



CAUTION

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Archives and Records Staff

MF111870

State Lease	Control	Base File	County
MF111870	07-022018	118134	CULBERSON
MF111870	07-103252	118134	REEVES

Survey PUBLIC SCHOOL LAND

Block 45

Block Name

Township

Section/Tract 3

Land Part

Part Description

Acres 640

Depth Below	Depth Above	Depth Other
		See Lease

Name LEGEND NATURAL GAS IV, LP

Lease Date 6/29/2010

Primary Term 5 yrs

Bonus (\$) \$0.00

Rental (\$) \$0.00

Lease Royalty 0.0125

Leasing: BR

Analyst: BR

Maps: _____

GIS: MC

CONTENTS OF FILE NO. MF- 111870

1. Letter yefu	7/19/10	19. Completion report 389-33061	6-29-15
2. PNH Review	8/11/10	20. Completion report 389-33502	6-29-15
3. Letter, bonus, + fee	10/8/10	scanned PJ	2-4-16
4. (3) Leases A,B,C	10/8/10	(21) Recon Billing	4/28/17
5. Email	12/14/10	scanned PJ	5-22-2017
6. GLO letter	12/14/10	(22) Recon Billing	6/28/18
7. Bonus	12/16/11	scanned PJ	7-2-2018
8. Letter + Fees	04/26/12	scanned PJ	7-18-2018
9a 9b 9. Lease D+E	04/26/12	23. Recon Billing	4/29/2025
10. GLO letter	06/19/12	Scanned sm	04/30/2025
11. 2nd yr rental lease D	11-5-12		
12. 2nd yr. rental Lease E	11/12/2012		
scanned PJ	4-3-13		
13. Email re: Rental payments + a shut-in well	6-24-13		
14. permit, plat 389-33061	6/26/13		
15. permit, w-1, plat, TCEQ	↓		
letter, w-14, w-15s, w-3	6/26/13		
389-33061	↓		
16. permit, w-1, plat, TCEQ			
letter 389-33502	6/26/13		
Scanned sm	7/19/13		
17. email re: Surface damages			
Betty Hansard state	45-3#2H 1/18/13		
Scanned PJ	10-30-13		
See MF 111132 #11 for Assignment #8672			
18. Division Order	7/11/13		
Scanned PJ	7-9-14		
See MF 111132 #13 for Assignment #8979			
Scanned PJ	8-1-14		
See MF 111132 #15 for Assignment #9188			
Scanned PJ	2-17-15		

Clay Johnson Oil & Gas Properties

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



AAPL-CPL

New
July 15, 2010

GENERAL LAND OFFICE

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

Re: Approval Request, Oil and Gas Lease,
Section 3, Block 45, PSL Survey,
Reeves County, Texas

Dear Drew:

The Deed Records of Reeves County, Texas indicate that Dale B. Hardeman owns an undivided 3/8ths surface interest under the above referenced mineral classified lands.

A trade has recently been made for an Oil and Gas Lease covering the above interest based on the following terms: \$400.00 per net mineral acre for bonus consideration, 1/4th royalty for a Five (5) year lease, with escalated rentals for the fourth year at \$400.00 per acre. *\$702/ac*

I have enclosed copies of these lease for the approval of the General Land Office, as well as a personal check in the amount of \$100.00 for the States processing fee.

If you have any questions please advise. Your prompt and favorable response will be greatly appreciated. Thank you for your time and consideration on this matter.

Respectfully,

M. K. Brasuel

Mary Kay Brasuel

Enclosures:

01.07.10

CLAY JOHNSON

General Land Office - State of Texas

13574

7/15/2010

~~X~~ 100.00

10709582

✓ 121

07.07.2

FIRST NATIONAL CH Approval Fee

100.00

1.

File No. MF 111870

Letter & fee

Date Filed: 7/19/10

Jerry Patterson, Commissioner

By JP

1
2
3
4
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6

RAL REVIEW SHEET

Transaction # 7497
 Lessor: Robert E. Landreth & Others
 Lessee: Petrohawk Prop., LP

Geologist:
 Lease Date: 11/10/2011 ☒ **UL**
 Gross Acres: 640
 Net Acres: 160

LEASE DESCRIPTION

County	PN#	Base File No	Part	Sec.	Block	Twp	Survey	Abst#
REEVES	07-103252	118134	540 ac. I	3	45	00	PUBLIC SCHOOL LAND	3536
CULBERSON	07-022018	118134	100 ac. I	3	45	00	PUBLIC SCHOOL LAND	3773

TERMS OFFERED

Primary Term: ☒ 3yr
 Bonus/Acre: \$2,000.00 ☒
 Rental/Acre: \$1.00
 Royalty: 1/4 ☒

TERMS RECOMMENDED

Primary Term: 3yr ☒ **OK**
 Bonus/Acre: 2000.00
 Rental/Acre: Paid up
 Royalty: 1/4

COMPARISONS

MF #	Lessee	Date	Term	Bonus/Ac.	Rental/Ac.	Royalty	Distance	Last Lease

Fail

MR. 111870 480 H₂O Ac
 Legend Natural Gas
 6.29.10 5yr Paid up 2nd & 3rd
 4th yr 701.00

11.23.11
 Money + Cert. - Coming

HAVE
NEED

Comments: \$100.00 per ac. Rental for yr. 2, 3 & 5 / a 4th yr rental of \$2000.00 per ac. Will be required

Approved: _____

RAL REVIEW SHEET

Transaction # 6851
Lessor: Hardeman, Dale B.
Lessee: Legend Natural Gas IV, LP

Geologist: R. Widmayer

Lease Date: 6/29/2010 **UT** ☐

Gross Acres: 640

Net Acres: 240

LEASE DESCRIPTION

County	PN#	Base File No	Part	Sec.	Block	Twp	Survey	Abst#
REEVES	07-103252	118134		3	45	00	PUBLIC SCHOOL LAND	3536

CULBERSON

07-022018

11

11 11 11

11

3773

TERMS OFFERED

Primary Term: 5 years
Bonus/Acre: \$400.00
Rental/Acre: \$1.00
Royalty: 1/4

TERMS RECOMMENDED

Primary Term 5 years
Bonus/Acre \$700.00
Rental/Acre \$1.00
Royalty 1/4

COMPARISONS

MF #	Lessee	Date	Term	Bonus/Ac.	Rental/Ac.	Royalty	Distance
MF105574	Chalfant Properties, Inc.	7/8/2005	5 years	\$300.00	\$1.00	1/5	Last Lease

Comments: 4th year rental will be \$700.00 per acre.

Approved: TH 8/11/10

RELINQUISHMENT ACT LEASE APPLICATION

Texas General Land Office

Jerry Patterson, Commissioner

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

DATE: 11-Aug-10

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

Applicant:	Legend Natural Gas IV, LP	County:	REEVES
Prim. Term:	5 years	Bonus/Acre	\$700.00
Royalty:	1/4	Rental/Acre	\$1.00

Consideration

Recommended: TH Date: 8/11/10

Not Recommended: _____

Comments: 4th year rental will be \$700.00 per acre.

Lease Form

Recommended: PRY Date: 8/18/10

Not Recommended: _____

Comments:

Louis Renaud, Deputy Commissioner Date: 8/18/10

Recommended: CLR
Not Recommended: _____

Bill Warnick, General Counsel Date: 8/23/10

Recommended: WFW
Not Recommended: _____

Larry Laine, Chief Clerk Date: 8/24/10

Approved: [Signature]
Not Approved: _____

Jerry Patterson, Commissioner Date: 8/25/10

Approved: Jerry E. Patterson
Not Approved: _____

2.

File No. MF 111870

BAA Review

Date Filed: 8/11/10

Jerry Patterson, Commissioner

By [Signature]

Clay Johnson Oil & Gas Properties

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



AAPL-CPL

October 5, 2010

GENERAL LAND OFFICE

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

Re: Relinquishment Act Leases
Reeves 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 Leases:

- 1) Oil and Gas Lease dated June 29, 2010, by and between The State of Texas, acting by and through its agent, N. S. Marrow, as Lessor and Legend Natural Gas IV, LP, as Lessee, file stamped #3456, Reeves County, Texas.
- 2) Oil and Gas Lease dated June 29, 2010, by and between The State of Texas, acting by and through its agent, Dale B. Hardeman, as Lessor and Legend Natural Gas IV, LP, as Lessee, file stamped #3454, Reeves County, Texas.
- 3) Oil and Gas Lease dated July 6, 2010, by and between The State of Texas, acting by and through its agent, Mrs. Patrick Browning, f/k/a Sally Rebecca Read, as Lessor and Legend Natural Gas IV, LP, as Lessee, file stamped #3455, Reeves County, Texas.

Also, find enclosed Legend Natural Gas IV, LP check no. 1637 in the amount of \$168,480.00, as payment for the State's 1/2 bonus due for the above leases.

To cover the required filing fees for handling this matter find enclosed Clay Johnson Check in the amount of \$75.00 made payable to the order of General Land Office – State of Texas.

Respectfully

M. K. Brasuel

Mary Kay Brasuel

Legend Natural Gas IV, LP

410 W. Grand Parkway South, Suite 400 • Katy, TX 77494 • (281) 644-5900

CHECK NO.

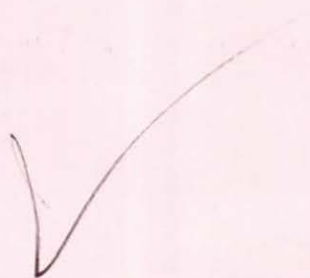
001637

1009-AP-34 09/28/10 CKR092810 168480.00 0.00 168480.00
Lease Bonus: All of section 3, Block 45, PSL Survey, Culberson/Reeves
Counties (Marrow, Hardeman, Browning)

$$\begin{array}{r} 480ac \\ \times 702 \\ \hline 336,960 \\ \div 2 \\ \hline 168,480 \end{array}$$

$$\begin{array}{r} 111870A \$84,240 \\ 111870B \$56,160 \\ 111870C 28,080 \\ \hline 168,480 \end{array}$$

121



CLAY JOHNSON

General Land Office - State of Texas

10/4/2010

13807

75.00

X

121

11701369

FIRST NATIONAL CH Filing fee - Hardeman, Marrow, Browning

75.00

CLAY JOHNSON

General Land Office - State of Texas

10/4/2010

13807

75.00

V

FIRST NATIONAL CH Filing fee - Hardeman, Marrow, Browning

75.00

3.

File No. MF 111870

Letter, bonus, & fee

Date Filed: 10/8/10

Leroy Patterson, Commissioner

By SP

14 2 10

MF 111870A

Paid-Up
OIL AND GAS LEASE

THIS AGREEMENT is made and entered into this 29th day of June, 2010, between the State of Texas, acting by and through its agent, **DALE B. HARDEMAN**

of 3225 64th Street, Lubbock, Texas 79413

said agent

(Give Permanent Address)

herein referred to as the owner of the soil (whether one or more), and **LEGEND 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 and Reeves County, State of Texas, to-wit:

 All of Section 3, Block 45, Public School Land Survey

 Containing 640.00 acres, more or less. The bonus consideration paid for this lease is as follows:

To the State of Texas: Eighty-four Thousand Two Hundred Forty and No/100-----
Dollars (\$ 84,240.00)

To the owner of the soil: Eighty-four Thousand Two Hundred Forty and No/100-----
Dollars (\$ 84,240.00)

 Total bonus consideration: One Hundred Sixty-eight Thousand Four Hundred Eighty and No/100-----
Dollars (\$ 168,480.00)

The total bonus consideration paid represents a bonus of Seven Hundred Two and No/100-----
Dollars (\$ 702.00) per acre, on 240.0 net acres.

2. **TERM.** Subject to the other provisions in this lease, this lease shall be for a term of Five (5) 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 _____, or its successors (which shall continue as the depository regardless of changes in the ownership of said land), the amount specified below; in addition, Lessee shall pay or tender to the COMMISSIONER OF THE GENERAL LAND OFFICE OF THE STATE OF TEXAS, AT AUSTIN, TEXAS, a like sum on or before said date. Payments under this paragraph shall operate as a rental and shall cover the privilege of deferring the commencement of a well for one (1) year from said date. Payments under this paragraph shall be in the following amounts:

To the owner of the soil: see Paragraphs 1 and 3 of the attached Exhibit "A" for amended Delay Rental Provision
Dollars (\$ _____)

To the State of Texas: see Paragraphs 1 and 3 of the attached Exhibit "A" for amended Delay Rental Provision
Dollars (\$ _____)

Total Rental: see Paragraphs 1 and 3 of the attached Exhibit "A" for amended Delay Rental Provision
Dollars (\$ _____)

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

thirty (30) days after the owner of the soil shall deliver to Lessee a proper recordable instrument naming another bank as agent to receive such payments or tenders.

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%) 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.

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

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

royalties on the gross value received, including any reimbursements for severance taxes and production related costs.

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

9. **ROYALTY PAYMENTS AND REPORTS.** All royalties not taken in kind shall be paid to the Commissioner of the General Land Office at Austin, Texas, in the following manner:

Payment of royalty on production of oil and gas shall be as provided in the rules set forth in the Texas Register. Rules currently provide that royalty on oil is due and must be received in the General Land Office on or before the 5th day of the second month succeeding the month of production, and royalty on gas is due and must be received in the General Land Office on or before the 15th day of the second month succeeding the month of production, accompanied by the affidavit of the owner, manager or other authorized agent, completed in the form and manner prescribed by the General Land Office and showing the gross amount and disposition of all oil and gas produced and the market value of the oil and gas, together with a copy of all documents, records or reports confirming the gross production, disposition and market value including gas meter readings, pipeline receipts, gas line receipts and other checks or memoranda of amount produced and put into pipelines, tanks, or pools and gas lines or gas storage, and any other reports or records which the General Land Office may require to verify the gross production, disposition and market value. In all cases the authority of a manager or agent to act for the Lessee herein must be filed in the General Land Office. Each royalty payment shall be accompanied by a check stub, schedule, summary or other remittance advice showing by the assigned General Land Office lease number the amount of royalty being paid on each lease. If Lessee pays his royalty on or before thirty (30) days after the royalty payment was due, then Lessee owes a penalty of 5% on the royalty or \$25.00, whichever is greater. A royalty payment which is over thirty (30) days late shall accrue a penalty of 10% of the royalty due or \$25.00 whichever is greater. In addition to a penalty, royalties shall accrue interest at a rate of 12% per year, such interest will begin 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 or causing royalties to be paid as prescribed by the due date provided herein. Payment of the delinquency penalty shall in no way operate to prohibit the State's right of forfeiture as provided by law nor act to postpone the date on which royalties were originally due. The above penalty provisions shall not apply in cases of title dispute as to the State's portion of the royalty or to that portion of the royalty in dispute as to fair market value.

10. (A) **RESERVES, CONTRACTS AND OTHER RECORDS.** Lessee shall annually furnish the Commissioner of the General Land Office with its best possible estimate of oil and gas reserves underlying this lease or allocable to this lease and shall furnish said Commissioner with copies of all contracts under which gas is sold or processed and all subsequent agreements and amendments to such contracts within thirty (30) days after entering into or making such contracts, agreements or amendments. Such contracts and agreements when received by the General Land Office shall be held in confidence by the General Land Office unless otherwise authorized by Lessee. All other contracts and records pertaining to the production, transportation, sale and marketing of the oil and gas produced on said premises, including the books and accounts, receipts and discharges of all wells, tanks, pools, meters, and pipelines shall at all times be subject to inspection and examination by the Commissioner of the General Land Office, the Attorney General, the Governor, or the representative of any of them.

(B) **PERMITS, DRILLING RECORDS.** Written notice of all operations on this lease shall be submitted to the Commissioner of the General Land Office by Lessee or operator five (5) days before spud date, workover, re-entry, temporary abandonment or plug and abandonment of any well or wells. Such written notice to the General Land Office shall include copies of Railroad Commission forms for application to drill. Copies of well tests, completion reports and plugging reports shall be supplied to the General Land Office at the time they are filed with the Texas Railroad Commission. All applications, permits, reports or other filings that reference this lease or any specific well on the leased premises and that are submitted to the Texas Railroad Commission or any other governmental agency shall include the word "State" in the title. Additionally, in accordance with Railroad Commission rules, any signage on the leased premises for the purpose of identifying wells, tank batteries or other associated improvements to the land must also include the word "State." Lessee shall supply the General Land Office with any records, memoranda, accounts, reports, cuttings and cores, or other information relative to the operation of the above described premises, which may be requested by the General Land Office, in addition to those herein expressly provided for. Lessee shall have an electrical and/or radioactivity survey made on the bore-hole section, from the base of the surface casing to the total depth of well, of all wells drilled on the above described premises and shall transmit a true copy of the log of each survey on each well to the General Land Office within fifteen (15) days after the making of said survey.

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

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

days prior thereto, a dry hole be completed and abandoned, or the production of oil or gas should cease for any cause, Lessee's rights shall remain in full force and effect without further operations until the expiration of the primary term; and if Lessee has not resumed production in paying quantities at the expiration of the primary term, Lessee may maintain this lease by conducting additional drilling or reworking operations pursuant to Paragraph 13, using the expiration of the primary term as the date of cessation of production under Paragraph 13. Should the first well or any subsequent well drilled on the above described land be completed as a shut-in oil or gas well within the primary term hereof, Lessee may resume payment of the annual rental in the same manner as provided herein on or before the rental paying date following the expiration of sixty (60) days from the date of completion of such shut-in oil or gas well and upon the failure to make such payment, this lease shall ipso facto terminate. If at the expiration of the primary term or any time thereafter a shut-in oil or gas well is located on the leased premises, payments may be made in accordance with the shut-in provisions hereof.

12. **DRILLING AND REWORKING AT EXPIRATION OF PRIMARY TERM.** If, at the expiration of the primary term, neither oil nor gas is being produced on said land, but Lessee is then engaged in drilling or reworking operations thereon, this lease shall remain in force so long as operations on said well or for drilling or reworking of any additional 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. Compensatory royalty payments which are not timely paid will accrue penalty and interest in accordance with Paragraph 9 of this lease. None of these provisions will relieve Lessee of the obligation of reasonable development nor the obligation to drill offset wells as provided in Texas Natural Resources Code 52.173; however, at the determination of the Commissioner, and with the Commissioner's written approval, the payment of compensatory royalties can satisfy the obligation to drill offset wells.

16. **RETAINED ACREAGE.** Notwithstanding any provision of this lease to the contrary, after a well producing or capable of producing oil or gas has been completed on the leased premises, Lessee shall exercise the diligence of a reasonably prudent operator in drilling such additional well or wells as may be reasonably necessary for the proper development of the leased premises and in marketing the production thereon.

(A) VERTICAL. In the event this lease is in force and effect two (2) years after the expiration date of the primary or extended term it shall then terminate as to all of the leased premises, EXCEPT (1) 40 acres surrounding each oil well capable of producing in paying quantities and 320 acres surrounding each gas well capable of producing in paying quantities (including a shut-in oil or gas well as provided in Paragraph 14 hereof), or a well upon which Lessee is then engaged in continuous drilling or reworking operations, or (2) the number of acres included in a producing pooled unit pursuant to Texas Natural Resources Code 52.151-52.153, 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 covered by this lease.

(C) IDENTIFICATION AND FILING. The surface acreage retained hereunder as to each well shall, as nearly as practical, be in the form of a square with the well located in the center thereof, or such other shape as may be approved by the Commissioner of the General Land Office. Within thirty (30) days after partial termination of this lease as provided herein, Lessee shall execute and record a release or releases containing a satisfactory legal description of the acreage and/or depths not retained hereunder. The recorded release, or a certified copy of same, shall be filed in the General Land Office, accompanied by the filing fee prescribed by the General Land Office rules in effect on the date the release is filed. If Lessee fails or refuses to execute and record such release or releases within ninety (90) days after being requested to do so by the General Land Office, then the Commissioner at his sole discretion may designate by written instrument the acreage and/or depths to be released hereunder and record such instrument at Lessee's expense in the county or counties where the lease is located and in the official records of the General Land Office and such designation shall be binding upon Lessee for all purposes.

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

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

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

20. (A) PROPORTIONATE REDUCTION CLAUSE. If the owner of the soil owns less than the entire undivided surface estate in the above described land, whether or not Lessee's interest is specified herein, then the royalties and rental herein provided to be paid to the owner of the soil shall be paid to him in the proportion which his interest bears to the entire undivided surface estate and the royalties and rental herein provided to be paid to the Commissioner of the General Land Office of the State of Texas shall be likewise proportionately reduced. However, before Lessee adjusts the royalty or rental due to the Commissioner of the General Land Office, Lessee or his authorized representative must submit to the Commissioner of the General Land Office a written

statement which explains the discrepancy between the interest purportedly leased under this lease and the actual interest owned by the owner of the soil. The Commissioner of the General Land Office shall be paid the value of the whole production allocable to any undivided interest not covered by a lease, less the proportionate development and production cost allocable to such undivided interest. However, in no event shall the Commissioner of the General Land Office receive as a royalty on the gross production allocable to the undivided interest not leased an amount less than the value of one-sixteenth (1/16) of such gross production.

(B) REDUCTION OF PAYMENTS. If, during the primary term, a portion of the land covered by this lease is included within the boundaries of a pooled unit that has been approved by the School Land Board and the owner of the soil in accordance with Natural Resources Code Sections 52.151-52.154, or if at any time after the expiration of the primary term or the extended term, this lease covers a lesser number of acres than the total amount described herein, payments that are made on a per acre basis hereunder shall be reduced according to the number of acres pooled, released, surrendered, or otherwise severed, so that payments determined on a per acre basis under the terms of this lease during the primary term shall be calculated based upon the number of acres outside the boundaries of a pooled unit, or, if after the expiration of the primary term, the number of acres actually retained and covered by this lease.

21. USE OF WATER. Lessee shall have the right to use water produced on said land necessary for operations under this lease except water from wells or tanks of the owner of the soil; provided, however, Lessee shall not use potable water or water suitable for livestock or irrigation purposes for 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.

25. POLLUTION. In developing this area, Lessee shall use the highest degree of care and all proper safeguards to prevent pollution. Without limiting the foregoing, pollution of coastal wetlands, natural waterways, rivers and impounded water shall be prevented by the use of containment facilities sufficient to prevent spillage, seepage or ground water contamination. In the event of pollution, Lessee shall use all means at its disposal to recapture all escaped hydrocarbons or other pollutant and shall be responsible for all damage to public and private properties. Lessee shall build and maintain fences around its slush, sump, and drainage pits and tank batteries so as to protect livestock against loss, damage or injury; and upon completion or abandonment of any well or wells, Lessee shall fill and level all slush pits and cellars and completely clean up the drilling site of all rubbish thereon. Lessee shall, while conducting operations on the leased premises, keep said premises free of all rubbish, cans, bottles, paper cups or garbage, and upon completion of operations shall restore the surface of the land to as near its original condition and contours as is practicable. Tanks and equipment will be kept painted and presentable.

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

27. (A) ASSIGNMENTS. Under the conditions contained in this paragraph and Paragraph 29 of this lease, the rights and estates of either party to this lease may be assigned, in whole or in part, and the provisions of this lease shall extend to and be binding upon their heirs, devisees, legal representatives, successors and assigns. However, a change or division in ownership of the land, rentals, or royalties will not enlarge the obligations of Lessee, diminish the rights, privileges and estates of Lessee, impair the effectiveness of any payment made by Lessee or impair the effectiveness of any act performed by Lessee. And no change or division in ownership of the land, rentals, or royalties shall bind Lessee for any purpose until thirty (30) days after the owner of the soil (or his heirs, devisees, legal representatives or assigns) furnishes the Lessee with satisfactory written evidence of the change in ownership, including the original recorded muniments of title (or a certified copy of such original) when the ownership changed because of a conveyance. A total or partial assignment of this lease shall, to the extent of the interest assigned, relieve and discharge Lessee of all subsequent obligations under this lease. If this lease is assigned in its entirety as to only part of the acreage, the right and option to pay rentals shall be apportioned as between the several owners ratably, according to the area of each, and failure by one or more of them to pay his share of the rental shall not affect this lease on the part of the land upon which pro rata rentals are timely paid or tendered; however, if the assignor or assignee does not file a certified copy of such assignment in the General Land Office before the next rental paying date, the entire lease shall terminate for failure to pay the entire rental due under Paragraph 3. Every assignee shall succeed to all rights and be subject to all obligations, liabilities, and penalties owed to the State by the original lessee or any prior assignee of the lease, including any liabilities to the State for unpaid royalties.

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

- (1) a nominee of the owner of the soil;
- (2) a corporation or subsidiary in which the owner of the soil is a principal stockholder or is an employee of such a

corporation or subsidiary;

(3) a partnership in which the owner of the soil is a partner or is an employee of such a partnership;

(4) a principal stockholder or employee of the corporation which is the owner of the soil;

(5) a partner or employee in a partnership which is the owner of the soil;

(6) a fiduciary for the owner of the soil; including but not limited to a guardian, trustee, executor, administrator, receiver, or conservator for the owner of the soil; or

(7) a family member of the owner of the soil or related to the owner of the soil by marriage, blood, or adoption.

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

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

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

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

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

33. **LIEN.** In accordance with Texas Natural Resources Code 52.136, the State shall have a first lien upon all oil and gas produced from the area covered by this lease to secure payment of all unpaid royalty and other sums of money that may become due under this lease. By acceptance of this lease, Lessee grants the State, in addition to the lien provided by Texas Natural Resources Code 52.136 and any other applicable statutory lien, an express contractual lien on and security interest in all leased minerals in and extracted from the leased premises, all proceeds which may accrue to Lessee from the sale of such leased minerals, whether such proceeds are held by Lessee or by a third party, and all fixtures on and improvements to the leased premises used in connection with the production or processing of such leased minerals in order to secure the payment of all royalties or other amounts due or to become due under this lease and to secure payment of any damages or loss that Lessor may suffer by reason of Lessee's breach of any covenant or condition of this lease, whether express or implied. This lien and security interest may be foreclosed with or without court proceedings in the manner provided in the Title 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.

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

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

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

38. **EXECUTION.** This oil and gas lease must be signed and acknowledged by the Lessee before it is filed of record in the county records and in the General Land Office of the State of Texas. Once the filing requirements found in Paragraph 39 of this lease have been satisfied, the effective date of this lease shall be the date found on Page 1.

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

40. See attached Exhibit "A" for additional provisions

LEGEND NATURAL GAS IV, LP

Carl Wimberley
Carl Wimberley, Vice President

DATE: 8/18/2010

STATE OF TEXAS

BY: Dale B. Hardeman
Individually and as agent for the State of Texas
Dale B. Hardeman

DATE: 7/23/10

STATE OF TEXAS

BY: _____
Individually and as agent for the State of Texas

DATE: _____

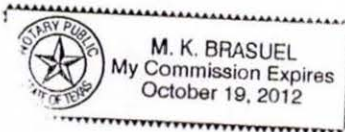
STATE OF TEXAS

COUNTY OF ~~HARRIS~~ Midland

(CORPORATION ACKNOWLEDGMENT)

BEFORE ME, the undersigned authority, on this day personally appeared Carl Wimberley, known to me to be the person whose name is subscribed to the foregoing instrument, as Vice President of Legend Natural Gas IV, LP a Delaware limited partnership, and acknowledged to me that she executed the same for the purposes and consideration therein expressed, in the capacity stated, and as the act and deed of said partnership.

Given under my hand and seal of office this 18 day of August, 2010.



M. K. Brasuel
Notary Public in and for the State of TEXAS

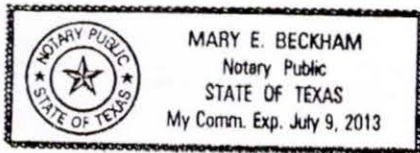
STATE OF TEXAS

COUNTY OF LUBBOCK

(INDIVIDUAL ACKNOWLEDGMENT)

Before me, the undersigned authority, on this day personally appeared Dale B. Hardeman known to me to be the person whose name are subscribed to the foregoing instrument, and acknowledged to me that they executed the same for the purposes and consideration therein expressed.

Given under my hand and seal of office this 23rd day of July, 2010.



Mary Beckham
Notary Public in and for the State of TEXAS

EXHIBIT "A"

ATTACHED TO AND MADE PART OF THAT CERTAIN OIL AND GAS LEASE
DATED JUNE 29, 2010, BY AND BETWEEN THE STATE OF TEXAS, ACTING BY AND
THROUGH ITS AGENT, DALE B. HARDEMAN, AS LESSOR, AND
LEGEND NATURAL GAS IV, LP, AS LESSEE

1. If, at the expiration of the primary term, this lease is being maintained in force under any provision of the lease, or within 180 days prior to the expiration of the primary term Lessee has completed a well as a dry hole or commenced a well on the leased premises or lands pooled therewith, or Lessee is then engaged in operations on the leased premises or lands pooled therewith, Lessee agrees to begin a continuous drilling program within 180 days after the end of the primary term or within 180 days after completion of such well or the cessation of such operations, whichever is the later date; and thereafter to carry on the continuous drilling program on the leased premises or lands pooled therewith until all proration units have been drilled, allowing not more than 180 days to elapse between the completion of one well and the commencement of the succeeding well. Should Lessee fail to begin the continuous drilling program or subsequently default in the performance thereof, then in either event, this lease shall terminate as to all lands covered hereby, save and except for the proration unit surrounding each well then producing, capable of producing or upon which operations are being conducted, limited, respectively, to those depths from the surface down to the stratigraphic equivalent of the depth 100 feet below the total depth drilled in any such proration unit. As used in this paragraph: i) the term "commission" means the Railroad Commission of the State of Texas or any successor agency, ii) the term "proration unit" means any acreage designated as a drilling unit or production unit in accordance with the rules of the commission (or any other governmental authority having jurisdiction) or any unit formed by pooling as provided in this lease or otherwise, iii) the terms "commenced" and "commencement" mean the date when a well is spudded, and iv) the terms "completed" and "completion" mean the date the initial potential test report is filed with the commission, if a productive well, or the date the plugging report is filed with the commission, if a dry hole. Notwithstanding the partial termination of this lease, Lessee shall continue to have the rights of ingress and egress across all of the leased premises to and from lands that remain subject to this lease, or lands pooled therewith, for the purposes described in paragraph 1 hereof, together with easements and rights of way for roads, pipelines, flowlines and other facilities on or across all of the leased premises for the exploration, development, production, gathering or transportation of oil, gas and other products from the lands still subject to this lease or lands pooled therewith. The sole liability or penalty for the failure of Lessee to drill any well or wells required or permitted by this lease shall be the termination or partial termination of Lessee's rights under the lease as provided above.

2. Notwithstanding anything to the contrary contained in Paragraph Three (3) of this Lease, for all purposes this lease shall be a fully Paid-Up Oil & Gas Lease for the first three years. Delay Rentals have been paid in full with the Bonus Consideration tendered herein. Delay Rental payment was based on a \$1.00 per net mineral acre per year for Two (2) Years. Concluding a \$2.00 per acre Pd-Up Rental Payment was made in advance for the Two (2) Year Period on the net mineral acres indicated in this Lease.

3. PAYMENTS OF MINIMUM ROYALTY AND SHUT-IN ROYALTY. Paragraph 5 (minimum Royalty) and Paragraph 14 (Shut in Royalty) contains a reference to a computation based upon the delay rental amount specified in Paragraph 3. However, notwithstanding anything contained herein to the contrary, the undersigned do hereby recognize, acknowledge and agree that i) all minimum royalty payments due pursuant to Paragraph 5 shall be calculated on the basis of the delay rental amount being one dollar (\$1.00) per acre, and ii) all shut-in royalty payments due pursuant to Paragraph 14 shall be calculated on the basis of double the annual rental amount of one dollar (\$1.00) per acre (being two dollars (\$2.00) per acre), but not less than \$1200.00 a year for each well capable of producing oil and gas in paying quantities.

4. The rentals for the 1st anniversary date and for the 2nd anniversary date have been pre-paid with the bonus for this lease and no additional payments for the 1st anniversary date and for the 2nd anniversary date are due and payable. The total payment to the State and to the owner of the soil is \$702.00 per acre. The state and the owner of the soil have split the total payment of \$702.00 per acre equally.

If delay rentals are paid on or before the 3rd anniversary date, the total rental paid shall be \$168,240.00.

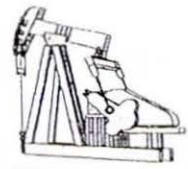
Said payment will include a pre-payment for the delay rentals for the 4th anniversary date.

Payments shall be made as follows:

To the owner of the soil:	\$84,120.00
To the State of Texas:	\$84,120.00

Clay Johnson Oil & Gas Properties

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



AAPL-CPL

July 15, 2010

GENERAL LAND OFFICE

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

Re: Approval Request, Oil and Gas Lease,
Section 3, Block 45, PSL Survey,
Reeves County, Texas

Dear Drew:

The Deed Records of Reeves County, Texas indicate that Dale B. Hardeman owns an undivided 3/8ths surface interest under the above referenced mineral classified lands.

A trade has recently been made for an Oil and Gas Lease covering the above interest based on the following terms: \$400.00 per net mineral acre for bonus consideration, 1/4th royalty for a Five (5) year lease, with escalated rentals for the fourth year at \$400.00 per acre.

\$702/acre

I have enclosed copies of these lease for the approval of the General Land Office, as well as a personal check in the amount of \$100.00 for the States processing fee.

If you have any questions please advise. Your prompt and favorable response will be greatly appreciated. Thank you for your time and consideration on this matter.

Respectfully,

M. K. Brasuel

Mary Kay Brasuel

Enclosures:

CLAY JOHNSON

REEVES COUNTY

Section 3: All
Block 45
PSL Survey
Reeves County, Texas
Containing 640.00 gross acres

Owner	Mineral Interest	Net Acres
The State of Texas (Mineral Classified)	3/16	120.00
Dale B. Hardeman	3/16	120.00
3225 64 th St.		
Lubbock, Texas 79413		
Tel: 806-791-4277		
806-790-3574		
SS#: 461-12-6795		
Terms: \$400.00 net acre		
1/4th royalty		
3 year term		
Total Bonus: \$48,000.00 for the State of Texas		
\$48,000.00 for Dale B. Hardeman.		
Lease Date: 6/29/30		
Option to renew 2 yrs @ \$400.00		

29
10

#3454

ORIGINAL OF THIS INSTRUMENT

29th FILED ON
DAY OF Sept 20 10

D. JAMES O. FLORES

DEPUTY COUNTY CLERK

BY: Carla Holman DEPUTY

OIL AND GAS LEASE

(Give Permanent Address)

(Give Permanent Address)

- 1 -

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.

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

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

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

9. **ROYALTY PAYMENTS AND REPORTS.** All royalties not taken in kind shall be paid to the Commissioner of the General Land Office at Austin, Texas, in the following manner:

Payment of royalty on production of oil and gas shall be as provided in the rules set forth in the Texas Register. Rules currently provide that royalty on oil is due and must be received in the General Land Office on or before the 5th day of the second month succeeding the month of production, and royalty on gas is due and must be received in the General Land Office on or before the 15th day of the second month succeeding the month of production, accompanied by the affidavit of the owner, manager or other authorized agent, completed in the form and manner prescribed by the General Land Office and showing the gross amount and disposition of all oil and gas produced and the market value of the oil and gas, together with a copy of all documents, records or reports confirming the gross production, disposition and market value including gas meter readings, pipeline receipts, gas line receipts and other checks or memoranda of amount produced and put into pipelines, tanks, or pools and gas lines or gas storage, and any other reports or records which the General Land Office may require to verify the gross production, disposition and market value. In all cases the authority of a manager or agent to act for the Lessee herein must be filed in the General Land Office. Each royalty payment shall be accompanied by a check stub, schedule, summary or other remittance advice showing by the assigned General Land Office lease number the amount of royalty being paid on each lease. If Lessee pays his royalty on or before thirty (30) days after the royalty payment was due, then Lessee owes a penalty of 5% on the royalty or \$25.00, whichever is greater. A royalty payment which is over thirty (30) days late shall accrue a penalty of 10% of the royalty due or \$25.00 whichever is greater. In addition to a penalty, royalties shall accrue interest at a rate of 12% per year, such interest will begin 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 or causing royalties to be paid as prescribed by the due date provided herein. Payment of the delinquency penalty shall in no way operate to prohibit the State's right of forfeiture as provided by law nor act to postpone the date on which royalties were originally due. The above penalty provisions shall not apply in cases of title dispute as to the State's portion of the royalty or to that portion of the royalty in dispute as to fair market value.

10. (A) **RESERVES, CONTRACTS AND OTHER RECORDS.** Lessee shall annually furnish the Commissioner of the General Land Office with its best possible estimate of oil and gas reserves underlying this lease or allocable to this lease and shall furnish said Commissioner with copies of all contracts under which gas is sold or processed and all subsequent agreements and amendments to such contracts within thirty (30) days after entering into or making such contracts, agreements or amendments. Such contracts and agreements when received by the General Land Office shall be held in confidence by the General Land Office unless otherwise authorized by Lessee. All other contracts and records pertaining to the production, transportation, sale and marketing of the oil and gas produced on said premises, including the books and accounts, receipts and discharges of all wells, tanks, pools, meters, and pipelines shall at all times be subject to inspection and examination by the Commissioner of the General Land Office, the Attorney General, the Governor, or the representative of any of them.

(B) **PERMITS, DRILLING RECORDS.** Written notice of all operations on this lease shall be submitted to the Commissioner of the General Land Office by Lessee or operator five (5) days before spud date, workover, re-entry, temporary abandonment or plug and abandonment of any well or wells. Such written notice to the General Land Office shall include copies of Railroad Commission forms for application to drill. Copies of well tests, completion reports and plugging reports shall be supplied to the General Land Office at the time they are filed with the Texas Railroad Commission. All applications, permits, reports or other filings that reference this lease or any specific well on the leased premises and that are submitted to the Texas Railroad Commission or any other governmental agency shall include the word "State" in the title. Additionally, in accordance with Railroad Commission rules, any signage on the leased premises for the purpose of identifying wells, tank batteries or other associated improvements to the land must also include the word "State." Lessee shall supply the General Land Office with any records, memoranda, accounts, reports, cuttings and cores, or other information relative to the operation of the above described premises, which may be requested by the General Land Office, in addition to those herein expressly provided for. Lessee shall have an electrical and/or radioactivity survey made on the bore-hole section, from the base of the surface casing to the total depth of well, of all wells drilled on the above described premises and shall transmit a true copy of the log of each survey on each well to the General Land Office within fifteen (15) days after the making of said survey.

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

11. **DRY HOLE/CESSATION OF PRODUCTION DURING PRIMARY TERM.** If, during the primary term hereof and prior to discovery and production of oil or gas on said land, Lessee should drill a dry hole or holes thereon, or if during the primary term hereof and after the discovery and actual production of oil or gas from the leased premises such production thereof should cease from any cause, this lease shall not terminate if on or before the expiration of sixty (60) days from date of completion of said dry hole or cessation of production Lessee commences additional drilling or reworking operations thereon, or pays or tenders the next annual delay rental in the same manner as provided in this lease. If, during the last year of the primary term or within sixty (60) days prior thereto, a dry hole be completed and abandoned, or the production of oil or gas should cease for any cause, Lessee's rights shall remain in full force and effect without further operations until the expiration of the primary term; and if Lessee has not resumed

production in paying quantities at the expiration of the primary term, Lessee may maintain this lease by conducting additional drilling or reworking operations pursuant to Paragraph 13, using the expiration of the primary term as the date of cessation of production under Paragraph 13. Should the first well or any subsequent well drilled on the above described land be completed as a shut-in oil or gas well within the primary term hereof, Lessee may resume payment of the annual rental in the same manner as provided herein on or before the rental paying date following the expiration of sixty (60) days from the date of completion of such shut-in oil or gas well and upon the failure to make such payment, this lease shall ipso facto terminate. If at the expiration of the primary term or any time thereafter a shut-in oil or gas well is located on the leased premises, payments may be made in accordance with the shut-in provisions hereof.

12. DRILLING AND REWORKING AT EXPIRATION OF PRIMARY TERM. If, at the expiration of the primary term, neither oil nor gas is being produced on said land, but Lessee is then engaged in drilling or reworking operations thereon, this lease shall remain in force so long as operations on said well or for drilling or reworking of any additional 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. Compensatory royalty payments which are not timely paid will accrue penalty and interest in accordance with Paragraph 9 of this lease. None of these provisions will relieve Lessee of the obligation of reasonable development nor the obligation to drill offset wells as provided in Texas Natural Resources Code 52.173; however, at the determination of the Commissioner, and with the Commissioner's written approval, the payment of compensatory royalties can satisfy the obligation to drill offset wells.

16. RETAINED ACREAGE. Notwithstanding any provision of this lease to the contrary, after a well producing or capable of producing oil or gas has been completed on the leased premises, Lessee shall exercise the diligence of a reasonably prudent operator in drilling such additional well or wells as may be reasonably necessary for the proper development of the leased premises and in marketing the production thereon.

(A) VERTICAL. In the event this lease is in force and effect two (2) years after the expiration date of the primary or extended term it shall then terminate as to all of the leased premises, EXCEPT (1) 40 acres surrounding each oil well capable of

producing in paying quantities and 320 acres surrounding each gas well capable of producing in paying quantities (including a shut-in oil or gas well as provided in Paragraph 14 hereof), or a well upon which Lessee is then engaged in continuous drilling or reworking operations, or (2) the number of acres included in a producing pooled unit pursuant to Texas Natural Resources Code 52.151-52.153, 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 covered by this lease.

(C) IDENTIFICATION AND FILING. The surface acreage retained hereunder as to each well shall, as nearly as practical, be in the form of a square with the well located in the center thereof, or such other shape as may be approved by the Commissioner of the General Land Office. Within thirty (30) days after partial termination of this lease as provided herein, Lessee shall execute and record a release or releases containing a satisfactory legal description of the acreage and/or depths not retained hereunder. The recorded release, or a certified copy of same, shall be filed in the General Land Office, accompanied by the filing fee prescribed by the General Land Office rules in effect on the date the release is filed. If Lessee fails or refuses to execute and record such release or releases within ninety (90) days after being requested to do so by the General Land Office, then the Commissioner at his sole discretion may designate by written instrument the acreage and/or depths to be released hereunder and record such instrument at Lessee's expense in the county or counties where the lease is located and in the official records of the General Land Office and such designation shall be binding upon Lessee for all purposes.

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

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

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

20. (A) PROPORTIONATE REDUCTION CLAUSE. If the owner of the soil owns less than the entire undivided surface estate in the above described land, whether or not Lessee's interest is specified herein, then the royalties and rental herein provided to be paid to the owner of the soil shall be paid to him in the proportion which his interest bears to the entire undivided surface estate and the royalties and rental herein provided to be paid to the Commissioner of the General Land Office of the State of Texas shall be likewise proportionately reduced. However, before Lessee adjusts the royalty or rental due to the Commissioner of the General Land Office, Lessee or his authorized representative must submit to the Commissioner of the General Land Office a written statement which explains the discrepancy between the interest purportedly leased under this lease and the actual interest owned by the owner of the soil. The Commissioner of the General Land Office shall be paid the value of the whole production allocable to any

undivided interest not covered by a lease, less the proportionate development and production cost allocable to such undivided interest. However, in no event shall the Commissioner of the General Land Office receive as a royalty on the gross production allocable to the undivided interest not leased an amount less than the value of one-sixteenth (1/16) of such gross production.

(B) **REDUCTION OF PAYMENTS.** If, during the primary term, a portion of the land covered by this lease is included within the boundaries of a pooled unit that has been approved by the School Land Board and the owner of the soil in accordance with Natural Resources Code Sections 52.151-52.154, or if at any time after the expiration of the primary term or the extended term, this lease covers a lesser number of acres than the total amount described herein, payments that are made on a per acre basis hereunder shall be reduced according to the number of acres pooled, released, surrendered, or otherwise severed, so that payments determined on a per acre basis under the terms of this lease during the primary term shall be calculated based upon the number of acres outside the boundaries of a pooled unit, or, if after the expiration of the primary term, the number of acres actually retained and covered by this lease.

21. **USE OF WATER.** Lessee shall have the right to use water produced on said land necessary for operations under this lease except water from wells or tanks of the owner of the soil; provided, however, Lessee shall not use potable water or water suitable for livestock or irrigation purposes for 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.

25. **POLLUTION.** In developing this area, Lessee shall use the highest degree of care and all proper safeguards to prevent pollution. Without limiting the foregoing, pollution of coastal wetlands, natural waterways, rivers and impounded water shall be prevented by the use of containment facilities sufficient to prevent spillage, seepage or ground water contamination. In the event of pollution, Lessee shall use all means at its disposal to recapture all escaped hydrocarbons or other pollutant and shall be responsible for all damage to public and private properties. Lessee shall build and maintain fences around its slush, sump, and drainage pits and tank batteries so as to protect livestock against loss, damage or injury; and upon completion or abandonment of any well or wells, Lessee shall fill and level all slush pits and cellars and completely clean up the drilling site of all rubbish thereon. Lessee shall, while conducting operations on the leased premises, keep said premises free of all rubbish, cans, bottles, paper cups or garbage, and upon completion of operations shall restore the surface of the land to as near its original condition and contours as is practicable. Tanks and equipment will be kept painted and presentable.

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

27. (A) **ASSIGNMENTS.** Under the conditions contained in this paragraph and Paragraph 29 of this lease, the rights and estates of either party to this lease may be assigned, in whole or in part, and the provisions of this lease shall extend to and be binding upon their heirs, devisees, legal representatives, successors and assigns. However, a change or division in ownership of the land, rentals, or royalties will not enlarge the obligations of Lessee, diminish the rights, privileges and estates of Lessee, impair the effectiveness of any payment made by Lessee or impair the effectiveness of any act performed by Lessee. And no change or division in ownership of the land, rentals, or royalties shall bind Lessee for any purpose until thirty (30) days after the owner of the soil (or his heirs, devisees, legal representatives or assigns) furnishes the Lessee with satisfactory written evidence of the change in ownership, including the original recorded muniments of title (or a certified copy of such original) when the ownership changed because of a conveyance. A total or partial assignment of this lease shall, to the extent of the interest assigned, relieve and discharge Lessee of all subsequent obligations under this lease. If this lease is assigned in its entirety as to only part of the acreage, the right and option to pay rentals shall be apportioned as between the several owners ratably, according to the area of each, and failure by one or more of them to pay his share of the rental shall not affect this lease on the part of the land upon which pro rata rentals are timely paid or tendered; however, if the assignor or assignee does not file a certified copy of such assignment in the General Land Office before the next rental paying date, the entire lease shall terminate for failure to pay the entire rental due under Paragraph 3. Every assignee shall succeed to all rights and be subject to all obligations, liabilities, and penalties owed to the State by the original lessee or any prior assignee of the lease, including any liabilities to the State for unpaid royalties.

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

- (1) a nominee of the owner of the soil;
- (2) a corporation or subsidiary in which the owner of the soil is a principal stockholder or is an employee of such a corporation or subsidiary;
- (3) a partnership in which the owner of the soil is a partner or is an employee of such a partnership;

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

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

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

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

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

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

33. **LIEN.** In accordance with Texas Natural Resources Code 52.136, the State shall have a first lien upon all oil and gas produced from the area covered by this lease to secure payment of all unpaid royalty and other sums of money that may become due under this lease. By acceptance of this lease, Lessee grants the State, in addition to the lien provided by Texas Natural Resources Code 52.136 and any other applicable statutory lien, an express contractual lien on and security interest in all leased minerals in and extracted from the leased premises, all proceeds which may accrue to Lessee from the sale of such leased minerals, whether such proceeds are held by Lessee or by a third party, and all fixtures on and improvements to the leased premises used in connection with the production or processing of such leased minerals in order to secure the payment of all royalties or other amounts due or to become due under this lease and to secure payment of any damages or loss that Lessor may suffer by reason of Lessee's breach of any covenant or condition of this lease, whether express or implied. This lien and security interest may be foreclosed with or without court proceedings in the manner provided in the Title 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.

35. **INDEMNITY.** Lessee hereby releases and discharges the State of Texas and the owner of the soil, their officers, employees, partners, agents, contractors, subcontractors, guests, invitees, and their respective successors and assigns, of and from all

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

36. **ENVIRONMENTAL HAZARDS.** Lessee shall use the highest degree of care and all reasonable safeguards to prevent contamination or pollution of any environmental medium, including soil, surface waters, groundwater, sediments, and surface of 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 LEASED PREMISES DURING LESSEE'S OCCUPANCY OR CONTROL OF THE LEASED PREMISES. LESSEE SHALL CLEAN UP, REMOVE, REMEDY AND REPAIR ANY SOIL OR GROUND WATER CONTAMINATION AND DAMAGE CAUSED BY THE PRESENCE OR RELEASE OF ANY HAZARDOUS MATERIALS IN, ON, UNDER, OR ABOUT THE LEASED PREMISES DURING LESSEE'S OCCUPANCY OF THE LEASED PREMISES IN CONFORMANCE WITH THE REQUIREMENTS OF APPLICABLE LAW. THIS INDEMNIFICATION AND ASSUMPTION SHALL APPLY, BUT IS NOT LIMITED TO, LIABILITY FOR RESPONSE ACTIONS UNDERTAKEN PURSUANT TO CERCLA OR ANY OTHER ENVIRONMENTAL LAW OR REGULATION. LESSEE SHALL IMMEDIATELY GIVE THE STATE OF TEXAS AND THE OWNER OF THE SOIL WRITTEN NOTICE OF ANY BREACH OR SUSPECTED BREACH OF THIS PARAGRAPH, UPON LEARNING OF THE PRESENCE OF ANY HAZARDOUS MATERIALS, OR UPON RECEIVING A NOTICE FROM ANY GOVERNMENTAL AGENCY PERTAINING TO HAZARDOUS MATERIALS WHICH MAY AFFECT THE LEASED PREMISES. THE OBLIGATIONS OF LESSEE HEREUNDER SHALL SURVIVE THE EXPIRATION OR EARLIER TERMINATION, FOR ANY REASON, OF THIS AGREEMENT.**

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

38. **EXECUTION.** This oil and gas lease must be signed and acknowledged by the Lessee before it is filed of record in the county records and in the General Land Office of the State of Texas. Once the filing requirements found in Paragraph 39 of this lease have been satisfied, the effective date of this lease shall be the date found on Page 1.

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

40. See attached Exhibit "A" for additional provisions

LEGEND NATURAL GAS IV, LP

Carl Wimberley
Carl Wimberley, Vice President

DATE: 8/18/10

STATE OF TEXAS

BY: Mrs. Patrick Browning
Individually and as agent for the State of Texas

Mrs. Patrick Browning

DATE: 7-20-10

STATE OF TEXAS

BY: _____
Individually and as agent for the State of

DATE: _____

STATE OF TEXAS

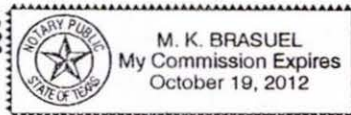
COUNTY OF ~~HARRIS~~ Midland

(CORPORATION ACKNOWLEDGMENT)

BEFORE ME, the undersigned authority, on this day personally appeared Carl Wimberley, known to me to be the person whose name is subscribed to the foregoing instrument, as Vice President of Legend Natural Gas IV, LP a Delaware limited partnership, and acknowledged to me that she executed the same for the purposes and consideration therein expressed, in the capacity stated, and as the act and deed of said partnership.

Given under my hand and seal of office this the 18 day of August, 2010.

M. K. Brasuel
Notary Public in and for the State of TEXAS



STATE OF TEXAS

(INDIVIDUAL ACKNOWLEDGMENT)

COUNTY OF TRAVIS

Before me, the undersigned authority, on this day personally appeared Mrs. Patrick Browning known to me to be the person whose name are subscribed to the foregoing instrument, and acknowledged to me that they executed the same for the purposes and consideration therein expressed.

Given under my hand and seal of office this the 26 day of July, 2010.



Mary Pillard
Notary Public in and for the State of TEXAS

EXHIBIT "A"

ATTACHED TO AND MADE PART OF THAT CERTAIN OIL AND GAS LEASE
DATED JULY 6, 2010, BY AND BETWEEN THE STATE OF TEXAS, ACTING BY AND
THROUGH ITS AGENT, MRS. PATRICK BROWNING, AS LESSOR, AND
LEGEND NATURAL GAS IV, LP, AS LESSEE

1. If, at the expiration of the primary term, this lease is being maintained in force under any provision of the lease, or within 180 days prior to the expiration of the primary term Lessee has completed a well as a dry hole or commenced a well on the leased premises or lands pooled therewith, or Lessee is then engaged in operations on the leased premises or lands pooled therewith, Lessee agrees to begin a continuous drilling program within 180 days after the end of the primary term or within 180 days after completion of such well or the cessation of such operations, whichever is the later date, and thereafter to carry on the continuous drilling program on the leased premises or lands pooled therewith until all proration units have been drilled, allowing not more than 180 days to elapse between the completion of one well and the commencement of the succeeding well. Should Lessee fail to begin the continuous drilling program or subsequently default in the performance thereof, then in either event, this lease shall terminate as to all lands covered hereby, save and except for the proration unit surrounding each well then producing, capable of producing or upon which operations are being conducted, limited, respectively, to those depths from the surface down to the stratigraphic equivalent of the depth 100 feet below the total depth drilled in any such proration unit. As used in this paragraph: i) the term "commission" means the Railroad Commission of the State of Texas or any successor agency, ii) the term "proration unit" means any acreage designated as a drilling unit or production unit in accordance with the rules of the commission (or any other governmental authority having jurisdiction) or any unit formed by pooling as provided in this lease or otherwise, iii) the terms "commenced" and "commencement" mean the date when a well is spudded, and iv) the terms "completed" and "completion" mean the date the initial potential test report is filed with the commission, if a productive well, or the date the plugging report is filed with the commission, if a dry hole. Notwithstanding the partial termination of this lease, Lessee shall continue to have the rights of ingress and egress across all of the leased premises to and from lands that remain subject to this lease, or lands pooled therewith, for the purposes described in paragraph 1 hereof, together with easements and rights of way for roads, pipelines, flowlines and other facilities on or across all of the leased premises for the exploration, development, production, gathering or transportation of oil, gas and other products from the lands still subject to this lease or lands pooled therewith. The sole liability or penalty for the failure of Lessee to drill any well or wells required or permitted by this lease shall be the termination or partial termination of Lessee's rights under the lease as provided above.

2. Notwithstanding anything to the contrary contained in Paragraph Three (3) of this Lease, for all purposes this lease shall be a fully Paid-Up Oil & Gas Lease for the first three years. Delay Rentals have been paid in full with the Bonus Consideration tendered herein. Delay Rental payment was based on a \$1.00 per net mineral acre per year for Two (2) Years. Concluding a \$2.00 per acre Pd-Up Rental Payment was made in advance for the Two (2) Year Period on the net mineral acres indicated in this Lease.

3. PAYMENTS OF MINIMUM ROYALTY AND SHUT-IN ROYALTY. Paragraph 5 (minimum Royalty) and Paragraph 14 (Shut in Royalty) contains a reference to a computation based upon the delay rental amount specified in Paragraph 3. However, notwithstanding anything contained herein to the contrary, the undersigned do hereby recognize, acknowledge and agree that i) all minimum royalty payments due pursuant to Paragraph 5 shall be calculated on the basis of the delay rental amount being one dollar (\$1.00) per acre, and ii) all shut-in royalty payments due pursuant to Paragraph 14 shall be calculated on the basis of double the annual rental amount of one dollar (\$1.00) per acre (being two dollars (\$2.00) per acre), but not less than \$1200.00 a year for each well capable of producing oil and gas in paying quantities.

4. The rentals for the 1st anniversary date and for the 2nd anniversary date have been pre-paid with the bonus for this lease and no additional payments for the 1st anniversary date and for the 2nd anniversary date are due and payable. The total payment to the State and to the owner of the soil is \$702.00 per acre. The state and the owner of the soil have split the total payment of \$702.00 per acre equally.

If delay rentals are paid on or before the 3rd anniversary date, the total rental paid shall be \$112,160.00.

Said payment will include a pre-payment for the delay rentals for the 4th anniversary date.

Payments shall be made as follows:

To the owner of the soil:	\$56,080.00
To the State of Texas:	\$56,080.00

#3455

ORIGINAL OF THIS INSTRUMENT

29th FILED ON
DAY OF Sept 20 10

29 ANNE O. FLOREZ

RIEVES COUNTY CLERK

BY: Michelle Hilde DEPUTY

MF 111 870 c

Paid-Up
OIL AND GAS LEASE

THIS AGREEMENT is made and entered into this 29th day of June, 2010, between the State of Texas, acting by and through its agent, N. S. Marrow of 2630 Exposition, Suite 118, Austin, Texas 79413

said agent

(Give Permanent Address)

herein referred to as the owner of the soil (whether one or more), and LEGEND 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 Reeves County, State of Texas, to-wit:

All of Section 3, Block 45, Public School Land Survey

Containing 640.00 acres, more or less. The bonus consideration paid for this lease is as follows:

To the State of Texas: Twenty-eight Thousand Eighty and No/100-----
Dollars (\$ 28,080.00)

To the owner of the soil: Twenty-eight Thousand Eighty and No/100-----
Dollars (\$ 28,080.00)

Total bonus consideration: Fifty-six Thousand One Hundred Sixty and No/100-----
Dollars (\$ 56,160.00)

The total bonus consideration paid represents a bonus of Seven Hundred Two and No/100-----
Dollars (\$ 702.00) per acre, on 80.00 net acres.

2. **TERM.** Subject to the other provisions in this lease, this lease shall be for a term of Five (5) 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 _____, or its successors (which shall continue as the depository regardless of changes in the ownership of said land), the amount specified below; in addition, Lessee shall pay or tender to the COMMISSIONER OF THE GENERAL LAND OFFICE OF THE STATE OF TEXAS, AT AUSTIN, TEXAS, a like sum on or before said date. Payments under this paragraph shall operate as a rental and shall cover the privilege of deferring the commencement of a well for one (1) year from said date. Payments under this paragraph shall be in the following amounts:

To the owner of the soil: see Paragraphs 2 and 3 of the attached Exhibit "A" for amended Delay Rental Provision
Dollars (\$ _____)

To the State of Texas: see Paragraphs 2 and 3 of the attached Exhibit "A" for amended Delay Rental Provision
Dollars (\$ _____)

Total Rental: see Paragraphs 2 and 3 of the attached Exhibit "A" for amended Delay Rental Provision
Dollars (\$ _____)

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

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.

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

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

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

9. **ROYALTY PAYMENTS AND REPORTS.** All royalties not taken in kind shall be paid to the Commissioner of the General Land Office at Austin, Texas, in the following manner:

Payment of royalty on production of oil and gas shall be as provided in the rules set forth in the Texas Register. Rules currently provide that royalty on oil is due and must be received in the General Land Office on or before the 5th day of the second month succeeding the month of production, and royalty on gas is due and must be received in the General Land Office on or before the 15th day of the second month succeeding the month of production, accompanied by the affidavit of the owner, manager or other authorized agent, completed in the form and manner prescribed by the General Land Office and showing the gross amount and disposition of all oil and gas produced and the market value of the oil and gas, together with a copy of all documents, records or reports confirming the gross production, disposition and market value including gas meter readings, pipeline receipts, gas line receipts and other checks or memoranda of amount produced and put into pipelines, tanks, or pools and gas lines or gas storage, and any other reports or records which the General Land Office may require to verify the gross production, disposition and market value. In all cases the authority of a manager or agent to act for the Lessee herein must be filed in the General Land Office. Each royalty payment shall be accompanied by a check stub, schedule, summary or other remittance advice showing by the assigned General Land Office lease number the amount of royalty being paid on each lease. If Lessee pays his royalty on or before thirty (30) days after the royalty payment was due, then Lessee owes a penalty of 5% on the royalty or \$25.00, whichever is greater. A royalty payment which is over thirty (30) days late shall accrue a penalty of 10% of the royalty due or \$25.00 whichever is greater. In addition to a penalty, royalties shall accrue interest at a rate of 12% per year, such interest will begin 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 or causing royalties to be paid as prescribed by the due date provided herein. Payment of the delinquency penalty shall in no way operate to prohibit the State's right of forfeiture as provided by law nor act to postpone the date on which royalties were originally due. The above penalty provisions shall not apply in cases of title dispute as to the State's portion of the royalty or to that portion of the royalty in dispute as to fair market value.

10. (A) **RESERVES, CONTRACTS AND OTHER RECORDS.** Lessee shall annually furnish the Commissioner of the General Land Office with its best possible estimate of oil and gas reserves underlying this lease or allocable to this lease and shall furnish said Commissioner with copies of all contracts under which gas is sold or processed and all subsequent agreements and amendments to such contracts within thirty (30) days after entering into or making such contracts, agreements or amendments. Such contracts and agreements when received by the General Land Office shall be held in confidence by the General Land Office unless otherwise authorized by Lessee. All other contracts and records pertaining to the production, transportation, sale and marketing of the oil and gas produced on said premises, including the books and accounts, receipts and discharges of all wells, tanks, pools, meters, and pipelines shall at all times be subject to inspection and examination by the Commissioner of the General Land Office, the Attorney General, the Governor, or the representative of any of them.

(B) **PERMITS, DRILLING RECORDS.** Written notice of all operations on this lease shall be submitted to the Commissioner of the General Land Office by Lessee or operator five (5) days before spud date, workover, re-entry, temporary abandonment or plug and abandonment of any well or wells. Such written notice to the General Land Office shall include copies of Railroad Commission forms for application to drill. Copies of well tests, completion reports and plugging reports shall be supplied to the General Land Office at the time they are filed with the Texas Railroad Commission. All applications, permits, reports or other filings that reference this lease or any specific well on the leased premises and that are submitted to the Texas Railroad Commission or any other governmental agency shall include the word "State" in the title. Additionally, in accordance with Railroad Commission rules, any signage on the leased premises for the purpose of identifying wells, tank batteries or other associated improvements to the land must also include the word "State." Lessee shall supply the General Land Office with any records, memoranda, accounts, reports, cuttings and cores, or other information relative to the operation of the above described premises, which may be requested by the General Land Office, in addition to those herein expressly provided for. Lessee shall have an electrical and/or radioactivity survey made on the bore-hole section, from the base of the surface casing to the total depth of well, of all wells drilled on the above described premises and shall transmit a true copy of the log of each survey on each well to the General Land Office within fifteen (15) days after the making of said survey.

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

11. **DRY HOLE/CESSATION OF PRODUCTION DURING PRIMARY TERM.** If, during the primary term hereof and prior to discovery and production of oil or gas on said land, Lessee should drill a dry hole or holes thereon, or if during the primary term hereof and after the discovery and actual production of oil or gas from the leased premises such production thereof should cease from any cause, this lease shall not terminate if on or before the expiration of sixty (60) days from date of completion of said dry hole or cessation of production Lessee commences additional drilling or reworking operations thereon, or pays or tenders the next annual delay rental in the same manner as provided in this lease. If, during the last year of the primary term or within sixty (60) days prior thereto, a dry hole be completed and abandoned, or the production of oil or gas should cease for any cause, Lessee's rights shall remain in full force and effect without further operations until the expiration of the primary term; and if Lessee has not resumed

production in paying quantities at the expiration of the primary term, Lessee may maintain this lease by conducting additional drilling or reworking operations pursuant to Paragraph 13, using the expiration of the primary term as the date of cessation of production under Paragraph 13. Should the first well or any subsequent well drilled on the above described land be completed as a shut-in oil or gas well within the primary term hereof, Lessee may resume payment of the annual rental in the same manner as provided herein on or before the rental paying date following the expiration of sixty (60) days from the date of completion of such shut-in oil or gas well and upon the failure to make such payment, this lease shall ipso facto terminate. If at the expiration of the primary term or any time thereafter a shut-in oil or gas well is located on the leased premises, payments may be made in accordance with the shut-in provisions hereof.

12. **DRILLING AND REWORKING AT EXPIRATION OF PRIMARY TERM.** If, at the expiration of the primary term, neither oil nor gas is being produced on said land, but Lessee is then engaged in drilling or reworking operations thereon, this lease shall remain in force so long as operations on said well or for drilling or reworking of any additional 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. Compensatory royalty payments which are not timely paid will accrue penalty and interest in accordance with Paragraph 9 of this lease. None of these provisions will relieve Lessee of the obligation of reasonable development nor the obligation to drill offset wells as provided in Texas Natural Resources Code 52.173; however, at the determination of the Commissioner, and with the Commissioner's written approval, the payment of compensatory royalties can satisfy the obligation to drill offset wells.

16. **RETAINED ACREAGE.** Notwithstanding any provision of this lease to the contrary, after a well producing or capable of producing oil or gas has been completed on the leased premises, Lessee shall exercise the diligence of a reasonably prudent operator in drilling such additional well or wells as may be reasonably necessary for the proper development of the leased premises and in marketing the production thereon.

(A) **VERTICAL.** In the event this lease is in force and effect two (2) years after the expiration date of the primary or extended term it shall then terminate as to all of the leased premises, EXCEPT (1) 40 acres surrounding each oil well capable of

producing in paying quantities and 320 acres surrounding each gas well capable of producing in paying quantities (including a shut-in oil or gas well as provided in Paragraph 14 hereof), or a well upon which Lessee is then engaged in continuous drilling or reworking operations, or (2) the number of acres included in a producing pooled unit pursuant to Texas Natural Resources Code 52.151-52.153, 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 covered by this lease.

(C) IDENTIFICATION AND FILING. The surface acreage retained hereunder as to each well shall, as nearly as practical, be in the form of a square with the well located in the center thereof, or such other shape as may be approved by the Commissioner of the General Land Office. Within thirty (30) days after partial termination of this lease as provided herein, Lessee shall execute and record a release or releases containing a satisfactory legal description of the acreage and/or depths not retained hereunder. The recorded release, or a certified copy of same, shall be filed in the General Land Office, accompanied by the filing fee prescribed by the General Land Office rules in effect on the date the release is filed. If Lessee fails or refuses to execute and record such release or releases within ninety (90) days after being requested to do so by the General Land Office, then the Commissioner at his sole discretion may designate by written instrument the acreage and/or depths to be released hereunder and record such instrument at Lessee's expense in the county or counties where the lease is located and in the official records of the General Land Office and such designation shall be binding upon Lessee for all purposes.

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

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

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

20. (A) PROPORTIONATE REDUCTION CLAUSE. If the owner of the soil owns less than the entire undivided surface estate in the above described land, whether or not Lessee's interest is specified herein, then the royalties and rental herein provided to be paid to the owner of the soil shall be paid to him in the proportion which his interest bears to the entire undivided surface estate and the royalties and rental herein provided to be paid to the Commissioner of the General Land Office of the State of Texas shall be likewise proportionately reduced. However, before Lessee adjusts the royalty or rental due to the Commissioner of the General Land Office, Lessee or his authorized representative must submit to the Commissioner of the General Land Office a written statement which explains the discrepancy between the interest purportedly leased under this lease and the actual interest owned by the owner of the soil. The Commissioner of the General Land Office shall be paid the value of the whole production allocable to any

undivided interest not covered by a lease, less the proportionate development and production cost allocable to such undivided interest. However, in no event shall the Commissioner of the General Land Office receive as a royalty on the gross production allocable to the undivided interest not leased an amount less than the value of one-sixteenth (1/16) of such gross production.

(B) **REDUCTION OF PAYMENTS.** If, during the primary term, a portion of the land covered by this lease is included within the boundaries of a pooled unit that has been approved by the School Land Board and the owner of the soil in accordance with Natural Resources Code Sections 52.151-52.154, or if at any time after the expiration of the primary term or the extended term, this lease covers a lesser number of acres than the total amount described herein, payments that are made on a per acre basis hereunder shall be reduced according to the number of acres pooled, released, surrendered, or otherwise severed, so that payments determined on a per acre basis under the terms of this lease during the primary term shall be calculated based upon the number of acres outside the boundaries of a pooled unit, or, if after the expiration of the primary term, the number of acres actually retained and covered by this lease.

21. **USE OF WATER.** Lessee shall have the right to use water produced on said land necessary for operations under this lease except water from wells or tanks of the owner of the soil; provided, however, Lessee shall not use potable water or water suitable for livestock or irrigation purposes for 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.

25. **POLLUTION.** In developing this area, Lessee shall use the highest degree of care and all proper safeguards to prevent pollution. Without limiting the foregoing, pollution of coastal wetlands, natural waterways, rivers and impounded water shall be prevented by the use of containment facilities sufficient to prevent spillage, seepage or ground water contamination. In the event of pollution, Lessee shall use all means at its disposal to recapture all escaped hydrocarbons or other pollutant and shall be responsible for all damage to public and private properties. Lessee shall build and maintain fences around its slush, sump, and drainage pits and tank batteries so as to protect livestock against loss, damage or injury; and upon completion or abandonment of any well or wells, Lessee shall fill and level all slush pits and cellars and completely clean up the drilling site of all rubbish thereon. Lessee shall, while conducting operations on the leased premises, keep said premises free of all rubbish, cans, bottles, paper cups or garbage, and upon completion of operations shall restore the surface of the land to as near its original condition and contours as is practicable. Tanks and equipment will be kept painted and presentable.

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

27. (A) **ASSIGNMENTS.** Under the conditions contained in this paragraph and Paragraph 29 of this lease, the rights and estates of either party to this lease may be assigned, in whole or in part, and the provisions of this lease shall extend to and be binding upon their heirs, devisees, legal representatives, successors and assigns. However, a change or division in ownership of the land, rentals, or royalties will not enlarge the obligations of Lessee, diminish the rights, privileges and estates of Lessee, impair the effectiveness of any payment made by Lessee or impair the effectiveness of any act performed by Lessee. And no change or division in ownership of the land, rentals, or royalties shall bind Lessee for any purpose until thirty (30) days after the owner of the soil (or his heirs, devisees, legal representatives or assigns) furnishes the Lessee with satisfactory written evidence of the change in ownership, including the original recorded muniments of title (or a certified copy of such original) when the ownership changed because of a conveyance. A total or partial assignment of this lease shall, to the extent of the interest assigned, relieve and discharge Lessee of all subsequent obligations under this lease. If this lease is assigned in its entirety as to only part of the acreage, the right and option to pay rentals shall be apportioned as between the several owners ratably, according to the area of each, and failure by one or more of them to pay his share of the rental shall not affect this lease on the part of the land upon which pro rata rentals are timely paid or tendered; however, if the assignor or assignee does not file a certified copy of such assignment in the General Land Office before the next rental paying date, the entire lease shall terminate for failure to pay the entire rental due under Paragraph 3. Every assignee shall succeed to all rights and be subject to all obligations, liabilities, and penalties owed to the State by the original lessee or any prior assignee of the lease, including any liabilities to the State for unpaid royalties.

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

- (1) a nominee of the owner of the soil;
- (2) a corporation or subsidiary in which the owner of the soil is a principal stockholder or is an employee of such a corporation or subsidiary;
- (3) a partnership in which the owner of the soil is a partner or is an employee of such a partnership;

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

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

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

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

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

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

33. **LIEN.** In accordance with Texas Natural Resources Code 52.136, the State shall have a first lien upon all oil and gas produced from the area covered by this lease to secure payment of all unpaid royalty and other sums of money that may become due under this lease. By acceptance of this lease, Lessee grants the State, in addition to the lien provided by Texas Natural Resources Code 52.136 and any other applicable statutory lien, an express contractual lien on and security interest in all leased minerals in and extracted from the leased premises, all proceeds which may accrue to Lessee from the sale of such leased minerals, whether such proceeds are held by Lessee or by a third party, and all fixtures on and improvements to the leased premises used in connection with the production or processing of such leased minerals in order to secure the payment of all royalties or other amounts due or to become due under this lease and to secure payment of any damages or loss that Lessor may suffer by reason of Lessee's breach of any covenant or condition of this lease, whether express or implied. This lien and security interest may be foreclosed with or without court proceedings in the manner provided in the Title 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.

35. **INDEMNITY.** Lessee hereby releases and discharges the State of Texas and the owner of the soil, their officers, employees, partners, agents, contractors, subcontractors, guests, invitees, and their respective successors and assigns, of and from all

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

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

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

38. **EXECUTION.** This oil and gas lease must be signed and acknowledged by the Lessee before it is filed of record in the county records and in the General Land Office of the State of Texas. Once the filing requirements found in Paragraph 39 of this lease have been satisfied, the effective date of this lease shall be the date found on Page 1.

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

40. See attached Exhibit "A" for additional provisions

LEGEND NATURAL GAS IV, LP

Carl Wimberley
Carl Wimberley, Vice President

DATE: 9/17/2010

STATE OF TEXAS

BY: N. S. Marrow
Individually and as agent for the State of Texas
N. S. Marrow
DATE: 8/12/10

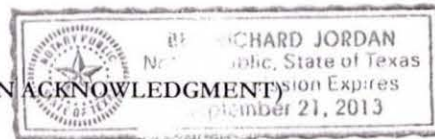
STATE OF TEXAS

BY: Ben Richard Jordan
Individually and as agent for the State of Texas
DATE: 8/12/10

STATE OF TEXAS

COUNTY OF HARRIS

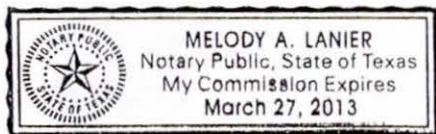
(CORPORATION ACKNOWLEDGMENT)



BEFORE ME, the undersigned authority, on this day personally appeared Carl Wimberley, known to me to be the person whose name is subscribed to the foregoing instrument, as Vice President of Legend Natural Gas IV, LP a Delaware limited partnership, and acknowledged to me that she executed the same for the purposes and consideration therein expressed, in the capacity stated, and as the act and deed of said partnership.

Given under my hand and seal of office this the 17th day of September, 2010.

Melody A. Lanier
Notary Public in and for the State of TEXAS



STATE OF TEXAS

(INDIVIDUAL ACKNOWLEDGMENT)

COUNTY OF TRAVIS

Before me, the undersigned authority, on this day personally appeared N. S. Marrow known to me to be the person whose name are subscribed to the foregoing instrument, and acknowledged to me that they executed the same for the purposes and consideration therein expressed.

Given under my hand and seal of office this the 12 day of August, 2010.

Ben Richard Jordan
Notary Public in and for the State of TEXAS

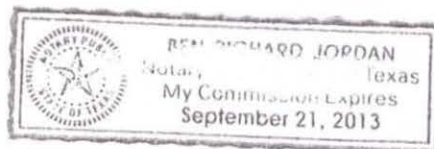


EXHIBIT "A"

ATTACHED TO AND MADE PART OF THAT CERTAIN OIL AND GAS LEASE
DATED JUNE 29, 2010, BY AND BETWEEN THE STATE OF TEXAS, ACTING BY AND
THROUGH ITS AGENT, N. S. MARROW, AS LESSOR, AND
LEGEND NATURAL GAS IV, LP, AS LESSEE

1. If, at the expiration of the primary term, this lease is being maintained in force under any provision of the lease, or within 180 days prior to the expiration of the primary term Lessee has completed a well as a dry hole or commenced a well on the leased premises or lands pooled therewith, or Lessee is then engaged in operations on the leased premises or lands pooled therewith, Lessee agrees to begin a continuous drilling program within 180 days after the end of the primary term or within 180 days after completion of such well or the cessation of such operations, whichever is the later date; and thereafter to carry on the continuous drilling program on the leased premises or lands pooled therewith until all proration units have been drilled, allowing not more than 180 days to elapse between the completion of one well and the commencement of the succeeding well. Should Lessee fail to begin the continuous drilling program or subsequently default in the performance thereof, then in either event, this lease shall terminate as to all lands covered hereby, save and except for the proration unit surrounding each well then producing, capable of producing or upon which operations are being conducted, limited, respectively, to those depths from the surface down to the stratigraphic equivalent of the depth 100 feet below the total depth drilled in any such proration unit. As used in this paragraph: i) the term "commission" means the Railroad Commission of the State of Texas or any successor agency, ii) the term "proration unit" means any acreage designated as a drilling unit or production unit in accordance with the rules of the commission (or any other governmental authority having jurisdiction) or any unit formed by pooling as provided in this lease or otherwise, iii) the terms "commenced" and "commencement" mean the date when a well is spudded, and iv) the terms "completed" and "completion" mean the date the initial potential test report is filed with the commission, if a productive well, or the date the plugging report is filed with the commission, if a dry hole. Notwithstanding the partial termination of this lease, Lessee shall continue to have the rights of ingress and egress across all of the leased premises to and from lands that remain subject to this lease, or lands pooled therewith, for the purposes described in paragraph 1 hereof, together with easements and rights of way for roads, pipelines, flowlines and other facilities on or across all of the leased premises for the exploration, development, production, gathering or transportation of oil, gas and other products from the lands still subject to this lease or lands pooled therewith. The sole liability or penalty for the failure of Lessee to drill any well or wells required or permitted by this lease shall be the termination or partial termination of Lessee's rights under the lease as provided above.

2. PAYMENTS OF MINIMUM ROYALTY AND SHUT-IN ROYALTY. Paragraph 5 (minimum Royalty) and Paragraph 14 (Shut in Royalty) contains a reference to a computation based upon the delay rental amount specified in Paragraph 3. However, notwithstanding anything contained herein to the contrary, the undersigned do hereby recognize, acknowledge and agree that i) all minimum royalty payments due pursuant to Paragraph 5 shall be calculated on the basis of the delay rental amount being one dollar (\$1.00) per acre, and ii) all shut-in royalty payments due pursuant to Paragraph 14 shall be calculated on the basis of double the annual rental amount of one dollar (\$1.00) per acre (being two dollars (\$2.00) per acre), but not less than \$1200.00 a year for each well capable of producing oil and gas in paying quantities.

3. The rentals for the 1st anniversary date and for the 2nd anniversary date have been pre-paid with the bonus for this lease and no additional payments for the 1st anniversary date and for the 2nd anniversary date are due and payable. The total payment to the State and to the owner of the soil is \$702.00 per acre. The state and the owner of the soil have split the total payment of \$702.00 per acre equally.

If delay rentals are paid on or before the 3rd anniversary date, the total rental paid shall be \$56,080.00.

Said payment will include a pre-payment for the delay rentals for the 4th anniversary date.

Payments shall be made as follows: To the owner of the soil: \$28,040.00
To the State of Texas: \$28,040.00

4.

File No. MF 111870
(3) Leases A-C
Date Filed: 10/8/10
Jerry Patterson, Commissioner
By JP

#3456
ORIGINAL OF THIS INSTRUMENT
FILED ON 20th DAY OF Sept 20 10
D. ANNE O. FLORES
REEVES COUNTY CLERK
BY: [Signature] DEPUTY

From: Harriet Dunne
To: Coby Nathanson
Date: 12/14/2010 8:06 AM
Subject: Re: State of TX leases in Culberson & Reeves Co TX - MF111870

female

281-644-5953

Coby,
I just listened to your voice mail and appreciate the call.

Your name is all I needed to be able to send you the final letter of approval by the State on your lease in Culberson & Reeves Co. You'll receive something from Drew Reid in a few days.

Thanks for the help,

Harriet Dunne, CPL
Manager, Mineral Leasing, Energy Resources
Texas General Land Office
512-475-1579
harriet.dunne@glo.state.tx.us

>>> "Coby Nathanson" <CNathanson@lng2.com> 12/13/2010 4:51 PM >>>
Ms. Dunne,

Following up from my vmail, below please find my contact information. If I can be of assistance, please do not hesitate to contact me.

Coby

Coby Nathanson
Staff Attorney
Legend Natural Gas, LLC
410 W. Grand Parkway South, Suite 400
Katy, Texas 77494

Direct: (281) 644-5953
Fax: (281) 644-5998
cnathanson@lng2.com

INFORMATION CONTAINED IN THIS TRANSMISSION IS ATTORNEY PRIVILEGED AND CONFIDENTIAL. IT IS INTENDED FOR THE USE OF THE INDIVIDUAL OR ENTITY NAMED ABOVE. IF THE READER OF THIS MESSAGE IS NOT THE INTENDED RECIPIENT, YOU ARE HEREBY NOTIFIED THAT ANY DISSEMINATION, DISTRIBUTION OR COPY OF THIS COMMUNICATION IS STRICTLY PROHIBITED. IF YOU HAVE RECEIVED THIS COMMUNICATION IN ERROR, PLEASE IMMEDIATELY NOTIFY US BY TELEPHONE. THANK YOU.

>>>

From: "Harriet Dunne" <Harriet.Dunne@GLO.STATE.TX.US>
To: "Kendal Kuiper" <kkuiper@lng2.com>

Date: 12/10/2010 3:04 PM

Subject: State of TX leases in Culberson & Reeves Co TX

Mr. Kuiper:

I found your name and e-mail address in the AAPL online directory. I need some information and was unable to talk to a human being on the phone at your company, so I am sending my query to you.

Legend has taken 3 undivided interest leases on State of Texas Relinquishment Act Lands in Culberson & Reeves Co, TX. I am trying to formulate a final letter which will approve the leases Legend has purchased and furnish you with our mineral file number.

If you are not the landman handling these counties, please pass this message along to the correct person.

In formulating the letter, I want a person's name to send the approval letter to. Please let me know who I should address the approval letter to.

Thank you,

Harriet Dunne, CPL
Manager, Mineral Leasing, Energy Resources
Texas General Land Office
512-475-1579
harriet.dunne@glo.state.tx.us

5.

File No. MF 111870

Email

Date Filed: 12/14/10

Jerry Patterson, Commissioner

By [Signature]

TEXAS



GENERAL LAND OFFICE

JERRY PATTERSON, COMMISSIONER

December 14, 2010

Coby Nathanson
Legend Natural Gas IV, LP
410 W Grand Parkway South Suite 400
Katy TX 77494

Re: **State Lease MF 111870A**
State Lease MF 111870B
State Lease MF 111870C

Dale B. Hardeman, agent for State of TX, Lessor
Mrs. Patrick Browning, agent for State of TX, Lessor
N. S. Marrow, agent for State of TX, Lessor
Relinquishment Act Leases covering 640 ac, Sec 3, Blk 45, PSL
Survey, Culberson & Reeves Counties, TX

Dear Ms Nathanson:

The certified copies of the Relinquishment Act leases covering the above referenced tract have been approved and filed in our records under Mineral File numbers **MF-111870A, MF-111870B and MF-111870C**. **Please refer to these lease numbers when making payments to the State and in all future correspondence concerning the leases. Failure to include the mineral file numbers may delay processing of any payments towards the leases.**

There are several contractual and statutory responsibilities for the Lessee which are material provisions of the leases as outlined in the agreements 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.

Your remittance of **\$168,480.00** has been applied to the State's portion of the cash bonuses for these three leases. The remittance by Clay Johnson of **\$100.00** has been applied to the processing fee and the remittance of **\$75.00** by Clay Johnson has been applied to the filing fees. Please let me know if you have any questions.

Sincerely yours,

Drew Reid
Minerals Leasing, Energy Resources
Energy Resources
(512) 475-1534
drew.reid@glo.state.tx.us

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

Post Office Box 12873 • Austin, Texas 78711-2873

512-463-5001 • 800-998-4GLO

www.glo.state.tx.us

6.

File No. MF 111870

910 letter

Date Filed: 12/14/10

Jerry Patterson, Commissioner

By JJP

PETROHAWK ENERGY CORPORATION

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

CHECK NO.

159009

REFERENCE	INVOICE DATE	INVOICE NO.	INVOICE AMT.	PRIOR PAYMENT	DISCOUNT	AMOUNT PAID
1112-AP-252	12/05/11	CKREQ-TEXAS .GENERAL.LA ND.OFFICE-1 2/05/11 Soil Owner: Inland Resources, Inc, 1/8	80000.00	0.00	12704614	80000.00
VENDOR				CHECK DATE	TOTAL	121 80,000.00
26956 TEXAS GENERAL LAND OFFICE				12/06/11		

111870 D

P

121

X

PETROHAWK ENERGY CORPORATION

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

12704029

CHECK NO.

158533

REFERENCE	INVOICE DATE	INVOICE NO.	INVOICE AMT.	PRIOR PAYMENT	DISCOUNT	AMOUNT PAID
1112-AP-140	11/30/11	CKREQ-TEXAS .GENERAL.LA ND.OFFICE-1 1/30/11-1	80000.00	0.00		80000.00
Soil Owner: Robert E. Landreth, Et Ux 1/8						
111870 E						
(P)						
121						
VENDOR				CHECK DATE	TOTAL	80,000.00
26956 TEXAS GENERAL LAND OFFICE				12/01/11		

DECEMBER 6, 2011 REQUEST

SECTION 3, BLOCK 45, PSL Survey, Reeves & Culberson Counties, Texas

Lessor	Gross Ac	Interest	Net Ac.	Bonus Per Acre	Bonus to Lessor	Bonus to State	Lease Bonus
Inland Resources, Inc.	640	1/8	80.00000000	\$2,000.00	\$80,000.00	\$80,000.00	\$160,000.00
TOTALS			80.00000000		\$80,000.00	\$80,000.00	\$160,000.00

Total Amount paid by check	\$80,000.00
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11.01.21

DECEMBER 2, 2011 REQUEST

SECTION 10, BLOCK 56, Township 2, T & P RR Co. Survey, Reeves County, Texas

Lessor	Gross Ac	Interest	Net Ac.	Bonus Per Acre	Bonus to Lessor	Bonus to State	Lease Bonus
Tunstill Oil and Land Trust	360	1	360.00000000	\$2,500.00	\$450,000.00	\$450,000.00	\$900,000.00
TOTALS			360.00000000		\$450,000.00	\$450,000.00	\$900,000.00

SECTION 3, BLOCK 45, PSL Survey, Reeves & Culberson Counties, Texas

Lessor	Gross Ac	Interest	Net Ac.	Bonus Per Acre	Bonus to Lessor	Bonus to State	Lease Bonus
Robert E. Landreth, et ux	640	1/8	80.00000000	\$2,000.00	\$80,000.00	\$80,000.00	\$160,000.00
Tunstill Oil and Land Trust	640	1/8	80.00000000	\$2,000.00	\$80,000.00	\$80,000.00	\$160,000.00
TOTALS			80.00000000		\$80,000.00	\$80,000.00	\$160,000.00

Total Amount paid by check	\$530,000.00
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7.
File No. 111870

Bonus 1st

Date Filed: 12-11-11
Jerry E. Patterson, Commissioner

By RE

Texas General Land Office

4/25/2012

Date	Type	Reference	Original Amt.	Balance Due	Discount	Payment
4/25/2012	Bill	Filing&ProcessingFee	250.00	250.00		250.00
					Check Amount	250.00



12710719

121
X

Iberia Bank

Filing Fee-6 Leases; Processing Fee-1 Tract

250.00

EXPLORATION LAND SERVICES, LLC

3893

Texas General Land Office

Date	Type	Reference	Original Amt.	Balance Due	6/7/2012	Discount	Payment
6/7/2012	Bill	Filing&ProcessingFee	750.00	750.00			750.00
					Check Amount		750.00

12712719

121

X

750.00

Iberia Bank

Filing Fee-14 Leases; Processing Fee-4 Tracts

Reeves/Culberson County, Texas

Dear Drew:

Enclosed herewith, please find sixteen (16) certified copies of leases, taken in the name of the State of Texas, in favor of Petrohawk Properties, LP, listed as follows:

<u>Lease No.</u>	<u>Date</u>	<u>Lessor</u>
ELS-0014DD	04/04/2012	Sharon Dianne Tucker Hansen
ELS-0014FF	04/04/2012	Janette Lee Kaufman
ELS-0032AA	03/15/2012	Bonnie Wedge
ELS-0032BB	03/15/2012	Jimmie J. McAdams
ELS-0056D	05/02/2012	Jo Ann Law Davis, et al
ELS-0069A	11/28/2011	Robert E. Landreth, et ux - } \$50.00
ELS-0069B	11/28/2011	Inland Resources, Inc. - }
ELS-0079A	05/08/2012	John D. Carter
ELS-0079C	05/07/2012	James R. Waldie, III
ELS-0079E	05/07/2012	David B. Waldie
ELS-0081	01/26/2012	Tom E. Johnson LP
ELS-0083	05/07/2012	Hut, Inc.
ELS-0092B	05/07/2012	James Douglas
ELS-0095B	05/01/2012	Lloyd W. Powell, Jr. Children's Trust (MF# 112764)
ELS-0095C	05/01/2012	Andrews Royalty, LP (MF# 112764)
ELS-0095D	05/01/2012	Pursuit Energy Corporation (MF# 112764)

Also enclosed, please find a check in the amount of \$750.00. This amount covers the filing fees for all of the leases, except for ELS-0069A & B, @ \$25/per lease. The check amount also covers the filing fees for the tracts under ELS-0079A, C, E; ELS-0081; ELS-0083; and ELS-0092B @ \$100/per tract. This covers all required fees associated with the above listed leases.

Please be advised that recorded copies of ELS-0069A & B filed in Reeves county were previously sent by letter dated April 25, 2012 and paid for by check number 3745. Because the tract that these leases cover is situated in Reeves and Culberson County, we are sending recorded copies of these leases filed in Culberson County.

EXPLORATION LAND SERVICES, LLC

P O Box 52105 • Lafayette, Louisiana 70505-2105 • Phone: 337.234.3500 • Fax: 337.234.3525 • Email: contact@explorationland.com

April 25, 2012

Via FedEx

Mr. Drew Reid
Texas General Land Office
1700 Congress Avenue
Stephen F. Austin Building, RM 847
Austin, Texas 78701

Re: Oil, Gas and Mineral Leases
Reeves County, Texas

Dear Drew:

Enclosed herewith, please find five (5) certified copies of leases, taken in the name of the State of Texas, in favor of Petrohawk Properties, LP, listed as follows:

<u>Lease No.</u>	<u>Date</u>	<u>Lessor</u>
ELS-0069A	11/28/2011	Robert E. Landreth, et ux
ELS-0069B	11/28/2011	Inland Resources, Inc.
ELS-0091B	02/01/2012	Margaret Frances Ranes Dornfeld
ELS-0091C	02/01/2012	Margaret Haag Deeney
ELS-0091D	02/01/2012	Lucille Haag Braden

Also enclosed, please find one (1) certified copy of an act of correction, listed as follows:

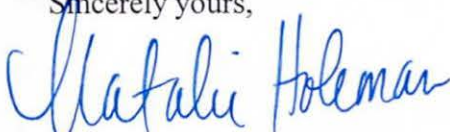
<u>Lease No.</u>	<u>Date</u>	<u>Lessor</u>
ELS-0039B	03/21/2012	Morris Winkler By-Pass Trust

Lastly enclosed, please find a check in the amount of \$250.00. This amount covers the filing fees for the 5 leases and 1 correction @ \$25/per lease & the filing fees for the tract under ELS-0069A & B @ \$100/per tract, which covers all required fees associated with the above listed leases. Please be advised that the filing fees for the tracts under leases ELS-0091B-D were previously paid by check number 3652, dated April 4, 2012.

Please sign and return the copy of the check to me in the enclosed prepaid envelope.

I trust that you will not hesitate to call me with any questions that you may have concerning this matter.

Sincerely yours,



Natalie Holeman

encl.

Drew Reid - Section 3, Block 45, PLS Survey, A-3536, Culberson and Reeves County - LEASE PROPOSAL

From: Aaron Latham <alatham@Petrohawk.com>
To: " (Drew.Reid@GLO.STATE.TX.US)" <Drew.Reid@GLO.STATE.TX.US>
Date: 11/10/2011 8:39 AM
Subject: Section 3, Block 45, PLS Survey, A-3536, Culberson and Reeves County - LEASE PROPOSAL
Attachments: 00 - GLO LEASE FORM - Landreth.doc; 00 - GLO LEASE EXHIBIT A - Landreth.doc; 00 - GLO LEASE FORM - Inland.doc; 00 - GLO LEASE EXHIBIT A - Inland.doc

Drew,

It was nice to visit with you on the phone the other day. Please find the attached GLO Oil and Gas Leases with Exhibit A for your review. Please find a summary of the negotiated offer below. Let me know if you have any questions.

Section 3, Block 45, PLS Survey, A-3536, Culberson and Reeves County							
	Gross Acreage	Interest	Net Acreage	Bonus Per Acre	Total	To Soil	To State
Robert E. Landreth, etux	640	1/8	80	\$ 2,000.00	\$ 160,000.00	\$ 80,000.00	\$ 80,000.00
Inland Resources	640	1/8	80	\$ 2,000.00	\$ 160,000.00	\$ 80,000.00	\$ 80,000.00
TOTAL:			160		\$ 320,000.00	\$ 160,000.00	\$ 160,000.00

Thank you,
 Aaron



Aaron Latham
 Landman - Mid-Continent
 BHP Billiton Petroleum - Petrohawk
 6100 South Yale, Suite 500
 Tulsa, OK 74136
 Main: 918-488-8283
 Direct: 918-491-4155
 Mobile: 918-230-7472
 Fax: 918-488-8184
alatham@petrohawk.com
www.petrohawk.com
www.bhpbilliton.com

** W:U Need *
 4th yr Rental of
 \$2000.00 Per Acre*

This communication may contain confidential information. If it has been sent to you in error, please do not read it, reply to the sender that you received it in error, and delete it. Any distribution or other reproduction is strictly prohibited.

8.
File No. 111070

Letter & Fees

Date Filed: 4/26/12

Jerry E. Patterson, Commissioner

By 

ELS-0064B

Notice of Confidentiality Rights: If you are a natural person, you may remove or strike any of the following information from this instrument before it is filed for record in the public records: your social security number or your driver's license number.

General Land Office
Relinquishment Act Lease Form
Revised, September 1997

12-00435
FILED FOR RECORD
REEVES COUNTY, TEXAS
Jan 18, 2012 at 01:41:09 PM

The State of Texas



Austin, Texas

MF 111870D

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OIL AND GAS LEASE

THIS AGREEMENT is made and entered into this 28th day of November, 2011, between the State of Texas, acting by and through its agent, INLAND RESOURCES, INC., a Texas Corporation, represented herein by its President Peggy Hahn

of POST OFFICE BOX 10169, MIDLAND, TEXAS 79702-7169

(Give Permanent Address)

said agent herein referred to as the owner of the soil (whether one or more), and PETROHAWK PROPERTIES, LP

of 6100 SOUTH YALE AVENUE, SUITE 500, TULSA, OKLAHOMA 74136 hereinafter called Lessee.

(Give Permanent Address)

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

ALL OF SECTION 3, BLOCK 45, PUBLIC SCHOOL LAND SURVEY, LOCATED IN ABSTRACT 3773, CULBERSON COUNTY AND IN ABSTRACT 3536, REEVES COUNTY TEXAS, CONTAINING 640 ACRES, MORE OR LESS.

SEE ATTACHED EXHIBIT "A" FOR ADDITIONAL PROVISIONS.

containing 640 acres, more or less. The bonus consideration paid for this lease is as follows:

To the State of Texas: EIGHTY THOUSAND DOLLARS AND 00/100

Dollars (\$80,000.00)

To the owner of the soil: EIGHTY THOUSAND DOLLARS AND 00/100

Dollars (\$80,000.00)

Total bonus consideration: ONE HUNDRED SIXTY THOUSAND DOLLARS AND 00/100

Dollars (\$160,000.00)

The total bonus consideration paid represents a bonus of TWO THOUSAND DOLLARS AND 00/100

Dollars (\$2,000.00) per acre, on 80 net acres.

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 or its successors (which shall continue as the depository regardless of changes in the ownership of said land), the amount specified below; in addition, Lessee shall pay or tender to the COMMISSIONER OF THE GENERAL LAND OFFICE OF THE STATE OF TEXAS, AT AUSTIN, TEXAS, a like sum on or before said date. Payments under this paragraph shall operate as a rental and shall cover the privilege of deferring the commencement of a well for one (1) year from said date. Payments under this paragraph shall be in the following amounts:

To the owner of the soil: FORTY DOLLARS AND 00/100

Dollars (\$40.00)

To the State of Texas: FORTY DOLLARS AND 00/100

Dollars (\$40.00)

Total Delay Rental: EIGHTY DOLLARS AND 00/100

Dollars (\$80.00)

A CERTIFIED COPY
IF IT BEARS THE SEAL OF THE COUNTY CLERK
ATTEST: April 27, 2012

LINDA McDONALD, COUNTY CLERK
CULBERSON COUNTY, TEXAS

BY Thurmon Berry DEPUTY



31.11.09

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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.

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

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

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

9. ROYALTY PAYMENTS AND REPORTS. All royalties not taken in kind shall be paid to the Commissioner of the General Land Office at Austin, Texas, in the following manner:

Payment of royalty on production of oil and gas shall be as provided in the rules set forth in the Texas Register. Rules currently provide that royalty on oil is due and must be received in the General Land Office on or before the 5th day of the second month succeeding the month of production, and royalty on gas is due and must be received in the General Land Office on or before the 15th day of the second month succeeding the month of production, accompanied by the affidavit of the owner, manager or other authorized agent, completed in the form and manner prescribed by the General Land Office and showing the gross amount and disposition of all oil and gas produced and the market value of the oil and gas, together with a copy of all documents, records or reports confirming the gross production, disposition and market value including gas meter readings, pipeline receipts, gas line receipts and other checks or memoranda of amount produced and put into pipelines, tanks, or pools and gas lines or gas storage, and any other reports or records which the General Land Office may require to verify the gross production, disposition and market value. In all cases the authority of a manager or agent to act for the Lessee herein must be filed in the General Land Office. Each royalty payment shall be accompanied by a check stub, schedule, summary or other remittance advice showing by the assigned General Land Office lease number the amount of royalty being paid on each lease. If Lessee pays his royalty on or before thirty (30) days after the royalty payment was due, then Lessee owes a penalty of 5% on the royalty or \$25.00, whichever is greater. A royalty payment which is over thirty (30) days late shall accrue a penalty of 10% of the royalty due or \$25.00 whichever is greater. In addition to a penalty, royalties shall accrue interest at a rate of 12% per year; such interest will begin to accrue when the royalty is sixty (60) days overdue. Affidavits and supporting documents which are not filed when due shall incur a penalty in an amount set by the General Land Office administrative rule which is effective on the date when the affidavits or supporting documents were due. The Lessee shall bear all responsibility for paying or causing royalties to be paid as prescribed by the due date provided herein. Payment of the delinquency penalty shall in no way operate to prohibit the State's right of forfeiture as provided by law nor act to postpone the date on which royalties were originally due. The above penalty provisions shall not apply in cases of title dispute as to the State's portion of the royalty or to that portion of the royalty in dispute as to fair market value.

ATTEST: April 27, 2012
LINDA McDONALD, COUNTY CLERK
CULBERSON COUNTY, TEXAS
BY Therese D. Boney DEPUTY



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.

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

11. DRY HOLE/CESSATION OF PRODUCTION DURING PRIMARY TERM. If, during the primary term hereof and prior to discovery and production of oil or gas on said land, Lessee should drill a dry hole or holes thereon, or if during the primary term hereof and after the discovery and actual production of oil or gas from the leased premises such production thereof should cease from any cause, this lease shall not terminate if on or before the expiration of sixty (60) days from date of completion of said dry hole or cessation of production Lessee commences additional drilling or reworking operations thereon, or pays or tenders the next annual delay rental in the same manner as provided in this lease. If, during the last year of the primary term or within sixty (60) days prior thereto, a dry hole be completed and abandoned, or the production of oil or gas should cease for any cause, Lessee's rights shall remain in full force and effect without further operations until the expiration of the primary term; and if Lessee has not resumed production in paying quantities at the expiration of the primary term, Lessee may maintain this lease by conducting additional drilling or reworking operations pursuant to Paragraph 13, using the expiration of the primary term as the date of cessation of production under Paragraph 13. Should the first well or any subsequent well drilled on the above described land be completed as a shut-in oil or gas well within the primary term hereof, Lessee may resume payment of the annual rental in the same manner as provided herein on or before the rental paying date following the expiration of sixty (60) days from the date of completion of such shut-in oil or gas well and upon the failure to make such payment, this lease shall ipso facto terminate. If at the expiration of the primary term or any time thereafter a shut-in oil or gas well is located on the leased premises, payments may be made in accordance with the shut-in provisions hereof.

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

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

14. SHUT-IN ROYALTIES. For purposes of this paragraph, "well" means any well that has been assigned a well number by the state agency having jurisdiction over the production of oil and gas. If, at any time after the expiration of the primary term of a lease that, until being shut in, was being maintained in force and effect, a well capable of producing oil or gas in paying quantities is located on the leased premises, but oil or gas is not being produced for lack of suitable production facilities or lack of a suitable market, then Lessee may pay as a shut-in oil or gas royalty an amount equal to double the annual rental provided in the lease, but not less than \$1,200 a year for each well capable of producing oil or gas in paying quantities. If Paragraph 3 of this lease does not specify a delay rental amount, then for the purposes of this paragraph, the delay rental amount shall be one dollar (\$1.00) per acre. To be effective, each initial shut-in oil or gas royalty must be paid on or before: (1) the expiration of the primary term, (2) 60 days after the Lessee ceases to produce oil or gas from the leased premises, or (3) 60 days after Lessee completes a drilling or reworking operation in accordance with the lease provisions; whichever date is latest. Such payment shall be made one-half (1/2) to the Commissioner of the General Land Office and one-half (1/2) to the owner of the soil. If the shut-in oil or gas royalty is paid, the lease shall be considered to be a producing lease and the payment shall extend the term of the lease for a period of one year from the end of the primary term, or from the first day of the month following the month in which production ceased, and, after that, if no suitable production facilities or suitable market for the oil or gas exists, Lessee may extend the lease for four more successive periods of one (1) year by paying the same amount each year on or before the expiration of each shut-in year.

15. COMPENSATORY ROYALTIES. If, during the period the lease is kept in effect by payment of the shut-in oil or gas royalty, oil or gas is sold and delivered in paying quantities from a well located within one thousand (1,000) feet of the leased premises and completed in the same producing reservoir, or in any case in which drainage is occurring, the right to continue to maintain the lease by paying the shut-in oil or gas royalty shall cease, but the lease shall remain effective for the remainder of the year for which the royalty has been paid. The Lessee may maintain the lease for four more successive years by Lessee paying compensatory royalty at the royalty rate provided in the lease of the market value of production from the well causing the drainage or which is completed in the same producing reservoir and within one thousand (1,000) feet of the leased premises. The compensatory royalty is to be paid monthly, one-half (1/2) to the Commissioner of the General Land Office and one-half (1/2) to the owner of the soil, beginning on or before the last day of the month following the month in which the oil or gas is produced from the well causing the drainage or that is completed in the same producing reservoir and located within one thousand (1,000) feet of the leased premises. If the compensatory royalty paid in any 12-month period is an amount less than the annual shut-in oil or gas royalty, Lessee shall pay an amount equal to the difference within thirty (30) days from the end of the 12-month period. Compensatory royalty payments which are not timely paid will accrue penalty and interest in accordance with Paragraph 9 of this lease. None of these provisions will relieve Lessee of the obligation of reasonable development nor the obligation to drill offset wells as provided in Texas Natural Resources Code 52.173; however, at the determination of the Commissioner, and with the Commissioner's written approval, the payment of compensatory royalties can satisfy the obligation to drill offset wells.

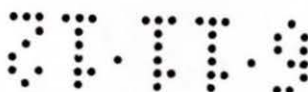
16. RETAINED ACREAGE. Notwithstanding any provision of this lease to the contrary, after a well producing or capable of producing oil or gas has been completed on the leased premises, Lessee shall exercise the diligence of a reasonably prudent operator in drilling such additional well or wells as may be reasonably necessary for the proper development of the leased premises and in marketing the production thereon.

(A) VERTICAL. In the event this lease is in force and effect two (2) years after the expiration date of the primary or extended term it shall then terminate as to all of the leased premises, EXCEPT (1) 40 acres surrounding each oil well capable of producing in paying quantities and 320 acres surrounding each gas well capable of producing in paying quantities (including a shut-in oil or gas well as provided in Paragraph 14 hereof), or a well upon which Lessee is then engaged in continuous drilling or reworking operations, or (2) the number of acres included in a producing pooled unit pursuant to Texas Natural Resources Code 52.151-52.154, or (3) such greater or lesser number of acres as may then be allocated for production

ATTEST:

LINDA McDONALD, COUNTY CLERK
CULBERSON COUNTY, TEXAS

BY Herminia D. Bugar DEPUTY



purposes to a proration unit for each such producing well under the rules and regulations of the Railroad Commission of Texas, or any successor agency, or other governmental authority having jurisdiction. If at any time after the effective date of the partial termination provisions hereof, the applicable field rules are changed or the well or wells located thereon are reclassified so that less acreage is thereafter allocated to said well or wells for production purposes, this lease shall thereupon terminate as to all acreage not thereafter allocated to said well or wells for production purposes. Notwithstanding the termination of this lease as to a portion of the lands covered hereby, Lessee shall nevertheless continue to have the right of ingress to and egress from the lands still subject to this lease for all purposes described in Paragraph 1 hereof, together with easements and rights-of-way for existing roads, existing pipelines and other existing facilities on, over and across all the lands described in Paragraph 1 hereof ("the retained lands"), for access to and from the retained lands and for the gathering or transportation of oil, gas and other minerals produced from the retained lands.

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

(C) **IDENTIFICATION AND FILING.** The surface acreage retained hereunder as to each well shall, as nearly as practical, be in the form of a square with the well located in the center thereof, or such other shape as may be approved by the Commissioner of the General Land Office. Within thirty (30) days after partial termination of this lease as provided herein, Lessee shall execute and record a release or releases containing a satisfactory legal description of the acreage and/or depths not retained hereunder. The recorded release, or a certified copy of same, shall be filed in the General Land Office, accompanied by the filing fee prescribed by the General Land Office rules in effect on the date the release is filed. If Lessee fails or refuses to execute and record such release or releases within ninety (90) days after being requested to do so by the General Land Office, then the Commissioner at his sole discretion may designate by written instrument the acreage and/or depths to be released hereunder and record such instrument at Lessee's expense in the county or counties where the lease is located and in the official records of the General Land Office and such designation shall be binding upon Lessee for all purposes.

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

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

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

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

(B) **REDUCTION OF PAYMENTS.** If, during the primary term, a portion of the land covered by this lease is included within the boundaries of a pooled unit that has been approved by the School Land Board and the owner of the soil in accordance with Natural Resources Code Sections 52.151-52.154, or if, at any time after the expiration of the primary term or the extended term, this lease covers a lesser number of acres than the total amount described herein, payments that are made on a per acre basis hereunder shall be reduced according to the number of acres pooled, released, surrendered, or otherwise severed, so that payments determined on a per acre basis under the terms of this lease during the primary term shall be calculated based upon the number of acres outside the boundaries of a pooled unit, or, if after the expiration of the primary term, the number of acres actually retained and covered by this lease.

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

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

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

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

25. POLLUTION. In developing this area, Lessee shall use the highest degree of care and all proper safeguards to prevent pollution. Without limiting the foregoing, pollution of coastal wetlands, natural waterways, rivers and impounded water shall be prevented by the use of containment facilities sufficient to prevent spillage, seepage or ground water contamination. In the event of pollution, Lessee shall use all means at its disposal to recapture all escaped hydrocarbons or other pollutant and shall be responsible for all damage to public and private properties. Lessee shall build and maintain fences around its slush, sump, and drainage pits and tank batteries so as to protect livestock against loss, damage or injury; and upon completion or abandonment of any well or wells, Lessee shall fill and level all slush pits and cellars and completely clean up the drilling site of all rubbish thereon. Lessee shall, while conducting operations on the leased premises, keep said premises free of all rubbish, cans, bottles, paper cups or garbage, and upon completion of operations shall restore the surface of the land to as near its original condition and contours as is practicable. Tanks and equipment will be kept painted and presentable.

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

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ATTEST: April 27, 2012
LINDA McDONALD, COUNTY CLERK
CULBERSON COUNTY, TEXAS
BY Theresa D. Bower DEPUTY

31119



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 pay his share of the rental shall not affect this lease on the part of the land upon which pro rata rentals are timely paid or tendered; however, if the assignor or assignee does not file a certified copy of such assignment in the General Land Office before the next rental paying date, the entire lease shall terminate for failure to pay the entire rental due under Paragraph 3. Every assignee shall succeed to all rights and be subject to all obligations, liabilities, and penalties owed to the State by the original lessee or any prior assignee of the lease, including any liabilities to the State for unpaid royalties.

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

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

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

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

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

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

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

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

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

35. INDEMNITY. Lessee hereby releases and discharges the State of Texas and the owner of the soil, their officers, employees, partners, agents, contractors, subcontractors, guests, invitees, and their respective successors and assigns, of and from all and any actions and causes of action of every nature, or other harm, including environmental harm, for which recovery of damages is sought, including, but not limited to, all losses and expenses which are caused by the activities of Lessee, its officers, employees, and agents arising out of, incidental to, or resulting from, the operations of or for Lessee on the leased premises hereunder, or that may arise out of or be occasioned by Lessee's breach of any of the terms or provisions of this Agreement, or by any other negligent or strictly liable act or omission of Lessee. Further, Lessee hereby agrees to be liable for, exonerate, indemnify, defend and hold harmless the State of Texas and the owner of the soil, their officers, employees and agents, their successors or assigns, against any and all claims, liabilities, losses, damages, actions, personal injury (including death), costs and expenses, or other harm for which recovery of damages is sought, under any theory including tort, contract, or strict liability, including attorneys' fees and other legal expenses, including those related to environmental hazards, on the leased premises or in any way related to Lessee's failure to comply with any and all environmental laws; those arising from or in any way related to Lessee's operations or any other of Lessee's activities on the leased premises; those arising from Lessee's use of the surface of the leased premises; and those that may arise out of or be occasioned by Lessee's breach of any of the terms or provisions of this Agreement or any other act or omission of Lessee, its directors, officers, employees, partners, agents, contractors, subcontractors, guests, invitees, and their

IF IT BEARS THE SEAL OF THE COUNTY CLERK
ATTEST: *April 27, 2012*

LINDA McDONALD, COUNTY CLERK
CULBERSON COUNTY, TEXAS

BY *Kenneth D. B...* DEPUTY



respective successors and assigns. Each assignee of this Agreement, or an interest therein, agrees to be liable for, exonerate, indemnify, defend and hold harmless the State of Texas and the owner of the soil, their officers, employees, and agents in the same manner provided above in connection with the activities of Lessee, its officers, employees, and agents as described above. EXCEPT AS OTHERWISE EXPRESSLY LIMITED HEREIN, ALL OF THE INDEMNITY OBLIGATIONS AND/OR LIABILITIES ASSUMED UNDER THE TERMS OF THIS AGREEMENT SHALL BE WITHOUT LIMITS AND WITHOUT REGARD TO THE CAUSE OR CAUSES THEREOF (EXCLUDING PRE-EXISTING CONDITIONS), STRICT LIABILITY, OR THE NEGLIGENCE OF ANY PARTY OR PARTIES (INCLUDING THE NEGLIGENCE OF THE INDEMNIFIED PARTY), WHETHER SUCH NEGLIGENCE BE SOLE, JOINT, CONCURRENT, ACTIVE, OR PASSIVE.

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

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

38. EXECUTION. This oil and gas lease must be signed and acknowledged by the Lessee before it is filed of record in the county records and in the General Land Office of the State of Texas. Once the filing requirements found in Paragraph 39 of this lease have been satisfied, the effective date of this lease shall be the date found on Page 1.

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

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

STATE OF TEXAS

By: INLAND RESOURCES, INC.

Peggy Hahn
BY: Peggy Hahn
Title: President
Individually and as agent for the State of Texas

Date: 12/2/11

LESSEE: PETROHAWK PROPERTIES, LP

By: P-H Energy, LLC, Its General Partner

D.R. Deffenbaugh
BY: D.R. Deffenbaugh
Title: Vice President - Land

Date: 12/12/11

A CERTIFIED COPY
IF IT BEARS THE SEAL OF THE COUNTY CLERK
ATTEST: April 27 2012
LINDA McDONALD, COUNTY CLERK
CULBERSON COUNTY, TEXAS
BY Muriel D. Brey DEPUTY



31779

STATE OF OKLAHOMA
COUNTY OF TULSA

(CORPORATION ACKNOWLEDGMENT)

BEFORE ME, the undersigned authority, on this day personally appeared D.R. Deffenbaugh
known to me to be the person whose name is subscribed to the foregoing instruments as Vice President - Land
of P-H Energy, LLC, general partner of Petrohawk Properties, LP, a Texas limited partnership and acknowledged to me that he
executed the same for the purposes and consideration therein expressed, in the capacity stated, and as the act and deed of said corporation.

Given under my hand and seal of office this the 12th day of December, 2011.



Vickie Horton
Notary Public in and for Oklahoma

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STATE OF Texas
COUNTY OF Midland

(CORPORATION ACKNOWLEDGMENT)

BEFORE ME, the undersigned authority, on this day personally appeared Peggy Hahn known to me to be the person whose name is
subscribed to the foregoing instruments as President of INLAND RESOURCES, INC. and acknowledged to me that she executed the same for the
purposes and consideration therein expressed, in the capacity stated, and as the act and deed of said corporation.

Given under my hand and seal of office this the 2nd day of December, 2011.

Gammy Kennedy
Notary Public in and for Texas

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IF IT BEARS THE SEAL OF THE COUNTY CLERK
ATTEST: April 27, 2012
LINDA McDONALD, COUNTY CLERK
CULBERSON COUNTY, TEXAS
BY Theresa D. Berry DEPUTY



21119

EXHIBIT "A"

THIS ADDENDUM IS HEREBY MADE TO THAT CERTAIN OIL AND GAS LEASE DATED NOVEMBER 28TH, 2011, BY AND BETWEEN THE STATE OF TEXAS, ACTING BY AND THROUGH ITS AGENT, INLAND RESOURCES, INC., AS LESSOR AND PETROHAWK PROPERTIES, LP, AS LESSEE.

PROPERTY DESCRIPTION

ALL OF SECTION 3, BLOCK 45, PUBLIC SCHOOL LAND SURVEY, LOCATED IN ABSTRACT 3773, CULBERSON COUNTY AND IN ABSTRACT 3536, REEVES COUNTY TEXAS, CONTAINING 640 ACRES, MORE OR LESS.

ADDITIONAL TERMS AND PROVISIONS:

NOTWITHSTANDING ANYTHING CONTAINED HEREIN TO THE CONTRARY, the following provisions shall apply as an ADDENDUM to the foregoing, Oil, Gas, and Mineral Lease, and shall be in force and effect as a part of said lease.

1. The provisions of paragraphs 14 and 15 notwithstanding, the payment of shut-in or compensatory royalties shall not be permitted to extend this lease for more than two years after the expiration of the primary term.
2. Lessee shall also furnish the same information as set out in Paragraph 10 (B) in the same manner to the owner of the soil.
3. Paragraph 16 shall be replaced as follows:

Paragraph 16. (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 this lease 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 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 producing pooled unit pursuant to Texas Natural Resources Code 52.151-52.154, or (3) such greater or lesser number of acres as may then be allocated for production purposes to a portion 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 or permitted to be allocated to said well or wells for production purposes, this lease shall thereupon terminate as to all acreage except the minimum acreage allocable to said well or wells for production purposes. Notwithstanding the termination of this lease as to a portion of the lands covered hereby, Lessee shall nevertheless continue to have the right of ingress to and egress from the lands still subject to this lease for all purposes described in Paragraph 1 hereof, together with easements and rights-of-way for existing roads, existing pipelines and other existing facilities on, over and across all the lands described in Paragraph 1 hereof ("the retained lands"), for access to and from the retained lands and for the gathering or transportation of oil, gas, and other minerals produced from the retained lands.

Paragraph 16. (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 vertical 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 and gas is produced in paying quantities from such deeper depths covered by this lease.

4. Paragraph 19 shall be replaced as follows:

Paragraph 19. WARRANTY CLAUSE. The owner of the soil warrants and agrees to defend title to the leased premises by, through, and under the owner of the soil, but not otherwise. 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.

Lessor Initials: DPY
DPY

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ATTEST: April 27, 2012
LINDA McDONALD, COUNTY CLERK
CULBERSON COUNTY, TEXAS

Deputy DEPUTY

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5. Paragraph 26 shall be replaced as follows:

Paragraph 26. REMOVAL OF EQUIPMENT. Subject to limitations in this paragraph, Lessee shall have the right and obligation 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 owners 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 owners of the soil. The owners of the soil at their option shall become the owners of any machinery, fixtures or casing which is not timely removed by Lessee under the terms of this paragraph. If the owners of the soil do not exercise said option Lessee shall retain the responsibility and liability for moving said equipment.

6. Paragraph 27 shall be replaced as follows:

Paragraph 27. (A) ASSIGNMENTS. Under the conditions contained in this paragraph and Paragraph 29 of this lease, the rights and estate 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 the satisfactory written evidence of the change in ownership, including the original recorded muniments of title (or certified copy of such original) when the ownership changed because of a conveyance. If this lease is assigned in its entirety as to only part of the acreage, the right and option to pay rentals shall be apportioned as between the several owners ratably, according to the area of each, and failure by one or more of them to pay his share of the rental shall not affect this lease on the part of the land upon which pro rata rentals are timely paid or tendered; however, if the assignor or assignee does not file a certified copy of such assignment in the General Land Office before the next rental paying date, the entire lease shall terminate for failure to pay the entire rental due under Paragraph 3. Every assignee shall succeed to all rights and be subject to all obligations, liabilities, and penalties owed to the State by the original lessee or any prior assignee of the lease, including any liabilities to the State for unpaid royalties.

7. There is reserved, to the owner of the soil herein, rights to the abandoned wellbore in the Southeast Quarter of the Southeast Quarter (SE/4 of SE/4) of Section 3, Block 45 for purposes and rights associated with the surface estate.

A CERTIFIED COPY
IF IT BEARS THE SEAL OF THE COUNTY CLERK
ATTEST: April 27, 2012
LINDA McDONALD, COUNTY CLERK
CULBERSON COUNTY, TEXAS
BY Theresa D. Bury DEPUTY



12-00435
DIANNE O. FLOREZ
COUNTY CLERK
2012 Jan 18 at 01:41 PM
REEVES COUNTY, TEXAS
By: EF Elisa Florez DEPUTY

Lessor Initials: RA.

Doc# 00000067845
#Pages 10 #NFPages 8
4/27/2012 1:15:33 PM
Filed & Recorded in
Official Public Records of
County and District Clerk
Linda McDonald
Fees 46.00

State of Texas
County of Culberson

I hereby certify this instrument was FILED on
the date and at the time stamped hereon by me
and was duly RECORDED in the VOL _____ and
Page _____ of the Official Public Records of
Culberson County, Texas on:

By Deputy _____

THE STATE OF TEXAS

COUNTY OF CULBERSON I, Linda McDonald, Clerk of the County Court in and

for said County and State, do hereby certify that the foregoing is a true and
correct copy of Oil And Gas Lease dated November 28

2011 filed for record in my office this 27TH day of April

2012, at 1:15 P.M, under Clerk's File No. 67845 to be

recorded in the Oil And Gas Records of Culberson County,
Texas.

TO CERTIFY WHICH, Witness my hand and seal at Van Horn this 27TH
day of April, 2012

By Linda McDonald Deputy LINDA McDONALD, COUNTY CLERK
CULBERSON COUNTY, TEXAS

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

The above and foregoing is a full, true and correct photographic copy of the
original record now in my lawful custody and possession, as the same is
filed/recorded in the public records of my office, found in VOL. 920,
PAGE 243, THRU 251 OFFICIAL PUBLIC
RECORD 04/27/12

I hereby certified on _____
DIANNE O. FLOREZ, COUNTY CLERK
REEVES COUNTY, TEXAS
BY Mary Abila DEPUTY
MARY ABILA



Notice of Confidentiality Rights: If you are a natural person, you may remove or strike any of the following information from this instrument before it is filed for record in the public records: your social security number or your driver's license number.

General Land Office
Relinquishment Act Lease Form
Revised, September 1997

12-00435
FILED FOR RECORD
REEVES COUNTY, TEXAS
Jan 18, 2012 at 01:41:00 PM

The State of Texas



Austin, Texas

OIL AND GAS LEASE

THIS AGREEMENT is made and entered into this 28th day of November, 2011, between the State of Texas, acting by and through its agent, INLAND RESOURCES, INC., a Texas Corporation, represented herein by its President Peggy Hahn

of POST OFFICE BOX 10169, MIDLAND, TEXAS 79702-7169

(Give Permanent Address)

said agent herein referred to as the owner of the soil (whether one or more), and PETROHAWK PROPERTIES, LP

of 6100 SOUTH YALE AVENUE, SUITE 500, TULSA, OKLAHOMA 74136

(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 AND REEVES County, State of Texas, to-wit:

ALL OF SECTION 3, BLOCK 45, PUBLIC SCHOOL LAND SURVEY, LOCATED IN ABSTRACT 3773, CULBERSON COUNTY AND IN ABSTRACT 3536, REEVES COUNTY TEXAS, CONTAINING 640 ACRES, MORE OR LESS.

SEE ATTACHED EXHIBIT "A" FOR ADDITIONAL PROVISIONS.

containing 640 acres, more or less. The bonus consideration paid for this lease is as follows:

To the State of Texas: EIGHTY THOUSAND DOLLARS AND 00/100

Dollars (\$80,000.00)

To the owner of the soil: EIGHTY THOUSAND DOLLARS AND 00/100

Dollars (\$80,000.00)

Total bonus consideration: ONE HUNDRED SIXTY THOUSAND DOLLARS AND 00/100

Dollars (\$160,000.00)

The total bonus consideration paid represents a bonus of TWO THOUSAND DOLLARS AND 00/100

Dollars (\$2,000.00) per acre, on 80 net acres.

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

or its successors (which shall continue as the depository regardless of changes in the ownership of said land), the amount specified below; in addition, Lessee shall pay or tender to the COMMISSIONER OF THE GENERAL LAND OFFICE OF THE STATE OF TEXAS, AT AUSTIN, TEXAS, a like sum on or before said date. Payments under this paragraph shall operate as a rental and shall cover the privilege of deferring the commencement of a well for one (1) year from said date. Payments under this paragraph shall be in the following amounts:

To the owner of the soil: FORTY DOLLARS AND 00/100

Dollars (\$40.00)

To the State of Texas: FORTY DOLLARS AND 00/100

Dollars (\$40.00)

Total Delay Rental: EIGHTY DOLLARS AND 00/100

Dollars (\$80.00)



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Clerks Office

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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.

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

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

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

9. ROYALTY PAYMENTS AND REPORTS. All royalties not taken in kind shall be paid to the Commissioner of the General Land Office at Austin, Texas, in the following manner:

Payment of royalty on production of oil and gas shall be as provided in the rules set forth in the Texas Register. Rules currently provide that royalty on oil is due and must be received in the General Land Office on or before the 5th day of the second month succeeding the month of production, and royalty on gas is due and must be received in the General Land Office on or before the 15th day of the second month succeeding the month of production, accompanied by the affidavit of the owner, manager or other authorized agent, completed in the form and manner prescribed by the General Land Office and showing the gross amount and disposition of all oil and gas produced and the market value of the oil and gas, together with a copy of all documents, records or reports confirming the gross production, disposition and market value including gas meter readings, pipeline receipts, gas line receipts and other checks or memoranda of amount produced and put into pipelines, tanks, or pools and gas lines or gas storage, and any other reports or records which the General Land Office may require to verify the gross production, disposition and market value. In all cases the authority of a manager or agent to act for the Lessee herein must be filed in the General Land Office. Each royalty payment shall be accompanied by a check stub, schedule, summary or other remittance advice showing by the assigned General Land Office lease number the amount of royalty being paid on each lease. If Lessee pays his royalty on or before thirty (30) days after the royalty payment was due, then Lessee owes a penalty of 5% on the royalty or \$25.00, whichever is greater. A royalty payment which is over thirty (30) days late shall accrue a penalty of 10% of the royalty due or \$25.00 whichever is greater. In addition to a penalty, royalties shall accrue interest at a rate of 12% per year, such interest will begin to accrue when the royalty is sixty (60) days overdue. Affidavits and supporting documents which are not filed when due shall incur a penalty in an amount set by the General Land Office administrative rule which is effective on the date when the affidavits or supporting documents were due. The Lessee shall bear all responsibility for paying or causing royalties to be paid as prescribed by the due date provided herein. Payment of the delinquency penalty shall in no way operate to prohibit the State's right of forfeiture as provided by law nor act to postpone the date on which royalties were originally due. The above penalty provisions shall not apply in cases of title dispute as to the State's portion of the royalty or to that portion of the royalty in dispute as to fair market value.



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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.

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

11. DRY HOLE/CESSATION OF PRODUCTION DURING PRIMARY TERM. If, during the primary term hereof and prior to discovery and production of oil or gas on said land, Lessee should drill a dry hole or holes thereon, or if during the primary term hereof and after the discovery and actual production of oil or gas from the leased premises such production thereof should cease from any cause, this lease shall not terminate if on or before the expiration of sixty (60) days from date of completion of said dry hole or cessation of production Lessee commences additional drilling or reworking operations thereon, or pays or tenders the next annual delay rental in the same manner as provided in this lease. If, during the last year of the primary term or within sixty (60) days prior thereto, a dry hole be completed and abandoned, or the production of oil or gas should cease for any cause, Lessee's rights shall remain in full force and effect without further operations until the expiration of the primary term; and if Lessee has not resumed production in paying quantities at the expiration of the primary term, Lessee may maintain this lease by conducting additional drilling or reworking operations pursuant to Paragraph 13, using the expiration of the primary term as the date of cessation of production under Paragraph 13. Should the first well or any subsequent well drilled on the above described land be completed as a shut-in oil or gas well within the primary term hereof, Lessee may resume payment of the annual rental in the same manner as provided herein on or before the rental paying date following the expiration of sixty (60) days from the date of completion of such shut-in oil or gas well and upon the failure to make such payment, this lease shall ipso facto terminate. If at the expiration of the primary term or any time thereafter a shut-in oil or gas well is located on the leased premises, payments may be made in accordance with the shut-in provisions hereof.

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

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

14. SHUT-IN ROYALTIES. For purposes of this paragraph, "well" means any well that has been assigned a well number by the state agency having jurisdiction over the production of oil and gas. If, at any time after the expiration of the primary term of a lease that, until being shut in, was being maintained in force and effect, a well capable of producing oil or gas in paying quantities is located on the leased premises, but oil or gas is not being produced for lack of suitable production facilities or lack of a suitable market, then Lessee may pay as a shut-in oil or gas royalty an amount equal to double the annual rental provided in the lease, but not less than \$1,200 a year for each well capable of producing oil or gas in paying quantities. If Paragraph 3 of this lease does not specify a delay rental amount, then for the purposes of this paragraph, the delay rental amount shall be one dollar (\$1.00) per acre. To be effective, each initial shut-in oil or gas royalty must be paid on or before: (1) the expiration of the primary term, (2) 60 days after the Lessee ceases to produce oil or gas from the leased premises, or (3) 60 days after Lessee completes a drilling or reworking operation in accordance with the lease provisions; whichever date is latest. Such payment shall be made one-half (1/2) to the Commissioner of the General Land Office and one-half (1/2) to the owner of the soil. If the shut-in oil or gas royalty is paid, the lease shall be considered to be a producing lease and the payment shall extend the term of the lease for a period of one year from the end of the primary term, or from the first day of the month following the month in which production ceased, and, after that, if no suitable production facilities or suitable market for the oil or gas exists, Lessee may extend the lease for four more successive periods of one (1) year by paying the same amount each year on or before the expiration of each shut-in year.

15. COMPENSATORY ROYALTIES. If, during the period the lease is kept in effect by payment of the shut-in oil or gas royalty, oil or gas is sold and delivered in paying quantities from a well located within one thousand (1,000) feet of the leased premises and completed in the same producing reservoir, or in any case in which drainage is occurring, the right to continue to maintain the lease by paying the shut-in oil or gas royalty shall cease, but the lease shall remain effective for the remainder of the year for which the royalty has been paid. The Lessee may maintain the lease for four more successive years by Lessee paying compensatory royalty at the royalty rate provided in the lease of the market value of production from the well causing the drainage or which is completed in the same producing reservoir and within one thousand (1,000) feet of the leased premises. The compensatory royalty is to be paid monthly, one-half (1/2) to the Commissioner of the General Land Office and one-half (1/2) to the owner of the soil, beginning on or before the last day of the month following the month in which the oil or gas is produced from the well causing the drainage or that is completed in the same producing reservoir and located within one thousand (1,000) feet of the leased premises. If the compensatory royalty paid in any 12-month period is an amount less than the annual shut-in oil or gas royalty, Lessee shall pay an amount equal to the difference within thirty (30) days from the end of the 12-month period. Compensatory royalty payments which are not timely paid will accrue penalty and interest in accordance with Paragraph 9 of this lease. None of these provisions will relieve Lessee of the obligation of reasonable development nor the obligation to drill offset wells as provided in Texas Natural Resources Code 52.173; however, at the determination of the Commissioner, and with the Commissioner's written approval, the payment of compensatory royalties can satisfy the obligation to drill offset wells.

16. RETAINED ACREAGE. Notwithstanding any provision of this lease to the contrary, after a well producing or capable of producing oil or gas has been completed on the leased premises, Lessee shall exercise the diligence of a reasonably prudent operator in drilling such additional well or wells as may be reasonably necessary for the proper development of the leased premises and in marketing the production thereon.

(A) VERTICAL. In the event this lease is in force and effect two (2) years after the expiration date of the primary or extended term it shall then terminate as to all of the leased premises, EXCEPT (1) 40 acres surrounding each oil well capable of producing in paying quantities and 320 acres surrounding each gas well capable of producing in paying quantities (including a shut-in oil or gas well as provided in Paragraph 14 hereof), or a well upon which Lessee is then engaged in continuous drilling or reworking operations, or (2) the number of acres included in a producing pooled unit pursuant to Texas Natural Resources Code 52.151-52.154, or (3) such greater or lesser number of acres as may then be allocated for production



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purposes to a proration unit for each such producing well under the rules and regulations of the Railroad Commission of Texas, or any successor agency, or other governmental authority having jurisdiction. If at any time after the effective date of the partial termination provisions hereof, the applicable field rules are changed or the well or wells located thereon are reclassified so that less acreage is thereafter allocated to said well or wells for production purposes, this lease shall thereupon terminate as to all acreage not thereafter allocated to said well or wells for production purposes. Notwithstanding the termination of this lease as to a portion of the lands covered hereby, Lessee shall nevertheless continue to have the right of ingress to and egress from the lands still subject to this lease for all purposes described in Paragraph 1 hereof, together with easements and rights-of-way for existing roads, existing pipelines and other existing facilities on, over and across all the lands described in Paragraph 1 hereof ("the retained lands"), for access to and from the retained lands and for the gathering or transportation of oil, gas and other minerals produced from the retained lands.

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

(C) **IDENTIFICATION AND FILING.** The surface acreage retained hereunder as to each well shall, as nearly as practical, be in the form of a square with the well located in the center thereof, or such other shape as may be approved by the Commissioner of the General Land Office. Within thirty (30) days after partial termination of this lease as provided herein, Lessee shall execute and record a release or releases containing a satisfactory legal description of the acreage and/or depths not retained hereunder. The recorded release, or a certified copy of same, shall be filed in the General Land Office, accompanied by the filing fee prescribed by the General Land Office rules in effect on the date the release is filed. If Lessee fails or refuses to execute and record such release or releases within ninety (90) days after being requested to do so by the General Land Office, then the Commissioner at his sole discretion may designate by written instrument the acreage and/or depths to be released hereunder and record such instrument at Lessee's expense in the county or counties where the lease is located and in the official records of the General Land Office and such designation shall be binding upon Lessee for all purposes.

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

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

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

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

(B) **REDUCTION OF PAYMENTS.** If, during the primary term, a portion of the land covered by this lease is included within the boundaries of a pooled unit that has been approved by the School Land Board and the owner of the soil in accordance with Natural Resources Code Sections 52.151-52.154, or if, at any time after the expiration of the primary term or the extended term, this lease covers a lesser number of acres than the total amount described herein, payments that are made on a per acre basis hereunder shall be reduced according to the number of acres pooled, released, surrendered, or otherwise severed, so that payments determined on a per acre basis under the terms of this lease during the primary term shall be calculated based upon the number of acres outside the boundaries of a pooled unit, or, if after the expiration of the primary term, the number of acres actually retained and covered by this lease.

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

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

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

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

25. **POLLUTION.** In developing this area, Lessee shall use the highest degree of care and all proper safeguards to prevent pollution. Without limiting the foregoing, pollution of coastal wetlands, natural waterways, rivers and impounded water shall be prevented by the use of containment facilities sufficient to prevent spillage, seepage or ground water contamination. In the event of pollution, Lessee shall use all means at its disposal to recapture all escaped hydrocarbons or other pollutant and shall be responsible for all damage to public and private properties. Lessee shall build and maintain fences around its slush, sump, and drainage pits and tank batteries so as to protect livestock against loss, damage or injury; and upon completion or abandonment of any well or wells, Lessee shall fill and level all slush pits and cellars and completely clean up the drilling site of all rubbish thereon. Lessee shall, while conducting operations on the leased premises, keep said premises free of all rubbish, cans, bottles, paper cups or garbage, and upon completion of operations shall restore the surface of the land to as near its original condition and contours as is practicable. Tanks and equipment will be kept painted and presentable.

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



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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 pay his share of the rental shall not affect this lease on the part of the land upon which pro rata rentals are timely paid or tendered; however, if the assignor or assignee does not file a certified copy of such assignment in the General Land Office before the next rental paying date, the entire lease shall terminate for failure to pay the entire rental due under Paragraph 3. Every assignee shall succeed to all rights and be subject to all obligations, liabilities, and penalties owed to the State by the original lessee or any prior assignee of the lease, including any liabilities to the State for unpaid royalties.

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

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

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

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

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

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

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

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

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

35. INDEMNITY. Lessee hereby releases and discharges the State of Texas and the owner of the soil, their officers, employees, partners, agents, contractors, subcontractors, guests, invitees, and their respective successors and assigns, of and from all and any actions and causes of action of every nature, or other harm, including environmental harm, for which recovery of damages is sought, including, but not limited to, all losses and expenses which are caused by the activities of Lessee, its officers, employees, and agents arising out of, incidental to, or resulting from, the operations of or for Lessee on the leased premises hereunder, or that may arise out of or be occasioned by Lessee's breach of any of the terms or provisions of this Agreement, or by any other negligent or strictly liable act or omission of Lessee. Further, Lessee hereby agrees to be liable for, exonerate, indemnify, defend and hold harmless the State of Texas and the owner of the soil, their officers, employees and agents, their successors or assigns, against any and all claims, liabilities, losses, damages, actions, personal injury (including death), costs and expenses, or other harm for which recovery of damages is sought, under any theory including tort, contract, or strict liability, including attorneys' fees and other legal expenses, including those related to environmental hazards, on the leased premises or in any way related to Lessee's failure to comply with any and all environmental laws; those arising from or in any way related to Lessee's operations or any other of Lessee's activities on the leased premises; those arising from Lessee's use of the surface of the leased premises; and those that may arise out of or be occasioned by Lessee's breach of any of the terms or provisions of this Agreement or any other act or omission of Lessee, its directors, officers, employees, partners, agents, contractors, subcontractors, guests, invitees, and their



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respective successors and assigns. Each assignee of this Agreement, or an interest therein, agrees to be liable for, exonerate, indemnify, defend and hold harmless the State of Texas and the owner of the soil, their officers, employees, and agents in the same manner provided above in connection with the activities of Lessee, its officers, employees, and agents as described above. EXCEPT AS OTHERWISE EXPRESSLY LIMITED HEREIN, ALL OF THE INDEMNITY OBLIGATIONS AND/OR LIABILITIES ASSUMED UNDER THE TERMS OF THIS AGREEMENT SHALL BE WITHOUT LIMITS AND WITHOUT REGARD TO THE CAUSE OR CAUSES THEREOF (EXCLUDING PRE-EXISTING CONDITIONS), STRICT LIABILITY, OR THE NEGLIGENCE OF ANY PARTY OR PARTIES (INCLUDING THE NEGLIGENCE OF THE INDEMNIFIED PARTY), WHETHER SUCH NEGLIGENCE BE SOLE, JOINT, CONCURRENT, ACTIVE, OR PASSIVE.

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

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

38. EXECUTION. This oil and gas lease must be signed and acknowledged by the Lessee before it is filed of record in the county records and in the General Land Office of the State of Texas. Once the filing requirements found in Paragraph 39 of this lease have been satisfied, the effective date of this lease shall be the date found on Page 1.

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

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

STATE OF TEXAS

By: INLAND RESOURCES, INC.

Peggy Hahn

BY: Peggy Hahn
Title: President

Individually and as agent for the State of Texas

Date: 12/2/11

LESSEE: PETROHAWK PROPERTIES, LP

By: P-H Energy, LLC, Its General Partner

D.R. Deffenbaugh

BY: D.R. Deffenbaugh
Title: Vice President - Land

Date: 12/12/11



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STATE OF OKLAHOMA

(CORPORATION ACKNOWLEDGMENT)

COUNTY OF TULSA

BEFORE ME, the undersigned authority, on this day personally appeared D.R. Deffenbaugh
known to me to be the person whose name is subscribed to the foregoing instruments as Vice President - Land
of P-H Energy, LLC, general partner of Petrohawk Properties, LP, a Texas limited partnership and acknowledged to me that he
executed the same for the purposes and consideration therein expressed, in the capacity stated, and as the act and deed of said corporation.

Given under my hand and seal of office this the 12th day of December, 2011.



Vickie Horton
Notary Public in and for Oklahoma

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STATE OF

Texas

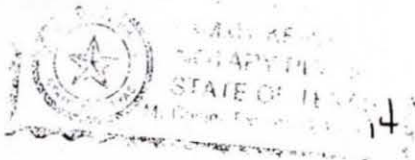
(CORPORATION ACKNOWLEDGMENT)

COUNTY OF

Midland

BEFORE ME, the undersigned authority, on this day personally appeared Peggy Hahn known to me to be the person whose name is
subscribed to the foregoing instruments as President of INLAND RESOURCES, INC. and acknowledged to me that she executed the same for the
purposes and consideration therein expressed, in the capacity stated, and as the act and deed of said corporation.

Given under my hand and seal of office this the 2nd day of December, 2011.



Sammy Kennedy
Notary Public in and for Texas

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EXHIBIT "A"

THIS ADDENDUM IS HEREBY MADE TO THAT CERTAIN OIL AND GAS LEASE DATED NOVEMBER 28TH, 2011, BY AND BETWEEN THE STATE OF TEXAS, ACTING BY AND THROUGH ITS AGENT, INLAND RESOURCES, INC., AS LESSOR AND PETROHAWK PROPERTIES, LP, AS LESSEE.

PROPERTY DESCRIPTION

ALL OF SECTION 3, BLOCK 45, PUBLIC SCHOOL LAND SURVEY, LOCATED IN ABSTRACT 3773, CULBERSON COUNTY AND IN ABSTRACT 3536, REEVES COUNTY TEXAS, CONTAINING 640 ACRES, MORE OR LESS.

ADDITIONAL TERMS AND PROVISIONS:

NOTWITHSTANDING ANYTHING CONTAINED HEREIN TO THE CONTRARY, the following provisions shall apply as an ADDENDUM to the foregoing, Oil, Gas, and Mineral Lease, and shall be in force and effect as a part of said lease.

1. The provisions of paragraphs 14 and 15 notwithstanding, the payment of shut-in or compensatory royalties shall not be permitted to extend this lease for more than two years after the expiration of the primary term.
2. Lessee shall also furnish the same information as set out in Paragraph 10 (B) in the same manner to the owner of the soil.
3. Paragraph 16 shall be replaced as follows:

Paragraph 16. (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 this lease 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 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 producing pooled unit pursuant to Texas Natural Resources Code 52.151-52.154, or (3) such greater or lesser number of acres as may then be allocated for production purposes to a portion 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 or permitted to be allocated to said well or wells for production purposes, this lease shall thereupon terminate as to all acreage except the minimum acreage allocable to said well or wells for production purposes. Notwithstanding the termination of this lease as to a portion of the lands covered hereby, Lessee shall nevertheless continue to have the right of ingress to and egress from the lands still subject to this lease for all purposes described in Paragraph 1 hereof, together with easements and rights-of-way for existing roads, existing pipelines and other existing facilities on, over and across all the lands described in Paragraph 1 hereof ("the retained lands"), for access to and from the retained lands and for the gathering or transportation of oil, gas, and other minerals produced from the retained lands.

Paragraph 16. (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 vertical 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 and gas is produced in paying quantities from such deeper depths covered by this lease.

4. Paragraph 19 shall be replaced as follows:

Paragraph 19. WARRANTY CLAUSE. The owner of the soil warrants and agrees to defend title to the leased premises by, through, and under the owner of the soil, but not otherwise. 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.

Lessor Initials: *DPY*
P.H.



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5. Paragraph 26 shall be replaced as follows:

Paragraph 26. REMOVAL OF EQUIPMENT. Subject to limitations in this paragraph, Lessee shall have the right and obligation 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 owners 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 owners of the soil. The owners of the soil at their option shall become the owners of any machinery, fixtures or casing which is not timely removed by Lessee under the terms of this paragraph. If the owners of the soil do not exercise said option Lessee shall retain the responsibility and liability for moving said equipment.

6. Paragraph 27 shall be replaced as follows:

Paragraph 27. (A) ASSIGNMENTS. Under the conditions contained in this paragraph and Paragraph 29 of this lease, the rights and estate 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 the satisfactory written evidence of the change in ownership, including the original recorded muniments of title (or certified copy of such original) when the ownership changed because of a conveyance. If this lease is assigned in its entirety as to only part of the acreage, the right and option to pay rentals shall be apportioned as between the several owners ratably, according to the area of each, and failure by one or more of them to pay his share of the rental shall not affect this lease on the part of the land upon which pro rata rentals are timely paid or tendered; however, if the assignor or assignee does not file a certified copy of such assignment in the General Land Office before the next rental paying date, the entire lease shall terminate for failure to pay the entire rental due under Paragraph 3. Every assignee shall succeed to all rights and be subject to all obligations, liabilities, and penalties owed to the State by the original lessee or any prior assignee of the lease, including any liabilities to the State for unpaid royalties.

7. There is reserved, to the owner of the soil herein, rights to the abandoned wellbore in the Southeast Quarter of the Southeast Quarter (SE/4 of SE/4) of Section 3, Block 45 for purposes and rights associated with the surface estate.

Lessor Initials: B.H.



True and Correct
copy of
Original filed in
Reeves County
Clerks Office

12-00435
DIANNE O. FLOREZ
COUNTY CLERK
2012 Jan 18 at 01:41 PM
REEVES COUNTY, TEXAS
By: EF Elisa Florez DEPUTY

2012

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

The above and foregoing is a full, true and correct photographic copy of the original record now in my lawful custody and possession, as the same is filed/recorded in the public records of my office, found in VOL. 920, PAGE 243, THRU 251 **OFFICIAL PUBLIC RECORD**

I hereby certified on 04/16/12



DIANNE O. FLOREZ, COUNTY CLERK
REEVES COUNTY, TEXAS

BY Mary Abila DEPUTY
MARY ABILA

Notice of Confidentiality Rights: If you are a natural person, you may remove or strike any of the following information from this instrument before it is filed for record in the public records: your social security number or your driver's license number.

General Land Office
Relinquishment Act Lease Form
Revised, September 1997

12-00434
FILED FOR RECORD
REEVES COUNTY, TEXAS
Jan 18, 2012 at 01:41:00 PM

The State of Texas



Austin, Texas

OIL AND GAS LEASE

THIS AGREEMENT is made and entered into this 28TH day of November, 2011, between the State of Texas, acting by and through its agent, ROBERT E. LANDRETH AND DONNA P. LANDRETH, HUSBAND AND WIFE

of 110 WEST LOUISIANA AVENUE, SUITE 404, MIDLAND, TEXAS 79701

(Give Permanent Address)

said agent herein referred to as the owner of the soil (whether one or more), and PETROHAWK PROPERTIES, LP

of 6100 SOUTH YALE AVENUE, SUITE 500, TULSA, OKLAHOMA 74136

(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 AND REEVES County, State of Texas, to-wit:

ALL OF SECTION 3, BLOCK 45, PUBLIC SCHOOL LAND SURVEY, LOCATED IN ABSTRACT 3773, CULBERSON COUNTY AND IN ABSTRACT 3536, REEVES COUNTY TEXAS, CONTAINING 640 ACRES, MORE OR LESS.

SEE ATTACHED EXHIBIT "A" FOR ADDITIONAL PROVISIONS.

containing 640 acres, more or less. The bonus consideration paid for this lease is as follows:

To the State of Texas: EIGHTY THOUSAND DOLLARS AND 00/100

Dollars (\$80,000.00)

To the owner of the soil: EIGHTY THOUSAND DOLLARS AND 00/100

Dollars (\$80,000.00)

Total bonus consideration: ONE HUNDRED SIXTY THOUSAND DOLLARS AND 00/100

Dollars (\$160,000.00)

The total bonus consideration paid represents a bonus of TWO THOUSAND DOLLARS AND 00/100

Dollars (\$2,000.00) per acre, on 80 net acres.

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 _____ or its successors (which shall continue as the depository regardless of changes in the ownership of said land), the amount specified below; in addition, Lessee shall pay or tender to the COMMISSIONER OF THE GENERAL LAND OFFICE OF THE STATE OF TEXAS, AT AUSTIN, TEXAS, a like sum on or before said date. Payments under this paragraph shall operate as a rental and shall cover the privilege of deferring the commencement of a well for one (1) year from said date. Payments under this paragraph shall be in the following amounts:

To the owner of the soil: FORTY DOLLARS AND 00/100

Dollars (\$40.00)

To the State of Texas: FORTY DOLLARS AND 00/100

Dollars (\$40.00)

Total Delay Rental: EIGHTY DOLLARS AND 00/100

Dollars (\$80.00)

A CERTIFIED COPY
IF IT BEARS THE SEAL OF THE COUNTY CLERK
ATTEST: April 27, 2012



LINDA McDONALD, COUNTY CLERK
CULBERSON COUNTY, TEXAS

BY Victoria S. Bay DEPUTY

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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.

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

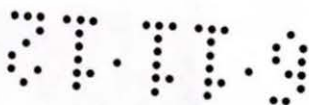
7. NO DEDUCTIONS. Lessee agrees that all royalties accruing under this lease (including those paid in kind) shall be without deduction for the cost of producing, gathering, storing, separating, treating, dehydrating, compressing, processing, transporting, and otherwise making the oil, gas and other products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

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

9. ROYALTY PAYMENTS AND REPORTS. All royalties not taken in kind shall be paid to the Commissioner of the General Land Office at Austin, Texas, in the following manner:

Payment of royalty on production of oil and gas shall be as provided in the rules set forth in the Texas Register. Rules currently provide that royalty on oil is due and must be received in the General Land Office on or before the 5th day of the second month succeeding the month of production, and royalty on gas is due and must be received in the General Land Office on or before the 15th day of the second month succeeding the month of production, accompanied by the affidavit of the owner, manager or other authorized agent, completed in the form and manner prescribed by the General Land Office and showing the gross amount and disposition of all oil and gas produced and the market value of the oil and gas, together with a copy of all documents, records or reports confirming the gross production, disposition and market value including gas meter readings, pipeline receipts, gas line receipts and other checks or memoranda of amount produced and put into pipelines, tanks, or pools and gas lines or gas storage, and any other reports or records which the General Land Office may require to verify the gross production, disposition and market value. In all cases the authority of a manager or agent to act for the Lessee herein must be filed in the General Land Office. Each royalty payment shall be accompanied by a check stub, schedule, summary or other remittance advice showing by the assigned General Land Office lease number the amount of royalty being paid on each lease. If Lessee pays his royalty on or before thirty (30) days after the royalty payment was due, then Lessee owes a penalty of 5% on the royalty or \$25.00, whichever is greater. A royalty payment which is over thirty (30) days late shall accrue a penalty of 10% of the royalty due or \$25.00 whichever is greater. In addition to a penalty, royalties shall accrue interest at a rate of 12% per year; such interest will begin to accrue when the royalty is sixty (60) days overdue. Affidavits and supporting documents which are not filed when due shall incur a penalty in an amount set by the General Land Office administrative rule which is effective on the date when the affidavits or supporting documents were due. The Lessee shall bear all responsibility for paying or causing royalties to be paid as prescribed by the due date provided herein. Payment of the delinquency penalty shall in no way operate to prohibit the State's right of forfeiture as provided by law nor act to postpone the date on which royalties were originally due. The above penalty provisions shall not apply in cases of title dispute as to the State's portion of the royalty or to that portion of the royalty in dispute as to fair market value.

ATTEST: April 27, 2012
LINDA McDONALD, COUNTY CLERK
CULBERSON COUNTY, TEXAS
BY Debbie D. Boy DEPUTY



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.

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

11. **DRY HOLE/CESSATION OF PRODUCTION DURING PRIMARY TERM.** If, during the primary term hereof and prior to discovery and production of oil or gas on said land, Lessee should drill a dry hole or holes thereon, or if during the primary term hereof and after the discovery and actual production of oil or gas from the leased premises such production thereof should cease from any cause, this lease shall not terminate if on or before the expiration of sixty (60) days from date of completion of said dry hole or cessation of production Lessee commences additional drilling or reworking operations thereon, or pays or tenders the next annual delay rental in the same manner as provided in this lease. If, during the last year of the primary term or within sixty (60) days prior thereto, a dry hole be completed and abandoned, or the production of oil or gas should cease for any cause, Lessee's rights shall remain in full force and effect without further operations until the expiration of the primary term; and if Lessee has not resumed production in paying quantities at the expiration of the primary term, Lessee may maintain this lease by conducting additional drilling or reworking operations pursuant to Paragraph 13, using the expiration of the primary term as the date of cessation of production under Paragraph 13. Should the first well or any subsequent well drilled on the above described land be completed as a shut-in oil or gas well within the primary term hereof, Lessee may resume payment of the annual rental in the same manner as provided herein on or before the rental paying date following the expiration of sixty (60) days from the date of completion of such shut-in oil or gas well and upon the failure to make such payment, this lease shall ipso facto terminate. If at the expiration of the primary term or any time thereafter a shut-in oil or gas well is located on the leased premises, payments may be made in accordance with the shut-in provisions hereof.

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

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

14. **SHUT-IN ROYALTIES.** For purposes of this paragraph, "well" means any well that has been assigned a well number by the state agency having jurisdiction over the production of oil and gas. If, at any time after the expiration of the primary term of a lease that, until being shut in, was being maintained in force and effect, a well capable of producing oil or gas in paying quantities is located on the leased premises, but oil or gas is not being produced for lack of suitable production facilities or lack of a suitable market, then Lessee may pay as a shut-in oil or gas royalty an amount equal to double the annual rental provided in the lease, but not less than \$1,200 a year for each well capable of producing oil or gas in paying quantities. If Paragraph 3 of this lease does not specify a delay rental amount, then for the purposes of this paragraph, the delay rental amount shall be one dollar (\$1.00) per acre. To be effective, each initial shut-in oil or gas royalty must be paid on or before: (1) the expiration of the primary term, (2) 60 days after the Lessee ceases to produce oil or gas from the leased premises, or (3) 60 days after Lessee completes a drilling or reworking operation in accordance with the lease provisions; whichever date is latest. Such payment shall be made one-half (1/2) to the Commissioner of the General Land Office and one-half (1/2) to the owner of the soil. If the shut-in oil or gas royalty is paid, the lease shall be considered to be a producing lease and the payment shall extend the term of the lease for a period of one year from the end of the primary term, or from the first day of the month following the month in which production ceased, and, after that, if no suitable production facilities or suitable market for the oil or gas exists, Lessee may extend the lease for four more successive periods of one (1) year by paying the same amount each year on or before the expiration of each shut-in year.

15. **COMPENSATORY ROYALTIES.** If, during the period the lease is kept in effect by payment of the shut-in oil or gas royalty, oil or gas is sold and delivered in paying quantities from a well located within one thousand (1,000) feet of the leased premises and completed in the same producing reservoir, or in any case in which drainage is occurring, the right to continue to maintain the lease by paying the shut-in oil or gas royalty shall cease, but the lease shall remain effective for the remainder of the year for which the royalty has been paid. The Lessee may maintain the lease for four more successive years by Lessee paying compensatory royalty at the royalty rate provided in the lease of the market value of production from the well causing the drainage or which is completed in the same producing reservoir and within one thousand (1,000) feet of the leased premises. The compensatory royalty is to be paid monthly, one-half (1/2) to the Commissioner of the General Land Office and one-half (1/2) to the owner of the soil, beginning on or before the last day of the month following the month in which the oil or gas is produced from the well causing the drainage or that is completed in the same producing reservoir and located within one thousand (1,000) feet of the leased premises. If the compensatory royalty paid in any 12-month period is an amount less than the annual shut-in oil or gas royalty, Lessee shall pay an amount equal to the difference within thirty (30) days from the end of the 12-month period. Compensatory royalty payments which are not timely paid will accrue penalty and interest in accordance with Paragraph 9 of this lease. None of these provisions will relieve Lessee of the obligation of reasonable development nor the obligation to drill offset wells as provided in Texas Natural Resources Code 52.173; however, at the determination of the Commissioner, and with the Commissioner's written approval, the payment of compensatory royalties can satisfy the obligation to drill offset wells.

16. **RETAINED ACREAGE.** Notwithstanding any provision of this lease to the contrary, after a well producing or capable of producing oil or gas has been completed on the leased premises, Lessee shall exercise the diligence of a reasonably prudent operator in drilling such additional well or wells as may be reasonably necessary for the proper development of the leased premises and in marketing the production thereon.

(A) **VERTICAL.** In the event this lease is in force and effect two (2) years after the expiration date of the primary or extended term it shall then terminate as to all of the leased premises, EXCEPT (1) 40 acres surrounding each oil well capable of producing in paying quantities and 320 acres surrounding each gas well capable of producing in paying quantities (including a shut-in oil or gas well as provided in Paragraph 14 hereof), or a well upon which Lessee is then engaged in continuous drilling or reworking operations, or (2) the number of acres included in a producing pooled unit pursuant to Texas Natural Resources Code 52.151-52.154, or (3) such greater or lesser number of acres as may then be allocated for production

IF IT BEARS THE SEAL OF THE COUNTY CLERK
ATTEST: April 27, 2012

LINDA McDONALD, COUNTY CLERK
CULBERSON COUNTY, TEXAS

BY Amirica B. B... DEPUTY



purposes to a proration unit for each such producing well under the rules and regulations of the Railroad Commission of Texas, or any successor agency, or other governmental authority having jurisdiction. If at any time after the effective date of the partial termination provisions hereof, the applicable field rules are changed or the well or wells located thereon are reclassified so that less acreage is thereafter allocated to said well or wells for production purposes, this lease shall thereupon terminate as to all acreage not thereafter allocated to said well or wells for production purposes. Notwithstanding the termination of this lease as to a portion of the lands covered hereby, Lessee shall nevertheless continue to have the right of ingress to and egress from the lands still subject to this lease for all purposes described in Paragraph 1 hereof, together with easements and rights-of-way for existing roads, existing pipelines and other existing facilities on, over and across all the lands described in Paragraph 1 hereof ("the retained lands"), for access to and from the retained lands and for the gathering or transportation of oil, gas and other minerals produced from the retained lands.

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

(C) **IDENTIFICATION AND FILING.** The surface acreage retained hereunder as to each well shall, as nearly as practical, be in the form of a square with the well located in the center thereof, or such other shape as may be approved by the Commissioner of the General Land Office. Within thirty (30) days after partial termination of this lease as provided herein, Lessee shall execute and record a release or releases containing a satisfactory legal description of the acreage and/or depths not retained hereunder. The recorded release, or a certified copy of same, shall be filed in the General Land Office, accompanied by the filing fee prescribed by the General Land Office rules in effect on the date the release is filed. If Lessee fails or refuses to execute and record such release or releases within ninety (90) days after being requested to do so by the General Land Office, then the Commissioner at his sole discretion may designate by written instrument the acreage and/or depths to be released hereunder and record such instrument at Lessee's expense in the county or counties where the lease is located and in the official records of the General Land Office and such designation shall be binding upon Lessee for all purposes.

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

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

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

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

(B) **REDUCTION OF PAYMENTS.** If, during the primary term, a portion of the land covered by this lease is included within the boundaries of a pooled unit that has been approved by the School Land Board and the owner of the soil in accordance with Natural Resources Code Sections 52.151-52.154, or if, at any time after the expiration of the primary term or the extended term, this lease covers a lesser number of acres than the total amount described herein, payments that are made on a per acre basis hereunder shall be reduced according to the number of acres pooled, released, surrendered, or otherwise severed, so that payments determined on a per acre basis under the terms of this lease during the primary term shall be calculated based upon the number of acres outside the boundaries of a pooled unit, or, if after the expiration of the primary term, the number of acres actually retained and covered by this lease.

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

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

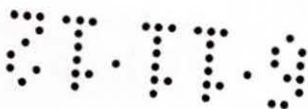
23. **PIPELINE DEPTH.** When requested by the owner of the soil, Lessee shall bury its pipelines below plow depth.

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

25. **POLLUTION.** In developing this area, Lessee shall use the highest degree of care and all proper safeguards to prevent pollution. Without limiting the foregoing, pollution of coastal wetlands, natural waterways, rivers and impounded water shall be prevented by the use of containment facilities sufficient to prevent spillage, seepage or ground water contamination. In the event of pollution, Lessee shall use all means at its disposal to recapture all escaped hydrocarbons or other pollutant and shall be responsible for all damage to public and private properties. Lessee shall build and maintain fences around its slush, sump, and drainage pits and tank batteries so as to protect livestock against loss, damage or injury; and upon completion or abandonment of any well or wells, Lessee shall fill and level all slush pits and cellars and completely clean up the drilling site of all rubbish thereon. Lessee shall, while conducting operations on the leased premises, keep said premises free of all rubbish, cans, bottles, paper cups or garbage, and upon completion of operations shall restore the surface of the land to as near its original condition and contours as is practicable. Tanks and equipment will be kept painted and presentable.

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

ATTEST: April 27, 2012
LINDA McDONALD, COUNTY CLERK
CULBERSON COUNTY, TEXAS
BY: Therice D. Brey DEPUTY



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 pay his share of the rental shall not affect this lease on the part of the land upon which pro rata rentals are timely paid or tendered; however, if the assignor or assignee does not file a certified copy of such assignment in the General Land Office before the next rental paying date, the entire lease shall terminate for failure to pay the entire rental due under Paragraph 3. Every assignee shall succeed to all rights and be subject to all obligations, liabilities, and penalties owed to the State by the original lessee or any prior assignee of the lease, including any liabilities to the State for unpaid royalties.

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

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

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

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

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

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

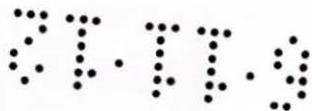
32. FORFEITURE. If Lessee shall fail or refuse to make the payment of any sum within thirty days after it becomes due, or if Lessee or an authorized agent should knowingly make any false return or false report concerning production or drilling, or if Lessee shall fail or refuse to drill any offset well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

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

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

35. INDEMNITY. Lessee hereby releases and discharges the State of Texas and the owner of the soil, their officers, employees, partners, agents, contractors, subcontractors, guests, invitees, and their respective successors and assigns, of and from all and any actions and causes of action of every nature, or other harm, including environmental harm, for which recovery of damages is sought, including, but not limited to, all losses and expenses which are caused by the activities of Lessee, its officers, employees, and agents arising out of, incidental to, or resulting from, the operations of or for Lessee on the leased premises hereunder, or that may arise out of or be occasioned by Lessee's breach of any of the terms or provisions of this Agreement, or by any other negligent or strictly liable act or omission of Lessee. Further, Lessee hereby agrees to be liable for, exonerate, indemnify, defend and hold harmless the State of Texas and the owner of the soil, their officers, employees and agents, their successors or assigns, against any and all claims, liabilities, losses, damages, actions, personal injury (including death), costs and expenses, or other harm for which recovery of damages is sought, under any theory including tort, contract, or strict liability, including attorneys' fees and other legal expenses, including those related to environmental hazards, on the leased premises or in any way related to Lessee's failure to comply with any and all environmental laws; those arising from or in any way related to Lessee's operations or any other of Lessee's activities on the leased premises; those arising from Lessee's use of the surface of the leased premises; and those that may arise out of or be occasioned by Lessee's breach of any of the terms or provisions of this Agreement, or any other act or omission of Lessee, its directors, officers, employees, partners, agents, contractors, subcontractors, guests, invitees, and their

ATTEST: April 27, 2012
LINDA McDONALD, COUNTY CLERK
CULBERSON COUNTY, TEXAS
BY Chambers B. Bony DEPUTY



respective successors and assigns. Each assignee of this Agreement, or an interest therein, agrees to be liable for, exonerate, indemnify, defend and hold harmless the State of Texas and the owner of the soil, their officers, employees, and agents in the same manner provided above in connection with the activities of Lessee, its officers, employees, and agents as described above. EXCEPT AS OTHERWISE EXPRESSLY LIMITED HEREIN, ALL OF THE INDEMNITY OBLIGATIONS AND/OR LIABILITIES ASSUMED UNDER THE TERMS OF THIS AGREEMENT SHALL BE WITHOUT LIMITS AND WITHOUT REGARD TO THE CAUSE OR CAUSES THEREOF (EXCLUDING PRE-EXISTING CONDITIONS), STRICT LIABILITY, OR THE NEGLIGENCE OF ANY PARTY OR PARTIES (INCLUDING THE NEGLIGENCE OF THE INDEMNIFIED PARTY), WHETHER SUCH NEGLIGENCE BE SOLE, JOINT, CONCURRENT, ACTIVE, OR PASSIVE.

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

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

38. **EXECUTION.** This oil and gas lease must be signed and acknowledged by the Lessee before it is filed of record in the county records and in the General Land Office of the State of Texas. Once the filing requirements found in Paragraph 39 of this lease have been satisfied, the effective date of this lease shall be the date found on Page 1.

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

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

LESSEE: PETROHAWK PROPERTIES, LP

BY: P-H ENERGY, LLC, ITS GENERAL PARTNER

[Signature]

BY: D. R. Deffenbaugh

Title: Vice-President Land

Date: 12/12/11

STATE OF TEXAS

[Signature]

BY: ROBERT E. LANDRETH,
as agent for the State of Texas

Date: 12/2/2011

STATE OF TEXAS

[Signature]

BY: DONNA P. LANDRETH,
as agent for the State of Texas

Date: 12/2/2011

A CERTIFIED COPY
IF IT BEARS THE SEAL OF THE COUNTY CLERK
ATTEST: April 27, 2012



LINDA McDONALD, COUNTY CLERK
CULBERSON COUNTY, TEXAS

BY: Veronica D. Bay, DEPUTY

27.17.9

STATE OF OKLAHOMA

(CORPORATION ACKNOWLEDGMENT)

COUNTY OF TULSA

BEFORE ME, the undersigned authority, on this day personally appeared D.R. Deffenbaugh
known to me to be the person whose name is subscribed to the foregoing instruments as Vice President - Land
of P-H Energy, LLC, general partner of Petrohawk Properties, LP, a Texas limited partnership and acknowledged to me that he
executed the same for the purposes and consideration therein expressed, in the capacity stated, and as the act and deed of said corporation.

Given under my hand and seal of office this the 12th day of December, 2011.



Vickie Horton
Notary Public in and for Oklahoma

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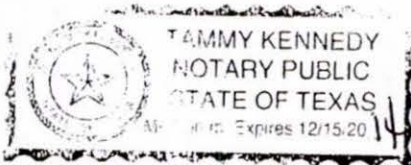
STATE OF Texas

(INDIVIDUAL ACKNOWLEDGMENT)

COUNTY OF Midland

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

Given under my hand and seal of office this the 2nd day of December, 2011.



Tammy Kennedy
Notary Public in and for Texas

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A CERTIFIED COPY
IF IT BEARS THE SEAL OF THE COUNTY CLERK
ATTEST: April 27, 2012



LINDA McDONALD, COUNTY CLERK
CULBERSON COUNTY, TEXAS

BY Kenneth Bay DEPUTY

37-119

EXHIBIT "A"

THIS ADDENDUM IS HEREBY MADE TO THAT CERTAIN OIL AND GAS LEASE DATED NOVEMBER 28TH, 2011, BY AND BETWEEN THE STATE OF TEXAS, ACTING BY AND THROUGH ITS AGENT, ROBERT E. LANDRETH AND DONNA P. LANDRETH, HUSBAND AND WIFE, AS LESSOR AND PETROHAWK PROPERTIES, LP, AS LESSEE.

PROPERTY DESCRIPTION

ALL OF SECTION 3, BLOCK 45, PUBLIC SCHOOL LAND SURVEY, LOCATED IN ABSTRACT 3773, CULBERSON COUNTY AND IN ABSTRACT 3536, REEVES COUNTY TEXAS, CONTAINING 640 ACRES, MORE OR LESS.

ADDITIONAL TERMS AND PROVISIONS:

NOTWITHSTANDING ANYTHING CONTAINED HEREIN TO THE CONTRARY, the following provisions shall apply as an ADDENDUM to the foregoing, Oil, Gas, and Mineral Lease, and shall be in force and effect as a part of said lease.

1. The provisions of paragraphs 14 and 15 notwithstanding, the payment of shut-in or compensatory royalties shall not be permitted to extend this lease for more than two years after the expiration of the primary term.
2. Lessee shall also furnish the same information as set out in Paragraph 10 (B) in the same manner to the owner of the soil.
3. Paragraph 16 shall be replaced as follows:

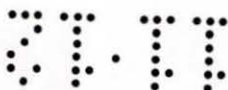
Paragraph 16. (A) VERTICAL. In the event this lease is in force and effect two (2) years after the expiration date of the primary or extended term this lease shall then terminate as to all of the leased premises, EXCEPT (1) 40 acres surrounding each oil well capable of producing in paying quantities and 320 acres surrounding each gas well capable of producing in paying quantities (including 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 producing pooled unit pursuant to Texas Natural Resources Code 52.151-52.154, or (3) such greater or lesser number of acres as may then be allocated for production purposes to a portion 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 or permitted to be allocated to said well or wells for production purposes, this lease shall thereupon terminate as to all acreage except the minimum acreage allocable to said well or wells for production purposes. Notwithstanding the termination of this lease as to a portion of the lands covered hereby, Lessee shall nevertheless continue to have the right of ingress to and egress from the lands still subject to this lease for all purposes described in Paragraph 1 hereof, together with easements and rights-of-way for existing roads, existing pipelines and other existing facilities on, over and across all the lands described in Paragraph 1 hereof ("the retained lands"), for access to and from the retained lands and for the gathering or transportation of oil, gas, and other minerals produced from the retained lands.

Paragraph 16. (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 vertical 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 and gas is produced in paying quantities from such deeper depths covered by this lease.

4. Paragraph 19 shall be replaced as follows:

Paragraph 19. WARRANTY CLAUSE. The owner of the soil warrants and agrees to defend title to the leased premises by, through, and under the owner of the soil, but not otherwise. 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.

Lessor Initials: *RPL*
RE



A CERTIFIED COPY
IF IT BEARS THE SEAL OF THE COUNTY CLERK
ATTEST: *April 27, 2012*

LINDA McDONALD, COUNTY CLERK
CULBERSON COUNTY, TEXAS

BY *Victoria Bay* DEPUTY



5. Paragraph 26 shall be replaced as follows:

Paragraph 26. REMOVAL OF EQUIPMENT. Subject to limitations in this paragraph, Lessee shall have the right and obligation 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 owners 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 owners of the soil. The owners of the soil at their option shall become the owners of any machinery, fixtures or casing which is not timely removed by Lessee under the terms of this paragraph. If the owners of the soil do not exercise said option Lessee shall retain the responsibility and liability for moving said equipment.

6. Paragraph 27 shall be replaced as follows:

Paragraph 27. (A) ASSIGNMENTS. Under the conditions contained in this paragraph and Paragraph 29 of this lease, the rights and estate 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 the satisfactory written evidence of the change in ownership, including the original recorded muniments of title (or certified copy of such original) when the ownership changed because of a conveyance. If this lease is assigned in its entirety as to only part of the acreage, the right and option to pay rentals shall be apportioned as between the several owners ratably, according to the area of each, and failure by one or more of them to pay his share of the rental shall not affect this lease on the part of the land upon which pro rata rentals are timely paid or tendered; however, if the assignor or assignee does not file a certified copy of such assignment in the General Land Office before the next rental paying date, the entire lease shall terminate for failure to pay the entire rental due under Paragraph 3. Every assignee shall succeed to all rights and be subject to all obligations, liabilities, and penalties owed to the State by the original lessee or any prior assignee of the lease, including any liabilities to the State for unpaid royalties.

7. There is reserved, to the owner of the soil herein, rights to the abandoned wellbore in the Southeast Quarter of the Southeast Quarter (SE/4 of SE/4) of Section 3, Block 45 for purposes and rights associated with the surface estate.

A CERTIFIED COPY
IF IT BEARS THE SEAL OF THE COUNTY CLERK
ATTEST: April 27, 2012



LINDA McDONALD, COUNTY CLERK
CULBERSON COUNTY, TEXAS

BY Herminia D. Brey DEPUTY

12-00434
DIANNE O. FLOREZ
COUNTY CLERK
2012 Jan 18 at 01:41 PM
REEVES COUNTY, TEXAS
BY: EE Dianne Florez DEPUTY

Lessor Initials: DL

RE

31.11.9

Doc# 00000067844
#Pages 10 #NFPages 8
4/27/2012 1:15:33 PM
Filed & Recorded in
Official Public Records of
County and District Clerk
Linda McDonald
Fees 46.00

State of Texas
County of Culberson

I hereby certify this instrument was FILED on
the date and at the time stamped hereon by me
and was duly RECORDED in the VOL _____ and
Page _____ of the Official Public Records of
Culberson County, Texas on:

By Deputy _____

THE STATE OF TEXAS

COUNTY OF CULBERSON I, Linda McDonald, Clerk of the County Court in and
for said County and State, do hereby certify that the foregoing is a true and
correct copy of Oil And Gas Lease dated November 28
2011 filed for record in my office this 27th day of April
2012 at 1:15 P.M., under Clerk's File No. 67844 to be
recorded in the Oil And Gas Records of Culberson County,
Texas.

TO CERTIFY WHICH, Witness my hand and seal at Van Horn this 27th
day of April, 2012

By Veronica D. Boney Deputy LINDA McDONALD, COUNTY CLERK
CULBERSON COUNTY, TEXAS

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

The above and foregoing is a full, true and correct photographic copy of the
original record now in my lawful custody and possession, as the same is
filed/recorded in the public records of my office, found in VOL 920
PAGE 234 THRU 242 OFFICIAL PUBLIC

RECORD 04/27/12
I hereby certified on



DIANNE O. FLOREZ, COUNTY CLERK
REEVES COUNTY, TEXAS

By Mary Abila DEPUTY
MARY ABILA

Notice of Confidentiality Rights: If you are a natural person, you may remove or strike any of the following information from this instrument before it is filed for record in the public records: your social security number or your driver's license number.

General Land Office
Relinquishment Act Lease Form
Revised, September 1997

12-00434
FILED FOR RECORD
REEVES COUNTY, TEXAS
Jan 18, 2012 at 01:41:00 PM

The State of Texas



Austin, Texas

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OIL AND GAS LEASE

THIS AGREEMENT is made and entered into this 28TH day of November, 2011, between the State of Texas, acting by and through its agent, ROBERT E. LANDRETH AND DONNA P. LANDRETH, HUSBAND AND WIFE

of 110 WEST LOUISIANA AVENUE, SUITE 404, MIDLAND, TEXAS 79701

(Give Permanent Address)

said agent herein referred to as the owner of the soil (whether one or more), and PETROHAWK PROPERTIES, LP

of 6100 SOUTH YALE AVENUE, SUITE 500, TULSA, OKLAHOMA 74136

(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 AND REEVES County, State of Texas, to-wit:

ALL OF SECTION 3, BLOCK 45, PUBLIC SCHOOL LAND SURVEY, LOCATED IN ABSTRACT 3773, CULBERSON COUNTY AND IN ABSTRACT 3536, REEVES COUNTY TEXAS, CONTAINING 640 ACRES, MORE OR LESS.

SEE ATTACHED EXHIBIT "A" FOR ADDITIONAL PROVISIONS.

containing 640 acres, more or less. The bonus consideration paid for this lease is as follows:

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

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

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

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

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

or its successors (which shall continue as the depository regardless of changes in the ownership of said land), the amount specified below; in addition, Lessee shall pay or tender to the COMMISSIONER OF THE GENERAL LAND OFFICE OF THE STATE OF TEXAS, AT AUSTIN, TEXAS, a like sum on or before said date. Payments under this paragraph shall operate as a rental and shall cover the privilege of deferring the commencement of a well for one (1) year from said date. Payments under this paragraph shall be in the following amounts:

To the owner of the soil: FORTY DOLLARS AND 00/100
Dollars (\$40.00)

To the State of Texas: FORTY DOLLARS AND 00/100
Dollars (\$40.00)

Total Delay Rental: EIGHTY DOLLARS AND 00/100
Dollars (\$80.00)



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Clerks Office

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.

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

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

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

9. ROYALTY PAYMENTS AND REPORTS. All royalties not taken in kind shall be paid to the Commissioner of the General Land Office at Austin, Texas, in the following manner:

Payment of royalty on production of oil and gas shall be as provided in the rules set forth in the Texas Register. Rules currently provide that royalty on oil is due and must be received in the General Land Office on or before the 5th day of the second month succeeding the month of production, and royalty on gas is due and must be received in the General Land Office on or before the 15th day of the second month succeeding the month of production, accompanied by the affidavit of the owner, manager or other authorized agent, completed in the form and manner prescribed by the General Land Office and showing the gross amount and disposition of all oil and gas produced and the market value of the oil and gas, together with a copy of all documents, records or reports confirming the gross production, disposition and market value including gas meter readings, pipeline receipts, gas line receipts and other checks or memoranda of amount produced and put into pipelines, tanks, or pools and gas lines or gas storage, and any other reports or records which the General Land Office may require to verify the gross production, disposition and market value. In all cases the authority of a manager or agent to act for the Lessee herein must be filed in the General Land Office. Each royalty payment shall be accompanied by a check stub, schedule, summary or other remittance advice showing by the assigned General Land Office lease number the amount of royalty being paid on each lease. If Lessee pays his royalty on or before thirty (30) days after the royalty payment was due, then Lessee owes a penalty of 5% on the royalty or \$25.00, whichever is greater. A royalty payment which is over thirty (30) days late shall accrue a penalty of 10% of the royalty due or \$25.00 whichever is greater. In addition to a penalty, royalties shall accrue interest at a rate of 12% per year; such interest will begin to accrue when the royalty is sixty (60) days overdue. Affidavits and supporting documents which are not filed when due shall incur a penalty in an amount set by the General Land Office administrative rule which is effective on the date when the affidavits or supporting documents were due. The Lessee shall bear all responsibility for paying or causing royalties to be paid as prescribed by the due date provided herein. Payment of the delinquency penalty shall in no way operate to prohibit the State's right of forfeiture as provided by law nor act to postpone the date on which royalties were originally due. The above penalty provisions shall not apply in cases of title dispute as to the State's portion of the royalty or to that portion of the royalty in dispute as to fair market value.



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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.

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

11. DRY HOLE/CESSATION OF PRODUCTION DURING PRIMARY TERM. If, during the primary term hereof and prior to discovery and production of oil or gas on said land, Lessee should drill a dry hole or holes thereon, or if during the primary term hereof and after the discovery and actual production of oil or gas from the leased premises such production thereof should cease from any cause, this lease shall not terminate if on or before the expiration of sixty (60) days from date of completion of said dry hole or cessation of production Lessee commences additional drilling or reworking operations thereon, or pays or tenders the next annual delay rental in the same manner as provided in this lease. If, during the last year of the primary term or within sixty (60) days prior thereto, a dry hole be completed and abandoned, or the production of oil or gas should cease for any cause, Lessee's rights shall remain in full force and effect without further operations until the expiration of the primary term; and if Lessee has not resumed production in paying quantities at the expiration of the primary term, Lessee may maintain this lease by conducting additional drilling or reworking operations pursuant to Paragraph 13, using the expiration of the primary term as the date of cessation of production under Paragraph 13. Should the first well or any subsequent well drilled on the above described land be completed as a shut-in oil or gas well within the primary term hereof, Lessee may resume payment of the annual rental in the same manner as provided herein on or before the rental paying date following the expiration of sixty (60) days from the date of completion of such shut-in oil or gas well and upon the failure to make such payment, this lease shall ipso facto terminate. If at the expiration of the primary term or any time thereafter a shut-in oil or gas well is located on the leased premises, payments may be made in accordance with the shut-in provisions hereof.

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

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

14. SHUT-IN ROYALTIES. For purposes of this paragraph, "well" means any well that has been assigned a well number by the state agency having jurisdiction over the production of oil and gas. If, at any time after the expiration of the primary term of a lease that, until being shut in, was being maintained in force and effect, a well capable of producing oil or gas in paying quantities is located on the leased premises, but oil or gas is not being produced for lack of suitable production facilities or lack of a suitable market, then Lessee may pay as a shut-in oil or gas royalty an amount equal to double the annual rental provided in the lease, but not less than \$1,200 a year for each well capable of producing oil or gas in paying quantities. If Paragraph 3 of this lease does not specify a delay rental amount, then for the purposes of this paragraph, the delay rental amount shall be one dollar (\$1.00) per acre. To be effective, each initial shut-in oil or gas royalty must be paid on or before: (1) the expiration of the primary term, (2) 60 days after the Lessee ceases to produce oil or gas from the leased premises, or (3) 60 days after Lessee completes a drilling or reworking operation in accordance with the lease provisions; whichever date is latest. Such payment shall be made one-half (1/2) to the Commissioner of the General Land Office and one-half (1/2) to the owner of the soil. If the shut-in oil or gas royalty is paid, the lease shall be considered to be a producing lease and the payment shall extend the term of the lease for a period of one year from the end of the primary term, or from the first day of the month following the month in which production ceased, and, after that, if no suitable production facilities or suitable market for the oil or gas exists, Lessee may extend the lease for four more successive periods of one (1) year by paying the same amount each year on or before the expiration of each shut-in year.

15. COMPENSATORY ROYALTIES. If, during the period the lease is kept in effect by payment of the shut-in oil or gas royalty, oil or gas is sold and delivered in paying quantities from a well located within one thousand (1,000) feet of the leased premises and completed in the same producing reservoir, or in any case in which drainage is occurring, the right to continue to maintain the lease by paying the shut-in oil or gas royalty shall cease, but the lease shall remain effective for the remainder of the year for which the royalty has been paid. The Lessee may maintain the lease for four more successive years by Lessee paying compensatory royalty at the royalty rate provided in the lease of the market value of production from the well causing the drainage or which is completed in the same producing reservoir and within one thousand (1,000) feet of the leased premises. The compensatory royalty is to be paid monthly, one-half (1/2) to the Commissioner of the General Land Office and one-half (1/2) to the owner of the soil, beginning on or before the last day of the month following the month in which the oil or gas is produced from the well causing the drainage or that is completed in the same producing reservoir and located within one thousand (1,000) feet of the leased premises. If the compensatory royalty paid in any 12-month period is an amount less than the annual shut-in oil or gas royalty, Lessee shall pay an amount equal to the difference within thirty (30) days from the end of the 12-month period. Compensatory royalty payments which are not timely paid will accrue penalty and interest in accordance with Paragraph 9 of this lease. None of these provisions will relieve Lessee of the obligation of reasonable development nor the obligation to drill offset wells as provided in Texas Natural Resources Code 52.173; however, at the determination of the Commissioner, and with the Commissioner's written approval, the payment of compensatory royalties can satisfy the obligation to drill offset wells.

16. RETAINED ACREAGE. Notwithstanding any provision of this lease to the contrary, after a well producing or capable of producing oil or gas has been completed on the leased premises, Lessee shall exercise the diligence of a reasonably prudent operator in drilling such additional well or wells as may be reasonably necessary for the proper development of the leased premises and in marketing the production thereon.

(A) VERTICAL. In the event this lease is in force and effect two (2) years after the expiration date of the primary or extended term it shall then terminate as to all of the leased premises, EXCEPT (1) 40 acres surrounding each oil well capable of producing in paying quantities and 320 acres surrounding each gas well capable of producing in paying quantities (including a shut-in oil or gas well as provided in Paragraph 14 hereof), or a well upon which Lessee is then engaged in continuous drilling or reworking operations, or (2) the number of acres included in a producing pooled unit pursuant to Texas Natural Resources Code 52.151-52.154, or (3) such greater or lesser number of acres as may then be allocated for production



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purposes to a proration unit for each such producing well under the rules and regulations of the Railroad Commission of Texas, or any successor agency; or other governmental authority having jurisdiction. If at any time after the effective date of the partial termination provisions hereof, the applicable field rules are changed or the well or wells located thereon are reclassified so that less acreage is thereafter allocated to said well or wells for production purposes, this lease shall thereupon terminate as to all acreage not thereafter allocated to said well or wells for production purposes. Notwithstanding the termination of this lease as to a portion of the lands covered hereby, Lessee shall nevertheless continue to have the right of ingress to and egress from the lands still subject to this lease for all purposes described in Paragraph 1 hereof, together with easements and rights-of-way for existing roads, existing pipelines and other existing facilities on, over and across all the lands described in Paragraph 1 hereof ("the retained lands"), for access to and from the retained lands and for the gathering or transportation of oil, gas and other minerals produced from the retained lands.

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

(C) **IDENTIFICATION AND FILING.** The surface acreage retained hereunder as to each well shall, as nearly as practical, be in the form of a square with the well located in the center thereof, or such other shape as may be approved by the Commissioner of the General Land Office. Within thirty (30) days after partial termination of this lease as provided herein, Lessee shall execute and record a release or releases containing a satisfactory legal description of the acreage and/or depths not retained hereunder. The recorded release, or a certified copy of same, shall be filed in the General Land Office, accompanied by the filing fee prescribed by the General Land Office rules in effect on the date the release is filed. If Lessee fails or refuses to execute and record such release or releases within ninety (90) days after being requested to do so by the General Land Office, then the Commissioner at his sole discretion may designate by written instrument the acreage and/or depths to be released hereunder and record such instrument at Lessee's expense in the county or counties where the lease is located and in the official records of the General Land Office and such designation shall be binding upon Lessee for all purposes.

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

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

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

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

(B) **REDUCTION OF PAYMENTS.** If, during the primary term, a portion of the land covered by this lease is included within the boundaries of a pooled unit that has been approved by the School Land Board and the owner of the soil in accordance with Natural Resources Code Sections 52.151-52.154, or if, at any time after the expiration of the primary term or the extended term, this lease covers a lesser number of acres than the total amount described herein, payments that are made on a per acre basis hereunder shall be reduced according to the number of acres pooled, released, surrendered, or otherwise severed, so that payments determined on a per acre basis under the terms of this lease during the primary term shall be calculated based upon the number of acres outside the boundaries of a pooled unit, or, if after the expiration of the primary term, the number of acres actually retained and covered by this lease.

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

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

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

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

25. **POLLUTION.** In developing this area, Lessee shall use the highest degree of care and all proper safeguards to prevent pollution. Without limiting the foregoing, pollution of coastal wetlands, natural waterways, rivers and impounded water shall be prevented by the use of containment facilities sufficient to prevent spillage, seepage or ground water contamination. In the event of pollution, Lessee shall use all means at its disposal to recapture all escaped hydrocarbons or other pollutant and shall be responsible for all damage to public and private properties. Lessee shall build and maintain fences around its slush, sump, and drainage pits and tank batteries so as to protect livestock against loss, damage or injury; and upon completion or abandonment of any well or wells, Lessee shall fill and level all slush pits and cellars and completely clean up the drilling site of all rubbish thereon. Lessee shall, while conducting operations on the leased premises, keep said premises free of all rubbish, cans, bottles, paper cups or garbage, and upon completion of operations shall restore the surface of the land to as near its original condition and contours as is practicable. Tanks and equipment will be kept painted and presentable.

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



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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 pay his share of the rental shall not affect this lease on the part of the land upon which pro rata rentals are timely paid or tendered; however, if the assignor or assignee does not file a certified copy of such assignment in the General Land Office before the next rental paying date, the entire lease shall terminate for failure to pay the entire rental due under Paragraph 3. Every assignee shall succeed to all rights and be subject to all obligations, liabilities, and penalties owed to the State by the original lessee or any prior assignee of the lease, including any liabilities to the State for unpaid royalties.

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

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

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

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

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

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

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

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

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

35. INDEMNITY. Lessee hereby releases and discharges the State of Texas and the owner of the soil, their officers, employees, partners, agents, contractors, subcontractors, guests, invitees, and their respective successors and assigns, of and from all and any actions and causes of action of every nature, or other harm, including environmental harm, for which recovery of damages is sought, including, but not limited to, all losses and expenses which are caused by the activities of Lessee, its officers, employees, and agents arising out of, incidental to, or resulting from, the operations of or for Lessee on the leased premises hereunder, or that may arise out of or be occasioned by Lessee's breach of any of the terms or provisions of this Agreement, or by any other negligent or strictly liable act or omission of Lessee. Further, Lessee hereby agrees to be liable for, exonerate, indemnify, defend and hold harmless the State of Texas and the owner of the soil, their officers, employees and agents, their successors or assigns, against any and all claims, liabilities, losses, damages, actions, personal injury (including death), costs and expenses, or other harm for which recovery of damages is sought, under any theory including tort, contract, or strict liability, including attorneys' fees and other legal expenses, including those related to environmental hazards, on the leased premises or in any way related to Lessee's failure to comply with any and all environmental laws; those arising from or in any way related to Lessee's operations or any other of Lessee's activities on the leased premises; those arising from Lessee's use of the surface of the leased premises; and those that may arise out of or be occasioned by Lessee's breach of any of the terms or provisions of this Agreement or any other act or omission of Lessee, its directors, officers, employees, partners, agents, contractors, subcontractors, guests, invitees, and their



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respective successors and assigns. Each assignee of this Agreement, or an interest therein, agrees to be liable for, exonerate, indemnify, defend and hold harmless the State of Texas and the owner of the soil, their officers, employees, and agents in the same manner provided above in connection with the activities of Lessee, its officers, employees, and agents as described above. EXCEPT AS OTHERWISE EXPRESSLY LIMITED HEREIN, ALL OF THE INDEMNITY OBLIGATIONS AND/OR LIABILITIES ASSUMED UNDER THE TERMS OF THIS AGREEMENT SHALL BE WITHOUT LIMITS AND WITHOUT REGARD TO THE CAUSE OR CAUSES THEREOF (EXCLUDING PRE-EXISTING CONDITIONS), STRICT LIABILITY, OR THE NEGLIGENCE OF ANY PARTY OR PARTIES (INCLUDING THE NEGLIGENCE OF THE INDEMNIFIED PARTY), WHETHER SUCH NEGLIGENCE BE SOLE, JOINT, CONCURRENT, ACTIVE, OR PASSIVE.

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

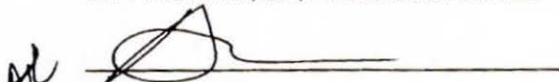
37. **APPLICABLE LAW.** This lease is issued under the provisions of Texas Natural Resources Code 52.171 through 52.190, commonly known as the Relinquishment Act, and other applicable statutes and amendments thereto, and if any provision in this lease does not conform to these statutes, the statutes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

38. **EXECUTION.** This oil and gas lease must be signed and acknowledged by the Lessee before it is filed of record in the county records and in the General Land Office of the State of Texas. Once the filing requirements found in Paragraph 39 of this lease have been satisfied, the effective date of this lease shall be the date found on Page 1.

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

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

LESSEE: PETROHAWK PROPERTIES, LP
BY: P-H ENERGY, LLC, ITS GENERAL PARTNER


BY: D. R. Deffenbaugh

Title: Vice-President Land

Date: 12/12/11

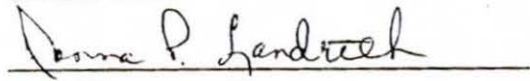
STATE OF TEXAS



BY: ROBERT E. LANDRETH,
as agent for the State of Texas

Date: 12/2/2011

STATE OF TEXAS



BY: DONNA P. LANDRETH,
as agent for the State of Texas

Date: 12/2/2011



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STATE OF OKLAHOMA

(CORPORATION ACKNOWLEDGMENT)

COUNTY OF TULSA

BEFORE ME, the undersigned authority, on this day personally appeared D.R. Deffenbaugh
known to me to be the person whose name is subscribed to the foregoing instruments as Vice President - Land
of P-H Energy, LLC, general partner of Petrohawk Properties, LP, a Texas limited partnership and acknowledged to me that he
executed the same for the purposes and consideration therein expressed, in the capacity stated, and as the act and deed of said corporation.

Given under my hand and seal of office this the 12th day of December, 2011.



Vickie Horton
Notary Public in and for Oklahoma

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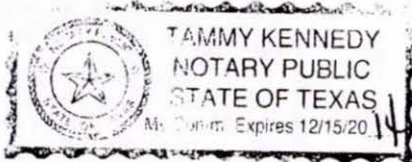
STATE OF Texas

(INDIVIDUAL ACKNOWLEDGMENT)

COUNTY OF Midland

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

Given under my hand and seal of office this the 2nd day of December, 2011.



Tammy Kennedy
Notary Public in and for Texas

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EXHIBIT "A"

THIS ADDENDUM IS HEREBY MADE TO THAT CERTAIN OIL AND GAS LEASE DATED NOVEMBER 28TH, 2011, BY AND BETWEEN THE STATE OF TEXAS, ACTING BY AND THROUGH ITS AGENT, ROBERT E. LANDRETH AND DONNA P. LANDRETH, HUSBAND AND WIFE, AS LESSOR AND PETROHAWK PROPERTIES, LP, AS LESSEE.

PROPERTY DESCRIPTION

ALL OF SECTION 3, BLOCK 45, PUBLIC SCHOOL LAND SURVEY, LOCATED IN ABSTRACT 3773, CULBERSON COUNTY AND IN ABSTRACT 3536, REEVES COUNTY TEXAS, CONTAINING 640 ACRES, MORE OR LESS.

ADDITIONAL TERMS AND PROVISIONS:

NOTWITHSTANDING ANYTHING CONTAINED HEREIN TO THE CONTRARY, the following provisions shall apply as an ADDENDUM to the foregoing, Oil, Gas, and Mineral Lease, and shall be in force and effect as a part of said lease.

1. The provisions of paragraphs 14 and 15 notwithstanding, the payment of shut-in or compensatory royalties shall not be permitted to extend this lease for more than two years after the expiration of the primary term.
2. Lessee shall also furnish the same information as set out in Paragraph 10 (B) in the same manner to the owner of the soil.
3. Paragraph 16 shall be replaced as follows:

Paragraph 16. (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 this lease 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 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 producing pooled unit pursuant to Texas Natural Resources Code 52.151-52.154, or (3) such greater or lesser number of acres as may then be allocated for production purposes to a portion 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 or permitted to be allocated to said well or wells for production purposes, this lease shall thereupon terminate as to all acreage except the minimum acreage allocable to said well or wells for production purposes. Notwithstanding the termination of this lease as to a portion of the lands covered hereby, Lessee shall nevertheless continue to have the right of ingress to and egress from the lands still subject to this lease for all purposes described in Paragraph 1 hereof, together with easements and rights-of-way for existing roads, existing pipelines and other existing facilities on, over and across all the lands described in Paragraph 1 hereof ("the retained lands"), for access to and from the retained lands and for the gathering or transportation of oil, gas, and other minerals produced from the retained lands.

Paragraph 16. (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 vertical 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 and gas is produced in paying quantities from such deeper depths covered by this lease.

4. Paragraph 19 shall be replaced as follows:

Paragraph 19. WARRANTY CLAUSE. The owner of the soil warrants and agrees to defend title to the leased premises by, through, and under the owner of the soil, but not otherwise. 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.

Lessor Initials: *RPL*
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5. Paragraph 26 shall be replaced as follows:

Paragraph 26. REMOVAL OF EQUIPMENT. Subject to limitations in this paragraph, Lessee shall have the right and obligation 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 owners 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 owners of the soil. The owners of the soil at their option shall become the owners' of any machinery, fixtures or casing which is not timely removed by Lessee under the terms of this paragraph. If the owners of the soil do not exercise said option Lessee shall retain the responsibility and liability for moving said equipment.

6. Paragraph 27 shall be replaced as follows:

Paragraph 27. (A) ASSIGNMENTS. Under the conditions contained in this paragraph and Paragraph 29 of this lease, the rights and estate 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 the satisfactory written evidence of the change in ownership, including the original recorded muniments of title (or certified copy of such original) when the ownership changed because of a conveyance. If this lease is assigned in its entirety as to only part of the acreage, the right and option to pay rentals shall be apportioned as between the several owners ratably, according to the area of each, and failure by one or more of them to pay his share of the rental shall not affect this lease on the part of the land upon which pro rata rentals are timely paid or tendered; however, if the assignor or assignee does not file a certified copy of such assignment in the General Land Office before the next rental paying date, the entire lease shall terminate for failure to pay the entire rental due under Paragraph 3. Every assignee shall succeed to all rights and be subject to all obligations, liabilities, and penalties owed to the State by the original lessee or any prior assignee of the lease, including any liabilities to the State for unpaid royalties.

7. There is reserved, to the owner of the soil herein, rights to the abandoned wellbore in the Southeast Quarter of the Southeast Quarter (SE/4 of SE/4) of Section 3, Block 45 for purposes and rights associated with the surface estate.

Lessor Initials: DPJ
RE

12-00431
DIANNE O. FLOREZ
COUNTY CLERK
2012 Jan 18 at 01:41 PM
REEVES COUNTY, TEXAS
By: EF E. Flores DEPUTY



True and Correct
copy of
Original filed in
Reeves County
Clerks Office

Page 2 of 2

File No. 111870
Leases
Date Filed: 04/26/12
Jerry E. Patterson, Commissioner
By [Signature]

2342

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

The above and foregoing is a full, true and correct photographic copy of the original record now in my lawful custody and possession, as the same is filed/recorded in the public records of my office, found in VOL. 920
PAGE 234, THRU 242 **OFFICIAL PUBLIC**



I hereby certified on 04/16/12

**DIANNE O. FLOREZ, COUNTY CLERK
REEVES COUNTY, TEXAS**

BY Mary Cabela DEPUTY

TEXAS



GENERAL LAND OFFICE

JERRY PATTERSON, COMMISSIONER

June 19, 2012

Micah Strother
Petrohawk Properties
333 Texas, Suite 400
Shreveport, LA 71101

Re: **State Lease MF 111870**

Two Relinquishment Act Leases described on **Page 2** hereof
Covering 640 ac., Sec. 3, Blk. 45, PSL Survey, Reeves &
Culberson Counties, TX

Dear Mr. Strother:

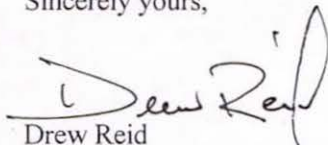
The certified copies of the Relinquishment Act leases covering the referenced tract have been approved and filed in our records under Mineral File numbers as set out on Page 2. **Please refer to these numbers when making payments to the State and in all future correspondence concerning the leases. Failure to include the mineral file numbers may delay processing of any payments towards the leases.**

There are several contractual and statutory responsibilities for the Lessee which are material provisions of the lease as outlined in the agreement such as Section 10(B) which requires submission of written notice for all drilling, production and related activities. When forms are filed with the Texas Railroad Commission, they are required to be submitted to the General Land Office as well. Examples are W-1, Application to Drill; W-2, Oil Well Completion Report and Log; G-1, Gas Well Completion Report and Log; W-3, Plugging Report; G-5, Gas Well Classification Report; G-10, Gas Well Status Report; W-10, Oil Well Status Report; W-12, Inclination Report; electric logs; directional surveys.

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

Your remittances are set out on Page 2 and have been applied to the State's portion of the cash bonus. In addition, we are in receipt of your processing and filing fees.

Sincerely yours,


Drew Reid
Mineral Leasing, Energy Resources
(512) 475-1534
drew.reid@glo.texas.gov

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

Post Office Box 12873 • Austin, Texas 78711-2873

512-463-5001 • 800-998-4GLO

www.glo.state.tx.us

Micah Strother
June 19, 2012
Page 2

State Lease MF111870D

Lease dated November 28, 2011 recorded Vol. 920, Pg. 243,
Reeves Co. & File 67845 Culberson Co.
Inland Resources Inc., agent for State of Texas, Lessor
Bonus received \$80,000.00

State Lease MF111870E

Lease dated November 28, 2011 recorded Vol. 920, Pg. 234,
Reeves Co. & File 67844 Culberson Co.
Robert & Donna Landreth, agent for State of Texas, Lessor,
Bonus received \$80,000.00

10.
File No. 111870

GLD letter

06/19/12

Date Filed: 06/19/12

Jerry E. Patterson, Commissioner

By 

PETROHAWK ENERGY CORPORATION

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

CHECK NO.

130280

REFERENCE	INVOICE DATE	INVOICE NO.	INVOICE AMT.	PRIOR PAYMENT	DISCOUNT	AMOUNT PAID
KGS24OCT2012- LAND1	10/22/12	1149	40.00			40.00
	NORTH REEVES PROSPECT					
			13702626			
			⑨			
			MF111870D			
VENDOR				CHECK DATE	TOTAL	
437294 COMMISSIONER OF THE TEXAS				10/25/12		\$40.00

121

X



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

CHECK NO.

130280

REFERENCE	INVOICE DATE	INVOICE NO.	INVOICE AMT.	PRIOR PAYMENT	DISCOUNT	AMOUNT PAID
KCS24OCT2012- LAND1	10/22/12 NORTH REEVES PROSPECT	1149	40.00 13702626		X 121	40.00
MF 111870 D book 920, pg 243					RECEIVED NOV 05 2012	
					COPY	
VENDOR				CHECK DATE	TOTAL	
437294 COMMISSIONER OF THE TEXAS				10/25/12		\$40.00

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

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

Bank of America

64-1278/611 GA

DATE _____

10/25/12

PAY Forty Dollars And Zero Cents*****

AMOUNT \$*****40.00

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. Sinner

11° 1 30 280 11°

Check Receipt

Check No.: 130280

Check Date: 10/25/2012

Period Covered:

11/28/2012-11/28/2013

Payment Type: DELAY RENTAL

Payment Amount: \$40.00

Lease Number: TX1703-088-005

Original Lessor: STATE OF TEXAS ET AL

Lease Effective Date: 11/28/2011

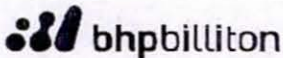
Recording Information: DOC12-00435 B920 P243

State: TX

County: REEVES, CULBERSON

Check Remarks:

PAYMENT REPRESENTS DELAY RENTAL DUE PURSUANT TO THE TERMS OF THE LEASE. CULBERSON COUNTY DOC 67845. ALL OF SEC 3, BLK 45 PSL SURVEY LOC IN A-3773, CULBERSON CO. AND A-3536 REEVES CO TX



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: \$40.00

Owner:
Address:

COMMISSIONER OF THE TEXAS GENERAL LAND
OFFICE
1700 N CONGRESS AVE STEPHEN F AUSTIN STATE
AUSTIN, TX 78701

IMPORTANT

PLEASE SIGN AND RETURN

Date Received 11/05/2012

Sign Here

[Signature] for GLO

By _____

Title

File No. MF11870 ⑪

2nd year rental lease D

Date Filed: 11/25/2012

Jerry E. Patterson, Commissioner

By JEP

PETROHAWK ENERGY CORPORATION

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

CHECK NO.

130286

REFERENCE	INVOICE DATE	INVOICE NO.	INVOICE AMT.	PRIOR PAYMENT	DISCOUNT	AMOUNT PAID
KGS24OCT2012- LAND1	10/22/12	1148	40.00			40.00
		NORTH REEVES PROSPECT	13702960			121
			MF111870E	920/243		
VENDOR				CHECK DATE	TOTAL	
437294 COMMISSIONER OF THE TEXAS				10/25/12		\$40.00

PETROHAWK ENERGY CORPORATION

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

CHECK NO.

130286

REFERENCE	INVOICE DATE	INVOICE NO.	INVOICE AMT.	PRIOR PAYMENT	DISCOUNT	AMOUNT PAID
KCS24OCT2012- LAND1	10/22/12 NORTH REEVES PROSPECT	1148	40.00 13702960			+ 40.00 121
VENDOR				CHECK DATE	TOTAL	
437294 COMMISSIONER OF THE TEXAS				10/25/12		\$40.00 BOLO-200

Handwritten: Paid
Rent
12/1/12
1046554
t602

COPY

RECEIVED
NOV 12 2012

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

PETROHAWK ENERGY CORPORATIONACCOUNTS PAYABLE DISBURSEMENT ACCOUNT
1000 LOUISIANA STREET, SUITE 5600
HOUSTON, TX 77002
832-204-2787

Bank of America

64-1278/611 GA

DATE

10/25/12

130286

13702960

PAY Forty Dollars And Zero Cents*****

AMOUNT \$*****40.00

TO THE
ORDER
OFCOMMISSIONER 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. Sumner

130286

Check Receipt

Check No.: 130286

Check Date: 10/25/2012

Period Covered:

11/28/2012-11/28/2013

Payment Type: DELAY RENTAL

Payment Amount: \$40.00

Lease Number: TX1703-088-004

Original Lessor: STATE OF TEXAS ET AL

Lease Effective Date: 11/28/2011

Recording Information: DOC12-00434 B920 P234

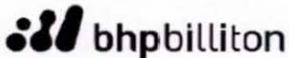
State: TX

County: REEVES, CULBERSON

COPY

Check Remarks:

PAYMENT REPRESENTS DELAY RENTAL DUE PURSUANT TO THE TERMS OF THE LEASE. CULBERSON COUNTY DOC 67844. ALL OF SEC 3, BLK 45 PSL SURVEY LOC IN A-3773, CULBERSON CO. AND A-3536 REEVES CO TX



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: \$40.00

Owner:

Address:

COMMISSIONER OF THE TEXAS GENERAL LAND
OFFICE
1700 N CONGRESS AVE STEPHEN F AUSTIN STATE
AUSTIN, TX 78701

IMPORTANT

PLEASE SIGN AND RETURN

Date Received 11/12/2014

Sign Here

A handwritten signature in black ink, appearing to be 'For GLO'.

By For GLO

Title

13105320

File No. MF111870

(12)

2nd year rental Lease E

Date Filed: 11/12/2012

Jerry E. Patterson, Commissioner

By JEP

021

11.15.13

From: "Vargas, Melanie" <Melanie.Vargas@bhpbilliton.com>
To: "Harriet.Dunne@GLO.TEXAS.GOV" <Harriet.Dunne@GLO.TEXAS.GOV>
Date: 1/18/2013 11:09 AM
Subject: RE: Your check # 141601 for \$5750.00 - need help identifying

-----Original Message-----

From: Vargas, Melanie
Sent: Friday, January 18, 2013 9:56 AM
To: Guzman, Brenda
Cc: Graybeal, Grace; Pulido, Joe
Subject: RE: Your check # 141601 for \$5750.00 - need help identifying

MF111870

Surface damages

This is for a ROW/Easement payment to the State of Texas on the Betty Hansard State 45-3 #2H.

I will speak with Aaron about how this was sent and if we can start sending these checks with some reference material for the State. I believe he is currently having a broker send these out.

Thanks!

Melanie

-----Original Message-----

From: Guzman, Brenda
Sent: Friday, January 18, 2013 9:46 AM
To: Vargas, Melanie
Cc: Graybeal, Grace; Pulido, Joe
Subject: FW: Your check # 141601 for \$5750.00 - need help identifying

Melanie - this one isn't mine, I believe it is yours. The GLO needs to know what the payment was for - Harriet's email is shown below.

Thank you,
Brenda

-----Original Message-----

From: Graybeal, Grace
Sent: Friday, January 18, 2013 9:09 AM
To: Pulido, Joe; Guzman, Brenda
Subject: FW: Your check # 141601 for \$5750.00 - need help identifying

Thank you Joe. I'm pretty sure this is a Permian lease so I am forwarding it to Brenda to investigate.

Grace

-----Original Message-----

From: Pulido, Joe
Sent: Friday, January 18, 2013 6:24 AM
To: Graybeal, Grace
Subject: FW: Your check # 141601 for \$5750.00 - need help identifying

Grace, Here is what I was speaking to you about. Let me know if I can help further. Thanks, Joe

-----Original Message-----

From: Harriet Dunne [mailto:Harriet.Dunne@GLO.TEXAS.GOV]
Sent: Thursday, January 17, 2013 8:56 AM
To: Pulido, Joe
Subject: Your check # 141601 for \$5750.00 - need help identifying

Joe,
Attached is a copy of a Petrohawk check. We think it might be surface damages or something similar, but we do not have the backup that probably came with the check. The State lease number is on the check, and for that we are grateful. However, we can find no indication on the check what Petrohawk is trying to pay.

Please let us know to what the payment should be credited.

Thank you,

Harriet Dunne, CPL
Manager, Mineral Leasing, Energy Resources Texas General Land Office
512-475-1579
NOTE: New e-mail address:
harriet.dunne@glo.texas.gov

This message and any attached files may contain information that is confidential and/or subject of legal privilege intended only for use by the intended recipient. If you are not the intended recipient or the person responsible for delivering the message to the intended recipient, be advised that you have received this message in error and that any dissemination, copying or use of this message or attachment is strictly forbidden, as is the disclosure of the information therein. If you have received this message in error please notify the sender immediately and delete the message.

PETROHAWK ENERGY CORPORATION

1360 POST OAK BLVD., SUITE 1900CT • HOUSTON, TX 77056 inquiry@bhpbilliton.com

CHECK NO.

141601

REFERENCE	INVOICE DATE	INVOICE NO.	INVOICE AMT.	PRIOR PAYMENT	DISCOUNT	AMOUNT PAID
EPL20DEC2012-1	12/19/12	CKREQ-TEXAS.G ENERAL.LAND.O FC-12/19/12	5,750.00			X 5,750.00
	IN REFERENCE TO FILE # MF111870-ALL OF SECTION 3 B			13705231		
VENDOR				CHECK DATE	TOTAL	X \$5,750.00
478046 TEXAS GENERAL LAND OFFICE				12/20/12		

only received a check

JAN 14 2013

COPY

BOLO-200

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

PETROHAWK ENERGY CORPORATION

ACCOUNTS PAYABLE DISBURSEMENT ACCOUNT

1360 POST OAK BLVD., SUITE 1900CT

HOUSTON, TX 77056

inquiry@bhpbilliton.com

Bank of America

64-1278/611 GA

DATE
12/20/12

141601

13705231

PAY Five Thousand Seven Hundred Fifty Dollars And Zero Cents*

AMOUNT \$*****5,750.00

TO THE
ORDER
OF

TEXAS GENERAL LAND OFFICE

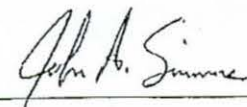
STATE OF TEXAS

P O BOX 12873

ATTN: ENERGY RESOURCES / MINERAL
LEASING

AUSTIN, TX 78711-2873 USA

VOID AFTER 180 DAYS



141601

File No. MF 111870

(17)

email re: Surface damages

Betty Hansard State 45-3 #2H

Date Filed: 1/18/13

Jerry E. Patterson, Commissioner

By SSD

MF111870



bhpbilliton
resourcing the future

DIVISION ORDER

To: **BHP Billiton Petroleum – Petrohawk Energy Corporation**
Land Administration
P O Box 22719
Houston, TX 77027-9998
(877) 311- 1443

Issue Date: 7/8/2013
Property Name: BETTYE HANSARD STATE 45-3 2H
Property #: 41135282
Production: ALL PRODUCTS
Operator: PETROHAWK OPERATING COMPANY
Legal Description: SEC 3, BLK 45, PSL SVY, REEVES AND CULBERSON COUNTY, TX REEVES COUNTY, TEXAS (635.9500 ACRES)

CREDIT TO

Owner # 479453
STATE OF TEXAS GLO
1700 N CONGRESS AVE #640
AUSTIN TX 78701-1495

Decimal	Type	Status	Start Date
0.12500000	ERI	RELIEVED	1/1/2013

PLEASE SIGN AND RETURN THIS COPY

The undersigned severally and not jointly certifies that they are the legal owner of the interest set out above of all products produced from the property described above:

THIS AGREEMENT DOES NOT AMEND ANY LEASE OR OPERATING AGREEMENT BETWEEN THE INTEREST OWNERS AND THE LESSEE OR OPERATOR OR ANY OTHER CONTRACTS FOR THE PURCHASE OF OIL OR GAS.

The following provisions apply to each interest owner ("owner") who executes this agreement and may not be altered as to its terms:

TERMS OF SALE: The undersigned will be paid in accordance with the division of interest set out above. The payor shall pay all parties at the price agreed to by the operator for products to be sold pursuant to this division order. Purchaser shall compute quantity and make corrections for gravity and temperature and make deductions for impurities.

PAYMENT: From the effective date, payment is to be made monthly by payor's check or electronic funds transfer, based on this division of interest, for products run during the preceding calendar month from the property listed above, less taxes required by law to be deducted and remitted by payor as purchaser. Payments of less than \$100 may be accrued before disbursement until the total amount equals \$100 or more, or until 12 months of proceeds accumulate, whichever occurs first. However, the payor may hold accumulated proceeds of less than \$10 until production ceases or the payor's responsibility for making payment for production ceases, whichever occurs first. Payee agrees to refund to payor any amounts attributable to an interest or part of an interest that payee does not own.

INDEMNITY: The owner agrees to indemnify and hold payor harmless from all liability resulting from payments made to the owner in accordance with such division of interest, including but not limited to attorney fees or judgments in connection with any suit that affects the owner's interest to which payor is made a party.

DISPUTE; WITHHOLDING OF FUNDS: If a suit is filed that affects the interest of the owner, written notice shall be given to payor by the owner together with a copy of the complaint or petition filed.

In the event of a claim or dispute that affects title to the division of interest credited herein, payor is authorized to withhold payments accruing to such interest, without interest unless otherwise required by applicable statute, until the claim or dispute is settled.

TERMINATION: Termination of this agreement is effective on the first day of the month that begins the 30th day after the date written notice of termination is received by either party.

NOTICES: The owner agrees to notify payor in writing of any change in the division of interest, including changes of interest contingent on payment of money or expiration of time.

No change of interest is binding on payor until the recorded copy of the instrument of change or documents satisfactorily evidencing such change are furnished to payor at the time the change occurs.

Any change of interest shall be made effective on the first day of the month following receipt of such notice by payor.

Any correspondence regarding this agreement shall be furnished to the addresses listed unless otherwise advised by either party.

In addition to the legal rights provided by the terms and provisions of this division order, an owner and payor may have certain statutory rights under the laws of this state.

PLEASE SIGN AND RETURN THIS COPY

Special Clauses/Comments:

Owners Signatures: _____

Owner Tax I.D. Number: XXXXXX - 9999 (TIN)

Day Time Phone Number: _____

E-Mail Address: _____

Owners Mailing Address: 1700 N CONGRESS AVE #640
AUSTIN TX 78701-1495

Witness: _____

Federal Law requires you to furnish your Social Security or Taxpayer Identification Number.
Failure to comply will result in 28% tax withholding and will not be refundable by Payor.



DIVO 19224 479453-3

PLEASE SIGN AND RETURN THIS COPY
BERNL - 19224

File No. MP 111870
Division Order

Date Filed: 7/11/13
Jerry E. Patterson, Commissioner
By EA

**RAILROAD COMMISSION OF TEXAS****Form G-1**

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

Status: Approved
Date: 12/13/2013
Tracking No.: 62973

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

Operator Name: PETROHAWK OPERATING COMPANY Operator No.: 660146
Operator Address: REGULATORY DEPARTMENT 1360 POST OAK BLVD SUITE 150 HOUSTON, TX 77056-0000

WELL INFORMATION

API No.: 42-389-33061 County: REEVES
Well No.: 1H RRC District No.: 08
Lease Name: BETTYE HANSARD STATE 45-3 Field Name: FORD, WEST (WOLFCAMP)
RRC Gas ID No.: 270785 Field No.: 31913800
Location: Section: 3, Block: 45, Survey: PSL/CARR, T D, Abstract: 3536

Latitude: Longitude:

This well is located _____ miles in a
direction from 10 MILES SW OF ORLA,
which is the nearest town in the county.

FILING INFORMATION

Purpose of filing: Well Record Only
Type of completion: New Well
Well Type: Shut-In Producer Completion or Recompletion Date: 02/11/2012
Type of Permit Date Permit No.
Permit to Drill, Plug Back, or Deepen 10/26/2011 726746
Rule 37 Exception
Fluid Injection Permit
O&G Waste Disposal Permit
Other:

COMPLETION INFORMATION

Spud date: Date of first production after rig released: 02/11/2012
Date plug back, deepening, recompletion, or drilling operation commenced: 12/18/2011 Date plug back, deepening, recompletion, or drilling operation ended: 02/11/2012
Number of producing wells on this lease in this field (reservoir) including this well: 1 Distance to nearest well in lease & reservoir (ft.): 0.0
Total number of acres in lease: 635.96 Elevation (ft.): 3015 GL
Total depth TVD (ft.): 7499 Total depth MD (ft.): 11139
Plug back depth TVD (ft.): 5272 Plug back depth MD (ft.): 5272
Was directional survey made other than inclination (Form W-12)? Yes Rotation time within surface casing (hours):
Is Cementing Affidavit (Form W-15) attached? Yes
Recompletion or reclass? No Multiple completion? No
Type(s) of electric or other log(s) run: Other
Electric Log Other Description: NEUTRON/GR
Location of well, relative to nearest lease boundaries of lease on which this well is located: 78.0 Feet from the South Line and
1213.0 Feet from the West Line of the
BETTYE HANSARD STATE 45-3 Lease. Off Lease: No

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

Field & Reservoir	Gas ID or Oil Lease No.	Well No.	Prior Service Type
-------------------	-------------------------	----------	--------------------

G1: N/A
 PACKET: N/A

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

GAU Groundwater Protection Determination Depth (ft.): Date: 10/27/2011
 SWR 13 Exception Depth (ft.):

GAS MEASUREMENT DATA

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

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

FIELD DATA AND PRESSURE CALCULATIONS

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

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

CASING RECORD

Row	Type of Casing	Casing Size (in.)	Hole Size (in.)	Setting Depth (ft.)	Multi - Stage Tool Depth (ft.)	Multi - Stage Shoe Depth (ft.)	Cement Class	Cement Amount (sacks)	Slurry Volume (cu. ft.)	Top of Cement (ft.)	TOC Determined By
1		13 3/8	17 1/2	835			C	705	1161.0	SURF	
2		9 5/8	12 1/4	5579			H	990	2029.0	2543	
3		9 5/8	12 1/4	5579	2542		H	820	1835.0	1020	

LINER RECORD

Row	Liner Size (in.)	Hole Size (in.)	Liner Top (ft.)	Liner Bottom (ft.)	Cement Class	Cement Amount (sacks)	Slurry Volume (cu. ft.)	Top of Cement (ft.)	TOC Determined By
N/A									

TUBING RECORD

Row	Size (in.)	Depth Size (ft.)	Packer Depth (ft.)/Type
N/A			

PRODUCING/INJECTION/DISPOSAL INTERVAL

Row	Open hole?	From (ft.)	To (ft.)
N/A			

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

Was hydraulic fracturing treatment performed? No

Is well equipped with a downhole actuation sleeve? No

If yes, actuation pressure (PSIG):

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

Actual maximum pressure (PSIG) during hydraulic fracturing:

Has the hydraulic fracturing fluid disclosure been reported to FracFocus disclosure registry (SWR29)? No

Row	Type of Operation	Amount and Kind of Material Used	Depth Interval (ft.)	
1		1ST CMT PLUG IN 8 3/4" PILOT HOLE (285 SXS CL H)	6997.0	7392.0
2		2ND CMT PLUG IN 8 3/4" PILOT HOLE (240 SXS CL H)	6171.0	6648.0
3		KOP FOR 8 3/4" LATERAL	6266.0	6266.0
4		CMT PLUG IN 8 3/4" LATERAL (80 SXS CL C)	6071.0	6221.0
5		CBP SET - RAN DUMP BAILER W/ TOTAL 8 SXS CMT (20')	5272.0	5292.0

FORMATION RECORD

<u>Formations</u>	<u>Encountered</u>	<u>Depth TVD (ft.)</u>	<u>Depth MD (ft.)</u>	<u>Is formation isolated?</u>	<u>Remarks</u>
-------------------	--------------------	------------------------	-----------------------	-------------------------------	----------------

N/A

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

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

REMARKS

8 3/4" PILOT HOLE DRILLED TO 7499. 2 CMT PLUGS SET @ 7392 & 6648. KOP @ 6266. 8 3/4 HOLE DRILLED TO 11139 MD/6854 TVD. LATERAL ABANDONED WITH CMT PLUG SET @ 6221. CIBP SET @ 5292 W/8 SXS CMT ON TOP FROM DUMP BAILER. WELL SHUT-IN PENDING EVALUATION.

RRC REMARKS**PUBLIC COMMENTS:****CASING RECORD :**

9 5/8" CASING - TOP OUT JOB PERFORMED W/95 SXS CL C, 11.9 #/GAL (38 BBLS TOTAL CEMENT BACK AT SURFACE).

TUBING RECORD:**PRODUCING/INJECTION/DISPOSAL INTERVAL :****ACID, FRACTURE, CEMENT SQUEEZE, CAST IRON BRIDGE PLUG, RETAINER, ETC. :**

9 5/8" CASING - TOP OUT JOB PERFORMED W/95 SXS CL C, 11.9 #/GAL (38 BBLS TOTAL CEMENT BACK AT SURFACE).

GAS MEASUREMENT DATE REMARK:**OPERATOR'S CERTIFICATION**

Printed Name: Greg Bilbro

Title: DRGA

Telephone No.: (512) 476-1245

Date Certified: 12/12/2013

2013

CERTIFICATE OF COMPLIANCE
AND TRANSPORTATION AUTHORITY

P-4

5/02—WWW-1

READ INSTRUCTIONS ON BACK

1. Field name exactly as shown on proration schedule FORD, WEST (WOLFCAMP)		2. Lease name as shown on proration schedule BETTYE HANSARD STATE 45-3					
3. Current operator name exactly as shown on P-5 Organization Report BHP BILLITON PET (TXLA OP) CO		4. Operator P-5 no. 068596	5. Oil Lse/Gas ID no.	6. County REEVES	7. RRC district 08		
8. Operator address including city, state, and zip code 1360 POST OAK BLVD HOUSTON, TX 77056		9. Well no(s) (see instruction E) 1H					
		10. Classification ☒ Oil ☐ Gas ☐ Other (see instruction A)		11. Effective Date 08/01/13			
12. Purpose of Filing. (Complete section a or b below.) (See instructions B and G)							
a. Change of: ☒ operator ☐ oil or condensate gatherer ☐ gas gatherer ☒ gas purchaser ☐ gas purchaser system code							
field name from: _____ lease name from: _____							
OR							
b. New RRC Number for: ☐ oil lease ☐ gas well ☐ other well (specify) _____ Due to: ☐ new completion or recompletion ☐ reclass oil to gas ☐ reclass gas to oil ☐ consolidation, unitization, or subdivision (oil lease only)							
13. Authorized GAS WELL GAS or CASINGHEAD GAS Gatherer(s) and/or Purchaser(s). (See instruction G).							
Gatherer	Purchaser	Name of GAS WELL GAS or CASINGHEAD GAS Gatherer(s) or Purchaser(s) As Indicated in Columns to the Left (Attach an additional sheet in same format if more space is needed)			Purchaser's RRC Assigned System Code	Percent of Take	Full-well stream
	x	BHP BILLITON PETROLEUM (TXLA OP) CO. (068596)			0001	100	
x		ENTERPRISE PRODUCTS OPERATING LLC (253368)				100	
14. Authorized OIL or CONDENSATE Gatherer(s). (See instruction G).						RRC USE ONLY	
Name of OIL or CONDENSATE Gatherer(s) - List Highest Volume Gatherer First (Attach an additional sheet in same format if more space is needed)					Percent of Take	Reviewer's initials: _____	
ENTERPRISE PRODUCTS OPERATING LLC (253368)					100	Approval date: _____	
15. PREVIOUS OPERATOR CERTIFICATION FOR CHANGE OF OPERATOR P-4 FILING. Being the PREVIOUS OPERATOR, I certify that operating responsibility for the well(s) designated in this filing, located on the subject lease has been transferred in its entirety to the above named Current Operator. I understand, as Previous Operator, that designation of the above named operator as Current Operator is not effective until this certificate is approved by the Commission.							
PETROHAWK OPERATING COMPANY				Signature _____			
Name of Previous Operator				☒ Authorized Employee of previous operator ☐ Authorized agent of previous operator (see instruction G)			
JAMES C. MELEAR				7/10/13 (713) 961-8561			
Name (print)				Date Phone with area code			
SR. REGULATORY SPECIALIST							
Title							
16. CURRENT OPERATOR CERTIFICATION. By signing this certificate as the Current Operator, I certify that all statements on this form are true and correct and I acknowledge responsibility for the regulatory compliance of the subject lease including plugging of well(s) pursuant to Rule 14. I further acknowledge that I assume responsibility for the physical operation, control, and proper plugging of each well designated in this filing. I also acknowledge that I will remain designated as the Current Operator until a new certificate designating a new Current Operator is approved by the Commission.							
CAREY P. HOLTZENDORF				Signature _____			
Name (print)				☒ Authorized Employee of current operator ☐ Authorized agent of current operator (see instruction G)			
ACTING REGULATORY MANAGER				7/10/13 (713) 552-4581			
Title				Date Phone with area code			
E-mail Address (optional)							

CERTIFICATE OF COMPLIANCE
AND TRANSPORTATION AUTHORITY

P-4

Tracking No.: 62973

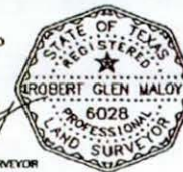
This facsimile P-4 was generated electronically from data submitted to the RRC.
A certification of the automated data is available in the RRC's Austin office.

1. Field name exactly as shown on proration schedule FORD, WEST (WOLFCAMP)		2. Lease name as shown on proration schedule BETTYE HANSARD STATE 45-3					
3. Current operator name exactly as shown on P-5 Organization Report PETROHAWK OPERATING COMPANY		4. Operator P-5 no. 660146	5. Oil Lse/Gas ID no 270785	6. County REEVES	7. RRC district 08		
8. Operator address including city, state, and zip code REGULATORY DEPARTMENT 1360 POST OAK BLVD SUITE 150 HOUSTON, TX 77056		9. Well no(s) (see instruction E) 1H			11. Effective Date 02/11/2012		
		10. Classification ☐ Oil ☒ Gas ☐ Other (see instruction A)					
12. Purpose of Filing. (Complete section a or b below.) (See instructions B and G) a. Change of: ☐ operator ☐ oil or condensate gatherer ☐ gas gatherer ☐ gas purchaser ☐ gas purchaser system code ☐ field name from _____ ☐ lease name from _____ -- OR -- b. New RRC Number for: ☐ oil lease ☒ gas well Due to: ☐ new completion or recompletion ☐ reclass oil to gas ☐ reclass gas to oil ☐ other well (specify) _____ ☐ consolidation, unitization, or subdivision (oil lease only)							
13. Authorized GAS WELL GAS or CASINGHEAD GAS Gatherer(s) and/or Purchaser(s). (See instruction G).							
Gatherer	Purchaser	Name of GAS WELL GAS or CASINGHEAD GAS Gatherer(s) or Purchaser(s) As Indicated in Columns to the Left (Attach an additional sheet in same format if more space is needed)			Purchaser's RRC Assigned System Code	Percent of Take	Full-well stream
14. Authorized OIL or CONDENSATE Gatherer(s). (See instruction G).							
Name of OIL or CONDENSATE Gatherer(s) - List Highest Volume Gatherer First (Attach an additional sheet in same format if more space is needed)						Percent of Take	
N/A							
RRC USE ONLY: Reviewer's initials: <u>RRC Staff</u> Approval date: <u>12/13/2013</u>							
15. PREVIOUS OPERATOR CERTIFICATION FOR CHANGE OF OPERATOR P-4 FILING. Being the PREVIOUS OPERATOR, I certify that operating responsibility for the well(s) designated in this filing, located on the subject lease has been transferred in its entirety to the above named Current Operator. I understand, as Previous Operator, that designation of the above named operator as Current Operator is not effective until this certificate is approved by the Commission.							
Name of Previous Operator _____ Name (print) _____ Title _____				Signature ☐ Authorized Employee of previous operator ☐ Authorized agent of previous operator (see instruction G) _____ Date _____ Phone with area code _____			
16. CURRENT OPERATOR CERTIFICATION. By signing this certificate as the Current Operator, I certify that all statements on this form are true and correct and I acknowledge responsibility for the regulatory compliance of the subject lease including plugging of well(s) pursuant to Rule 14. I further acknowledge that I assume responsibility for the physical operation, control, and proper plugging of each well designated in this filing. I also acknowledge that I will remain designated as the Current Operator until a new certificate designating a new Current Operator is approved by the Commission.							
Name (print) <u>DRGA</u> Title <u>greg@drgainc.com</u> E-mail Address (optional)				Greg Bilbro Signature ☒ Authorized Employee of current operator ☐ Authorized agent of current operator (see instruction G) <u>01/05/2013</u> <u>(512) 476-1245</u> Date Phone with area code			

62973

JOB #: 1106050

I HEREBY STATE THAT THIS PLAT
SHOWS THE SUBJECT LOCATION BASED
ON INFORMATION PROVIDED BY
THE CLIENT.



ROBERT GLEN MALOY
REGISTERED PROFESSIONAL LAND SURVEYOR
LICENSE NO. 6028

LINE	BEARING	DISTANCE
L1	N 01°34'38" E	389.16'
L2	N 01°34'38" E	4385.59'
L3	N 01°34'38" E	317.02'

GENERAL NOTES:

- Units are United States Survey Feet.
- Vertical Datum is NAVD 88.
- Area and Distances are "Grid".
- Combined Scale Factor = 0.999821717
- Coordinates are Texas Coordinate System of 1983, Texas Central Zone unless otherwise stated.
- Bearings are based upon Texas Coordinate System of 1983, Texas Central Zone and are based on the monument "Marathon" (Y = 10,607,101.00, X = 1,140,367.70).
- All lease and tract information shown hereon is done as by limited deed record information only. All acreages shown hereon are by deed and lease call, except where noted. This is not in any way a "Boundary Survey".

PREPARED BY: PETROHAWK Operating Company
6100 S. Yale Ave.
Suite 500
Tulsa, Oklahoma 74136

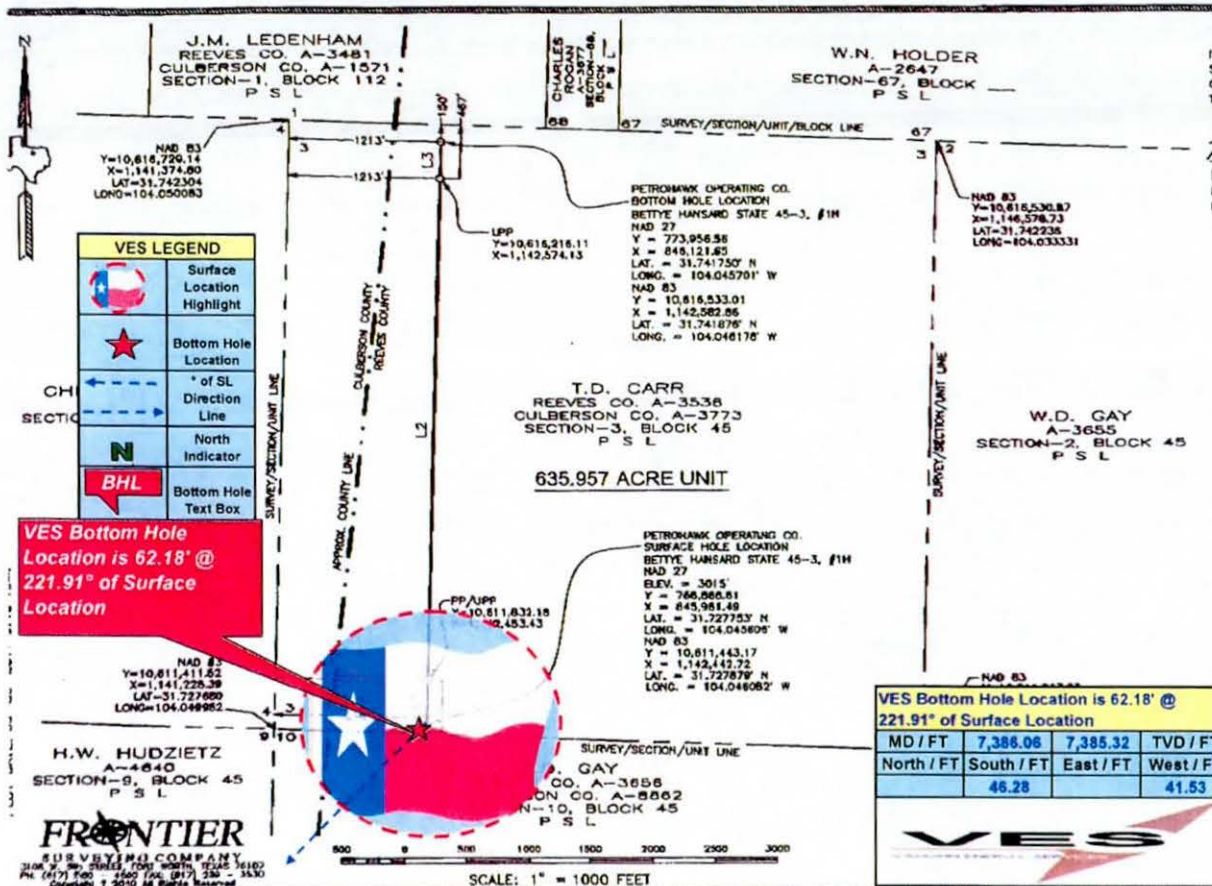
PLAT OF:

A PROPOSED WELL LOCATION FOR:

PETROHAWK OPERATING CO.
BETTYE HANSARD STATE 45-3, #1H

SITUATED IN SECTION 3, BLOCK 45, A - 3536
(REEVES CO.), A - 3773 (CULBERSON CO.)
T.D. CARR SURVEY, APPROX. 10 MILES
SOUTHWEST OF ORLA IN
CULBERSON AND REEVES COUNTY, TEXAS

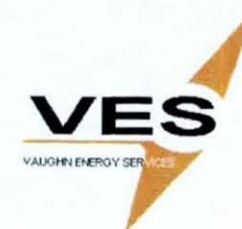
Completion Date: 07/08/11 File Name: 1106050.DWG
Scale: 1" = 1000' Surveyed by: LJ/RR
Drawn by: JK Checked by: RM/TG



FRONTIER
SURVEYING COMPANY
2106 W. 21st Street, Fort Worth, Texas 76102
Ph: (817) 760-4600 Fax: (817) 350-5530
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Company: Petrohawk Operating
 Lease/Well: Bettye Hansard State 45-3/1H
 Location: 10 Miles SW of Orla
 Rig Name: Nabors M-45
 State/County: Texas/Reeves
 Latitude: 31.73
 GRID North is 1.91 Degrees West of True North
 VS-Azi: 0.00 Degrees



Depth Reference : RKB = 22.7 Feet

DRILLOG MS GYRO SURVEY CALCULATIONS

Filename: msgyro_run01-01_ed.ut

Minimum Curvature Method

Report Date/Time: 1/30/2012 / 10:43

Vaughn Energy Services

Gardendale, Texas

432-563-5444

Surveyor: Seth Hardin

Bettye Hansard State 45-3 1H / API 42-389-33061

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	TVD FT	+N/-S FT	+E/-W FT	Vertical Section FT	Closure Distance FT	Closure Direction Deg	Dogleg Severity Deg/100
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	****
80.22	0.42	312.31	80.22	0.20	-0.22	0.20	0.30	312.31	0.53
173.91	0.17	80.27	173.91	0.46	-0.34	0.46	0.57	323.53	0.58
267.60	0.40	274.98	267.60	0.51	-0.53	0.51	0.73	313.91	0.61
361.29	0.47	266.02	361.29	0.51	-1.25	0.51	1.35	292.32	0.10
454.98	0.69	259.34	454.97	0.38	-2.19	0.38	2.22	279.84	0.24
548.67	1.01	255.22	548.65	0.06	-3.54	0.06	3.54	271.04	0.34
642.36	1.61	224.82	642.32	-1.08	-5.27	-1.08	5.38	258.41	0.96
736.05	1.19	223.10	735.98	-2.73	-6.86	-2.73	7.38	248.34	0.45
829.74	1.30	213.94	829.65	-4.32	-8.12	-4.32	9.20	241.99	0.24
923.43	1.28	228.95	923.31	-5.89	-9.50	-5.89	11.18	238.21	0.36
1017.12	1.20	272.17	1016.98	-6.54	-11.28	-6.54	13.04	239.88	0.98
1110.81	1.15	244.20	1110.65	-6.91	-13.11	-6.91	14.82	242.19	0.61
1204.50	0.71	227.71	1204.33	-7.71	-14.39	-7.71	16.32	241.80	0.55
1298.19	0.56	272.98	1298.02	-8.08	-15.27	-8.08	17.28	242.12	0.54
1391.88	0.59	180.37	1391.70	-8.54	-15.73	-8.54	17.90	241.51	0.89
1485.57	0.64	205.43	1485.39	-9.49	-15.96	-9.49	18.57	239.25	0.29
1579.26	0.61	208.41	1579.07	-10.40	-16.42	-10.40	19.44	237.64	0.05
1672.95	0.88	234.46	1672.75	-11.26	-17.24	-11.26	20.59	236.85	0.46

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	TVD FT	+N/-S FT	+E/-W FT	Vertical Section FT	Closure Distance FT	Closure Direction Deg	Dogleg Severity Deg/100
1766.64	0.96	256.51	1766.43	-11.86	-18.59	-11.86	22.05	237.46	0.38
1860.33	1.04	240.80	1860.11	-12.46	-20.09	-12.46	23.64	238.20	0.31
1954.02	0.89	251.52	1953.78	-13.11	-21.53	-13.11	25.20	238.67	0.25
2047.71	0.69	314.91	2047.47	-12.94	-22.62	-12.94	26.06	240.23	0.91
2141.40	0.69	236.26	2141.15	-12.85	-23.49	-12.85	26.77	241.32	0.93
2235.09	0.65	217.68	2234.84	-13.58	-24.28	-13.58	27.82	240.78	0.23
2328.78	0.70	218.70	2328.52	-14.45	-24.96	-14.45	28.84	239.93	0.05
2422.47	0.78	149.29	2422.20	-15.44	-25.00	-15.44	29.38	238.29	0.90
2516.16	0.78	221.54	2515.89	-16.47	-25.09	-16.47	30.01	236.73	0.98
2609.85	0.78	233.22	2609.57	-17.32	-26.02	-17.32	31.26	236.35	0.17
2703.54	0.82	239.94	2703.25	-18.04	-27.11	-18.04	32.57	236.36	0.11
2797.23	0.82	256.64	2796.93	-18.53	-28.34	-18.53	33.86	236.83	0.25
2890.92	0.71	295.22	2890.61	-18.44	-29.52	-18.44	34.81	238.02	0.55
2984.61	0.66	266.02	2984.30	-18.23	-30.59	-18.23	35.61	239.21	0.37
3078.30	0.37	247.99	3077.98	-18.38	-31.41	-18.38	36.39	239.67	0.35
3171.99	0.31	259.67	3171.67	-18.53	-31.94	-18.53	36.93	239.87	0.10
3265.68	0.20	209.36	3265.36	-18.72	-32.27	-18.72	37.30	239.87	0.25
3359.37	0.25	185.16	3359.05	-19.07	-32.36	-19.07	37.56	239.49	0.11
3453.06	0.46	102.31	3452.74	-19.35	-32.02	-19.35	37.41	238.85	0.52
3546.75	0.65	138.99	3546.42	-19.83	-31.30	-19.83	37.05	237.65	0.42
3640.44	0.46	170.42	3640.11	-20.60	-30.89	-20.60	37.13	236.30	0.38
3734.13	0.19	169.66	3733.80	-21.12	-30.80	-21.12	37.35	235.56	0.29
3827.82	0.27	104.09	3827.49	-21.32	-30.56	-21.32	37.26	235.09	0.28
3921.51	0.45	181.23	3921.18	-21.75	-30.35	-21.75	37.34	234.38	0.50
4015.20	0.40	278.81	4014.86	-22.06	-30.68	-22.06	37.79	234.28	0.69
4108.89	0.37	24.35	4108.55	-21.74	-30.89	-21.74	37.77	234.86	0.66
4202.58	0.53	300.40	4202.24	-21.25	-31.14	-21.25	37.69	235.69	0.66
4296.27	0.38	274.71	4295.93	-21.00	-31.82	-21.00	38.13	236.58	0.27
4389.96	0.37	301.59	4389.62	-20.82	-32.38	-20.82	38.50	237.27	0.19
4483.65	0.32	296.83	4483.30	-20.54	-32.88	-20.54	38.77	238.00	0.06
4577.34	0.38	328.46	4576.99	-20.16	-33.27	-20.16	38.90	238.79	0.21
4671.03	0.42	265.87	4670.68	-19.92	-33.77	-19.92	39.21	239.46	0.44
4764.72	0.48	198.89	4764.37	-20.32	-34.24	-20.32	39.82	239.31	0.53
4858.41	0.14	233.23	4858.06	-20.77	-34.46	-20.77	40.24	238.93	0.40
4952.10	0.14	233.23	4951.75	-20.90	-34.64	-20.90	40.46	238.89	0.00
5045.79	0.14	233.23	5045.44	-21.04	-34.83	-21.04	40.69	238.86	0.00
5139.48	0.18	302.81	5139.13	-21.03	-35.04	-21.03	40.87	239.03	0.20
5233.17	0.03	222.55	5232.82	-20.96	-35.18	-20.96	40.96	239.21	0.19
5326.86	0.14	75.68	5326.51	-20.95	-35.09	-20.95	40.87	239.16	0.17

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	TVD FT	+N/-S FT	+E/-W FT	Vertical Section FT	Closure Distance FT	Closure Direction Deg	Dogleg Severity Deg/100
5420.55	0.12	54.59	5420.20	-20.87	-34.90	-20.87	40.66	239.13	0.05
5514.24	0.20	128.67	5513.88	-20.91	-34.69	-20.91	40.51	238.92	0.21
5607.93	0.18	173.73	5607.57	-21.16	-34.55	-21.16	40.51	238.52	0.15
5701.62	0.44	38.02	5701.26	-21.02	-34.31	-21.02	40.24	238.51	0.63
5795.31	0.34	354.60	5794.95	-20.46	-34.11	-20.46	39.78	239.05	0.33
5889.00	0.14	144.81	5888.64	-20.28	-34.07	-20.28	39.65	239.24	0.50
5982.69	0.37	185.98	5982.33	-20.68	-34.04	-20.68	39.82	238.72	0.30
6076.38	0.56	200.72	6076.02	-21.41	-34.23	-21.41	40.38	237.97	0.24
6170.07	0.64	182.49	6169.70	-22.37	-34.42	-22.37	41.05	236.98	0.22
6263.76	0.74	180.29	6263.38	-23.50	-34.44	-23.50	41.70	235.69	0.11
6357.45	0.82	206.51	6357.07	-24.71	-34.75	-24.71	42.64	234.58	0.39
6451.14	0.87	151.03	6450.75	-25.93	-34.70	-25.93	43.32	233.23	0.84
6544.83	0.89	155.17	6544.43	-27.21	-34.05	-27.21	43.59	231.37	0.07
6638.52	1.11	208.43	6638.10	-28.67	-34.18	-28.67	44.61	230.01	0.98
6732.21	0.82	197.42	6731.78	-30.10	-34.81	-30.10	46.02	229.14	0.37
6825.90	0.81	196.27	6825.46	-31.38	-35.19	-31.38	47.15	228.28	0.02
6919.59	0.54	230.86	6919.15	-32.29	-35.72	-32.29	48.16	227.88	0.51
7013.28	2.06	174.39	7012.81	-34.25	-35.90	-34.25	49.62	226.35	1.94
7106.97	2.28	182.92	7106.43	-37.79	-35.83	-37.79	52.07	223.48	0.42
7200.66	2.12	206.93	7200.06	-41.19	-36.71	-41.19	55.17	221.71	0.99
7294.35	2.26	229.74	7293.68	-43.93	-38.90	-43.93	58.68	221.53	0.94
7386.06	2.15	226.61	7385.32	-46.28	-41.53	-46.28	62.18	221.91	0.18



I Seth Hardin certify that I am employed by Vaughn Energy Services. That I did on the day(s) of 01/11/12 through 01/11/12 conduct or supervise the taking of a Rate Gyro survey from a depth of 0 feet to a depth of 7386.06 feet; that the data is true, correct, complete and within the limitations of the tool as set forth by Vaughn Energy Services, that I am authorized and qualified to make this report; that this survey was conducted at the at the request of Petrohawk Operating for the Gettysburg State 45-3 Well # 1H API # 42-389-33061 in Reeves County, Texas ; and that I have reviewed this report and find that it conforms to the principles and procedures as set forth by Vaughn Energy Services

Seth Hardin
Service Technician
Vaughn Energy Services

57.07.9



Survey Certification Form

I, Eric Fitzgerald certify that; I am employed by Leam Drilling Systems, inc. that I did on the day(s) of 01/14/2012 through 02/04/2012 conduct or supervise the taking of a MWD Survey from a depth of 6,282' to 11,115'; that the depth is true, correct, complete and within the limitations of the tools as set forth by Leam Drilling Systems, Inc., that I am authorized and qualified to make this report; that this survey was conducted at the request of Petrohawk Operating Co., for the Bettye Hansard State 45-3 #1H, in Reeves County, Texas; and that I have reviewed this report and find that it conforms to the principles and procedures as set forth by Leam Drilling Systems, Inc.

Eric Fitzgerald

Surveyor Name
MWD Operator



November 26, 2012

Railroad Commission of Texas
Oil and Gas Division
P.O. Box 12967
Capitol Station
Austin, TX 78711

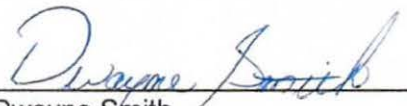
Attn: Pam Johns

RE: Petrohawk Operating, Inc.
Bettye Hansard State 45-3 #1H
Reeves County, Tx.
API # 42-389-33061
ONLINE FILING

Enclosed, please find the original and one copy of the survey performed on the above referenced well by Leam Drilling Systems, Inc. (P-5 No. 491646). Other information required by your office is as follows:

Name & Title of Surveyor	Drainhole Number	Surveyed Depths	Dates Performed	Type of Survey
Eric Fitzgerald	#1H	6282' - 11,115'	01/14/2012 - 02/04/2012	MWD

A certified plat on which the bottom hole location is oriented both to the surface location and to the lease lines (or unit lines in case of pooling) is attached to the survey report. If any other information is required, please contact the undersigned at the letterhead address and phone number.

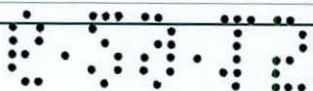

Dwayne Smith
Well Planner

Enclosures

Leam Drilling Systems

Survey Report

Company: PETROHAWK ENERGY				Date: 2/4/2012		Time: 08:13:09		Page: 1			
Field: Reeves County, Tx				Co-ordinate(NE) Reference:		Site: Bettye Hansard State 45-3 #1H					
Site: Bettye Hansard State 45-3 #1H				Vertical (TVD) Reference:		SITE 3115.0					
Well: Well #45-3-1H				Section (VS) Reference:		Well (0.00N,0.00E,1.58Azi)					
Wellpath: #1H				Survey Calculation Method:		Minimum Curvature		Db: Sybase			
Survey: Leam MWD				Start Date:		1/21/2012					
Company: Leam Drilling Systems				Engineer:		DSmith					
Tool: MWD;Std MWD				Tied-to:		From: Pilot Hole					
Well: Well #45-3-1H				Slot Name:							
Well Position:		+N/-S	0.00 ft	Northing:	768866.81 ft	Latitude:		31 43 39.911 N			
		+E/-W	0.00 ft	Easting :	845981.49 ft	Longitude:		104 2 44.180 W			
Position Uncertainty:		0.00 ft									
Survey											
MD ft	Incl deg	Azim deg	TVD ft	N/S ft	E/W ft	VS ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	ClsD ft	ClsA deg
6170.07	0.64	182.49	6169.70	-22.37	-34.39	-23.31	0.00	0.00	0.00	41.03	236.96
6282.00	0.88	257.64	6281.62	-23.18	-35.26	-24.14	0.85	0.21	67.14	42.19	236.68
6314.00	1.85	346.75	6313.62	-22.73	-35.62	-23.70	6.36	3.03	278.47	42.25	237.46
6346.00	4.92	358.18	6345.56	-20.85	-35.78	-21.83	9.78	9.59	35.72	41.41	239.76
6378.00	8.00	0.82	6377.35	-17.25	-35.79	-18.23	9.67	9.62	8.25	39.73	244.26
6409.00	10.90	2.05	6407.93	-12.17	-35.65	-13.14	9.38	9.35	3.97	37.67	251.16
6441.00	13.89	2.58	6439.18	-5.30	-35.37	-6.28	9.35	9.34	1.66	35.77	261.47
6473.00	16.53	3.63	6470.05	3.08	-34.91	2.12	8.29	8.25	3.28	35.05	275.04
6505.00	18.91	3.46	6500.53	12.80	-34.31	11.85	7.44	7.44	-0.53	36.62	290.46
6537.00	21.63	4.16	6530.55	23.86	-33.57	22.92	8.53	8.50	2.19	41.18	305.40
6568.00	24.27	3.98	6559.09	35.91	-32.71	35.00	8.52	8.52	-0.58	48.58	317.67
6600.00	27.00	3.46	6587.94	49.73	-31.82	48.83	8.56	8.53	-1.62	59.04	327.39
6632.00	29.81	3.46	6616.09	64.92	-30.90	64.05	8.78	8.78	0.00	71.90	334.55
6664.00	32.62	3.46	6643.45	81.47	-29.90	80.62	8.78	8.78	0.00	86.79	339.85
6695.00	35.26	3.46	6669.17	98.75	-28.85	97.92	8.52	8.52	0.00	102.88	343.71
6740.00	39.92	3.46	6704.81	126.14	-27.20	125.34	10.36	10.36	0.00	129.04	347.83
6772.00	44.05	2.58	6728.60	147.51	-26.08	146.74	13.04	12.91	-2.75	149.80	349.98
6804.00	48.01	1.88	6750.81	170.52	-25.19	169.76	12.47	12.37	-2.19	172.37	351.60
6836.00	52.85	1.70	6771.19	195.17	-24.42	194.42	15.13	15.12	-0.56	196.69	352.87
6867.00	57.24	1.00	6788.94	220.56	-23.82	219.82	14.28	14.16	-2.26	221.85	353.84
6899.00	61.47	0.12	6805.25	248.09	-23.56	247.34	13.43	13.22	-2.75	249.20	354.58
6931.00	66.21	359.06	6819.36	276.80	-23.77	276.04	15.11	14.81	-3.31	277.82	355.09
6963.00	70.96	359.59	6831.04	306.58	-24.12	305.80	14.92	14.84	1.66	307.53	355.50
6986.00	74.04	359.41	6837.95	328.51	-24.31	327.72	13.41	13.39	-0.78	329.41	355.77
7018.00	77.91	1.70	6845.71	359.55	-24.00	358.75	13.94	12.09	7.16	360.35	356.18
7050.00	80.72	2.23	6851.64	390.97	-22.92	390.19	8.93	8.78	1.66	391.64	356.64
7081.00	82.57	1.88	6856.14	421.62	-21.82	420.86	6.07	5.97	-1.13	422.18	357.04
7113.00	83.62	2.58	6859.99	453.36	-20.59	452.63	3.93	3.28	2.19	453.83	357.40
7145.00	84.86	2.75	6863.20	485.17	-19.11	484.46	3.91	3.87	0.53	485.54	357.74
7177.00	85.30	2.75	6865.95	517.01	-17.58	516.33	1.37	1.37	0.00	517.31	358.05
7209.00	86.79	3.11	6868.15	548.89	-15.95	548.25	4.79	4.66	1.12	549.12	358.34
7240.00	87.93	2.40	6869.58	579.82	-14.46	579.21	4.33	3.68	-2.29	580.00	358.57
7272.00	87.93	2.23	6870.74	611.78	-13.17	611.18	0.53	0.00	-0.53	611.92	358.77
7304.00	88.46	1.88	6871.74	643.74	-12.02	643.17	1.98	1.66	-1.09	643.85	358.93
7399.00	89.96	2.05	6873.05	738.67	-8.76	738.15	1.59	1.58	0.18	738.72	359.32
7494.00	91.10	2.40	6872.18	833.60	-5.07	833.14	1.26	1.20	0.37	833.61	359.65
7590.00	91.80	2.05	6869.75	929.49	-1.35	929.10	0.82	0.73	-0.36	929.49	359.92
7685.00	93.21	1.17	6865.59	1024.36	1.32	1024.01	1.75	1.48	-0.93	1024.36	0.07
7780.00	91.28	1.70	6861.87	1119.25	3.70	1118.93	2.11	-2.03	0.56	1119.26	0.19
7875.00	89.25	2.23	6861.43	1214.19	6.95	1213.92	2.21	-2.14	0.56	1214.21	0.33
7970.00	89.96	2.40	6862.09	1309.11	10.79	1308.91	0.77	0.75	0.18	1309.15	0.47
8065.00	88.02	1.52	6863.76	1404.03	14.04	1403.89	2.24	-2.04	-0.93	1404.10	0.57
8161.00	89.08	1.35	6866.19	1499.97	16.44	1499.86	1.12	1.10	-0.18	1500.06	0.63
8256.00	89.69	0.82	6867.21	1594.95	18.24	1594.85	0.85	0.64	-0.56	1595.05	0.66



Leam Drilling Systems

Survey Report

Company: PETROHAWK ENERGY
 Field: Reeves County, Tx
 Site: Bettye Hansard State 45-3 #1H
 Well: Well #45-3-1H
 Wellpath: #1H

Date: 2/4/2012 Time: 08:13:09 Page: 2
 Co-ordinate(NE) Reference: Site: Bettye Hansard State 45-3 #1H
 Vertical (TVD) Reference: SITE 3115.0
 Section (VS) Reference: Well (0.00N,0.00E,1.58Azi)
 Survey Calculation Method: Minimum Curvature Db: Sybase

Survey

MD ft	Incl deg	Azim deg	TVD ft	N/S ft	E/W ft	VS ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	ClsD ft	ClsA deg
8351.00	90.13	0.29	6867.36	1689.94	19.16	1689.83	0.73	0.46	-0.56	1690.05	0.65
8446.00	89.69	1.88	6867.51	1784.92	20.96	1784.82	1.74	-0.46	1.67	1785.05	0.67
8541.00	89.69	1.88	6868.02	1879.87	24.08	1879.82	0.00	0.00	0.00	1880.02	0.73
8636.00	90.48	1.70	6867.88	1974.82	27.04	1974.82	0.85	0.83	-0.19	1975.01	0.78
8732.00	91.63	1.70	6866.12	2070.76	29.89	2070.80	1.20	1.20	0.00	2070.98	0.83
8827.00	90.75	3.81	6864.14	2165.63	34.46	2165.75	2.41	-0.93	2.22	2165.90	0.91
8922.00	90.75	4.86	6862.90	2260.35	41.64	2260.63	1.11	0.00	1.11	2260.73	1.06
9018.00	91.54	6.09	6860.98	2355.89	50.79	2356.39	1.52	0.82	1.28	2356.43	1.24
9113.00	91.45	9.08	6858.50	2450.01	63.33	2450.83	3.15	-0.09	3.15	2450.83	1.48
9208.00	90.84	11.90	6856.60	2543.40	80.62	2544.65	3.04	-0.64	2.97	2544.67	1.82
9303.00	93.12	15.94	6853.32	2635.53	103.45	2637.37	4.88	2.40	4.25	2637.56	2.25
9398.00	91.28	14.71	6849.67	2727.07	128.54	2729.58	2.33	-1.94	-1.29	2730.10	2.70
9493.00	86.97	9.96	6851.12	2819.82	148.82	2822.85	6.75	-4.54	-5.00	2823.75	3.02
9588.00	85.82	6.62	6857.10	2913.63	162.49	2917.00	3.71	-1.21	-3.52	2918.16	3.19
9683.00	86.61	5.74	6863.37	3007.87	172.70	3011.48	1.24	0.83	-0.93	3012.82	3.29
9778.00	88.02	2.75	6867.82	3102.49	179.72	3106.26	3.48	1.48	-3.15	3107.69	3.32
9873.00	90.22	0.82	6869.28	3197.42	182.68	3201.24	3.08	2.32	-2.03	3202.64	3.27
9968.00	90.40	0.47	6868.77	3292.42	183.75	3296.23	0.41	0.19	-0.37	3297.54	3.19
10063.00	89.43	359.24	6868.91	3387.41	183.51	3391.18	1.65	-1.02	-1.29	3392.38	3.10
10158.00	89.08	359.06	6870.14	3482.39	182.10	3486.09	0.41	-0.37	-0.19	3487.15	2.99
10253.00	88.64	358.89	6872.03	3577.36	180.40	3580.97	0.50	-0.46	-0.18	3581.90	2.89
10348.00	92.24	358.71	6871.30	3672.32	178.41	3675.84	3.79	3.79	-0.19	3676.65	2.78
10444.00	92.33	358.71	6867.48	3768.22	176.25	3771.64	0.09	0.09	0.00	3772.34	2.68
10539.00	91.36	358.01	6864.42	3863.13	173.53	3866.44	1.26	-1.02	-0.74	3867.02	2.57
10634.00	91.36	357.48	6862.16	3958.03	169.79	3961.20	0.56	0.00	-0.56	3961.67	2.46
10729.00	92.86	357.48	6858.66	4052.87	165.62	4055.89	1.58	1.58	0.00	4056.25	2.34
10825.00	90.84	357.13	6855.57	4148.71	161.11	4151.57	2.14	-2.10	-0.36	4151.84	2.22
10920.00	90.66	357.13	6854.32	4243.58	156.35	4246.28	0.19	-0.19	0.00	4246.46	2.11
11115.00	88.72	357.31	6855.38	4438.34	146.89	4440.70	1.00	-0.99	0.09	4440.77	1.90

Casing Points

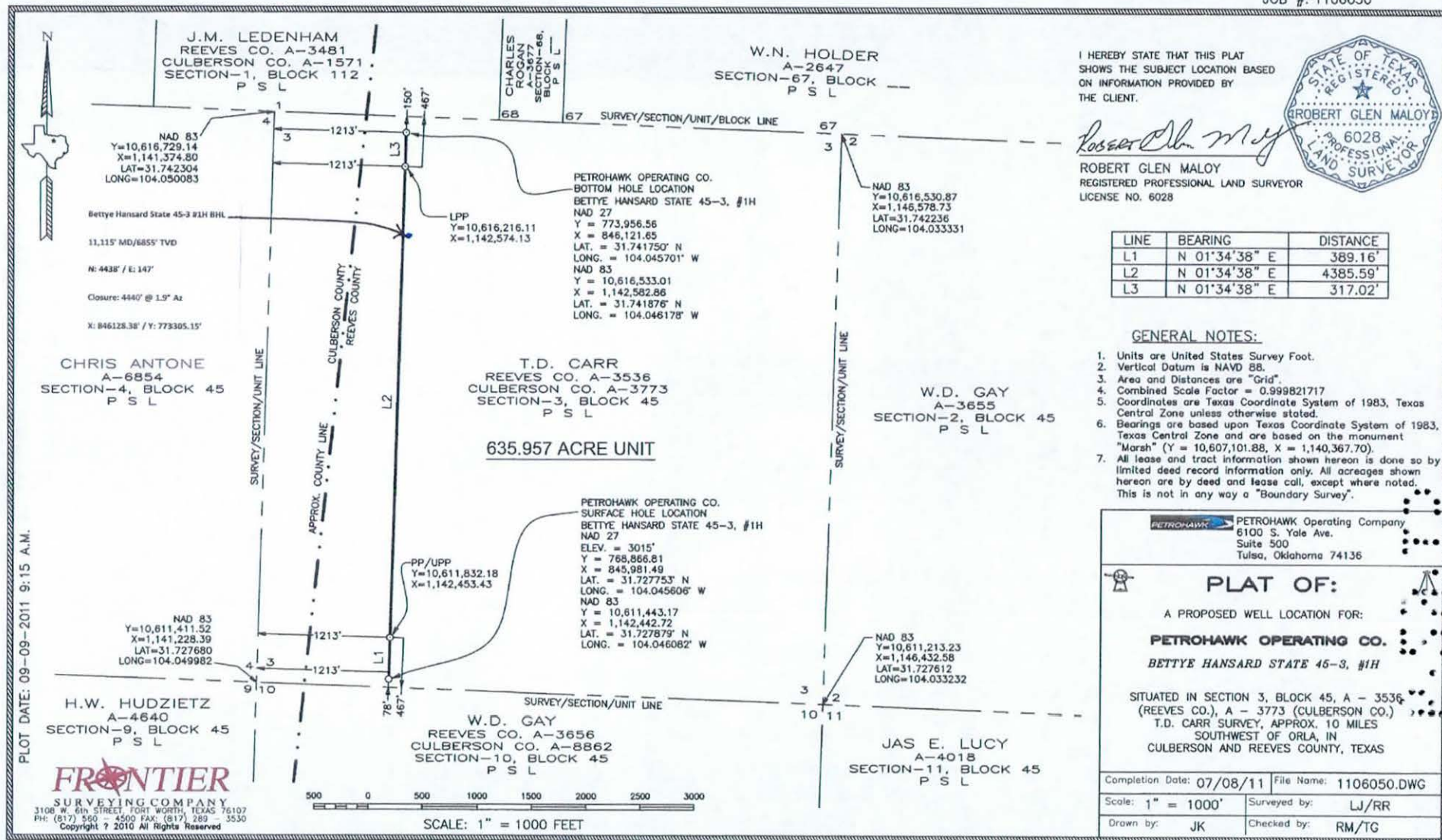
MD	TVD	Diameter	Hole Size	Name

Annotation

MD	TVD



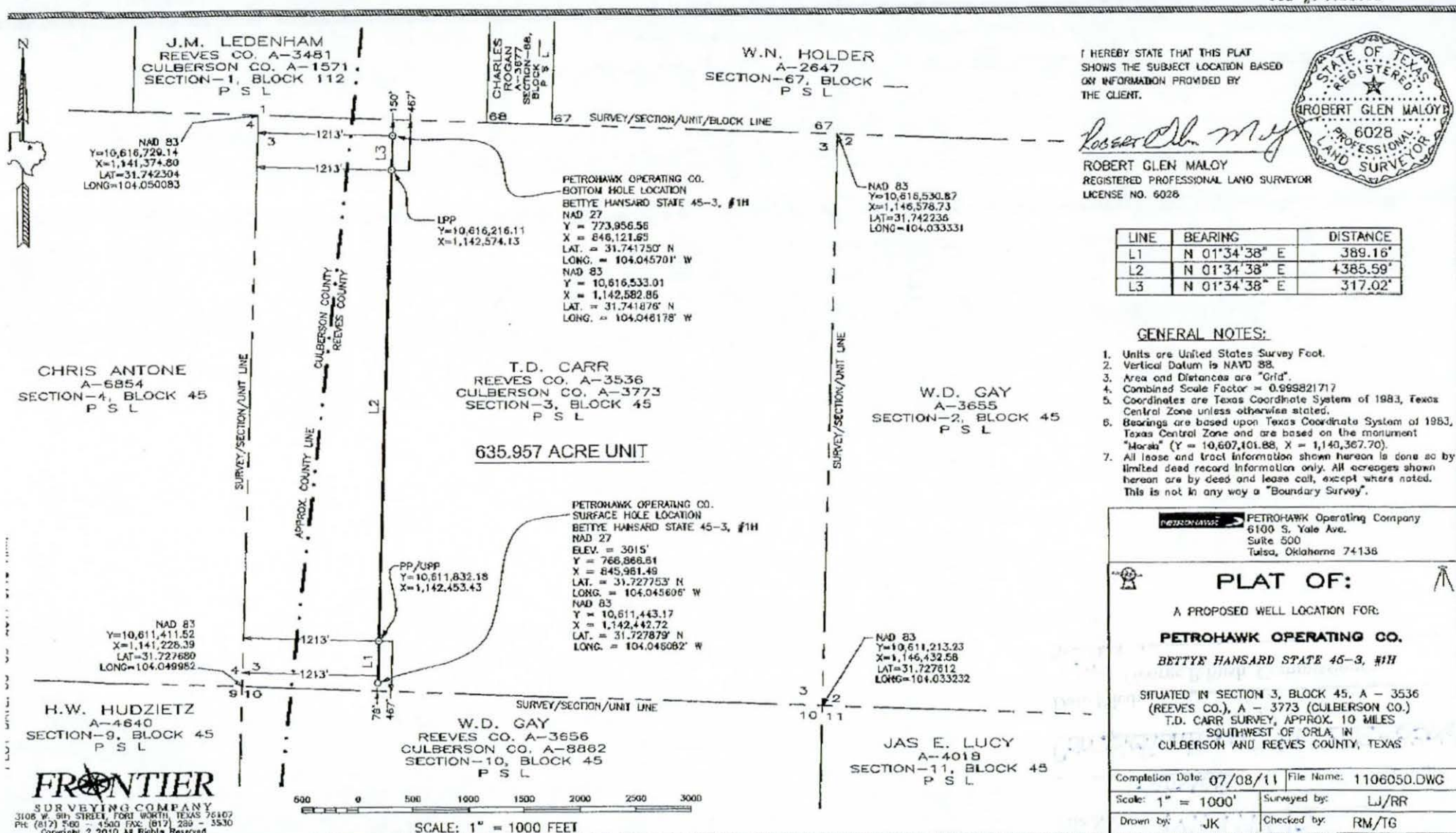
JOB #: 1106050



6-29-15

API No. <u>42-389-33061</u>		RAILROAD COMMISSION OF TEXAS OIL & GAS DIVISION APPLICATION FOR PERMIT TO DRILL, RECOMPLETE, OR RE-ENTER <i>This facsimile W-1 was generated electronically from data submitted to the RRC.</i> <i>A certification of the automated data is available in the RRC's Austin office.</i>			FORM W-1 Permit Status: <u>Approved</u>	
Drilling Permit # <u>726746</u>						
SWR Exception Case/Docket No. _____						
1. RRC Operator No. <u>660146</u>		2. Operator's Name (as shown on form P-5, Organization Report) <u>PETROHAWK OPERATING COMPANY</u>		3. Operator Address (include street, city, state, zip) <u>REGULATORY DEPARTMENT</u> <u>1360 POST OAK BLVD SUITE 150</u> <u>HOUSTON, TX 77056-0000</u>		
4. Lease Name <u>BETTYE HANSARD STATE 45-3</u>		5. Well No. <u>1H</u>				
GENERAL INFORMATION						
6. Purpose of filing (mark ALL appropriate boxes): ☒ New Drill ☐ Recompletion ☐ Reclaim ☐ Field Transfer ☐ Re-Enter ☐ Amended ☐ Amended as Drilled (BHL)(Also File Form W-1D)						
7. Wellbore Profile (mark ALL appropriate boxes): ☐ Vertical ☒ Horizontal (Also File Form W-1H) ☐ Directional (Also File Form W-1D) ☐ Sidetrack						
8. Total Depth <u>12500</u>		9. Do you have the right to develop the minerals under any right-of-way? ☒ Yes ☐ No		10. Is this well subject to Statewide Rule 36 (hydrogen sulfide area)? ☐ Yes ☒ No		
SURFACE LOCATION AND ACREAGE INFORMATION						
11. RRC District No. <u>08</u>		12. County <u>REEVES</u>		13. Surface Location ☒ Land ☐ Bay/Estuary ☐ Inland Waterway ☐ Offshore		
14. This well is to be located <u>10.0</u> miles in a <u>SW</u> direction from <u>Orla</u> which is the nearest town in the county of the well site.						
15. Section <u>3</u>	16. Block <u>45</u>	17. Survey <u>PSL/CARR, T D</u>	18. Abstract No. <u>3536</u>	19. Distance to nearest lease line: <u>467.0</u> ft.	20. Number of contiguous acres in lease, pooled unit, or unitized tract: <u>635.96</u>	
21. Lease Perpendiculars: <u>78.0</u> ft. from the <u>S</u> line and <u>1213.0</u> ft. from the <u>W</u> line.						
22. Survey Perpendiculars: <u>78.0</u> ft. from the <u>S</u> line and <u>1213.0</u> ft. from the <u>W</u> line.						
23. Is this a pooled unit? ☐ Yes ☒ No		24. Unitization Docket No: _____		25. Are you applying for Substandard Acreage Field? ☐ Yes (attach Form W-1A) ☒ No		
FIELD INFORMATION List all fields of anticipated completion including Wildcat. List one zone per line.						
26. RRC District No. <u>08</u>	27. Field No. <u>31913800</u>	28. Field Name (exactly as shown in RRC records) <u>FORD, WEST (WOLFCAMP)</u>	29. Well Type <u>Gas Well</u>	30. Completion Depth <u>12500</u>	31. Distance to Nearest Well in this Reservoir <u>0.0</u>	32. Number of Wells on this lease in this Reservoir <u>1</u>
BOTTOMHOLE LOCATION INFORMATION is required for DIRECTIONAL, HORIZONTAL, AND AMENDED AS DRILLED PERMIT APPLICATIONS						
Remarks 				Certificate: I certify that information stated in this application is true and complete, to the best of my knowledge RRC User _____ 10/21/2011 Name of filer _____ Date Submitted Phone _____ Email Address(OPTIONAL)		
RRC Use Only Date Validation Time Stamp: <u>Mon, 8 Jun 2015 08:41:02</u>						

JOB #: 1106050



19
File No. MF111870
Reeves County
Completion Report API 389-33061
Date Filed: 6-29-15
George P. Bush, Commissioner
By Jm

0.50.12

**RAILROAD COMMISSION OF TEXAS****Form G-1**

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

Status: Approved
Date: 11/25/2014
Tracking No.: 104924

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.: 42-389-33502 County: REEVES
Well No.: 2H RRC District No.: 08
Lease Name: BETTYE HANSARD STATE 45-3 Field Name: PHANTOM (WOLFCAMP)
RRC Gas ID No.: 272207 Field No.: 71052900
Location: Section: 3, Block: 45, Survey: PSL, Abstract: 3536

Latitude: Longitude:

This well is located 10 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: 06/09/2013
Type of Permit Date Permit No.
Permit to Drill, Plug Back, or Deepen 10/30/2012 750470
Rule 37 Exception
Fluid Injection Permit
O&G Waste Disposal Permit
Other:

COMPLETION INFORMATION

Spud date: 02/14/2013 Date of first production after rig released: 06/09/2013
Date plug back, deepening, recompletion, or drilling operation commenced: 05/21/2013 Date plug back, deepening, recompletion, or drilling operation ended: 06/05/2013
Number of producing wells on this lease in this field (reservoir) including this well: 1 Distance to nearest well in lease & reservoir (ft.): 0.0
Total number of acres in lease: 635.96 Elevation (ft.): 3089 GL
Total depth TVD (ft.): 10619 Total depth MD (ft.): 15414
Plug back depth TVD (ft.): 10616 Plug back depth MD (ft.): 15261
Was directional survey made other than inclination (Form W-12)? Yes Rotation time within surface casing (hours):
Is Cementing Affidavit (Form W-15) attached? No
Recompletion or reclass? No Multiple completion? No
Type(s) of electric or other log(s) run: Neutron/Density logs (combo of tools)
Electric Log Other Description: MWD GR/CBL/CCL
Location of well, relative to nearest lease boundaries Off Lease: No
of lease on which this well is located: 215.0 Feet from the South Line and
670.0 Feet from the East Line of the
BETTYE HANSARD 45-3 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.): 650.0 Date: 11/02/2012
 SWR 13 Exception Depth (ft.): 2700.0

GAS MEASUREMENT DATA

Date of test: 06/19/2013 Gas measurement method(s):
 Gas production during test (MCF): 10056 Orifice Meter, Flange Taps
 Was the well preflowed for 48 hours? Yes

Run No.	Line size	Orif. or Choke Size (in.)	24 hr. Coeff. Orif. Or Choke (in.)	Static Pm or Choke (in.)	Diff (hw)	Flow Temp (°F)	Temp. (Ftf)	Gravity (Fg)	Compress (Fpv)	Volume (MCF/day)
1	3.068	1.750	20668.46	312.0	107.0	118.0	0.9485	0.8260	0.913	3352.0

FIELD DATA AND PRESSURE CALCULATIONS

Gravity (dry gas): 0.721 Gravity (liquid hydrocarbons) (Deg. API): 58.0
 Gas-Liquid Hydro Ratio (CF/Bbl): 23773 Gravity (mixture): Gmix= 0.826
 Avg. shut in temp. (°F): 131.0 Bottom hole temp. and depth: 159.0 °F@ 10619.0 FT

Run No.	Time of Run (Min.)	Choke Size (in.)	Wellhead Pressure (PSIA)	Wellhead Flow Temp (°F)
SHUT-IN	4320		3419	102.0
1	4320	2034	2034	118.0

CASING RECORD

Row	Type of Casing	Casing Size (in.)	Hole Size (in.)	Setting Depth (ft.)	Multi - Stage Tool Depth (ft.)	Multi - Stage Shoe Depth (ft.)	Cement Class	Cement Amount (sacks)	Slurry Volume (cu. ft.)	Top of Cement (ft.)	TOC Determined By
1	Surface	13 3/8	17 1/2	2696			C	3002	3992.0	0	Circulated to Surface
2	Intermediate	9 5/8	12 1/4	5774			C	768	1563.0	785	Calculation
3	Intermediate	7	8 3/4	9540			H	565	1175.0	1713	Calculation
4	Tapered Production	5	6 1/8	15402			H	595	708.0	7960	Calculation

LINER RECORD

Row	Liner Size (in.)	Hole Size (in.)	Liner Top (ft.)	Liner Bottom (ft.)	Cement Class	Cement Amount (sacks)	Slurry Volume (cu. ft.)	Top of Cement (ft.)	TOC Determined By
N/A									

TUBING RECORD

Row	Size (in.)	Depth Size (ft.)	Packer Depth (ft.) / Type
N/A			

PRODUCING/INJECTION/DISPOSAL INTERVAL

Row	Open hole?	From (ft.)	To (ft.)
1	No	L1 10718	15254

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

Was hydraulic fracturing treatment performed? Yes

Is well equipped with a downhole actuation sleeve? No

If yes, actuation pressure (PSIG):

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

Actual maximum pressure (PSIG) during hydraulic fracturing:

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

Row	Type of Operation	Amount and Kind of Material Used	Depth Interval (ft.)
1	Fracture	501 BBLS 15% HCL; 25567 BBLS S/W; 4265 BBLS LINEAR; 73763 BBLS X-LINK; & 1566865 # 40/80 & 20/40 MESH PROP	10718.0 15254.0

FORMATION RECORD

Formations	Encountered	Depth TVD (ft.)	Depth MD (ft.)	Is formation isolated?	Remarks
2ND BONE SPRING SAND	No	7693.0	7693.0	No	
WOLFCAMP	No	9364.0	9366.0	No	
MIDDLE WOLFCAMP	No	9770.0	9774.0	No	

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

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

REMARKS

WELL WAS DRILLED AS A VERTICAL PILOT HOLE. THEN PLUGGED BACK AND DRILLED AS A HORIZONTAL.

RRC REMARKS

PUBLIC COMMENTS:

[RRC Staff 2014-06-11 14:34:02.874] EDL=4536 feet, max acres=704, PHANTOM (WOLFCAMP) oil or gas well

CASING RECORD :

5" X 4-1/2" XO OVER IS @ 9,755' MD

TUBING RECORD:

WELL NOT TUBED UP FIELD RULES ALLOW 180 DAYS.

PRODUCING/INJECTION/DISPOSAL INTERVAL :

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

GAS MEASUREMENT DATE REMARK:

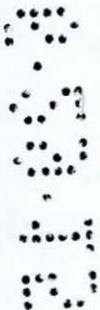
OPERATOR'S CERTIFICATION

Printed Name: James Melear

Title: Sr. Regulatory Specialist

Telephone No.: (713) 961-8561

Date Certified: 11/25/2014



**RAILROAD COMMISSION OF TEXAS****Form G-1**

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

Status: Approved
Date: 05/30/2014
Tracking No.: 79793

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.: 42-389-33502 County: REEVES
Well No.: 2H RRC District No.: 08
Lease Name: BETTYE HANSARD STATE 45-3 Field Name: PHANTOM (WOLFCAMP)
RRC Gas ID No.: 272207 Field No.: 71052900
Location: Section: 3, Block: 45, Survey: PSL, Abstract: 3536
Latitude: 31 Longitude: -104
This well is located _____ miles in a
direction from 10 MILES SW DIRECTION FROM ORLA,
which is the nearest town in the county.

FILING INFORMATION

Purpose of filing: Well Record Only
Type of completion: New Well
Well Type: Shut-In Producer Completion or Recompletion Date: 04/11/2013
Type of Permit Date Permit No.
Permit to Drill, Plug Back, or Deepen 10/30/2012 750470
Rule 37 Exception
Fluid Injection Permit
O&G Waste Disposal Permit
Other:

COMPLETION INFORMATION

Spud date: Date of first production after rig released: 04/11/2013
Date plug back, deepening, recompletion, or drilling operation commenced: 02/14/2013 Date plug back, deepening, recompletion, or drilling operation ended: 04/11/2013
Number of producing wells on this lease in this field (reservoir) including this well: 1 Distance to nearest well in lease & reservoir (ft.): 0.0
Total number of acres in lease: 635.96 Elevation (ft.): 3089 GL
Total depth TVD (ft.): 10617 Total depth MD (ft.): 15414
Plug back depth TVD (ft.): 10615 Plug back depth MD (ft.): 15264
Was directional survey made other than inclination (Form W-12)? Yes Rotation time within surface casing (hours):
Is Cementing Affidavit (Form W-15) attached? Yes
Recompletion or reclass? No Multiple completion? No
Type(s) of electric or other log(s) run: Neutron/Density logs (combo of tools)
Electric Log Other Description:
Location of well, relative to nearest lease boundaries Off Lease: No
of lease on which this well is located: 215.0 Feet from the South Line and
670.0 Feet from the East Line of the
BETTYE HANSARD 45-3 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.): 650.0 Date: 11/02/2012
 SWR 13 Exception Depth (ft.): 2700.0

GAS MEASUREMENT DATA

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

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

FIELD DATA AND PRESSURE CALCULATIONS

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

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

CASING RECORD

Row	Type of Casing	Casing Size (in.)	Hole Size (in.)	Setting Depth (ft.)	Multi - Stage Tool Depth (ft.)	Multi - Stage Shoe Cement Class	Cement Amount (sacks)	Slurry Volume (cu. ft.)	Top of Cement (ft.)	TOC Determined By
1	Surface	13 3/8	17 1/2	2696		C	3002	3992.0	0	Circulated to Surface
2	Intermediate	9 5/8	12 1/4	5774		C	785	1563.0	798	Calculation
3	Intermediate	7	8 3/4	9540		H	565	1175.0	1713	Calculation
4	Tapered Production	4 1/2	6 1/4	15402		H	595	708.0	9700	Cement Evaluation Log

LINER RECORD

Row	Liner Size (in.)	Hole Size (in.)	Liner Top (ft.)	Liner Bottom (ft.)	Cement Class	Cement Amount (sacks)	Slurry Volume (cu. ft.)	Top of Cement (ft.)	TOC Determined By
N/A									

TUBING RECORD

Row	Size (in.)	Depth Size (ft.)	Packer Depth (ft.)/Type
N/A			

PRODUCING/INJECTION/DISPOSAL INTERVAL

Row	Open hole?	From (ft.)	To (ft.)
N/A			

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

Was hydraulic fracturing treatment performed?

No

Is well equipped with a downhole actuation sleeve? No

If yes, actuation pressure (PSIG):

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

Actual maximum pressure (PSIG) during hydraulic fracturing:

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

No

Row Type of OperationAmount and Kind of Material UsedDepth Interval (ft.)

N/A

FORMATION RECORD

<u>Formations</u>	<u>Encountered</u>	<u>Depth TVD (ft.)</u>	<u>Depth MD (ft.)</u>	<u>Is formation isolated?</u>	<u>Remarks</u>
BONE SPRING		6290.0	6290.0		
DEAN		9044.0	9044.0		
WOLFCAMP		9358.0	9358.0		

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

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

REMARKS

PILOT HOLE TO 11,100'. PILOT HOLE PLUGS SET @ 11,080' AND 10,500'. 4 1/2" X 5" TAPERED PRODUCTION CASING SET @ 9,755'. KOP = 9,855'. WELL IS TOE UP.

RRC REMARKS**PUBLIC COMMENTS:**

[RRC Staff 2014-04-21 14:47:21.56] Per Jim (4/15/14): Re. tapered csg hole size, vertical pilot hole is 6-1/8" diameter. Plug was set lateral was drilled 6-1/4" diameter bit.

CASING RECORD :

6-1/8" PILOT HOLE TO 11,100'. PILOT HOLE PLUGS SET @ 11,080' AND 10,500'. 4 1/2" X 5" TAPERED PRODUCTION CASING SET @ 9,755' IN 6-1/4" HOLE. KOP = 9,855'. WELL IS TOE UP.

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

OPERATOR'S CERTIFICATION

Printed Name: James Melear

Title: Sr. Regulatory Specialist

Telephone No.: (713) 961-8561

Date Certified: 04/21/2014

2014

RAILROAD COMMISSION OF TEXAS
Oil and Gas Division

GAS WELL
CLASSIFICATION REPORT

Form G-5

Tracking No.: 104924

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

1. OPERATOR NAME (Exactly as shown on Form P5 Organization Report) BHP BILLITON PET(TXLA OP) CO		3. RRC DISTRICT NO. 08	4. OIL LEASE NO OR GAS WELL ID NO. 272207								
2. MAILING ADDRESS 1360 POST OAK BLVD STE 150 HOUSTON, TX 77056		5. WELL NO. 2H	6. API NO. 42- 389-33502								
		7. COUNTY OF WELL SITE REEVES									
8. FIELD NAME (as per RRC Records) PHANTOM (WOLFCAMP)		9. LEASE NAME BETTYE HANSARD STATE 45-3									
10. LOCATION (Section, Block and Survey) 3 , 45 , PSL , A-3536		11. PIPELINE CONNECTION OR USE OF GAS BHP BILLITON PET (TXLA OP) CO									
PRODUCTION TEST AT RATE ELECTED BY OPERATOR (data on 24-hour basis)		A.S.T.M. DISTILLATION OF LIQUID SAMPLE. Distillation test is required for gas wells ONLY if the producing gas-liquid hydrocarbon ratio is less than 100,000 CF/barrel.									
A. Date of Test <u>06/19/2013</u> B. Gas Volume <u>3352.0</u> (Mcf) C. Oil or Condensate Volume <u>141.0</u> (Bbl) D. Water Volume <u>3352.0</u> (Bbl) E. Gas/Liquid Hydrocarbon Ratio <u>23773</u> (Cf/Bbl) F. Flowing Tubing Pressure <u>2034</u> (psia) G. Choke Size <u>2034</u> (in.) H. Casing Pressure <u>2034.0</u> (psia) I. Shut-in Wellhead Pressure-- Tubing <u>3419</u> (psia) J. Separator Operating Pressure <u>107.0</u> (psia) K. Color of Stock Tank Liquid <u>Straw</u> L. Gravity of Separator Liquid <u>58.0</u> ° API M. Gravity of Stock Tank Liquid <u>55.0</u> ° API N. Specific Gravity of the Gas (Air = 1) <u>0.721</u>		Date Liquid Sample Obtained <u>07/10/2013</u> Where Obtained: ☒ Separator ☐ Stock Tank <table style="width:100%;"> <tr> <td style="width:50%;"> % Over Temp. (deg. F) Initial Boiling Temp. <u>138.0</u> 10 <u>168.0</u> 20 <u>196.0</u> 30 <u>228.0</u> 40 <u>248.0</u> 50 <u>270.0</u> </td> <td style="width:50%;"> % Over Temp. (deg. F) 60 <u>286.0</u> 70 <u>322.0</u> 80 <u>362.0</u> 90 <u>508.0</u> 95 <u>598.0</u> End Point <u>610.0</u> </td> </tr> <tr> <td>Total Recovery <u>96.0</u></td> <td>percent</td> </tr> <tr> <td>Residue <u>2.0</u></td> <td>percent</td> </tr> <tr> <td>Loss <u>2.0</u></td> <td>percent</td> </tr> </table>		% Over Temp. (deg. F) Initial Boiling Temp. <u>138.0</u> 10 <u>168.0</u> 20 <u>196.0</u> 30 <u>228.0</u> 40 <u>248.0</u> 50 <u>270.0</u>	% Over Temp. (deg. F) 60 <u>286.0</u> 70 <u>322.0</u> 80 <u>362.0</u> 90 <u>508.0</u> 95 <u>598.0</u> End Point <u>610.0</u>	Total Recovery <u>96.0</u>	percent	Residue <u>2.0</u>	percent	Loss <u>2.0</u>	percent
% Over Temp. (deg. F) Initial Boiling Temp. <u>138.0</u> 10 <u>168.0</u> 20 <u>196.0</u> 30 <u>228.0</u> 40 <u>248.0</u> 50 <u>270.0</u>	% Over Temp. (deg. F) 60 <u>286.0</u> 70 <u>322.0</u> 80 <u>362.0</u> 90 <u>508.0</u> 95 <u>598.0</u> End Point <u>610.0</u>										
Total Recovery <u>96.0</u>	percent										
Residue <u>2.0</u>	percent										
Loss <u>2.0</u>	percent										
I declare under penalties prescribed in Sec. 91.143, Texas Natural Resources Code, that I am authorized to make this report, that this report was prepared by me or under my supervision and direction, and that data and facts stated therein are true, correct, and complete to the best of my knowledge. <u>05/15/2014</u> DATE		RRC USE ONLY									
		PETROHAWK OPERATING COMPANY NAME (Type or Print) <u>James Melear</u> SIGNATURE <u>Sr. Regulatory Specialist</u> TITLE (713) 961-8561 EXT 8561									
		CONTACT PERSON PHONE NUMBER									



Tracking No.: 104924

OPERATOR NAME AND ADDRESS including city, state and zip

BHP BILLITON PET(TXLA OP) CO
1360 POST OAK BLVD STE 150
HOUSTON, TX 77056

GAS WELL STATUS REPORT

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

This facsimile G-10 was generated electronically
from data submitted to the RRC.

Reason for Filing	Operator P-5 Organization No.	RRC Dist. No.	G-10
☐ Survey ☐ Retest	068596	08	
☒ Initial Test ☐ Correction	Test Period: Due Date: Effective Date:		

FIELD NAME * LEASE NAME	RRC IDENT NO.	DATE TESTED MO/DAY/YR	GAS PRODUCED MCF/DAY **		CONDENSATE PRODUCED		WATER PROD BBL/DAY		***SIWH PRESSURE PSIA
	WELL NO.	MARK X FOR SHUT-IN WELL	GAS SPEC. GRAVITY		CONDENSATE GRAVITY (API)		X BOTTOMHOLE PRESSURE PSIA		***FLOWING PRESSURE PSIA
PHANTOM (WOLFCAMP)	272207	06/19/2013	3352	MCF	141.0	BBL	1955.0	BBL	3419
BETTYE HANSARD STATE 45-3	2H		0.721		58.0				2034
				MCF		BBL		BBL	
				MCF		BBL		BBL	
				MCF		BBL		BBL	
				MCF		BBL		BBL	
				MCF		BBL		BBL	
				MCF		BBL		BBL	
				MCF		BBL		BBL	
				MCF		BBL		BBL	
				MCF		BBL		BBL	
				MCF		BBL		BBL	

CERTIFICATION: I declare under penalties prescribed in Texas Natural Resources Code, Sec. 91.143, that I am authorized to make this report, that this report was prepared by me or under my supervision and direction, and that data and facts stated herein are true, correct, and complete to the best of my knowledge.

G.W. WIRELINE, INC

Signature: JERRY GRAY

Title:

Phone: (940) 325-3617

Date: 05/15/2014

* 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

91.62.9

CERTIFICATE OF COMPLIANCE
AND TRANSPORTATION AUTHORITY

P-4

Tracking No.: 104924

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.

1. Field name exactly as shown on proration schedule PHANTOM (WOLFCAMP)		2. Lease name as shown on proration schedule BETTYE HANSARD STATE 45-3					
3. Current operator name exactly as shown on P-5 Organization Report BHP BILLITON PET(TXLA OP) CO		4. Operator P-5 no. 068596	5. Oil Lse/Gas ID no 272207	6. County REEVES	7. RRC district 08		
8. Operator address including city, state, and zip code 1360 POST OAK BLVD STE 150 HOUSTON, TX 77056		9. Well no(s) (see instruction E) 2H					
		10. Classification ☐ Oil ☒ Gas ☐ Other (see instruction A)			11. Effective Date 06/09/2013		
12. Purpose of Filing. (Complete section a or b below.) (See instructions B and G) a. Change of: ☐ operator ☐ oil or condensate gatherer ☐ gas gatherer ☐ gas purchaser ☐ gas purchaser system code ☐ field name from _____ ☐ lease name from _____ -- OR -- b. New RRC Number for: ☐ oil lease ☒ gas well Due to: ☒ new completion or recompletion ☐ reclass oil to gas ☐ reclass gas to oil ☐ other well (specify) _____ ☐ consolidation, unitization, or subdivision (oil lease only)							
13. Authorized GAS WELL GAS or CASINGHEAD GAS Gatherer(s) and/or Purchaser(s). (See instruction G).							
Gatherer	Purchaser	Name of GAS WELL GAS or CASINGHEAD GAS Gatherer(s) or Purchaser(s) As Indicated in Columns to the Left (Attach an additional sheet in same format if more space is needed)			Purchaser's RRC Assigned System Code	Percent of Take	Full-well stream
X		BHP BILLITON PET (TX GATH), LLC(068595)				100.0	
	X	REGENCY FIELD SERVICES LLC(698769)			0001	100.0	
14. Authorized OIL or CONDENSATE Gatherer(s). (See instruction G).							
Name of OIL or CONDENSATE Gatherer(s) - List Highest Volume Gatherer First (Attach an additional sheet in same format if more space is needed)						Percent of Take	
ENTERPRISE CRUDE OIL LLC(253117)						34.0	
SHELL TRADING (US) COMPANY(774715)						33.0	
SUNOCO PTNRS. MKTG.&TERMINALS LP(829626)						33.0	
RRC USE ONLY: Reviewer's initials: <u>RRC Staff</u> Approval date: <u>11/25/2014</u>							
15. PREVIOUS OPERATOR CERTIFICATION FOR CHANGE OF OPERATOR P-4 FILING. Being the PREVIOUS OPERATOR, I certify that operating responsibility for the well(s) designated in this filing, located on the subject lease has been transferred in its entirety to the above named Current Operator. I understand, as Previous Operator, that designation of the above named operator as Current Operator is not effective until this certificate is approved by the Commission.							
Name of Previous Operator _____ Name (print) _____ Title _____				Signature ☐ Authorized Employee of previous operator ☐ Authorized agent of previous operator (see instruction G) _____ Date _____ Phone with area code _____			
16. CURRENT OPERATOR CERTIFICATION. By signing this certificate as the Current Operator, I certify that all statements on this form are true and correct and I acknowledge responsibility for the regulatory compliance of the subject lease including plugging of well(s) pursuant to Rule 14. I further acknowledge that I assume responsibility for the physical operation, control, and proper plugging of each well designated in this filing. I also acknowledge that I will remain designated as the Current Operator until a new certificate designating a new Current Operator is approved by the Commission.							
PETROHAWK OPERATING COMPANY Name (print) <u>Sr. Regulatory Specialist</u> Title <u>James.Melear@bhpbilliton.com</u> E-mail Address (optional)				James Melear Signature ☒ Authorized Employee of current operator ☐ Authorized agent of current operator (see instruction G) <u>05/13/2014</u> Date (713) 961-8561 EXT 8561 Phone with area code			



STATEMENT OF PRODUCTIVITY OF ACREAGE
ASSIGNED TO PRORATION UNITS

Form P-15

Tracking No.: 104924

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

The undersigned states that he is authorized to make this statement; that he has knowledge of the facts concerning the BHP BILLITON PET(TXLA OP) CO ,
OPERATOR
BETTYE HANSARD STATE 45-3 , No. 2H ; that such well is
LEASE WELL
completed in the PHANTOM (WOLFCAMP) Field, REEVES County,
Texas and that the acreage claimed, and assigned to such well for proration purposes as
authorized by special rule and as shown on the attached certified plat embraces _____
560.0 acres which can reasonably be considered to be productive of hydrocarbons.

- CERTIFICATE

*I declare under penalties prescribed in Sec. 91.143, Texas Natural
Resources Code, that I am autho-
rized to make this report, that this report was prepared by me or
under my supervision and direction,*

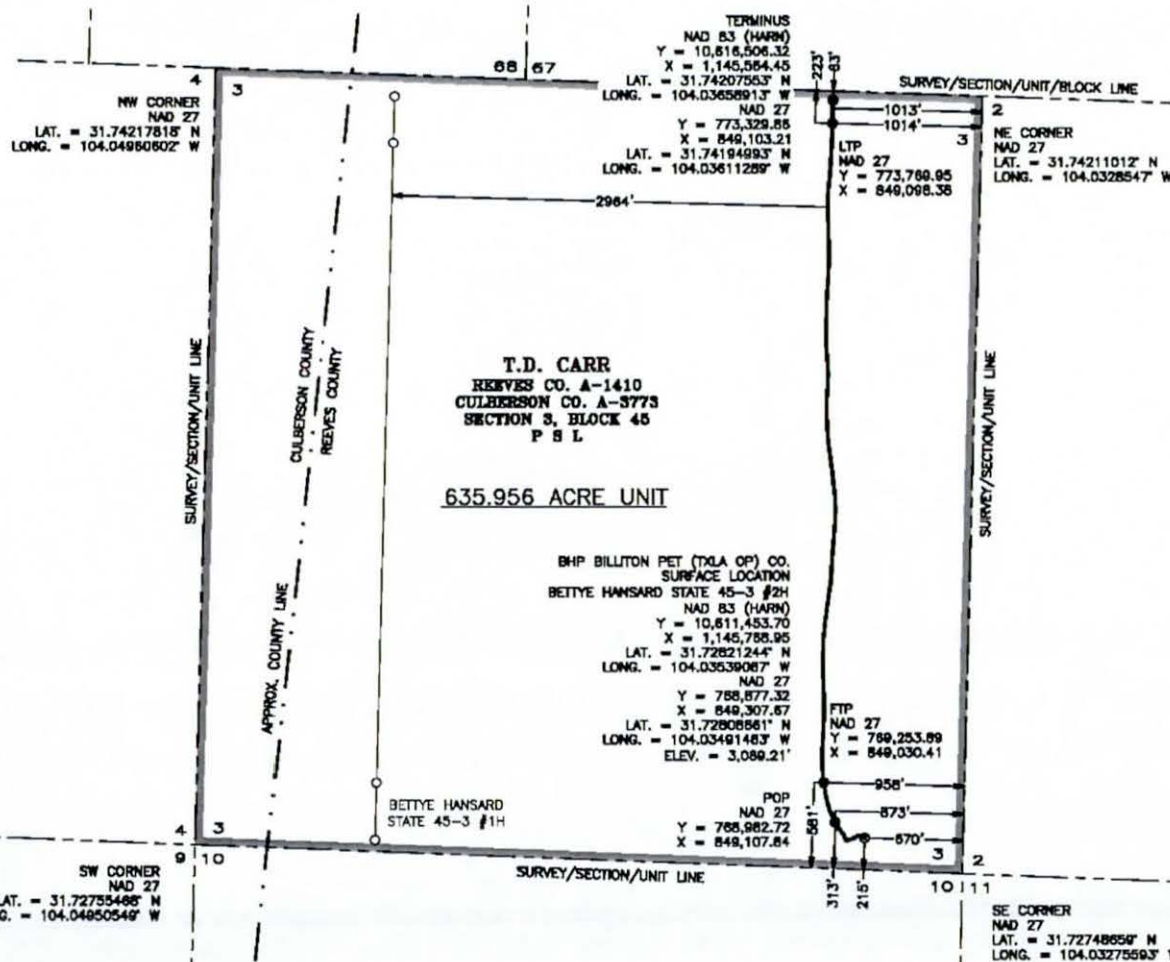
Date 05/13/2014 Signature James Melear

Telephone (713) 961-8561 EXT 8561 Title Sr. Regulatory Specialist
AREA CODE

97.62.9



0 500 1000
1" = 1000 FEET

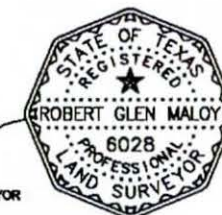


GENERAL NOTES

1. COORDINATES SHOWN ARE BASED ON TEXAS COORDINATE SYSTEM OF NAD 27 "TEXAS CENTRAL ZONE", AND BASED ON "MARSH" NGS MONUMENT (Y = 784,525.80, X = 843,906.48)
2. VERTICAL DATUM IS NAVD 88
3. COMBINED SCALE FACTOR - 0.999837804
4. LATITUDE AND LONGITUDE ARE NAD 27 AS SHOWN
5. AREA, DISTANCES, AND COORDINATES ARE "GRID"
6. 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".

I HEREBY STATE THAT THIS PLAT
SHOWS THE SUBJECT LOCATION BASED
ON INFORMATION PROVIDED BY
THE CLIENT.

ROBERT GLEN MALOY
REGISTERED PROFESSIONAL LAND SURVEYOR
LICENSE NO. 6028



REVISION	DATE	BY	DETAILS
A	09/11/13	JK	MAKE PRELIMINARY PLAT
B	09/18/13	JK	MAKE REVISION AND FINAL

PLAT OF:

AN AS-DRILLED WELL LOCATION FOR:

BHP BILLITON PET (TXLA OP) CO.
BETTYE HANSARD STATE 45-3 #2H
WID# 848

SITUATED IN SECTION 3, BLOCK 45, T.D. CARR SURVEY,
A-3536 (REEVES CO.), A-3773 (CULBERSON CO.), IN THE
PUBLIC SCHOOL LAND, BEING APPROXIMATELY 10 MILES
SOUTHWEST OF ORLA, IN CULBERSON COUNTY AND REEVES
COUNTY, TEXAS

FRANK
SURVEYING COMPANY INC.

558 Bailey Ave., 318 - Fort Worth, TX 76187
Ph: 817.349.9808 - Fax: 979.732.5271
TXPLS Firm No. 10193887
www.franksurveying.com
LAND SURVEYING/ENERGY/GIS SERVICES
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bhpbilliton

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

DATE: 09/16/13 PROJECT NO: 201309388
DRAWN BY: JK SCALE: 1" = 1000'
CHECKED BY: RM SHEET: 1 OF 1
FIELD CREW: REVISION: NO



Company: BHP Billiton
Lease/Well: Bettye Hansard 45-3/ 2H
Location: 10 Miles SW Of Orla
Rig Name: Patterson # 240
State/County: Texas/ Reeves
Latitude: 31.83, Longitude: -103.92
GRID North is 1.85 Degrees West of True North
VS-Azi: 357.88 Degrees



Depth Reference : 25'

DRILLOG HA GYRO SURVEY CALCULATIONS

Filename: gyro survey.ut
Minimum Curvature Method
Report Date/Time: 3/25/2013 / 14:18

Vaughn Energy Services
Fort Worth, Texas
817-741-3610
Survey Engineer: Jason Wilson
Bettye Hansard 45-3 2H / API 42-389-33502

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	TVD FT	+N/-S FT	+E/-W FT	Vertical Section FT	Closure Distance FT	Closure Direction Deg	Dogleg Severity Deg/100
Tied into MWD survey									
8981.00	1.76	271.05	8979.00	-12.12	-101.34	-8.36	102.06	263.18	****
9000.00	1.23	263.04	8997.99	-12.14	-101.83	-8.36	102.56	263.20	2.98
9100.00	1.36	272.14	9097.97	-12.23	-104.09	-8.37	104.80	263.30	0.24
9200.00	1.43	263.42	9197.94	-12.32	-106.51	-8.38	107.22	263.40	0.22
9300.00	1.10	264.34	9297.91	-12.56	-108.70	-8.53	109.42	263.41	0.33
9400.00	0.99	257.57	9397.90	-12.84	-110.50	-8.75	111.24	263.37	0.16
9500.00	1.65	250.28	9497.87	-13.51	-112.70	-9.34	113.50	263.16	0.68
9600.00	1.91	242.14	9597.82	-14.78	-115.52	-10.49	116.46	262.71	0.36
9700.00	2.82	243.84	9697.74	-16.64	-119.20	-12.22	120.36	262.05	0.92
9800.00	4.07	244.78	9797.55	-19.24	-124.62	-14.61	126.10	261.23	1.25
9900.00	6.00	248.73	9897.16	-22.64	-132.70	-17.72	134.62	260.32	1.95
10000.00	8.92	256.71	9996.31	-26.32	-145.11	-20.94	147.48	259.72	3.09
10100.00	13.22	259.33	10094.43	-30.22	-163.90	-24.14	166.67	259.55	4.33
10200.00	17.69	257.47	10190.79	-35.64	-189.98	-28.59	193.30	259.38	4.50
10300.00	21.99	250.36	10284.84	-45.24	-222.47	-36.97	227.03	258.51	4.93
10400.00	25.98	246.05	10376.19	-60.43	-260.14	-50.76	267.07	256.92	4.35
10500.00	29.87	242.70	10464.54	-80.75	-302.31	-69.51	312.91	255.04	4.20
10600.00	33.31	240.28	10549.71	-105.79	-348.30	-92.84	364.01	253.10	3.66
10700.00	36.41	240.47	10631.76	-134.04	-397.98	-119.22	419.95	251.39	3.10



Measured Depth FT	Incl Angle Deg	Drift Direction Deg	TVD FT	+N/-S FT	+E/-W FT	Vertical Section FT	Closure Distance FT	Closure Direction Deg	Dogleg Severity Deg/100
10800.00	40.33	241.18	10710.14	-164.27	-452.18	-147.43	481.09	250.03	3.94
10900.00	45.13	240.05	10783.58	-197.58	-511.27	-178.53	548.12	248.87	4.86
11000.00	47.73	239.50	10852.50	-234.06	-573.86	-212.67	619.76	247.81	2.64
11035.00	48.65	233.20	10875.84	-248.51	-595.55	-226.31	645.32	247.35	13.67

0.53.12



Company: BHP Billiton
Rig: Patterson 240
Latitude: 31.830
Longitude: -103.920
API # 42-289-33502
Date: 3/17/13

Well: Bettye Hansard 45-3 2H
Location: Texas / Reeves
Grid North 1.85
Depth Reference: 25'
Surveyor: Jason Wilson
VS:

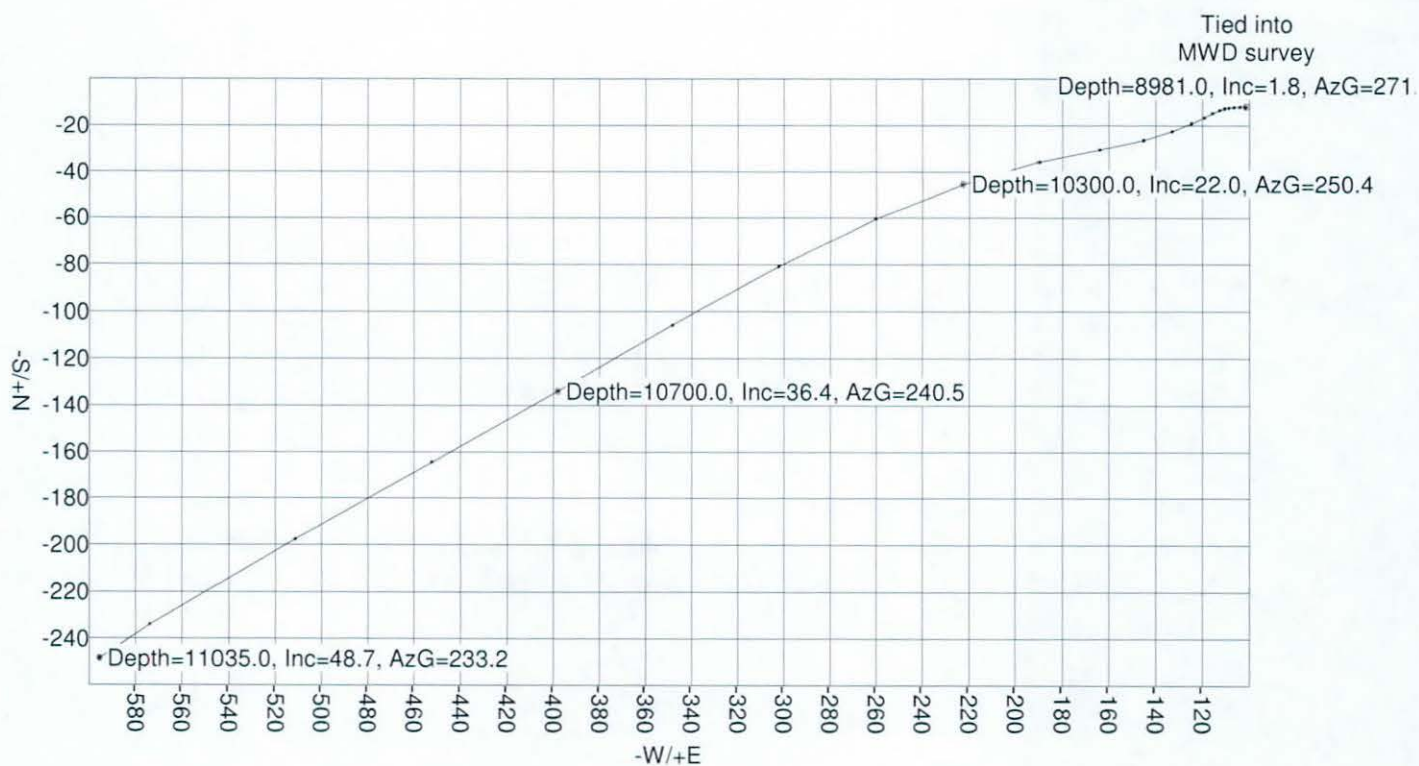
HA Gyro Survey Calculations

Depth	Inc	AzG	N/-S	E/-W	TVD	DL	VS	CD	Cbrg
8981	1.76	271.05	-12.12	-101.34	8979	****	-8.36	102.06	263.18
9000	1.23	263.04	-12.14	-101.83	8998	2.98	-8.36	102.56	263.2
9100	1.36	272.14	-12.23	-104.09	9098	0.24	-8.37	104.8	263.3
9200	1.43	263.42	-12.32	-106.51	9197.9	0.22	-8.38	107.22	263.4
9300	1.1	264.34	-12.56	-108.7	9297.9	0.33	-8.53	109.42	263.41
9400	0.99	257.57	-12.84	-110.5	9397.9	0.16	-8.75	111.24	263.37
9500	1.65	250.28	-13.51	-112.7	9497.9	0.68	-9.34	113.5	263.16
9600	1.91	242.14	-14.78	-115.52	9597.8	0.36	-10.49	116.46	262.71
9700	2.82	243.84	-16.64	-119.2	9697.7	0.92	-12.22	120.36	262.05
9800	4.07	244.78	-19.24	-124.62	9797.6	1.25	-14.61	126.1	261.23
9900	6	248.73	-22.64	-132.7	9897.2	1.95	-17.72	134.62	260.32
10000	8.92	256.71	-26.32	-145.11	9996.3	3.09	-20.94	147.48	259.72
10100	13.22	259.33	-30.22	-163.9	10094	4.33	-24.14	166.67	259.55
10200	17.69	257.47	-35.64	-189.98	10191	4.5	-28.59	193.3	259.38
10300	21.99	250.36	-45.24	-222.47	10285	4.93	-36.97	227.03	258.51
10400	25.98	246.05	-60.43	-260.14	10376	4.35	-50.76	267.07	256.92
10500	29.87	242.7	-80.75	-302.31	10465	4.2	-69.51	312.91	255.04
10600	33.31	240.28	-105.79	-348.3	10550	3.66	-92.84	364.01	253.1
10700	36.41	240.47	-134.04	-397.98	10632	3.1	-119.22	419.95	251.39
10800	40.33	241.18	-164.27	-452.18	10710	3.94	-147.43	481.09	250.03
10900	45.13	240.05	-197.58	-511.27	10784	4.86	-178.53	548.12	248.87
11000	47.73	239.5	-234.06	-573.86	10853	2.64	-212.67	619.76	247.81
11035	48.65	233.2	-248.51	-595.55	10876	13.67	-226.31	645.32	247.35

51.62.9



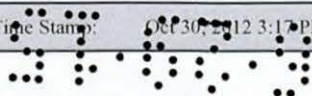
Vaughn Energy Services
Fort Worth, Texas
817-741-3610
Survey Engineer: Jason Wilson
Bettye Hansard 45-3 2H / API 42-389-33502

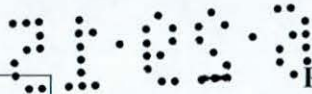


VES Survey Date: 03/17/2013

0.50.12

API No. <u>42-389-33502</u> Drilling Permit # <u>750470</u> SWR Exception Case/Docket No. _____		RAILROAD COMMISSION OF TEXAS OIL & GAS DIVISION APPLICATION FOR PERMIT TO DRILL, RECOMPLETE, OR RE-ENTER <i>This facsimile W-1 was generated electronically from data submitted to the RRC.</i> <i>A certification of the automated data is available in the RRC's Austin office.</i>			FORM W-1 07/2004 Permit Status: Approved	
1. RRC Operator No. <u>660146</u>		2. Operator's Name (as shown on form P-5, Organization Report) PETROHAWK OPERATING COMPANY		3. Operator Address (include street, city, state, zip): _____ _____ _____		
4. Lease Name <u>BETTYE HANSARD 45-3</u>		5. Well No. <u>2H</u>				
GENERAL INFORMATION						
6. Purpose of filing (mark ALL appropriate boxes): ☒ New Drill ☐ Recompletion ☐ Reclass ☐ Field Transfer ☐ Re-Enter ☐ Amended ☐ Amended as Drilled (BHL) (Also File Form W-1D)						
7. Wellbore Profile (mark ALL appropriate boxes): ☐ Vertical ☒ Horizontal (Also File Form W-1H) ☐ Directional (Also File Form W-1D) ☐ Sidetrack						
8. Total Depth <u>12500</u>		9. Do you have the right to develop the minerals under any right-of-way? ☒ Yes ☐ No		10. Is this well subject to Statewide Rule 36 (hydrogen sulfide area)? ☐ Yes ☒ No		
SURFACE LOCATION AND ACREAGE INFORMATION						
11. RRC District No. <u>08</u>		12. County <u>REEVES</u>		13. Surface Location ☒ Land ☐ Bay/Estuary ☐ Inland Waterway ☐ Offshore		
14. This well is to be located <u>10</u> miles in a <u>SW</u> direction from <u>Orla</u> which is the nearest town in the county of the well site.						
15. Section <u>3</u>	16. Block <u>45</u>	17. Survey <u>PSL</u>	18. Abstract No. <u>A-3536</u>	19. Distance to nearest lease line: <u>200</u> ft.	20. Number of contiguous acres in lease, pooled unit, or unitized tract: <u>635.96</u>	
21. Lease Perpendiculars: <u>215</u> ft from the <u>S</u> line and <u>670</u> ft from the <u>E</u> line. 22. Survey Perpendiculars: <u>215</u> ft from the <u>S</u> line and <u>670</u> ft from the <u>E</u> line.						
23. Is this a pooled unit? ☐ Yes ☒ No		24. Unitization Docket No: _____		25. Are you applying for Substandard Acreage Field? ☐ Yes (attach Form W-1A) ☒ No		
FIELD INFORMATION List all fields of anticipated completion including Wildcat. List one zone per line.						
26. RRC District No.	27. Field No.	28. Field Name (exactly as shown in RRC records)	29. Well Type	30. Completion Depth	31. Distance to Nearest Well in this Reservoir	
08	71052900	PHANTOM (WOLFCAMP)	Oil or Gas Well	9515	0.00	
BOTTOMHOLE LOCATION INFORMATION is required for DIRECTIONAL, HORIZONTAL, AND AMENDED AS DRILLED PERMIT APPLICATIONS (see W-1H attachment)						
Remarks [FILER Oct 25, 2012 8:07 AM]: EST MD 18000'			Certificate: I certify that information stated in this application is true and complete, to the best of my knowledge. Carey Holtzendorf, Lead Regulatory Specialist Name of filer Date submitted (713)5524581 Oct 25, 2012 Phone E-mail Address (OPTIONAL)			
RRC Use Only Data Validation Time Stamp: <u>Oct 30, 2012 3:17 PM</u> (Current Version)						





RAILROAD COMMISSION OF TEXAS
OIL & GAS DIVISION

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

Permit Status: Approved

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

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

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

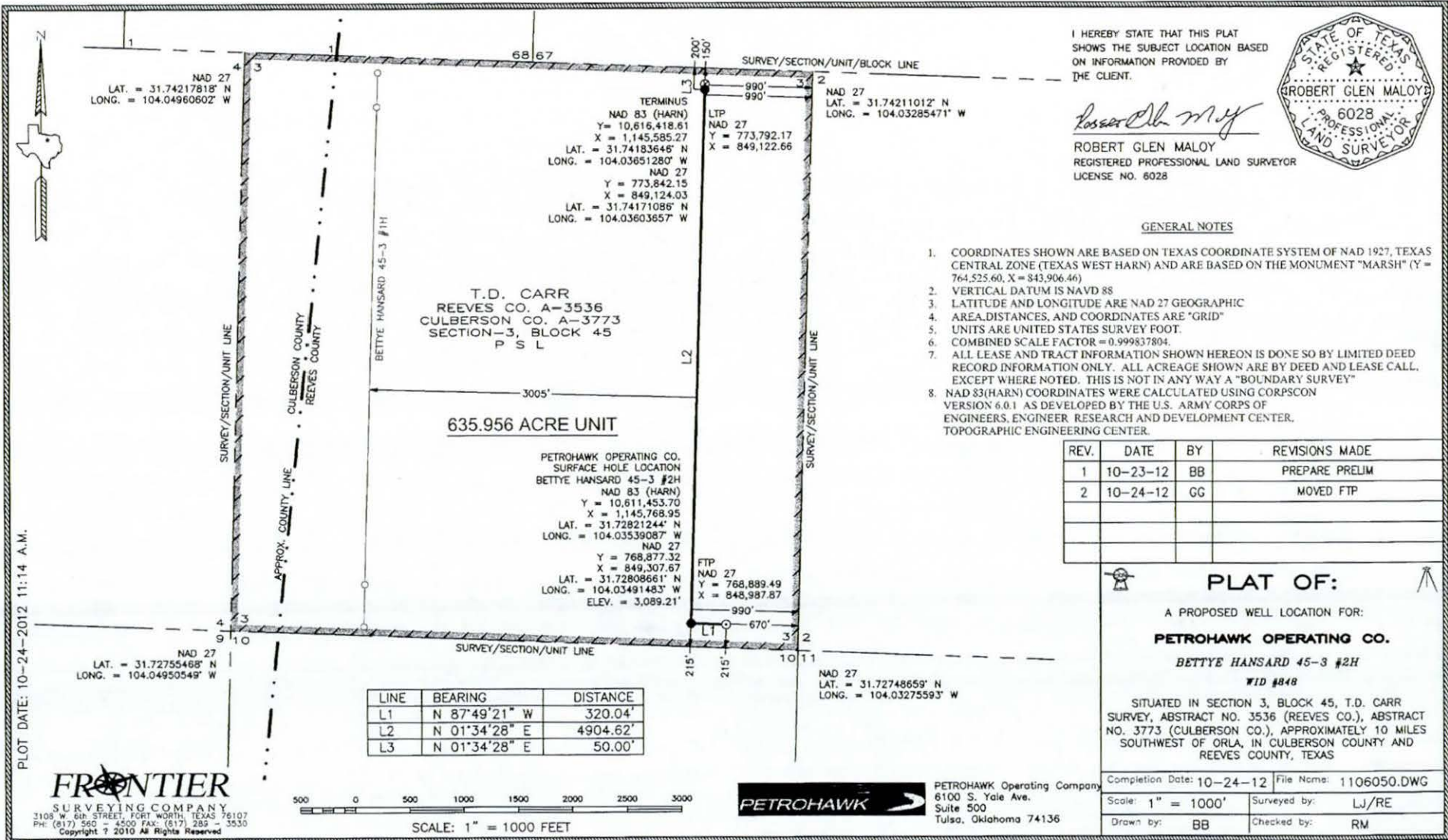
Permit # 750470

Approved Date: Oct 30, 2012

1. RRC Operator No. 660146	2. Operator's Name (exactly as shown on form P-5, Organization Report) PETROHAWK OPERATING COMPANY	3. Lease Name BETTYE HANSARD 45-3	4. Well No. 2H
Lateral Drainhole Location Information			
5. Field as shown on Form W-1 PHANTOM (WOLFCAMP) (Field # 71052900, RRC District 08)			
6. Section 3	7. Block 45	8. Survey PSL	9. Abstract 3536
10. County of BHL REEVES			
11. Terminus Lease Line Perpendiculars 150 ft. from the N line. and 990 ft. from the E line			
12. Terminus Survey Line Perpendiculars 150 ft. from the N line. and 990 ft. from the E line			
13. Penetration Point Lease Line Perpendiculars 215 ft. from the S line. and 990 ft. from the E line			

0.29.15

PERMIT PLAT WID#848 JOB #: 1106050



I HEREBY STATE THAT THIS PLAT SHOWS THE SUBJECT LOCATION BASED ON INFORMATION PROVIDED BY THE CLIENT.

Robert Glen Maloy
ROBERT GLEN MALOY
REGISTERED PROFESSIONAL LAND SURVEYOR
LICENSE NO. 6028



GENERAL NOTES

- COORDINATES SHOWN ARE BASED ON TEXAS COORDINATE SYSTEM OF NAD 1927, TEXAS CENTRAL ZONE (TEXAS WEST HARN) AND ARE BASED ON THE MONUMENT "MARSH" (Y = 764,525.60, X = 843,906.46)
- VERTICAL DATUM IS NAVD 88
- LATITUDE AND LONGITUDE ARE NAD 27 GEOGRAPHIC
- AREA, DISTANCES, AND COORDINATES ARE "GRID"
- UNITS ARE UNITED STATES SURVEY FOOT
- COMBINED SCALE FACTOR = 0.999837804
- ALL LEASE AND TRACT INFORMATION SHOWN HEREON IS DONE SO BY LIMITED DEED RECORD INFORMATION ONLY. ALL ACREAGE SHOWN ARE BY DEED AND LEASE CALL, EXCEPT WHERE NOTED. THIS IS NOT IN ANY WAY A "BOUNDARY SURVEY"
- NAD 83(HARN) COORDINATES WERE CALCULATED USING CORPSCON VERSION 6.0.1 AS DEVELOPED BY THE U.S. ARMY CORPS OF ENGINEERS, ENGINEER RESEARCH AND DEVELOPMENT CENTER, TOPOGRAPHIC ENGINEERING CENTER.

REV.	DATE	BY	REVISIONS MADE
1	10-23-12	BB	PREPARE PRELIM
2	10-24-12	GG	MOVED FTP

PLAT OF:

A PROPOSED WELL LOCATION FOR:

PETROHAWK OPERATING CO.

BETTYE HANSARD 45-3 #2H

WID #848

SITUATED IN SECTION 3, BLOCK 45, T.D. CARR SURVEY, ABSTRACT NO. 3536 (REEVES CO.), ABSTRACT NO. 3773 (CULBERSON CO.), APPROXIMATELY 10 MILES SOUTHWEST OF ORLA, IN CULBERSON COUNTY AND REEVES COUNTY, TEXAS

Completion Date: 10-24-12	File Name: 1106050.DWG
Scale: 1" = 1000'	Surveyed by: LJ/RE
Drawn by: BB	Checked by: RM

21023

File No. MF111870

20

Roames County

Completion Report AP1389-33502

Date Filed: 6-29-15

George P. Bush, Commissioner

By Jm

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☐ Return Receipt (electronic) \$ _____
☐ Certified Mail Restricted Delivery \$ _____
☐ Adult Signature Required \$ _____
☐ Adult Signature Restricted Delivery \$ _____

Postage

\$

Total Postage and Fees

\$

ATTN: Cristen Steele

Sent To

BHP Billiton Petroleum (TXLA Operating) Co.

Street and Apt. No., or PO Box No.

1360 Post Oak Blvd ste 150

City, State, ZIP+4®

Houston, TX 77056-3030

Postmark
Here

MF111870

Certified Mail service provides the following benefits:

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- Electronic verification of delivery or attempted delivery.
- A record of delivery (including the recipient's signature) that is retained by the Postal Service™ for a specified period.

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- Certified Mail service is *not* available for international mail.
- Insurance coverage is *not* available for purchase with Certified Mail service. However, the purchase of Certified Mail service does not change the insurance coverage automatically included with certain Priority Mail items.
- For an additional fee, and with a proper endorsement on the mailpiece, you may request the following services:
 - Return receipt service, which provides a record of delivery (including the recipient's signature). You can request a hardcopy return receipt or an electronic version. For a hardcopy return receipt, complete PS Form 3811, *Domestic Return Receipt*; attach PS Form 3811 to your mailpiece;

for an electronic return receipt, see a retail associate for assistance. To receive a duplicate return receipt for no additional fee, present this USPS®-postmarked Certified Mail receipt to the retail associate.

- Restricted delivery service, which provides delivery to the addressee specified by name, or to the addressee's authorized agent.
- Adult signature service, which requires the signee to be at least 21 years of age (not available at retail).
- Adult signature restricted delivery service, which requires the signee to be at least 21 years of age and provides delivery to the addressee specified by name, or to the addressee's authorized agent (not available at retail).
- To ensure that your Certified Mail receipt is accepted as legal proof of mailing, it should bear a USPS postmark. If you would like a postmark on this Certified Mail receipt, please present your Certified Mail item at a Post Office™ for postmarking. If you don't need a postmark on this Certified Mail receipt, detach the barcoded portion of this label, affix it to the mailpiece, apply appropriate postage, and deposit the mailpiece.

IMPORTANT: Save this receipt for your records.

SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

BHP Petroleum (TXLA Operating) Co.
ATTN: Cristen Steele
1360 Post Oak Blvd Ste 150
Houston, TX 77056-3030



9590 9402 1749 6074 7821 53

7015 1520 0000 6667 2927

COMPLETE THIS SECTION ON DELIVERY

A. Signature

X *Elsa Powell*

☐ Agent

☐ Addressee

B. Received by (Printed Name)

Elsa Powell

C. Date of Delivery

D. Is delivery address different from item 1?

☐ Yes

If YES, enter delivery address below:

☐ No

3. Service Type

- ☐ Adult Signature
- ☐ Adult Signature Restricted Delivery
- ☐ Certified Mail®
- ☐ Certified Mail Restricted Delivery
- ☐ Collect on Delivery

☐ Priority Mail Express®

☐ Registered Mail™

☐ Registered Mail Restricted Delivery

☐ Return Receipt for Merchandise

☐ Signature Confirmation™

☐ Signature Confirmation Restricted Delivery

☐ Delivery Restricted Delivery

fail

fail Restricted Delivery

(over \$500)

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Texas General Land Office

George P. Bush, Commissioner

P.O. Box 12873

Austin, Texas 78711-2873

RECEIVED
MAY 03 2017
ATTN: ~~MaBra~~ Jordan MF 111870

General Land Office



Texas General Land Office

Reconciliation Billing

George P. Bush, Commissioner

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

BHP Billiton Petroleum (TXLA Operating) Company
Attn: Cristen Steele
1360 Post Oak Blvd Ste 150
Houston, TX 77056-3030

Billing Date: 4/24/2017
Billing Due Date: 5/24/2017
Customer Number: C000046383

Invoice	Mineral File	Gas Royalty	Oil Royalty	Penalty	Interest	Total Due
17I00355	MF111870	\$3,178.81	\$0.00	\$665.26	\$224.97	\$4,069.04
Total Due		\$3,178.81	\$0.00	\$665.26	\$224.97	\$4,069.04

Penalty and interest have been calculated thru 4/30/2017. Payment remitted after 4/30/2017 will result in additional penalty and interest charges.

Contact Info: Thomas Kincaid (512) 463-5219 or Tom.Kincaid@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: 4/24/2017

Billing Due Date: 5/24/2017

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
17I00355	MF111870	\$3,178.81	\$0.00	\$665.26	\$224.97	\$4,069.04
Total Due		\$3,178.81	\$0.00	\$665.26	\$224.97	\$4,069.04
Amt. Paid						

Customer ID: C000046383
Invoice Number:
GLO Lease: MF111870
GLO Review: BHP Billiton Petroleum (TXLA Operating) Company
Review Period Sep 2015 Through Aug 2016

Category: Gas
Auditor/AE: TKIncaid
Billing Date: 4/6/2017
P&I Calculation Date: 4/30/2017
Royalty 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 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
Sep-15	08-272207	2,035	1.000000	\$2.670996	1.042916	\$5,668.75	\$708.59	\$0.00	\$708.59	532	4.25%	\$70.86	\$39.03	\$818.48
Oct-15	08-272207	1,532	1.000000	\$2.534009	1.042977	\$4,048.94	\$506.12	\$0.00	\$506.12	502	4.25%	\$50.61	\$26.11	\$582.84
Nov-15	08-272207	1,476	1.000000	\$2.216000	1.043084	\$3,411.74	\$426.47	\$0.00	\$426.47	471	4.50%	\$42.65	\$21.66	\$490.78
Dec-15	08-272207	1,211	1.000000	\$1.984297	1.043084	\$2,506.51	\$313.31	\$0.00	\$313.31	440	4.50%	\$31.33	\$14.72	\$359.36
Jan-16	08-272207	1,023	1.000000	\$2.201229	1.043047	\$2,348.79	\$293.60	\$0.00	\$293.60	411	4.50%	\$29.36	\$12.74	\$335.70
Feb-16	08-272207	708	1.000000	\$2.201229	1.153130	\$1,797.12	\$224.64	\$0.00	\$224.64	380	4.50%	\$25.00	\$8.89	\$258.53
Mar-16	08-272207	977	1.000000	\$1.765984	1.153369	\$1,989.98	\$248.75	\$0.00	\$248.75	350	4.50%	\$25.00	\$8.92	\$282.67
Apr-16	08-272207	1,323	1.000000	\$1.695828	1.153369	\$2,587.68	\$323.46	\$0.00	\$323.46	319	4.50%	\$32.35	\$10.37	\$366.18
May-16	08-272207	5,945	1.000000	\$1.695828	1.058900	\$10,675.51	\$1,334.44	\$0.00	\$1,334.44	289	4.50%	\$133.44	\$37.84	\$1,505.72
Jun-16	08-272207	1,968	1.000000	\$1.725031	1.017500	\$3,454.27	\$431.78	\$0.00	\$431.78	258	4.50%	\$43.18	\$10.59	\$485.55
Jul-16	08-272207	2,495	1.000000	\$2.736544	1.021000	\$6,971.06	\$871.38	\$0.00	\$871.38	227	4.50%	\$87.14	\$18.05	\$976.57
Aug-16	08-272207	2,838	1.000000	\$2.558191	1.039500	\$7,546.92	\$943.37	\$0.00	\$943.37	197	4.50%	\$94.34	\$16.05	\$1,053.76
May-16	08-272207	0	1.000000	\$1.000000	1.000000	\$0.00	\$0.00	\$1,473.76	-\$1,473.76	289	4.50%	\$0.00	\$0.00	-\$1,473.76
Jun-16	08-272207	0	1.000000	\$1.000000	1.000000	\$0.00	\$0.00	\$1,973.34	-\$1,973.34	258	4.50%	\$0.00	\$0.00	-\$1,973.34
TOTALS		23,531				\$53,007.27	\$6,625.91	\$3,447.10	\$3,178.81			\$665.26	\$224.97	\$4,069.04

ATTN: Cristen Steele
CERTIFIED MAIL: 7015 1520 0000 6667 2927

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.
THE FINAL TWO LINES IN THE SCHEDULE (MAY-16, JUN-16 WITH ZERO VOLUMES) REPRESENT DUE VS PAID
OVERPAYMENTS FOR GAS VOLUMES WHICH ARE BEING CREDITED THE UNDERPAID AMOUNTS.

COLUMN (3) RRC VOLUME - REPRESENTS OVER/UNDER REPORTED SALES VOLUMES TO THE GLO FROM RRC WELL ID#s 08-272207
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 (12)(13)(14): PLEASE GO TO THE BELOW 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 PREFERRED 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.

(21)

File No. MF 111870

County

Recon Billing

Date Filed: 4/28/17

George P. Bush, Commissioner

By AT

U.S. Postal Service™
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Domestic Mail Only

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Extra Services & Fees (check box, add fee as appropriate)

- ☐ Return Receipt (hardcopy) \$ _____
☐ Return Receipt (electronic) \$ _____
☐ Certified Mail Restricted Delivery \$ _____
☐ Adult Signature Required \$ _____
☐ Adult Signature Restricted Delivery \$ _____

Postage

\$

Total Postage and Fees

\$

Sent To

BHP Billiton Petroleum (TX LA Operating) Co.
Street and Apt. No., or PO Box No.
1360 Post Oak Blvd Ste 150
City, State, ZIP+4® Houston, TX 77056-3030

MF111870

MF 111870

Postmark
Here

ATTN: Molly Dutton

Certified Mail service provides the following benefits:

- A receipt (this portion of the Certified Mail label).
- A unique identifier for your mailpiece.
- Electronic verification of delivery or attempted delivery.
- A record of delivery (including the recipient's signature) that is retained by the Postal Service™ for a specified period.

Important Reminders:

- You may purchase Certified Mail service with First-Class Mail®, First-Class Package Service®, or Priority Mail® service.
- Certified Mail service is *not* available for international mail.
- Insurance coverage is *not* available for purchase with Certified Mail service. However, the purchase of Certified Mail service does not change the insurance coverage automatically included with certain Priority Mail items.
- For an additional fee, and with a proper endorsement on the mailpiece, you may request the following services:
 - Return receipt service, which provides a record of delivery (including the recipient's signature). You can request a *hardcopy* return receipt or an electronic version. For a *hardcopy* return receipt, complete PS Form 3811, *Domestic Return Receipt*; attach PS Form 3811 to your mailpiece;

for an electronic return receipt, see a retail associate for assistance. To receive a duplicate return receipt for no additional fee, present this USPS®-postmarked Certified Mail receipt to the retail associate.

- Restricted delivery service, which provides delivery to the addressee specified by name, or to the addressee's authorized agent.
- Adult signature service, which requires the signee to be at least 21 years of age (not available at retail).
- Adult signature restricted delivery service, which requires the signee to be at least 21 years of age and provides delivery to the addressee specified by name, or to the addressee's authorized agent (not available at retail).
- To ensure that your Certified Mail receipt is accepted as legal proof of mailing, it should bear a USPS postmark. If you would like a postmark on this Certified Mail receipt, please present your Certified Mail item at a Post Office™ for postmarking. If you don't need a postmark on this Certified Mail receipt, detach the barcoded portion of this label, affix it to the mailpiece, apply appropriate postage, and deposit the mailpiece.

IMPORTANT: Save this receipt for your records.

SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

BHP Billiton Petroleum (TXLA Operating)
CO.
ATTN: Holly Dutton
1360 Post Oak Blvd Ste 150
Houston, TX 77056-3030



9590 9402 1749 6074 7565 81

7016 2070 0000 7390 5533

COMPLETE THIS SECTION ON DELIVERY

A. Signature

X

- ☒ Agent
☐ Addressee

B. Received by (Printed Name)

April Canales

C. Date of Delivery

6/20/18

D. Is delivery address different from item 1? ☐ Yes

If YES, enter delivery address below: ☐ No

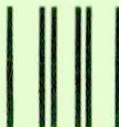
3. Service Type

- ☐ Adult Signature
☐ Adult Signature Restricted Delivery
☐ Certified Mail®
☐ Certified Mail Restricted Delivery
☐ Collect on Delivery
☐ Collect on Delivery Restricted Delivery
☐ Mail
☐ Mail Restricted Delivery

- ☐ Priority Mail Express®
☐ Registered Mail™
☐ Registered Mail Restricted Delivery
☐ Return Receipt for Merchandise
☐ Signature Confirmation™
☐ Signature Confirmation Restricted Delivery

(over \$500)

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9590 9402 1749 6074 7565 81

United States
Postal Service



Texas General Land Office

George P. Bush, Commissioner

P.O. Box 12873

Austin, Texas 78711-2873

ATTN: Aurora Jordan 7th Flr Energy
MF111870

MF111870



Texas General Land Office

Reconciliation Billing

George P. Bush, Commissioner

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

BHP Billiton Petroleum (TXLA Operating) Company
Attn: Holly Dutton
1360 Post Oak Blvd Ste 150
Houston, TX 77056-3030

Billing Date: 6/15/2018
Billing Due Date: 7/15/2018
Customer Number: C000046383

Invoice	Mineral File	Gas Royalty	Oil Royalty	Penalty	Interest	Total Due
18I00562	MF111870	\$3,685.32	\$0.00	\$368.54	\$226.28	\$4,280.14
Total Due		\$3,685.32	\$0.00	\$368.54	\$226.28	\$4,280.14

Penalty and interest have been calculated thru 6/30/2018. Payment remitted after 6/30/2018 will result in additional penalty and interest charges.

Contact Info: Sabrina Garcia (512) 475-1510 or Sabrina.Garcia@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: 6/15/2018

Billing Due Date: 7/15/2018

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
18I00562	MF111870	\$3,685.32	\$0.00	\$368.54	\$226.28	\$4,280.14
Total Due		\$3,685.32	\$0.00	\$368.54	\$226.28	\$4,280.14
Amt. Paid						

Customer ID: C000046383
 Invoice Number: 18100562
 GLO Lease: MF111870
 GLO Review: BHP BILLITON PET(TXLA OP) CO.
 Review Period: September 2016 through August 2017

Category: Gas
 Auditor/AE: Sgarcia
 Billing Date: 6/15/2018
 P&I Calculation Date: 6/30/2018
 Royalty 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 Particip	Price	BTU	Gross Value	Royalty Due	Royalty Paid	Additional Ro	Number of Da	Interest Rate For	Penalty Rate Fron	Interest Rate Fron	Revenue Due
Sep-16	08-272207	3,426	1.00000000	\$ 2.568093	1.038100	\$9,133.50	\$1,141.69	\$0.00	\$1,141.69	592	4.50%	\$114.17	\$75.02	\$1,330.88
Oct-16	08-272207	3,432	1.00000000	\$ 2.691810	1.038100	\$9,590.27	\$1,198.78	\$0.00	\$1,198.78	562	4.50%	\$119.88	\$74.34	\$1,393.00
Nov-16	08-272207	1,300	1.00000000	\$ 2.236542	1.023900	\$2,976.70	\$372.09	\$0.00	\$372.09	531	4.75%	\$37.21	\$22.86	\$432.16
Dec-16	08-272207	1,126	1.00000000	\$ 3.379959	1.023300	\$3,894.51	\$486.81	\$0.00	\$486.81	500	4.75%	\$48.68	\$27.94	\$563.43
Jan-17	08-272207	1,219	1.00000000	\$ 3.115363	1.023700	\$3,887.63	\$485.95	\$0.00	\$485.95	472	4.75%	\$48.60	\$26.12	\$560.67
TOTALS		10,503				\$29,482.62	\$3,685.32	\$0.00	\$3,685.32			\$368.54	\$226.28	\$4,280.14

ATTN: Holly Dutton
 CERTIFIED MAIL: 7016 2070 0000 7390 5533

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

COLUMN (3) VOLUME - REPRESENTS UNDER REPORTED SALES VOLUMES TO THE GLO FROM RRC WELL ID 08-272207
 COLUMN (5), (6) PRICE & BTU - TAKEN FROM ROYALTY PRODUCTION 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 PREFERRED 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.

(22)

File No. MF 111870

County

Recon Billing

Date Filed: 6/28/18

George P. Bush, Commissioner

By AT



Texas General Land Office

Reconciliation Billing

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

Commissioner Dawn Buckingham, M.D.

BPX Operating Company
Attn: Patty Burg
OFC WM11 6025-1
15377 Memorial Dr
Houston, TX 77079-4101

Billing Date: 4/7/2025
Billing Due Date: 5/7/2025
Customer Number: C000046383

Invoice	Mineral File	Gas Royalty	Oil Royalty	Penalty	Interest	Total Due
25I00581	MF111870	\$6,536.02	\$0.00	\$653.60	\$588.63	\$7,778.25
Total Due		\$6,536.02	\$0.00	\$653.60	\$588.63	\$7,778.25

Penalty and interest have been calculated thru 4/30/2025. Payment remitted after 4/30/2025 will result in additional penalty and interest charges.

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.

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: 4/7/2025
Billing Due Date: 5/7/2025

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
25I00581	MF111870	\$6,536.02	\$0.00	\$653.60	\$588.63	\$7,778.25
Total Due		\$6,536.02	\$0.00	\$653.60	\$588.63	\$7,778.25
Amt. Paid						

Customer ID: C000046383
 Invoice Number:
 GLO Lease: MF111870
 GLO Review: BPX OPERATING COMPANY
 Review Period: Sept 2023 - Aug 2024

Category Gas
 Auditor/AE: ECortez
 Billing Date: 4/2/2025
 P&I Calculation Date: 4/30/2025
 Royalty 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 Due	Royalty Paid	Additional Royalty Due	Number of Days Late	Interest Rate For Additional Royalty	Penalty Rate From Additional Royalty	Interest Rate From Additional Royalty2	Revenue Due
Jan-24	08-272207	12,634	1	\$2.913	1,146,598	\$42,196.65	\$5,274.58	\$0.00	\$5,274.58	411	9.50%	\$527.46	\$483.24	\$6,285.28
Feb-24	08-272207	11,294	1	\$0.786	1,137,114	\$10,091.55	\$1,261.44	\$0.00	\$1,261.44	380	9.50%	\$126.14	\$105.39	\$1,492.97
TOTALS		23,928				\$52,288.20	\$6,536.02	\$0.00	\$6,536.02			\$653.60	\$588.63	\$7,778.25

COMMENTS: BILLING ON UNDER REPORTED GAS VOLUMES TO THE GLO FOR RRC ID 08-272207

COLUMN (3) UNDER REPORTED VOLUME: REPORTED RRC VOLUMES MINUS REPORTED GLO2 VOLUMES
 COLUMNS (5) & (6) REPORTED GLO2 PRICES AND BTU FACTORS WERE USED
 COLUMNS (12),(13),(14) PLEASE GO TO THIS WEB SITE FOR EXPLANATION OF PENALTY AND INTEREST ASSESSMENTS:
<http://www.glo.texas.gov/energy-business/oil-gas/trac/forms/penalty-interest-assessment-rules.pdf>

FOR QUESTIONS REGARDING THIS INVOICE PLEASE E-MAIL: eric.cortez@glo.texas.gov

NOTE 1: PAYMENT OF THIS INVOICE MAY BE MADE BY CHECK OR ACH DEBIT.
 PLEASE REMIT PAYMENT OF THIS INVOICE SEPARATELY FROM REGULAR ROYALTY PAYMENTS.
 WHEN PAYMENT IS REMITTED, PLEASE SEND AN EMAIL TO: accountservices@glo.texas.gov and eric.cortez@glo.texas.gov
 NOTING YOUR COMPANY NAME, CUSTOMER ID, INVOICE NUMBER(S) AND AMOUNT OF PAYMENT.

EMAIL: Patty Burg
Patty.Burg@bpx.com

File No. MF111870 23

County

Recon Billing

Date Filed: 4/29/2025

Commissioner Dawn Buckingham, M.D.

By: VD