



CAUTION

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Archives and Records Staff

MF113744

8234

State Lease	Control	Base File	County
MF113744	07-103341	152857	REEVES

Survey	PUBLIC SCHOOL LAND		
Block	53		
Block Name			
Township			
Section/Tract	12		
Land Part	W/2SW/2		
Part Description	S2 OF W4		
Acres	80		
Depth Below	Depth Above	Depth Other	

Leasing: GH

Analyst: GH

Maps: VH

GIS: me

DocuShare: _____

Name	FULTROHAWK PROPERTIES LP		
Lease Date	11/2/2011		
Primary Term	5 yrs		
Bonus (\$)	\$80,000.00		
Rental (\$)	\$0.00		
Lease Royalty	0.1250		

CONTENTS OF FILE NO. MF 113744

1. RAL Review Sheet	11/17/11	scanned PJ 9-12-2019
2. Lease	11/2/11	14. Notice of Intent to R4A 5/12/2023 API 42-389-35361
3. Cover Letter, Bonus, and Fees		
4. Final Letter	10/23/12	scanned WM 5-22-2023
Scanned sm 7/15/13		See MF 111357 #72 Audit Letter 6/26/2023
5. Rentals- 4 th & 5 th yr.	10/29/2014	scanned PJ 11-12-14
(Sec MF 112445 #9, Arsn # 9429)		See #35 in MF 111399 Final Audit Billing Notice 11/8/2023
BAP to Carrizo 10-6-15		See #36 in MF 111399 Final Audit Billing Notice 11/8/2023
scanned PJ 12-3-15		
6. Assign ID #10081		
Permian to 299 12-15-16		scanned WM 11-21-2023
scanned PJ 12-29-16		See #37 in MF 111399 Audit Closure Letter 1/3/2024
7. Assign # 10318		See #38 in MF 111399 Audit Closure Letter 1/3/2024
299 (to) PDC 299 7-28-17		
(See MF 111748 #32, Assign #10318)		
299 (to) PDC 299 8-8-17		scanned WM 1-10-2024
scanned PJ 8-18-2017		15. O. Draft + Audit Billing Notice 4/16/2024
8. Ltr. From MSM W&O 8/21/17		16. Gas Draft + Audit Billing Notice 4/16/2024
9. Ltr. to MSM W&O 8/21/17		scanned PJ 4-17-2024
10. Pooling Agmt. Packet # 8234		
Liam State 53-12 1H Unit 8/21/17		
scanned PJ 11-16-2017		
11. Completion Report API 389-35361		
Unit # 8234 2/13/2018		
scanned PJ 2-15-2018		
12. Drilling Permit API 389-37095 1/11/19		
scanned PJ 2-6-2019		
13. DIVISION ORDER 8-5-19		

RAL REVIEW SHEET

MF113744

Transaction # 7498

Geologist:

Lessor: Steve F. Armstrong

Lease Date: 11/2/2011

UL ☐

Lessee: Petrohawk Prop., LP

Gross Acres: 80

Net Acres: 80

LEASE DESCRIPTION

County	PN#	Base File No	Part	Sec.	Block	Twp	Survey	Abst#
REEVES	07-103341	152857	W/2SW/4	12	53	00	PUBLIC SCHOOL LAND	5910

TERMS OFFERED

Primary Term: 5 years

Bonus/Acre: \$2,000.00

Rental/Acre: \$0.00

Royalty: 1/4

TERMS RECOMMENDED

Primary Term: 5 years

Bonus/Acre: \$2,000.00

Rental/Acre: \$0.00

Royalty: 1/4

COMPARISONS

MF #	Lessee	Date	Term	Bonus/Ac.	Rental/Ac.	Royalty	Distance
							Last Lease
Pending	Petrohawk Properties	9-1-11	5 Yrs	\$2000.00	\$1.00	1/4	Adjacent North

Comments: rentals paid for 2nd & 3rd yr / 4th yr rental is \$2000.00 per ac., this pays the 5th yr

Approved: 11/17/11

RELINQUISHMENT ACT LEASE APPLICATION

Texas General Land Office

Jerry Patterson, Commissioner

TO: Jerry Patterson, Commissioner
Larry Laine, Chief Clerk
Bill Warnick, General Counsel
Louis Renaud, Deputy Commissioner

DATE: 16-Nov-11

FROM: Robert Hatter, Director of Mineral Leasing
Tracey Throckmorton, Geoscience Manager

Applicant: Pertohawk Prop., LP County: REEVES
Prim. Term: 5 years Bonus/Acre \$2,000.00
Royalty: 1/4 Rental/Acre \$0.00

Consideration

Recommended: [Signature] Date: 11/17/11

Not Recommended: _____

Comments: rentals paid for 2nd & 3rd yr / 4th yr rental is \$2000.00 per ac., this pays the 5th yr

Lease Form

Recommended: [Signature] Date: 11/23/11

Not Recommended: _____

Comments:

Louis Renaud, Deputy Commissioner Date: 12/27/11

Recommended: [Signature]

Not Recommended: _____

Bill Warnick, General Counsel Date: 1/5/12

Recommended: [Signature]

Not Recommended: _____

Larry Laine, Chief Clerk Date: 1/6/12

Approved: [Signature]

Not Approved: _____

Jerry Patterson, Commissioner Date: 1/10/12

Approved: [Signature]

Not Approved: _____

File No. 113744

App@ Checklist

Date Filed: 11/17/11

Jerry E. Patterson, Commissioner

By GIT

11/17/11
316

MF113744

FILE# 8613

General Land Office
Relinquishment Act Lease Form
Revised, September 1997

The State of Texas



Austin, Texas

OIL AND GAS LEASE

THIS AGREEMENT is made and entered into this 2nd day of NOVEMBER, 2011, between the State of Texas, acting by and through its agent, STEVE F. ARMSTRONG OF PO BOX 64370, LUBBOCK, TEXAS 79464
(Give Permanent Address)
said agent herein referred to as the owner of the soil (whether one or more), and PETROHAWK PROPERTIES, LP
of 6100 SOUTH YALE AVENUE, SUITE 500, TULSA, OKLAHOMA 74136 hereinafter called Lessee
(Give Permanent Address)

1. **GRANTING CLAUSE.** For and in consideration of the amounts stated below and of the covenants and agreements to be paid, kept and performed by Lessee under this lease, the State of Texas acting by and through the owner of the soil, hereby grants, leases and lets unto Lessee, for the sole and only purpose of prospecting and drilling for and producing oil and gas, laying pipe lines, building tanks, storing oil and building power stations, telephone lines and other structures thereon, to produce, save, take care of, treat and transport said products of the lease, the following lands situated in REEVES County, State of Texas, to-wit:

WEST HALF OF THE SOUTHWEST QUARTER (W/2 OF SW/2) OF SECTION 12, BLOCK 53, A-5910, PSL SURVEY, REEVES COUNTY, TEXAS, CONTAINING 80 ACRES MORE OR LESS.

Containing 80 acres, more or less. The bonus consideration paid for this lease is as follows:

To the State of Texas: EIGHTY THOUSAND AND 00/100'S
Dollars (\$80,000.00)

To the owner of the soil: EIGHTY THOUSAND AND 00/100'S
Dollars (\$80,000.00)

Total bonus consideration: ONE HUNDRED SIXTY THOUSAND AND 00/100
Dollars (\$160,000.00)

The total bonus consideration paid represents a bonus of TWO THOUSAND AND 00/100
Dollars (\$2,000.00) per acre, on 80 net acres.

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.

2. **TERM.** Subject to the other provisions in this lease, this lease shall be for a term of FIVE years from this date (herein called "primary term") and as long thereafter as oil and gas, or either of them, is produced in paying quantities from said land. As used in this lease, the term "produced in paying quantities" means that the receipts from the sale or other authorized commercial use of the substance(s) covered exceed out of pocket operational expenses for the six months last past.

3. **DELAY RENTALS.** If no well is commenced on the leased premises on or before one (1) year from this date, this lease shall terminate, unless on or before such anniversary date Lessee shall pay or tender to the owner of the soil or to his credit in the BANK at PAY DIRECTLY TO OWNER OF THE SOIL or its successors (which shall continue as the depository regardless of changes in the ownership of said land), the amount specified below; in addition, Lessee shall pay or tender to the COMMISSIONER OF THE GENERAL LAND OFFICE OF THE STATE OF TEXAS, AT AUSTIN, TEXAS, a like sum on or before said date. Payments under this paragraph shall operate as a rental and shall cover the privilege of deferring the commencement of a well for one (1) year from said date. Payments under this paragraph shall be in the following amounts:

To the owner of the soil: _____
Dollars (\$ _____)
To the State of Texas: REFER TO ADDENDUM PARAGRAPH 40
Dollars (\$ _____)
Total Delay Rental: _____
Dollars (\$ _____)

In a like manner and upon like payments or tenders annually, the commencement of a well may be further deferred for successive periods of one (1) year each during the primary term. All payments or tenders of rental to the owner of the soil may be made by check or sight draft of Lessee, or any assignee of this lease, and may be delivered on or before the rental paying date. If the bank designated in this paragraph (or its successor bank) should cease to exist, suspend business, liquidate, fail or be succeeded by another bank, or for any reason fail or refuse to accept rental, Lessee shall not be held in default for failure to make such payments or tenders of rental until thirty (30) days after the owner of the soil shall deliver to Lessee a proper recordable instrument naming another bank as agent to receive such payments or tenders.

SFA.



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Reeves County
Clerk's Office

4. PRODUCTION ROYALTIES. Upon production of oil and/or gas, Lessee agrees to pay or cause to be paid one-half (1/2) of the royalty provided for in this lease to the Commissioner of the General Land Office of the State of Texas, at Austin, Texas, and one-half (1/2) of such royalty to the owner of the soil:

(A) **OIL.** Royalty payable on oil, which is defined as including all hydrocarbons produced in a liquid form at the mouth of the well and also as all condensate, distillate, and other liquid hydrocarbons recovered from oil or gas run through a separator or other equipment, as hereinafter provided, shall be 1/4 part of the gross production or the market value thereof, at the option of the owner of the soil or the Commissioner of the General Land Office, such value to be determined by 1) the highest posted price, plus premium, if any, offered or paid for oil, condensate, distillate, or other liquid hydrocarbons, respectively, of a like type and gravity in the general area where produced and when run, or 2) the highest market price thereof offered or paid in the general area where produced and when run, or 3) the gross proceeds of the sale thereof, whichever is the greater. Lessee agrees that before any gas produced from the leased premises is sold, used or processed in a plant, it will be run free of cost to the royalty owners through an adequate oil and gas separator of conventional type, or other equipment at least as efficient, so that all liquid hydrocarbons recoverable from the gas by such means will be recovered. The requirement that such gas be run through a separator or other equipment may be waived, in writing, by the royalty owners upon such terms and conditions as they prescribe.

(B) **NON PROCESSED GAS.** Royalty on any gas (including flared gas), which is defined as all hydrocarbons and gaseous substances not defined as oil in subparagraph (A) above, produced from any well on said land (except as provided herein with respect to gas processed in a plant for the extraction of gasoline, liquid hydrocarbons or other products) shall be 1/4 part of the gross production or the market value thereof, at the option of the owner of the soil or the Commissioner of the General Land Office, such value to be based on the highest market price paid or offered for gas of comparable quality in the general area where produced and when run, or the gross price paid or offered to the producer, whichever is the greater; provided that the maximum pressure base in measuring the gas under this lease shall not at any time exceed 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 tests made by the Balance Method or by the most approved method of testing being used by the industry at the time of testing.

(C) **PROCESSED GAS.** Royalty on any gas processed in a gasoline plant or other plant for the recovery of gasoline or other liquid hydrocarbons shall be 1/4 part of the residue gas and the liquid hydrocarbons extracted or the market value thereof, at the option of the owner of the soil or the Commissioner of the General Land Office. All royalties due herein shall be based on one hundred percent (100%) of the total plant production of residue gas attributable to gas produced from this lease, and on fifty percent (50%), or that percent accruing to Lessee, whichever is the greater, of the total plant production of liquid hydrocarbons attributable to the gas produced from this lease; provided that if liquid hydrocarbons are recovered from gas processed in a plant in which Lessee (or its parent, subsidiary or affiliate) owns an interest, then the percentage applicable to liquid hydrocarbons shall be fifty percent (50%) or the highest percent accruing to a third party processing gas through such plant under a processing agreement negotiated at arm's length (or if there is no such third party, the highest percent then being specified in processing agreements or contracts in the industry), whichever is the greater. The respective royalties on residue gas and on liquid hydrocarbons shall be determined by 1) the highest market price paid or offered for any gas (or liquid hydrocarbons) of comparable quality in the general area, or 2) the gross price paid or offered for such residue gas (or the weighted average gross selling price for the respective grades of liquid hydrocarbons), whichever is the greater. In no event, however, shall the royalties payable under this paragraph be less than the royalties which would have been due had the gas not been processed.

(D) **OTHER PRODUCTS.** Royalty on carbon black, sulphur or any other products produced or manufactured from gas (excepting liquid hydrocarbons) whether said gas be "casinghead," "dry," or any other gas, by fractionating, burning or any other processing shall be 1/4 part of the gross production of such products, or the market value thereof, at the option of the owner of the soil or the Commissioner of the General Land Office, such market value to be determined as follows: 1) on the basis of the highest market price of each product for the same month in which such product is produced, or 2) on the basis of the average gross sale price of each product for the same month in which such products are produced; whichever is the greater.

5. MINIMUM ROYALTY. During any year after the expiration of the primary term of this lease, if this lease is maintained by production, the royalties paid under this lease in no event shall be less than an amount equal to the total annual delay rental herein provided; otherwise, there shall be due and payable on or before the last day of the month succeeding the anniversary date of this lease a sum equal to the total annual rental less the amount of royalties paid during the preceding year. If Paragraph 3 of this lease does not specify a delay rental amount, then for the purposes of this paragraph, the delay rental amount shall be one dollar (\$1.00) per acre.

6. ROYALTY IN KIND. Notwithstanding any other provision in this lease, at any time or from time to time, the owner of the soil or the Commissioner of the General Land Office may, at the option of either, upon not less than sixty (60) days notice to the holder of the lease, require that the payment of any royalties accruing to such royalty owner under this lease be made in kind. The owner of the soil's or the Commissioner of the General Land Office's right to take its royalty in kind shall not diminish or negate the owner of the soil's or the Commissioner of the General Land Office's rights or Lessee's obligations, whether express or implied, under this lease.

7. NO DEDUCTIONS. Lessee agrees that all royalties accruing under this lease (including those paid in kind) shall be without deduction for the cost of producing, gathering, storing, separating, treating, dehydrating, compressing, processing, transporting, and otherwise making the oil, gas and other products hereunder ready for sale or use. Lessee agrees to compute and pay royalties on the gross value received, including any reimbursements for severance taxes and production related costs.

8. 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 processing plant. Notwithstanding any other provision of this lease, and subject to the written consent of the owner of the soil and the Commissioner of the General Land Office, Lessee may recycle gas for gas lift purposes on the leased premises or for injection into any oil or gas producing formation underlying the leased premises after the liquid hydrocarbons contained in the gas have been removed; no royalties shall be payable on the recycled gas until it is produced and sold or used by Lessee in a manner which entitles the royalty owners to a royalty under this lease.

9. ROYALTY PAYMENTS AND REPORTS. All royalties not taken in kind shall be paid to the Commissioner of the General Land Office 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 Register. Rules currently provide that royalty on oil is due and must be received in the General Land Office on or before the 5th day of the second month succeeding the month of production, and royalty on gas is due and must be received in the General Land Office on or before the 15th day of the second month succeeding the month of production, accompanied by the affidavit of the owner, manager or other authorized agent, completed in the form and manner prescribed by the General Land Office and showing the gross amount and disposition of all oil and gas produced and the market value of the oil and gas, together with a copy 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 amount produced and put into pipelines, tanks, or pools and gas lines or gas storage, and any other reports or records which the General Land Office 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 General Land Office. Each royalty payment shall be accompanied by a check stub, schedule, summary or other remittance advice showing by the assigned General Land Office lease number the amount of royalty being paid on each lease. If Lessee pays his royalty on or before thirty (30) days after the royalty payment was due, then Lessee owes a penalty of 5% on the royalty or \$25.00, whichever is greater. A royalty payment which is over thirty (30) days late shall accrue a penalty of 10% of the royalty due or \$25.00 whichever is greater. In addition to a penalty, royalties shall accrue interest at a rate of 12% per year; such interest will begin to accrue when the royalty is sixty (60) days overdue. Affidavits and supporting documents which are not filed when due shall incur a penalty in an amount set by the General Land Office 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.

10. (A) RESERVES, CONTRACTS AND OTHER RECORDS. Lessee shall annually furnish the Commissioner of the General Land Office with its best possible estimate of oil and gas reserves underlying this lease or allocable to this lease and shall furnish said Commissioner 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 General Land Office shall be held in confidence by the General Land Office unless otherwise authorized by Lessee. All other contracts and records pertaining to the production, transportation, sale and marketing of the oil and gas produced on said premises, including the books and accounts, receipts and discharges of all wells, tanks, pools, meters, and pipelines shall at all times be subject to inspection and examination by the Commissioner of the General Land Office, the



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Attorney General, the Governor, or the representative of any of them.

(B) PERMITS, DRILLING RECORDS. Written notice of all operations on this lease shall be submitted to the Commissioner of the General Land Office 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 General Land Office 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 General Land Office 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 shall include the word "State" 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." Lessee shall supply the General Land Office with any records, memoranda, accounts, reports, cuttings and cores, or other information relative to the operation of the above-described premises, which may be requested by the General Land Office, in addition to those herein expressly provided for. Lessee shall have an electrical and/or radioactivity survey 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 premises and shall transmit a true copy of the log of each survey on each well to the General Land Office within fifteen (15) days after the making of said survey.

(C) PENALTIES. Lessee shall incur a penalty whenever reports, documents or other materials are not filed in the General Land Office when due. The penalty for late filing shall be set by the General Land Office administrative rule which is effective on the date when the materials were due in the General Land Office.

11. DRY HOLE/CESSATION OF PRODUCTION DURING PRIMARY TERM. If, during the primary term hereof and prior to discovery and production of oil or gas on said land, Lessee should drill a dry hole or holes thereon, or if during the primary term hereof and after the discovery and actual production of oil or gas from the leased premises such production thereof should cease from any cause, this lease shall not terminate if on or before the expiration of sixty (60) days from date of completion of said dry hole or cessation of production Lessee commences additional drilling or reworking operations thereon, or pays or tenders the next annual delay rental in the same manner as provided in this lease. If, during the last year of the primary term or within sixty (60) days prior thereto, a dry hole be completed and abandoned, or the production of oil or gas should cease for any cause, 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 Paragraph 13, using the expiration of the primary term as the date of cessation of production under Paragraph 13. 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 ipso facto 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.

12. DRILLING AND REWORKING AT EXPIRATION OF PRIMARY TERM. If, at the expiration of the primary term, neither oil nor gas is being produced on said land, but Lessee is then engaged in drilling or reworking operations thereon, this lease shall remain in force so long as operations on said well or for drilling or reworking of any additional wells are prosecuted in good faith and in workmanlike manner without interruptions totaling more than sixty (60) days during any one such operation, and if they result in the production of oil and/or gas, so long thereafter as oil and/or gas is produced in paying quantities from said land, or payment of shut-in oil or gas well royalties or compensatory royalties is made as provided in this lease.

13. CESSATION, DRILLING, AND REWORKING. If, after the expiration of the primary term, production of oil or gas from the leased premises, after once obtained, should cease from any cause, this lease shall not terminate if Lessee 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 General Land Office within thirty (30) days of any cessation of production.

14. SHUT-IN ROYALTIES. For purposes of this paragraph, "well" means any well that has been assigned a well number by the state 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 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. If Paragraph 3 of this lease does not specify a delay rental amount, then for the purposes of this paragraph, the delay rental amount shall be one dollar (\$1.00) per acre. To be effective, each initial shut-in oil or gas royalty must be paid on or before: (1) the expiration of the primary term, (2) 60 days after the Lessee ceases to produce oil or gas from the leased premises, or (3) 60 days after Lessee completes a drilling or reworking operation in accordance with the lease provisions; whichever date is latest. Such payment shall be made one-half (1/2) to the Commissioner of the General Land Office and one-half (1/2) to the owner of the soil. If the shut-in oil or gas royalty is paid, 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 year from the end of the primary term, or from the first day of the month following the month in which production ceased, and, after that, if no suitable production facilities or suitable market for the oil or gas exists, Lessee may extend the lease for four more successive periods of one (1) year by paying the same amount each year on or before the expiration of each shut-in year.

15. 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. The Lessee may maintain the lease for four 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, one-half (1/2) to the Commissioner of the General Land Office and one-half (1/2) to the owner of the soil, 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 12-month period is 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 12-month period. Compensatory royalty payments which are not timely paid will accrue penalty and interest in accordance with Paragraph 9 of this lease. None of these provisions will relieve Lessee of the obligation of reasonable development nor the obligation to drill offset wells as provided in Texas Natural Resources Code 52.173; however, at the determination of the Commissioner, and with the Commissioner's written approval, the payment of compensatory royalties can satisfy the obligation to drill offset wells.

16. 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 two (2) years after the expiration date of the primary or extended term it shall then terminate as to all of the leased premises, EXCEPT (1) 40 acres surrounding each oil well capable of producing in paying quantities and 320 acres surrounding each gas well capable of producing in paying quantities (including a shut-in oil or gas well as provided in Paragraph 14 hereof), or a well upon which Lessee is then engaged in continuous drilling or reworking operations, or (2) the number of acres included in a producing pooled unit pursuant to Texas Natural Resources Code 52.151-52.154, or (3) such greater or lesser number of acres as may then be allocated for production purposes to a proration unit for each such producing well under the rules and regulations of the Railroad Commission of Texas, or any successor agency, or other governmental authority having jurisdiction. 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. Notwithstanding the termination of this lease as to a portion of the lands covered hereby, Lessee shall nevertheless continue to have the right of ingress to and egress from the lands still subject to this lease for all purposes described in Paragraph 1 hereof, together with easements and rights-of-way for existing roads, existing pipelines and other existing facilities on, over and across all the lands described in Paragraph 1 hereof ("the retained lands"), for access to and from the retained lands and for the gathering or transportation of oil, gas and other minerals produced from the retained lands.



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Clerk's Office

(B) **HORIZONTAL.** In the event this lease is in force and effect two (2) years after the expiration date of the primary or extended term it shall further terminate as to all depths below 100 feet below the total depth drilled (hereinafter "deeper depths") in each well located on acreage retained in Paragraph 16 (A) above, unless on or before two (2) years after the primary or extended term Lessee pays an amount equal to one-half (1/2) of the bonus originally paid as consideration for this lease (as specified on page 1 hereof). If such amount is paid, this lease shall be in force and effect as to such deeper depths, and said termination shall be delayed for an additional period of two (2) years and so long thereafter as oil or gas is produced in paying quantities from such deeper depths covered by this lease.

(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 with the well located in the center thereof, or such other shape as may be approved by the Commissioner of the General Land Office. Within thirty (30) days after partial termination of this lease as provided herein, Lessee shall 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 General Land Office, accompanied by the filing fee prescribed by the General Land Office rules in effect on the date the release is filed. If Lessee fails or refuses to execute and record such release or releases within ninety (90) days after being requested to do so by the General Land Office, then the Commissioner at his sole discretion may designate by written instrument the acreage and/or depths to be released 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 General Land Office and such designation shall be binding upon Lessee for all purposes.

17. **OFFSET WELLS.** Neither the bonus, delay rentals, nor royalties paid, or to be paid, under this lease shall relieve Lessee of his obligation to protect the oil and gas under the above-described land from being drained. Lessee, sublessee, receiver or other agent in control of the leased premises shall drill as many wells as the facts may justify and shall use appropriate means and drill to a depth necessary to prevent undue drainage of oil and gas from the leased premises. In addition, if oil and/or gas should be produced in commercial quantities within 1,000 feet of the leased premises, or in any case where the leased premises is being drained by production of oil or gas, the Lessee, sublessee, receiver or other agent in control of the leased premises shall in good faith begin the drilling of a well or wells upon the leased premises within 100 days after the draining well or wells or the well or wells completed within 1,000 feet of the leased premises start producing in commercial quantities and shall prosecute such drilling with diligence. Failure to satisfy the statutory offset obligation may subject this lease and the owner of the soil's agency rights to forfeiture. Only upon the determination of the Commissioner of the General Land Office and with his written approval may the payment of compensatory royalty under applicable statutory parameters satisfy the obligation to drill an offset well or wells required under this paragraph.

18. **FORCE MAJEURE.** If, after a good faith effort, Lessee is prevented from complying with any express or implied covenant of this lease, from conducting drilling operations on the leased premises, or from producing oil or gas from the leased premises by reason of war, rebellion, riots, strikes, acts of God, or any valid order, rule or regulation of government authority, then while so prevented, Lessee's obligation to comply with such covenant shall be suspended and Lessee shall not be liable for damages for failure to comply with such covenants; additionally, this lease shall be extended while Lessee is prevented, by any such cause, from conducting drilling and reworking operations or from producing oil or gas from the leased premises. However, nothing in this paragraph shall suspend the payment of delay rentals in order to maintain this lease in effect during the primary term in the absence of such drilling or reworking operations or production of oil or gas.

19. **WARRANTY CLAUSE.** The owner of the soil warrants and agrees to defend title to the leased premises. If the owner of the soil defaults in payments owed on the leased premises, then Lessee may redeem the rights of the owner of the soil in the leased premises by paying any mortgage, taxes or other liens on the leased premises. If Lessee makes payments on behalf of the owner of the soil under this paragraph, Lessee may recover the cost of these payments from the rental and royalties due the owner of the soil.

20. (A) **PROPORTIONATE REDUCTION CLAUSE.** If the owner of the soil owns less than the entire undivided surface estate in the above described land, whether or not Lessee's interest is specified herein, then the royalties and rental herein provided to be paid to the owner of the soil shall be paid to him in the proportion which his interest bears to the entire undivided surface estate and the royalties and rental herein provided to be paid to the Commissioner of the General Land Office of the State of Texas shall be likewise proportionately reduced. However, before Lessee adjusts the royalty or rental due to the Commissioner of the General Land Office, Lessee or his authorized representative must submit to the Commissioner of the General Land Office a written statement which explains the discrepancy between the interest purportedly leased under this lease and the actual interest owned by the owner of the soil. The Commissioner of the General Land Office shall be paid the value of the whole production allocable to any undivided interest not covered by a lease, less the proportionate development and production cost allocable to such undivided interest. However, in no event shall the Commissioner of the General Land Office receive as a royalty on the gross production allocable to the undivided interest not leased an amount less than the value of one-sixteenth (1/16) of such gross production.

(B) **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 School Land Board and the owner of the soil in accordance with Natural Resources Code 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.

21. **USE OF WATER.** Lessee shall have the right to use water produced on said land necessary for operations under this lease except water from wells or tanks of the owner of the soil; provided, however, Lessee shall not use potable water or water suitable for livestock or irrigation purposes for waterflood operations without the prior consent of the owner of the soil.

22. **AUTHORIZED DAMAGES.** Lessee shall pay the owner of the soil for damages caused by its operations to all personal property, improvements, livestock and crops on said land.

23. **PIPELINE DEPTH.** When requested by the owner of the soil, Lessee shall bury its pipelines below plow depth.

24. **WELL LOCATION LIMIT.** No well shall be drilled nearer than two hundred (200) feet to any house or barn now on said premises without the written consent of the owner of the soil.

25. **POLLUTION.** In developing this area, 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 pollutant and shall be responsible for all damage to public and private properties. 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. Lessee shall, while conducting operations on the leased premises, keep said premises free of all rubbish, cans, bottles, paper cups or garbage, and upon completion of operations shall restore the surface of the land to as near its original condition and contours as is practicable. Tanks and equipment will be kept painted and presentable.

26. **REMOVAL OF EQUIPMENT.** Subject to limitations in this paragraph, Lessee shall have the right to remove machinery and fixtures placed by Lessee on the leased premises, including the right to draw and remove casing, within one hundred twenty (120) days after the expiration or the termination of this lease unless the owner of the soil grants Lessee an extension of this 120-day period. However, Lessee may not remove casing from any well capable of producing oil and gas in paying quantities. Additionally, Lessee may not draw and remove casing until after thirty (30) days written notice to the Commissioner of the General Land Office and to the owner of the soil. The owner of the soil shall become the owner of any machinery, fixtures, or casing which are not timely removed by Lessee under the terms of this paragraph.

27. (A) **ASSIGNMENTS.** Under the conditions contained in this paragraph and Paragraph 29 of this lease, the rights and estates of either party to this lease may be assigned, in whole or in part, and the provisions of this lease shall extend to and be binding upon their heirs, devisees, legal representatives, successors and assigns. However, a change or division in ownership of the land, rentals, or royalties will not enlarge the obligations of Lessee, diminish the rights, privileges and estates of Lessee, impair the effectiveness of any payment made by Lessee or impair the effectiveness of any act performed by Lessee. And no change or division in ownership of the land, rentals, or royalties shall bind Lessee for any purpose until thirty (30) days after the owner of the soil (or his heirs, devisees, legal representatives or assigns) furnishes the Lessee with satisfactory written evidence of the change in ownership, including the original recorded muniments of title (or a certified copy of such original) when the ownership changed because of a



True and Correct
copy of
Original filed in
Pecos County
Clerk's Office

conveyance. A total or partial assignment of this lease shall, to the extent of the interest assigned, relieve and discharge Lessee of all subsequent obligations under this lease. If this lease is assigned in its entirety as to only part of the acreage, the right and option to pay rentals shall be apportioned as between the several owners ratably, according to the area of each, and failure by one or more of them to pay his share of the rental shall not affect this lease on the part of the land upon which pro rata rentals are timely paid or tendered; however, if the assignor or assignee does not file a certified copy of such assignment in the General Land Office before the next rental paying date, the entire lease shall terminate for failure to pay the entire rental due under Paragraph 3. Every assignee 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 assignee of the lease, including any liabilities to the State for unpaid royalties.

(B) ASSIGNMENT LIMITATION. Notwithstanding any provision in Paragraph 27(a), if the owner of the soil acquires this lease in whole or in part by assignment without the prior written approval of the Commissioner of the General Land Office, this lease is void as of the time of assignment and the agency power of the owner may be forfeited by the Commissioner. An assignment will be treated as if it were made to the owner of the soil if the assignee is:

- (1) a nominee of the owner of the soil;
- (2) a corporation or subsidiary in which the owner of the soil is a principal stockholder or is an employee of such a corporation or subsidiary;
- (3) a partnership in which the owner of the soil is a partner or is an employee of such a partnership;
- (4) a principal stockholder or employee of the corporation which is the owner of the soil;
- (5) a partner or employee in a partnership which is the owner of the soil;
- (6) a fiduciary for the owner of the soil; including but not limited to a guardian, trustee, executor, administrator, receiver, or conservator for the owner of the soil; or
- (7) a family member of the owner of the soil or related to the owner of the soil by marriage, blood, or adoption.

28. RELEASES. Under the conditions contained in this paragraph and Paragraph 29, Lessee may at any time execute and deliver to the owner of the soil and place of record a release or releases covering any portion or portions of the leased premises, and thereby surrender this lease as to such portion or portions, and be relieved of all subsequent obligations as to acreage surrendered. If any part of this lease is properly surrendered, the delay rental due under this lease shall be reduced by the proportion that the surrendered acreage bears to the acreage which was covered by this lease immediately prior to such surrender; however, such release will not relieve Lessee of any liabilities which may have accrued under this lease prior to the surrender of such acreage.

29. FILING OF ASSIGNMENTS AND RELEASES. If all or any part of this lease is assigned or released, such assignment or release must be recorded in the county where the land is situated, and the recorded instrument, or a copy of the recorded instrument certified by the County Clerk of the county in which the instrument is recorded, must be filed in the General Land Office within 90 days of the last execution date accompanied by the prescribed filing fee. If any such assignment is not so filed, the rights acquired under this lease shall be subject to forfeiture at the option of the Commissioner of the General Land Office.

30. DISCLOSURE CLAUSE. All provisions pertaining to the lease of the above-described land have been included in this instrument, including the statement of the true consideration to be paid for the execution of this lease and the rights and duties of the parties. Any collateral agreements concerning the development of oil and gas from the leased premises which are not contained in this lease render this lease invalid.

31. FIDUCIARY DUTY. The owner of the soil owes the State a fiduciary duty and must fully disclose any facts affecting the State's interest in the leased premises. When the interests of the owner of the soil conflict with those of the State, the owner of the soil is obligated to put the State's interests before his personal interests.

32. FORFEITURE. If Lessee shall fail or refuse to make the payment of any sum within thirty 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 Commissioner of the General Land Office, 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 General Land Office, the School Land Board, or the Railroad Commission, or if Lessee should 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 General Land Office a correct log of any well, or if Lessee shall knowingly violate any of the material provisions of this lease, or if this lease is assigned and the assignment is not filed in the General Land Office as required by law, the rights acquired under this lease shall be subject to forfeiture by the Commissioner, and he shall forfeit same when sufficiently informed of the facts which authorize a forfeiture, and when forfeited the area shall again be subject to lease under the terms of the Relinquishment Act. 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 Commissioner of the General Land Office of future compliance with the provisions of the law and of this lease and the rules and regulations that may be adopted relative hereto.

33. LIEN. In accordance with Texas Natural Resources Code 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 Texas Natural Resources Code 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 lien and security interest may be foreclosed with or without court proceedings in the manner provided in the Title 1, Chap. 9 of the Texas Business and Commerce Code. Lessee agrees that the Commissioner 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 Commissioner at any time determine that this representation is not true, then the Commissioner may declare this lease forfeited as provided herein.

34. POOLING. Lessee is hereby granted the right to pool or unitize the royalty interest of the owner of the soil under this lease with any other leasehold or mineral interest for the exploration, development and production of oil or gas or either of them upon the same terms as shall be approved by the School Land Board and the Commissioner of the General Land Office for the pooling or unitizing of the interest of the State under this lease pursuant to Texas Natural Resources Code 52.151-52.154. The owner of the soil agrees that the inclusion of this provision in this lease satisfies the execution requirements stated in Texas Natural Resources Code 52.152.

35. INDEMNITY. Lessee hereby releases and discharges the State of Texas and the owner of the soil, their officers, employees, partners, agents, contractors, subcontractors, guests, invitees, and their respective successors and assigns, of and from all and any actions and causes of action of every nature, or other harm, including environmental harm, for which recovery of damages is sought, including, but not limited to, all losses and expenses which are caused by the activities of Lessee, its officers, employees, and agents arising out of, incidental to, or resulting from, the operations of or for Lessee on the leased premises hereunder, or that may arise out of or be occasioned by Lessee's breach of any of the terms or provisions of this Agreement, or by any other negligent or strictly liable act or omission of Lessee. Further, Lessee hereby agrees to be liable for, exonerate, indemnify, defend and hold harmless the State of Texas and the owner of the soil, their officers, employees and agents, their successors or assigns, against any and all claims, liabilities, losses, damages, actions, personal injury (including death), costs and expenses, or other harm for which recovery of damages is sought, under any theory including tort, contract, or strict liability, including attorneys' fees and other legal expenses, including those related to environmental hazards, on the leased premises or in any way related to Lessee's failure to comply with any and all environmental laws; those arising from or in any way related to Lessee's operations or any other of Lessee's activities on the leased premises; those arising from Lessee's use of the surface of the leased premises; and those that may arise out of or be occasioned by Lessee's breach of any of the terms or provisions of this Agreement or any other act or omission of Lessee, its directors, officers, employees, partners, agents, contractors, subcontractors, guests, invitees, and their respective successors and assigns. Each assignee of this Agreement, or an interest therein, agrees to be liable for, exonerate, indemnify, defend and hold harmless the State of Texas and the owner of the soil, their officers, employees, and agents in the same manner provided above in connection with the activities of Lessee, its officers, employees, and agents as described above. **EXCEPT AS OTHERWISE EXPRESSLY LIMITED HEREIN, ALL OF THE INDEMNITY OBLIGATIONS AND/OR LIABILITIES ASSUMED UNDER THE TERMS OF THIS AGREEMENT SHALL BE WITHOUT LIMITS AND WITHOUT REGARD TO THE CAUSE OR CAUSES THEREOF (EXCLUDING PRE-EXISTING CONDITIONS), STRICT LIABILITY, OR THE NEGLIGENCE OF ANY PARTY OR PARTIES (INCLUDING THE NEGLIGENCE OF THE INDEMNIFIED PARTY), WHETHER SUCH NEGLIGENCE BE SOLE, JOINT, CONCURRENT, ACTIVE, OR PASSIVE.**

36. **ENVIRONMENTAL HAZARDS.** Lessee shall use the highest degree of care and all reasonable safeguards to prevent contamination or pollution of any environmental medium, including soil, surface waters, groundwater, sediments, and surface or subsurface strata, ambient air or any other environmental medium in, on, or under, the leased premises, by any waste, pollutant, or contaminant. Lessee shall not bring or permit to remain on the leased premises any asbestos containing materials, explosives, toxic materials, or substances regulated as hazardous wastes, hazardous materials, hazardous substances (as the term "Hazardous Substance" is defined in the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), 42 U.S.C. Sections 9601, et seq.), or toxic substances under any federal, state, or local law or regulation ("Hazardous Materials"), except ordinary products commonly used in connection with oil and gas exploration and development operations and stored in the usual manner and quantities. **LESSEE'S VIOLATION OF THE FOREGOING PROHIBITION SHALL CONSTITUTE A MATERIAL BREACH AND DEFAULT HEREUNDER AND LESSEE SHALL INDEMNIFY, HOLD HARMLESS AND DEFEND THE STATE OF TEXAS AND THE OWNER OF THE SOIL FROM AND AGAINST ANY CLAIMS, DAMAGES, JUDGMENTS, PENALTIES, LIABILITIES, AND COSTS (INCLUDING REASONABLE ATTORNEYS' FEES AND COURT COSTS) CAUSED BY OR ARISING OUT OF (1) A VIOLATION OF THE FOREGOING PROHIBITION OR (2) THE PRESENCE, RELEASE, OR DISPOSAL OF ANY HAZARDOUS MATERIALS ON, UNDER, OR ABOUT THE LEASED PREMISES DURING LESSEE'S OCCUPANCY OR CONTROL OF THE LEASED PREMISES. LESSEE SHALL CLEAN UP, REMOVE, REMEDY AND REPAIR ANY SOIL OR GROUND WATER CONTAMINATION AND DAMAGE CAUSED BY THE PRESENCE OR RELEASE OF ANY HAZARDOUS MATERIALS IN, ON, UNDER, OR ABOUT THE LEASED PREMISES DURING LESSEE'S OCCUPANCY OF THE LEASED PREMISES IN CONFORMANCE WITH THE REQUIREMENTS OF APPLICABLE LAW. THIS INDEMNIFICATION AND ASSUMPTION SHALL APPLY, BUT IS NOT LIMITED TO, LIABILITY FOR RESPONSE ACTIONS UNDERTAKEN PURSUANT TO CERCLA OR ANY OTHER ENVIRONMENTAL LAW OR REGULATION. LESSEE SHALL IMMEDIATELY GIVE THE STATE OF TEXAS AND THE OWNER OF THE SOIL WRITTEN NOTICE OF ANY BREACH OR SUSPECTED BREACH OF THIS PARAGRAPH, UPON LEARNING OF THE PRESENCE OF ANY HAZARDOUS MATERIALS, OR UPON RECEIVING A NOTICE FROM ANY GOVERNMENTAL AGENCY PERTAINING TO HAZARDOUS MATERIALS WHICH MAY AFFECT THE LEASED PREMISES. THE OBLIGATIONS OF LESSEE HEREUNDER SHALL SURVIVE THE EXPIRATION OR EARLIER TERMINATION, FOR ANY REASON, OF THIS AGREEMENT.**

37. **APPLICABLE LAW.** This lease is issued under the provisions of Texas Natural Resources Code 52.171 through 52.190, commonly known as the Relinquishment Act, and other applicable statutes and amendments thereto, and if any provision in this lease does not conform to these statutes, the statutes will prevail over any nonconforming lease provisions.

38. **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 General Land Office of the State of Texas. Once the filing requirements found in Paragraph 39 of this lease have been satisfied, the effective date of this lease shall be the date found on Page 1.

39. **LEASE FILING.** Pursuant to Chapter 9 of the Texas Business and Commerce 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 General Land Office. This lease is not effective until a certified copy of this lease (which is made and certified by the County Clerk from his records) is filed in the General Land Office in accordance with Texas Natural Resources Code 52.183. Additionally, this lease shall not be binding upon the State unless it recites the actual and true consideration paid or promised for execution of this lease. The bonus due the State and the prescribed filing fee shall accompany such certified copy to the General Land Office.

ADDENDUM PROVISION - #40, #41 and #42

40. **DELAY RENTALS.** As stipulated in Paragraph #3 of this lease, the rentals for this lease have been PAID-UP for the second (2nd) and third (3rd) years of the primary term hereof. Lessee or its assigns shall have the right to keep this lease in force and effect for the fourth (4th) and fifth (5th) years of the primary term provided for herein by tendering a payment of TWO THOUSAND DOLLARS (\$2000.00) per net acre prior to NOVEMBER 2, 2014, as to any acreage covered hereby and not otherwise being maintained by any other provision herein at such time.

41. If, at the expiration of the primary term, this lease is being maintained in force under any provision of the lease, or within 180 days prior to the expiration of the primary term Lessee has completed a well as a dry hole or commenced a well on the leased premises or lands pooled therewith, or Lessee is then engaged in operations on the leased premises or lands pooled therewith, Lessee agrees to begin a continuous drilling program within 180 days after the end of the primary term or within 180 days after completion of such well or the cessation of such operations, whichever is the later date; and thereafter to carry on the continuous drilling program on the leased premises or lands pooled therewith until all proration units have been drilled, allowing not more than 180 days to elapse between the completion of one well and the commencement of the succeeding well. Should Lessee fail to begin the continuous drilling program or subsequently default in the performance thereof, then in either event, this lease shall terminate as to all lands covered hereby, save and except for the proration unit surrounding each well then producing, capable of producing or upon which operations are being conducted, limited, respectively, to those depths from the surface down to the stratigraphic equivalent of the depth 100 feet below the base of the deepest penetrated formation. As used in this paragraph: i) the term "commission" means the Railroad Commission of the State of Texas or any successor agency, ii) the term "proration unit" means any acreage designated as a drilling unit or production unit in accordance with the rules of the commission (or any other governmental authority having jurisdiction) or any unit formed by pooling as provided in this lease or otherwise, iii) the terms "commenced" and "commencement" mean the date when a well is spud, and iv) the terms "completed" and "completion" mean the date the initial potential test report is filed with the commission, if a productive well, or the date the plugging report is filed with the commission, if a dry hole, in either event no later than 60 days after the drilling rig has been released. Notwithstanding the partial termination of this lease, Lessee shall continue to have the rights of ingress and egress across all of the leased premises to and from lands that remain subject to this lease, or lands pooled therewith, for the purposes described in paragraph 1 hereof, together with easements and rights of way for roads, pipelines, flowlines and other facilities on or across all of the leased premises for the exploration, development, production, gathering or transportation of oil, gas and other products from the lands still subject to this lease or lands pooled therewith. The sole liability or penalty for the failure of Lessee to drill any well or wells required or permitted by this lease shall be the termination or partial termination of Lessee's rights under the lease as provided above.

42. **COMPENSATION OR DAMAGE PAYMENTS.** All Compensation or Damage Payments will be split equally between the State of Texas and the current surface owner.

IN WITNESS WHEREOF, this instrument is executed on the date first above written.

LESSEE: PETROHAWK PROPERTIES, LP,
by P-H Energy, LLC, Its General Partner

BY: D. R. Deffenbaugh

Title: Vice President - Land

Date: 11-15-11



True and Correct
copy of
Original filed in
Brewer County
Office

STATE OF TEXAS

Steve F. Armstrong

BY: STEVE F. ARMSTRONG
as agent for the State of Texas

Date: 11-7-2011

STATE OF TEXAS

BY:
as agent for the State of Texas

Date: _____

STATE OF OKLAHOMA
COUNTY OF TULSA

(CORPORATION ACKNOWLEDGMENT)

BEFORE ME, the undersigned authority, on this day personally appeared D. R. DEFFENBAUGH
known to me to be the person whose name is subscribed to the foregoing instruments as Vice President - Land
of P-H Energy, LLC, General Partner of Petrohawk Properties, LP 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 corporation.

Given under my hand and seal of office this the 15th day of November, 2011.



Rita Kay Walker
Notary Public in and for Oklahoma

STATE OF _____
COUNTY OF _____

(CORPORATION 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 instruments as _____
of _____ 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 corporation.

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

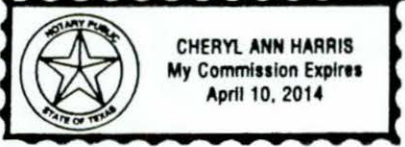
Notary Public in and for _____

STATE OF TEXAS
COUNTY OF LUBBOCK

(INDIVIDUAL ACKNOWLEDGMENT)

BEFORE ME, the undersigned authority, on this day personally appeared Steve F. Armstrong
known to me to be the persons whose names are subscribed to the foregoing instrument, and acknowledged to me that they executed the same for the
purposes and consideration therein expressed.

Given under my hand and seal of office this the 7th day of November, 2011.



Cheryl Ann Harris
Notary Public in and for State of Texas

STATE OF _____
COUNTY OF _____

(INDIVIDUAL ACKNOWLEDGMENT)

BEFORE ME, the undersigned authority, on this day personally appeared _____
known to me to be the persons whose names are subscribed to the foregoing instrument, and acknowledged to me that they executed the same for the
purposes and consideration therein expressed.

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

Notary Public in and for _____

ANY PROVISION HEREIN WHICH RESTRICTS THE SALE, RENTAL,
OR USE OF THE DESCRIBED REAL PROPERTY BECAUSE OF COLOR
OR RACE IS INVALID AND UNENFORCEABLE UNDER FEDERAL
LAW

FILE# 8613

FILED FOR RECORD ON THE 30TH DAY OF NOVEMBER A.D. 2011 2:45 P M.

DULY RECORDED ON THE 20TH DAY OF DECEMBER A.D. 2011 8:10 A M.

BY: Dianne O. Florez, DEPUTY

DIANNE O. FLOREZ, COUNTY CLERK
REEVES COUNTY, TEXAS

True and Correct
copy of
Original filed in
Reeves County
Clerk's Office

(2)

File No. 113704
Lease
Date Filed: 11/2/11
Jerry E. Patterson, Commissioner
By Git

113704

CERTIFIED TRUE AND CORRECT COPY CERTIFICATE
STATE OF TEXAS
COUNTY OF REEVES

The above and foregoing is a full, true and correct photographic copy of the original record now in my lawful custody and possession, as the same is filed/recorded in the public records of my office, found in VOL. 912, PAGE 457, THRU 463 OFFICIAL PUBLIC RECORD



I hereby certified on 01/12/2012
DIANNE O. FLOREZ, COUNTY CLERK
REEVES COUNTY, TEXAS
BY Norma Chavez DEPUTY
NORMA CHAVEZ

PETROHAWK ENERGY CORPORATION

1000 LOUISIANA STREET, SUITE 5600 • HOUSTON, TX 77002 832-204-2787

12703909

CHECK NO.

158095

REFERENCE.	INVOICE DATE	INVOICE NO.	INVOICE AMT.	PRIOR PAYMENT	DISCOUNT	AMOUNT PAID
1111-AP-1169	11/28/11	CKREQ-TEXAS .GENERAL.LA ND.OFFICE-1 1/28/11B	80000.00	0.00		80000.00
That Certain OGML Dated November 2, 2011 Executed by Steve F. Armstrong as Agent for the State of Texas. This Payment is for the GLO's Portion of the Bonus						
MF113744 (P)						
VENDOR				CHECK DATE	TOTAL	
26956 TEXAS GENERAL LAND OFFICE				11/29/11	80,000.00	

BRADLEY BROUSSARD LAND SERVICES, INC.

32102

Texas General Land Office
Date Type Reference
11/16/2011 Bill

Original Amt.
675.00

Balance Due
675.00

11/16/2011
Discount
Check Amount

Payment
675.00
X 675.00

~~\$125.00~~ 12/1
MF 113744 12703703

Cash-Iberia/BBLS

4704-Filing fees for GLO Leases

675.00



MAILING: P.O. Drawer 52826 / Lafayette, Louisiana 70505 / **PHYSICAL:** 319 Audubon Blvd. / Lafayette, Louisiana 70503
PH: 337-233-3428 / **FX:** 337-233-3427 / **WEBSITE:** www.bradleybroussard.com

November 30, 2011

Mr. Drew Reid
Texas General Land Office
P. O. Box 12873
Austin, TX 78711-2873

RE: Oil, Gas and Mineral Lease
by Steve F. Armstrong, as agent for the State of Texas
in favor of Petrohawk Properties, LP
S/2 of W/4 Sec 12, BLK 53, A-5910
Reeves County, TX

Dear Mr. Reid:

Please find enclosed funds in the amount of \$80,000 in connection with recent negotiations with Robert Malagarie of our firm, representing Petrohawk Properties, LP and the owners of the soil of the above referenced section and block in Reeves County, Texas.

Also enclosed is a copy of the partially executed Oil, Gas and Mineral Lease indicated above. We will forward the certified copy of the lease once obtained.

Should you have any questions, please contact me at 337-233-3428 or Robert at 337-962-7377.

Sincerely,
Bradley Broussard Land Services, Inc.

Michelle R. Cooper

/enc





MAILING: P.O. Drawer 52826 / Lafayette, Louisiana 70505 / PHYSICAL: 319 Audubon Blvd. / Lafayette, Louisiana 70503
PH: 337-233-3428 / FX: 337-233-3427 / WEBSITE: www.bradleybroussard.com

November 16, 2011

Mr. Drew Reid
Mineral Leasing Division
Texas General Land Office
1700 North Congress Avenue, Room 600
Austin, TX 78701-1495

RE: Processing and Recording Fees for Oil, Gas and Mineral Leases
Section 23, BLK 53; A-4088 - 160 gross acres
Section 12, BLK 53; A-3237 - 80 gross acres
Section 28, BLK 53; A-2652 - 320 gross acres
Section 35, BLK 53; A-3467 - 480 gross acres
Section 37, BLK 53; A-5968 - 320 gross acres
Section 12, BLK 53; A-5910 - 80 gross acres
Reeves County, TX

Dear Mr. Reid:

Please find enclosed funds in the amount of \$675.00 in connection with processing of the above six tracts and the recording of the leases recently negotiated by and between Robert Malagarie of our firm, representing Petrohawk Properties, LP and the owners of the soil of the above referenced sections and block in Reeves County, Texas, leases are as follows:

1. Sandra Kornegay Metcalf and Robert J. Kornegay, individually and as agents for the State of Texas being the full interest of a 160 acre tract of land described as the NW/4 of Section 23, BLK 53, A-4088, PSL Survey, Reeves Co., TX. BPA: \$2000/ac; Primary Term: 5 yrs; Rental: \$1333.34/ac; Royalty: 1/4; A File Stamped copy of said lease is included herewith.
2. Lowe Royalty Partners, LP, individually and as agents for the State of Texas being the full interest of 1200 acres of land described as the W/2 of NW/4 of Section 12, A-3237; E/2 of Section 28, A-2652; S/2 and NE/4 of Section 35, A-3467; W/2 of Section 37, A-5968; all of BLK 53, PSL Survey, Reeves County, TX. BPA: \$2000; Primary Term: 5 yrs; Rental: \$1,333.34; Royalty 1/4; A File Stamped copy of said lease is included herewith.
3. Steve F. Armstrong, individually and as agents for the State of Texas being the full interest of an 80 acre tract of land described as the S/2 of the W/4 of Section 12, BLK 53, A-5910, PSL Survey, Reeves Co., TX. BPA: \$2000/ac; Primary Term: 3 yrs with a 2 yr option to extend; Extension: \$1333.34/ac; Royalty: 1/4; A copy of the executed lease is included herewith. The File Stamped copy of said lease is forthcoming, please hold filing fee but begin the approval process.

Please advise should you require a Certified Copy of the final recorded leases.

Should you have any questions, please contact me at 337-233-3428 or Robert at 337-962-7377.

Sincerely,
Bradley Broussard Land Services, Inc.


Michelle R. Cooper

/enc

11-16-11

Lease Acquisitions
Title Research
Lease Checks
Title Curative
Seismic Permits & Options

Bradley Broussard Land Services, Inc.

mailing: Post Office Drawer 52826 • Lafayette, Louisiana 70505

physical: 319 Audubon Blvd. • Lafayette, Louisiana 70503

tel: (337) 233-3428 • *fax:* (337) 233-3427

email: BBLS@bradleybroussard.com

Right of Way Acquisitions
Abstracting of Title
State/Federal Lands Research
Well Activity Research
Acquisition Due Diligence

January 11, 2012

CONFIDENTIAL

Mr. Drew Reid
Texas General Land Office
1700 Congress Ave.
Austin, TX 78701

Ref: Certified Copy of State of Texas and Steve F. Armstrong Lease to Petrohawk Properties, L.P.

Drew,

Enclosed you will find a certified copy of the Lease from the State of Texas and Steve F. Armstrong to Petrohawk being that 80 acres and the West Half of the Southwest Quarter of Section 12, Block 53, Abstract 5910, PSL Survey. The Royalty is $\frac{1}{4}$ and the lease bonus was paid at \$2,000.00 per acre for the first 3 years and if extended for an additional 2 years, will be paid at the same \$2,000.00 bonus per acre.

Drew, as always, it is a pleasure working with you. Should you have any questions or need any additional information, please let us know.

Sincerely,
Bradley Broussard Land Services, Inc.



Robert M. Malagarie

enclosures

3

File No. 113744

Cover Letter + Bemo + Fees

Date Filed: _____

Jerry E. Patterson, Commissioner

By G14

1.12.13

TEXAS



GENERAL LAND OFFICE

JERRY PATTERSON, COMMISSIONER

October 23, 2012

Micah Strother
Petrohawk Properties
1360 Postoak Blvd., Suite 150
Houston, Texas 77056

Re: **State Lease MF 113744**

RAL Lease dated November 2, 2011 recorded in B. 912, P. 457, covering 80 ac. being Sec. 12, Blk. 53, A-5910, PSL Survey, Reeves Co., TX, Steve Armstrong, agent for State of TX, Lessor

Dear Mr. Strother:

The certified copy of the Relinquishment Act lease covering the above referenced tract has been approved and filed in our records under Mineral File numbers **MF-113744**. **Please refer to this lease number when making payments to the State and in all future correspondence concerning the lease. Failure to include the mineral file number may delay processing of any payments towards the lease.**

There are several contractual and statutory responsibilities for the Lessee which are material provisions of the lease as outlined in the agreement such as Section 10(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 be submitted to the General Land Office as well. Examples are W-1, Application to Drill; W-2, Oil Well Completion Report and Log; G-1, Gas Well Completion Report and Log; W-3, Plugging Report; 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.

Chapter 52 of the Texas Natural Resources Codes specifies that the surface owner's right to receive a portion of the revenues generated by the lease shall be in lieu of all damages to the soil. Therefore, any payments made for surface use or damages other than the authorized damages set out in the lease form must be shared equally with the state.

Your remittance of **\$80,000.00** has been applied to the State's portion of the cash bonus. In addition, we are in receipt of the processing and filing fees.

Sincerely yours,

Deborah A. Cantu
Mineral Leasing, Energy Resources
(512) 305-8598
deborah.cantu@glo.texas.gov

Stephen F. Austin Building • 1700 North Congress Avenue • Austin, Texas 78701-1495

Post Office Box 12873 • Austin, Texas 78711-2873

512-463-5001 • 800-998-4GLO

www.glo.state.tx.us

21

File No. 1137421

Final Letter

Date Filed: 10/23/12

Jerry E. Patterson, Commissioner

By GH

Check No.: 203974
Payment Type: DELAY RENTAL

Period Covered: 11/02/2014-11/02/2016
Payment Amount: \$80,000.00

15703178

Lease Number: 1044165/001 LSE

Original Lessor: STATE OF TEXAS ET AL



Lease Effective Date: 11/02/2011

Recording Information: Book # 912 Page # 457, 8613

State: TX

County: REEVES

Check Remarks:

MF 113744 DELAY RENTAL FOR YRS 4, 5

W/2 SW/4 OF SEC 12 BLK 53 A-5910, PSL SURVEY, REEVES CO, TX

RENTAL PAYMENT
4th & 5th yr.
P

121

For the Credit of:

Owner: COMMISSIONER OF THE TEXAS GENERAL
LAND OFFICE ATN MINERAL LEASING
Address: 1700 N CONGRESS AVE
AUSTIN, TX 78701

(BA#):80104210

Payment Amount: \$80,000.00

Check No.: 203974
Payment Type: DELAY RENTAL

Period Covered: 11/02/2014-11/02/2016
Payment Amount: \$80,000.00

15703178

Lease Number: 1044165/001 LSE

Original Lessor: STATE OF TEXAS ET AL

Lease Effective Date: 11/02/2011

Recording Information: Book # 912 Page # 457, 8613

State: TX

County: REEVES

Check Remarks:

W/2 SW/4 OF SEC 12 BLK 53 A-5910, PSL SURVEY, REEVES CO, TX

W/2 SW/4 OF SEC 12 BLK 53 A-5910, PSL SURVEY, REEVES CO, TX

For the Credit of:

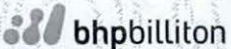
Owner: COMMISSIONER OF THE TEXAS GENERAL
LAND OFFICE ATN MINERAL LEASING
Address: 1700 N CONGRESS AVE
AUSTIN, TX 78701

(BA#):80104210

Payment Amount: \$80,000.00

VERIFY THE AUTHENTICITY OF THIS MULTI-TONE SECURITY DOCUMENT.

CHECK BACKGROUND AREA CHANGES COLOR GRADUALLY FROM TOP TO BOTTOM.



PETROHAWK ENERGY CORPORATION
ATTN LAND ADMINISTRATION
P.O. BOX 22719
HOUSTON, TX 77027-9998

Bank of America 1455 Market St. 4th Fl
San Francisco CA 94103

32-1
1110 GL

15703178
DATE 10/19/2014 CHECK NO. 203974

PAY *****80000*DOLLARS AND* 00*CENTS

AMOUNT *****\$80,000.00

VOID IF NOT CASHED WITHIN
SIX MONTHS OF ISSUE

NON TRANSFERABLE

Owner Call Center: 1-877-311-1443

PAY
TO
THE
ORDER
OF

COMMISSIONER OF THE TEXAS GENERAL
LAND OFFICE ATN MINERAL LEASING
1700 N CONGRESS AVE
AUSTIN, TX 78701

Daniel Powell
FACSIMILE SIGNATURE

Jeffrey L. Sells
FACSIMILE SIGNATURE

0000203974

File No. MF113744 (5)

Rentals - 4th & 5th yr.

Date Filed: 10/29/2014

Jerry E. Patterson, Commissioner

By JEP

10.29.14



TEXAS GENERAL LAND OFFICE
GEORGE P. BUSH, COMMISSIONER

December 15, 2016

299 Resources. LLC
Attn: Sarah DeBruyn Petros, Lease Analyst
950 17th Street, Ste. 1050
Denver, CO 80202

Re: *GLO Assignment ID #10081, Reeves County
MF-113744 and MF-113745*

Dear Ms. DeBruyn Petros:

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

Assignment, Bill of Sale and Conveyance, effective 08/01/16 from Carrizo (Permian) LLC, Assignor to 299 Production, LLC, Assignee. Filed for record under Doc. #16-10841.

Filing fees in the amount of \$50.00 were received and \$50 are still due in connection with the above assignment.

Please feel free to contact me at (512) 463-5407 or email carl.bonn@glo.texas.gov if you have further questions.

Best Regards,

Carl Bonn, CPL
Mineral Leasing-Energy Resources



October 24, 2016

State of Texas General Land Office
Attention: Carl Bonn
P. O. Box 12873
Austin, Texas 78711-2873

RE: Assignments of Working Interest
Felix Energy Holdings, LLC and Carrizo (Permian), LLC, Assignors
299 Resources, LLC, Assignee
Reeves and Culberson Counties, Texas

Dear Carl:

Please find enclosed two Assignment Summary forms as described above, for properties purchased from Felix Energy Holdings ("Felix") and Carrizo (Permian), LLC ("Carrizo") by 299 Resources, LLC ("299") in separate acquisitions, more particularly described as follows, along with 299's checks to cover the cost of approval fees:

- Felix Assignment: six leases (two in Reeves County, four in Culberson County)
Check #2125: 6 leases x \$25.00 per lease = \$150.00
- Carrizo Assignment: two leases, both in Reeves County
Check #2124: 2 leases x \$25.00 per lease = \$50.00

Once the Assignments have been approved, please send notification to my attention at 950 17th Street, Suite 1050, Denver, Colorado 80202.

Should you have any questions or concerns, or require anything further from us, please feel free to contact me on my direct line at (303)446-8083, or email spetros@KimmeridgeEnergy.com.

Respectfully yours,

Sarah DeBruyn Petros CPLTA
Lease Analyst

encl.

Handwritten notes in a large bracketed box:

Top section:
ID 10081
MF = 113 744
113 745

Bottom section:
pd \$150
owe → \$100
ID 10082
MF 118101 to 4
MF = 118118

Vertical barcode-like markings on the right side of the bottom section.



129

ORIGINAL DOCUMENT PRINTED ON CHEMICAL REACTIVE PAPER WITH MICROPRINTED BORDER



299 Resources LLC
950 17th Street, Suite 1050
Denver, CO 80202
303-825-0680

SILICON VALLEY BANK

17702904

2124

DATE

CONTROL NUMBER

90-4039/12110/14/16

151

PAY Fifty dollars and 00 cents

AMOUNT

TO THE
ORDER
OF

COMMISSIONER OF STATE OF TEXAS
GENERAL LAND OFFICE
1700 CONGRESS AVENUE
STEPHEN F. AUSTIN STATE OFFICE BLD
AUSTIN, TX 78701-1495

\$*****50.00

[Handwritten signature]



THIS DOCUMENT CONTAINS HEAT SENSITIVE INK. TOUCH OR PRESS HERE - RED IMAGE DISAPPEARS WITH HEAT.

002124



129

ORIGINAL DOCUMENT PRINTED ON CHEMICAL REACTIVE PAPER WITH MICROPRINTED BORDER

17702905

2125



299 Resources LLC
950 17th Street, Suite 1050
Denver, CO 80202
303-825-0680

SILICON VALLEY BANK

DATE

CONTROL NUMBER

90-4039/121110/14/16

152

PAY One hundred fifty dollars and 00 cents

AMOUNT

TO THE
ORDER
OF

COMMISSIONER OF STATE OF TEXAS
GENERAL LAND OFFICE
1700 CONGRESS AVENUE
STEPHEN F. AUSTIN STATE OFFICE BLD
AUSTIN, TX 78701-1495

\$*****150.00



THIS DOCUMENT CONTAINS HEAT SENSITIVE INK. TOUCH OR PRESS HERE - RED IMAGE DISAPPEARS WITH HEAT.

002125

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	Document	Execution Date/Effective Date
Reeves	16-10844	8/22/2016
Culberson	2298	8/22/2016

ASSIGNMENT FEE: \$25 per State Lease (additional \$25 after 90 days)

INTEREST BEING CONVEYED: (mark one)

Working Interest Overriding Royalty Interest Other (explain)

Remarks:

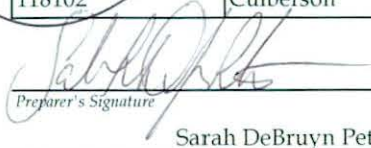
Assignment of all right, title and interest from Felix Energy Holdings II LLC
to 299 Resources LLC

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. Felix Energy Holdings II LLC	299 Resources, LLC	100	100	none

Attach additional pages as needed.

LEASES COVERED BY THIS TRANSFER:

State Lease #	COUNTY	BLOCK	SECTION	PART OF SECTION	DEPTH RESTRICTION
118118	Reeves	45	39	E/2	none
118138	Reeves	57	28	N/2	none
118103	Culberson	45	9	ALL	none
118101	Culberson	45	5	ALL	none
118104	Culberson	45	16	ALL	none
118102	Culberson	45	7	ALL	none


Preparer's Signature

Sarah DeBruyn Petros

Name (please print)

spetros@kimmeridgeenergy.com

Email Address

303-446-8083

Telephone Number

Lease Analyst

Title

10/24/16

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.

299 Resources, LLC

Company Name

950 17th Street, Suite 1050

Mailing Address

Denver, CO 80202

City, State, ZIP

917501

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)

ASSIGNMENT FEE: \$25 per State Lease (additional \$25 after 90 days)

INTEREST BEING CONVEYED: (mark one)

Working Interest Overriding Royalty Interest Other (explain)

County	Document	Execution Date/Effective Date
Reeves	16-10841	exec 8/19/16, eff 8/1/16

Remarks:

Assignment of all right, title and interest from Carrizo (Permian) LLC to 299 Resources, LLC

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. Carrizo (Permian) LLC	299 Resources, LLC	100	100	none
2.				
3.				
4.				

Attach additional pages as needed.

LEASES COVERED BY THIS TRANSFER:

State Lease #	COUNTY	BLOCK	SECTION	PART OF SECTION	DEPTH RESTRICTION
1. MF-113745	Reeves	53	12	W/2NW	none
2. MF-113744	Reeves	53	12	W/2SW	none
3.					
4.					

Preparer's Signature

Sarah DeBruyn Petros

Name (please print)

spetros@kimmeridgeenergy.com

Email Address

303-446-8083

Telephone Number

Lease Analyst

Title

10/24/2016

Date

299 Resources, LLC

Company Name

950 17th Street, Suite 1050

Mailing Address

Denver, CO 80202

City, State, ZIP

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.

97.12.07

After Recording, Return to:

299 Production, LLC

ID 10081
MF 113744
113745

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

eff 8-1-16
all

STATE OF TEXAS

§

§

COUNTY OF REEVES

§

ASSIGNMENT, BILL OF SALE AND CONVEYANCE

This ASSIGNMENT, BILL OF SALE AND CONVEYANCE (this "Assignment") is from **CARRIZO (PERMIAN) LLC**, a Delaware limited liability company, ("Assignor"), whose address is 500 Dallas Street, Suite 2300, Houston, TX 77002, to **299 Production, LLC**, a Delaware limited liability company ("Assignee"), whose address is 400 Madison Avenue, Suite 14C, New York, NY 10017, and is effective as of August 1, 2016 (the "Effective Time")

RECITALS

WHEREAS, Assignor desires to assign to Assignee, and Assignee desires to receive from Assignor, all of Assignor's right, title and interest in the assets and properties described below.

NOW, THEREFORE, for and in consideration of the mutual promises contained herein, the benefits to be derived by each party hereunder and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, Assignor and Assignee agree as follows:

ARTICLE I ASSIGNMENT OF ASSETS

1.1 Assignment. Subject to the terms and conditions of this Assignment, Assignor does hereby ASSIGN, GRANT, CONVEY, TRANSFER and DELIVER to Assignee, and Assignee agrees to acquire, the following interests and properties, including all of Assignor's right, title and interest thereto, less and except for the Excluded Assets, such interests and properties described in this Section 1.1, collectively, the "Assets"):

A. The oil and gas leases described on Exhibit "A" (including all leasehold estates, working interests, royalty interests, overriding royalty interests, fee mineral interests, net profits interests, net revenue interests, reversionary rights and all other interests therein, whether described or not, and included within the lands covered by such leases (the "Lands") (collectively the "Leases");



TRUE & CORRECT
COPY OF
ORIGINAL FILED IN
REEVES COUNTY
CLERKS OFFICE



B. All the oil and gas and associated liquid or gaseous hydrocarbons in, on and under or that is produced from or are attributable to the Lands, the Leases or the Properties ("Hydrocarbons") from and after the Effective Time;

C. To the extent assignable, all governmental permits, licenses and authorizations, as well as any applications for the same, related to the Leases, Properties or Related Assets, or the use thereof; and

D. Electronic copies of Assignor's files, records and data relating to the items described in subsections (A) through (C) above, including, without limitation, all lease, division order and other title records (including title curative documents, title opinions and title reports); surveys, maps; contracts; correspondence; regulatory and all related matters and construction documents; in each case, to the extent related to the Assets but excluding (i) any books, records, data, files, maps and accounting records to the extent disclosure or transfer is restricted by third-party agreement or applicable law and the necessary consents to transfer are not obtained, after using commercially reasonable efforts to obtain same, (ii) computer software, (iii) attorney-client privileged communications and work product of Assignor's legal counsel (other than title opinions and title reports), (iv) reserve studies and evaluations, and (v) records relating to the negotiation and consummation of the sale of the Assets (collectively, the "Records"); provided, however, that Assignor may retain copies of such files and other records as Assignor has determined may be required for litigation, tax, accounting, auditing purposes or other purposes, or that are stored as electronic records.

1.2 **TO HAVE AND TO HOLD** the Assets unto Assignee, its successors and assigns, forever, subject, however, to all the terms and conditions of this Assignment, including, without limitation, Article III.

1.3 **Excluded Assets.** The Assets shall not include, and Assignor hereby reserves and retains, the following items (collectively, the "Excluded Assets"):

A. All credits, rebates, refunds, adjustments, accounts, instruments and general intangibles, all bonds posted by Assignor and all insurance claims, all to the extent attributable to the Assets with respect to any period of time prior to the Effective Time;

B. To the extent monetary settlement for same is received by Assignee or Assignor, all claims of Assignor for refunds of or loss carry forwards with respect to (i) ad valorem, severance or any other taxes attributable to any period prior to the Effective Time, (ii) income or franchise taxes of Assignor, or (iii) any taxes attributable to the other Excluded Assets, and such other refunds, and rights thereto, for amounts paid in connection with the Assets and attributable to the period prior to the Effective Time;

C. To the extent monetary settlement for same is received by Assignee or Assignor, all proceeds, income or revenues (and any security or other deposits made) attributable to (i) the Assets for any period prior to the Effective Time, or (ii) any other Excluded Assets;

D. All of Assignor's proprietary computer software, technology, patents, trade secrets and other intellectual property;

E. All of Assignor's rights and interests in geological and geophysical data;



TRUE & CORRECT
COPY OF
ORIGINAL FILED IN
REEVES COUNTY
CLERKS OFFICE

F. All documents and instruments of Assignor that are protected by an attorney-client privilege (other than title opinions and title reports);

G. Data and other information that cannot be disclosed or assigned to Assignee as a result of confidentiality or similar arrangements under agreements with persons unaffiliated with Assignor;

H. Any and all files, records, contracts and documents relating to Assignor's efforts to sell the Assets (or any other discussions or negotiations regarding the sale or other disposition of any of the Assets), including any research, valuation or pricing information prepared by Assignor and/or its consultants in connection therewith, and any bids received for such interests and information and correspondence in connection therewith;

I. All corporate, partnership, and income tax records of Assignor;

J. All claims arising from acts, omissions or events, or damage to or destruction of the Assets before the Effective Time and all rights, titles, claims and interests of Assignor related thereto (i) under any policy or agreement of insurance or indemnity, (ii) under any bond or letter of credit, or (iii) to any insurance or condemnation proceeds or awards;

K. All leasehold not listed on Exhibit "A";

L. Any logo, service mark, copyright, trade name or trademark of or associated with Assignor or any Assignor's affiliate or any business of Assignor or of any Assignor's affiliate; and

M. A nonexclusive, non-transferable right to use for internal business purposes only any logs, maps, seismic data, engineering data and reports, reserve studies and evaluations, and other data and information being transferred as a part of the Assets.

ARTICLE II SPECIAL WARRANTY; DISCLAIMERS; CERTAIN DEFINITIONS

2.1 *Special Warranty.* Assignor hereby binds itself, its successors and assigns subject, however, to the Permitted Encumbrances, to warrant and forever defend all and singular title to the Assets for claims arising by, through or under Assignor, but not otherwise.

2.2 *Disclaimers of Warranties and Representations.*

A. Information About the Assets. Assignor disclaims all liability and responsibility for any representation, warranty, statements or communications (orally or in writing) to Assignee, including any information contained in any opinion, information or advice that may have been provided to Assignee by any employee, officer, director, agent, consultant, engineer or engineering firm, trustee, representative, investment banker, financial advisor, partner, member, beneficiary, stock holder or contractor of Assignor whenever and however made, including those made in any data room or internet site and any supplements or amendments thereto or during any negotiations with respect to this assignment or any confidentiality agreement previously executed by the Parties with respect to the Assets, excepting only those mutual representations and warranties expressly set forth in the Offer Letter. FURTHER, EXCEPT AS EXPRESSLY SET FORTH IN THIS ASSIGNMENT, ASSIGNOR MAKES NO WARRANTY OR REPRESENTATION, EXPRESS,



TRUE & CORRECT
COPY OF
ORIGINAL FILED IN
REEVES COUNTY
CLERKS OFFICE

STATUTORY OR IMPLIED, AS TO (i) THE ACCURACY, COMPLETENESS OR MATERIALITY OF ANY DATA, INFORMATION OR RECORDS FURNISHED TO ASSIGNEE IN CONNECTION WITH THE ASSETS OR OTHERWISE CONSTITUTING A PORTION OF THE ASSETS; (ii) THE PRESENCE, QUALITY AND QUANTITY OF OIL AND GAS RESERVES (IF ANY) ATTRIBUTABLE TO THE ASSETS, INCLUDING WITHOUT LIMITATION, SEISMIC DATA AND ASSIGNOR'S INTERPRETATION AND OTHER ANALYSIS THEREOF; (iii) THE ABILITY OF THE ASSETS TO PRODUCE OIL AND GAS, INCLUDING WITHOUT LIMITATION PRODUCTION RATES, DECLINE RATES AND RECOMPLETION OPPORTUNITIES; (iv) ALLOWABLES, OR OTHER REGULATORY MATTERS; (v) THE PRESENT OR FUTURE VALUE OF THE ANTICIPATED INCOME, COSTS OR PROFITS, IF ANY, TO BE DERIVED FROM THE ASSETS; (vi) THE ENVIRONMENTAL CONDITION OF THE ASSETS; (vii) THE PLUGGING AND ABANDONMENT AND SURFACE RESTORATION LIABILITIES ASSOCIATED WITH THE ASSETS; (viii) ANY PROJECTIONS AS TO EVENTS THAT COULD OR COULD NOT OCCUR; (ix) THE TAX ATTRIBUTES OF ANY ASSET; AND (x) ANY OTHER MATTERS CONTAINED IN OR OMITTED FROM ANY INFORMATION OR MATERIAL FURNISHED TO ASSIGNEE BY ASSIGNOR OR OTHERWISE CONSTITUTING A PORTION OF THE ASSETS. ANY DATA, INFORMATION OR OTHER RECORDS FURNISHED BY ASSIGNOR ARE PROVIDED TO ASSIGNEE AS A CONVENIENCE AND ASSIGNEE'S RELIANCE ON OR USE OF THE SAME IS AT ASSIGNEE'S SOLE RISK.

B. Independent Investigation. Assignee has made its own independent investigation, analysis and evaluation of the transactions contemplated by this Assignment (including Assignee's own estimate and appraisal of the extent and value of Assignor's oil and gas reserves (if any) attributable to the Assets and an independent assessment of the risks, including environmental risks, and liabilities associated with the acquisition or operations of the Assets). Assignee has had access to perform its investigation and has not relied on any representations by Assignor other than those expressly set forth in this Assignment.

C. SALE "AS IS, WHERE IS". Except as expressly set forth in this Assignment, the Assets are to be sold AS IS AND WHERE IS AND WITHOUT WARRANTY OF ANY KIND, WHETHER EXPRESS OR IMPLIED, INCLUDING, WITHOUT LIMITATION, ANY WARRANTY OF TITLE, MERCHANTABILITY, CONDITION OR FITNESS FOR A PARTICULAR PURPOSE. ASSIGNEE HAS INSPECTED THE ASSETS AND ACCEPTS THE ASSETS IN THEIR PRESENT STATUS, CONDITION AND STATE OF REPAIR, "AS IS," "WHERE IS," AND "WITH ALL FAULTS" AND IN THEIR PRESENT CONDITION AND STATE OF REPAIR. ASSIGNOR HAS NOT AND WILL NOT MAKE ANY REPRESENTATION OR WARRANTY REGARDING ANY MATTER OR CIRCUMSTANCE RELATING TO ENVIRONMENTAL LAWS, ENVIRONMENTAL LIABILITIES, THE RELEASE OF MATERIALS INTO THE ENVIRONMENT OR THE PROTECTION OF HUMAN HEALTH, SAFETY, NATURAL RESOURCES OR THE ENVIRONMENT, OR ANY OTHER ENVIRONMENTAL CONDITION OF THE ASSETS.

D. Waiver of Deceptive Trade Practices Acts. ASSIGNEE WAIVES ITS RIGHTS UNDER THE DECEPTIVE TRADE PRACTICES ACT SECTION 17.41 et seq., TEXAS BUSINESS & COMMERCE CODE, A LAW THAT GIVES CONSUMERS SPECIAL RIGHTS, AND UNDER SIMILAR STATUTES ADOPTED IN OTHER STATES, TO THE EXTENT THEY HAVE APPLICABILITY TO THE TRANSACTIONS CONTEMPLATED BY THIS ASSIGNMENT. AFTER CONSULTATION WITH AN ATTORNEY OF ITS SELECTION, ASSIGNEE CONSENTS TO THIS WAIVER.



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E. Disclaimers as to Physical Condition of the Assets. Assignor does not make any representation or warranty regarding the condition of the Assets nor the effect any such use has had on the physical condition of the Assets. Assignee shall assume the risk that the Assets may contain wastes or contaminants and that adverse physical conditions, including the presence of waste or contaminants, may not have been revealed by Assignee's investigation. Upon execution of this Assignment, Assignee shall assume all responsibility and liability related to or arising from the environmental condition of the Assets, including, without limitation, the disposal, spill or release of wastes or contamination on, in, under or from the Assets arising on or after the Effective Time.

F. General Disclaimers.

(i) EXCEPT AS SET FORTH IN THIS ASSIGNMENT, ASSIGNOR EXPRESSLY DISCLAIMS ALL LIABILITY AND RESPONSIBILITY FOR ANY REPRESENTATION, STATEMENT OR INFORMATION MADE OR COMMUNICATED (ORALLY OR IN WRITING) TO ASSIGNEE OR ANY OF ITS AFFILIATES, EMPLOYEES, AGENTS, CONSULTANTS OR REPRESENTATIVES (INCLUDING, WITHOUT LIMITATION, ANY OPINION, INFORMATION, PROJECTION OR ADVICE THAT MAY HAVE BEEN PROVIDED TO ASSIGNEE BY ANY OFFICER, DIRECTOR, EMPLOYEE, AGENT, CONSULTANT, REPRESENTATIVE OR ADVISOR OF ASSIGNOR OR ANY OF ITS AFFILIATES).

(ii) EXCEPT AS SET FORTH IN THIS ASSIGNMENT, ASSIGNOR EXPRESSLY DISCLAIMS ANY REPRESENTATION OR WARRANTY, EXPRESS, STATUTORY OR IMPLIED, AS TO (a) THE CONTENTS, CHARACTER OR NATURE OF ANY DESCRIPTIVE MEMORANDUM OR ANY REPORT OF ANY PETROLEUM ENGINEERING OR ANY GEOLOGICAL OR SEISMIC DATA OR INTERPRETATION, RELATING TO THE ASSETS, (b) THE QUANTITY, QUALITY OR RECOVERABILITY OF PETROLEUM SUBSTANCES IN OR FROM THE ASSETS, (c) ANY ESTIMATES OF THE VALUE OF THE ASSETS OR FUTURE REVENUES GENERATED BY THE ASSETS, (d) THE PRODUCTION OF HYDROCARBONS FROM THE ASSETS, (e) THE MAINTENANCE REPAIR, CONDITION, QUALITY, SUITABILITY, DESIGN OR MARKETABILITY OF THE ASSETS, (f) THE CONTENT, CHARACTER OR NATURE OF ANY DESCRIPTIVE MEMORANDUM, REPORTS, BROCHURES, STATEMENTS OR MATERIALS PREPARED BY THIRD PARTIES, (g) ANY OTHER MATERIALS OR INFORMATION THAT MAY HAVE BEEN MADE AVAILABLE OR COMMUNICATED TO ASSIGNEE, ITS AGENTS, CONSULTANTS, REPRESENTATIVES OR ADVISORS IN CONNECTION WITH THE TRANSACTIONS CONTEMPLATED HEREIN, AND FURTHER DISCLAIMS ANY REPRESENTATION OR WARRANTY, EXPRESS, STATUTORY OR IMPLIED, OF MERCHANTABILITY, FREEDOM FROM REDHIBITORY VICES, LATENT VICES OR DEFECTS, FITNESS FOR A PARTICULAR PURPOSE OR CONFORMITY TO MODELS OR SAMPLES.

ARTICLE III MISCELLANEOUS

3.1 *Separate Assignments.* Where separate assignments of Assets have been or will be executed for filing in other recording jurisdictions or counties or for filing with, and approval by, applicable governmental authorities, any such separate assignments (a) shall evidence this Assignment and assignment of the applicable Assets herein made and shall not constitute any additional assignment or assignment of the Assets, (b) are not intended to modify, and shall not modify, any of the terms, covenants and conditions or limitations on warranties set forth in this Assignment and are not intended to create, and shall not create, any representations, warranties or additional covenants of or by Assignor or Assignee and (c) shall be deemed to contain all of the terms and provisions of this Assignment, as fully and to all intents and purposes as though the



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same were set forth at length in such separate assignments.

3.2 *Governing Law.* This Assignment is governed by and must be construed according to the laws of the State of Texas, excluding any conflicts-of-law rule or principle that might apply the law of another jurisdiction. The state or federal courts of Harris County, Texas shall have exclusive jurisdiction and shall be the exclusive forum and venue for any cause of action, suit, litigation or other proceeding arising out of or relating to this Agreement. Each party hereby irrevocably and unconditionally waives any and all objections or challenges to the venue of any action, suit or proceeding arising out of this Assignment in the state or federal courts of Harris County, Texas.

3.34 *Further Assurances.* Assignor and Assignee shall execute and deliver such other instruments and documents and take such other actions as may be reasonably necessary to evidence and effectuate the transactions contemplated by this Assignment.

3.4 *Successors and Assigns.* This Assignment shall bind and inure to the benefit of the parties hereto and their respective successors and assigns.

3.5 *Counterparts.* This Assignment may be executed in any number of counterparts, and each such counterpart hereof shall be deemed to be an original instrument, but all of such counterparts shall constitute for all purposes one agreement. To facilitate recordation, there are omitted from the Exhibits to this Assignment in certain counterparts descriptions of the Assets located in recording jurisdictions other than the jurisdiction in which the counterpart is to be filed or recorded.

IN WITNESS WHEREOF, this Assignment has been executed by the parties hereto as of August 15, 2016 but is effective for all purposes as of the Effective Time.

ASSIGNOR:

CARRZIO (PERMIAN) LLC

By: 

Andrew R. Agosto, Vice President - BD

ASSIGNEE:

299 Production, LLC

By: _____

~~Noam Lockshin, Vice President~~

Ben Dell, President



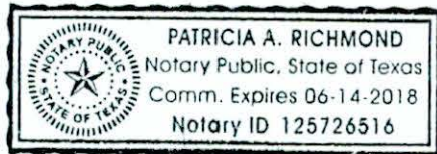
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ACKNOWLEDGMENTS

STATE OF TEXAS §
COUNTY OF HARRIS §

I, the undersigned, a notary public of the said county, do hereby certify that on this 19th day of August, 2016, before me personally appeared Andrew R. Agosto, who acknowledged himself to be the Vice President – Business Development for **CARRIZO (PERMIAN) LLC**, a Delaware limited liability company, and that he as such officer, being so authorized to do so, executed the foregoing instrument for the purposes therein contained, by signing the name of the company by himself as said officer.

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



Patricia A. Richmond
Notary Public's Signature

STATE OF NEW YORK §
COUNTY OF NEW YORK §

I, the undersigned, a notary public of the said county, do hereby certify that on this ____ day of August, 2016, before me personally appeared Noam Lockshin, who acknowledged himself to be the Vice President of 299 Production, LLC, a Delaware limited liability company, and that he as such officer, being so authorized to do so, executed the foregoing instrument for the purposes therein contained, by signing the name of the company by himself as said officer.

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

Notary Public's Signature



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same were set forth at length in such separate assignments.

3.2 *Governing Law.* This Assignment is governed by and must be construed according to the laws of the State of Texas, excluding any conflicts-of-law rule or principle that might apply the law of another jurisdiction. The state or federal courts of Harris County, Texas shall have exclusive jurisdiction and shall be the exclusive forum and venue for any cause of action, suit, litigation or other proceeding arising out of or relating to this Agreement. Each party hereby irrevocably and unconditionally waives any and all objections or challenges to the venue of any action, suit or proceeding arising out of this Assignment in the state or federal courts of Harris County, Texas.

3.34 *Further Assurances.* Assignor and Assignee shall execute and deliver such other instruments and documents and take such other actions as may be reasonably necessary to evidence and effectuate the transactions contemplated by this Assignment.

3.4 *Successors and Assigns.* This Assignment shall bind and inure to the benefit of the parties hereto and their respective successors and assigns.

3.5 *Counterparts.* This Assignment may be executed in any number of counterparts, and each such counterpart hereof shall be deemed to be an original instrument, but all of such counterparts shall constitute for all purposes one agreement. To facilitate recordation, there are omitted from the Exhibits to this Assignment in certain counterparts descriptions of the Assets located in recording jurisdictions other than the jurisdiction in which the counterpart is to be filed or recorded.

IN WITNESS WHEREOF, this Assignment has been executed by the parties hereto as of August 15, 2016 but is effective for all purposes as of the Effective Time.

ASSIGNOR:

CARRZIO (PERMIAN) LLC

By: 

Andrew R. Agosto, Vice President - BD

ASSIGNEE:

299 Production, LLC

By: 

~~Noam Lockshin, Vice President~~

Ben Dell, President



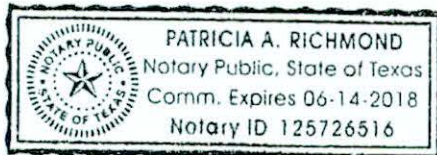
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ACKNOWLEDGMENTS

STATE OF TEXAS §
COUNTY OF HARRIS §

I, the undersigned, a notary public of the said county, do hereby certify that on this ____ day of August, 2016, before me personally appeared Andrew R. Agosto, who acknowledged himself to be the Vice President – Business Development for **CARRIZO (PERMIAN) LLC**, a Delaware limited liability company, and that he as such officer, being so authorized to do so, executed the foregoing instrument for the purposes therein contained, by signing the name of the company by himself as said officer.

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

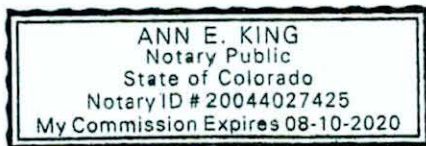


Patricia A. Richmond
Notary Public's Signature

STATE OF NEW YORK §
COUNTY OF NEW YORK §

I, the undersigned, a notary public of the said county, do hereby certify that on this 19th day of August, 2016, before me personally appeared Ben Dell, who acknowledged himself to be the ~~Vice~~ President of 299 Production, LLC, a Delaware limited liability company, and that he as such officer, being so authorized to do so, executed the foregoing instrument for the purposes therein contained, by signing the name of the company by himself as said officer.

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



Ann E. King
Notary Public's Signature



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Exhibit "A"

Attached to and made a part of that certain
ASSIGNMENT, BILL OF SALE AND CONVEYANCE, dated effective of August 1, 2016, by and between
CARRIZO (PERMIAN) LLC, as Assignor, and
299 Production, LLC, as Assignee

Lessor	Lessee	State Lse No.	Lease date	Book	Page	Records	Blk	Sec	Description	Acreage
Lowe Royalty Partners	Petrohawk Properties, L.P.	MF113745	9-1-2011	906	220	OPR	53	12	W/2 of NW/4	80.0
Steve F. Armstrong	Petrohawk Properties , L.P.	MF 113744	11-2-2011	912	457	OPR	53	12	W/2 of SW/4	80.0

BY: ER *[Signature]*, DEPUTY

Inst No. 16-10841
DIANNE O. FLOREZ
COUNTY CLERK
2016 AUG 25 at 11:19 AM
REEVES COUNTY, TEXAS



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07.10.01

2015-08-25

6

File No. MF 113744
Assign ID # 10081
Permian to 299
Date Filed: 12-15-16
George P. Bush, Commissioner
By AT

THE STATE OF TEXAS
COUNTY OF REEVES
I, Dianne O. Florez, Clerk of the County Court in and for said County and State do hereby certify that the foregoing is a true and correct copy of Assignment Bill of Sale dated Aug 25, 2014, filed for record in my office this 25 day of August at 11:30 AM, under Clerk's File No. 16-10841, to be recorded in the Official Public Records Records of Reeves County, Texas.
TO CERTIFY WHICH, Witness my hand and official seal at Pecos, Texas this 25 day of August, 20 14.
By Chia Gunn Deputy. DIANNE O. FLOREZ, COUNTY CLERK
REEVES COUNTY, TEXAS

**McELROY, SULLIVAN, MILLER,
WEBER & OLMSTEAD, L.L.P.**
Attorneys at Law

MAILING ADDRESS

P.O. BOX 12127
AUSTIN, TX 78711

1201 SPYGLASS DRIVE
SUITE 200
AUSTIN, TX 78746

TELEPHONE

(512) 327-8111

FAX

(512) 327-6566

August 16, 2017

Via Hand Delivery

Mr. J. Daryl Morgan
Texas General Land Office
Stephen F. Austin State Bldg.
1700 N. Congress St.
Austin, Texas 78701

Re: Pooling Agreement
299 Production, LLC, now "PDC Permian Inc."
Liam State 53-12 1H Unit
Reeves County

Dear Mr. Morgan:

Enclosed are duplicate executed originals of the Liam State 53-12 1H Unit Pooling Agreement. Also enclosed to each agreement are Exhibits A, B, and C.

After proper execution and acknowledgement by the Commissioner, please return one fully executed original to me. If you should have any questions or need additional information, please do not hesitate to contact me.

Respectfully submitted,



Krystal Eversdyk

cc: PDC Permian Inc.

Enclosures



7.0.0.0

8

File No. M-113744

Ltr. From Mgm W + O County

Date Filed: 8/21/17

George P. Barr, Commissioner

By [Signature]



TEXAS GENERAL LAND OFFICE
GEORGE P. BUSH, COMMISSIONER

August 21, 2017

Ms. Krystal Eversdyk
McElroy, Sullivan, Miller, Weber & Olmstead, LLP
P. O. Box 12127
Austin, Texas 78711-2127

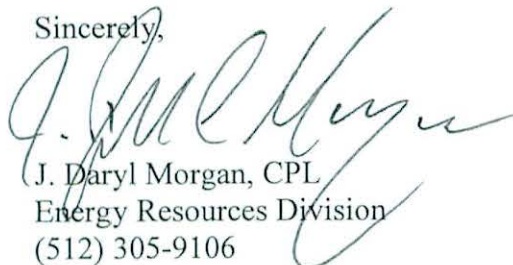
Re: Pooling Agreement
PDC Permian, Inc.
Liam State 53-12 1H Unit
GLO Unit No. 8234
Reeves County, Texas

Dear Ms. Eversdyk:

Enclosed is a duplicate original of the above referenced Pooling Agreement that has been executed by George P. Bush, Commissioner of the Texas General Land Office. We have retained the other original of the Pooling Agreement for our files. Please have your client refer to the referenced GLO Unit No. when filing Royalty Reports with the GLO.

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

Sincerely,


J. Daryl Morgan, CPL
Energy Resources Division
(512) 305-9106

Enclosure

9

M-113744

File No.

Ltr. to MSMWD

County

8/21/17

Date Filed:

George P. Bush
Commissioner

By

[Signature]

DO NOT DESTROY



Texas General Land Office

UNIT AGREEMENT MEMO

UPA169331

Unit Number 8234

Operator Name 299 Production, LLC

Effective Date 11/01/2016

Customer ID C000089360

Unitized For Oil And Gas

Unit Name Liam State 53-12

Unit Term

County 1 Reeves

RRC District 1 08

Old Unit Number Inactive Status Date

County 2

RRC District 2

County 3

RRC District 3

County 4

RRC District 4

Unit type Permanent

State Net Revenue Interest Oil 0.12500000

State Part in Unit 1.00000000

Unit Depth Allow All Depths

Well

From Depth

Formation

To Depth

Participation Basis Surface Acreage

If Exclusions Apply: See Remarks

Lease Number	Tract No	Lease Acres in Unit	Total Unit Acres	Tract Participation	O/G	Lease Royalty	NRI of Lease in Unit	Royalty Rate Reduction Clause
MF113745	1	80.000000	320.000000	0.25000000	O/G	0.12500000	0.03125000	No
MF113744	2	80.000000	320.000000	0.25000000	O/G	0.12500000	0.03125000	No
MF117815	3	160.000000	320.000000	0.50000000	O/G	0.12500000	0.06250000	

API Number

4238935361

Remarks:

Prepared By:

GLO Base Updated By:

RAM Approval By:

GIS By:

Well Inventory By:

Prepared Date:

GLO Base Date:

RAM Approval Date:

GIS Date:

WI Date:

11/01/2016

11/01/2016

11/2/16

8/23/2017

11/01/2016

Pooling Committee Report

To: School Land Board

UPA169331

Date of Board Meeting: 11/01/2016

Unit Number: 8234

Effective Date: 11/01/2016

Unit Expiration Date:

Applicant: 299 Production, LLC

Attorney Rep:

Operator: 299 Production, LLC

Unit Name: Liam State 53-12

Field Name: PHANTOM (WOLFCAMP)

County: Reeves

<u>Lease Type</u>	<u>Lease Number</u>	<u>Lease Royalty</u>	<u>Expiration Date</u>	<u>Lease Term</u>	<u>Lease Acres</u>	<u>Lease Acres In Unit</u>	<u>Royalty Participation</u>
RAL	MF113744	0.12500000	11/02/2016	5 years	80.000000	80.000000	0.03125000
RAL	MF113745	0.12500000	09/01/2016	5 years	80.000000	80.000000	0.03125000
RAL	MF117815	0.12500000	06/23/2016	7 months	640.000000	160.000000	0.06250000

Private Acres:	0.000000
State Acres:	320.000000
Total Unit Acres:	320.000000

<u>Participation Basis:</u>	Surface Acreage
Surface Acreage	
<u>State Acreage:</u>	100.00%
<u>State Net Revenue Interest:</u>	12.50%

<u>Unit Type:</u>	<u>Unitized for:</u>
Permanent	Oil And Gas
<u>Term:</u>	

<u>RRC Rules:</u>	<u>Spacing Acres:</u>
Yes	704 acres for a 10,200 foot lateral (FTP to LTP).

Working File Number: UPA169331

REMARKS:

- 299 Production, LLC is requesting permanent oil and gas pooling of all depths in order to test the Wolfcamp formation.
- The applicant spud the unit well on September 18, 2016. A 10,200 foot lateral is expected to be drilled.
- With Board approval of the unit the State's unit royalty participation will be 12.5%.
- The State will participate on a unitized basis from the date of first production.

POOLING COMMITTEE RECOMMENDATION:

The Pooling Committee recommends Board approval of a permanent oil and gas unit under the above-stated provisions.



Mary Smith - Office of the Attorney General



Date



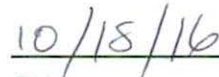
Robert Hatter - General Land Office



Date



Diane Morris - Office of the Governor



Date

S. ALSTON
A-4335

K.M. ALSTON
A-4333

G.W. GOSS
A-2628

0

11

PSL

L.L. FORD
A-3237
MF113745

12

S. ALSTON
A-4336

G.W. GOSS
A-2630

W.E.
TINNIN
A-2760

L. FORD
A-5910
MF113744

14

13

K.M. ALSTON
A-4334

G.W. GOSS
A-2631

PBHL

W.P. BRYAN
A-4088

23

STATE
A-3972

C.A. LYNN
A-2294

CULBERSON
COUNTY

REEVES
COUNTY

Unit #8234
299 Production, LLC.
Liam State 53-12 Unit
Phantom (Wolfcamp) Field
Reeves County, Texas

1,500 750 0 1,500 Feet



The Texas General Land Office makes no representations or warranties regarding the accuracy or completeness of the information depicted on this map or the data from which it was produced. This map IS NOT suitable for navigational purposes and does not purport to depict or establish boundaries between private and public land.



Map Generated by:
Mark Conway
Enterprise Technology Solutions/GIS
November 2016

POOLING AGREEMENT
299 PRODUCTION, LLC
LIAM STATE 53-12 1H UNIT
GLO UNIT NO. 8234
REEVES COUNTY, TEXAS

THIS AGREEMENT is entered into by and between the Commissioner of the General Land Office, on behalf of the State of Texas, as "Lessor" and 299 Production, LLC, herein referred to as "Lessee", and such other interested parties as may join in the execution hereof, the undersigned parties herein collectively referred to as the "parties", in consideration of the mutual agreements hereinafter set forth and other valuable considerations, the receipt and sufficiency of which are hereby acknowledged, and for the purposes and upon the terms and conditions which follow:

PURPOSES:

1.

This Pooling Agreement ("Agreement") is made for the purposes of conservation and utilization of the pooled mineral, to prevent waste, to facilitate orderly development and to preserve correlative rights. To such end, it is the purpose of this Agreement to effect equitable participation within the unit formed hereby. This Agreement is intended to be performed pursuant to and in compliance with all applicable statutes, decisions, regulations, rules, orders and directives of any governmental agency having jurisdiction over the production and conservation of the pooled mineral and in its interpretation and application shall, in all things, be subject thereto.

UNIT DESCRIPTION:

2.

The oil and gas leases, which are included within the pooled unit, are listed on the attached Exhibit "A", to which leases and the records thereof reference is here made for all pertinent purposes. The pooled unit shall consist of all of the lands described in Exhibit "B" attached hereto and made a part hereof. A plat of the pooled unit is attached hereto as Exhibit "C".

MINERAL POOLED:

3.

The mineral pooled and unitized ("pooled mineral") hereby shall be oil and gas including all hydrocarbons that may be produced from an oil well or a gas well as such wells are recognized and designated by the Railroad Commission of Texas or other state regulatory agency having jurisdiction of the drilling and production of oil and gas wells. The pooled mineral shall extend to all depths underlying the surface boundaries of the pooled unit subject to the provision in the State Lease or Leases for Horizontal Severance ("unitized interval").

POOLING AND EFFECT:

4.

The parties hereto commit all of their interests which are within the unit to the extent and as above described into said unit and unitize and pool hereunder the separate tracts described on the attached Exhibit "B", for and during the term hereof, so that such pooling or unitization shall have the following effect:

- (a) The unit, to the extent as above described, shall be operated as an entirety for the exploration, development and production of the pooled mineral, rather than as separate tracts.
- (b) All drilling operations, reworking or other operations with respect to the pooled mineral on land within the unit shall be considered as though the same were on each separate tract in the unit, regardless of the actual location of the well or wells thereon, for all purposes under the terms of the respective leases or other contracts thereon and this Agreement. In the event the unitized area covered by this Agreement is maintained in force by drilling or reworking operations conducted on a directional or horizontal well drilled under the unitized area from a surface location on adjacent or adjoining lands not included within the boundaries of the unitized area, such operations shall be considered to have been commenced on the unitized area when drilling is commenced on the adjacent or adjoining land for the purpose of directionally drilling under the unitized area and production of oil or gas from the unitized area through any directional or horizontal well surfaced on adjacent or adjoining land or drilling or reworking of any such well shall be considered production or drilling or reworking operations, as the case may be, on the unitized area for all purposes under this Agreement. Nothing in this Agreement is intended or shall be construed as granting to Lessee any leasehold interest, easements, or other rights in or with respect to any such adjacent or adjoining land in addition to any such leasehold interests, easements, or other rights which the lessee, operator or other interest owner in the unitized area may have lawfully acquired from the state or others.
- (c) Production of the pooled mineral from the unit allocated to each separate tract, respectively, as hereinafter provided, shall be deemed to have been produced from each such separate tract in the unit, regardless of the actual location of the well or wells thereon, for all purposes under the terms of the respective leases or other contracts thereon and this Agreement.
- (d) All rights to the production of the pooled mineral from the unit, including royalties and other payments, shall be determined and governed by the lease or other contract pertaining to each separate tract, respectively, based upon the production so allocated to such tract only, in lieu of the actual production of the pooled mineral therefrom. Provided that, payments that are made on a per acre basis shall be reduced according to the number of acres pooled and included herein, so that payments made on a per acre basis shall be calculated based upon the number of acres actually included within the boundaries of the pooled unit covered by this Agreement.
- (e) A shut-in oil or gas well located upon any land or lease included within said unit shall be considered as a shut-in oil or gas well located upon each land or lease included within said unit; provided, however, that shut-in oil or gas well royalty shall be paid to the State on each State lease wholly or partially within the unit, according to the terms of such lease as though such shut-in oil or gas well were located on said lease, it

being agreed that shut-in royalties provided in each State lease shall not be shared with other royalty owners.

- (f) Notwithstanding any other provision hereof, it is expressly agreed that each State lease may be maintained in force as to areas lying outside the unitized area described in Exhibit "B" only as provided in each such lease without regard to unit operations or unit production. Neither production of the pooled mineral, nor unit operations with respect thereto, nor the payment of shut-in royalties from a unit well, shall serve to hold any State lease in force as to any area outside the unitized area described in Exhibit "B" regardless of whether the production or operations on the unit are actually located on the State lease or not. "Area" as used in this paragraph shall be based upon surface acres to the end that, except as may otherwise be provided in each State Lease, the area inside the surface boundaries of the pooled unit, if held, will be held as to all depths and horizons.
- (g) If the Railroad Commission of Texas (or any other Texas regulatory body having jurisdiction) shall adopt special field rules providing for oil and/or gas proration units of less than 320 acres, then Lessee agrees to either (1) drill to the density permitted by the Railroad Commission, (2) make application to the School Land Board of the State of Texas to reform the unit to comply with Railroad Commission unit rules, or (3) make application to the School Land Board of the State of Texas for such remedy as may be agreeable to the Board.
- (h) This Agreement shall not relieve Lessee from the duty of protecting the State leases described in Exhibit "A" and the State lands within the boundaries of the pooled unit described in Exhibit "B" from drainage from any well situated on privately owned land, lying outside the unitized area described in Exhibit "B", but, subject to such obligation, Lessee may produce the allowable for the entire unit as fixed by the Railroad Commission of Texas or other lawful authority, from any one or more wells completed thereon.
- (i) There shall be no obligation to drill internal offsets to any other well on separate tracts within the pooled unit, nor to develop the lands within the boundaries thereof separately, as to the pooled mineral.
- (j) Should this Agreement terminate for any cause, the leases and other contracts affecting the lands within the unit, if not then otherwise maintained in force and effect, shall remain and may be maintained in force and effect under their respective terms and conditions in the same manner as though there had been production or operations under said lease or contract and the same had ceased on the date of the termination of this Agreement.

ALLOCATION OF PRODUCTION:

5.

For the purpose of computing the share of production of the pooled mineral to which each interest owner shall be entitled from the pooled unit, there shall be allocated to each tract committed to said unit that pro rata portion of the pooled mineral produced from the pooled unit which the number of surface acres covered by each such tract and included in the unit bears to the total number of surface acres included in said unit, and the share of production to which each interest owner is entitled shall be computed on the basis of such owner's interest in the production so allocated to each tract.

TAKING ROYALTY IN KIND:

6.

Notwithstanding anything contained herein to the contrary, the State may, at its option, upon not less than sixty (60) days notice to Lessee, require that payment of all or any royalties accruing to the State under this pooling or unitization agreement be made in kind, without deduction for the cost of producing, gathering, storing, separating, treating, dehydrating, compressing, processing, transporting and otherwise making the oil, gas and other products produced hereunder ready for sale or use.

EFFECTIVE DATE:

7.

Upon execution by the Commissioner of the General Land Office of the State of Texas this Agreement shall become effective as of November 1, 2016.

TERM:

8.

This Agreement shall remain in effect so long as the pooled mineral is being produced from said unit, or so long as all leases included in the pooled unit are maintained in force by payment of delay rentals or shut-in oil or gas well royalties, by drilling or rework, or by other means, in accordance with the terms of said leases. Nothing herein shall amend or modify Section 52.031 of the Natural Resources Code, or any of the provisions thereof, which are contained in any State lease, covered by this Agreement.

STATE LAND:

9.

Insofar as the royalty interest of the State of Texas in and under any State tract committed to the unit is concerned, this Agreement is entered into, made and executed by the undersigned Commissioner of the General Land Office by virtue of the authority and pursuant to the provisions of Subchapter E, Chapter 52, of the Natural Resources Code, authorizing the same, after the prerequisites, findings and approval hereof, as provided in said Code having been duly considered, made and obtained.

DISSOLUTION:

10.

The unit covered by this Agreement may be dissolved by Lessee, his heirs, successors or assigns, by an instrument filed for record in Reeves County, Texas, and a certified copy thereof filed in the General Land Office at any time after the cessation of production on said unit or the completion of a dry hole thereon prior to production or upon such other date as may be approved by the School Land Board and mutually agreed to by the undersigned parties, their successors or assigns.

RATIFICATION/WAIVER:

11.

Nothing in this Agreement, nor the approval of this Agreement by the School Land Board, nor the execution of this Agreement by the Commissioner shall: (1) operate as a ratification or revivor of any State lease that has expired, terminated, or has been released in whole or in part or terminated under the terms of such State lease or the laws applicable thereto; (2) constitute a waiver or release of any claim for money, oil, gas or other hydrocarbons, or other thing due to the State by reason of the existence or failure of such lease; (3) constitute a waiver or release of any claim by the State that such lease is void or voidable for any reason, including, without limitation, violations of the laws of the State with respect to such lease or failure of consideration; (4) constitute a confirmation or recognition of any boundary or acreage of any tract or parcel of land in which the State has or claims an interest; or (5) constitute a ratification of, or a waiver or release of any claim by the State with respect to any violation of a statute, regulation, or any of the common laws of this State, or any breach of any contract, duty, or other obligation owed to the State.

COUNTERPARTS:

12.

This Agreement may be executed in counterparts and if so executed shall be valid, binding and have the same effect as if all the parties hereto actually joined in and executed one and the same document. For recording purposes and in the event counterparts of this Agreement are executed, the executed pages, together with the pages necessary to show acknowledgments, may be combined with the other pages of this Agreement so as to form what shall be deemed and treated as a single original instrument showing execution by all parties hereto.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement upon the respective dates indicated below.

Date Executed 8/18/17

STATE OF TEXAS

By: [Signature]
George P. Bush, Commissioner
of the General Land Office

Legal
Content
Geology
Executive

[Signature]

Date Executed 8/15/17

PDC Permian Inc.
~~299 PRODUCTION, LLC~~

By: [Signature]
O. F. Baldwin II
Its: Vice President - Land

STATE OF COLORADO

COUNTY OF Denver

This instrument was acknowledged before me on August 15, 2017, by O. F. Baldwin II
as Vice President - Land of 299 PRODUCTION, LLC, a Delaware Corporation
PDC Permian Inc.
limited liability company on behalf of said company.

BRITTNEY VALENTI
NOTARY PUBLIC
STATE OF COLORADO
NOTARY ID 20164016988
MY COMMISSION EXPIRES MAY 4, 2020

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

CERTIFICATE

I, Stephanie Crenshaw, Secretary of the School Land Board of the State of Texas, do hereby certify that at a meeting of the School Land Board duly held on the 1st day of November, 2016, the foregoing instrument was presented to and approved by said Board under the provisions of Subchapter E, Chapter 52, of the Natural Resources Code, all of which is set forth in the Minutes of the Board of which I am custodian.

IN TESTIMONY WHEREOF, witness my hand this 1st day of August, 2016.

[Signature]
Secretary of the School Land Board

EXHIBIT "A"

LEASES SUBJECT TO POOLED UNIT:

Lease Number 1

Date: September 1, 2011

Recording: Volume 906, Page 220, Official Public Records, Reeves County, Texas.

Mineral File No. MF-113745

Lessor: **The State of Texas, acting by and through its agent, Lowe Royalty Partners, LP, represented by Mary Ralph Lowe, Managing Partner**

Lessee: Petrohawk Properties, LP

Lands Covered: W/2 of NW/4 of Section 12, Block 53, PSL Survey, Reeves County, Texas, containing 80.00 acres more or less

Lease Number 2

Date: November 2, 2011

Recording: Volume 912, Page 457, Official Public Records, Reeves County, Texas.

Mineral File No. MF-113744

Lessor: **The State of Texas, acting by and through its agent, Steven F. Armstrong**

Lessee: Petrohawk Properties, LP

Lands Covered: W/2 of SW/4 of Section 12, Block 53, A-5910 PSL Survey, Reeves County, Texas, containing 80.00 acres more or less

Lease Number 3

Date: February 4, 2016



Recording: Volume 1256, Page 766, Official Public Records, Reeves County, Texas.

Mineral File No. MF-117815

Lessor: **The State of Texas, acting by and through its agent, The Clyde Michael Williams, III Trust, by Clyde Michael Williams, III, Trustee**

Lessee: ConocoPhillips Company

Lands Covered: Insofar and only Insofar:
W/2 of W/2 of Section 13, Block 53, PSL Survey, A-2631, Reeves County, Texas, containing 160.00 acres more or less



Lease Number 4

Date: February 4, 2016

Recording: Volume 1246, Page 600, Official Public Records, Reeves County, Texas.

Mineral File No. MF-117815

Lessor: **The State of Texas, acting by and through its agent, Clyde Michael Williams, III, dealing in his sole and separate property**

Lessee: ConocoPhillips Company

Lands Covered: Insofar and only Insofar:
W/2 of W/2 of Section 13, Block 53, PSL Survey, A-2631, Reeves County, Texas, containing 160.00 acres more or less

Lease Number 5

Date: February 23, 2016

Recording: Volume 1246, Page 516, Official Public Records, Reeves County, Texas.

Mineral File No. MF-117815

Lessor: **The State of Texas, acting by and through its agent, Crimson Properties, Ltd. c/o Ralph J. Lawson**

Lessee: ConocoPhillips Company

Lands Covered: Insofar and only Insofar:
W/2 of W/2 of Section 13, Block 53, PSL Survey, A-2631, Reeves
County, Texas, containing 160.00 acres more or less

Lease Number 6

Date: February 4, 2016

Recording: Volume 1246, Page 588, Official Public Records, Reeves County, Texas.

Mineral File No. MF-117815

Lessor: **The State of Texas, acting by and through its agent, Edith Gibbs Williams, by Clyde Michael Williams, III, Attorney-in-fact**

Lessee: ConocoPhillips Company

Lands Covered: Insofar and only Insofar:
W/2 of W/2 of Section 13, Block 53, PSL Survey, A-2631, Reeves
County, Texas, containing 160.00 acres more or less

Lease Number 7

Date: February 4, 2016

Recording: Volume 1256, Page 714, Official Public Records, Reeves County, Texas.

Mineral File No. MF-117815

Lessor: **The State of Texas, acting by and through its agent, The Edith Gibbs Williams Trust, by Edith Gibbs Williams, Trustee**

Lessee: ConocoPhillips Company

Lands Covered: Insofar and only Insofar:
W/2 of W/2 of Section 13, Block 53, PSL Survey, A-2631, Reeves
County, Texas, containing 160.00 acres more or less

Lease Number 8

Date: February 1, 2016

Recording: Volume 1257, Page 7, Official Public Records, Reeves County, Texas.



Mineral File No. MF-117815

Lessor: The State of Texas, acting by and through its agent, E.M. Smither Company, a partnership consisting of the following members: Charles W. Smither Company, A Texas General Partnership, Cornelia S. Davis Company, LLC, a Texas Limited Liability Company, Eugene M. Smither Company, A Texas General Partnership, Roland E. Black Living Trust dated May 10, 2010, and Virginia S. King Company

Lessee: ConocoPhillips Company

Lands Covered: Insofar and only Insofar:
W/2 of W/2 of Section 13, Block 53, PSL Survey, A-2631, Reeves County, Texas, containing 160.00 acres more or less

Lease Number 9

Date: February 23, 2016

Recording: Volume 1248, Page 96, Official Public Records, Reeves County, Texas.

Mineral File No. MF-117815

Lessor: The State of Texas, acting by and through its agent, Sarah Hawley Dunning and John Richard Hawley, Co-Trustees of the Eva Smither Hawley Family Trust

Lessee: ConocoPhillips Company

Lands Covered: Insofar and only Insofar:
W/2 of W/2 of Section 13, Block 53, PSL Survey, A-2631, Reeves County, Texas, containing 160.00 acres more or less

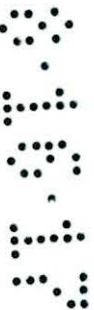
Lease Number 10

Date: February 23, 2016

Recording: Volume 1246, Page 552, Official Public Records, Reeves County, Texas.

Mineral File No. MF-117815

Lessor: The State of Texas, acting by and through its agent Florine Klusmann



Lessee: ConocoPhillips Company

Lands Covered: Insofar and only Insofar:
W/2 of W/2 of Section 13, Block 53, PSL Survey, A-2631, Reeves
County, Texas, containing 160.00 acres more or less

Lease Number 11

Date: February 23, 2016

Recording: Volume 1246, Page 576, Official Public Records, Reeves County, Texas.

Mineral File No. MF-117815

Lessor: **The State of Texas, acting by and through its agent, Gertrude J. Smither, by John Jackson Smither, Attorney-in-Fact**

Lessee: ConocoPhillips Company

Lands Covered: Insofar and only Insofar:
W/2 of W/2 of Section 13, Block 53, PSL Survey, A-2631, Reeves
County, Texas, containing 160.00 acres more or less

Lease Number 12

Date: February 4, 2016

Recording: Volume 1246, Page 612, Official Public Records, Reeves County, Texas.

Mineral File No. MF-117815

Lessor: **The State of Texas, acting by and through its agent, John Thomas Smither Williams, dealing in his sole and separate property, by Clyde Michael Williams, III, Attorney-in-Fact**

Lessee: ConocoPhillips Company

Lands Covered: Insofar and only Insofar:
W/2 of W/2 of Section 13, Block 53, PSL Survey, A-2631, Reeves
County, Texas, containing 160.00 acres more or less

Lease Number 13

Date: February 4, 2016



Recording: Volume 1256, Page 734, Official Public Records, Reeves County, Texas.

Mineral File No. MF-117815

Lessor: **The State of Texas, acting by and through its agent, The John Thomas Smither Williams Trust, by John Thomas Smither Williams, Trustee**

Lessee: ConocoPhillips Company

Lands Covered: Insofar and only Insofar:
W/2 of W/2 of Section 13, Block 53, PSL Survey, A-2631, Reeves County, Texas, containing 160.00 acres more or less

Lease Number 14

Date: February 4, 2016

Recording: Volume 1246, Page 624, Official Public Records, Reeves County, Texas.

Mineral File No. MF-117815

Lessor: **The State of Texas, acting by and through its agent, Kathleen Smither Williams, dealing in her sole and separate property, by Clyde Michael Williams, III, Attorney-in-Fact**

Lessee: ConocoPhillips Company

Lands Covered: Insofar and only Insofar:
W/2 of W/2 of Section 13, Block 53, PSL Survey, A-2631, Reeves County, Texas, containing 160.00 acres more or less

Lease Number 15

Date: February 4, 2016

Recording: Volume 1256, Page 724, Official Public Records, Reeves County, Texas.

Mineral File No. MF-117815

Lessor: **The State of Texas, acting by and through its agent, The Kathleen Smither Williams Trust, by Kathleen Smither Williams, Trustee**

Lessee: ConocoPhillips Company



Lands Covered: Insofar and only Insofar:
W/2 of W/2 of Section 13, Block 53, PSL Survey, A-2631, Reeves
County, Texas, containing 160.00 acres more or less

Lease Number 16

Date: February 1, 2016

Recording: Volume 1246, Page 660, Official Public Records, Reeves County, Texas.

Mineral File No. MF-117815

Lessor: **The State of Texas, acting by and through its agent, Mark B. Woodward, dealing in his sole and separate property**

Lessee: ConocoPhillips Company

Lands Covered: Insofar and only Insofar:
W/2 of W/2 of Section 13, Block 53, PSL Survey, A-2631, Reeves
County, Texas, containing 160.00 acres more or less

Lease Number 17

Date: February 1, 2016

Recording: Volume 1246, Page 684, Official Public Records, Reeves County, Texas.

Mineral File No. MF-117815

Lessor: **The State of Texas, acting by and through its agent, Mary Lee Nichols, dealing in her sole and separate property**

Lessee: ConocoPhillips Company

Lands Covered: Insofar and only Insofar:
W/2 of W/2 of Section 13, Block 53, PSL Survey, A-2631, Reeves
County, Texas, containing 160.00 acres more or less

Lease Number 18

Date: February 23, 2016

Recording: Volume 1248, Page 84, Official Public Records, Reeves County, Texas.



Mineral File No. MF-117815

Lessor: **The State of Texas, acting by and through its agent, Mary Sue Coffman**

Lessee: ConocoPhillips Company

Lands Covered: Insofar and only Insofar:
W/2 of W/2 of Section 13, Block 53, PSL Survey, A-2631, Reeves County, Texas, containing 160.00 acres more or less

Lease Number 19

Date: February 23, 2016

Recording: Volume 1246, Page 672, Official Public Records, Reeves County, Texas.

Mineral File No. MF-117815

Lessor: **The State of Texas, acting by and through its agent, Pleasant Street Limited**

Lessee: ConocoPhillips Company

Lands Covered: Insofar and only Insofar:
W/2 of W/2 of Section 13, Block 53, PSL Survey, A-2631, Reeves County, Texas, containing 160.00 acres more or less

Lease Number 20

Date: February 23, 2016

Recording: Volume 1246, Page 636, Official Public Records, Reeves County, Texas.

Mineral File No. MF-117815

Lessor: **The State of Texas, acting by and through its agent, Sage Green Company**

Lessee: ConocoPhillips Company

Lands Covered: Insofar and only Insofar:
W/2 of W/2 of Section 13, Block 53, PSL Survey, A-2631, Reeves County, Texas, containing 160.00 acres more or less



Lease Number 21

Date: February 23, 2016

Recording: Volume 1250, Page 1, Official Public Records, Reeves County, Texas.

Mineral File No. MF-117815

Lessor: **The State of Texas, acting by and through its agent, Smither Asset Management, LLC, a Texas Limited Liability Company**

Lessee: ConocoPhillips Company

Lands Covered: Insofar and only Insofar:
W/2 of W/2 of Section 13, Block 53, PSL Survey, A-2631, Reeves County, Texas, containing 160.00 acres more or less

Lease Number 22

Date: February 1, 2016

Recording: Volume 1246, Page 648, Official Public Records, Reeves County, Texas.

Mineral File No. MF-117815

Lessor: **The State of Texas, acting by and through its agent, Walter Woodward, Jr. , dealing in his sole and separate property**

Lessee: ConocoPhillips Company

Lands Covered: Insofar and only Insofar:
W/2 of W/2 of Section 13, Block 53, PSL Survey, A-2631, Reeves County, Texas, containing 160.00 acres more or less

Lease Number 23

Date: February 23, 2016

Recording: Volume 1250, Page 588, Official Public Records, Reeves County, Texas.

Mineral File No. MF-117815

Lessor: **The State of Texas, acting by and through its agent, Wilbur Lawrence Smither, III Estate, by Martha Mossman Smither, Executor**



Lessee: ConocoPhillips Company

Lands Covered: Insofar and only Insofar:
W/2 of W/2 of Section 13, Block 53, PSL Survey, A-2631, Reeves
County, Texas, containing 160.00 acres more or less

Lease Number 24

Date: February 23, 2016

Recording: Volume 1254, Page 250, Official Public Records, Reeves County, Texas.

Mineral File No. MF-117815

Lessor: **The State of Texas, acting by and through its agent, Frances R. Snipes**

Lessee: ConocoPhillips Company

Lands Covered: Insofar and only Insofar:
W/2 of W/2 of Section 13, Block 53, PSL Survey, A-2631, Reeves
County, Texas, containing 160.00 acres more or less

Lease Number 25

Date: February 1, 2016

Recording: Volume 1254, Page 208, Official Public Records, Reeves County, Texas.

Mineral File No. MF-117815

Lessor: **The State of Texas, acting by and through its agent, William Robinson
Woodward, dealing in his sole and separate property**

Lessee: ConocoPhillips Company

Lands Covered: Insofar and only Insofar:
W/2 of W/2 of Section 13, Block 53, PSL Survey, A-2631, Reeves
County, Texas, containing 160.00 acres more or less



EXHIBIT "B"

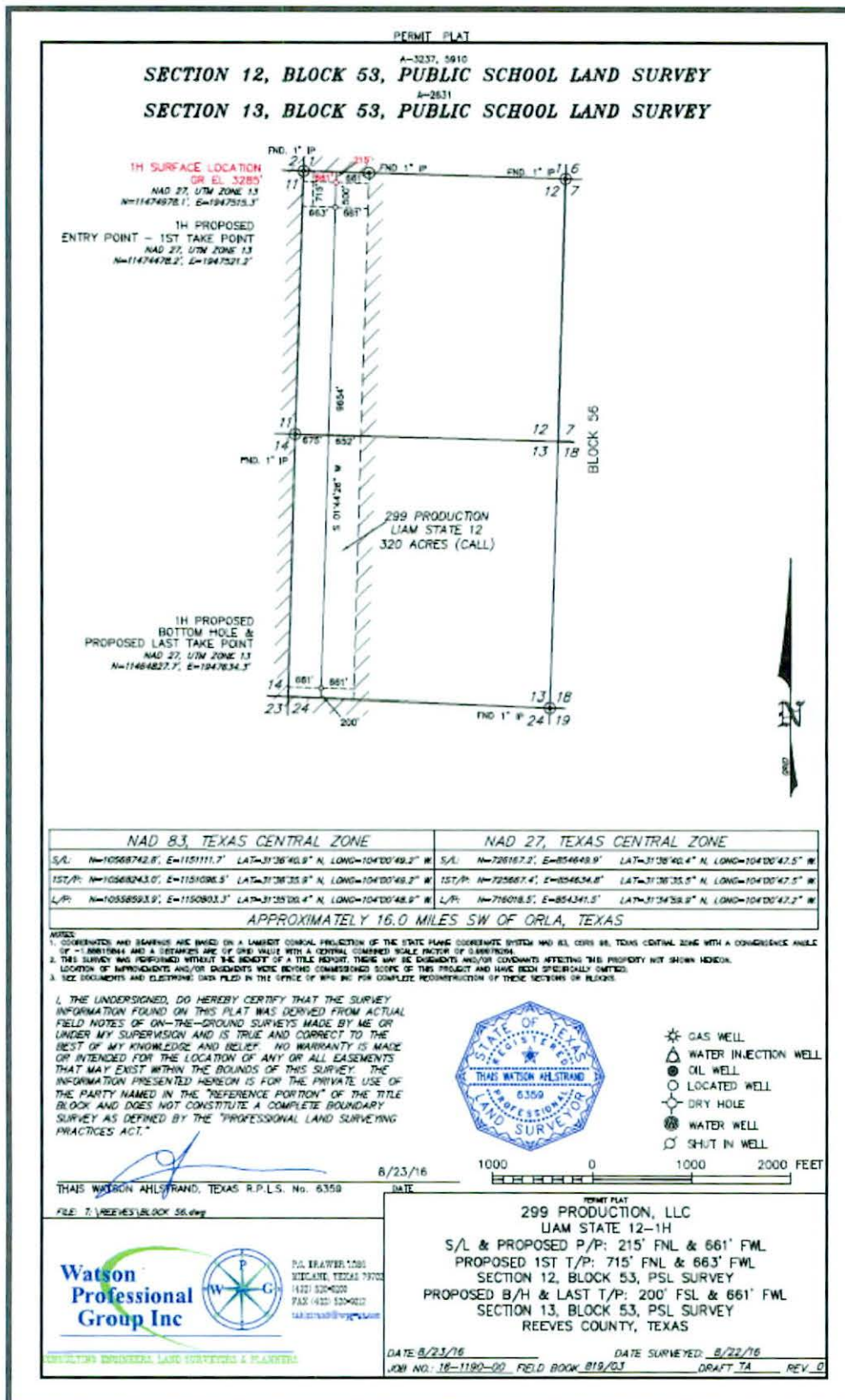
DESIGNATED LANDS:

W/2 OF W/2 of Section 12, Block 53
PSL Survey, A-3237
Reeves County, Texas
Containing 160.00 acres, more or less

W/2 OF W/2 of Section 13, Block 53
PSL Survey, A-2631,
Reeves County, Texas
Containing 160.0 acres, more or less



EXHIBIT "C"



000000

10

File No.

M-113744
Pooling Agmt. Packet # 8234
Liam State 52-12 1H Unit

Date Filed:

8/21/17

George P. Bush, Commissioner

By:



**RAILROAD COMMISSION OF TEXAS****Form W-2**

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

Status: Approved
Date: 07/28/2017
Tracking No.: 167704

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

OPERATOR INFORMATION	
Operator Name: PDC PERMIAN, INC.	Operator No.: 646832
Operator Address: 1775 SHERMAN ST STE 3000 DENVER, CO 80203-0000	

WELL INFORMATION	
API No.: 42-389-35361	County: REEVES
Well No.: 1H	RRC District No.: 08
Lease Name: LIAM STATE 53-12	Field Name: PHANTOM (WOLFCAMP)
RRC Lease No.: 48731	Field No.: 71052900
Location: Section: 12, Block: 53, Survey: PSL/FORD, L L, Abstract: 3237	
Latitude:	Longitude:
This well is located 16 miles in a SW direction from ORLA, which is the nearest town in the county.	

FILING INFORMATION		
Purpose of filing: Initial Potential		
Type of completion: New Well		
Well Type: Producing	Completion or Recompletion Date: 01/18/2017	
Type of Permit	Date	Permit No.
Permit to Drill, Plug Back, or Deepen	08/26/2016	818014
Rule 37 Exception		
Fluid Injection Permit		
O&G Waste Disposal Permit		
Other:		

COMPLETION INFORMATION			
Spud date: 09/20/2016	Date of first production after rig released: 01/18/2017		
Date plug back, deepening, recompletion, or drilling operation commenced: 09/20/2016	Date plug back, deepening, recompletion, or drilling operation ended: 10/25/2016		
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: 320.00	Elevation (ft.): 3285 GR		
Total depth TVD (ft.): 9845	Total depth MD (ft.): 19705		
Plug back depth TVD (ft.):	Plug back depth MD (ft.):		
Was directional survey made other than inclination (Form W-12)? Yes	Rotation time within surface casing (hours): 360.0		
Recompletion or reclass? No	Is Cementing Affidavit (Form W-15) attached? Yes		
Type(s) of electric or other log(s) run: Combo of Induction/Neutron/Density	Multiple completion? No		
Electric Log Other Description:			
Location of well, relative to nearest lease boundaries of lease on which this well is located:	215.0 Feet from the North Line and 660.0 Feet from the West Line of the LIAM STATE 53-12 Lease.		Off Lease : No
FORMER FIELD (WITH RESERVOIR) & GAS ID OR OIL LEASE NO.			
Field & Reservoir	Gas ID or Oil Lease No.	Well No.	Prior Service Type
W2: N/A			

PACKET: N/A

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

GAU Groundwater Protection Determination	Depth (ft.): 1275.0	Date: 08/26/2016
SWR 13 Exception	Depth (ft.): 2965.0	

INITIAL POTENTIAL TEST DATA FOR NEW COMPLETION OR RECOMPLETION

Date of test: 03/14/2017	Production method: Pumping
Number of hours tested: 24	Choke size: 32
Was swab used during this test? No	Oil produced prior to test: 6903.00

PRODUCTION DURING TEST PERIOD:

Oil (BBLs): 319.00	Gas (MCF): 2471
Gas - Oil Ratio: 7746	Flowing Tubing Pressure: 1224.00
Water (BBLs): 1788	

CALCULATED 24-HOUR RATE

Oil (BBLs): 319.0	Gas (MCF): 2471
Oil Gravity - API - 60.: 53.6	Casing Pressure: 2869.00
Water (BBLs): 1788	

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	9 5/8	12 1/4	2994			C	1315	2575.8	0	Circulated to Surface
2	Intermediate	7	8 3/4	10189			C & H	580	1653.4	355	Calculation
3	Conventional Production	4 1/2	6 1/4	19705			H	785	989.1	10100	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
N/A									

TUBING RECORD

Row	Size (in.)	Depth Size (ft.)	Packer Depth (ft.)/Type
1	2 3/8	9306	9288 /

PRODUCING/INJECTION/DISPOSAL INTERVAL

Row	Open hole?	From (ft.)	To (ft.)
1	No	L1 10193	19249.0

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

Was hydraulic fracturing treatment performed? Yes

Is well equipped with a downhole actuation sleeve? No

If yes, actuation pressure (PSIG):

Production casing test pressure (PSIG) prior to hydraulic fracturing treatment: 12250

Actual maximum pressure (PSIG) during hydraulic fracturing: 10854

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	65183 BBLS SLICKWATER, 6598325# 100 MESH, 8333256# 40/70 WHITE, 1671122# 30/50	10286	19249
2	Cement Squeeze	SQUEEZE WITH 100 SKS CEMENT	7012	7800
3	Cement Squeeze	SQUEEZE WITH 400 SKS CEMENT TO FINISH TOPPING OFF INTERMEDIATE CASING	355	1518

FORMATION RECORD					
Formations	Encountered	Depth TVD (ft.)	Depth MD (ft.)	Is formation isolated?	Remarks
FORD-DELAWARE	No			No	NOT IDENTIFIED IN WELLBORE
CASTILLE	No			No	NOT IDENTIFIED IN WELLBORE
BELL CANYON	No			No	NOT IDENTIFIED IN WELLBORE
DELAWARE	No			No	NOT IDENTIFIED IN WELLBORE
DELAWARE CONSOLIDATED GAS	No			No	NOT IDENTIFIED IN WELLBORE
CHERRY CANYON	Yes	3940.0	3940.0	Yes	ISOLATED WITH CEMENT
BONE SPRINGS	Yes	6995.0	6995.0	Yes	ISOLATED WITH CEMENT
PERMIAN	No			No	NOT IDENTIFIED IN WELLBORE
WOLFCAMP	Yes	9430.0	9430.0	Yes	ISOLATED WITH CEMENT
PENNSYLVANIAN	No			No	NOT IDENTIFIED IN WELLBORE
MISSISSIPPIAN	No			No	NOT IDENTIFIED IN WELLBORE
DEVONIAN	No			No	NOT IDENTIFIED IN WELLBORE
FUSSELMAN	No			No	NOT IDENTIFIED IN WELLBORE
ELLENBURGER	No			No	NOT IDENTIFIED IN WELLBORE
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 9302

RRC REMARKS**PUBLIC COMMENTS:**

[RRC Staff 2017-06-05 15:58:08.084] EDL=9056 feet, max acres=704, PHANTOM (WOLFCAMP) oil or gas well

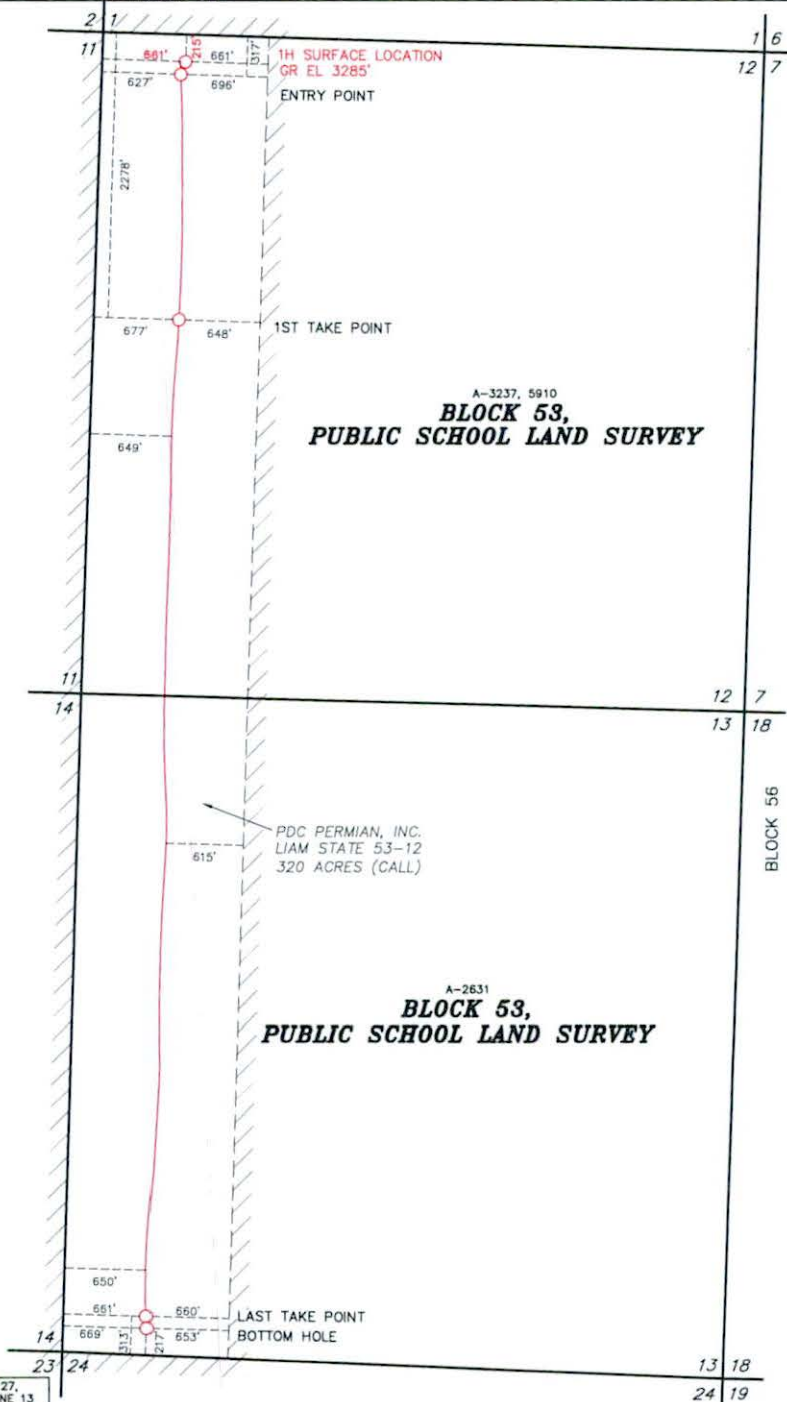
CASING RECORD :**TUBING RECORD:****PRODUCING/INJECTION/DISPOSAL INTERVAL :****ACID, FRACTURE, CEMENT SQUEEZE, CAST IRON BRIDGE PLUG, RETAINER, ETC. :****POTENTIAL TEST DATA:****OPERATOR'S CERTIFICATION**

Printed Name: Robin Swanner

Title: Consulting Agent

Telephone No.: (903) 930-1532

Date Certified: 07/27/2017



NAD 27 TX STATE PLANE COORDINATES	NAD 27 GEOGRAPHIC COORDINATES (DMS)	NAD 27 GEOGRAPHIC COORDINATES (DD)	NAD 27, UTM ZONE 13
SHL N=726167.2' E=854649.9'	LAT: 31°36'40.4" LON: 104°00'47.5"	LAT: 31.6112228 LON: 104.0131990	N=11474978.1' E=1947515.3'
EP N=726066.0' E=854612.0'	LAT: 31°36'39.4" LON: 104°00'47.9"	LAT: 31.6109415 LON: 104.0133102	N=11474875.5' E=1947481.6'
FTP N=724104.8' E=854596.8'	LAT: 31°36'20.0" LON: 104°00'47.3"	LAT: 31.6055511 LON: 104.0131504	N=11472915.7' E=1947549.1'
LTP N=716131.9' E=854344.9'	LAT: 31°35'01.0" LON: 104°00'47.2"	LAT: 31.5836212 LON: 104.0131122	N=11464941.1' E=1947632.9'
BHL N=716035.0' E=854349.5'	LAT: 31°35'00.1" LON: 104°00'47.1"	LAT: 31.5833554 LON: 104.0130872	N=11464844.5' E=1947641.6'

APPX. 16.0 MILES SW OF ORLA, TEXAS

I, THE UNDERSIGNED, DO HEREBY CERTIFY THAT THE SURVEY INFORMATION FOUND ON THIS PLAT WAS DERIVED FROM ACTUAL FIELD NOTES OF ON-THE-GROUND SURVEYS 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 THE PRIVATE USE OF THE PARTY NAMED IN THE "REFERENCE PORTION" OF THE TITLE BLOCK AND DOES NOT CONSTITUTE A COMPLETE BOUNDARY SURVEY AS DEFINED BY THE "PROFESSIONAL LAND SURVEYING PRACTICES ACT."



Thais Watson Ahlstrand TEXAS R.P.L.S. No. 6359
FILE: T:\REEVES\BLOCK 56.dwg

APRIL 5, 2017
DATE

**Watson
Professional
Group Inc**



P.O. DRAWER 11806
MIDLAND, TEXAS 79702
(432) 520-9200
FAX (432) 520-9212
tahlstrand@wpg-usa.com

- ☼ GAS WELL
- ⚙️ WATER INJECTION WELL
- OIL WELL
- LOCATED WELL
- ⊙ DRY HOLE
- ⊗ WATER WELL
- ⊕ PLUGGED WELL

NOTES:

- COORDINATES AND BEARINGS ARE BASED ON A LAMBERT CONICAL PROJECTION OF THE STATE PLANE COORDINATE SYSTEM NAD 83, CORRS W8, TEXAS, CENTRAL ZONE WITH A CONVERGENCE ANGLE OF -1.88615844 AND A DISTANCE ARE OF GRID VALUE WITH A CENTRAL COMBINED SCALE FACTOR OF 0.99978264.
- THIS SURVEY WAS PERFORMED WITHOUT THE BENEFIT OF A TITLE REPORT. THERE MAY BE EASEMENTS AND/OR COVENANTS AFFECTING THIS PROPERTY NOT SHOWN HEREON.
- LOCATION OF IMPROVEMENTS AND/OR EASEMENTS WERE BEYOND COMMISSIONED SCOPE OF THIS PROJECT AND HAVE BEEN SPECIFICALLY OMITTED.
- SEE DOCUMENTS AND ELECTRONIC DATA FILED IN THE OFFICE OF WPG INC FOR COMPLETE RECONSTRUCTION OF THESE SECTIONS OR BLOCKS.
- SURFACE LOCATION PROVIDED BY PDC PERSONNEL.

1000 0 1000 2000 FEET

AS-DRILLED PLAT

PDC PERMIAN, INC.

LIAM STATE 53-12-1H

SURFACE LOCATION: 215' FNL & 661' FWL

ENTRY POINT: 317' FNL & 627' FWL

1ST TAKE POINT: 2278' FNL & 677' FWL

SECTION 12, BLOCK 53, PSL SURVEY

LAST TAKE POINT: 313' FSL & 661' FWL

BOTTOM HOLE: 217' FSL & 669' FWL

SECTION 13, BLOCK 53, PSL SURVEY

REEVES COUNTY, TEXAS

DATE: APRIL 5, 2017

DATE SURVEYED: 8/22/16

JOB NO.: 16-1190-00 FIELD BOOK 819/03

DRAFT TA REV.

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

FIELD(s) and LIMITATIONS:

Terminus Point: TH1 Section: 13 Block: 53 Abstract: 2631 Survey: PSL/GOSS, G W BH County: REEVES
Lease Lines: 200.0 ft SOUTH 661.0 ft WEST
Survey Lines: 200.0 ft SOUTH 661.0 ft WEST
Penetration Lines: 715.0 ft NORTH 663.0 ft WEST

This is a hydrogen sulfide field. This well shall be drilled in accordance with SWR 36.

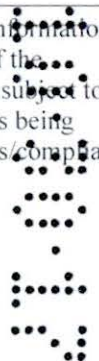
This well shall be completed and produced in compliance with applicable special field or statewide spacing and density rules. If this well is to be used for brine mining, underground storage of liquid hydrocarbons in salt formations, or underground storage of gas in salt formations, a permit for that specific purpose must be obtained from Environmental Services prior to construction, including drilling, of the well in accordance with Statewide Rules 81, 95, and 97.

Page 3 of 4

Railroad Commission of Texas
Oil and Gas Division
SWR #13 Formation Data
REEVES (389) COUNTY

Formation	Shallow Top	Deep Top	Remarks	Geological Order	Effective Date
FORD-DELAWARE	2500	2500		1	01/01/2014
CASTILLE	2800	2800		2	01/01/2014
BELL CANYON	4800	5000		3	01/01/2014
DELAWARE	2500	5700		4	01/01/2014
DELAWARE CONSOLIDATED	6500	6500		5	01/01/2014
CHERRY CANYON	3800	7800		6	01/01/2014
BONE SPRINGS	7500	9800		7	01/01/2014
PERMIAN	11300	11300		8	01/01/2014
WOLFCAMP	10000	12300		9	01/01/2014
PENNSYLVANIAN	11000	14900		10	01/01/2014
MISSISSIPPIAN	10000	16000		11	01/01/2014
DEVONIAN	13600	17800		12	01/01/2014
FUSSELMAN	14000	17800		13	01/01/2014
ELLENBURGER	15000	20800		14	01/01/2014

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>



API No. <u>42-389-35361</u> Drilling Permit # <u>818014</u> SWR Exception Case/Docket No. _____		RAILROAD COMMISSION OF TEXAS OIL & GAS DIVISION APPLICATION FOR PERMIT TO DRILL, RECOMPLETE, OR RE-ENTER <i>This facsimile W-1 was generated electronically from data submitted to the RRC.</i> <i>A certification of the automated data is available in the RRC's Austin office.</i>			FORM W-1 Permit Status: Approved	
1. RRC Operator No. <u>954917</u>		2. Operator's Name (as shown on form P-5, Organization Report) <u>299 PRODUCTION, LLC</u>		3. Operator Address (include street, city, state, zip) <u>PO BOX 472</u> <u>JUDSON, TX 75660-0000</u>		
4. Lease Name <u>LIAM STATE 53-12</u>		5. Well No. <u>1H</u>				
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 <u>10500</u>		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. <u>08</u>		12. County <u>REEVES</u>		13. Surface Location ☒ Land ☐ Bay/Estuary ☐ Inland Waterway ☐ Offshore		
14. This well is to be located <u>16.0</u> miles in a <u>SW</u> direction from <u>Orla</u> which is the nearest town in the county of the well site.						
15. Section <u>12</u>	16. Block <u>53</u>	17. Survey <u>PSL/FORD, L L</u>	18. Abstract No. <u>3237</u>	19. Distance to nearest lease line: <u>200.0</u> ft.	20. Number of contiguous acres in lease, pooled unit, or unitized tract: <u>320.0</u>	
21. Lease Perpendiculars: <u>215.0</u> ft. from the <u>NORTH</u> line and <u>660.0</u> ft. from the <u>WEST</u> line.						
22. Survey Perpendiculars: <u>215.0</u> ft. from the <u>NORTH</u> line and <u>661.0</u> ft. from the <u>WEST</u> 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. <u>08</u>	27. Field No. <u>71052900</u>	28. Field Name (exactly as shown in RRC records) <u>PHANTOM (WOLFCAMP)</u>	29. Well Type <u>Oil or Gas Well</u>	30. Completion Depth <u>10500</u>	31. Distance to Nearest Well in this Reservoir <u>0.0</u>	
32. Number of Wells on this lease in this Reservoir <u>1</u>						
BOTTOMHOLE LOCATION INFORMATION is required for DIRECTIONAL, HORIZONTAL, AND AMENDED AS DRILLED PERMIT APPLICATIONS						
Remarks			Certificate: I certify that information stated in this application is true and complete, to the best of my knowledge RRC User _____ <u>08/24/2016</u> Name of filer _____ Date Submitted Phone _____ Email Address(OPTIONAL) _____			
RRC Use Only Date Validation Time Stamp: <u>Fri, 2 Sep 2016 10:34:43</u>						

17.09.07

RAILROAD COMMISSION OF TEXAS

OIL & GAS DIVISION

APPLICATION FOR PERMIT TO DRILL, RECOMPLETE, OR RE-

FORM W-1H

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.

*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 # 818014

Approved Date: 08/26/2016

1. RRC Operator No. 954917	2. Operator's Name (as shown on form P-5, Organization Report) 299 PRODUCTION, LLC	3. Lease Name LIAM STATE 53-12	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 53	8. Survey PSL/GOSS, G W	9. Abstract 2631
10. County of BHL REEVES			
11. Terminus Lease Line Perpendiculars 200.0 ft. from the SOUTH line and 661.0 ft. from the WEST line			
12. Terminus Survey Line Perpendiculars 200.0 ft. from the SOUTH line and 661.0 ft. from the WEST line			
13. Penetration Point Lease Line Perpendiculars 715.0 ft. from the NORTH line and 663.0 ft. from the WEST line			



RAILROAD COMMISSION OF TEXAS

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

Form W-15

Rev. 08/2014

CEMENTING REPORT

Cementer: Fill in shaded areas.
Operator: Fill in other items.

OPERATOR INFORMATION

Operator Name: 299 Production Operator P-5 No.: 954917
Cementer Name: Compass Cementing Services Cementer P-5 No.: 166789

WELL INFORMATION

District No.: 08 County: Reeves
Well No.: 1H API No.: 42-389-35361 Drilling Permit No.: 818014
Lease Name: Liam State 53-12 Lease No.:
Field Name: Phantom (Wolfcamp) Field No.: 71052900

I. CASING CEMENTING DATA

Type of casing: ☐ Conductor ☒ Surface ☐ Intermediate ☐ Liner ☐ Production
Drilled hole size (in.): 12.25 Depth of drilled hole (ft.): 2994 Est. % wash-out or hole enlargement:
Size of casing in O.D. (in.): 9.625 Casing weight (lbs/ft) and grade: 40/ J55 No. of centralizers used: 5
Was cement circulated to ground surface (or bottom of cellar) outside casing? ☒ YES ☐ NO If no for surface casing, explain in Remarks. Setting depth shoe (ft.): 2994 Top of liner (ft.):
Setting depth liner (ft.):
Hrs. waiting on cement before drill-out: +/- 12 Calculated top of cement (ft.): 0 Cementing date: 9/23/2016

SLURRY

Slurry No.	No. of Sacks	Class	Additives	Volume (cu. ft.)	Height (ft.)
1	260	C	SEE REMARKS	558.4	245
2	235	C	SEE REMARKS	312.55	934
3					
Total					

II. CASING CEMENTING DATA

Type of casing: ☒ Surface ☐ Intermediate ☐ Production ☐ Tapered production ☐ Multi-stage cement shoe ☐ Multiple parallel strings
Drilled hole size (in.): Depth of drilled hole (ft.): Est. % wash-out or hole enlargement:
Size of casing in O.D. (in.): Casing weight (lbs/ft) and grade: No. of centralizers used:
Tapered string drilled hole size (in.) Tapered string depth of drilled hole (ft.)
Upper: Lower: Upper: Lower:
Tapered string size of casing in O.D. (in.) Tapered string casing weight (lbs/ft) and grade Tapered string no. of centralizers used
Upper: Lower: Upper: Lower:
Was cement circulated to ground surface (or bottom of cellar) outside casing? ☒ YES ☐ NO Setting depth shoe (ft.):
Hrs. waiting on cement before drill-out: Calculated top of cement (ft.): Cementing date:

SLURRY

Slurry No.	No. of Sacks	Class	Additives	Volume (cu. ft.)	Height (ft.)
1	640	C	SEE REMARKS	1465.8	1050
2	180	C	SEE REMARKS	241.2	769
3					
Total	1315			2575.75	2998

III. CASING CEMENTING DATA

Type of casing: ☐ Surface ☐ Intermediate ☐ Production ☐ Tapered production ☐ Multi-stage cement/DV tool ☐ Multiple parallel strings
Drilled hole size (in.): Depth of drilled hole (ft.): Est. % wash-out or hole enlargement:
Size of casing in O.D. (in.): Casing weight (lbs/ft) and grade: No. of centralizers used:
Tapered string drilled hole size (in.) Tapered string depth of drilled hole (ft.)
Upper: Lower: Upper: Lower:
Tapered string size of casing in O.D. (in.) Tapered string casing weight (lbs/ft) and grade Tapered string no. of centralizers used
Upper: Lower: Upper: Lower:
Was cement circulated to ground surface (or bottom of cellar) outside casing? ☐ YES ☐ NO Setting depth tool (ft.):
Hrs. waiting on cement before drill-out: Calculated top of cement (ft.): Cementing date:

SLURRY

Slurry No.	No. of Sacks	Class	Additives	Volume (cu. ft.)	Height (ft.)
1					
2					
3					
Total					

CEMENTING TO SQUEEZE, PLUG BACK OR PLUG AND ABANDON							
	PLUG #1	PLUG #2	PLUG #3	PLUG #4	PLUG #5	PLUG #6	PLUG #7
Cementing Date							
Size of hole or pipe (in.)							
Depth to bottom of tubing or drill pipe (ft.)							
Cement retainer setting depth (ft.)							
CIBP setting depth (ft.)							
Amount of cement on top of CIBP (ft.)							
Sacks of cement used							
Slurry volume pumped (cu. ft.)							
Calculated top of plug (ft.)							
Measured top of plug, if tagged (ft.)							
Slurry weight (lbs/gal)							
Class/type of cement							
Perforate and squeeze (YES/NO)							

REMARKS

1st Lead Bentonite, Salt, C-51, C-45, STE, Citric Acid, Kol Seal, C-41P-1st Stage Tail C-51, C-41P
2nd Lead Bentonite, Salt, C-45, Kol Seal, C-41P 2nd Tail C-45, Calcium Chloride, C-41P

CEMENTER'S CERTIFICATE: I declare under penalties prescribed in Sec. 91.143, Texas Natural Resources Code, that I am authorized to make this certification, that the cementing of casing and/or the placing of cement plugs in this well as shown in the report was performed by me or under my supervision, and that the cementing data and facts presented on both sides of this form are true, correct, and complete, to the best of my knowledge. This certification covers cementing data only.

Stephen Foote

Compass Cementing Services



Name and title of cementer's representative

Cementing Company

Signature

10013 West Co Rd. 157

Midland, Texas

79706

432-561-5970

9/24/2016

Address

City, State, Zip Code

Tel: Area Code

Number

Date: mo. day yr.

OPERATOR'S CERTIFICATE: I declare under penalties prescribed in Sec. 91.143, Texas Natural Resources Code, that I am authorized to make this certification, that I have knowledge of the well data and information presented in this report, and that data and facts presented on both sides of this form are true, correct, and complete, to the best of my knowledge. This certification covers all well data.

Robin Swanner

Consultant



Typed or printed name of operator's representative

Title

Signature

P.O. Box 472 Judson, TX 75660

903-930-1532

5/19/17

Address

City, State, Zip Code

Tel: Area Code

Number

Date: mo. day yr.

Instructions for Form W-15, Cementing Report

NOTICE: The Form W-15 must be submitted as an attachment to a Form G-1 (Gas Well Back Pressure Test, Completion or Recompletion Report, and Log), Form W-2 (Oil Well Potential Test, Completion or Recompletion Report, and Log), Form W-3 (Plugging Record), or Form W-4 (Application for Multiple Completion), any time cement is pumped in a wellbore.

- What to file:** An operator should file an original and one copy of the completed Form W-15 for each cementing company used on a well. The cementing of different casing strings on a well by one cementing company may be reported on one form.
The Form W-15 should be filed with the Form W-3, Plugging Record, unless the Form W-3 is signed by the cementing company representative. When reporting dry holes, operators must complete Form W-15, in addition to Form W-3, to show any casing cemented in the hole.
- How to file:** An oil and gas completion report and Form W-15 may be filed online using the Commission's Online System ([https://webapps.rrc.state.tx.us/pls/pub/readtac\\$ext.TacPage?sl=R&app=9&p_dir=&p_rloc=&p_tloc=&p_ploc=&pg=1&p_tac=&ti=16&pt=1&ch=3&rl=14](https://webapps.rrc.state.tx.us/pls/pub/readtac$ext.TacPage?sl=R&app=9&p_dir=&p_rloc=&p_tloc=&p_ploc=&pg=1&p_tac=&ti=16&pt=1&ch=3&rl=14)) or a paper copy of the form may be mailed to the Commission in Austin (P.O. Box 12967, Austin, Texas 78711-2967).
- Surface casing:** An operator must set and cement sufficient surface casing to protect all usable-quality water strata, as defined by the Groundwater Advisory Unit in Austin. Sufficient cement shall be used to fill the annular space outside the casing from the shoe to the ground surface or to the bottom of the cellar. Before drilling a well, an operator must obtain a letter from the Groundwater Advisory Unit stating the protection depth. Surface casing should not be set deeper than 200 feet below the specified depth without prior approval from the Commission.
To plug and abandon a well, operators must use only cementers approved by the Commission's Director of Field Operations in accordance with SWR 14 ([http://info.sos.state.tx.us/pls/pub/readtac\\$ext.TacPage?sl=R&app=9&p_dir=&p_rloc=&p_tloc=&p_ploc=&pg=1&p_tac=&ti=16&pt=1&ch=3&rl=14](http://info.sos.state.tx.us/pls/pub/readtac$ext.TacPage?sl=R&app=9&p_dir=&p_rloc=&p_tloc=&p_ploc=&pg=1&p_tac=&ti=16&pt=1&ch=3&rl=14)). Cementing companies, service companies, or operators can qualify as approved cementers by demonstrating that they are able to mix and pump cement in compliance with Commission rules and regulations.
- Estimated % wash-out:** If the estimated % wash-out is less than 20% (or 30% along the Gulf Coast), provide supporting documentation such as a caliper log to show how the estimated % wash-out was obtained.
- Multi-stage cement:** An operator must report the multi-stage cement shoe in II. Casing Cementing Data section by selecting the type of casing and Multi-stage cement shoe. The operator must report the multi-stage cement tool in III. Casing Cementing Data section by selecting the type of casing and Multi-stage cement/DV tool.
- Multiple parallel strings:** An operator should file the Form W-15 as an attachment to the Form W-4, Application for Multiple Completion. An operator may be required to submit multiple Form W-15s to show all data for multiple parallel strings.
- Slurry data:** If cement job exceeds three slurries, continue the list of slurries in the Slurry table in the subsequent Casing Cementing Data box.



RAILROAD COMMISSION OF TEXAS

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

Form W-15

Rev. 08/2014

CEMENTING REPORT

Cementer: Fill in shaded areas.
Operator: Fill in other items.

OPERATOR INFORMATION

Operator Name: 299 Production Operator P-5 No.: 954917
Cementer Name: Compass Cementing Services Cementer P-5 No.: 169789

WELL INFORMATION

District No.: 08 County: Reeves
Well No.: 1H API No.: 42-389-35361 Drilling Permit No.: 818014
Lease Name: Liam State 53-12 Lease No.:
Field Name: Phantom (Wolfcamp) Field No.: 71052900

I. CASING CEMENTING DATA

Type of casing: ☐ Conductor ☐ Surface ☒ Intermediate ☐ Liner ☐ Production
Drilled hole size (in.): 8.75" Depth of drilled hole (ft.): 10200 Est. % wash-out or hole enlargement:
Size of casing in O.D. (in.): 7" Casing weight (lbs/ft) and grade: 29' HCP 110 No. of centralizers used: 32
Was cement circulated to ground surface (or bottom of cellar) outside casing? ☐ YES ☒ NO If no for surface casing, explain in Remarks. Setting depth shoe (ft.): 10189 (MD) Top of liner (ft.):
Setting depth liner (ft.):
Hrs. waiting on cement before drill-out: +/- 12 Calculated top of cement (ft.): 355 Cementing date: 10/7/2016

SLURRY

Slurry No.	No. of Sacks	Class	Additives	Volume (cu. ft.)	Height (ft.)
1	380	C	SEE REMARKS	1417.4	9417
2	200	H	SEE REMARKS	236	1500
3					
Total	580			1653.4	

II. CASING CEMENTING DATA

Type of casing: ☐ Surface ☐ Intermediate ☐ Production ☐ Tapered production ☐ Multi-stage cement shoe ☐ Multiple parallel strings
Drilled hole size (in.): Depth of drilled hole (ft.): Est. % wash-out or hole enlargement:
Size of casing in O.D. (in.): Casing weight (lbs/ft) and grade: No. of centralizers used:
Tapered string drilled hole size (in.) Tapered string depth of drilled hole (ft.)
Upper: Lower: Upper: Lower:
Tapered string size of casing in O.D. (in.) Tapered string casing weight (lbs/ft) and grade Tapered string no. of centralizers used
Upper: Lower: Upper: Lower:
Was cement circulated to ground surface (or bottom of cellar) outside casing? ☐ YES ☐ NO Setting depth shoe (ft.):
Hrs. waiting on cement before drill-out: Calculated top of cement (ft.): Cementing date:

SLURRY

Slurry No.	No. of Sacks	Class	Additives	Volume (cu. ft.)	Height (ft.)
1					
2					
3					
Total					

III. CASING CEMENTING DATA

Type of casing: ☐ Surface ☐ Intermediate ☐ Production ☐ Tapered production ☐ Multi-stage cement/DV tool ☐ Multiple parallel strings
Drilled hole size (in.): Depth of drilled hole (ft.): Est. % wash-out or hole enlargement:
Size of casing in O.D. (in.): Casing weight (lbs/ft) and grade: No. of centralizers used:
Tapered string drilled hole size (in.) Tapered string depth of drilled hole (ft.)
Upper: Lower: Upper: Lower:
Tapered string size of casing in O.D. (in.) Tapered string casing weight (lbs/ft) and grade Tapered string no. of centralizers used
Upper: Lower: Upper: Lower:
Was cement circulated to ground surface (or bottom of cellar) outside casing? ☐ YES ☐ NO Setting depth tool (ft.):
Hrs. waiting on cement before drill-out: Calculated top of cement (ft.): Cementing date:

SLURRY

Slurry No.	No. of Sacks	Class	Additives	Volume (cu. ft.)	Height (ft.)
1					
2					
3					
Total					

CEMENTING TO SQUEEZE, PLUG BACK OR PLUG AND ABANDON

	PLUG #1	PLUG #2	PLUG #3	PLUG #4	PLUG #5	PLUG #6	PLUG #7
Cementing Date	10/05/16	10/05/16					
Size of hole or pipe (in.)	8 3/4	8 3/4					
Depth to bottom of tubing or drill pipe (ft.)	10189	10189					
Cement retainer setting depth (ft.)							
CIBP setting depth (ft.)							
Amount of cement on top of CIBP (ft.)							
Sacks of cement used	100	300					
Slurry volume pumped (cu. ft.)	175	519					
Calculated top of plug (ft.)	355'	1518'					
Measured top of plug, if tagged (ft.)							
Slurry weight (lbs/gal)	13.5	13.5					
Class/type of cement	C	C					
Perforate and squeeze (YES/NO)							

REMARKS

LEAD- BENTONITE, C-47B, C41-P, CITRIC ACID, CSA-1000, C-19, STE, PLEXCRETE SFA, KOL SEAL, GYP SEAL
TAIL- C-20, C-51,

CEMENTER'S CERTIFICATE: I declare under penalties prescribed in Sec. 91.143, Texas Natural Resources Code, that I am authorized to make this certification, that the cementing of casing and/or the placing of cement plugs in this well as shown in the report was performed by me or under my supervision, and that the cementing data and facts presented on both sides of this form are true, correct, and complete, to the best of my knowledge. This certification covers cementing data only.

Stephen Foote

Compass Cementing Services



Name and title of cementer's representative

Cementing Company

Signature

10013 West Co Rd. 157

Midland, Texas

79706

432-561-5970

10/9/16

Address

City

State, Zip Code

Tel: Area Code

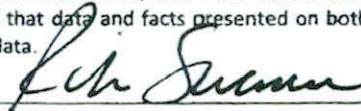
Number

Date: mo. day yr.

OPERATOR'S CERTIFICATE: I declare under penalties prescribed in Sec. 91.143, Texas Natural Resources Code, that I am authorized to make this certification, that I have knowledge of the well data and information presented in this report, and that data and facts presented on both sides of this form are true, correct, and complete, to the best of my knowledge. This certification covers all well data.

Robin Swanner

Consultant



Typed or printed name of operator's representative

Title

Signature

P.O. Box 472 Judson, TX 75660

903 930 1532

5/19/17

Address

City

State, Zip Code

Tel: Area Code

Number

Date: mo. day yr.

Instructions for Form W-15, Cementing Report

NOTICE: The Form W-15 must be submitted as an attachment to a Form G-1 (Gas Well Back Pressure Test, Completion or Recompletion Report, and Log), Form W-2 (Oil Well Potential Test, Completion or Recompletion Report, and Log), Form W-3 (Plugging Record), or Form W-4 (Application for Multiple Completion), any time cement is pumped in a wellbore.

- What to file:** An operator should file an original and one copy of the completed Form W-15 for each cementing company used on a well. The cementing of different casing strings on a well by one cementing company may be reported on one form.
The Form W-15 should be filed with the Form W-3, Plugging Record, unless the Form W-3 is signed by the cementing company representative. When reporting dry holes, operators must complete Form W-15, in addition to Form W-3, to show any casing cemented in the hole.
- How to file:** An oil and gas completion report and Form W-15 may be filed online using the Commission's Online System (<https://webapps.rrc.state.tx.us/security/login.do>) or a paper copy of the form may be mailed to the Commission in Austin (P.O. Box 12967, Austin, Texas 78711-2967).
- Surface casing:** An operator must set and cement sufficient surface casing to protect all usable-quality water strata, as defined by the Groundwater Advisory Unit in Austin. Sufficient cement shall be used to fill the annular space outside the casing from the shoe to the ground surface or to the bottom of the cellar. Before drilling a well, an operator must obtain a letter from the Groundwater Advisory Unit stating the protection depth. Surface casing should not be set deeper than 200 feet below the specified depth without prior approval from the Commission.
To plug and abandon a well, operators must use only cementers approved by the Commission's Director of Field Operations in accordance with SWR 14 (http://info.sos.state.tx.us/pls/pub/readtacSext.TacPage?sl=R&app=9&p_dir=&p_rloc=&p_tloc=&p_ploc=&pg=1&p_tac=&ti=16&pt=1&ch=3&rl=14). Cementing companies, service companies, or operators can qualify as approved cementers by demonstrating that they are able to mix and pump cement in compliance with Commission rules and regulations.
- Estimated % wash-out:** If the estimated % wash-out is less than 20% (or 30% along the Gulf Coast), provide supporting documentation such as a caliper log to show how the estimated % wash-out was obtained.
- Multi-stage cement:** An operator must report the multi-stage cement shoe in II. Casing Cementing Data section by selecting the type of casing and Multi-stage cement shoe. The operator must report the multi-stage cement tool in III. Casing Cementing Data section by selecting the type of casing and Multi-stage cement/DV tool.
- Multiple parallel strings:** An operator should file the Form W-15 as an attachment to the Form W-4, Application for Multiple Completion. An operator may be required to submit multiple Form W-15s to show all data for multiple parallel strings.
- Slurry data:** If cement job exceeds three slurries, continue the list of slurries in the Slurry table in the subsequent Casing Cementing Data box.



RAILROAD COMMISSION OF TEXAS

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

Form W-15

Rev. 08/2014

CEMENTING REPORT

Cementer: Fill in shaded areas.
Operator: Fill in other items.

OPERATOR INFORMATION	
Operator Name: 299 RESOURCES	Operator P-5 No.: 954917
Cementer Name: Compass Cementing Services, LLC	Cementer P-5 No.: 169789

WELL INFORMATION		
District No.: 08	County: Reeves	
Well No.: 1H	API No.: 42-389-35361	Drilling Permit No.: 818014
Lease Name: Liam State 53-12	Lease No.:	
Field Name: Phantom (Wolfcamp)	Field No.: 71052900	

I. CASING CEMENTING DATA					
Type of casing: ☐ Conductor ☐ Surface ☐ Intermediate ☐ Liner ☒ Production					
Drilled hole size (in.): 6.125		Depth of drilled hole (ft.): 19708		Est. % wash-out or hole enlargement:	
Size of casing in O.D. (in.): 4.5		Casing weight (lbs/ft) and grade: 13.5		No. of centralizers used: 115	
Was cement circulated to ground surface (or bottom of cellar) outside casing? ☐ YES ☒ NO If no for surface casing, explain in Remarks.			Setting depth shoe (ft.): 19705		Top of liner (ft.):
					Setting depth liner (ft.):
Hrs. waiting on cement before drill-out: +/- 72		Calculated top of cement (ft.): 10100		Cementing date: 10-22-16	
SLURRY					
Slurry No.	No. of Sacks	Class	Additives	Volume (cu. ft.)	Height (ft.)
1	785	H-POZ	SEE REMARKS	989.1	10424
2					
3					
Total	785			989.1	10424

II. CASING CEMENTING DATA					
Type of casing: ☐ Surface ☐ Intermediate ☐ Production ☐ Tapered production ☐ Multi-stage cement shoe ☐ Multiple parallel strings					
Drilled hole size (in.):		Depth of drilled hole (ft.):		Est. % wash-out or hole enlargement:	
Size of casing in O.D. (in.):		Casing weight (lbs/ft) and grade:		No. of centralizers used:	
Tapered string drilled hole size (in.)		Tapered string depth of drilled hole (ft.)			
Upper:	Lower:	Upper:	Lower:		
Tapered string size of casing in O.D. (in.)		Tapered string casing weight (lbs/ft) and grade		Tapered string no. of centralizers used	
Upper:	Lower:	Upper:	Lower:	Upper:	Lower:
Was cement circulated to ground surface (or bottom of cellar) outside casing? ☐ YES ☐ NO				Setting depth shoe (ft.):	
Hrs. waiting on cement before drill-out:		Calculated top of cement (ft.):		Cementing date:	
SLURRY					
Slurry No.	No. of Sacks	Class	Additives	Volume (cu. ft.)	Height (ft.)
1					
2					
3					
Total					

III. CASING CEMENTING DATA					
Type of casing: ☐ Surface ☐ Intermediate ☐ Production ☐ Tapered production ☐ Multi-stage cement/DV tool ☐ Multiple parallel strings					
Drilled hole size (in.):		Depth of drilled hole (ft.):		Est. % wash-out or hole enlargement:	
Size of casing in O.D. (in.):		Casing weight (lbs/ft) and grade:		No. of centralizers used:	
Tapered string drilled hole size (in.)		Tapered string depth of drilled hole (ft.)			
Upper:	Lower:	Upper:	Lower:		
Tapered string size of casing in O.D. (in.)		Tapered string casing weight (lbs/ft) and grade		Tapered string no. of centralizers used	
Upper:	Lower:	Upper:	Lower:	Upper:	Lower:
Was cement circulated to ground surface (or bottom of cellar) outside casing? ☐ YES ☐ NO				Setting depth tool (ft.):	
Hrs. waiting on cement before drill-out:		Calculated top of cement (ft.):		Cementing date:	
SLURRY					
Slurry No.	No. of Sacks	Class	Additives	Volume (cu. ft.)	Height (ft.)
1					
2					
3					
Total					

CEMENTING TO SQUEEZE, PLUG BACK OR PLUG AND ABANDON							
	PLUG #1	PLUG #2	PLUG #3	PLUG #4	PLUG #5	PLUG #6	PLUG #7
Cementing Date							
Size of hole or pipe (in.)							
Depth to bottom of tubing or drill pipe (ft.)							
Cement retainer setting depth (ft.)							
CIBP setting depth (ft.)							
Amount of cement on top of CIBP (ft.)							
Sacks of cement used							
Slurry volume pumped (cu. ft.)							
Calculated top of plug (ft.)							
Measured top of plug, if tagged (ft.)							
Slurry weight (lbs/gal)							
Class/type of cement							
Perforate and squeeze (YES/NO)							

REMARKS
H-POZ(65-35), .25% C-20, .30% C-47B, .25% C-41P, .08% CSA-1000

CEMENTER'S CERTIFICATE: I declare under penalties prescribed in Sec. 91.143, Texas Natural Resources Code, that I am authorized to make this certification, that the cementing of casing and/or the placing of cement plugs in this well as shown in the report was performed by me or under my supervision, and that the cementing data and facts presented on both sides of this form are true, correct, and complete, to the best of my knowledge. This certification covers cementing data only.

ALEX GARCIA CEMENT SUPERVISOR COMPASS WELL SERVICES

Name and title of cementer's representative	Cementing Company	Signature	
10013 WEST COUNTY RD 157	MIDLAND, TX, 79706	432-561-5970	10-22-16
Address	City, State, Zip Code	Tel: Area Code Number	Date: mo. day yr.

OPERATOR'S CERTIFICATE: I declare under penalties prescribed in Sec. 91.143, Texas Natural Resources Code, that I am authorized to make this certification, that I have knowledge of the well data and information presented in this report, and that data and facts presented on both sides of this form are true, correct, and complete, to the best of my knowledge. This certification covers all well data.

Robin Swanner	Consultant	Signature	
Typed or printed name of operator's representative	Title	Signature	
P.O. Box 472 Judson, TX 75660	903 930 1532	5/19/17	
Address	City, State, Zip Code	Tel: Area Code Number	Date: mo. day yr.

Instructions for Form W-15, Cementing Report

NOTICE: The Form W-15 must be submitted as an attachment to a Form G-1 (Gas Well Back Pressure Test, Completion or Recompletion Report, and Log), Form W-2 (Oil Well Potential Test, Completion or Recompletion Report, and Log), Form W-3 (Plugging Record), or Form W-4 (Application for Multiple Completion), any time cement is pumped in a wellbore.

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- Estimated % wash-out:** If the estimated % wash-out is less than 20% (or 30% along the Gulf Coast), provide supporting documentation such as a caliper log to show how the estimated % wash-out was obtained.
- Multi-stage cement:** An operator must report the multi-stage cement shoe in II. Casing Cementing Data section by selecting the type of casing and Multi-stage cement shoe. The operator must report the multi-stage cement tool in III. Casing Cementing Data section by selecting the type of casing and Multi-stage cement/DV tool.
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RAILROAD COMMISSION OF TEXAS

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

Form W-15

Rev. 08/2014

CEMENTING REPORT

Cementer: Fill in shaded areas.
Operator: Fill in other items.

OPERATOR INFORMATION

Operator Name: 299 Production
Cementer Name: Compass Cementing LLC

Operator P-5 No.: 954917
Cementer P-5 No.: 169789

WELL INFORMATION

District No.: 08
Well No.: 1H
Lease Name: Liam State 53-12
Field Name: Phantom (Wolfcamp)

County: Reeves
API No.: 42-389-35361
Lease No.:
Drilling Permit No.: 818014
Field No.: 71052900

I CASING CEMENTING DATA

Type of casing: ☐ Conductor ☐ Surface ☐ Intermediate ☐ Liner ☐ Production

Drilled hole size (in.): Depth of drilled hole (ft.): Est. % wash-out or hole enlargement:

Size of casing in O.D. (in.): Casing weight (lbs/ft) and grade: No. of centralizers used:

Was cement circulated to ground surface (or bottom of cellar) outside casing? ☐ YES ☐ NO If no for surface casing, explain in Remarks. Setting depth shoe (ft.): Top of liner (ft.):
Setting depth liner (ft.):

Hrs. waiting on cement before drill-out: Calculated top of cement (ft.): Cementing date:

SLURRY

Slurry No.	No. of Sacks	Class	Additives	Volume (cu. ft.)	Height (ft.)
1					
2					
3					
Total					

II CASING CEMENTING DATA

Type of casing: ☐ Surface ☐ Intermediate ☐ Production ☐ Tapered production ☐ Multi-stage cement shoe ☐ Multiple parallel strings

Drilled hole size (in.): Depth of drilled hole (ft.): Est. % wash-out or hole enlargement:

Size of casing in O.D. (in.): Casing weight (lbs/ft) and grade: No. of centralizers used:

Tapered string drilled hole size (in.) Tapered string depth of drilled hole (ft.)
Upper: Lower: Upper: Lower:
Tapered string size of casing in O.D. (in.) Tapered string casing weight (lbs/ft) and grade Tapered string no. of centralizers used
Upper: Lower: Upper: Lower:

Was cement circulated to ground surface (or bottom of cellar) outside casing? ☐ YES ☐ NO Setting depth shoe (ft.):

Hrs. waiting on cement before drill-out: Calculated top of cement (ft.): Cementing date:

SLURRY

Slurry No.	No. of Sacks	Class	Additives	Volume (cu. ft.)	Height (ft.)
1					
2					
3					
Total					

III CASING CEMENTING DATA

Type of casing: ☐ Surface ☐ Intermediate ☐ Production ☐ Tapered production ☐ Multi-stage cement/DV tool ☐ Multiple parallel strings

Drilled hole size (in.): Depth of drilled hole (ft.): Est. % wash-out or hole enlargement:

Size of casing in O.D. (in.): Casing weight (lbs/ft) and grade: No. of centralizers used:

Tapered string drilled hole size (in.) Tapered string depth of drilled hole (ft.)
Upper: Lower: Upper: Lower:
Tapered string size of casing in O.D. (in.) Tapered string casing weight (lbs/ft) and grade Tapered string no. of centralizers used
Upper: Lower: Upper: Lower:

Was cement circulated to ground surface (or bottom of cellar) outside casing? ☐ YES ☐ NO Setting depth tool (ft.):

Hrs. waiting on cement before drill-out: Calculated top of cement (ft.): Cementing date:

SLURRY

Slurry No.	No. of Sacks	Class	Additives	Volume (cu. ft.)	Height (ft.)
1					
2					
3					
Total					

CEMENTING TO SQUEEZE, PLUG BACK OR PLUG AND ABANDON

	PLUG #1	PLUG #2	PLUG #3	PLUG #4	PLUG #5	PLUG #6	PLUG #7
Cementing Date	1-8-2017						
Size of hole or pipe (in.)	8 2/4						
Depth to bottom of tubing or drill pipe (ft.)							
Cement retainer setting depth (ft.)							
CIBP setting depth (ft.)							
Amount of cement on top of CIBP (ft.)							
Sacks of cement used	100						
Slurry volume pumped (cu. ft.)	317						
Calculated top of plug (ft.)	7012						
Measured top of plug, if tagged (ft.)							
Slurry weight (lbs/gal)	10.7						
Class/type of cement	TXI LIGHTWEIGHT						
Perforate and squeeze (YES/NO)							

REMARKS

100% TXI LIGHTWEIGHT, 1.3% C-45, .75% C-41P, .35% CITRIC ACID, .1% C-19, .2% CSA-1000, 6% STE, .3% C-49, .83#/SK SALT BWW, 5#/SK GYP SEAL

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MICHAEL WALLS, Service supervisor

Compass Cementing



Name and title of cementer's representative

Cementing Company

Signature

10013 West County Rd 157, Midland, TX, 79706

432-561-5970

Address

City, State, Zip Code

Tel: Area Code

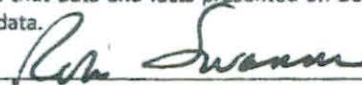
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Robin Swanner

Consultant



Typed or printed name of operator's representative

Title

Signature

P.O. Box 472 Judson TX 75660

903 930 1532

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71.003.01

11.

File No. MF113744
Reeves County
Completion Report API 389-35361 Unit 8234
Date Filed: 02/13/2018
By: George P. Bush, Commissioner

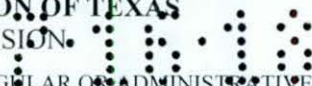
RAILROAD COMMISSION OF TEXAS
OIL & GAS DIVISION

1510

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

PERMIT NUMBER 839269	DATE PERMIT ISSUED OR AMENDED Apr 27, 2018	DISTRICT * 08															
API NUMBER 42-389-37095	FORM W-1 RECEIVED Apr 25, 2018	COUNTY REEVES															
TYPE OF OPERATION NEW DRILL	WELLBORE PROFILE(S) Horizontal	ACRES 320.39															
OPERATOR PDC PERMIAN, INC. 1775 SHERMAN ST STE 3000 DENVER, CO 80203-0000		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 LIAM STATE 53-12		WELL NUMBER C 4H															
LOCATION 15.95 miles SW direction from ORLA		TOTAL DEPTH 13000															
Section, Block and/or Survey SECTION ◀ 12 BLOCK ◀ 53 ABSTRACT ◀ 3237 SURVEY ◀ PSL/FORD, L L																	
DISTANCE TO SURVEY LINES 250 ft. NORTH 718 ft. WEST		DISTANCE TO NEAREST LEASE LINE 200 ft.															
DISTANCE TO LEASE LINES 250 ft. NORTH 718 ft. WEST		DISTANCE TO NEAREST WELL ON LEASE See FIELD(s) Below															
FIELD(s) and LIMITATIONS: * SEE FIELD DISTRICT FOR REPORTING PURPOSES *																	
<table style="width:100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">FIELD NAME LEASE NAME</th> <th style="text-align: center;">ACRES NEAREST LEASE</th> <th style="text-align: center;">DEPTH NEAREST LEASE</th> <th style="text-align: center;">WELL # NEAREST WE</th> <th style="text-align: center;">DIST</th> </tr> </thead> <tbody> <tr> <td>PHANTOM (WOLFCAMP)</td> <td style="text-align: center;">320.39</td> <td style="text-align: center;">13,000</td> <td style="text-align: center;">C 4H</td> <td style="text-align: center;">08</td> </tr> <tr> <td>LIAM STATE 53-12</td> <td style="text-align: center;">200</td> <td></td> <td style="text-align: center;">306</td> <td></td> </tr> </tbody> </table>			FIELD NAME LEASE NAME	ACRES NEAREST LEASE	DEPTH NEAREST LEASE	WELL # NEAREST WE	DIST	PHANTOM (WOLFCAMP)	320.39	13,000	C 4H	08	LIAM STATE 53-12	200		306	
FIELD NAME LEASE NAME	ACRES NEAREST LEASE	DEPTH NEAREST LEASE	WELL # NEAREST WE	DIST													
PHANTOM (WOLFCAMP)	320.39	13,000	C 4H	08													
LIAM STATE 53-12	200		306														
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: 25.0 F NORTH L 330.0 F WEST L Terminus Location BH County: REEVES Section: 13 Block: 53 Abstract: 2631 Survey: PSL/GOSS, G W Lease Lines: 150.0 F SOUTH L 330.0 F WEST L Survey Lines: 150.0 F SOUTH L 330.0 F WEST L																	
THE FOLLOWING RESTRICTIONS APPLY TO ALL FIELDS																	

RAILROAD COMMISSION OF TEXAS
OIL & GAS DIVISION



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

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OPERATOR PDC PERMIAN, INC. 1775 SHERMAN ST STE 3000 DENVER, CO 80203-0000		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 LIAM STATE 53-12		WELL NUMBER C 4H										
LOCATION 15.95 miles SW direction from ORLA		TOTAL DEPTH 13000										
Section, Block and/or Survey SECTION ◀ 12 BLOCK ◀ 53 ABSTRACT ◀ 3237 SURVEY ◀ PSL/FORD, L L												
DISTANCE TO SURVEY LINES 250 ft. NORTH 718 ft. WEST		DISTANCE TO NEAREST LEASE LINE 200 ft.										
DISTANCE TO LEASE LINES 250 ft. NORTH 718 ft. WEST		DISTANCE TO NEAREST WELL ON LEASE See FIELD(s) Below										
FIELD(s) and LIMITATIONS: * SEE FIELD DISTRICT FOR REPORTING PURPOSES *												
<table style="width:100%; border: none;"> <tr> <td style="width:60%;">FIELD NAME</td> <td style="width:10%;">ACRES</td> <td style="width:10%;">DEPTH</td> <td style="width:10%;">WELL #</td> <td style="width:10%;">DIST</td> </tr> <tr> <td>LEASE NAME</td> <td>NEAREST LEASE</td> <td></td> <td>NEAREST WE</td> <td></td> </tr> </table>			FIELD NAME	ACRES	DEPTH	WELL #	DIST	LEASE NAME	NEAREST LEASE		NEAREST WE	
FIELD NAME	ACRES	DEPTH	WELL #	DIST								
LEASE NAME	NEAREST LEASE		NEAREST WE									
This well shall be completed and produced in compliance with applicable special field or statewide spacing and density rules. If this well is to be used for brine mining, underground storage of liquid hydrocarbons in salt formations, or underground storage of gas in salt formations, a permit for that specific purpose must be obtained from Environmental Services prior to construction, including drilling, of the well in accordance with Statewide Rules 81, 95, and 97. This well must comply to the new SWR 3.13 requirements concerning the isolation of any potential flow zones and zones with corrosive formation fluids. See approved permit for those formations that have been identified for the county in which you are drilling the well in. The designated interval, for one or more of the fields approved on this permit, appears to overlap with the designated interval of another field or fields in this district. In the case of conflicting designated intervals you will be required to be consistent in field designation on this lease. Further, if the designated interval overlap of wells on this lease results in an actual or potential double assignment of reservoir and the applicant cannot conclusively demonstrate that there is no double assignment, the permitted well may not be assigned an allowable until the conflict is resolved. Because of the overlapping designated intervals in this area, issuance of this permit does not guarantee that the completion of the well will be approved or that the well will receive an allowable in any given field, even if that field is listed on the approved permit application.												

RAILROAD COMMISSION OF TEXAS
OIL & GAS DIVISION

SWR #13 Formation Data

REEVES (389) County

Formation	Shallow Top	Deep Top	Remarks	Geological Order	Effective Date
FORD-DELAWARE	2,500	2,500		1	12/17/2013
CASTILLE	2,800	2,800		2	12/17/2013
BELL CANYON	4,800	5,000		3	12/17/2013
DELAWARE	2,500	5,700		4	12/17/2013
DELAWARE CONSOLIDATED GAS	6,500	6,500		5	12/17/2013
CHERRY CANYON	3,800	7,800		6	12/17/2013
BONE SPRINGS	7,500	9,800		7	12/17/2013
PERMIAN	11,300	11,300		8	12/17/2013
WOLFCAMP	10,000	12,300		9	12/17/2013
PENNSYLVANIAN	11,000	14,900		10	12/17/2013
MISSISSIPPIAN	10,000	16,000		11	12/17/2013
DEVONIAN	13,600	17,800		12	12/17/2013
FUSSELMAN	14,000	17,800		13	12/17/2013
ELLENBURGER	15,000	20,800		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>

June 11, 2018

Texas General Land Office
Attn: Daryl Morgan
1700 North Congress Avenue
Austin, Texas 78701-1495

RE: Notice of Intent to Spud
Liam State 53-12 C4H
Block 53, Sections 12 and 13
Culberson County, Texas

Mr. Morgan:

PDC Permian, Inc. plans to spud the Liam State 53-12 C4H Well on September 16, 2018. Please find enclosed the Approved Permit to Drill as well as the Form W-1. The enclosed permit was approved by the Rail Road Commission on April 27, 2018.

If you should have any questions please feel free to contact me at any time. Thanks and have a great day.

Sincerely,
PDC Permian, Inc.



Adam Intagliata
Regional Landman
Adam.Intagliata@pdce.com
303-860-5828

Enclosures

File No. MF113744Rooves County

Drilling Permit API 389-37095 Unit 8234

Date Filed: 01/11/2019

George P. Bush, Commissioner

By gm



Unit 8234 MF113745 MF113744 ✓
MF117815

NADOA Model Form Division Order (Adopted 9/95)

DIVISION ORDER

To: **PDC Permian, Inc. d/b/a PDC Energy, Inc.**

Date: April 23, 2019

1775 Sherman Street, Suite 3000

Denver, CO 80203

Attn: Linh Hoang (303) 318-6144 or Linh.Hoang@pdce.com

Property Number: 142.104996

Effective Date: April 16, 2019

Property Name: Liam State 53-12 C4H

Operator: PDC Permian, Inc.

County and State: Reeves, Texas

Property: PUBLIC SCHOOL LAND, Blk 53, Sec 12: W2W2; Sec 13: W2W2 ~ 320.39 Acres

Description: 389-37095

Production: ☒ X Oil ☒ X Gas ☒ X Other: all products

Owner Name

OWNER NUMBER: 79006

and Address:

Commissioner Of State Of Texas General Land

Type of Interest: ERI

1700 Congress Ave

Decimal Interest: 0.12500000

Austin, TX 78701-1495

The undersigned certifies the ownership of their decimal interest in production or proceeds as described above payable by **PDC Permian, Inc. d/b/a PDC Energy, Inc.** (Payor).

Payor shall be notified, in writing, of any change in ownership, decimal interest, or payment address. All such changes shall be effective the first day of the month following receipt of such notice.

Payor is authorized to withhold payment pending resolution of a title dispute or adverse claim asserted regarding the interest in production claimed herein by the undersigned. The undersigned agrees to indemnify and reimburse Payor any amount attributable to an interest to which the undersigned is not entitled.

Payor may accrue proceeds until the total amount equals \$25.00, or pay yearly whichever occurs first, or as required by applicable state statute.

This Division Order does not amend any lease or operating agreement between the undersigned and the lessee or operator or any other contracts for the purchase of oil or gas.

In addition to the terms and conditions of this Division Order, the undersigned and Payor may have certain statutory rights under the laws of the state in which the property is located.

Special Clauses: (None or See Attached Exhibit)

Owner(s) Signature(s):

Commissioner Of State Of Texas

Owner(s) SSN/Tax I.D. Number(s):

Owner Daytime Telephone:

Owner Email Address:

Federal Law requires you to furnish your Social Security or Taxpayer Identification Number.
Failure to comply will result in 24% tax withholding and will not be refundable by Payor

LMH

Retain this copy for your records

61.334

INSTRUCTIONS TO ALL INTEREST OWNERS

Dear Interest Owner,

PDC Permian, Inc. d/b/a PDC Energy has enclosed a Division Order for your execution.

The attached document should not be altered in any way except to correct spelling errors, unless accompanied by documentary evidence to support the change.

If your name and interest are correctly shown:

1. Sign your name as shown on the Division Order.
2. If your name has changed due to marriage or divorce, execute the Division Order using your present name and furnish a copy of the marriage certificate or divorce decree.
3. If signing for a corporation, signature must be attested, corporate seal fixed and title of signatory party reflected.
4. If signed by agent, attorney-in-fact, guardian or any party other than the named interest owner, a certified copy of the power of attorney or other evidence of such party's right to sign must be furnished.
5. Your correct mailing address should be noted in the space provided to insure prompt receipt of production proceeds.
6. The top copy or the "Original" of the Division Order should be returned to:

PDC Permian, Inc. d/b/a PDC Energy
1775 Sherman Street, Suite 3000
Denver, Colorado 80203
Attn: Division Orders

7. Should you have any further questions regarding the enclosed Division Order, please contact PDC Permian, Inc. d/b/a PDC Energy at (303) 860-5836 or (888) 860-5836.
8. Please DO NOT DETACH the exhibit from the Division Order or Transfer Order if one is included.





TEXAS GENERAL LAND OFFICE
GEORGE P. BUSH, COMMISSIONER

August 5, 2019

Shelby McCloud
Division Order Team Lead
PDC Permian, Inc.
1775 Sherman Street, Suite 3000
Denver, Colorado 80203

✓
Re: State Lease Nos. MF113745, MF113744 and MF117815 Liam State 53-12 C4H Unit 8234

Dear Mrs. McCloud:

The Texas General Land Office (GLO) has received your Division Orders for the referenced Unit. This Division Order has been filed in the appropriate mineral file(s).

The payment of royalties attributable to state-owned mineral and royalty interests is set by contract and applicable statutes and rules. The execution of division orders may, in some cases, affect the manner in which such payments are made or calculated. Therefore, Title 31, §9.32, of the Texas Administrative Code specifies that GLO staff cannot execute a division order or bind the state to any terms contained within it.

Subject to applicable state law and the state's right to take its production in-kind, the GLO acquiesces to the sale of oil and gas in accordance with the terms and conditions set out in the oil and gas leases. If you have questions concerning this matter, please feel free to e-mail me at the address below my signature.

We look forward to being put on pay status as soon as you are able to set up the wells in our RRAC system.

Thank you,

Vivian Zamora
Landman, Energy Resources
512-475-0428
512-475-1404 (fax)
vivian.zamora@glo.texas.gov

File No. MF 113744
Reeves County
Division Order
Date Filed: 8/5/19
George P. Bush, Commissioner
By VB



January 3, 2023

Sent Via FedEx #770925532882

Texas General Land Office
Attn: Joy McCauley
1700 N. Congress Avenue, Ste. 840
Austin, Texas 78701-1495

RE: Notice of Intent to Plug & Abandon
Well: Liam State 53-12 1H
MF113744, MF113745, MF117815
GLO Unit No. 8234

To Whom it May Concern:

Please allow for this letter to serve as notice that PDC Permian, Inc. intends to Plug and Abandon the Liam State 53-12 1H well, API Number: 42-389-35361. Form W-3A has been filed with the Railroad Commission of Texas and has been enclosed for your records.

If you should have any questions regarding this matter, please do not hesitate to reach out to me directly.

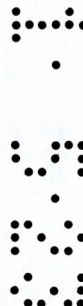
Respectfully,
PDC PERMIAN, Inc.

A handwritten signature in blue ink that reads "Mark Seligman".

Mark Seligman
Land Supervisor – Delaware
Mark.Seligman@pdce.com
Office: 303.318.6140

MS:ss

/enclosures



Type or print only

RAILROAD COMMISSION OF TEXAS
Oil and Gas Division
Notice of Intention to Plug and Abandon

Form W-3A

Rev 1/1/83

(02/00)

WWW-1

Operators must comply with RRC plugging procedures as outlined on the reverse side.

1. Operator's Name and Address (Exactly as shown on Form P-5, Organization Report) PDC PERMIAN, INC. 1775 SHERMAN ST STE 3000 DENVER, CO 80203-					6. Drilling Permit No. 818014	5. API No. 38935361
					8. Oil Lease No. or Gas Well ID No. 283408	9. Well No. 1H
2. RRC Operator No 646832	7. Rule 37 Case No.	4. County of Well Site REEVES	3. District No. 08			
10. Field Name (Exactly as shown on RRC records) PHANTOM [WOLFCAMP]			11. Lease Name LIAM STATE 53-12			
12. Location • Section No. 12 Block No 53 Survey and Survey No PSL/FORD, L L Abstract No. A- 3237 • Distance (in miles) and direction from a nearby town in this county (name the town).						
13. Type of well Gas			14. Type of completion Single		15. Total depth 9845	

16. Usable-quality water strata detail

77]. The base of usable-quality water that must be protected is estimated to occur at a depth of 850 feet below the land surface. Moreover, the fresh water contained in the interval from the land surface to a depth of 450 feet must be isolated from water in underlying beds.

Letter Date 12/06/2022

17. • If there are wells in this area which are producing from or have produced from a shallower zones, state depth of zones

_____, _____, _____, _____, _____, and _____.

• If there are wells into which salt water is being or has been disposed of into a shallower zones, state depth of zones

_____, _____, _____, _____, _____, and _____.

18. Casing record (list all casing in well)

Type	Hole size	Size	Depth	Cement	Top of cement	Tool setting depth	Anticipated casing recovery	Top of liner	Bottom of liner	Top of cement determined by		
										Temper Survey	Calculated	Cement Bond Log
Casing	9 5/8	12 1/4	2994	1315	0							
Casing	7	8 3/4	10189	580	355							
Casing	4 1/2	6 1/4	19705	785	10100							

WARNING: If the above area for Casing Record is full, verify that there are no more than 8 by reviewing the online version.**19. Has notice of intent to plug been filed previously for this well?** No **Date:**

21. Record of perforated intervals or open hole

Perforations or Open Hole	Perforations	Interval (ft)	10193	to	19249	Plugged or Not Plugged
Historic Plug Information		Set at	feet with			feet of cement on top
			feet to			feet with sacks
		Sacks pumped 'on top'				Sacks pumped 'below'
Other Plugging proposal type						
Perforations or Open Hole	Open Hole	Interval (ft)		to		Plugged or Not Plugged
Historic Plug Information		Set at	feet with			feet of cement on top
			feet to			feet with sacks
		Sacks pumped 'on top'				Sacks pumped 'below'
Other Plugging proposal type						
Perforations or Open Hole	Open Hole	Interval (ft)		to		Plugged or Not Plugged
Historic Plug Information		Set at	feet with			feet of cement on top
			feet to			feet with sacks
		Sacks pumped 'on top'				Sacks pumped 'below'
Other Plugging proposal type						
Perforations or Open Hole		Interval (ft)		to		Plugged or Not Plugged
Historic Plug Information		Set at	feet with			feet of cement on top
			feet to			feet with sacks
		Sacks pumped 'on top'				Sacks pumped 'below'
Other Plugging proposal type						
Perforations or Open Hole		Interval (ft)		to		Plugged or Not Plugged
Historic Plug Information		Set at	feet with			feet of cement on top
			feet to			feet with sacks
		Sacks pumped 'on top'				Sacks pumped 'below'
Other Plugging proposal type						
Perforations or Open Hole		Interval (ft)		to		Plugged or Not Plugged
Historic Plug Information		Set at	feet with			feet of cement on top
			feet to			feet with sacks
		Sacks pumped 'on top'				Sacks pumped 'below'
Other Plugging proposal type						
Perforations or Open Hole		Interval (ft)		to		Plugged or Not Plugged
Historic Plug Information		Set at	feet with			feet of cement on top
			feet to			feet with sacks
		Sacks pumped 'on top'				Sacks pumped 'below'
Other Plugging proposal type						
Perforations or Open Hole		Interval (ft)		to		Plugged or Not Plugged
Historic Plug Information		Set at	feet with			feet of cement on top
			feet to			feet with sacks
		Sacks pumped 'on top'				Sacks pumped 'below'
Other Plugging proposal type						

WARNING: If the above area for Perforations/Open Hole is full, verify that there are no more than 9 by reviewing the online version.

Plugging Proposal Type	CIBP	Set at or from	10150	feet to	feet with	20	sacks
				feet with	100	feet of cement on top	
Additional requirements			sacks pumped 'below' and			sacks pumped 'on top'	
3 -Tag top of plug							

Plugging Proposal Type	Cement Plug	Set at or from	6995	feet to	6895	feet with	50	sacks
				feet with		feet of cement on top		
Additional requirements			sacks pumped 'below' and			sacks pumped 'on top'		
2 - Perforate and Squeeze								

Plugging Proposal Type	Cement Plug	Set at or from	3940	feet to	3840	feet with	50	sacks
				feet with		feet of cement on top		
Additional requirements			sacks pumped 'below' and			sacks pumped 'on top'		
2 - Perforate and Squeeze								

Plugging Proposal Type	Cement Plug	Set at or from	3050	feet to	2950	feet with	50	sacks
				feet with		feet of cement on top		
Additional requirements			sacks pumped 'below' and				sacks pumped 'on top'	
2 - Perforate and Squeeze								

Plugging Proposal Type	Cement Plug	Set at or from	900	feet to	800	feet with	50	sacks
				feet with		feet of cement on top		
Additional requirements				sacks pumped 'below' and		sacks pumped 'on top'		
2 - Perforate and Squeeze, 4 - Wait 4 hours and tag top of plug								

Plugging Proposal Type	Cement Plug	Set at or from	500	feet to	400	feet with	50	sacks
				feet with		feet of cement on top		
Additional requirements			sacks pumped 'below' and			sacks pumped 'on top'		
2 - Perforate and Squeeze, 4 - Wait 4 hours and tag top of plug								

Plugging Proposal Type	Cement Surface Plug	Set at or from	10	feet to	0	feet with	20	sacks
				feet with		feet of cement on top		
Additional requirements			sacks pumped 'below' and			sacks pumped 'on top'		
6 - None								

Plugging Proposal Type	Set at or from	feet to	feet with	sacks
		feet with	feet of cement on top	
Additional requirements		sacks pumped 'below' and		sacks pumped 'on top'

Plugging Proposal Type	Set at or from	feet to feet with	feet with feet of cement on top	sacks
Additional requirements		sacks pumped 'below' and		sacks pumped 'on top'

Plugging Proposal Type	Set at or from	feet to	feet with	sacks
		feet with	feet of cement on top	
Additional requirements		sacks pumped 'below' and		sacks pumped 'on top'

API No:

38935361

Well No:

1H

20. Plugging proposal (List all bridge and cement plugs. Load the hole with at least 9.5 lbs. per gallon mud.)

Plugging Proposal Type	Set at or from	feet to	feet with	sacks
		feet with	feet of cement on top	
Additional requirements		sacks pumped 'below' and	sacks pumped 'on top'	

Plugging Proposal Type	Set at or from	feet to	feet with	sacks
		feet with	feet of cement on top	
Additional requirements		sacks pumped 'below' and	sacks pumped 'on top'	

Plugging Proposal Type	Set at or from	feet to	feet with	sacks
		feet with	feet of cement on top	
Additional requirements		sacks pumped 'below' and	sacks pumped 'on top'	

Plugging Proposal Type	Set at or from	feet to	feet with	sacks
		feet with	feet of cement on top	
Additional requirements		sacks pumped 'below' and	sacks pumped 'on top'	

Plugging Proposal Type	Set at or from	feet to	feet with	sacks
		feet with	feet of cement on top	
Additional requirements		sacks pumped 'below' and	sacks pumped 'on top'	

WARNING: If the above area for Plugging Proposal is full, verify that there are no more than 16 by reviewing the online version.**22. Name and address of cementing company or contractor**

Will use approved cementing company.

Rachel Milne

Typed or printed name of operator's representative

(303) 513-7667

Telephone: Area Code Number**23. Anticipated plugging date for this well is:**January 01
2023

Regulatory Consultant

Title of person

Rachel Milne

Signature**RRC District Office Action** **Expiration date**

January 01 2024

Jeffery Morgan

District Director

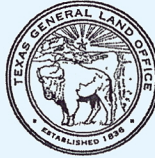
Erik Hanson

Must Witness:

No

Approved on behalf of the District Director by:

File No. MF113744
Reemes County
Notice of Intent to P&A AP142-389-35361
 Date Filed: 5/12/2023
Commissioner Dawn Buckingham, M.D.
 By: [Signature]



TEXAS GENERAL LAND OFFICE
COMMISSIONER DAWN BUCKINGHAM, M.D.

August 25, 2023

CERTIFIED MAIL NO: 7011-1150-0001-2416-4387

Sent via e-mail

PDC Energy, Inc.
1099 18th Street, Suite 1500
Denver, Colorado 80202
Attention: Tonia Carabajal, Senior Manager Revenue Accounting

Re: Oil Draft Audit Billing Notice for State Leases Operated by PDC

Dear Ms. Carabajal:

The Texas General Land Office (GLO) has completed the audit of the above-referenced State leases operated and/or held PDC Energy, Inc (PDC). The objective of this audit was to determine whether oil royalties were being accurately reported and paid per the lease agreement and the *Texas Natural Resources Code*. The audit scope covered the production months of November 2014 through December 2022. Enclosed is a draft of the audit report and audit billing schedules. The audit has preliminarily resulted in a royalty due of \$1,808,936.74. This letter does not constitute an audit billing notice as defined in Section 52.135(c) of the *Texas Natural Resources Code*.

This amount does not include penalty and interest assessed for royalty underpayments. Penalty and interest will be computed and included in our final audit billing notice. Attached are the following documents in support of our findings:

- Attachment I - Summary of the audit exceptions by lease;
- Attachment II - Draft audit report, which includes a brief discussion of the audit exceptions; and
- Attachment III - Various schedules and documents that support royalty calculations.

Please respond to this notice within 30 days of the above date. If you have any questions or need additional information regarding this draft billing notice, contact Pamela Akpotaire at (281) 923-7478 or by email at pamela.akpotaire@glo.texas.gov.

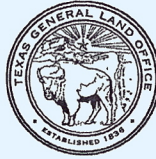
Sincerely,

Brian B. Raygon, MBA, CFE
Director of Minerals Audit
Texas General Land Office
(512) 463-0154 / brian.raygon@glo.texas.gov

Cc:

Ryan Robison, Revenue Accounting Director / PDC
Glinda Cummings, Chevron Services Company
Matthew Bartkowiak, Chevron Services Company

Attachments
Ltr Log# 0388



TEXAS GENERAL LAND OFFICE
COMMISSIONER DAWN BUCKINGHAM, M.D.

September 13, 2023

CERTIFIED MAIL NO: 7006-2760-0000-6437-6822

Sent via e-mail

PDC Energy, Inc.
1099 18th Street, Granite Tower, Suite 1500
Denver, CO 80202
Attention: Tonia Carbajal, Senior Manager Revenue Accounting

Re: Oil Final Audit Billing Notice for State Leases Operated by PDC

Dear Ms. Carbajal:

The Texas General Land Office (GLO) has completed the audit of the above-referenced State leases operated and/or held PDC Energy, Inc. (PDC). The objective of this audit was to determine whether oil royalties were being accurately reported and paid per the lease agreement and the *Texas Natural Resources Code*. Please refer to Attachment I, which highlights the audit and billing periods for each audited State lease.

Due to Chevron Corporation's acquisition of PDC in May 2023 and interest of time in quantifying potential additional royalties owed by PDC, the GLO will separately issue oil and gas final audit billing notices. Consequently, the gas draft and final audit billing notices will be forthcoming. Therefore, this letter does constitute an Audit Billing Notice for oil audit exception as defined in Section 52.135(c) of the *Texas Natural Resources Code*.

The audit resulted in the determination of additional amounts due for oil royalties as follows:

Royalty	\$ 1,808,936.74
Penalty	\$ 196,492.61
Interest	\$ 417,863.04
Total	<u>\$ 2,423,292.39</u>

Interest has been computed through August 31, 2023, per Section 52.131 of the *Texas Natural Resources Code* and will continue to accrue until the royalty has been paid. Attached are the following documents in support of our findings:

- Attachment I - Summary of the oil audit exceptions by lease;
- Attachment II - An audit report, which includes a brief discussion of the oil audit exceptions;
- Attachment III – The procedures used for assessment of penalties and interest; and

➤ Attachment IV - Various schedules and documents that support oil royalty calculations.

To ensure your company remains in good standing with the GLO, please respond within 30 days from the receipt of this Final Oil Audit Billing Notice. Respond with your payment, or request a hearing before the Commissioner, or his representative, for redetermination of such assessment. To ensure proper credit, mail your payment (or, advise and provide supporting documents on any electronic payments made for this audit billing) with your audit billing notice to the following address:

Texas General Land Office
Stephen F. Austin Building
1700 North Congress Avenue
Austin, Texas 78701-1495

For any questions or additional information on this audit, please contact Pamela Akpotaire at (281) 923-7478 or send an email to pamela.akpotaire@glo.texas.gov.

Sincerely,



Brian B. Raygon, MBA, CFE
Director of Minerals Audit
Texas General Land Office
(512) 463-0154 / brian.raygon@glo.texas.gov

Cc:

Ryan Robison, Revenue Accounting Director/PDC
Matthew Bartkowiak, Chevron Services Company
Glinda Cummings, Chevron Services Company

Attachments
Ltr Log #0393

ATTACHMENT I
PDC Permian, Inc.
SUMMARY OF AUDIT EXCEPTIONS - OIL

FIELD NAME STATE LEASE NUMBER	ATTACHMENT	EXCEPTION	ADDITIONAL ROYALTY DUE	PENALTY DUE AS OF 8/31/2023	INTEREST DUE AS OF 8/31/2023	AUDITED PRODUCTION MONTHS	BILLED PRODUCTION MONTHS
Fields: Ford, West-Wolfcamp, Gresswood (Atoka), Phantom-Wolfcamp, Wolfbone (Trend Area)							
Leases:							
MF111356	IV A	Billing on under reported oil prices	\$79,896.90	\$8,118.70	\$15,784.76	\$103,800.36	August 2016 - December 2022
MF111399	IV B	Billing on under reported oil prices	\$2,883.23	\$367.77	\$793.44	\$4,044.44	March 2017 - December 2022
MF111746	IV A	Billing on under reported oil prices	\$1,625.34	\$604.59	\$445.31	\$2,675.24	March 2017 - December 2022
MF111747	IV B	Billing on under reported oil prices	\$5,778.76	\$617.77	\$1,590.28	\$7,986.81	March 2017 - December 2022
MF111748	IV A	Billing on under reported oil prices	\$82,656.19	\$8,306.31	\$20,452.53	\$111,415.03	March 2016 - December 2022
MF112094	IV A	Billing on under reported oil prices	\$175,599.65	\$17,559.97	\$33,489.32	\$226,648.94	December 2016 - December 2022
MF112404	IV A	Billing on under reported oil prices	\$46,022.33	\$4,672.53	\$12,091.63	\$62,786.49	March 2017 - December 2022
MF112407	IV B	Billing on under reported oil prices	\$8,610.88	\$1,043.34	\$2,367.46	\$12,021.68	February 2017 - December 2022
MF112415	IV B	Billing on under reported oil prices	\$4,556.74	\$713.70	\$1,236.03	\$6,506.47	March 2017 - December 2022
MF112438	IV B	Billing on under reported oil prices	\$2,268.53	\$600.00	\$615.33	\$3,483.86	March 2017 - December 2022
MF112687	IV B	Billing on under reported oil prices	\$3,535.93	\$557.57	\$1,017.60	\$5,111.10	December 2016 - December 2022
MF112692	IV A	Billing on under reported oil prices	\$53,006.32	\$5,427.43	\$9,817.79	\$68,251.54	December 2016 - December 2022
MF112819	IV B	Billing on under reported oil prices	\$1,075.18	\$375.00	\$294.84	\$1,745.02	February 2017 - December 2022
MF112844		No Material Finding	\$0.00	\$0.00	\$0.00	\$0.00	NO PRODUCTION REPORTED
MF113522	IV B	Billing on under reported oil prices	\$604.77	\$450.00	\$167.46	\$1,222.23	December 2016 - December 2022
MF113523	IV B	Billing on under reported oil prices	\$907.14	\$450.00	\$251.17	\$1,608.31	December 2016 - December 2022
MF113744	IV A	Billing on under reported oil prices	\$32,649.91	\$3,424.77	\$8,371.25	\$44,445.93	January 2017 - December 2022
MF113745	IV A	Billing on under reported oil prices	\$32,649.67	\$3,424.76	\$8,371.22	\$44,445.65	January 2017 - December 2022
MF114156	IV A	Billing on under reported oil prices	\$43,425.03	\$4,361.99	\$8,714.13	\$56,501.15	April 2018 - December 2022
MF116245	IV B	Billing on under reported oil prices	\$2,288.27	\$452.64	\$653.60	\$3,394.51	August 2016 - December 2022
MF116246	IV B	Billing on under reported oil prices	\$716.10	\$150.00	\$192.22	\$1,058.32	November 2017 - December 2022
MF116247		No Material Finding	\$0.00	\$0.00	\$0.00	\$0.00	NO PRODUCTION REPORTED
MF116248	IV B	Billing on under reported oil prices	\$16,573.45	\$2,021.55	\$4,936.17	\$23,531.17	November 2014 - December 2022
MF116249	IV B	Billing on under reported oil prices	\$3,042.05	\$528.11	\$878.12	\$4,448.28	August 2016 - December 2022
MF116544	IV B	Billing on under reported oil prices	\$302.22	\$400.00	\$83.68	\$785.90	December 2016 - December 2022
MF116609	IV A	Billing on under reported oil prices	\$6,136.10	\$1,233.59	\$1,479.09	\$8,848.78	September 2017 - December 2022
MF116834	IV A	Billing on under reported oil prices	\$41,454.82	\$4,227.62	\$9,992.82	\$55,675.26	September 2017 - December 2022
MF116835	IV A	Billing on under reported oil prices	\$82,908.31	\$8,348.25	\$19,985.27	\$111,241.83	September 2017 - December 2022
MF116844	IV B	Billing on under reported oil prices	\$37,353.35	\$3,747.52	\$11,163.23	\$52,264.10	June 2015 - December 2022
MF117056	IV A	Billing on under reported oil prices	\$2,991.35	\$1,028.36	\$772.13	\$4,791.84	December 2017 - December 2022
MF117175	IV B	Billing on under reported oil prices	\$7,132.63	\$1,850.88	\$1,889.69	\$10,873.20	October 2015 - December 2022
MF117292	IV A	Billing on under reported oil prices	\$113,222.56	\$11,489.53	\$25,855.56	\$150,567.65	March 2018 - December 2022
MF117414	IV A	Billing on under reported oil prices	\$139,201.23	\$13,939.70	\$32,832.65	\$185,973.58	August 2016 - December 2022
MF117492	IV A	Billing on under reported oil prices	\$394.35	\$450.00	\$88.50	\$932.85	February 2019 - December 2022
MF117516	IV A	Billing on under reported oil prices	\$170,329.23	\$17,032.86	\$40,579.82	\$227,941.91	February 2018 - December 2022
MF117652	IV A	Billing on under reported oil prices	\$12,581.00	\$1,384.88	\$2,835.52	\$16,801.40	March 2018 - December 2022
MF117815	IV A	Billing on under reported oil prices	\$42,450.69	\$4,380.93	\$10,819.36	\$57,650.98	January 2017 - December 2022
MF117960	IV B	Billing on under reported oil prices	\$3,225.35	\$538.08	\$884.41	\$4,647.84	February 2017 - December 2022
MF118062	IV A	Billing on under reported oil prices	\$3,294.14	\$629.17	\$787.00	\$4,710.31	May 2018 - December 2022
MF118083	IV B	Billing on under reported oil prices	\$6,588.25	\$1,608.06	\$1,488.92	\$9,685.23	May 2016 - December 2022
MF118101	IV A	Billing on under reported oil prices	\$39,033.04	\$3,903.31	\$10,176.80	\$53,113.15	September 2018 - December 2022
MF118118	IV A	Billing on under reported oil prices	\$12,108.64	\$1,464.11	\$2,473.50	\$16,046.25	June 2019 - December 2022
MF118152	IV B	Billing on under reported oil prices	\$9,737.56	\$1,478.86	\$2,213.95	\$13,430.37	September 2017 - December 2022
MF118164	IV A	Billing on under reported oil prices	\$30,226.43	\$3,151.69	\$7,286.14	\$40,664.26	September 2017 - December 2022
MF118284	IV B	Billing on under reported oil prices	\$5,667.49	\$1,305.78	\$1,411.92	\$8,385.19	September 2017 - December 2022
MF118354	IV B	Billing on under reported oil prices	\$11,977.85	\$1,702.44	\$2,907.12	\$16,587.41	May 2017 - December 2022
MF118460	IV B	Billing on under reported oil prices	\$12,001.39	\$1,519.80	\$2,903.20	\$16,424.39	September 2017 - December 2022
MF118486	IV A	Billing on under reported oil prices	\$178,865.19	\$17,900.55	\$42,140.41	\$238,906.15	April 2017 - December 2022
MF118552	IV A	Billing on under reported oil prices	\$13,819.51	\$1,643.37	\$3,331.19	\$18,794.07	September 2017 - December 2022
MF118601	IV B	Billing on under reported oil prices	\$17,440.01	\$1,900.10	\$3,921.09	\$23,261.20	July 2017 - December 2022
MF118602	IV B	Billing on under reported oil prices	\$17,439.99	\$1,900.10	\$3,921.09	\$23,261.18	July 2017 - December 2022
MF118630	IV A	Billing on under reported oil prices	\$21,500.12	\$2,332.41	\$5,182.72	\$29,015.25	September 2017 - December 2022
MF118664	IV A	Billing on under reported oil prices	\$9,253.22	\$1,414.16	\$1,854.48	\$12,521.86	December 2017 - December 2022
MF118671	IV A	Billing on under reported oil prices	\$13,055.26	\$1,683.10	\$2,336.69	\$17,275.05	December 2017 - December 2022
MF118709	IV B	Billing on under reported oil prices	\$9,737.56	\$1,478.86	\$2,213.95	\$13,430.37	September 2017 - December 2022
MF119148	IV A	Billing on under reported oil prices	\$70,522.49	\$7,054.69	\$14,152.76	\$91,729.94	April 2018 - December 2022
MF119160	IV A	Billing on under reported oil prices	\$27,635.28	\$2,906.03	\$6,661.60	\$37,202.91	September 2017 - December 2022
MF119281	IV A	Billing on under reported oil prices	\$12,908.38	\$1,404.56	\$3,137.19	\$17,450.13	March 2018 - December 2022
MF119424	IV A	Billing on under reported oil prices	\$608.08	\$725.00	\$142.23	\$1,475.31	March 2018 - December 2022
MF119686	IV A	Billing on under reported oil prices	\$24,219.48	\$2,680.76	\$4,947.02	\$31,847.26	June 2019 - December 2022
MF119900		No Material Finding	\$0.00	\$0.00	\$0.00	\$0.00	August 2021 - December 2022
MF119996	IV A	Billing on under reported oil prices	\$1,241.80	\$425.00	\$278.68	\$1,945.48	May 2019 - December 2022
IV A & B			\$1,808,936.74	\$196,492.61	\$417,863.04	\$2,423,292.39	GRAND TOTAL

File No. MF 113744

County

o. Draft + Audit Billing Notice

Date Filed: 4/16/2024

Commissioner Dawn Buckingham, M.D.

By: [Signature]



TEXAS GENERAL LAND OFFICE
COMMISSIONER DAWN BUCKINGHAM, M.D.

October 20, 2023

Certified Mail No: 7006-2760-0000-6437-6843

Sent via e-mail

PDC Energy, Inc.
1099 18th Street, Granite Tower, Suite 1500
Denver, CO 80202
Attention: Tonia Carbajal, Sr. Manager Revenue Accounting

Re: Gas Draft Audit Billing Notice for State Leases Operated by PDC

Dear Ms. Carbajal:

The Texas General Land Office (GLO) has completed the audit of the above-referenced State leases operated and/or held PDC Energy, Inc. (PDC). The objective of this audit was to determine whether gas royalties were being accurately reported and paid per the lease agreement and the *Texas Natural Resources Code*. Please refer to Attachment I that highlights the audit and billing periods for each audited State lease.

The audit has preliminarily resulted in a royalty due of **\$4,692,841.78**. This letter does not constitute an audit billing notice as defined in Section 52.135(c) of the *Texas Natural Resources Code*. This amount **does not include** penalty and interest assessed for royalty underpayments. Penalty and interest will be computed and included in our final audit billing notice. Attached are the following documents in support of our findings:

- Attachment I - Summary of the audit exceptions by lease;
- Attachment II - Draft audit report, which includes a brief discussion of the audit exceptions; and
- Attachment III - Various schedules and documents that support royalty calculations.

Please respond to this notice within 30 days of the above date. If you have any questions or need additional information regarding this draft billing notice, contact Pamela Akpotaire at (281) 923-7478 or by email at pamela.akpotaire@glo.texas.gov.

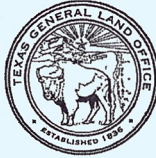
Sincerely,

Brian B. Raygon, MBA, CFE
Director of Minerals Audit
Texas General Land Office
(512) 463-0154 / brian.raygon@glo.texas.gov

Cc:

Ryan Robison, Revenue Accounting Director/PDC
Glinda Cummings, Chevron Services Company
Matthew Bartkowiak, Chevron Services Company

Attachments
Ltr Log# 0394



TEXAS GENERAL LAND OFFICE
COMMISSIONER DAWN BUCKINGHAM, M.D.

November 7, 2023

Certified Mail No: 7006-2760-0000-6437-6846

Sent via e-mail

PDC Energy, Inc.
1099 18th Street, Granite Tower, Suite 1500
Denver, CO 80202
Attention: Tonia Carbajal, Senior Manager Revenue Accounting

Re: Gas Final Audit Billing Notice for State Leases Operated by PDC

Dear Ms. Carbajal:

The Texas General Land Office (GLO) has completed the audit of the above-referenced State leases operated and/or held by PDC Energy, Inc. (PDC). The objective of this audit was to determine whether gas royalties were being accurately reported and paid per the lease agreement and the *Texas Natural Resources Code*. Please refer to Attachment I, which highlights the audit and billing periods for each audited State lease.

Due to Chevron Corporation's acquisition of PDC in May 2023, and in the interest of time in quantifying potential additional royalties owed by PDC, the GLO advised PDC that separate final audit billing notices would be sent for oil and gas. Consequently, the Final Audit Billing Notice for oil-related audit exceptions was issued on September 13, 2023. This letter constitutes a Final Audit Billing Notice for gas-related audit exceptions as defined in Section 52.135(c) of the Texas Natural Resources Code.

The audit resulted in the determination of additional amounts due for gas royalties as follows:

Royalty	\$4,692,799.04
Penalty	\$ 533,569.37
Interest	<u>\$ 646,758.58</u>
Total	<u>\$5,873,126.99</u>

Interest has been computed through October 31, 2023, per Section 52.131 of the *Texas Natural Resources Code* and will continue to accrue until the royalty has been paid. Attached are the following documents in support of our findings:

- Attachment I – Summary of the gas audit exceptions by lease;
- Attachment II – Audit Report, which includes a brief discussion of the gas audit exceptions;
- Attachment III – The procedures used for assessment of penalties and interest; and
- Attachment IV – Various schedules and documents that support gas royalty calculations.

To ensure your company remains in good standing with the GLO, please respond within 30 days from the receipt of this Final Gas Audit Billing Notice. Respond with your payment, or request a hearing before the Commissioner, or his representative, for redetermination of such assessment. To ensure proper credit, mail your payment (or advise and provide supporting documents on any electronic payments made for this audit billing) with your audit billing notice to the following address:

Texas General Land Office
Stephen F. Austin Building
1700 North Congress Avenue
Austin, Texas 78701-1495

For any questions or additional information on this audit, please contact Pamela Akpotaire at (281) 923-7478 or send an email to pamela.akpotaire@glo.texas.gov.

Sincerely,



Brian B. Raygon, MBA, CFE
Director of Minerals Audit
Texas General Land Office
(512) 463-0154 / brian.raygon@glo.texas.gov

Cc:

Ryan Robison, Revenue Accounting Director/PDC
Glinda Cummings, Chevron Services Company
Matthew Bartkowiak, Chevron Services Company

Attachments
Ltr Log# 0396

ATTACHMENT I
PDC PERMIAN, INC.
SUMMARY OF FINAL AUDIT EXCEPTIONS - GAS
11/7/2023

FIELD NAME STATE LEASE #	ATT	ERROR RATE CODES *	EXCEPTION	ADDITIONAL ROYALTY DUE Under / (Over)	PENALTY DUE AS OF 10/31/2023	INTEREST DUE AS OF 10/31/2023	ADDITIONAL REVENUE DUE Under / (Over)	AUDITED PRODUCTION MONTHS	BILLED PRODUCTION MONTHS
Fields: Phantom-Wolfcamp, Wolfbone (Trend Area)									
MF111356	IV	A	See Att II Audit Report for Exceptions	\$111,271.49	\$11,472.04	\$9,054.81	\$131,798.34	Aug 2016 - Dec 2022	Aug 2016 - Dec 2022
MF111399	IV	B	See Att II Audit Report for Exceptions	\$18,819.04	\$1,888.66	\$5,521.77	\$26,229.47	Sep 2016 - Dec 2017	Sep 2016 - Dec 2017
MF111746	IV	B(i)	See Att II Audit Report for Exceptions	\$1,346.95	\$375.00	\$376.57	\$2,098.52	Jul 2017 - Jun 2019	Jul 2017 - Jun 2019
MF111747	IV	B	See Att II Audit Report for Exceptions	\$37,720.81	\$3,790.29	\$11,178.69	\$52,689.79	Sep 2016 - Dec 2017	Sep 2016 - Dec 2017
MF111748	IV	A	See Att II Audit Report for Exceptions	\$399,546.14	\$39,954.60	\$78,254.27	\$517,755.01	Dec 2016 - Dec 2022	Dec 2016 - Dec 2022
MF112094	IV	A	See Att II Audit Report for Exceptions	\$518,967.41	\$51,924.36	\$50,012.99	\$620,904.76	Nov 2016 - Dec 2022	Nov 2016 - Dec 2022
MF112404	IV	B(i)	See Att II Audit Report for Exceptions	\$45,703.12	\$4,627.17	\$12,368.80	\$62,699.09	Jul 2017 - Jun 2019	Jul 2017 - Jun 2019
MF112407	IV	B	See Att II Audit Report for Exceptions	\$11,045.43	\$1,209.47	\$3,118.62	\$15,373.52	Feb 2017 - Jun 2019	Feb 2017 - Jun 2019
MF112415	IV	B	See Att II Audit Report for Exceptions	\$12,431.26	\$1,391.76	\$3,375.81	\$17,198.83	Jul 2017 - Jul 2019	Jul 2017 - Jul 2019
MF112438	IV	B	See Att II Audit Report for Exceptions	\$6,187.89	\$840.39	\$1,680.36	\$8,708.64	Jul 2017 - Jul 2019	Jul 2017 - Jul 2019
MF112687	IV	B	See Att II Audit Report for Exceptions	\$54,136.53	\$5,435.78	\$15,631.56	\$75,203.87	Nov 2016 - Feb 2019	Nov 2016 - Feb 2019
MF112692	IV	A	See Att II Audit Report for Exceptions	\$168,559.29	\$16,972.68	\$15,790.46	\$201,322.43	Nov 2016 - Dec 2022	Nov 2016 - Dec 2022
MF112819	IV	B	See Att II Audit Report for Exceptions	\$1,379.05	\$350.00	\$389.34	\$2,118.39	Feb 2017 - May 2019	Feb 2017 - May 2019
MF112844	IV	B	See Att II Audit Report for Exceptions	\$13,314.64	\$1,662.63	\$3,316.66	\$18,293.93	Nov 2016 - Dec 2021	Nov 2016 - Dec 2021
MF113522	IV	B	See Att II Audit Report for Exceptions	\$3,380.65	\$531.17	\$966.96	\$4,878.78	Nov 2016 - Oct 2018	Nov 2016 - Oct 2018
MF113523	IV	B	See Att II Audit Report for Exceptions	\$5,070.95	\$671.37	\$1,450.42	\$7,192.74	Nov 2016 - Oct 2018	Nov 2016 - Oct 2018
MF113744	IV	A	See Att II Audit Report for Exceptions	\$76,570.20	\$7,905.43	\$11,964.27	\$96,439.90	Jan 2017 - Dec 2022	Jan 2017 - Dec 2022
MF113745	IV	A	See Att II Audit Report for Exceptions	\$76,570.18	\$7,905.43	\$11,964.27	\$96,439.88	Jan 2017 - Dec 2022	Jan 2017 - Dec 2022
MF114156	IV	A	See Att II Audit Report for Exceptions	\$175,999.70	\$17,602.82	\$21,949.24	\$215,551.76	May 2018 - Dec 2022	May 2018 - Dec 2022
MF116245	IV	B	See Att II Audit Report for Exceptions	\$11,367.04	\$1,216.38	\$3,350.51	\$15,933.93	Dec 2014 - Apr 2019	Dec 2014 - Apr 2019
MF116246	IV	B	See Att II Audit Report for Exceptions	\$8,927.71	\$924.97	\$2,509.09	\$12,361.77	May 2017 - May 2018	May 2017 - May 2018
MF116247	IV	B	See Att II Audit Report for Exceptions	\$887.13	\$148.50	\$251.91	\$1,287.54	Apr 2017 - Dec 2017	Apr 2017 - Dec 2017
MF116248	IV	B	See Att II Audit Report for Exceptions	\$75,999.10	\$7,663.39	\$23,014.25	\$106,676.74	Dec 2014 - Aug 2019	Dec 2014 - Aug 2019
MF116249	IV	B	See Att II Audit Report for Exceptions	\$11,369.01	\$1,216.58	\$3,351.12	\$15,936.71	Aug 2016 - Apr 2019	Aug 2016 - Apr 2019
MF116544	IV	B	See Att II Audit Report for Exceptions	\$1,690.27	\$401.56	\$483.46	\$2,575.29	Nov 2016 - Oct 2018	Nov 2016 - Oct 2018
MF116609	IV	B(i)	See Att II Audit Report for Exceptions	\$4,274.39	\$1,075.00	\$741.85	\$6,091.24	Sep 2017 - Dec 2022	Sep 2017 - Dec 2022
MF116834	IV	A	See Att II Audit Report for Exceptions	\$28,023.09	\$3,119.64	\$4,596.18	\$35,738.91	Sep 2017 - Dec 2022	Sep 2017 - Dec 2022
MF116835	IV	A	See Att II Audit Report for Exceptions	\$55,216.69	\$5,679.52	\$9,055.73	\$69,951.94	Sep 2017 - Dec 2022	Sep 2017 - Dec 2022
MF116844	IV	B	See Att II Audit Report for Exceptions	\$21,701.24	\$2,354.93	\$6,571.25	\$30,627.42	Jul 2015 - Sep 2019	Jul 2015 - Sep 2019
MF117056	IV	A	See Att II Audit Report for Exceptions	\$38,844.63	\$4,284.75	\$3,487.80	\$46,617.18	Dec 2017 - Dec 2022	Dec 2017 - Dec 2022
MF117175	IV	B	See Att II Audit Report for Exceptions	\$13,835.43	\$1,868.08	\$3,143.66	\$18,847.17	Oct 2015 - Sep 2022	Oct 2015 - Sep 2022
MF117292	IV	A(i)	See Att II Audit Report for Exceptions	(\$203,862.91)	\$21,938.77	\$20,760.09	(\$161,164.05)	Feb 2018 - Dec 2022	Feb 2018 - Dec 2022
MF117414	IV	A	See Att II Audit Report for Exceptions	\$142,601.55	\$14,320.90	\$18,231.43	\$175,153.88	Aug 2016 - Dec 2022	Aug 2016 - Dec 2022
MF117492	IV	A(ii) 4c	See Att II Audit Report for Exceptions	\$1,017.86	\$400.00	\$115.14	\$1,533.00	Feb 2019 - Dec 2022	Feb 2019 - Dec 2022
MF117516	IV	A	See Att II Audit Report for Exceptions	\$704,475.61	\$70,469.81	\$47,332.96	\$822,278.38	Mar 2018 - Dec 2022	Mar 2018 - Dec 2022
MF117652	IV	A(i)	See Att II Audit Report for Exceptions	(\$15,241.78)	\$2,060.55	\$2,014.60	(\$11,166.63)	Feb 2018 - Dec 2022	Feb 2018 - Dec 2022
MF117815	IV	A	See Att II Audit Report for Exceptions	\$153,140.50	\$15,714.54	\$23,928.48	\$192,783.52	Jan 2017 - Dec 2022	Jan 2017 - Dec 2022
MF117960	IV	B	See Att II Audit Report for Exceptions	\$4,136.99	\$567.60	\$1,168.06	\$5,872.65	Feb 2017 - Jun 2019	Feb 2017 - Jun 2019
MF118062	IV	A(ii) 4c	See Att II Audit Report for Exceptions	\$2,339.32	\$750.00	\$448.83	\$3,538.15	May 2018 - Dec 2022	May 2018 - Dec 2022

ATTACHMENT I
PDC PERMIAN, INC.
SUMMARY OF FINAL AUDIT EXCEPTIONS - GAS
11/7/2023

FIELD NAME STATE LEASE #	ATT	ERROR RATE CODES *	EXCEPTION	ADDITIONAL ROYALTY DUE Under / (Over)	PENALTY DUE AS OF 10/31/2023	INTEREST DUE AS OF 10/31/2023	ADDITIONAL REVENUE DUE Under / (Over)	AUDITED PRODUCTION MONTHS	BILLED PRODUCTION MONTHS
Fields: Phantom-Wolfcamp, Wolfbone (Trend Area)									
MF118083	IV	B	See Att II Audit Report for Exceptions	\$3,006.17	\$1,350.00	\$499.62	\$4,855.79	May 2016 - Dec 2022	May 2016 - Dec 2022
MF118101	IV	B(ii) 4c	See Att II Audit Report for Exceptions	\$33,374.31	\$3,337.42	\$8,991.97	\$45,703.70	Sep 2018 - Jun 2019	Sep 2018 - Jun 2019
MF118118	IV	A(i)	See Att II Audit Report for Exceptions	\$342,724.35	\$34,455.31	\$26,240.20	\$403,419.86	Jun 2019 - Dec 2022	Jun 2019 - Dec 2022
MF118152	IV	B(ii) 4c	See Att II Audit Report for Exceptions	\$23,904.06	\$2,739.78	\$3,454.43	\$30,098.27	Sep 2017 - Dec 2022	Sep 2017 - Dec 2022
MF118164	IV	A	See Att II Audit Report for Exceptions	\$20,131.68	\$2,410.78	\$3,301.67	\$25,844.13	Sep 2017 - Dec 2022	Sep 2017 - Dec 2022
MF118284	IV	B(ii) 4c	See Att II Audit Report for Exceptions	\$7,443.20	\$1,201.04	\$1,909.75	\$10,553.99	Sep 2017 - Oct 2021	Sep 2017 - Oct 2021
MF118354	IV	B	See Att II Audit Report for Exceptions	\$63,643.95	\$6,507.87	\$12,383.87	\$82,535.69	May 2017 - Dec 2022	May 2017 - Dec 2022
MF118460	IV	B(ii) 4c	See Att II Audit Report for Exceptions	\$14,720.93	\$1,781.56	\$3,648.76	\$20,151.25	Sep 2017 - Oct 2021	Sep 2017 - Oct 2021
MF118486	IV	A	See Att II Audit Report for Exceptions	\$228,319.98	\$22,867.35	\$35,814.71	\$287,002.04	Apr 2017 - Dec 2022	Apr 2017 - Dec 2022
MF118552	IV	B(i)	See Att II Audit Report for Exceptions	\$9,626.91	\$1,512.98	\$1,670.87	\$12,810.76	Sep 2017 - Dec 2022	Sep 2017 - Dec 2022
MF118601	IV	B	See Att II Audit Report for Exceptions	\$22,972.91	\$2,453.85	\$3,893.82	\$29,320.58	Aug 2017 - Dec 2022	Aug 2017 - Dec 2022
MF118602	IV	B	See Att II Audit Report for Exceptions	\$22,972.82	\$2,453.85	\$3,893.81	\$29,320.48	Aug 2017 - Dec 2022	Aug 2017 - Dec 2022
MF118630	IV	B(i)	See Att II Audit Report for Exceptions	\$14,979.47	\$1,925.71	\$2,599.77	\$19,504.95	Sep 2017 - Dec 2022	Sep 2017 - Dec 2022
MF118664	IV	A	See Att II Audit Report for Exceptions	\$36,782.72	\$4,081.91	\$3,613.39	\$44,478.02	Dec 2017 - Dec 2022	Dec 2017 - Dec 2022
MF118671	IV	A	See Att II Audit Report for Exceptions	\$66,855.75	\$6,879.92	\$6,139.32	\$79,874.99	Dec 2017 - Dec 2022	Dec 2017 - Dec 2022
MF118709	IV	B(ii) 4c	See Att II Audit Report for Exceptions	\$23,904.04	\$2,739.78	\$3,454.43	\$30,098.25	Sep 2017 - Dec 2022	Sep 2017 - Dec 2022
MF119148	IV	A	See Att II Audit Report for Exceptions	\$285,777.58	\$28,577.78	\$35,644.74	\$350,000.10	May 2018 - Dec 2022	May 2018 - Dec 2022
MF119160	IV	B(i)	See Att II Audit Report for Exceptions	\$19,253.85	\$2,272.63	\$3,341.65	\$24,868.13	Sep 2017 - Dec 2022	Sep 2017 - Dec 2022
MF119281	IV	A(ii) 4c	See Att II Audit Report for Exceptions	\$24,095.87	\$2,535.51	\$3,593.48	\$30,224.86	Feb 2018 - Dec 2022	Feb 2018 - Dec 2022
MF119424	IV	A(i)	See Att II Audit Report for Exceptions	(\$1,111.23)	\$150.00	\$43.74	(\$917.49)	Mar 2018 - Dec 2022	Mar 2018 - Dec 2022
MF119686	IV	A(i)	See Att II Audit Report for Exceptions	\$682,821.60	\$68,647.82	\$52,345.99	\$803,815.41	Jun 2019 - Dec 2022	Jun 2019 - Dec 2022
MF119900	IV	A(i)	See Att II Audit Report for Exceptions	(\$52,165.47)	\$0.00	(\$2,643.68)	(\$54,809.15)	Aug 2021 - Dec 2022	Aug 2021 - Dec 2022
MF119996	IV	n/a	See Att II Audit Report for Exceptions	\$0.00	\$0.00	\$0.00	\$0.00	May 2019 - Oct 2020	Excluded
Total for all Leases	III			\$4,692,799.04	\$533,569.37	\$646,758.58	\$5,873,126.99	GRAND TOTAL	

Credit to PDC Permian, Inc. (\$272,381.40)

Footnotes: * See Attach I Exhibit "B" for Error Rate Code Legend

(A): Error Rate for Audited Leases.

(B): Error Rate Applied to Non-Audited Leases.

Attachment I - Exhibit "B"

GLO REVIEW: PDC Permian, Inc.
 AUDIT EXCEPTION: All Gas Error Rates
 MINERAL FILE #: State Leases Operated by PDC Permian, Inc
 FIELDNAME: Phantom
 RRC COUNTY: 08 / Reeves (Unitized)
 AUDIT PERIOD: Nov 2014 thru Dec 2022
 PURPOSE: To determine the Average Gas Error Rate for 27 audited leases according to lease agreement (A).
 For the 34 non-audited leases listed below, the Average Error Rate calculated for audited leases was applied to the Non-Audited Leases according to the lease agreement (B).
 Excluded one (1) leases MF119996 due to materiality. Error Rates were applied to the GLO3 Payments to determine Additional Royalty Due.

Auditor: RL & PA
 Date: 11/7/2023

CONCLUSIONS:

The 34 non-audited leases made-up 12.25% of PDC Permian, Inc. gas sales during the audit period; therefore, these remaining leases are not as risky and the average error rate would be an applicable metric used to determine additional royalty due.

MF Lease Number	Gas Error Rate	Leased on	with 4(c)1 (Y/N)	ER Code
MF111356	7.95%	Dec-09	No	A
MF111748	15.84%	Aug-10	No	A
MF112094	15.13%	Oct-10	No	A
MF112692	14.98%	Mar-11	No	A
MF113744	7.27%	Nov-11	No	A
MF113745	7.27%	Sep-11	No	A
MF114156	15.74%	Sep-10	No	A
MF116834	7.74%	May-14	No	A
MF116835	7.60%	Sep-14	No	A
MF117056	11.61%	Feb-14	No	A
MF117414	7.95%	Feb-15	No	A
MF117516	13.08%	Mar-15	No	A
MF117815	7.27%	Feb-16	No	A
MF118164	7.60%	Jul-16	Yes	A
MF118486	8.89%	Sep-14	No	A
MF118664	9.84%	Jan-17	No	A
MF118671	11.02%	Nov-14	No	A
MF119148	15.74%	Jan-15	No	A
MF117292	12.38% & -17.04%	Feb-15	Yes	A(i)
MF117652	10.33% & -16.05%	Mar-15	No	A(i)
MF118118	12.59% & 26.89%	Jul-16	Yes	A(i)
MF119424	12.27% & -17.05%	Mar-18	Yes	A(i)
MF119686	12.59% & 26.73%	Oct-18	Yes	A(i)
MF119900	-31.50%	Dec-18	Yes	A(i)
MF117492	12.30%	Oct-14	Yes	A(ii) 4c
MF118062	1.99%	Jun-16	Yes	A(ii) 4c
MF119281	12.37%	Oct-17	Yes	A(ii) 4c
MF111399	10.70%	Jul-10	No	B
MF111747	10.70%	Jul-10	No	B
MF112407	10.70%	Oct-10	No	B
MF112415	10.70%	Apr-11	No	B
MF112438	10.70%	Apr-11	No	B
MF112687	10.70%	Apr-11	No	B
MF112819	10.70%	Oct-11	No	B
MF112844	10.70%	May-11	No	B
MF113522	10.70%	Jun-11	No	B
MF113523	10.70%	Jun-11	No	B

MF Lease Number	Gas Error Rate	Leased on	with 4(c)1 (Y/N)	ER Code
MF111356	7.95%	Dec-09	No	A
MF111748	15.84%	Aug-10	No	A
MF112094	15.13%	Oct-10	No	A
MF112692	14.98%	Mar-11	No	A
MF113744	7.27%	Nov-11	No	A
MF113745	7.27%	Sep-11	No	A
MF114156	15.74%	Sep-10	No	A
MF116834	7.74%	May-14	No	A
MF116835	7.60%	Sep-14	No	A
MF117056	11.61%	Feb-14	No	A
MF117414	7.95%	Feb-15	No	A
MF117516	13.08%	Mar-15	No	A
MF117815	7.27%	Feb-16	No	A
MF118164	7.60%	Jul-16	Yes	A
MF118486	8.89%	Sep-14	No	A
MF118664	9.84%	Jan-17	No	A
MF118671	11.02%	Nov-14	No	A
MF119148	15.74%	Jan-15	No	A

WTD Average ER - B: 10.70%

Notes:

ER from audited State leases and the WTD Average ER was used for non-audited leases "B"

MF Lease Number	Gas Error Rate	Leased on	with 4(c)1 (Y/N)	ER Code
MF117292	12.38% & -17.04%	Feb-15	Yes	A(i)
MF117652	10.33% & -16.05%	Mar-15	No	A(i)
MF118118	12.59% & 26.89%	Jul-16	Yes	A(i)
MF119424	12.27% & -17.05%	Mar-18	Yes	A(i)
MF119686	12.59% & 26.73%	Oct-18	Yes	A(i)
MF119900	-31.50%	Dec-18	Yes	A(i)

Notes:

Stoneman State 3927 Unit #11275 leases:

Due to reporting errors, two (2) weighted average error rates were calculated per lease, Pre & Post 08/2021.

PDC given credit for over pymts starting on 8/2021 prod months.

Error rates were not used nor combined with other leases.

MF Lease Number	Gas Error Rate	Leased on	with 4(c)1 (Y/N)	ER Code
MF116245	10.70%	Jan-14	No	B
MF116246	10.70%	Jan-14	No	B
MF116247	10.70%	Jan-14	No	B
MF116248	10.70%	Jan-14	No	B
MF116249	10.70%	Jan-14	No	B
MF116544	10.70%	Feb-14	No	B
MF116844	10.70%	Jun-14	No	B
MF117175	10.70%	Jul-14	No	B
MF117960	10.70%	Oct-15	No	B
MF118083	10.70%	Aug-15	No	B
MF118354	10.70%	Feb-12	No	B
MF118601	10.70%	Oct-15	No	B
MF118602	10.70%	Jun-15	No	B
MF111746	10.70%	Jul-10	No	B(i)
MF112404	10.70%	Apr-11	No	B(i)
MF116609	10.70%	Jan-14	No	B(i)
MF118552	10.70%	Feb-17	No	B(i)
MF118630	10.70%	Mar-17	No	B(i)
MF119160	10.70%	Aug-17	No	B(i)
MF118101	8.88%	Jul-16	Yes	B(ii) 4c
MF118152	8.88%	Jul-16	Yes	B(ii) 4c
MF118284	8.88%	Oct-16	Yes	B(ii) 4c
MF118460	8.88%	Oct-16	Yes	B(ii) 4c
MF118709	8.88%	Jun-17	Yes	B(ii) 4c
MF119996	Deleted low \$			
* Error Rate Code Legend Error Rates & Codes for all leases	10.70%		Audited	A
	Various		Audited	A(i)
	8.88%		Audited 4(c-p)	A(ii) 4c
	10.70%		Non-Audited	B
	10.70%		Non-Audited (immaterial)	B(i)
	8.88%		Non-Audited 4(c-p)	B(ii) 4c

MF Lease Number	Gas Error Rate	Leased on	with 4(c)1 (Y/N)	ER Code
MF117492	12.30%	Oct-14	Yes	A(ii) 4c
MF118062	1.99%	Jun-16	Yes	A(ii) 4c
MF119281	12.37%	Oct-17	Yes	A(ii) 4c

WTD Average ER-B(ii) 4c: 8.88%

Notes:

Minimum Liquid POP% 4(c-p) ER from audited State leases and WTD Average ER was used for non-audited leases with processing fee clause of 4(c-p) "B(ii) 4(c).

Notes:

A. Audited Leases - Average Error Rate

A(i). Outlier - PDC given credit for over payment of Gas Royalties.

Excluded from Average Error Rate for Audited Leases Due to over reported volumes.

Stoneman State 3927 Unit #11275 - RRC ID#'s: #286927 well #BH; #287041 well #A2H and #290992 well #B4H

Stoneman State leases error rates not used nor combined with other leases due to overreporting starting on 8/2021 prod months

A(ii). 4c Lease Agreement Provision - Processing Fees Allowed.

B. Error Rate Applied to Non-Audited Leases

B(i). Initially planned to be audited:

MF111746 & MF112404 documents were not provided for July 2017 - June 2019.

MF116609, MF118552, MF118630, & MF119160 allocated production was immaterial for the sample months.

B(ii). 4c - Error Rate Applied to Non-Audited Leases with 4c Lease Agreement Provision - Processing Fees Allowed.

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File No. MF 113744

County
Gas Draft Audit Billing Notice

Date Filed: 4/16/2024
Commissioner Dawn Buckingham, M.D.

By: [Signature]