

OIL AND GAS LEASE
NO. _____

WHEREAS, pursuant to the Texas Natural Resources Code Chapters 32, 33, 34, 51, and Chapter 52, Subchapters A-D and H, (hereinafter referred to as N.R.C.), and subject to all rules and regulations promulgated by the Texas General Land Office ("GLO") and/or the School Land Board ("SLB") pursuant thereto, and all other applicable statutes and amendments to the N.R.C., the following area (the "Leased Premises"), to-wit:

was, after being duly advertised, offered for lease on the ____ day of _____, **2015**, at 10:00 o'clock a.m., by the GLO and the Texas Parks and Wildlife Department Board for Lease (TPWD) for the sole and only purpose of exploring and drilling for, and producing oil and/or gas that may be found and produced from the Leased Premises; and

WHEREAS, after all bids and remittances which were received up to said time have been duly considered by the GLO and the TPWD at a regular meeting thereof in the GLO at Austin, Texas, on the ____ day of _____, **2015**, hereinafter the "effective date" and it was found and determined that _____ ("Lessee") whose address is _____ had offered the highest and best bid for a lease of the Leased Premises and is, therefore, entitled to receive a lease thereon:

NOW, THEREFORE, I, George P. Bush, Commissioner of the GLO, hereinafter sometimes referred to as "Lessor," by virtue of the authority vested in me and in consideration of the payment by Lessee of the sum of _____, receipt of which is hereby acknowledged and of the royalties, covenants, stipulations and conditions contained and hereby agreed to be paid, observed and performed by Lessee, do hereby demise, grant, lease and let unto Lessee the non-exclusive right to explore for, and the exclusive right to produce and take oil and/or gas from the Leased Premises upon the following terms and conditions:

1. RESERVATION: There is hereby excepted and reserved to Lessor: the full use of the Leased Premises and all rights with respect to the surface and subsurface thereof for any and all purposes except those granted to Lessee, and to the extent herein granted to Lessee; the right to grant third parties seismic, geophysical and geological permits and to enter into other agreements with third parties, which allow such third parties to conduct geophysical, geological or seismic surveys on, over, under, through and across the Leased Premises during the term of this lease; and the rights of ingress and egress and use of the Leased Premises by Lessor and its mineral lessees for purposes of exploring for and producing the minerals which are not covered, or which may not be covered in the future, under the terms of this lease, but which may be located within the surface boundaries of the Leased Premises. All of the rights in and to the Leased Premises retained by Lessor and all of the rights in and to the Leased Premises granted to Lessee herein shall be exercised in such a manner that neither shall unduly interfere with the operations of the other. This lease is made and entered into subject to any existing rights of way, easements, geophysical or geochemical exploration permits.

2. TERM: Subject to the other provisions hereof, this lease shall be for a term of **one (1)** year from the effective date hereof (herein called "primary term") and as long thereafter as oil or gas is produced in paying quantities from the Leased Premises.

3. DELAY RENTALS: This is a one (1) year Paid-Up Oil and Gas Lease. For the purpose of any payment or payments in this lease that are based on a delay rental amount, the delay rental shall be considered to be Ten Dollars (\$10.00) per acre.

4. ROYALTY: All capitalized terms used in this lease that are not defined in this lease shall have the meanings given them in the Rules. Upon production of Oil and/or Gas, Lessee agrees to pay or cause to be paid to the GLO, for the use and benefit of the State of Texas, during the term hereof, each of the following royalties as applicable to the substances actually produced from the Leased Premises and/or subsequent processing:

- (a) **OIL:** As a royalty on Oil, **one fourth (1/4)** part of the Gross Production or the value thereof, at the option of the Lessor, such value to be calculated at the point the Oil is Ready for Sale and Use and without deduction for expenses, as described in section (4)(k), and determined by the greatest of: (1) the highest posted price, plus premium, if any, paid or offered for Oil of a like type and gravity in the general area where produced and when run, (2) the highest market price thereof paid or offered in the general area where produced and when run, or (3) the gross proceeds of the sale thereof.
- (b) **NON-PROCESSED GAS:** As a royalty on any Non-Processed Gas that is produced from the Leased Premises, Lessee agrees to pay Lessor **one fourth (1/4)** part of the Gross Production or the value thereof received by Lessee or any Affiliate of Lessee, at the option of the Lessor, such value to be calculated (i) at the point at which the Non-Processed Gas is Ready for Sale and Use and without deduction for expenses, as described in section (4)(k), (ii) on a Dry gas basis as to both volume and energy content (as described in the section 30 definitions below), and (iii) based on the higher of:

(A) the highest market price paid or offered for gas of comparable quality in the general area where produced and when run; or

(B) the gross price paid or offered to the Lessee; provided that the maximum pressure base in measuring the gas under this lease contract shall equal 14.65 pounds per square inch absolute, and the standard base temperature shall be sixty (60) degrees Fahrenheit, correction to be made for pressure according to Boyle's Law, and for specific gravity according to a test made by chromatographic analysis or the Balance Method.

Provided, however, that if Non-Processed Gas is sold to a parent, subsidiary or affiliate of Lessee, then the royalty due hereunder shall be based on the value of the Gas as either Non-Processed Gas or Processed Gas, as the case may be, in the first sale to a third party in an agreement negotiated at arms' length.

- (c) **PROCESSED GAS:** As a royalty on any Processed Gas, Lessee agrees to pay **one fourth (1/4)** part of the Residue Gas and the NGLs extracted, or the value thereof, at the option of the Lessor, such value to be calculated at the point the Residue Gas and/or the NGLs, respectively, are Ready for Sale and Use. All royalties due herein shall be on 100% of the volume of the Gas produced from the Leased Premises (calculated on a Dry gas basis as to both volume and energy content, as described in the section 30 definitions below) as measured or attributed at the inlet of the Processing Plant. The royalty due from Lessee hereunder shall be based on the greater value of:

(1) the sum of the values of (A) 100% of the Residue Gas MMBtus attributable to the Gas determined at the plant recovery efficiency applicable to each NGL component, plus (B) the net value of the NGLs after deduction of all applicable gas processing fees and/or the value of the NGLs at the applicable liquids percent of proceeds accruing to the Processing Plant; or

(2) the sum of the values of (A) 100% of the available Residue Gas MMBtus attributable to the Gas, plus (B) the value of the NGLs at the applicable minimum liquids POP%, established herein in section 4(d), without deduction or reduction in the value of the NGLs by a percent of proceeds or any other fees or adjustments of any type, form, or character; or

(3) the “keep whole” value of the Gas as described in section (4)(f).

For purposes of calculating the royalty due hereunder, the respective values of the Residue Gas and the NGLs shall be based on the greater of:

(1) the highest market price paid or offered in the general area for (A) any Pipeline-Quality Residue Gas, and (B) NGLs, as either Raw Mix or merchantable and marketable commercial grades and/or blends of each of the individual components, after fractionation, of comparable quality in the general area, or

(2) the (A) gross price paid or offered to Lessee for such Pipeline-Quality Residue Gas, and (B) weighted monthly average gross selling price for the respective grades of NGLs, as either Raw Mix or merchantable and marketable commercial grades and/or blends of each of the individual components, after fractionation.

No fees or costs of any kind shall be deducted from the value of Gas that is bypassed around a gas Processing Plant and then blended with Gas that was processed to remove liquefiable hydrocarbons at, or at a point downstream of, the tailgate of the Processing Plant, a.k.a. “conditioning”. The value of Gas bypassed around a plant in which no liquefiable hydrocarbons or NGLs are removed from the gas shall equal that for Non-Processed Gas per section (4)(b).

Provided, however, that if NGLs are recovered from Gas processed in a plant in which Lessee (or its parent, subsidiary or affiliate) owns an interest, then the POP% applicable to NGLs shall be the greater of (x) the applicable POP% per section 4(d), or (y) the highest percent accruing to a third party processing Gas through such plant under a processing agreement negotiated at arms' length.

(d) **APPLICABLE MINIMUM LIQUIDS PERCENT OF PROCEEDS:** (1) The applicable minimum liquids percent of proceeds (“POP%”) of the total available liquid hydrocarbon content volume for all NGLs, except ethane, shall, regardless of the natural gas liquids recovery process or gas processing agreement terms and/or conditions, be equal to the following:

(A) 70% for gas with a heating content or BTU value equal to or greater than 1100 BTU/SCF;

(B) 60% for gas with a heating content or BTU value equal to or greater than 1070 BTU/SCF but less than 1100 BTU/SCF; and

(C) 50% for gas with a heating content or BTU value less than 1070 BTU/SCF.

(2) The available liquid hydrocarbon volume, in gallons, of each NGL component used to calculate the value of the NGLs at the applicable POP% shall equal the product of (i) the Processing Plant inlet Gas volume, in MSCF, on a Dry gas basis, times (ii) the gallons per MSCF of each component calculated per the applicable standards, at 14.65 pounds per square inch absolute and 60° Fahrenheit, according to a test made by chromatographic analysis of the Gas, except ethane, where the theoretical gallons of ethane available in the Gas shall be reduced by the Processing Plant recovery efficiency of ethane then being specified in processing agreements negotiated at arm's length between the Lessee and the plant for each dedicated Processing Plant and each Processing Plant that may process the Gas in a series of plants.

(3) The available Residue Gas MMBtu amount used in the calculation of the royalty value in section 4(c)(2) shall equal the product of (i) the Processing Plant inlet Gas MMBtu amount less the sum total MMBtu of shrinkage calculated for the available liquid hydrocarbon volume in section 4(d)(2) for each NGL component, times (ii) one (1.0) minus the lesser of (A) the plant fuel MMBtu percentage divided by 100%, or (B) 0.035.

(e) **OTHER PRODUCTS:** As a royalty on carbon black, carbon dioxide, sulphur or any other products (including water) produced (excepting Oil, Gas, or NGLs, addressed separately above), Lessee agrees to pay **one fourth (1/4)** part of the gross production of such products, or the value thereof at the option of Lessor, such value to be calculated at the point the other products are Ready for Sale and Use and without deduction for expenses, as described in section (4)(k), such value to be based on the higher of:

(1) the highest market price of each product, during the same month in which such product is produced; or

(2) the average gross sale price of each product for the same month in which such products are produced.

(f) **KEEP WHOLE:** Notwithstanding any other provision of this lease to the contrary, Lessee may not pay a royalty hereunder for Processed Gas that is less than the royalty that would have been due under section 4(b) for the total energy content of the Processing Plant inlet Gas if it had not been processed.

(g) **NON-SALES DISPOSITIONS:** As a royalty on non-sales dispositions of Gas, including but not limited to vented gas, flared gas, flash gas and lease fuel gas, Lessee agrees to pay Lessor based on the royalty provisions for Non-Processed Gas described in section 4(b) of this Lease (but without requirement of merchantability or marketability) if the Gas produced from the Leased Premises is not processed; otherwise, the non-sales dispositions of Gas shall be based on the royalty provisions for Processed Gas described in section 4(c) for Residue Gas. If, for whatever reason, there are no Gas sales dispositions, then Lessee agrees to pay to Lessor royalty on one fourth (1/4) part of the total energy content of the Gas, in MMBtu determined on a Dry gas basis, based on the posted market price of natural gas at the nearest applicable gas market hub in \$/MMBtu.

(h) **PLANT FUEL AND RECYCLED GAS:** No royalty shall be payable on any Gas as may represent this lease's proportionate share of any fuel used to process Gas produced hereunder in any third party gas processing plant pursuant to section 4(c). Subject to the consent in writing of Lessor, Lessee may inject gas for secondary or enhanced recovery operations or for gas lift purposes into any oil- or gas-producing formation in the Leased Premises after the liquid hydrocarbons contained in the Gas have been removed, and no royalty shall be payable on the Gas so injected until such time as the same may thereafter be produced and sold or used.

(i) **CONSERVATION:** Lessee shall use all reasonable means to prevent the underground or above ground waste of Oil or Gas and to avoid the physical waste, flaring or venting of Gas produced from the Leased Premises.

- (j) **DUTY TO MARKET:** Lessee shall exercise due diligence and use all reasonable efforts in marketing any and all production from the Leased Premises, at no cost to Lessor, to obtain the best price reasonably available for the Oil and Gas
- (k) **NO DEDUCTIONS:** Except for fees or deductions that may be permitted pursuant to section 4(c), Lessee shall pay or cause to be paid royalty due under this lease without deduction for the cost of producing, gathering, storing, separating, treating, dehydrating, conditioning, compressing, processing, transporting and otherwise making the Oil, Non-Processed Gas, Processed Gas, and other products hereunder Ready For Sale and Use, whether borne by Lessee or by third-party purchasers and whether stated as a deduction from the price or an adjustment to the price based on location or condition. If any contract by which Lessee or an Affiliate of Lessee sells Oil or Gas produced hereunder makes deductions or adjustments to the price to account for costs of producing, gathering, storing, separating, treating, dehydrating, conditioning, compressing, processing, or transporting of Oil or Gas produced from the Leased Premises, then such deductions shall be added back to the price received for purposes of computing the gross production upon which royalties are to be paid. Lessor and Lessee agree that the foregoing provision is to be given full effect and is not to be construed as "surplusage" under *Heritage Resources, Inc. v. Nationsbank*, 939 S.W.2d 118 (Tex. 1996).
- (l) **ROYALTY IN KIND:** Lessee shall pay monetary royalties based on the value of the gross production from the Leased Premises, unless Lessor elects to receive royalty in kind. Lessee shall pay oil or gas royalty, or both, in kind at the option of Lessor without deduction for expenses, as described in section (4)(k), necessary to make the oil, gas and any other products Ready for Sale and Use. Lessor may change its election to take royalty in kind or monetary form at any time or from time to time by giving Lessee notice of such election not less than sixty (60) days in advance. If Lessor elects to take its royalty production in kind, Lessor may elect to have the royalty production of the Oil, Gas, and any other products that are in a Ready for Sale and Use condition delivered in kind at the location Lessee sells its production, or at another location mutually acceptable to Lessor and Lessee. Lessee shall bear all costs to the point of delivery. If Lessor elects to take its royalty in kind, Lessor and Lessee agree to execute either the State's form of Gas Balancing Agreement or any other agreement that is acceptable to Lessor and Lessee.
- (m) **SEPARATION:** Lessee agrees that before any hydrocarbons in liquid form and any gas produced from the Leased Premises is sold, transferred, surface commingled with the production from any other lease tract and/or pooled unit, or is used or processed in a plant, it will be run free of cost to Lessor through a gravity-based oil and gas separator of conventional type and of adequate size and efficiency such that all liquid hydrocarbons recoverable from the gas by such means shall be recovered. Upon written consent of Lessor, Lessee may apply other forms of separation equipment that are at least as efficient as a gravity-based separator upon such terms and conditions as prescribed by Lessor. Upon written consent of Lessor, the requirement that such gas and liquid hydrocarbons be run through a separator or other equipment may be waived upon such terms and conditions as prescribed by Lessor. Lessee must request and obtain a waiver in writing from Lessor before the installation and/or use of any full well stream/wet gas/multiphase flow meters that measure any production on or from the Leased Premises.
- (n) **COMMINGLING:** Lessee must obtain prior written permission from Lessor per 31 TAC §9.35(a)(3) before surface commingling Oil and/or Gas production from a state lease or pooled unit with the production from any other private or state lease and/or unit into (i) a common manifold and/or separator, (ii) common storage, (iii) a common gathering system or pipeline, or (iv) to utilize an off-lease gas supply to inject gas for lift purposes into any oil- or gas-producing formation in the Leased Premises. These requirements are in addition to, and apart from, the requirements of any other state and/or federal entity.
- (o) **METERING:** Lessee agrees that any hydrocarbons in liquid form and any gas produced from the Leased Premises shall be measured separately before the liquid hydrocarbons and/or gas leave the Leased Premises. Lessee agrees to comply with all applicable American Gas Association (AGA) Standards, as well as the American Petroleum Institute (API) Manual of Petroleum Measurement Standards (MPMS) for any measurement device or tank that covers the standards, practices, guidelines, recommendations and procedures which include, but are not limited to, the design, installation, calibration, testing and handling of samples and operation of a metering system used for the measurement of hydrocarbons in liquid form or gas at any meter location on the Leased Premises, at a point of lease custody transfer, for the purpose of lease allocation in the event of surface commingling, or for the reporting and allocation of lease fuel, flared gas volumes, vented volumes or any other lease use.
- (p) **ROYALTY ON CONTRACT SETTLEMENTS:** Lessee shall pay to the GLO royalty at the applicable royalty rate on any monetary settlement received by Lessee from any breach of contract by Lessee's purchaser relating to the marketing, pricing or taking of oil or gas production from the Leased Premises.

5. PAYMENTS, SUBMISSIONS AND NOTICES TO LESSOR:

- (a) **MONETARY ROYALTY PAYMENTS:** All royalty not paid in kind at the election of Lessor shall be paid to the GLO at Austin, Texas, in the following manner: payment of royalty on production of oil and gas shall be as provided in the rules set forth in the Texas Administrative Code. The rules currently provide that royalty on oil is due and must be received in the GLO on or before the fifth (5th) day of the second (2nd) month succeeding the month of production or such later date as may be prescribed in the rules. Royalty on gas is due and must be received in the GLO on or before the fifteenth (15th) day of the second (2nd) month succeeding the month of production or such later date as may be prescribed in the rules. All royalty payments must be accompanied by the affidavit of the owner, manager or other authorized agent, completed in the form and manner prescribed by the GLO and showing the gross amount and disposition of all oil and gas produced and the market value of the oil and gas. Lessee must maintain, and make available to the GLO upon request, copies of all documents, records or reports confirming the gross production, disposition and market value including gas meter readings, pipeline receipts, gas line receipts and other checks or memoranda of the amount produced and put into pipelines, tanks, or pools and gas lines or gas storage, and any other reports or records which the GLO may require to verify the gross production, disposition and market value. In all cases the authority of a manager or agent to act for the Lessee herein must be filed in the GLO. Each royalty payment shall be accompanied by a check stub, schedule, summary or other remittance advice showing, by the assigned GLO lease number, the amount of royalty being paid on each lease.
- (b) **MANNER AND TIMELINESS OF PAYMENTS:** A monetary royalty payment that is not submitted electronically shall be considered timely paid if delivered to the Lessor on or before the applicable due date or if deposited in a postpaid, properly addressed wrapper with a post office or official depository under the care and custody of, and postmarked by, the United States Postal Service at least one (1) day before the applicable due date. A payment that is submitted electronically shall be considered timely paid if such payment is successfully transmitted to the proper account with the Comptroller of the State of Texas on or before the due date.
- (c) **PENALTIES AND INTEREST.** Lessee shall pay penalties and interest due on late royalty payments and other sums due, and for failure to provide

documents, (whether physical documents or information in electronic form), as provided by law or the rules. The right to collect penalties and interest is in addition to, and shall not in any way limit or restrict, the rights of the GLO to pursue other remedies at law or in equity, including without limitation forfeiture of this lease. If Lessee pays royalty on or before thirty (30) days after the royalty payment was due, then Lessee owes a penalty of five percent (5%) on the royalty or twenty-five dollars (\$25.00), whichever is greater. A royalty payment which is over thirty (30) days late shall accrue a penalty of ten percent (10%) of the royalty due or twenty-five dollars (\$25.00), whichever is greater. In addition to a penalty, royalties shall accrue interest at a rate of twelve percent (12%) per year; such interest will begin to accrue when the royalty is sixty (60) days overdue. For royalties due on or after February 26, 2010, the interest rate assessed on delinquent royalties shall be determined as of the date of the first business day of the year the royalty becomes delinquent and will be reduced to prime plus one percent (1%). Affidavits and supporting documents which are not filed when due shall incur a penalty in an amount set by the GLO administrative rule which is effective on the date when the affidavits or supporting documents were due. The Lessee shall bear all responsibility for paying or causing royalties to be paid as prescribed by the due date provided herein. Payment of the delinquency penalty shall in no way operate to prohibit the State's right of forfeiture as provided by law nor act to postpone the date on which royalties were originally due. The above penalty provisions shall not apply in cases of title dispute as to the State's portion of the royalty or to that portion of the royalty in dispute as to fair market value

- (d) **PAYMENTS, NOTICES, AND CORRESPONDENCE TO LESSOR:** Lessee shall assure that all royalty payments, shut-in royalty payments, extension payments, delay rentals, and all other payments due under this Lease, as well as documents, reports, notices, and other information, unless expressly provided herein that such payment or information be directed to another office, are directed to the following address:

Texas General Land Office
P.O. Box 12873
Austin, Texas 78711-2873

or

Texas General Land Office
1700 N. Congress Avenue
Austin, Texas 78701

or such other address as may then be specified in the rules. Any payments submitted electronically shall be delivered by electronic funds transfer to the proper account with the Comptroller.

- (e) **NOTICES AND CORRESPONDENCE TO LESSEE:** Notices and correspondence to Lessee shall be sent to the address shown above or such other address as Lessee shall provide in writing to Lessor. Any such notice of change of address must specifically reference this Lease.

6. RECORDS:

- (a) **RESERVES, CONTRACTS AND OTHER RECORDS:** Upon written request by the GLO, Lessee shall annually furnish the GLO with its best possible estimate of oil and gas reserves underlying this lease or allocable to this lease and shall furnish the GLO with copies of all contracts under which gas is sold or processed and all subsequent agreements and amendments to such contracts within thirty (30) days after entering into or making such contracts, agreements or amendments. Such contracts and agreements when received by the GLO shall be held in confidence by the GLO unless otherwise authorized by Lessee. All other contracts and records pertaining to the production, transportation, sale and marketing of the oil and gas produced from these Leased Premises, including the books and accounts, receipts and discharges of all wells, tanks, pools, meters, and pipelines shall at all times be subject to audit, inspection, and examination by the GLO, the Attorney General, the Governor, or the representative of any of them.
- (b) **PERMITS, DRILLING RECORDS AND REQUIRED FILINGS:** Written notice of all operations on this lease shall be submitted to the GLO by Lessee or operator five (5) days before spud date, workover, re-entry, temporary abandonment or plug and abandonment of any well or wells. Such written notice to the GLO shall include copies of Railroad Commission forms for application to drill. Copies of well tests, completion reports and plugging reports shall be supplied to the GLO at the time they are filed with the Texas Railroad Commission. All applications, permits, reports or other filings that reference this lease or any specific well on the Leased Premises and that are submitted to the Texas Railroad Commission or any other governmental agency must have the word "State" as the first word in the title. Additionally, in accordance with Railroad Commission rules, any signage on the Leased Premises for the purpose of identifying wells, tank batteries or other associated improvements to the land must also include the word "State." Division orders must be submitted to the GLO within thirty (30) days of first production. GLO shall not be required to sign any division orders. Lessee shall supply the GLO with any records, memoranda, accounts, reports, cuttings and cores, or other information relative to the operation of the above-described Leased Premises, which may be requested by the GLO, in addition to those herein expressly provided for. Lessee shall have a basic electrical log as defined by the Railroad Commission made on the bore-hole section, from the base of the surface casing to the total depth of well, of all wells drilled on the above described Leased Premises or such other log or logs as a reasonable and prudent operator would run and shall transmit a complete suite of such logs on each well to the GLO within fifteen (15) days after the making of said logs.
- (c) **PENALTIES:** Lessee shall incur a penalty whenever reports, documents or other materials are not filed in the GLO when due. The penalty for late filing shall be set by the GLO administrative rule which is effective on the date when the materials were due to the GLO.

7. RETAINED ACREAGE: Notwithstanding any provision of this lease to the contrary, but subject to Exhibit B attached hereto, after a well producing or capable of producing oil or gas has been completed on the Leased Premises, Lessee shall exercise the diligence of a reasonably prudent operator in drilling such additional well or wells as may be reasonably necessary for the proper development of the Leased Premises and in marketing the production thereon.

(a) **VERTICAL:** In the event this lease is in force and effect in whole or in part, two (2) years after the expiration date of the primary term it shall then terminate as to all of the Leased Premises, EXCEPT as to the following acreage amounts for wells drilled under this lease capable of producing in paying quantities (including a shut-in oil or gas well as provided in section 11 hereof), or a well that has been spud and upon which Lessee is, then engaged in continuous drilling or reworking

operations: (1) the lesser of 40 acres or the amount of acreage assigned to an oil well for proration purposes under special field rules; (2) the lesser of 80 acres or the amount of acreage assigned to a gas well for proration purposes under special field rules; (3) for horizontal drainhole wells the amount of acreage retained shall be the greater of 40 acres or the amount of acreage determined by the following formula: $0.032 \times L = A$, where L = the length (in feet) of the horizontal lateral component of the well from the first takepoint to the last takepoint and A = the area retained (in acres) provided that, if A is not divisible by the number 20, A will be rounded up to the next number divisible by 20, i.e. ($0.032 \times 4500 \text{ feet} = 144 \text{ acres}$, which rounds up to 160 acres); (4) if more acreage is required than is provided for in (1), (2) or (3) above in order to obtain the maximum allowable under special field rules for the permitted or producing interval or intervals, upon written approval from the GLO, such number of acres that are required to obtain the maximum allowable as required by the special field rules as approved by the Railroad Commission of Texas, or any successor agency, or other governmental authority having jurisdiction; or (5) the number of acres held in a pooled unit pursuant to Natural Resources Code Sections 52.151-52.154. After termination pursuant to this subsection, each tract retained shall be considered a separate lease and must be maintained independently. Lessee shall retain the right of ingress and egress on and across the terminated portion of the Leased Premises as may be reasonably necessary for the continued operation of the portions of the lease remaining in force and effect. Further, Lessee shall retain an easement for its pipelines, tank batteries or other surface equipment or installations on the terminated acreage for so long as they continue to be used for the development and operations on the retained acreage.

(b) **HORIZONTAL:** Two (2) years after the expiration date of the primary term this lease shall further terminate as to those depths stipulated as follows for each tract retained in section 7 (a) above: for vertical wells, 100 feet true vertical depth below the deepest then producing perforations; for horizontal wells, 300 feet true vertical depth below the deepest depth reached by the horizontal lateral between the first takepoint and the last takepoint, and for acreage retained that is pooled or unitized, all depths above and below the pooled or unitized interval. If a well has been spud and is being drilled over this termination date, the acreage retained by said well under section 7 (a) shall be held as to all depths until completion of the well, and upon completion of the well as capable of producing in paying quantities, the acreage retained shall then terminate as to those depths as provided in this section.

(c) **IDENTIFICATION AND FILING:** The surface acreage retained hereunder as to each well shall, as nearly as practical, be in the form of a square for vertical wells or a rectangle for horizontal wells, with the well located in the center thereof, or such other shape as may be approved by the GLO. Within thirty (30) days after partial termination of this lease as provided herein, Lessee must execute and record a release or releases containing a satisfactory legal description of the acreage and/or depths not retained hereunder. The recorded release, or a certified copy of same, shall be filed in the GLO, within thirty (30) days of recording accompanied by the filing fee prescribed by the GLO rules in effect on the date the release is filed. If Lessee fails or refuses to execute and record such release or releases then the GLO, in its sole discretion, may designate, by written instrument, the acreage and/or depths that have terminated hereunder, and record such instrument at Lessee's expense in the county or counties where the lease is located and in the official records of the GLO, and such designation shall be binding upon Lessee for all purposes. If at any time after the effective date of the partial termination provisions hereof, the applicable field rules are changed or the well or wells located thereon are reclassified so that less acreage is thereafter allocated to said well or wells for production purposes, this lease shall thereupon terminate as to all acreage not thereafter allocated to said well or wells for production purposes, and Lessee shall file a release or releases in the same manner as provided above.

(d) **FIELD RULES AND EXCEPTIONS:** If Lessee seeks to amend existing field rules to establish field rules applicable to the Leased Premises, and if Lessee requests a hearing for the amendment or establishment of field rules, or if Lessee requests the consolidation of existing field rules or an exemption from field rules or statewide rules, or if Lessee seeks to adopt field rules different from those in use in the immediate area, Lessee shall notify Lessor of such request prior to any Railroad Commission hearing and provide all exhibits to Lessor relative to such hearing. Any attempt by Lessee to establish, amend, consolidate, or exempt such field rules without Lessor's prior consent shall not be applicable to the Leased Premises unless and until such consent is given.

8. OFFSET WELLS: If oil and/or gas should be produced in commercial quantities from a well located on land privately owned or on State land leased at a lesser royalty, which well is within one thousand (1,000) feet of the area included herein, or which well is draining the area covered by this lease, the Lessee shall, within sixty (60) days after such initial production from the draining well or the well located within one thousand (1,000) feet from the area covered by this lease, begin in good faith and prosecute diligently the drilling of an offset well on the area covered by this lease, and such offset well shall be drilled to such depth as may be necessary to prevent the undue drainage of the area covered by this lease, and the Lessee shall use all means necessary in a good faith effort to make such offset well produce oil and/or gas in commercial quantities. Only upon the determination of the GLO with its written approval, may the payment of a compensatory royalty satisfy the obligation to drill an offset well or wells required under this section.

9. DRY HOLE/CESSATION, DRILLING, AND REWORKING:

(a) If, during the primary term hereof, within sixty (60) days of a lease anniversary date, (i) Lessee should complete a well as a dry hole, or (ii) production should cease, then the lease is maintained over the anniversary date without the payment of a delay rental. If a dry hole is completed or production or drilling operations cease more than sixty (60) days before a lease anniversary date, a delay rental must be paid on or before such anniversary date to maintain the lease and upon failure to make such payment the lease shall terminate unless otherwise held over the anniversary date by additional drilling operations or re-establishment of production during the sixty (60) days prior to the anniversary date. If, during the last year of the primary term, the production of oil or gas should cease, Lessee's rights shall remain in full force and effect without further operations until the expiration of the primary term; and if Lessee has not resumed production in paying quantities at the expiration of the primary term, Lessee may maintain this lease by conducting additional drilling or reworking operations pursuant to section 9(b), using the expiration of the primary term as the date of cessation of production under section 9(b). Should the first well or any subsequent well drilled on the above described land be completed as a shut-in oil or gas well within the primary term hereof, Lessee may resume payment of the annual rental in the same manner as provided herein on or before the rental paying date following the expiration of sixty (60) days from the date of completion of such shut-in oil or gas well and upon the failure to make such payment, this lease shall automatically terminate. If, at the expiration of the primary term or any time thereafter, a shut-in oil or gas well is located on the Leased Premises, payments may be made in accordance with the shut-in provisions hereof.

(b) If, after the expiration of the primary term, production of oil or gas from the Leased Premises, after once obtained, should cease for any cause, this lease shall not terminate if Lessee restores production in paying quantities within sixty (60) days after such cessation or commences additional drilling or reworking operations within sixty (60) days after such cessation, and this lease shall remain in full force and effect for so long as such operations continue in good faith and in workmanlike manner without interruptions totaling more than sixty (60) days. If such drilling or reworking operations result in the production of oil or gas, the lease shall remain in full force and effect for so long as oil or gas is produced from the Leased Premises in paying quantities or payment of shut-in oil or gas well royalties or payment of compensatory royalties is made as provided herein or as provided by law. If the drilling or reworking operations result in the completion of a well as a dry hole, the lease will not terminate if the Lessee commences additional drilling or reworking operations within sixty (60) days after the completion of the well as a dry hole, and this lease shall remain in effect so long as Lessee continues drilling or reworking operations in good faith and in a workmanlike manner without interruptions totaling more than sixty (60) days. Lessee shall give written notice to the GLO within thirty (30) days of any cessation of production.

10. POOLING; ALLOCATION: Lessee is hereby expressly prohibited from pooling or unitizing the Leased Premises or any interests therein with any other leasehold or mineral interest for the exploration, development and production of oil or gas or either of them without the express consent of the School Land Board and the Commissioner of the General Land Office. A well, whether or not classified as an allocation well, that traverses multiple leases or units including the Leased Premises hereunder, one or more of which leases or units contains oil and gas owned by the state, and which well is not associated with an agreement approved by Lessor specifying the allocation of the production of state-owned oil and gas, is hereby expressly not permitted and may not be operated on or under this lease or a unit containing state-owned oil and gas without the prior written consent of the Commissioner of the General Land Office or his authorized designee, which consent may be granted or withheld in the Commissioner's sole discretion.

11. SHUT-IN ROYALTIES: For purposes of this section, "well" means any well that has been assigned a well number by the governmental agency having jurisdiction over the production of oil and gas. If at any time after the expiration of the primary term of a lease that, until being shut in, was being maintained in force and effect, a well capable of producing oil or gas in paying quantities is located on the Leased Premises, but oil or gas is not being produced for lack of suitable production facilities (lack of suitable production facilities is not acceptable as a reason for making a shut-in payment if all or part of such production facilities are owned and /or operated by Lessee, and the cause is due to Lessee's improper maintenance or neglect) or lack of a suitable market, then Lessee may pay as a shut-in oil or gas royalty an amount equal to double the annual rental provided in the lease, but not less than \$1,200 a year for each well capable of producing oil or gas in paying quantities. To be effective, each initial shut-in oil or gas royalty payment, accompanied by the GLO Shut-In Affidavit, must be paid on or before: (1) the expiration of the primary term, (2) Sixty (60) days after the Lessee ceases to produce oil or gas from the Leased Premises, or (3) Sixty (60) days after Lessee completes a drilling or reworking operation in accordance with the lease provisions; whichever date is the latest. If the shut-in oil or gas royalty is paid, accompanied by the GLO Shut-In Affidavit, the lease shall be considered to be a producing lease and the payment shall extend the term of the lease for a period of one (1) year from the end of the primary term, or from the first (1st) day of the month following the month in which production ceased, and, after that, if after a diligent effort, that being those of a reasonable and prudent operator to obtain or repair the production facilities or to obtain a market, no suitable production facilities or suitable market for the oil or gas exists, Lessee may, upon written approval of the GLO, extend the lease for four (4) more successive periods of one (1) year by paying the same amount each year on or before the expiration of each shut-in year.

12. COMPENSATORY ROYALTIES: If, during the period the lease is kept in effect by payment of the shut-in oil or gas royalty, oil or gas is sold and delivered in paying quantities from a well located within one thousand (1,000) feet of the Leased Premises and completed in the same producing reservoir, or in any case in which drainage is occurring, the right to continue to maintain the lease by paying the shut-in oil or gas royalty shall cease, but the lease shall remain effective for the remainder of the year for which the royalty has been paid. Upon written approval from the GLO, the Lessee may maintain the lease for four (4) more successive years by Lessee paying compensatory royalty at the royalty rate provided in the lease of the market value of production from the well causing the drainage or which is completed in the same producing reservoir and within one thousand (1,000) feet of the Leased Premises. The compensatory royalty is to be paid monthly to the GLO beginning on or before the last day of the month following the month in which the oil or gas is produced from the well causing the drainage or that is completed in the same producing reservoir and located within one thousand (1,000) feet of the Leased Premises; if the compensatory royalty paid in any twelve (12) month period is in an amount less than the annual shut-in oil or gas royalty, Lessee shall pay an amount equal to the difference within thirty (30) days from the end of the twelve (12) month period; and none of these provisions will relieve Lessee of the obligation of reasonable development nor the obligation to drill offset wells as provided in N.R.C. Section 52.034; however, at the determination of the GLO, and with the GLO's written approval, the payment of compensatory royalties shall satisfy the obligation to drill offset wells. Compensatory royalty payments which are not timely paid will accrue penalty and interest in accordance with section 5 of this lease.

13. EXTENSIONS: If, at the expiration of the primary term of this lease, production of oil or gas has not been obtained on the Leased Premises but drilling operations are being conducted thereon in good faith and in a good and workmanlike manner, Lessee may, on or before the expiration of the primary term, file in the GLO written application for a thirty (30) day extension of this lease, accompanied by payment of Three Thousand Dollars (\$3,000.00) if this lease covers six hundred forty (640) acres or less and Six Thousand Dollars (\$6,000.00) if this lease covers more than six hundred forty (640) acres and the GLO shall, in writing, extend this lease for a thirty (30) day period from and after the expiration of the primary term and so long thereafter as oil or gas is produced in paying quantities; provided further, that Lessee may, so long as such drilling operations are being conducted, make like application and payment during any thirty (30) day extended period for an additional extension of thirty (30) days and, upon receipt of such application and payment, the GLO shall, in writing, again extend this lease so that same shall remain in force for such additional thirty (30) day period and so long thereafter as oil or gas is produced in paying quantities; provided, however, that this lease shall not be extended for more than a total of three hundred ninety (390) days from and after the expiration of the primary term unless production in paying quantities has been obtained.

14. USE OF WATER; SURFACE: See Exhibit A.

15. POLLUTION: In developing the Leased Premises, Lessee shall use the highest degree of care and all proper safeguards to prevent pollution. Without limiting the foregoing, pollution of coastal wetlands, natural waterways, rivers and impounded water shall be prevented by the use of containment facilities sufficient to prevent spillage, seepage or ground water contamination. In the event of pollution, Lessee shall use all means at its disposal to recapture all escaped hydrocarbons or other pollutants and shall be responsible for all damage to public and private properties.

(A) UPLANDS: Lessee shall build and maintain fences around its slush, sump and drainage pits and tank batteries so as to protect livestock against loss, damage or injury; and upon completion or abandonment of any well or wells, Lessee shall fill and level all slush pits and cellars and completely clean up the drilling site of all rubbish thereon and restore the surface to its original condition.

(B) SUBMERGED LANDS: No discharge of solid waste or garbage shall be allowed into State waters from any drilling or support vessels, production platform, crew or supply boat, barge, jack-up rig or other equipment located on the leased area. Solid waste shall include but shall not be limited to containers, equipment, rubbish, plastic, glass, and any other man-made non-biodegradable items. A sign must be displayed in a high traffic area on all vessels and manned platforms stating, "Discharge of any solid waste or garbage into State Waters from vessels or platforms is strictly prohibited and may subject a State of Texas lease to forfeiture." Such statement shall be in lettering of at least 1" in size.

(C) RIVERS: To the extent necessary to prevent pollution, the provisions found in subsections (a) and (b) of this section shall also apply to rivers and riverbeds.

(D) PENALTY: Failure to comply with the requirements of this provision may result in the maximum penalty allowed by law including forfeiture of the lease. Lessee shall be liable for the damages caused by such failure and any costs and expenses incurred in cleaning areas affected by the discharged waste.

16. IDENTIFICATION MARKERS: Lessee shall erect, at a distance not to exceed twenty-five (25) feet from each well on the premises covered by this lease, a legible sign on which shall be stated the name of the operator, the lease designation and the well number. Where two or more wells on the same lease or where wells on two or more leases are connected to the same tank battery, whether by individual flow line connections direct to the tank or tanks or by use of a multiple header system, each line between each well and such tank or header shall be legibly identified at all times, either by a firmly attached tag or plate or an identification properly painted on such line at a distance not to exceed three feet (3') from such tank or header connection. Said signs, tags, plates or other identification markers shall be maintained in a legible condition throughout the term of this lease.

17. ASSIGNMENTS: Subject to the right of the GLO to require a demonstration by the transferee of its financial responsibility, this lease may be transferred at any time; provided, however, that the liability of the transferor to properly discharge its obligation under the lease, including properly plugging abandoned wells, removing platforms or pipelines or remediation of contamination at drill sites shall only pass to the transferee upon the prior written consent of the GLO. The GLO may require the transferee to demonstrate financial responsibility and may require a bond or other security. All transfers must reference the lease by the file number and must be recorded in the county where the area is located, and the recorded transfer or a copy certified to by the County Clerk of the county where the transfer is recorded must be filed in the GLO within ninety (90) days of the execution date, as provided by N.R.C. Section 52.026, accompanied by the filing fee prescribed by the GLO rules in effect on the date of receipt by the GLO of such transfer or certified copy thereof. Without limiting the liability of the original lessee or any prior transferee for that entity's debts owed to the GLO hereunder, every transferee shall succeed to all rights and be subject to all obligations, liabilities, and penalties owed to the State by the original lessee or any prior transferee of the lease, including any liabilities to the State for unpaid royalties.

18. RELEASES: Lessee may relinquish the rights granted hereunder to the State at any time by recording the relinquishment in the county where this area is situated and filing the recorded relinquishment or certified copy of same in the GLO within ninety (90) days after its execution accompanied by the filing fee prescribed by the GLO rules in effect on the date of receipt by the GLO of such relinquishment or certified copy thereof. Such relinquishment will not have the effect of releasing Lessee from any liability theretofore accrued in favor of the State.

19. LIEN: In accordance with N.R.C. Section 52.136, the State shall have a first lien upon all oil and gas produced from the area covered by this lease to secure payment of all unpaid royalty and other sums of money that may become due under this lease. By acceptance of this lease, Lessee grants the State, in addition to the lien provided by N.R.C. Section 52.136 and any other applicable statutory lien, an express contractual lien on and security interest in all leased minerals in and extracted from the Leased Premises, all proceeds which may accrue to Lessee from the sale of such leased minerals, whether such proceeds are held by Lessee or by a third party, and all fixtures on and improvements to the Leased Premises used in connection with the production or processing of such leased minerals in order to secure the payment of all royalties or other amounts due or to become due under this lease and to secure payment of any damages or loss that Lessor may suffer by reason of Lessee's breach of any covenant or condition of this lease, whether express or implied. This lease, when filed in the real property records where the Leased Premises are located, and for purposes of perfecting Lessor's lien on and security interest in all proceeds, shall constitute a financing statement under the Texas Uniform Commercial Code. This lien and security interest may be foreclosed with or without court proceedings in the manner provided in Title 1, Chapter 9 of the Texas Business and Commerce Code. Lessee agrees that the GLO may require Lessee to execute and record such instruments as may be reasonably necessary to acknowledge, attach or perfect this lien. Lessee hereby represents that there are no prior or superior liens arising from and relating to Lessee's activities upon the above-described property or from Lessee's acquisition of this lease. Should the GLO at any time determine that this representation is not true, then the GLO may declare this lease forfeited as provided herein.

20. FORFEITURE: If Lessee shall fail or refuse to make the payment of any sum within thirty (30) days after it becomes due, or if Lessee or an authorized agent should knowingly make any false return or false report concerning production or drilling, or if Lessee shall fail or refuse to drill any offset well or wells in good faith as required by law and the rules and regulations adopted by the GLO, or if Lessee should fail to file reports in the manner required by law or fail to comply with rules and regulations promulgated by the GLO, the SLB or the Railroad Commission, or refuse the proper authority access to the records pertaining to operations, or if Lessee or an authorized agent should knowingly fail or refuse to give correct information to the proper authority, or knowingly fail or refuse to furnish the GLO a correct log of any well, or if Lessee shall knowingly violate any of the provisions of this lease, or if this lease is assigned and the assignment is not filed in the GLO as required by law, or if Lessee shall fail or refuse to execute and file a release as required under this lease and by GLO rules, the rights acquired under the entirety of this lease shall be subject to forfeiture by the GLO, and it shall forfeit same when sufficiently informed of the facts which authorize a forfeiture, and when forfeited the area shall again be subject to lease to the highest bidder, under the same regulations controlling the original sale of leases. However, nothing herein shall be construed as waiving the automatic termination of this lease by operation of law or by reason of any special limitation arising hereunder. Forfeitures may be set aside and this lease and all rights thereunder reinstated before the rights of another intervene upon satisfactory evidence to the GLO of future compliance with the provisions of the law and of this lease and the rules and regulations that may be adopted relative hereto.

21. RIVERBED TRACTS: In the event this lease covers a riverbed, Lessee is hereby specifically granted the right of eminent domain and condemnation as provided for in N.R.C. Sections 52.092-52.093.

22. APPLICABLE LAWS AND DRILLING RESTRICTIONS: This lease shall be subject to all rules and regulations, and amendments thereto, promulgated by the Railroad Commission and the GLO governing drilling and producing operations on State land (specifically including any rules promulgated that relate to payment of royalties, and auditing procedures, and shall be subject to all other valid statutes, rules, regulations, orders and ordinances that may affect operations under the provisions of this lease. Without limiting the generality of the foregoing, Lessee hereby agrees, by the acceptance of this lease, to be bound by and subject to all statutory and regulatory provisions relating to the GLO's audit billing notice and audit hearings procedures. Said statutes are currently found at N.R.C. Sections 52.135 and 52.137 through 52.140. In the event this lease covers land franchised or leased or otherwise used by a navigation district or by the United States for the purpose of navigation or other purpose incident to the operation of a port, then Lessee shall not be entitled to enter or possess such land without prior approval as provided under Section 61.117 of the Texas Water Code, but Lessee shall be entitled to develop such land for oil and gas by directional drilling; provided, however, that no surface drilling location may be nearer than six hundred sixty feet (660') and special permission from the GLO is necessary to make any surface location nearer than two thousand one hundred sixty feet (2,160') measured at right angles from the nearest bulkhead line or from the nearest dredged bottom edge of any channel, slip, or turning basin which has been authorized by the United States as a federal project for future construction, whichever is nearer.

23. REMOVAL OF EQUIPMENT: Upon the termination of this lease, Lessee has the duty to properly plug all wells and to remove all equipment, structures, machinery, tools, supplies and other items on the property and otherwise restore the property to the condition it was in immediately preceding issuance of the lease. If such is not completed within one hundred twenty (120) days of termination, a presumption shall arise that these items have been abandoned by the lessee or operator and the GLO may exercise the State's rights pursuant to N.R.C. Section 51.302 *et seq.*

24. FORCE MAJEURE: If, in the last year of the primary term or thereafter, Lessee is prevented from complying with any express or implied covenant of this lease, from conducting drilling operations thereon, or from producing oil and/or gas therefrom, after effort made in good faith, by reason of war, rebellion, riots, strikes, fires, acts of God or any order, rule or regulation of governmental authority, then while so prevented, Lessee's obligation to comply with such covenant shall be suspended upon proper and satisfactory proof presented to the GLO (the GLO should be notified within fifteen (15) days of any force majeure event) and accepted by the GLO in support of Lessee's contention and Lessee shall not be liable for damages for failure to comply therewith; and this lease shall be extended while and so long as Lessee is prevented, by any such cause, from drilling, reworking operations or producing oil and/or gas from the Leased Premises. Lessee agrees to immediately notify the GLO when the reason for force majeure has ceased. Notwithstanding anything contained herein to the contrary, this section is not applicable for wells being shut-in due to pipeline disruptions. See section 11.

25. LEASE SECURITY: Lessee shall take the highest degree of care and all proper safeguards to protect said Leased Premises and to prevent theft of oil, gas, and other hydrocarbons produced from said lease. This includes, but is not limited to, the installation of all necessary equipment, seals, locks, or other appropriate protective devices on or at all access points at the lease's production, gathering, and storage systems where theft of hydrocarbons can occur. Lessee shall be liable for the loss of any hydrocarbons resulting from theft and shall pay the GLO royalties thereon as provided herein on all oil, gas or other hydrocarbons lost by reason of theft.

26. LESSER ESTATE CLAUSE; REDUCTION OF PAYMENTS: (a) If this lease covers a less interest in the oil and gas on, in or under all or any part of said land than the entire and undivided fee simple estate therein, whether or not this lease purports to cover the whole or a fractional interest, then the royalties (including shut-in oil or gas well royalties) and rentals accruing from any part as to which this lease covers less than such full interest shall be paid only in the proportion which the interest herein, if any, covered by this lease, bears to the whole and undivided fee simple estate therein. If the mineral interest covered hereby is subject to any outstanding nonparticipating royalty, such royalty shall be deducted from the royalties payable to Lessor hereunder. (b) If, during the primary term, a portion of the land covered by this lease is included within the boundaries of a pooled unit that has been approved by the TPWD in accordance with Natural Resources Code Sections 52.151-52.153, or if, at any time after the expiration of the primary term or the extended term, this lease covers a lesser number of acres than the total amount described herein, payments that are made on a per acre basis hereunder shall be reduced according to the number of acres pooled, released, surrendered, or otherwise severed, so that payments determined on a per acre basis under the terms of this lease during the primary term shall be calculated based upon the number of acres outside the boundaries of a pooled unit, or, if after the expiration of the primary term, the number of acres actually retained and covered by this lease.

27. SUCCESSORS AND ASSIGNS: The covenants, conditions and agreements contained herein shall extend to and be binding upon the heirs, executors, administrators, successors or assigns of Lessee herein.

28. ANTIQUITIES CODE: In the event that any feature of archeological or historical interest is encountered during the activities authorized by this lease, Lessee will immediately cease activities and will immediately notify the GLO and the Texas Historical Commission (P.O. Box 12276, Austin, TX 78711) so that adequate measures may be undertaken to protect or recover such discoveries or findings, as appropriate. Lessee is expressly placed on notice of the National Historical Preservation Act of 1966 (PB-89-66, 80 Statute 915; 16 U.S.C.A. 470) and the Antiquities Code of Texas, N.R.C. Chapter 191 (Vernon 1993 & Supp. 1998). On state-owned land not dedicated to the Permanent School Fund, lessee shall notify the Texas Historical Commission before breaking ground at a project location. An archaeological survey might be required by the Commission before construction of the project can commence. Further, in the event that any site, object, location, artifact or other feature of archaeological, scientific, educational, cultural or historic interest is encountered during the activities authorized by this lease, Lessee will immediately notify Lessor and the Texas Historical Commission so that adequate measures may be undertaken to protect or recover such discoveries or findings, as appropriate.

29. VENUE: Lessor and Lessee, including Lessee's successors and assigns, hereby agree that venue for any dispute arising out of a provision of this lease, whether express or implied, regarding interpretation of this lease, or relating in any way to this lease or to applicable case law, statutes, or administrative rules, shall be in a court of competent jurisdiction located in the county where venue is established pursuant to applicable statute, or, if no such venue is established by statute, then, at the election of Lessor, either in Travis County, Texas, or in the county where the Leased Premises are located.

30. DEFINITIONS:

- a. **"BTU"** means British thermal unit, which is the quantity of heat required to raise the temperature of one-pound avoirdupois of pure water from 58.5 degrees Fahrenheit ("°F") to 59.5° F. An MMBtu is one million (1,000,000) British thermal units.
- b. **"Dry gas"** means a gas that contains less than or equal to seven (7) lbs of water per million standard cubic feet. The volume of Gas, on a Dry gas basis, shall be determined by mathematically removing the water vapor from Gas that is partially or fully saturated with water vapor at measurement conditions of flowing pressure and temperature. The total energy content of Gas shall be the product of multiplying the volume of Gas, on a Dry gas basis, times the heating value per unit volume, in Btu/SCF, on a Dry gas basis, at the same base temperature and base pressure.
- c. **"Gas"** means methane and other gaseous hydrocarbons, including gaseous combustible, noncombustible, and inert elements, compounds, components or mixtures thereof, and liquefiable hydrocarbons in the vapor stream. Gas volumes shall be calculated and reported, at the option of Lessor, in standard cubic feet (SCF), one thousand (1,000) standard cubic feet of gas (MSCF), or one million (1,000,000) standard cubic feet of gas (MMSCF).
- d. **"Gross Heating Value or BTU Content"** means the energy per unit volume represented by the number of BTUs produced by the complete combustion of one standard cubic foot of Gas (excluding hydrogen sulfide) at a temperature base of sixty degrees (60° F) Fahrenheit and pressure base of 14.65 pounds per square inch absolute.
- e. **"Gross Production"** means all gas and fluids brought from underground up to and through the well head, and includes: (i) all hydrocarbons produced in liquid form as oil or condensate at the well head and also all condensate, distillate, and any other liquid hydrocarbons recovered from oil, condensate, or gas run through a separator or other equipment; (ii) all hydrocarbons and gaseous substances not in liquid form produced from any well; and (iii) natural gasoline or liquid hydrocarbons, carbon dioxide, carbon black, sulfur or any other products produced or manufactured from any gas or liquid. The gross production volumes of oil, condensate, and gas includes all sales, custody transfer dispositions, and/or stored volumes and all non-sales disposition volumes, including but not limited to, lease use, fuel, vent, flare, spills, uncontrolled releases, theft, and any other loss. The gross production of gaseous hydrocarbons shall be adjusted and reported in MMBTUs.

- f. **“Market Value”** means the greatest of (i) the highest posted price, plus premium, if any, offered or paid for oil, gas, condensate, distillate, other hydrocarbons, or any Other Products produced or manufactured from the Oil or Gas, of similar characteristics and type in the general area, (ii) the prevailing market price thereof in the general area, (iii) the proceeds of the sale thereof, or (iv) the highest value reasonably available to Lessee. The proceeds of sale shall include the total value accruing to the Lessee from the sale or use of the production, including proceeds and any other thing of value received by Lessee or the operator.
- g. **“Marketable”** means that sufficient infrastructure is in-place or installed to allow for the sale or delivery of merchantable Oil and/or Gas into the custody of an authorized carrier, receiving agency, or party.
- h. **“Merchantable”** means (i) with respect to Gas, a gas that is commercially free of dust, sand, dirt, gum-forming constituents, natural gasoline, liquid hydrocarbons, water, inerts, and any other substances that may become separated from the gas during handling thereof and may be injurious to utility facilities, industrial, commercial, and/or residential users that would cause the gas to be unmarketable or require additional treating and/or processing to be ready for use and consumption (sale and use), and (ii) with respect to Oil, a crude oil, condensate, and other liquid hydrocarbons recovered in liquid form from any hydrocarbon production (oil or gas) produced on or from the Leased Premises that is suitable for normal refinery processing, sufficiently free of foreign contaminants or chemicals, and meets the appropriate pipeline or truck haul specifications for sediment and water.
- i. **“Natural Gas Liquids (NGLs)”** means those hydrocarbons liquefied, removed, recovered, or condensed from natural gas at the surface in field production facilities as oil or condensate or in natural gas processing plants as oil or stabilized condensate and as raw mix liquids prior to separation down to their base components. Natural gas liquids that are not recovered or removed as condensate in plant systems located on or off the Leased Premises or in a Processing Plant consist of either: (i) Raw Mix, or (ii) component plant products consisting of merchantable and marketable commercial grades and/or blends of each of the individual components, after fractionation, of ethane, propane, iso-butane, normal butane, and natural gasoline that include pentanes plus (iso-pentane, normal pentane and hydrocarbon components of higher molecular weight).
- j. **“Non-Processed Gas”** means all hydrocarbons and gaseous substances not defined as oil, that are not processed in plant systems located on or off the Leased Premises or in a Processing Plant to remove or extract Natural Gas Liquids to produce a Pipeline-Quality Natural Gas or Residue Gas (although the term includes such substances that have been removed from the Gas that include, but are not limited to, carbon dioxide, sulphur, water, or any other constituent or component necessary to produce a Pipeline-Quality Natural Gas).
- k. **“Oil”** means all hydrocarbons produced in a liquid form at the mouth of the well and also all condensate, distillate and other liquid hydrocarbons recovered in liquid form from any hydrocarbon production (oil or gas) produced on or from the Leased Premises when run through a separator or other equipment that is stored at pressures less than or equal to 15 pounds per square inch gauge, and that is not extracted in the form of Raw Mix in plant systems located on or off the Leased Premises or in a Processing Plant prior to fractionation. All Oil volumes shall be corrected from the measurement condition to report the produced volume of Oil in Stock Tank Barrels at Stock Tank Conditions per the applicable API MPMS standards.
- l. **“Pipeline-Quality Natural Gas”** means a natural gas that is merchantable and marketable that meets an interstate or intrastate transmission company’s minimum specifications with respect to (i) delivery pressure, (ii) delivery temperature, (iii) BTU content, (iv) mercaptan sulfur, (v) total sulfur, (vi) moisture and/or water content, (vii) carbon dioxide, (viii) oxygen, (ix) total inerts (the total combined carbon dioxide, helium, nitrogen, oxygen, and any other inert compound percentage by volume), (x) hydrocarbon dew point limits, (xi) merchantability, (xii) content of any liquids at or immediately downstream of the delivery point into a pipeline, and (xiii) interchangeability with the typical composition of the gas in the pipeline with respect to the following indices: Wobbe Number, Lifting Index, Flashback Index, and Yellow Tip Index per AGA Bulletin No. 36.
- m. **“Processed Gas”** means natural gas processed in a Processing Plant(s) located on or off the Leased Premises where Gas is processed to remove or extract liquefiable hydrocarbons or Raw Mix from the natural gas stream to produce a Pipeline-Quality Natural Gas or Residue Gas, NGLs, and other products, and as used herein includes the Residue Gas, the Raw Mix (and resulting NGLs), and other products.
- n. **“Processing Plant”** means plant systems, located on or off the Leased Premises, that include a gas processing plant, natural gasoline plant, gasoline plant, or other plant where raw unprocessed natural gas is processed to remove or extract Raw Mix from the natural gas stream to produce a Pipeline-Quality Natural Gas or Residue Gas and other products, and the Raw Mix is then either (i) separated by fractionation down to its base components prior to storage and/or transport that meets or conforms to all applicable Gas Processors Association (GPA) Standards and/or Specifications for the commercial sale of each liquefiable hydrocarbon product, or (ii) transported to another plant for separation down to its base components by fractionation prior to storage and/or transport for the commercial sale of each liquefiable hydrocarbon product. Any deductions, costs, or processing fees associated with the removal or recovery of Natural Gas Liquids is strictly limited to only that part of any Processing Plant or facility where Raw Mix is recovered, and if applicable at that plant, also fractionated to their component parts.
- o. **“Raw Mix”** means a mixture of Natural Gas Liquids (NGLs) that has a true vapor pressure greater than fifteen (15) pounds per square inch gauge at 100 degrees Fahrenheit (°F) prior to separation down to its base components by fractionation, typically consisting of a mixture of liquefiable hydrocarbons, including but not limited to, the natural gas liquids ethane, propane, iso-butane, normal butane, and natural gasoline that include pentanes plus (iso-pentane, normal pentane and hydrocarbon components of higher molecular weight).
- p. **“Ready for Sale and Use”** means the following:
 - i. **For Oil:** Oil that is merchantable and marketable and otherwise in a condition such that the Oil is suitable for transfer of ownership and will be accepted by a purchaser under a sales contract typical for the field or area.
 - ii. **For Non-Processed Gas:** A Pipeline-Quality Natural Gas that is merchantable and marketable and otherwise in a condition suitable for transfer of ownership such that the natural gas or other gas product will be interchangeable with and accepted by a

purchaser under an interstate and/or intrastate gas sales contract typical for the field or area for use by an industrial, commercial, and/or residential user.

- iii. **For Residue Gas:** A Pipeline-Quality Natural Gas at the tailgate of the only or last stage of gas processing to remove Natural Gas Liquids that is merchantable and marketable and otherwise in a condition suitable for transfer of ownership such that the natural gas or other gas product will be interchangeable with and accepted by a purchaser under an interstate and/or intrastate gas sales contract typical for the field or area for use by an industrial, commercial, and/or residential user.
- iv. **For Natural Gas Liquids:** (A) merchantable and marketable Raw Mix at the point sold as such to a third party at arms' length, or (B) merchantable and marketable Natural Gas Liquids at the tailgate of a Processing Plant after fractionation that are suitable for transfer of ownership that will be interchangeable with and accepted by a purchaser for sale or use by an industrial and/or commercial user.
- v. **For Other Products:** Products that are in a condition that will be accepted by a purchaser under a sales contract typical for the field or area for use by an industrial or commercial user.

- q. **"Residue Gas"** means (i) the material that remains after a separation, treatment, or gas conditioning process, and (ii) that gas remaining after the recovery of Natural Gas Liquids to produce a Pipeline-Quality Natural Gas. If the gas is processed to remove liquefiable hydrocarbons in a series of Processing Plants, then the Residue Gas is that gas remaining after the recovery of Natural Gas Liquids to produce a Pipeline-Quality Natural Gas at the last Processing Plant in the series.
- r. **"Stock Tank Barrel"** means the volume of liquid hydrocarbons that is equivalent to the volume of forty-two (42) U.S. gallons at atmospheric pressure and 60 °F.
- s. **"Stock Tank Conditions"** means a stock tank meeting all applicable API specifications and requirements at atmospheric pressure and 60° F.

31. LEASE FILING: Pursuant to Chapter 9 of the Tex. Bus. & Com. Code, this lease must be filed of record in the office of the County Clerk in any county in which all or any part of the Leased Premises is located, and certified copies thereof must be filed in the GLO. The prescribed filing fee shall accompany the certified copies sent to the GLO.

32. EXECUTION: This Oil and Gas Lease must be signed and acknowledged by the Lessee before it is filed of record in the county records and in the GLO.

LESSEE

BY: _____

TITLE: _____

DATE: _____

IN TESTIMONY WHEREOF, witness the signature of the Commissioner of the General Land Office of the State of Texas under the seal of the General Land Office.

**COMMISSIONER OF THE GENERAL LAND OFFICE
OF THE STATE OF TEXAS**

APPROVED

Contents _____
Legal _____
GC _____

Exec _____

STATE OF _____

(LESSEE ACKNOWLEDGMENT)

COUNTY OF _____

BEFORE ME, the undersigned authority, on this day personally appeared _____,
known to me to be the person whose name is subscribed to the foregoing instrument, as _____ of
_____, a _____, and acknowledged to me that he executed the same
for the purposes and consideration therein expressed, in the capacity stated, and as the act and deed of said _____.

Given under my hand and seal of office _____, 20____.

Notary Public in and for the State of _____

EXHIBIT B

Notwithstanding anything in this lease to the contrary, the application of the Vertical termination in 7(A) and the Horizontal termination in 7(B) shall be suspended for so long as the following continuous development provision is met:

If, at the expiration of the primary term, any acreage or depths leased herein are not part of the acreage included in a proration unit for an oil or gas well, or not included in a producing pooled unit, all such acreage and/or depths shall be released to the Lessor and this Lease shall terminate as to all such acreage and/or depths unless Lessee is then engaged in drilling operations on a well (for purposes of this Section, a "well" means a well drilled and completed in a depth which is at least as deep as the Eagle Ford Formation or horizon) on such acreage. If such drilling operations are ongoing, this Lease shall remain in force and effect as to such acreage so long as Lessee shall commence the actual drilling of an additional well prior to seventy five (75) days thereafter. Said Lease shall remain in full force and effect as to all such acreage and depths during such drilling operations, and as long thereafter as Lessee continues to drill additional wells, commencing the actual drilling of each well within either seventy five (75) days after the drilling rig ceases drilling and is moved off the wellbore of such well, until all of the acreage covered by the Leased Premises shall be producing and included in a proration unit or pooled unit or as otherwise provided for in 7(A). If, during the drilling of any well under this paragraph, Lessee loses or abandons the hole or well, then Lessee shall notify Lessor, and within sixty (60) days after the abandonment of said operation, Lessee may commence the actual drilling of a substitute well. If any such drilling, additional drilling, or reworking operations on any well drilled hereunder being continued at the expiration of the primary term or thereafter in accordance with the terms of this paragraph results in production, then this Lease shall remain in full force and effect as provided herein. If Lessee commences actual drilling operations in compliance with this Lease within less than the required time for the commencement of a subsequent well, then Lessee may, at its election, apply all or part of the Banked Days (as defined below) resulting therefrom to extend the time within which Lessee is required to commence the drilling of the next or any subsequent well; provided that in no event may the number of Banked Days exceed 365 days, and any Banked Days in excess of 365 Banked Days or used to so extend the continuous development period shall terminate upon such use or accrual in excess of 365 days. As used herein, the term "Banked Days" means the number of days within which Lessee is then authorized to commence the actual drilling of an additional well under the continuous development provision less the actual number of days between the date the drilling rig for a well ceases drilling and is moved off of that well's wellbore and the date actual drilling operations are commenced on the next additional well by a drilling rig capable of reaching the total depth for such well as shown on the Texas Railroad Commission permit for such well. If Lessee does claim to so accrue any Banked Days, then within ten (10) days following the completion of drilling date or the date of abandonment of a well, Lessee shall notify Lessor in writing of such claim of accrual, which notice shall contain the names and the dates of commencement of drilling and completion of drilling or abandonment of the wells resulting in the accrual. Lessee shall subsequently notify Lessor in writing within ten (10) days following Lessee's use of all or part of such Banked Days to postpone the commencement date of drilling of a subsequent well, which notice shall contain the number of Banked Days used, the completion of drilling date or the date of abandonment of the immediately prior well and the date of the commencement of drilling operations on the subsequent well.

Exhibit A to Lease No. _____ (Surface Use Agreement)

Lessee must establish Surface Locations (as defined below) off the Chaparral Wildlife Management Area (CWMA), when prudent and feasible. In those cases when Surface Locations cannot be established off the CWMA, this Surface Use Agreement governs use of the CWMA.

County/State: Dimmit and LaSalle counties, Texas

OUTLINE OF PARAGRAPHS

- 1.0 PARTIES**
- 1.1 TERM**
- 2.0 DEFINED TERMS**
 - 2.1 DEFINED TERM - SURFACE OWNER**
 - 2.2 DEFINED TERM - OPERATOR**
 - 2.3 DEFINED TERM - LESSOR**
 - 2.4 DEFINED TERM - OPERATIONS**
 - 2.5 DEFINED TERM - LEASED PREMISES**
 - 2.6 DEFINED TERM –GATHERING LINE(S)**
 - 2.7 DEFINED TERM - SURFACE LOCATION**
 - 2.8 DEFINED TERM –PLAN OF OPERATIONS**
 - 2.9 DEFINED TERM –DRILL PADS**
 - 2.10 DEFINED TERM – OIL FIELD CORRIDORS**
 - 2.11 DEFINED TERM – EXISTING WATER WELL**
 - 2.12 DEFINED TERM—PREFERRED ZONE OF OPERATIONS**
- 3.0 CONDUCT OF OPERATIONS**
- 4.0 RULES, REQUIRED SURVEYS PRIOR TO OPERATIONS, DAMAGES AND RESTORATION**
 - 4.1 CHAPARRAL WILDLIFE MANAGEMENT AREA MINERAL ACCESS RULES**
 - 4.2 REQUIRED SURVEYS PRIOR TO OPERATIONS**
 - 4.3 DAMAGES**
 - 4.4 RESTORATION AND RECLAMATION**
- 5.0 PROHIBITED ACTIVITIES**
- 6.0 NOTICE**
- 7.0 INGRESS AND EGRESS**
 - 7.1 INGRESS AND EGRESS - KEYS TO GATES AND LOCKS**
 - 7.2 INGRESS AND EGRESS INTERIOR GATES**
 - 7.3 [RESERVED]**
 - 7.4 INGRESS AND EGRESS - CATTLE GUARDS**
 - 7.5 INGRESS AND EGRESS - GATE GUARD**
 - 7.6 INGRESS AND EGRESS - PROHIBITED TO SERVICE OTHER LANDS**
- 8.0 OIL FIELD CORRIDOR ROADS**
 - 8.1 ROADS – CONSTRUCTION IN OIL FIELD CORRIDOR**
 - 8.2 ABANDONED OIL FIELD CORRIDOR**

- 8.3 ROADS – SHARING BY OPERATORS**
- 8.4 ROADS - WATERING**
- 9.0 LOCATION OF FACILITIES--SURFACE LOCATIONS(S) AND GATHERING LINES**
- 9.1 NOISE ABATEMENT EQUIPMENT**
- 9.2 LIMITED SURFACE ACCESS AREAS**
- 9.3 AREAS OF LIMITED DRILLING OR FRACING OPERATIONS DURING HUNTING SEASON**
- 9.4 POWERLINES**
- 10.0 PRODUCTION AND DRILLING OPERATIONS**
- 10.1 DRILLING OPERATIONS – WELL LOCATION/CONSTRUCTION AND POST-COMPLETION RECLAMATION**
- 10.2 DRILLING OPERATIONS – CLOSED DRILLING FLUID SYSTEM**
- 10.3 DRILLING OPERATIONS - DISCHARGE AND PROTECTION OF FRESH WATER**
- 10.4 DRILLING OPERATIONS – LOGGING THE CARRIZO FORMATION FROM EACH PAD LOCATION**
- 10.5 DRILLING OPERATIONS - SURFACE LOCATION(S)**
- 10.6 DRILLING OPERATIONS – ROAD ACCESS AND SIGNS**
- 10.7 DRILLING OPERATIONS - WATER USE AND WATER WELLS**
- 10.8 DRILLING OPERATIONS –MEASUREMENT AND ACCOUNTING**
- 10.9 DRILLING OPERATIONS – FRAC PONDS**
- 10.10 DRILLING OPERATIONS – CONSTRUCTION OF OIL AND SALTWATER GATHERING LINES AND AUTOMATED MEASUREMENT FACILITIES ARE REQUIRED WHEN GAS GATHERING LINES ARE CONSTRUCTED**
- 10.11 DRILLING OPERATIONS – RECYCLED FRAC WATER**
- 10.12 DRILLING OPERATIONS - SURFACE CASING**
- 10.13 DRILLING OPERATIONS – ABANDONMENT OF WELLS OR OTHER PROPERTY**
- 10.14 DRILLING OPERATIONS – REUSE OF TUBING OR PIPE**
- 11.0 GATHERING LINES**
- 11.1 GATHERING LINES - EXCAVATION AND INSTALLATION**
- 11.2 GATHERING LINES - MAINTENANCE AND RECLAMATION**
- 11.3 GATHERING LINES - MARKING**
- 11.4 GATHERING LINES - TREES**
- 11.5 GATHERING LINES – NO USE OF HERBICIDES**
- 11.6 GATHERING LINES - SAFETY**
- 11.7 GATHERING LINES - SEEDING**
- 11.8 GATHERING LINES - COMPLIANCE AND REMEDIES**
- 12.0 HAZARDOUS MATERIAL**
- 13.0 NOTICE REGARDING ENVIRONMENTAL AND HAZARDOUS MATERIAL**
- 14.0 SURFACE AND SUBSOIL DAMAGES**
- 15.0 SPILLS**
- 16.0 INDEMNIFICATION**
- 17.0 INSURANCE**

- 18.0 OVER-FLIGHTS
- 19.0 RESERVED RIGHTS OF SURFACE OWNER
- 20.0 OBJECTIONABLE EMPLOYEES
- 21.0 REMEDIES
- 22.0 APPLICABLE LAWS, RULES & REGULATIONS
- 23.0 SURVIVAL OF ASSIGNMENTS
- 24.0 [RESERVED]
- 25.0 COUNTERPART
- 26.0 ASSIGNMENT
- 27.0 [RESERVED]
- 28.0 CHOICE OF LAW AND VENUE
- 29.0 FORCE MAJEURE
- 30.0 AUDITS
- 31.0 MEMORANDUM OF AGREEMENT

Exhibit A.....Map of Chaparral WMA

Exhibit A.1.....Preferred Zone of Operations

Exhibit B.....Form of Addendum to Agreement Based on Plan of Operations

Exhibit C.....CWMA Mineral Access Rules

Exhibit D.1.....Damage and Fee Schedule Within Preferred Zone of Operations

Exhibit D.2.....Damage and Fee Schedule Outside Preferred Zone of Operations

Exhibit E.....Limited Surface Access Pastures

Exhibit F.....Restricted Drill Site Location Areas

Exhibit G.....FY 2016 Public Hunt Schedule for CWMA (September 1, 2015-August 31, 2016)

Surface Use Agreement

This Surface Use Agreement (this “Agreement” or “Surface Use Agreement”) is for the purpose of specifying the use of the Chaparral Wildlife Management Area (“CWMA” or “Lands”) described in Exhibit A hereto pursuant to the terms of: Oil and Gas Lease No. _____, effective August 4, 2015 by and between the Board for Lease of State Park Lands acting on behalf of the Texas Parks and Wildlife Department, as Lessor and _____, as Lessee; those certain oil and gas leases (the “SM Leases”) dated 2009 by and between the Light family interests as Lessors and SM Energy, Inc., as Lessee; Oil and Gas Lease No. M-110600 effective January 28, 2010 by and between the Board for Lease of State Park Lands acting on behalf of the Texas Parks and Wildlife Department, as Lessor and Chesapeake Exploration, L.L.C., an Oklahoma corporation, as Lessee; and all other oil and gas leases currently in effect or that are issued in the future (herein referred to as the “Lease” or “Leases”) covering the Lands.

1.0 PARTIES

Texas Parks & Wildlife Department, an agency of the State of Texas, is presently the surface owner (“Surface Owner”) of the Lands. The Lessees of the SM Leases, the Lessee of Oil and Gas Lease No. M-110600, and the Lessee of Oil and Gas Lease No. _____, are referred to herein for convenience as “Lessee”. The Leased Premises are that portion of the Lands upon which Lessee has or may acquire in the future the right to explore and produce oil and gas pursuant to valid Leases. _____ is the operator (“Operator”) of the Leased Premises. It is the intent of Surface Owner and Operator that the Surface Owner, its successors or assigns, shall receive the benefit of any provisions of this Agreement as well as the provisions of such Leases which pertain to the surface estate of any of the Lands. Surface Owner and Operator may be referred to individually as “Party” and collectively as “Parties”. In addition, the SM Leases, Oil and Gas Lease No. M-110600, Lease No. _____, and any other leases of the right to explore and produce oil and gas from the Lands in effect now or in the future may be referred to individually as the “Lease” and collectively as the “Leases”, and shall be deemed to include any extensions, renewals or replacements of the Lease or Leases. Whenever the context requires, the gender of words used herein shall include the masculine, feminine, and neuter, and number of words used herein shall include the singular and the plural. Nothing in this Surface

Use Agreement shall be interpreted to create or expand any rights to oil and gas exploration and production on or within the Lands beyond those rights held by mineral rights holders or Lessees by virtue of their ownership or lease of rights to explore or produce oil and gas from the Lands.

1.1 TERM

This Agreement shall commence on the effective date of Oil and Gas Lease No. _____ (the “Effective Date”) and shall continue for as long as any Leases covering any of the minerals located beneath the surface of the Lands or any part thereof remain in force or effect. The specific terms of this Agreement will expire ten years after the Effective Date. This Agreement shall automatically renew for an additional ten-year term unless terminated or modified by agreement of the Parties. This Agreement will incorporate the Plan of Operations developed and amended in accordance with section 2.8 below. During the initial ten-year term, the applicable Damage and Fee Schedule within the Preferred Zone of Operations shall be the Damage and Fee Schedule attached in Exhibit D.1. During the second ten-year term, the applicable Damage and Fee Schedule within the Preferred Zone of Operations shall be the Damage and Fee Schedule attached in Exhibit D.1, adjusted by the change in the consumer price index (CPI) over the initial ten-year period. Outside the Preferred Zone of Operations, the applicable Damage and Fee Schedule for the initial ten-year term is attached as Exhibit D.2. During the second ten-year term, the applicable Damage and Fee Schedule outside the Preferred Zone of Operations shall be the Damage and Fee Schedule of the TPWD in effect at the time of expiration of the first ten-year term. If after the expiration of the second ten-year term the Parties have not extended this Agreement, this Agreement shall continue in effect from year to year as follows: for operations outside the Preferred Zone of Operations, 150% of Surface Owner’s Damage and Fee Schedule then in effect; and for operations within the Preferred Zone of Operations, 150% of the Damage and Fee Schedule applicable for the second ten-year term, after adjustment for the change in CPI over the second ten-year period.

2.0 DEFINED TERMS

The following terms will have the meanings set forth below when used in this Agreement:

2.1 DEFINED TERM - SURFACE OWNER

“Surface Owner” shall mean Texas Parks & Wildlife Department, its successor(s), transferees, receivers, assigns or its designated agent.

2.2 DEFINED TERM – OPERATOR

“Operator” as used herein shall include not only _____ but also the respective successors and assigns of _____. Operator shall be fully responsible for any noncompliance with this Agreement by any and all independent contractors of Operator and all other persons entering on to the Lands for the purpose of performing any Operations.

2.3 DEFINED TERM - LESSOR

“Lessor” shall mean the State of Texas and the “Light Family”, which includes all of the persons and entities who signed the SM Leases as Lessors, their heirs, successor(s), assigns or their designated agent.

2.4 DEFINED TERM - OPERATIONS

“Operations” shall mean conduct on the Lands by the Operator or by Operator’s agents, representatives, contractors, subcontractors or licensees or any other third party working on behalf of the Operator with regard to any of the following: surveying, constructing, operating, maintaining, inspecting, calibrating, repairing, removing, or reclaiming any Gathering Line (as defined herein), Surface Location (as defined herein) or any other location used in the (i) seismic operations, drilling, exploring, completing, producing, testing, calibrating, measuring, reworking, recompleting, reclaiming, transporting, remediation, compression, treatment, and separation of hydrocarbons and (ii) the production, transportation, delivery, storage, use and disposal of water, to the extent permitted hereunder, for use in its drilling and completion operations and any other operation authorized by the Leases. Operations shall also include deepening, plugging back, side-tracking, re-drilling along a horizontal path from an existing vertical well bore, or drilling a new horizontal well bore, in search of or in an endeavor to obtain production of oil or gas and other hydrocarbons, or gauging, metering, measurement, sampling,

testing, maintenance or other production or exploration activities associated with the above Operations of Operator, its agents, representatives, contractors, subcontractors or licensees or any third party working on behalf of the Operator. In the event Operator desires to conduct seismic operations on the Lands, Operator and Surface Owner recognize that any such seismic operations are not specifically addressed in this Agreement, but will be covered by an additional and separate surface use agreement.

2.5 DEFINED TERM - LEASED PREMISES

“Leased Premises” shall mean the portion of the Lands which are subject to the Leases.

2.6 DEFINED TERM – GATHERING LINE(S)

“Gathering Line(s),” which includes flow lines, as used herein shall be limited to, pipelines for the transportation of hydrocarbons from the well-head to Operator’s central processing area, metering facility, on Leased Premises point of sale or from a central processing area to a gas-operated pump on a well, for gas lift or other purposes related to Operations and shall not include pipelines that carry any third party hydrocarbons produced off the Leased Premises. The term “Gathering Lines” does not include transmission lines, which transport hydrocarbons produced off the Lands. This Agreement does not authorize a transmission line or lines on the Lands.

2.7 DEFINED TERM - SURFACE LOCATION

“Surface Location” as used herein shall mean any area upon any of the Lands prepared or used for the purposes of any Operations of Operator as such terms are defined herein. Unless otherwise required herein, the term Surface Location shall include, but shall not be confined to, each drill site, drill pad, well location, frac pond, processing facility, gathering facility, Gathering Line, other lines, road, water well or other area of the Lands on which Operator conducts Operations at any time.

2.8 DEFINED TERM –PLAN OF OPERATIONS

This section 2.8 applies throughout the Lands.

Operator shall meet with authorized representatives of the Surface Owner no less than semiannually to present to Surface Owner a Plan of Operations. Operator's Plan of Operations shall be presented to Surface Owner in the months of May and November of each year unless otherwise agreed by Surface Owner and Operator. The Plan of Operations shall include a projection by Operator of anticipated Operations so that Surface Owner may establish its operational schedules (for, e.g., hunting and grazing) over the next calendar year and hunting season. Surface Owner may propose changes to the Plan of Operations presented by Operator. No Operations on the Lands are allowed except as agreed to by Surface Owner and Operator in the Plan of Operations. The Plan of Operations will contain eight (8) primary parts:

- (1) an enumerated list of Operations on the Lands contemplated by the Operator for the next six (6) months. To the extent that Surface Owner has identified to Operator scheduled activities beyond the six-month time frame, including but not limited to research projects, hunting schedules, bird breeding and nesting seasons, and grazing schedules, Operator shall account for those plans in subsequent amendments to the Plan of Operations;
- (2) a detailed map that shows in detail the location of the existing Operations and the proposed Operations on the Lands;
- (3) a detailed map showing each proposed Operation with the dimensions and location of the Surface Location along with the specifications and detailed plan, including the estimated schedules of all of the Operations to be conducted on such Surface Location;
- (4) the necessary archaeological and environmental surveys and permits that are required before any Operation is conducted as provided for herein;
- (5) any proposed modification, extension, or designation of an Oil Field Corridor (as such term is defined herein) shall be included in the Plan of Operations;
- (6) a calculation based on Exhibit D.1 and D.2 hereto of the amount of damage payments due the Surface Owner from the Operator for past Operations, and an estimate of damages for future Operations included in the Plan of Operations;
- (7) a calculation, based on information provided to the General Land Office under the State Lease, of past hydrocarbon production from the Leased Premises; and
- (8) for each individual Surface Location estimated to be reclaimed in the next six months, a site-specific reclamation plan to be accomplished by Operator.

The map shall be an evolving document that shows the location of past Operations as well as Operations planned for the next six (6) months. The map shall include spatial data identifying the location and dimensions of Operations consistent with industry standards. Operator shall provide this spatial data in a format reasonably acceptable to Surface Owner within forty-five (45) days after the impact or change to the surface of the Lands occurs, provided that for midstream pipelines, spatial data shall be provided sixty (60) days after the impact or change to the surface of the Lands occurs. Impacts or changes to the surface of the Lands include, but are not limited to, Oil Field Corridors, the location and depth of each Gathering Line, buried power lines, buried water lines, frac ponds, multiple well drill pads (“Multiple Well Drill Pads” or “Drill Pads”), central production facilities, compressor sites, and tank batteries and separation equipment.

In addition to the foregoing and by way of illustration, the Plan of Operations shall include site-specific project information and field techniques designed to minimize surface impacts, a 7.5 minute topographical map showing the location of the proposed Operations, all access routes and ancillary facilities, and a proposed time schedule and calendar of Operations. The map should be at a minimum scale of one inch (1”) equal to two thousand (2,000) feet.

When a Plan of Operations for the upcoming six (6) months is approved by both the Surface Owner and the Operator, they shall both execute and attach to the Plan of Operations a page in the form attached hereto as Exhibit B and shall maintain such executed page and the attached approved Plan of Operations as an Addendum to this Agreement.

The term Plan of Operations also includes any changes between the meetings, agreed to in writing by the Parties. These changes shall amend and restate the prior approved Plan of Operations.

Operator plans to drill wells from surface locations, and to conduct other Operations, along the northern boundary of the CWMA off of the Lands or from other surface locations outside the

Lands (“Off-Lands Operations”), and in the Preferred Zone of Operations shown on Exhibit A.1. The Parties agree to the establishment of this Preferred Zone of Operations for Drill Pads (also defined below) and other Surface Locations, subject to the provisions of Subparagraph 4.2.

2.9 DEFINED TERM –DRILL PADS

This section 2.9 applies throughout the Lands.

A Drill Pad means an area on the Lands where Operator drills wells intended to produce oil, gas or other hydrocarbons. Operator agrees that it will try to drill as many wells as is reasonably feasible from each Drill Pad but in no event fewer than three (3) wells per pad, provided that for good cause shown Operator may propose and Surface Owner may agree to fewer than three (3) wells per pad in a Plan of Operations. Outside the Preferred Zone of Operations, Operator may not create more than one (1) Drill Pad per 480 acres on the Lands without the written approval of Surface Owner. Outside the Preferred Zone of Operations, the precise location and size of these Drill Pads shall be subject to Surface Owner’s approval in writing in the Plan of Operations, which shall not be unreasonably withheld.

Operator will use its best efforts to investigate the feasibility of establishing Drill Pads off the CWMA. Any Drill Pads on the CWMA outside the Preferred Zone of Operations must be planned in conjunction with the Surface Owner and authorized by the Surface Owner in order to conserve wildlife habitat, and prevent disruption of CWMA operations, including management, research and public use activities. The number of Drill Pad sites shall be minimized by use of horizontal drilling, multiple wells from a single drilling site, and other appropriate methods. Outside the Preferred Zone of Operations, the Operator shall locate Drill Pads in previously disturbed areas, such as abandoned well sites or other disturbed areas when practicable.

2.10 DEFINED TERM - OIL FIELD CORRIDORS

This section 2.10 does not apply to the Preferred Zone of Operations, but applies outside the Preferred Zone of Operations. Oil Field Corridors are authorized routes for use by the Operator in its Operations that not only include oil field roads but also include the route for Gathering Lines, water lines, buried power lines, saline and produced water transfer lines, fiber optic cables

lines and other below ground cable lines and related equipment and facilities. As a part of the Plan of Operations, to the extent reasonably practical and to the extent Surface Owner determines that use of an Oil Field Corridor will best serve the purposes of the CWMA, Operator will use Oil Field Corridors. All Oil Field Corridors shall not exceed 150' in width unless otherwise agreed by Operator and Surface Owner.

2.11 DEFINED TERM – EXISTING WATER WELLS

Existing Water Wells means the two water wells that are currently in operation on the Lands. These wells are located at N. 28.31212 W. 99.40758 (the Long well) and N. 28.31841 W. 99.42939 (the Headquarters well).

2.12 DEFINED TERM – PREFERRED ZONE OF OPERATIONS

The Preferred Zone of Operations, shown on Exhibit A.1, is authorized for use by the Operator in its Operations which include Drill Pads, oil field roads, Gathering Lines, water wells, water lines, buried power lines, saline and produced water transfer lines, fiber optic cables lines, other below ground cable lines and related equipment and facilities, water storage ponds, processing facilities and other Surface Locations. Prior to beginning Operations within the Preferred Zone of Operations, Operator shall build a fence separating the Preferred Zone of Operations from the rest of the CWMA, after conducting the necessary archeological study and obtaining archeological clearance for the fence line. The fence shall be constructed to the reasonable specifications of Surface Owner, equivalent in design and construction to the perimeter fence around the CWMA which was completed in April 2013, and shall be sufficient to prevent white-tailed deer and cattle from entering the Preferred Zone of Operations from the remainder of the Lands.

3.0 CONDUCT OF OPERATIONS

This section 3.0 applies throughout the Lands.

Operator will conduct its Operations in such a way as not to unreasonably interfere with Surface Owner, or its tenants' operation of the Lands for the production of livestock, wildlife and other products of a similar nature, it being understood that the Lands are owned and held by Surface Owner for the exclusive purposes of: wildlife management, including hunting; for the preservation of the soils, nature and character of the land and as habitat of the various forms of vegetation and animal life which exist thereon; for research, education, and demonstration; and for the authorized recreational purposes of the citizens of and visitors to the State of Texas. Operator further agrees that all Operations hereunder will be conducted having due regard for the continued use of the Lands by Surface Owner, its Operators and other authorized persons, for hunting, research, education, demonstration, recreation and wildlife management, and shall seek all reasonable alternatives to accommodate Surface Owner. Operator shall pursue surface impact mitigation practices designed to minimize the environmental impact of Operator's Operations on the surface of the Lands and make every reasonable effort to reduce its traffic on and over the Lands.

4.0 RULES, REQUIRED SURVEYS PRIOR TO OPERATIONS, DAMAGES AND RESTORATION

4.1 CHAPARRAL WILDLIFE MANAGEMENT AREA MINERAL ACCESS RULES

This section 4.1 applies throughout the Lands except as stated in 4.1(f) and (h).

Operator will comply with the Chaparral Wildlife Management Area Mineral Access Rules (the "CWMA Rules") attached hereto as Exhibit C and made a part of this Surface Use Agreement. Operator has the obligation to provide each of its employees, representatives, agents and contractors with the CWMA Rules and to expressly inform each employee, representative, agent and contractor that he or she must abide by these rules and by the terms of the Surface Use Agreement. Operator agrees to designate in writing an individual responsible for Operator's compliance with all terms and conditions of any right-of-way agreement(s), Surface Use

Agreement and the CWMA Rules. Surface Owner reserves the right to inspect, and Operator hereby agrees that Surface Owner has the right to inspect, or to have inspected by Surface Owner, agent or by any officer of the law, any vehicle, equipment or person entering upon the Lands, at any time or at any location thereon, for any items prohibited under CWMA Rules. Operator further agrees that any such prohibited items are subject to confiscation by said Surface Owner, its agent or any officer of the law. No employee, agent, representative or contractor of Operator, nor any other person allowed to come upon the Lands by Operator, shall be permitted to:

- a) remove or disturb any artifacts (including archeological and paleontological artifacts, whether historic or pre-historic), cacti, shrubs, rocks, brass shell cases or any natural features from the Lands to include skulls, shed antlers or bones; or
- b) knowingly harass, kill or capture any wildlife species found on the CWMA: or
- c) hunt, fish, trap, swim, camp or picnic on the Lands (other than as permitted otherwise by the rules and regulations of the Surface Owner); or
- d) bring any dog, cat, other wild or domesticated animal, gun, firearm, archery equipment (including crossbows), “snake sticks”, fishing equipment or other sporting paraphernalia, or any alcohol or illegal drug of any kind onto the Lands; or
- e) discard or bury any papers, boxes, sacks, containers, hazardous waste material, trash or litter of any kind on the Lands; or
- f) cross any outside boundary fence of the Lands other than through the designated entrance gate(s), or, except within the Preferred Zone of Operations, travel through the Lands, i.e., enter by one gate and leave by another; or

- g) do any road maintenance work, bulldozing work, cut any trees or senderos, disturb any vegetation or soils, construct any Gathering Lines, bury any power lines or stations, tanks, buildings or other structures, except in the manner and at locations approved of and specified by Surface Owner in the Plan of Operations; or
- h) except within the Preferred Zone of Operations, travel any road not designated by Surface Owner as an Oil Field Corridor road, or otherwise approved by Surface Owner; or
- i) bring any visitor or guest onto the Lands without Surface Owner approval; or
- j) exceed a maximum of twenty-five (25) miles per hour speed limit on the Lands in any motor vehicle.

4.2 REQUIRED SURVEYS PRIOR TO OPERATIONS

This section 4.2 applies throughout the Lands.

No Operations of any kind will be conducted on any part of the Lands until the required surveys, studies and permits are acquired and provided to the Surface Owner. Operator must obtain archaeological clearance from the Texas Historical Commission, under the provision of Section 191.0525 of the Texas Natural Resources Code, prior to the commencement of mineral exploration or recovery activities, including but not limited to, equipment staging areas, rights-of-way for road construction, pipelines, Drill Pads, processing facilities, water storage ponds, soil storage areas, and other proposed operations that disturb the ground surface. Surface Owner will cooperate with Operator to assist Operator in meeting its obligations under Texas law and regulation.

- a) Archeological clearance must be site-specific and shall not be construed to authorize any other or additional use within the designated rights-of-way or activity sites. Surface Owner recommends use of GIS/GPS technology in archeological surveys. Plans for archeological surveys, testing, and data recovery investigations must be conducted in compliance with 13 Texas Administrative Code chapter 26. Cultural resource studies will be conducted under permit

with the Texas Historical Commission (THC). The proposed scope of work for archaeological studies in support of acquiring a THC permit, and drafts of reports to be submitted to the THC, must be reviewed and approved by a TPWD archeologist.

b) Operator's professional archaeological contractors shall complete Texas archaeological site forms, and coordinate with the Texas Archaeological Research Lab to obtain State site numbers for newly discovered cultural resources identified during projects which will be incorporated in all reports and records.

c) Three complete copies of all documentation, survey information, reports, USGS 7.5 minute topographical maps and other information relating to archeological clearance shall be provided to the Surface Owner prior to commencement of mineral recovery activities. All collected artifacts, records, photographs, maps, journals, field notes, site forms, and reports obtained from cultural resource studies shall be submitted for curation at the TPWD archaeological curation repository.

d) If an archeological or cultural artifact is discovered during surface-disturbing Operations, Operator shall cease all surface disturbance in the immediate area and shall report the discovery to the Surface Owner and the Texas Historical Commission. Operator may continue surface-disturbing Operations where no archeological deposits are present. Under the provisions of Subsection 191.0525(g) of the Texas Natural Resources Code, the Texas Historical Commission and the Department will determine whether further investigation is necessary prior to proceeding with surface-disturbing activities in that area. The required report and any additional cultural resource studies arising from the discovery shall be the responsibility of the Operator and shall be conducted in conformance with the appropriate Texas Antiquities Code permit as outlined in 4.2 a), above..

e) The Operator shall notify the Land Manager in writing 48 hours in advance where practicable, but in no case less than 24 hours in advance of the initial entry to begin any such archaeological surveys or studies. Where written notification is not possible verbal notification shall be considered sufficient.

(f) Prior to any disturbance at a Surface Location, Operator shall conduct a survey of the occurrence and location of state or federally listed threatened, endangered, candidate, or proposed species of plants or animals on the Lands that could be affected by such Surface Location, and shall provide this survey to the Surface Owner. If required by the Surface Owner, Operator shall include in its Plan of Operations all measures necessary to protect such species. This provision does not relieve Operator of its obligation to comply with all applicable provisions of state and federal law and regulation regarding such species.

(g) If, in the judgment of Surface Owner, any Operations will occur in wetlands under the jurisdiction of the U.S. Army Corps of Engineers pursuant to Clean Water Act section 404, Operator shall perform a wetland delineation and assessment and provide it to Surface Owner. This provision does not relieve Operator of its obligation to comply with all applicable provisions of state and federal law and regulation regarding wetlands.

4.3 DAMAGES

This section 4.3 applies throughout the Lands.

- a. In addition to all other requirements and provisions contained herein, Operator agrees to pay damages according to Exhibit D.1 for Operator's Operations in the Preferred Zone of Operations, and according to the TPWD Damage and Fee Schedule attached as Exhibit D.2 for Operator's Operations on the Lands outside of the Preferred Zone of Operations.
- b. Operator shall pay to Surface Owner the amount of actual damages caused by any such Operations to fences, surface, roads, bridges, cattle guards, houses, barns, windmills, water wells, water lines, tanks, timber, grass, livestock, livestock facilities, wildlife, growing crops, buildings and other structures on the Lands.

- c. Damages as specified in this Surface Use Agreement and the Fee Schedules attached as Exhibits D.1 and D.2 hereto shall be paid as directed by TPWD, in writing, in accordance with state law, including but not limited to H.B. 1, 84th Legislature, or other authority as may be granted by the Texas Legislature to TPWD. TPWD's address for payments is: Texas Parks & Wildlife Department 4200 Smith School Road, Attn: Cashier, Austin, Texas 78744-3291.

4.4 RESTORATION AND RECLAMATION

This section 4.4 applies throughout the Lands.

(a) The Operator shall survey, study and test all Surface Locations prior to disturbance to assess the species composition, soil chemistry, drainage patterns, and wildlife habitat features (such as nesting and denning sites) and thereby establish baseline conditions. All soil excavations shall be conducted using the "double digging" technique of first removing not less than four (4) inches of top soil and setting it aside for later replacement, and then removing deeper soils, according to stratification and setting soil and rock from each stratum aside in separate and distinct locations. When restoration work begins, the soils will be restored in the same stratifications as when originally removed. Operator shall control invasive plant species immediately upon identification. Operator shall dispose of brush and other materials cleared from the Lands as reasonably directed by Surface Owner by methods such as sale, removal, mulching, on-site stacking, or piling of brush for wildlife cover instead of by burning. Operator shall leave a screen of natural vegetation where the Leased Premises are visible from any road or highway. Existing drainage patterns associated with the terrain surrounding Surface Locations shall be maintained and shall be uninterrupted by the use of conduit, culverts, bridges, or applicable techniques as specified and authorized by the Surface Owner. The use of flashboard risers may be required as mitigation to create or enhance wetland habitat. Water turnouts on roads may be required as deemed necessary by the Surface Owner. Operator shall prevent soil erosion from Surface Locations.

(b) Restoration of any and all Surface Location sites on the Lands consistent with the restoration plan agreed to by Operator and Surface Owner, shall be the financial responsibility of the Operator. The restoration plan shall include a full assessment of immediate and long-term restoration costs, including labor, and a timetable setting forth a schedule for all restoration activities. The restoration plan for each individual Surface Location shall be submitted to Surface Owner by Operator at a semi-annual meeting prior to ground disturbance at that Surface Location and shall be subject to review, amendment, and approval by Surface Owner, which approval shall not be unreasonably withheld. At the option of the Surface Owner, restoration can be performed either by the Operator or the Surface Owner. Where the Surface Owner elects to restore a Surface Location, the restoration plan shall establish a timetable for payment by Operator to the Surface Owner for all costs associated with restoration activities. The restoration plan shall address responsibility for the restoration.

(c) Restoration measures within that plan may include, but are not limited to, reestablishment of former surface contours, restoration of soil structure, restoration of preconstruction drainage patterns, removal of excess fill materials from the Lands, discing or plowing of compacted soils (to include ripping of pad if desired by Surface Owner), fertilization, re-vegetation with site-appropriate native species, species composition and survival criteria, and construction of nesting platforms, denning sites, or other wildlife habitat improvements to replace natural features lost or altered by mineral recovery activities.

(d) The standard or level of re-vegetation to be reached shall be set forth in the restoration plan. Site specific native plant species shall be used. The use of exotic plant species is prohibited.

(e) Where restoration to preconstruction condition is not feasible, the plan shall include measures to compensate for loss of habitat or natural resources.

(f) Specific Restoration Criteria

1) Abandoned Oil Field Corridors. Unless Surface Owner elects in writing to leave the Abandoned Oil Field Corridor in place, Operator shall remove all caliche from an Abandoned

Oil Field Corridor, restore topsoil to the road, and reseed the Abandoned Oil Field Corridor according to Surface Owner's specifications, and follow the specifications for Road Reclamation as defined in this section. The Surface Owner shall have the option to require reclamation by the Operator of roads with Gathering Lines. The requirements herein for restoration of an Abandoned Oil Field Corridor shall also apply to an abandoned Preferred Zone of Operations.

2) Surface Locations.

- A. Within 120 days after plugging of all wells at any Drill Pad, either as dry holes or after ceasing Production in Paying Quantities (as defined by Oil and Gas Lease No. M-110600), such Drill Pad shall be reclaimed as provided below and to the satisfaction of Surface Owner.
- B. Re-vegetation alone shall not constitute successful reclamation as to any Surface Location. Restoration of the original landform is a key element in ensuring that the effects of oil and gas development are not permanent.
- C. All disturbed areas shall be re-contoured back to the original contour or a contour that blends with the surrounding landform, topsoil shall be redistributed, and the site shall be re-vegetated.
- D. In re-contouring areas that have been surfaced with gravel or similar materials, the material is to be removed from the Surface Location or buried deep in the re-contoured cut to prevent communication or mixing with the top soil or any possible surface exposure.
- E. Any excavations and pits that are approved of by Surface Owner must be closed by backfilling when they are dry and free of waste and graded to conform to the surrounding terrain.
- F. Salvaged topsoil must be re-spread evenly over the surface to be re-vegetated. The top-soiled site should be prepared to provide a seedbed for reestablishment of desirable vegetation.
- G. Site preparation may include gouging, ripping, scarifying, mulching, fertilizing, seeding, and planting.

H. Seeds of native, perennial and/or annual species, or other plant materials specified by the Surface Owner, will be used. If water bars were used, they should be removed and seeded following successful re-vegetation.

3. Roads.

- A. Interim reclamation consists of reclaiming portions of the road not needed for vehicle travel. Wherever possible, cut slopes, fill slopes, and borrow ditches should be covered with topsoil and re-vegetated to restore habitat and to reduce soil erosion and maintenance costs.
- B. At abandonment, roads must be reclaimed by the Operator unless the Surface Owner requests that they be left in place. Reclamation will include re-contouring the location of the road back to the original contour of the land, seeding, controlling noxious weeds, and may also include other techniques to improve reclamation success, such as ripping, scarifying, replacing topsoil, placing water bars, pitting, mulching, redistributing woody debris and barricading.
- C. Seeds of native, perennial and/or annual species, or other plant materials specified by the Surface Owner, will be used. If water bars were used, they should be removed and seeded following successful re-vegetation.

4. Gathering Lines. Upon abandonment of any Gathering Line, Operator shall, if Surface Owner so requires, take up and remove all Gathering Line which have been laid during the term of any Lease affecting the Lands, and shall level and re-seed the Gathering Line corridors, battery and equipment locations and all Surface Locations as provided in this section. An individual Gathering Line shall be deemed abandoned after twelve (12) months of nonuse unless Operator specifically requests continued use of that particular Gathering Line.

5. Other Facilities. All other facilities and areas of surface disturbance associated with oil and gas Lease development, including water impoundments, temporary freshwater

frac ponds not designed as permanent water catchments, power lines, metering buildings, compression facilities, caliche pits or other excavation sites, and tank batteries must be removed and reclaimed in accordance with the requirements of this section.

(g) Following completion of restoration procedures, the Surface Owner shall determine if restoration of any environmental damage has been satisfactorily completed and may, at that time, require additional restoration measures to satisfy the conditions of the restoration, provided that Operator shall be required to restore the surface consistent with the restoration plan agreed to by Surface Owner and Operator. When the Surface Owner verifies that restoration is complete, the Operator shall be notified in writing.

(h) If the Surface Owner and the Operator cannot reach agreement on the method of restoration, the Surface Owner shall request the restoration plan and all procedures be docketed for consideration and final decision before the Board for Lease for Parks and Wildlife Lands. Should no resolution occur at that time the issue may be submitted for mediation or non-binding arbitration. Provided, however, nothing herein shall be construed to limit or waive any of the Surface Owner's remedies against the Operator.

5.0 PROHIBITED ACTIVITIES

This section 5.0 applies throughout the Lands, except for 5.0(g).

It is understood that Surface Owner must let Operator use such surface rights as are reasonably necessary for Operator's Operations hereunder; however, despite contrary provisions in any Lease, if any, Operator shall not, without Surface Owner's written permission presented to Surface Owner as part of the Plan of Operations, dig canals or ditches, establish any electric lines, fiber optic lines, telephone lines or other telecommunications lines, roads, gates, fences, employee houses or other structures or facilities on the Lands for exploring, drilling for, producing, treating, storing and transporting minerals on, to or from any land other than the Lands. Operator agrees to take all reasonable and necessary steps to prevent its Operations from:

- a) Causing or contributing to soil erosion or to the injury of terraces or other soil conserving structures on the Lands; or
- b) Polluting the soil of the premises or waters of the aquifers, reservoirs, springs, streams, creeks or wells upon the Lands; or
- c) Damaging crops, grasses, brush, trees or other foliage or habitat whether natural or improved, cultivated or not, of whatsoever nature, on the Lands; or
- d) Harming or injuring in any way the critical vegetation, any artifacts, wildlife, animals or livestock on the Lands; or
- e) Allowing any waste oil, frac water, chemicals or saltwater to flow over the surface of the Lands, or allowing same to drain down any draws, drains, creeks or ravines on the Lands; or
- f) Entering the Limited Surface Access Areas as defined in Paragraph 9.2; or
- g) Except for Operator's Operations within a Preferred Zone of Operations which are authorized during Hunting Season, drilling or fracing wells in the Areas of Limited Drilling or Fracing Operations During Hunting Season as defined in Paragraph 9.3; or
- h) Using any existing improved or paved road on the Lands.

6.0 NOTICE Until notified otherwise, all communications to the Surface Owner shall be given to the following persons:

Name: Stephen Lange

Title: Area Manager, Chaparral WMA

Address: 64 Chaparral WMA Drive, Cotulla, TX 78014

Email Address: Stephen.lange@tpwd.texas.gov_____

Office Telephone: 830-676-3413_____

Cell Phone: 830-879-5497_____

With copy to:

Name: Dennis Gissell_____

Title: WMA Facilities Coordinator_____

Address: 4200 Smith School Rd., Austin, TX 78744_____

Email Address: dennis.gissell@tpwd.texas.gov_____

Until notified otherwise, all communications to the Operator shall be given to the following persons:

Name: _____

Title: _____

Address: _____

Email Address: _____

Office Telephone: _____

Cell Phone: _____

With a copy to:

Name: _____

Title: _____

Address: _____

Email Address: _____

Office Telephone: _____

Cell Phone: _____

Operator shall notify Surface Owner and the specified agent or employee of Surface Owner in writing no less than fourteen (14) days in advance of commencing Operations, except in the case of a bona fide emergency. All notice required by the terms of this Agreement shall be in writing by facsimile, electronic mail (confirmed receipt), regular mail or other form of delivery or if by telephone, confirmed in writing by facsimile, electronic mail (confirmed receipt), regular mail or other form of delivery.

In the event the Surface Owner is not satisfied with the level of frank communication or promptness in addressing its concerns by the Operator's contact and compliance person for reasonable grounds held in good faith, Surface Owner may request that another contact and compliance person be assigned to the Operations on the Leased Premises. Such contact may be the same as the compliance person. In the event such request is reasonable, Operator shall replace the contact and compliance person.

7.0 INGRESS AND EGRESS

This section 7 applies throughout the Lands.

The terms of Paragraphs 7.0 through 7.6 shall constitute the exclusive rights of Ingress and Egress for the Lands. It is understood and agreed that Operator's right of Ingress and Egress to the Lands shall be only as permitted herein. Under no circumstances whatsoever shall any persons entering the Lands, (i) enter by one gate and exit by another gate, except in the Preferred Zone of Operations; (ii) use the existing paved road entrance located on the Surface Owner's Lands; or (iii) enter the Lands from adjoining lands not owned by the Surface Owner other than public right of ways. Ingress and egress within the Preferred Zone of Operations shall be as reasonably agreed by Operator and Surface Owner.

7.1 INGRESS AND EGRESS - KEYS TO GATES AND LOCKS

This section 7.1 applies throughout the Lands.

It is understood and agreed that Operator and any persons who may enter upon the Lands under permission, license or authority from Operator, shall do so only through the entrance gates designated in writing by Surface Owner as the specific points of Ingress and Egress. Except when a gate guard is in attendance, such entrance gates shall be kept locked at all times, or

except when in actual use for entering and leaving the Lands. The key(s) to the locks used by Operator in opening said gates shall be kept in the actual possession of an authorized representative or representatives of Operator in order that such key(s) shall not be accessible to use by any unauthorized person or persons. Operator shall provide the lock and furnish Surface Owner with copies of the keys. Operator will maintain and make available to Surface Owner a list of those persons, including address and phone number, who have had, or who currently have, keys to Operator's lock system.

7.2 INGRESS AND EGRESS INTERIOR GATES

This section 7.2 does not apply within the Preferred Zone of Operations, but applies outside the Preferred Zone of Operations.

Operator shall close all high fenced gates after entry. If the approved Plan of Operations contemplates entry or passage through a high fence, Operator shall install a thirty (30) foot deep cattle guard with wing panels on both sides.

7.3 RESERVED

7.4 INGRESS AND EGRESS - CATTLE GUARDS AND GATES

This section 7.4 does not apply within the Preferred Zone of Operations, but applies outside the Preferred Zone of Operations.

If requested by Surface Owner in the Plan of Operations, and agreed by the Parties, Operator shall build, install, and maintain, to Surface Owner's reasonable written specifications, cattle guards and/or gates in and through all fences. No heavy equipment will be taken over Surface Owner's cattle guards. Gates adjacent to cattle guards will be used in moving any equipment heavier than a pickup truck.

7.5 INGRESS AND EGRESS - GATE GUARD

This section 7.5 applies throughout the Lands.

While Operator is conducting any drilling, completion, construction, or other Operations when more than ten (10) trucks are expected to be operating in a 24-hour period on the Lands, Operator will post a guard at the designated entrance gate during the hours when actual Operations are being conducted on the Lands. No convicted felon or anyone who has tested positive for illegal drugs, has been convicted for possession, use or distribution of illegal drugs or who has been convicted of a violation of any fishing and/or hunting laws shall work as a guard. When a gate guard is in attendance, Operator will maintain a written log of all vehicles and individuals entering and exiting the Lands, including but not limited to, license plate numbers and other pertinent information concerning such vehicles and individuals, and copies of such written log shall be provided to Surface Owner each Monday morning. Salary and all costs related to the employment of such guard will be the sole responsibility of Operator. The designated entry gate will be locked when no gate guard is present.

7.6 INGRESS AND EGRESS - PROHIBITED TO SERVICE OTHER LANDS

This section 7.6 applies throughout the Lands.

Operator specifically covenants and agrees that it will not use any portion of the Lands for the exploration for, development of, production of, transportation of, or sale of oil, gas or other minerals or water from any lands other than the Lands.

8.0 OIL FIELD CORRIDOR ROADS

This section 8.0 applies outside the Preferred Zone of Operations and not within the Preferred Zone of Operations.

Operator will use ONLY such routes, roadways, access and/or approaches in going upon, over or about the Lands located in the Oil Field Corridor and as are designated in writing by Surface Owner, reasonably exercised, for Operator's use as part of the Plan of Operations. Once so designated in writing, a road for use by Operator in its Operations shall be known as an Oil Field Corridor. Surface Owner will reasonably designate a route for Operator's purposes consistent with terrain, preservation of the land, preservation of and natural habitat and of improvements, and the conduct of Surface Owner's and its Operators' ranching, hunting, research, wildlife and

habitat preservation and recreational operations and Operator's costs and needs in conducting its Operations under the Leases. The Operator has the obligation to maintain all roads used by the Operator, to the extent of Operator's use of the road, whether a road is preexisting or not.

8.1 ROADS - CONSTRUCTION IN OIL FIELD CORRIDOR

This section 8.1 applies throughout the Lands except 8.1.D and J, which apply to the Lands outside the Preferred Zone of Operations.

- A. Operator agrees that any road designated or constructed as an Oil Field Corridor shall only be done in accordance with a current and approved Plan of Operations.
- B. Any roads built by Operator shall be at Operator's sole expense.
- C. Operator agrees to construct such roads in the manner reasonably designated by Surface Owner, which may include the placing of road material, such as gravel or caliche, in or on the roadbed to maintain its condition in wet weather and any road materials reasonably necessary to minimize dust. Surface Owner maintains the ability to reasonably specify the type and color of road material to be used in reasonable efforts to minimize dust.
- D. All roads authorized for use by Operator for Operations shall be constructed in a manner and have signage approved by Surface Owner that makes it obvious to all Operator personnel and contractors that a particular road is an Oil Field Corridor, if applicable. The surface of such roads shall be designed to avoid predations of the Texas Horned Lizard, a Texas Threatened Species. The requirements of this Subsection D shall not apply to roads in the Preferred Zone of Operations.
- E. Once so designated, all roads in an Oil Field Corridor (whether new or existing) shall be constructed to the following specifications:
 - 1. Roads shall be thirty (30) feet in width;
 - 2. the base of the road before road materials are brought to the road shall be watered and packed with a roller;
 - 3. at least 12 inches of good quality road material, as required by Surface Owner, shall then be spread on the road;
 - 4. the material spread on the road shall be watered by turning and mixing the material with water so that the water is distributed throughout the material;

5. the material mixed with water shall then be peeled back so that 6 inches of moist material is exposed;
6. the 6 inches of moist material shall then be rolled to insure maximum compaction; and
7. the same rolling and compaction process will then be done to the remainder of the material.

Temporary roads may be approved in writing by Surface Owner's area manager.

- F. The road shall be crowned so that rain water drains off the center of the road and down the sides. Large rocks and excess material shall be hauled off the Lands.
- G. Operator agrees that, in order to retard erosion, Operator will construct and maintain sufficient terraces (at intervals) across the slopes of any roads or Gathering Line(s) used by Operator.
1. Terraces are rises in the elevation of the road constructed where a road slopes so that water does not run long distances down the slope of a road thereby creating erosion in the road itself.
 2. Such terraces shall extend not less than ten (10) feet beyond the sides of the roads or Gathering Line(s), so as to divert the water flowing along the roads, or Gathering Line(s), and to do such other acts as may be necessary to prevent erosion from any areas cleared by Operator.
 3. Operator agrees to repair said roads or Gathering Line(s) as necessary to prevent erosion and to maintain said terraces to Surface Owner's satisfaction.
 4. Any terraces constructed shall be of sufficient height to divert the water from the roads, and shaped in such a manner that any ordinary car can pass over them.
 5. Water diversions shall be placed at each terrace so that water stopped by a terrace runs into the land and not down the sides of the road.
- H. Roads and Gathering Line(s) so constructed shall not be bladed below the surface of the surrounding ground.
- I. At any point where a Gathering Line(s) crosses an unpaved road, Operator shall put and maintain a minimum of eight (8) inches of caliche, limestone, gravel or other material

upon the road, and a sufficient distance along the road to allow the roadbed to be properly watered, compacted and maintained across any Gathering Line.

- J. Except within the Preferred Zone of Operations, in order to minimize surface damages, Operator agrees and obligates itself to use Oil Field Corridors, unless otherwise agreed, and to never construct more than one (1) road to any Surface Location, with all road construction requiring the prior written consent of Surface Owner, reasonably exercised.
- K. All roadways on the Lands shall be kept and maintained by Operator in a good state of repair and condition, suitable at all times for use by 2-wheeled-drive passenger vehicles, at Operator's sole cost and expense, and so returned to Surface Owner upon the expiration of the Leases. Roads in poor condition or impassable due to muddy conditions shall not be widened to permit passage, but rather, the actual roadway will be built up to prevent such condition and kept in good repair, and all roadways shall at a minimum be graded and rolled at least once each year.
- L. Any inside gates and cattle guards that may be installed, as well as any such existing gates and cattle guards as may be used by Operator, shall be painted in a color approved and specified in writing by Surface Owner, and kept and maintained by Operator in a good state of repair and condition, at Operator's expense. All roads, gates and cattle guards shall be surrendered by Operator upon the expiration of the Leases in a good state of repair and condition except where Surface Owner has required restoration pursuant to an agreed restoration plan.
- M. The intent of the Surface Owner is that a road constructed by Operator will look like roads made for oil & gas operations traffic—i.e. large, crowned, all weather-packed, terraced, and well maintained— with appropriate signage, so that there will be little doubt which road will be the road authorized for use by the Operator in its operations. Operator shall have signs made that prohibit use of existing roads not authorized for oil and gas operations, specifically including any and all paved roads on the CWMA.
- N. Operator shall not use motor vehicles on any portion of the Lands other than a designated road, except as approved by Surface Owner.
- O. In instances where roads intersect existing paved roads on the Lands, Operator shall take precautions to protect such existing paved roads and provide for a safe flow of traffic by

both users of the road and the public using the existing paved roads. These precautions should include, but not be limited to: installation of metal plates over existing paved road to protect from oil field traffic; construction of the roadbed to include a gradual slope approaching paved roads; installation of culverts under the roadbed to accommodate normal flow of water in ditches alongside paved roads; and adequate signage to limit oil field traffic to the road and general public traffic to existing paved roads (such signage should include YIELD signs on all four corners of any intersections). Additionally, should any pipelines need to cross existing paved roads on the Lands, they should be installed by boring under the existing roadbed.

8.2 ABANDONED OIL FIELD CORRIDOR

This section 8.2 applies throughout the Lands.

Surface Owner recognizes that Operator may experiment with optimum horizontal lateral lengths and that changes in the planned length of laterals may require relocating planned Drill Pad locations and the Oil Field Corridor to access those Drill Pads. Likewise, Operator may determine that an existing Oil Field Corridor is no longer necessary and will not be used. If the Operator proposes to abandon a previously constructed Oil Field Corridor, Operator shall notify Surface Owner pursuant to a Plan of Operations. If so, at the option of the Surface Owner, Surface Owner may require Operator to designate a road as an Abandoned Oil Field Corridor. Abandoned Oil Field Corridors shall be restored and reclaimed as provided in section 4.4 of this Agreement, unless Surface Owner elects to retain the road for its use, in which event Surface Owner shall be responsible for maintenance, restoration and reclamation costs.

8.3 ROADS – SHARING BY OPERATORS

This section 8.3 applies throughout the Lands.

In order to minimize surface and subsurface damages, Operator agrees to use designated Oil Field Corridor roads insofar as reasonably practicable and never to construct more than one (1) road to any Surface Location without the prior written consent of Surface Owner through the approval of a Plan of Operations. Operator agrees to make reasonable efforts to enter into

arrangements to share oilfield roads if applicable, on the Lands, including costs and expenses, with other operators and/or third parties, in order to minimize surface and subsurface damage. Surface Owner, as well as its other present or future oil and gas, hunting, grazing, and other Operators, shall have the right in common with Operator to use such roads in such manner so as not to interfere unreasonably with Operator's Operations, provided that Surface Owner shall not allow public uses within the Preferred Zone of Operations that conflict with Operator's Operations.

8.4 ROADS – WATERING

This section 8.4 applies throughout the Lands.

When Operator is conducting drilling or fracing operations on a well, Operator shall spray water on the road used to access the drill site at least once per day or as otherwise approved by Surface Owner, in an effort to preserve the fines of the road material on the road (so the road is not reduced to rocks) and to minimize dust. Operator shall water all roads as reasonably necessary to preserve the road material fines if operations other than drilling or fracing create excessive amounts of dust.

9.0 LOCATION OF FACILITIES - SURFACE LOCATION(S) AND GATHERING LINE(S)

This section 9.0 applies throughout the Lands except for 9.0.E, which does not apply within the Preferred Zone of Operations.

- A. Prior to installing any Gathering Lines or erecting any other Surface Location, Operator shall present the proposed Operations as a part of the Plan of Operations. This Agreement contemplates that, where reasonably practical, Gathering Lines shall be constructed within Oil Field Corridors and that Surface Locations shall be located just off Oil Field Corridors.

- B. Surface Owner and Operator will then mutually select the site or sites for locating such Surface Location, taking into consideration the ranching, wildlife management, research, hunting, recreation and other operations of Surface Owner and its Operators, the preservation of the natural character of the land and habitat, and Operator's needs in conducting its Operations under the terms of Leases in a reasonable manner.
- C. No Surface Location will be erected on any Lands except as specifically authorized and approved by Surface Owner, reasonably exercised, and presented as a part of a Plan of Operations. Notwithstanding anything to the contrary in this Agreement, if a Gathering Line or other Surface Location has been included in an approved Oil Field Corridor, in a Preferred Zone of Operations or in an approved Plan of Operations, no additional approvals are required by Surface Owner. Operator will notify Surface Owner before commencing work on the Gathering Line or other Surface Location.
- D. Operator agrees to paint and maintain all Surface Location and Gathering Line equipment a color specified in writing by Surface Owner, which color shall not change.
- E. At Surface Owner's option all Surface Locations will be enclosed and kept enclosed with a suitable cattle-proof fence or deer-proof fence as may be required by Surface Owner. Each Plan of Operations that includes Surface Locations must include an option for a cattle-proof or deer-proof fence that may be required by the Surface Owner. This Subsection shall not apply to a Preferred Zone of Operations.
- F. Operator shall bury metal "finders tape" or use other reasonable methods to detect non-metallic Gathering Line installed on the Lands.

9.1 NOISE ABATEMENT EQUIPMENT

This section 9.1 applies throughout the Lands.

Operator agrees to install sound abatement equipment as reasonably required by Surface Owner to reduce sound emissions below 55 dB at 200 yards from the source from all noise producing equipment, including, but not limited to, compressors, permanent generators, and pumps installed on the Lands, and Operator shall install such sound abatement equipment to Surface

Owner's satisfaction. Sound abatement equipment shall not be required for drilling and fracing Operations.

9.2 LIMITED SURFACE ACCESS AREAS

- A. Subject to the provisions of the Leases, OPERATOR SHALL HAVE ACCESS TO THE ENTIRE SUBSURFACE OF THE LEASED PREMISES. Surface Owner shall work with Operator (through the process of the Plan of Operations and otherwise) to assure that Operator has the ability to access and develop the entirety of the Leased Premises by drilling horizontal laterals from Drill Pads.
- B. Although Operator shall have access to the entirety of the subsurface of the Leased Premises through horizontal laterals, several areas of the Lands will have restrictions on the Operator's ability to access the surface of those areas. The limits on surface access are as follows:

a. **LIMITED SURFACE ACCESS PASTURES**

Except for underground horizontal laterals, Operator shall not be permitted to enter or conduct Operations on the surface of those certain areas that are crosshatched on the drawing attached as Exhibit E hereto. Provided that the hydrocarbons under the areas designated in Exhibit E are recoverable by Operator under a Lease or operating agreement, hydrocarbons under these areas designated on Exhibit E shall be accessed only from horizontal laterals drilled from Surface Locations outside of these areas that are herein referred to as "Limited Surface Access Pastures". It is recognized, however, that there are not any Limited Surface Access Pastures in the Preferred Zone of Operations.

b. **RESTRICTED DRILLSITE LOCATION AREAS**

The attached Exhibit F shows areas of the Lands in which no Surface Locations are permitted unless specific exceptions to this prohibition are approved in writing by Surface Owner pursuant to a Plan of Operations. These areas are herein referred to as "Restricted Drillsite Location Areas" and they contain houses, camping grounds, improvements, future house sites or areas particularly sensitive to Surface Owner's wildlife management and research mission. Provided that the

hydrocarbons under Restricted Drillsite Location Areas are recoverable by Operator under a Lease or operating agreement, hydrocarbons under these pastures shall be accessed only from horizontal laterals drilled from Surface Locations outside of these Restricted Drillsite Location Areas. It is recognized, however, that there are not any Restricted Drillsite Location Areas within the Preferred Zone of Operations.

9.3 AREAS OF LIMITED DRILLING OR FRACING OPERATIONS DURING HUNTING SEASON

This section 9.3 does not apply within the Preferred Zone of Operations.

- A. Operator shall not drill or frac wells from November 1 of any year to March 1 of the following year unless specifically agreed to in writing by Surface Owner. In the months of September, October, and March, Operator shall use its best efforts to work with Surface Owner to avoid Operations that will conflict with scheduled hunts. Operator shall incorporate these provisions into its Plan of Operations.
- B. Operator can propose to Surface Owner particular well(s) when Operator proposes to conduct drilling and fracing operations in the Plan of Operations. Surface Owner will reasonably approve such requests but will have no obligation to approve any such proposed operation during the November 1 – March 1 time period. The exception is only when and where Surface Owner agrees that the proposed Operations do not unreasonably interfere with its wildlife management, research and hunting operations. Surface Owner's public hunt schedule for Fiscal Year 2016 (September 1, 2015-August 31, 2016) is attached as Exhibit G.

9.4 POWERLINES

This section 9.4 does not apply within the Preferred Zone of Operations.

Unless agreed to by Surface Owner pursuant to a Plan of Operations, Operator shall not construct or cause to be constructed elevated power lines on the Lands. The expectation of the Surface Owner is that NO interior elevated power lines shall ever be constructed on the Lands. Notwithstanding the foregoing, Operator may construct elevated power lines at locations along

the exterior boundaries of the Lands subject to approval of Surface Owner reasonably exercised, which shall be included in a Plan of Operations.

Operator may install buried power lines (i) in an Oil Field Corridor, or at other locations, if the route is presented to Surface Owner in a Plan of Operations and approved in writing and (ii) to any water wells which Operator drills on the Lands (iii) or as otherwise reasonably agreed in writing. All approved power lines shall be constructed at Operator's sole expense. Surface Owner shall have the right to tap into any power lines run by the Operator, subject to load and other limitations, and Surface Owner's assumption of all liabilities, by having the area electricity provider install a meter that measures Surface Owner's use of electricity, which shall measure the electricity use to be paid by Surface Owner. In addition, overhead power lines may be used by Operator within a Preferred Zone of Operations.

10.0 PRODUCTION AND DRILLING OPERATIONS

10.1 DRILLING OPERATIONS – WELL LOCATION, CONSTRUCTION, AND POST-COMPLETION RECLAMATION

This section 10.1 applies throughout the Lands except for 10.1.C, D, and H, and as specified in F and K.

- A. Operator shall give notice as provided herein (but in no event less than fourteen (14) days before the commencement of any drilling operations) to Surface Owner of Operator's intentions to commence a Drill Pad as detailed in the Plan of Operations. Drill Pad locations approved in a Plan of Operations shall require no additional approvals from Surface Owner.
- B. Prior to conducting any Operations, Operator shall conduct a (i) baseline environmental test on each approved Drill Pad by taking adequate soil and subsoil samples for an accurate analysis of the approved Drill Pad and (ii) conduct the environmental and archaeological studies as required by the Texas Historical Commission and applicable laws.

C. No well shall be drilled within three thousand (3,000) feet from CWMA headquarters or any residence, nor within one thousand five hundred (1,500) feet of any barn, water well, dam, lake, pond or any other structure on the Land without Surface Owner's prior written consent.

D. Surface Owner has the right to move the proposed Drill Pad locations no more than 1,000 feet from the original proposal as presented in the Plan of Operations. The requirements of this Subsection 10.1.D shall not apply to Operator's Operations within the Preferred Zone of Operations.

E. In preparation of any Drill Pad, the topsoil shall be removed separately from the subsoil, removing and separately stockpiling not less than four (4) inches of said topsoil, and in the reclamation of said Drill Pad, the subsoil shall be replaced first and the topsoil shall be replaced last, so as to conserve the integrity of the topsoil. Operator agrees to use geotextile materials sufficient to segregate caliche or other pad material from the subsoil of the Drill Pad site so as to reduce compaction, and further agrees to aid in the removal of said caliche or other pad material.

F. Within one hundred and twenty (120) days from cessation of drilling and completion of a well, Operator shall remove drilling and frac fluids from the Lands, and fill and level any pits, and (outside the Preferred Zone of Operations) enclose the Drill Pad as provided for herein. Upon abandonment of any producing well drilled on the Leased Premises, or upon the drilling of a dry hole, Operator will within one hundred and twenty (120) days plug the well bore and restore the surface of the Drill Pad consistent with the restoration plan. a Drill Pad shall not exceed six acres in size, and Operator shall reduce the size of the Drill Pad (for any producing Drill Pad) to the smallest size possible and in no event larger than two acres within two (2) years of the date of completion of the first well drilled on a Drill Pad.

G. If Operator drills a vertical well on a separate single well drill pad, then in such event, the Operator shall comply with all of the site preparation and reclamation requirements for Drill Pads, except that the final surface area impact of such single vertical well location shall be reduced to one (1) acre within one (1) year from the completion of said single well location.

H. Operator further agrees that each Surface Location, including Drill Pad, derrick, tool house, tanks, separators, treaters, and any and all other pertinent well and lease equipment above the surface, shall, at the option of the Surface Owner reasonably exercised, be enclosed and kept enclosed with a suitable cattle-proof or deer-proof fence as may be designated by Surface Owner and for as long as Surface Owner may require. The requirements of this Subsection 10.1.H shall not apply to Operator's Operations within the Preferred Zone of Operations.

I. Operator agrees to provide portable toilets properly serviced during any Operations so as to prevent any litter on the Lands, and to remove all waste and such portable toilets from the Lands at the conclusion of each such Operation. Operator shall not bury refuse or trash of any kind on the Lands, but shall cause any and all trash of whatever kind to be contained in such a manner so as to prevent refuse or trash from blowing or overflowing, and Operator shall haul all trash off the Lands.

J. All earth moving equipment used for any operations on the Lands must be free of noxious weed seeds and other plant seeds harmful to native pasture lands, and must be treated to prevent possible spread of fever ticks immediately before being brought onto the CWMA. Operator shall construct and operate a vehicle washing station at the Oil Field entry to the Lands to remove all debris, potential seed sources and fever ticks from vehicles prior to entry. Operator shall provide a trap for water, debris, seeds and fever ticks from this washing facility and shall remove such materials from the trap and haul this material to an offsite landfill or other facility approved by the Surface Owner.

K. Operator agrees, after reclamation of the Drill Pad as provided herein, to construct berms around the well locations if Surface Owner determines such berms to be necessary to prevent the visual impairment of the natural values of the Lands. All well locations must be concealed or otherwise located so as to be compatible with existing topography and landscape of the Lands to the greatest extent practicable. Operator further agrees to maintain the well locations with mechanical equipment acceptable to Surface Owner rather than with herbicides. Around each wellhead, Operator shall construct and maintain a pipe fence adequate to turn livestock. Operator agrees to construct access roads, if needed, to well locations to conform to the terrain, and to avoid constructing straight

access roads leading from any connecting road. For purposes of this Surface Use Agreement, each well location shall also be considered a Surface Location, and unless otherwise provided herein, provisions applying to Surface Locations shall apply equally to well locations. The requirements of this Subsection 10.1.K shall not apply to Operator's Operations within the Preferred Zone of Operations, except that the prohibition against herbicide use shall apply within the Preferred Zone of Operations.

10.2 DRILLING OPERATIONS – CLOSED DRILLING FLUID SYSTEM

This section 10.2 applies throughout the Lands.

The Operator shall use a closed and containerized drilling fluid system for all drilling operations, unless otherwise authorized in writing by the Surface Owner. With the approval of the Surface Owner, the Operator may use a compressed air drilling system where feasible and more protective of surface uses.

(a) Lessee shall use water-based drilling muds where feasible.

(a) Operator shall ensure that all drilling fluids, cuttings, completion fluids and any other products of drilling or completion operations are contained in steel tanks.

(b) The Operator shall provide that all containment around the rig for the purpose of catching fluids involved in rig operations are lined, covered, and fenced and that these lined ditches drain into a lined, covered, and fenced catch basin or container. Linings, covers, and fences shall be constructed and maintained as required by the Surface Owner.

(c) The Operator shall remove all oil and gas waste materials including trash and garbage to an offsite disposal facility approved by the Texas Railroad Commission and the Operator shall notify the Surface Owner of the facility to be used.

10.3 DRILLING OPERATIONS - DISCHARGE AND PROTECTION OF FRESH WATER

This section 10.3 applies throughout the Lands.

- A. In any oil and gas well drilled by or for Operator, Operator shall set or cause to be set such character and amount of surface casing as may be required by law or by any rule, regulation or order of either the Texas Commission on Environmental Quality or the Texas Railroad Commission or any other government body or agency having jurisdiction or authority in the matter, or as necessary to protect any fresh water sands, aquifers, or other strata containing groundwater encountered in the drilling of any such well.
- B. In the event any Surface Location shall discharge water, oil, gas, including salt water, frac water, sulfur water or other waters, Operator shall not permit such water, oil, gas or other mineral to flow unrestrained over Surface Owner's land, but instead shall contain the same, preventing it securely from penetrating, seeping or flowing into any fresh water formation below the surface and from flowing into any tank, reservoir or water course on the surface.
- C. Operator is hereby charged with the duty of seeing that no such water, oil, gas or other mineral shall injure the surface or subsurface of the land, lakes or ponds on the land, or penetrate fresh water formations beneath the surface.
- D. No salt water injection wells or frac water disposal wells or waste disposal wells of any type are allowed on the Lands.

10.4 DRILLING OPERATIONS – LOGGING THE CARRIZO FORMATION FROM EACH PAD LOCATION

This section 10.4 applies throughout the Lands.

Operator shall run an open hole (before setting surface casing) gamma ray, SP, and resistivity log through the Carrizo and Wilcox aquifer sand for the first oil and gas well drilled on each Drill Pad, provided that this information is not then available from another well within a two (2) mile radius of the well. Operator shall deliver electronic and paper logs to Surface Owner within 60 days of generation of such logs.

10.5 DRILLING OPERATIONS - SURFACE LOCATION(S)

This section 10.5 applies throughout the Lands.

- A. [Reserved]
- B. [Reserved]
- C. In preparation of any Surface Location for a Drill Pad, the topsoil shall be removed separately from the subsoil, removing and separately stockpiling not less than four (4) inches of said topsoil, and in the reclamation of any Surface Location, the subsoil shall be replaced first and the topsoil shall be replaced last, so as to conserve the integrity of the topsoil.
- D. At the termination of any lease or cessation of production under the terms of the Lease or the termination of any well tract within the Lease, Operator shall take up and remove all Surface Locations within six (6) months. Operator shall replace the topsoil as provided herein, and shall aerate, disc and reseed with native seed the area in accordance with the restoration plan.

10.6 DRILLING OPERATIONS – ROAD ACCESS AND SIGNS

This section 10.6 does not apply within the Preferred Zone of Operations.

When Operator proposes the drilling of a well in the Plan of Operations, Surface Owner and Operator shall reasonably agree on a specific route for Operator's personnel and contractors to access the drilling location (using an Oil Field Corridor where reasonably practical). Operator shall ensure that all persons use only that designated route to access the drill site.

10.7 DRILLING OPERATIONS - WATER USE AND WATER WELLS

This section 10.7 applies throughout the Lands.

- A. Operator may not, without the express prior written permission of Surface Owner, use water from Surface Owner's existing tanks or streams or any other surface water source for any purposes whatsoever, or use groundwater from Surface Owner's Existing Water Wells.

- B. When water is requested by the Operator pursuant to a Plan of Operations, Surface Owner has the option to (a) require Operator to drill a new water well at a location agreed to by Surface Owner; or (b) require Operator to obtain water from sources off the Lands.
- C. If Operator drills a new water well, Operator shall run a gamma ray, SP, and resistivity open hole log through the Carrizo or Wilcox formations, whichever is the target formation, before casing the well, provided that this information is not then available from another well within a two (2) mile radius of the well. Operator shall provide Surface Owner with electronic and/or paper copies of well logs, well permits, and production tests. Operator shall run an underground electric line to the location of any such water well along a route agreed to by Surface Owner, reasonably exercised. Operator shall also take samples of the water produced from any such wells and obtain a comprehensive water quality test of such water including total dissolved solids, chlorides, hydrocarbons and other constituents of the water. Operator shall provide Surface Owner with such water quality reports.
- D. Such new water well or wells, all down-hole equipment, pumping and related facilities, infrastructure and equipment, wiring and surface controls and electric meter loops, all to the extent owned by Operator, but excluding any portable generator, shall become the property of Surface Owner upon the expiration of the Leases.
- E. During Operator's use of any water well(s), Operator shall pay all expenses including, but not limited to electricity use, repair, maintenance and replacing all down-hole equipment, pumping and related facilities or infrastructure, and equipment associated with producing the water.
- F. EVEN IF LESSEE PAYS FOR THE COST OF DRILLING A WATER WELL, SURFACE OWNER HAS AN ABSOLUTE RIGHT TO REQUIRE LESSEE TO CEASE WATER PRODUCTION FROM THE WELL IF SURFACE OWNER—IN ITS FULL AND ABSOLUTE DISCRETION—DETERMINES THAT THE WATER PRODUCTION EXCEEDS THE AMOUNT OF WATER THAT CAN BE PRUDENTLY PRODUCED FROM THE AQUIFER.
- G. NO PRODUCED FRAC WATER MAY BE REUSED FOR FRACS IN OTHER WELLS WITHOUT SURFACE OWNER'S WRITTEN PERMISSION. ALL

PRODUCED FRAC WATER SHALL BE PUMPED VIA SALT WATER DISPOSAL GATHERING LINES TO A CENTRAL FACILITY AND HAULED OFF THE LANDS.

- H. WATER PRODUCED ON THE LANDS SHALL BE USED FOR OPERATIONS ON THE LANDS ONLY, AND SALE OR TRANSPORT OF WATER PRODUCED ON THE LANDS FOR USE OUTSIDE OF THE LANDS IS STRICTLY PROHIBITED.

10.8 DRILLING OPERATIONS – MEASUREMENT AND ACCOUNTING

This section 10.8 applies throughout the Lands.

- A. Detailed measurements of production and water levels shall be taken by Lessee on all water wells used by Lessee in Operations on the Leased Premises. Lessee shall take and record the following measurements for each water well used in Operations for each production interval (i.e. each period of time when a water well started producing until the pump was turned off):
1. initial static water level (depth below the surface) before turning on the pump;
 2. [Reserved];
 3. water level 5 minutes after turning on the pump;
 4. the date and time production began (day, hour, minute);
 5. the volume of water in gallons, barrels, and acre-feet produced during a production interval;
 6. the water level BEFORE the pump was turned off at the end of a production interval; and
 7. the water level 10 minutes after the pump was turned off at the end of a production interval.
- B. In the event production from a water well is continuous for more than 14 days, Lessee shall take and record the following measurements:
1. the date and time (hour, minute, seconds) the 14 day test was done;
 2. the water level of the producing water level; and

3. the volume of water produced, in gallons, barrels, and acre-feet, since the last test or when production began, whichever is later.
- C. Lessee shall provide this information to Surface Owner in an electronic spreadsheet (the form of which to be agreed to by Surface Owner) monthly.
- D. Lessee shall be responsible for maintaining the quantity and quality of water production from the Existing Water Wells. Prior to commencement of drilling operations on the Leased Premises, Lessee shall provide baseline information (including but not limited to methane levels) regarding the quantity and quality of water production from the Existing Water Wells. No oil and gas drilling operations may begin on the Leased Premises until such baseline information has been provided to Surface Owner's satisfaction. Lessee shall, at Lessee's expense, conduct comprehensive water quality and quantity testing of the Existing Water Wells at least once per year, and shall provide those test results to Surface Owner within 30 days of Lessee's receipt of such test results. In the event that the quantity or quality of water production from an Existing Water Well falls below the levels demonstrated in the baseline information, Lessee shall take all steps necessary to provide to Surface Owner the same quantity and quality of water demonstrated by the baseline information, at no cost to Surface Owner. "All steps necessary" may include, but not be limited to, drilling of one or more new water wells, provision of treatment facilities, or permanent provision of water for Surface Owner's use from an off-site source.

10.9 DRILLING OPERATIONS – FRAC PONDS

This section 10.9 applies throughout the Lands.

Surface Owner will allow Operator to construct fresh water frac ponds for the purpose of holding water produced from an authorized water well for Operator's exclusive use in drilling and fracing operations. No frac pond shall be constructed unless the location is approved in writing by Surface Owner pursuant to a Plan of Operations. Fresh water frac ponds shall be either of the two types described below in subparagraphs A and B.

Except for a frac pond or water storage pond in the Preferred Zone of Operations, if after the Leases terminate or Operator no longer has a need for a particular pond, whichever occurs sooner, Surface Owner shall have the right to use any pond for cattle, wildlife, or recreational use. Operator shall only put fresh water from surface run-off or from water wells reasonably agreed by Surface Owner and Operator pursuant to a Plan of Operations in the ponds. Under no circumstances shall Operator place produced frac water, drilling mud, or any fluid other than fresh water in the ponds.

A. Permanent (natural drainage) Fresh Water Catchment Frac Pond (“PFCFP”)

A “Permanent (natural drainage) Freshwater Catchment Frac Pond” shall be a surface water impoundment designed to use the natural drainage and topography for surface water catchment as a wildlife watering feature. A PFCFP shall be constructed with adequate clay or other material to seal the pit and an adequate dam or spillway for the particular watershed.

B. Temporary (non-drainage) Freshwater Frac Pond (“TFFP”)

A “Temporary (non-drainage) Freshwater Frac Pond” shall be a temporary impoundment not designed using natural drainage or topography. Operator will construct a TFFP where a PFCFP is not feasible, permitted or practical. A TFFP shall be built in such a manner as to facilitate eventual reclamation. Operator shall use plastic or other non-permeable liner to create an impervious barrier on a TFFP, and it shall be reclaimed if it has not been used for one year unless a longer time is agreed to in writing by the Surface Owner, but in no event later than 90 days after the cessation of continuous drilling operations.

10.10 DRILLING OPERATIONS – CONSTRUCTION OF OIL AND SALTWATER GATHERING LINES AND AUTOMATED MEASUREMENT FACILITIES REQUIRED WHEN GAS GATHERING LINES ARE CONSTRUCTED

This section 10.10 applies throughout the Lands.

A paramount and overarching goal of the Surface Owner with respect to Operations on the Lands is to reduce the frequency of oil gauger or pump vehicles, oil trucks and salt water disposal trucks that come onto the Lands beyond any central facility located near a point of Ingress or

Egress. Accordingly, when Operator constructs gas Gathering Lines to transport gas from a producing well to a central facility, OPERATOR SHALL ALSO LAY AND CONSTRUCT AN OIL GATHERING LINE AND A SALT WATER DISPOSAL GATHERING LINE TO A CENTRAL FACILITY NEAR THE POINT OF INGRESS AND EGRESS FROM THE LANDS. Specifically for volumetric and heating value or constituent measurement, Operator will install and utilize electronic measurement systems and equipment which can be remotely monitored without daily visits to the measurement and production facilities and with as little physical sampling as possible, thereby reducing the amount of traffic on the Lands to the absolute minimum. To the extent available, any such measurement equipment or systems should have diagnostic capabilities whereby the party remotely monitoring the production can determine whether the measurement system or equipment requires calibration, thereby obviating additional unnecessary trips to the Lands. The heating value and specific gravity of the produced gas and liquids shall be determined using the most accurate field-deployable measurement equipment which is capable of analyzing such gas and liquids on a continuous and real time basis. The heating value shall be continually correlated to the volume measurement from the mutually agreed upon volume metering device in order to determine the total heating value of the production at all times. Operator should have the clear expectation that a gas gathering line system, an oil gathering line system, a salt water disposal gathering line system, and remote automated measurement shall be the ultimate and exclusive means of measuring and transporting oil, gas and salt water off the Lands with all measurement of individual wells occurring at the central facility.

10.11 DRILLING OPERATIONS - RECYCLED FRAC WATER

This section 10.11 applies throughout the Lands.

Pursuant to a Plan of Operations, Operator may propose to Surface Owner that it construct a pit to store frac water produced from an oil and gas well. Surface Owner's approval, reasonably exercised, is necessary for the construction of such a pit. Operator shall present to Surface Owner a detailed plan showing (1) the location and the construction specifications of the frac water pit and (2) the precise means of transporting the frac water from the pit to a well location for reuse in fracturing operations. The plan will incorporate means to prevent frac water from

seeping into the Lands or spilling onto the Lands during any stage of the process of recycling frac water. Operator shall construct a suitable fence surrounding a pit to store frac water produced from an oil or gas well. Operator shall construct a fence sufficient to exclude deer, herptiles, and other wildlife, and shall install netting sufficient to repel birds.

10.12 DRILLING OPERATIONS - SURFACE CASING

This section 10.12 applies throughout the Lands.

In any well drilled by or for Operator hereunder, Operator shall set or cause to be set such character and amount of new surface casing as may be required to protect all fresh water zones, including but not limited to all fresh water zones by law or by any rule, regulation or order of either the Texas Water Development Board, the TRRC, the Texas Commission on Environmental Quality, or any other government body or agency having jurisdiction or authority in the matter. Regardless of any less-stringent requirement, surface casing shall be set through all fresh water zones.

10.13 DRILLING OPERATIONS - ABANDONMENT OF WELLS OR OTHER PROPERTY

This section 10.13 applies throughout the Lands.

- A. Operator will use its best efforts to prevent fires on the Lands.
- B. In the event of the abandonment or forfeiture of the Lease as to any part of the Leased Premises, Operator shall have the obligation to remove all materials and fixtures of whatsoever kind placed on the Lands by Operator, except that Operator shall not draw and remove any casing from any well at the time of Operator's desire to abandon such well. If Operator fails to remove such property and fixtures within six (6) months after termination, abandonment or forfeiture of the Lease, as to any separate Surface Location, such property and fixtures shall be deemed abandoned, except for Gathering Lines in service or under pressure.. Surface Owner may take possession of abandoned property and dispose of same, at Operator's expense, as Surface Owner sees fit; provided, however, Operator shall not be relieved of Operator's responsibility and liability to plug all wells so abandoned. In the event that any Lands contain any abandoned or unplugged

wells, then in such event, Operator shall plug the well bores of all such abandoned or unplugged wells owned by Operator in compliance with the requirements of the appropriate state agency and, whether or not required by said state agency, Operator shall install casing to fully and completely protect all fresh water zones, and shall otherwise comply with all the requirements of plugging and abandonment of wells contained herein or by any state or federal agency with appropriate jurisdiction.

10.14 DRILLING OPERATIONS - REUSE OF TUBING OR PIPE

This section 10.14 applies throughout the Lands.

TUBING MAY NOT BE REUSED UNLESS IT HAS BEEN CHECKED FOR NATURALLY OCCURRING RADIOACTIVE MATERIAL ("NORM"). REPORTS OF NORM TESTS MUST BE DELIVERED TO THE SURFACE OWNER. IF NORM IS DETECTED, TUBING MUST BE HAULED OFF THE LANDS.

11.0 GATHERING LINES

11.1 GATHERING LINES - EXCAVATION AND INSTALLATION

This section 11.1 applies throughout the Lands.

- A. In the excavation for any Gathering Line, the topsoil shall be removed separately from the subsoil, and in backfilling the ditch, the subsoil shall be replaced first and the topsoil shall be replaced last, in order to conserve the topsoil.
- B. Operator shall replace the dirt or earth in any water diversion terrace or levee that Operator may cross with said Gathering Line according to the reasonable direction of Surface Owner.
- C. Operator shall fill in all ruts and holes caused by its Operations, level with an eight inch (8") berm along the Gathering Line ditch, as nearly as practical restore the contour of the ground as it was, and maintain the Lands in such condition.
- D. Operator is on notice that Surface Owner from time to time conducts land reclamation and/or brush control operations. Therefore, Operator shall bury the Gathering Lines, or other buried appurtenances, double ditched where requested by Surface Owner, or where necessary in the opinion of Operator, to such depth that the top of such Gathering Line or

other buried appurtenances be a minimum of thirty-six (36) inches below the surface. For purposes of this Paragraph, the term “double ditched” shall mean that the topsoil shall be removed separately from the subsoil and in backfilling the ditch, the subsoil shall be replaced first and the topsoil shall be replaced last in order to conserve the integrity of the topsoil.

- E. If necessary, Operator shall add additional cover after subsidence to prevent surface depression.
- F. Operator shall bore for Gathering Lines under any paved road, drainage ditch, or creek, and in other locations where possible. Operator shall fill, water and compact the ground and caliche in the Gathering Line ditch where such Gathering Line goes across any unpaved road.

11.2 GATHERING LINES - MAINTENANCE AND RECLAMATION

This section 11.2 applies throughout the Lands.

- A. Upon the completion of the construction, operation, maintenance, and/or repair of any Gathering Line(s), Operator shall restore the surface and subsurface of the ground consistent with the restoration plan agreed to by Operator and Surface Owner, which restoration shall include, aerating, discing and seeding the acreage affected by any Gathering Line in a manner as designated in writing by Surface Owner, or at Surface Owner's option, pay to Surface Owner the actual cost of such aerating, discing and seeding. Operator shall be required to reseed only at times of the year when seeds are reasonably likely to germinate. Operator shall continue restoration efforts until the success criteria in the restoration plan are met.
- B. With regard to the subsoil or subsurface, Operator shall take all necessary steps to prevent subsoil or subsurface contamination, and in the event of any subsoil or subsurface contamination, Operator agrees to take all necessary steps to remediate such contamination.
- C. Operator agrees that, in order to retard erosion, Operator will construct and maintain sufficient terraces (at intervals) across the slopes of any roads or Gathering Line(s) right-of-way(s) used by Operator, and extending not less than ten (10) feet beyond the sides

thereof, so as to divert the water flowing along the road or Gathering Line(s), and to do such other acts as may be necessary to prevent erosion from any areas cleared or altered by Operator. Any terraces constructed shall be of sufficient height to divert the water from the roads and shaped in such a manner that any ordinary car can pass over them. Roads and Gathering Line(s) so constructed shall not be bladed below the surface of the surrounding ground. If at any time during the existence of a Gathering Line, the soil should settle, wash or erode causing a depression over the Gathering Line(s), Operator shall level such depression and smooth the surface to substantially the same level as existed before construction.

- D. At any time and from time to time, upon request of Surface Owner, Operator agrees to correct, level and restore to the original ground level any further settlement of the soil that may occur following the previous filling or leveling of the same, so as to restore and maintain the surface of Surface Owner's property to Surface Owner's reasonable satisfaction, and protect Surface Owner's property against erosion.
- E. During the use of any Gathering Line, Operator shall maintain its Gathering Line(s) in good condition and shall prevent any leakage from such Gathering Line. Any Gathering Line leaks discovered shall be immediately repaired.

11.3 GATHERING LINES – MARKING

This section 11.3 applies throughout the Lands.

All buried Gathering Lines shall be permanently marked by vertical steel posts, colored according to industry standard, not smaller than two (2) inches in diameter placed not more than three hundred (300) feet or line-of-sight apart directly above the actual buried Gathering Line, and said posts shall be placed at least two (2) feet deep and project at least six (6) feet above ground level. In addition, Operator shall lay and bury metallic finders tape or use other reasonable methods to detect non-metallic Gathering Line constructed on the Lands. Any failure to place Gathering Line markers, as required herein, within seven (7) days of the day the Gathering Line is buried shall cause Operator to pay to Surface Owner a penalty of THREE AND NO/100 DOLLARS (\$3.00) per linear foot per day of buried, unmarked Gathering Line.

11.4 GATHERING LINES – TREES

Outside the Preferred Zone of Operations, Operator shall refrain from cutting, uprooting or otherwise disturbing any oak, mesquite, coma, persimmon or other tree growing upon the Lands outside any Gathering Line(s) or Surface Locations. Within the Preferred Zone of Operations, should it become necessary to cut any trees growing within a Gathering Line right-of-way(s) or Surface Locations, Operator shall obtain Surface Owner's prior written consent, and Surface Owner and Operator shall mutually agree upon the amount which Operator shall pay Surface Owner as damages for cutting such trees.

11.5 GATHERING LINES – NO USE OF HERBICIDES

This section 11.5 applies throughout the Lands.

Operator shall maintain the lands covered by any Gathering Line or Surface Location free of brush, in order to aid in the detection of leaks and to prevent introduction of a secondary growth of brush or noxious plants. Operator agrees to maintain said areas with mechanical equipment to control woody vegetation or noxious plants, rather than with any type of herbicide, unless otherwise directed by Surface Owner in writing. No herbicides or other biocides (such as insecticides and rodenticides) may be used by Operator on the Lands except with written permission of the Surface Owner.

11.6 GATHERING LINES – SAFETY

This section 11.6 applies throughout the Lands.

Surface Owner and Operator recognize that the acreage over and across which any Gathering Line travels is part of the CWMA, and as a result and in recognition of such, Operator agrees to construct, operate, repair, test and maintain such Gathering Line(s) in accordance with the highest industry standards for safety and shall comply with all state, federal and regulatory requirements while constructing, operating, repairing, testing, maintaining, inspecting and removing such Gathering Line. For Gathering Lines, Operator shall at least use fiber spar, or coat and wrap steel lines.

11.7 GATHERING LINES – SEEDING

This section 11.7 applies throughout the Lands.

It is expressly provided that not more than forty-five (45) days from the installation and marking of any Gathering Line(s) or removal of any appurtenances, Operator obligates itself to conduct the necessary aerating, discing and reseeding with native grass seed of Surface Owner's choice, at the rate of not less than two (2) pounds per acre, per variety of seed, tested to contain zero percent (0%) noxious weed seed, until such time as the surface of the land has settled uniformly with the surface of the adjoining land. Operator shall be required to reseed only at times of the year that seed is reasonably likely to germinate.

11.8 GATHERING LINES - COMPLIANCE AND REMEDIES

This section 11.8 applies throughout the Lands.

In the event that Operator does not timely and appropriately restore and reclaim Gathering Line(s), or remove Gathering Line(s) and restore and reclaim the surface and subsurface of the land as required herein, Operator will be given written notice by certified mail, return receipt requested, to restore and reclaim such Gathering Line. If Operator fails to commence Operations to restore and reclaim such Gathering Line(s) within one hundred and twenty (120) days from the date of receipt of such notice, Surface Owner may properly restore and reclaim the surface and subsurface of the land in conformity herewith, and Operator hereby agrees to pay unto Surface Owner the full cost and expense of the restoration and reclamation of the Gathering Line(s) in conformance with the specifications stated herein. Surface Owner and Operator have agreed that all Gathering Lines that are to be abandoned shall be properly treated and flushed pursuant to regulatory requirements and to the reasonable satisfaction of Surface Owner.

12.0 HAZARDOUS MATERIAL

This section 12.0 applies throughout the Lands.

Operator covenants that: (a) no substances deemed hazardous under any Applicable Environmental or Hazardous Material Law, defined below, as they may be amended from time to time, including, without limitation, asbestos or any substance containing asbestos, the group of organic compounds known as polychlorinated biphenyls, flammable explosives, radioactive

materials, chemicals known to cause cancer or reproductive toxicity, pollutants, effluents, contaminants, emissions, or related materials, and any items included in the definition of hazardous or toxic waste, materials, or substances (“Hazardous Materials”) under any law relating to environmental conditions and industrial hygiene, including, without limitation, the Resource Conservation and Recovery Act of 1976 (“RCRA”), 42 U.S.C. §6901 et seq., the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (“CERCLA”), 42. U.S.C. §§9601-9657, as amended by the Superfund Amendments and Reauthorization Act of 1986 (“SARA”), the Hazardous Materials Transportation Act, 49 U.S.C. §5101, et seq., the Federal Water Pollution Control Act, 33 U.S.C. §1251 et seq., the Clean Air Act, 42 U.S.C. §7401 et seq., the Clean Water Act, 33 U.S.C. §1251, the Toxic Substances Control Act, 15 U.S.C. §§2601-2629, the Safe Drinking Water Act, 42 U.S.C. 300f-300j, and all similar federal, state, and local environmental statutes, ordinances, and the regulations, orders, and decrees now or hereafter promulgated thereunder (collectively, the “Applicable Environmental or Hazardous Material Laws”), shall be installed, used, generated, manufactured, treated, handled, refined, produced, processed, stored, disposed of, or otherwise present in, on, or under the Lands, except in compliance with all applicable statutes and regulations and only while necessary for active and ongoing surface Operations on the Lands; (b) no activity shall be undertaken on the Lands which would cause the Lands to become a hazardous waste treatment, storage, or disposal facility within the meaning of, or otherwise bring the Lands within the scope of, RCRA or any Applicable Environmental or Hazardous Material Laws or regulations; (c) there shall be no release or threatened release of Hazardous Material from the Lands within the meaning of, or otherwise bring the Lands within the scope of, CERCLA or SARA or any Applicable Environmental or Hazardous Material Laws or regulations; (d) there shall be no discharge of any Hazardous Materials into any watercourse, well, abandoned or otherwise, body of surface or subsurface water, or wetland, or discharge into the atmosphere of any Hazardous Material which would require a permit under any Applicable Environmental or Hazardous Material Laws or regulations; (e) no activity shall be undertaken with respect to the Lands which would cause a violation or support a claim under RCRA, CERCLA, SARA, or any Applicable Environmental or Hazardous Material Laws or regulations; and (f) no underground storage tanks

or underground deposits shall be located on the Lands. Operator's Operations on the Lands shall comply with applicable EPA and State of Texas air emissions standards.

13.0 NOTICE REGARDING ENVIRONMENTAL AND HAZARDOUS MATERIAL

This section 13.0 applies throughout the Lands.

To the extent Operator has actual or constructive knowledge thereof, Operator shall immediately advise Surface Owner as provided in Paragraph 6 of: (a) any governmental or regulatory actions instituted or threatened under any Applicable Environmental or Hazardous Material Law or any regulation affecting any Lands; (b) all claims made or threatened by any third party against Operator or the Lands relating to damage, contribution, cost recovery, compensation, loss, or injury resulting from any Hazardous Material; (c) the discovery of any occurrence or condition on any real property adjoining or in the vicinity of the Lands that could cause any part of the Lands to be classified in a manner which may support a claim under any Applicable Environmental or Hazardous Material Law or regulation; and (d) the discovery of any occurrence or condition on the Lands or any real property adjoining or in the vicinity of the Lands which could subject Operator, Surface Owner, or the Lands to any restrictions on ownership, occupancy, transferability, value or use of the Lands under any Applicable Environmental or Hazardous Material Law or regulation. Operator is neither an agent nor an employee of Surface Owner, nor shall Surface Owner have any responsibility to inspect or oversee Operator's Operations nor to indemnify or correct any potentially harmful, dangerous or damaging conditions. Surface Owner shall not have any right to control any details of Operator's Operations, or to designate or control Operator's contractors. It is not the intention of any party hereto to create, nor shall any lease or other document be construed as creating, a partnership or association, joint venture or trust, or to render Surface Owner liable as partner under any such circumstances. Surface Owner makes no representations or warranties regarding or related to the environmental condition of the Lands, and Operator has inspected or has had opportunity to fully and adequately inspect the Lands for their intended purposes. Operator acknowledges Surface Owner's disclosure and Operator's awareness of past uses of the property consistent with oil and gas operations thereon. Neither Operator nor any contractors shall have

the right of contribution or indemnity from Surface Owner for any matter relating to Operations on said lands or conditions on said lands. Surface Owner may elect to join and participate in any settlements, remedial actions, legal proceedings, or other actions initiated by Operator in connection with any claims under any Applicable Environmental or Hazardous Material Law or regulation and to have its reasonable attorney's fees and expenses, including consulting fees, paid by Operator. At its sole cost and expense, Operator agrees when applicable or upon request of Surface Owner, to promptly and completely cure and remedy every violation of an Applicable Environmental or Hazardous Material Law or regulation caused directly or indirectly by Operator or Operator's Operations hereunder and to promptly remove all Hazardous Materials brought by Operator or its contractors on the Lands and to dispose of the same as required by Applicable Environmental or Hazardous Material Laws or state or federal regulations or by Surface Owner. Operator shall promptly provide to Surface Owner complete copies of any environmental reports and exhibits or studies received or commissioned by Operator which relate to all or part of the Lands, and if oral, the names and addresses of the engineers or consultants who conducted the studies and will release such engineers or consultants to fully discuss any findings or observations with Surface Owner. All such reports and other materials shall be held in strict confidence by Operator, and Operator agrees not to disclose the same to any third party without the written consent of Surface Owner, and, for so long as any Lease is in effect, Surface Owner agrees not to disclose said reports and other materials to any third party without the written consent of Operator, except as may be required by law, or as is necessary to ensure environmental cleanup, or in the context of disclosure to any potential purchaser.

14.0 SURFACE AND SUBSOIL DAMAGES

This section 14.0 applies throughout the Lands.

In addition to any other sums due or payable to Surface Owner for surface damages, Operator shall pay Surface Owner the cost of repair or replacement for any unrepaired damages to fences, gates, cattle guards, terraces, roads, earthen tanks, dams, water wells, water lines, water troughs, watering facilities, crops, livestock, wildlife habitat, personal property or any other property damage caused directly or indirectly by the Operator, its employees, agents, contractors or subcontractors by reason of Operator's Operations. Operator's obligation is to restore Surface

Owner's real and personal property to its former condition as nearly as reasonably practical. Operator's obligation to fully restore and remediate any damage to Surface Owner's real or personal property shall not be lessened or mitigated by the fact that the cost to fully repair, restore or remediate exceeds the fair market value of such real or personal property, it being the intent of the parties that the Lessee pay all costs of full and complete restoration, remediation or repair to Surface Owner's property. Repair to any such damages shall be performed in a manner as designated in writing by Surface Owner.

15.0 SPILLS

This section 15.0 applies throughout the Lands.

Operator is charged with the duty of seeing that no salt water, frac water, chemicals, oil, gas or other mineral, chemical or noxious liquid from its Surface Locations, including Drill Pads, Gathering Line(s), equipment or Operations, shall injure or pollute the surface or subsurface of the land, lakes, ponds or waterways on the land, enter into any water well or penetrate any fresh water formation or aquifer beneath the surface of the Lands. Operator shall notify Surface Owner within twenty-four (24) hours upon discovery of any spill, and Operator shall reclaim and remediate any such spill, including but not limited to, all refined hydrocarbon products, crude oil, gas, geothermic resources, condensate, salt-water, frac water, other well liquids or associated products not otherwise reportable under TRRC regulations within twenty-four (24) hours.

16.0 INDEMNIFICATION

This section 16.0 applies throughout the Lands.

OPERATOR AGREES TO ASSUME ANY AND ALL LIABILITIES FOR LAWSUITS, MEDIATION AND ARBITRATION EXPENSES, DAMAGES AND CLAIMS IN CONNECTION WITH AND ARISING OUT OF ANY INJURY, LOSS OR DAMAGE SUSTAINED OR ALLEGED TO HAVE BEEN SUSTAINED BY ANY PERSON, FIRM OR COMPANY, DAMAGE, LOSS OR ALLEGED DAMAGE OR LOSS TO PROPERTY IN CONNECTION WITH OR ARISING DIRECTLY OR INDIRECTLY FROM OPERATOR'S OPERATIONS ON OR ABOUT THE LANDS OR THOSE OF OPERATOR'S AGENTS, REPRESENTATIVES, EMPLOYEES, CONTRACTORS,

SUBCONTRACTORS OR LICENSEES OR ANY THIRD PARTY OR ENTITY WORKING ON BEHALF OF OPERATOR. THE INTENT OF THIS IDEMNITY AND HOLD HARMLESS PARAGRAPH IS THAT THE SURFACE OWNER (INCLUDING ALL OF ITS EMPLOYERS, OFFICERS, AGENTS, OPERATORS AND INVITEES) SHALL INCUR NO LIABILITY, COST OF DEFENSE OR OTHER DAMAGE OR HARM AS A RESULT OF OPERATOR'S "OPERATIONS," AS SUCH TERM IS DEFINED HEREIN. OPERATOR SHALL DEFEND, INDEMNIFY AND HOLD HARMLESS THE SURFACE OWNER AND ITS SUCCESSORS, ASSIGNS, AFFILIATES, PARTNERS, DIRECTORS, OFFICERS, EMPLOYEES, REPRESENTATIVES, OPERATORS, INVITEES AND AGENTS FROM ANY AND ALL SUCH LOSSES, EXPENSES, DEMANDS AND CLAIMS AND SHALL DEFEND ANY SUIT OR ACTION BROUGHT AGAINST SURFACE OWNER BASED UPON ANY SUCH ALLEGED INJURY, LOSS OR DAMAGE, INCLUDING REASONABLE ATTORNEYS' FEES AND EXPENSES, EXPERTS' AND CONSULTANTS' FEES AND EXPENSES, OR ANY VIOLATION BY OPERATOR OF THE TERMS AND CONDITIONS OF ANY LEASE, OR ANY INQUIRY OR PROCEEDING COMMENCED BY A GOVERNMENTAL ENTITY RELATED TO THE OPERATION OF ANY SURFACE LOCATIONS, FACILITIES, IMPROVEMENTS, GATHERING LINE(S) OR OCCUPANCY OF THE RIGHT-OF-WAY(S) BY OPERATOR HEREUNDER, AND SHALL PAY ALL CLAIMS, DAMAGES, COSTS AND DEMANDS IN CONNECTION WITH OR RESULTING THEREFROM INCLUDING, BUT NOT LIMITED TO, ENVIRONMENTAL CLAIMS AND HAZARDOUS MATERIAL CLAIMS ARISING FROM INJURY TO OR DEATH OF ANY PERSON INCLUDING, BUT NOT LIMITED TO, EMPLOYEES OF THE INDEMNITEES, OR DAMAGE TO OR LOSS OF PROPERTY OF THIRD PARTIES RELATED TO THE OPERATION OR OCCUPANCY OF THE PREMISES BY OPERATOR HEREUNDER, EXCEPT TO THE EXTENT OF THE GROSS NEGLIGENCE OF SURFACE OWNER, ITS AGENTS, REPRESENTATIVES, EMPLOYEES, CONTRACTORS, SUBCONTRACTORS OR LICENSEES. It is further expressly agreed that if Surface Owner be compelled to pay any expenses, including reasonable attorneys', experts' or consultants' fees, necessarily incurred in

instituting, prosecuting or defending any action or proceeding instituted by reason of any default of Operator hereunder, the sum or sums so paid by Surface Owner, with all interest, costs and damages, shall be paid by Operator to Surface Owner.

17.0 INSURANCE

This section 17.0 applies throughout the Lands.

While conducting Operations on the Lands, Operator shall carry a minimum of:

(a) general public liability insurance coverage of at least TWO MILLION AND NO/100 DOLLARS (\$2,000,000.00), and such comprehensive general liability insurance shall provide coverage for premises Operations, explosion and collapse hazard, underground hazard, products/completed Operations hazard, contractual insurance, broad form property damage, independent contractors and personal injury coverage; and (b) excess umbrella liability insurance to a limit of at least TEN MILLION AND NO/100 DOLLARS (\$10,000,000.00) including coverage for construction, operation and maintenance of Pipelines for gathering, transporting or storing natural gas, including but not limited to, hydrogen sulfide gas (H₂S or “Sour Gas”). Surface Owner shall be named as an additional insured on the above mentioned insurance policies. Surface Owner shall be furnished proof of such coverage before commencement of Operations hereunder. Surface Owner in its sole discretion may agree to amend the insurance coverage requirements of this section, provided that any such amendment is ineffective without prior written approval by Surface Owner.

Prior to conducting any Operations on the Lands, Operator shall post a performance bond, letter of credit, or other guarantee in form acceptable to Surface Owner in an amount not less than \$250,000.00 to ensure compliance with the terms of this Agreement. The performance bond will be released upon completion of all Operations and completion of restoration of the surface of the Lands in accordance with the restoration plan.

18.0 OVER-FLIGHTS

This section 18.0 applies throughout the Lands.

Except as required by law or governmental rule or regulation, all over-flights of the CWMA by Operator, its agents, successors, assigns, representatives, contractors or employees shall be prohibited unless specifically consented to in writing by Surface Owner, which consent shall not be unreasonably withheld.

19.0 RESERVED RIGHTS OF SURFACE OWNER

This section 19.0 applies throughout the Lands.

Surface Owner reserves all rights in the lands covered by this Agreement not expressly granted by Surface Owner to Operator, including without limitation, all hunting, fishing, grazing and recreational rights, and all other rights and uses as set out in this Agreement.

20.0 OBJECTIONABLE EMPLOYEES

This section 20.0 applies throughout the Lands.

If any of Operator's representatives, agents, contractors or employees are or become objectionable to Surface Owner for reasonable grounds held in good faith, Surface Owner may give written notice thereof to Operator, and, if Operator does not voluntarily remove or exclude any such party from the Lands within ten (10) days after receipt of such notice, Surface Owner shall have the right to eject such party from the Lands and thereafter prohibit such party from entering upon the Lands.

21.0 REMEDIES

This section 21.0 applies throughout the Lands.

Notwithstanding anything in this Agreement to the contrary, and in addition to any other remedy which may be available to Surface Owner, Surface Owner shall give Operator written notice of any alleged violation of this Agreement. Surface Owner agrees to leave in place all of the evidence, or if that is not possible to document and photograph any evidence that cannot be left in place, so that Operator may be afforded the opportunity to investigate and determine the cause of the alleged violation. For any repeat violations of the same kind and character of the provisions of this Agreement, Operator agrees to promptly pay Surface Owner the sum of ONE THOUSAND AND NO/100 DOLLARS (\$1,000.00) for such repeat violation of the terms and

conditions of this Agreement, subject to the terms of this Subparagraph. The damages for violation of the provisions contained in this Agreement are uncertain, and this amount represents an approximation by Surface Owner and Operator of damages and is not to be considered a penalty nor as liquidated damages, and shall be in addition to any other remedies provided for herein. Except as may be specifically provided elsewhere in this Agreement, in the event that Surface Owner believes that Operator fails to comply with deadlines established in this Agreement for restoration, reclamation, Operation in hunting season or any other Operations, Surface Owner shall give written notice to Operator setting forth with reasonable particularity the nature of the alleged noncompliance, and the specific performance sought by Surface Owner to cure the alleged noncompliance. Operator shall have sixty (60) business days from its receipt of the notice to either cure the alleged noncompliance or, if the alleged noncompliance is not capable of being cured within sixty (60) business days, to make substantial efforts and progress towards curing the alleged noncompliance. In the event that Operator does not cure the alleged noncompliance, or make substantial efforts and progress towards curing the alleged noncompliance, within thirty (60) business days of its receipt of the notice, Surface Owner shall have the right to receive as damages and not as a penalty \$1000.00 per day for the alleged noncompliance, recognizing that the actual damages to Surface Owner for such noncompliance would be difficult to quantify, all subject to Operator's right to reserve all of its rights with regard to the alleged noncompliance. Damages that are not paid within 30 days of accrual shall be subject to interest at the legal rate per annum, compounded annually, until paid.

22.0 APPLICABLE LAWS, RULES, AND REGULATIONS

This section 22.0 applies throughout the Lands.

Operator's Operations hereunder shall be in keeping with all applicable laws, rules, and regulations, both federal and state, and any agency thereof and as may be amended from time to time.

23.0 SURVIVAL OF ASSIGNMENTS; PARTIES BOUND

This section 23.0 applies throughout the Lands.

The terms and conditions of this Agreement shall survive any assignment or other transfer of the interests of the Parties in the surface or the minerals of the Lands or the Leased Premises. Any assignment or other transfer shall expressly include a provision binding the assignee or transferee to this Agreement and its terms and conditions, and that as of the effective date of the assignment or transfer, assignor or transferor shall be relieved of its rights and obligations under this Agreement. It is expressly understood and agreed that no amendment hereto shall be effective unless said amendment shall be in writing and signed by both Surface Owner and Operator. This Agreement shall be binding on the affiliates, subsidiaries, legal representatives, receivers, assignees, and transferees of all Parties.

24.0 NOTICE

[Reserved]

25.0 [RESERVED]

26.0 ASSIGNMENT

This section 26.0 applies throughout the Lands.

Operator shall not assign this SUA except with the written approval of Surface Owner, which approval shall not be unreasonably withheld.

27.0 [RESERVED]

28.0 CHOICE OF LAW AND VENUE

This section 28.0 applies throughout the Lands.

THIS AGREEMENT SHALL BE GOVERNED AND CONSTRUED IN ACCORDANCE WITH THE LAWS OF THE STATE OF TEXAS, WITHOUT REGARD TO ANY CHOICE OF LAW RULES THAT WOULD APPLY THE LAWS OF ANOTHER JURISDICTION.

All suits to enforce any provision of this Surface Use Agreement shall be brought in Travis County, Texas.

29. FORCE MAJEURE

This section 29.0 applies throughout the Lands.

If any Party is rendered unable, wholly or in part by force majeure, to carry out its obligations under this Agreement, other than any obligation to make any payments, such Party must give to the other Party prompt written notice of the force majeure, with reasonably full particulars, and thereupon the obligations of the Party giving the notice, so far as they are affected by the act of force majeure, will be suspended, and the running of all time periods within which certain actions must be completed will be tolled, during, but not longer, than the continuance of the force majeure, plus such reasonable further period of time, if any, required to resume the suspended operation. The affected Party must use reasonable diligence to remove the force majeure situation as quickly as practicable; provided, that it will not be required to settle strikes, lockouts or other labor difficulty contrary to its wishes. All such labor difficulties are to be handled entirely within the discretion of the Party concerned. "Force Majeure" means an act of nature, strike, lock-out or other industrial disturbance, act of the public enemy, war, blockade, public riot, lightning, fire, storm, flood or other adverse weather condition, explosion, or governmental action, inaction, restraint or delay, other than actions of Surface Owner.

30.0 AUDITS

[RESERVED]

31.0 MEMORANDUM OF AGREEMENT

This section 31.0 applies throughout the Lands.

After execution of this Surface Use Agreement, the Parties agree to execute a Memorandum of the Agreement which Operator shall record in the public records of Dimmit County and La Salle County, Texas.

Exhibit A—Chaparral WMA

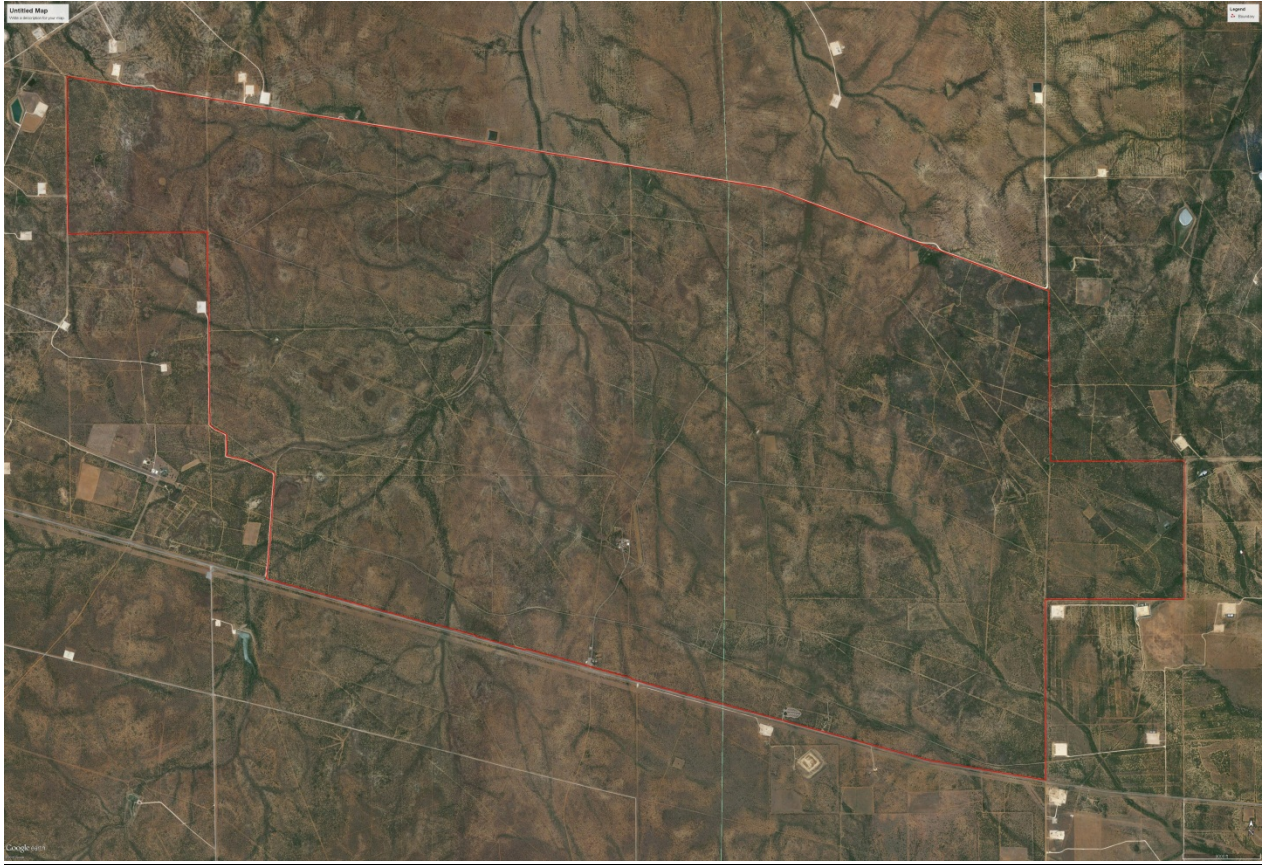


Exhibit A.1—Preferred Zone Of Operations

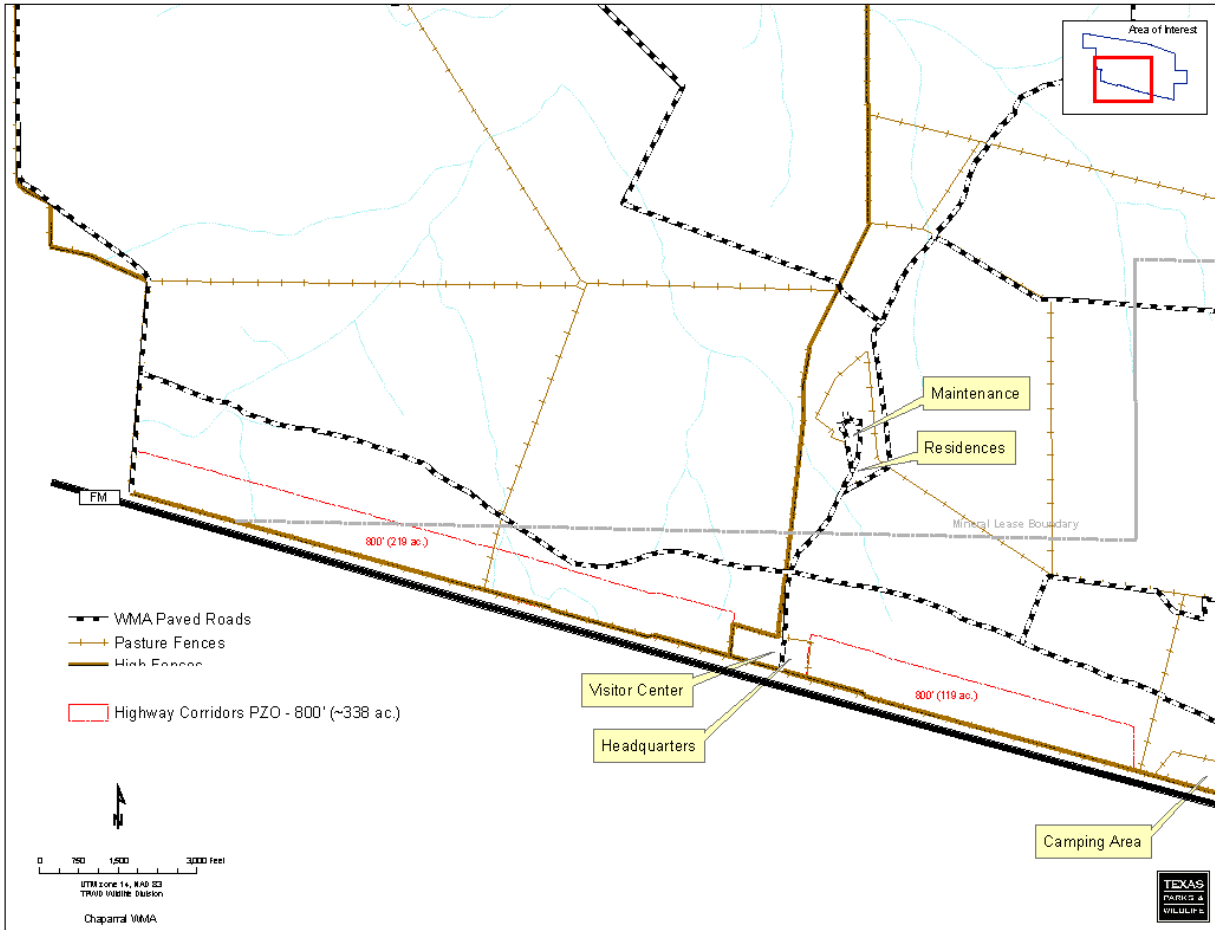


Exhibit B—Form of “Plan of Operations” Agreement

For lands in Dimmit and LaSalle Counties, Texas, the Surface Use Agreement dated _____, 2015 by and between Texas Parks and Wildlife Department, as “Surface Owner” and _____

_____ as “Operator”, is hereby amended and supplemented by the “Plan of Operations” attached hereto and made a part hereof for all purposes, to the extent and only to the extent that such agreed upon “Operations” are conducted when and as provided in the attached Plan of Operations and the Surface Owner is timely compensated for such Operations as specified in the attached Plan of Operations pursuant to the terms of the Surface Use Agreement.

Executed this _____ day of _____, 20____, by and between the undersigned.

Texas Parks and Wildlife Department

Operator

By: _____
Title: _____
Date: _____

By: _____
Title: _____
Date: _____

Exhibit C --CWMA Mineral Access Rules

The following CWMA Mineral Access Rules are intended to supplement the Surface Use Agreement dated _____, 20__ between _____, a _____, and _____ (hereinafter referred to as “_____”). The following rules will be followed on the CWMA, being approximately _____ acres in Dimmit and LaSalle Counties, Texas, and such parties agree to the following rules and regulations while operating on the CWMA:

1. All entries and exits to the CWMA shall be through the gates on the CWMA designated by the Texas Parks and Wildlife Department in the Surface Use Agreement and herein referenced as the Mineral Gates. All oil field traffic will use the Mineral Gates.

2. A person may enter the CWMA only if:

A. the person's name is on Operator's approved list of employees or contractors. The Operator shall provide an approved list, which shall include a name, title, affiliation, and driver's license number; or

B. the person has been cleared by _____, _____, or _____. **No one else** may give permission for visitors to enter the CWMA; or

C. the person's name appears on the list of approved persons provided by the CWMA.

If the person's name is not on the approved list, please call: the CWMA office (____); _____', house (____); the (____); or _____ (____) **before** allowing the person to enter.

D. The gate guard should fill out the information and give the sheet to the visitor to sign. *Please make sure that their printed name and destination on the ranch are legible.*

E. Persons on the approved entrance list do not need to re-enter their driver's license numbers, or other information besides date and time of entry, destination and signature.

3. _____ will recognize a twenty-five (25) mile per hour speed limit on all CWMA and shall yield to other traffic at all intersections, merging roads and shall approach intersections, cattle guards, homes, pens, corrals and other ranch facilities at a cautious and reduced speed, not to exceed fifteen (15) miles per hour.

4. All persons entering CWMA, either employed by _____ or guests, shall be provided with a copy of the CWMA Rules. _____ agrees to maintain twenty-four (24) hour staffing of said Mineral Gates during all times when _____ is conducting construction, drilling or fracing operations on the CWMA. All persons entering and leaving must sign the entrance sheet. All entrance logs must be turned in to the CWMA office every Monday morning.

5. The procedures, staffing and expenses related to the Main Gate shall be at the sole cost, expense and liability of _____ and any other lessees using said Main Gate.

6. _____ agrees, in cooperation with other oil and gas lessees using the CWMA Gate, to maintain twenty-four (24) hour staffing of the Mineral Gates during scheduled hunts between September 1 and April 1.

7. Prohibited Activities:

A. Remove any archeological or paleontological artifacts, whether historical or prehistorical (arrowheads, shell casings, etc.), cacti, shrubs, rocks or other natural features from the Lands;

B. Intentionally harass, kill or capture any wildlife species;

C. Hunt, fish, swim, camp or picnic on the Lands;

D. Bring any unauthorized individuals or visitors or guests onto the Lands;

E. Bring any wild or domesticated animal, dog, cat, gun, archery equipment (including crossbow), firearm, "snake stick", fishing equipment or other sporting paraphernalia, or any alcohol or illegal drugs of any kind, onto the Lands;

F. Discard any papers, boxes, sacks, containers or waste material of any kind, or trash or litter of any kind, on the Lands;

G. Cross any outside boundary fence of the Lands other than through the designated Mineral Gates, or travel through the property, i.e., enter by one gate and leave by another;

H. Discard cigarettes or burning tobacco products on the Lands;

I. Do any bulldozing work, cut any trees, or senderos, construct any gathering lines, power lines or stations, tanks, buildings or other structures of facilities, except in the manner and at locations approved and specified by the Surface Owner; or

J. Travel any road outside the Preferred Zone of Operations or not designated as an Oil Field Corridor road by Surface Owner.

8. Inspection. Any vehicle or equipment entering or being brought on the CWMA by _____ is subject to inspection at any time and at any location thereon.

9. Designated Representatives, Emergencies and Safety. _____ agrees to designate a single person for contact at the CWMA with Surface Owner to ensure compliance with the Surface Use Agreement referenced herein and these CWMA Rules.

10. Safety. _____ agrees to take all necessary steps to insure the safety of its employees, its permitted guests, licensees, agents and contactors, and to take necessary steps to prevent losses from fire, erosion and environmental contamination and other damages to the surface of the CWMA associated with _____'s operations.

11. Enforcement. The handling of, and any fines for, violation of the CWMA Mineral Access Rules shall be as provided in the Agreement.

Exhibit D.1—Damage And Fee Schedule Within Preferred Zone Of Operations

**Drill Pad, Water Impoundments and Related Facilities
Minimum Damage and Fee Schedule**

Pad Size	Damage Schedule	Fee Schedule
Communications or utility pad; less than 200 sq. ft.	\$2,500 per acre	
Less than 50' in each dimension	\$2.00/square foot; minimum fee \$2000.00	
Less than ½ acre	\$3,750.00	
More than ½ acre	\$7,500.00 per acre	
Water impoundments	\$7,500.00 per acre	
Miscellaneous pads	Same as above	
Central Processing Facilities (CPF's) and Central Gathering Facilities (CGF's)	\$10,000.00 per acre	\$3,000.00 per acre annually

Geophysical Minimum Damage Schedule

Type of Geophysical Operation	Damage fees	Comments
Geophones only; air drop or pedestrian access only	\$20/acre	Lines and phones must be removed within 30 days
Geophones only; vehicular placement minimal damage	\$30/acre	Limited use by vehicles
On-site nonintrusive energy source w/geophones	\$35/acre	Same as above
On-site shot holes and charges w/geophones	\$45/acre	TPWD may limit depth & charge and require plugging

Pipeline Minimum Damage and Fee Schedule

Inside Pipe Diameter	Damage Schedule	Fee Schedule
up to 6"	\$10.00/ft	
Greater than 6" up to 10"	\$20.00/ft	
Greater than 10"	\$2.00/in./ft	
Temporary water lines laid across surface only (not to exceed 24 months)	\$0.50/ft if the pipe is on the ground greater than 180 days, no damages due if pipe is on the ground less than 180 days	

Service Road Minimum Damage and Fee Schedule

	Minimum Road Damage Fee	Minimum Re-use and Renewal Fees
New roads	\$250 per mile at initial installation	\$2,500/mile/year

Utility Minimum Damage and Fee Schedule

Nature of Utility Project	Damage Assessment New Easement	Occupancy Fee
Elect. Transmission	\$1.00/ft	

Fresh Water

Where water is produced on the CWMA for the drilling or completing of an oil and gas well which has a surface location located on the CWMA, the TPWD will be paid as damages \$0.55 per barrel of water (measured at the water well head on the CWMA) used for the drilling or completion of such oil and gas well.

Wildlife Damages

- The TPWD shall actively seek full restitution for and/or restoration of fish, wildlife and habitat loss occurring as a result of Operator's activities.
- If any person entering the CWMA is found with an illegally killed white-tailed deer in his possession or it is determined such person illegally killed a white-tailed deer on the CWMA, Operator will pay a restitution of \$50,000.00 in accordance with TITLE 31 NATURAL RESOURCES AND CONSERVATION, PART 2 TEXAS PARKS AND WILDLIFE DEPARTMENT CHAPTER 69 RESOURCE PROTECTION, SUBCHAPTER B FISH AND WILDLIFE VALUES RULE §69.30 Trophy Wildlife Species and RULE §69.22 Wildlife--Recovery Values.

Failure of TPWD to bill or assess penalties, fines, or damages shall not modify or waive Operator's obligation to pay penalties, fines, or damages as provided herein. All amounts not paid in a timely manner shall accrue interest from the date when amounts are payable until paid at the maximum rate allowed by law.

Exhibit D.2—Damage And Fee Schedule Outside Preferred Zone Of Operations

Drill Pad, Water Impoundments and Related Facilities

Pad Size	Damage Schedule	Fee Schedule
Communications or utility pad; less than 200 sq. ft.	\$2,500	\$500 per year
Less than 50' in each dimension	\$2.00/square foot; minimum fee \$2000.00	\$500 per year
Less than ½ acre	\$5,000	\$1,500 per year
More than ½ acre	\$10,000 per acre	\$3,000 per acre per year
Water impoundments	\$10,000 per acre	\$3,000 per acre per year
Miscellaneous pads	Same as above	Same as above
Central Processing Facilities (CPF's) and Central Gathering Facilities (CGF's)	\$10,000 per acre Includes a 500 ft buffer around developed site	\$3,000 per acre annually includes a 500 ft buffer around developed site

Geophysical Minimum Damage Schedule

Type of Geophysical Operation	Damage fees	Comments
Geophones only; air drop or pedestrian access only	\$20/acre	Lines and phones must be removed within 30 days
Geophones only; vehicular placement minimal damage	\$30/acre	Limited use by vehicles
On-site nonintrusive energy source w/geophones	\$35/acre	Same as above
On-site shot holes and charges w/geophones	\$45/acre	TPWD may limit depth & charge and require plugging

Pipeline Minimum Damage and Fee Schedule

Inside Pipe Diameter	Damage Schedule	Fee Schedule
2" to < 10"	\$20.00/ft, minimum fee \$500	\$1.25/foot/year
10" or greater	\$2.00/ft for each inch of OD	\$2/rod for each inch of OD/year

Temporary water lines laid across surface only (not to exceed 24 months)	\$1/foot	\$1.50/rod/year (maximum 8" line)
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Service Road Minimum Damage and Fee Schedule

	Minimum Road Damage Fee	Minimum Re-use and Renewal Fees
New roads	\$3/foot/year per 15 ft of width - \$2,000 minimum	\$15/rod/15 feet of width per year - \$500 minimum per year

Utility Minimum Damage and Fee Schedule

Nature of Utility Project	Damage Assessment New Easement	Occupancy Fee
Elect. Transmission	\$2.50/foot	\$10/rod/year

Fresh Water

Where water is produced on the CWMA for the drilling or completing of an oil and gas well which has a surface location located on the CWMA, the TPWD will be paid as damages \$1.00 per barrel of water (measured at the water well head on the CWMA) used for the drilling or completion of such oil and gas well.

Wildlife Damages

- The TPWD shall actively seek full restitution for and/or restoration of fish, wildlife and habitat loss occurring as a result of Operator's activities.
- If any person entering the CWMA is found with an illegally killed white-tailed deer in his possession or it is determined such person illegally killed a white-tailed deer on the CWMA, Operator will pay a restitution of \$50,000.

Failure of TPWD to bill or assess penalties, fines, or damages shall not modify or waive Operator's obligation to pay penalties, fines, or damages as provided herein. All amounts not paid in a timely manner shall accrue interest from the date when amounts are payable until paid at the maximum rate allowed by law.

Exhibit E.....Limited Surface Access Pastures

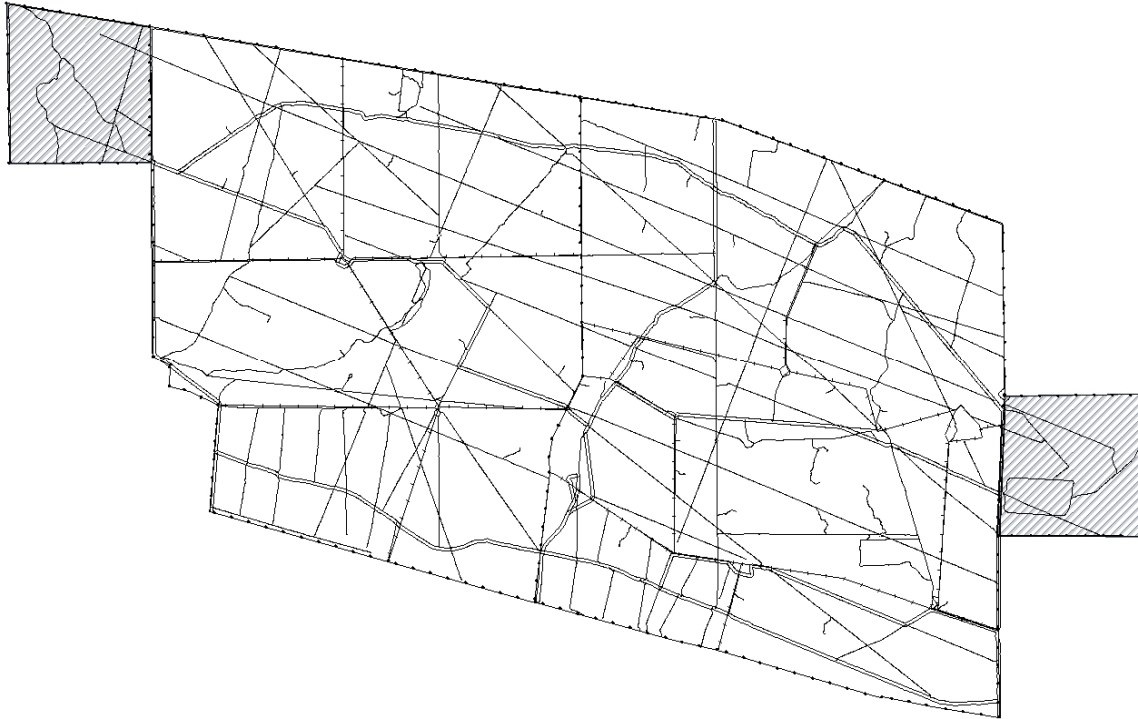


Exhibit F.....Restricted Drillsite Location Areas

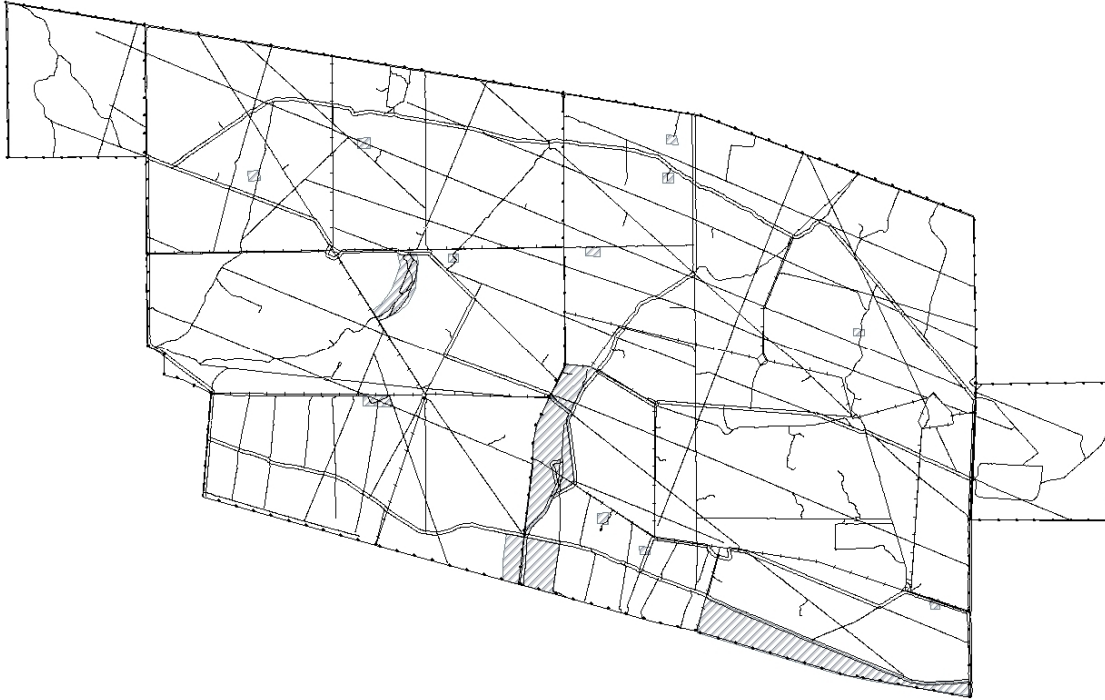


Exhibit G.....FY 2016 Public Hunt Schedule for CWMA (September 1, 2015-August 31, 2016)

2015-2016

Proposed 2015-2016 Public Hunt Recommendations

September '15							October '15							November '15						
Su	M	Tu	W	Th	F	Sa	Su	M	Tu	W	Th	F	Sa	Su	M	Tu	W	Th	F	Sa
		1	2	3	4	5					1	2	3	1	2	3	4	5	6	7
6	7	8	9	10	11	12	4	5	6	7	8	9	10	8	9	10	11	12	13	14
13	14	15	16	17	18	19	11	12	13	14	15	16	17	15	16	17	18	19	20	21
20	21	22	23	24	25	26	18	19	20	21	22	23	24	22	23	24	25	26	27	28
27	28	29	30				25	26	27	28	29	30	31	29	30					

December '15							January '16							February '16						
Su	M	Tu	W	Th	F	Sa	Su	M	Tu	W	Th	F	Sa	Su	M	Tu	W	Th	F	Sa
		1	2	3	4	5						1	2	1	2	3	4	5	6	
6	7	8	9	10	11	12	3	4	5	6	7	8	9	7	8	9	10	11	12	13
13	14	15	16	17	18	19	10	11	12	13	14	15	16	14	15	16	17	18	19	20
20	21	22	23	24	25	26	17	18	19	20	21	22	23	21	22	23	24	25	26	27
27	28	29	30	31			24	25	26	27	28	29	30	28	29					

March '16							April '16							May '16						
Su	M	Tu	W	Th	F	Sa	Su	M	Tu	W	Th	F	Sa	Su	M	Tu	W	Th	F	Sa
		1	2	3	4	5						1	2	1	2	3	4	5	6	7
6	7	8	9	10	11	12	3	4	5	6	7	8	9	8	9	10	11	12	13	14
13	14	15	16	17	18	19	10	11	12	13	14	15	16	15	16	17	18	19	20	21
20	21	22	23	24	25	26	17	18	19	20	21	22	23	22	23	24	25	26	27	28
27	28	29	30	31			24	25	26	27	28	29	30	29	30	31				

June '16							July '16							August '16						
Su	M	Tu	W	Th	F	Sa	Su	M	Tu	W	Th	F	Sa	Su	M	Tu	W	Th	F	Sa
			1	2	3	4						1	2	1	2	3	4	5	6	
5	6	7	8	9	10	11	3	4	5	6	7	8	9	7	8	9	10	11	12	13
12	13	14	15	16	17	18	10	11	12	13	14	15	16	14	15	16	17	18	19	20
19	20	21	22	23	24	25	17	18	19	20	21	22	23	21	22	23	24	25	26	27
26	27	28	29	30			24	25	26	27	28	29	30	28	29	30	31			

CHAPARRAL WMA / PUBLIC HUNT UNIT 700																				
LEGEND:																				
FOWLING DAY FOR BROWN HINDS																				
WWDO - Special White-winged dove, Special White-winged dove zone (2)																				
DOVE - Regular dove, Special White-winged dove zone (2)																				
YOUTH DOVE/QUAIL (1)																				
QUAIL ONLY (2)																				
YDA - Youth Deer Antlerless/Spike (3)																				
YDM - Youth Deer Management (1)																				
GDM - Gun Deer Management (2)																				
ADE/CDE - Archery & Crossbow Either-sex (3)																				
GDE - Gun Deer Either-sex (2)																				
YDE - Gun Deer Either-sex (1)																				
YJE - Youth Javelina (1)																				
GJE - Javelina (2)																				
Coyote/Hog - APH Post Card Hunt																				
Multi-species, Antlerless - APH Post Card Hunt																				
Special Non-consumptive use April 1 - August 31																				

3/24/2015 6:29 PM