

MF117555

1st Extension to 9/3/18

PSA00316

iNut 11271

iNut 11850

iNut 11851

iNut 11852

iNut 14086

iNut 14087

iNut 14088

Lease Type
Upland Fee

Control

Basefile

County

15-017733

155446

LOVING

Survey

Public School Land

Block

C-24

Block Name

Township

Section/Tract

13

Land Part

Acres

Net: 640.000000 Gross: 640.000000

Depth Below

Depth Above Depth Other

0'

13,234'

Allow All
Depths

Name

PANTHER ENERGY COMPANY II, LLC...

Lease Date

8/4/2015

Primary Term

3 years

Bonus

\$3,968,000.00

Lease Royalty

0.25000000

Paid Up

No

Leasing: GM

Maps: JK

GIS: MC

Scanlab: _____



CAUTION

Documents in this file have been placed in Table of Contents order and scanned.

Please help keep documents in content order and let the ScanLab know when new documents are added to this file.

Thank you for your assistance.

Archives and Records Staff

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①

File No. M-117555
Loving County
Lease Information Sheet
Date Filed: 8/6/15
George P. Bush, Commissioner
By George Martin

The State of Texas



Lease Form
Revised 4/15
Uplands

Austin, Texas

OIL AND GAS LEASE
NO. 117555

WHEREAS, pursuant to the Texas Natural Resources Code Chapters 32, 33, 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:

SECTION 13, BLOCK C-24, PUBLIC SCHOOL LAND SURVEY, LOVING COUNTY, TEXAS, CONTAINING APPROXIMATELY 640 ACRES, AS SHOWN ON THE OFFICIAL MAP OF LOVING COUNTY, TEXAS NOW ON FILE IN THE TEXAS GENERAL LAND OFFICE, AUSTIN, TEXAS,

was, after being duly advertised, offered for lease on the 4th day of August, 2015, at 10:00 o'clock a.m., by the GLO and the SLB 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 SLB at a regular meeting thereof in the GLO at Austin, Texas, on the 4th day of August, 2015, hereinafter the "effective date" and it was found and determined that Panther Energy Company II, LLC d/b/a Panther Exploration, LLC ("Lessee") whose address is 6100 S. Yale, Suite 600, Tulsa, OK 74136 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 Three Million Nine Hundred Sixty-Eight Thousand And 00/100 Dollars (\$3,968,000.00), 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 three (3) years 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:** If no well is commenced on the Leased Premises on or before the anniversary date of this lease, this lease shall terminate as to both parties unless the Lessee on or before said date shall pay to the GLO the sum of Ten Dollars (\$10.00) per acre, which if received in the GLO on or before the anniversary date shall operate as rental and confer on Lessee the privilege of deferring the commencement of a well for twelve (12) months from said date. In like manner and upon like payments the commencement of a well may be further deferred for like periods of the same number of months successively during the primary term hereof. 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.

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 MMBtu 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 MMBtu 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.

- (b) **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, 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. (0.032×4500 feet = 144 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 operate 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: For the rates established below, Lessee shall have the right to use water produced on said land necessary for drilling operations hereunder and solely upon the Leased Premises; provided, however, Lessee shall not use potable water or water suitable for livestock or irrigation purposes for water flood, hydraulic fracturing, or completion operations without the prior written consent of Lessor. Subject to its obligation to pay surface damages, Lessee shall have the right to use so much of the surface of the land that may be reasonably necessary for drilling and operating oil and gas wells and transporting and marketing the production therefrom, such use to be conducted under conditions of least injury to the surface of the land. Lessee shall pay surface damages and water use in an amount no less than the amount set by the University Lands Rate and Damage Schedule which is effective on the date when the activity requiring the payment of surface damages or water use occurs.

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. REDUCTION OF PAYMENTS: 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 SLB in accordance with N.R.C. Sections 52.151-52.154, 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 on Permanent School Fund Land 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 (PH-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.

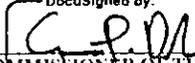
s. "Stock Tank Conditions" means a stock tank meeting all applicable API specifications and requirements at atmospheric pressure and 60° F.

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.

DocuSigned by:

COMMISSIONER OF THE GENERAL LAND OFFICE
OF THE STATE OF TEXAS

APPROVED

Contents 
Legal 
GC 
Exec 

STATE OF _____
COUNTY OF _____

(LESSEE ACKNOWLEDGMENT)

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 _____

(2)

File No. M-117555

Loving County

Oil & Gas Lease

Date Filed: 9/15/15

By George P. Bush, Commissioner
George Martin



TEXAS GENERAL LAND OFFICE
GEORGE P. BUSH, COMMISSIONER

September 15, 2015

Mr. Jim Stone
Panther Energy Company II, LLC D/B/A Panther Exploration, LLC
6100 S. Yale, Suite 600
Tulsa, Ok 74136

Dear Mr. Stone:

Thank you for participating in the General Land Office Oil and Gas Lease Sale held on August 4, 2015. I am pleased to inform you that Panther Energy Company II, LLC D/B/A Panther Exploration, LLC was the high bidder on **MGL. No. 15**, which has been assigned the lease number **M-117555**.

State Lease M-117555 is enclosed and serves as your receipt for your bid. This lease form must be fully executed by the lessee, and then recorded in the County Clerk's office of the county or counties in which lands covered by the lease are located. After signing and recording the lease, please submit a certified copy of the recorded lease to the attention of the undersigned. These requirements are material provisions of the lease; therefore, please return the certified copy at your earliest convenience.

The lessee's other contractual and statutory responsibilities are outlined in the lease agreement, such as Section 6(B), which requires submission of written notice for all drilling, production, and related activities. When forms are filed with the Texas Railroad Commission, they are required to submit copies of these forms to the General Land Office, such as Forms W-1, Application to Drill; W-2, Oil Well Completion Report and Log; G -1, Gas Well Completion Report and Log; W-3, Plugging Record; G-5, Gas Well Classification Report; G-10, Gas Well Status Report; W-10, Oil Well Status Report; W-12, Inclination Report; Electric Logs; Directional Surveys.

Please let me know if you have any questions or need any additional information.

Sincerely,

Robert B. Hatter, Director
Mineral Leasing Division

③

File No. M-117555
Loving County
Transmittal Letter
Date Filed: 9/15/15
By George P. Bush, Commissioner
George Martin

The State of Texas



Lease Form
Revised 4/15
Uplands

Austin, Texas

OIL AND GAS LEASE
NO. 117555

WHEREAS, pursuant to the Texas Natural Resources Code Chapters 32, 33, 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:

SECTION 13, BLOCK C-24, PUBLIC SCHOOL LAND SURVEY, LOVING COUNTY, TEXAS, CONTAINING APPROXIMATELY 640 ACRES, AS SHOWN ON THE OFFICIAL MAP OF LOVING COUNTY, TEXAS NOW ON FILE IN THE TEXAS GENERAL LAND OFFICE, AUSTIN, TEXAS,

was, after being duly advertised, offered for lease on the 4th day of August, 2015, at 10:00 o'clock a.m., by the GLO and the SLB 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 SLB at a regular meeting thereof in the GLO at Austin, Texas, on the 4th day of August, 2015, hereinafter the "effective date" and it was found and determined that Panther Energy Company II, LLC d/b/a Panther Exploration, LLC ("Lessee") whose address is 6100 S. Yale, Suite 600, Tulsa, OK 74136 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 Three Million Nine Hundred Sixty-Eight Thousand And 00/100 Dollars (\$3,968,000.00), 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 three (3) years 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:** If no well is commenced on the Leased Premises on or before the anniversary date of this lease, this lease shall terminate as to both parties unless the Lessee on or before said date shall pay to the GLO the sum of Ten Dollars (\$10.00) per acre, which if received in the GLO on or before the anniversary date shall operate as rental and confer on Lessee the privilege of deferring the commencement of a well for twelve (12) months from said date. In like manner and upon like payments the commencement of a well may be further deferred for like periods of the same number of months successively during the primary term hereof. 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.

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

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District & County Clerk - Loving County, TX



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MOZELLE CARR, COUNTY CLERK
LOVING COUNTY, TX

By [Signature]
Deputy

(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

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MOZELLE CARR, COUNTY CLERK
 LOVING COUNTY, TX

By [Signature] Deputy

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

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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.

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- (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, 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. $(0.032 \times 4500 \text{ feet} = 144 \text{ acres, which rounds up to } 160 \text{ acres})$; (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

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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 operate 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: For the rates established below, Lessee shall have the right to use water produced on said land necessary for drilling operations hereunder and solely upon the Leased Premises; provided, however, Lessee shall not use potable water or water suitable for livestock or irrigation purposes for water flood, hydraulic fracturing, or completion operations without the prior written consent of Lessor. Subject to its obligation to pay surface damages, Lessee shall have the right to use so much of the surface of the land that may be reasonably necessary for drilling and operating oil and gas wells and transporting and marketing the production therefrom, such use to be conducted under conditions of least injury to the surface of the land. Lessee shall pay surface damages and water use in an amount no less than the amount set by the University Lands Rate and Damage Schedule which is effective on the date when the activity requiring the payment of surface damages or water use occurs.

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,

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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.

A CERTIFIED COPY: PG 7 OF 11

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MOZELLE CARR, COUNTY CLERK
LOVING COUNTY, TX

By MWJ Deputy

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. REDUCTION OF PAYMENTS: 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 SLB in accordance with N.R.C. Sections 52.151-52.154, 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 on Permanent School Fund Land 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

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LOVING COUNTY, TXBy MJ Deputy

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

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LOVING COUNTY, TXBy [Signature] Deputy

- 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 [Signature]
 BY: James R. Stone
 TITLE: Executive Vice President
 DATE: 10-14-15

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.

DocuSigned by:
[Signature]
 COMMISSIONER OF THE GENERAL LAND OFFICE
 OF THE STATE OF TEXAS

APPROVED

Contents [Signature]
 Legal [Signature]
 GC [Signature]
 Exec [Signature]

STATE OF OKLAHOMA
 COUNTY OF TULSA

(LESSEE ACKNOWLEDGMENT)

BEFORE ME, the undersigned authority, on this day personally appeared James R. Stone
 known to me to be the person whose name is subscribed to the foregoing instrument, as Executive Vice President of
Panther Energy Company II, LLC dba Panther Exploration, LLC, 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 Executive Vice President

Given under my hand and seal of office 10-14, 2015

[Signature]
 Notary Public in and for the State of OKLAHOMA



A CERTIFIED COPY: PG 10 OF 11

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MOZELLE CARR, COUNTY CLERK
LOVING COUNTY, TX

By [Signature] Deputy

I, Mozelle Carr, Clerk of the County Court, in and for said County, do hereby certify that the within instrument in writing, dated 08/04/2015 with its certification of authentication, was filed in my office 10/20/2015 at 11:21 AM and recorded 10/20/2015 in the OFFICIAL PUBLIC RECORDS of Loving County, Texas with Instrument Number 2015-3650. Witness my Hand and Seal of Said Court, at office in Mentone, Texas, on date and year last above written.



Mozelle Carr

MOZELLE CARR, County Clerk
Loving County Texas

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MOZELLE CARR, COUNTY CLERK
LOVING COUNTY, TX

By [Signature] Deputy

4

File No. M-117555

Loving County

Certified copy of lease

Date Filed: 3/11/16

By: George P. Bush, District Clerk
Hedge Maden

CERTIFIED COPY CERTIFICATE
STATE OF TEXAS COUNTY OF LOVING

I hereby certify that the above is a true & correct copy of the original record on file in my office.

MOZELLE CARR, DISTRICT CLERK & COUNTY CLERK, LOVING CO. TX

By: 
Deputy

INVOICE	DATE	DESCRIPTION	NET
8012016A	08/01/16	TERRAPIN PROSPECT	6,400.00

Delay Rental Payment – State of Texas Lease #117555

August 4, 2016 – August 4, 2017

640 acres @ \$10 per acre rental payment

Sec 13, Blk C-24, PSL Survey, Loving Co TX

16714663

121

VENDOR TEX0009 CHECK 15494 DATE 08/01/16

6,400.00

5

File No. MF 17555

Rentals 2nd yr County

Date Filed: 8/2/16

George P. Bush, Commissioner

By: JEN



17716377

PAYMENT IS MADE UNDER INSTRUMENT DESCRIBED BELOW, PLEASE DEPOSIT AMOUNT OF CHECK TO THE CREDIT OF PARTY OR PARTIES NAMED.
DATE, SIGN AND RETURN THIS RECEIPT ON THE DAY YOU RECEIVE IT.
THIS PAYMENT IS MADE IN A MANNER TO CONFORM TO THE TERMS OF THE INSTRUMENT REFERRED TO WHEREIN YOU ARE NAMED DEPOSITORY

SJ

WHEN SIGNED, PLEASE MAIL TO: **WPXENERGY** RKI EXPLORATION & PRODUCTION LLC
P.O. Box 3102
Tulsa, OK 74101

RENTAL RECEIPT/ SHUT IN RECEIPT JPMorgan Chase Bank N.A. Page 1
Chicago, IL 60606

DATE: 07/13/2017 NO. 310004474

LEASE RECORDS ACCOUNT			RENTAL PERIOD			
COUNTY	STATE	RECORDED-BOOK PAGE	LEASE EFFECTIVE DATE	MONTHS	FROM	TO
LOVING	TX	2015-3650	08/04/15	12	08/04/17	08/04/18

LEASE NUMBER	ORIGINAL LESSOR IDENTIFICATION OR LEASE SERIAL NUMBER	PAY EXACTLY
84010283.000	STATE OF TEXAS MF 117555	*****\$6,400.00

PAY TO THE ORDER OF: TEXAS GENERAL LAND OFFICE
1700 N CONGRESS AVE
AUSTIN, TX 78701-1495
US

RECEIVED ON _____ 20_____
THE AMOUNT SHOWN ABOVE

NAME OF BANK, CORPORATION OR INDIVIDUAL _____

BY _____

RECEIPT IS HEREBY ACKNOWLEDGED OF THE AMOUNT STATED WHICH IS IN FULL SETTLEMENT OF RENTAL/SHUT-IN DUE PARTY NAMED COVERING OUR INTEREST IN OIL AND GAS LEASE DESCRIBED HEREIN.

PAYEE WILL PLEASE DATE, SIGN AND RETURN THIS RECEIPT BY NEXT MAIL. OFFICERS SIGNING FOR CORPORATIONS WILL PLEASE GIVE FULL NAME AND TITLE.

TO BE CREDITED TO	RENTAL AMOUNT	BANK
TEXAS GENERAL LAND OFFICE 1700 N CONGRESS AVE AUSTIN, TX 78701-1495 US	** DELAY RENTALS ** *****\$6,400.00	

SURVEY: PUBLIC SCHOOL LAND
BLOCK/TOWNSHIP: C-24
SEC.: 13, BLK C-24, PSL SURVEY
LOVING COUNTY, TEXAS

121

PAYEE: DETACH THIS STATEMENT BEFORE DEPOSITING

THIS CHECK HAS A COLORED FACE ON WHITE STOCK AND AN ARTIFICIAL WATERMARK ON THE BACK.

WPXENERGY RKI EXPLORATION & PRODUCTION LLC 70-2322 DATE: 07/13/2017 NO. 310004474
P.O. Box 3102 JPMorgan Chase Bank N.A. 719
Tulsa, OK 74101 Chicago, IL 60606

17716377

LEASE RECORDS ACCOUNT			RENTAL PERIOD			
COUNTY	STATE	RECORDED-BOOK PAGE	LEASE EFFECTIVE DATE	MONTHS	FROM	TO
LOVING	TX	2015-3650	08/04/15	12	08/04/17	08/04/18

LEASE NUMBER	ORIGINAL LESSOR IDENTIFICATION OR LEASE SERIAL NUMBER	PAY EXACTLY
84010283.000	STATE OF TEXAS MF 117555	*****\$6,400.00

VOID AFTER 180 DAYS

PAY TO THE ORDER OF
TEXAS GENERAL LAND OFFICE
1700 N CONGRESS AVE
AUSTIN, TX 78701-1495
US

RKI EXPLORATION & PRODUCTION LLC
[Signature]
CONTROLLER & TREASURER

6

File No. MF117555
Rentals 3rd yr County

Date Filed: 8/3/17

By BN George P. Bush, Commissioner [Signature]

LSA

**EXTENSION OF STATE OIL AND GAS LEASE
TEXAS GENERAL LAND OFFICE
STATE LEASE NO. MF117555
REEVES COUNTIES, TEXAS**

WHEREAS, State Lease No. **MF117555** was issued to **Panther Energy Company II, LLC d/b/a Panther Exploration, LLC** on the **4th day of August, 2015**, covering the tract of land described as: **Section 13, Block C-24, Public School Land Survey, Loving County, Texas**, containing approximately **640.0 acres** as more particularly described in said Lease on file in the Archives and Records of the Texas General Land Office in Mineral File **MF117555**; and

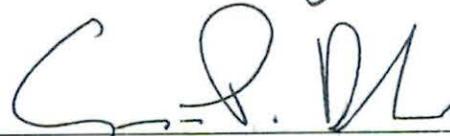
WHEREAS, Section 52.031 of the Natural Resources Code provides for extensions of valid and subsisting leases; and

WHEREAS, drilling operations are being conducted thereon in good faith and workmanlike manner; and

WHEREAS, the owner of said lease, **WPX Energy Permian, LLC**, has made written application for an extension in accordance with said Act, and paid the sum of **\$3,000.00**, as consideration therefor:

NOW, THEREFORE, I, George P. Bush, Commissioner of the General Land Office of the State of Texas, by the authority vested in me, and in accordance with the provisions of said Act, do by these presents hereby extend said lease for a period of thirty (30) days beginning the **5th day of August, 2018**, said term extends to and includes the **3rd day of September, 2018**, and so long thereafter as oil or gas is being produced in paying quantities.

IN TESTIMONY, WHEREOF, witness the signature of the Commissioner of the Texas General Land Office, under the seal thereof, this the 13 day of August, 2018.



George P. Bush, Commissioner
Texas General Land Office

APPROVED:

Content SSD
Min. Leasing [Signature]
Legal [Signature]
Executive [Signature]

PAY DATE	SUPPLIER NO.	SUPPLIER NAME	CHECK TOTAL
Jul 12, 2018	401460	TEXAS GENERAL LAND OFFICE	\$3,000.00

Invoice Date	Invoice / Credit Memo Invoice Description	Gross	Discount	Net
Jul 11, 2018	Inv Num: 11-JUL-2018 Inv Desc: 30 DAY EXTENSION OF OIL & GAS LEASE 84010283.000 (MF 117555), PAID BY WPX ENERGY	\$3,000.00	\$0.00	\$3,000.00
		18714222		
				121
		Page Totals		\$3,000.00

Supplier Support 1-866-581-4981

Page Totals	\$0.00	+ \$3,000.00
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VERIFY THE AUTHENTICITY OF THIS MULTI-TONE SECURITY DOCUMENT.

CHECK BACKGROUND AREA CHANGES COLOR GRADUALLY FROM TOP TO BOTTOM.



WPX ENERGY PERMIAN, LLC
PO BOX 21358
TULSA, OK 74121-1358
Company Number: 3035

JPMorgan Chase Bank, N.A.
Chicago, IL

70-2322/719

Check Number: 3035016729

Check Date: Jul 12, 2018

18714222

Three Thousand Dollars And Zero Cents*****

Pay To The Order Of
TEXAS GENERAL LAND OFFICE
PO BOX 12873
AUSTIN, TX 78711-2873 US

00000000000009403908

PAY (USD) \$3,000.00

Authorized Signature

⑈ 3035016729 ⑈



Application for 30 Day Extension of State Oil and Gas Lease

Energy Resources

Texas General Land Office
1700 North Congress Avenue
Austin, Texas 78701

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

Under the provisions of Section 52.031 of the Natural Resources Code, providing for extensions of valid and subsisting leases, the undersigned hereby applies for a thirty (30) day extension of the oil and gas lease held by the lessee on the tract of land described below.

Enclosed is the extension payment in the amount of \$3,000 and a copy of Railroad Commission Form W-1, Application for Permit to Drill, for the well on which drilling operations have been commenced prior to the end of the primary term.

NOTE: (the W-1 is only required with the initial extension application, it is not needed for additional extensions)

STATE LEASE NO. MF 117555
LEASE DATE: August 4, 2015
SECTION: 13 BLOCK: C-24 Public School Land Survey
ACRES: 640
COUNTY: Loving County, Texas

(Only one lease should be included in this application, and the land must be described the same as in the original lease, as granted, unless the amount of acreage held at the end of the primary term is less than was originally covered by the lease)

A handwritten signature in blue ink, appearing to read 'B West', written over a horizontal line.

WPX Energy Permian, LLC

By: Brennan West - Landman

Date: July 12, 2018



Affidavit of Drilling Operations – State of Texas Leases

Before me, the undersigned authority in and for the State of Oklahoma, this day personally appeared Brennan West, of WPX Energy Permian, LLC stated to me to be the person who subscribed his name below, and who after being by me duly sworn, upon oath deposes and says that WPX Energy Permian, LLC as operator commenced drilling operations on June 3, 2018, and at the end of the primary term or extended term, on August 4, 2018, was engaged in drilling operations on the Ren State 13-1H Well, (API No. 42-301-33966) located on Section 13, Block C-24, Public School Land Survey, Loving County, Texas which is covered by State Lease MF 117555 and is continuing drilling operations in good faith and in good and workmanlike manner and as of this date, the well has been drilled to a depth of approximately 12,720' feet TVD and 17,568' TMD.

By: 

Brennan West
Landman
WPX Energy Permian, LLC

THE STATE OF OKLAHOMA
COUNTY OF TULSA

Sworn to me and subscribed before me on this the 4th day of August, 2018 by

Christine A. Kennon





Permit Status: **Approved**

*The RRC has not approved this application.
Duplication or distribution of information is
at the user's own risk.*

**RAILROAD COMMISSION OF TEXAS
OIL & GAS DIVISION**

Form W-1H 07/2004
Supplemental Horizontal Well Information

APPLICATION FOR PERMIT TO DRILL, RECOMPLETE, OR RE-ENTER

*This facsimile W-1 was generated electronically from data submitted to the RRC.
A certification of the automated data is available in the RRC's Austin office.*

Permit # **838616**

Approved Date: **Apr 12, 2018**

1. RRC Operator No. 714221	2. Operator's Name (exactly as shown on form P-5, Organization Report) RKI EXPLORATION & PRODUCTION LLC	3. Lease Name REN STATE 13	4. Well No. 1H
--------------------------------------	-----------------------------------------------------------------------------------------------------------------------	--------------------------------------	--------------------------

Lateral Drainhole Location Information

5. Field as shown on Form W-1 **PHANTOM (WOLFCAMP) (Field # 71052900, RRC District 08)**

6. Section 13	7. Block C-24	8. Survey PUBLIC SCHOOL LAND SURVEY	9. Abstract	10. County of BHL LOVING
-------------------------	-------------------------	-----------------------------------------------	-------------	------------------------------------

11. Terminus Lease Line Perpendiculars
100 ft. from the **North** line and **330** ft. from the **West** line

12. Terminus Survey Line Perpendiculars
100 ft. from the **North** line and **330** ft. from the **West** line

13. Penetration Point Lease Line Perpendiculars
50 ft. from the **South** line and **330** ft. from the **West** line

**RAILROAD COMMISSION OF TEXAS
OIL & GAS DIVISION
SWR #13 Formation Data**

LOVING (301) County

Formation	Shallow Top	Deep Top	Remarks	Geological Order	Effective Date
RED BLUFF	3,900	3,900		1	12/17/2013
BELL CANYON	4,700	4,700		2	12/17/2013
BRUSHY CANYON	6,000	6,000		3	12/17/2013
DELAWARE	3,000	6,500		4	12/17/2013
CHERRY CANYON	3,700	7,800		5	12/17/2013
BONE SPRINGS	8,200	9,800		6	12/17/2013
WOLFCAMP	11,000	12,900		7	12/17/2013
PENNSYLVANIAN	14,900	15,000		8	12/17/2013
STRAWN	14,700	15,000		9	12/17/2013
ATOKA	15,200	16,000	high pressure	10	12/17/2013
MORROW	15,700	17,000		11	12/17/2013
DEVONIAN	17,800	17,800		12	12/17/2013
FUSSELMAN	18,900	19,000		13	12/17/2013
ELLENBURGER	21,000	21,000		14	12/17/2013

The above list may not be all inclusive, and may also include formations that do not intersect all wellbores. Formation "TOP" information listed reflects an estimated range based on geologic variances across the county. To clarify, the "Deep Top" is not the bottom of the formation; it is the deepest depth at which the "TOP" of the formation has been or might be encountered. This is a dynamic list subject to updates and revisions. It is the operator's responsibility to make sure that at the time of spudding the well the most current list is being referenced. Refer to the RRC website at the following address for the most recent information.
<http://www.rrc.texas.gov/oil-gas/compliance-enforcement/rule-13-geologic-formation-info>

July 13, 2018

VIA HAND DELIVERY

Susan Draughn
General Land Office
1700 N. Congress Avenue
Austin, TX 78701

In Re: Application by WPX Energy Permian, LLC for 30 day Extension of State Oil & Gas Lease No. M-117555, Loving County, Texas

Dear Ms. Draughn:

On behalf of WPX Energy Permian, LLC (WPX), the current lessee of State Lease No. M-117555 and operator of the Ren State 13 No. 1H Well, we enclose the following:

1. Application for 30 Day Extension of State Oil & Gas Lease;
2. WPX check in the amount of \$3,000.00 and payable to the Texas General Land Office as the appropriate extension payment to extend the subject lease; and
3. A copy of the Railroad Commission drilling permit for the subject Ren State 13 Well No. 1H.

This application and payment are being submitted before the expiration of the primary term of the subject lease to ensure this payment is made timely. An Affidavit of Drilling Operations confirming that drilling operations are being conducted on August 4, 2018, the primary term expiration date for the subject lease, within the next several days. If you have any questions or issues with this application and payment, please let me know as soon as possible. Thank you for your attention and assistance to this matter.

Very truly yours,



H. Philip Whitworth
Attorney for WPX Energy Permian, LLC

HPW:map
Enclosures
cc: Brennan West, *via email*

4830-3966-9101

Scott Douglass & McConnico LLP | Attorneys at Law

RECEIVED
JUL 13 2018

July 13, 2018

VIA HAND DELIVERY

Susan Draughn
General Land Office
1700 N. Congress Avenue
Austin, TX 78701

In Re: Application by WPX Energy Permian, LLC for 30 day Extension of State Oil & Gas Lease No. M-117555, Loving County, Texas

Dear Ms. Draughn:

On behalf of WPX Energy Permian, LLC (WPX), the current lessee of State Lease No. M-117555 and operator of the Ren State 13 No. 1H Well, we enclose the following:

1. Application for 30 Day Extension of State Oil & Gas Lease;
2. WPX check in the amount of \$3,000.00 and payable to the Texas General Land Office as the appropriate extension payment to extend the subject lease; and
3. A copy of the Railroad Commission drilling permit for the subject Ren State 13 Well No. 1H.

This application and payment are being submitted before the expiration of the primary term of the subject lease to ensure this payment is made timely. An Affidavit of Drilling Operations confirming that drilling operations are being conducted on August 4, 2018, the primary term expiration date for the subject lease, within the next several days. If you have any questions or issues with this application and payment, please let me know as soon as possible. Thank you for your attention and assistance to this matter.

Very truly yours,



H. Philip Whitworth
Attorney for WPX Energy Permian, LLC

HPW:map
Enclosures
cc: Brennan West, *via email*

4830-3966-9101



August 6, 2018

VIA HAND DELIVERY

Susan Draughn
General Land Office
1700 N. Congress Avenue
Austin, TX 78701

In Re: Application by WPX Energy Permian, LLC for 30 day Extension of State Oil & Gas Lease No. M-117555, Loving County, Texas

Dear Ms. Draughn:

On behalf of WPX Energy Permian, LLC (WPX), the current lessee of State Lease No. M-117555 and operator of the Ren State 13 No. 1H Well, we enclose an Affidavit of Drilling Operations confirming that drilling operations were being conducted on the Ren State 13 Well No. 1H on August 4, 2018, which is the expiration date of the primary term for the subject State lease. These operations were commenced prior to this expiration date and are continuing. We would appreciate your confirming the 30 day extension of this State fee lease. Thank you for your assistance and cooperation in this matter.

Very truly yours,

H. Philip Whitworth
Attorney for WPX Energy Permian, LLC

HPW:map

Enclosure

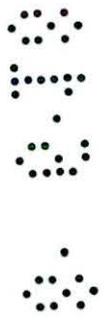
cc: Brennan West, *via email*

4815-6550-2317

Scott Douglass & McConnico LLP | Attorneys at Law

File No. MF 117555
Extension of lease (1st) County

Date Filed: 8/15/18
George P. Bush, Commissioner
By SSD





TEXAS GENERAL LAND OFFICE
GEORGE P. BUSH, COMMISSIONER

August 15, 2018

Mr. H. Philip Whitworth
Scott, Douglass & McConnico LLP
303 Colorado Street, Suite 2400
Austin, TX 78701

RE: State Lease MF117555 – Extension of Oil and Gas Lease
640.0 Acres, Section 13, Block C-24, Public School Land Survey, Loving County, Texas

Dear Mr. Whitworth,

Enclosed for your client, WPX Energy Permian, LLC, is an original Extension of State Oil and Gas Lease for the referenced lease that has been executed by George P. Bush, Commissioner of the Texas General Land Office. We have retained a duplicate original of the extension for our files.

Your remittances totaling \$3,000.00, received in our office on July 13, 2018, has been applied to extend the lease for an additional thirty-day period beginning August 5, 2018 and ending September 3, 2018. The extension will serve as receipt for the payments. If additional extensions are required, the same procedure should be followed, with the new applications and payments due in our office prior to the expiration of the current extension period and an affidavit to follow documenting the activities during the extended period.

Thank you for your assistance with this matter and please let me know if you have any questions or need anything further.

Sincerely,

Susan Draughn, Landman
Energy Resources/ Mineral Leasing
Direct: 512.463.6521 / Email: susan.draughn@glo.texas.gov

8.

File No. ME117555

Transmittal letter County

Date Filed: 8/15/18

George P. Bush, Commissioner

By SSD

September 7, 2018

VIA HAND DELIVERY & EMAIL

Susan Draughn
General Land Office
1700 N. Congress Avenue
Austin, TX 78701

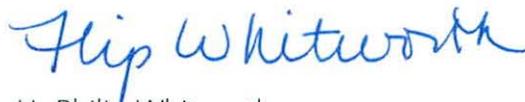
In Re: Application by WPX Energy Permian, LLC for 30 day Extension of State Oil & Gas Lease No. M-117555, Loving County, Texas

Dear Ms. Draughn:

 Please be advised that WPX Energy Permian, LLC (WPX) established first production from its Ren State 13 1H well on August 14, 2018 which has been producing continuously since that time. Accordingly, WPX as operator of the Ren State Unit, has not filed any additional extension payments to maintain the above referenced lease beyond the September 3, 2018 expiration of the 30 day extension period.

 We would accordingly appreciate your confirmation that this State fee lease remains valid and in full force and effect. Thank you for your assistance and cooperation.

Very truly yours,



H. Philip Whitworth
Attorney for WPX Energy Permian, LLC

HPW:map

cc: Brennan West, *via email*

4852-3397-4641

Scott Douglass & McConnico LLP | Attorneys at Law

9.

File No. MF117555

letter notice of County
production

Date Filed: 9/10/18

George P. Bush, Commissioner

By SSD

8. 270



TEXAS GENERAL LAND OFFICE
GEORGE P. BUSH, COMMISSIONER

September 10, 2018

VIA HAND DELIVERY & EMAIL

Mr. H. Philip Whitworth
Scott, Douglass & McConnico LLP
303 Colorado Street, Suite 2400
Austin, TX 78701

RE: State Lease MF117555 – Extension of Oil and Gas Lease
640.0 Acres, Section 13, Block C-24, Public School Land Survey, Loving County, Texas

Dear Mr. Whitworth,

The Texas General Land Office is in receipt of your letter, hand delivered and dated September 7, 2018, regarding the status of State Fee Lease MF117555. Thank you for informing the GLO that the Ren State Unit is now producing and there is no longer a need to extend the lease.

State Fee Lease MF117555 remains in full force and effect and the status of the lease has been changed to "Producing".

Thank you for your assistance with this matter and please let me know if you have any questions or need anything further.

Sincerely,

Susan Draughn, Landman
Energy Resources/ Mineral Leasing
Direct: 512.463.6521 / Email: susan.draughn@glo.texas.gov

File No. MF117555

Letter acknowledging County
producing status

Date Filed: 9/10/18

George P. Bush, Commissioner

By SSP



RAILROAD COMMISSION OF TEXAS

Form G-1

1701 N. Congress
P.O. Box 12967
Austin, Texas 78701-2967

Status: Approved
Date: 11/09/2018
Tracking No.: 199406

GAS WELL BACK PRESSURE TEST, COMPLETION OR RECOMPLETION REPORT, AND LOG

OPERATOR INFORMATION

Operator Name: WPX ENERGY PERMIAN, LLC Operator No.: 942623
Operator Address: 3500 ONE WILLIAMS CENTER MD-35 TULSA, OK 74172-0000

WELL INFORMATION

API No.: 42-301-33966 County: LOVING
Well No.: 1H RRC District No.: 08
Lease Name: REN STATE 13 Field Name: PHANTOM (WOLFCAMP)
RRC Gas ID No.: 285026 Field No.: 71052900
Location: Section: 13, Block: C-24, Survey: PUBLIC SCHOOL LAND SURVEY, Abstract:
Latitude: Longitude:
This well is located 22.9 miles in a NE direction from MENTONE, which is the nearest town in the county.

FILING INFORMATION

Purpose of filing: Well Record Only
Type of completion: New Well
Well Type: Shut-In Producer Completion or Recompletion Date: 08/13/2018
Type of Permit Date Permit No.
Permit to Drill, Plug Back, or Deepen 04/12/2018 838616
Rule 37 Exception
Fluid Injection Permit
O&G Waste Disposal Permit
Other:

COMPLETION INFORMATION

Spud date: 06/12/2018 Date of first production after rig released: 08/13/2018
Date plug back, deepening, recompletion, or drilling operation commenced: 06/12/2018 Date plug back, deepening, recompletion, or drilling operation ended: 07/05/2018
Number of producing wells on this lease in this field (reservoir) including this well: 1 Distance to nearest well in lease & reservoir (ft.): 0.0
Total number of acres in lease: 640.00 Elevation (ft.): 3124 GR
Total depth TVD (ft.): 12719 Total depth MD (ft.): 17568
Plug back depth TVD (ft.): 12719 Plug back depth MD (ft.): 17480
Was directional survey made other than inclination (Form W-12)? Yes Rotation time within surface casing (hours): 44.0
Is Cementing Affidavit (Form W-15) attached? Yes
Recompletion or reclass? No Multiple completion? No
Type(s) of electric or other log(s) run: Gamma Ray (MWD)
Electric Log Other Description:
Location of well, relative to nearest lease boundaries of lease on which this well is located: 225.0 Feet from the South Line and 500.0 Feet from the West Line of the REN STATE 13 Lease. Off Lease: No

Table with 4 columns: Field & Reservoir, Gas ID or Oil Lease No., Well No., Prior Service Type

G1: N/A
 PACKET: N/A

FOR NEW DRILL OR RE-ENTRY, SURFACE CASING DEPTH DETERMINED BY:

GAU Groundwater Protection Determination Depth (ft.): 450.0 Date: 04/24/2018
 SWR 13 Exception Depth (ft.):

GAS MEASUREMENT DATA

Date of test: Gas measurement method(s):
 Gas production during test (MCF):
 Was the well preflowed for 48 hours? No

Run No.	Line size	Orif. or Choke Size (in.)	24 hr. Coeff. Orif. Or Choke (in.)	Static Pm or Choke (in.)	Diff (hw)	Flow Temp (°F)	Temp. (Ftf)	Gravity (Fg)	Compress (Fpv)	Volume (MCF/day)
N/A										

FIELD DATA AND PRESSURE CALCULATIONS

Gravity (dry gas): Gravity (liquid hydrocarbons) (Deg. API):
 Gas-Liquid Hydro Ratio (CF/Bbl): Gravity (mixture): Gmix=
 Avg. shut in temp. (°F): Bottom hole temp. and depth: °F@ FT

Run No.	Time of Run (Min.)	Choke Size (in.)	Wellhead Pressure (PSIA)	Wellhead Flow Temp (°F)
N/A				

CASING RECORD

Row	Type of Casing	Casing Size (in.)	Hole Size (in.)	Setting Depth (ft.)	Multi - Stage Depth (ft.)	Multi - Stage Shoe Depth (ft.)	Cement Class	Cement Amount (sacks)	Slurry Volume (cu. ft.)	Top of Cement (ft.)	TOC Determined By
1	Surface	13 3/8	17 1/2	532			C	684	907.0	0	Circulated to Surface
2	Intermediate	9 5/8	12 1/4	5332			C	1369	2572.0	501	Calculation
3	Intermediate	7	8 3/4	12939			C	810	2090.0	1393	Calculation

LINER RECORD

Row	Liner Size (in.)	Hole Size (in.)	Liner Top (ft.)	Liner Bottom (ft.)	Cement Class	Cement Amount (sacks)	Slurry Volume (cu. ft.)	Top of Cement (ft.)	TOC Determined By
1	4 1/2	6 1/8	11927	17568	H	571	696.0	11927 7	Calculation

TUBING RECORD

Row	Size (in.)	Depth Size (ft.)	Packer Depth (ft.)/Type
1	2 7/8	12547	12533 / AS-1X

PRODUCING/INJECTION/DISPOSAL INTERVAL

Row	Open hole?	From (ft.)	To (ft.)
1	No	L1 12949	17425

ACID, FRACTURE, CEMENT SQUEEZE, CAST IRON BRIDGE PLUG, RETAINER, ETC.

Was hydraulic fracturing treatment performed? Yes

Is well equipped with a downhole actuation sleeve? If yes, actuation pressure (PSIG): 9920.0
 Yes

Production casing test pressure (PSIG) prior to hydraulic fracturing treatment: 11000 Actual maximum pressure (PSIG) during hydraulic fracturing: 11015

Has the hydraulic fracturing fluid disclosure been reported to FracFocus disclosure registry (SWR29)? Yes

Row	Type of Operation	Amount and Kind of Material Used	Depth Interval (ft.)
1	Fracture	11,145,552 TOTAL PROPPANT; 8,674,606 TOTAL FLUID	12949.0 17425.0

FORMATION RECORD

Formations	Encountered	Depth TVD (ft.)	Depth MD (ft.)	Is formation isolated?	Remarks
RED BLUFF	No			No	NOT GEOLOGICALLY PRESENT
BELL CANYON	Yes	5282.0	5291.0	Yes	
BRUSHY CANYON	Yes	7775.0	7784.0	Yes	
DELAWARE	No			No	NOT GEOLOGICALLY PRESENT
CHERRY CANYON	Yes	6570.0	6579.0	Yes	
BONE SPRINGS	Yes	9161.0	9170.0	Yes	
WOLFCAMP	Yes	12379.0	12418.0	Yes	
PENNSYLVANIAN	No			No	DID NOT DRILL INTO THIS FORMATION
STRAWN	No			No	DID NOT DRILL INTO THIS FORMATION
ATOKA - HIGH PRESSURE	No			No	DID NOT DRILL INTO THIS FORMATION
MORROW	No			No	DID NOT DRILL INTO THIS FORMATION
DEVONIAN	No			No	DID NOT DRILL INTO THIS FORMATION
FUSSELMAN	No			No	DID NOT DRILL INTO THIS FORMATION
ELLENBURGER	No			No	DID NOT DRILL INTO THIS FORMATION

Do the producing interval of this well produce H2S with a concentration in excess of 100 ppm (SWR 36)? No

Is the completion being downhole commingled (SWR 10)? No

REMARKS

KOP (12,135' MD)

COMPLETION P-16, AS-DRILLED PLAT AND G-5 WILL BE SUBMITTED WITH INITIAL POTENTIAL COMPLETION REPORT.

RRC REMARKS

PUBLIC COMMENTS:

[RRC Staff 2018-11-09 10:18:43.975] APPROVAL UPDATED [G-1]
schmidtsa
10/24/2018 15:20:30 PM

CASING RECORD :

TUBING RECORD:

PRODUCING/INJECTION/DISPOSAL INTERVAL :

ACID, FRACTURE, CEMENT SQUEEZE, CAST IRON BRIDGE PLUG, RETAINER, ETC. :

GAS MEASUREMENT DATE REMARK:

OPERATOR'S CERTIFICATION

Printed Name: Lorri Kline

Title:

Telephone No.: (539) 573-3518

Date Certified: 10/31/2018



RAILROAD COMMISSION OF TEXAS

Form W-2

1701 N. Congress
P.O. Box 12967
Austin, Texas 78701-2967

Status: Approved
Date: 01/02/2019
Tracking No.: 202524

OIL WELL POTENTIAL TEST, COMPLETION OR RECOMPLETION REPORT, AND LOG

OPERATOR INFORMATION

Operator Name: WPX ENERGY PERMIAN, LLC Operator No.: 942623
Operator Address: 3500 ONE WILLIAMS CENTER MD-35 TULSA, OK 74172-0000

WELL INFORMATION

API No.: 42-301-33966 County: LOVING
Well No.: 1H RRC District No.: 08
Lease Name: REN STATE 13 Field Name: PHANTOM (WOLFCAMP)
RRC Lease No.: 50881 Field No.: 71052900
Location: Section: 13, Block: C-24, Survey: PUBLIC SCHOOL LAND SURVEY, Abstract:
Latitude: Longitude:
This well is located 22.9 miles in a NE direction from MENTONE, which is the nearest town in the county.

FILING INFORMATION

Purpose of filing: Reclass Gas to Oil
Type of completion: Other/Recompletion
Well Type: Producing Completion or Recompletion Date: 08/13/2018
Type of Permit Date Permit No.
Permit to Drill, Plug Back, or Deepen 04/12/2018 838616
Rule 37 Exception
Fluid Injection Permit
O&G Waste Disposal Permit
Other:

COMPLETION INFORMATION

Spud date: 06/12/2018 Date of first production after rig released: 08/13/2018
Date plug back, deepening, recompletion, or drilling operation commenced: 06/12/2018 Date plug back, deepening, recompletion, or drilling operation ended: 07/05/2018
Number of producing wells on this lease in this field (reservoir) including this well: 1 Distance to nearest well in lease & reservoir (ft.): 0.0
Total number of acres in lease: 640.00 Elevation (ft.): 3124 GR
Total depth TVD (ft.): 12719 Total depth MD (ft.): 17568
Plug back depth TVD (ft.): 12719 Plug back depth MD (ft.): 17480
Was directional survey made other than inclination (Form W-12)? Yes Rotation time within surface casing (hours): 44.0
Is Cementing Affidavit (Form W-15) attached? Yes
Recompletion or reclass? Yes Multiple completion? No
Type(s) of electric or other log(s) run: Gamma Ray (MWD)
Electric Log Other Description:
Location of well, relative to nearest lease boundaries Off Lease: No
of lease on which this well is located: 225.0 Feet from the South Line and
500.0 Feet from the West Line of the
REN STATE 13 Lease.

FORMER FIELD (WITH RESERVOIR) & GAS ID OR OIL LEASE NO.

Table with 5 columns: Field & Reservoir, Gas ID or Oil Lease No., Well No., Prior Service Type. Row 1: PACKET, PHANTOM (WOLFCAMP), 285026, 1H, (blank)

W2: N/A

FOR NEW DRILL OR RE-ENTRY, SURFACE CASING DEPTH DETERMINED BY:

GAU Groundwater Protection Determination Depth (ft.): 450.0 Date: 04/24/2018
 SWR 13 Exception Depth (ft.):

INITIAL POTENTIAL TEST DATA FOR NEW COMPLETION OR RECOMPLETION

Date of test: 10/21/2018 Production method: Flowing
 Number of hours tested: 24 Choke size: 50/64
 Was swab used during this test? No Oil produced prior to test: 13795.00

PRODUCTION DURING TEST PERIOD:

Oil (BBLs): 372.00 Gas (MCF): 399
 Gas - Oil Ratio: 1072 Flowing Tubing Pressure: 240.00
 Water (BBLs): 860

CALCULATED 24-HOUR RATE

Oil (BBLs): 372.0 Gas (MCF): 399
 Oil Gravity - API - 60.: 46.4 Casing Pressure: 160.00
 Water (BBLs): 860

CASING RECORD

Row	Type of Casing	Casing Hole Size		Setting Depth (ft.)	Multi - Stage Depth (ft.)	Multi - Stage Shoe Depth (ft.)	Cement Class	Cement Amount (sacks)	Slurry Volume (cu. ft.)	Top of Cement (ft.)	TOC Determined By
		(in.)	(in.)								
1	Surface	13 3/8	17 1/2	532			C	684	907.0	SURF ACE 501	Circulated to Surface
2	Intermediate	9 5/8	12 1/4	5332			C	1369	2572.0		Calculation
3	Intermediate	7	8 3/4	12939			C	810	2090.0	1393	Calculation

LINER RECORD

Row	Liner Size (in.)	Hole Size (in.)	Liner Top (ft.)	Liner Bottom (ft.)	Cement Class	Cement Amount (sacks)	Slurry Volume (cu. ft.)	Top of Cement (ft.)	TOC Determined By
1	4 1/2	6 1/8	11927	17568	H	572	696.0	11927	Calculation

TUBING RECORD

Row	Size (in.)	Depth Size (ft.)	Packer Depth (ft.)/Type
1	2 7/8	12547	12533 / AS-1X

PRODUCING/INJECTION/DISPOSAL INTERVAL

Row	Open hole?	From (ft.)	To (ft.)
1	No	L1 12949	17425.0

ACID, FRACTURE, CEMENT SQUEEZE, CAST IRON BRIDGE PLUG, RETAINER, ETC.

Was hydraulic fracturing treatment performed? Yes

Is well equipped with a downhole actuation sleeve? Yes If yes, actuation pressure (PSIG): 9920.0

Production casing test pressure (PSIG) prior to hydraulic fracturing treatment: 11000 Actual maximum pressure (PSIG) during hydraulic fracturing: 11015

Has the hydraulic fracturing fluid disclosure been reported to FracFocus disclosure registry (SWR29)? Yes

Row Type of Operation Amount and Kind of Material Used Depth Interval (ft.)

1

Fracture

8,674,606 TL FLUID; 11,145,552 TL PROPPANT

12949

17425

FORMATION RECORD

<u>Formations</u>	<u>Encountered</u>	<u>Depth TVD (ft.)</u>	<u>Depth MD (ft.)</u>	<u>Is formation isolated?</u>	<u>Remarks</u>
RED BLUFF	No			No	NOT GEOLOGICALLY PRESENT
BELL CANYON	Yes	5282.0	5291.0	Yes	
BRUSHY CANYON	Yes	7775.0	7784.0	Yes	
DELAWARE	No			No	NOT GEOLOGICALLY PRESENT
CHERRY CANYON	Yes	6570.0	6579.0	Yes	
BONE SPRINGS	Yes	9161.0	9170.0	Yes	
WOLFCAMP	Yes	12379.0	12418.0	Yes	
PENNSYLVANIAN	No			No	DID NOT DRILL INTO THIS FORMATION
STRAWN	No			No	DID NOT DRILL INTO THIS FORMATION
ATOKA - HIGH PRESSURE	No			No	DID NOT DRILL INTO THIS FORMATION
MORROW	No			No	DID NOT DRILL INTO THIS FORMATION
DEVONIAN	No			No	DID NOT DRILL INTO THIS FORMATION
FUSSELMAN	No			No	DID NOT DRILL INTO THIS FORMATION
ELLENBURGER	No			No	DID NOT DRILL INTO THIS FORMATION

Do the producing interval of this well produce H2S with a concentration in excess of 100 ppm (SWR 36)?

No

Is the completion being downhole commingled (SWR 10)?

No

REMARKS

KOP @ 12,135' MD. FILING A RECLASS FROM GAS TO OIL AS A W-2 INITIAL POTENTIAL DUE TO PREVIOUS FILING SUBMITTED AS G-1. THIS WELL DOES NOT QUALIFY AS A GAS WELL.

RRC REMARKS

PUBLIC COMMENTS:

[RRC Staff 2018-12-14 13:31:32.806] location of well is plotted to be OK with take points at 12949-17425 feet

CASING RECORD :

TUBING RECORD:

PRODUCING//INJECTION/DISPOSAL INTERVAL :

ACID, FRACTURE, CEMENT SQUEEZE, CAST IRON BRIDGE PLUG, RETAINER, ETC. :

POTENTIAL TEST DATA:



OPERATOR'S CERTIFICATION

Printed Name: Lorri Kline

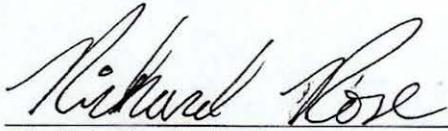
Title:

Telephone No.: (539) 573-3518

Date Certified: 12/13/2018

State of Texas
County of Midland

I, Richard Rose, certify that; I am employed by Scientific Drilling International; that I did on the day(s) of 06/12/2018 through 07/04/2018 conduct or supervise the taking of a MWD survey from a depth of 683 feet to a depth of 17511 feet; that the data is true, correct, complete and within the limitations of the tool as set forth by Scientific Drilling International; that I am authorized and qualified to make this report; that this survey was conducted at the request of WPX Energy for the Ren State 13-1H Well, API# 42-301-33966 in Loving County, Texas; and that I have reviewed this report and find that it conforms to the principals and procedures as set forth by Scientific Drilling International.



Field Technician

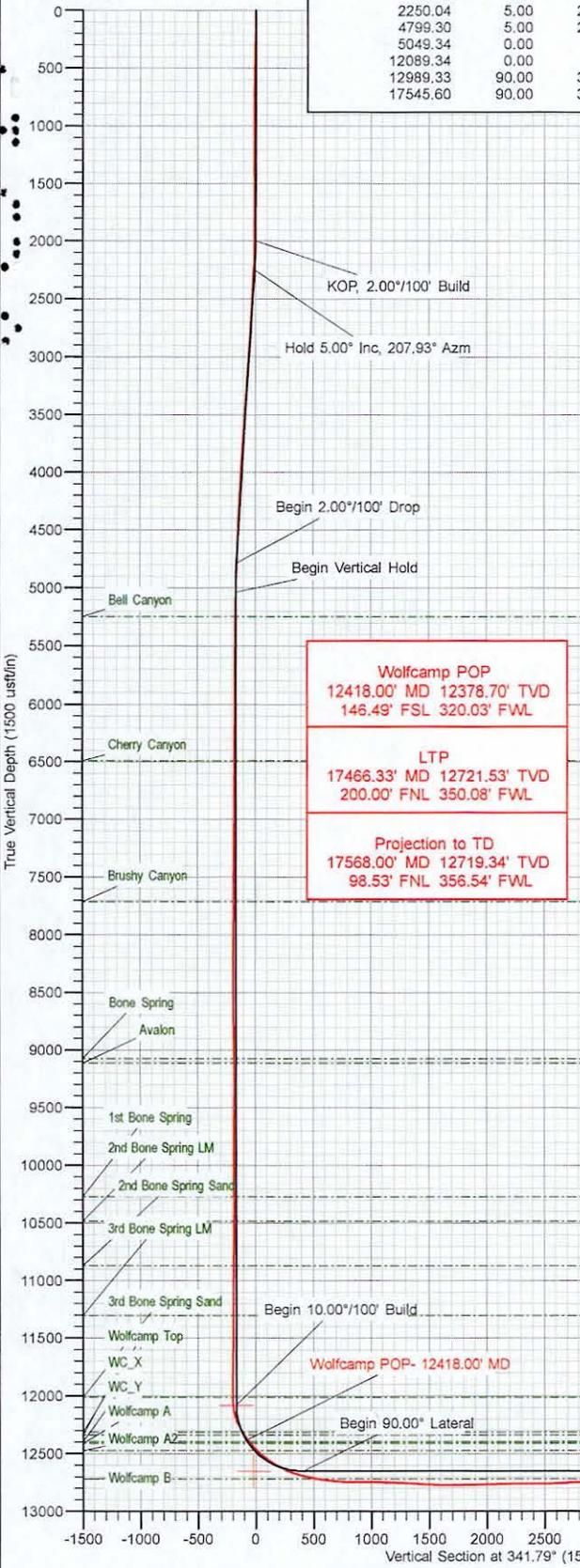


Company: WPX Energy
 Site: Ren State
 Well: Ren State 13-1H
 Project: Loving County, Texas (NAD 83)
 Rig Name: Latshaw 11



ANNOTATIONS

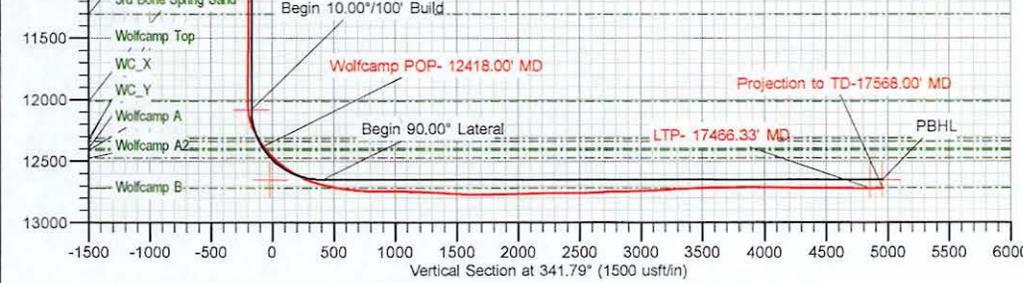
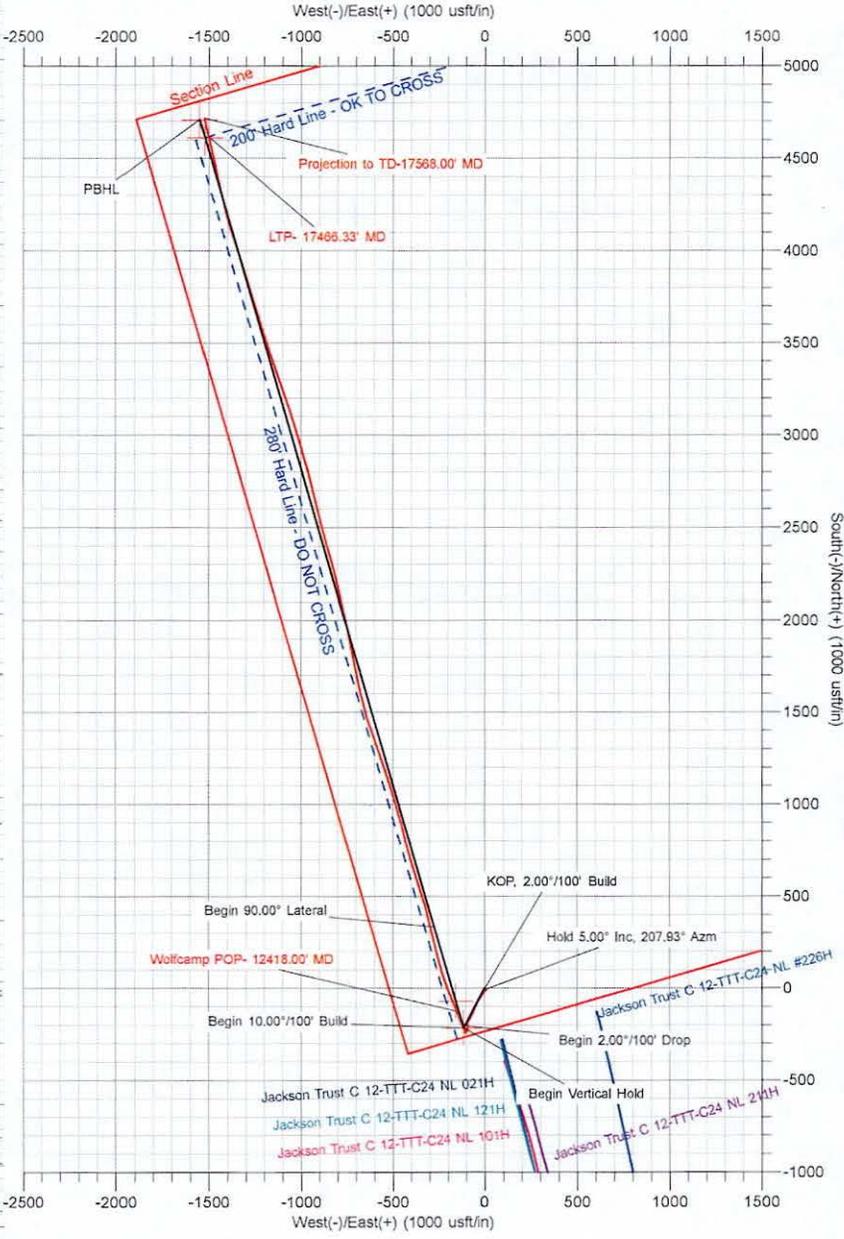
MD	Inc	Azi	TVD	+N/-S	+E/-W	Vsect	Departure	Annotation
2000.00	0.00	0.00	2000.00	0.00	0.00	0.00	0.00	KOP, 2.00°/100' Build
2250.04	5.00	207.93	2249.72	-9.63	-5.11	-7.55	10.90	Hold 5.00° Inc, 207.93° Azm
4799.30	5.00	207.93	4789.28	-205.96	-109.21	-161.50	233.12	Begin 2.00°/100' Drop
5049.34	0.00	0.00	5039.00	-215.59	-114.32	-169.06	244.02	Begin Vertical Hold
12089.34	0.00	0.00	12079.00	-215.59	-114.32	-169.06	244.02	Begin 10.00°/100' Build
12989.33	90.00	343.75	12651.96	334.48	-274.62	403.56	816.98	Begin 90.00° Lateral
17545.60	90.00	343.75	12652.00	4708.78	-1549.42	4957.15	5373.25	PBHL



Wolfcamp POP
 12418.00' MD 12378.70' TVD
 146.49' FSL 320.03' FWL

LTP
 17466.33' MD 12721.53' TVD
 200.00' FNL 350.08' FWL

Projection to TD
 17568.00' MD 12719.34' TVD
 98.53' FNL 356.54' FWL



Created By: SRA
 Date: 13:16, July 03 2018
 Plan: Design #1

US State Plane 1983
 Texas Central Zone

Azimuths to Grid North
 True North: 1.58°
 Magnetic North: 8.39°
 Magnetic Field
 Strength: 47740.0nT
 Dip Angle: 59.82°
 Date: 6/4/2018
 Model: BGGM2018

The customer should only rely on this document after independently verifying all paths, targets, coordinates, lease and hard lines represented. Any decisions made or wells drilled utilizing this or any other information supplied by MS Directional are at the sole risk and responsibility of the customer. MS Directional is not responsible for the accuracy of this schematic or the information contained herein.

WPXENERGY®



WPX Energy

Loving County, Texas (NAD 83)

Ren State

Ren State 13-1H

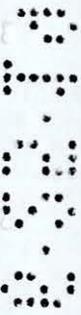
Wellbore #1

Design: Surveys

Standard Survey Report

03 July, 2018

MS *Directional*





MS Directional
Survey Report



Company:	WPX Energy	Local Co-ordinate Reference:	Well Ren State 13-1H
Project:	Loving County, Texas (NAD 83)	TVD Reference:	WELL @ 3149.00usft (Latshaw 11)
Site:	Ren State	MD Reference:	WELL @ 3149.00usft (Latshaw 11)
Well:	Ren State 13-1H	North Reference:	Grid
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Surveys	Database:	EDM 5000.1 Conroe DB

Project	Loving County, Texas (NAD 83)		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	Texas Central Zone		

Site	Ren State				
Site Position:		Northing:	10,693,470.50 usft	Latitude:	31° 58' 15.988 N
From:	Map	Easting:	1,356,720.50 usft	Longitude:	103° 21' 51.624 W
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "		

Well	Ren State 13-1H					
Well Position	+N/-S	0.00 usft	Northing:	10,693,470.46 usft	Latitude:	31° 58' 15.987 N
	+E/-W	0.00 usft	Easting:	1,356,720.50 usft	Longitude:	103° 21' 51.624 W
Position Uncertainty	0.00 usft		Wellhead Elevation:	usft	Ground Level:	3,124.00 usft
Grid Convergence:	-1.561 °					

Wellbore	Wellbore #1				
-----------------	-------------	--	--	--	--

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	BGGM2018	6/4/2018	6.832	59.816	47,740.03

Design	Surveys				
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Audit Notes:					
Version:	1.0	Phase:	ACTUAL	Tie On Depth:	0.00

Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.00	0.00	0.00	341.79

Survey Program	Date	7/3/2018		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
98.00	17,568.00	Scientific MWD (Wellbore #1)	MWD	OWSG MWD - Standard

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
98.00	0.60	136.45	98.00	-0.37	0.35	-0.46	0.61	0.61	0.00
188.00	0.77	158.38	187.99	-1.28	0.90	-1.49	0.34	0.19	24.37
277.00	0.73	149.47	276.98	-2.32	1.41	-2.64	0.14	-0.04	-10.01
367.00	0.86	155.52	366.98	-3.43	1.98	-3.88	0.17	0.14	6.72
483.00	0.95	149.02	482.96	-5.05	2.84	-5.68	0.12	0.08	-5.60
683.00	0.81	131.15	682.94	-7.40	4.75	-8.51	0.15	-0.07	-8.94
774.00	0.76	130.02	773.93	-8.21	5.70	-9.58	0.06	-0.05	-1.24
866.00	0.74	138.75	865.92	-9.05	6.56	-10.64	0.13	-0.02	9.49
958.00	0.19	305.28	957.92	-9.41	6.83	-11.07	1.01	-0.60	181.01



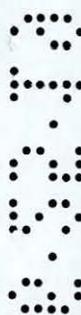
MS Directional Survey Report



Company: WPX Energy	Local Co-ordinate Reference: Well Ren State 13-1H
Project: Loving County, Texas (NAD 83)	TVD Reference: WELL @ 3149.00usft (Latshaw 11)
Site: Ren State	MD Reference: WELL @ 3149.00usft (Latshaw 11)
Well: Ren State 13-1H	North Reference: Grid
Wellbore: Wellbore #1	Survey Calculation Method: Minimum Curvature
Design: Surveys	Database: EDM 5000.1 Conroe DB

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
1,049.00	0.86	329.65	1,048.92	-8.73	6.36	-10.28	0.76	0.74	26.78
1,142.00	0.61	324.53	1,141.91	-7.72	5.72	-9.12	0.28	-0.27	-5.51
1,234.00	0.39	14.94	1,233.90	-7.02	5.52	-8.39	0.51	-0.24	54.79
1,328.00	0.46	76.58	1,327.90	-6.63	5.96	-8.16	0.47	0.07	65.57
1,421.00	0.26	56.37	1,420.90	-6.42	6.50	-8.13	0.25	-0.22	-21.73
1,511.00	0.15	95.59	1,510.90	-6.32	6.79	-8.13	0.19	-0.12	43.58
1,602.00	0.31	70.17	1,601.90	-6.25	7.14	-8.17	0.20	0.18	-27.93
1,693.00	0.32	80.10	1,692.90	-6.12	7.62	-8.20	0.06	0.01	10.91
1,785.00	0.20	79.17	1,784.90	-6.05	8.03	-8.25	0.13	-0.13	-1.01
1,877.00	0.08	56.63	1,876.90	-5.98	8.24	-8.26	0.14	-0.13	-24.50
1,971.00	1.11	239.97	1,970.89	-6.40	7.51	-8.43	1.27	1.10	-187.94
2,064.00	2.35	228.35	2,063.85	-8.12	5.31	-9.37	1.38	1.33	-12.49
2,157.00	2.99	215.84	2,156.75	-11.35	2.46	-11.55	0.93	0.69	-13.45
2,250.00	4.15	209.40	2,249.56	-16.25	-0.61	-15.25	1.32	1.25	-6.92
2,343.00	3.70	206.35	2,342.35	-21.87	-3.59	-19.65	0.53	-0.48	-3.28
2,437.00	4.17	210.74	2,436.12	-27.53	-6.69	-24.06	0.59	0.50	4.67
2,531.00	4.88	216.91	2,529.83	-33.66	-10.84	-28.59	0.91	0.76	6.56
2,625.00	4.95	217.65	2,623.49	-40.07	-15.71	-33.15	0.10	0.07	0.79
2,719.00	5.16	216.75	2,717.12	-46.67	-20.72	-37.86	0.24	0.22	-0.96
2,813.00	5.33	212.22	2,810.73	-53.75	-25.58	-43.06	0.48	0.18	-4.82
2,907.00	5.79	210.80	2,904.28	-61.51	-30.33	-48.95	0.51	0.49	-1.51
3,001.00	5.26	207.91	2,997.85	-69.39	-34.78	-55.05	0.64	-0.56	-3.07
3,095.00	4.83	205.46	3,091.48	-76.78	-38.50	-60.90	0.51	-0.46	-2.61
3,190.00	4.94	206.36	3,186.14	-84.05	-42.03	-66.71	0.14	0.12	0.95
3,284.00	5.29	207.87	3,279.76	-91.51	-45.85	-72.60	0.40	0.37	1.61
3,377.00	5.49	204.64	3,372.35	-99.34	-49.71	-78.83	0.39	0.22	-3.47
3,471.00	5.93	203.08	3,465.89	-107.90	-53.49	-85.78	0.50	0.47	-1.66
3,565.00	5.43	201.12	3,559.42	-116.51	-57.00	-92.87	0.57	-0.53	-2.09
3,660.00	5.10	202.05	3,654.02	-124.62	-60.20	-99.56	0.36	-0.35	0.98
3,754.00	4.76	202.99	3,747.68	-132.08	-63.29	-105.69	0.37	-0.36	1.00
3,848.00	4.55	202.99	3,841.37	-139.10	-66.27	-111.43	0.22	-0.22	0.00
3,943.00	5.43	207.70	3,936.01	-146.55	-69.83	-117.39	1.02	0.93	4.96
4,037.00	5.31	210.44	4,029.59	-154.24	-74.11	-123.36	0.30	-0.13	2.91
4,131.00	5.06	210.03	4,123.21	-161.58	-78.38	-128.99	0.27	-0.27	-0.44
4,225.00	4.70	210.28	4,216.87	-168.49	-82.40	-134.31	0.38	-0.38	0.27
4,319.00	4.31	210.28	4,310.58	-174.87	-86.12	-139.20	0.41	-0.41	0.00
4,413.00	3.70	210.76	4,404.35	-180.53	-89.46	-143.53	0.65	-0.65	0.51
4,506.00	2.86	206.91	4,497.19	-185.18	-92.04	-147.14	0.93	-0.90	-4.14
4,601.00	2.48	186.90	4,592.09	-189.33	-93.36	-150.67	1.05	-0.40	-21.06
4,695.00	2.25	186.55	4,686.01	-193.18	-93.81	-154.19	0.25	-0.24	-0.37
4,789.00	1.93	178.77	4,779.95	-196.60	-93.99	-157.38	0.45	-0.34	-8.28
4,883.00	2.24	157.36	4,873.89	-199.88	-93.25	-160.72	0.89	0.33	-22.78
4,977.00	1.97	149.17	4,967.83	-202.96	-91.71	-164.13	0.43	-0.29	-8.71





MS Directional Survey Report



Company:	WPX Energy	Local Co-ordinate Reference:	Well Ren State 13-1H
Project:	Loving County, Texas (NAD 83)	TVD Reference:	WELL @ 3149.00usft (Latshaw 11)
Site:	Ren State	MD Reference:	WELL @ 3149.00usft (Latshaw 11)
Well:	Ren State 13-1H	North Reference:	Grid
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Surveys	Database:	EDM 5000.1 Conroe DB

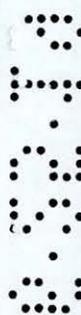
Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
5,070.00	1.33	136.34	5,060.79	-205.11	-90.15	-166.67	0.79	-0.69	-13.80
5,164.00	0.99	167.55	5,154.77	-206.69	-89.22	-168.46	0.75	-0.36	33.20
5,258.00	0.99	214.84	5,248.76	-208.15	-89.51	-169.76	0.84	0.00	50.31
5,456.00	0.86	220.66	5,446.73	-210.68	-91.46	-171.55	0.08	-0.07	2.94
5,644.00	0.78	224.98	5,634.71	-212.66	-93.28	-172.86	0.05	-0.04	2.30
5,831.00	0.69	217.98	5,821.70	-214.45	-94.87	-174.06	0.07	-0.05	-3.74
6,018.00	0.74	218.45	6,008.68	-216.28	-96.32	-175.35	0.03	0.03	0.25
6,204.00	0.75	213.03	6,194.67	-218.24	-97.73	-176.77	0.04	0.01	-2.91
6,391.00	0.43	229.80	6,381.66	-219.72	-98.93	-177.80	0.19	-0.17	8.97
6,577.00	0.69	230.27	6,567.65	-220.89	-100.32	-178.47	0.14	0.14	0.25
6,764.00	0.56	203.67	6,754.64	-222.44	-101.56	-179.57	0.17	-0.07	-14.22
6,951.00	0.51	221.78	6,941.63	-223.90	-102.48	-180.66	0.09	-0.03	9.68
7,138.00	0.35	235.87	7,128.62	-224.84	-103.51	-181.24	0.10	-0.09	7.53
7,324.00	0.67	216.21	7,314.61	-226.04	-104.62	-182.02	0.19	0.17	-10.57
7,511.00	0.48	191.87	7,501.61	-227.69	-105.43	-183.34	0.16	-0.10	-13.02
7,701.00	0.57	205.07	7,691.60	-229.32	-105.99	-184.72	0.08	0.05	6.95
7,888.00	0.44	182.00	7,878.59	-230.88	-106.41	-186.07	0.13	-0.07	-12.34
8,075.00	0.59	182.63	8,065.58	-232.56	-106.48	-187.64	0.08	0.08	0.34
8,261.00	0.32	238.34	8,251.58	-233.79	-106.96	-188.66	0.26	-0.15	29.95
8,448.00	0.52	40.19	8,438.58	-233.42	-106.86	-188.33	0.44	0.11	86.55
8,635.00	1.15	75.38	8,625.56	-232.30	-104.50	-188.01	0.42	0.34	18.82
8,822.00	1.71	350.38	8,812.51	-229.07	-103.15	-185.36	1.06	0.30	-45.45
9,009.00	0.71	19.93	8,999.47	-225.23	-103.22	-181.69	0.61	-0.53	15.80
9,197.00	1.55	46.31	9,187.43	-222.38	-100.98	-179.68	0.51	0.45	14.03
9,385.00	2.90	97.21	9,375.30	-221.22	-94.43	-180.63	1.21	0.72	27.07
9,573.00	1.08	173.32	9,563.21	-223.58	-89.50	-184.41	1.51	-0.97	40.48
9,760.00	0.51	295.73	9,750.19	-224.97	-90.05	-185.56	0.76	-0.30	65.46
9,941.00	0.54	285.22	9,931.19	-224.39	-91.59	-184.53	0.06	0.02	-5.81
10,129.00	0.69	277.58	10,119.18	-224.01	-93.57	-183.55	0.09	0.08	-4.06
10,316.00	0.61	275.66	10,306.16	-223.76	-95.68	-182.66	0.04	-0.04	-1.03
10,503.00	0.64	101.66	10,493.16	-223.88	-95.65	-182.77	0.67	0.02	-93.05
10,689.00	0.74	134.43	10,679.15	-224.93	-93.77	-184.36	0.22	0.05	17.62
10,876.00	0.93	163.03	10,866.13	-227.22	-92.47	-186.95	0.24	0.10	15.29
11,063.00	1.04	213.98	11,053.10	-230.08	-92.97	-189.51	0.46	0.06	27.25
11,249.00	1.09	223.92	11,239.07	-232.76	-95.14	-191.37	0.10	0.03	5.34
11,436.00	0.55	227.63	11,426.05	-234.64	-97.04	-192.57	0.29	-0.29	1.98
11,622.00	0.72	181.52	11,612.04	-236.41	-97.73	-194.03	0.28	0.09	-24.79
11,809.00	1.56	225.77	11,799.01	-239.36	-99.58	-196.25	0.62	0.45	23.66
11,979.00	0.96	218.86	11,968.96	-242.09	-102.14	-198.04	0.36	-0.35	-4.06
12,041.00	1.50	215.77	12,030.95	-243.15	-102.94	-198.80	0.88	0.87	-4.98
12,135.00	11.55	337.14	12,124.35	-235.45	-107.33	-190.11	13.19	10.69	129.12
12,228.00	21.03	337.79	12,213.51	-211.36	-117.28	-164.13	10.20	10.19	0.70
12,323.00	29.41	338.91	12,299.38	-173.75	-132.14	-123.76	8.83	8.82	1.18

Company:	WPX Energy	Local Co-ordinate Reference:	Well Ren State 13-1H
Project:	Loving County, Texas (NAD 83)	TVD Reference:	WELL @ 3149.00usft (Latshaw 11)
Site:	Ren State	MD Reference:	WELL @ 3149.00usft (Latshaw 11)
Well:	Ren State 13-1H	North Reference:	Grid
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Surveys	Database:	EDM 5000.1 Conroe DB

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
12,417.00	37.15	338.48	12,377.90	-125.74	-150.88	-72.29	8.24	8.23	-0.46
12,418.00	37.20	338.47	12,378.70	-125.18	-151.11	-71.69	5.52	5.46	-1.36
Wolfcamp POP- 12418.00' MD									
12,512.00	42.34	337.32	12,450.93	-69.50	-173.76	-11.72	5.52	5.46	-1.22
12,605.00	50.20	337.99	12,515.16	-7.38	-199.26	55.26	8.47	8.45	0.72
12,700.00	57.97	342.63	12,570.87	65.02	-225.01	132.08	9.08	8.18	4.88
12,792.00	62.77	345.68	12,616.34	141.93	-246.79	211.95	5.96	5.22	3.32
12,886.00	69.01	345.69	12,654.72	225.03	-267.99	297.50	6.64	6.64	0.01
13,003.00	75.36	346.78	12,690.50	333.17	-294.46	408.50	5.50	5.43	0.93
13,098.00	78.32	345.28	12,712.13	422.92	-316.80	500.74	3.47	3.12	-1.58
13,193.00	83.20	342.77	12,727.38	513.03	-342.61	594.40	5.76	5.14	-2.64
13,287.00	84.15	342.32	12,737.74	602.15	-370.63	687.82	1.12	1.01	-0.48
13,381.00	87.72	342.18	12,744.40	691.44	-399.21	781.56	3.80	3.80	-0.15
13,477.00	91.41	345.38	12,745.13	783.59	-426.02	877.47	5.09	3.84	3.33
13,571.00	89.53	346.61	12,744.36	874.78	-448.76	971.21	2.39	-2.00	1.31
13,666.00	88.72	343.40	12,745.81	966.52	-473.34	1,066.04	3.48	-0.85	-3.38
13,761.00	87.51	342.80	12,748.93	1,057.37	-500.94	1,160.96	1.42	-1.27	-0.63
13,854.00	87.68	342.98	12,752.84	1,146.18	-528.28	1,253.86	0.27	0.18	0.19
13,948.00	86.27	340.57	12,757.80	1,235.33	-557.63	1,347.72	2.97	-1.50	-2.56
14,042.00	85.84	339.33	12,764.26	1,323.42	-589.78	1,441.45	1.39	-0.46	-1.32
14,137.00	85.90	340.93	12,771.11	1,412.53	-621.98	1,536.16	1.68	0.06	1.68
14,230.00	89.23	345.52	12,775.06	1,501.46	-648.78	1,629.00	6.09	3.58	4.94
14,324.00	90.44	346.55	12,775.33	1,592.67	-671.47	1,722.74	1.69	1.29	1.10
14,418.00	92.52	348.49	12,772.90	1,684.41	-691.77	1,816.23	3.03	2.21	2.06
14,512.00	92.22	349.00	12,769.02	1,776.53	-710.10	1,909.46	0.63	-0.32	0.54
14,606.00	92.58	348.40	12,765.08	1,868.62	-728.51	2,002.70	0.74	0.38	-0.64
14,700.00	91.95	347.96	12,761.36	1,960.56	-747.75	2,096.04	0.82	-0.67	-0.47
14,794.00	88.62	346.77	12,760.90	2,052.26	-768.30	2,189.58	3.76	-3.54	-1.27
14,888.00	91.51	347.49	12,760.79	2,143.89	-789.24	2,283.16	3.17	3.07	0.77
14,982.00	89.33	346.14	12,760.10	2,235.40	-810.68	2,376.79	2.73	-2.32	-1.44
15,077.00	90.10	343.22	12,760.57	2,327.02	-835.78	2,471.65	3.18	0.81	-3.07
15,171.00	93.45	345.55	12,757.66	2,417.48	-861.06	2,565.49	4.34	3.56	2.48
15,265.00	92.58	344.63	12,752.72	2,508.19	-885.21	2,659.21	1.35	-0.93	-0.98
15,359.00	91.35	345.49	12,749.49	2,598.96	-909.43	2,752.99	1.60	-1.31	0.91
15,453.00	91.38	347.38	12,747.25	2,690.31	-931.47	2,846.66	2.01	0.03	2.01
15,547.00	90.84	344.91	12,745.43	2,781.55	-953.98	2,940.36	2.69	-0.57	-2.63
15,642.00	92.82	343.23	12,742.40	2,872.84	-980.04	3,035.23	2.73	2.08	-1.77
15,723.00	93.36	345.06	12,738.03	2,950.65	-1,002.13	3,116.04	2.35	0.67	2.26
15,818.00	94.14	342.14	12,731.82	3,041.58	-1,028.89	3,210.78	3.18	0.82	-3.07
15,912.00	93.49	340.42	12,725.56	3,130.40	-1,058.99	3,304.56	1.95	-0.69	-1.83
16,006.00	93.09	341.19	12,720.17	3,219.03	-1,089.85	3,398.39	0.92	-0.43	0.82
16,100.00	91.58	341.23	12,716.34	3,307.94	-1,120.10	3,492.30	1.61	-1.61	0.04
16,194.00	91.61	341.20	12,713.72	3,396.90	-1,150.36	3,586.26	0.05	0.03	-0.03
16,289.00	90.67	342.21	12,711.83	3,487.08	-1,180.17	3,681.24	1.45	-0.99	1.06





MS Directional
Survey Report



Company:	WPX Energy	Local Co-ordinate Reference:	Well Ren State 13-1H
Project:	Loving County, Texas (NAD 83)	TVD Reference:	WELL @ 3149.00usft (Latshaw 11)
Site:	Ren State	MD Reference:	WELL @ 3149.00usft (Latshaw 11)
Well:	Ren State 13-1H	North Reference:	Grid
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Surveys	Database:	EDM 5000.1 Conroe DB

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
16,383.00	90.30	341.91	12,711.04	3,576.50	-1,209.13	3,775.24	0.51	-0.39	-0.32
16,478.00	89.40	342.97	12,711.29	3,667.08	-1,237.79	3,870.23	1.46	-0.95	1.12
16,572.00	89.19	342.99	12,712.44	3,756.95	-1,265.30	3,964.20	0.22	-0.22	0.02
16,667.00	89.36	342.56	12,713.64	3,847.68	-1,293.43	4,059.18	0.49	0.18	-0.45
16,762.00	88.09	342.39	12,715.76	3,938.25	-1,322.03	4,154.15	1.35	-1.34	-0.18
16,856.00	88.22	340.86	12,718.79	4,027.41	-1,351.64	4,248.09	1.63	0.14	-1.63
16,951.00	90.10	342.77	12,720.18	4,117.65	-1,381.28	4,343.08	2.82	1.98	2.01
17,045.00	90.13	345.32	12,719.99	4,208.02	-1,407.12	4,437.00	2.71	0.03	2.71
17,139.00	91.34	347.20	12,718.78	4,299.31	-1,429.44	4,530.70	2.38	1.29	2.00
17,233.00	88.79	347.41	12,718.68	4,391.01	-1,450.10	4,624.25	2.72	-2.71	0.22
17,327.00	88.66	347.03	12,720.77	4,482.66	-1,470.89	4,717.81	0.43	-0.14	-0.40
17,420.00	90.03	346.85	12,721.83	4,573.24	-1,491.90	4,810.42	1.49	1.47	-0.19
17,466.33	90.72	347.21	12,721.53	4,618.39	-1,502.30	4,856.56	1.67	1.48	0.77
LTP- 17466.33' MD									
17,511.00	91.38	347.55	12,720.71	4,661.97	-1,512.06	4,901.01	1.67	1.48	0.77
17,568.00	91.38	347.55	12,719.34	4,717.62	-1,524.35	4,957.70	0.00	0.00	0.00
Projection to TD-17568.00' MD									

Design Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
12,418.00	12,378.70	-125.18	-151.11	Wolfcamp POP- 12418.00' MD
17,466.33	12,721.53	4,618.39	-1,502.30	LTP- 17466.33' MD
17,568.00	12,719.34	4,717.62	-1,524.35	Projection to TD-17568.00' MD

Railroad Commission of Texas
 Oil And Gas Division
 Request for Clearance of Storage Tanks
 Prior to Potential Test

Form P-8

Reference No. 44131

1. Operator's Name and Address (Exactly as shown on Form P-5 Organization Report) WPX ENERGY PERMIAN, LLC 3500 ONE WILLIAMS CENTER MD-35 TULSA, OK 74172-0000		3. RRC District No. 08
		4. County of Well Site LOVING
		5. API No. 42-301-33966
2. RRC Operator Number: <u>942623</u>		
6. Field Name (Wildcat or exactly as shown on RRC records) PHANTOM (WOLFCAMP)	7. Drilling Permit No. 838616	8. Rule 37 Case No.
9. Lease Name REN STATE 13	10. Oil lease No.	11. Well No. 1H
12. Drilling completed on <u>07/05/2018</u>		13. Completion report--Form W-2 or G-1--will be filed on <u>12/02/2018</u>
14. Oil or condensate gatherer's name and address TARGA DELAWARE LLC 811 LOUISIANA ST STE 2100 HOUSTON, TX 77002-1400 (337) 583-5200		15. Authorization to transport oil or condensate (mark one) <input checked="" type="checkbox"/> Form P-4 attached <input checked="" type="checkbox"/> Form P-4 Filed on <u>07/16/2018</u>
16. This request is for <u>72000</u> barrels of <input checked="" type="checkbox"/> crude oil OR <input type="checkbox"/> condensate		17. Amount of oil/condensate in tanks <u>0</u> barrels on <u>07/16/2018</u>
18. Storage capacity in bbls. Tank battery <u>2500</u> Test tanks <u>0</u> Total <u>2500</u>		
19. Previous request for clearance. Amount _____ barrels granted on _____		
20. Reason for current request for clearance (explain briefly) New Well Completion.		
Lorri Kline _____ Name of operator's representative		PERMIT TECHNICIAN II _____ Title of person
(539) 573-3518 _____ Telephone	07/16/2018 _____ Date	
RRC District Office Action		
Status: Approved	Barrels recommended <u>72000</u>	RRC Staff _____ Date <u>07/16/2018</u>

CERTIFICATE OF COMPLIANCE
 AND TRANSPORTATION AUTHORITY

This facsimile P-4 was generated electronically from data submitted to the RRC.
 A certification of the automated data is available in the RRC's Austin office.

Tracking No.: 202524

1. Field name exactly as shown on proration schedule PHANTOM (WOLFCAMP)		2. Lease name as shown on proration schedule REN STATE 13					
3. Current operator name exactly as shown on P-5 Organization Report WPX ENERGY PERMIAN, LLC		4. Operator P-5 no. 942623	5. Oil Lse/Gas ID no. 50881	6. County LOVING	7. RRC district 08		
8. Operator address including city, state, and zip code 3500 ONE WILLIAMS CENTER MD-35 TULSA, OK 74172		9. Well no(s) (see instruction E) 1H			11. Effective Date 08/13/2018		
		10. Classification <input checked="" type="checkbox"/> Oil <input type="checkbox"/> Gas <input type="checkbox"/> Other (see instruction A)					
2. Purpose of Filing. (Complete section a or b below.) (See instructions B and G)							
a. Change of: <input type="checkbox"/> operator <input type="checkbox"/> oil or condensate gatherer <input type="checkbox"/> gas gatherer <input type="checkbox"/> gas purchaser <input type="checkbox"/> gas purchaser system code							
<input type="checkbox"/> field name from _____ <input type="checkbox"/> lease name from _____							
OR							
b. New RRC Number for: <input checked="" type="checkbox"/> oil lease <input type="checkbox"/> gas well <input type="checkbox"/> other well (specify) _____							
Due to: <input type="checkbox"/> new completion or recompletion <input type="checkbox"/> reclass oil to gas <input checked="" type="checkbox"/> reclass gas to oil							
<input type="checkbox"/> consolidation, unitization, or subdivision (oil lease only)							
13. Authorized GAS WELL GAS or CASINGHEAD GAS Gatherer(s) and/or Purchaser(s). (See instruction G).							
Gatherer	Purchaser	Name of GAS WELL GAS or CASINGHEAD GAS Gatherer(s) or Purchaser(s) As Indicated in Columns to the Left <i>(Attach an additional sheet in same format if more space is needed)</i>			Purchaser's RRC Assigned System Code	Percent of Take	Full-well stream
X		TARGA DELAWARE LLC(836022)				100.0	
	X	TARGA DELAWARE LLC(836022)			0001	100.0	
14. Authorized OIL or CONDENSATE Gatherer(s). (See instruction G).							
Name of OIL or CONDENSATE Gatherer(s) - List Highest Volume Gatherer First <i>(Attach an additional sheet in same format if more space is needed)</i>						Percent of Take	
SINCLAIR CRUDE COMPANY(784582)						80.0	
NGL CRUDE LOGISTICS, LLC(609236)						20.0	
RRC USE ONLY: Reviewer's initials: <u>RRC Staff</u> Approval date: <u>01/02/2019</u>							
15. PREVIOUS OPERATOR CERTIFICATION FOR CHANGE OF OPERATOR P-4 FILING. Being the PREVIOUS OPERATOR, I certify that operating responsibility for the well(s) designated in this filing, located on the subject lease has been transferred in its entirety to the above named Current Operator. I understand, as Previous Operator, that designation of the above named operator as Current Operator is not effective until this certificate is approved by the Commission.							
Name of Previous Operator				Signature			
Name (print)				<input type="checkbox"/> Authorized Employee of previous operator		<input type="checkbox"/> Authorized agent of previous operator (see instruction G)	
Title				Date		Phone with area code	
16. CURRENT OPERATOR CERTIFICATION. By signing this certificate as the Current Operator, I certify that all statements on this form are true and correct and I acknowledge responsibility for the regulatory compliance of the subject lease including plugging of well(s) pursuant to Rule 14. I further acknowledge that I assume responsibility for the physical operation, control, and proper plugging of each well designated in this filing. I also acknowledge that I will remain designated as the Current Operator until a new certificate designating a new Current Operator is approved by the Commission.							
Name (print) WPX ENERGY PERMIAN, LLC				Signature Lorri Kline			
Title				<input checked="" type="checkbox"/> Authorized Employee of current operator		<input type="checkbox"/> Authorized agent of current operator (see instruction G)	
E-mail Address (optional) lorri.kline@wpxenergy.com				Date 10/31/2018		Phone with area code (539) 573-3518	

**RAILROAD COMMISSION OF TEXAS
OIL & GAS DIVISION**

PERMIT TO DRILL, DEEPEN, PLUG BACK, OR RE-ENTER ON A REGULAR OR ADMINISTRATIVE EXCEPTION LOCATION

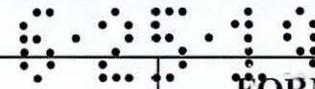
PERMIT NUMBER 838616	DATE PERMIT ISSUED OR AMENDED Apr 12, 2018	DISTRICT * 08		
API NUMBER 42-301-33966	FORM W-1 RECEIVED Apr 09, 2018	COUNTY LOVING		
TYPE OF OPERATION NEW DRILL	WELLBORE PROFILE(S) Horizontal	ACRES 640		
OPERATOR RKI EXPLORATION & PRODUCTION LLC 3500 ONE WILLIAMS CENTER MD 35 TULSA, OK 74172-0000		714221 NOTICE This permit and any allowable assigned may be revoked if payment for fee(s) submitted to the Commission is not honored. District Office Telephone No: (432) 684-5581		
LEASE NAME REN STATE 13		WELL NUMBER 1H		
LOCATION 22.9 miles NE direction from MENTONE		TOTAL DEPTH 16000		
Section, Block and/or Survey SECTION ◀ 13 BLOCK ◀ C-24 ABSTRACT ◀ SURVEY ◀ PUBLIC SCHOOL LAND SURVEY				
DISTANCE TO SURVEY LINES 225 ft. SOUTH 500 ft. WEST		DISTANCE TO NEAREST LEASE LINE 200 ft.		
DISTANCE TO LEASE LINES 225 ft. SOUTH 500 ft. WEST		DISTANCE TO NEAREST WELL ON LEASE See FIELD(s) Below		
FIELD(s) and LIMITATIONS: * SEE FIELD DISTRICT FOR REPORTING PURPOSES *				
FIELD NAME LEASE NAME	ACRES NEAREST LEASE	DEPTH NEAREST WE	WELL # NEAREST WE	DIST
----- PHANTOM (WOLFCAMP) REN STATE 13 -----	640.00 200	16,000	1H 0	08
----- WELLBORE PROFILE(S) FOR FIELD: Horizontal -----				
RESTRICTIONS: This is a hydrogen sulfide field. Hydrogen Sulfide Fields with perforations must be isolated and tested per State Wide Rule 36 and a Form H-9 filed with the district office. Fields with SWR 10 authority to downhole commingle must be isolated and tested individually prior to commingling production.				
Lateral: TH1 Penetration Point Location Lease Lines: 50.0 F SOUTH L 330.0 F WEST L				
Terminus Location BH County: LOVING Section: 13 Block: C-24 Abstract: Survey: PUBLIC SCHOOL LAND SURVEY Lease Lines: 100.0 F NORTH L 330.0 F WEST L Survey Lines: 100.0 F NORTH L 330.0 F WEST L				
THE FOLLOWING RESTRICTIONS APPLY TO ALL FIELDS				

**RAILROAD COMMISSION OF TEXAS
OIL & GAS DIVISION
SWR #13 Formation Data**

LOVING (301) County

Formation	Shallow Top	Deep Top	Remarks	Geological Order	Effective Date
RED BLUFF	3,900	3,900		1	12/17/2013
BELL CANYON	4,700	4,700		2	12/17/2013
BRUSHY CANYON	6,000	6,000		3	12/17/2013
DELAWARE	3,000	6,500		4	12/17/2013
CHERRY CANYON	3,700	7,800		5	12/17/2013
BONE SPRINGS	8,200	9,800		6	12/17/2013
WOLFCAMP	11,000	12,900		7	12/17/2013
PENNSYLVANIAN	14,900	15,000		8	12/17/2013
STRAWN	14,700	15,000		9	12/17/2013
ATOKA	15,200	16,000	high pressure	10	12/17/2013
MORROW	15,700	17,000		11	12/17/2013
DEVONIAN	17,800	17,800		12	12/17/2013
FUSSELMAN	18,900	19,000		13	12/17/2013
ELLENBURGER	21,000	21,000		14	12/17/2013

The above list may not be all inclusive, and may also include formations that do not intersect all wellbores. Formation "TOP" information listed reflects an estimated range based on geologic variances across the county. To clarify, the "Deep Top" is not the bottom of the formation; it is the deepest depth at which the "TOP" of the formation has been or might be encountered. This is a dynamic list subject to updates and revisions. It is the operator's responsibility to make sure that at the time of spudding the well the most current list is being referenced. Refer to the RRC website at the following address for the most recent information.
<http://www.rrc.texas.gov/oil-gas/compliance-enforcement/rule-13-geologic-formation-info>



**RAILROAD COMMISSION OF TEXAS
OIL & GAS DIVISION**

FORM W-1 07/2004

API No. 42-301-33966
Drilling Permit # 838616
SWR Exception Case Docket No. _____

APPLICATION FOR PERMIT TO DRILL, RECOMPLETE, OR RE-ENTER

*This facsimile W-1 was generated electronically from data submitted to the RRC.
A certification of the automated data is available in the RRC's Austin office.*

Permit Status: **Approved**

1. RRC Operator No. 714221	2. Operator's Name (as shown on form P-5, Organization Report) RKI EXPLORATION & PRODUCTION LLC	3. Operator Address (include street, city, state, zip): 3500 ONE WILLIAMS CENTER MD 35 TULSA, OK 74172-0000
4. Lease Name REN STATE 13	5. Well No. 1H	

GENERAL INFORMATION

6. Purpose of filing (mark ALL appropriate boxes):
 New Drill Recompletion Reclass Field Transfer Re-Enter
 Amended Amended as Drilled (BHL) (Also File Form W-1D)

7. Wellbore Profile (mark ALL appropriate boxes):
 Vertical Horizontal (Also File Form W-1H) Directional (Also File Form W-1D) Sidetrack

8. Total Depth **16000** 9. Do you have the right to develop the minerals under any right-of-way? Yes No 10. Is this well subject to Statewide Rule 36 (hydrogen sulfide area)? Yes No

SURFACE LOCATION AND ACREAGE INFORMATION

11. RRC District No. **08** 12. County **LOVING** 13. Surface Location Land Bay/Estuary Inland Waterway Offshore

14. This well is to be located **22.9** miles in a **NE** direction from **Mentone** which is the nearest town in the county of the well site.

15. Section **13** 16. Block **C-24** 17. Survey **PUBLIC SCHOOL LAND SURVEY** 18. Abstract No. **A-** 19. Distance to nearest lease line: **200** ft. 20. Number of contiguous acres in lease, pooled unit, or unitized tract: **640**

21. Lease Perpendiculars: **225** ft from the **SOUTH** line and **500** ft from the **WEST** line.
 22. Survey Perpendiculars: **225** ft from the **SOUTH** line and **500** ft from the **WEST** line.

23. Is this a pooled unit? Yes No 24. Unitization Docket No: _____ 25. Are you applying for Substandard Acreage Field? Yes (attach Form W-1A) No

FIELD INFORMATION List all fields of anticipated completion including Wildcat. List one zone per line.

26. RRC District No.	27. Field No.	28. Field Name (exactly as shown in RRC records)	29. Well Type	30. Completion Depth	31. Distance to Nearest Well in this Reservoir	32. Number of Wells on this lease in this Reservoir
08	71052900	PHANTOM (WOLFCAMP)	Oil or Gas Well	16000	0.00	1

BOTTOMHOLE LOCATION INFORMATION is required for DIRECTIONAL, HORIZONTAL, AND AMENDED AS DRILLED PERMIT APPLICATIONS (see W-1H attachment)

<p>Remarks</p> 	<p align="center">Certificate:</p> <p>I certify that information stated in this application is true and complete, to the best of my knowledge.</p> <p align="center"><u>Larry Rader, Regulatory Specialist</u> <u>Apr 09, 2018</u> Name of filer Date submitted</p> <p align="center"><u>(539)573-3543</u> <u>larry.rader@wpenergy.com</u> Phone E-mail Address (OPTIONAL)</p>
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**RAILROAD COMMISSION OF TEXAS
OIL & GAS DIVISION**

Form W-1H 07/2004
Supplemental Horizontal Well Information

Permit Status: **Approved**
The RRC has not approved this application. Duplication or distribution of information is at the user's own risk.

APPLICATION FOR PERMIT TO DRILL, RECOMPLETE, OR RE-ENTER

This facsimile W-1 was generated electronically from data submitted to the RRC. A certification of the automated data is available in the RRC's Austin office.

Permit # **838616**
Approved Date: **Apr 12, 2018**

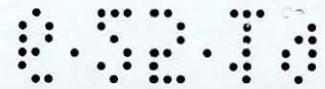
1. RRC Operator No. 714221	2. Operator's Name (exactly as shown on form P-5, Organization Report) RKI EXPLORATION & PRODUCTION LLC	3. Lease Name REN STATE 13	4. Well No. 1H
--------------------------------------	-----------------------------------------------------------------------------------------------------------------------	--------------------------------------	--------------------------

Lateral Drainhole Location Information

5. Field as shown on Form W-1 **PHANTOM (WOLFCAMP) (Field # 71052900, RRC District 08)**

6. Section 13	7. Block C-24	8. Survey PUBLIC SCHOOL LAND SURVEY	9. Abstract	10. County of BHL LOVING
-------------------------	-------------------------	-----------------------------------------------	-------------	------------------------------------

11. Terminus Lease Line Perpendiculars 100 ft. from the North line. and 330 ft. from the West line
12. Terminus Survey Line Perpendiculars 100 ft. from the North line. and 330 ft. from the West line
13. Penetration Point Lease Line Perpendiculars 50 ft. from the South line. and 330 ft. from the West line



GROUNDWATER PROTECTION DETERMINATION

Form GW-2



Groundwater Advisory Unit

Date Issued:	24 April 2018	GAU Number:	193858
Attention:	RKI EXPLORATION & 3500 ONE WILLIAMS CENTER TULSA, OK 74172	API Number:	30133966
Operator No.:	714221	County:	LOVING
		Lease Name:	REN STATE 13
		Lease Number:	
		Well Number:	1H
		Total Vertical Depth:	16000
		Latitude:	31.970982
		Longitude:	-103.363881
		Datum:	NAD27

Purpose: New Drill
Location: Survey-PSL; Abstract-73; Block-C24

To protect usable-quality groundwater at this location, the Groundwater Advisory Unit of the Railroad Commission of Texas recommends:

The interval from the land surface to the base of the Santa Rosa, which is estimated to occur at a depth of 450 feet, must be protected.

This recommendation is applicable to all wells within a radius of 2000 feet of this location.

Please send Gamma/Porosity log of this well when it is available.

Note: Unless stated otherwise, this recommendation is intended to apply only to the subject well and not for area-wide use. This recommendation is for normal drilling, production, and plugging operations only. It does not apply to saltwater disposal operation into a nonproductive zone (RRC Form W-14).

This determination is based on information provided when the application was submitted on 04/12/2018. If the location information has changed, you must contact the Groundwater Advisory Unit, and submit a new application if necessary. If you have questions, please contact us at 512-463-2741 or gau@rrc.texas.gov.

Groundwater Advisory Unit, Oil and Gas Division

Tracking No.: 199406

This facsimile L-1 was generated electronically from data submitted to the RRC.

Instructions

When to File Form L-1:

- with Forms G-1, W-2, and GT-1 for new and deepened gas, oil, and geothermal wells
- with Form W-3 for plugged dry holes
- when sending in a log which was held under a request for confidentiality and the period for confidentiality has not yet expired.

When is Form L-1 NOT required:

- with Forms W-2, G-1, and GT-1 filed for injection wells, disposal wells, water supply wells, service wells, re-test wells, re-classifications, and plugbacks of oil, gas or geothermal wells
- with Form W-3 for plugging of other than a dry hole

Where to File Form L-1:

- with the appropriate Commission district office

Filling out Form L-1:

- Section I and the signature section must be filled out for all wells
- complete only the appropriate part of Section II

Type of log required:

- any wireline survey run for the purpose of obtaining lithology, porosity, or resistivity information
- no more than one such log is required but it must be of the subject well
- if such log is NOT run on the subject well, do NOT substitute any other type of log; just select Section II, Part A below

SECTION I. IDENTIFICATION

Operator Name: WPX ENERGY PERMIAN, LLC	District No. 08	Completion Date: 08/13/2018
Field Name PHANTOM (WOLFCAMP)	Drilling Permit No. 838616	
Lease Name REN STATE 13	Lease/ID No.	Well No. 1H
County LOVING	API No. 42- 301-33966	

SECTION II. LOG STATUS (Complete either A or B)

A. BASIC ELECTRIC LOG NOT RUN

B. BASIC ELECTRIC LOG RUN. (Select one)

- 1. Confidentiality is requested and a copy of the header for each log that has been run on the well is attached.
- 2. Confidentiality already granted on basic electric log covering this interval (applicable to deepened wells only).
- 3. Basic electric log covering this interval already on file with Commission (applicable to deepened wells only).
- 4. Log attached to (select one):
 - (a) Form L-1 (this form). If the company/lease name on log is different from that shown in Section I, please enter name on log here: _____
Check here if attached log is being submitted after being held confidential.
 - (b) Form P-7, Application for Discovery Allowable and New Field Designation.
 - (c) Form W-4, Application for Multiple Completion:
Lease or ID No(s). _____
Well No(s). _____

Jessica DeMarce _____ Signature WPX ENERGY PERMIAN, LLC _____ Name (print)	Permit Technician II _____ Title (539) 573-3521 _____ Phone 09/10/2018 _____ Date
-------------------------------------------------------------------------------------------	-----------------------------------------------------------------------------------------------------------

-FOR RAILROAD COMMISSION USE ONLY-

WPX ENERGY



Scale: 5" / 100'
Measured Depth Log

Well Name Ren State 13-1H
 Location SECTION 13, BLOCK C-24
 State Texas County Loving
 Country USA Rig Number Latshaw 11
 API Number 42-301-33966 Drilling Completed 7/3/2018
 Geographic Region West Texas
 Spud Date 6/14/2018
 Surface Coordinates 225 FSL 500 FWL SEC 13
 Bottom Hole Coordinates SECTION 13, BLOCK C-24
 Ground Elevation 3124 K.B. Elevation 3149
 Logged Interval 12050 To 17568 Total Depth 17568
 Formation Wolfcamp A
 Type of Drilling Fluid Brine/OBM

Operator

Company WPX Energy
 Address ONE WILLIAMS CENTER
 TULSA, OK 74103

Geologist

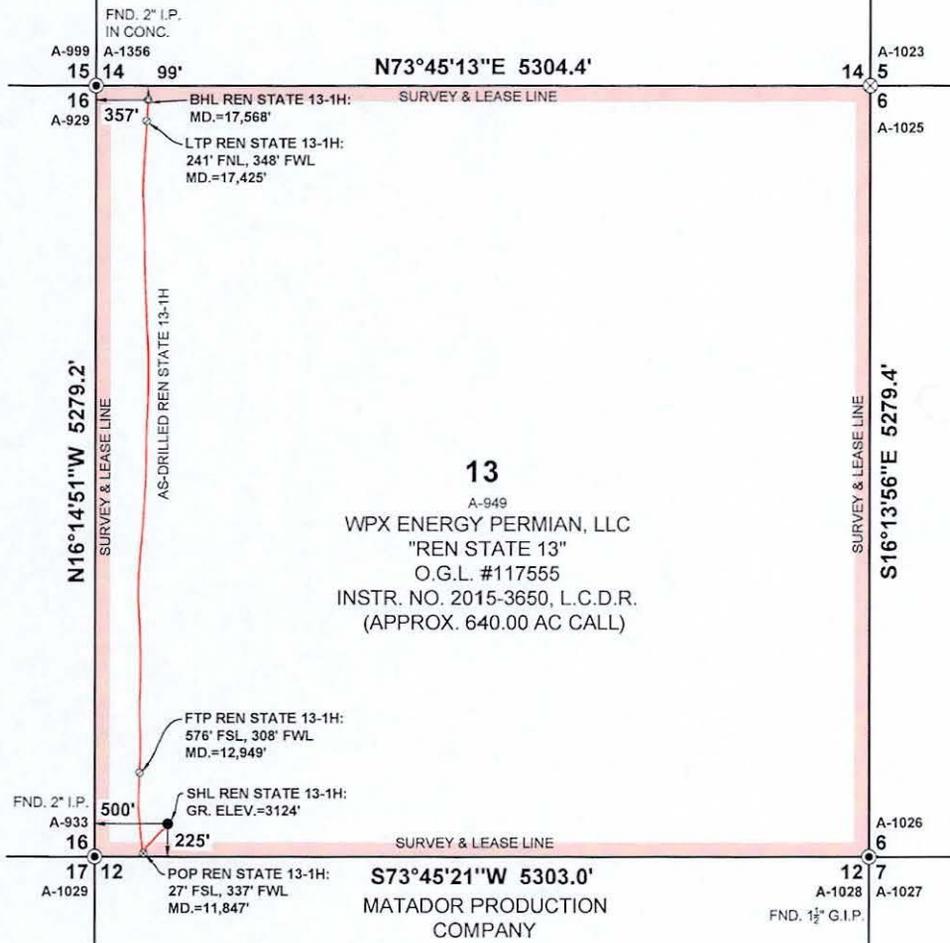
Company FIELD GEO SERVICES, INC.
 Address 533 BOGART LANE, UNIT A
 GRAND JUNCTION, CO 81505
 (970) 424-5162 OFFICE
 (970) 424-5164 FAX



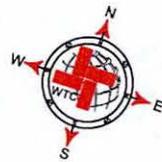
Zone Color Coding

■ Oil	■ Condensate	■ Gas
■ Note	■ Core	■ Press
■ Error	■ Water	■ Seal

AS-DRILLED PLAT
SECTION 13, BLOCK C-24, A-949, PUBLIC SCHOOL LAND SURVEY,
LOVING COUNTY, TEXAS



SURFACE HOLE LOCATION	FOOTAGE: 225 FSL, 500' FWL
	NAD 83, TXSP-C, N,(Y) = 10593470.5', E,(X) = 1356720.5' - LAT. = N31.9711078° N, LON. = W103.3643400° W NAD 27, TX-C, N,(Y) = 850891.6', E,(X) = 1060257.6' - LAT. = 31.9709805° N, LON. = 103.3638829° W
POINT OF PENETRATION	FOOTAGE: 27' FSL, 337' FWL
	NAD 83, TXSP-C, N,(Y) = 10593230.5', E,(X) = 1356620.3' - LAT. = N31.9704408° N, LON. = W103.3646418° W NAD 27, TX-C, N,(Y) = 850651.7', E,(X) = 1060157.4' - LAT. = 31.9703136° N, LON. = 103.3641847° W
FIRST TAKE	FOOTAGE: 576' FSL, 308' FWL
	NAD 83, TXSP-C, N,(Y) = 10593753.7', E,(X) = 1356438.3' - LAT. = N31.9718648° N, LON. = W103.3652747° W NAD 27, TX-C, N,(Y) = 851174.9', E,(X) = 1058975.4' - LAT. = 31.9717377° N, LON. = 103.3648176° W
LAST TAKE	FOOTAGE: 241' FNL, 348' FWL
	NAD 83, TXSP-C, N,(Y) = 10598048.6', E,(X) = 1355227.5' - LAT. = N31.9835749° N, LON. = W103.3695554° W NAD 27, TX-C, N,(Y) = 855469.6', E,(X) = 1058764.7' - LAT. = 31.9834479° N, LON. = 103.3690978° W
BOTTOM HOLE LOCATION/TERMINUS	FOOTAGE: 99' FNL, 357' FWL
	NAD 83, TXSP-C, N,(Y) = 10598188.1', E,(X) = 1355196.2' - LAT. = N31.9839558° N, LON. = W103.3696687° W NAD 27, TX-C, N,(Y) = 855609.1', E,(X) = 1058733.3' - LAT. = 31.9838288° N, LON. = 103.3692111° W

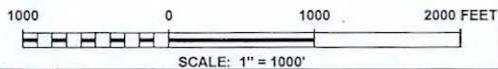


SURVEYOR'S NOTES:

- ALL DOWNHOLE, POINT OF PENETRATION AND BOTTOM HOLE INFORMATION AND THEIR LOCATIONS WERE PROVIDED BY WPX ENERGY PERMIAN, LLC, AND ARE NOT GUARANTEED BY THIS SURVEYOR.
- SEE DOCUMENTS FILED IN THIS OFFICE WHICH DESCRIBE IN DETAIL THE RECONSTRUCTION OF THESE SECTIONS AND/OR BLOCKS, USING FOUND MONUMENTATION, GLO AND COURTHOUSE DOCUMENTATION.
- NO SURFACE OWNERSHIP WAS PROVIDED OR REQUESTED BY WPX ENERGY PERMIAN, LLC AND NONE WAS RESEARCHED OR PROVIDED BY WTC, INC.
- BASIS OF BEARING, COORDINATES, AND DISTANCES ARE A LAMBERT CONICAL PROJECTION OF THE TEXAS COORDINATE SYSTEM, STATE PLANE GRID, NAD 83, TEXAS CENTRAL (4202), WITH A CONVERGENCE ANGLE OF -01°33'35.50" AND COMBINED SCALE FACTOR OF 0.9999879138 BASED ON AN OPUS SOLUTION ON CONTROL POINT SCENIC VIEW AT N.=10692222.830' - E.=1230584.092'
- THIS LOCATION IS APPROXIMATELY 22.9 MILES N.39°E., OF MENTONE, TEXAS.

LEGEND

- PROPOSED WELL LOCATION/POP
- ⊙ FTP/LTP
- ⊙ BHL
- EXISTING WELL
- ⊙ FOUND SECTION CORNER (AS NOTED)
- ⊙ CALCULATED CORNER
- LEASE BOUNDARY



I, THE UNDERSIGNED, DO HEREBY CERTIFY THAT THE SURVEY INFORMATION FOUND ON THIS PERMIT PLAT WAS DERIVED FROM FIELD NOTES OR ELECTRONIC DATA OF AN ACTUAL ON-THE-GROUND SURVEY MADE BY ME OR UNDER MY SUPERVISION AND IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF. NO WARRANTY IS MADE OR INTENDED FOR THE LOCATION OF ANY OR ALL EASEMENTS THAT MAY EXIST WITHIN THE BOUNDS OF THIS SURVEY. THE INFORMATION PRESENTED HEREON IS FOR TEXAS RAILROAD COMMISSION PERMITTING ONLY, AND DOES NOT CONSTITUTE OR REPRESENT A COMPLETE BOUNDARY SURVEY AS DEFINED BY THE T.B.P.L.S., "PROFESSIONAL LAND SURVEYING PRACTICES ACT." IF THERE ARE ANY ALTERATIONS MADE, (HAND DRAWN OR HANDWRITTEN ADDITIONS) THIS SURVEYOR IS NO LONGER RESPONSIBLE FOR THE VALIDITY OF THIS PLAT.

James E. Tompkins
JAMES E. TOMPKINS RPLS #1185 DATE 9/19/2018
SURVEY DATE: N/A DRAFT: M.Y.
JOB NO.: WTC52780 SHEET: 1 OF 1

WPX ENERGY PERMIAN, LLC

REN STATE 13-1H
SHL 225' FSL & 500' FWL
SECTION 13, BLOCK C-24, A-949,
P.S.L. SURVEY,
LOVING COUNTY, TEXAS



W T C, INC.
405 S.W. 1st STREET
ANDREWS, TEXAS 79714
(409) 623-2181
TEXAS REGISTERED ENGINEERING FIRM F-2748
TEXAS REGISTERED SURVEYOR FIRM #100792-00

File No. MF117555 11
Loving County
Completion Report API 42-301-33966
Date Filed: 9/17/19
By George P. Bush, Commissioner
jm

05270



MEMORANDUM

TEXAS GENERAL LAND OFFICE • GEORGE P. BUSH • COMMISSIONER

TIME SENSITIVE: Action Required by: (November 20, 2020)

DATE: November 10, 2020

TO: Commissioner Bush

FROM: Joy McCauley

SUBJECT: Extension of Oil and Gas Lease for State Fee Lease M-117555 to defer 2020 Drilling Obligation Wells for Six (6) Months for signature.

.....
SUMMARY: Attached for your approval and signature are duplicate originals of an Extension of Oil and Gas Lease for State Fee Lease M-117555 for Drilling Deferral that was approved by the School Land Board on April 21, 2020, whereby the School Land Board delegated to the Commissioner, until December 31, 2020, the authority to grant extensions of time not to exceed six (6) months in duration.

DETAILS: This agreement complies with existing GLO rules and policies and has been reviewed and approved by Energy Resources staff and the Legal Services Division. Chapter 52, Subchapter F of the Texas Natural Resources Code, which constitutes the owner of the soil as agent for the State to lease the oil and gas that in certain State lands upon such terms and conditions as such owner may deem best and gives authority to the Commissioner to approve such lease and the terms and conditions therein contained.

Document Name

Recipient

Extension of Oil and Gas Lease
Six (6) Month Drilling Deferral for
State Fee Lease M-117555
Loving County, Texas

WPX Energy Permian, LLC

Recommendation: Please sign and return to Joy McCauley in Energy Resources (3-4704).

Attachments: Two (2) Extension of Oil and Gas Lease for State Fee Lease M-117555

Thru: Larry Hargrave
Legal

EXTENSION OF OIL AND GAS LEASE
WPX ENERGY PERMIAN, LLC
LEASE NO. MF-117555
LOVING COUNTY, TEXAS

WPX Energy Permian, LLC ("WPX") is the current owner ("Lessee") of a State Lease executed by the Commissioner of the General Land Office of the State of Texas ("Lessor") dated August 4, 2015, covering 640.00 acres of land, more or less, recorded as Instrument No. 2015-3650 in the Official Public Records, Loving County, Texas, and on file as State Lease No. MF-117555 in the Archives & Records of the Texas General Land Office, Austin, Texas (the "Lease").

WPX is obligated to drill one (1) Well on the Lease on or before August 4, 2020, pursuant to the terms and conditions of a Production Sharing Agreement, being PSA 00316 on file in the Archives & Records of the Texas General Land Office, Austin, Texas.

Lessor and Lessee desire to defer for a period of six (6) months the obligation to drill the Well on the Lease and extend the Lease to allow Lessee to complete the drilling of the Well on the Lease for a period of time ending February 4, 2021.

For adequate consideration, the receipt and sufficiency of which is acknowledged, the undersigned Lessor and Lessee agree to a one-time extension of the Lease for a period of six (6) months from August 4, 2020, the Effective date, on the terms and conditions provided for in the Lease.

In all other respects, the terms of the Lease are unchanged.

This Extension of Oil, Gas, and Mineral Lease is executed by the parties below as Lessor and Lessee as of the respective dates indicated below, but shall be deemed effective, for all purposes, as of August 4, 2020.

Date: _____

STATE OF TEXAS

Content
Dep. Dir.
OGC
Executive

[Signature]
[Signature]

By: _____

GEORGE P. BUSH, COMMISSIONER
TEXAS GENERAL LAND OFFICE

WPX ENERGY PERMIAN, LLC

By: _____

Printed name: Cole Gallaway

Its: Attorney-in-Fact

Date: September 22, 2020

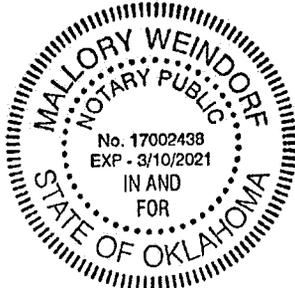
one



STATE OF OKLAHOMA

COUNTY OF TULSA

This instrument was acknowledged before me on September 22, 2020, by Cole Gallaway
as Attorney-in-Fact of WPX Energy Permian, LLC, a Delaware
limited liability company on behalf of said company.



[Signature]
Notary Public, State of Oklahoma

[Faint text at bottom of page]

STATE OF TEXAS §
 §
COUNTY OF TRAVIS §

This instrument was acknowledged before me on _____, 2020, by George P. Bush.

Notary Public, State of Texas
My Commission Expires: _____

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

File No. MF117555

Loving County

2020 Deferral of Drilling Obligation Memo

Date Filed: 05/25/2021

By Jm
George P. Bush, Commissioner

**EXTENSION OF OIL AND GAS LEASE
WPX ENERGY PERMIAN, LLC
LEASE NO. MF-117555
LOVING COUNTY, TEXAS**

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In all other respects, the terms of the Lease are unchanged.

This Extension of Oil, Gas, and Mineral Lease is executed by the parties below as Lessor and Lessee as of the respective dates indicated below, but shall be deemed effective, for all purposes, as of August 4, 2020.

Date: 12/14/2020

Content _____
Dep. Dir. _____
OGC _____
Executive _____

STATE OF TEXAS

By: [Signature]
GEORGE P. BUSH, COMMISSIONER
TEXAS GENERAL LAND OFFICE

WPX ENERGY PERMIAN, LLC

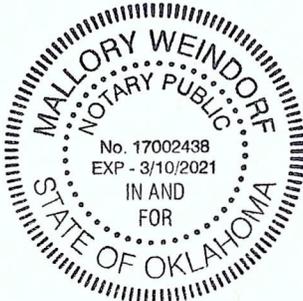
By: [Signature]
Printed name: Cole Gallaway
Its: Attorney-in-Fact
Date: September 22, 2020

One


STATE OF OKLAHOMA

COUNTY OF TULSA

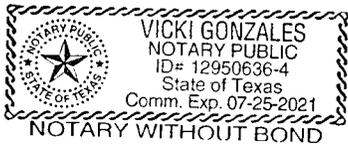
This instrument was acknowledged before me on September 22, 2020, by Cole Gallaway
as Attorney-in-Fact of WPX Energy Permian, LLC, a Delaware
limited liability company on behalf of said company.



[Signature]
Notary Public, State of Oklahoma

STATE OF TEXAS §
 §
COUNTY OF TRAVIS §

This instrument was acknowledged before me on Dec. 14 2020, by George P. Bush.



Vicki Gonzales
Notary Public, State of Texas
My Commission Expires: 7/25/2021

File No. MF117555

Loving County

2020 Deferral of Drilling Obligation

Date Filed: 05/25/2021

By: jm
George P. Bush, Commissioner



TEXAS GENERAL LAND OFFICE
GEORGE P. BUSH, COMMISSIONER

December 30, 2020

Ms. Amber Cooke
WPX Energy, Inc.
3400 One Williams Center
Tulsa, Oklahoma 74172

Re: Extension of Oil and Gas Lease
State Lease M-117555
Loving County, Texas

Dear Ms. Cooke:

Enclosed is a duplicate original of the above referenced Extension of Oil and Gas Lease that has been executed by George P. Bush, Commissioner of the Texas General Land Office ("GLO"). We have retained the other original of the Extension of Oil and Gas Lease.

Thank you for your assistance with this matter, if you have any questions or need anything further, please feel free to call.

Sincerely,

Joy McCauley, Landman
Energy Resources Division
Joy.McCauley@glo.texas.gov
(512) 463-4704

enclosure

File No. MF117555

Loving County

Letter to Operator

Date Filed: 05/25/2021

By JM George P. Bush, Commissioner

**EXTENSION OF OIL AND GAS LEASE
WPX ENERGY PERMIAN, LLC
LEASE NO. MF-117555
LOVING COUNTY, TEXAS**

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WPX is obligated to drill one (1) Well on the Lease on or before August 4, 2020, pursuant to the terms and conditions of a Production Sharing Agreement, being PSA 00316 on file in the Archives & Records of the Texas General Land Office, Austin, Texas.

Lessor and Lessee desire to defer for a period of six (6) months the obligation to drill the Well on the Lease and extend the Lease to allow Lessee to complete the drilling of the Well on the Lease for a period of time ending February 4, 2021.

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In all other respects, the terms of the Lease are unchanged.

This Extension of Oil, Gas, and Mineral Lease is executed by the parties below as Lessor and Lessee as of the respective dates indicated below, but shall be deemed effective, for all purposes, as of August 4, 2020.

Date: 12/14/2020

STATE OF TEXAS

By: [Signature]
GEORGE P. BUSH, COMMISSIONER
TEXAS GENERAL LAND OFFICE

Content _____
Dep. Dir. _____
OGC _____
Executive _____

WPX ENERGY PERMIAN, LLC

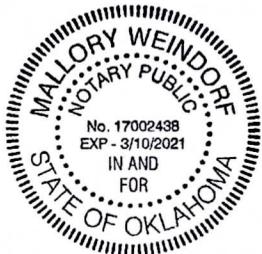
By: [Signature]
Printed name: Cole Galloway
Its: Attorney-in-Fact
Date: September 22, 2020

ane


STATE OF OKLAHOMA

COUNTY OF TULSA

This instrument was acknowledged before me on September 22, 2020, by Cole Galloway
as Attorney-in-Fact of WPX Energy Permian, LLC, a Delaware
limited liability company on behalf of said company.



[Signature]
Notary Public, State of Oklahoma

2021-0449 EXT
03/02/2021 11:25:10 AM Pages: 3 Fee: 30.00
District & County Clerk - Loving County, TX

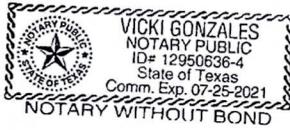

03.09.20

Certified Copy
A True and Correct Copy of the Original
Record Filed in Loving County, Texas
Mozelle Carr, County Clerk
[Signature]
Clerk/Deputy

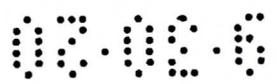
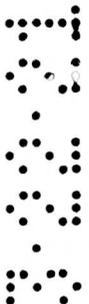


STATE OF TEXAS §
COUNTY OF TRAVIS §

This instrument was acknowledged before me on Dec. 14 2020, by George P. Bush.



Vicki Gonzales
Notary Public, State of Texas
My Commission Expires: 7/25/2021



Certified Copy
A True and Correct Copy of the Original
Record Filed in Loving County, Texas
Mozelle Carr, County Clerk

Mozelle Carr
Clerk/Deputy



I, Mozelle Carr, Clerk of the County Court, in and for said County, do hereby certify that the within instrument in writing, dated 12/14/2020 with its certification of authentication, was filed in my office 03/02/2021 at 11:25 AM and recorded 03/02/2021 in the OFFICIAL PUBLIC RECORDS of Loving County, Texas with Instrument Number 2021-0449. Witness my Hand and Seal of Said Court, at office in Mentone, Texas, on date and year last above written.



Mozelle Carr

MOZELLE CARR, County Clerk
Loving County Texas



Certified Copy
A True and Correct Copy of the Original
Record Filed in Loving County, Texas
Mozelle Carr, County Clerk

Be
Clerk/Deputy





A CERTIFIED COPY

Document No. 2021-0449

Volume No. / Page No.

A/An 3 Page Document,

Attest the 2 Day of March, 2021

Mozelle Carr, County & District Clerk

Loving County, Texas

By: B. Ellen

Chief Deputy Clerk



File No. MF117555

Loving County

Recorded Copy of Lease extension

Date Filed: 5/25/2021

George P. Bush, Commissioner

By Jm

2021



TEXAS GENERAL LAND OFFICE
GEORGE P. BUSH, COMMISSIONER

December 13, 2021

Nathan Eubanks, Landman
Grey Rock Energy Partners
2911 Turtle Creek Blvd, Ste 1150
Dallas, TX 75219

File

Re: Assignment ID # 11114 – MF117555
Loving County

Dear Mr. Eubanks:

The General Land Office received the following instrument and filed it in the appropriate files.

Partial Assignment, Bill of Sale and Conveyance, effective September 1, 2021,
from WPX Energy Permian, LLC, Assignor to GREP III-A Permian, LLC and
GREP III-B Permian, LLC, Assignee. Filed of record under Doc # 2021-2473.

Filing fees in the amount of \$25.00 were received on the referenced assignment.

Please feel free to contact me at (512) 590-9600 or email carl.bonn@glo.texas.gov if you have further questions.

Best Regards,

Carl Bonn, CPL
Mineral Leasing-Energy Resources



Nathan Eubanks, Landman
(214)-396-2846 - Direct

December 2, 2021

SENT VIA FEDEX

Texas General Land Office
Attn: Deborah Cantu
1700 N. Congress Ave., Ste 840
Austin, TX 78701-1495

RE: Assignment Notification
E/2 W/2, E/2, Section 13, Blk C24
Public School Survey
Loving County, Texas

Dear Deborah,

Please find enclosed a recorded and certified copy of a Partial Assignment, Bill of Sale and Conveyance from WPX Energy Permian, LLC to GREP III-A Permian, LLC and GREP III-B Permian, LLC covering one (1) Relinquishment Act Lease, State Lease number MF-117555. This partial assignment was filed as Instrument Number 2021-2473 on November 16, 2021, in the official public records of Loving County, Texas.

A fully completed Assignment Summary Form and check in the amount of \$25.00 covering the GLO Assignment processing fee are also enclosed.

If you have any questions or need additional information, please do not hesitate to contact me.

Thank you for your time and attention to this matter.

Sincerely,

Grey Rock Energy Partners

A handwritten signature in black ink, appearing to read 'N. Eubanks', written over a light blue horizontal line.

Nathan Eubanks, RPL
Landman

Handwritten: Advice # 11114

22702802

Handwritten: MF 117555



Mail to: Texas General Land Office
 Attn: Energy Resources
 P.O. 12873
 Austin, Texas 78711-2873

Texas General Land Office
 ASSIGNMENT SUMMARY

For General Land Office Use Only

DOCUMENT TYPE: (mark one):
 Assignment Deed of Trust Merger/Name Change

DOCUMENT RECORDING INFORMATION: (Include all the counties covered by the properties listed below)

County	Volume	Page	Execution Date/Effective Date
Loving	2021-2473		9/1/2021

ASSIGNMENT FEE: \$25 per State Lease (additional \$25 after 90 days)
 INTEREST BEING CONVEYED: (mark one)

Working Interest: 35% Overriding Royalty Interest Other (explain):

Remarks:

FROM List all companies or individuals listed in this instrument who are transferring ownership interests, in whole or in part, in the leases shown below	TO List all companies or individuals listed in this instrument who are receiving ownership interests in the leases listed below	% GROSS WI OWNED BY ASSIGNOR	% GROSS WI TRANSFERRED BY ASSIGNOR	% GROSS WI RETAINED BY ASSIGNOR
1. WPX Energy Permian, LLC	GREP III-A Permian, LLC	100%	10.619%	65%
2.	GREP III-B Permian, LLC		24.381%	
3.				
4.				

Attach additional pages as needed.

LEASES COVERED BY THIS TRANSFER:

State Lease #	COUNTY	BLOCK	SECTION	PART OF SECTION	DEPTH RESTRICTION
1. MF-117555	Loving	C24	13	E2 W2; E2	Limited to the Wolfcamp Formation
2.					
3.					
4.					


 Preparer's Signature
Matt Miller
 Name (please print)
matt@grey-rock.com
 E-Mail Address
214-396-2852
 Telephone Number

President
 Title
12/2/2021
 Date
 I am an authorized representative of the lessee(s) under the State of Texas leases identified herein and represent and certify to the Commissioner of the General Land Office that the information provided on this form is true and correct.

GREP III-A Permian, LLC & GREP III-B Permian, LLC
 Company Name
2911 Turtle Creek Blvd., Ste 1150
 Mailing Address
Dallas, TX 75219
 City/State/Zip

GREP III-B Permian, LLC
2911 Turtle Creek Blvd, Suite 1150
Dallas, TX 75219

Prosperity Bank
1301 North Mechanic St.
El Campo, TX 77437

10080

22702802

Twenty-five dollars and no cents

DATE	AMOUNT
12/02/2021	**25.00*

Pay to the Order of The State of Texas General Land Office
1700 Congress Ave
Austin, TX 78701-1495

CHG

SECURITY LOCKS WILL DISAPPEAR WHEN COPIED OR WITH NORMAL BODY HEAT

⑈0 10080⑈

From: GREP III-B Permian, LLC	Vendor Code	Check Date	Check Amount	Check Number
To: The State of Texas General Land Office 1700 Congress Ave Austin, TX 78701-1495	TXGLO	12/02/2021	\$25.00	PERM-10080

Invoice #	Invoice Amt
DEVON PROCESSING FEE	25.00
GLO Assignment Processing Fee	

22702802

129

NOTICE OF CONFIDENTIALITY RIGHTS: IF YOU ARE A NATURAL PERSON, YOU MAY REMOVE OR STRIKE ANY OF THE FOLLOWING INFORMATION FROM THIS INSTRUMENT BEFORE IT IS FILED FOR RECORD IN THE PUBLIC RECORDS: YOUR SOCIAL SECURITY NUMBER OR YOUR DRIVER'S LICENSE NUMBER.

ID 11114
MF 117555
eff 9-1-21

PARTIAL ASSIGNMENT, BILL OF SALE AND CONVEYANCE

STATE OF TEXAS §
 §
COUNTY OF LOVING §

THIS PARTIAL ASSIGNMENT, BILL OF SALE AND CONVEYANCE ("Assignment"), dated effective as of 7:00 a.m. Central Standard Time on September 1, 2021 (the "Effective Time"), is from WPX Energy Permian, LLC ("Assignor"), a Delaware limited liability company, whose address is 333 West Sheridan Avenue, Oklahoma City, OK 73102-5015, to GREP III-A Permian, LLC ("GREP A") and GREP III-B Permian, LLC ("GREP B"), and together with GREP A, the "Assignee"), each a Delaware limited liability company whose shared address is 2911 Turtle Creek Blvd., Suite 1150, Dallas, TX 75219. Assignor, GREP A, and GREP B may be referred to individually as a "Party" or collectively as the "Parties".

For good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, effective as of the Effective Time, Assignor hereby SELLS, ASSIGNS, TRANSFERS, GRANTS, BARGAINS, and CONVEYS, unto each Party listed below the undivided percentages set forth across from such Party's name:

GREP III-A Permian, LLC 30.340001%
GREP III-B Permian, LLC 69.659999%

an undivided **thirty five percent (35%)** of all of Assignor's right, title, and interest (the "Conveyed Interest"), whether legal, equitable, contractual, present, contingent, or reversionary, in and to the following (the "Assets"), less and except the Excluded Assets (defined below):

(a) The oil and gas leases (including all leasehold estates, operating rights, working interests, net revenue interests, net profits interests, and carried, force-pooled, non-consent, and reversionary interests) described on Exhibit A and all amendments, renewals, extensions, top leases or ratifications thereof limited to the Wolfcamp Formation which means the formation identified by the Gamma Ray log run in the Sharp Nose 1 well, located in the W/2 of Section 14, Block C24, PSL Survey, Loving County, Texas, with the top of the formation being found at a depth of 12,395' feet MD below the surface and the base of the formation being found at a depth of 14,340' feet MD below the surface or the stratigraphic equivalents thereof. (collectively, the "Leases"), together with the lands covered thereby or pooled, communitized, or unitized therewith limited to the Wolfcamp Formation (collectively, the "Lands");

(b) All unitization, pooling and communitization agreements, declarations, orders, permits, licenses, authorizations, and approvals, insofar as they pertain to the Leases or Lands, including those pertaining to the units depicted on Exhibit B;

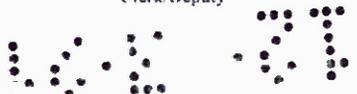
(c) The oil, gas, condensate, casinghead gas, plant products, and other hydrocarbons, whether liquid or gaseous, in, on, or under or that may be produced from or attributable to the Leases and Lands (collectively, the "Hydrocarbons");

(d) All equipment, facilities, improvements, structures and fixtures located on the Lands, or used in connection with the Lands or the Leases for the exploration, production, gathering, treatment, compression, transportation, processing, sale or disposal of Hydrocarbons or water, including but not limited to gathering and flow lines, treating and compressor facilities, salt water disposal facilities, and frac ponds and facilities;

2021-2473 ABS
11/16/2021 02:53:49 PM Pages: 9 Fee: 54.00
District & County Clerk - Loving County, TX


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Mozelle Carr, County Clerk

Clerk Deputy



(e) All contracts, agreements, and instruments described on Exhibit C (collectively, the "Contracts"), INSOFAR AND ONLY TO THE EXTENT pertaining to the Conveyed Interest in and to the Leases and Lands; and

(f) Copies of all files and records pertaining to the properties and interests described in subsections (a) through (e) above, less and except the Excluded Assets, including without limitation, lease, land, well, division order, title and contract files, title abstracts, ownership reports, title opinions, and engineering data (collectively, the "Records"); provided, however, the Records do not include seismic, geophysical, or core data.

Notwithstanding the foregoing, the Assets shall not include, and there is excepted, reserved and excluded from the transaction contemplated by this Assignment and the Purchase Agreement (the "Transaction"), all of Assignor's right, title and interest in and to (a) the remaining undivided sixty five percent (65%) of all of Assignor's right, title, and interest in and to the Leases and Lands (the "Retained Interest"), (b) 100% of all depths and formations other than the Wolfcamp Formation ("Retained Depths"), (c) the West Half of the West Half of Section 13, Block C-24, Public School Land Survey, Loving County, Texas, containing approximately 160 acres, as shown on the official map of Loving County, Texas now on file in the Texas General Land Office, Austin, Texas ("Retained Acreage"), (d) 100% of the wellbore of the Ren State 13-14A #433H well (API #423013524900) (the "Excluded Wellbore"), including all rights in the Leases reasonably necessary to own or operate the Excluded Wellbore including the right to market or dispose of production and hydrocarbons related thereto and all rights to deepen, plug back, re-enter, re-complete uphole or downhole, (e) all contracts not specifically listed on Exhibit C including but not limited to the Surface Use Agreement, dated effective August 1, 2018, by and between D. K. Boyd Land and Cattle Company and WPX Energy Permian, LLC f/k/a RKI Exploration & Production, LLC and the Oryx Crude Oil Buy/Sell Agreement dated November 1, 2018, a memorandum of which is recorded as Instrument No. 2019-0991 of the records of Loving County, Texas ("Excluded Contracts"), and (f) the properties and interests described in subsections (b) through (f) above, in each case, INSOFAR AND ONLY TO THE EXTENT pertaining to the Retained Interest, Retained Depths, Retained Acreage, Excluded Wellbore, and Excluded Contracts (collectively, the "Excluded Assets"). Notwithstanding the fact that the Oryx Crude Oil Buy/Sell Agreement dated November 1, 2018 is an Excluded Contract, Assignee acknowledges that the Assets are subject to the dedication contained in such Excluded Contract and Assignee shall be bound by the dedication contained in such Excluded Contract INSOFAR AND ONLY TO THE EXTENT pertaining to the Assets.

TO HAVE AND TO HOLD the Assets unto Assignee, its successors and assigns, forever, subject to the terms and conditions of this Assignment.

A. Special Warranty of Title. Assignor warrants to Assignee, its successors and assigns title to the Assets against all persons whomsoever lawfully claiming or attempting to claim the same or any part thereof, by, through and under Assignor or its affiliates, but not otherwise.

B. Subrogation. To the extent permitted by law and after the Effective Time, Assignee shall be subrogated to Assignor's rights in and to representations, warranties, and covenants given with respect to the Assets. Assignor hereby grants and transfers to Assignee, its successors and assigns, to the extent so transferable and permitted by law, the benefit of and the right to enforce the covenants, representations, and warranties, if any, which Assignor is entitled to enforce with respect to the Assets.

C. Purchase Agreement. This Assignment is made pursuant to and subject to the terms and conditions of that certain Purchase and Sale Agreement by and among the Parties dated November 4, 2021 (the "Purchase Agreement"). Capitalized terms used but not defined herein shall have the meaning assigned to such terms in the Purchase Agreement. In the event of a conflict between the terms and conditions of this Assignment and the Purchase Agreement, the terms and conditions of the Purchase Agreement will prevail and control.

D. Successors and Assigns. This Assignment binds and inures to the benefit of Assignor and Assignee and their respective successors and assigns.

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Mozelle Carr, County Clerk


Clerk Deputy



E. Further Assurances. The Parties shall each execute, acknowledge and deliver to the other such further instruments and take such other action as may be necessary in order to accomplish more effectively the purposes of the Transaction.

F. Governing Law. This Assignment, the Transaction (which is also contemplated by the Purchase Agreement), and any dispute resolution conducted pursuant hereto shall be construed in accordance with, and governed by, the Laws of the State of Texas, without regard to any conflicts of laws rules.

G. Construction. The Parties have participated jointly in the negotiation and drafting of this Assignment. If an ambiguity or question of intent or interpretation arises, this Assignment will be construed as if drafted jointly by the Parties and no presumption or burden of proof will arise favoring or disfavoring any Party because of the authorship of any provision of this Assignment.

H. Exhibits. The Exhibits to this Assignment are hereby incorporated in this Assignment by reference and constitute a part of this Assignment.

I. Severability. If any term or other provision of this Assignment is invalid, illegal or incapable of being enforced by any rule of law or public policy, all other conditions and provisions of this Assignment shall nevertheless remain in full force and effect so long as the economic or legal substance of the Transaction is not materially affected in any adverse manner to any Party.

J. Counterparts. This Assignment may be executed by the Parties in any number of counterparts, each of which shall be deemed an original instrument, but all of which together shall constitute but one and the same instrument.

[Signature and acknowledgment pages follow.]

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Mozelle Carr, County Clerk


Clerk Deputy



EXECUTED on the dates contained in the acknowledgments of this instrument, to be effective for all purposes as of the Effective Time.

ASSIGNOR:

WPX Energy Permian, LLC

By: [Signature]
Name: David M. Korell
Title: Attorney-in-Fact

*DMK
MBM*

ACKNOWLEDGMENT

STATE OF OKLAHOMA)
)
COUNTY OF OKLAHOMA)

The instrument was acknowledged before me on this 4th day of November, 2021, by David M. Korell, as Attorney-in-Fact of WPX Energy Permian, LLC, a Delaware limited liability company, on behalf of said limited liability company.

[Signature: Hannah Clare Otey]
Notary Public

My commission expires:

10/03/2025



Assignor's Signature and Acknowledgment Page to Assignment, Bill of Sale and Conveyance

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A True and Correct Copy of the Original
Record Filed in Loving County, Texas
Mozelle Carr, County Clerk

[Signature]
Clerk Deputy



EXECUTED on the dates contained in the acknowledgments of this instrument, to be effective for all purposes as of the Effective Time.

ASSIGNEE:

GREP III-A Permian, LLC

By: [Signature]
Name: Matt Miller
Title: President

GREP III-B Permian, LLC

By: [Signature]
Name: Matt Miller
Title: President

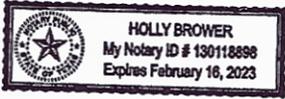
ACKNOWLEDGMENT

STATE OF TEXAS)
)
COUNTY OF DALLAS)

The instrument was acknowledged before me on this 5th day of November, 2021, by Matt Miller, as President of GREP III-A Permian, LLC and GREP III-B Permian, LLC, each a Delaware limited liability company, on behalf of said limited liability companies.

[Signature]
Notary Public in and for the State of Texas

My commission expires:
Feb, 16, 2023



Assignee's Signature and Acknowledgment Page to Assignment, Bill of Sale and Conveyance

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Mozelle Carr, County Clerk
[Signature]
Clerk/Deputy



Exhibit A
Leases

LEASE 1:

Lessor: State of Texas – MF117555
Original Lessee: Panther Energy Company II, LLC d/b/a Panther Exploration, LLC
Dated: August 4, 2015
Recorded: Instrument No. 2015-3650 of the Official Public Records of Loving County, Texas
Legal Description: Section 13, Block C24, Public School Land Survey, Loving County, Texas, limited to the E2W2 and E/2, and limited to the Wolfcamp Formation identified by the Gamma Ray log run in the Sharp Nose 1 well, located in the W/2 of Section 14, Block C24, PSL Survey, Loving County, Texas, with the top of the formation being found at a depth of 12,395' feet MD below the surface and the base of the formation being found at a depth of 14,340' feet MD below the surface or the stratigraphic equivalents thereof.

Lease Extension: This lease was extended by Extension of Oil and Gas Lease dated August 4, 2020 and recorded in Instrument No. 2021-0449 of the Official Public Records of Loving County, Texas

LEASE 2:

Lessor: Ralph L. Ross
Original Lessee: Siete Oil & Gas Corporation
Dated: November 15, 1993
Recorded: Volume 49, Page 114 of the Official Public Records of Loving County, Texas
Legal Description: Section 14, Block C24, Public School Land Survey, Loving County, Texas, limited to the East 320 acres, and limited to the Wolfcamp Formation identified by the Gamma Ray log run in the Sharp Nose 1 well, located in the W/2 of Section 14, Block C24, PSL Survey, Loving County, Texas, with the top of the formation being found at a depth of 12,395' feet MD below the surface and the base of the formation being found at a depth of 14,340' feet MD below the surface or the stratigraphic equivalents thereof.

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Mozelle Carr, County Clerk

MC
Clerk Deputy



Exhibit C

CONTRACT TYPE	PARTIES	DATE	STATE	COUNTY	LEGAL DESCRIPTION	RECORDING
Marketing	WPX Energy Permian, LLC and Targa Delaware, LLC	11/1/2016	TX	LOVING	Section 13 & 14, Block C24, PSL Survey, Loving County, TX	
Production Sharing Agreement	WPX Energy Permian, LLC & General Land Office	4/30/2020	TX	LOVING	<p><u>Tract 1:</u> Section 13, Block C24, Public School Land Survey, Loving County, Texas insofar as such lands cover depths from the surface to the base of the Wolfcamp formation, and subject to the provisions of Addendum "A".</p> <p><u>Tract 2:</u> The east 320 acres of Section 14, Block C-24 Public School Land Survey, Loving County, Texas insofar as such lands cover depths from the surface to the base of the Wolfcamp formation.</p>	2021-0450

The Contracts, Leases, Lands, Assets, and Conveyed Interest are depth limited to only the "Wolfcamp Formation," which means the formation identified by the Gamma Ray log run in the Sharp Nose 1 well, located in the W/2 of Section 14, Block C24, PSL Survey, Loving County, Texas, with the top of the formation being found at a depth of 12,395' feet MD below the surface and the base of the formation being found at a depth of 14,340' feet MD below the surface or the stratigraphic equivalents thereof.

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 Record Filed in Loving County, Texas
 Mozelle Carr, County Clerk

[Signature]
 Clerk Deputy



I, Mozelle Carr, Clerk of the County Court, in and for said County, do hereby certify that the within instrument in writing, dated 09/01/2021 with its certification of authentication, was filed in my office 11/16/2021 at 02:53 PM and recorded 11/16/2021 in the OFFICIAL PUBLIC RECORDS of Loving County, Texas with Instrument Number 2021-2473. Witness my Hand and Seal of Said Court, at office in Mentone, Texas, on date and year last above written.

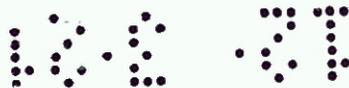


Mozelle Carr

MOZELLE CARR, County Clerk
Loving County Texas

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Mozelle Carr, County Clerk

[Signature]
Clerk/Deputy



A CERTIFIED COPY

Document No. 2021-2473

Volume No. / Page No.

A/An 9 Page Document,

Attest the 16 Day of November, 2021

Mozelle Carr, County & District Clerk

Loving County, Texas

By: Brandy Ellis

Chief Deputy Clerk



16

File No. MF 117555

Assign # 11114
WPX (to) GREP

Date Filed: _____
George P. Bush, Commissioner

By [Signature]

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NOTICE OF CONFIDENTIALITY RIGHTS: IF YOU ARE A NATURAL PERSON, YOU MAY REMOVE OR STRIKE ANY OF THE FOLLOWING INFORMATION FROM THIS INSTRUMENT BEFORE IT IS FILED FOR RECORD IN THE PUBLIC RECORDS: YOUR SOCIAL SECURITY NUMBER OR YOUR DRIVER'S LICENSE NUMBER.

PARTIAL RELEASE OF OIL AND GAS LEASE
(AS TO DEPTH)

STATE OF TEXAS §
 §
COUNTY OF LOVING §

WITNESSETH:

This Partial Release of Oil and Gas Lease (this "Partial Release") is by **WPX Energy Permian, LLC**, a Delaware limited liability company, whose address is 333 West Sheridan Avenue, Oklahoma City, Oklahoma 73102-5015 and **Granite Ridge Holdings, LLC**, a Delaware limited liability company, whose address is 5217 McKinney Avenue, Suite 400, Dallas, Texas, 75205 ("Releasing Parties"), who do hereby **RELEASE, REMISE, AND RELINQUISH** part of Releasing Parties' right, title, and interest, if any, in and to that certain Oil and Gas Lease, dated August 4, 2015, by and between George P. Bush, Commissioner of the GLO, as Lessor, and Panther Energy Company II, LLC d/b/a Panther Exploration, LLC, as Lessee, covering all of Section 13, Block C-24, Public School Land Survey, Loving County, Texas, containing 640 acres of land, more or less, recorded as Instrument No. 2015-3650 of the Official Public Records of Loving County, Texas (together with any and all extensions, revisions, amendments, or corrections thereto, the "Lease"), **BUT INSOFAR AND ONLY INSOFAR** as the Lease covers depths below 13,234 feet subsurface, such depth being 300 feet below the deepest depth drilled in the Ren State 13-14A 433H well (API #42-301-35249), as seen in the directional survey dated January 25, 2021 (such released depths, the "Released Depths").

1. Releasing Parties do hereby RESERVE AND RETAIN all other interests in the Lease as it pertains to and covers depths not released herein, including the surface and all depths above the Released Depths, and including all rights necessary or convenient to own, operate, and produce from the existing and future oil and gas wells drilled on the Lease (collectively, the "Retained Rights").
2. It is the intent of the Releasing Parties to only release those portions of the Lease that have expired pursuant to the Lease terms.
3. The Lease, as it pertains to the Retained Rights, is still a valid and subsisting lease and the Releasing Parties expressly retain all surface and subsurface rights, uses, and easements otherwise granted therein to explore for, drill, mine and operate for, produce and own the oil, gas, and other minerals (as such substances are defined in the Lease) as to those intervals, horizons, and lands covered by the Lease and not expressly released, surrendered, or relinquished hereby.

4. This Partial Release is binding upon and inures to the benefit of the parties as recited in the Lease, and to their respective heirs, legal representatives, successors, and assigns.

EXECUTED this 26th day of October, 2023, but effective for all purposes as of April 19, 2022.

WPX ENERGY PERMIAN, LLC

By: _____
Lindsey N. Miles, Vice President *LMC*
SDE
DMX

STATE OF OKLAHOMA §
§
COUNTY OF OKLAHOMA §

This instrument was acknowledged before me on this 26th day of October, 2023, by Lindsey N. Miles, as Vice President for **WPX Energy Permian, LLC**, a Delaware limited liability company, on behalf of said limited liability company.



Taylor J. Peterson

Notary Public in and for the State of Oklahoma

I, Mozelle Carr, Clerk of the County Court, in and for said County, do hereby certify that the within instrument in writing, dated with its certification of authentication, was filed in my office 10/26/2023 at 03:31 PM and recorded 10/26/2023 in the OFFICIAL PUBLIC RECORDS of Loving County, Texas with Instrument Number 2023-2318. Witness my Hand and Seal of Said Court, at office in Mentone, Texas, on date and year last above written.



Mozelle Carr

MOZELLE CARR, County Clerk
Loving County Texas

Countersignature: _____
Date Filed: _____
Time Filed: _____

17

File No. ME117555

County

Partial Release - Deaths

Date Filed: 11-16-2023

Commissioner Dawn Buckingham, M.D.

By: CRB