interest from the due date until paid at a per annum rate equal to the lesser of (i) the prime rate in effect at JP Morgan Chase on the first day of the month in which the delinquency occurs, plus 300 basis points or (ii) the highest non-usurious rate permitted by applicable law. All costs incurred by or at the direction of Operator in making such disbursements (excluding interest on late payments but including, without limitation, all costs incurred by or at the direction of Operator in the preparation and circulation of division orders), but expressly not including those costs identified in the Accounting Procedure (Exhibit "C" to the Operating Agreement) as being covered by fixed rate overhead, shall be charged by Operator to the joint account of the parties in accordance with their fractional interests in the Contract Area.
4. Any non-taking party may provide to Operator and the relevant purchaser or purchasers of production the written notices provided for in Article VI.G., and thereby exercise the non-taking party's right to take in kind and/or, if acceptable to the purchaser or purchasers of production, receive payment directly from the purchaser(s) thereof for its share of all production.
5. Operator shall at all times (other than during any period when such Non-Operator has elected to take in kind) unilaterally market and contract for each Non-Operator's production in a non-discriminatory fashion as to each Non-Operator's production.

X. Dispute Costs and Expenses:

Costs and expenses attributable to the settlement of disputes, claims or litigation, other than the collection of debts by Operator from Non-Operator, arising out of and between any of the parties to this Agreement, shall be borne solely by such parties and not by the joint account.

Y. Third Party Beneficiaries:

Neither this Agreement, nor any performance hereunder by the parties hereto, shall be deemed or interpreted to create any right, claim, cause of action, or remedy on behalf of any person not a party hereto.

Z. Bankruptcy:

If, following the granting of relief under the U.S. Bankruptcy Code to any party hereto as debtor thereunder, this Operating Agreement should be held to be an executory contract within the meaning of 11 U.S.C. Section 365, then the Operator, or (if the Operator is the debtor in bankruptcy) any other party, shall be entitled to a determination by debtor or any trustee for debtor within thirty (30) days from the date an order for relief is entered under the Bankruptcy Code as to the rejection or assumption of this Operating Agreement. In the event of an assumption, Operator or said other party shall be entitled to adequate assurances as to future performance of debtor's obligations hereunder and the protection of the interests of all other parties.

AA. Counterpart Execution:

This Operating Agreement may be executed in counterpart, each of which is so executed shall be given the effect of execution of the original agreement. If this Operating Agreement is executed in counterpart, the signature pages to the various counterparts may be combined by Operator in one or more copies of this Operating Agreement and treated and given effect for all purposes.

BB. Successor Operator:

In the event of removal of Operator hereunder, the elected Successor Operator is hereby authorized to sign any necessary change of Operator forms on behalf of the former Operator.

CC. Limitation on Damages:

WITH RESPECT TO ANY DISPUTE, CLAIM, COUNTERCLAIM, CONTROVERSY OR OTHER MATTERS (THE "CLAIMS") ARISING BETWEEN THE PARTIES OUT OF OR RELATING TO THIS OPERATING AGREEMENT OR THE SUBJECT MATTER HEREOF, OR ANY ALLEGED BREACH THEREOF, OR THE RELATIONSHIP BETWEEN THE PARTIES CREATED BY THIS OPERATING AGREEMENT, EVEN THOUGH SOME OR ALL OF SUCH CLAIMS MAY BE EXTRA-CONTRACTUAL IN NATURE, AND WHETHER SOUNDING IN TORT, CONTRACT, WARRANTY OR OTHERWISE, INCLUDING ALLEGATIONS OF FRAUD IN THE INDUCEMENT, DUTY TO DEAL IN GOOD FAITH OR CONFIDENTIAL RELATIONSHIP, NO PARTY SHALL EVER BE LIABLE FOR EXEMPLARY, PUNITIVE, CONSEQUENTIAL, SPECIAL, INCIDENTAL, INDIRECT OR OTHER SIMILAR DAMAGES, INCLUDING LOST PROFITS, BUSINESS INTERRUPTION OR LOSS OF OPPORTUNITY, WHETHER SUCH DAMAGES ARE CLAIMED UNDER BREACH OF CONTRACT, BREACH OF WARRANTY, TORT OR ANY OTHER THEORY OR CAUSE OF ACTION AT LAW OR IN EQUITY. THE LIMITATIONS IN THIS PARAGRAPH ARE PART OF THE MATERIAL, BARGAINED-FOR CONSIDERATION FOR ENTERING THIS OPERATING AGREEMENT.

DD. Liens and Security Rights:

1. Security Rights. In addition to any other security rights and remedies provided by law with respect to services rendered or materials and equipment furnished under this Operating Agreement for valuable consideration, the receipt and sufficiency of which are hereby acknowledged, and in consideration of the covenants and mutual undertakings of the parties, herein, the parties shall have the following security rights:

(i) Lien in Favor of Operator. To secure payment of the Non-Operators Indebtedness (as defined below) and the performance of the covenants and obligations of Non-Operators under this Operating Agreement, Non-Operators do by these presents hereby GRANT, BARGAIN, SELL, MORTGAGE, ASSIGN, TRANSFER, PLEDGE, HYPOTHECATE AND CONVEY to Operator all of the right, title and interest of Non-Operators in and to the real and personal property, rights, titles, interests and estates making up the Mortgaged Property (defined below).

For purposes of this Section, “Mortgaged Property” shall consist of the following: (1) the Oil and Gas Leases, Oil and Gas Interests and other interests comprising the Contract Area, including any operating rights, working interests, royalty interests, overriding royalty interests, non-participating royalty interests, production payments, net profits interests, or any other interest measured by or payable out of production of hydrocarbons, and all renewals and extensions thereof related thereto (“Oil and Gas Properties”), (2) the Oil and Gas in, on, under, and that may be produced from the Oil and Gas Properties, including, without limitation, Oil and Gas produced with respect to all contractual rights, operating rights, leasehold interests, working interests, royalty interests, overriding royalty interests, non-participating royalty interests, mineral interests, production payments, net profits interests, or any other interest measured by or payable out of production of hydrocarbons (as such interests may be enlarged by the discharge of any payments out of production or by the removal of any charges or encumbrances related thereto) and all other as-extracted collateral, (3) all wells (oil, gas, oil/gas, injection, water or disposal), equipment, machinery and appurtenances, including fixtures, whether corporeal or incorporeal located upon or pooled with and primarily used in connection with such Oil and Gas Properties, (4) all easements, rights of way and other real property interests located upon and primarily used in connection with the Oil and Gas Properties, (5) all permits, licenses, and servitudes to the extent primarily used in connection with the Oil and Gas Properties and (6) all geological, geophysical, engineering, accounting, title, legal and other technical and business data primarily relating to the other Mortgaged Property (but only to the extent that they are related to any or all of the other Mortgaged Property).

This lien is given to secure the complete and timely performance of and payment by Non-Operators of all Non-Operators Indebtedness (defined below) of every kind or nature, whether now owed by Non-Operators or hereafter arising, pursuant to this Operating Agreement. As used herein, the term “Non-Operators Indebtedness” shall mean (x) all costs and other expenses properly chargeable to Non-Operators under this Operating Agreement, together with (y) all reasonable attorneys’ fees and other reasonable costs sustained in the collection of amounts owed by Non-Operators and (z) interest at the rate of six percent (6%) per annum accrued on the amounts set forth in clauses (x) and (y) if not paid when due and shall begin to accrue interest upon the first day after any amount is not paid when due and shall continue to accrue until such amount is paid in full. Upon an Event of Default (defined below), Operator shall have the additional right to notify the purchaser or purchasers of Non-Operators’ Oil and Gas production related to the Mortgaged Property and collect such Non-Operators Indebtedness out of the proceeds from the sale of Non-Operators’ share of Oil and Gas production until the amount owed has been paid. Operator shall have the right to offset the Non-Operators Indebtedness against the proceeds from the sale of Non-Operators’ share of Oil and Gas production related to the Mortgaged Property. Any purchaser of such production shall be entitled to rely on Operator’s statement concerning the amount of Non-Operators Indebtedness owed by Non-Operators and payment made to Operator by any purchaser shall be binding and conclusive as between such purchaser and Non-Operators. Notwithstanding anything to the contrary herein, the parties shall cooperate to ensure that royalties owed to third parties are timely paid.

(ii) Security Interest in Favor of Operator. To further secure the complete and timely performance of and payment by Non-Operators of the Non-Operators Indebtedness now existing or hereafter arising, Non-Operators hereby grants to Operator a lien and continuing security interest in and to all of its right, title, interest, in and to the Collateral (defined below).

For purposes of this Section, “Collateral” shall mean, collectively: (A) all equipment, accounts, contract rights, general intangibles, chattel paper, commercial tort claims, documents, instruments, goods, inventory, insurance contracts, insurance proceeds, inventory, hydrocarbons, as-extracted collateral, operating rights, working interests, royalty interests, overriding royalty interests, non-participating royalty interests, production payments, net profits interests, or any other interest measured by or payable out of production of hydrocarbons (as such interests may be enlarged by the discharge of any payments out of production or by the removal of any charges or encumbrances) and fixtures (to the extent any of the preceding terms are defined in the Uniform Commercial Code presently in effect in the jurisdiction in which such property is situated (“Applicable UCC”) such term shall have the meaning provided for such term in the Applicable UCC) of any kind and character to the extent such items primarily relate to the Mortgaged Properties or are primarily attributable to the Mortgaged Properties, or primarily used in connection with the ownership, use or exploitation of the Mortgaged Properties and (B) all the proceeds and products of the items described in preceding clause (A), and all substitutions therefor, replacements thereof, or accessions thereto, all of which, whether now owned or hereafter acquired, whether now or hereafter acquired by operation of law or otherwise.

(iii) Lien in Favor of Non-Operators. To secure payment of the Operator Indebtedness (defined below) and the performance of the covenants and obligations of Operator under this Operating Agreement, Operator does by these presents hereby GRANT, BARGAIN, SELL, MORTGAGE, ASSIGN, TRANSFER, PLEDGE, HYPOTHECATE AND CONVEY to Non-Operators all of Operator’s right, title and interest in and to the real and personal property, rights, titles, interests and estates making up the Mortgaged Property.

This lien is given to secure the complete and timely performance of and payment by Operator of all Operator Indebtedness (defined below) of every kind or nature, whether now owed by Operator or hereafter arising, pursuant to this Operating Agreement. As used herein, the term “Operator Indebtedness” shall mean (x) all costs and other expenses properly chargeable to Operator under this Operating Agreement, together with (y) all reasonable attorneys’ fees and other reasonable costs sustained in the collection of amounts owed by Operator, and (z) interest at the rate of six percent (6%) per annum accrued on the amounts set forth in clauses (x) and (y) if not paid when due and shall begin to accrue interest upon the first day after any amount is not paid when due and shall continue to accrue until such amount is paid in full. Upon an Event of Default, Non-Operators shall have the additional right to notify the purchaser or purchasers of Operator’s Oil and Gas production related to the Mortgaged Property and collect such Operator Indebtedness out of the proceeds from the sale of Operator’s share of Oil and Gas production until the amount owed has been paid.

Any purchaser of such production shall be entitled to rely on Non- Operators' statement concerning the amount of Operator Indebtedness owed by Operator and payment made to Non- Operators by any purchaser shall be binding and conclusive as between such purchaser and Operator. Notwithstanding anything to the contrary herein, the parties shall cooperate to ensure that royalties owed to third parties are timely paid.

(iv) Security Interest in Favor of Non-Operators. To further secure the complete and timely performance of and payment by Operator of the Operator Indebtedness now existing or hereafter arising, pursuant to this Operating Agreement, Operator hereby grants to Non- Operators a lien and continuing security interest in and to all of its right, title, interest, in and to the Collateral.

(v) Priority; Successors. Each party represents and warrants to the other parties that the liens and security interests granted by such party to the other parties under this Article shall be a first and prior lien and security interest. Each party hereby agrees to maintain the priority of such lien and security interest so long as this Operating Agreement remains in effect with respect to such Mortgaged Properties or Collateral. Any third party acquiring an interest in the Mortgaged Property or Collateral from any party, whether by assignment, merger, mortgage, operation of law, or otherwise, shall be deemed to have taken subject to the liens and security interests granted by such party hereunder as to all obligations attributable to such interest hereunder whether or not such obligations arise before or after such interest is acquired.

(vi) Waiver. If an Event of Default (defined below) occurs, and such Event of Default subjects such party (the "Defaulting Party") to foreclosure or execution proceedings pursuant to the provisions of this Operating Agreement, to the extent allowed by the applicable law where the Collateral or Mortgaged Property is located, such Defaulting Party waives any available right of redemption from and after the date of judgment, any required valuation or appraisal of the property covered by the lien and security interest created hereunder prior to sale, any available right to stay execution or to require a marshalling of assets, and any required bond in the event a receiver is appointed.

(vii) Other Lien Rights. 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 Mortgaged Property is located, or that is otherwise applicable, to enforce the rights and remedies of each party hereunder. Without limiting the generality of the foregoing, to the extent permitted by applicable law, each of the parties agrees that the Operator may invoke or utilize the mechanics' or materialmen's lien law of any state where the Mortgaged Property is located, or that is otherwise applicable, in order to secure the payment to the Operator of any sum due hereunder for services performed or materials supplied by the Operator.

(viii) Foreclosure and Sale. If an Event of Default shall occur and be continuing, to the extent provided by applicable law, the parties other than the Defaulting Party (the "Non-Defaulting Parties") shall have the right and option to proceed with foreclosure with respect to the Mortgaged Property by proceeding, in each case, with foreclosure and to sell all or any portion of the Mortgaged Property at one or more sales, as an entirety or in parcels, at such place or places in otherwise such manner and upon such notice as may be required by any applicable law, or, in the absence of any such requirement, as Non-Defaulting Parties may reasonably deem appropriate, and to make conveyance to the purchaser or purchasers. Where the Mortgaged Property is situated in more than one jurisdiction, notice as above provided shall be posted and filed in all such jurisdictions (if such notices are required by applicable law), and all such Mortgaged Property may be sold in any such jurisdiction and any such notice shall designate the jurisdiction where such Mortgaged Property is to be sold. Nothing contained in this Article shall be construed so as to limit in any way any rights to sell the Mortgaged Property or any portion thereof by private sale if and to the extent that such private sale is permitted under any applicable laws of the applicable jurisdiction or by public or private sale after entry of a judgment by any court of competent jurisdiction so ordering. Defaulting Party hereby irrevocably appoints the Non-Defaulting Parties, with full power of substitution, to each be Defaulting Party's attorney-in-fact and to act in the name and on behalf of Defaulting Party, at any time after the occurrence and during the continuance of an Event of Default, to execute and deliver any deeds, transfers, conveyances, assignments, assurances and notices which Defaulting Party ought to execute and deliver and do and perform any and all such acts and things which Defaulting Party ought to do and perform under the covenants herein contained and generally, to use the name of Defaulting Party in the exercise of all or any of the powers hereby conferred on the Non-Defaulting Parties.

(ix) Other Rights. If an Event of Default shall occur and be continuing, then (i) Non-Defaulting Parties shall be entitled to all of the rights, powers and remedies afforded a secured party by the Applicable UCC with reference to the Collateral and (ii) the Non-Defaulting Parties may proceed as to any Collateral in accordance with the rights and remedies granted under this Operating Agreement or applicable law in respect of the Collateral. Such rights, powers and remedies shall be cumulative and in addition to those granted to the Non-Defaulting Parties under any other provision of this Operating Agreement. Written notice mailed to Defaulting Party as provided herein at least ten (10) days prior to the date of public sale of any part of the Collateral which is personal property subject to the provisions of the Applicable UCC, or prior to the date after which private sale of any such part of the Collateral will be made, shall constitute reasonable notice.

(x) Judicial Actions. If any of the Non-Operators Indebtedness or Operator Indebtedness, as applicable, shall become due and payable and shall not be promptly paid, the Non-Defaulting Parties shall have the right and power to proceed by a suit or suits in equity or at law, whether for the specific performance of any covenant or agreement contained herein or in aid of the execution of any power granted herein, or for any foreclosure hereunder or for the sale of the Collateral under the judgment or decree of any court or courts of competent jurisdiction, or for the appointment of a receiver pending any foreclosure hereunder or the sale of the Collateral under the order of a court or courts of competent jurisdiction or under executory or other legal process, or for the enforcement of any other appropriate legal or equitable remedy.

(xi) Bar. It is agreed that any sale pursuant to this Article shall be a perpetual bar against Defaulting Party and its successors, assigns, legal representatives, and all other persons claiming under the foregoing persons. It is further agreed that any holder or holders of the obligations of Defaulting Party under this Operating Agreement or any Non-Defaulting Party shall have the right to become the purchaser or purchasers at any sale of the Mortgaged Properties or Collateral pursuant to this Article if such Party is the highest bidder or bidders, in which event the bid or bids may be credited upon the Non-Operator Indebtedness or Operator Indebtedness, as applicable.

(xii) Election of Remedies. The bringing of a suit and the obtaining of judgment by any party for either the Non-Operators Indebtedness or the Operator Indebtedness, as applicable, shall not be deemed an election of remedies or otherwise affect the rights or security interest for the payment thereof.

2. Event of Default. For purposes of this Article, an "Event of Default" shall mean (i) with respect to Non-Operators, Non-Operators fail to pay any Non-Operators Indebtedness, (ii) with respect to Operator, Operator fails to pay any Operator Indebtedness and (iii) with respect to either party, any default by such party described in Article VII.D of this Operating Agreement, in each case following the expiration of thirty (30) days after receipt of written notice of such failure to pay.

3. **Recordation.** To provide evidence of, and to further perfect the parties' security rights and interests created hereunder, upon request by Operator, (i) Non-Operators shall execute and acknowledge the Memorandum of Operating Agreement and Financing Statement attached as Exhibit "H-1" (the "Non-Operators Memorandum") in multiple counterparts as appropriate and (ii) Operator shall execute and acknowledge the Memorandum of Operating Agreement and Financing Statement attached as Exhibit "H-2" (the "Operator Memorandum", and together with the Non-Operators Memorandum, the "Memoranda"). The parties authorize each other party to file the Memoranda and any amendment, restatement, revision, ratification or other similar document altering or ratifying the Memoranda in the public records of each county where any of the Mortgaged Property is located and shall serve as notice of the existence of this Operating Agreement and the mortgage, liens, security interests and other burdens created by this Operating Agreement with respect to the Mortgaged Property and Collateral and for purposes of satisfying otherwise relevant recording and filing requirements of applicable law and to attach an original of the Memoranda to a standard UCC-1 financing statement or similar document for filing in the UCC records where necessary to perfect the security interests created by the parties pursuant to this Operating Agreement.

4. **Financing Statement and Fixture Filing.** The Memoranda shall also be effective as a financing statement filed as a fixture filing with respect to all fixtures included within the Mortgaged Property and is to be filed or filed for record in the real estate records, and the Applicable UCC records of each jurisdiction where any part of the Mortgaged Property (including said fixtures) are situated. The Memoranda shall also be effective as a financing statement covering minerals or the like (including Oil and Gas and all other substances of value which may be extracted from the ground, including as-extracted collateral) and accounts financed at the wellhead or minehead of wells or mines located on the properties subject to the Applicable UCC and is to be filed for record in the real estate records and the Applicable UCC records of each jurisdiction where any part of the Mortgaged Property is situated. In addition, each of the parties shall execute and deliver to the parties, upon the party's reasonable request, any financing statements or amendments thereof or continuation statements thereto or similar documents that such party may reasonably require to perfect security interests, mortgages and liens in said items or types of property as contemplated by the Memoranda and this Operating Agreement.

In that regard, the following information is provided:

With respect to the Non-Operators Indebtedness:

Name of Debtor: _____
Address of Debtor: _____

Attention: _____
State of Formation/Location: _____
Organization ID: _____
Principal Place of Business of Debtor: _____

Name of Secured Party: SWN PRODUCTION (OHIO), LLC
Address of Secured Party: 10000 Energy Drive
Spring, Texas 77389
Attention: General Counsel

Owner of Record of Real Property: _____

With respect to the SWN Indebtedness:

Name of Debtor: SWN PRODUCTION (OHIO), LLC
Address of Debtor: 10000 Energy Drive
Spring, Texas 77389
Attention: General Counsel
State of Formation/Location: Texas
Organization ID: _____
Principal Place of Business of Debtor: Spring, Texas

Name of Secured Party: _____
Address of Secured Party: _____

Attention: _____

Owner of Record of Real Property: SWN PRODUCTION (OHIO), LLC

5. **Amendments.** Each party agrees that the parties shall amend this Article and the Memoranda, as necessary, to ensure that a valid, perfected security interest, mortgage and lien as currently contemplated in this Article exists with respect to any properties that are subject to this Operating Agreement under the laws of any applicable jurisdiction. The parties further consent to and authorize any party to file any necessary amendments, uniform commercial code filings or similar documents, with the appropriate filing office, as is reasonably necessary to perfect the security interests mortgages and liens as contemplated by this Article.

6. **Special Ohio Provisions.** THIS IS AN OPEN END MORTGAGE WITHIN THE MEANING OF OHIO REVISED CODE SECTION 5301.232 WHICH SECURES FUTURE ADVANCES. THE MAXIMUM AMOUNT OF LOAN INDEBTEDNESS WHICH MAY BE OUTSTANDING AT ANY TIME UNDER THIS MORTGAGE, EXCLUSIVE OF INTEREST THEREON, IS \$500,000,000. THIS OPEN END MORTGAGE ALSO SECURES OTHER AMOUNTS PROVIDED FOR HEREIN AND AT LAW. IN ADDITION TO ANY OTHER DEBT OR OBLIGATION, THIS INSTRUMENT SHALL SECURE UNPAID BALANCES OF ADVANCES MADE, PLUS ACCRUED INTEREST ON (IF ANY), WITH RESPECT TO THE MORTGAGED PREMISES, FOR THE PAYMENT OF TAXES, ASSESSMENTS, INSURANCE PREMIUMS, OR COSTS INCURRED FOR THE PROTECTION OF THE MORTGAGED PREMISES, IT BEING INTENDED TO ACKNOWLEDGE, AFFIRM AND COMPLY WITH THE PROVISIONS OF OHIO REVISED CODE SECTION 5301.233.

7. Release of the Mortgaged Property and Collateral. Upon the termination of this Operating Agreement pursuant to Article XIII, the parties shall promptly execute and deliver to the other party all releases, re-conveyances or other documents reasonably necessary or desirable for the release of the liens created hereby on such portion of the Mortgaged Property.

[REMAINDER OF PAGE INTENTIONALLY LEFT BLANK]

IN WITNESS WHEREOF, this agreement shall be effective as of the 6th day of April, 2023.

SWN Production (Ohio), LLC, who has prepared and circulated this form for execution, represents and warrants that the form was printed from and, with the exception(s) listed below, is identical to the AAPL Form 610-1989 Model Form Operating Agreement, as published in computerized form by Forms On-A-Disk, Inc. No changes, alterations, or modifications, other than those made by strikethrough and/or insertion and that are clearly recognizable as changes. ~~in~~ Articles ~~have been made to the form.~~ Notwithstanding the foregoing statement, the undersigned acknowledge that they have reviewed the agreement in its entirety and agree to be bound by all the terms and conditions contained herein.

OPERATOR

ATTEST OR WITNESS

SWN Production (Ohio), LLC
A Texas limited liability company

By: _____

Title: _____

Address: _____

NON-OPERATORS

ATTEST OR WITNESS

By: _____

Title: _____

Address: _____

ATTEST OR WITNESS

By: _____

Title: _____

Address: _____

ACKNOWLEDGMENT

COMMONWEALTH OF TEXAS)
) §
COUNTY OF HARRIS)

On this, the ____ day of _____, 20____, before me _____, the undersigned officer, personally appeared, who acknowledged himself to be the _____ of SWN Production (Ohio), LLC, a Texas limited liability company, 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 limited liability company 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:
SWN Production (Ohio), LLC
10000 Energy Drive
Spring, TX 77389

EXHIBIT “A”

Attached to and made a part of that certain Operating Agreement dated April 6, 2023, as approved by the Ohio Department of Natural Resources, Division of Oil and Gas Resources Management, for the Emerson Belle A Unit.

(1) **Identification of lands subject to this Agreement.**

The Contract Area is shown on Exhibit “A-1” attached hereto.

(1) **Restrictions as to depths and formations.**

This Agreement shall cover the Unit Area at a stratigraphic equivalent interval that is from the top of the Utica Shale formation to the top of the Trenton Limestone formation, and frequently referred to as the Utica/Point Pleasant Formation (as more particularly defined in Article 1 of the Unit Plan).

(2) **Percentages or fractional interests of parties to this Agreement.***

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

(3) **Oil and gas leases and/or oil and gas interests subject to this Agreement.**

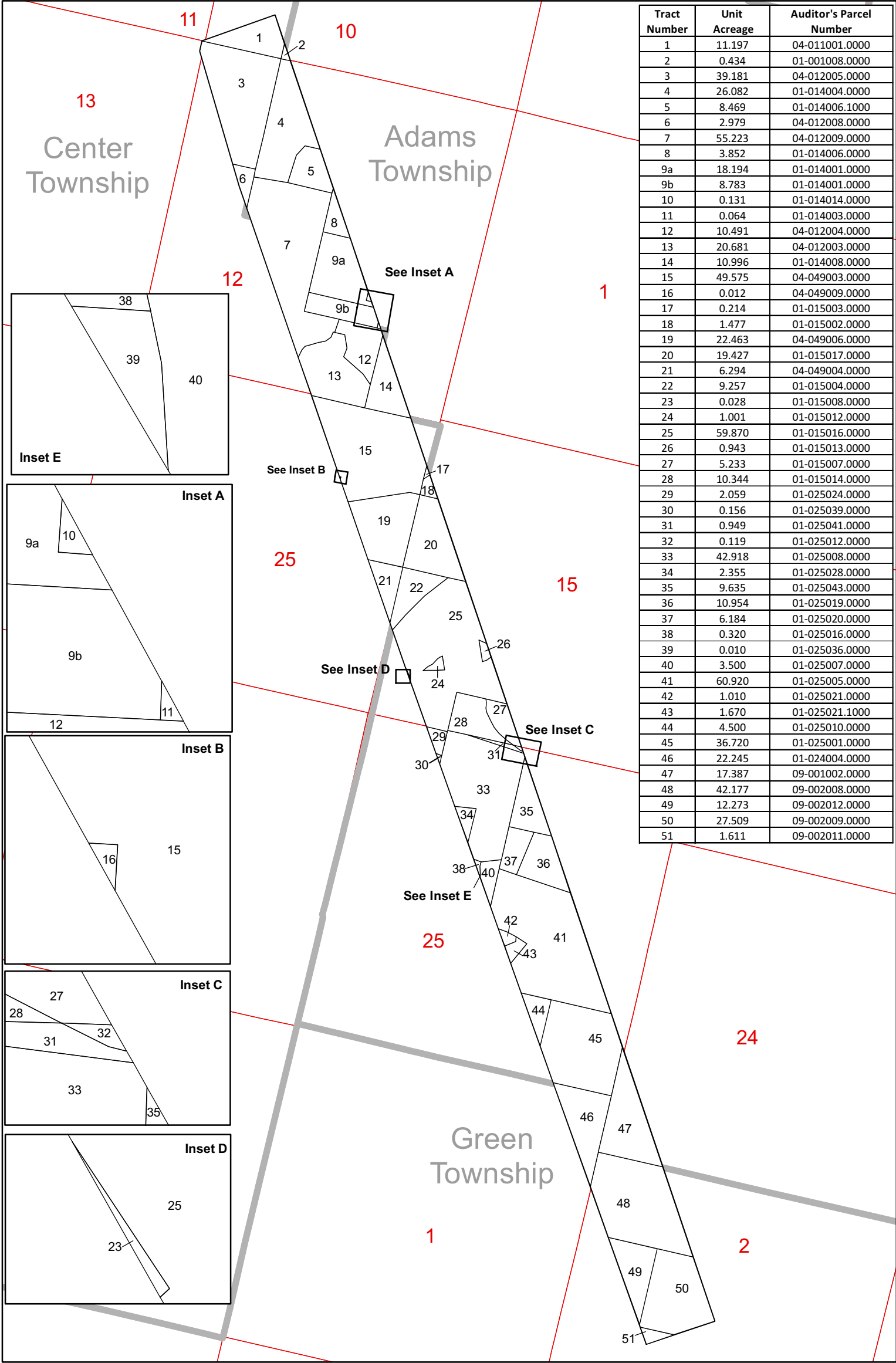
<u>Operator</u>	<u>SWN Working Interest*</u>
SWN Production (Ohio), LLC	87.326879%
<u>Non-Operator</u>	
<u>Unleased Mineral Owners</u>	<u>12.673121%</u>
Total:	100.000000%

(4) **Addresses of parties for notice purposes.**

SWN Production (Ohio), LLC
Attention: Gary Nuckolls
10000 Energy Drive
Spring, Texas 77389

The names and addresses of the remaining parties are set forth in Exhibit “A-3,” Exhibit “A-4,” Exhibit “A-5,” and Exhibit “A-6” attached hereto.

*It is understood by the Parties that the working interests listed in this Agreement (and any attachments thereto) 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.



Tract Number	Unit Acreage	Auditor's Parcel Number
1	11.197	04-011001.0000
2	0.434	01-001008.0000
3	39.181	04-012005.0000
4	26.082	01-014004.0000
5	8.469	01-014006.1000
6	2.979	04-012008.0000
7	55.223	04-012009.0000
8	3.852	01-014006.0000
9a	18.194	01-014001.0000
9b	8.783	01-014001.0000
10	0.131	01-014014.0000
11	0.064	01-014003.0000
12	10.491	04-012004.0000
13	20.681	04-012003.0000
14	10.996	01-014008.0000
15	49.575	04-049003.0000
16	0.012	04-049009.0000
17	0.214	01-015003.0000
18	1.477	01-015002.0000
19	22.463	04-049006.0000
20	19.427	01-015017.0000
21	6.294	04-049004.0000
22	9.257	01-015004.0000
23	0.028	01-015008.0000
24	1.001	01-015012.0000
25	59.870	01-015016.0000
26	0.943	01-015013.0000
27	5.233	01-015007.0000
28	10.344	01-015014.0000
29	2.059	01-025024.0000
30	0.156	01-025039.0000
31	0.949	01-025041.0000
32	0.119	01-025012.0000
33	42.918	01-025008.0000
34	2.355	01-025028.0000
35	9.635	01-025043.0000
36	10.954	01-025019.0000
37	6.184	01-025020.0000
38	0.320	01-025016.0000
39	0.010	01-025036.0000
40	3.500	01-025007.0000
41	60.920	01-025005.0000
42	1.010	01-025021.0000
43	1.670	01-025021.1000
44	4.500	01-025010.0000
45	36.720	01-025001.0000
46	22.245	01-024004.0000
47	17.387	09-001002.0000
48	42.177	09-002008.0000
49	12.273	09-002012.0000
50	27.509	09-002009.0000
51	1.611	09-002011.0000

02,0504,100

Feet

1 inch = 1,863 feet

Contract Area

Tax Parcels

Section Lines

Township Lines

Emerson Belle A Unit

Exhibit A-1

Contract Area: 710.076 Acres

Center, Adams & Green Townships, Monroe County

Date: 3/22/2023

<div>Exhibit A-2</div> <div>All Mineral Owners in the proposed Emerson Belle A Unit.</div>														
Tract Number	Mineral Owner	Leased Yes or No	Decimal Interest in Tract	Surface Acres in Unit (Net)	Tract Participation in Unit (Net)	Tax Map Parcel ID	Township	County	Consenting Working Interest Percentage	Applicant Working Interest Percentage	Address	City	State	Zip
1	DANMAR Holdings, LLC	Yes	1.000000	11.197	1.576873%	04-011001.0000	Center	Monroe	1.576873%	1.576873%	ATTN: Gloria Marlene Jones 48095 Kings Highway	Beallsville	OH	43716
2	Paul Crum, Trustee of The Crum Family Trust	Yes	1.000000	0.434	0.061120%	01-001008.0000	Adams	Monroe	0.061120%	0.061120%	7209 Marsh Terrace	Port St. Lucie	FL	34986
3	Dale E. Feldner and Donella K. Feldner, husband and wife	No	1.000000	39.181	5.517860%	04-012005.0000	Center	Monroe	0.000000%	0.000000%	26475 Tabor Ridge	Caldwell	OH	43724
4	Darrell Hall and Betty Hall, husband and wife, as tenants in common	Yes	1.000000	26.082	3.673128%	01-014004.0000	Adams	Monroe	3.673128%	3.673128%	48315 State Route 26	Beallsville	OH	43716
5	Wilbur James Valkovic	Yes	0.505500	4.281	0.602904%	01-014006.1000	Adams	Monroe	0.602904%	0.602904%	48004 State Route 26	Beallsville	OH	43716
5	AMP IV, LP	Yes	0.494500	4.188	0.589785%	01-014006.1000	Adams	Monroe	0.589785%	0.589785%	ATTN: Mark Phillip Thomas, Jr., Chief Operating Officer 225 Ross Street Suite 301	Pittsburgh	PA	15219
6	Ruth A. Billiter	No	1.000000	2.979	0.419533%	04-012008.0000	Center	Monroe	0.000000%	0.000000%	37157 Mount Street	Sardis	OH	43946
7	Max Maroni	Yes	1.000000	55.223	7.777055%	04-012009.0000	Center	Monroe	7.777055%	7.777055%	42153 Sunfish Creek Road	Beallsville	OH	43716
8	Wilbur James Valkovic	Yes	0.505500	1.947	0.274222%	01-014006.0000	Adams	Monroe	0.274222%	0.274222%	48004 State Route 26	Beallsville	OH	43716
8	AMP IV, LP	Yes	0.494500	1.905	0.268255%	01-014006.0000	Adams	Monroe	0.268255%	0.268255%	ATTN: Mark Phillip Thomas, Jr., Chief Operating Officer 225 Ross Street Suite 301	Pittsburgh	PA	15219
9a	Richard Glenn Charbono	Yes	1.000000	18.194	2.562261%	01-014001.0000	Adams	Monroe	2.562261%	2.562261%	47811 State Route 26	Beallsville	OH	43716
9b	Unknown Heirs or Assigns of Charles R. Buckio	No	0.062500	0.549	0.077307%	01-014001.0000	Adams	Monroe	0.000000%	0.000000%	Unknown	Unknown	Unknown	Unknown
9b	Richard Glenn Charbono	Yes	0.500000	4.392	0.618455%	01-014001.0000	Adams	Monroe	0.618455%	0.618455%	47811 State Route 26	Beallsville	OH	43716
9b	Unknown Heirs or Assigns of George F. Buckio	No	0.062500	0.549	0.077307%	01-014001.0000	Adams	Monroe	0.000000%	0.000000%	Unknown	Unknown	Unknown	Unknown
9b	Jeffrey C. Buckio	No	0.020833	0.183	0.025769%	01-014001.0000	Adams	Monroe	0.000000%	0.000000%	14265 Domingo Court	Reno	NV	89511
9b	Joellen Buckio	Yes	0.020833	0.183	0.025769%	01-014001.0000	Adams	Monroe	0.025769%	0.025769%	105 Buckeye Lane	Chapel Hill	NC	27516
9b	Egger Family Holdings, LLC	Yes	0.125000	1.098	0.154614%	01-014001.0000	Adams	Monroe	0.154614%	0.154614%	ATTN: Wilma Jean Schwall, Member 220 North Main Street	Woodsfield	OH	43793
9b	Unknown Heirs or Assigns of Louise F. Haefele	No	0.062500	0.549	0.077307%	01-014001.0000	Adams	Monroe	0.000000%	0.000000%	Unknown	Unknown	Unknown	Unknown
9b	Jennifer B. Henthorn	Yes	0.020833	0.183	0.025769%	01-014001.0000	Adams	Monroe	0.025769%	0.025769%	37771 County Road 2E	Woodsfield	OH	43793
9b	Nancy Rubel	Yes	0.125000	1.098	0.154614%	01-014001.0000	Adams	Monroe	0.154614%	0.154614%	37779 State Route 78	Woodsfield	OH	43793
10	Peak Acquisition Partners, LLC	Yes	1.000000	0.131	0.018449%	01-014014.0000	Adams	Monroe	0.018449%	0.018449%	ATTN: Daniel Balgo P.O. Box 426	Martins Ferry	OH	43935
11	Unknown Heirs or Assigns of Charles R. Buckio	No	0.062500	0.004	0.000563%	01-014003.0000	Adams	Monroe	0.000000%	0.000000%	Unknown	Unknown	Unknown	Unknown
11	Peak Acquisition Partners, LLC	Yes	0.500000	0.032	0.004507%	01-014003.0000	Adams	Monroe	0.004507%	0.004507%	ATTN: Daniel Balgo P.O. Box 426	Martins Ferry	OH	43935
11	Unknown Heirs or Assigns of George F. Buckio	No	0.062500	0.004	0.000563%	01-014003.0000	Adams	Monroe	0.000000%	0.000000%	Unknown	Unknown	Unknown	Unknown
11	Jeffrey C. Buckio	Yes	0.020833	0.001	0.000188%	01-014003.0000	Adams	Monroe	0.000188%	0.000188%	14265 Domingo Court	Reno	NV	89511
11	Joellen Buckio	Yes	0.020833	0.001	0.000188%	01-014003.0000	Adams	Monroe	0.000188%	0.000188%	105 Buckeye Lane	Chapel Hill	NC	27516
11	Egger Family Holdings, LLC	Yes	0.125000	0.008	0.001127%	01-014003.0000	Adams	Monroe	0.001127%	0.001127%	ATTN: Wilma Jean Schwall, Member 220 North Main Street	Woodsfield	OH	43793
11	Unknown Heirs or Assigns of Louise F. Haefele	No	0.062500	0.004	0.000563%	01-014003.0000	Adams	Monroe	0.000000%	0.000000%	Unknown	Unknown	Unknown	Unknown
11	Jennifer B. Henthorn	Yes	0.020833	0.001	0.000188%	01-014003.0000	Adams	Monroe	0.000188%	0.000188%	37771 County Road 2E	Woodsfield	OH	43793
11	Nancy Rubel	Yes	0.125000	0.008	0.001127%	01-014003.0000	Adams	Monroe	0.001127%	0.001127%	37779 State Route 78	Woodsfield	OH	43793
12	Robert D. Hopton and Irene E. Hopton, Co-Trustees of the Robert D. Hopton Family Trust	Yes	1.000000	10.491	1.477447%	04-012004.0000	Center	Monroe	1.477447%	1.477447%	73 1st Street	Rittman	OH	44270
13	LL&B Headwater II, LP	Yes	0.500000	10.341	1.456253%	04-012003.0000	Center	Monroe	1.456253%	1.456253%	ATTN : Gordon Deen, President 11412 Bee Cave Road Suite 301	Austin	TX	78738
13	Ridgetop Royalties, LLC	Yes	0.500000	10.341	1.456253%	04-012003.0000	Center	Monroe	1.456253%	1.456253%	ATTN: Bradley Carpenter, Managing Member 380 Southpoint Boulevard Plaza II, Suite 405	Canonsburg	PA	15317
14	Robert D. Hopton and Irene E. Hopton, Co-Trustees of the Robert D. Hopton Family Trust	Yes	1.000000	10.996	1.548567%	01-014008.0000	Adams	Monroe	1.548567%	1.548567%	73 1st Street	Rittman	OH	44270
15	LL&B Headwater II, LP	Yes	0.500000	24.788	3.490824%	04-049003.0000	Center	Monroe	3.490824%	3.490824%	ATTN : Gordon Deen, President 11412 Bee Cave Road Suite 301	Austin	TX	78738

15	Ridgetop Royalties, LLC	Yes	0.500000	24.788	3.490824%	04-049003.0000	Center	Monroe	3.490824%	3.490824%	ATTN: Bradley Carpenter, Managing Member 380 Southpoint Boulevard Plaza II, Suite 405	Canonsburg	PA	15317
16	Julie A. Myers and Thomas Myers, wife and husband	Yes	0.250000	0.003	0.000422%	04-049009.0000	Center	Monroe	0.000422%	0.000422%	52177 State Route 899	Malaga	OH	43757
16	Patricia A. Wells	Yes	0.500000	0.006	0.000845%	04-049009.0000	Center	Monroe	0.000845%	0.000845%	50922 State Route 145	Malaga	OH	43757
16	Steven J. Wells and Marcia J. Wells, husband and wife	Yes	0.250000	0.003	0.000422%	04-049009.0000	Center	Monroe	0.000422%	0.000422%	56014 Brands Run Road	Alledonia	OH	43902
17	LL&B Headwater II, LP	Yes	0.500000	0.107	0.015069%	01-015003.0000	Center	Monroe	0.015069%	0.015069%	ATTN : Gordon Deen, President 11412 Bee Cave Road Suite 301	Austin	TX	78738
17	Ridgetop Royalties, LLC	Yes	0.500000	0.107	0.015069%	01-015003.0000	Center	Monroe	0.015069%	0.015069%	ATTN: Bradley Carpenter, Managing Member 380 Southpoint Boulevard Plaza II, Suite 405	Canonsburg	PA	15317
18	Amber Hope Lodge	Yes	0.350000	0.517	0.072802%	01-015002.0000	Adams	Monroe	0.072802%	0.072802%	44261 Main Street	St. Clairsville	OH	43950
18	Sarah Lodge Wiggins	Yes	0.650000	0.960	0.135204%	01-015002.0000	Adams	Monroe	0.135204%	0.135204%	43093 Sunfish Creek Road	Woodsfield	OH	43793
19	J & T Mineral Management, LLC	Yes	1.000000	22.463	3.163464%	04-049006.0000	Center	Monroe	3.163464%	3.163464%	ATTN: Glenn W. Dierkes and Mary Knight, Managing Members 952 Peters Run Road	Wheeling	WV	26003
20	J & T Mineral Management, LLC	Yes	1.000000	19.427	2.735904%	01-015017.0000	Adams	Monroe	2.735904%	2.735904%	ATTN: Glenn W. Dierkes and Mary Knight, Managing Members 952 Peters Run Road	Wheeling	WV	26003
21	KOAG, Inc	Yes	0.500000	3.147	0.443192%	04-049004.0000	Adams	Monroe	0.443192%	0.443192%	ATTN: Kay Kremer Phillips, Treasurer 856 Hardwood Court	Gates Mills	OH	44040
21	Anna Marie Gillespie	Yes	0.500000	3.147	0.443192%	04-049004.0000	Center	Monroe	0.443192%	0.443192%	31 Drigheda Drive	Colliers	WV	26035
22	KOAG, Inc	Yes	0.500000	4.629	0.651832%	01-015004.0000	Adams	Monroe	0.651832%	0.651832%	ATTN: Kay Kremer Phillips, Treasurer 856 Hardwood Court	Gates Mills	OH	44040
22	Anna Marie Gillespie	Yes	0.500000	4.629	0.651832%	01-015004.0000	Adams	Monroe	0.651832%	0.651832%	31 Drigheda Drive	Colliers	WV	26035
23	J & T Mineral Management, LLC	Yes	1.000000	0.028	0.003943%	01-015008.0000	Adams	Monroe	0.003943%	0.003943%	ATTN: Glenn W. Dierkes and Mary Knight, Managing Members 952 Peters Run Road	Wheeling	WV	26003
24	Timothy D. Dierkes	Yes	1.000000	1.001	0.140971%	01-015012.0000	Adams	Monroe	0.140971%	0.140971%	43360 Mt. Carrick Road	Woodsfield	OH	43793
25	J & T Mineral Management, LLC	Yes	1.000000	59.870	8.431492%	01-015016.0000	Adams	Monroe	8.431492%	8.431492%	ATTN: Glenn W. Dierkes and Mary Knight, Managing Members 952 Peters Run Road	Wheeling	WV	26003
26	Melissa A. Hartshorn	Yes	1.000000	0.943	0.132803%	01-015013.0000	Adams	Monroe	0.132803%	0.132803%	45538 Township Road 272	Lewisville	OH	43754
27	PIBUR, LLC	Yes	1.000000	5.233	0.736963%	01-015007.0000	Adams	Monroe	0.736963%	0.736963%	ATTN: Dolly M. Burden, Managing Member 5816 Cynthia Circle	North Richland Hills	TX	76117
28	PIBUR, LLC	Yes	1.000000	10.344	1.456745%	01-015014.0000	Adams	Monroe	1.456745%	1.456745%	ATTN: Dolly M. Burden, Managing Member 5816 Cynthia Circle	North Richland Hills	TX	76117
29	Charles P. Schwaben and Kathy J. Schwaben, husband and wife	No	1.000000	2.059	0.289969%	01-025024.0000	Adams	Monroe	0.000000%	0.000000%	102 Clare Kennedy Drive	Marietta	OH	45750
30	Theresa L. Brown	Yes	1.000000	0.156	0.021969%	01-025039.0000	Adams	Monroe	0.021969%	0.021969%	43203 Mt. Carrick Road	Woodsfield	OH	43793
31	PIBUR, LLC	Yes	1.000000	0.949	0.133648%	01-025041.0000	Adams	Monroe	0.133648%	0.133648%	ATTN: Dolly M. Burden, Managing Member 5816 Cynthia Circle	North Richland Hills	TX	76117
32	PIBUR, LLC	Yes	1.000000	0.119	0.016759%	01-025012.0000	Adams	Monroe	0.016759%	0.016759%	ATTN: Dolly M. Burden, Managing Member 5816 Cynthia Circle	North Richland Hills	TX	76117
33	Steven R. Demchak and Dixie M. Demchak, husband and wife	No	1.000000	42.918	6.044142%	01-025008.0000	Adams	Monroe	0.000000%	0.000000%	43883 Mount Carrick Road	Woodsfield	OH	43793
34	James E. Headley	Yes	1.000000	2.355	0.331655%	01-025028.0000	Adams	Monroe	0.331655%	0.331655%	43290 State Route 78	Woodsfield	OH	43793
35	Gary O. Piatt and Brenda L. Piatt, husband and wife, as survivorship tenants	Yes	0.468750	4.516	0.636045%	01-025043.0000	Adams	Monroe	0.636045%	0.636045%	321 Galatian Street	Glenmont	OH	44628
35	Janet M. Ryan	Yes	0.221354	2.133	0.300355%	01-025043.0000	Adams	Monroe	0.300355%	0.300355%	2604 S. Robins Bow Road	Bloomington	IN	47401
35	Edward P. Ryan	Yes	0.044271	0.427	0.060071%	01-025043.0000	Adams	Monroe	0.060071%	0.060071%	2604 S. Robins Bow Road	Bloomington	IN	47401
35	Edward T. Ryan	Yes	0.044271	0.427	0.060071%	01-025043.0000	Adams	Monroe	0.060071%	0.060071%	8421 Pavia Way	Lakewood Ranch	FL	34202
35	Robert M. Ryan	Yes	0.044271	0.427	0.060071%	01-025043.0000	Adams	Monroe	0.060071%	0.060071%	7910 Sunnyvale Lane	Charlotte	NC	28210
35	Beverly Jean Staudt	Yes	0.118056	1.137	0.160189%	01-025043.0000	Adams	Monroe	0.160189%	0.160189%	2795 St. Andrew Square Apt 1715	Allison Park	PA	15101
35	Mary A. Cook, f/k/a Mary A. Staudt	Yes	0.059028	0.569	0.080095%	01-025043.0000	Adams	Monroe	0.080095%	0.080095%	128 Boothbay Harbor	Bradford Woods	PA	15015
36	Harry A. Smith and Andrea L. Smith, husband and wife	Yes	1.000000	10.954	1.542652%	01-025019.0000	Adams	Monroe	1.542652%	1.542652%	43580 State Route 78	Woodsfield	OH	43793
37	Richard A. Smith and Kimberlee D. Smith, husband and wife	Yes	1.000000	6.184	0.870893%	01-025020.0000	Adams	Monroe	0.870893%	0.870893%	42986 Mt. Carrick Road	Woodsfield	OH	43793
38	Mary Ann Tomlin	Yes	1.000000	0.320	0.045066%	01-025016.0000	Adams	Monroe	0.045066%	0.045066%	43311 State Route 78	Woodsfield	OH	43793
39	Mary Ann Tomlin	Yes	1.000000	0.010	0.001408%	01-025036.0000	Adams	Monroe	0.001408%	0.001408%	43311 State Route 78	Woodsfield	OH	43793
40	Daniel H. Binegar	Yes	0.200000	0.700	0.098581%	01-025007.0000	Adams	Monroe	0.098581%	0.098581%	305 Washington Street Apt 5	Marietta	OH	45750
40	Robert Binegar, Jr.	Yes	0.200000	0.700	0.098581%	01-025007.0000	Adams	Monroe	0.098581%	0.098581%	3308 24th Street NW	Canton	OH	44708

40	Shawn Binegar	Yes	0.200000	0.700	0.098581%	01-025007.0000	Adams	Monroe	0.098581%	0.098581%	3624 West Street	Weirton	WV	26062
40	Susan Blatt	Yes	0.200000	0.700	0.098581%	01-025007.0000	Adams	Monroe	0.098581%	0.098581%	305 Washington Street Apt 5	Marietta	OH	45750
40	Jennifer Butler	Yes	0.200000	0.700	0.098581%	01-025007.0000	Adams	Monroe	0.098581%	0.098581%	506 Fitzhugh Street	Ravenswood	WV	26164
41	Darren W. Robbins and Jeanneane I. Robbins, husband and wife, joint with right of survivor	Yes	1.000000	60.920	8.579363%	01-025005.0000	Adams	Monroe	8.579363%	8.579363%	45658 Township Road 954	Woodsfield	OH	43793
42	Golden Eagle Resources II, LLC	No	1.000000	1.010	0.142238%	01-025021.0000	Adams	Monroe	0.000000%	0.000000%	ATTN: Michael Faust, Authorized Representative 600 Jefferson Street, Suite 2000	Houston	TX	77002
43	Daniel M. Chaplin and Kelly J. Chaplin, husband and wife, as survivorship tenants	Yes	1.000000	1.670	0.235186%	01-025021.1000	Adams	Monroe	0.235186%	0.235186%	45500 Township Road 954	Woodsfield	OH	43793
44	Bounty Minerals, LLC	Yes	0.335196	1.508	0.212425%	01-025010.0000	Adams	Monroe	0.212425%	0.212425%	ATTN: Tracie R. Palmer, President 777 Main Street Suite 3400	Fort Worth	TX	76102
44	Larry Hustack and Lori Hustack, husband and wife, as survivorship tenants	Yes	0.664804	2.992	0.421310%	01-025010.0000	Adams	Monroe	0.421310%	0.421310%	991 Brookpoint Drive	Macedonia	OH	44056
45	GCWJ Properties, LLC	Yes	1.000000	36.720	5.171277%	01-025001.0000	Adams	Monroe	5.171277%	5.171277%	ATTN: Jeff Palte & Coleen Palte, Members 7455 Road 10	Ottawa	OH	45875
46	AMP IV, LP	Yes	0.500000	11.123	1.566382%	01-024004.0000	Adams	Monroe	1.566382%	1.566382%	ATTN: Mark Phillip Thomas, Jr., Chief Operating Officer 225 Ross Street Suite 301	Pittsburgh	PA	15219
46	William H. Dennison, II, a/k/a W. H. Dennison, II	Yes	0.500000	11.123	1.566382%	01-024004.0000	Adams	Monroe	1.566382%	1.566382%	44999 Flauhaus Ridge Road	Woodsfield	OH	43793
47	GCWJ Properties, LLC	Yes	1.000000	17.387	2.448611%	09-001002.0000	Green	Monroe	2.448611%	2.448611%	ATTN: Jeff Palte & Coleen Palte, Members 7455 Road 10	Ottawa	OH	45875
48	AMP IV, LP	Yes	0.250000	10.544	1.484947%	09-002008.0000	Green	Monroe	1.484947%	1.484947%	ATTN: Mark Phillip Thomas, Jr., Chief Operating Officer 225 Ross Street Suite 301	Pittsburgh	PA	15219
48	William H. Dennison, II, a/k/a W. H. Dennison, II	Yes	0.750000	31.633	4.454840%	09-002008.0000	Green	Monroe	4.454840%	4.454840%	44999 Flauhaus Ridge Road	Woodsfield	OH	43793
49	Donald George Thompson and Barbara Jeanette Thompson, Co-Trustees of the Donald George and Barbara Jeanette Thompson Family Trust	Yes	1.000000	12.273	1.728407%	09-002012.0000	Green	Monroe	1.728407%	1.728407%	43904 State Route 255	Woodsfield	OH	43793
50	The Tank First Family Limited Partnership	Yes	1.000000	27.509	3.874092%	09-002009.0000	Green	Monroe	3.874092%	3.874092%	ATTN Helen M. Tank, Trustee 9301 Alamander Court Apt 201	Fort Myers	FL	33919
51	Jalee Geneva Craig	Yes	1.000000	1.611	0.226877%	09-002011.0000	Green	Monroe	0.226877%	0.226877%	44139 Bondi Ridge Rd.	Woodsfield	OH	43793
			Total Unit Acres:		710.076	100.000000%								
			Total Leased Acres:		620.087									

Exhibit A-3													
All Unleased Mineral Owners in the proposed Emerson Belle A Unit.													
Tract Number	Mineral Owner	Leased Yes or No	Decimal Interest in Tract	Surface Acres in Unit (Net)	Tract Participation in Unit (Net)	Tax Map Parcel ID	Tract Surface Use	Township	County	Address	City	State	Zip
3	Dale E. Feldner and Donella K. Feldner, husband and wife	No	1.000000	39.181	5.517860%	04-012005.0000	Agricultural	Center	Monroe	26475 Tabor Ridge	Caldwell	OH	43724
6	Ruth A. Billiter	No	1.000000	2.979	0.419533%	04-012008.0000	Agricultural	Center	Monroe	37157 Mount Street	Sardis	OH	43946
9b	Unknown Heirs or Assigns of Charles R. Buckio	No	0.062500	0.549	0.077307%	01-014001.0000	Agricultural	Adams	Monroe	Unknown	Unknown	Unknown	Unknown
9b	Unknown Heirs or Assigns of George F. Buckio	No	0.062500	0.549	0.077307%	01-014001.0000	Agricultural	Adams	Monroe	Unknown	Unknown	Unknown	Unknown
9b	Jeffrey C. Buckio	No	0.020833	0.183	0.025769%	01-014001.0000	Agricultural	Adams	Monroe	14265 Domingo Court	Reno	NV	89511
9b	Unknown Heirs or Assigns of Louise F. Haefele	No	0.062500	0.549	0.077307%	01-014001.0000	Agricultural	Adams	Monroe	Unknown	Unknown	Unknown	Unknown
11	Unknown Heirs or Assigns of Charles R. Buckio	No	0.062500	0.004	0.000563%	01-014003.0000	Residential	Adams	Monroe	Unknown	Unknown	Unknown	Unknown
11	Unknown Heirs or Assigns of George F. Buckio	No	0.062500	0.004	0.000563%	01-014003.0000	Residential	Adams	Monroe	Unknown	Unknown	Unknown	Unknown
11	Unknown Heirs or Assigns of Louise F. Haefele	No	0.062500	0.004	0.000563%	01-014003.0000	Residential	Adams	Monroe	Unknown	Unknown	Unknown	Unknown
29	Charles P. Schwaben and Kathy J. Schwaben, husband and wife	No	1.000000	2.059	0.289969%	01-025024.0000	Residential	Adams	Monroe	102 Clare Kennedy Drive	Marietta	OH	45750
33	Steven R. Demchak and Dixie M. Demchak, husband and wife	No	1.000000	42.918	6.044142%	01-025008.0000	Agricultural	Adams	Monroe	43883 Mount Carrick Road	Woodsfield	OH	43793
42	Golden Eagle Resources II, LLC	No	1.000000	1.010	0.142238%	01-025021.0000	Residential	Adams	Monroe	ATTN: Michael Faust, Authorized Representative 600 Jefferson Street, Suite 2000	Houston	TX	77002
				Total Unleased Acres:	89.989	12.673121%							
				Total Unit Acres:	710.076								

Exhibit A-4 All Consenting Working Interest Owners in the proposed Emerson Belle A Unit.												
Tract Number	Consenting Working Interest Owner	Address	City	State	Zip	Leased Yes or No	Decimal Interest in Tract	Surface Acres in Unit (Net)	Tract Participation in Unit (Net)	Tax Map Parcel ID	Township	County
1	SWN Production (Ohio), LLC	Attn: Gary Nuckolls 10000 Energy Drive	Spring	TX	77389	Yes	1.000000	11.197	1.576873%	04-011001.0000	Center	Monroe
2	SWN Production (Ohio), LLC	Attn: Gary Nuckolls 10000 Energy Drive	Spring	TX	77389	Yes	1.000000	0.434	0.061120%	01-001008.0000	Adams	Monroe
4	SWN Production (Ohio), LLC	Attn: Gary Nuckolls 10000 Energy Drive	Spring	TX	77389	Yes	1.000000	26.082	3.673128%	01-014004.0000	Adams	Monroe
5	SWN Production (Ohio), LLC	Attn: Gary Nuckolls 10000 Energy Drive	Spring	TX	77389	Yes	1.000000	8.469	1.192689%	01-014006.1000	Adams	Monroe
7	SWN Production (Ohio), LLC	Attn: Gary Nuckolls 10000 Energy Drive	Spring	TX	77389	Yes	1.000000	55.223	7.777055%	04-012009.0000	Center	Monroe
8	SWN Production (Ohio), LLC	Attn: Gary Nuckolls 10000 Energy Drive	Spring	TX	77389	Yes	1.000000	3.852	0.542477%	01-014006.0000	Adams	Monroe
9a	SWN Production (Ohio), LLC	Attn: Gary Nuckolls 10000 Energy Drive	Spring	TX	77389	Yes	1.000000	18.194	2.562261%	01-014001.0000	Adams	Monroe
9b	SWN Production (Ohio), LLC	Attn: Gary Nuckolls 10000 Energy Drive	Spring	TX	77389	Yes	0.791667	6.953	0.979220%	01-014001.0000	Adams	Monroe
10	SWN Production (Ohio), LLC	Attn: Gary Nuckolls 10000 Energy Drive	Spring	TX	77389	Yes	1.000000	0.131	0.018449%	01-014014.0000	Adams	Monroe
11	SWN Production (Ohio), LLC	Attn: Gary Nuckolls 10000 Energy Drive	Spring	TX	77389	Yes	0.812500	0.052	0.007323%	01-014003.0000	Adams	Monroe
12	SWN Production (Ohio), LLC	Attn: Gary Nuckolls 10000 Energy Drive	Spring	TX	77389	Yes	1.000000	10.491	1.477447%	04-012004.0000	Center	Monroe
13	SWN Production (Ohio), LLC	Attn: Gary Nuckolls 10000 Energy Drive	Spring	TX	77389	Yes	1.000000	20.681	2.912505%	04-012003.0000	Center	Monroe
14	SWN Production (Ohio), LLC	Attn: Gary Nuckolls 10000 Energy Drive	Spring	TX	77389	Yes	1.000000	10.996	1.548567%	01-014008.0000	Adams	Monroe
15	SWN Production (Ohio), LLC	Attn: Gary Nuckolls 10000 Energy Drive	Spring	TX	77389	Yes	1.000000	49.575	6.981647%	04-049003.0000	Center	Monroe
16	SWN Production (Ohio), LLC	Attn: Gary Nuckolls 10000 Energy Drive	Spring	TX	77389	Yes	1.000000	0.012	0.001690%	04-049009.0000	Center	Monroe
17	SWN Production (Ohio), LLC	Attn: Gary Nuckolls 10000 Energy Drive	Spring	TX	77389	Yes	1.000000	0.214	0.030138%	01-015003.0000	Center	Monroe
18	SWN Production (Ohio), LLC	Attn: Gary Nuckolls 10000 Energy Drive	Spring	TX	77389	Yes	1.000000	1.477	0.208006%	01-015002.0000	Adams	Monroe
19	SWN Production (Ohio), LLC	Attn: Gary Nuckolls 10000 Energy Drive	Spring	TX	77389	Yes	1.000000	22.463	3.163464%	04-049006.0000	Center	Monroe
20	SWN Production (Ohio), LLC	Attn: Gary Nuckolls 10000 Energy Drive	Spring	TX	77389	Yes	1.000000	19.427	2.735904%	01-015017.0000	Adams	Monroe

21	SWN Production (Ohio), LLC	Attn: Gary Nuckolls 10000 Energy Drive	Spring	TX	77389	Yes	1.000000	6.294	0.886384%	04-049004.0000	Adams	Monroe
22	SWN Production (Ohio), LLC	Attn: Gary Nuckolls 10000 Energy Drive	Spring	TX	77389	Yes	1.000000	9.257	1.303663%	01-015004.0000	Adams	Monroe
23	SWN Production (Ohio), LLC	Attn: Gary Nuckolls 10000 Energy Drive	Spring	TX	77389	Yes	1.000000	0.028	0.003943%	01-015008.0000	Adams	Monroe
24	SWN Production (Ohio), LLC	Attn: Gary Nuckolls 10000 Energy Drive	Spring	TX	77389	Yes	1.000000	1.001	0.140971%	01-015012.0000	Adams	Monroe
25	SWN Production (Ohio), LLC	Attn: Gary Nuckolls 10000 Energy Drive	Spring	TX	77389	Yes	1.000000	59.870	8.431492%	01-015016.0000	Adams	Monroe
26	SWN Production (Ohio), LLC	Attn: Gary Nuckolls 10000 Energy Drive	Spring	TX	77389	Yes	1.000000	0.943	0.132803%	01-015013.0000	Adams	Monroe
27	SWN Production (Ohio), LLC	Attn: Gary Nuckolls 10000 Energy Drive	Spring	TX	77389	Yes	1.000000	5.233	0.736963%	01-015007.0000	Adams	Monroe
28	SWN Production (Ohio), LLC	Attn: Gary Nuckolls 10000 Energy Drive	Spring	TX	77389	Yes	1.000000	10.344	1.456745%	01-015014.0000	Adams	Monroe
30	SWN Production (Ohio), LLC	Attn: Gary Nuckolls 10000 Energy Drive	Spring	TX	77389	Yes	1.000000	0.156	0.021969%	01-025039.0000	Adams	Monroe
31	SWN Production (Ohio), LLC	Attn: Gary Nuckolls 10000 Energy Drive	Spring	TX	77389	Yes	1.000000	0.949	0.133648%	01-025041.0000	Adams	Monroe
32	SWN Production (Ohio), LLC	Attn: Gary Nuckolls 10000 Energy Drive	Spring	TX	77389	Yes	1.000000	0.119	0.016759%	01-025012.0000	Adams	Monroe
34	SWN Production (Ohio), LLC	Attn: Gary Nuckolls 10000 Energy Drive	Spring	TX	77389	Yes	1.000000	2.355	0.331655%	01-025028.0000	Adams	Monroe
35	SWN Production (Ohio), LLC	Attn: Gary Nuckolls 10000 Energy Drive	Spring	TX	77389	Yes	1.000000	9.635	1.356897%	01-025043.0000	Adams	Monroe
36	SWN Production (Ohio), LLC	Attn: Gary Nuckolls 10000 Energy Drive	Spring	TX	77389	Yes	1.000000	10.954	1.542652%	01-025019.0000	Adams	Monroe
37	SWN Production (Ohio), LLC	Attn: Gary Nuckolls 10000 Energy Drive	Spring	TX	77389	Yes	1.000000	6.184	0.870893%	01-025020.0000	Adams	Monroe
38	SWN Production (Ohio), LLC	Attn: Gary Nuckolls 10000 Energy Drive	Spring	TX	77389	Yes	1.000000	0.320	0.045066%	01-025016.0000	Adams	Monroe
39	SWN Production (Ohio), LLC	Attn: Gary Nuckolls 10000 Energy Drive	Spring	TX	77389	Yes	1.000000	0.010	0.001408%	01-025036.0000	Adams	Monroe
40	SWN Production (Ohio), LLC	Attn: Gary Nuckolls 10000 Energy Drive	Spring	TX	77389	Yes	1.000000	3.500	0.492905%	01-025007.0000	Adams	Monroe
41	SWN Production (Ohio), LLC	Attn: Gary Nuckolls 10000 Energy Drive	Spring	TX	77389	Yes	1.000000	60.920	8.579363%	01-025005.0000	Adams	Monroe
43	SWN Production (Ohio), LLC	Attn: Gary Nuckolls 10000 Energy Drive	Spring	TX	77389	Yes	1.000000	1.670	0.235186%	01-025021.1000	Adams	Monroe
44	SWN Production (Ohio), LLC	Attn: Gary Nuckolls 10000 Energy Drive	Spring	TX	77389	Yes	1.000000	4.500	0.633735%	01-025010.0000	Adams	Monroe

45	SWN Production (Ohio), LLC	Attn: Gary Nuckolls 10000 Energy Drive	Spring	TX	77389	Yes	1.000000	36.720	5.171277%	01-025001.0000	Adams	Monroe
46	SWN Production (Ohio), LLC	Attn: Gary Nuckolls 10000 Energy Drive	Spring	TX	77389	Yes	1.000000	22.245	3.132763%	01-024004.0000	Adams	Monroe
47	SWN Production (Ohio), LLC	Attn: Gary Nuckolls 10000 Energy Drive	Spring	TX	77389	Yes	1.000000	17.387	2.448611%	09-001002.0000	Green	Monroe
48	SWN Production (Ohio), LLC	Attn: Gary Nuckolls 10000 Energy Drive	Spring	TX	77389	Yes	1.000000	42.177	5.939787%	09-002008.0000	Green	Monroe
49	SWN Production (Ohio), LLC	Attn: Gary Nuckolls 10000 Energy Drive	Spring	TX	77389	Yes	1.000000	12.273	1.728407%	09-002012.0000	Green	Monroe
50	SWN Production (Ohio), LLC	Attn: Gary Nuckolls 10000 Energy Drive	Spring	TX	77389	Yes	1.000000	27.509	3.874092%	09-002009.0000	Green	Monroe
51	SWN Production (Ohio), LLC	Attn: Gary Nuckolls 10000 Energy Drive	Spring	TX	77389	Yes	1.000000	1.611	0.226877%	09-002011.0000	Green	Monroe
								Total Consenting Acres:		620.087	87.326879%	
								Total Unit Acres:		710.076		

Exhibit A-5												
All Non-Consenting Working Interest Owners in the proposed Emerson Belle A Unit.												
Tract Number	Non-Consenting Working Interest Owner	Address	City	State	Zip	Leased Yes or No	Decimal Interest in Tract	Surface Acres in Unit (Net)	Tract Participation in Unit (Net)	Tax Map Parcel ID	Township	County
There are no non-consenting working interest owners in the proposed Emerson Belle A Unit.												
						Total Non-Consenting Acres:	0.000	0.000000%				
						Total Unit Acres:	710.076					

Exhibit A-6												
All parcels subject to pending ownership litigation or potential adverse ownership claims in the proposed Emerson Belle A Unit.												
Tract Number	Ownership Dispute Parties	Address	City	State	Zip	Leased Yes or No	Potential Decimal Interest in Tract	Potential Surface Acres in Unit (Net)	Potential Tract Participation in Unit (Net)	Tax Map Parcel ID	Township	County
9b	Dr. David C. Buckis	8145 Rondelay Lane	Fairfax Station	VA	22039	Yes	0.062500	0.549	0.077307%	01-014001.0000	Adams	Monroe
	Perry M. Kacik	2402 West Street	Brookfield	VT	05036	No						
	The Estate of Walter Scott Kidder, deceased	ATTN: Ann Gillin, Executrix 1060 Kings Ridge Blvd	Wadsworth	OH	44281	No						
	Ann Gillin	1060 Kings Ridge Blvd	Wadsworth	OH	44281	No						
	Michael Kidder	380 Hathaway Drive	Cuyahoga Falls	OH	44223	No						
	Walter Kidder	80 North Portage Path, Apt. 12B2	Akron	OH	44303	No						
	Eleanor Graves	38 School Street	Hatfield	MA	01038	No						
	Margaret Burroughs	2123 Clarence Ave.	Lakewood	OH	44107	No						
	Maryellen Meissner	1100 Dranesville Road Apt 421	Herndon	VA	20170	No						
9b	Elizabeth Marie Sacksteder	333 Central Park W Apt 125	New York	NY	10025	No	0.062500	0.549	0.077307%	01-014001.0000	Adams	Monroe
	Michael Fairchild	5100 Brent Road	Longview	TX	75604	No						
	Ben Kincaid	9194 County Road 137 N	Overton	TX	75684	No						
	Michael Kincaid	501 Ross Drive	Kilgore	TX	75662	No						
9b	Unknown Heirs or Assigns of Dorothy Deaton Gustafson	Unknown	Unknown	Unknown	Unknown	No	0.062500	0.549	0.077307%	01-014001.0000	Adams	Monroe
	Unknown Heirs or Assigns of Richard Charles Fussell	Unknown	Unknown	Unknown	Unknown	No						
	Thomas P. Fussell	1 Lake Front Drive	Hilltop Lakes	TX	77871	No						
	James R. Haefele	1308 Old Stickney Point Rd Apt 21	Sarasota	FL	34242	No						
	Unknown Heirs or Assigns of Kenneth W. Haefele	Unknown	Unknown	Unknown	Unknown	No						
11	Unknown Heirs or Assigns of Thomas C. Haefele	Unknown	Unknown	Unknown	Unknown	No	0.062500	0.004	0.000563%	01-014003.0000	Adams	Monroe
	Dr. David C. Buckis	8145 Rondelay Lane	Fairfax Station	VA	22039	Yes						
	Perry M. Kacik	2402 West Street	Brookfield	VT	05036	No						
	The Estate of Walter Scott Kidder, deceased	ATTN: Ann Gillin, Executrix 1060 Kings Ridge Blvd	Wadsworth	OH	44281	No						
	Ann Gillin	1060 Kings Ridge Blvd	Wadsworth	OH	44281	No						
	Michael Kidder	380 Hathaway Drive	Cuyahoga Falls	OH	44223	No						
	Walter Kidder	80 North Portage Path, Apt. 12B2	Akron	OH	44303	No						
	Eleanor Graves	38 School Street	Hatfield	MA	01038	No						
	Margaret Burroughs	2123 Clarence Ave.	Lakewood	OH	44107	No						
11	Maryellen Meissner	1100 Dranesville Road Apt 421	Herndon	VA	20170	No	0.062500	0.004	0.000563%	01-014003.0000	Adams	Monroe
	Elizabeth Marie Sacksteder	333 Central Park W Apt 125	New York	NY	10025	No						
	Michael Fairchild	5100 Brent Road	Longview	TX	75604	No						
	Ben Kincaid	9194 County Road 137 N	Overton	TX	75684	No						
11	Michael Kincaid	501 Ross Drive	Kilgore	TX	75662	No	0.062500	0.004	0.000563%	01-014003.0000	Adams	Monroe
	Unknown Heirs or Assigns of Dorothy Deaton Gustafson	Unknown	Unknown	Unknown	Unknown	No						
	Unknown Heirs or Assigns of Richard Charles Fussell	Unknown	Unknown	Unknown	Unknown	No						
	Thomas P. Fussell	1 Lake Front Drive	Hilltop Lakes	TX	77871	No						
	James R. Haefele	1308 Old Stickney Point Rd Apt 21	Sarasota	FL	34242	No						
38	Unknown Heirs or Assigns of Kenneth W. Haefele	Unknown	Unknown	Unknown	Unknown	No	1.000000	0.320	0.045066%	01-025016.0000	Adams	Monroe
	Unknown Heirs or Assigns of Thomas C. Haefele	Unknown	Unknown	Unknown	Unknown	No						
38	David V. Paulus, Trustee of the Paulus Family Trust dated August 19, 2019*	421 Eastern Avenue	Woodsfield	OH	43793	Yes	1.000000	0.320	0.045066%	01-025016.0000	Adams	Monroe

39	David V. Paulus, Trustee of the Paulus Family Trust dated August 19, 2019*	421 Eastern Avenue	Woodsfield	OH	43793	Yes	1.000000	0.010	0.001408%	01-025036.0000	Adams	Monroe
51	Willickie, LLC	ATTN: William Thomas 390 US Highway 40	Lore City	OH	43755	Yes	0.500000	0.806	0.113439%	09-002011.0000	Green	Monroe
* Indicates a party who has a potential claim to a working interest in an oil and gas lease that Applicant believes to be inoperative.					Total Acres Subject to Pending Ownership Litigation or Potential Ownership Claims:			2.794	0.393523%			
					Total Unit Acres:			710.076				

EXHIBIT “B”

Attached to and made a part of that certain Operating Agreement dated April 6, 2023,
as approved by the Ohio Department of Natural Resources, Division of Oil and Gas Resources Management,
for the Emerson Belle A Unit.

**PAID-UP
OIL & GAS LEASE**
Lease No.

11/20 - OH

This Lease, made this ___ day of __ 20 __, by and between __, of __, hereinafter collectively called “Lessor.” and **SWN Production (Ohio), LLC**, a Texas limited liability company, 10000 Energy Drive, Spring, Texas 77389, hereinafter called “Lessee.”

WITNESSETH, that for and in consideration of Ten Dollars (\$10.00) and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, and of the mutual covenants and agreements hereinafter set forth, the Lessor and Lessee agree as follows:

LEASING CLAUSE. Lessor hereby leases exclusively to Lessee 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 gaseous constituents, whether hydrocarbon or non-hydrocarbon, underlying the land herein leased, together with such exclusive rights as may be necessary or convenient for Lessee, at its election, to explore for, develop, produce, measure, and market production from the Leasehold, or from other lands, using methods and techniques which are not restricted to current technology, including, without limitation, the right to conduct geophysical and other exploratory tests; to drill, maintain, operate, cease to operate, plug, abandon, and remove wells; to use or install roads over and across the Leasehold for use in development of the Leasehold or other lands, electric power and telephone facilities, water impoundments, and to construct pipelines with appurtenant facilities, including data acquisition, compression and collection facilities for use in the production and transportation of products from the Leasehold or from other lands across the Leasehold, to use oil, gas, and non-domestic water sources, free of cost, to store gas of any kind underground, regardless of the source thereof, including the injecting of gas therein and removing the same therefrom; to protect stored gas; to operate, maintain, repair, and remove material and equipment; to use and occupy the subsurface of the Leasehold for the drilling of a wellbore(s) for use in development of the Leasehold or other lands.

DESCRIPTION. The Leasehold is located in the Township of __, in the County of __, in the State of Ohio, and described as follows:

Section No.: __; Township No.: __; Range No. : ____
Property Tax Parcel Identification Number:

and is bounded formerly or currently as follows:

- On the North by lands of __;
- On the East by lands of __;
- On the South by lands of __;
- On the West by lands of __;

including lands acquired from __ by virtue of __ dated __, and recorded in __ Book __, at Page __, and described for the purposes of this agreement as containing a total of __ Leasehold acres, whether actually more or less, and including contiguous lands owned by Lessor. This Lease also covers and includes, in addition to that above described, all land, if any, contiguous or adjacent to or adjoining the land above described and (a) owned or claimed by Lessor, by limitation, prescription, possession, reversion or unrecorded instrument or (b) as to which Lessor has a preference right of acquisition. Lessor agrees to execute any supplemental instrument requested by Lessee for a more complete or accurate description of said land.

LEASE TERM. This Lease shall remain in force for a primary term of one (1) year from 12:00 A.M. __ (effective date) to 11:59 P.M. __ (last day of primary term) and shall continue beyond the primary term as to the entirety of the Leasehold if any of the following is satisfied: (i) operations are conducted on the Leasehold or lands pooled/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/unitized therewith, or (iii) oil or gas, or their constituents, are produced from the Leasehold or lands pooled/unitized therewith, or (iv) if the Leasehold or lands pooled/unitized therewith is used for the underground storage of gas, or for the protection of stored gas, or (v) if prescribed payments are made, or (vi) if Lessee’s operations are delayed, postponed or interrupted as a result of any coal, stone or other mining or mining related operation under any existing and effective lease, permit or authorization covering such operations on the leased premises or on other lands affecting the leased premises, such delay will automatically extend the primary or secondary term of this oil and gas lease without additional compensation or performance by Lessee for a period of time equal to any such delay, postponement 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 below shall be conclusive evidence that the Lease has been extended beyond the primary term.

EXTENSION OF PRIMARY TERM. Lessee has the option to extend the primary term of this Lease as to all or any part of the acreage then covered hereby for up to a maximum of __ (__) consecutive one (1) year terms from the expiration of the primary term of this Lease; each such extension of the primary term to be under the same terms and conditions as contained in this Lease. Lessee may exercise this option to extend the primary term of this Lease if on or before the expiration date of the primary term or any extension thereof, Lessee pays or tenders to the Lessor or to the Lessor’s credit an amount equal to the sum of the initial consideration given for the execution hereof (each an “Extension Payment”), which shall be paid in proportion to the number of net acres actually extended. The Extension Payment shall be reduced for any portion of the leased premises that is being maintained by other provisions of this Lease prior to the expiration of the Primary Term or any extension thereof. Exercise of this option is at Lessee’s sole discretion and may be invoked by Lessee where no other alternative of the Lease Term clause extends this Lease beyond the primary term or any extension thereof. Tender of the Extension Payment shall be deemed to have been properly made either to Lessor in person or by mailing the same to Lessor at their last known address on or before the expiration of the primary term of this lease or any extension thereof.

NO AUTOMATIC TERMINATION OR FORFEITURE.

(A) CONSTRUCTION OF LEASE: The language of this Lease (including, but not limited to, the Lease Term and Extension of Term clauses) shall never be read 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 above. 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/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 action or proceeding to enforce a claim of termination, cancellation, expiration or forfeiture due to any action or inaction by the Lessee, including, but not limited to making any prescribed payments authorized under the terms of this Lease, unless the Lessee has received written notice of Lessor's demand and thereafter fails or refuses to satisfy or provide justification responding to Lessor's demand within 60 days from the receipt of such notice. If Lessee timely responds to Lessor's demand, but in good faith disagrees with Lessor's position and sets 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 the dispute, other than claims for payments that may be due under the terms of this Lease.

PAYMENTS TO LESSOR. In addition to the bonus paid by Lessee for the execution hereof, Lessee covenants to pay Lessor, proportionate to Lessor's percentage of ownership, as follows:

(A) DELAY RENTAL: To pay Lessor as Delay Rental, after the first year, at the rate of five dollars (\$5.00) per net acre per year payable in advance. **The parties hereto agree that this is a Paid-Up Lease with no further Delay Rental and/or Delay in Marketing payments due to Lessor during the primary term or , if so exercised, the extended primary term hereof.**

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

1. OIL: To deliver to the credit of Lessor a Royalty equal to one-eighth (1/8) of the net revenue realized by Lessee for all oil and any constituents thereof produced and marketed from the Leasehold, less the cost to transport, handle, separate, meter, treat, process and market the oil.

2. GAS: To pay Lessor on actual volumes of gas and any constituents thereof sold from said land, one-eighth 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. 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 one hundred dollars (\$100.00).

(C) DELAY IN MARKETING: In the event that Lessee drills a well on the Leasehold or lands pooled/unitized therewith that is awaiting completion (including, without limitation, hydraulic fracture stimulation), or that Lessee deems to be capable of production, but does not market producible gas, oil, or their constituents, therefrom, and there is no other basis for extending this Lease, Lessee shall pay after the primary term and until such time as marketing is established (or Lessee surrenders the Lease) a Delay in Marketing payment equal in amount and frequency to the annual Delay Rental payment, and this Lease shall remain in full force and effect to the same extent as payment of Royalty.

(D) SHUT-IN: In the event that production of oil, gas, or their constituents, is interrupted and not marketed for a period of twelve (12) months, and there is no producing well on the Leasehold or lands pooled/unitized therewith, Lessee shall, after the primary term, as Royalty for constructive production, pay a Shut-in Royalty equal in amount and frequency to the annual Delay Rental payment until such time as production is re-established (or Lessee surrenders the Lease) and this Lease shall remain in full force and effect. During 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 (12) months, this Lease shall remain in full force and effect without payment of Royalty or Shut-in Royalty.

(E) DAMAGES: Lessee will remove unnecessary equipment and materials and reclaim all disturbed lands at the completion of all activities on the Leasehold, and Lessee agrees to repair any damaged improvements to the land and pay for the loss of growing crops or marketable timber.

(F) 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.

(G) CHANGE IN LAND OWNERSHIP: Lessee shall not be bound by any change in the ownership of the Leasehold until furnished by Lessor 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 a change had not occurred.

(H) TITLE: If Lessee receives evidence that Lessor does not have title to all or any part of the rights herein leased, Lessee may immediately withhold payments that would be otherwise due and payable hereunder to Lessor until the adverse claim is fully resolved. Lessor represents and warrants that there is no existing oil and gas lease which is presently in effect covering the Leasehold.

(I) 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 costs, by deduction from any future payments to Lessor or by any other lawful means. In the event the leased lands are encumbered by a prior mortgage, then, notwithstanding anything contained herein to the contrary, Lessee shall have the right to suspend the payment of any royalties due hereunder, without liability for interest, until such time as Lessor obtains at its own expense a subordination of the mortgage in a form acceptable to Lessee.

(J) CHARACTERIZATION OF PAYMENTS: Payments set forth herein are covenants, not special limitations, regardless of the manner in which these payments may be invoked. 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 bonus payments 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.

(K) PAYMENT REDUCTIONS. If Lessor owns a lesser interest in the oil or gas than the entire undivided fee simple estate, then the rentals (except for Delay Rental payments as set forth above), royalties and shut-in royalties hereunder shall be paid to Lessor only in the proportion which Lessor's interest bears to the whole and undivided fee.

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 from the unit, or payment of Royalty, Shut-in Royalty, Delay in Marketing payment 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, or the deeded acreage amount, Lessee may, at its option, rely on the latter as being determinative for the purposes of this paragraph.

In addition to the rights granted above, Lessor grants Lessee the right, in Lessee's sole discretion, to develop this Lease, or lands pooled or unitized therewith, jointly with adjacent leases or units by horizontal wells that cross or traverse one or more other leases or pools/units ("Multi-Unit Wells"). In the event that Lessee drills a Multi-Unit Well on the Leasehold, or lands pooled or unitized therewith, Lessor agrees to accept and receive out of the production or revenue realized from the production from such a Multi-Unit Well an allocated proportionate share of the Royalty which shall be calculated by dividing (i) the linear length of perforated horizontal wellbore of the Multi-Unit Well within the Lease, or the pool or unit if the Lease is then pooled or unitized, by (ii) the entire linear length of the Multi-Unit Well's horizontal wellbore from the first perforation along the wellbore to the final perforation along the wellbore. No production will be allocated to unperforated sections of the wellbore from the wellhead to the first perforation. If the Lease is then pooled or unitized, the share of Royalty shall then be allocated within the pool or unit as provided hereinabove. Drilling, operations in preparation for drilling, production, or shut-in production from the Multi-Unit Well, or payment of Royalty, Shut-in Royalty, Delay in Marketing payment or Delay Rental attributable to this Lease, or lands pooled or unitized therewith, or any other lands or units which are developed with the Multi-Unit Well shall have the same effect upon the terms of this Lease as if a Multi-Unit Well were located on, or the subject activity attributable to, the Leasehold.

FACILITIES. Lessee shall not drill a well on the Leasehold within 200 feet of any structure located on the Leasehold without Lessor's 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.

CONVERSION TO STORAGE. Lessee is hereby granted the right to convert the Leasehold or lands pooled/unitized therewith to gas storage. At the time of conversion, Lessee shall pay Lessor's proportionate part for the estimated recoverable gas remaining in any well drilled pursuant to this Lease using methods of calculating gas reserves as are generally accepted by the natural gas industry and, in the event that all wells on the Leasehold and/or lands pooled/unitized therewith have permanently ceased production, Lessor shall be paid a Conversion to Storage payment in an amount equal to Delay Rental for as long thereafter as the Leasehold or lands pooled/unitized therewith is/are used for gas storage or for protection of gas storage; such Conversion to Storage payment shall first become due upon the next ensuing Delay Rental anniversary date. The use of any part of the Leasehold or lands pooled or unitized therewith for the underground storage of gas, or for the protection of stored gas will extend this Lease beyond the primary term as to all rights granted by this Lease, including but not limited to production rights, regardless of whether the production and storage rights are owned together or separately.

DISPOSAL AND INJECTION WELLS. Lessor hereby grants to Lessee the right to drill wells and/or re-enter existing wells, including necessary location, roadway and pipeline easements and rights of way, on any part of the Leasehold or lands pooled or unitized therewith for the disposal and/or injection into any subsurface strata, other than a potable water strata, of air, gas, brine, completion and production fluids, waste water and any hydrocarbon related substances from any source, including, but not limited to wells on the Leasehold or lands pooled or unitized therewith or from properties and lands outside the Leasehold or lands pooled or unitized therewith, and to conduct all operations as may be required, for so long as necessary and required by Lessee for purposes as herein provided. If, at the expiration of the primary term, Lessee is disposing and/or injecting into any subsurface strata underlying the Leasehold or lands pooled or unitized therewith or conducting operations for such disposal and/or injection and this lease is not being maintained by any other provision contained herein and no other payments are being made to Lessor as prescribed hereunder, Lessee shall pay to Lessor the sum of one thousand dollars (\$1,000.00) per year, proportionately reduced to Lessor's ownership in the Leasehold and surface as it bears to the full and undivided estate, beginning on the next anniversary date of this Lease and said payment and term of this Lease, insofar as to terms and provisions contained herein applicable to disposal and injection wells, shall continue annually thereafter for so long as necessary and required by Lessee for purposes as herein provided and until all disposal and/or injection wells located on the Leasehold or on lands pooled or unitized therewith are plugged and abandoned. Lessor agrees that if required by Lessee, regulatory agency or governmental authority having jurisdiction, Lessor shall enter a separate Disposal and Injection Agreement with Lessee for the purposes as herein provided.

TITLE AND INTERESTS. 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.

LEASE DEVELOPMENT. There is no implied covenant to drill, prevent drainage, further develop or market production within the primary term or any extension of term of this Lease. There shall be no Leasehold forfeiture, termination, expiration or cancellation for failure to comply with said implied covenants. Provisions herein, including, but not limited to the prescribed payments, constitute full compensation for the privileges herein granted.

COVENANTS. This Lease and its expressed or implied covenants shall not be subject to termination, forfeiture of rights, or damages due to failure to comply with obligations if compliance is effectively prevented by federal, state, or local law, regulation, or decree, or the acts of God and/or third parties over whom Lessee has no control.

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 which will take effect upon expiration of this Lease ("Top Lease") covering all or part of the Leasehold, Lessee shall have the continuing option by meeting any such offer to acquire a 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

Name/Notary Public (print): _____

ACKNOWLEDGMENT

STATE OF)
) SS:
COUNTY OF)

On this the day of 20 , before me, the undersigned officer, personally appeared , known to me (or satisfactorily proven) to be the person(s) whose name(s) is/are subscribed to the within instrument, and acknowledged that **he/she/they** executed the same for the purposes therein contained.

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

My Commission Expires: _____
Signature/Notary Public: _____
Name/Notary Public (print): _____

ACKNOWLEDGMENT

STATE OF)
) SS:
COUNTY OF)

On this the day of 20 , before me, the undersigned officer, personally appeared , known to me (or satisfactorily proven) to be the person(s) whose name(s) is/are subscribed to the within instrument, and acknowledged that **he/she/they** executed the same for the purposes therein contained.

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

My Commission Expires: _____
Signature/Notary Public: _____
Name/Notary Public (print): _____

CORPORATE ACKNOWLEDGMENT

STATE OF)
) SS:
COUNTY OF)

On this the ____ day of ____ 20 , before me, the undersigned authority, personally appeared ____ , who acknowledged himself to be the ____ of ____, and that (s)he as such ____, being authorized to do so, executed the foregoing instrument for the purposes therein contained by signing the name of the corporation by himself/herself as ____ , a ____ corporation.

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

My Commission Expires: _____
Signature/Notary Public: _____
Name/Notary Public (print): _____

Exhibit “ C ” ACCOUNTING PROCEDURE JOINT OPERATIONS

Attached to and made a part of that certain Operating Agreement dated April 6, 2023, as approved by the Ohio Department of Natural Resources, Division of Oil and Gas Resources Management, for the Emerson Belle A Unit.

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
- Responsibility 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.

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.

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

those Non-Operators approving such audit.

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

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

B. The Operator shall provide a written response to all exceptions in an audit report within one hundred eighty (180) days after Operator receives such report. Denied exceptions should be accompanied by a substantive response. If the Operator fails to provide substantive response to an exception within this one hundred eighty (180) day period, the Operator will owe interest on that exception or portion thereof, if ultimately 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 Payments by the Parties*).

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

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

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

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

6. APPROVAL BY PARTIES

A. GENERAL MATTERS

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

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

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

B. AMENDMENTS

If the Agreement to which this Accounting Procedure is attached contains no contrary provisions in regard thereto, this Accounting Procedure can be amended by an affirmative vote of two (2) or more Parties, one of which is the Operator, having a combined working interest of at least 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.

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

3. MATERIAL

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

4. TRANSPORTATION

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

5. SERVICES

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

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

6. EQUIPMENT AND FACILITIES FURNISHED BY OPERATOR

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

- A. The Operator shall charge the Joint Account for use of Operator-owned equipment and facilities, including but not limited to production facilities, Shore Base Facilities, Offshore Facilities, and Field Offices, at rates commensurate with the costs of ownership and operation. The cost of Field Offices shall be chargeable to the extent the Field Offices provide direct service to personnel who are chargeable pursuant to Section II.2.A (*Labor*). Such rates may include labor, maintenance, repairs, other operating expense, insurance, taxes, depreciation using straight line depreciation method, and interest on gross investment less accumulated depreciation not to exceed _____ten_____ percent (____10____%) per annum; provided, however, depreciation shall not be charged when the

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

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

7. AFFILIATES

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

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

8. DAMAGES AND LOSSES TO JOINT PROPERTY

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

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

9. LEGAL EXPENSE

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

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

10. TAXES AND PERMITS

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

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

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

Charges to the Joint Account resulting from sales/use tax audits, including extrapolated amounts and penalties and interest, are permitted, provided the Non-Operator shall be allowed to review the invoices and other underlying source documents which served as the basis for 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 review such documentation, the sales/use tax amount shall not be directly charged unless the Operator can conclusively document the amount owed by the Joint Account.

11. INSURANCE

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

12. COMMUNICATIONS

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

13. ECOLOGICAL, ENVIRONMENTAL, AND SAFETY

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

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

14. ABANDONMENT AND RECLAMATION

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

15. OTHER EXPENDITURES

Any other expenditure not covered or dealt with in the foregoing provisions of this Section II (*Direct Charges*), or in Section III (*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 Joint Operations. Charges made under this Section II.15 shall require approval of the Parties, pursuant to Section I.6.A (*General Matters*).

III. OVERHEAD

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

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

- warehousing, other than for warehouses that are jointly owned under this Agreement
- design and drafting (except when allowed as a direct charge under Sections II.13, III.1.A(ii), and III.2, Option B)
- inventory costs not chargeable under Section V (*Inventories of Controllable Material*)
- procurement
- administration
- accounting and auditing
- 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 \$ 25,000 (prorated for less than a full month)

Producing Well Rate per month \$ 2,500

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

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

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

C. OVERHEAD—PERCENTAGE BASIS

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

2. OVERHEAD—MAJOR CONSTRUCTION AND CATASTROPHE

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

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

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

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

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

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

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

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

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

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

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 (*Affiliates*), the provisions of this Section III.2 shall govern.

3. AMENDMENT OF OVERHEAD RATES

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 or excessive, in accordance with the provisions of Section I.6.B (*Amendments*).

IV. MATERIAL PURCHASES, TRANSFERS, AND DISPOSITIONS

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

1. DIRECT PURCHASES

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

2. TRANSFERS

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.

A. PRICING

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:

- (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).
 - (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*).
 - (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*).
- (2) Based on a price quotation from a vendor that reflects a current realistic acquisition cost.
- (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.
- (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.

B. FREIGHT

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:

- (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.
- (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.
- (3) Transportation costs for special end tubular goods shall be calculated using the interstate truck rate from Houston, Texas, to the Railway Receiving Point.
- (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

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.

C. TAXES

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.

D. CONDITION

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

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

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

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

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

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

The cost of reconditioning may be charged to the receiving property to the extent Condition “C” value, plus cost of reconditioning, does not exceed Condition “B” value.

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

(5) Condition “E” – Junk shall be priced at prevailing scrap value prices.

E. OTHER PRICING PROVISIONS

(1) Preparation Costs

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

(2) Loading and Unloading Costs

Loading and unloading costs related to the movement of the Material to the Joint Property shall be charged in accordance with the methods specified in COPAS MFI-38 (“Material Pricing Manual”).

3. DISPOSITION OF SURPLUS

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

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

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

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

4. SPECIAL PRICING PROVISIONS

A. PREMIUM PRICING

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

B. SHOP-MADE ITEMS

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

C. MILL REJECTS

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

V. INVENTORIES OF CONTROLLABLE MATERIAL

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

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

1. DIRECTED INVENTORIES

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

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

- A. A per diem rate for each inventory person, representative of actual salaries, wages, and payroll burdens and benefits of the personnel 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 be applied to a reasonable number of days for pre-inventory work and report preparation.
- B. Actual transportation costs and Personal Expenses for the inventory team.
- C. Reasonable charges for report preparation and distribution to the Non-Operators.

2. NON-DIRECTED INVENTORIES**A. OPERATOR INVENTORIES**

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

B. NON-OPERATOR INVENTORIES

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

C. SPECIAL INVENTORIES

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

EXHIBIT “D”

Attached to and made a part of that certain Operating Agreement dated April 6, 2023, as approved by the Ohio Department of Natural Resources, Division of Oil and Gas Resources Management, for the Emerson Belle A Unit.

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 Operating Agreement dated April 6, 2023, as approved by the Ohio Department of Natural Resources, Division of Oil and Gas Resources Management, for the Emerson Belle A Unit.

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 Platts Inside FERC's Gas Market Report ("Platts IFERC") Dominion Transmission Inc., Appalachia Index 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"

EXHIBIT “H”

Attached to and made a part of that certain Operating Agreement dated April 6, 2023, as approved by the Ohio Department of Natural Resources, Division of Oil and Gas Resources Management, for the Emerson Belle A Unit.

MODEL FORM RECORDING SUPPLEMENT TO OPERATING AGREEMENT AND FINANCING STATEMENT

THIS AGREEMENT, entered into by and between SWN Production (Ohio), LLC, hereinafter referred to as “Operator,” and the signatory party or parties other than Operator, hereinafter referred to individually as “Non-Operator,” and collectively as “Non-Operators.”

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” (said land, Leases and Interests being hereinafter called the “Contract Area”), and in any instance in which the Leases or Interests of a party are not of record, the record owner and the party hereto that owns the interest or rights therein are reflected on Exhibit “A”;

WHEREAS, the parties hereto have executed an Operating Agreement dated April 6, 2023 (herein the “Operating Agreement”), covering the Contract Area for the purpose of exploring and developing such lands, Leases and Interests for Oil and Gas; and

WHEREAS, the parties hereto have executed this agreement for the purpose of imparting notice to all persons of the rights and obligations of the parties under the Operating Agreement and for the further purpose of perfecting those rights capable of perfection.

NOW, THEREFORE, in consideration of the mutual rights and obligations of the parties hereto, it is agreed as follows:

1. This agreement supplements the Operating Agreement, which Agreement in its entirety is incorporated herein by reference, and all terms used herein shall have the meaning ascribed to them in the Operating Agreement.
1. The parties do hereby agree that:
 - A. The Oil and Gas Leases and/or Oil and Gas Interests of the parties comprising the Contract Area shall be subject to and burdened with the terms and provisions of this agreement and the Operating Agreement, and the parties do hereby commit such Leases and Interests to the performance thereof.
 - B. The exploration and development of the Contract Area for Oil and Gas shall be governed by the terms and provisions of the Operating Agreement, as supplemented by this agreement.
 - C. All costs and liabilities incurred in operations under this agreement and the Operating Agreement shall be borne and paid, and all equipment and materials acquired in operations on the Contract Area shall be owned, by the parties hereto, as provided in the Operating Agreement.
 - D. Regardless of the record title ownership to the Oil and Gas Leases and/or Oil and Gas Interests identified on Exhibit “A,” all production of Oil and Gas from the Contract Area shall be owned by the parties as provided in the Operating Agreement; provided nothing contained in this agreement shall be deemed an assignment or cross-assignment of interests covered hereby.
 - E. Each party shall pay or deliver, or cause to be paid or delivered, all burdens on its share of the production from the Contract Area as provided in the Operating Agreement.
 - F. An overriding royalty, production payment, net profits interest or other burden payable out of production hereafter created, assignments of production given as security for the payment of money and those overriding royalties, production payments and other burdens payable

out of production heretofore created and defined as Subsequently Created Interests in the Operating Agreement shall be (i) borne solely by the party whose interest is burdened therewith, (ii) subject to suspension if a party is required to assign or relinquish to another party an interest which is subject to such burden, and (iii) subject to the lien and security interest hereinafter provided if the party subject to such burden fails to pay its share of expenses chargeable hereunder and under the Operating Agreement, all upon the terms and provisions and in the times and manner provided by the Operating Agreement.

- G. The Oil and Gas Leases and/or Oil and Gas Interests which are subject hereto may not be assigned or transferred except in accordance with those terms, provisions and restrictions in the Operating Agreement regulating such transfers.

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

- H. The parties shall have the right to acquire an interest in renewal, extension and replacement leases, leases proposed to be surrendered, wells proposed to be abandoned, and interests to be relinquished as a result of non-participation in subsequent operations, all in accordance with the terms and provisions of the Operating Agreement.

- I. The rights and obligations of the parties and the adjustment of interests among them in the event of a failure or loss of title, each party's right to propose operations, obligations with respect to participation in operations on the Contract Area and the consequences of a failure to participate in operations, the rights and obligations of the parties regarding the marketing of production, and the rights and remedies of the parties for failure to comply with financial obligations shall be as provided in the Operating Agreement.

- J. Each party's interest under this agreement and under the Operating Agreement shall be subject to relinquishment for its failure to participate in subsequent operations and each party's share of production and costs shall be reallocated on the basis of such relinquishment, all upon the terms and provisions provided in the Operating Agreement.

- K. All other matters with respect to exploration and development of the Contract Area and the ownership and transfer of the Oil and Gas Leases and/or Oil and Gas Interest therein shall be governed by the terms and provisions of the Operating Agreement.

3. The parties hereby grant reciprocal liens and security interests as follows:

- A. 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 and the Operating Agreement including but not limited to payment of expense, interest and fees, the proper disbursement of all monies paid under this agreement and the Operating Agreement, the assignment or relinquishment of interest in Oil and Gas Leases as required under this agreement and the Operating Agreement, and the proper performance of operations under this agreement and the Operating Agreement. 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 and the Operating 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 the sale of production at the wellhead), contract rights, inventory and general intangibles relating thereto or arising therefrom, and all proceeds and products of the foregoing.

- B. 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

and the Operating 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 and the Operating 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 the Operating Agreement and this instrument as to all obligations attributable to such interest under this agreement and the Operating Agreement whether or not such obligations arise before or after such interest is acquired.

- C. To the extent that the 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, interest 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, 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.
 - D. If any party fails to pay its share of expenses 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 this paragraph 3 and in the Operating Agreement, and each paying party may independently pursue any remedy available under the Operating Agreement or otherwise.
 - E. If any party does not perform all of its obligations under this agreement or the Operating Agreement, and the failure to perform subjects such party to foreclosure or execution proceedings pursuant to the provisions of this agreement or the Operating 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 marshalling of assets 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 or under the Operating Agreement, such power to be exercised in the manner provided by applicable law or otherwise in a commercially reasonable manner and upon reasonable notice.
 - F. The lien and security interest granted in this paragraph 3 supplements identical rights granted under the Operating Agreement.
 - G. 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 under this agreement and the Operating Agreement for services performed or materials supplied by Operator.
 - H. The above described security will be financed at the wellhead of the well or wells located on the Contract Area and this Recording Supplement may be filed in the land records in the County or Parish in which the Contract Area is located, and as a financing statement in all recording offices required under the Uniform Commercial Code or other applicable state statutes to perfect the above-described security interest, and any party hereto may file a continuation statement as necessary under the Uniform Commercial Code, or other state laws.
4. This agreement shall be effective as of the date of the Operating Agreement as above recited. Upon termination of this agreement and the Operating Agreement and the satisfaction of all

obligations thereunder, Operator is authorized to file of record in all necessary recording offices a notice of termination, and each party hereto agrees to execute such a notice of termination as to Operator’s interest, upon the request of Operator, if Operator has complied with all of its financial obligations.

- 5. This agreement and the Operating Agreement shall be binding upon and shall inure to the benefit of the parties hereto and their respective heirs, devisees, legal representatives, successors and assigns. No sale, encumbrance, transfer or other disposition shall be made by any party of any interest in the Leases or Interests subject hereto except as expressly permitted under the Operating Agreement and, if permitted, shall be made expressly subject to this agreement and the Operating Agreement and without prejudice to the rights of the other parties. If the transfer is permitted, the assignee of an ownership interest in any Oil and Gas Lease shall be deemed a party to this agreement and the Operating Agreement as to the interest assigned from and after the effective date of the transfer of ownership; provided, however, that the other parties shall not be required to recognize any such sale, encumbrance, transfer or other disposition for any purpose hereunder until thirty (30) days after they have received a copy of the instrument of transfer or other satisfactory evidence thereof in writing from the transferor or transferee. No assignment or other disposition of interest by a party shall relieve such party of obligations previously incurred by such party under this agreement or the Operating Agreement with respect to the interest transferred, including without limitation the obligation of a party to pay all costs attributable to an operation conducted under this agreement and the Operating Agreement in which such party has agreed to participate prior to making such assignment, and the lien and security interest granted by Article VII.B. of the Operating Agreement and hereby shall continue to burden the interest transferred to secure payment of any such obligations.
- 6. In the event of a conflict between the terms and provisions of this agreement and the terms and provisions of the Operating Agreement, then, as between the parties, the terms and provisions of the Operating Agreement shall control.
- 7. This agreement shall be binding upon each Non-Operator when this agreement or a counterpart thereof has been executed by such Non-Operator and Operator notwithstanding that this agreement is not then or thereafter executed by all of the parties to which it is tendered or which are listed on Exhibit “A” as owning an interest in the Contract Area or which own, in fact, an interest in the Contract Area. In the event that any provision herein is illegal or unenforceable, the remaining provisions shall not be affected, and shall be enforced as if the illegal or unenforceable provision did not appear herein.

IN WITNESS WHEREOF, this agreement shall be effective as of the 6th day of April, 2023.

ATTEST OR WITNESS

OPERATOR

SWN Production (Ohio), LLC

A Texas limited liability company

By:

Title:

Address:

NON-OPERATORS

ATTEST OR WITNESS

By: _____

Title: _____

Address: _____

ATTEST OR WITNESS

By: _____

Title: _____

Address: _____

ACKNOWLEDGMENT

STATE OF TEXAS)
)
COUNTY OF HARRIS)

On this _____ day of _____, 20____, before me _____, the undersigned officer, personally appeared _____, who acknowledged himself to be the _____ of SWN Production (Ohio), LLC, a Texas limited liability company, 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 limited liability company 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 _____ day of _____, 20____, before me _____, the undersigned officer, personally appeared _____, who acknowledged himself to be the _____ of _____, a/an _____, 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 _____ 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:
SWN Production (Ohio), LLC
10000 Energy Drive
Spring, TX 77389

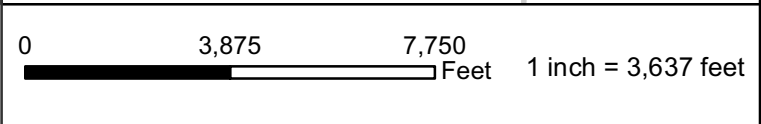
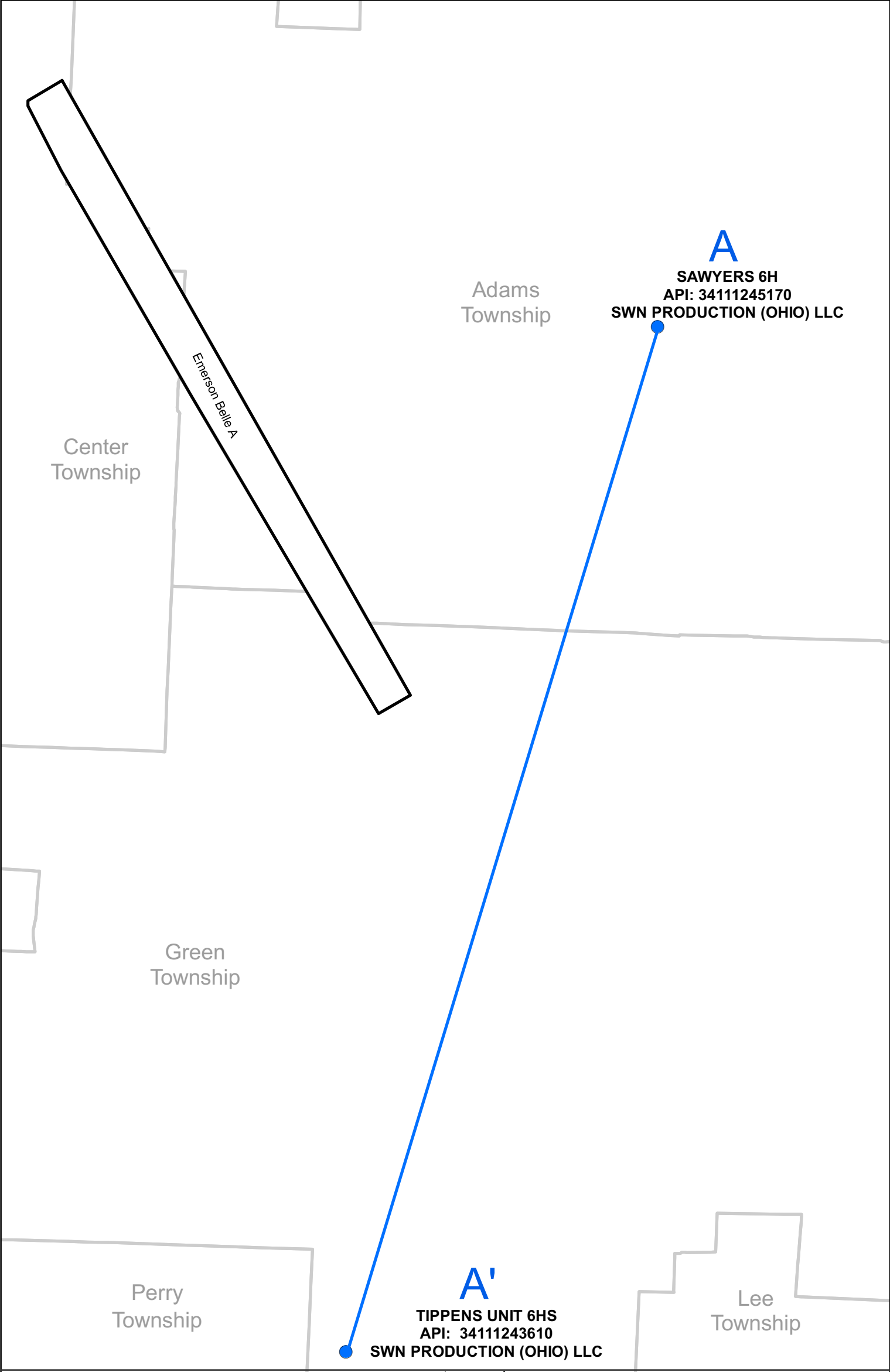


Exhibit 1 Cross Section Map

● Cross Sectioned Wells	□ Emerson Belle A Unit
— Cross Section	

Emerson Belle A Unit Center, Adams & Green Townships, Monroe County Date: 3/1/2023

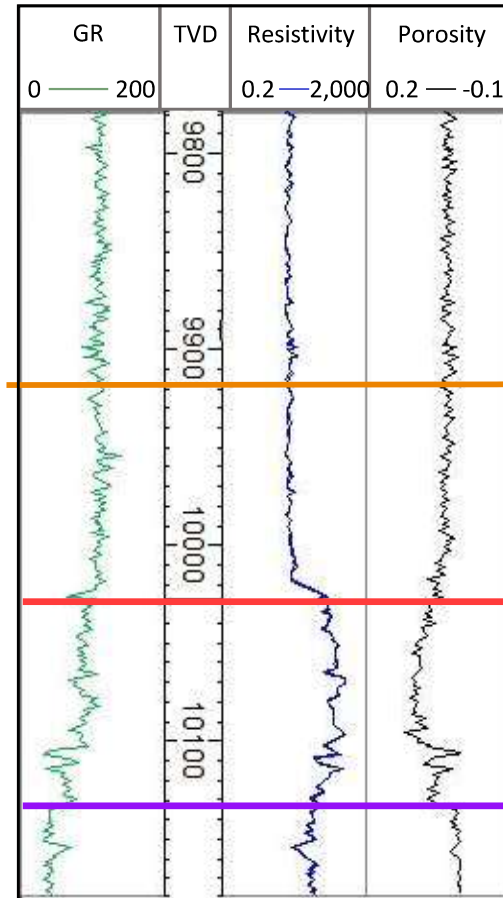
Geologic Cross-Section

Exhibit 2 – Emerson Belle A Unit

Monroe County, Ohio

A

Sawyers 6H
API: 34111245170
SWN Production (Ohio) LLC



TD = 10,350'

Emerson Belle A Unit
SWN Production (Ohio) LLC

~ 2.8 miles

~ 3.9 miles

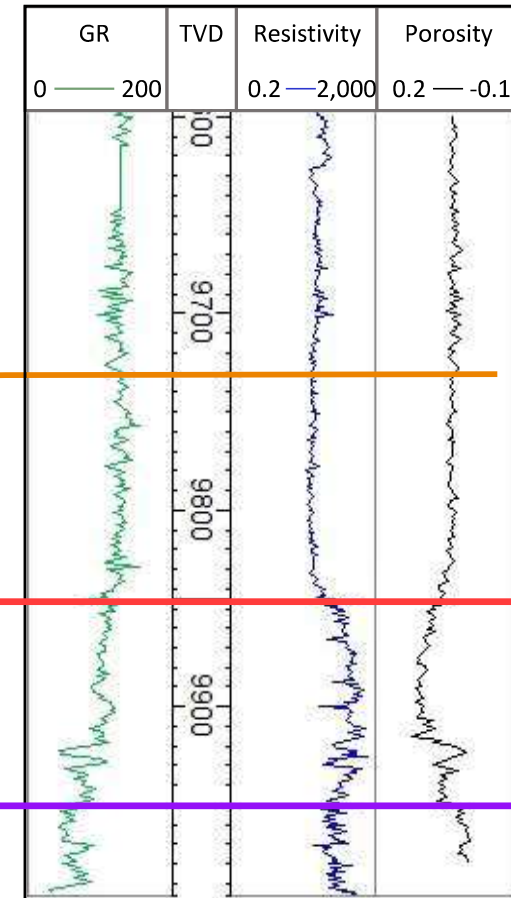
Utica

Point Pleasant
Interval of Utica

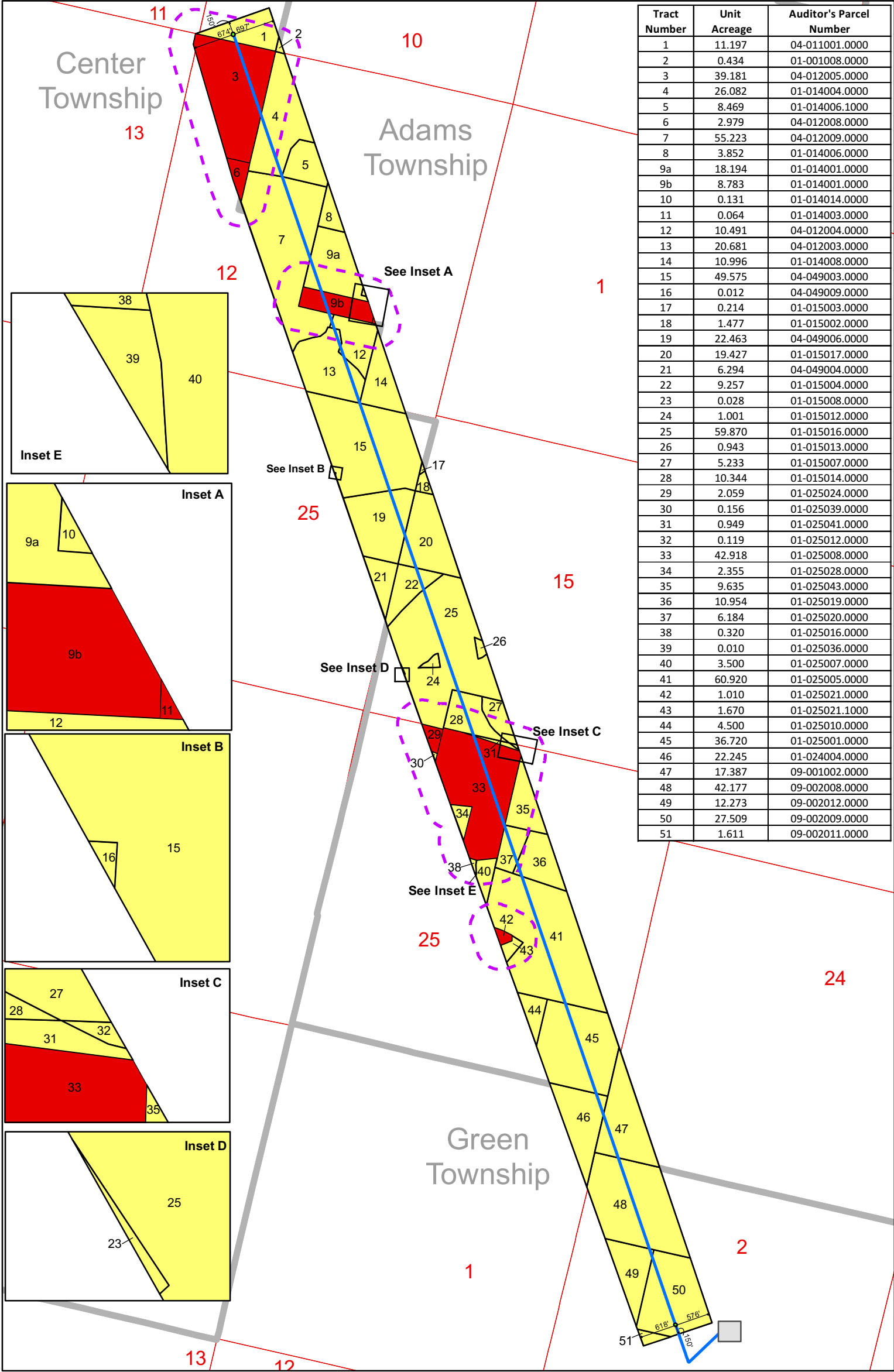
Trenton

A'

Tippens Unit 6HS
API: 34111243610
SWN Production (Ohio) LLC



TD = 10,045'



Tract Number	Unit Acreage	Auditor's Parcel Number
1	11.197	04-011001.0000
2	0.434	01-001008.0000
3	39.181	04-012005.0000
4	26.082	01-014004.0000
5	8.469	01-014006.1000
6	2.979	04-012008.0000
7	55.223	04-012009.0000
8	3.852	01-014006.0000
9a	18.194	01-014001.0000
9b	8.783	01-014001.0000
10	0.131	01-014014.0000
11	0.064	01-014003.0000
12	10.491	04-012004.0000
13	20.681	04-012003.0000
14	10.996	01-014008.0000
15	49.575	04-049003.0000
16	0.012	04-049009.0000
17	0.214	01-015003.0000
18	1.477	01-015002.0000
19	22.463	04-049006.0000
20	19.427	01-015017.0000
21	6.294	04-049004.0000
22	9.257	01-015004.0000
23	0.028	01-015008.0000
24	1.001	01-015012.0000
25	59.870	01-015016.0000
26	0.943	01-015013.0000
27	5.233	01-015007.0000
28	10.344	01-015014.0000
29	2.059	01-025024.0000
30	0.156	01-025039.0000
31	0.949	01-025041.0000
32	0.119	01-025012.0000
33	42.918	01-025008.0000
34	2.355	01-025028.0000
35	9.635	01-025043.0000
36	10.954	01-025019.0000
37	6.184	01-025020.0000
38	0.320	01-025016.0000
39	0.010	01-025036.0000
40	3.500	01-025007.0000
41	60.920	01-025005.0000
42	1.010	01-025021.0000
43	1.670	01-025021.1000
44	4.500	01-025010.0000
45	36.720	01-025001.0000
46	22.245	01-024004.0000
47	17.387	09-001002.0000
48	42.177	09-002008.0000
49	12.273	09-002012.0000
50	27.509	09-002009.0000
51	1.611	09-002011.0000

0

2,100

4,200

Feet

1 inch = 1,848 feet

Wellbore

Perforation

Unit Boundary

400 Ft Buffer

Well Pad

Status

Unleased Parcels

Committed Parcels

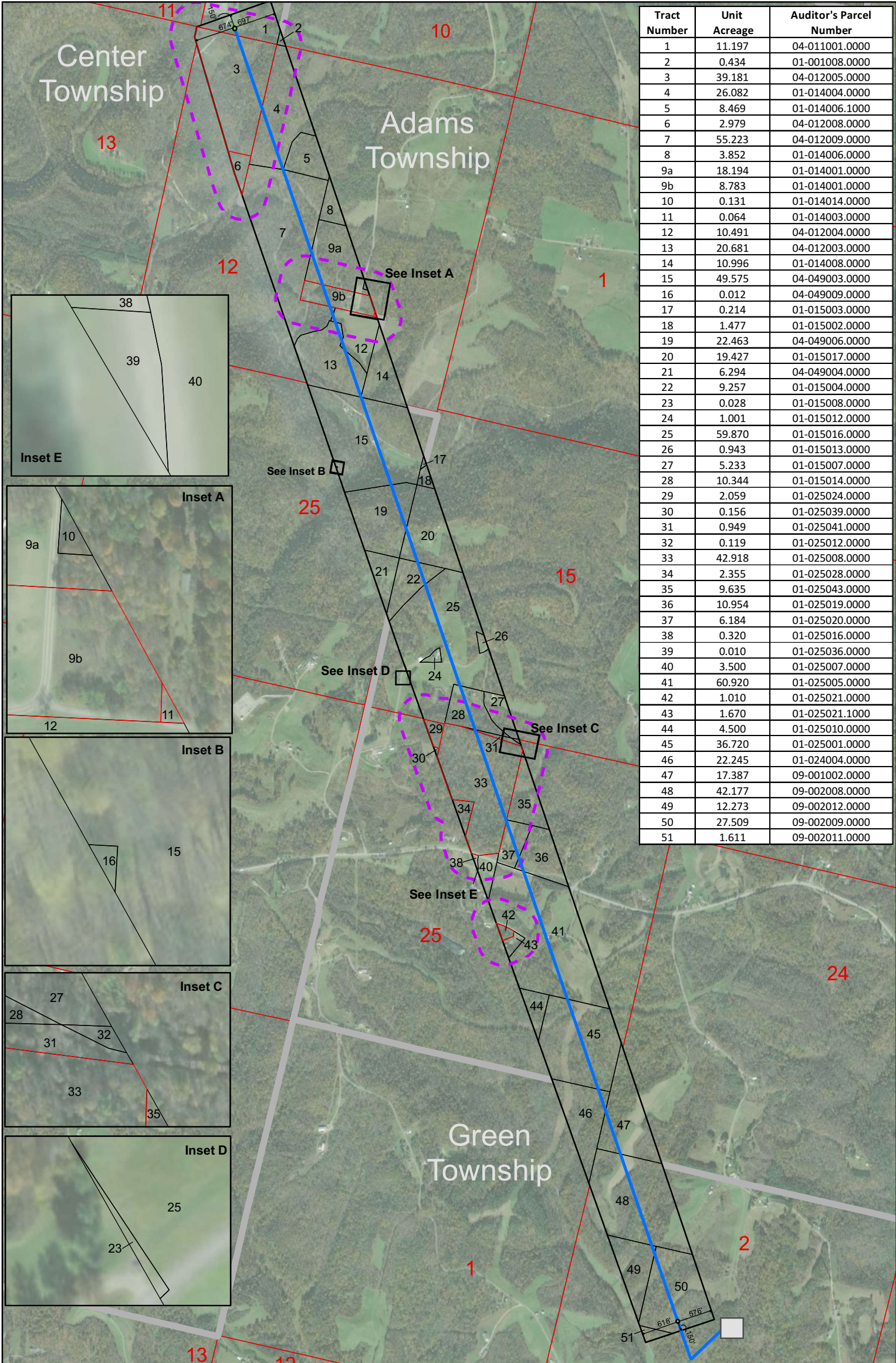
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EXHIBIT 3

Emerson Belle A Unit

Unit Size: 710.076 Acres

Center, Adams & Green Townships, Monroe County



Tract Number	Unit Acreage	Auditor's Parcel Number
1	11.197	04-011001.0000
2	0.434	01-001008.0000
3	39.181	04-012005.0000
4	26.082	01-014004.0000
5	8.469	01-014006.1000
6	2.979	04-012008.0000
7	55.223	04-012009.0000
8	3.852	01-014006.0000
9a	18.194	01-014001.0000
9b	8.783	01-014001.0000
10	0.131	01-014014.0000
11	0.064	01-014003.0000
12	10.491	04-012004.0000
13	20.681	04-012003.0000
14	10.996	01-014008.0000
15	49.575	04-049003.0000
16	0.012	04-049009.0000
17	0.214	01-015003.0000
18	1.477	01-015002.0000
19	22.463	04-049006.0000
20	19.427	01-015017.0000
21	6.294	04-049004.0000
22	9.257	01-015004.0000
23	0.028	01-015008.0000
24	1.001	01-015012.0000
25	59.870	01-015016.0000
26	0.943	01-015013.0000
27	5.233	01-015007.0000
28	10.344	01-015014.0000
29	2.059	01-025024.0000
30	0.156	01-025039.0000
31	0.949	01-025041.0000
32	0.119	01-025012.0000
33	42.918	01-025008.0000
34	2.355	01-025028.0000
35	9.635	01-025043.0000
36	10.954	01-025019.0000
37	6.184	01-025020.0000
38	0.320	01-025016.0000
39	0.010	01-025036.0000
40	3.500	01-025007.0000
41	60.920	01-025005.0000
42	1.010	01-025021.0000
43	1.670	01-025021.1000
44	4.500	01-025010.0000
45	36.720	01-025001.0000
46	22.245	01-024004.0000
47	17.387	09-001002.0000
48	42.177	09-002008.0000
49	12.273	09-002012.0000
50	27.509	09-002009.0000
51	1.611	09-002011.0000

019503900

Feet

1 inch = 1,848 feet

N

Wellbore

Perforation

Unit Boundary

400 Ft Buffer

Well Pad

Status

Unleased Parcels

Committed Parcels

EXHIBIT 4

Emerson Belle A Unit

Unit Size: 710.076 Acres

Center, Adams & Green Townships, Monroe County

Exhibit: 5 Engineering Calculations

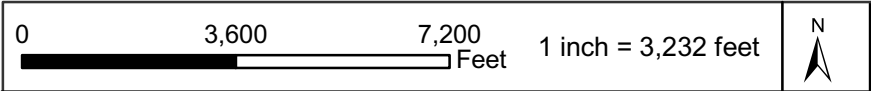
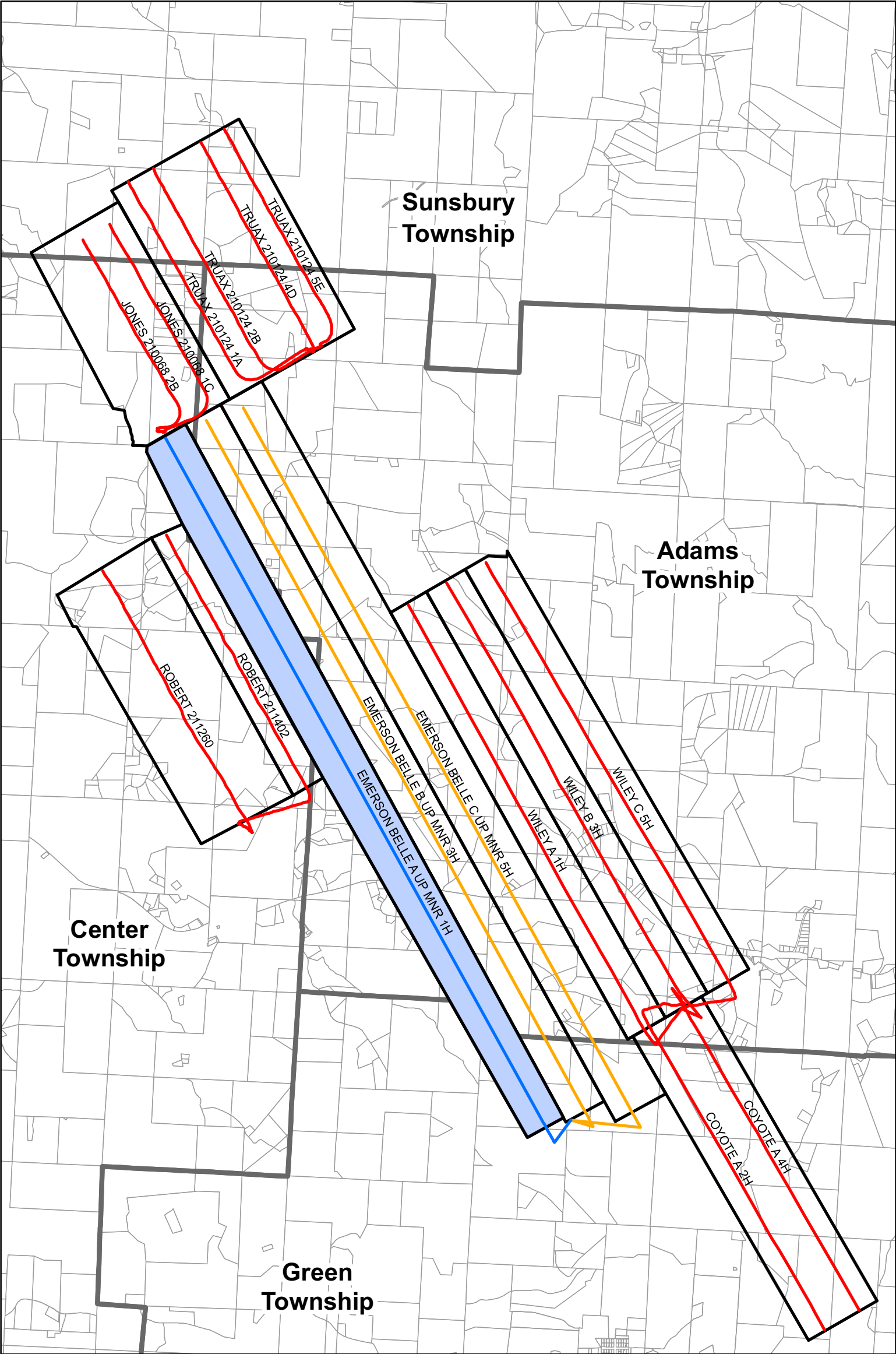
Unitized: Emerson Belle A									
Well Name	Lateral Length <i>ft</i>	Gross Oil <i>MBbl</i>	Gross NGL <i>MBbl</i>	Gross Gas <i>Bcf</i>	Gross Equivalent <i>Bcfe</i>	Gross Investment Costs <i>M\$</i>	Undiscounted Cash Flow <i>M\$</i>	10% Discounted Value <i>M\$</i>	Initial 5 Year Operating Costs <i>M\$</i>
Emerson Belle A UP MNR 1H	22,449	0	0	34.4	34.4	\$21,732	\$46,059	\$19,931	\$8,484
Unitized Total	22,449	0	0	34.4	34.4	\$21,732	\$46,059	\$19,931	\$8,484

Non-Unitized: Emerson Belle A									
Well Name	Lateral Length <i>ft</i>	Gross Oil <i>MBbl</i>	Gross NGL <i>MBbl</i>	Gross Gas <i>Bcf</i>	Gross Equivalent <i>Bcfe</i>	Gross Investment Costs <i>M\$</i>	Undiscounted Cash Flow <i>M\$</i>	10% Discounted Value <i>M\$</i>	Initial 5 Year Operating Costs <i>M\$</i>
Emerson Belle A UP MNR 1H	7,943	0	0	12.1	12.1	\$12,542	\$9,560	\$1,790	\$3,444
Non-Unitized Total	7,943	0	0	12.1	12.1	\$12,542	\$9,560	\$1,790	\$3,444

Difference									
Well Name	Lateral Length <i>ft</i>	Gross Oil <i>MBbl</i>	Gross NGL <i>MBbl</i>	Gross Gas <i>Bcf</i>	Gross Equivalent <i>Bcfe</i>	Gross Investment Costs <i>M\$</i>	Undiscounted Cash Flow <i>M\$</i>	10% Discounted Value <i>M\$</i>	Initial 5 Year Operating Costs <i>M\$</i>
Emerson Belle A UP MNR 1H	14,506	0	0	22.3	22.3	\$9,190	\$36,499	\$18,141	\$5,040
Non-Unitized Total	14,506	0	0	22.3	22.3	\$9,190	\$36,499	\$18,141	\$5,040

Reference Prices						
February 2023 - Strip price as of 2/15/2023						
Product	2023	2024	2025	2026	2027	Thereafter
Gas, \$/MMBtu	\$3.05	\$3.62	\$3.86	\$3.91	\$3.91	\$3.91

*Calculations based on 100% Working Interest and 82% Net Revenue Interest









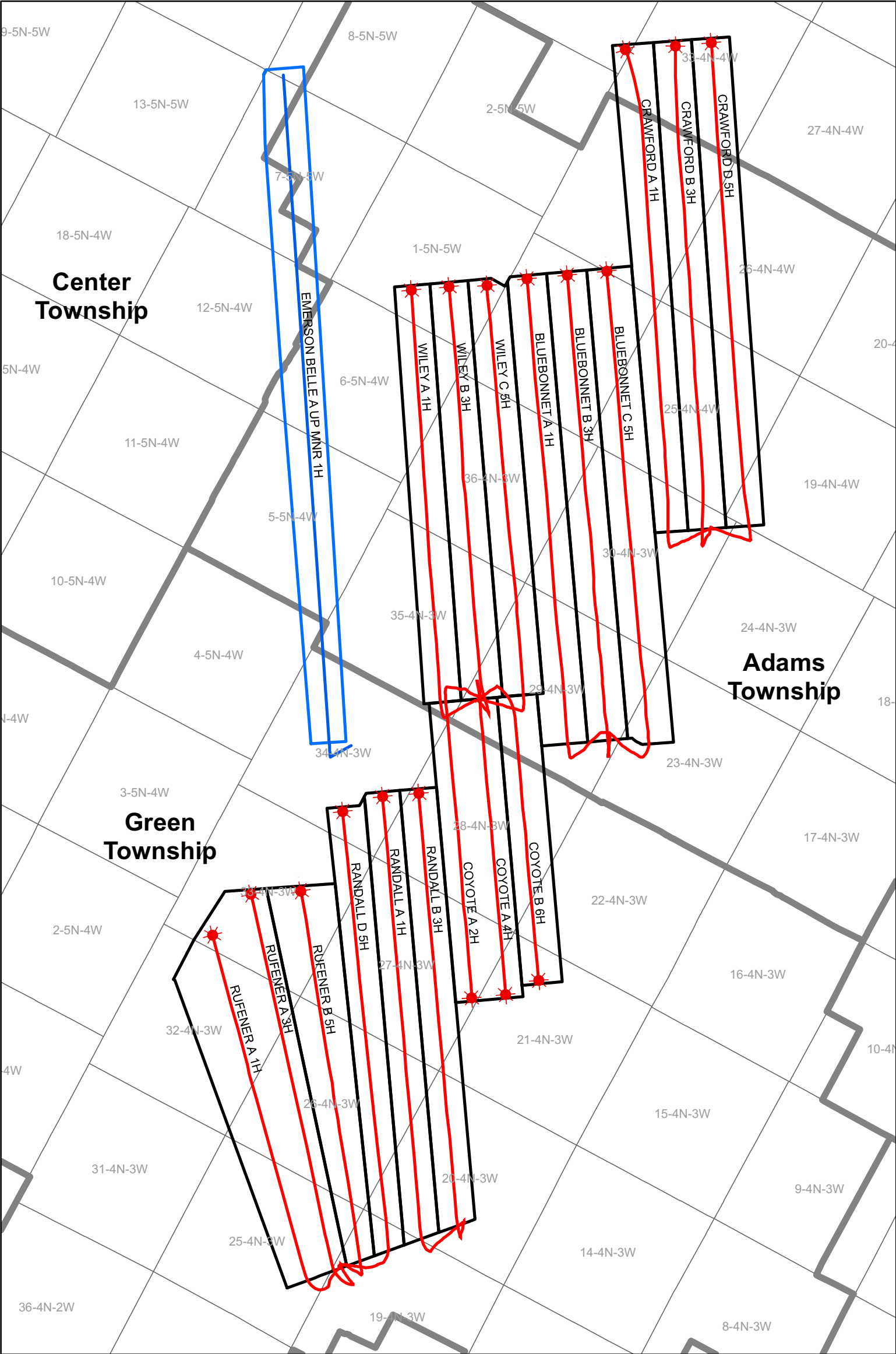
 Subject Wellbore	 Producing	 Townships
 Subject Unit Boundary	 Planned	 Tax Parcels

EXHIBIT 6

Emerson Belle A

Unit Size: 710.076 Acres

Center, Adams & Green Townships, Monroe County



04,2008,400

Feet

1 inch = 3,789 feet

SECTIONS

TOWNSHIPS

PRODUCING WELLS

PLANNED WELLS

PLANNED UNIT

PRODUCING UNITS

EXHIBIT 7

Reserve Calculations

Emerson Belle A Unit

Adams, Center, and Green Townships, Monroe County

Exhibit #7 Reserve Calculations Well List Emerson Belle A Unit				
Well Name	API Number	First Production Date	Lateral Length	Distance from Unit (miles)
RUFENER A 3H	34111249410000	2/9/2022	12,830	0.87
RUFENER B 5H	34111249430000	2/9/2022	12,438	0.72
RUFENER A 1H	34111249420000	2/9/2022	11,914	1.22
RANDALL D 5H	34111249440000	2/9/2022	14,684	0.21
RANDALL B 3H	34111249340000	11/15/2021	14,447	0.51
RANDALL A 1H	34111249350000	11/15/2021	14,783	0.34
CRAWFORD A 1H	34111249250000	9/27/2021	15,992	2.06
CRAWFORD B 3H	34111249240000	9/27/2021	16,056	2.35
CRAWFORD D 5H	34111249220000	9/27/2021	16,212	2.42
WILEY C 5H	34111249210000	6/2/2021	13,732	0.85
WILEY B 3H	34111249200000	6/2/2021	13,804	0.84
WILEY A 1H	34111249190000	6/2/2021	13,807	0.60
COYOTE A 4H	34111249070000	6/9/2020	9,791	0.86
COYOTE A 2H	34111249080000	6/9/2020	9,809	0.65
COYOTE B 6H	34111249060000	6/9/2020	9,442	0.88
BLUEBONNET C 5H	34111248850000	2/19/2020	15,719	1.68
BLUEBONNET B 3H	34111248830000	2/19/2020	15,566	1.60
BLUEBONNET A 1H	34111248840000	2/19/2020	15,572	1.34

In re the Matter of the Application of SWN :
Production (Ohio), LLC for Unit Operation :
 :
Emerson Belle A Unit :

My Commission Expires: 1-22-2027

Affidavit of Leasing and Commitment Efforts - Emerson Bell A Unit				
Tract	Owner	Parcel	Land Use	Address
3	Dale E. Feldner and Donella K. Feldner, husband and wife	04-012005.0000	Agricultural	26475 Tabor Ridge Caldwell, OH 43724
Date	Comment			
2/1/2021-12/30/2021	Kevin Songer and Dale Feldner and Donella Feldner discussed the lease, lease bonus and royalty offer over the course of the date range provided. The parties could not come to an agreement on the lease.			
6/1/2022	Kevin Songer called Dale E. Feldner and Donella K. Feldner to discuss the lease, lease bonus and royalty offer. Dale E. Feldner and Donella K. Feldner were not available, so Mr. Songer left a detailed voicemail explaining the reason for his call.			
8/1/2022	Kevin Songer called Dale E. Feldner and Donella K. Feldner to discuss the lease, lease bonus and royalty offer. Dale E. Feldner and Donella K. Feldner were not available, so Mr. Songer left a detailed voicemail explaining the reason for his call.			
10/28/2022	Kevin Songer met with Dale E. Feldner and Donella K. Feldner and made a lease, lease bonus and royalty offer. Dale E. Feldner and Donella K. Feldner informed Mr. Songer that they would review the lease and offer and get back to Mr. Songer in the coming weeks.			
11/7/2022	Kevin Songer called Dale E. Feldner and Donella K. Feldner to discuss the lease, lease bonus and royalty offer. Dale E. Feldner and Donella K. Feldner were not available, so Mr. Songer left a detailed voicemail explaining the reason for his call.			
11/19/2022	Kevin Songer called Dale E. Feldner and Donella K. Feldner to discuss the lease, lease bonus and royalty offer. Dale E. Feldner and Donella K. Feldner were not available, so Mr. Songer left a detailed voicemail explaining the reason for his call.			
11/29/2022	Kevin Songer called Dale E. Feldner and Donella K. Feldner to discuss the lease, lease bonus and royalty offer. Dale E. Feldner and Donella K. Feldner were not available, so Mr. Songer left a detailed voicemail explaining the reason for his call.			
12/26/2022	Kevin Songer called Dale E. Feldner and Donella K. Feldner to discuss the lease, lease bonus and royalty offer. Dale E. Feldner and Donella K. Feldner were not available, so Mr. Songer left a detailed voicemail explaining the reason for his call.			
1/6/2023	Kevin Songer called Dale E. Feldner and Donella K. Feldner to discuss the lease, lease bonus and royalty offer. Dale E. Feldner and Donella K. Feldner were not available, so Mr. Songer left a detailed voicemail explaining the reason for his call.			
1/18/2023	Kevin Songer called Dale E. Feldner and Donella K. Feldner to discuss the lease, lease bonus and royalty offer. Dale E. Feldner and Donella K. Feldner were not available, so Mr. Songer left a detailed voicemail explaining the reason for his call.			
1/24/2023	Kevin Songer called Dale E. Feldner and Donella K. Feldner to discuss the lease, lease bonus and royalty offer. Dale E. Feldner and Donella K. Feldner were not available, so Mr. Songer left a detailed voicemail explaining the reason for his call.			
2/3/2023	Kevin Songer called Dale E. Feldner and Donella K. Feldner to discuss the lease, lease bonus and royalty offer. Dale E. Feldner and Donella K. Feldner were not available, so Mr. Songer left a detailed voicemail explaining the reason for his call.			
2/27/2023	Kevin Songer called Dale E. Feldner and Donella K. Feldner to discuss the lease, lease bonus and royalty offer. Dale E. Feldner and Donella K. Feldner were not available, so Mr. Songer left a detailed voicemail explaining the reason for his call.			
3/8/2023	Kevin Songer called Dale E. Feldner and Donella K. Feldner to discuss the lease, lease bonus and royalty offer. Dale E. Feldner and Donella K. Feldner were not available, so Mr. Songer left a detailed voicemail explaining the reason for his call.			
3/16/2023	Kevin Songer called Dale E. Feldner and Donella K. Feldner to discuss the lease, lease bonus and royalty offer. Dale E. Feldner and Donella K. Feldner were not available, so Mr. Songer left a detailed voicemail explaining the reason for his call.			

Tract	Owner	Parcel	Land Use	Address	
6	Ruth A. Billiter	04-012008.0000	Agricultural	37157 Mount Street Sardis, OH 43946	
Date	Comment				
4/5/2023	Zach Buck, representative of the applicant, called Ruth A. Billiter to discuss a lease, lease bonus and royalty offer. Mrs. Billiter was not available so Zach left a detailed message explaining the reason for his call.				
4/6/2023	Gary Nuckolls, of the applicant, emailed Travis Billiter, son of Ruth A. Billiter who has historically negotiated on her behalf, to discuss a lease, lease bonus and royalty offer.				
Tract	Owner	Parcel	Land Use	Address	
9b	Unknown Heirs or Assigns of Charles R. Buckio	01-014001.0000	Agricultural	Unknown	
11		01-014003.0000	Residential		
Date	Comment				
Note:	Perry M. Kacik, of 2402 West Street, Brookfield, VT 05036, was identified as a potential heir of Charles R. Buckio, and applicant is pursuing an oil and gas lease with him.				
1/31/2023	Dwight Jones, representative of the applicant, mailed an offer letter, including a lease, lease bonus and royalty offer to the best available address for Perry M. Kacik.				
2/3/2023	Dwight Jones called and spoke with Mr. Kacik in regard to the lease, lease bonus and royalty offer. Mr. Jones and Mr. Kacik engaged in lease negotiations and information sharing, and Mr. Kacik agreed to review a full lease, lease bonus and royalty offer. Mr. Jones agreed to send Mr. Kacik the same in the coming days/weeks.				
2/6/2023	Dwight Jones prepared and mailed a lease packet, including a lease, lease bonus, and royalty offer to Perry M. Kacik.				
2/27/2023	Dwight Jones called Perry M. Kacik to discuss the lease, lease bonus and royalty offer made. Mr. Kacik was not available, so Mr. Jones left detailed voicemail explaining the reason for his call.				
3/9/2023	Dwight Jones called Perry M. Kacik to discuss the lease, lease bonus and royalty offer made. Mr. Kacik was not available, so Mr. Jones left detailed voicemail explaining the reason for his call.				
3/16/2023	Dwight Jones called Perry M. Kacik to discuss the lease, lease bonus and royalty offer made. Mr. Kacik was not available, so Mr. Jones left detailed voicemail explaining the reason for his call.				
Note:	The Estate of Walter Scott Kidder, deceased, whose executrix, Ann Gillin's address is 1060 Kings Ridge Blvd., Wadsworth, OH 44281, was identified as a potential heir of Charles R. Buckio, and applicant is pursuing an oil and gas lease with Walter's heirs or devisees.				
2/2/2023	Dwight Jones, representative of the applicant, mailed an offer letter, including a lease, lease bonus and royalty offer to the best available address for Walter Scott Kidder.				
2/3/2023	Dwight Jones was informed by a Buckio family member that Walter Scott Kidder recently passed away. Mr. Jones researched contact information for any children/heirs of Mr. Kidder to discuss a lease, lease bonus and royalty offer.				
2/17/2023	Dwight Jones called and spoke with Ann Gillin of 1060 Kings Ridge Blvd., Wadsworth, OH 44281, daughter and Executor of the Estate of Walter Scott Kidder, regarding the lease, lease bonus and royalty offer. Mr. Jones and Mrs. Gillin engaged in lease negotiations and information sharing, and Mrs. Gillin agreed to review a full lease, lease bonus and royalty offer at a future date, once her father's estate has been properly handled and taken of. Mrs. Gillin informed Mr. Jones she would notify him when the probate was complete. Mrs. Gillin provided a list of Devisees under the Last Will and Testament of Walter Scott Kidder; including, Michael Kidder of 380 Hathaway Drive, Cuyahoga Falls, Ohio 44223, Walter Kidder, of 80 North Portage Path, Apt. 12B2, Akron, Ohio 44303, Eleanor Graves, of 38 School Street, Hatfield, MA 01038, and Margaret Burroughs, of 2123 Clarence Ave., Lakewood, Ohio 44107.				
2/27/2023	Dwight Jones called Ann Gillin to follow up on the lease, lease bonus and royalty offer for the Estate of Walter Scott Kidder. Mrs. Gillin was not available, so Mr. Jones left detailed voicemail explaining the reason for his call.				

3/15/2023	Dwight Jones called and spoke to Ann Gillin to follow up on the lease, lease bonus and royalty offer for the Estate of Walter Scott Kidder. Mrs. Gillin informed Mr. Jones that she would review the offer with her siblings, and get back with Mr. Jones soon regarding this matter.				
Note:	Maryellen Meissner, of 1100 Dranesville Road Apt 421, Herndon, VA 20170, was identified as a potential heir of Charles R. Buckio, and applicant is pursuing an oil and gas lease with her.				
1/30/2023	Dwight Jones, representative of the applicant, mailed an offer letter, including a lease, lease bonus and royalty offer to the best available address for Maryellen Meissner.				
2/6/2023	Dwight Jones called and spoke with Nancy Meissner, Maryellen Meissner's daughter-in-law, in regard to the lease, lease bonus and royalty offer. Mr. Jones and Mrs. Meissner's daughter-in-law engaged in lease negotiations and information sharing, and Mrs. Meissner's family agreed to review a full lease, lease bonus and royalty offer. Mr. Jones agreed to send Mrs. Meissner the same in the coming days/weeks.				
2/7/2023	Dwight Jones prepared and mailed a lease packet, including a lease, lease bonus, and royalty offer to Maryellen Meissner.				
2/17/2023	Dwight Jones called Maryellen Meissner to follow up on the lease, lease bonus and royalty offer. Mrs. Meissner was not available, so Mr. Jones left detailed voicemail explaining the reason for his call.				
2/28/2023	Dwight Jones called Maryellen Meissner to follow up on the lease, lease bonus and royalty offer. Mrs. Meissner was not available, so Mr. Jones left detailed voicemail explaining the reason for his call.				
3/9/2023	Dwight Jones called Maryellen Meissner to follow up on the lease, lease bonus and royalty offer. Mrs. Meissner was not available, so Mr. Jones left detailed voicemail explaining the reason for his call.				
3/17/2023	Dwight Jones called Maryellen Meissner to follow up on the lease, lease bonus and royalty offer. Mrs. Meissner was not available, so Mr. Jones left detailed voicemail explaining the reason for his call.				
Note:	Elizabeth Marie Sacksteder, of 333 Central Park W Apt. 125, New York, NY 10025, was identified as a potential heir of Charles R. Buckio, and applicant is pursuing an oil and gas lease with her.				
1/30/2023	Dwight Jones, representative of the applicant, mailed an offer letter, including a lease, lease bonus and royalty offer to the best available address for Elizabeth Marie Sacksteder.				
2/9/2023	Dwight Jones called all available numbers for Elizabeth Marie Sacksteder to discuss a lease, lease bonus and royalty offer. Mr. Jones left detailed voicemails where applicable explaining the reason for his call.				
2/23/2023	Dwight Jones called all available numbers for Elizabeth Marie Sacksteder to discuss a lease, lease bonus and royalty offer. Mr. Jones left detailed voicemails where applicable explaining the reason for his call.				
3/9/2023	Dwight Jones called all available numbers for Elizabeth Marie Sacksteder to discuss a lease, lease bonus and royalty offer. Mr. Jones left detailed voicemails where applicable explaining the reason for his call.				
3/17/2023	Dwight Jones called all available numbers for Elizabeth Marie Sacksteder to discuss a lease, lease bonus and royalty offer. Mr. Jones left detailed voicemails where applicable explaining the reason for his call.				
Tract	Owner	Parcel	Land Use	Address	
9b	Unknown Heirs or Assigns of George F. Buckio	01-014001.0000	Agricultural	Unknown	
11		01-014003.0000	Residential		
Date	Comment				
Note:	Michael Fairchild, of 5100 Brent Road, Longview, TX 75604, was identified as a potential heir of George F. Buckio, and applicant is pursuing an oil and gas lease with him.				

2/2/2023	Dwight Jones, representative of the applicant, mailed an offer letter, including a lease, lease bonus and royalty offer to the best available address for Michael Fairchild.			
2/8/2023	Dwight Jones called and spoke with Mr. Fairchild in regard to the lease, lease bonus and royalty offer. Mr. Jones and Mr. Fairchild engaged in lease negotiations and information sharing, and Mr. Fairchild agreed to review a full lease, lease bonus and royalty offer. Mr. Jones agreed to send Mr. Fairchild the same in the coming days/weeks.			
2/9/2023	Dwight Jones prepared a lease packet, including a lease, lease bonus and royalty offer and sent to Michael Fairchild.			
2/17/2023	Dwight Jones called Michael Fairchild to discuss the lease, lease bonus and royalty offer. Mr. Fairchild was not available, so Mr. Jones left detailed voicemail explaining the reason for his call.			
2/27/2023	Dwight Jones called Michael Fairchild to discuss the lease, lease bonus and royalty offer. Mr. Fairchild was not available, so Mr. Jones left detailed voicemail explaining the reason for his call.			
3/9/2023	Dwight Jones called Michael Fairchild to discuss the lease, lease bonus and royalty offer. Mr. Fairchild was not available, so Mr. Jones left detailed voicemail explaining the reason for his call.			
3/17/2023	Dwight Jones called Michael Fairchild to discuss the lease, lease bonus and royalty offer. Mr. Fairchild was not available, so Mr. Jones left detailed voicemail explaining the reason for his call.			
Note:	Ben Kincaid, of 9194 County Road 137 N, Overton, TX 75684, was identified as a potential heir of George F. Buckio, and applicant is pursuing an oil and gas lease with him.			
2/10/2023	Dwight Jones, representative of the applicant, mailed an offer letter, including a lease, lease bonus and royalty offer to the best available address for Ben Kincaid.			
2/15/2023	Dwight Jones researched contact information and alternate addresses for Ben Kincaid to discuss a lease, lease bonus and royalty offer.			
2/27/2023	Dwight Jones called all available numbers for Ben Kincaid to discuss a lease, lease bonus and royalty offer. Mr. Jones left detailed voicemails where applicable explaining the reason for his call.			
3/9/2023	Dwight Jones called all available numbers for Ben Kincaid to discuss a lease, lease bonus and royalty offer. Mr. Jones left detailed voicemails where applicable explaining the reason for his call.			
3/17/2023	Dwight Jones called all available numbers for Ben Kincaid to discuss a lease, lease bonus and royalty offer. Mr. Jones left detailed voicemails where applicable explaining the reason for his call.			
Note:	Michael Kincaid, of 501 Ross Drive, Kilgore, TX 75662, was identified as a potential heir of George F. Buckio, and applicant is pursuing an oil and gas lease with him.			
1/30/2023	Dwight Jones, representative of the applicant, mailed an offer letter, including a lease, lease bonus and royalty offer to the best available address for Michael Kincaid.			
2/10/2023	Dwight Jones called all available numbers for Michael Kincaid to discuss a lease, lease bonus and royalty offer. Mr. Jones left detailed voicemails where applicable explaining the reason for his call.			
2/24/2023	Dwight Jones called all available numbers for Michael Kincaid to discuss a lease, lease bonus and royalty offer. Mr. Jones left detailed voicemails where applicable explaining the reason for his call.			
3/9/2023	Dwight Jones called all available numbers for Michael Kincaid to discuss a lease, lease bonus and royalty offer. Mr. Jones left detailed voicemails where applicable explaining the reason for his call.			
3/17/2023	Dwight Jones called all available numbers for Michael Kincaid to discuss a lease, lease bonus and royalty offer. Mr. Jones left detailed voicemails where applicable explaining the reason for his call.			
Tract	Owner	Parcel	Land Use	Address

9b	Jeffrey C. Buckio	01-014001.0000	Agricultural	14265 Domingo Court Reno, NV 89511
Date	Comment			
4/22/2022	Kevin Songer, representative of the applicant, called and spoke to Jeffrey Buckio to discuss a lease, lease bonus and royalty offer. Mr. Buckio agreed to review the lease. Kevin prepared a lease packet, including a lease, lease bonus and royalty offer and sent to Mr. Buckio.			
4/29/2022	Kevin Songer called Jeffrey Buckio to discuss the lease, lease bonus and royalty offer. Mr. Buckio was not available so Kevin left a detailed message explaining the reason for his call.			
5/6/2022	Kevin Songer called and spoke to Jeffrey Buckio inquiring as to the lease, lease bonus and royalty offer. Kevin told Mr. Buckio his siblings had signed their leases and Mr. Buckio told Kevin he was still considering the offer.			
1/26/2023	Kevin Songer called Jeffrey Buckio to discuss the lease, lease bonus and royalty offer. Mr. Buckio was not available so Kevin left a detailed message explaining the reason for his call.			
1/28/2023	Kevin Songer prepared an updated lease packet, including a lease, lease bonus and royalty offer and sent the updated packet to Mr. Buckio.			
2/8/2023	Kevin Songer called Jeffrey Buckio to discuss the lease, lease bonus and royalty offer. Mr. Buckio was not available so Kevin left a detailed message explaining the reason for his call.			
2/17/2023	Kevin Songer called Jeffrey Buckio to discuss the lease, lease bonus and royalty offer. Mr. Buckio was not available so Kevin left a detailed message explaining the reason for his call.			
2/24/2023	Kevin Songer called Jeffrey Buckio to discuss the lease, lease bonus and royalty offer. Mr. Buckio was not available so Kevin left a detailed message explaining the reason for his call.			
2/27/2023	Kevin Songer called Jeffrey Buckio to discuss the lease, lease bonus and royalty offer. Mr. Buckio was not available so Kevin left a detailed message explaining the reason for his call.			
3/1/2023	Jeffrey C. Buckio signed and returned his lease for Tract 11. However, he did not return the lease initially sent to him for Tract 9b. Kevin Songer prepared a new lease packet, including a lease, lease bonus and royalty offer and sent to Jeffrey Buckio for Tract 9b. Kevin Songer called and spoke to Mr. Buckio. Mr. Buckio agreed to sign and return the additional lease as soon as possible.			
3/17/2023	Kevin Songer called Jeffrey Buckio to discuss the lease, lease bonus and royalty offer for Tract 9b. Mr. Buckio was not available so Kevin left a detailed message explaining the reason for his call.			
Tract	Owner	Parcel	Land Use	Address
9b	Unknown Heirs or Assigns of Louise F. Haefele	01-014001.0000	Agricultural	Unknown
11		01-014003.0000	Residential	
Date	Comment			
Note:	Unknown Heirs or Assigns of Dorothy Deaton Gustafson, whose mailing addresses are currently unknown, were identified as potential heirs of Louise F. Haefele, and applicant is pursuing an oil and gas lease with them.			
2/3/2023	Dwight Jones, representative of the applicant, mailed an offer letter, including a lease, lease bonus and royalty offer to the best available address for Dorothy Deaton Gustafson.			
2/17/2023	Dwight Jones called Dorothy Deaton Gustafson to discuss the lease, lease bonus and royalty offer. Mrs. Gustafson was not available, so Mr. Jones left detailed voicemail explaining the reason for his call.			
2/24/2023	Dwight Jones called Dorothy Deaton Gustafson to discuss the lease, lease bonus and royalty offer. Mrs. Gustafson was not available, so Mr. Jones left detailed voicemail explaining the reason for his call. Mr. Jones prepared and sent a lease packet, including a lease, lease bonus and royalty offer the best available address for Dorothy Deaton Gustafson in hopes of receiving a reply.			

3/9/2023	Dwight Jones called and spoke to Renee Fussell, a distant relative of Dorothy Gustafson, to determine if she had contact information for Dorothy to discuss a lease, lease bonus and royalty offer. Renee told Dwight that Dorothy was now deceased and she was not exactly sure who would have inherited from the decedent. Mr. Jones thanked Renee and continued to search for obituaries, possible heirs, etc.
3/20/2023	Dwight Jones continued researching the potential heirs of Dorothy Gustafson to discuss a lease, lease bonus and royalty offer. Dwight has been unable to locate any potential heirs yet.
Note:	Unknown Heirs or Assigns of Richard Charles Fussell, whose mailing addresses are currently unknown, were identified as potential heirs of Louise F. Haefele, and applicant is pursuing an oil and gas lease with them.
2/9/2023	Dwight Jones, representative of the applicant, mailed an offer letter, including a lease, lease bonus and royalty offer to the best available address for Richard Charles Fussell.
2/16/2023	Dwight Jones called all available numbers for Richard Charles Fussell to discuss a lease, lease bonus and royalty offer. Mr. Jones left detailed voicemails where applicable explaining the reason for his call.
2/27/2023	Dwight Jones called all available numbers for Richard Charles Fussell to discuss a lease, lease bonus and royalty offer. Mr. Jones left detailed voicemails where applicable explaining the reason for his call.
3/9/2023	Dwight Jones called and spoke to Renee Fussell, a distant relative of Richard Fussell, to determine if she had contact information for Richard to discuss a lease, lease bonus and royalty offer. Renee told Dwight that Richard was now deceased and she was not exactly sure who would have inherited from the decedent. Mr. Jones thanked Renee and continued to search for obituaries and possible heirs of Richard Fussell.
3/17/2023	Dwight Jones continued researching the potential heirs of Richard Fussell to discuss a lease, lease bonus and royalty offer. Dwight has been unable to locate any potential heirs yet.
Note:	Thomas P. Fussell, of 1 Lake Front Drive, Hilltop Lakes, TX 77871, was identified as a potential heir of Louise F. Haefele, and applicant is pursuing an oil and gas lease with him.
1/31/2023	Dwight Jones, representative of the applicant, mailed an offer letter, including a lease, lease bonus and royalty offer to the best available address for Thomas P. Fussell.
2/9/2023	Dwight Jones called all available numbers for Thomas P. Fussell to discuss a lease, lease bonus and royalty offer. Mr. Jones left detailed voicemails where applicable explaining the reason for his call.
2/10/2023	Dwight Jones prepared and sent a lease packet, including a lease, lease bonus and royalty offer the best available address for Thomas P. Fussell in hopes of receiving a reply.
2/24/2023	Dwight Jones called all available numbers for Thomas P. Fussell to discuss a lease, lease bonus and royalty offer. Mr. Jones left detailed voicemails where applicable explaining the reason for his call.
3/9/2023	Dwight Jones called all available numbers for Thomas P. Fussell to discuss a lease, lease bonus and royalty offer. Mr. Jones left detailed voicemails where applicable explaining the reason for his call.
3/17/2023	Dwight Jones called all available numbers for Thomas P. Fussell to discuss a lease, lease bonus and royalty offer. Mr. Jones left detailed voicemails where applicable explaining the reason for his call.

Note:	James R. Haeefe, of 1308 Old Stickney Point Road Apt 21, Sarasota, FL 34242, was identified as a potential heir of Louise F. Haeefe, and applicant is pursuing an oil and gas lease with him.
1/30/2023	Dwight Jones, representative of the applicant, mailed an offer letter, including a lease, lease bonus and royalty offer to the best available address for James R. Haeefe.
2/9/2023	Dwight Jones called all available numbers for James R. Haeefe to discuss a lease, lease bonus and royalty offer. Mr. Jones left detailed voicemails where applicable explaining the reason for his call.
2/17/2023	Dwight Jones called all available numbers for James R. Haeefe to discuss a lease, lease bonus and royalty offer. Mr. Jones left detailed voicemails where applicable explaining the reason for his call.
2/24/2023	Dwight Jones called all available numbers for James R. Haeefe to discuss a lease, lease bonus and royalty offer. Mr. Jones left detailed voicemails where applicable explaining the reason for his call.
3/17/2023	Dwight Jones called and spoke to James R. Haeefe to discuss a lease, lease bonus and royalty offer. Mr. Haeefe informed Mr. Jones that he would be willing to review a full lease, lease bonus and royalty offer. Mr. Jones agreed to send a lease packet to Mr. Haeefe. James R. Haeefe also told Dwight that his brothers, Kenneth W. Haeefe and Thomas C. Haeefe were deceased. James told Dwight that he was unsure if Kenneth ever had children but was positive that Thomas did not.
3/20/2023	Dwight Jones prepared a lease packet, including a lease, lease bonus and royalty offer for James R. Haeefe. Dwight Jones sent the lease packet to James and is waiting for it to arrive to follow up with James.
Note:	Unknown Heirs or Assigns of Kenneth W. Haeefe, whose mailing addresses are currently unknown, were identified as potential heirs of Louise F. Haeefe, and applicant is pursuing an oil and gas lease with them.
1/30/2023	Dwight Jones, representative of the applicant, mailed an offer letter, including a lease, lease bonus and royalty offer to the best available address for Kenneth W. Haeefe.
2/9/2023	Dwight Jones called all available numbers for Kenneth W. Haeefe to discuss a lease, lease bonus and royalty offer. Mr. Jones left detailed voicemails where applicable explaining the reason for his call.
2/17/2023	Dwight Jones called all available numbers for Kenneth W. Haeefe to discuss a lease, lease bonus and royalty offer. Mr. Jones left detailed voicemails where applicable explaining the reason for his call.
2/22/2023	Dwight Jones called all available numbers for Kenneth W. Haeefe to discuss a lease, lease bonus and royalty offer. Mr. Jones left detailed voicemails where applicable explaining the reason for his call.
3/9/2023	Dwight Jones called all available numbers for Kenneth W. Haeefe to discuss a lease, lease bonus and royalty offer. Mr. Jones left detailed voicemails where applicable explaining the reason for his call.
3/17/2023	Dwight Jones called all available numbers for Kenneth W. Haeefe to discuss a lease, lease bonus and royalty offer. Mr. Jones left detailed voicemails where applicable explaining the reason for his call. Dwight called and spoke to James Haeefe. James told Dwight that Kenneth was deceased but was unsure if he had any heirs.
3/20/2023	Dwight Jones continued researching the potential heirs of Kenneth W. Haeefe to discuss a lease, lease bonus and royalty offer. Dwight has been unable to locate any potential heirs yet.
Note:	Unknown Heirs or Assigns of Thomas C. Haeefe, deceased, whose mailing addresses are currently unknown, were identified as potential heirs of Louise F. Haeefe, and applicant is pursuing an oil and gas lease with them.
1/27/2023-2/15/2023	Dwight Jones is researching the unknown heirs or assigns of Thomas C. Haeefe to discuss a lease, lease bonus and royalty offer.
2/16/2023-2/28/2023	Dwight Jones is researching the unknown heirs or assigns of Thomas C. Haeefe to discuss a lease, lease bonus and royalty offer.

3/9/2023	Dwight Jones called all available numbers for Thomas C. Haeefele in regard to the lease, lease bonus and royalty offer. Dwight left messages where applicable.			
3/17/2023	Dwight Jones called and spoke Thomas C. Haeefele's brother, James R. Haeefele, in regard to the lease, lease bonus and royalty offer. Mr. Haeefele informed Mr. Jones that his brother, Thomas, died in 2010 and never married or fathered children.			
Tract	Owner	Parcel	Land Use	Address
29	Charles P. Schwaben and Kathy J. Schwaben, husband and wife	01-025024.0000	Residential	102 Clare Kennedy Drive Marietta, OH 45750
Date	Comment			
1/21/2022	Phil Fleming, representative of the applicant, researched contact information for Charles P. Schwaben and Kathy J. Schwaben to discuss a lease, lease bonus and royalty offer.			
1/25/2022	Phil Fleming called and spoke with Charles P. Schwaben in an attempt to discuss a lease, lease bonus and royalty offer. Mr. Schwaben informed Mr. Fleming that he was busy, and that Mr. Fleming needed to call back the following day.			
1/26/2022	Phil Fleming again called and spoke with Charles P. Schwaben in an attempt to discuss a lease, lease bonus and royalty offer. Mr. Schwaben agreed to review a lease, lease bonus and royalty offer. Mr. Fleming agreed to send Mr. Schwaben a lease, lease bonus and royalty offer soon. Phil prepared a lease packet, including a lease, lease bonus and royalty offer and sent to Mr. Schwaben.			
1/28/2023	Phil Fleming called Charles P. Schwaben to the discuss the lease, lease bonus and royalty offer made. Mr. Schwaben was not available, so Mr. Fleming left a detailed voicemail explaining the reason for his call.			
2/1/2022	Phil Fleming called Charles P. Schwaben to the discuss the lease, lease bonus and royalty offer made. Mr. Schwaben was not available, so Mr. Fleming left a detailed voicemail explaining the reason for his call.			
2/3/2022	Phil Fleming met with Charles P. Schwaben to discuss the lease, lease bonus and royalty offer. The two parties reviewed the lease and lease offer together, and Mr. Schwaben informed Mr. Fleming that he would take the lease and offer package to his attorney for further review.			
2/11/2022	Phil Fleming called Charles P. Schwaben to follow up on the lease, lease bonus and royalty offer made. Mr. Schwaben was not available, so Mr. Fleming left a detailed voicemail explaining the reason for his call.			
2/12/2022	Charles P. Schwaben texted Phil Fleming and notified him that he was not interested in the current offer to lease.			
2/15/2022	Phil Fleming called Charles P. Schwaben to discuss a revised lease, lease bonus and royalty offer. Mr. Schwaben was not available, so Mr. Fleming left a detailed voicemail explaining the reason for his call.			
2/16/2022	Phil Fleming drove to the property address for Charles P. Schwaben and Kathy J. Schwaben to discuss the lease, lease bonus and royalty offer. The Schwabens were not home, so Mr. Fleming left his business card and a note explaining that there was some room to negotiate the terms of the lease and asked for a return phone call.			
2/24/2022	Phil Fleming called Charles P. Schwaben to discuss a revised lease, lease bonus and royalty offer. Mr. Schwaben was not available, so Mr. Fleming left a detailed voicemail explaining the reason for his call.			
5/4/2022	Phil Fleming called Charles P. Schwaben to discuss a revised lease, lease bonus and royalty offer. Mr. Schwaben was not available, so Mr. Fleming left a detailed voicemail explaining the reason for his call.			
1/20/2023	Phil Fleming prepared and sent an updated lease packet, including a revised lease offer, revised lease and royalty offer to Charles P. Schwaben and Kathy J. Schwaben.			
1/23/2023	Phil Fleming drove to the property address for Charles P. Schwaben and Kathy J. Schwaben to discuss the lease, lease bonus and royalty offer. The Schwabens were not home, so Mr. Fleming left his business card and a note explaining that there was some room to negotiate the terms of the lease and asked for a return phone call.			

1/25/2023	Phil Fleming called and spoke with Charles P. Schwaben to discuss the updated lease packet sent. Mr. Scwaben said he received the packet and was reviewing.			
1/27/2023	Phil Fleming called and spoke with Charles P. Schwaben in regard to the new lease, lease bonus and royalty offer. Mr. Schwaben informed Mr. Fleming that he is not interested in leasing at the terms offered. Mr. Schwaben would not make a counteroffer.			
2/28/2023	Phil Fleming called Charles P. Schwaben to make an attempt to secure a lease, lease bonus and royalty offer. Mr. Schwaben reiterated to Phil that he was not interested in leasing at the terms offered.			
3/15/2023	Phil Fleming called and spoke to Charles Schwaben. Charles told Phil he was not interested in leasing at the current offer.			
Tract	Owner	Parcel	Land Use	Address
33	Steven R. Demchak and Dixie M. Demchak, husband and wife	01-025008.0000	Agricultural	43883 Mount Carrick Road Woodsfield, OH 43793
Date	Comment			
10/5/2022	Phil Fleming, representative of the applicant, visited the home of Steven R. Demchak. Phil made an offer to lease, including a lease, lease bonus and royalty offer. Mr. Demchak told Phil he was not in the ballpark as to acceptable terms. Mr. Demchak asked Phil to contact him if the offer increased.			
10/19/2022	Phil Fleming called and left a message for Steven R. Demchak to discuss the lease, lease bonus and royalty offer. Mr. Demchak was not available so Phil left a detailed message explaining the reason for his call.			
11/3/2022	Pete Haines, representative of the applicant, called Steven R. Demchak to discuss a lease, lease bonus and royalty offer. Mr. Demchak was not available so Mr. Haines left a detailed voicemail explaining the reason for his call.			
11/8/2022	Pete Haines drove to the property address for Steven R. Demchak to discuss a lease, lease bonus and royalty offer. Mr. Haines was unable to make contact with Mr. Demchak so Pete left his business card and an introduction letter.			
11/18/2022	Pete Haines called Steven R. Demchak to discuss a lease, lease bonus and royalty offer. Mr. Demchak was not available so Mr. Haines left a detailed voicemail explaining the reason for his call.			
11/23/2022	Pete Haines called Steven R. Demchak to discuss a lease, lease bonus and royalty offer. Mr. Demchak was not available so Mr. Haines left a detailed voicemail explaining the reason for his call.			
11/29/2022	Pete Haines drove to and met with Steven R. Demchak at his home to discuss a lease, lease bonus and royalty offer. Mr. Haines and Mr. Demchak could not reach an agreement but did agree to keep in touch over the next few weeks to revisit the lease and offer.			
12/1/2022	Pete Haines called Steven R. Demchak to discuss a lease, lease bonus and royalty offer. Mr. Demchak was not available so Mr. Haines left a detailed voicemail explaining the reason for his call.			
12/7/2022	Pete Haines called Steven R. Demchak to discuss a lease, lease bonus and royalty offer. Mr. Demchak was not available so Mr. Haines left a detailed voicemail explaining the reason for his call.			
1/20/2023	Pete Haines called Steven R. Demchak to discuss a lease, lease bonus and royalty offer. Mr. Demchak was not available so Mr. Haines left a detailed voicemail explaining the reason for his call.			
1/23/2023	Pete Haines called Steven R. Demchak to discuss a lease, lease bonus and royalty offer. Mr. Demchak was not available so Mr. Haines left a detailed voicemail explaining the reason for his call.			
1/25/2023	Pete Haines called Steven R. Demchak to discuss a lease, lease bonus and royalty offer. Mr. Demchak was not available so Mr. Haines left a detailed voicemail explaining the reason for his call.			

2/2/2023	Pete Haines drove to the property address for Steven R. Demchak to discuss a lease, lease bonus and royalty offer. Mr. Demchak was not home, so Pete left a note and his card and asked Mr. Demchak to call him when available.			
2/27/2023	Pete Haines called Steven R. Demchak to discuss a lease, lease bonus and royalty offer. Mr. Demchak was not available so Mr. Haines left a detailed voicemail explaining the reason for his call.			
3/3/2023	Pete Haines called and spoke to Steven R. Demchak to discuss a lease, lease bonus and royalty offer. Mr. Demchak told Pete any future correspondence should be through the mail.			
3/9/2023	Pete Haines prepared an offer letter, lease, lease bonus and royalty offer and sent it to Zach Buck, representative of the applicant, for review.			
3/15/2023	Pete Haines sent the letter, lease, lease bonus and royalty offer to Steven R. Demchak.			
3/21/2023	Pete Haines has not received any reply to the package sent to Steven R. Demchak.			
Tract	Owner	Parcel	Land Use	Address
42	Golden Eagle Resources II, LLC	01-025021.0000	Residential	ATTN: Michael Faust, Authorized Representative 600 Jefferson Street, Suite 2000 Houston, TX 77002
Date	Comment			
1/20/2022	Gary Nuckolls, of the applicant, emailed Cori Willett, representative of Golden Eagle Resources II, LLC regarding a lease, lease bonus and royalty offer. Cori replied to Gary letting him know that Golden Eagle Resources, II, LLC would be interested in reviewing a lease, lease bonus and royalty offer.			
1/21/2022	Gary Nuckolls emailed Cori Willett a lease proposal, including a lease, lease bonus and royalty offer. Cori replied to Gary's email acknowledging receipt and let Gary know that she would be reviewing the offer.			
2/14/2022	Gary Nuckolls emailed Cori Willett to follow up on the lease, lease bonus and royalty offer.			
3/2/2022	Gary Nuckolls emailed Cori Willett to follow up on the lease, lease bonus and royalty offer.			
3/23/2022	Gary Nuckolls emailed Cori Willett to follow up on the lease, lease bonus and royalty offer. Cori replied to Gary approving the lease form and confirming the lease bonus offer.			
10/13/2022	Gary Nuckolls emailed Cori Willett regarding their lease negotiations.			
10/18/2022	Cori Willett emailed Gary Nuckolls regarding their lease negotiations with some questions.			
10/19/2022	Gary Nuckolls emailed Cori Willett addressing her questions from the day before.			
10/28/2022	Gary Nuckolls emailed Cori Willett regarding their lease negotiations.			

12/7/2022	Bailey Brougher, employee of the applicant, emailed Cori Willett regarding the lease negotiations.
12/7/2022	Paul Bacho, employee of the applicant, emailed Joshua Sanger, representative of Golden Eagle Resources II, LLC regarding the lease, lease bonus and royalty offer. Paul asked Joshua if Cori Willett was the appropriate contact party for lease negotiations at Golden Eagle Resources, II, LLC. Joshua did not immediately reply to Paul's email.
3/1/2023	Gary Nuckolls emailed Joshua Sanger regarding their lease negotiations. Joshua replied to Gary's email. Joshua told Gary that Cori was still the point person for this request.
3/21/2023	Gary Nuckolls emailed Joshua Sanger and Cori Willett to determine if there was any interest in the lease, lease bonus and royalty offer. Cori replied, stating that Golden Eagle had been busy and would reply again soon.
3/23/2023	Cori Willett emailed Gary Nuckolls indicating Golden Eagle would be leasing with another party. Cori and Gary spoke and Cori subsequently emailed Gary with the contact information of the party they would be leasing to, Selenite Energy.
3/24/2023	Chris Branch, a contract representative of Selenite Energy, emailed Gary Nuckolls regarding Golden Eagle's interest.
3/27/2023	Gary Nuckolls spoke with Chris Branch and Chris indicated that a lease has not yet been executed but it should be in the near future. An executed lease has not been provided to date, but Chris indicated that Selenite's intent is to participate in the unit well.

In re the Matter of the Application of SWN
Production (Ohio), LLC for Unit Operation
Emerson Belle A Unit



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

In re the Matter of the Application of SWN :
Production (Ohio), LLC for Unit Operation :
 :
 :
Emerson Belle A Unit :

DUE DILIGENCE AFFIDAVIT

I, Cooper Farish, being first duly cautioned and sworn, do hereby affirm and state as follows:

1. Affiant is competent to testify on the matters contained in this affidavit.
2. Affiant is employed by Southwestern Energy Company as a Staff Landman. Southwestern Energy Company is the parent company of SWN Production (Ohio), LLC (“SWN”). My daily responsibilities include managing field land brokers, negotiating lease acquisitions, and handling title matters for SWN’s operations in the Utica/Point Pleasant Formation.
3. Affiant has the authority to sign this Affidavit on behalf of SWN.
4. Pursuant to Ohio Revised Code § 1509.28, SWN is filing an application with the Chief of the Division of Oil and Gas Resources Management (DOGRM) requesting an order authorizing SWN to operate the Unitized Formation and applicable land area, identified as the Emerson Belle A Unit. The Emerson Belle A Unit is located in Monroe County, Ohio, and as a unit of an entire pool or part thereof consists of 51 separate tracts of land covering 710.076 acres.
5. As a function of Affiant’s job duties, Affiant, or persons under Affiant’s direction or supervision, has personal knowledge of the matters set forth in this affidavit. Further, Affiant, or persons under Affiant’s direction or supervision, has reviewed all documents, which reflect SWN’s efforts to identify and locate mineral interest owners within the proposed unit.
6. Affiant attests that SWN acted with due diligence, and will continue to, to identify all mineral interest owners within the proposed unit and ascertain their current addresses. These efforts include diligently reviewing county public records to determine mineral ownership. Affiant further attests that where it was not reasonably possible or practicable to identify mineral interest owners’ identities or addresses, SWN will provide notice by publication of a hearing scheduled pursuant to R.C. 1509.28.

7. Affiant attests that, to the best of its knowledge, the names and addresses SWN has provided to DOGRM are accurate.
8. Affiant understands that the DOGRM is relying on the statements and representations contained in this Affidavit to verify that SWN has acted with all due diligence to identify and locate mineral interest owners for tracts contained within the proposed unit. Further, SWN understands its duty to provide to DOGRM updated mineral interest owner's information as soon as is practicable, and understands that updated information may result in a new or rescheduled unitization hearing.
9. Nothing in this Affidavit shall constitute a waiver of right in law or equity by the DOGRM or SWN.
10. Affiant states that the above is true and accurate to the best of Affiant's knowledge and belief.

FURTHER AFFIANT SAYETH NAUGHT.



Cooper Farish – Staff Landman

JURAT CERTIFICATE

STATE OF TEXAS)
) ss:
COUNTY OF HARRIS)

Sworn to and subscribed before me this 6th day of April, 2023, by Cooper Farish. This is a jurat certificate; an oath or affirmation was administered to the signer with regard to this notarial act.



Notary Public

Printed Name: Brenda Borens

My Commission Expires: 1-22-2027



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

In re the Matter of the Application of SWN :
Production (Ohio), LLC for Unit Operation :
:
Emerson Belle A Unit :

WORKING INTEREST OWNER APPROVAL

SWN Production (Ohio), LLC (“Applicant”) has prepared and/or filed an application asking the Chief of the Division of Oil and Gas Resources Management to issue an order authorizing Applicant to operate the Emerson Belle A Unit, located in Monroe County, Ohio, and consisting of 51 separate tracts of land covering approximately 710.076 acres, according to the Unit Plan attached thereto (the “Application”).

Applicant is an owner (as that term is defined in Ohio Revised Code § 1509.01(K)) in 46 tract(s) of land covering approximately 620.087 acres contained in the Emerson Belle A Unit, or 87.326879% of the lands in the unit, all as more specifically described on attached Exhibit 1.

Pursuant to Ohio Revised Code § 1509.28(A), Applicant hereby approves, and supports the making of, the Application (including without limitation the Unit Plan attached thereto), and further commit its acreage to the Emerson Belle A Unit.

SWN Production (Ohio), LLC

By: 
Cooper Farish – Staff Landman

Date: April 6, 2022

Exhibit 1

Tract Number	Mineral Owners	Surface Acres in Unit (Net)	Tax Map Parcel ID
1	DANMAR Holdings, LLC	11.197	04-011001.0000
2	Paul Crum, Trustee of The Crum Family Trust	0.434	01-001008.0000
4	Darrell Hall and Betty Hall, husband and wife, as tenants in common	26.082	01-014004.0000
5	Wilbur James Valkovic	4.281	01-014006.1000
5	AMP IV, LP	4.188	01-014006.1000
7	Max Maroni	55.223	04-012009.0000
8	Wilbur James Valkovic	1.947	01-014006.0000
8	AMP IV, LP	1.905	01-014006.0000
9a	Richard Glenn Charbono	18.194	01-014001.0000
9b	Richard Glenn Charbono	4.392	01-014001.0000
9b	Joellen Buckio	0.183	01-014001.0000
9b	Egger Family Holdings, LLC	1.098	01-014001.0000
9b	Jennifer B. Henthorn	0.183	01-014001.0000
9b	Nancy Rubel	1.098	01-014001.0000
10	Peak Acquisition Partners, LLC	0.131	01-014014.0000
11	Peak Acquisition Partners, LLC	0.032	01-014003.0000
11	Jeffrey C. Buckio	0.001	01-014003.0000
11	Joellen Buckio	0.001	01-014003.0000
11	Egger Family Holdings, LLC	0.008	01-014003.0000
11	Jennifer B. Henthorn	0.001	01-014003.0000
11	Nancy Rubel	0.008	01-014003.0000
12	Robert D. Hopton and Irene E. Hopton, Co- Trustees of the Robert D. Hopton Family Trust	10.491	04-012004.0000
13	LL&B Headwater II, LP	10.341	04-012003.0000
13	Ridgetop Royalties, LLC	10.341	04-012003.0000
14	Robert D. Hopton and Irene E. Hopton, Co- Trustees of the Robert D. Hopton Family Trust	10.996	01-014008.0000
15	LL&B Headwater II, LP	24.788	04-049003.0000
15	Ridgetop Royalties, LLC	24.788	04-049003.0000
16	Julie A. Myers and Thomas Myers, wife and husband	0.003	04-049009.0000
16	Patricia A. Wells	0.006	04-049009.0000
16	Steven J. Wells and Marcia J. Wells, husband and wife	0.003	04-049009.0000
17	LL&B Headwater II, LP	0.107	01-015003.0000
17	Ridgetop Royalties, LLC	0.107	01-015003.0000
18	Amber Hope Lodge	0.517	01-015002.0000
18	Sarah Lodge Wiggins	0.960	01-015002.0000
19	J & T Mineral Management, LLC	22.463	04-049006.0000

20	J & T Mineral Management, LLC	19.427	01-015017.0000
21	KOAG, Inc	3.147	04-049004.0000
21	Anna Marie Gillespie	3.147	04-049004.0000
22	KOAG, Inc	4.629	01-015004.0000
22	Anna Marie Gillespie	4.629	01-015004.0000
23	J & T Mineral Management, LLC	0.028	01-015008.0000
24	Timothy D. Dierkes	1.001	01-015012.0000
25	J & T Mineral Management, LLC	59.870	01-015016.0000
26	Melissa A. Hartshorn	0.943	01-015013.0000
27	PIBUR, LLC	5.233	01-015007.0000
28	PIBUR, LLC	10.344	01-015014.0000
30	Theresa L. Brown	0.156	01-025039.0000
31	PIBUR, LLC	0.949	01-025041.0000
32	PIBUR, LLC	0.119	01-025012.0000
34	James E. Headley	2.355	01-025028.0000
35	Gary O. Piatt and Brenda L. Piatt, husband and wife, as survivorship tenants	4.516	01-025043.0000
35	Janet M. Ryan	2.133	01-025043.0000
35	Edward P. Ryan	0.427	01-025043.0000
35	Edward T. Ryan	0.427	01-025043.0000
35	Robert M. Ryan	0.427	01-025043.0000
35	Beverly Jean Staudt	1.137	01-025043.0000
35	Mary A. Cook, f/k/a Mary A. Staudt	0.569	01-025043.0000
36	Harry A. Smith and Andrea L. Smith, husband and wife	10.954	01-025019.0000
37	Richard A. Smith and Kimberlee D. Smith, husband and wife	6.184	01-025020.0000
38	Mary Ann Tomlin	0.320	01-025016.0000
39	Mary Ann Tomlin	0.010	01-025036.0000
40	Daniel H. Binegar	0.700	01-025007.0000
40	Robert Binegar, Jr.	0.700	01-025007.0000
40	Shawn Binegar	0.700	01-025007.0000
40	Susan Blatt	0.700	01-025007.0000
40	Jennifer Butler	0.700	01-025007.0000
41	Darren W. Robbins and Jeanneane I. Robbins, husband and wife, joint with right of survivor	60.920	01-025005.0000
43	Daniel M. Chaplin and Kelly J. Chaplin, husband and wife, as survivorship tenants	1.670	01-025021.1000
44	Bounty Minerals, LLC	1.508	01-025010.0000
44	Larry Hustack and Lori Hustack, husband and wife, as survivorship tenants	2.992	01-025010.0000
45	GCWJ Properties, LLC	36.720	01-025001.0000
46	AMP IV, LP	11.123	01-024004.0000
46	William H. Dennison, II, a/k/a W. H. Dennison, II	11.123	01-024004.0000

47	GCWJ Properties, LLC	17.387	09-001002.0000
48	AMP IV, LP	10.544	09-002008.0000
48	William H. Dennison, II, a/k/a W. H. Dennison, II	31.633	09-002008.0000
49	Donald George Thompson and Barbara Jeanette Thompson, Co-Trustees of the Donald George and Barbara Jeanette Thompson Family Trust	12.273	09-002012.0000
50	The Tank First Family Limited Partnership	27.509	09-002009.0000
51	Jalee Geneva Craig	1.611	09-002011.0000
	Total:	620.087	

End of “Exhibit 1”

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

In re the Matter of the Application of SWN :
Production (Ohio), LLC for Unit Operation :
 :
Emerson Belle A Unit :
 :

**PREPARED TESTIMONY OF KEVIN WOLFE
ON BEHALF OF SWN PRODUCTION (OHIO), LLC**

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Attorneys for Applicant,
SWN Production (Ohio), LLC

PREPARED DIRECT TESTIMONY OF KEVIN WOLFE

INTRODUCTION

Q1. Please introduce yourself to the Division.

A1. My name is Kevin Wolfe. I am a Staff Geologist for Southwestern Energy Company. The Applicant, SWN Production (Ohio), LLC (“SWN”), is a wholly owned subsidiary of Southwestern Energy Company. My business address is 10000 Energy Drive, Spring, TX 77389.

Q2. Can you please describe your educational background?

A2. I received my Bachelor of Arts degree in Geology from the College of Wooster in Wooster, Ohio in May of 2005. I also received my Master of Science degree in Geology from the University of Illinois Urbana-Champaign in Urbana, Illinois in August of 2008.

Q3. Would you briefly describe your professional experience?

A3. I have worked for Southwestern Energy Company since January of 2023. Prior to that, I worked for Grit Oil and Gas, planning and developing San Miguel, Eagle Ford, and Austin Chalk wells in Dimmit and Maverick Counties, Texas. Before that, I worked for Noble Energy until its merger with Chevron. During my time with Noble Energy, I worked the Marcellus and Utica/Point Pleasant Formations in the Appalachian Basin in West Virginia, the Marcellus Formation in Pennsylvania, the Lewis and Fox Hills Formation in the Greater Green River Basin of Wyoming, and Wolfcamp and Bone Spring wells in the Permian Basin of Texas. I started my career in 2008 working for EQT, where I worked on the Marcellus, Lower Huron, and Berea Formations in Pennsylvania, West Virginia, and Kentucky. To date I have been responsible for planning and executing hundreds of unconventional wells in West Virginia, Pennsylvania, and Texas, building out future development plans, evaluating near-field acquisition opportunities, and completing subsurface evaluations of hydrocarbon-containing formations utilizing core, electronic logs and cuttings.

Q4. Are you a member of any professional associations?

A4. Yes, I am an active member of the American Association of Petroleum Geologists.

Q5. What do you do as a Staff Geologist for Southwestern Energy Company?

1 A5. As a Staff Geologist at Southwestern Energy Company, I work as a development
2 geologist for the Marcellus and Utica/Point Pleasant Formations in Ohio and West
3 Virginia. Specifically, I evaluate potential reservoirs within these formations using
4 electronic logs, core, and laboratory data, and work with a team of planning,
5 completions, drilling, and reservoir engineers to plan a drilling program to most
6 efficiently extract these hydrocarbons.

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

8 A6. I am testifying in support of the *Application of SWN Production (Ohio), LLC for Unit*
9 *Operation* (the “Application”), with respect to the Emerson Belle A Unit, consisting
10 of 51 separate tracts of land totaling approximately 710.076 acres in Monroe County,
11 Ohio. My testimony will show that the Unitized Formation described in the
12 Application is part of a pool and thus an appropriate subject of unitization.
13 Additionally, my testimony will support the Unit Plan’s allocation of unit production
14 and expenses to separately owned tracts on a surface-acreage basis, based on the unit
15 area’s nearly uniform thickness and substantially identical geological characteristics
16 throughout.

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

18 **Q7. To begin, would you tell me what a “pool” is?**

19 A7. A pool is a consolidated area or ‘unit’ within a defined reservoir containing
20 hydrocarbons. This is consistent with the Ohio statutory definition defining a pool
21 as “an underground reservoir containing a common accumulation of oil or gas, or
22 both, but does not include a gas storage reservoir.”

23 **Q8. How is the Unitized Formation defined for the Emerson Belle A Unit?**

24 A8. It is defined as the subsurface portion of the Emerson Belle A Unit at a stratigraphic
25 equivalent interval that is from the top of the Utica Shale formation to the top of the
26 Trenton Limestone formation, as more particularly described in Attachment 1, and
27 frequently referred to as the Utica/Point Pleasant Formation.

28 **Q9. Do you have an opinion on whether or not the Unitized Formation contemplated**
29 **by the Emerson Belle A Unit constitutes a pool or part of a pool?**

30 A9. Yes. It is my opinion, based on my education and professional experience, that the
31 Unitized Formation is part of a pool.

Q10. Why?

A10. SWN believes the Point Pleasant interval and the encompassing Utica Shale Formation are both part of the same pool in the proposed Emerson Belle A Unit. Based on our analysis of the geological data, which includes wireline logs, core testing, image logs, and microseismic data, we think most of the production is from the Point Pleasant interval. However, a small portion of the oil and gas accumulation occurs within that portion of Utica Shale Formation above the Point Pleasant interval. Moreover, even though we will drill and target the Point Pleasant interval, some portion of the Utica Shale Formation above the Point Pleasant interval will also be accessed by way of the rock matrix and natural and induced fracturing.

Q11. What data sources did SWN use in determining the geologic features of the Emerson Belle A Unit?

A11. We used wireline logs from surrounding wells, core data from the Herrick Unit A 3H well (API #: 34-111-24401) located approximately 7 miles to the south of the proposed Emerson Belle A Unit, and structural information from previously drilled horizontal wells throughout the area.

Q12. Did you prepare any exhibits to support your opinion?

A12. Attachment 2, Exhibit 1, is a cross-section map of the Point Pleasant interval around the proposed Emerson Belle A Unit, which is outlined in black. There is no reason to think there are any structural or lithological features that would separate the Utica/Point Pleasant reservoir within the proposed Emerson Belle A Unit. Attachment 2, Exhibit 2, is a Southwest-Northeast stratigraphic cross-section of two key vertical wells on either side of the proposed Emerson Belle A Unit, being the Sawyers 6H well and the Tippens Unit 6HS well. See Attachment 2, Exhibit 1, for location of the cross-section wells. The log data curves displayed in both wells are the gamma ray in the left track, deep resistivity in the center track, and porosity in the right track. As seen on this exhibit, the log data demonstrates that the Utica/Point Pleasant Formation stratigraphy is very consistent and does not significantly change on either one side of the proposed Emerson Belle A Unit. Geologic properties in general, like thickness, porosity, and resistivity, are laterally consistent throughout the proposed Unit.

1 **Q13. How does this data support your opinion that the Emerson Belle A Unit should**
2 **be considered a part of a pool?**

3 A13. The log data demonstrates that formation thickness remains relatively constant across
4 the proposed Emerson Belle A Unit. Porosity and resistivity will be relatively
5 uniform, and the thermal maturity of the rock, which applies to BTU and liquids
6 content, is the same across the unit. Based on the foregoing, in my professional
7 opinion, the area within the proposed Emerson Belle A Unit boundary is all one
8 geologic unit, or part of the same pool.

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

11 A14. Yes.

12 **ALLOCATION METHODOLOGY**

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

17 A15. Yes. In my opinion, allocation on a surface-acreage basis is appropriate.

18 **Q16. Why?**

19 A16. The relative thickness and reservoir qualities of the Utica/Point Pleasant Formation
20 are expected to be consistent across the Emerson Belle A Unit. There are no
21 substantial variations expected across the proposed unit and therefore there is no
22 geologic reason to allocate production using a method other than surface acreage.

23 **Q17. In your experience, is this a common method for allocating production and**
24 **expenses?**

25 A17. Yes.

26 **Q18. Have you seen this allocation method used in other shale basins?**

27 A18. Yes. SWN has used this method on all the units that we have drilled in Ohio to date.
28 To my knowledge, similar methods are used in Pennsylvania, West Virginia, and
29 Arkansas.

30 **Q19. Does this conclude your testimony?**

31 A19. Yes.

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

In re the Matter of the Application of SWN :
Production (Ohio), LLC for Unit Operation :
 :
Emerson Belle A Unit :
 :

**PREPARED TESTIMONY OF TYLER NIEBERDING
ON BEHALF OF SWN PRODUCTION (OHIO), LLC**

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Attorneys for Applicant,
SWN Production (Ohio), LLC

PREPARED DIRECT TESTIMONY OF TYLER NIEBERDING

INTRODUCTION.

Q1. Please introduce yourself to the Division.

A1. My name is Tyler Nieberding. I am a Reservoir Engineer with Southwestern Energy Company. The Applicant, SWN Production (Ohio), LLC ("SWN"), is a wholly owned subsidiary of Southwestern Energy Company. My business address is 10000 Energy Drive, Spring, TX 77389.

Q2. Can you please describe your educational background?

A2. I received a Bachelor of Science degree in Petroleum Engineering from Marietta College in 2017.

Q3. Would you briefly describe your professional experience?

A3. I have worked at Southwestern Energy Company for over 5 years. I started working for Southwestern Energy Company upon graduation where I spent time on both the drilling and reservoir engineering teams across the Marcellus shale, Fayetteville shale, and now the Utica/Point Pleasant Formation. My first rotation was in reservoir for the Fayetteville shale team. I then worked in drilling in the Marcellus shale for approximately 2 years. For the last 3 years, I have worked as a reservoir engineer in the Marcellus shale in Pennsylvania and more recently the Marcellus and Utica/Point Pleasant plays across Ohio. I have focused on resource development, delineation, and optimization across the plays through analyzing well performance, completion designs, and subsurface characteristics.

Q4. Are you a member of any professional associations?

A4. I am a member of the Society of Petroleum Engineers (SPE).

Q5. What do you do as a reservoir engineer for Southwestern Energy Company?

A5. At Southwestern Energy Company, my responsibilities involve developing strategies for effective and efficient resource recovery to maximize value. This includes conducting integrated and interdisciplinary analysis for evaluating well performance, aiding in designing completions, forecasting reserves, and providing economics evaluations to inform decisions.

Q6. What is the purpose of your testimony today?

A6. I am testifying in support of the *Application of SWN Production (Ohio), LLC for Unit*

1 *Operation* (the “Application”), with respect to the Emerson Belle A Unit, consisting of 51
2 separate tracts of land totaling approximately 710.076 acres in Monroe County, Ohio. My
3 testimony addresses the following: (i) that unit operations for the Emerson Belle A Unit
4 are reasonably necessary to increase substantially the ultimate recovery of oil and gas, and
5 (ii) that the value of the estimated additional recovery due to unit operations exceeds its
6 estimated additional costs.

7 **UNIT OPERATIONS ARE REASONABLY NECESSARY TO INCREASE**
8 **SUBSTANTIALLY THE ULTIMATE RECOVERY OF OIL AND GAS.**

9 **Q7. Have you made an estimate of the production you anticipate from the proposed**
10 **Emerson Belle A Unit assuming an order authorizing unit operations is granted?**

11 A7. Yes, it is estimated that if the Emerson Belle A Unit was developed by drilling one (1)
12 horizontal well(s) 22,449' in completed lateral length(s), then approximately 710.076 acres
13 would be effectively developed and approximately 34.4 BCFe of natural gas would be
14 recovered. The calculations are summarized in Attachment 2, Exhibit 5.

15 **Q8. How did you make these estimates?**

16 A8. I created a type well forecast based on analogous offset well data and geology. These type-
17 well forecasts are scaled accordingly for the legally allowed perforated interval and then
18 used to estimate reserves.

19 **Q9. Have you made an estimate of the production you anticipate from the proposed**
20 **Emerson Belle A Unit assuming an order authorizing unit operations is *not* granted?**

21 A9. Yes, the results of my calculations are summarized in Attachment 2, Exhibit 5. If an order
22 authorizing unit operations is not granted, SWN would not be able to drill and complete
23 14,506' of the estimated 22,449' of lateral for the unitized unit. Additionally, estimates
24 predict we would only be able to recover 12.1 BCFe of natural gas. The stimulated lateral
25 length reduction is a result of the inability to complete segments within our unit boundary
26 due to tracts owned by unleased mineral owners and “stand-off” requirements.

27 **Q10. In your professional opinion, would it be economic to develop the Emerson Belle A**
28 **Unit using traditional vertical drilling?**

29 A10. No, you cannot produce sufficient quantities of hydrocarbons to economically justify the
30 cost of development. This is especially true in tight shale formations such as the Utica/Point

1 Pleasant. Vertical well drilling is more applicable in a thicker, more permeable productive
2 interval. Horizontal drilling in conjunction with multi-stage hydraulic fracturing is
3 necessary to increase the reservoir contact with the wellbore, which increases the reserves
4 you can produce for a more economic development. Without horizontal drilling and
5 stimulation, the permeability is too low to produce the volume of production you would
6 need to make the development economic.

7 **Q11. Summarize what your calculations show and the differences between unitized vs non-**
8 **unitized development?**

9 A11. The results of my calculations are summarized in Attachment 2, Exhibit 5. Taking the
10 difference between the unitized and non-unitized development plans, we would lose
11 approximately 14,506' feet of producible lateral. This results in a loss in recoverable
12 reserves of roughly 22.3 BCFe of natural gas.

13 **Q12. Do you believe that the proposed unit operations are reasonably necessary to increase**
14 **substantially the ultimate recovery of oil and gas from the unit area?**

15 A12. Yes, I believe the proposed unit operations are reasonably necessary to increase
16 substantially the oil and gas reserves for this immediate area. Not doing so would result in
17 a loss of value to all parties involved and make developing the "left behind" reserves
18 economically un-justifiable.

19 **VALUE OF ESTIMATED ADDITIONAL RECOVERY EXCEEDS ITS ESTIMATED**
20 **ADDITIONAL COSTS**

21 **Q13. Let's turn to the financial side of the project. Generally, in your professional**
22 **experience, how would the economics of a development project such as the**
23 **development of the Emerson Belle A Unit be evaluated?**

24 A13. During the reserve estimation process, a production profile that is proportional to the
25 stimulated lateral length was generated to estimate produced volumes over time for the
26 well(s). This, along with capital costs, operating expenses, royalty burden, taxes, and a
27 specific pricing scenario, is essential to provide an economic evaluation of a well or project.

28 **Q14. Did you do that here?**

29 A14. Yes, the results of that evaluation are summarized in Attachment 2, Exhibit 5.

30 **Q15. Would you walk us through your economic evaluation, beginning with your estimate**

1 **of the anticipated revenue stream from the Emerson Belle A Unit's development?**

2 A15. Yes. The production stream, previously discussed, was first netted for a royalty burden. I
3 then applied a price for natural gas, using the strip price, subtracting any anticipated basis
4 differential and correcting for heat value content in the natural gas. This natural gas price
5 is based on individual product pricing, subtracting out any additional fees for transportation
6 and marketing.

7 **Q16. What about anticipated capital and operating expenses?**

8 A16. Capital and operating expenses were incorporated in my analysis and are associated with
9 construction, drilling, completions, facilities, and production. The estimates are provided
10 by the Operations engineers and are based on recent costs we have experienced and
11 incurred in our Utica/Point Pleasant drilling program.

12 **Q17. Did you consider whether the Emerson Belle A Unit could be developed using a**
13 **different, smaller unit or by locating the well pad somewhere else?**

14 A17. Yes, however, there was not a feasible solution for alternative development. Other
15 potential locations were ruled out due to ownership, topography, and setback from dwelling
16 requirements that made it difficult to locate an alternative pad site that would be suitable
17 to develop all of the minerals. Thus, developing the Emerson Belle A Unit from the
18 location demonstrated on Attachment 2, Exhibit 3, will maximize efficiency, minimize
19 surface disturbance, and is the sensible decision operationally, environmentally and
20 economically.

21 **Q18. Based on this information and your professional judgment, does the value of the**
22 **estimated additional recovery from the unitized project exceed its estimated**
23 **additional costs?**

24 A18. Yes. The incremental recovery, if a unit order is granted, is estimated to be 22.3 BCFe and
25 would require an additional \$9.190 million capital investment. As a result of the additional
26 expenditure and increased reserves, the PV(10) of the project increases by approximately
27 \$18.141 million. This estimate accounts for the capital costs, operating costs, plugging and
28 abandonment costs, and reclamation costs.

29 **Q19. Does this conclude your testimony at this time?**

30 A19. Yes.

In re the Matter of the Application of
SWN Production (Ohio), LLC for Unit
Operation
Emerson Belle A Unit

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Attorneys for Applicant,
SWN Production (Ohio), LLC

PREPARED DIRECT TESTIMONY OF GARY NUCKOLLS

INTRODUCTION.

Q1. Please introduce yourself to the Division.

A1. My name is Gary Nuckolls. I am a Staff Landman with Southwestern Energy Company. The Applicant, SWN Production (Ohio), LLC (“SWN”), is a wholly owned subsidiary of Southwestern Energy Company. My business address is 10000 Energy Drive, Spring, Texas 77389.

Q2. Can you please describe your educational background?

A2. I have a Bachelor of Business Administration in Business Management from the University of Oklahoma in Norman, Oklahoma.

Q3. Would you briefly describe your professional experience?

A3. I have more than ten years of professional experience as a landman. I began my career in 2007 working for a broker in Oklahoma. I was tasked with the following responsibilities: (1) acquiring leases; and (2) running title to determine mineral ownership. In November 2008, I joined Southwestern Energy Company as a landman.

Q4. Are you a member of any professional associations?

A4. Yes, I am a member of the American Association of Professional Landmen.

Q5. What do you do as a Staff Landman for Southwestern Energy Company?

A5. As a Staff Landman at Southwestern Energy Company, I am responsible for managing land assets in Ohio and West Virginia. My daily responsibilities include unit formation, lease analysis, title review, and creating and obtaining joint operating agreements from competitors. I also contact various landowners, working interest competitors and partners to negotiate oil and gas leases and/or working interest approvals.

Q6. What is the purpose of your testimony today?

A6. I am testifying in support of the *Application of SWN Production (Ohio), LLC for Unit Operation* (the “Application”), with respect to the Emerson Belle A Unit, consisting of 51 separate tracts of land totaling approximately 710.076 acres in Monroe County, Ohio. In particular, I will describe the efforts made by SWN to put the Emerson Belle A Unit together and the Unit Plan that SWN is proposing.

EFFORTS MADE BY SWN TO LEASE UNLEASED MINERAL OWNERS.

1 **Q7. What percentage of the total acreage of the Emerson Belle A Unit is represented**
2 **by the oil and gas rights held by SWN?**

3 A7. SWN controls more than 87% of the working interest in the unit.

4 **Q8. Why was SWN not able to acquire the oil and gas rights to all of the acreage in**
5 **the Emerson Belle A Unit?**

6 A8. SWN employees or representatives are still actively engaged in trying to lease the
7 remaining unleased mineral owners. SWN is confident it has made diligent efforts to
8 lease the unleased mineral owners within the proposed unit and that its oil and gas lease
9 offers are fair considering the level of competition for new leases in the area and the
10 amount of primary term needed to develop the proposed unit.

11 **Q9. Have you prepared an affidavit detailing SWN's efforts to obtain leases from the**
12 **unleased mineral owners in the Emerson Belle A Unit?**

13 A9. Attachment 2, Exhibit 8 highlights SWN's efforts to obtain leases from the unleased
14 mineral owners as of the date of this filing.

15 **Q10. If an unleased mineral owner was to ask to lease with SWN, would SWN be likely**
16 **to agree?**

17 A10. Yes. SWN is willing to lease on reasonable, fair market value terms for the geographic
18 area in which SWN's proposed unit is located.

19 **Q11. Could you describe the location of the tracts owned by consenting working interest**
20 **owners, unleased mineral owners, and non-consenting working interest owners**
21 **within the Emerson Belle A Unit?**

22 A11. Yes. Attachment 2, Exhibit 3 is a colored plat showing each of the tracts in the Emerson
23 Belle A Unit, along with the wellbore(s) in same. The tracts highlighted in yellow
24 indicate that SWN has acquired the necessary rights to fully develop the oil and gas
25 thereunder. The tracts highlighted in red indicate that the tract is owned in whole or in
26 part by one or more unleased mineral owners.

27 **Q12. Do you have an aerial plat of the Emerson Belle A Unit?**

28 A12. Yes, I've attached one as Attachment 2, Exhibit 4.

29 **UNIT PLAN PROVISIONS.**

30 **Q13. Would you describe generally the development plan for the Emerson Belle A**
31 **Unit?**

1 A13. SWN plans to develop the Emerson Belle A Unit from a well pad that is located outside
2 the southeast corner of the Emerson Belle A Unit. From that pad, SWN plans to drill
3 one (1) horizontal well(s) into the Emerson Belle A Unit. This well is projected to be
4 22,449' feet in completed lateral length.

5 **Q14. Does SWN have a specific timeline for drilling the well(s) in the Emerson Belle A**
6 **Unit?**

7 A14. SWN intends to spud the well(s) in fourth quarter of 2023.

8 **Q15. Does SWN have any other development activity in the immediate area?**

9 A15. Yes, please see Attachment 2, Exhibit 6, which depicts SWN's units in the area of the
10 Emerson Belle A Unit.

11 **Q16. Are you familiar with the Unit Plan proposed by SWN for the Emerson Belle A**
12 **Unit?**

13 A16. Yes. The Unit Plan proposed by SWN is attached to the Application and consists of an
14 initial document that establishes the non-operating relationship between the parties in
15 the unit, and an operating agreement and related exhibits that establish how the unit is
16 going to be explored, developed, and produced.

17 **Q17. Turning first to the body of the Unit Plan, marked as Attachment 1 to the**
18 **Application. Would you describe briefly what it does?**

19 A17. Yes. The general intent of the Unit Plan is to effectively combine the oil and gas rights
20 and interests in the Emerson Belle A Unit in a uniform manner so that they can be
21 developed as though each of the tracts were covered by a single lease.

22 **Q18. Are all of the oil and gas rights in the proposed unit combined?**

23 A18. No. The Unit Plan only unitizes the oil and gas rights in and related to the Unitized
24 Formation. The Unitized Formation is those depths located at a stratigraphic equivalent
25 interval that is from the top of the Utica Shale formation to the top of the Trenton
26 Limestone formation, and frequently referred to as the Utica/Point Pleasant Formation.

27 **Q19. How would production from the Emerson Belle A Unit be allocated?**

28 A19. On a surface-acreage basis. Under Article 4 of the Unit Plan, every tract is assigned a
29 tract participation percentage based on surface acreage, as shown on Exhibit A-2 to the
30 Unit Operating Agreement. Article 5 of the Unit Plan allocates production based on
31 that tract participation.

1 **Q20. Why use a surface-acreage basis as the method of allocation?**

2 A20. Based on the testimony of Kevin Wolfe attached to the Application as Attachment 3, a
3 surface-acreage basis is an appropriate method of allocation because the formation
4 thickness and reservoir quality of the Unitized Formation is expected to be consistent
5 across the Emerson Belle A Unit.

6 **Q21. Would you go through an example from Exhibit A-2 to the Unit Operating**
7 **Agreement to illustrate how a surface-acreage basis would be applied to the**
8 **Emerson Belle A Unit?**

9 A21. Yes. If you look at the column on Exhibit A-2 to the Unit Operating Agreement entitled
10 “Surface Acres in Unit (Net),” it shows each mineral owner’s net surface acres in each
11 tract included within the Emerson Belle A Unit. The adjacent column on Exhibit A-2
12 shows the related tract participation, which is calculated by dividing those net surface
13 acres by the total number of surface acres in the unit. So, for example, if you look at
14 Tract Number 1 on Exhibit A-2, it shows that this particular tract is owned solely by
15 DANMAR Holdings, LLC. The owner’s net surface acreage in Tract Number 1 is
16 11.197 acres. This equates to a tract participation of approximately 1.576873% (11.197
17 $\div 710.076 = 1.576873\%$).

18 **Q22. What does that mean in terms of production allocated to that particular tract?**

19 A22. It would mean this particular tract owned of record by DANMAR Holdings, LLC
20 would have allocated to it 1.576873% of all production from the Emerson Belle A Unit,
21 which would then be distributed based on the terms of the lease or other relevant
22 document affecting ownership to production proceeds from the tract.

23 **Q23. Is this the way production would be allocated to the tracts owned, in whole or in**
24 **part, by unleased mineral owners or non-consenting working interest owners?**

25 A23. Yes.

26 **Q24. In your experience, is this an unusual way to allocate production in a unit?**

27 A24. No, this method is the customary method for allocating production in a unit.

28 **Q25. How are unit expenses allocated?**

29 A25. Like production in the unit, generally on a surface-acreage basis. Article 3 of the Unit
30 Plan provides that expenses, unless otherwise allocated in the Unit Operating

Agreement, will be allocated to each tract of land within the unit in the proportion that the surface acres of each tract bear to the surface acres of the entire unit.

Q26. Who pays the unit expenses?

A26. According to the terms of the proposed Unit Plan, the working interest owners.

Q27. Do the royalty owners pay any part of the unit expenses?

A27. No, unless the terms and conditions of the royalty owner's oil and gas lease dictate otherwise.

Q28. Let's turn to the Unit Operating Agreement. It appears to be based upon A.A.P.L. Form 610 – Model Form Operating Agreement, is that correct?

A28. Yes. We typically use a modified version of the 1989 agreement. The Form 610, together with its exhibits, is a commonly used form in the industry and is frequently modified to fit the needs of the parties and circumstances.

Q29. Would it be fair to say, then, that you are familiar with the custom and usage of the Form 610 and other similar agreements in the industry?

A29. Yes.

Q30. Turning to the Unit Operating Agreement in particular, does it address how unit expenses are determined and paid?

A30. Yes. Article III of the Unit Operating Agreement provides that all costs and liabilities incurred in operations shall be borne and paid proportionately by the working interest owners, according to their Unit Participation percentages. Those percentages can be found in Exhibit A-2 to the Unit Operating Agreement. Moreover, the Unit Operating Agreement has attached to it an accounting procedure identified as Exhibit C that offers greater details regarding how unit expenses are determined and paid.

Q31. That's commonly referred to as the COPAS?

A31. Yes, it stands for the Council of Petroleum Accountants Societies, Inc. and is a commonly used form in the industry.

Q32. Based upon your education and professional experience, do you view the terms of Exhibit C as reasonable?

A32. Yes. The terms as presented in Exhibit C are commonly accepted amongst operators and clearly set forth definitions, processes, timelines, etc., so that all parties can fully

1 understand and agree as to those costs and accounting procedures associated with the
2 activity of drilling and producing oil and natural gas wells and units.

3 **Q33. Will there be in-kind contributions made by owners in the unit area for unit**
4 **operations, such as contributions of equipment?**

5 A33. No.

6 **Q34. How are decisions made regarding unit operations?**

7 A34. Article V of the Unit Operating Agreement designates SWN as the Unit Operator, with
8 full operational authority for the supervision and conduct of operations in the unit.

9 **Q35. I believe you've already described generally the documents in Exhibits A and C**
10 **to the Unit Operating Agreement. Let's turn therefore to Exhibit B of the Unit**
11 **Operating Agreement. What is it?**

12 A35. Exhibit B is a standard oil and gas lease form that is attached to the joint operating
13 agreement to govern any unleased interests owned by the parties. Article III.A of the
14 Unit Operating Agreement provides that if any party owns or acquires an oil and gas
15 interest in the Contract Area, then that interest shall be treated for all purposes of the
16 Unit Operating Agreement as if it were covered by the form of lease attached as Exhibit
17 B.

18 **Q36. Does this oil and gas lease contain standard provisions that SWN uses in**
19 **connection with its operations in Ohio?**

20 A36. Yes.

21 **Q37. Moving on to Exhibit D of the Unit Operating Agreement, would you describe**
22 **what it is?**

23 A37. Yes, Exhibit D is the insurance exhibit to the joint operating agreement. It sets forth
24 coverage amounts and limitations, and the insurance terms for operations conducted
25 under the Unit Operating Agreement.

26 **Q38. Would you next describe Exhibit E of the Unit Operating Agreement?**

27 A38. Yes. Exhibit E is the Gas Balancing Agreement, which further details the rights and
28 obligations of the parties with respect to marketing and selling any production from the
29 Contract Area.

30 **Q39. Last, would you next describe Exhibit H of the Unit Operating Agreement?**

1 A39. Yes. Exhibit H is a Model Form Recording Supplement to Operating Agreement and
2 Financing Statement, which is a document that is primarily used to give third persons
3 constructive notice of the terms of the Unit Operating Agreement.

4 **Q40. In your professional opinion, given your education and experience, are the terms**
5 **of the Unit Plan, including the terms of the exhibits just discussed, just and**
6 **reasonable?**

7 A40. Yes.

8 **Q41. Does this conclude your testimony?**

9 A41. Yes.