# DRILLING AND OPERATING AGREEMENT

# INDEX

Secu	OII		rage
1.	Assignment of Well Locations; R Locations; Outside Activities A	epresentations and Indemnification Associated with the Assignment of the Lease; Designation of Additional Well are Not Restricted	1
2.	Drilling of Wells; Timing; Extent of Drilling; Interest of Developer; Right to Substitute Well Locations		3
3.	Operator – Responsibilities in Ge	neral; Covenants; Term	4
4.	Operator's Charges for Drilling and Completing Wells; Payment; Completion Determination; Dry Hole Determination; Excess Funds and Cost Overruns – Intangible Drilling Costs; Excess Funds and Cost Overruns – Tangible Costs		
5.	Title Examination of Well Locations; Developer's Acceptance and Liability; Additional Well Locations		9
6.	Operations Subsequent to Comple	etion of the Wells; Fee Adjustments; Extraordinary Costs; Pipelines; Price Determinations; Plugging and Abandonment	9
7.	Billing and Payment Procedure with Respect to Operation of Wells; Disbursements; Separate Account for Sale Proceeds; Records and Reports; Additional Information		11
8.	Operator's Lien; Right to Collect	From Oil or Gas Purchaser	13
9.	Successors and Assigns; Transfer	s; Appointment of Agent	13
10.	. Operator's Insurance; Subcontractors' Insurance; Operator's Liability		15
11.	. Internal Revenue Code Election; Relationship of Parties; Right to Take Production in Kind		15
12.	Effect of Force Majeure; Definition of Force Majeure; Limitation		16
13.	Term		17
14.	Governing Law; Invalidity		17
15.	. Integration; Written Amendment		17
16.	Waiver of Default or Breach		17
17.	Notices		17
18.	. Interpretation		18
19.	Counterparts		18
	Exhibit A Exhibits A-l through A Exhibit B Exhibit C	Description of Leases and Initial Well Locations Maps of Initial Well Locations Form of Assignment Form of Addendum	

## DRILLING AND OPERATING AGREEMENT

THIS AGREEMENT made this 21st day of February, 2013, by and between ATLAS RESOURCES, LLC, a Pennsylvania limited liability company (hereinafter referred to as "Atlas" or "Operator"),

and

ATLAS RESOURCES SERIES 33-2013 L.P. a Delaware limited partnership, (hereinafter referred to as the "Developer").

#### WITNESSETH THAT:

WHEREAS, the Operator, by virtue of the Oil and Natural Gas Leases (the "Leases") described on Exhibit A attached to and made a part of this Agreement, has certain rights to develop the \_\_\_\_\_\_ (\_\_\_\_\_\_) initial well locations (the "Initial Well Locations") identified on the maps attached to and made a part of this Agreement as Exhibits A-l through A-\_\_\_\_;

WHEREAS, the Developer, subject to the terms and conditions of this Agreement, desires to acquire certain of the Operator's rights to develop the Initial Well Locations and to provide for the development on the terms and conditions set forth in this Agreement of additional well locations ("Additional Well Locations") that the parties may from time to time designate; and

WHEREAS, the Operator is in the oil and natural gas exploration and development business, and the Developer desires that Operator, as its independent contractor, perform certain services in connection with its efforts to develop the aforesaid Initial and Additional Well Locations (collectively the "Well Locations") and to operate the wells completed on the Well Locations, on the terms and conditions set forth in this Agreement;

NOW THEREFORE, in consideration of the mutual covenants herein contained and subject to the terms and conditions hereinafter set forth, the parties hereto, intending to be legally bound, hereby agree as follows:

- 1. Assignment of Well Locations; Representations and Indemnification Associated with the Assignment of the Lease; Designation of Additional Well Locations; Outside Activities Are Not Restricted.
  - (a) Assignment of Well Locations. The Operator shall execute an assignment of an undivided percentage of Working Interest in the Well Location for each well to the Developer as shown on Exhibit A attached hereto, which assignment shall be limited by the Operator to the "Prospect," which is defined as the minimum area permitted by state law or local practice on which one well may be drilled, which may be different for different Horizons. Notwithstanding the foregoing sentence, "Prospect" shall be deemed:
    - in the Marble Falls primary area in north-central Texas, approximately 40 acres for vertical wells and approximately 160 acres for vertical natural gas wells, and further limited to the deepest depth penetrated at the cessation of drilling activities and as adjusted to take into account lease boundaries;
    - for horizontal wells in the Marcellus Shale primary area in northeastern Pennsylvania, the wellbore, plus 125 feet on either side of the center line of a lateral in the well, extending from the beginning of the first perforation to the end of the last perforation and from the bottom of the Tully zone to the bottom of the Marcellus Shale formation, subject to any limitations under Pennsylvania law and as adjusted to take into account lease boundaries:
    - for horizontal wells in the Utica Shale primary area in eastern Ohio, the wellbore, plus 125 feet on either side of the center line of a lateral in the well, extending from the beginning of the first perforation to the end of the last perforation and from the bottom of the Reedsville Shale to the top of the Trenton Lime formation, subject to any limitations under Ohio law and as adjusted to take into account lease boundaries; and

for horizontal wells in the Mississippi Lime primary area in northern Oklahoma, the wellbore, plus 125 feet on either side of the center line of a
lateral in the well, extending from the beginning of the first perforation to the end of the last perforation and from the bottom of the Mississippi
Unconformity to the top of the Kinderhook formation, subject to any limitations under Oklahoma law and as adjusted to take into account lease
boundaries.

The assignment shall be substantially in the form of Exhibit B attached to and made a part of this Agreement. The amount of acreage, the wellbore, and any laterals, as the case may be, included in each Initial Well Location and the configuration of the Initial Well Location are indicated on the maps attached to this Agreement as Exhibits A-l through A-\_\_\_\_. The amount of acreage, the wellbore, and any laterals, as the case may be, included in each Additional Well Location and the configuration of the Additional Well Location shall be indicated on the maps to be attached as exhibits to the applicable addendum to this Agreement as provided in sub-section (c) below. The parties agree that a horizontal well or wells may be drilled on the same well pad on which another well has been drilled by the Developer.

- (b) **Representations and Indemnification Associated with the Assignment of the Lease.** With respect to the Lease assignments described in Section 1(a), the Operator represents and warrants to the Developer that:
  - (i) the Operator is the lawful owner of the Lease and rights and interest under the Lease and of the personal property on the Lease or used in connection with the Lease;
  - (ii) the Operator has good right and authority to sell and convey the rights, interest, and property;
  - (iii) the rights, interest, and property are free and clear from all liens and encumbrances; and
  - (iv) all rentals and royalties due and payable under the Lease have been duly paid.

The Operator agrees to indemnify, protect and hold the Developer and its successors and assigns harmless from and against all costs (including but not limited to reasonable attorneys' fees), liabilities, claims, penalties, losses, suits, actions, causes of action, judgments or decrees resulting from the breach of any of the above representations and warranties. It is understood and agreed that, except as specifically set forth above, the Operator makes no warranty or representation, express or implied, as to its title or the title of the lessors in and to the lands or oil and natural gas interests covered by said Leases.

- (c) **Designation of Additional Well Locations.** If the parties hereto desire to designate Additional Well Locations to be developed in accordance with the terms and conditions of this Agreement, then the parties shall execute an addendum substantially in the form of Exhibit C attached to and made a part of this Agreement specifying:
  - (i) the undivided percentage of Working Interest and the oil and natural gas Leases to be included as Leases under this Agreement;
  - (ii) the amount and configuration of acreage, the wellbore and any laterals included in each Additional Well Location on maps attached as exhibits to the addendum; and
  - (iii) their agreement that the Additional Well Locations shall be developed in accordance with the terms and conditions of this Agreement.
- (d) Outside Activities Are Not Restricted. It is understood and agreed that the assignment of rights under the Leases and the oil and natural gas development activities contemplated by this Agreement relate only to the Initial Well Locations and the Additional Well Locations. Nothing contained in this Agreement shall be interpreted to restrict in any manner the right of each of the parties to conduct without the participation of the other party any additional activities relating to exploration, development, drilling, production, or

delivery of oil and natural gas on lands adjacent to or in the immediate vicinity of the Well Locations or elsewhere.

- 2. Drilling of Wells; Timing; Extent of Drilling; Interest of Developer; Right to Substitute Well Locations.
  - Drilling of Wells. Operator, as Developer's independent contractor, agrees to drill, complete (or plug) and operate\_ \_) Initial Well Locations in accordance with the terms and conditions of this Agreement. Developer, as a minimum commitment, agrees to participate in and pay the Operator's charges for drilling and completing (or plugging) the wells and any extra costs pursuant to Section 4 in proportion to the share of the Working Interest owned by the Developer in the wells with respect to all initial wells. It is understood and agreed that, subject to sub-section (e) below, Developer does not reserve the right to decline participation in the drilling of any of the initial wells to be drilled under this Agreement.
  - Timing. Operator shall begin drilling the first well within thirty (30) days after the date of this Agreement, and shall begin drilling each of the other initial wells for which payment is made pursuant to Section 4(b) before the close of the 90th day after the close of the calendar year in which this Agreement is entered into by Operator and the Developer. Subject to the foregoing time limits, Operator shall determine the timing of and the order of drilling the Initial Well Locations.
  - **Extent of Drilling.** All of the wells to be drilled under this Agreement shall be:
    - drilled and completed (or plugged) in accordance with the generally accepted and customary oil and natural gas field practices and techniques then prevailing in the geographical area of the Well Locations; and
    - drilled to a depth sufficient to thoroughly test the objective formation or the deepest assigned depth, whichever is less, in the case of a vertical well, and drilled both vertically and horizontally to thoroughly test the objective formation, in the case of a horizontal well.
  - Interest of Developer. Except as otherwise provided in this Agreement, all costs, expenses, and liabilities incurred in connection with the drilling and other operations and activities contemplated by this Agreement shall be borne and paid, and all wells, gathering lines in connection with a natural gas well, equipment, materials, and facilities acquired, constructed or installed under this Agreement shall be owned by the Developer in proportion to the share of the Working Interest owned by the Developer in the wells. Subject to the payment of lessor's royalties and other royalties and overriding royalties, if any, production of oil and natural gas from the wells to be drilled under this Agreement shall be owned by the Developer in proportion to the share of the Working Interest owned by the Developer in the wells. Additionally, all costs, expenses, and liabilities incurred in connection with the leasing, developing, drilling or acquisition and operation of water disposal or injection wells, and the transportation, treatment or injection of water from Developer's productive wells under this Agreement shall be the sole responsibility of Developer in proportion to the share of the Working Interest owned by the Developer. In the event Operator provides any services related to water disposal wells, injection wells, transportation and treatment of waste water or similar matters under this Agreement, Operator shall be paid a competitive monthly fee, as agreed to by Developer and Operator, in addition to the Operator's other fees and reimbursements under this Agreement.
  - Right to Substitute Well Locations. Notwithstanding the provisions of sub-section (a) above, if the Operator or Developer determines in good faith, with respect to any Well Location, before operations begin under this Agreement on the proposed new well location, that it would not be in the best interest of the Developer to drill a well on the Well Location, then the party making the determination shall notify the other party of its determination and the basis for its determination and, unless otherwise instructed by Developer, the well shall not be drilled. This determination may be based on:

- (i) the production or failure of production of any other wells that may have been recently drilled in the immediate area of the Well Location;
- (ii) newly discovered title defects; or
- (iii) any other evidence with respect to the Well Location as may have been obtained.

If the well is not drilled, then Operator shall promptly propose a new well location (including all information for the proposed new well location as Developer may reasonably request) to be substituted for the original Well Location. Developer shall then have seven (7) business days to either reject or accept the proposed new well location. If the new well location is rejected, then Operator shall promptly propose another substitute well location pursuant to the provisions of this sub-section.

Once the Developer accepts a substitute well location or does not reject it within the seven (7) day period, this Agreement shall terminate as to the original Well Location and the substitute well location shall become subject to the terms and conditions of this Agreement.

#### 3. Operator – Responsibilities in General: Covenants: Term.

- (a) **Operator Responsibilities in General.** Atlas shall be the Operator of the wells and Well Locations subject to this Agreement and, as the Developer's independent contractor, shall, in addition to its other obligations under this Agreement do the following:
  - (i) arrange for drilling and completing (or plugging) the wells and, if a natural gas well, installing the necessary natural gas gathering line systems and processing and connection facilities;
  - (ii) make the technical decisions required in drilling, testing, completing (or plugging), and operating the wells;
  - (iii) manage and conduct all field operations in connection with the drilling, testing, completing (or plugging), equipping, operating, and producing the wells;
  - (iv) maintain all wells, equipment, gathering lines if a natural gas well, and facilities in good working order during their useful lives;
  - (v) perform the necessary administrative and accounting functions; and
  - (vi) design water disposal, recycling and treatment plans, if needed, for the wells.

In performing the work contemplated by this Agreement, Operator is an independent contractor with authority to control and direct the performance of the details of the work.

- (b) Covenants. Operator covenants and agrees that under this Agreement:
  - it shall perform and carry on (or cause to be performed and carried on) its duties and obligations in a good, prudent, diligent, and workmanlike
    manner using technically sound, acceptable oil and natural gas field practices then prevailing in the geographical area of the Well Locations;
  - (ii) all drilling and other operations conducted by, for and under the control of Operator shall conform in all respects to federal, state and local laws, statutes, ordinances, regulations, and requirements;
  - (iii) unless otherwise agreed in writing by the Developer, all work performed pursuant to a written estimate shall conform to the technical specifications set forth in the written estimate and all equipment and materials installed or incorporated in the wells and facilities shall be new or used and of good quality;

- (iv) in the course of conducting operations, it shall comply with all terms and conditions, other than any minimum drilling commitments, of the Leases (and any related assignments, amendments, subleases, modifications and supplements);
- (v) it shall keep the Well Locations and all wells, equipment and facilities located on the Well Locations free and clear of all labor, materials and other types of liens or encumbrances arising out of operations;
- (vi) it shall file all reports and obtain all permits and bonds required to be filed with or obtained from any governmental authority or agency in connection with the drilling or other operations and activities; and
- (vii) it will provide competent and experienced personnel to supervise drilling, completing (or plugging), and operating the wells and use the services of competent and experienced service companies to provide any third-party services necessary or appropriate in order to perform its duties.
- (c) **Term.** Atlas shall serve as Operator under this Agreement until the earliest of:
  - (i) the termination of this Agreement pursuant to Section 13;
  - (ii) the termination of Atlas as Operator by the Developer at any time in the Developer's discretion, with or without cause, on sixty (60) days' advance written notice to the Operator; or
  - (iii) the resignation of Atlas as Operator under this Agreement, which may occur on ninety (90) days' written notice to the Developer at any time after five (5) years from the date of this Agreement, it being expressly understood and agreed that Atlas shall have no right to resign as Operator before the expiration of the five-year period.

Any successor Operator shall be selected by the Developer. Nothing contained in this sub-section shall relieve or release Atlas or the Developer from any liability or obligation under this Agreement that accrued or occurred before Atlas' removal or resignation as Operator under this Agreement. On any change in Operator under this provision, the then present Operator shall deliver to the successor Operator possession of all records, equipment, materials and appurtenances used or obtained for use in connection with operations under this Agreement and owned by the Developer.

- 4. Operator's Charges for Drilling and Completing Wells; Payment; Completion Determination; Dry Hole Determination; Excess Funds and Cost Overruns-Intangible Drilling Costs; Excess Funds and Cost Overruns-Tangible Costs.
  - (a) Operator's Charges for Drilling and Completing Wells. Each oil and natural gas well that is drilled and completed under this Agreement shall be drilled and completed for an amount equal to the sum of the following items: (i) the Cost of permits, supplies, materials, equipment, and all other items used in the drilling and completion of a well provided by third-parties, or if the foregoing items are provided by Affiliates of the Developer's Managing General Partner, then those items shall be charged at competitive rates; (ii) fees for third-party services; (iii) fees for services provided by the Developer's Managing General Partner's Affiliates, which shall be charged at competitive rates; (iv) an administration and oversight fee at a competitive rate in the area where the well is situated, which is \$100,000 per vertical well in the Marble Falls primary area in north-central Texas, \$300,000 per horizontal well in the Marcellus Shale primary area in northeastern Pennsylvania, \$300,000 per horizontal well in the Mississippi Lime primary area in northern Oklahoma, and \$400,000 per horizontal well in the Utica Shale primary area in eastern Ohio; and (v) a mark-up in an amount equal to 15% of the sum of (i), (ii), (iii) and (iv), above, for the Developer's Managing General Partner's services as general drilling contractor and Operator under this Agreement.

"Cost" shall mean the price paid by Operator in an arm's-length transaction. Additionally, if the Operator drills a well for the Developer that the Developer's Managing General Partner determines is not an average well in the area because of the well's depth, complexity associated with either drilling or completion activities or as otherwise determined by the Managing General Partner, the administration and oversight fee for the well described above, if applicable, and in §4.02(d)(1)(iv) of the Developer's Partnership Agreement, may be increased to a competitive rate as determined by the Managing General Partner.

The estimated price for drilling and completing each of the wells shall be set forth in an Authority for Expenditure ("AFE") that shall be attached to this Agreement as an Exhibit, and shall cover all ordinary costs which may be incurred in drilling and completing (or plugging) each well. This includes without limitation, site preparation, permits and bonds, roadways, surface damages, power at the site, water and water supply and disposal lines, Operator's compensation as set forth above, including the Operator's administration and oversight fee and 15% mark-up for the well as discussed above, rights-of-way, drilling rigs, equipment and materials, costs of title examinations, logging, cementing, fracturing, casing, meters (other than utility purchase meters), connection facilities, salt water collection tanks, exchangers, compressors, holding tanks, separators, siphon string, rabbit, tubing, and gathering lines in connection with a natural gas well, and geological, geophysical and engineering services. After each initial well or additional well is drilled and completed under this Agreement, on request Operator shall prepare and deliver to the Developer an amended AFE that sets forth the allocation between Intangible Drilling Costs and Tangible Costs (as those terms are defined in Section 4(b), below, for the well based on the actual costs to drill and complete the well.

(b) Payment. The Developer shall pay to Operator on execution of this Agreement, in proportion to the share of the Working Interest owned by the Developer in the wells, one hundred percent (100%) of the estimated Intangible Drilling Costs and Tangible Costs, as those terms are defined below, for drilling and completing all initial wells. Notwithstanding the foregoing, any payment from Atlas to Operator for its share of the Developer's payments to Operator under this Section 4 as the Managing General Partner of the Developer shall be paid within five (5) business days of notice from Operator that the costs have been incurred.

The Developer's payment shall be nonrefundable in all events in order to enable Operator to do the following:

- (i) commence site preparation for the initial wells;
- (ii) obtain suitable subcontractors for drilling and completing or plugging the initial wells at currently prevailing prices; and
- (iii) insure the availability of equipment and materials.

For purposes of this Agreement, "Intangible Drilling Costs" or "IDCs" shall mean those expenditures associated with property acquisition and the drilling and completion of oil and natural gas wells that under present law are generally accepted as fully deductible currently for federal income tax purposes. This includes:

- (i) all expenditures made with respect to any well before the establishment of production in commercial quantities for wages, fuel, repairs, hauling, supplies and other costs and expenses incident to and necessary for the drilling of the well and the preparation of the well for the production of oil or natural gas, that are currently deductible pursuant to Section 263(c) of the Internal Revenue Code of 1986, as amended (the "Code"), and Treasury Reg. Section 1.612-4, which are generally termed "intangible drilling and development costs";
- (ii) the expense of plugging and abandoning any well before a completion attempt; and

(iii) the costs (other than Tangible Costs and Lease acquisition costs) to re-enter and deepen an existing well, complete the well to deeper formations or reservoirs, or plug and abandon the well if it is nonproductive from the targeted deeper formations or reservoirs.

"Tangible Costs" shall mean those costs associated with property acquisition and the drilling and completion of oil and natural gas wells that are generally accepted as capital expenditures pursuant to the provisions of the Code. This includes:

- (i) all costs of equipment, parts and items of hardware used in drilling and completing (or plugging) a well;
- (ii) the costs (other than IDCs and Lease acquisition costs) to re-enter and deepen an existing well, complete the well to deeper formations or reservoirs, or plug and abandon the well if it is nonproductive from the targeted deeper formations or reservoirs; and
- (iii) those items necessary to deliver acceptable oil and natural gas production to purchasers to the extent installed downstream from the wellhead of any well, which are required to be capitalized under the Code and its regulations.

With respect to each additional well drilled on the Additional Well Locations, if any, the Developer shall pay to Operator, in proportion to the share of the Working Interest owned by the Developer in the wells, one hundred percent (100%) of the estimated IDCs and Tangible Costs for drilling and completing the well on execution of the applicable addendum pursuant to Section I(c) above. The Developer's payment shall be nonrefundable in all events in order to enable Operator to do the following:

- (i) commence site preparation for the additional wells;
- (ii) obtain suitable subcontractors for drilling and completing the additional wells at currently prevailing prices; and
- (iii) insure the availability of equipment and materials

Developer shall pay, in proportion to the share of the Working Interest owned by the Developer in the wells, any extra costs incurred for each well pursuant to sub-section (a) above within ten (10) business days of its receipt of Operator's statement for the extra costs.

- (c) Completion Determination. Operator shall determine whether or not to run the production casing for an attempted completion or to plug and abandon any well drilled under this Agreement. However, a well shall be completed only if Operator has made a good faith determination that there is a reasonable possibility of obtaining commercial quantities of oil or natural gas.
- (d) **Dry Hole Determination.** If Operator determines at any time during the drilling or attempted completion of any well drilled under this Agreement, in accordance with the generally accepted and customary oil and natural gas field practices and techniques then prevailing in the geographic area of the Well Location that the well should not be completed, then it shall promptly and properly plug and abandon the well.
- (e) Excess Funds and Cost Overruns Intangible Drilling Costs. Any estimated IDCs set forth on the AFE Exhibit and prepaid by Developer with respect to any well that exceed Operator's actual price specified in sub-section (a) above for the IDCs of the well shall be retained by Operator and shall be applied, in proportion to the share of the Working Interest owned by the Developer in the well, to:
  - (i) the IDCs of an additional well or wells to be drilled on the Additional Well Locations; or
  - (ii) any cost overruns owed by the Developer to Operator for IDCs on one or more of the other wells on the Well Locations.

Conversely, if Operator's actual price specified in sub-section (a) above for the IDCs of any well exceeds the estimated IDCs set forth on the AFE Exhibit that were prepaid by Developer for the well, then:

- (i) Developer shall pay the additional price to Operator within ten (10) business days after notice from Operator that the additional amount is due and owing; or
- (ii) Developer and Operator may agree to delete or reduce Developer's Working Interest in the well or one or more of the other wells to be drilled under this Agreement to provide funds to pay the additional amounts owed by Developer to Operator. If doing so results in any excess prepaid IDCs, then the excess shall be applied, in proportion to the share of the Working Interest owned by the Developer in the wells, to:
  - (a) the IDCs of an additional well to be drilled on the Additional Well Locations; or
  - (b) any cost overruns owed by the Developer to Operator for IDCs on one or more of the other wells on the Well Locations.

The Exhibits to this Agreement with respect to the affected wells shall be amended as appropriate.

- (f) Excess Funds and Cost Overruns Tangible Costs. Any estimated Tangible Costs set forth on the AFE Exhibit and prepaid by Developer with respect to any well that exceed Operator's actual price specified in sub-section (a) above for the Tangible Costs of the well shall be retained by Operator and shall be applied, in proportion to the share of the Working Interest owned by the Developer in the well, to:
  - (i) the Developer's share of the Tangible Costs or IDCs for an additional well or wells to be drilled on the Additional Well Locations; or
  - (ii) any cost overruns owed by the Developer to Operator for the Developer's Participants' share of the Tangible Costs or IDCs of one or more of the other wells on the Well Locations.

Conversely, subject to (iii) below, if Operator's actual price specified in sub-section (a) above for the Developer's Participants' share of the Tangible Costs of any well (i.e., the actual Tangible Costs) exceeds the estimated Tangible Costs set forth on the AFE Exhibit that were prepaid by Developer for the Developer's share of the Tangible Costs for the well, then:

- (i) Developer shall pay the additional price to Operator within ten (10) business days after notice from Operator that the additional amount is due and owing; or
- (ii) Developer and Operator may agree to delete or reduce Developer's Working Interest in the well or one or more of the other wells to be drilled under this Agreement to provide funds to pay the additional amounts owed by Developer to Operator. If doing so results in any excess prepaid Tangible Costs, then the excess shall be applied, in proportion to the share of the Working Interest owned by the Developer in the wells, to:
  - (a) the Tangible Costs or IDCs of an additional well or wells to be drilled on the Additional Well Locations; or
  - (b) any cost overruns owed by the Developer to Operator for the Tangible Costs or IDCs of one or more of the other wells on the Well Locations; and
- (iii) the Developer's Participants' share of the Tangible Costs, in the aggregate, of all of the wells drilled under this Agreement and any additional wells to be drilled on the Additional Well Locations under any Addendum to this Agreement shall not exceed six percent (6%) of the total price prepaid by Developer to Operator pursuant to Section 4(b) of this Agreement or any Addendum hereto and the Developer's Managing General Partner shall pay all remaining Tangible Costs owed by Developer

to Operator, provided, however, that the Developer's Participants' share of the Tangible Costs of any one well drilled under this Agreement shall be determined by taking into account the Developer's Participants' share of all of the Tangible Costs of all of the wells to be drilled under this Agreement and any Addendum hereto.

The Exhibits to this Agreement with respect to the affected wells shall be amended as appropriate.

- 5. Title Examination of Well Locations; Developer's Acceptance and Liability; Additional Well Locations.
  - (a) **Title Examination of Well Locations, Developer's Acceptance and Liability.** The Developer acknowledges that Operator has furnished Developer with the title opinions identified on Exhibit A, and other documents and information that Developer or its counsel has requested in order to determine the adequacy of the title to the Initial Well Locations and leased premises subject to this Agreement. The Developer accepts the title to the Initial Well Locations and leased premises and acknowledges and agrees that, except for any loss, expense, cost, or liability caused by the breach of any of the warranties and representations made by the Operator in Section l(b), any loss, expense, cost or liability whatsoever caused by or related to any defect or failure of the Developer's title shall be the sole responsibility of and shall be borne entirely by the Developer.
  - (b) Additional Well Locations. Before beginning drilling of any well on any Additional Well Location, Operator shall conduct, or cause to be conducted, a title examination of the Additional Well Location, in order to obtain appropriate abstracts, opinions and certificates and other information necessary to determine the adequacy of title to both the applicable Lease and the fee title of the lessor to the premises covered by the Lease. The results of the title examination and such other information as is necessary to determine the adequacy of title for drilling purposes shall be submitted to the Developer for its review and acceptance. No drilling on the Additional Well Location shall begin until the title has been accepted in writing by the Developer or Developer has otherwise authorized the drilling on the Additional Well Location. After any title has been accepted by the Developer or drilling on the Additional Well Location has begun, any loss, expense, cost, or liability whatsoever, caused by or related to any defect or failure of the Developer's title shall be the sole responsibility of and shall be borne entirely by the Developer, unless such loss, expense, cost, or liability was caused by the breach of any of the warranties and representations made by the Operator in Section 1(b).
- 6. Operations Subsequent to Completion of the Wells; Fee Adjustments; Extraordinary Costs; Pipelines; Price Determinations; Plugging and Abandonment.
  - (a) Operations Subsequent to Completion of the Wells. Beginning with the month in which a well drilled under this Agreement begins to produce, Operator shall be entitled to an operating fee at a competitive rate in the area where the well is situated, which is \$1,000 per month for each productive vertical well in the Marble Falls primary area in north-central Texas, \$1,500 per month for each productive horizontal well in the Marcellus Shale primary area in northeastern Pennsylvania, \$2,000 per month per each productive horizontal well in the Mississippi Lime primary area in northern Oklahoma, and \$2,000 per month for each productive horizontal well in the Utica Shale primary area in eastern Ohio. The operating fees shall be proportionately reduced, on a well-by-well basis to the extent the Developer owns less than 100% of the Working Interest in a well. The operating fees shall be in lieu of any direct charges by Operator for its services or the provision by Operator of its equipment for normal superintendence and maintenance of the wells and related pipelines and facilities.

The operating fees shall cover all normal, regularly recurring operating expenses for the production, delivery and sale of natural gas, including without limitation:

- (i) well tending, routine maintenance and adjustment;
- (ii) reading meters, recording production, pumping, maintaining appropriate books and records;

- (iii) preparing reports to the Developer and government agencies; and
- (iv) collecting and disbursing revenues.

The operating fees shall not cover costs and expenses related to the following:

- the production and sale of oil;
- (ii) the collection, transportation, treatment, and disposal of salt water or other liquids or waste produced by the wells;
- (iii) the rebuilding of access roads; and
- (iv) the purchase of equipment, materials or third-party services;

which, subject to the provisions of sub-section (c) of this Section 6, shall be invoiced by Operator to the Developer on a monthly basis, and shall be paid by the Developer within ten (10) business days after notice from Operator that the additional amounts are due and owing in proportion to the share of the Working Interest owned by the Developer in the wells.

Any well that is temporarily abandoned or shut-in continuously for an entire calendar month shall not be considered a producing well for purposes of determining the number of wells in the month subject to the operating fee.

(b) **Fee Adjustments.** The monthly operating fee set forth in sub-section (a) above may be adjusted by Operator annually, as of the first day of January (the "Adjustment Date") of each year, beginning January 1, 2014. This adjustment, if any, shall not exceed the percentage increase in the average weekly earnings of "Crude Petroleum, Natural Gas, and Natural Gas Liquids" workers, as published by the U.S. Department of Labor, Bureau of Labor Statistics, and shown in Employment and Earnings Publication, Monthly Establishment Data, Hours and Earning Statistical Table C-2, Index Average Weekly Earnings of "Crude Petroleum, Natural Gas, and Natural Gas Liquids" workers, SIC Code #131-2, or any successor index thereto, since January 1, 2013, in the case of the first adjustment, and since the previous Adjustment Date, in the case of each subsequent adjustment.

In addition, the monthly operating fee set forth in sub-section (a) above for any given well or wells being operated under this Agreement may be increased beyond the annual adjustment described in the prior paragraph without advance notice to the Developer, from time-to-time, to the competitive rate in the area where the well(s) are situated, as determined by the Operator in its sole discretion.

- (c) **Extraordinary Costs.** Without the prior written consent of the Developer, pursuant to a written estimate submitted by Operator, Operator shall not undertake any single project or incur any extraordinary cost with respect to any well being produced under this Agreement that is reasonably estimated to result in an expenditure of more than \$50,000, unless the project or extraordinary cost is necessary for the following:
  - (i) to safeguard persons or property; or
  - (ii) to protect the well or related facilities in the event of a sudden emergency.

In no event, however, shall the Developer be required to pay for any project or extraordinary cost arising from the negligence or misconduct of Operator, its agents, servants, employees, subcontractors, licensees, or invitees.

All extraordinary costs incurred and the cost of projects undertaken under this section with respect to a well being produced under this Agreement shall be billed to the Developer at the invoice cost of third-party services performed or materials purchased together with a reasonable and competitive charge by Operator

- for any services performed directly by it or its Affiliates, in proportion to the share of the Working Interest owned by the Developer in the well. Operator shall have the right to require the Developer to pay in advance all or a portion of the estimated costs of a project undertaken under this section, before undertaking the project, in proportion to the share of the Working Interest owned by the Developer in the well or wells.
- (d) **Pipelines.** Subject to Section 2 (d) relating to Developer's interest in gathering lines for the wells, Developer shall have no interest in any natural gas pipeline and gathering system or processing plant, including but not limited to gathering systems and processing plants owned by the Operator or its Affiliates. Also, Developer shall not be charged any cost or expense for the construction, expansion or maintenance of those pipeline and gathering systems or processing plants.
- (e) **Price Determinations.** Notwithstanding anything in this Agreement to the contrary, the Developer shall pay all costs in proportion to the share of the Working Interest owned by the Developer in the wells with respect to obtaining price determinations under and otherwise complying with the Natural Gas Policy Act of 1978 and the implementing state regulations. This responsibility shall include, without limitation, preparing, filing, and executing all applications, affidavits, interim collection notices, reports and other documents necessary or appropriate to obtain price certification, to effect sales of natural gas, or otherwise to comply with the Act and the implementing state regulations.
  - Operator agrees to furnish the information and render the assistance as the Developer may reasonably request in order to comply with the Act and the implementing state regulations without charge for services performed by its employees.
- (f) Plugging and Abandonment. The Developer shall have the right to direct Operator to plug and abandon any well that has been completed under this Agreement as a producer. In addition, notwithstanding any other provision of this Agreement, Operator shall not plug and abandon any well that has been drilled and completed as a producer under this Agreement before obtaining the written consent of the Developer. In this regard, if the Operator determines that any well drilled and completed under this Agreement as a producer shall be plugged and abandoned in accordance with the generally accepted and customary oil and natural gas field practices and techniques then prevailing in the geographic area of the well location, and makes a written request to the Developer for authority to plug and abandon the well and the Developer fails to respond in writing to the request within forty-five (45) days following the date of the request, then the Developer shall be deemed to have consented to the plugging and abandonment of the well.

All costs and expenses related to plugging and abandoning wells that have been drilled and completed under this Agreement as producing wells shall be borne and paid by the Developer in proportion to the share of the Working Interest owned by the Developer in the wells. Also, at any time after one (1) year from the date each well drilled and completed under this Agreement is placed into production, Operator shall have the right to deduct each month from the Developer's share of the production from the well up to \$200 for the purpose of establishing a fund to cover the Operator's estimate of the Developer's share of the costs of eventually plugging and abandoning the well. All of these funds shall be deposited by Operator in a separate interest bearing escrow account for the account of the Developer, and the total amount so retained and deposited shall not exceed Operator's reasonable estimate of Developer's share of the costs of eventually plugging and abandoning the well.

- 7. Billing and Payment Procedure with Respect to Operation of Wells; Disbursements; Separate Account for Sale Proceeds; Records and Reports; Additional Information.
  - (a) **Billing and Payment Procedure with Respect to Operation of Wells.** Operator shall promptly and timely pay and discharge on behalf of the Developer, in proportion to the share of the Working Interest owned by the Developer in the wells, the following:

- (i) all expenses and liabilities payable and incurred by reason of its operation of the wells in accordance with this Agreement, such as severance taxes, royalties, overriding royalties, operating fees, and pipeline gathering charges; and
- (ii) any third-party invoices received by Operator with respect to the Developer's share of the costs and expenses incurred in connection with the operation of the wells.

Operator, however, shall not be required to pay and discharge any of the above costs and expenses that are being contested in good faith by Operator. Operator shall:

- (i) deduct the foregoing costs and expenses from the Developer's share of the proceeds of the oil and/or natural gas sold from the wells; and
- (ii) keep an accurate record of the Developer's account, showing expenses incurred and charges and credits made and received with respect to each well

If the Developer's share of the proceeds of the oil and/or natural gas sold from the wells is insufficient to pay the costs and expenses, then Operator shall promptly and timely pay and discharge the costs and expenses described above, in proportion to the share of the Working Interest owned by the Developer in the wells, and prepare and submit an invoice to the Developer each month for those costs and expenses. The invoice shall be accompanied by the form of statement specified in sub-section (b) below, and shall be paid by the Developer within ten (10) business days of its receipt.

- (b) **Disbursements.** Operator shall disburse to the Developer, on a monthly basis, the Developer's share of the proceeds received from the sale of oil and/or natural gas sold from the wells operated under this Agreement, less:
  - (i) the amounts charged to the Developer under sub-section (a); and
  - (ii) the amount, if any, withheld by Operator for future plugging costs pursuant to sub-section (f) of Section 6.

Each disbursement made and/or invoice submitted to the Developer pursuant to sub-section (a) above shall be accompanied by a statement from the Operator itemizing with respect to each well:

- (i) the total production of oil and/or natural gas since the date of the last disbursement or invoice billing period, as the case may be, and the Developer's share of the production;
- (ii) the total proceeds received from any sale of the production, and the Developer's share of the proceeds;
- (iii) the costs and expenses deducted from the proceeds and/or being billed to the Developer pursuant to sub-section (a) above;
- (iv) the amount withheld for future plugging costs; and
- (v) any other information as Developer may reasonably request, including without limitation copies of all third-party invoices listed on the statement for the period.
- (c) Separate Account for Sale Proceeds. Operator agrees to deposit all proceeds from the sale of oil and/or natural gas sold from the wells operated under this Agreement in a separate checking account maintained by Operator. This account shall be used solely for the purpose of collecting and disbursing funds constituting proceeds from the sale of production under this Agreement.

- (d) **Records and Reports.** In addition to the statements required under sub-section (b) above, within seventy-five (75) days after the completion or plugging and abandoning of each well drilled under this Agreement, Operator shall furnish the Developer with a detailed statement itemizing the total costs and charges of the well under Section 4(a) and the Developer's share of the costs and charges, and any other information as is necessary to enable the Developer:
  - (i) to allocate any extra costs incurred with respect to the well between Tangible Costs and Intangible Drilling Costs; and
  - (ii) to determine the amount of the investment tax credit or marginal well production tax credit, if applicable.
- (e) Additional Information. Operator shall promptly furnish the Developer with any additional information as it may reasonably request, including without limitation geological, geophysical, technical, and financial information, in the form as may reasonably be requested, pertaining to any phase of the operations and activities governed by this Agreement. The Developer and its authorized employees, agents and consultants, including independent accountants shall, at Developer's sole cost and expense:
  - (i) on at least ten (10) days' written notice to Operator have access during normal business hours to all of Operator's records pertaining to operations under this Agreement, including without limitation, the right to audit the books of account of Operator relating to all receipts, costs, charges, expenses and disbursements and information regarding the separate account required under sub-section (c); and
  - (ii) have access, at its sole risk, to any wells drilled by Operator under this Agreement at all times to inspect and observe any machinery, equipment and operations.

### 8. Operator's Lien; Right to Collect From Oil or Gas Purchaser.

- (a) **Operator's Lien.** To secure the payment of all sums due from Developer to Operator under this Agreement, the Developer grants Operator a first and preferred lien on, and security interest in, the following:
  - (i) the Developer's interest in the Leases covered by this Agreement;
  - (ii) the Developer's interest in oil and natural gas produced under this Agreement and its share of the proceeds from the sale of the oil and natural gas; and
  - (iii) the Developer's interest in materials and equipment under this Agreement.
- (b) **Right to Collect From Oil or Natural Gas Purchaser.** If the Developer fails to timely pay any amount owing under this Agreement by it to the Operator, then Operator, without prejudice to other existing remedies, may collect and retain from any purchaser or purchasers of oil or natural gas the Developer's share of the proceeds from the sale of the oil and natural gas until the amount owed by the Developer, plus twelve percent (12%) interest on a per annum basis, and any additional costs (including without limitation actual attorneys' fees and costs) resulting from the delinquency, has been paid. Each purchaser of oil or natural gas shall be entitled to rely without inquiry on Operator's written statement concerning the amount of any default.

## 9. Successors and Assigns; Transfers; Appointment of Agent.

(a) Successors and Assigns. This Agreement shall be binding on and inure to the benefit of the undersigned parties and their respective successors and permitted assigns. However, without the prior written consent of the Developer the Operator may not assign, transfer, pledge, mortgage, hypothecate, sell or otherwise

dispose of any of its interest in this Agreement, or any of its rights or obligations under this Agreement. Notwithstanding, this consent shall not be required in connection with:

- (i) the assignment of work to be performed for Operator to subcontractors, it being understood and agreed, however, that any assignment to Operator's subcontractors shall not in any manner relieve or release Operator from any of its obligations and responsibilities under this Agreement;
- (ii) any lien, assignment, security interest, pledge or mortgage arising under Operator's present or future financing arrangements; or
- (iii) the liquidation, merger, consolidation, or other corporate reorganization or sale of substantially all of the assets of Operator.

Further, in order to maintain uniformity of ownership in the wells, production, equipment, and leasehold interests covered by this Agreement, and notwithstanding any other provision of this Agreement to the contrary, the Developer shall not, without the prior written consent of Operator, sell, assign, transfer, encumber, mortgage or otherwise dispose of any of its interest in the wells, production, equipment, leasehold interests, or drilling rights covered by this Agreement unless the disposition encompasses either:

- (i) the entire interest of the Developer in all wells, production, equipment and leasehold interests and drilling rights subject to this Agreement; or
- (ii) an equal undivided interest in all such wells, production, equipment, leasehold interests, and drilling rights.
- (b) **Transfers.** Subject to the provisions of sub-section (a) above, any sale, encumbrance, transfer or other disposition made by the Developer of its interests in the wells, production, equipment, leasehold interests, and drilling rights covered by this Agreement shall be made:
  - (i) expressly subject to this Agreement;
  - (ii) without prejudice to the rights of the Operator; and
  - (iii) in accordance with and subject to the provisions of the Leases covering the Well Locations.
- (c) **Appointment of Agent.** If at any time the interest of the Developer is divided among or owned by co-owners, Operator may, in its discretion, require the Developer to appoint a single trustee or agent with full authority to do the following:
  - (i) receive notices, reports and distributions of the proceeds from production;
  - (ii) approve expenditures;
  - (iii) receive billings for and approve and pay all costs, expenses and liabilities incurred under this Agreement;
  - (iv) exercise any rights granted to the Developer under this Agreement;
  - (v) grant any approvals or authorizations required or contemplated by this Agreement;
  - sign, execute, certify, acknowledge, file and/or record any agreements, contracts, instruments, reports, or documents whatsoever in connection with this Agreement or the activities contemplated by this Agreement; and
  - (vii) deal generally with, and with power to bind, the Developer with respect to all activities and operations contemplated by this Agreement.

However, the Developer shall continue to have the right to enter into and execute all contracts or agreements for its share of the oil and natural gas produced from the wells drilled under this Agreement in accordance with sub-section (c) of Section 11.

### 10. Operator's Insurance; Subcontractors' Insurance; Operator's Liability.

(a) **Operator's Insurance.** Operator shall obtain and maintain at its own expense, so long as it is Operator under this Agreement, all required Workmen's Compensation Insurance and comprehensive general public liability insurance in amounts and coverage not less than \$1,000,000 per person per occurrence for personal injury or death and \$1,000,000 for property damage per occurrence, which shall include coverage for blow-outs as well as total liability coverage of not less than \$10,000,000.

Subject to the above limits, the Operator's general public liability insurance shall be in all respects comparable to that generally maintained in the industry with respect to services of the type to be rendered and activities of the type to be conducted under this Agreement. Operator's general public liability insurance shall, if permitted by Operator's insurance carrier:

- (i) name the Developer as an additional insured party; and
- (ii) provide that at least thirty (30) days' prior notice of cancellation and any other adverse material change in the policy shall be given to the Developer.

However, the Developer shall reimburse Operator for the additional cost, if any, of including it as an additional insured party under the Operator's insurance.

Current copies of all policies or certificates of the Operator's insurance coverage shall be delivered to the Developer on request. It is understood and agreed that Operator's insurance coverage may not adequately protect the interests of the Developer and that the Developer shall carry at its expense the excess or additional general public liability, property damage, and other insurance, if any, as the Developer deems appropriate.

- (b) **Subcontractors' Insurance.** Operator shall require all of its subcontractors to carry all required Workmen's Compensation Insurance and to maintain such other insurance, if any, as Operator in its discretion may require.
- (c) **Operator's Liability.** Operator's liability to the Developer as Operator under this Agreement shall be limited to, and Developer shall indemnify the Operator and hold it harmless from, claims, penalties, liabilities, obligations, charges, losses, costs, damages, or expenses (including but not limited to reasonable attorneys' fees), as provided in §4.05 of the Developer's Partnership Agreement.

## 11. Internal Revenue Code Election; Relationship of Parties; Right to Take Production in Kind.

(a) Internal Revenue Code Election. With respect to this Agreement, each of the parties elects under Section 761(a) of the Internal Revenue Code of 1986, as amended, to be excluded from the provisions of Subchapter K of Chapter 1 of Subtitle A of the Internal Revenue Code of 1986, as amended. If the income tax laws of the state or states in which the wells covered by this Agreement are located contain, or may subsequently contain, a similar election, each of the parties agrees that the election shall be exercised.

Beginning with the first taxable year of operations under this Agreement, each party agrees that the deemed election provided by Section 1.761-2(b)(2)(ii) of the Regulations under the Internal Revenue Code of 1986, as amended, will apply; and no party will file an application under Section 1.761-2 (b)(3)(i) of the Regulations to revoke the election. Each party agrees to execute the documents and make the filings with the appropriate governmental authorities as may be necessary to effect the election.

- (b) **Relationship of Parties.** It is not the intention of the parties to create, nor shall this Agreement be construed as creating, a mining or other partnership or association or to render the parties liable as partners or joint venturers for any purpose. Operator shall be deemed to be an independent contractor and shall perform its obligations as set forth in this Agreement.
- (c) Right to Take Production in Kind. Subject to the provisions of Section 8 above and this Section 11, the Developer shall have the exclusive right to execute all contracts relating to the sale or disposition of its proportionate share of the production from the wells drilled under this Agreement and sell or dispose of its proportionate share of all oil and natural gas produced from the wells to be drilled under this Agreement, exclusive of production:
  - (i) that may be used in development and producing operations;
  - (ii) unavoidably lost; and
  - (iii) used to fulfill any free natural gas obligations under the terms of the applicable Lease or Leases.

Except as provided below, Operator shall not have any right to sell or otherwise dispose of the Developer's share of the oil and natural gas.

Developer shall have no interest in any natural gas or oil supply agreements of Operator, except the right to receive Developer's share of the proceeds received from the sale of any natural gas or oil from wells developed under this Agreement. The Developer agrees to designate Operator or Operator's designated bank agent as the Developer's collection agent in any contracts. On request, Operator shall assist Developer in arranging the sale or disposition of Developer's oil and natural gas under this Agreement and shall promptly provide the Developer with all relevant information that comes to Operator's attention regarding opportunities for selling production.

If Developer fails to take in kind or separately dispose of its proportionate share of the oil and natural gas produced under this Agreement, then Operator shall have the right, subject to the revocation at will by the Developer, but not the obligation, to purchase the oil and natural gas or sell it to others at any time and from time to time, for the account of the Developer at the best price obtainable in the area for the production. Notwithstanding, Operator shall have no liability to Developer should Operator fail to market the production.

Any such purchase or sale by Operator shall be subject always to the right of the Developer to exercise at any time its right to take in-kind, or separately dispose of, its share of oil and natural gas not previously delivered to a purchaser. Any purchase or sale by Operator of the Developer's share of oil and natural gas under this Agreement shall be only for reasonable periods of time as are consistent with the minimum needs of the oil and natural gas industry under the particular circumstances, but in no event for a period in excess of one (1) year.

## 12. Effect of Force Majeure; Definition of Force Majeure; Limitation.

- (a) Effect of Force Majeure. If Operator is rendered unable, wholly or in part, by force majeure (as defined below) to carry out any of its obligations under this Agreement, including but not limited to beginning the drilling of one or more wells by the applicable times set forth in Section 2(b) or any Addendum to this Agreement, the obligations of the Operator, so far as it is affected by the force majeure, shall be suspended during, but no longer than, the continuance of the force majeure. The Operator shall give the Developer prompt written notice of the force majeure with reasonably full particulars concerning it. Operator shall use all reasonable diligence to remove the force majeure as quickly as possible to the extent the same is within its reasonable control.
- (b) **Definition of Force Majeure.** The term "force majeure" shall mean an act of God, strike, lockout, or other industrial disturbance, act of the public enemy, war, terrorist acts, blockade, public riot, lightning,

fire, storm, flood, explosion, governmental restraint, unavailability of drilling rigs, equipment or materials, plant shut-downs, curtailments by oil and natural gas purchasers and any other causes whether of the kind specifically enumerated above or otherwise, which directly preclude Operator's performance under this Agreement and are not reasonably within the control of the Operator including, but not limited to, the inability of Operator to begin the drilling of the wells subject to this Agreement by the applicable times set forth in Section 2(b) or in any Addendum to this Agreement due to decisions of third-party operators to delay drilling the wells, poor weather conditions, inability to obtain drilling permits, access rights to the drilling site or title problems.

(c) **Limitation.** 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 affecting the Operator contrary to its wishes. The method of handling these difficulties shall be entirely within the discretion of the Operator.

#### 13. Term.

This Agreement shall become effective when executed by Operator and the Developer. Except as provided in sub-section (c) of Section 3, this Agreement shall continue and remain in full force and effect for the productive lives of each well being operated under this Agreement.

## 14. Governing Law; Invalidity.

- (a) Governing Law. This Agreement shall be governed by, construed and interpreted in accordance with the laws of the Commonwealth of Pennsylvania, excluding its conflict of law provisions.
- (b) **Invalidity.** The invalidity or unenforceability of any particular provision of this Agreement shall not affect the other provisions of this Agreement, and this Agreement shall be construed in all respects as if the invalid or unenforceable provision were omitted.

### 15. Integration; Written Amendment.

- (a) Integration. This Agreement and the Exhibits to this Agreement constitute and represent the entire understanding and agreement of the parties with respect to the subject matter of this Agreement and supersede all prior negotiations, understandings, agreements, and representations relating to the subject matter of this Agreement.
- (b) Written Amendment. No change, waiver, modification, or amendment of this Agreement shall be binding or of any effect unless in writing duly signed by the party against which the change, waiver, modification, or amendment is sought to be enforced.

#### Waiver of Default or Breach.

No waiver by any party to any default of or breach by any other party under this Agreement shall operate as a waiver of any future default or breach, whether of like or different character or nature.

#### 17. Notices.

Unless otherwise provided in this Agreement, all notices, statements, requests, or demands that are required or contemplated by this Agreement shall be in writing and shall be hand-delivered or sent by registered or certified mail, postage prepaid, to the following addresses until a party's address is changed by certified or registered letter so addressed to the other party:

(i) If to the Operator, to:

Atlas Resources, LLC Park Place Corporate Center One 1000 Commerce Drive, 4th Floor Pittsburgh, Pennsylvania 15275 Attention: President

## (ii) If to Developer, to:

Atlas Resources Series 33-2013 L.P. c/o Atlas Resources, LLC Park Place Corporate Center One 1000 Commerce Drive, 4th Floor Pittsburgh, Pennsylvania 15275

Notices that are served by registered or certified mail on the parties in the manner provided above shall be deemed sufficiently served or given for all purposes under this Agreement at the time the notice is hand-delivered or mailed in any post office or branch post office regularly maintained by the United States Postal Service or any successor. All payments shall be hand-delivered or sent by United States mail, postage prepaid to the addresses set forth above until a party's address is changed by certified or registered letter so addressed to the other party.

#### 18. Interpretation.

The titles of the Sections in this Agreement are for convenience of reference only and shall not control or affect the meaning or construction of any of the terms and provisions of this Agreement. As used in this Agreement, the plural shall include the singular and the singular shall include the plural whenever appropriate.

### 19. Counterparts.

The parties may execute this Agreement in any number of separate counterparts, each of which, when executed and delivered by the parties, shall have the force and effect of an original; but all counterparts of this Agreement shall be deemed to constitute one and the same instrument.

IN WITNESS WHEREOF, the parties hereto have duly executed this Agreement as of the day and year first above written.

OPERATOR:	ATLAS RESOURCES, LLC
	By: /s/ Matthew Jones
DEVELOPER:	ATLAS RESOURCES SERIES 33-2013 L.P.
	By its Managing General Partner: ATLAS RESOURCES, LLC
	By: /s/ Freddie M. Kotek

# DESCRIPTION OF LEASES AND INITIAL WELL LOCATIONS

[To be completed as information becomes available]

# 1. WELL LOCATION

(a)	Oil and Gas Lease from	dated, covering approximately	and recorded in Deed Book Volumeacres in	
	Township, County,	·		
(b)	The portion of the leasehold estate constituting the the map attached hereto as Exhibit A-l.		No	Well Location is described on
(c)	Title Opinion of,		, . dated	. 20
(d)	The Developer's interest in the oil and gas leasehold estate clandowner's royalty interest, overriding royalty interests and	2	ivided% Work	ing Interest, subject to the

Exhibit A

# ASSIGNMENT OF OIL AND NATURAL GAS LEASE

STA	ATE/COMMONWEALTH OF		
COI	UNTY OF		
KNO	OW ALL MEN BY THESE PRESENTS:		
valu	THAT the undersigned (collectively, hereinafter called "Assignor"), for and in consideration of One Dollar and other able consideration (\$1.00 ovc), the receipt and adequacy of which is hereby acknowledged, does hereby sell, assign, transfer and set over unto (hereinafter called "Assignee"), an undivided in, and to, the oil and natural gas lease(s)		
desc	ribed as follows:		
	respect to the well(s) known as, but only to the extent described as follows (with all other interests being expressly rved to Assignor) [check one box to show applicability]:		
	in the Marble Falls primary area in north-central Texas, approximately 40 acres for vertical oil wells and approximately 160 acres for vertical natural gas wells, and further limited to the deepest depth penetrated at the cessation of drilling activities and as adjusted to take into account lease boundaries;		
	for horizontal wells in the Marcellus Shale primary area in northeastern Pennsylvania, the wellbore, plus 125 feet on either side of the center line of a lateral in th well, extending from the beginning of the first perforation to the end of the last perforation and from the bottom of the Tully zone to the bottom of the Marcellus Shale formation, subject to any limitations under Pennsylvania law and as adjusted to take into account lease boundaries;		
	for horizontal wells in the Utica Shale primary area in eastern Ohio, the wellbore, plus 125 feet on either side of the center line of a lateral in the well, extending from the beginning of the first perforation to the end of the last perforation and from the bottom of the Reedsville Shale to the top of the Trenton Lime formation subject to any limitations under Ohio law and as adjusted to take into account lease boundaries; and		
	for horizontal wells in the Mississippi Lime primary area in northern Oklahoma, the wellbore, plus 125 feet on either side of the center line of a lateral in the we extending from the beginning of the first perforation to the end of the last perforation and from the bottom of the Mississippi Unconformity to the top of the Kinderhook formation, subject to any limitations under Oklahoma law and as adjusted to take into account lease boundaries.		
	CEPTIONS:		
	Exhibit B (Page 1)		

And for the same consideration, the Assignor covenants with the said Assignee and his or its heirs, successors, or assigns that Assignor is the lawful owner of said lease and rights and interest thereunder and of the personal property thereon or used in connection therewith; that the undersigned has good right and authority to sell and convey the same; and that said rights, interest and property are free and clear from all liens and encumbrances, and that all rentals and royalties due and payable thereunder have been duly paid.

[remainder of page intentionally left blank; signatures appear on following page]

Exhibit B (Page 2)

IN WITNESS WHEREOF, and intending to be legally bound, the undersigned Assignor has signed and sealed this instrument the day of		
Signed and acknowledged in the presence of		
Exhibit B (Page 3)		

ADDENDUM NO				
TO DRILLING AND OPERATING AGREEMENT DATED, 20				
THIS ADDENDUM NO made and entered into this day of, 20, by and between ATLAS RESOURCES, LLC, a Pennsylvania limited liability company (hereinafter referred to as "Operator"),				
and				
ATLAS RESOURCES SERIES 33-2013 L.P., a Delaware limited partnership, (hereinafter referred to as the Developer).				
WITNESSETH THAT:				
WHEREAS, Operator and the Developer have entered into a Drilling and Operating Agreement dated				
WHEREAS, pursuant to Section l(c) of the Agreement, Operator and Developer presently desire to designate Additional Well Locations described below to be developed in accordance with the terms and conditions of the Agreement.				
NOW, THEREFORE, in consideration of the mutual covenants contained in this Addendum and intending to be legally bound, the parties agree as follows:				
1. Pursuant to Section I(c) of the Agreement, the Developer hereby authorizes Operator to drill, complete (or plug) and operate, on the terms and conditions set forth in the Agreement and this Addendum No, additional wells on the Additional Well Locations described on Exhibit A to this Addendum and on the maps attached to this Addendum as Exhibits A through A				
2. Operator, as Developer's independent contractor, agrees to drill, complete (or plug) and operate the additional wells on the Additional Well Locations in accordance with the terms and conditions of the Agreement and further agrees to begin drilling the first additional well within thirty (30) days after the date of this Addendum and to begin drilling all of the additional wells before the close of the 90th day after the close of the calendar year in which the Agreement was entered into by Operator and the Developer, or, if this Addendum is dated after that 90 day period, to begin drilling the first additional well within thirty (30) days after the date of this Addendum and to drill and complete (or plug) all of the remaining additional wells by the end of the calendar year in which this Addendum is dated.				
3. Developer acknowledges that:				
(a) Operator has furnished Developer with the title opinions identified on Exhibit A to this Addendum; and				
(b) such other documents and information which Developer or its counsel has requested in order to determine the adequacy of the title to the above Additional Well Locations.				
The Developer accepts the title to the Additional Well Locations and leased premises in accordance with the provisions of Section 5 of the Agreement.				
4. The drilling and operation of the additional wells on the Additional Well Locations shall be in accordance with and subject to the terms and conditions set forth in the Agreement as supplemented by this Addendum No and except as previously supplemented, all terms and conditions of the Agreement shall remain in full force and effect as originally written.				
Exhibit C				

Exhibit C (Page 1)

5.	This Addendum No shall be legally binding on, and shall inure to the benefit of, the parties and their respective successors and permitted assigns.		
WIT	WITNESS the due execution of this Addendum on the day and year first above written.		
		OPERATOR:	ATLAS RESOURCES, LLC
			Ву
		DEVELOPER:	ATLAS RESOURCES SERIES 33-2013 L.P.
			By its Managing General Partner: ATLAS RESOURCES, LLC
			Ву
	Exhibit C (Page 2)		
		(1 ag	( <i>L</i> )