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

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

Thank you for your assistance.

Archives and Records Staff

nna-n004	MF113602
#06763	State Lease Control Base File County MF113602 07-032249 100588 CULBERSON MF113602 07-032855 100591 CULBERSON
	Survey Block 111, 113 Block Name Township Section/Tract Land Part Part Description Acres Depth Below PUBLIC SCHOOL LAND 11, 113 11, 113 Public School Land 11, 113 12,0 Depth Above Depth Other
Leasing: 61+ Analyst: 614 Maps: 6IS: MC DocuShare: 615	Name LEGEND NATURAL GAS IV, LP Lease Date 7/29/2011 Primary Term 3 yrs Bonus (\$) \$960 000.00 Rental (\$) \$0.00 Lease Royalty 0.1250

ATTENTION FILE USERS!
This file has been placed in table of contents order.
RETURN TO VAULT WITH DOCUMENTS IN ORDER!

CONTENTS OF FILE NO. MF 113602

					-
1. RAL Review Sheet	10/10/11	scanned	M	5-23-2017	
2. Lease	7/29/11	12. Rec	on Billin	ng 10/13/17	
3. Cover Letter, Bonus, and Fees	9/30/11	scannes	e pt	10-18-2017	7
4. Final Letter	6/6/12			Z for the 2018 Plan	
5. Rental 2012	04/18/12	of Dev. +2nd	Amulto Hors	seshoe Springs State	U.7
Scarned Sm 2	2/22/13	Scanned	Pf	6-1-2018	
6. Pental Payment - 3rd ipar	06/28/20/3	13. Divi	Sion Orc	ler 7-20-18	3
Beanned Sm 7	115/13	14. Recon	Billing	8/10/18	
See MF111132 HIL For Assign	ment #8672	seanned	Pf	8-30-2018	
See MF 111/32 #13 for Assign	ment #897	Scc # 41	in M-111132	For the 2019 11	94
Sec # 9 in M-112402	on the	of Nev.	- Horsehoe	Sylvings State Unit	<u> </u>
Hurseshoe Springs Stake	Init 7-676)	scanned	Pf	7-10:2019	
scanned of 9.	-18-14	15. Recin	Billing	8/16/2071	4
See MF111132 #15 For Assign	ment #9188	16. Recon	Billing	8/16/2021	3
Sec # 14:n M-111133	For the	Scanne	J Pa	8-18-21	
Horseshoe Springs State V	4:7#7219	Mesee MF.	111132 #1	to. Clarification	4
scanned Pt 1-	27-15	And Corre	ction of a	Amended Unit	
7. PERMIT UNIT 7219; 109-32810	0 6-29-19	Agreeme	nt #067	63 Horseshap	4
8 G1 for API 109-32810 Unit#72	199/8/15	Springs s	State Uni	+ 4/24/23	4_
scanned M	10-14-15	seannes	d P	4-25-20	43
9. Division Order	9-13-16	SeeMF	-11/132	447	4
scanned for 10	0-27-16	Surfac	o Homa,	es 5/12/23	
10. Recon Billing	12/6/16	scanned	1/72 1/10	5-23-202	3
	12-19-16	Ree MF/11	1	Recorded COP	4
Sec # 23 in M-111133 For		Claritica.		rrection of	
HS State 113-24/13 West Un:	H 8272	Hmended		ement #0676	
scannel Pf	3-17-17	Horseshoe	Springs S	tate Unit 6/1/2	
Seets 17-27 in M-111132		Jeahnes	d Po	6-14-2023	
on Horseshoesprings State Vai					-
scanned Pt 3	-27-17				-
(1) Haree to commingle	3/30/17				

RAL REVIEW SHEET

Transaction #

7473

Geologist:

Lessor:

Roddy L. Harrison

Lease Date:

7/29/2011

~

L08800:

Legend Natural Gas

Gross Acres:

1280

Net Acres:

960

LEASE DESCRIPTION

County	PIN#	Base File No	Part	Sec.	Block	Twp	Survey	Abst#
CULBERSON	07-032855	100591	all	24	113	00	PUBLIC SCHOOL LAND	1853
CHIRERSON	07-032249	100588	all	1	111	00	PUBLIC SCHOOL LAND	1850

TERMS OFFERED

TERMS RECOMMENDED

Primary Term:

3 years

Primary Term

3 years

Bonus/Acre:

\$2,000.00

Bonus/Acre

\$2,000.00

Rental/Acre:

\$1.00

Rental/Acre

\$1.00

Royalty:

1/4

Royalty

1/4

COMPARISONS

L08800	Date	Term	Bonus/Ac.	Rental/Ac.	Royalty	Distance
Legend Natural Gas IV, LP	5/25/2010	5 years	\$423.00	\$1.00	1/4	Last Lease
Clay Johnson	7-20-11	54.5	\$1300.00	\$1.00	14	1 Mile West
	Legend Natural Gas IV, LP	Legend Natural Gas IV, LP 5/25/2010	Legend Natural Gas IV, LP 5/25/2010 5 years	Legend Natural Gas IV, LP 5/25/2010 5 years \$423.00	Legend Natural Gas IV, LP 5/25/2010 5 years \$423.00 \$1.00	Legend Natural Gas IV, LP 5/25/2010 5 years \$423.00 \$1.00 1/4

Comments: 180 day continuous drilling starts at the end of the primary term

Approved: 10/10/11

RELINQUISHMENT ACT LEASE APPLICATION

Texas General Land Office		Jerry Pa	tterson, Commissioner
TO: Jerry Patterson, Commis	sioner	DATE:	10-Oct-11
Larry Laine, Chief Clerk			
Bill Warnick, General Co	ounsel		
Louis Renaud, Deputy C	ommissioner		
FROM: Robert Hatter, Director o			
Tracey Throckmorton, Ge	eoscience Manager		
Applicant: Legend Natural G	as	County:	CULBERSON
Prim. Term: 3 years	Bonus/Acre	\$2,000.00	
Royalty: 1/4	Rental/Acre	\$1.00	
Consideration		, ,	
Recommended:	Date:/	10/11	
Not Recommended:			
Comments: 180 day continuous drilli	ng starts at the end of	the primary term	
/			
Lease Form			
Recommended: RH	Date: _ / • /	112/11	
Not Recommended:			
Comments:			
Louis Renaud, Deputy Commissione	er Date: 100	1-20-11	
Recommended: CLR			
Not Recommended:			
Bill Warnick, General Coursel	Date: 10	126/11	
Recommended:			
Not Recommended:			
Larry Laine Chief Clerk	Date:	dreely	
Approved:			
Not Approved:			
Jerry Patterson, Commissioner /	Date:	27/2011	
Approved: Leng E. to	Elleron	Marie No.	
Not Approved:	Maria.		

File No	113602
RAL DA	euleu Slort
Date File	d: 10/10/11
Jerry By G	E. Patterson, Commissioner

MF113602 A

General Land Office
 Relinquishment Act Lease Form
 Revised, September 1997

OIL AND GAS LEASE

THIS AGREEMENT is made and entered into this 29th day of July, 2011, between the State of Texas, acting by and through its agent, RODDY L. HARRISON, TRUSTEE OF THE HARRISON TRUST UNDER TRUST INDENTURE DATED
04/25/96, AS AMENDED, P.O. Box 1908, Pecos, Texas 79772 said agent
(Give Permanent Address)
herein referred to as the owner of the soil (whether one or more), andLEGEND NATURAL GAS IV, LP
of 410 W. Grand Parkway South, Suite 400
Katy, Texas 77494
(Give Permanent Address) hereinafter called Lessee.
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 Culberson County, State of Texas, to-wit:
Block 113, Public School Land Survey Section 24: All Block 111, Public School Land Survey Section 1: All
Containing 1,280.00 acres, more or less. The bonus consideration paid for this lease is as follows:
To the State of Texas: Nine Hundred Sixty Thousand and No/100 Dollars (\$_960,000.00)
To the owner of the soil: Nine Hundred Sixty Thousand and No/100 Dollars (\$ 960,000.00)
Total bonus consideration: One Million Nine Hundred Twenty Thousand and No/100 Dollars (\$_1,920,000.00_)
The total bonus consideration paid represents a bonus of
2. TERM. Subject to the other provisions in this lease, this lease shall be for a term of Three (3) 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 Pay direct to Lessor at the above address Bank, at
To the owner of the soil: Four Hundred Eighty and No/100 Dollars (\$ 480.00)
To the State of Texas: Four Hundred Eighty and No/100 Dollars (\$ 480.00)
Total Rental: Nine Hundred Sixty and No/100
Dollars (\$960.00)
A CERTIFIED COPY IF IT BEARS THE SEAL OF THE COUNTY CLERK ATTEST: 8-19-2011

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.

- 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 1/4th 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 1/4th 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 1/4th 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 1/4th 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.

A CERTIFIED COPY

IF IT BEARS THE SEAL OF THE COUNTY CLERK

ATTEST:

LINDA McDONALD, COUNTY CLERK

CULBERSON COUNTY, TEXAS

BY

DEPUTY

- 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 • at a rate of 12" per year, such interest will begin accruing 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 on 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 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.

A CERTIFIED COPY

IF IT BEARS THE SEAL OF THE COUNTY CLERK

ATTEST:

LINDA McDONALD, COUNTY CLERK

CULBERSON COUNTY, TEXAS

- (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.
- 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 well 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 in an amount less than the annual shut-in oil or gas royalty, Lessee shall pay an amount equal to the difference within thirty (30) days from the end of the 12-month period. A Compensatory royalty payments

LINDA McDONALD, COUNTY CLERK
CULBERSON COUNTY, TEXAS

BY
DEPLOY
DEPLOY

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 52.151-52.153, 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 right-of-ways 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.
- (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.
- (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.

A CERTIFIED COPY

IF IT BEARS THE SEAL OF THE COUNTY CLERK

ATTEST:

LINDA McDONALD, COUNTY CLERK

CULBERSON COUNTY, TEXAS

BY

MILLE SAMPLE DEPUTY

- 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 watertlood 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.
- 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 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

A CERTIFIED COPY

IF IT BEARS THE SEAL OF THE COUNTY CLERK

ATTEST:

LINDA McDONALD, COUNTY CLERK

CULBERSON COUNTY, TEXAS

BY

LINDA MCDONALD, COUNTY DEPUT

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

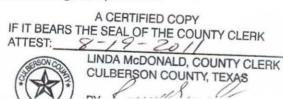
A CERTIFIED COPY
IF IT BEARS THE SEAL OF THE COUNTY CLERK
ATTEST:

LINDA M-DONALD, COUNTY CLERK
CULBERSON COUNTY, TEXAS

BY LILLIN LIVE DEPUT

proceedings in the manner provided in the Title I, Chapter 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 52.151-52.153. 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.
- 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 INDENINIFIED PARTY), WHETHER SUCH NEGLIGENCE BE SOLE, JOINT, CONCURRENT, ACTIVE, OR PASSIVE.
- 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 (I) A VIOLATION OF THE FOREGOING PROHIBITION OR (II) THE PRESENCE, RELEASE, OR DISPOSAL OF ANY HAZARDOUS MATERIALS ON, UNDER, OR ABOUT THE LÉASED 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.
- LEASE FILING. Pursuant to Chapter 9 of the Texas Business and Commerce Code, this lease must be filed of

thereof must be filed in the General Land Office. This lease certified by the County Clerk from his records) is filed in the C 52.183. Additionally, this lease shall not be binding upon the S	h all or any part of the leased premises is located, and certified copies is not effective until a certified copy of this lease (which is made and General Land Office in accordance with Texas Natural Resources Code state unless it recites the actual and true consideration paid or promised rescribed filing fee shall accompany such certified copy to the General
40. See attached Exhibit "A" for additional prov	isions.
LEGEND NATURAL GA	A CERTIFIED COPY IF IT BEARS THE SEAL OF THE COUNTY CLERK ATTEST: 8 9 901
Carl Wimberley, Vice Pre	sident LINDA McDONALD, COUNTY CLER CULBERSON COUNTY, TEXAS
Date: 8/5/2011	BY LUNIUS BLY DEPUT
STATE OF TEXAS	STATE OF TEXAS
BY:	BY:Individually and as agent for the State of Texas
DATE: 1-29-11	DATE:
STATE OF TEXAS	(CORPORATE ACKNOWLEDGMENT)
COUNTY OF HARRIS	•••••
is subscribed to the foregoing instrument, as Vice President of Leg	ppeared Carl Wimberley known to me to be the person whose name gend Natural Gas IV, LP, a Delaware limited partnership, and acknowledged to expressed, in the capacity stated, and as the act and deed of said partnership.
Given under my hand and seal of office this the 5th da	Canardia tane Vall Notary Public in and for the State of TEXAS
CASSANDRA FAYE VALK Notary Public, State of Texas My Commission Expires June 01, 2013	
STATE OF TEXAS	(INDIVIDUAL ACKNOWLEDGMENT)
COUNTY OF REEVES	
	Roddy L. Harrison, Trustee of the Harrison Trust Under Trust Indenture ne is subscribed to the foregoing instrument, and acknowledged to me that they
management	ay of 10/11/50/10/50 M
CLAY JOHNSON	Notary Public in and for the State of TEXAS

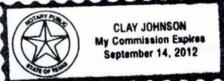


EXHIBIT "A"

ATTACHED TO AND MADE PART OF THAT CERTAIN OIL AND GAS LEASE DATED AUGUST 1, 2011, BY AND BETWEEN THE STATE OF TEXAS, ACTING BY AND THROUGH ITS AGENT, RODDY L. HARRISON, TRUSTEE OF THE HARRISON TRUST UNDER TRUST INDENTURE DATED 014/25/96, AS AMENDED, AS LESSOR, AND LEGEND NATURAL GAS IV, LP, AS LESSEE

The provisions of this Exhibit shall prevail and control over any inconsistent language contained in the foregoing provisions of said lease.

- 41. Lessor has advised that certain, specific, individual(s) shall not be allowed access to the lands herein described. Lessee hereby agrees to restrict access to the specific individual(s) defined by Lessee. Lessor agrees to deliver by written request notice to Lessee of the specific individual(s) to be denied access.
- At the end of the primary term, this lease shall terminate as to all of the above described land, except as to each proration unit allocated for production allowable purposes under the rules and regulations of the Railroad Commission of the State of Texas, or other governmental authority having jurisdiction to each well producing oil and/or gas in commercial quantities, and as to each such proration unit, as to all depths 100 feet below the base of the deepest formation from which such production is being obtained on such proration unit unless Lessee commences that actual drilling of an additional well within one hundred eighty (180) days of the last to occur of (i) the expiration of the primary term (only if a well was completed prior to the expiration of the primary term) or, (ii) the date that any well actually being drilling at the expiration of the primary term is completed as a well capable or producing oil and/or gas in commercial quantities or as a dry hole, and thereafter Lessee shall continuously develop the above described land with no more than one hundred eighty days elapsing between the date one well is completed as a well capable of producing oil and/or gas in commercial quantities or as a dry hole and the date the actual drilling of the next succeeding well commences, until said land has been drilled to the density necessary to obtain the maximum production allowable per well under the rules and regulations : of the Railroad Commission of Texas, or other governmental authority having jurisdiction. Upon the cessation of such continuous development, this lease shall terminate except as to each proration unit allocated as aforesaid upon which a well is producing oil and/or gas in commercial quantities. At the end of the primary term or the date that this lease shall • expire as to any part hereon, whichever is later. Lessee shall select and designate a producing unit around each producing oil and gas well. The acres in each unit are to be limited to or expanded to conform with the minimum area provided for or established directly or indirectly, in the applicable rules and regulations of the regulatory authority having jurisdiction of the premises with reference to the spacing of wells or the size of producing wells. A well shall be deemed to :.... have been completed on the first to occur of (i) the date the completion or plugging report required by the Railroad Commission of the State of Texas or other governmental authority having jurisdiction is filed, or, (ii) thirty (30) days after the completion rig that drilled the relevant well is released from the well location.

A CERTIFIED COPY

IF IT BEARS THE SEAL OF THE COUNTY CLERK

ATTEST: 8-19-2011

CULBE BY_______

LINDA McDONALD, COUNTY CLERK CULBERSON COUNTY, TEXAS

	-	
1.		١.
UD	1	1
11	~	1
1		/

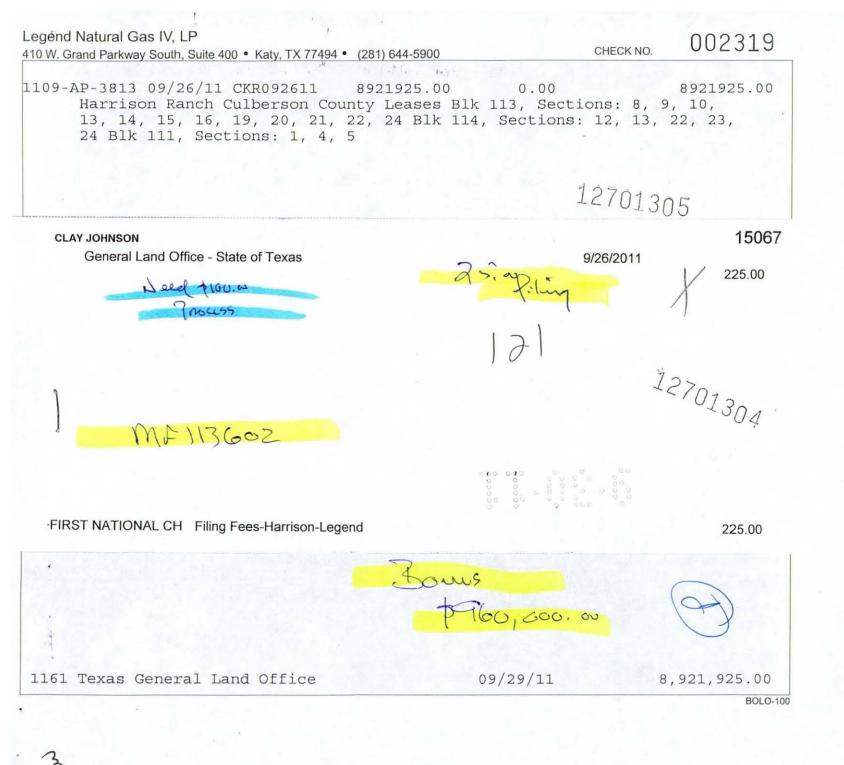
Jerry E. Patterson, Commissioner Date Filed: 7 29 11 Leouse

#67197 AT 3:43 O'CLOCK _____ M. aug. 18, 2011

County Clerk, Culberson County, Tx

BY Lucy Surge DEPUTY

THE STATE OF TEXAS	
COUNTY OF CULBERSON	I, Linda McDonald, Clerk of the County Court in and
correct copy of Del & Go	nereby certify that the foregoing is a true and as 1205 dated 8-5-2011 office this 18 day of 199
	1 under Clerk's File No. 67/97 to be
recorded in the Och 4	Gas Records of Culberson County,
Texas.	19
TO CERTIFY WHICH, With	ness my hand and seal at Van Horn this
day of dela	1 3011
By Laure Brong	LINDA McDONALD, COUNTY CLERK CULBERSON COUNTY, TEXAS



Clay Johnson Oil & Gas Properties

203 WEST WALL, SUITE 202*MIDLAND, TEXAS 79701 *(432) 684-4110* FAX (432) 684-5166



AAPL-CPL

September 26, 2011

GENERAL LAND OFFICE

Stephen F. Austin Bldg. 1700 North Congress Ave. Austin, TX 78701

Attn: Mr. Drew Reid

Re: Relinquishment Act Lease Culberson

County, Texas

Dear Drew:

Find enclosed for your files and further handling a certified file stamped copy of the following described Relinquishment Act Oil and Gas Lease:

Oil and Gas Lease dated July 29, 2011, by and between The State of Texas, acting by and through its agent, Roddy L. Harrison, Trustee of the Harrison Trust under Trust Indenture dated 4-25-96, as amended, as Lessor and Legend Natural Gas IV, LP, as Lessee, File Stamp 67190, Culberson County, Texas.

Oil and Gas Lease covers All of Section 8 and 9, Block 113, Public School Land Survey, Save and Except that Portion of Bexar Preemption Survey 199, lying within the boundaries of Section 8 and 9, (840.00 net acres).

States 1/2 Bonus: \$ 840,000.00

Oil and Gas Lease dated July 29, 2011, by and between The State of Texas, acting by and through its agent, Roddy L. Harrison, Trustee of the Harrison Trust under Trust Indenture dated 4-25-96, as amended, as Lessor and Legend Natural Gas IV, LP, as Lessee, File Stamp 67191, Culberson County, Texas.

Oil and Gas Lease covers:

Block 113, Public School Land Survey

Section 10: All Section 16: All (960.00 net acres)

States 1/2 Bonus: \$ 960,000.00

3) Oil and Gas Lease dated July 29, 2011, by and between The State of Texas, acting by and through its agent, Roddy L. Harrison, Trustee of the Harrison Trust under Trust Indenture dated 4-25-96, as Amended, as Lessor and Legend Natural Gas IV, LP, as Lessee, File Stamp 67192, Culberson County, Texas.

Oil and Gas Lease covers:

Block 114, Public School Land Survey

Section 12: All Section 13: All (960.00 net acres)

States 1/2 Bonus: \$ 960,000.00

4) Oil and Gas Lease dated July 29, 2011, by and between The State of Texas, acting by and through its agent, Roddy L. Harrison, Trustee of the Harrison Trust under Trust Indenture dated 4-25-96, as Amended, as Lessor and Legend Natural Gas IV, LP, as Lessee, File Stamp 61793, Culberson County, Texas.

Oil and Gas Lease covers:

Block 114, Public School Land Survey

Section 22: All Section 23: All (960.00 net acres)

States 1/2 Bonus: \$ 960,000.00

Oil and Gas Lease dated July 29, 2011, by and between The State of Texas, acting by and through its agent, Roddy L. Harrison, Trustee of the Harrison Trust under Trust Indenture dated 4-25-96, as Amended, as Lessor and Legend Natural Gas IV, LP, as Lessee, File Stamp 67194, Culberson County, Texas.

Oil and Gas Lease covers:

Block 114, Public School Land Survey

Section 24: All

Block 113, Public School Land Survey

Section 19: All

Block 111, Public School Land Survey

Section 5: N/143.7 acres

(1,067.775 net acres)

States 1/2 Bonus: \$ 1,067,775.00

6) Oil and Gas Lease dated July 29, 2011, by and between The State of Texas, acting by and through its agent, Roddy L. Harrison, Trustee of the Harrison Trust under Trust Indenture dated 4-25-96, as Amended, as Lessor and Legend Natural Gas IV, LP, as Lessee, File Stamp 67195, Culberson County, Texas.

Oil and Gas Lease covers:

Block 113, Public School Land Survey

Section 20: All Section 21: All

Block 111, Public School Land Survey

Section 4: N/392.2 acres

(1,254.15 net acres)

States 1/2 Bonus: \$ 1,254,150.00

7) Oil and Gas Lease dated July 29, 2011, by and between The State of Texas, acting by and through its agent, Roddy L. Harrison, Trustee of the Harrison Trust under Trust Indenture dated 4-25-96, as Amended, as Lessor and Legend Natural Gas IV, LP, as Lessee, File Stamp 67196, Culberson County, Texas.

Oil and Gas Lease covers:

Block 113, Public School Land Survey

Section 15: All Section 22: All (960.00 net acres)

States 1/2 Bonus: \$ 960,000.00

8) Oil and Gas Lease dated July 29, 2011, by and between The State of Texas, acting by and through its agent, Roddy L. Harrison, Trustee of the Harrison Trust under Trust Indenture dated 4-25-96, as Amended, as Lessor and Legend Natural Gas IV, LP, as Lessee, File Stamp 67197, Culberson County, Texas.

Oil and Gas Lease covers:

Block 113, Public School Land Survey

Section 24: All

Block 11, Public School Land Survey

Section 1: All (960.00 net acres)

MF113402

States 1/2 Bonus: \$ 960,000.00

9) Oil and Gas Lease dated July 29, 2011, by and between The State of Texas, acting by and through its agent, Roddy L. Harrison, Trustee of the Harrison Trust under Trust Indenture dated 4-25-96, as Amended, as Lessor and Legend Natural Gas IV, LP, as Lessee, File Stamp 67198, Culberson County, Texas.

Oil and Gas Lease covers:

Block 113, Public School Land Survey

Section 13: All Section 14: All (960.00 net acres)

States 1/2 Bonus: \$ 960,000.00

STATES TOTAL 1/2 BONUS FOR ALL NINE LEASES: \$ 8,921,925.00

Above I have broken out what each lease covers and the State of Texas' 1/2 Bonus that they are to receive under each Oil and Gas Lease.

Please find enclosed, a payment for the State's 1/2 bonus due for the first 3 years for the above nine (9) Oil and Gas Leases in the amount of \$8,921,925.00.

To cover the required filing fees for handling this matter find enclosed Clay Johnson Check in the amount of \$225.00 made payable to the order of General Land Office – State of Texas.

Respectfully,

Clay Johnson

WCJ/cj

Enclosures:

/	-
	5
	-

File No. 11360 2 Date Filed: 9/30/11	**	7/67	
	e No. 1	X20 =	-
	te Filed:	9/30/11	
Jerry E. Patterson, Commissioner			Г



GENERAL LAND OFFICE

JERRY PATTERSON, COMMISSIONER

June 6, 2012

Carl Wimberly Legend Natural Gas IV, LP 410 W. Grand Parkway South, Suite 400 Katy, Texas 77494

Re: State Lease MF 113602A

RAL Lease dated July 29, 2011 recorded File 67197, covering Sec. 24, Blk 113, Sec. 1, Blk. 111, PSL Survey, Culberson County, TX, Harrison Trust, agent for State of Texas, Lessor

Dear Mr. Wimberly:

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-113602A. 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.

Of your remittance of \$8,921,925.00, \$960,000.00 has been applied to the State's portion of the cash bonus. In addition, we are in receipt of the filing fee. However, we are not in receipt of the \$100 processing fee, which we request you send as soon as possible.

Sincerely yours,

Drew Reid

Mineral Leasing, Energy Resources

(512) 475-1534

drew.reid@glo.texas.gov

5

File No. 11 36 02

Hual Letter

Date Filed: 6 6 112

Jerry E. Patterson, Commissioner

PETROHAWK ENERGY CORPORATION

104032

	REET, SUITE 5600 ·				CHECK NO.	104002
REFERENCE	INVOICE DATE	INVOICE NO.	INVOICE AMT.	PRIOR PAYMENT	DISCOUNT	AMOUNT PAID
KCS07JUN2012- LAND2	6/4/12 DELAY RENTAL-T	1021 X1703-048	480.00 MF 113402			480.00
					127130	30
					COF	
437294 COM	VE MMISSIONER OF	NDOR		CHECK DATE 06/08/12	12 \	\$480.00

CHECK NO.

REFERENCE	INVOICE DATE	INVOICE NO.	INVOICE AMT.	PRIOR PAYMENT	DISCOUNT	AMOUNT PAID
CS07JUN2012- LAND2	6/4/12 DELAY RENTAL-T	1021 X1703-048	480.00			480.00
		MF	113602			
					127130	30
						SIVE 18 2012
					12-1	
	VE	NDOR		CHECK DATE	TOTAL	
437294 COM	MISSIONER OF	THE TEXAS		06/08/12		\$480.00 BOLG

WARNING: DO NOT ACCEPT THIS DOCUMENT UNLESS YOU CAN SEE A WATERMARK.

PETROHAWK ENERGY CORPORATION

ACCOUNTS PAYABLE DISBURSEMENT ACCOUNT 1000 LOUISIANA STREET, SUITE 5600 HOUSTON, TX 77002 832-204-2787 Bank of America

104032

64 - 1278 / 611 GA

DATE

06/08/12

12713030

AMOUNT

\$*****480.00

TO THE ORDER OF COMMISSIONER OF THE TEXAS

GENERAL LAND OFFICE

1700 N CONGRESS AVE

STEPHEN F AUSTIN STATEOFFICE BUILDING

AUSTIN, TX 78701 USA

VOID AFTER 180 DAYS

John A. Simme





June 11, 2012

Commissioner of the Texas General Land Office 1700 North Congress Avenue Stephen F. Austin State Office Bldg. Austin, TX 78701

Re:

Annual Delay Rental State of Texas Lease Recorded: Bk. 106, Pg. 570 Culberson County, Texas

Gentlemen:

Enclosed please find check #104032 in the amount of \$480.00 to cover annual delay rental for above captioned agreement. I kindly request that you acknowledge receipt of this payment by signing and dating in the spaces provided below and return in the provided envelope.

Thank you for your attention to this matter. Should you have any questions, I can be contacted at (918) 497-4536.

Sincerely,

Theresa Skelton Lease Analyst

Enclosures

ABOVE PAYMENT IS ACKNOWLEDGED ON THIS _____, DAY OF _______, 2012

THIS _____, DAY OF _____

By: RENTAL PAYMENT

Lease TX1703-048/002

5

File No. 113402

Date Filed: og 16112. Jerry E. Patterson, Commissioner Rental 2012

By

PETROHAWK ENERGY CORPORATION

1360 POST OAK BLVD., SUITE 1900CT · HOUSTON, TX 77056 inquiry@bhpbilliton.com CHECK NO. AMOUNT PAID REFERENCE INVOICE DATE INVOICE NO. INVOICE AMT. PRIOR PAYMENT DISCOUNT 480.00 EPL10JUN2013L 6/3/13 1734 480.00 AND-2 13713060 NORTH REEVES PROSPECT TX1703-043-002 MF113602 CHECK DATE 437294 COMMISSIONER OF TEXAS GENERAL LAND TOTAL \$480.00 **OFFICE** 06/11/13

PETROHAWK ENERGY CORPORATION 1360 POST OAK BLVD., SUITE 1900CT · HOUSTON, TX 77056 inquiry@bhpbilliton.com CHECK NO. AMOUNT PAID REFERENCE INVOICE DATE INVOICE NO. INVOICE AMT. PRIOR PAYMENT DISCOUNT EPL10JUN2013L 480.00 6/3/13 1734 480.00 AND-2 13713060 NORTH REEVES PROSPECT TX1703-043-002 MF113602 CHECK DATE 437294 COMMISSIONER OF TEXAS GENERAL LAND TOTAL \$480.00 **OFFICE** 06/11/13 BOLO-200 WARNING: DO NOT ACCEPT THIS DOCUMENT UNLESS YOU CAN SEE A WATERMARK 1**3713060** PETROHAWK ENERGY CORPORATION ACCOUNTS PAYABLE DISBURSEMENT ACCOUNT 1360 POST OAK BLVD., SUITE 1900CT DATE HOUSTON, TX 77056 inquiry@bhpbilliton.com 06/11/13 PAY

COMMISSIONER OF THE TEXAS GENERAL LAND OFFICE

ATTENTION MINERAL LEASING

1700 N CONGRESS AVE

AUSTIN, TX 78701 USA

TO THE

ORDER

OF

AMOUNT

\$******480.00

VOID AFTER 180 DAYS

Check Receipt

Check No.: 163988

Check Date: 6/11/2013

Period Covered:

Payment Type: DELAY RENTAL

Payment Amount: \$480.00

7/29/2013-7/29/2014

Lease Number: TX1703-048-002

Original Lessor:

STATE OF TEXAS ET AL

Lease Effective Date:

7/29/2011

Recording Information:

FILE#67197 B106 P570

State: TX

County: CULBERSON

Check Remarks:

MF113602. SEC 24, BLK 113. SEC 1, BLK 111 - PSL SVY, CULBERSON CO. TX. ANNUAL DELAY RENTAL



resourcing the future BHP BILLITON PETROLEUM (FAYETTEVILLE) ATTN LAND ADMINISTRATION 1360 POST OAK BLVD STE 150 HOUSTON, TX 77056

Owner Relations: 1-877-311-1443

For the Credit of:

(BA#): 437294-1

Payment Amount: \$480.00

COMMISSIONER OF THE TEXAS GENERAL LAND

Owner:

1700 N CONGRESS AVE STEPHEN F AUSTIN STATE Address:

AUSTIN, TX 78701

IMPORTANT

PLEASE SIGN AND RETURN

Date Filed: 06/28/2013

Jerry E. Patterson, Commissioner

By 560

API No. RAILROAD COMMISSION OF TEXAS FORM W-1 07/2004 42-109-32810 OIL & GAS DIVISION Drilling Permit # Approved Permit Status: 802289 APPLICATION FOR PERMIT TO DRILL, RECOMPLETE, OR RE-ENTER SWR Exception Case/Docket No. 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. 1. RRC Operator No. 2. Operator's Name (as shown on form P-5, Organization Report) 3. Operator Address (include street, city, state, zip): 068596 BHP BILLITON PET(TXLA OP) CO 1360 POST OAK BLVD STE 150 4. Lease Name 5. Well No. HOUSTON, TX 77056-0000 HORSESHOESPRINGSSTATE113-24X1 1H GENERAL INFORMATION ☐ Field Transfer X New Drill Reclass Recompletion Re-Enter 6. Purpose of filing (mark ALL appropriate boxes): Amended Amended as Drilled (BHL) (Also File Form W-1D) Horizontal (Also File Form W-1H) Sidetrack ☐ Vertical Directional (Also File Form W-1D) 7. Wellbore Profile (mark ALL appropriate boxes): X Yes 8. Total Depth 9. Do you have the right to develop the Yes X No 10. Is this well subject to Statewide Rule 36 (hydrogen sulfide area)? 14000 minerals under any right-of-way? SURFACE LOCATION AND ACREAGE INFORMATION 11. RRC District No. 12. County X Land Inland Waterway 13. Surface Location ☐ Bay/Estuary CULBERSON **ORLA** direction from 14. This well is to be located miles in a which is the nearest town in the county of the well site. 17. Survey 18. Abstract No. 19. Distance to nearest lease line: 15. Section 16. Block 20. Number of contiguous acres in 24 113 PSL/ MC GILVREY, LE A-1853 ft. lease, pooled unit, or unitized tract: 971.86 200 2265 N OFFLEASE 990 ft from the W OFFLEASE 21. Lease Perpendiculars: ft from the line and 2265 990 ft from the line and ft from the 22. Survey Perpendiculars: . X No 23. Is this a pooled unit? X Yes 24. Unitization Docket No: (attach Form W-1A) FIELD INFORMATION List all fields of anticipated completion including Wildcat. List one zone per line. 26. RRC 27. Field No. 28. Field Name (exactly as shown in RRC records) 29. Well Type 30. Completion Depth 31. Distance to Nearest 32. Number of Wells or District No. Well in this Reservoir this lease in this Reservoir 08 71052900 PHANTOM (WOLFCAMP) Oil or Gas Well 12500 0.00 BOTTOMHOLE LOCATION INFORMATION is required for DIRECTIONAL, HORIZONTAL, AND AMENDED AS DRILLED PERMIT APPLICATIONS (see W-1H attachment) Remarks Certificate: I certify that information stated in this application is true and complete, to the best of my knowledge. Nicole Vail, Regulatory Specialist Dec 31, 2014

Jan 22, 2015 6:24 AM(Current Version)

RRC Use Only

Data Validation Time Stamp:

Name of filer

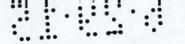
Phone

(713)499-5391

Date submitted

nicole.vail@bhpbilliton.com

E-mail Address (OPTIONAL)



Permit Status:

Approved

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

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

Form W-1H Supplemental Horizontal Well Information

802289

07/2004

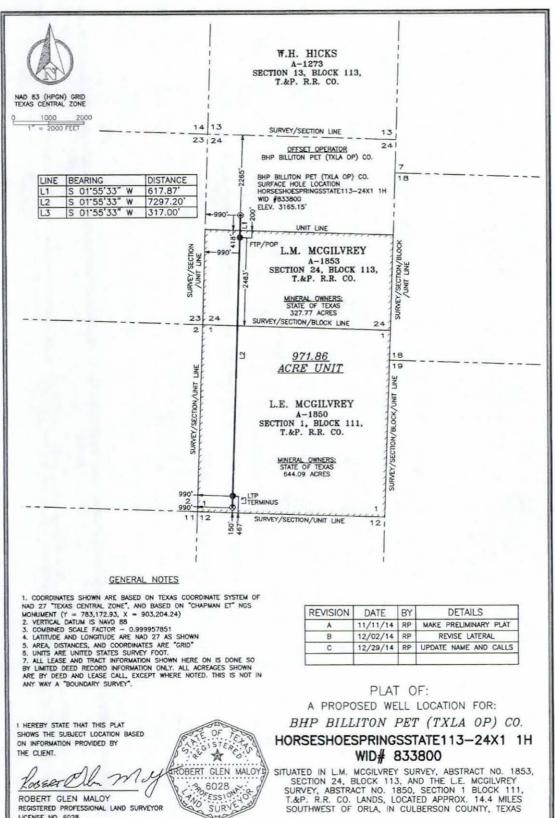
Approved Date: Jan 21, 2015

Permit #

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.

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

RRC Operator 068596				3. Lease Name HORSESHOESPRINGSSTATE113-24X1					4. Well No.
ateral Drainh	ole Location Information			ALC: NO					
Field as shown	on Form W-1 PHANTO	M (WOLFCAMP) (F	ield # 71052900,	RRC I	District 08)				
Section 1	ection 7. Block 8. Survey PSL/ MC GILVREY, L E					9. Abstract 1850	10. County CULBE		
	us Lease Line Perpendiculars 150 ft. from the as Survey Line Perpendiculars	S	line, and	990	ft. from the	W	- 11-4	lin	е
12. Termino	ft. from the _	S	S line, and		ft. from the	W		line	
13. Penetra	tion Point Lease Line Perpendi	culars N	line, and	990	ft. from the	V		lin	е



ROBERT GLEN MALOY REGISTERED PROFESSIONAL LAND SURVEYOR LICENSE NO. 5028

0 6028 SURVE

SITUATED IN L.M. MCGILVREY SURVEY, ABSTRACT NO. 1853, SECTION 24, BLOCK 113, AND THE L.E. MCGILVREY SURVEY, ABSTRACT NO. 1850, SECTION 1 BLOCK 111, T.&P. R.R. CO. LANDS, LOCATED APPROX. 14.4 MILES SOUTHWEST OF ORLA, IN CULBERSON COUNTY, TEXAS

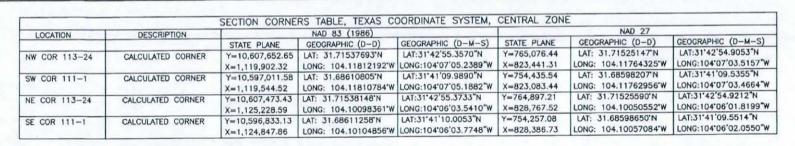
BHP Billiton bhpbilliton 1360 Post Ook Blvd. #150 Houston, Texas 77056



550 Bailey Ave., 205 - Fort Worth, TX 76107 Ph: 817.349,9800 - Fax: 979.732.5271 TBPLS Firm No. 10193887 www.franksurveying.com LAND SURVEYING/ENERGY/GIS SERVICES © 005720841 516 - 4 10 PARTH SELECTION

DATE 12/29/14 DRAWN BY CHECKED BY FIELD CREW

PROJECT NO: 2014091001 SCALE: 1" = 2000 REVISION



		LATERAL POINT	S TABLE TEXAS COO	ORDINATE SYSTEM, C	ENTRAL ZONE		
LOCATION	OFFSETS		NAD 83 (1986)			NAD 27	
COOMING	0113210	STATE PLANE	GEOGRAPHIC (D-D)	GEOGRAPHIC (D-M-S)	STATE PLANE	GEOGRAPHIC (D-D)	GEOGRAPHIC (D-M-S)
SURFACE HOLE LOC	2265' FNL OF 113-24	Y=10,605,355,62	LAT: 31.70915144'N	LAT:31'42'32.9452"N	Y=762,779.45	LAT: 31.70902584°N	LAT:31'42'32.4930"N
SONTAGE HOLL LOG	990' FWL OF 113-24	X=1,120,815.66		LONG:104'06'53.7673"W	X=824,354.63	LONG: 104.11445688°W	
FTP/POP	2483' FSL OF 113-24	Y=10,604,738.10	LAT: 31.70745292°N	LAT:31'42'26.8305"N	Y=762,161.94	LAT: 31.70732729'N	LAT:31°42'26.3783"N
11171 01	990' FWL OF 113-24	X=1,120,794.90		LONG:104'06'53.7645"W	X=824,333.86	LONG: 104.11445613'W	
LAST TAKE POINT	467' FSL OF 111-1	Y=10.597,445.02	LAT: 31.68739285'N	LAT:31'41'14.6143"N	Y=754,868.97	LAT: 31.68726687'N	LAT:31"41"14.1607"N
DIOT THILL I ONLY	990' FWL OF 111-1	X=1,120,549.66	LONG: 104.11492566'W	LONG: 104*06'53.7324"W	X=824,088.58	LONG: 104.11444746'W	
TERMINUS	150' FSL OF 111-1		LAT: 31.68652141'N	LAT:31*41'11.4771"N	Y=754,552.16	LAT: 31.68639542'N	LAT:31'41'11.0235"N
LIMITOS	990' FWL OF 111-1	X=1,120,539.00		LONG: 104'06'53.7310"W	X=824,077.91	LONG: 104.11444711"W	LONG:104'06'52.0096"W

GENERAL NOTES

DETAILS REVISION DATE BY MAKE PRELIMINARY PLAT 11/11/14 RP REVISE LATERAL 12/02/14 RP B UPDATE NAME AND CALLS 12/29/14 RP C

1. COORDINATES SHOWN ARE BASED ON TEXAS COORDINATE SYSTEM OF NAD 27 "TEXAS CENTRAL ZONE", AND BASED ON "CHAPMAN ET" NGS MONUMENT (Y = 783,172.93, X = 903,204.24) 2. VERTICAL DATUM IS NAVD 88

3. COMBINED SCALE FACTOR - 0.999957851 4. LATITUDE AND LONGITUDE ARE NAD 27 AS SHOWN

5. AREA. DISTANCES, AND COORDINATES ARE "GRID"

5. UNITS ARE UNITED STATES SURVEY FOOT.

7. ALL LEASE AND TRACT INFORMATION SHOWN HERE ON IS DONE SO BY LIMITED DEED RECORD INFORMATION ONLY. ALL ACREAGES SHOWN ARE BY DEED AND LEASE CALL, EXCEPT WHERE NOTED. THIS IS NOT IN ANY WAY A "BOUNDARY SURVEY".

PLAT OF:

A PROPOSED WELL LOCATION FOR: BHP BILLITON PET (TXLA OP) CO.

HORSESHOESPRINGSSTATE113-24X1 1H WID# 833800

SITUATED IN L.M. MCGILVREY SURVEY, ABSTRACT NO. 1853, SECTION 24. BLOCK 113, AND THE L.E. MCGILVREY SURVEY, ABSTRACT NO. 1850, SECTION 1 BLOCK 111, T.&P. R.R. CO. LANDS, LOCATED APPROX. 14.4 MILES SOUTHWEST OF ORLA, IN CULBERSON COUNTY, TEXAS



BHP Billiton bhpbilliton 1360 Post Oak Blvd. \$150

SURVEYING COMPANY INC 550 Bailey Ave., 205 - Fort Worth, TX 76107 Ph: 817.349.9800 - Fax: 979.732.5271 TBPLS Firm No. 10193887 www.franksurveying.com LAND SURVEYING/ENERGY/GIS SERVICES

12/29/14 DATE DRAWN BY: CHECKED BY FIELD CREW: PROJECT NO: SCALE: SHEET: REVISION

JK DE/MR 2014091001 2 OF 2

RP

RAILROAD COMMISSION OF TEXAS Oil and Gas Division PO Box 12967 Austin, Texas 78711-2967

CERTIFICATE OF POOLING AUTHORITY

www.rrc.state.tx.us	Revised L	05/2001					
Field Name(s) Phantom (Wolfcamp	o)	2. Lease/ID Number (if assigned)	3. RRC District Number 08				
Operator Name BHP BILLITON (TX)		5. Operator P-5 Number 068596	6. Well Number				
7. Pooled Unit Name HORSESHOESPRI	INGSSTATE113-24X1	8. API Number	9. Purpose of Filing				
10. County CULBERSON		11.Total acres in pooled unit 971.86	✓ Drilling Permit (W-1) ☐ Completion Report				
DE	ESCRIPTION OF INDIVIDUAL TRACTS CO	ONTAINED WITHIN THE POOL	ED UNIT				
TRACT/PLAT TRACT IDENTIFIER NAME		ACRES IN TRACT (See inst. #7 below)	INDICATE UNDIVIDED INTERESTS UNLEASED NON-POOLED				
1. STA	TE OF TEXAS	644.09	ПП				
2. STAT	TE OF TEXAS	327.77					
SALVANIA CONTRACTOR CO							
CERTIFICATION:		The state of the s					
foregoing statements and	prescribed pursuant to the Sec. 91.143, To d that the information provided by me or un the best of my knowledge.	nder my direction on this Certific					
1 / Wat		NICOLE VAIL					
Signature REG SPECIALIST	nicole.vail@bhpbilliton.com	Print Name 12/31/2014	(713) 344-5391				
Title	E-mail (if available)	Date	Phone				
 When two or more track Rule 38(d)(3) the opera The certified plat shall identifier and associate 	nce: Statewide Rules 31, 38 and 40 cts are pooled to form a unit to obtain a drilling stor must file an original Certificate of Pooling At designate each tract with an outline and a trace of information listed on the Certificate.	thority and certified plat. t identifier. The tract identifier on t	he plat shall correspond to the tract				

- 4. If the Purpose of Filing is to obtain a drilling permit, in box #1 list all applicable fields separately or enter "All Fields" if the Certificate pertains to all fields requested on Form W-1.
- 5. If the Purpose of Filing is to file completion paperwork, enter the applicable field name in box #1 for the completion.
- 6. Identify the drill site tract with an * to the left of the tract identifier.
- 7. The total number of acres in the pooled unit in #11 should equal the total of all acres in the individual tracts listed.



Page _____of ____

v	,	,	1	,	
		١	ı		
		ı	l		
		ı	ı		۰

File No.	MF113602	
	Culbirson	County
Drillin		,
Date Fil	ed: 6-29-15	
By TY	George P. Bush, Commissione	r



RAILROAD COMMISSION OF TEXAS

Form G-1

1701 N. Congress P.O. Box 12967 Austin, Texas 78701-2967 Status: Date: Submitted 08/24/2015

Tracking No.:

141064

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

OPERATOR INFORMATION

Operator Name: BHP BILLITON PET(TXLA OP) CO

Operator No.: 068596

Operator Address: 1360 POST OAK BLVD STE 150 HOUSTON, TX 77056-0000

WELL INFORMATION

API No.: 42-109-32810

County: CULBERSON

Well No.: 1H

RRC District No.: 08

Lease Name: HORSESHOESPRINGSSTATE113-24X1

Field Name: PHANTOM (WOLFCAMP)

RRC Gas ID No .:

Field No.: 71052900

Location: Section: 24, Block: 113, Survey: PSL/ MC GILVREY, L E, Abstract: 1853

Latitude: 31.70902

Longitude: -104.11445

This well is located

14.4 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:

04/26/2015

Type of Permit

Date

Permit No.

Permit to Drill, Plug Back, or Deepen

01/21/2015

802289

Rule 37 Exception
Fluid Injection Permit
O&G Waste Disposal Permit

Other:

COMPLETION INFORMATION

Spud date: 01/28/2015

Date of first production after rig released:

Date plug back, deepening, recompletion, or

Date plug back, deepening, recompletion, or

drilling operation commenced: 01/28/2015

drilling operation ended: 02/25/2015

Number of producing wells on this lease in this field (reservoir) including this well:

Distance to nearest well in lease & reservoir (ft.): 0.0

Total number of acres in lease: 971.34

Elevation (ft.): 3165

Total depth TVD (ft.): 9101

Total depth MD (ft.): 16650

Plug back depth TVD (ft.): 9101

Plug back depth MD (ft.): 16550

Was directional survey made other than inclination (Form W-12)? Yes

Rotation time within surface casing (hours): Is Cementing Affidavit (Form W-15) attached?

GL

Yes

04/26/2015

Recompletion or reclass? No

Multiple completion?

Type(s) of electric or other log(s) run:

Gamma Ray (MWD)

Electric Log Other Description:

Garinia Ray (WWD)

Location of well, relative to nearest lease boundaries

Off Lease: No

of lease on which this well is located:

2265.0 Feet from the

North Line and

990.0 Feet from the

West Line of the

HORSESHOESPRINGSSTATE113-24X1 Lease.

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

Field & Reservoir

Gas ID or Oil Lease No.

Well No.

• Prior Service Type

G1:

N/A

PACKET:

N/A

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

GAU Groundwater Protection Determination

Depth (ft.): 375.0

Date: 01/16/2015

SWR 13 Exception

Depth (ft.):

GAS MEASUREMENT DATA

Date of test: 08/14/2015

Gas production during test (MCF): 8721

Gas measurement method(s):

Orifice Meter, Flange Taps

Was the well preflowed for 48 hours?

Orif. or Run Line Choke

24 hr. Coeff. Orif. Or Choke

(in.)

28226.21

Static Pm or Choke (in.)

Flow Temp Diff (hw) (°F)

Temp. (Ftf)

Gravity Compress (Fg)

Volume (Fpv) (MCF/day)

3.068

size

No.

Size (in.) 2.000

244.0

55.0 103.0

0.9092 0.9610

1.020

2907.0

FIELD DATA AND PRESSURE CALCULATIONS

Gravity (dry gas): 0.724

Gravity (liquid hydrocarbons) (Deg. API):

50.1

Gas-Liquid Hydro Ratio (CF/Bbl): Avg. shut in temp. (°F): 121.0

7630 Bottom hole temp, and depth:

Gravity (mixture): Gmix= 1.039

147.0

°F@ 9083.0 FT

Run No.

Time of Run (Min.)

Choke Size (in.)

Wellhead Pressure (PSIA)

Wellhead Flow Temp (°F)

SHUT-IN 1

1440 4320 48/64 48/64 2997 528

94.0 103.0

CASING RECORD											
	Type of	Size	Size		Stage Tool				Volume	Cemen	t Determined
Row	Casing	<u>(in.)</u>	<u>(in.)</u>	(ft.)	Depth (ft.)	Depth (ft.)	Class	(sacks)	(cu. ft.)	(ft.)	Ву
1	Surface	11 3/4	14 3/4	497			С	604	803.0	SURF	Circulated to Surface
2	Intermediate	9 5/8	10 5/8	3500			C	377	771.0	0	Circulated to Surface
3	Intermediate	7 5/8	8 3/4	8925			TXI; C	408	830.0	2042	Calculation
4	Tapered Production	5 1/2	6 3/4	16640			VERSA	1355	2255.0	6229	Calculation
5	Tapered Production	4 1/2	6 3/4	16640			VERSA	1355	2255.0	6229	Calculation

LINER RECORD

Row Size (in.)

Hole Size (in.)

Liner Top (ft.)

Liner Bottom (ft.) Cement Class

Slurry Cement Amount Volume (sacks) (cu. ft.)

Top of Cement (ft.)

TOC Determined Ву

N/A

Row

TUBING RECORD

Size (in.) 27/8

Depth Size (ft.) 8075

Packer Depth (ft.)/Type

8058 / BRANTON-BT1-XW

PRODUCING/INJECTION/DISPOSAL INTERVAL

Open hole? Row 1 No

From (ft.) L2 9541

To (ft.) 16463

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

Was hydraulic fracturing treatment performed?

Yes

Is well equipped with a downhole actuation

sleeve? Yes

If yes, actuation pressure (PSIG): 9480.0

Production casing test pressure (PSIG) prior to

Actual maximum pressure (PSIG) during hydraulic

hydraulic fracturing treatment:

fracturing: 10628

Has the hydraulic fracturing fluid disclosure been

reported to FracFocus disclosure registry (SWR29)?

Yes

Type of Operation Row

Amount and Kind of Material Used

Depth Interval (ft.)

Fracture

22 STAGES: 8,719,934# PROPPANT: 8,108,114 GALLONS

9541.0

16463.0

FLUID

FORMATION RECORD							
Formations	Encountered	Depth TVD (ft.)	Depth MD (ft.)	Is formation isolated?			
RUSTLER	Yes	375.0	375.0	Yes	ESTIMATED - GAU		
LAMAR LM.	Yes	2215.0	2215.0	Yes			
BELL CANYON	Yes	2250.0	2250.0	Yes			
FORD-DELAWARE	Yes	2500.0	2500.0	Yes	ESTIMATED		
DELAWARE	Yes	2600.0	2600.0	Yes	ESTIMATED		
CHERRY CANYON	Yes	3076.0	3077.0	Yes			
BRUSHY CANYON	Yes	4019.0	4020.0	Yes			
BONE SPRINGS	Yes	5840.0	5842.0	Yes			
MID AVALON LIMESTON	Yes	6347.0	6349.0	Yes			
BASE AVALON SHALE	Yes	6809.0	6811.0	Yes			
2ND BONE SPRING	Yes	7399.0	7401.0	Yes			
3RD BONE SPRING	Yes	8493.0	8513.0	Yes			
MISSISSIPPIAN	Yes	8900.0	8900.0	Yes	NOT DEEP ENOUGH		
WOLFCAMP	Yes	0.0088	8873.0	Yes			
ATOKA	No			No	NOT DEEP ENOUGH		
MORROW	No			No	NOT DEEP ENOUGH		
STRAWN	No			No	NOT DEEP ENOUGH		
SILURIAN	No			No	NOT DEEP ENOUGH		

Do the producing interval of this well produce H2S with a concentration in excess of 100 ppm (SWR 36)? No s the completion being downhole commingled (SWR 10)?

REMARKS

NITIAL G-1. KOP AT 8064'. XO AT 8173' NOTE: ACREAGE AMENDED TO 971.34 ACRES.

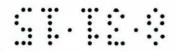
Page 3 of 4

RRC REMARKS
PUBLIC COMMENTS:
CASING RECORD:
TUBING RECORD:
PRODUCING/INJECTION/DISPOSAL INTERVAL :
ACID, FRACTURE, CEMENT SQUEEZE, CAST IRON BRIDGE PLUG, RETAINER, ETC. :
GAS MEASUREMENT DATE REMARK:

OPERATOR'S CERTIFICATION

Title: Sr. Regulatory Specialist

Printed Name:Diann FlowersTitle: Sr. Regulatory SpecialiTelephone No.:(713) 983-2508Date Certified: 08/24/2015



Advisory Unit	Januar	GAU File No.:	1230	
			API Number	10932810
Attention: NICOLE VAIL			RRC Lease No	000000
SC_068596	_10932	810_000000_123	30.pdf	
		Measured-	 Digital Map 	Location:
		990 ft FWL	X-coord/Long 7	62779
BHP BILLITON PET -TXLA OP- 1360 POST OAK BLVD	co	2265 ft FNL	Y-coord/Lat 8	24354
HOUSTON TX 77056		MRL: SECTION	Datum 27	Zone C
P-5# 0	68596			
County CULBERSON Lease & Well No. HOR	SESHOE	SPRINGSSTATE1	13-24X1 #1	HAME ND

The interval from the land surface to the base of the RUSTLER, which is estimated to occur at a depth of 375 feet, must be protected.

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

If you have any questions, please contact us at 512-483-2741 gau@rrc.state.tx.us, or by mail.

Sincerely,

of Texas recommends:

GEOLOGIST SEAL

George Dunfteld

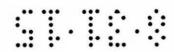
George Dunfield, P.G.

Geologist, Groundwater Advisory Unit Oil & Gas Division

The seal appearing on this document was authorized by George Dunheir on 1/16/2015 Note: Alteration of this electronic document valid invalidate the digital signature.

Form GW-2 Ruy, 02/2014

P.O. Box 12967 Austin, Texas 78711-2967 512-463-2741 Internet address: www.rrc.state.tx.us



Form G-5

GAS WELL CLASSIFICATION REPORT

Tracking No.: 141064

This facsimile G-5 was generated electronically from data submitted to the RRC.

1. OPERATOR NAME (Exactly as show	n on Form P5 Or	ganization Report)			3. RRC DISTRICT N			STRICT NO	. 4	OIL LEASE NO OR GAS WELL ID NO.
BHP BILLITON PET(TXLA OF	r) CO							80		das well ib no.
2. MAILING ADDRESS	**************************************				***		5. WELL	NO.	(S. API NO.
1360 POST OAK BLVD STE 1	50							1H	4	2- 109-32810
HOUSTON, TX 77056						t	7. COUNT	Y OF WELL	SITE	
							CULBE	ERSON		
8. FIELD NAME (as per RRC Records)					ASE NAME					
PHANTOM (WOLFCAMP)	- 101			HOI	RSESHOE	SPRI	NGSSTAT	TE113-24X	1	
10. LOCATION (Section, Block and Su					PELINE CON					
24, 113, PSL/ MC GILVREY,	LE, A-185	3		BHF	PBILLITO	N PET	(TX GAT	H), LLC		
PRODUCTION TEST AT RATE E (data on 24-hour basis)	LECTED BY	OPERATOR				gas well	SONLY if	the producing		Distillation test is id hydrocarbon
A. Date of Test	08/14/201	5		- -	ratio is less ti	nan 100	000 CF/bai	rei.		11.0
B. Gas Volume	2907.0		(Mcf		Date Liquid	Sample	Obtained	08/05/2	015	- NASANT
C. Oil or Condensate Volume	381.0	-	(Bbl)		Where Obta	ained:	X	Separator		Stock Tank
D. Water Volume	1920.0		(Bbl)		% Over Initial	Temp. (deg. F)		%	6 Over Temp. (deg. F)
E. Gas/Liquid Hydrocarbon Ratio	7630	(C	f/Bbl	0	Boiling Temp. —	9	9.0	-	60	486.0
F. Flowing Tubing Pressure	528	(psia)		10 _	19	99.0	-	70	570.0
G. Choke Size	48/64	action is the second	(in.)		20 _	24	12.0	-	80	665.0
H. Casing Pressure	1048.0	(psia)		30 _		33.0	-	90	708.0
Shut-in Wellhead Pressure Tubing	2997	(psia)		40 _		35.0	-	95	718.0
J. Separator Operating Pressure	360.0	(psia)		50 _	4(0.80	_ En	d Point	718.0
K. Color of Stock Tank Liquid	Pale Yello	w								
L. Gravity of Separator Liquid	50.1		API	-	Total Re	ecovery	_	93.5		percent
M. Gravity of Stock Tank Liquid	50.1		API		Residue			4.3		percent
N. Specific Gravity of the Gas (Air = 1)	0.724				Loss		_	2.2	_	percent
										RRC USE ONLY
I declare under penalties preso										complete our school of \$1566.6
Sec. 91.143, Texas Natural Resour that I am authorized to make the		NAME		(T)	ype or Print)					
that this report was prepared b	y me or	Diann Flowers								
under my supervision and direction, and										
that data and facts stated therein correct, and complete to the bes										
knowledge.	. o. my	Sr. Regulatory S	spec	cialist				-		
08/24/2015						(71	3) 983-2	508		
DATE		CONTACT PERSON	N			. P	IONE NU	MBER	::	



FESCO, Ltd.

Petroleum Engineers

CORPORATE HEADQUARTERS: 1000 FESCO AVE. • ALICE, TEXAS 78332-7318 • (361) 661-7000 ALICE LABORATORY: (361) 661-7015 • FAX (361) 661-7019

ALICE(361) 664-3479	,
ALICE HYDRAULICS (361) 661-1538	
BEAUMONT (409) 842-3000	
BRIDGEPORT, WV (304) 592-3366	
BRYAN(979) 775-1825	
CANADIAN1806) 323-5050	į

CORPUS CHRIS	TJ
AND AND SALES OF THE SALES OF T	T (361) 882-4124
	E (361) 452-1631
	(956) 383-8378
EL CAMPO	(979) 543-9451
HOUSTON SALE	5 (281) 565-1115

KILGORE(903) 984-4814
LAFAYETTE, LA(337) 896-3838
LAREDO(956) 724-7501
LIBERAL, KS(580) 778-3384
LUFKIN(936) 632-7036
MANSFIELD, LA (318) 872-0734

ODESSA(43	32)	332	321	1
OZONA(3)	25)	392-	377	3
PECOS43	32)	445-	199	3
REFUGIO(36	611	526-	464	4
VICTORIA138	51)	575	753	3
WOODWARD, OK., (58	30)	256-	084	8

August 14, 2015

Mr. Diann Flowers BHP Billiton - Petroleum (TXLA OP) Co. 3800 East 42nd Street, Suite 105 Odessa, Texas 79762

Re: Well:

Horseshoe Springs State 113-24X1 No. 1H

Field:

(Phantom) Wolfcamp Reeves County, Texas

Location: Formation:

Wolfcamp

Lateral:

9541 - 16463 ft

Test Type:

Mathematically Recombined C74 Wellstream Analysis

Dear Ms. Flowers:

As instructed, FESCO collected gas and hydrocarbon (HC) liquid samples from the first-stage lease separator on August 5, 2015 then sent the samples to its laboratory in Alice, Texas for C_{7+} compositional analysis. FESCO then determined the corresponding wellstream fluid composition by mathematically recombining the separator gas and separator HC liquid compositions at the producing GOR of 5378 Scf/Sep Bbl (5875 Scf/STB). The attached report contains the separator gas, separator liquid and wellstream fluid compositions through C_{7+} . The operator provided the GOR value used to determine the wellstream composition. The resulting molar volume of the C_{7+} wellstream pseudocomponent was 7.055 mole percent.

Thank you for this opportunity to serve BHP Billiton - Petroleum (TXLA OP) Co. Please call me if you have any questions or concerns regarding this report.

Sincerely,

FESCO, Ltd.

Conan Pierce Corporate Engineer Alice, Texas

Phone: 361-661-7000 Ext. 125 Email: Conan.Pierce@FescoInc.com

FESCO, Ltd. 1100 FESCO Avenue - Alice, Texas 78332

For: BHP Billiton - Petroleum (TXLA OP) Co. 3800 East 42nd Street, Suite 105 Odessa, Texas 79762

COMPOSITIONAL ANALYSIS OF THE SEPARATOR GAS, HC LIQUID, AND MATHEMATICALLY RECOMBINED WELLSTREAM THROUGH C7.

Well Information For Sample Date of : 08/05/15

Well Name:	Horseshoe Springs State 113-24X1 No. 1H	Formation:	Wolfcamp	
Field:	(Phantom) Wolfcamp	Lateral:	9541 - 16463	ft
County:	Reeves, Texas	FWHP:	600	psig

Separator Effluents at: 360 psig & 107°F

Production Data Furnished by: Operator

Stock Tank GOR:	5875	SCF/STB	Separator Gas Rate:	1785	MCF/Day
Separator GOR:	5378	SCF / Sep Bbl	Separator HC Liquid Rate:	331.9	Bbls/Day
			Stock Tank HC Liquid Rate:	303.8	Bbls/Day
Stock Tank HC SG:	50.1	°API @ 60 °F	Water Rate:	1431.0	Bbls/Day
Stock Tank HC Color;	Pale Yellow		Sep HC Liquid Recovery Factor:	91.549	%

	G/	AS	HC I	IQUID	WELLST	REAM	
Component	Mole%	Mole% GPM		Liquid Volume %	Mole %	GPM	
Hydrogen Sulfide**	< 0.001				< 0.001		
Nitrogen	0.631		0.024	0.005	0.553		
Carbon Dioxide	0.233		0.044	0.014	0.209		
Methane	79.956	79.956		2.862	70.864		
Ethane	11.034 4.605 0.670	034 2.934	6.309	3.166	10.429	2.773	
Propane			1.261	7.928	4.098	5.031	1.378
Iso-butane			0.218	2.311	1.419	0.880	0.286
N-butane	1.445	1.445 0.453 0.000 0.000	6.789 0.086	4.016 0.062	2.130 0.011	0.668	
2-2 Dimethylpropane	0.000					0.004	
so-pentane	0.337	0.123	3.276	2.248	0.714	0.259	
N-pentane	0.376	0.136	4.604	3.131	0.918	0.331	
Hexanes	0.284	0.116	7.487	5.777	1.207	0.494	
Heptanes Plus	0.429	0.208	52.139	73.202	7.055	5.152	
TOTALS	100.000	5.448	100.000	100.000	100.000	11.345	

HEPTANES PLUS (C7.) FRACTION CHARACTERISTICS								
	GAS	HC LIQUID	WELLSTREAM					
Molecular Weight	107.2 lb/lb-mol	192.6 lb/lb-mol	188.1 lb/lb-mol					
Specific Gravity	3.7147 (Air=1)	0.8158 (Water=1)	0.8117 (Water=1)					
Vapor Volume	20.663 Scf/Gal	13.441 Scf/Gal	13.694 Scf/Gal					

		TOTAL SAMPLE	CHARACTERISTICS	4535-531
W	GAS HC L		HC LIQUID	WELLSTREAM
Molecular Weight 20.9 lb/lb-mol		124.8 lb/ib-mol	34.2 lb/lb-mol	
Specific Gravity	0.7243 (Air=1)		0.7420 (Water=1)	1.1857 (Air=1)
Vapor Volume	183.541	Scf/Gal	18.870 Scf/Gal	88.143 Scf/Gal
Gross Heating Value	Dry BTU/Scf	Sat BTU/Scf		
	1256	1235		

^{**}Hydrogen Sulfide tested on location by:

Stained Tube Method (GPA 2377)

0.063 Gr/100 CF, 1.0 PPMV or 0.0001 Mol %

Base Conditions: 14.650 psia and 60 °F

Conan Pierce

Certified: FESCO, Ltd. - Alice, Texas

361-661-7015

Tracking No.: 141064							
OPERATOR NAME AND ADDRESS including city, state and zlp	GAS	WELL	Reason for Filin	g Operator P-5 Or	ganization No.	RRC Dist. No.	G-10
BHP BILLITON PET(TXLA OP) CO	NIBRAT P SURFEE	REPORT		0685	96	08	0-10
1360 POST OAK BLVD STE 150 HOUSTON, TX 77056	RAILROAD COMMISSION OF TEXAS Oil and Gas Division P.O. Box 12967 Austin, Texas 78711-2967		Survey Reter	Test Period: Due Date:			
		is generated electronically mitted to the RRC.	Initial Test Corre	ction Effective Date:			
FIELD NAME	RRC IDENT NO.	DATE TESTED MO/DAY/YR	GAS PRODUCED MCF/DAY **	CONDENSATE PRODUCED	WATER PRO		SIWH URE PSIA
* LEASE NAME	WELL NO.	MARK X FOR SHUT-IN WELL	GAS SPEC. GRAVITY	CONDENSATE GRAVITY (API)	X BOTTOMHI PRESSURE F	OLE ***FL	OMNG URE PSIA
PHANTOM (WOLFCAMP)		08/14/2015	2907 MCI	381.0 BBL	1920.0	ввь 2997	
HORSESHOESPRINGSSTATE113-24X1	1H		0.724	50.1		528	
	And the state of t		мсғ	BBL		ВВЦ	
			мся	BBL		BBL	
			мся	BBL		BBL	
			мс	BBL		BBL	
			мс	BBL		BBL	
			мсі	- 8BL		BBL	
			MCI	- 881		BBL	

* AN ASTERISK PREPRINTED ON A SURVEY IDENTIFIES WELL SUBJECT TO COMMINGLING TEST REQUIREMENT

^{**} GAS PRODUCTION RATE, IN MCF, IS TO BE REPORTED FULL-WELL STREAM, INCLUDING CONDENSATE *** PRESSURE FOR THE TEXAS HUGOTON FIELD IS REPORTED IN PSIG

X AN 'X' PREPRINTED ON A SURVEY IN THE BOTTOMHOLE PRESSURE BOX INDICATES A BOTTOMHOLE PRESSURE MUST BE REPORTED FOR THE WELL



LEAM Drilling Systems LLC

2027 A Airport Rd. Conroe, TX 77301

Horseshoe Springs State 113_24X1 1H

Scale 5":100' - TVD 2/21/2015 7:07 AM

Oper. Company: BHP

Well: Horseshoe Springs State 113_24X1 1H

Field: Wolfcamp Rig: H&P 490

Well ID: 42109328100000

Job Number: CO-150062

Latitude: 31 42' 32.493 N

Longitude: 104 6' 52.044 W

State: TX

County: Culberson

Country: USA

Location: Culberson

Start Date: 02/03/2015 09:30:00

End Date: 02/21/2015 06:00:00

Elev KB: 30

Elev DF: 3195

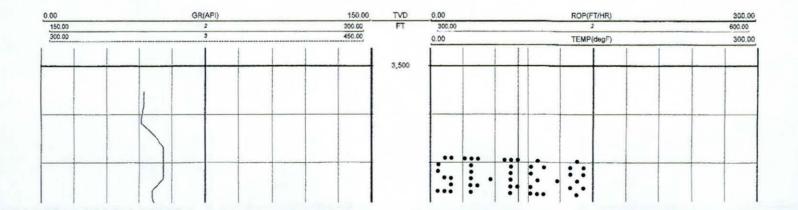
Elev GL: 3165

Operator 1: Michael Beaver

Operator 2: Edward Wooldride

Tool Run Data	Run #1	Run #2	Run #3	Run #4	Run #5
Tool \$/N	DG150	DG25	DG34	DG34	
Bit Size	8.75	8.75	6.75	6.75	
Gamma Offset	42.00	42.00	40.00	40.00	
Resisitivity Offset	0.00	0.00	0.00	0.00	
Start Depth	3545.00	8640.00	8927.00	11390.00	
StartDate	2/3/2015	2/9/2015	2/13/2015	2/17/2015	
StartTime	9:30 AM	11:30 PM	5:21 PM	12:00 AM	
EndDepth	8640.00	8927.00	11390.00	16650.00	
EndDate	2/8/2015	2/11/2015	2/16/2015	2/21/2015	
EndTime	5:00 PM	10:30 AM	11:30 PM	6:00 AM	
Mud Type	WBM	WBM	ОВМ	OBM	
Mud Weight	8.6	8.9	9.5	9.8	
Funnel Viscosity	29	31	62	54	
Solids Content	1.8	1.4	12.6	14.4	
Sand Content	.01	.01	0.0	0.1	33.20
Chlorides	114000	20000	36000	28000	
	Hole Data	and west to have		Casing Data	
Size	From	То	Size	From	То
8.75	3510.00	8927.00	11.75	0.00	507.00
6.75	8927.00	16650.00	9.625	0.00	3510.00
			7.625	0.00	8927.00

All interpretations are opinions based on inferences from electrical or other measurements and we cannot and do not guarantee the accuracy or correctness of any interpretation, and we shall not except in the case of gross or willful negligence on our part, be liable or responsible for any loss, cost demages or expenses incurred or sustained by enyone resulting from an interpretation made by any of our officers, agents, or employees.



RAILROAD COMMISSION OF TEXAS Oil and Gas Division PO Box 12967 Austin TX 78711-2967 www.rrc.state.tx.us

CERTIFICATE OF COMPLIANCE AND TRANSPORTATION AUTHORITY

P-4

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

Tra	acking	g No.: 141064 A certification of the automated dat	a is available in the RRC's	Austin office.				
		name exactly as shown on proration schedule ITOM (WOLFCAMP)		own on proration sched				
		nt operator name exactly as shown on P-5 Organization Report BILLITON PET(TXLA OP) CO	4. Operator P-5 no. 068596	5. Oil Lse/Gas ID no	6. County CULBERSON	7. RRC 08	district	
		tor address including city, state, and zip code POST OAK BLVD STE 150	9. Well no(s) (see in: 1H	struction E)				
		STON, TX 77056	10. Classification	Gas Other (see	instruction A)	11. Effecti 04/26/2		
		se of Filing. (Complete section a or b below.) (See instructions B and G) see of: operator field name from	gas gatherer	gas purchaser	☐ gas pur	rchaser syst	tem code	9
		field name from lease name from						1
		RRC Number for: oil lease gas well other well (specify)	new completion or re-	completion	reclass oil to gas	reclass	gas to oi	- ii
		rized GAS WELL GAS or CASINGHEAD GAS Gatherer(s) and/or Purchase						
Gatherer	Purchaser	Name of GAS WELL GAS or CA Gatherer(s) or Purchaser(s) As Indicate (Attach an additional sheet in same form	ed in Columns to the Le		Purchaser RRC Assigned System Co	Tak		stream
X		BHP BILLITON PET (TX GATH), LLC(068595)				100.0	0	
	X	BP ENERGY CO.(085349)			0001	60.0		
	Х	CONOCOPHILLIPS COMPANY(172232)			0001	40.0		
NG	L CR	orized OIL or CONDENSATE Gatherer(s). (See instruction G). Name of OIL or CONDENSATE Gatherer (Attach an additional sheet in same UDE LOGISTICS, LLC(609236) FRADING (US) COMPANY(774715)					Percen Take 90.0	F2-10-1-1
					*** H ********************************			
15.	PRE	NIOUS OPERATOR CERTIFICATION FOR CHANGE OF OPERATOR OPERATOR of the well(s) designated in this filing, located on the subject lease has be Operator, that designation of the above named operator as Current Operator is	OR P-4 FILING. Being een transferred in its en	tirety to the above nam	ed Current Operator	. I understa	g and, as	
N	ame of	Previous Operator	Signature			100 May 25		-
N:	ame (p	rint)	Authorized I of previous	THE RESIDENCE OF THE PARTY OF T	Authorized operator (se			
Ti	tle		Date	Ĭ	hone with area code	9		-
acl	nowle	RRENT OPERATOR CERTIFICATION. By signing this certificate as the edge responsibility for the regulatory compliance of the subject lease including pility for the physical operation, control, and proper plugging of each well desi until a new certificate designating a new Current Operator is approved by the	g plugging of well(s) purignated in this filing. I Commission.	rsuant to Rule 14. I fur	rther acknowledge th	hat I assum	e	
_		and the second of the second o	Diann Flowers					
	ame (p		Signature	C1				
-		egulatory Specialist	X Authorized I		Authorized operator (se	6.0		
7,67	tle dianr	n.flowers@bhpbilliton.com	08/24/2015		(713) 983-2508			
_		Address (optional)	Date		hone with area code	8		
_								_



RAILROAD COMMISSION OF TEXAS Oil and Gas Division PO Box 12967 Austin, Texas 78711-2967 www.rrc.state.tx.us

1. Field Name(s)

CERTIFICATE OF POOLING AUTHORITY

P-12

3. RRC District Number

na

Revised 05/2001

2. Lease/ID Number (if assigned)

PHANTON	M (WOLFCAME	P)		08
Operator Nam BHP BILLI	e TON PET (TX	A OP) CO	5. Operator P-5 Number 068596	6. Well Number 1H
7. Pooled Unit No HORSESI		STATE 113-24X1	8. API Number 42-109-32810	9. Purpose of Filing Drilling Permit (W-1)
10. County CULBERS	SON		11.Total acres in pooled unit 971.34	Completion Report
	DESCR	IPTION OF INDIVIDUAL TRACTS	CONTAINED WITHIN THE POC	DLED UNIT
TRACT/PLAT	TRACT NAME		ACRES IN TRACT (See inst. #7 below)	INDICATE UNDIVIDED INTERESTS UNLEASED NON-POOLED
1	STATE O	FTEXAS	643.42	
2	STATE O	TEXAS	327.92	
		804CWCD-4-608-Hp-64	The same of the sa	
foregoing state	er penalties prese ements and that	cribed pursuant to the Sec. 91.143 the information provided by me cest of my knowledge.	3, Texas Natural Resources Code or under my direction on this Certi Diann Flowers	, that I am authorized to make the ficate of Pooling Authority is true
Signature Sr. Pogulate	ory Specialist	diann.flowers@bhpbilliton.c	Print Name om 08/18/2015	(713) 983-2508
Title	ory Specialist	E-mail (# available)	Date	Phone
INSTRUCTION	or more tracts are	Statewide Rules 31, 38 and 40 e pooled to form a unit to obtain a dri ust file an original Certificate of Poolin	lling permit, file completion paperwork	c, or reform a pooled unit pursuant

to all fields requested on Form W-1. If the Purpose of Filing is to file completion paperwork, enter the applicable field name in box #1 for the completion. 5.

3. If within an individual tract, a non-pooled and/or unleased interest exists, indicate by checking the appropriate box.

The certified plat shall designate each tract with an outline and a tract identifier. The tract identifier on the plat shall correspond to the tract

If the Purpose of Filing is to obtain a drilling permit, in box #1 list all applicable fields separately or enter "All Fields" if the Certificate pertains

Identify the drill site tract with an * to the left of the tract identifier.

identifier and associated information listed on the Certificate.

The total number of acres in the pooled unit in #11 should equal the total of all acres in the individual tracts listed.



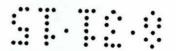
STATEMENT OF PRODUCTIVITY OF ACREAGE ASSIGNED TO PRORATION UNITS

Form P-15

Tracking No.: 141064

This facsimile P-15 was generated electronically from data submitted to the RRC.

acts concerning the		T(TXLA OP)		RATOR	
ORSESHOESPRINGSS	TATE113-24X1		No	1H	; that such well
LEASE		,		WELL	
ompleted in the PHA	NTOM (WOLFCAM	P)	Field,	CULBERS	Coun
		CERTIFICA	TE -		
rized to make this r	alties prescribed in eport, that this repo	Sec. 91.143, rt was prepar	Texas Na ed by me	or under my	rces Code, that I am autho- supervision and direction, he best of my knowledge,
rized to make this r	alties prescribed in eport, that this repo	Sec. 91.143, rt was prepar	Texas Na ed by me ect, and co	or under my	supervision and direction,



P-15 STATEMENT OF PRODUCTIVITY OF ACREAGE

OPERATOR: BHP BILLITON PET (TXLA OP) CO (068596)

COUNTY: CULBERSON - DISTRICT 08 FIELD NAME: PHANTOM (WOLFCAMP)

LEASE NAME: HORSESHOESPRINGSSTATE 113-24X1

LEASE ACRES: 971.34

LEASE ID	DRILLING PERMIT #	WELL NO.	DEDICATED ACRES
PENDING	802289	1H	704.00

TOTAL ALLOCATED:

TOTAL AVAILABLE:

704.00

267.34

Operator: Fill in other items

1. Operator's Name (As shown on Form P-5, Organization Perort)

Form W-15

Cementing Report

Rev. 4/1/83

483-045

RAILROAD COMMISSION OF TEXAS

Oil and Gas Divsion

2. RRC Operator No. 3. RRC District No. 4. County of Well Site 08 068 596 culberson 6. API No. 7. Drilling Permit No.

BHP Billiton PET (TXLA OP) Co 5. Field Name (Wildcat or exactly as shown on RRC records) Prantom / Wolfcamp 109-32810 802289 8. Lease Name 10. Oil Lease/Gas ID No. 9. Rule 37 Case No. 11. Well No. : 113-24X1 torseshoe Jaring 1H

SURFACE INTER- CASING MEDIATE		PRODUCTION CASING		MULTI-STAGE CEMENTING PROCESS		
	CASING	Single Multiple String Parallel Strings		Tool		
1/29/2015						
14 3/4			Y W			
				FIVE		
113/4	47#, J-55		# Ta George 10	A 444 C 200		
			FS	3 1 0 2015		
497			REGU	ATORY DEF	T.	
3		t:		4 N	*	
41						
604						
Class C						
Remarks						
	10.00					
A votesting and construction of the second						
31853						
Yes						
	1/29/2018 14 3/4 11 3/4 497 3 4/1 604 Class C Remarks 1853	CASING MEDIATE CASING 1/29/2015 14 3/4 11 3/4 47*, T-55 497 3 4/1 604 Class C Remarks 802 1863	CASING MEDIATE CASING Single String 1729/2018 14 3/4 11 3/4 47*, T-55 497 3 4/1 604 Class C Remarks 1823	CASING MEDIATE CASING Single String Parallel Strings 1/29/2016 1/4 3/4 1/1 3/4 4/7, 7-55 497 3 4/1 604 Class C Remarks 1823 1823 1853	CASING MEDIATE CASING Single Single String Parallel Strings Tool 1729/2016 14 3/4 11 3/4 17 7-55 FEB 10 2015 APT REGULATORY DEF Single Parallel Strings Tool APT REGULATORY DEF S	

nd

D8N5-00014

CEMENTING TO PLUG AND ABANDON	PLUG #1	PLUG #2	PLUG #3	PLUG #4	PLUG #5	PLUG #6	PLUG #7	PLUG #8
2. Concusing des								
24. Size of hole or pipe plugged (in.)								A STATE OF THE PARTY OF THE PAR
25. Depth to bottom of tubing or drill pipe (ft.)								
Es Sout of Constitution (Clerkolo)								
27. Stony official psinyed could.)								
28. Chicologia sp. week (#2)								
29. Measured top of plug, if tagged (ft.)		The state of the s	AND THE PROPERTY OF THE PARTY O	STATE OF THE STATE		est	AND STREET, ST	25 x2 200 all the executive recent
All Tillian (1994)							NEW YORK	

	if add profite paydely it \$4.9, (4), (2).		
contractive the territoring receive	color to punció emedidad con pelo	a description de la president de not	radores de la como de
especial sines seed that the connecting rests	and foregoing or both and the first for a	The control of the second	Lieberton, Oke
curtification could be transming data easy.	and fillings rest in the Arth Alex of his field are	to the second second second	
Annual Control of the Control	NO Down	and of the second second second	
AZE beliena kee	y Midland Toron	(970) (432) 681-11	87 29-Jan-18
Address	Tity,	Bari. Zip Code Bull Area Code N	misel Date no day w

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.

NICOLE Vail	Regul	latory special	list I VWX	\mathcal{Q}	
Typed or printed name of operator's representative	Houston	1x 77056	713 499-5391	3/2/15	
Address	City,	State, Zip Code	Tel.: Area Code Number	Date: mo. day	yr.

Instructions to Form W-15, Cementing Report

IMPORTANT: Operators and cementing companies must comply with the requirements of the Commission's State Rules 8 (Water Protection), 13 (Casing, Cementing, Drilling, and Completion), and 14 (Well Plugging). For offshore operations, see the requirements of Rule 13 (c).

- A. 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. Form W-15 should be filed with the following:
 - . An initial oil or gas completion report, Form W-2 or G-1, as required by Statewide or special field rules;
 - · Form W-4, Application for Multiple Completion, if the well is a muliple parallel casing completion; and
 - Form W-3, Plugging Record, unless the 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.
- B. Where to file. The appropriate Commission District Office for the county in which the well is located.
- C. Surface casing. An operator must set and cement sufficient surface casing to protect all usable-quality water strata, as defined by the Texas Department of Water Resources, Austin. Before drilling a well in any field or area in which no field rules are in effect or in which surface casing requirements are not specified in the applicable rules, an operator must obtain a letter from the Department of Water Resources stating the protection depth. Surface casing should not be set deeper than 200 feet below the specified depth without prior approval from the Commission.
- D. Centralizers. Surface casing must be centralized at the shoe, above and below a stage collar or diverting tool, if run, and through usable-quality water zones. In nondeviated holes, a centralizer must be placed every fourth joint from the cement shoe to the ground surface or to the bottom of the cellar. All centralizers must meet API specifications.
- E. Exceptions and alternative casing programs. The District Director may grant an exception to the requirements of Statewide Rule 13. In a written application, in operator must state the reason for the requested exception and outline an alternate program for casing and cementing through the protection depth for strata containing usable-quality water. The District Director may approve, modify, or reject a proposed program. An operator must obtain approval of any exception before beginning casing and cementing operations.
- 3. Intermediate and production casing. For specific technical requirements, operators should consult Statewide Rule 13 (b) (3) and (4).
- 3. Plugging and abandoning. Cement plugs must be placed in the wellbore as required by Statewide Rule 14. The District Director may require additional cement plugs. For onshore or inland wells, a 10-foot cement plug must be placed in the top of the well, and the casing must be cut off three feet below the ground surface. All tement plugs, except the top plug, must have sufficient slurry volume to fill 100 feet of hole plus ten percent for each 1,000 feet of depth from the ground surface to he bottom of the plug.

To plug and abandon a well, operators must use only cementers approved by the Director of Field Operations. Cementing companies, service companies, or

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

RAILROAD COMMISSION OF TEXAS Oil and Gas Divsion

Form W-15

Cementing Report

Rev. 4/1/83

483-045

1. Operator's Name (As shown on Form P.5. Organization Report) BHP Billion Fet (KLA OP) Co	2. RRC Operator No. 068596	3. RRC District No.	4. County of Well Site	rson
5. Field Name (Wildcat or exactly as shown on RRC records) Phantom (Wolfcamp)		6. API No. 109-32810	7. Drilling Permit No. 802289	
8. Lease Name Horseshoe Springs Ptato 113-24X1	9. Rule 37 Case No.	10. Oil Lease/Gas ID i	No. 11. Well No. 1H	

CASING	CASING MEI	INTER- MEDIATE	C	DUCTION ASING	MULTI- CEMENTIN		
			CASING			Tool	Shoe
12. Ceme	enting Date		2/2/2015				
13. •Dri	illing hole size		10 5/8				
●Est	t. % wash or hole enlargement						
14. Size	of casing (in. O.D.)		9 5/8	47#; J-55			
15. Top 6	of liner (ft.)						
16. Setti	ng depth (ft.)		3500				
17. Num	ber of centralizers used		0				
18. Hrs.	waiting on cement before drill-out		14.5				
È 19.	API cement used; No. of sacks		198				
1st Slurry	Class		Class C		A TAIL A MESSION STANCE		
S	Additives		Remarks				
È	No. of sacks	ar a Viscolne i Suntil Collect	179		STATE OF STATE		
2nd Shurry	Class		Class C				
2nd	Additives		Remarks				
à	No. of sacks			STANDARS SACRES			
3rd Siurry	Class						
۴	Additives						
표 20.	Slurry pumped:Volume (cu. ft.)		515				
-	Height (ft.)		4661				
2nd	Volume (cu. ft.)		255.96				
21	Height (ft.)		2318				
3rd	Volume (cu. ft.)						
	Height (ft.)						
Total	Volume (cu. ft.)		771				
100	rieigili (ii.)		6979				
	cement circulated to ground surface ottom of cellar) outside casing?		Yes				

st 0.02 gps D047 + 2% S001 + 5% D154 + 3% D020

nd 1.5% D020 + 0.1% D065 + 0.08% D013 + 0.02 gps D047

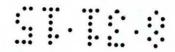
rd f

50 sks to surface (23 bbls)

KI CENVEL

OVER +

FEB 1 0 2015



KEGULATORY DEPT.

CEMENTING TO PLUG AND ABANDON	PLUG #1	PLUG #2	PLUG #3	PLUG #4	PLUG #5	PLUG #6	PLUG #7	PLUG #8
23. Cementing date	A	Emerica	e Stantalisa			90.		0.00
24. Size of hole or pipe plugged (in.)								
25. Depth to bottom of tubing or drill pipe (ft.)			- ASMINIMINATE OF THE PARTY OF					
26. Sacks of cement used (each plug)			50.0	2	Television of Marie			
27. Slurry volume pumped (cu, ft.)		100						
28. Calculated top of plug (ft.)								
29. Measured top of plug, if tagged (ft.)								
30. Slurry wt. (lbs/gal)								
31. Type cement	1494099350							

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.

 Matthew Courtney, FE
 Dowell Schlumberger
 Matching Company

 Name and title of cementer's representative
 Cementing Company
 Sighature

 32 E. Industrial Loop
 Midland, Texas 79701
 (432) 683-1887
 1-Feb-15

 Address
 City.
 State, Zip Code
 Tel.: Area Code Number
 Date: mod 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.

Typed or printed name of operator's representative

NICOLE Vai

H

N TX 77051 State, Zip Code Signature
713 499 539
Tel.: Area Code Number

3/2/15

Address

Instructions to Form W-15, Cementing Report

IMPORTANT: Operators and cementing companies must comply with the requirements of the Commission's State Rules 8 (Water Protection), 13 (Casing, Cementing, Drilling, and Completion), and 14 (Well Plugging). For **offshore** operations, see the requirements of Rule 13 (c).

- A. 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. Form W-15 should be filed with the following:
 - An initial oil or gas completion report, Form W-2 or G-1, as required by Statewide or special field rules;
 - . Form W-4, Application for Multiple Completion, if the well is a muliple parallel casing completion; and
 - Form W-3. Plugging Record, unless the 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.
- B. Where to file. The appropriate Commission District Office for the county in which the well is located.
- C. Surface casing. An operator must set and cement sufficient surface casing to protect all usable-quality water strata, as defined by the Texas Department of Water Resources, Austin. Before drilling a well in any field or area in which no field rules are in effect or in which surface casing requirements are not specified in the applicable rules, an operator must obtain a letter from the Department of Water Resources stating the protection depth. Surface casing should not be set deeper than 200 feet below the specified depth without prior approval from the Commission.
- D. Centralizers. Surface casing must be centralized at the shoe, above and below a stage collar or diverting tool, if run, and through usable-quality water zones. In nondeviated holes, a centralizer must be placed every fourth joint from the cement shoe to the ground surface or to the bottom of the cellar. All centralizers must neet API specifications.
- E. Exceptions and alternative casing programs. The District Director may grant an exception to the requirements of Statewide Rule 13. In a written application, in operator must state the reason for the requested exception and outline an alternate program for casing and cementing through the protection depth for strata containing usable-quality water. The District Director may approve, modify, or reject a proposed program. An operator must obtain approval of any exception before beginning casing and cementing operations.
- F. Intermediate and production casing. For specific technical requirements, operators should consult Statewide Rule 13 (b) (3) and (4).
- 3. Plugging and abandoning. Cement plugs must be placed in the wellbore as required by Statewide Rule 14. The District Director may require additional cement plugs. For onshore or inland wells, a 10-foot cement plug must be placed in the top of the well, and the casing must be cut off three feet below the ground surface. All tement plugs, except the top plug, must have sufficient slurry volume to fill 100 feet of hole, plus ten percent for each 1,000 feet of depth from the ground surface to he bottom of the plug.

To plug and abandon a well, operators must use only cementers approved by the Director of Field Operations. Cementing companies, service companies, or operators can qualify as approved cementers by demonstrating that they are able to fink and gain prompt in compliance with Commission rules and regulations.

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

Form W-15

Cementing Report

Rev. 4/1/83

483-045

RAILROAD COMMISSION OF TEXAS

Oil and Gas Divsion

1. Operator's Name (As shown on Form P-5, Organization Report)	RRC Operator No.	3. RRC District No.	 County of Well Site
BHP Billiton PET (TXLA OP)CO	068596	08 8	Culberson
5. Field Name (Wildcat or exactly as shown on RRC records) Phantom (Wolfcamp)		6. API No. 109-32810	7. Drilling Permit No. 802281
8. Lease Name Horseshoe Springs State 113-24X1	9. Rule 37 Case No.	10. Oil Lease/Gas ID N	o. 11. Well No. 1H

CAS	SING CEMENTING DATA:	SURFACE	SURFACE INTER- PRODUCTION CASING MEDIATE CASING			MULTI-STAGE CEMENTING PROCESS		
		CASING	CASING	Single String	Multiple Parallel Strings	Tool	Shoe	
12.	Cementing Date		2/12/2015					
13.	Drilling hole size		8 3/4					
	Est. % wash or hole enlargement		20%					
14.	Size of casing (in. O.D.)		7 5/8	29.7#, P110				
15.	Top of liner (ft.)							
16.	Setting depth (ft.)		892 5					
17.	Number of centralizers used		0		*			
18.	Hrs. waiting on cement before drill-out		35	and the second	-			
'n	19. API cement used: No. of sacks	•	238					
1st Slurry	Class	•	TXI					
Ist	Additives	•	Remarks					
ņ	No. of sacks		170	Carrier Section			The second second second	
2nd Slurry	Class	•	Class C					
2nd	Additives	•	Remarks					
ry.	No. of sacks	•						
3rd Slurry	Class	•						
3rc	Additives	•						
1	20. Slurry pumped:Volume (cu. ft.)		566					
1st	Height (ft.)	•	5638					
P	Volume (cu. ft.)	•	264					
2nd	Height (ft.)	•	2623					
rd	Volume (cu. ft.)	•			alies de Stanton de Lag Lagranda de Stanton			
31	Height (ft.)	•		The second second second				
-	Volume (cu. ft.)	•	830			100		
Total	Height (ft.)	•	8260					
	Was cement circulated to ground surface (or bottom of cellar) outside casing?		No			CEIVE		

RECEIVED

<u>03% D208 + .3% D167 + .1% D202 + .22% D201 + .1% D202</u> <u>2%D065 + .05% D208 + 3% M117 + .5% D112 + .23% D201 + .2% D046</u>

MAR 1 8 2015

	PLUG #1	PLUG #2	PLUG #3	PLUG #4	PLUG #5	PLUG #6	PLUG #7	PLUG #8
23. Cementing date								
24. Size of hole or pipe plugged (in.)								
25. Depth to bottom of tubing or drill pipe (ft.)								
26. Sacks of cement used (each plug)		3-10-10-10-10-10-10-10-10-10-10-10-10-10-		Superior Section 2015				
27. Slurry volume pumped (cu. ft.)	000							
28. Calculated top of plug (ft.)								
29. Measured top of plug, if tagged (ft.)								
30. Slurry wt. (lbs/gal)				-				
31. Type cement								

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.

Jackie Stone, FSDowell SchlumbergerName and title of cementer's representativeCementing CompanySignature32 E. Industrial LoopMidland, Texas 79701(432) 683-188712-Feb-15AddressCity, State, Zip CodeTel.: Area Code NumberDate: 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.

inted name of operator's representative

Agous

Houston

TX 77056

Signature
(7/3) 983 - 2588
Tel: Area Code, Number

8-17-26/5 Date: mo. day y

Instructions to Form W-15, Cementing Report

IMPORTANT: Operators and cementing companies must comply with the requirements of the Commission's State Rules 8 (Water Protection), 13 (Casing, Cementing, Drilling, and Completion), and 14 (Well Plugging). For offshore operations, see the requirements of Rule 13 (c).

- A. 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. Form W-15 should be filed with the following:
 - An initial oil or gas completion report, Form W-2 or G-1, as required by Statewide or special field rules;
 - Form W-4, Application for Multiple Completion, if the well is a muliple parallel casing completion; and
 - Form W-3, Plugging Record, unless the 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.
- B. Where to file. The appropriate Commission District Office for the county in which the well is located.
- C. Surface casing. An operator must set and cement sufficient surface casing to protect all usable-quality water strata, as defined by the Texas Department of Water Resources, Austin. Before drilling a well in any field or area in which no field rules are in effect or in which surface casing requirements are not specified in the applicable rules, an operator must obtain a letter from the Department of Water Resources stating the protection depth. Surface casing should not be set deeper than 200 feet below the specified depth without prior approval from the Commission.
- D. Centralizers. Surface casing must be centralized at the shoe, above and below a stage collar or diverting tool, if run, and through usable-quality water zones. In nondeviated holes, a centralizer must be placed every fourth joint from the cement shoe to the ground surface or to the bottom of the cellar. All centralizers must meet API specifications.
- E. Exceptions and alternative casing programs. The District Director may grant an exception to the requirements of Statewide Rule 13. In a written application, an operator must state the reason for the requested exception and outline an alternate program for casing and cementing through the protection depth for strata containing usable-quality water. The District Director may approve, modify, or reject a proposed program. An operator must obtain approval of any exception before beginning casing and cementing operations.
- F. Intermediate and production casing. For specific technical requirements, operators should consult Statewide Rule 13 (b) (3) and (4).
- G. Plugging and abandoning. Cement plugs must be placed in the wellbore as required by Statewide Rule 14. The District Director may require additional cement plugs. For onshore or inland wells, a 10-foot cement plug must be placed in the top of the well, and the casing must be cut off three feet below the ground surface. All tement plugs, except the top plug, must have sufficient slurry volume to fill 100 feet of hole, plus ten percent for each 1,000 feet of depth from the ground surface to the bottom of the plug.

To plug and abandon a well, operators must use only cementers approved by the Director of Field Operations. 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.



3 Total

RAILROAD COMMISSION OF TEXAS

1701 N. Congress P.O. Box 12967

Austin, Texas 78701-2967

Form W-15

Rev. 08/2014

Cementer: Fill in shaded areas. CEMENTING REPORT Operator: Fill in other items. OPERATOR INFORMATION BHP BILLITON Operator Name: Operator P-5 No.: (TYLLA OP) 068596 Cementer Name: Schlumberger Cementer P-5 No.: 754900 WELL INFORMATION District No.: County: CULBERSON Well No .: 1H API No .: 109-32810 Drilling Permit No .: 802289 HORSESHOE SPRING STATE 113-24X1 Lease Name: Lease No.: Field Name: **PHANTOM** (WOIF CAMP Field No.: 710.52900 I. CASING CEMENTING DAT 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 Top of liner (ft.): Setting depth shoe (ft.): casing? No if no for surface casing, explain in Remarks. 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 IL CASING CEMENTING DATA Type of casing: Surface Intermediate Production X 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.): 5 1/2 Casing weight (lbs/ft) and grade: 20, 13.5 No. of centralizers used: Tapered string drilled hole size (in.)
Upper: 63/4 Tapered string depth of drilled hole (ft.) 6 Upper: Lower: 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: 20, P-110 Lower: 13.5 Upper: Lower: Was cement circulated to ground surface (or bottom of cellar) outside casing? Yes X No Setting depth tool (ft.): Hrs. waiting on cement before drill-out: Calculated top of cement (ft.): Cementing date: 23-Feb-15 SLURRY Slurry No. No. of Sacks Class Additives Volume (cu.ft.) Height (ft.) 1355 VERSACEM PBSH2 Remarks 2255 20126 2 Total 1355 2255 20126 III. CASING CEMENTING DATA Type of casing: Surface Intermediate Production Tapered production Multi-stage cement/DV tool Multiple parallel strings Orilled 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.) 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 Lower: Upper: Upper: Lower: Was cement circulated to ground surface (or bottom of cellar) outside casing? No Yes 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.) 2

	the state of the s	The state of the s	Charles and Charles and the Printers	BANDON	电影的时间的影响的影响和影响	The state of the s	The second second
	PLUG #1	PLUG #2	PLUG #3	PLUG #4	PLUG #5	PLUG #6	PLUG #7
ementing Date							
ize of hole or pipe (in.)					-5/1		
epth to bottom of tubing or drill pipe (ft.)					THE RESERVE OF THE PERSON OF T		
ement retainer setting depth (ft.)							
BP setting depth (ft.)							
nount of cement on top of CIBP (ft.)							1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
cks of cement used							
irry volume pumped (cu. ft.)							
Iculated top of plug (ft.)		1.3					
easured top of plug, if tagged (ft.)							
urry weight (ibs/gal)							
ass/type of cement		1					
rforate and squeeze (YES/NO)							
Horate and squeeze (125/110)	THE CONTRACT OF THE PARTY OF TH	REMARKS	13 H. W. W. T. S. W.		TEMPETER SCOTA		
MENTER'S CERTIFICATE: I declare under penalties p at the cementing of casing and/or the placing of cen menting data and facts presented on both sides of t	nent plugs in this well	as shown in th	e report was p	erformed by r	ne or under m	y supervision,	and that th
o only.			-10.2		·	16	
Denys Teodoro, FSM		Schlumberg	er		100	1	
32 E. Industrial Loop Midland Addreess City, S	TX 79701	Tel:	(432) 683-188 Area Code	Number	-	February 23, 2 Date: mo. day	
PERATOR'S CERTIFICATE: I declare under penalties prest I have knowledge of the well data and information d complete, to the best of my knowledge. This certificant Tradits Typed or printed name of operator's representation	presented in this replication covers all well	port, and that c	data and facts p	presented on t	ooth sides of the	nis form are tro	ne, correct,
So host tak Rhy Pom 217018 House	ton, Tx 77056	(113)	783-2508		8-18-	2015	
riddi colo	tate, Zip Code			lumber enort	8-18-	-2015 Date: mo. day	yr.
Instru	actions for Forn	n W-15, Ce	menting R	eport			
Instru	uctions for Forn	n W-15, Ce	menting R	eport r Recompletion	Report, and Log	, Form W-2 (Oil	Well Potentia
riddicess	to a Form G-1 (Gas Well (Plugging Record), or Fo one copy of the comple company may be reporte Plugging Record, unless t form W-3, to show any orm W-15 may be filed o	m W-15, Ce Back Pressure Te brim W-4 (Applicate the Form W-15 for ed on one form. the Form W-3 is a casing cemented inline using the Co	menting R st, Completion o tion for Multiple or each cementir igned by the cen lin the hole. commission's Onli	eport r Recompletion: Completion), an ing company used menting company	Report, and Log) y time cement is f on a well. The or), Form W-2 (Oil of pumped in a we cementing of	Well Potentia ellbore.

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. F. Multiple parallel strings: An operator should file the Form W-15 as an attendment 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.
 G. Slurry data: If cement job exceeds three slurries, continue the list of slurries in the Slurry table in the subsequent Casing Cementing Data box.

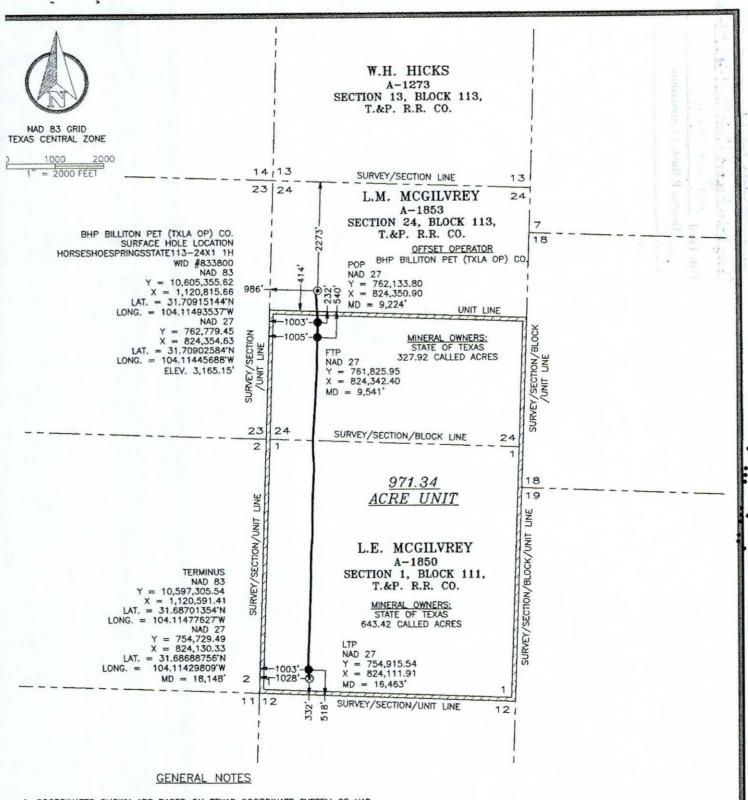
(http://info.sos.state.tx.us/pls/pub/readtac\$ext.TacPage?sl=R&app=9&p_dir=&p_rloc=&p_ploc=&p_ploc=&pg=1&p_tac=&ti=16&pt=1&ch=3&ri=14). Cementing companies, service companies, or operators can qualify as approved cementers by demonstrating that they are able to mix and pump cement in compliance with Commission rules and

D. 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

E. 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

regulations.

the estimated % wash-out was obtained.



1. COORDINATES SHOWN ARE BASED ON TEXAS COORDINATE SYSTEM OF NAD 27 STATE PLANE "TEXAS CENTRAL ZONE" (EPSG 32039), AND BASED ON "CHAPMAN ET" NGS MONUMENT (Y = 783,172.93, X = 903,204.24) 2. VERTICAL DATUM IS NAVD 88 (EPSG 5103) 3. COMBINED SCALE FACTOR - 0.999957851 4. GRID NORTH CONVERGENCE ANGLE -1"56"57.89178" 5. LATITUDE AND LONGITUDE ARE NAD 27 (EPSG 4267) AS SHOWN 6. ADEA DISTANCES AND COORDINATES ARE "TEND"

6. AREA, DISTANCES, AND COORDINATES ARE "GRID"
7. UNITS ARE UNITED STATES SURVEY FOOT.
8. ALL LEASE AND TRACT INFORMATION SHOWN HERE ON IS DONE SO BY LIMITED DEED RECORD INFORMATION ONLY. ALL ACREAGES SHOWN ARE BY DEED AND LEASE CALL, EXCEPT WHERE NOTED. THIS IS NOT IN ANY WAY "BOUNDARY SURVEY"

	VISION	DATE	BY	DETAILS
A 04/17/15 GG MAKE PRELIMINARY PL	Α	04/17/15	GG	MAKE PRELIMINARY PLAT

PLAT OF:

AN AS-DRILLED WELL LOCATION FOR:

BHP BILLITON PET (TXLA OP) CO.

HORSESHOESPRINGSSTATE113-24X1 1H WID# 833800

SITUATED IN L.M. MCGILVREY SURVEY, ABSTRACT NO. 1853, SECTION 24, BLOCK 113, AND THE L.E. MCGILVREY SURVEY, ABSTRACT NO. 1850, SECTION 1 BLOCK 111, T.&P. R.R. CO. LANDS, LOCATED APPROX. 14.4 MILES SOUTHWEST OF ORLA, IN CULBERSON COUNTY, TEXAS



PE+PS

GLEN MALOY

E OF

90 6028 NO. FESS 101-10

SURVE

Resi

bhpbilliton BHP Billiton 1360 Post Oak Bivd. #150 Houston, Texas 77056



I HEREBY STATE THAT THIS PLAT

ON INFORMATION PROVIDED BY

ROBERT GLEN MALOY

LICENSE NO. 6028

THE CLIENT.

SHOWS THE SUBJECT LOCATION BASED

REGISTERED PROFESSIONAL LAND SURVEYOR

550 Bailey Ave., 205 - Fort Worth, TX 76107 Ph: 817.349.9800 - Fax: 979.732.5271

TBPLS Firm No. 10193887

www.franksurveying.com

LAND SURVEYING-ENERGY-GIS SERVICES

© COPYRIGHT 2014 - ALL RIBHTS RESERVED

DATE DRAWN BY: CHECKED BY: FIELD CREW:

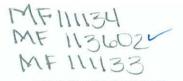
12/29/14 RP

PROJECT NO 2014091001 SCALE: 1" = 2000" SHEET: RE/MR REVISION

	:	•	<u>:</u>		•	
--	---	---	----------	--	---	--

File No. MF113602	0.
Culberson Con	inty
Completion Report Unit 7219-API 10	9-32810
Date Filed: 09 08 2015	
George P. Bush, Commissioner	
. 0	

Q







- To:

BHP Billiton Petroleum

Land Administration P O Box 22719

Houston, TX 77227-9927

(877) 311- 1443

Issue Date:

4/27/2015

Property Name:

HORSESHOE SPRINGS STATE 113-24X1 1H

Property #: Production: P1M605/00501 | API 109-32810
ALL PRODUCTS

Operator:

BHP BILLITON PETROLEUM (TXLA OPERATING)

Legal Description:

PSL ABST/ID# 1853 Grantee MCGILVREY Blk 113 Sec 24 CULBERSON COUNTY,

TEXAS (327.60 ACRES); PSL ABST/ID# 1850 Grantee MCGILVREY Blk 111 Sec 1

CULBERSON COUNTY, TEXAS (642.80 ACRES)

CREDIT TO

Owner # 80113945 STATE OF TEXAS GLO 1700 N CONGRESS AVE NO 640 AUSTIN TX 78701-1495

Decimal 0.12500000 Type RI Status PAY Reason

Start Date 4/1/2015

PLEASE KEEP THIS COPY FOR YOUR RECORDS



TEXAS GENERAL LAND OFFICE GEORGE P. BUSH, COMMISSIONER

September 12, 2016

Broderick Brown Division Order Analyst BHP Billiton Petroleum P O BOX 22719 Houston, TX 77227-9927

Re: State Lease Nos. MF111133, MF111134 and MF113602 HorseshoeSpringState113-24 1H

Dear Mr. Brown:

The Texas General Land Office (GLO) has received your Division Order for the referenced unit. This Division Order has been filed in the appropriate mineral files.

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 Hernandez

Landman, Energy Resources

512-475-0428

512-475-1543 (fax)

vivian.hernandez@glo.texas.gov

sebrandez nou

9.

File No. MF 113602	
Division Order	County
Date Filed: 4-13-16	
George P. Bush, Commissioner	UH



Texas General Land Office Reconciliation Billing

PO Box 12873 Austin, TX 78711-2873 (800) 998-4456 8:00 - 5:00 M-F

George P. Bush, Commissioner

BHP Billiton Petroleum (TXLA Operating) Company

Attn: Cristen Steele

1360 Post Oak Blvd Ste 150 Houston, TX 77056-3030

Billing Date:

5/3/2016

Billing Due Date:

6/2/2016

Customer Number: C000046383

Invoice	Mineral File	Gas Royalty	Oil Royalty	Penalty	Interest	Total Due
16I00395	MF065125	\$16,927.65	\$0.00	\$1,892.25	\$469.02	\$19,288.92
16I00397	MF111133	\$961.17	\$0.00	\$155.66	\$41.87	\$1,158.70
16I00399	MF111133	\$0.00	\$435.27	\$75.00	\$12.31	\$522.58
16I00400	MF111134	\$1,885.97	\$0.00	\$305.43	\$82.15	\$2,273.55
16I00401	MF111134	\$0.00	\$858.32	\$97.72	\$24.30	\$980.34
16I00402	MF113602	\$8,541.37	\$0.00	\$1,383.27	\$273.81	\$10,198.45
16I00403	MF113602	\$0.00	\$3,893.00	\$389.30	\$110.27	\$4,392.57
Total Due		\$28,316.16	\$5,186.59	\$4,298.63	\$1,013.73	\$38,815.11

Penalty and interest have been calculated thru 5/31/2016. Payment remitted after 5/31/2016 will result in additional penalty and interest charges.

Contact Info: Andrea Charlton (512) 463-5190 or Andrea.Charlton@GLO.TEXAS.GOV

NOTICE

- Please update GLO1 and GLO2 production reports to correct volumes.
- Please do not update GLO3 report to include billed royalty, penalty or interest. This receivable has already been recorded.
- For other royalty reporting questions, visit http://www.glo.texas.gov, call (512) 463-6850 or email us at glo123@glo.texas.gov.

This notice does not constitute an Audit Billing Notice as defined in Section 52.135 of the Texas Natural Resources Code and, consequently, does not preclude the TGLO from conducting further examinations of these leases, time periods or issues.

Detach and return with payment

Reconciliation Billing

BHP Billiton Petroleum (TXLA Operating) Company

Billing Date: 5/3/2016

Billing Due Date: 6/2/2016

Remit Payment To:

Texas General Land Office

PO Box 12873

Austin, TX 78711-2873

Customer Number: C000046383

Invoice	Mineral File	Gas Royalty	Oil Royalty	Penalty	Interest	Total Due
16I00395	MF065125	\$16,927.65	\$0.00	\$1,892.25	\$469.02	\$19,288.92
16I00397	MF111133	\$961.17	\$0.00	\$155.66	\$41.87	\$1,158.70
16I00399	MF111133	\$0.00	\$435.27	\$75.00	\$12.31	\$522.58
16I00400	MF111134	\$1,885.97	\$0.00	\$305.43	\$82.15	\$2,273.55



Texas General Land Office

PO Box 12873 Austin, TX 78711-2873 (800) 998-4456 8:00 - 5:00 M-F

George P. Bush, Commissioner

16I00401	MF111134	\$0.00	\$858.32	\$97.72	\$24.30	\$980.34
16I00402	MF113602	\$8,541.37	\$0.00	\$1,383.27	\$273.81	\$10,198.45
16I00403	MF113602	\$0.00	\$3,893.00	\$389.30	\$110.27	\$4,392.57
Total Due		\$28,316.16	\$5,186.59	\$4,298.63	\$1,013.73	\$38,815.11
Amt. Paid						

Energy Financial Management SMAR Activity / Invoicing Approval

Auditor/Account Examiner: Andrea Charlton

Company Name:

Petrohawk Energy Corp

Customer Number:

C000044995

Mineral File #:

MF113602

Transaction Type:

Volume Reconciliation

Other / Invoice #:

Previous Amount	Current Amount	Date	AE / Reviewer's Notes	Reviewer's Signature	AR Notes
	\$10,198.45	04/29/16	Under reported/paid sales volumes.	MM 4/29/2016	

All original invoices must be approved.

All reductions in billing of more than \$1000 must be approved.

Customer ID:

C000046383

Invoice Number:

MF113602

Auditor/AE: Billing Date: Acharlto

GLO Lease:

P&I Calculation Date:

5/2/2016 5/31/2016

GLO Review: Review Period: BHP BILLITON PET(TXLA OP) CO JANUARY Through AUGUST 2015

Royalty Rate:

12.50%

		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	
Month / Year	RRC Number	Gas Volume	Tract Participation	Price	BTU	Gross Value (1)X(2)x(3)x(4)	Royalty Due		Additional Royalty Due			Penalty From Additional Royalty	Interest From Additional Royalty	Revenue Due (8)+(11)+(12)
Apr-15	08-278243		1.000000			\$10,954.00	\$1,369.25		(\$851,66)	351	4.250000%	\$0.00	\$0.00	(\$851.66)
May-15	08-278243		1.000000			\$110,661.68	\$13,832.71	\$18,272.39	(\$4,439.68)		4.250000%		\$0.00	(\$4,439.68)
Aug-15	08-278243		1.000000			\$267,330.80	\$33,416.35	\$19,583.64	\$13,832.71	229	4.250000%	\$1,383.27	\$273.81	\$15,489,79
TOTALS		0				\$388,946.48	\$48,618.31	\$40,076.94	\$8,541,37			\$1,383,27	\$273.81	\$10,198.45

ATTN: CRISTEN STEELE

CERTIFIED MAIL: 7007 0710 0000 5380 6514

COMMENTS: Underpaid Due vs Paid royalties due to the GLO

COLUMN (10)(11)(12) PLEASE GO TO THIS WEB SITE FOR EXPLANATION OF PENALTY AND INTEREST ASSESSMENT:

http://www.glo.texas.gov/energy-business/oil-gas/rrac/forms/penalty-interest-assessment-rules.pdf

NOTE 1: PLEASE REMIT PAYMENT OF THIS INVOICE SEPARATELY FROM REGULAR ROYALTY PAYMENTS. THE PREFERED METHOD OF PAYMENT IS BY CHECK

ACCOMPANIED WITH THE BOTTOM HALF OF THE ATTACHED INVOICE. IF PAYMENT IS MADE THROUGH ACH DEBIT, NOTIFY THE AUDITOR AS TO THE

REMITTANCE DATE SO THE INVOICE CAN BE PROPERLY CREDITED.

Energy Financial Management SMAR Activity / Invoicing Approval

Auditor/Account Examiner: Andrea Charlton

Company Name:

Petrohawk Energy Corp

Customer Number:

C000046383

Mineral File #:

MF113602

Transaction Type:

Volume Reconciliation

Other / Invoice #:

Previous Amount	Current Amount	Date	AE / Reviewer's Notes	Reviewer's Signature	AR Notes
e e	\$4,392.57	04/29/16	Under reported/paid sales volumes.	MM 4/29/2016	
			·		

All original invoices must be approved.

All reductions in billing of more than \$1000 must be approved.

Customer ID:

C000046383

Invoice Number:

GLO Lease: M

MF113602

GLO Review: Review Period: BHP Billiton Petroleum Company

JANUARY THROUGH DECEMBER 2014

Auditor/AE:

Acharlto

Billing Date: P&I Calculation Date: 5/2/2016

Royalty Rate:

5/31/2016 12.50%

		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	
Month / Year	RRC Number	Oil Volume	Tract Participation Rate	Price	Gross Value	Royalty Due	Royalty Paid	Additional Royalty Due	Number of Days Late	Interest Rate For Additional Royalty	Penalty From Additional Royalty	Interest From Additional Royalty	Revenue Due
Apr-15	08-278243	119.00	1	\$45.66	\$5,433,72	(4) * Royalty Rate \$679,21	\$0.00	\$679.21	204	4.07000004			(7)+(10)+(11)
				Commence of the Commence of th			The different	1.2 10 10 10 10 10 10 10 10 10 10 10 10 10	361	4.250000%	\$67.92	\$23.88	\$771.01
Jun-15	08-278243	331.00	1	\$52.30	\$17,311.31	\$2,163.91	\$0.00	\$2,163.91	300	4.250000%	\$216.39	\$60.72	\$2,441.02
Jul-15	08-278243	185.00	1	\$45.40	\$8,399.01	\$1,049.88	\$0.00	\$1,049.88	269	4.250000%	\$104.99	\$25.67	\$1,180.54
TOTALS		635.00			\$31,144.04	\$3,893.00	\$0.00	\$3,893.00			\$389.30	\$110.27	\$4,392.57

ATTENTION: CRISTEN STEELE

CERTIFIED MAIL: 7007 0710 0000 5380 6514

COMMENTS: SALES VOLUMES REPORTED TO THE GLO WAS COMPARED TO VOLUMES REPORTED TO THE RRC.

IT HAS BEEN DETERMINED THAT THE SALES VOLUMES HAS BEEN UNDER PAID.

COLUMN (1) RRC VOLUME - REPRESENTS UNDER REPORTED SALES VOLUMES TO THE GLO FROM RRC WELL ID# 08-278243

COLUMN (3) PRICE - TAKEN FROM PRODUCTION ROYALTY REPORTS SUBMITTED TO THE TEXAS GENERAL LAND OFFICE

COLUMN (10)(11)(12) PLEASE GO TO THIS WEB SITE FOR EXPLANATION OF PENALTY AND INTEREST ASSESSMENT:

http://www.glo.texas.gov/energy-business/oil-gas/rrac/forms/penalty-interest-assessment-rules.pdf

NOTE 1: PLEASE REMIT PAYMENT OF THIS INVOICE SEPARATELY FROM REGULAR ROYALTY PAYMENTS. THE PREFERED METHOD OF PAYMENT IS BY CHECK ACCOMPANIED WITH THE BOTTOM HALF OF THE ATTACHED INVOICE. IF PAYMENT IS MADE THROUGH ACH DEBIT, NOTIFY THE AUDITOR AS TO THE

REMITTANCE DATE SO THE INVOICE CAN BE PROPERLY CREDITED.



File No. MF	113602	
		County
Reco	on Billing	9
Date Filed:	12-6-16	
George	P. Bush, Commissio	ner A
By		111



TEXAS GENERAL LAND OFFICE GEORGE P. BUSH, COMMISSIONER

March 22, 2017

Certified Mail: 7016 2070 0000 7391 7925

Ms. Nicole Vail Regulatory Analyst BHP Billiton Pet (TXLA OP) Co. 1360 Post Oak Blvd. Suite 150 Houston, Texas 77056 3020

RE: Your Application Dated 2/28/17 for Authority to Surface Commingle Oil and Gas Production from the Horseshoe Springs State 113-24x1 and HS State 113-24x13 Leases, State RAL Mineral Leases MF111133, MF111134, MF115984, MF113602, and MF113603, the Horseshoe Springs State 113-24x1 Unit, GLO Unit 7219, and HS State 113-24x13 Unit, GLO Unit 8292, RRC Commingling Permit 08-7837, Culberson County, Texas.

Dear Ms. Vail:

Please reference your letters dated 2/13/2017 and 2/28/2017, where you requested permission to commingle state lease production and advised that the commingling permit is required due to the commingling of condensate/oil from RRC designated gas leases into common storage at the Horseshoe Springs State 113-24x1 Tank Battery. In addition, pursuant to the terms of the state's lease, you requested permission to utilize on-lease gas lift and to utilize and commingle with off-lease sources of gas for gas lift supply purposes.

As shown by the process flow diagram, the production from each lease/unit well is separated, metered, and then further treated/processed for sale and/or disposal at the Horseshoe Springs State 113-24x1 Tank Battery. The available for sale gas produced at the tank battery/facility is either: a) measured prior to transfer into a common gas gathering system and/or b) the gas is used to supply gas lift to the wells of each unit. Gas buy-back meters are provided at the facility to allow for the buy-back of gas volumes for gas lift start-up, make-up, and fuel gas supply purposes. The purpose of the RRC Form P-17 commingling permit is to allow for the oil from multiple RRC gas leases/units to be commingled into a common storage. The state's net royalty interest is the same for all RRC leases in the scope of the commingling permit; however, the wells are included in different pooled units.

In this specific case, per the conditions of commingling below, the production royalty shall be due based on the proportionate share of: (1) the gross or total stock tank barrels of oil produced monthly by each state lease/unit, (2) the gross or total MMBTUs of gas produced by each

Ms. Nicole Vail BHP Billiton Pet (TXLA OP) Co. March 22, 2017 Page 2 of 3

lease/unit that is processed in a plant to recover natural gas liquids, and (3) any non-sales dispositions of gas.

Absent any details regarding the gas gathering system and the methodology used to determine the royalty due amounts for oil and gas please be advised that GLO staff might disagree with your report of royalty and/or allocation methodology in the context of an audit.

Please be advised that the subject application is approved **subject to the following conditions**.

- 1. All oil production royalties shall be due based on the proportionate share of the total oil production sales and stock tank inventory (in stock tank barrels) that are allocated to each unit as determined by the separated and metered oil volumes of each RRC Lease ID/unit well. In this specific case the Lessee may pay monthly oil royalties per Texas Administrative Code (TAC) Title 31, Part 1, Chapter 9, Subchapter D, Rule §9.51.
- 2. All gas production royalties shall be due based on the proportionate share of the total or gross gas production volumes (sales and non-sales dispositions), reported in MSCF and energy content (MMBtus) as measured by the available for sale gas meter located at the Horseshoe Springs State 113-24x1 Tank Battery Tank Battery after accounting for any applicable offlease gas lift supply; and any other non-sales dispositions such as fuel, vent, and flare volumes.
 - The gross production of gas shall be determined by the sum of: (1) the gas production volumes and energy content remaining after accounting for any applicable off-lease gas lift contribution as measured at the available for sale facility gas meter located downstream of the separation equipment serving each state lease/unit, (2) the applicable flash gas volume and composition as determined by the performance of laboratory flash separation tests at the appropriate stage of separation or per industry standard correlations, based on the total monthly oil production of each state lease/unit, and (3) any other non-sales dispositions such as fuel, vent, and flare volumes. The gas BTU content and component analysis obtained at each lease separator and facility gas meter shall be determined by gas sample chromatographic analysis or other industry-accepted practices.
- 3. Retain, for lease audit purposes, all meter records, volume statements/reports, oil and gas analyses reports, and shrinkage/flash gas calculation records for a period of at least seven (7) years after creation of each report or record.
- 4. Any changes to the flow process, metering scheme, or the addition of any state lease wells that are not currently processed at the Horseshoe Springs State 113-24x1 Tank Battery Tank Battery shall require the Lessee to obtain permission from the GLO prior to making said changes.

Ms. Nicole Vail BHP Billiton Pet (TXLA OP) Co. March 22, 2017 Page 3 of 3

- 5. With respect to the application of gas lift as an artificial lift method and the use of off-lease sources of gas, the Lessee has permission to utilize gas lift and off-lease make-up supply sources contingent upon the requirement that:
 - Lessee shall install and utilize square-edged orifice meters and meter tubes per all
 applicable specifications and requirements of API MPMS 14.3/AGA Report No. 3 for
 gas measurement,
 - b. Lessee shall continuously meter the gas lift supply to each well and the gas that passes through any other gas lift supply and distribution meter,
 - c. All measuring equipment shall be calibrated and adjusted as necessary by Lessee or as frequently as deemed necessary due to cleaning, repair, replacement, or any other condition that affects the accuracy, repeatability, and linearity of a meter, but not less frequently than once per calendar quarter, at intervals not to exceed 100 days, and
 - d. The gas BTU content and component analysis obtained at each lease/unit gas lift supply meter shall be determined by gas sample chromatographic analysis.

If you have questions, please contact me at (512) 475-2230, or by FAX at (512) 475-1543. My e-mail address is matthew.scott@glo.state.tx.us

Sincerely,

Matthew T. Scott, P.E.

Petroleum Engineer

Energy Resources/Mineral Leasing

Markew & Serry

cc: Robert Hatter, Deputy Director of Energy Resources Dale Sump, Director of Minerals Audit



File N	0	ME	1136	02
	CUL	BERS	SON.	County
_A	6RE	E 70	COM	MINGL
Date I	Filed:	3/3	0/17	
	Georg	e P. Bush,	Commissi	oner
Rv	M	TSC	011	

U.S. Postal Service™ CERTIFIED MAIL® RECEIPT

3422

Domestic Mail Only	EIPT
For delivery information, visit our website	e at www.usps.com®.
OFFICIAL	. USE
ertified Mail Fee	MF/11/33
xtra Services & Fees (check box, add fee as appropriate) Return Receipt (hardcopy) \$	0
Return Receipt (electronic) \$	Postmark
Certified Mail Restricted Delivery \$	Here
Adult Signature Required \$	
Adult Signature Restricted Delivery \$	MIT 112
ostage	12 112 MOS
	8
otal Postage and Fees ATTN: Itelly Dutton	MF111134
3HP Billiton Petroleum (TXI	(A Operating) Co.
1360 fost Dak BIVO	ste 150
ity, State, ZIP+40 Houston NY 7	0056-3030

PS Form 3800. April 2015 PSN 7530-02-000-9047

See Reverse for Instructions



Texas General Land Office Reconciliation Billing

PO Box 12873 Austin, TX 78711-2873 (800) 998-4456 8:00 - 5:00 M-F

George P. Bush, Commissioner

BHP Billiton Petroleum (TXLA Operating) Company

Attn: Holly Dutton

1360 Post Oak Blvd Ste 150 Houston, TX 77056-3030 Billing Date: 10/11/2017
Billing Due Date: 11/10/2017

Customer Number: C000046383

Invoice	Mineral File	Gas Royalty	Oil Royalty	Penalty	Interest	Total Due
18I00061	MF111133	\$694.26	\$0.00	\$69.43	\$45.88	\$809.57
18I00062	MF111134	\$1,362.25	\$0.00	\$136.23	\$90.02	\$1,588.50
18I00063	MF113602	\$6,169.54	\$0.00	\$616.95	\$407.70	\$7,194.19
18I00064	MF113602	\$0.00	\$1,850.88	\$192.43	\$124.36	\$2,167.67
Total Due		\$8,226.05	\$1,850.88	\$1,015.04	\$667.96	\$11,759.93

Penalty and interest have been calculated thru 10/31/2017. Payment remitted after 10/31/2017 will result in additional penalty and interest charges.

Contact Info: David Jacquet (512) 463-5262 or david.jacquet@glo.texas.gov

NOTICE

- Please update GLO1 and GLO2 production reports to correct volumes.
- Please do not update GLO3 report to include billed royalty, penalty or interest. This receivable has already been recorded.
- For other royalty reporting questions, visit http://www.glo.texas.gov, call (512) 463-6850 or email us at glo123@glo.texas.gov.

This notice does not constitute an Audit Billing Notice as defined in Section 52.135 of the Texas Natural Resources Code and, consequently, does not preclude the TGLO from conducting further examinations of these leases, time periods or issues.

Detach and return with payment

Reconciliation Billing

BHP Billiton Petroleum (TXLA Operating) Company

Remit Payment To:

Billing Date: 10/11/2017

Texas General Land Office

Billing Due Date: 11/10/2017

PO Box 12873

Customer Number: C000046383

Austin, TX 78711-2873

Invoice	Mineral File	Gas Royalty	Oil Royalty	Penalty	Interest	Total Due
18100061	MF111133	\$694.26	\$0.00	\$69.43	\$45.88	\$809.57
18I00062	MF111134	\$1,362.25	\$0.00	\$136.23	\$90.02	\$1,588.50
18I00063	MF113602	\$6,169.54	\$0.00	\$616.95	\$407.70	\$7,194.19
18I00064	MF113602	\$0.00	\$1,850.88	\$192.43	\$124.36	\$2,167.67
Total Due		\$8,226.05	\$1,850.88	\$1,015.04	\$667.96	\$11,759.93
Amt. Paid						

C000046383

Invoice Number: GLO Lease:

MF111134

GLO Review: Review Period:

BHP BILLINTON PET (TX LA OP) CO September 2015 through August 2016 Category Gas Auditor/AE: DJACQUET Billing Date: 10/9/2017

P&I Calculation Date: 10/31/2017 Royalty Rate: 12 50%

		Coptained Lote at	rough / lugust 20	10			K	byanty Rate.	12.50%						
(1)		(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Month / Year		RRC Number	Gas/Oil Volume	Tract Participation Rate	Price	BTU	Gross Value		Royalty Paid			Interest Rate For Additional Royalty	Additional	From Additional	Revenue Due
														The state of the s	Date
								1							
	Jan-16	08-278243	29,995	0.16560200	\$2.23	1.00	\$11,076.93	\$1,384.62	\$22.37	\$1,362.25	595	4.50%	\$136.23	\$90.02	\$1,588.
TOTALS			29,995				\$11,076.93	\$1,384.62	\$22.37	\$1,362.25			\$136,23	\$90.02	\$1,588.5

COMMENTS:

VOLUMES WERE VALUED AT \$.01 PER MCF ON GLO2 REPORTS WHICH IS CLEARLY UNDER VALUED.

COLUMN (3)

VOLUMES SHOWN ARE THE TOTAL OF LEASE USE, RESIDUE, VENTED OR FLARED SALES REPORTED TO THE RRC.

COLUMNS (5) & (6)

THE PRICE AND BTU FACTORS WERE BASED OFF THE HOUSTON SHIP CHANNEL PRICE AND BTU FOR THE PRODUCTION MONTH.

COLUMNS (12),(13),(14)

PLEASE GO TO THIS WEB SITE FOR EXPLANATION OF PENALTY AND INTEREST ASSESSMENT:

http://www.glo.texas.gov/energy-business/oil-gas/rrac/forms/penalty-interest-assessment-rules.pdf

NOTE 1:

PLEASE REMIT PAYMENT OF THIS INVOICE SEPARATELY FROM REGULAR ROYALTY PAYMENTS. THE PREFERED METHOD OF PAYMENT IS BY CHECK ACCOMPANIED WITH THE BOTTOM HALF OF THE ATTACHED INVOICE. IF PAYMENT IS MADE THROUGH ACH DEBIT, NOTIFY THE AUDITOR AS TO THE

REMITTANCE DATE SO THE INVOICE CAN BE PROPERLY CREDITED.

ATTN:

HOLLY DUTTON

CERTIFIED MAIL:

C000046383

Invoice Number:

GLO Lease: MF111133

GLO Review:

BHP BILLINTON PET (TX LA OP) CO

Category Gas

Auditor/AE: DJACQUET Billing Date: 10/9/2017

P&I Calculation Date: 10/31/2017

Royalty Rate: 12.50%

(1)	(2)	(3)	(4)	(5)	(6)	771	X.00.1							
					10/	(/)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Month / Year RRC		Gas/Oil	Tract Participation Rate	Price	вти	Gross Value		Royalty			Interest Rate For Additional	From Additional		Revenue Due
Jan-16	08-278243	29,995	0.08439820	\$2.23	1.00	\$5,645.30	\$705.66	\$11.40	\$694.26	595	4.50%	\$69.43	\$45.88	\$809.57
TOTALS		29,995				\$5,645.30	\$705.66	\$11.40	\$694.26	7		\$69.43	\$45.88	\$809.57

COMMENTS:

VOLUMES WERE VALUED AT \$.01 PER MCF ON GLO2 REPORTS WHICH IS CLEARLY UNDER VALUED.

COLUMN (3)

VOLUMES SHOWN ARE THE TOTAL OF LEASE USE, RESIDUE, VENTED OR FLARED SALES REPORTED TO THE RRC.

COLUMNS (5) & (6)

THE PRICE AND BTU FACTORS WERE BASED OFF THE HOUSTON SHIP CHANNEL PRICE AND BTU FOR THE PRODUCTION MONTH.

COLUMNS (12),(13),(14)

PLEASE GO TO THIS WEB SITE FOR EXPLANATION OF PENALTY AND INTEREST ASSESSMENT:

http://www.glo.texas.gov/energy-business/oil-gas/rrac/forms/penalty-interest-assessment-rules.pdf

NOTE 1:

PLEASE REMIT PAYMENT OF THIS INVOICE SEPARATELY FROM REGULAR ROYALTY PAYMENTS. THE PREFERED METHOD OF PAYMENT IS BY CHECK ACCOMPANIED WITH THE BOTTOM HALF OF THE ATTACHED INVOICE. IF PAYMENT IS MADE THROUGH ACH DEBIT, NOTIFY THE AUDITOR AS TO THE

REMITTANCE DATE SO THE INVOICE CAN BE PROPERLY CREDITED.

ATTN:

HOLLY DUTTON

CERTIFIED MAIL:

C000046383

Invoice Number:

MF113602

GLO Lease: GLO Review: Review Period:

BHP BILLINTON PET (TX LA OP) CO September 2015 through August 2016 Category Gas

Auditor/AE: DJACQUET

Billing Date: 10/9/2017 P&I Calculation Date: 10/31/2017

Povalty Pate: 12 500/

retron i criou.	oeptember 2010 ti	irougii August 20	10			R	oyalty Rate:	12.50%						
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Month / Year	RRC Number	Gas/Oil Volume	Tract Participation Rate	Price	вти	Gross Value	Royalty Due	Royalty Paid		Number of Days Late	Interest Rate For Additional	From Additional	Interest Rate From Additional Royalty2	Revenue Due
	Jan-16 08-27824	29,995	0.750	\$2.23	1.00	\$50,166.64	\$6,270.83	\$101.29	\$6,169.54	595				\$7,194.
TOTALS		29,995				\$50,166.64	\$6,270.83	\$101.29	\$6,169,54			\$616.95		\$7,194.

COMMENTS:

VOLUMES WERE VALUED AT \$.01 PER MCF ON GLO2 REPORTS WHICH IS CLEARLY UNDER VALUED.

COLUMN (3)

VOLUMES SHOWN ARE THE TOTAL OF LEASE USE, RESIDUE, VENTED OR FLARED SALES REPORTED TO THE RRC.

COLUMNS (5) & (6)

THE PRICE AND BTU FACTORS WERE BASED OFF THE HOUSTON SHIP CHANNEL PRICE AND BTU FOR THE PRODUCTION MONTH.

COLUMNS (12),(13),(14)

PLEASE GO TO THIS WEB SITE FOR EXPLANATION OF PENALTY AND INTEREST ASSESSMENT:

http://www.glo.texas.gov/energy-business/oil-gas/rrac/forms/penalty-interest-assessment-rules.pdf

NOTE 1:

PLEASE REMIT PAYMENT OF THIS INVOICE SEPARATELY FROM REGULAR ROYALTY PAYMENTS. THE PREFERED METHOD OF PAYMENT IS BY CHECK ACCOMPANIED WITH THE BOTTOM HALF OF THE ATTACHED INVOICE. IF PAYMENT IS MADE THROUGH ACH DEBIT, NOTIFY THE AUDITOR AS TO THE REMITTANCE DATE SO THE INVOICE CAN BE PROPERLY CREDITED.

ATTN:

HOLLY DUTTON

CERTIFIED MAIL:

C000046383

Invoice Number:

MF113602 GLO Lease:

GLO Review:

BHP BILLITON PET (TXLA OP) CO

Review Period:

September 2015 thru August 2016

Category Oil

Auditor/AE: DJACQUET

Billing Date: 10/9/2017

P&I Calculation Date: 10/31/2017

Royalty Rate: 12.50%

(1)		(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
lonth / Year		RRC Number	Gas/Oil Volume	Tract Participation Rate	Price	вти	Gross Value	Royalty Due				For Additional	Penalty Rate From Additional Royalty	Interest Rate From Additional Royalty2	Revenue Due
	Oct-15	08-278243	92	4	\$41.22	1.00	\$3,792.24	\$474.03	\$0.00	\$474.03	696	4.25%	\$47.40	\$35.16	\$556.
	Nov-15	08-278243	35	1	\$40.35	1.00	\$1,412.25	\$176.53	\$0.00	\$176.53	665	4.50%	\$25.00	\$13,19	\$214.
	Jan-16	08-278243	154	1	\$29.23	1.00	\$4,501.42	\$562.68	\$0.00	\$562.68	605	4.50%	\$56.27	\$37.88	\$656.
	Mar-16	08-278243	177	1	\$28.82	1.00	\$5,101.14	\$637.64	\$0.00	\$637.64	544	4.50%	\$63,76	\$38.13	\$739.5
	TOTALS		458				\$14,807.05	\$1,850.88	\$0.00	\$1,850.88			\$192.43	\$124.36	\$2,167,0

COMMENTS:

BILLING ON DIFFERENCE FROM VOLUMES REPORTED TO GLO COMPARED TO THE VOLUMES REPORTED TO RRC.

COLUMN (3) COLUMN (5) VOLUME - REPRESENTS UNDER REPORTED SALES VOLUMES TO THE GLO FROM RRC ID # 08-278243

PRICE - AVERAGE FROM PRODUCTION ROYALTY REPORTS SUBMITTED TO THE TEXAS GENERAL LAND OFFICE. COLUMNS (12),(13),(14) PLEASE GO TO THIS WEB SITE FOR EXPLANATION OF PENALTY AND INTEREST ASSESSMENT:

http://www.glo.texas.gov/energy-business/oil-gas/rrac/forms/penalty-interest-assessment-rules.pdf

NOTE 1:

PLEASE REMIT PAYMENT OF THIS INVOICE SEPARATELY FROM REGULAR ROYALTY PAYMENTS. THE PREFERED METHOD OF PAYMENT IS BY CHECK ACCOMPANIED WITH THE BOTTOM HALF OF THE ATTACHED INVOICE. IF PAYMENT IS MADE THROUGH ACH DEBIT, NOTIFY THE AUDITOR AS TO THE

REMITTANCE DATE SO THE INVOICE CAN BE PROPERLY CREDITED.

HOLLY DUTTON

CERTIFIED MAIL:

File No. MF 113602	(12)
	County
Date Filed: 10/13/17 George P. Bush, Commissioner	1
By————————————————————————————————————	177

MF11133 MF113602

MF 113603 MF 115984

EXHIBIT A Unit 8292

Date: 5/23/2018

CREDIT TO

Owner # 80113945 STATE OF TEXAS GLO 1700 N CONGRESS AVE NO 640 AUSTIN TX 78701-1495

BHP

BHP
Land Administration
P.O. Box 22719
Houston, TX 77227-9927
T (877) 311-1443
F (888) 484-3189
PetroleumOwnerRelations
Request@bhpbilliton.com

Special Clauses/Comments:

Issue Date:

5/23/2018

Property Name:

HS STATE 113-24X13 W102H

Property #:

P1M896/00502 109-33228

Production:

ALL PRODUCTS

Operator: Legal Description: BHP BILLITON PETROLEUM (TXLA OPERATING)

PSL ABST/ID# 1273 Grantee W.H. HICKS Blk 113 Sec 13 CULBERSON

COUNTY/PARISH, TEXAS (488.200 ACRES); PSL ABST/ID# 1853 Grantee MCGILVREY Blk 113 Sec 24 CULBERSON COUNTY/PARISH, TEXAS (488.200

ACRES)

Decimal 0.01051055	Type RI	Status PAY	Reason	Start Date 4/1/2018
0.06221835	RI	PAY		4/1/2018
0.03153165	RI	PAY		4/1/2018
0.02073945	RI	PAY		4/1/2018



BHP
Land Administration
P.O. Box 22719
Houston, TX 77227-9927
T (877) 311-1443
F (888) 484-3189
PetroleumOwnerRelations
Request@bhpbilliton.com

STATE OF TEXAS GLO 1700 N CONGRESS AVE NO 640 AUSTIN TX 78701-1495

Division Order Instruction Sheet

We are pleased to deliver this Division Order which sets forth your share of production proceeds from the well indicated thereon and the name and address to which payments will be made. Please return one fully executed copy and retain the other copy for your records. Your Division Order contains information that will aid in your communication with BHP. When contacting us about any questions regarding your interest or Division Order, please have the Division Order in hand as it contains identifying information that will assist us in answering your questions.

WE ARE NOT ABLE TO ACCEPT ANY ALTERATIONS TO THIS DIVISION ORDER FORM.

SIGNATURES:

- Sign exactly as shown on the Division Order. If your signature is different, please enclose legal documentation authorizing the name change with your returned Division Order.
- Signatures by Agents, Attorneys-in-Fact, Guardians, or Trustees must be verified by attaching a copy of the recorded legal evidence of the rights vested in the signing party.
- In the event of multiple trustees/executors, all signatures are required unless documentation is provided evidencing authority to sign on behalf of all parties.
- An authorized official, with the name and title of the signing party printed beneath the signature, must execute for companies, corporations, or partnerships.
- All signatures must be witnessed. Notary is not required.

TAXPAYER IDENTIFICATION NUMBER OR SOCIAL SECURITY NUMBER:

Include your Tax ID or Social Security Number in the space provided on your Division Order. Failure to furnish this number will result in 24% tax withholding in accordance with Section 3406 of the Internal Revenue Service Code, and any tax withheld will not be refundable by BHP.

ADDRESS & TITLE CHANGES:

- · Please note any change of address directly on your Division Order
- Subsequent address changes must be submitted in writing either by mail, fax or email (a change of address form can be found at http://www.bhpbilliton.com/investor-centre/owner-relations).
- If a change in title occurs, please furnish us with a copy of the recorded deed or document transferring the title.

PAYMENTS: Royalty check payments are mailed on or before the 30th of each month. Our policy is to remit checks monthly when your account reaches \$100, or once a year, whichever occurs first. We can reduce the minimum hold on your account from \$100 to \$25 upon written request.

<u>PRIVACY</u>: BHP respects the privacy of our owners. Please remember we are unable to release information to third parties on any ownership account without prior written authorization from the owner unless legally required. In order for us to discuss your lease, agreement, and/or royalty information with your appointed representative, we must be furnished with your written authorization.

CONTACT US: The following information will assist us in serving you: (1) name & owner number (2) county and state where well is located (3) well name and property number (4) telephone number with area code (5) nature of your inquiry

Owner Relations Call Center

Phone Number: 1-877-311-1443

Fax: 1-888-484-3189

E-mail: petroleumownerrelationsreguest@bhp&illiton.com

BHP

Land Administration P O Box 22719

Houston, TX 77227-9927



TEXAS GENERAL LAND OFFICE

GEORGE P. BUSH, COMMISSIONER

July 19, 2018

Broderick Brown Division Order Analyst BHP Billiton Petroleum P O BOX 22719 Houston, TX 77227-9927

Re: State Lease Nos. MF111133, MF113602, MF113603 and MF115984 HS State 113-24X13 W102H Unit 8292

Dear Mr. Brown:

The Texas General Land Office (GLO) has received your Division Order 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

512-475-1543 (fax)

vivian.zamora@glo.texas.gov

Tile No. MF	13602	
Culber	50n	_Con-
	on Order	
Date Filed:	7-20-18	
By VZ George	P. Bush, Commissioner	

S Form 3800, April 2015 PSN 753-003-00-0047 See Reverse for Instructions	d
SHP Bill Dr. Jetroleum (TXLA Operation) Co.	7016
refted ellet and seed has egisted lat	8 1
047 611 4M operation	\$ -
Actification Mail Restricted Delivery \$ 1996 Actification Required \$ 200 Actification Required \$ 200 Actification Restricted Delivery \$ 200 Actification	
tra Services & Fees (check box, add fee as appropriate) Applied Applied Services & Fees (check box, add fee as appropriate) Applied Applied Services & S	
ESIIII AM eeiliine	5P2
For delivery information, visit our website at www.usps.com*	0
Domestic Mail Only For delivery interesting at www uses com	629
CERTIFIED MAIL® RECEIPT	
U.S. Postal Service"	



Texas General Land Office Reconciliation Billing

PO Box 12873 Austin, TX 78711-2873 (800) 998-4456 8:00 - 5:00 M-F

George P. Bush, Commissioner

BHP Billiton Petroleum (TXLA Operating) Company

Attn: Holly Dutton

1360 Post Oak Blvd Ste 150 Houston, TX 77056-3030

Billing Date:

8/6/2018

Billing Due Date:

9/5/2018

Customer Number: C000046383

Invoice	Mineral File	Gas Royalty	Oil Royalty	Penalty	Interest	Total Due
18I00624	MF111133	\$569.28	\$0.00	\$68.60	\$24.75	\$662.63
18I00625	MF111133	\$0.00	\$307.29	\$30.73	\$12.04	\$350.06
18I00626	MF111134	\$977.18	\$0.00	\$99.72	\$42.51	\$1,119.41
18I00627	MF111134	\$0.00	\$597.82	\$59.78	\$23.42	\$681.02
18I00628	MF113596	\$1,087.24	\$0.00	\$108.72	\$67.21	\$1,263.17
18I00629	MF113602	\$4,600.16	\$0.00	\$460.02	\$199.53	\$5,259.71
18I00630	MF113602	\$0.00	\$2,695.17	\$269.52	\$105.57	\$3,070.26
18I00631	MF113640	\$10,188.11	\$0.00	\$1,018.81	\$582.60	\$11,789.52
18I00632	MF116740	\$5,238.97	\$0.00	\$635.85	\$351.94	\$6,226.76
Total Due		\$22,660.94	\$3,600.28	\$2,751.75	\$1,409.57	\$30,422.54

Penalty and interest have been calculated thru 8/31/2018. Payment remitted after 8/31/2018 will result in additional penalty and interest charges.

Contact Info: Jasminda Alapaq (512) 475-1447 or jasminda.alapaq@qlo.texas.gov

NOTICE

- Please update GLO1 and GLO2 production reports to correct volumes.
- Please do not update GLO3 report to include billed royalty, penalty or interest. This receivable has already been recorded.
- For other royalty reporting questions, visit http://www.glo.texas.gov, call (512) 463-6850 or email us at glo123@glo.texas.gov.

This notice does not constitute an Audit Billing Notice as defined in Section 52.135 of the Texas Natural Resources Code and, consequently, does not preclude the TGLO from conducting further examinations of these leases, time periods or issues.

Detach and return with payment

Reconciliation Billing

BHP Billiton Petroleum (TXLA Operating) Company

Remit Payment To:

Billing Date: 8/6/2018

Texas General Land Office

Billing Due Date: 9/5/2018

PO Box 12873

Customer Number: C000046383

Austin, TX 78711-2873

Invoice	Mineral File	Gas Royalty	Oil Royalty	Penalty	Interest	Total Due
18I00624	MF111133	\$569.28	\$0.00	\$68.60	\$24.75	\$662.63
18I00625	MF111133	\$0.00	\$307.29	\$30.73	\$12.04	\$350.06



Texas General Land Office

PO Box 12873 Austin, TX 78711-2873 (800) 998-4456 8:00 - 5:00 M-F

George P. Bush, Commissioner

18I00626	MF111134	\$977.18	\$0.00	\$99.72	\$42.51	\$1,119.41
18I00627	MF111134	\$0.00	\$597.82	\$59.78	\$23.42	\$681.02
18I00628	MF113596	\$1,087.24	\$0.00	\$108.72	\$67.21	\$1,263.17
18I00629	MF113602	\$4,600.16	\$0.00	\$460.02	\$199.53	\$5,259.71
18I00630	MF113602	\$0.00	\$2,695.17	\$269.52	\$105.57	\$3,070.26
18I00631	MF113640	\$10,188.11	\$0.00	\$1,018.81	\$582.60	\$11,789.52
18I00632	MF116740	\$5,238.97	\$0.00	\$635.85	\$351.94	\$6,226.76
Total Due		\$22,660.94	\$3,600.28	\$2,751.75	\$1,409.57	\$30,422.54
Amt. Paid						

C000046383 Customer ID: Invoice Number:

MF113602 GLO Lease:

GLO Review: Review Period 201500 201709

BHP Billiton Pet (TxLA OP) Co

Billing Date: P&I Calculation Date: Povalty Pate:

Category

Auditor/AF:

Gas

JasAlapag

8/31/2018

8/1/2018

40 F00/

Review Period.	1	01009-201100						recyally reace.	12.0070						
(1)		(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Month / Year	F	RRC Number	Gas/Oil Volume	Tract Participa	Price	BTU	Gross Value	Royalty Due	Royalty Paid	Additional Ro	Number of Da	Interest Rate For	Penalty Rate Fron	Interest Rate Fron	Revenue Due
Jan	-17	08-278243	2,665	1.00000000	3.124321	1.016035	\$8,459.83	\$1,057.48	\$0.00	\$1,057.48	534	4.75%	\$105.75	\$65.37	\$1,228.60
Jul	-17	08-278243	10,879	1.00000000	2,557401	1.018671	\$28,341.43	\$3,542.68	\$0.00	\$3,542.68	350	4.75%	\$354.27	\$134.16	\$4,031.11
TOTALS			13,544				\$36,801.26	\$4,600.16	\$0.00	\$4,600.16		DOT TO THE	\$460.02	\$199.53	\$5,259.71

ATTN: Holly Dutton

CERTIFIED MAIL: 7016 0600 0000 6595 6629

COMMENTS: SALES VOLUMES REPORTED TO THE GLO WERE COMPARED TO VOLUMES REPORTED TO THE RRC. IT HAS BEEN DETERMINED THAT THE SALES VOLUMES HAVE BEEN UNDER PAID.

COLUMN (3) RRC VOLUME - REPRESENTS UNDER REPORTED SALES VOLUMES TO THE GLO FROM RRC WELL ID# 08-278243

COLUMN (5) PRICE - TAKEN FROM PRODUCTION ROYALTY REPORTS. SUBMITTED TO THE TEXAS GENERAL LAND OFFICE

COLUMN (6) BTU - TAKEN FROM PRODUCTION ROYALTY REPORTS SUBMITTED TO THE TEXAS GENERAL LAND OFFICE

COLUMN (13)(14)(15) PLEASE GO TO THIS WEB SITE FOR EXPLANATION OF PENALTY AND INTEREST ASSESSMENT:

http://www.glo.texas.gov/energy-business/oil-gas/rrac/forms/penalty-interest-assessment-rules.pdf

NOTE 1: PLEASE REMIT PAYMENT OF THIS INVOICE SEPARATELY FROM REGULAR ROYALTY PAYMENTS. THE PREFERED METHOD OF PAYMENT IS BY CHECK ACCOMPANIED WITH THE BOTTOM HALF OF THE ATTACHED INVOICE. IF PAYMENT IS MADE THROUGH ACH DEBIT. NOTIFY THE AUDITOR AS TO THE REMITTANCE DATE SO THE INVOICE CAN BE PROPERLY CREDITED.

Energy Financial Management SMAR Activity / Invoicing Approval

Auditor/Account Examiner: Jasmin Alapag

Company Name:

BHP Billiton Pet (TxLA OP) Co

Customer Number: Mineral File #: C000046383 MF113602

Transaction Type: Other / Invoice #:

Previous Amount	Current Amount	Date	AE / Reviewer's Notes	Reviewer's Signature	AR Notes
	\$5,259.71	08/01/18		MM 7/25/2018	

All original invoices must be approved.

All reductions in billing of more than \$1000 must be approved.

C000046383

C000046383

GLO Lease: MF113602

GLO Review: Review Period: BHP Billiton Pet (TxLA OP) Co SEPT 2016 Through AUG 2017

(1)		(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Month / Year		RRC Number	Gas/Oil Volume	Tract Participa	Price	BTU	Gross Value	Royalty Due	Royalty Paid	Additional Ro	Number of Da	Interest Rate For	Penalty Rate From	Interest Rate Fron F	Revenue Due
	Jul-17	08-278243	486	1.000000000	44.364869	1.000000	\$21,561.33	\$2,695.17	\$0.00	\$2,695.17	360	4.75%	\$269.52	\$105.57	\$3,070.26
TOTALS			486				\$21,561.33	\$2,695.17	\$0.00	\$2,695.17			\$269.52	\$105.57	\$3,070.26

ATTENTION: Holly Dutton

CERTIFIED MAIL: 7016 0600 0000 6595 6629

COMMENTS: SALES VOLUMES REPORTED TO THE GLO WERE COMPARED TO VOLUMES REPORTED TO THE RRC.

IT HAS BEEN DETERMINED THAT THE SALES VOLUMES HAVE BEEN UNDER PAID.

COLUMN (3) RRC VOLUME - REPRESENTS UNDER REPORTED SALES VOLUMES TO THE GLO FROM RRC WELL ID# 08-278243

COLUMN (5) PRICE - TAKEN FROM PRODUCTION ROYALTY REPORTS SUBMITTED TO THE TEXAS GENERAL LAND OFFICE

COLUMN (13)(14)(15) PLEASE GO TO THIS WEB SITE FOR EXPLANATION OF PENALTY AND INTEREST ASSESSMENT:

http://www.glo.texas.gov/energy-business/oil-gas/rrac/forms/penalty-interest-assessment-rules.pdf

NOTE 1: PLEASE REMIT PAYMENT OF THIS INVOICE SEPARATELY FROM REGULAR ROYALTY PAYMENTS. THE PREFERED METHOD OF PAYMENT IS BY CHECK ACCOMPANIED WITH THE BOTTOM HALF OF THE ATTACHED INVOICE. IF PAYMENT IS MADE THROUGH ACH DEBIT, NOTIFY THE AUDITOR AS TO THE

REMITTANCE DATE SO THE INVOICE CAN BE PROPERLY CREDITED.

Energy Financial Management SMAR Activity / Invoicing Approval

Auditor/Account Examiner: Jasmin Alapag

Company Name:

BHP Billiton Pet (TxLA OP) Co

Customer Number:

C000046383

Mineral File #:

MF113602

Transaction Type: Other / Invoice #:

Previous Amount	Current Amount	Date	AE / Reviewer's Notes	Reviewer's Signature	AR Notes
	\$3,070.26	08/01/18		MM 7/25/2018	

All original invoices must be approved.

All reductions in billing of more than \$1000 must be approved.

File No. MF 113602

County

Recon Billing

Date Filed: 8/10/18

George P. Bush, Commissioner



Texas General Land Office Reconciliation Billing

PO Box 12873 Austin, TX 78711-2873 (800) 998-4456 8:00 - 5:00 M-F

George P. Bush, Commissioner

BPX Operating Company

Attn: Patty Burg Office: WM11 6025-1

15377 Memorial Drive Houston, TX 77079-4101 Billing Date:

6/10/2021

Billing Due Date: 7/10/2021

Customer Number: C000046383

Invoice	Mineral File	Gas Royalty	Oil Royalty	Penalty	Interest	Total Due
21I00823	MF113602	\$1,691.34	\$0.00	\$274.74	\$157.18	\$2,123.26
Total Due		\$1,691.34	\$0.00	\$274.74	\$157.18	\$2,123.26

Penalty and interest have been calculated thru 6/30/2021. Payment remitted after 6/30/2021 will result in additional penalty and interest charges.

Charlton, Andrea M (512) 463-5190 or Andrea. Charlton@GLO. TEXAS. GOV

NOTICE

- Please update GLO1 and GLO2 production reports to correct volumes.
- Please do not update GLO3 report to include billed royalty, penalty or interest. This receivable has already been recorded.
- For questions regarding this invoice, email us at glo123@glo.texas.gov.

This notice does not constitute an Audit Billing Notice as defined in Section 52.135 of the Texas Natural Resources Code and, consequently, does not preclude the TGLO from conducting further examinations of these leases, time periods or issues.

Detach and return with payment

Reconciliation Billing

BPX Operating Company

Billing Date: 6/10/2021

Billing Due Date: 7/10/2021

Customer Number: C000046383

Remit Payment To:

Texas General Land Office

PO Box 12873

Austin, TX 78711-2873

Invoice	Mineral File	Gas Royalty	Oil Royalty	Penalty	Interest	Total Due
21I00823	MF113602	\$1,691.34	\$0.00	\$274.74	\$157.18	\$2,123.26
Total Due		\$1,691.34	\$0.00	\$274.74	\$157. 18	\$2,123.26
Amt. Paid						

Customer ID: Invoice Number:		C000046383						Category Auditor/AE:							
GLO Lease:		MF113602						Billing Date:							
GLO Review:		BPX OPERATING CO	MPANY				P	%I Calculation Date:							
Review Period:		201909-202008	(2)	(4)	(5)	(6)	(7)	Royalty Rate:	12.50%	(40)	(4.4)	(4.0)	(40)	44	(4.5)
Month / Year		(2) RRC Number	(3) Gas/Oil Volume	(4) Tract Participa		(6) BTU	(7) Gross Value	Royalty Due	Royalty Paid	(10) Additional Roy	(11) Number of Day	(12) Interest Rate For AP	(13) enalty Rate From	(14) Interest Rate Front	(15) Revenue Due
	Sep-19	08-278243	396	1.00000000	2.677004	0.982926	\$1,041.99	\$130.25	\$0.00	\$130.25	593	6.50%	\$25.00	\$12.39	\$167.64
	Oct-19	08-278243	521	1.00000000	2.622128	1.005090	\$1,373.08	\$171.64	\$0,00	\$171.64	563	6.50%	\$25.00	\$15,41	\$212,05
	Nov-19	08-278243	(1,755	1.00000000	2,759871	0,997814	(\$4,832.99)	(\$604.12)	\$0.00	(\$604.12)	532	5.75%	\$0.00	\$0,00	(\$604.12)
	Dec-19	08-278243	1,494	1.00000000	3,423801	1.004885	\$5,140.15	\$642,52	\$0.00	\$642.52	501	5.75%	\$64.25	\$44.74	\$751.51
	Jan-20	08-278243	1,665	1.00000000	3.105424	1.017268	\$5,259.82	\$657.48	\$0.00	\$657.48	472	5.75%	\$65.75	\$42.78	\$766.01
	Feb-20	08-278243	1,523	1.00000000	2.259762	1.016907	\$3,499.80	\$437.48	\$0.00	\$437.48	441	5.75%	\$43.75	\$26.33	\$507.56
	Mar-20	08-278243	1,190	1,00000000	1.714437	1,019145	\$2,079.24	\$259.90	\$0.00	\$259.90	411	5.75%	\$25,99	\$14.41	\$300,30
	Apr-20	08-278243	499	1.00000000	0.349025	1.013235	\$176.47	\$22.06	\$0.00	\$22,06	380	5.75%	\$25.00	\$1.12	\$48.18
	May-20	08-278243	(16	1,00000000	1,513319	1,005241	(\$24.34)	(\$3.04)	\$0,00	(\$3.04)	350	5.75%	\$0.00	\$0.00	(\$3,04)
	Jun-20	08-278243	(34)	1,00000000	1,412820	1.006752	(\$48.36)	(\$6.05)	\$0.00	(\$6.05)	319	5.75%	\$0.00	\$0.00	(\$6.05)
	Jul-20	08-278243	(63)	1,00000000	1,343580	1.005392	(\$85.10)	(\$10.64)	\$0.00	(\$10,64)	288	5.75%	\$0.00	\$0.00	(\$10.64)
A	Aug-20	08-278243	(35)	1.00000000	1.386233	1,012183	(\$49.11)	(\$6.14)	\$0.00	(\$6.14)	258	5.75%	\$0.00	\$0,00	(\$6,14)
T	OTALS		5,385				\$13,530,65	\$1,691.34	\$0.00	\$1,691.34			\$274.74	\$157.18	\$2 123 26

ATTN: Patty Burg

E-MAIL: Patty.Burg@bpx.com

COMMENTS: SALES VOLUMES REPORTED TO THE GLO WERE COMPARED TO VOLUMES REPORTED TO THE RRC, IT HAS BEEN DETERMINED THAT THE SALES VOLUMES HAVE BEEN UNDER PAID,

COLUMN (3) RRC VOLUME - REPRESENTS UNDER REPORTED SALES VOLUMES TO THE GLO FROM RRC WELL ID# 08-278243 UNIT 7219

COLUMN (5) PRICE - TAKEN FROM PRODUCTION ROYALTY REPORTS SUBMITTED TO THE TEXAS GENERAL LAND OFFICE

COLUMN (6) BTU - TAKEN FROM PRODUCTION ROYALTY REPORTS SUBMITTED TO THE TEXAS GENERAL LAND OFFICE

COLUMN (13)(14)(15) PLEASE GO TO THIS WEB SITE FOR EXPLANATION OF PENALTY AND INTEREST ASSESSMENT:

http://www.glo.texas.gov/energy-business/oil-gas/rrac/forms/penalty-interest-assessment-rules.pdf

NOTE 1: PLEASE REMIT PAYMENT OF THIS INVOICE SEPARATELY FROM REGULAR ROYALTY PAYMENTS. THE PREFERED METHOD OF PAYMENT IS BY CHECK ACCOMPANIED WITH THE BOTTOM HALF OF THE ATTACHED INVOICE. IF PAYMENT IS MADE THROUGH ACH DEBIT, SEND AN EMAIL TO account.services@gio.texas.gov NOTING YOUR COMPANY NAME, CUSTOMER ID, INVOICE NUMBER, REMITTANCE DATE AND AMOUNT OF PAYMENT.

File No. MF113602 Recon Billing _County Date Filed: ___ George P. Bush, Commissioner By-



Texas General Land Office Reconciliation Billing

PO Box 12873 Austin, TX 78711-2873 (800) 998-4456 8:00 - 5:00 M-F

George P. Bush, Commissioner

BPX Operating Company

Attn: Patty Burg Office: WM11 6025-1 15377 Memorial Drive Houston, TX 77079-4101

Billing Date:

6/10/2021

Billing Due Date: 7/10/2021

Customer Number: C000046383

Invoice	Mineral File	Gas Royalty	Oil Royalty	Penalty	Interest	Total Due
21I00840	MF113602	\$0.00	\$4,368.77	\$494.66	\$335.32	\$5,198.75
Total Due		\$0.00	\$4,368.77	\$494.66	\$335.32	\$5,198.75

Penalty and interest have been calculated thru 6/30/2021. Payment remitted after 6/30/2021 will result in additional penalty and interest charges.

Charlton, Andrea M (512) 463-5190 or Andrea. Charlton@GLO.TEXAS.GOV

NOTICE

- Please update GLO1 and GLO2 production reports to correct volumes.
- Please do not update GLO3 report to include billed royalty, penalty or interest. This receivable has already been recorded.
- For questions regarding this invoice, email us at glo123@glo.texas.gov.

This notice does not constitute an Audit Billing Notice as defined in Section 52.135 of the Texas Natural Resources Code and, consequently, does not preclude the TGLO from conducting further examinations of these leases, time periods or issues.

Detach and return with payment

Reconciliation Billing

BPX Operating Company

Billing Date: 6/10/2021

Remit Payment To:

Texas General Land Office

Billing Due Date: 7/10/2021

PO Box 12873

Customer Number: C000046383

Austin, TX 78711-2873

Invoice	Mineral File	Gas Royalty	Oil Royalty	Penalty	Interest	Total Due
21I00840	MF113602	\$0.00	\$4,368.77	\$494.66	\$335.32	\$5,198.75
Total Due		\$0.00	\$4,368.77	\$494.66	\$335.32	\$5,198.75
Amt. Paid						

Customer ID: Invoice Number: GLO Lease: GLO Review: Review Period: (1)		C000046383 MF113602 BPX OPERATING C SEPT 2019 Through (2)		(4)	(5)	(6)	(7)	Category Auditor/AE: Billing Date: P&I Calculation Date: Royalty Rate: (8)	Acharlto 6/1/2021 6/30/2021	(10)	(11)	(12)	(13)	(14)	(15)
Month / Year		RRC Number	Gas/Oil Volume	Tract Participa	Price	BTU	Gross Value	Royalty Due	Royalty Paid	Additional Roy	Number of Day	Interest Rate For A	Penalty Rate From	Interest Rate From	Revenue Due
	Sep-19	08-282866	95	1,00000000	52,917430	1.000000	\$5,027.16	\$628,39	\$0,00	\$628,39	603	6.50%	\$62.84	\$60.88	\$752.11
	Oct-19	08-282866	37	1.00000000	50.332370	1.000000	\$1,862.30	\$232.79	\$0.00	\$232.79	573	6.50%	\$25.00	\$21.31	\$279.10
	Nov-19	08-282866	20	1.00000000	53,706920	1.000000	\$1,074.14	\$134.27	\$0,00	\$134.27	542	5.75%	\$25.00	\$10.22	\$169.49
17.0	Dec-19	08-282866	414	1.00000000	56.881810	1.000000	\$23,549.07	\$2,943.63	\$0.00	\$2,943.63	511	5,75%	\$294.36	\$209.60	\$3,447.59
	Jan-20	08-282866	55	1.00000000	54,486140	1.000000	\$2,996.74	\$374,59	\$0.00	\$374.59	482	5.75%	\$37,46	\$24.96	\$437.01
	Feb-20	08-282866	11	1,00000000	47.334000	1,000000	\$520.67	\$65.08	\$0,00	\$65,08	451	5,75%	\$25.00	\$4.02	\$94,10
	Mar-20	08-282866	22	1.00000000	27.590000	1.000000	\$606.98	\$75.87	\$0.00	\$75.87	421	5.75%	\$25.00	\$4.33	\$105.20
	Jun-20	08-282866	(20	1.00000000	34,338950	1,000000	(\$686.78)	(\$85.85)	\$0.00	(\$85,85)	329	5,75%	\$0.00	\$0.00	(\$85.85)
T	OTALS		634				\$34,950.27	\$4,368.77	\$0.00	\$4,368.77			\$494.66	\$335.32	\$5,198.75

ATTENTION: Patty Burg E-MAIL: Patty.Burg@bpx.com

COMMENTS: SALES VOLUMES REPORTED TO THE GLO WERE COMPARED TO VOLUMES REPORTED TO THE RRC.

IT HAS BEEN DETERMINED THAT THE SALES VOLUMES HAVE BEEN UNDER PAID.

COLUMN (3) RRC VOLUME - REPRESENTS UNDER REPORTED SALES VOLUMES TO THE GLO FROM RRC WELL ID# 08-285860 08-285860

COLUMN (5) PRICE - TAKEN FROM PRODUCTION ROYALTY REPORTS SUBMITTED TO THE TEXAS GENERAL LAND OFFICE

COLUMN (5) PRICE - TAKEN FROM NYMEX PRICING 202003

COLUMN (13)(14)(15) PLEASE GO TO THIS WEB SITE FOR EXPLANATION OF PENALTY AND INTEREST ASSESSMENT:

http://www.glo.texas.gov/energy-business/oil-gas/rrac/forms/penalty-interest-assessment-rules.pdf

NOTE 1: PLEASE REMIT PAYMENT OF THIS INVOICE SEPARATELY FROM REGULAR ROYALTY PAYMENTS. THE PREFERED METHOD OF PAYMENT IS BY CHECK ACCOMPANIED WITH THE BOTTOM HALF OF THE ATTACHED INVOICE. IF PAYMENT IS MADE THROUGH ACH DEBIT, SEND AN EMAIL TO account.services@gio.texas.gov NOTING YOUR COMPANY NAME, CUSTOMER ID, INVOICE NUMBER, REMITTANCE DATE AND AMOUNT OF PAYMENT.

File No. MF1/3602 EB/6

County

Date Filed: 8/16/202/

George P. Buch, Commissioner

By