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Archives and Records Staff

MF112848

State Lease	Control	Base File	County
MF112848	07-032640	133937	CULBERSON

Survey	PUBLIC SCHOOL LAND	
Block	113	
Block Name		
Township		
Section/Tract	2	
Land Part	S/2 & NW/4	
Part Description		
Acres	480	
Depth Below	Depth Above	Depth Other

Leasing: [Signature]
Analyst: [Signature]
Maps: _____
GIS: MC
DocuShare: _____

Name	THUNDERHEAD PETROLEUM, L.P.
Lease Date	3/1/2011
Primary Term	5 yrs
Bonus (\$)	\$240,480.00
Rental (\$)	\$0.00
Lease Royalty	0.1250

ATTENTION FILE USERS!
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Scanned sm	03/29/2023

RAL REVIEW SHEET

Transaction # 7094
Lessor: The Undersigned
Lessee: Thunderhead Petroleum, LP

Geologist: R. Widmayer

Lease Date: 12/13/2010 **UL** ☐

Gross Acres: 480

Net Acres: 480

LEASE DESCRIPTION

County	PM#	Base File No	Part	Sec.	Block	Twp	Survey	Abst#
CULBERSON	07-032640	133937	NW/4 & S/2	2	113	00	PUBLIC SCHOOL LAND	5092

TERMS OFFERED

Primary Term: 5 years
Bonus/Acre: \$700.00
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
MF106746	Craig L. Blair	11/1/2005	5 years	\$200.00	\$1.00	1/5	Last Lease
Pending	Craig L. Blair	7-1-10	5 yrs	\$700.00	\$1.00	1/4	Adjacent SE

Comments: 2nd and 3rd year rentals are paid up. 4th year rental will be \$700.00 per acre and will pay up the 5th year. Shallow depths are not included under 4 producing wells on this lease (160 acres).

Approved: 1/24/11

RELINQUISHMENT ACT LEASE APPLICATION

Texas General Land Office

Jerry Patterson, Commissioner

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

DATE: 14-Jan-11

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

Applicant:	Thunderhead Petroleum, LP	County:	CULBERSON
Prim. Term:	5 years	Bonus/Acre	\$700.00
Royalty:	1/4	Rental/Acre	\$1.00

Consideration

Recommended: ML

Date: 1/21/11

Not Recommended: _____

Comments: 2nd and 3rd year rentals are paid up. 4th year rental will be \$700.00 per acre and will pay up the 5th year. Shallow depths are not included under 4 producing wells on this lease (160 acres).

Lease Form

Recommended: Port

Date: 1/26/11

Not Recommended: _____

Comments:

Louis Renaud, Deputy Commissioner

Date: 2-7-11

Recommended: CLR

Not Recommended: _____

Bill Warnick, General Counsel

Date: 2-10-11

Recommended: WFW

Not Recommended: _____

Larry Laine, Chief Clerk

Date: 2/14/11

Approved: [Signature]

Not Approved: _____

Jerry Patterson, Commissioner

Date: 02/16/2011

Approved: Jerry E. Patterson

Not Approved: _____

①

File No. 112548

RAL Rawen Shores

Date Filed: 1/21/11

Jerry E. Patterson, Commissioner

By GH

11/21/10

11/21/10

11/21/10

11/21/10

11/21/10

11/21/10

11/21/10

#66963

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

MF12848

The State of Texas



Austin, Texas

OIL AND GAS LEASE

Rentals paid for
2nd + 3rd yr

4th yr Rental is \$700.00
Per acre - pay the
5th yr

THIS AGREEMENT is made and entered into this 1st day of March, 2011, between the State of Texas, acting by and through its Agent, being the undersigned parties
of P.O. Box 5637, Midland, Texas 79704-5637
(Give Permanent Address)
said agent herein referred to as the owner of the soil (whether one or more), and Thunderhead Petroleum, L.P.
of P.O. Box 2476, Carlsbad, New Mexico 88220 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 County, State of Texas, to-wit:

All of the South-half and the Northwest-quarter (S/2 and NW/4) of Section 2, Abstract 5092, Block 113, Public School Land Survey, Culberson County, Texas; **Save and Except** the following four (4) tracts of land:

- Tract No. 1: The Northwest-quarter of the Southeast-quarter (NW/4 SE/4) containing 40.0 acres in the shape of a square surrounding the Columbia 7 #5 well. API No. 42-109-32225 from the surface to 2,848 feet subsurface;
- Tract No. 2: The Northeast-quarter of the Southeast-quarter (NE/4 SE/4) containing 40.0 acres in the shape of a square surrounding the Columbia 7 #8 well. API No. 42-109-32262 from the surface to 3,046 feet subsurface;
- Tract No. 3: The Southwest-quarter of the Southeast-quarter (SW/4 SE/4) containing 40.0 acres in the shape of a square surrounding the Columbia 7 #2 well. API No. 42-109-32221 from the surface to 2,640 feet subsurface;
- Tract No. 4: The Southeast-quarter of the Southeast-quarter (SE/4 SE/4) containing 40.0 acres in the shape of a square surrounding the Columbia 7 #1 well. API No. 42-109-31740 from the surface to 4,137 feet subsurface;

containing 480.0 acres, more or less. The bonus consideration paid for this lease is as follows:

To the State of Texas: Two hundred forty thousand four hundred eighty and no/100
Dollars (\$240,480.00)

To the owner of the soil: Two hundred forty thousand four hundred eighty and no/100
Dollars (\$240,480.00)

Total bonus consideration: Four hundred eighty thousand nine hundred sixty and no/100
Dollars (\$480,960.00)

The total bonus consideration paid represents a bonus of One thousand two and no/100
Dollars (\$1,002.00) per acre, on 480.0 net acres.

2. TERM. Subject to the other provisions in this lease, this lease shall be for a term of five (5) years 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.

SEE PARAGRAPH 40 IN ADDENDUM ATTACHED HERETO.

3. DELAY RENTALS. If no well is commenced on the leased premises on or before one (1) year from this date, this lease shall terminate, unless on or before such anniversary date Lessee shall pay or tender to the owner of the soil or to his credit in the _____

Bank, at _____ or its successors (which shall continue as the depository regardless of changes in the ownership of said land), the amount specified below, in addition, Mid: 008540\000003\924627.1



IF IT BEARS THE SEAL OF THE COUNTY CLERK
A CERTIFIED COPY
ATTEST: June 2, 2011
LINDA DONALD, COUNTY CLERK
CULBERSON COUNTY, TEXAS
BY [Signature] DEPUTY

Lessee shall pay or tender to the COMMISSIONER OF THE GENERAL LAND OFFICE OF THE STATE OF TEXAS, AT AUSTIN, TEXAS, a like sum on or before said date. Payments under this paragraph shall operate as a rental and shall cover the privilege of deferring the commencement of a well for one (1) year from said date. Payments under this paragraph shall be in the following amounts:

To the owner of the soil: _____
Dollars (\$ _____)
To the State of Texas: _____
Dollars (\$ _____)
Total Delay Rental: _____
Dollars (\$ _____)

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

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.

Mid: 008540\000003\924627.1

11:00:00

IF IT BEARS THE SEAL OF THE COUNTY CLERK
ATTEST: June 2, 2011
LINDA McDONALD, COUNTY CLERK
COLUMBIA COUNTY, TEXAS
BY [Signature]

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

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



IT BEARS THE SEAL OF THE COUNTY CLERK
ATTEST: June 2, 2011
LINDA REDFORD, COUNTY CLERK
CUMBERLAND COUNTY, TEXAS
BY: [Signature] DEPUTY

the drainage or which is completed in the same producing reservoir and within one thousand (1,000) feet of the leased premises. The compensatory royalty is to be paid monthly, one-half (1/2) to the Commissioner of the General Land Office and one-half (1/2) to the owner of the soil, beginning on or before the last day of the month following the month in which the oil or gas is produced from the well causing the drainage or that is completed in the same producing reservoir and located within one thousand (1,000) feet of the leased premises. If the compensatory royalty paid in any 12-month period is an amount less than the annual shut-in oil or gas royalty, Lessee shall pay an amount equal to the difference within thirty (30) days from the end of the 12-month period. Compensatory royalty payments which are not timely paid will accrue penalty and interest in accordance with Paragraph 9 of this lease. None of these provisions will relieve Lessee of the obligation of reasonable development nor the obligation to drill offset wells as provided in Texas Natural Resources Code 52.173; however, at the determination of the Commissioner, and with the Commissioner's written approval, the payment of compensatory royalties can satisfy the obligation to drill offset wells.

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

(A) VERTICAL. In the event this lease is in force and effect two (2) years after the expiration date of the primary or extended term it shall then terminate as to all of the leased premises, EXCEPT (1) 40 acres surrounding each oil well capable of producing in paying quantities and 320 acres surrounding each gas well capable of producing in paying quantities (including a shut-in oil or gas well as provided in Paragraph 14 hereof), or a well upon which Lessee is then engaged in continuous drilling or reworking operations, or (2) the number of acres included in a producing pooled unit pursuant to Texas Natural Resources Code 52.151-52.154, or (3) such greater or lesser number of acres as may then be allocated for production purposes to a proration unit for each such producing well under the rules and regulations of the Railroad Commission of Texas, or any successor agency, or other governmental authority having jurisdiction. If at any time after the effective date of the partial termination provisions hereof, the applicable field rules are changed or the well or wells located thereon are reclassified so that less acreage is thereafter allocated to said well or wells for production purposes, this lease shall thereupon terminate as to all acreage not thereafter allocated to said well or wells for production purposes. Notwithstanding the termination of this lease as to a portion of the lands covered hereby, Lessee shall nevertheless continue to have the right of ingress to and egress from the lands still subject to this lease for all purposes described in Paragraph 1 hereof, together with easements and rights-of-way for existing roads, existing pipelines and other existing facilities on, over and across all the lands described in Paragraph 1 hereof ("the retained lands"), for access to and from the retained lands and for the gathering or transportation of oil, gas and other minerals produced from the retained lands.

(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.

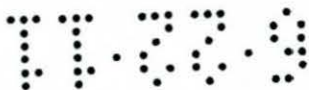
19. WARRANTY CLAUSE. The owner of the soil warrants and agrees to defend title to the leased premises. If the owner of the soil defaults in payments owed on the leased premises, then Lessee may redeem the rights of the owner of the soil in the leased premises by paying any mortgage, taxes or other liens 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.



IF IT BEARS THE SEAL OF THE COUNTY CLERK
ATTEST: June 2, 2011
LINDA MC DONALD, COUNTY CLERK
COMMISSION COUNTY, TEXAS

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 1, Chap. 9 of the Texas Business and Commerce Code. Lessee agrees that the Commissioner may require Lessee to execute and record such instruments as may be reasonably necessary to acknowledge, attach or perfect this lien. Lessee hereby represents that there are no prior or superior liens arising from and relating to Lessee's activities upon the above-described property or from Lessee's acquisition of this lease. Should the Commissioner at any time determine that this representation is not true, then the Commissioner may declare this lease forfeited as provided herein.

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

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

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

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

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

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

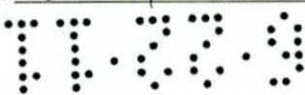
EXHIBITS "A" and "B" ATTACHED HERETO CONTAIN ADDITIONAL PROVISIONS WHICH ARE INCORPORATED HEREIN AND MADE A PART OF THIS LEASE. IN THE EVENT OF INCONSISTENCY OR CONFLICT BETWEEN ANY PRINTED PROVISIONS OF THIS LEASE FORM AND THE PROVISIONS SET FORTH ON THOSE EXHIBITS, THE PROVISIONS ON THE EXHIBITS SHALL PREVAIL. NEVERTHELESS, THE OWNER OF THE SOIL AND LESSEE DESIRE TO COMPLY WITH SUBCHAPTER F OF CHAPTER 52 OF THE TEXAS NATURAL RESOURCES CODE, KNOWN AS THE RELINQUISHMENT ACT, AND SHOULD ANY PROVISION ON EXHIBITS "A" AND "B" OTHERWISE VIOLATE THE RELINQUISHMENT ACT, IT SHALL BE DEEMED REMOVED OR AMENDED TO THE EXTENT NECESSARY SO THIS LEASE FULLY COMPLIES WITH THE RELINQUISHMENT ACT.

LESSEE

Thunderhead Petroleum, L.P.
a Texas Limited Partnership
By: SC Blair, Inc.,
General Partner

BY: Craig L. Blair
Craig L. Blair, President

Date: 5-14-11



IF IT BEARS THE SEAL OF THE COUNTY CLERK
A CERTIFIED COPY
ATTEST: June 2, 2011
LINDA M. DONALD, COUNTY CLERK
COLLESON COUNTY, TEXAS
BY: [Signature]

STATE OF TEXAS

BY: Diane Davidson Claiborne
Diane Davidson Claiborne, Individually and as Agent for the State of Texas
P.O. Box 5637
Midland, Texas 79704-5637

Date: 4/1/11

STATE OF TEXAS

BY: Elaine Davidson Smith
Elaine Davidson Smith, Individually, as Trustee and as Agent for the State of Texas
2606 Curtis
Amarillo, Texas 79109

Date: _____

STATE OF TEXAS

BY: Carol Lynn Windham
Carol Lynn Windham, Individually and as Agent for the State of Texas
P.O. Box 6699
Abilene, Texas 79608-3408

Date: _____

STATE OF TEXAS

BY: Shauna Claiborne Bowers
Shauna Claiborne Bowers, Individually and as Agent for the State of Texas
P.O. Box 5637
Midland, Texas 79704-5637

Date: 4-5-2011

STATE OF TEXAS

BY: Rick Hayes Smith
Rick Hayes Smith, Individually and as Agent for the State of Texas
2606 Curtis
Amarillo, Texas 79109-3408

Date: _____

STATE OF TEXAS

BY: Paul Eldon Smith
Paul Eldon Smith, Individually and as Agent for the State of Texas
2606 Curtis
Amarillo, Texas 79109-3408

Date: _____

STATE OF TEXAS

BY: Robbie Reagan Smith Moseley
Robbie Reagan Smith Moseley, Individually and as Agent for the State of Texas
2606 Curtis
Amarillo, Texas 79109-3408

Date: _____

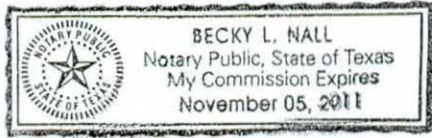
(INDIVIDUAL ACKNOWLEDGMENT)

STATE OF Texas

COUNTY OF Midland

BEFORE ME, the undersigned authority, on this day personally appeared **Diane Davidson Claiborne**, known to me to be the person whose name is 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 1st day of April, 2011.



Becky L. Nall
Notary Public

(INDIVIDUAL ACKNOWLEDGMENT)

STATE OF Texas

COUNTY OF Patterson

BEFORE ME, the undersigned authority, on this day personally appeared **Elaine Davidson Smith**, known to me to be the person whose name is 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 1st day of April, 2011.



Ashley C. Cordell
Notary Public

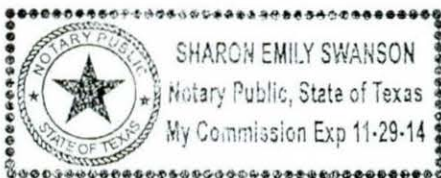
(INDIVIDUAL ACKNOWLEDGMENT)

STATE OF Texas

COUNTY OF Wilton

BEFORE ME, the undersigned authority, on this day personally appeared **Carol Lynn Windham**, known to me to be the person whose name is 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 27 day of April, 2011.



Sharon Swanson
Notary Public

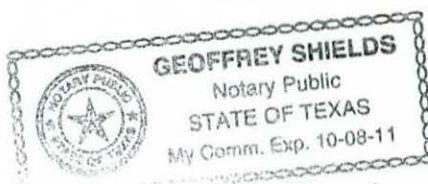
(INDIVIDUAL ACKNOWLEDGMENT)

STATE OF TEXAS

COUNTY OF DALLAS

BEFORE ME, the undersigned authority, on this day personally appeared **Shauna Claiborne Bowers**, known to me to be the person whose name is 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 05 day of April, 2011.



Geoffrey Shields
Notary Public

Mid: 008540\000003\924627.1



IF IT BEARS THE SEAL OF THE COUNTY CLERK
ATTEST: June 2, 2011
Erin McDonald
COUNTY CLERK
CLAYTON COUNTY, TEXAS
BY Erin McDonald
DEPUTY

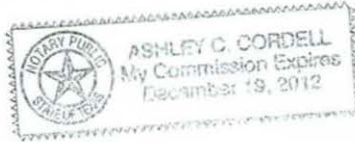
(INDIVIDUAL ACKNOWLEDGMENT)

STATE OF Texas

COUNTY OF Potter

BEFORE ME, the undersigned authority, on this day personally appeared Rick Hayes Smith, known to me to be the person whose name is 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 14th day of April, 2011.



Ashley C. Cordell
Notary Public

(INDIVIDUAL ACKNOWLEDGMENT)

STATE OF Texas

COUNTY OF Potter

BEFORE ME, the undersigned authority, on this day personally appeared Paul Eldon Smith, known to me to be the person whose name is 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 14th day of April, 2011.



Ashley C. Cordell
Notary Public

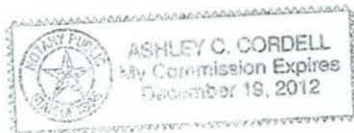
(INDIVIDUAL ACKNOWLEDGMENT)

STATE OF Texas

COUNTY OF Potter

BEFORE ME, the undersigned authority, on this day personally appeared Robbie Reagan Smith Moseley, known to me to be the person whose name is 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 14th day of April, 2011.



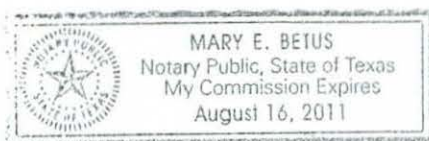
Ashley C. Cordell
Notary Public

(CORPORATE ACKNOWLEDGMENT)

STATE OF Texas

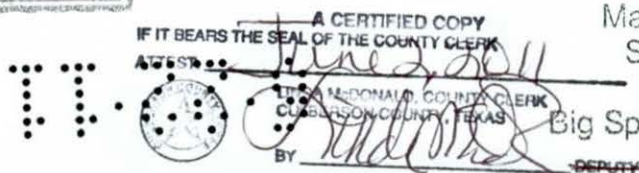
COUNTY OF Howard

This instrument was acknowledged before me on the 14th day of May, 2011 by Craig L. Blair, President of SC Blair, Inc., on behalf of said corporation, acting in the capacity of General Partner of Thunderhead Petroleum, L.P., a Texas Limited Partnership.



Mary E. Betus
Notary Public

Mid: 008540\000003\924627.1



Mail Instrument back to
Slate Land Services
P.O. Box 550
Big Spring, Texas 79721-0550

EXHIBIT "A"

ADDENDUM

Attached to and made a part of that certain Oil and Gas Lease dated March 1, 2011, between the State of Texas, acting by and through its Agent, Diane Davidson Claiborne, et al, as Owners of the Soil; and Thunderhead Petroleum, L.P., a Texas Limited Partnership, as Lessee, as to those lands described herein located in Culberson County, Texas.

40. DELAY RENTALS. The Lessee has paid up delay rentals for the 2nd and 3rd years of this Lease. These prepayments of \$1.00 per acre per year are as follows:

To the owner of the soil: Two hundred forty and no/100
Dollars (\$240.00)
To the State of Texas: Two hundred forty and no/100
Dollars (\$240.00)
Total Delay Rental: Four hundred eighty and no/100
Dollars (\$480.00)

If no well is commenced on the leased premises on or before three (3) years 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, paid directly to the owner of the soil at the address above, 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. These payments are calculated at \$501.00 per acre. Rentals for the fifth year of the Primary Lease Term are included in the fourth year delay rentals and if the fourth year delay rentals are paid then no additional rentals are due under this Lease. Payments under this paragraph shall be in the following amounts:

To the owner of the soil: One hundred twenty thousand two hundred forty and no/100
Dollars (\$120,240.00)
To the State of Texas: One hundred twenty thousand two hundred forty and no/100
Dollars (\$120,240.00)
Total Delay Rental: Two hundred forty thousand four hundred eighty and no/100
Dollars (\$240,480.00)

EXHIBIT "B"

Attached to and made part of that certain Oil and Gas Lease dated March 1, 2011 between the State of Texas, acting by and through its Agent, Diane Davidson Claiborne, et al, said agent herein referred to as the Owner of the Soil (whether one or more), and Thunderhead Petroleum, L.P., a Texas Limited Partnership, as Lessee

ADDITIONAL PROVISIONS

This Exhibit "B" is attached to and made a part of that certain Oil and Gas Lease dated this 1st day of March, 2011, by and between the **STATE OF TEXAS**, acting by and through its Agent, Diane Davidson Claiborne, et al, said Agent referred to as the "Owner of the Soil," and the State of Texas and the Owner of the Soil sometimes together referred to as "Lessor" and Thunderhead Petroleum, L.P., a Texas Limited Partnership, as Lessee, and the terms, covenants and conditions hereof are incorporated in the said Oil and Gas Lease.

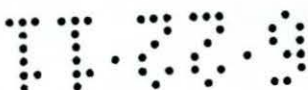
41. Lessee shall carry, for the benefit of Lessee, the State of Texas, and the Owner of the Soil, and in support of the indemnification obligations under this Lease, and shall require that all contractors and subcontractors carry, the following insurance, to wit:

- (a) Worker's Compensation Insurance to cover full liability under the Worker's Compensation Laws of the State of Texas.
- (b) Employer's Liability Insurance with limits of not less than \$5,000,000.00 for accidental injury to or death of one or more employees.
- (c) Comprehensive General Public Liability Bodily Injury Insurance with limits of liability of not less than \$5,000,000.00 for the accidental injury or death of one person, and \$5,000,000.00 for accidental injury or death of more than one person as the result of one accident or occurrence.
- (d) Comprehensive General Public Liability Property Damage Insurance with limits of not less than \$1,000,000.00 for damage to property as a result of one accident or occurrence.
- (e) Automobile Public Liability and Property Damage Insurance combined with limits of not less than \$1,000,000.00 for injuries to or death of one person or property damage, and \$1,000,000.00 for injuries to or death of more than one person and property damage as the result of one accident.
- (f) Umbrella Liability with limits of \$5,000,000.00 per occurrence.
- (g) Pollution Insurance with limits of not less than \$5,000,000.00, or in lieu of coverage, Broad Form Property Damage endorsement.
- (h) Care, custody and control coverage with limits of not less than \$5,000,000.00, or in lieu of coverage, Broad Form Property Damage endorsement.

Each insurance policy obtained by Lessee with respect to operations conducted hereunder shall name the State of Texas and the Owner of the Soil as additional insureds and shall contain a waiver of subrogation with respect to them. Lessee shall cause a certificate of the insurance obtained hereunder to be delivered to the Owner of the Soil. Such certificate shall describe the coverage obtained, any exclusions from such coverage, and the parties insured thereunder, and shall provide at least thirty (30) days prior written notice to the Owner of the Soil in the event of cancellation.

42. If oil, gas or other hydrocarbons are discovered in paying quantities on the Leased Premises, Lessee agrees to further explore and fully develop the Leased Premises the same as a reasonably prudent operator would. In addition to the obligation imposed by the foregoing sentence, but not in limitation thereof, and notwithstanding any other provision of the Lease, Lessor and Lessee agree as follows:

- (a) If at the expiration of the Primary Term oil, gas or other liquid hydrocarbons or any of them are being produced from the Leased Premises in paying quantities, or if Lessee is then engaged in actual drilling or reworking operations on the Leased Premises in the bona fide effort to find oil or gas, Lessee may conduct a continuous development program on the Leased Premises by commencing actual operations for the drilling of an additional well on or before the end of the Primary Term hereof or within one hundred eighty (180) days after completion of operations on any well being drilled over the end of the Primary Term, whichever is the later date, and by thereafter allowing no more than one hundred eighty (180) days to elapse between the completion or abandonment of one well and the commencement of actual operations for the drilling of another well in the bona fide effort to find and produce oil, gas or other hydrocarbons, until such time as the Leased Premises has been fully developed as to each productive formation in accordance with the minimum spacing and proration requirements fixed by special field rules established by the Railroad Commission of Texas or other lawful governmental authority exercising like jurisdiction, or, if there be no such special field rules, to the density of forty (40) acres for each well classified by the Railroad Commission of Texas as an oil well, and one hundred sixty (160) acres for each well classified by the Railroad Commission of Texas as a gas well. If the Railroad Commission of Texas or other lawful authority adopts special field rules prescribing proration units of specific acreage size and dimensions and authorizing the operator to establish optional size proration units for any wells drilled hereunder, all proration units established under this lease shall



contain the minimum acreage allowed for such wells under the special field rules in effect at the time the well is drilled. Lessee agrees to pursue the drilling of all wells commenced with due diligence and in a good and workmanlike manner, and to complete each such well within one hundred twenty (120) days from the commencement thereof; and if Lessee fails to do so, then it shall be conclusively presumed that Lessee has failed to comply with this Continuous Development Provision.

- (b) If Lessee fails to timely commence continuous development, or if having commenced such fails to continue the same, but in any event not later than March 1, 2018, this Lease shall ipso facto terminate as to all acreage covered hereby, **Save and Except** for a tract surrounding each well then producing, with each such tract to contain the minimum number of acres required to comply with the applicable rules and regulations of the Railroad Commission of Texas or other lawful governmental authority exercising like jurisdiction, or if there be no such rules or regulations, forty (40) acres for each oil well and one hundred sixty (160) acres for each gas well, and shall also automatically and ipso facto terminate as to all depths lying more than one hundred (100) feet below the deepest producing interval(s) within each proration unit otherwise maintained in accordance herewith. Thereafter, each such tract shall be treated for purposes of lease preservation as being covered by a separate Lease, and the Lease as to each such separate tract must then be maintained, if at all, by production or operations on that tract. The acreage retained hereunder for each well shall be in as nearly the form of a rectangle as practicable, and configured in such a shape as will facilitate further and full development of the Premises. Upon such termination Lessor, Lessor's successors, lessees, or assigns, shall have the right to use the Leased Premises for the purpose of investigating, exploring, prospecting, drilling for, producing and owning oil, gas and other hydrocarbons from the horizons as to which this Lease has terminated. If necessary, Lessee shall have a continuing non-exclusive easement across the surface of the Leased Premises as to which this Lease has terminated for access, utilizing then existing routes, to the Land as to which this Lease remains in effect.
- (c) Termination provided for in this article or any other article of this Lease shall be automatic; however, without limiting the rights of Lessor, if this Lease terminates as to any portion or portions of the Leased Premises, Lessee expressly agrees to promptly execute and deliver to Lessor a properly recordable instrument releasing and accurately describing such portion or portions of the Leased Premises. Should Lessee fail to deliver any such Release within ninety (90) days after Lessor's written request for same, Lessee shall pay to Lessor, as liquidated damages for clouding Lessor's title, the sum of \$100.00 per day for each day thereafter until the Release is received by Lessor, said sum being payable one-half to the Owner of the Soil and one-half to the Commissioner of the General Land Office of the State of Texas.
- (d) Lessee shall have a period of ninety (90) days from and after the termination of this Lease as to any portion of the Land covered hereby, to remove all property, casing and fixtures from the affected Land, and in the event Lessee fails to so remove such property within the said period, ownership of the same shall vest in Lessor. Lessor, at its option, may require the removal of said equipment.

43. Lessee agrees to provide the Owner of the Soil, at Lessee's sole cost, the following:

- (a) Any abstracts which Lessee purchases covering any of the Leased Premises, along with copies of all Title Opinions covering all or any portion of said Land acquired or procured by Lessee or in Lessee's possession;
- (b) Copies of all Assignments, Partial Assignments, Releases and Partial Releases filed for record in Culberson County, Texas covering all or any portion of this Lease or the Leased Premises; and
- (c) All of the data provided to the Commissioner of the General Land Office of the State of Texas under any provision of this lease including, without limitation, Paragraph 10 hereof, and all copies so received by the Owner of the Soil shall be kept confidential to the extent that the General Land Office of the State of Texas is also required to keep same confidential.

44. Notwithstanding anything contained in Paragraph 19 of this Lease to the contrary, this Lease is executed, delivered and recorded without any representation or warranties (of title, or otherwise), either statutory, express or implied, except the Owner of the Soil covenants that its interest in the Leased Premises is free and clear of any encumbrance done or suffered by Lessor.

45. A separate Surface Use and Damage Agreement of even date governing operations on the surface of the Land has been entered into by the parties hereto, and all sums due thereunder are payable one-half (1/2) to the owner of the soil and one-half (1/2) to the Commissioner of the General Land Office of the State of Texas.

END OF EXHIBIT "B"

Mid: 008540\000003\924629.1

IF IT BEARS THE SEAL OF THE COUNTY CLERK
ATTEST: *June 2, 2011*

LINDA PERSONA, COUNTY CLERK
CULBERSON COUNTY, TEXAS
BY *[Signature]* DEPUTY

Mail Instrument back to
Slate Land Services
P.O. Box 550
Big Spring, Texas 79721-0550

2

File No. 112548
Lease
Date Filed: 3/11/11
Jerry E. Patterson, Commissioner
By GH

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 & Gas Lease dated 2011 filed for record in my office this 2nd day of June 2011, at 4:16 P.M., under Clerk's File No. 66963 to be recorded in the Oil & Gas Records of Culberson County, Texas.

TO CERTIFY WHICH, Witness my hand and seal at Van Horn this 2nd day of June 2011
By Linda McDonald Deputy LINDA McDONALD, COUNTY CLERK
CULBERSON COUNTY, TEXAS

03311

CAPITAN ENERGY INC. - P. O. BOX 2476 - CARLSBAD, NM 88221-2476

To: Commissioner of the General Land Office
of the State of Texas, at Austin, Texas
Mineral Leasing Division; 1700 N. Congress Ave., Suite 640
Austin, TX 78701-1495

Vendor Code
COMGLO

Check Date
04/18/2011

Check Amount
\$240,480.00

006765
Check Number

Invoice #	Invoice Amt
4142011	240,480.00
for Lease covering all of the S/2 and NW/4 of Section 2, A-5092, Blk 113, PSL Surv., Culberson Co., TX save and except the following 4 tracts of land: Tr. 1: the NW/4 SE/4 containing 40.0 ac. in the shape of a square surrounding the Columbia 7 #5 Well. API#42-109-32225 from the surface to 2,848 feet subsurface; Tract 2: NE/4 SE/4 containing 40.0 ac. in the shape of a square surrounding the Columbia 7 #8 Well. API#42-109-32262 from the surface to 3,046 feet subsurface. Tract # 3: The SW/4 SE/4 containing 40.0 ac in the shape of a square surrounding the Columbia 7 #2 Well. API#42-109-32221 from the surface to 2,640 feet subsurface. Tract #4 SE/4 SE/4	

Invoice #	Invoice Amt
containing 40.0 acres in the shape of a square surrounding the Columbia 7 #1 Well API#42-109-31740 from the surface to 4,137 feet subsurface. Containing 480.0 acres, more or less.	

MF112848

11.22.41

121

11712241





AUGUSTINE OR TONI HERNANDEZ
HIS 05988880 HERS 15537835
432-213-1775
1606 SUNSET
BIG SPRING, TX 79720

11712240

2929

June 21, 2011
DATE

PAY TO THE ORDER OF Texas General Land Office \$ 125.00
One hundred twenty five & no 100 100 DOLLARS



**WESTERN
BANK**
P.O. BOX 2400
BIG SPRING, TEXAS 79720
409-267-1113

FOR Processing and Filing Fees

[Signature]

121

11.22.9

Slate Land & Right-of-Way Services

INCLUDING LAND ADMINISTRATIVE ASSISTANCE

P. O. Box 550
BIG SPRING, TEXAS 79721-0550
(432) 267-3601

June 21, 2011

UPS: 1Z F70 964 22 1002 7116

Texas General Land Office
Attn: Drew Reid
1700 North Congress Ave., Suite 840
Austin, Texas 78701-1495

RE: Certified copy of one (1) Oil and Gas Lease to Relinquishment Act (Mineral Classified Lands) covering all of the South-half and the Northwest-quarter (S/2 and NW/4) of Section 2, Abstract 5092, Block 113, Public School Land Survey, Culberson County, Texas: **Save and Except** the following four tracts of Land:

Tract No. 1: The Northwest-quarter of the Southeast-quarter (NW/4 SE/4) containing 40.0 acres in the shape of a square surrounding the Columbia 7 #5 Well. API No. 42-109-32225 from the surface to 2,848 feet subsurface;

Tract No. 2: The Northeast-quarter of the Southeast-quarter (NE/4 SE/4) containing 40.0 acres in the shape of a square surrounding the Columbia 7 #8 Well. API No. 42-109-32262 from the surface to 3,046 feet subsurface;

Tract No. 3: The Southwest-quarter of the Southeast-quarter (SW/4 SE/4) containing 40.0 acres in the shape of a square surrounding the Columbia 7 #2 Well. API No. 42-109-32221 from the surface to 2,640 feet subsurface;

Tract No. 4: The Southeast-quarter of the Southeast-quarter (SE/4 SE/4) containing 40.0 acres in the shape of a square surrounding the Columbia 7 #1 Well. API No. 42-109-31740 from the surface to 4,137 feet subsurface;

containing 480.0 acres, more or less.

Dear Mr. Reid:

Please find enclosed the above referenced certified copy of the Oil and Gas Lease. I have also included check #6765 in the amount of \$240,480.00 as full payment for the State's share of the bonus consideration. This amount represents \$1,000.00 per net acre. The Primary Term on the Lease is five (5) years, and the delay rentals for year 2 and 3 have been included with the initial bonus. Fourth (4th) year delay rentals will be due in the amount of \$501.00 per net acre and include the fifth (5th) year delay rental. This Lease provide for a one-fourth (1/4th) Royalty.

I have also included check #2929 for \$125.00 as payment for the processing and filing fees as required by the State of Texas.

The following is a list of owners accounting for 100% of the Surface Estate to Section 2:

1. Diane Davidson Claiborne - 1/48
2. Diane Davidson Claiborne and Elaine D. Smith, Co-Trustees - 3/32
3. Elaine Davidson Smith - 1/48
4. Carol Lynn Windham - 1/4
5. Shauna Claiborne Bowers - 17/96
6. Rick Hayes Smith - 7/48
7. Paul Eldon Smith - 7/48
8. Robbie Reagan Smith Moseley - 7/48

Thank you for your assistance in this matter. If you have any questions, please do not hesitate to call; our toll-free number is 1-877-589-8858 or my number is 1-432-213-1775. Please return any correspondence to my attention at Slate Land and Right-of-Way Services, P.O. Box 550, Big Spring, TX 79721-0550.

Sincerely,

Augustine Hernandez

Augustine Hernandez
Petroleum Landman

AH/cc

Drew Reid - Fw: EXHIBIT A-Add'l provisions.DOC

From: <slsaugustine@crcom.net>
To: <drew.reid@glo.state.tx.us>
Date: 3/7/2011 12:37 PM
Subject: Fw: EXHIBIT A-Add'l provisions.DOC
Attachments: EXHIBIT A-Add'l provisions.DOC

Send me a reply!

Augustine

Sent from my Verizon Wireless BlackBerry

From: Steve Hofer <shofer@cbtd.com>
Date: Thu, 3 Mar 2011 16:23:00 -0600
To: <slsaugustine@crcom.net>
Subject: FW: EXHIBIT A-Add'l provisions.DOC

Augustine - Attached is the addendum we use for Relinquishment Act leases. Please add this to the lease you are preparing, and an additional paragraph which says:

"A separate Surface Use and Damage Agreement of even date governing operations on the surface of the Land has been entered into by the parties, and all sums due thereunder are payable one-half (1/2) to the Owner of the Soil and one-half (1/2) to the Commissioner of the General Land Office"

Also please call me when you get a chance, we need to talk about the bonus and 4th year rental.

Steve Hofer

From: Jana Long
Sent: Thursday, March 03, 2011 4:09 PM
To: Steve Hofer
Subject: EXHIBIT A-Add'l provisions.DOC

Jana Long
 Legal Secretary to Michel E. Curry and Steven C. Hofer
 Cotton, Bledsoe, Tighe & Dawson, PC
 500 W. Illinois, Suite 300
 Midland, TX 79701
jlong@cbtd.com
 (432) 684-5782 Ext. 327
 (432) 684-3123 (Fax)

This email transmission is covered by the Electronic Communications Privacy Act, 18 U.S.C. sec. 2510-2521, and is legally privileged, confidential, and protected from disclosure. If you are not the intended recipient, you should immediately delete the message and notify the sender identified above.

Treasury Circular 230 Disclosure: To the extent this communication (including any attachments) contains statements that can be construed as "tax advice", such statements are not intended or written to be used, and cannot be used, by any person for the purpose of, or as the basis for, (i) avoiding any tax penalties that may be imposed on that person or (ii) promoting, marketing, or recommending to another party any particular transaction or tax-related services (because we have not included in this email all of the information required by Circular 230, nor have we performed services that rise to that level of assurance). This disclosure is attached to comply with requirements imposed by U.S. Treasury Regulations relating to tax practice.

4-13-11
 lease being
 ship for signature
 8 surface owners
 all in different
 locations

New
Drew Reid - Oil and Gas Lease Proposal Culberson County, Texas.

From: "Augustine Hernandez" <augusth@suddenlink.net>
To: <drew.reid@glo.state.tx.us>
Date: 1/12/2011 11:29 PM
Subject: Oil and Gas Lease Proposal Culberson County, Texas.
CC: <slsaugustine@crcom.net>
Attachments: GLO - ALEASE Sec 2, Blk 113 - 01-12-11.docx; Diane D. Claiborne, et al OGL 1-12-2011.docx

Drew,

Please review the attached offer letter and oil and gas lease and give me a call if you have any questions.

Thanks,

Augustine Hernandez

Slate Land Services
P.O. Box 550
Big Spring, Texas 79721-0550
(432) 267-3601

11 213-1775

Slate Land & Right-of-Way Services

INCLUDING LAND ADMINISTRATIVE ASSISTANCE

P. O. Box 550

BIG SPRING, TEXAS 79721-0550

(432) 267-3601

January 12, 2011

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

Sent via e-mail to:
drew.reid@glo.state.tx.us

RE: Relinquishment Act (Mineral Classified) Lands covering the Northwest Quarter (NW/4) and South One-half (S/2) Section 2, Abstract No. 5092, Block 113, Public School Land Survey, Culberson County, Texas. **Save and Except** the following four (4) tracts of land:

Tract No. 1: The Northwest Quarter of the Southeast Quarter (NW/4 SE/4) containing 40.0 acres in the shape of a square surrounding the Columbia 7 #5 Well. API No. 42-109-32225 from the surface to 2,848 feet subsurface.

Tract No. 2: The Northeast Quarter of the Southeast Quarter (NE/4 SE/4) containing 40.0 acres in the shape of a square surrounding the Columbia 7 #8 Well. API No. 42-109-32262 from the surface to 3,046 feet subsurface.

Tract No. 3: The Southwest Quarter of the Southeast Quarter (SW/4 SE/4) containing 40.0 acres in the shape of a square surrounding the Columbia 7 #2 Well. API No. 42-109-32221 from the surface to 2,640 feet subsurface.

Tract No. 4: The Southeast Quarter of the Southeast Quarter (SE/4 SE/4) containing 40.0 acres in the shape of a square surrounding the Columbia 7 #1 Well. API No. 42-109-31740 from the surface to 4,137 feet subsurface.

Containing 480.0 acres, more or less.

Dear Mr. Reid:

According to the Deed Records of Culberson County, Texas the above referenced tract of land is considered state-owned lands on which the surface was sold and minerals were reserved to the state. Our client, Craig L. Blair of Carlsbad, NM would like to make an offer to lease said interest for the following terms:

1. \$702.00 per acre bonus consideration, this pays up the 2nd and 3rd year.
2. \$701.00 per acre delay rental payment that would cover the 4th and 5th year at Lessee's option due on or before the 3rd year anniversary date.
3. One-fourth (1/4th) royalty.
4. Five (5) year primary term.

If you accept this offer, the bonus amount for the State's share would total \$168,480.00. Please consider this offer and contact us at your earliest convenience; our phone number is (877) 589-8858.

File No. 112848

Cover Letter @ Bonus @ Fees

Date Filed: 6/22/11

Jerry E. Patterson, Commissioner

By GK

TEXAS



GENERAL LAND OFFICE

JERRY PATTERSON, COMMISSIONER

April 24, 2012

Craig Blair
Thunderhead Petroleum
PO Box 2476
Carlsbad, New Mexico 88220

Re: **State Lease MF 112848**

RAL Lease dated March 1, 2011 recorded in Doc. 66963,
covering 480 ac. being S/2 & NW/4 Sec. 2, Blk. 113, A-5092,
PSL Survey, Culberson Co., TX, Diane Davidson Claiborne, et
al, agents for State of TX, Lessors

Dear Mr. Blair:

The certified copy of the Relinquishment Act lease covering the above referenced tract has been approved and filed in our records under Mineral File numbers **MF-112848**. **Please refer to this lease number when making payments to the State and in all future correspondence concerning the lease. Failure to include the mineral file number may delay processing of any payments towards the lease.**

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

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

Your remittance of **\$240,480.00** has been applied to the State's portion of the cash bonus. In addition, we are also 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

48

File No. 112848

Final Letter

Date Filed: 4/24/12

Jerry E. Patterson, Commissioner

By GLT

From: Carl Bonn
To: Saenz, Alex
Date: 3/26/2013 11:41 AM
Subject: MF112848 Active Lease with limited depths - Culberson County
Attachments: Bonn, Carl.vcf

Alex,

The referenced lease is less and except the wells and depths listed in the note. However, there appears to be 5 wells (Columbia 7) in Well Inventory.

Please delete all wells from well inventory since this lease is not yet producing.

Thanks,
Carl

Carl Bonn, CPL
Landman
Energy Resources
Texas General Land Office
PO Box 12873 Austin, TX 78711
(512) 463-5407 - Office (512) 475-1543 - Fax

(5)

MF=112,848

File No.

email to de/cto

well inventory

Date Filed:

3-26-13

Jerry E. Patterson, Commissioner

By

C. Boun

From: Capitan Energy Inc HB Op/Rev

To: Commissioner of the General Land Office
PO Box 12873
Austin, TX 78711

Vendor Code
COMGLA

Check Date
01/18/2014

Check Amount
\$120,240.00

Check Number
A-1030

1030

Invoice #	Invoice Amt
CS 2010 PROSPECT	120,240.00
CS 2010 Prospect – Check request for Options due by February 28, 2014 for an Oil, Gas and Mineral Lease covering all of the South-half and Northwest-quarter (S/2 and NW/4) of Section 2, Abstract 5092, Block 113, Public School Land Survey, Culberson County, Texas; Save and Except the following four (4) tracts of land: Tract No. 1: The Northwest-quarter of the Southeast-quarter (NW/4 SE/4) containing 40.0 acres in the shape of a square surrounding the Columbia 7 #5 Well. API No. 42-109-32225 from the surface to 2,848 feet subsurface; Tract No. 2: The Northeast-quarter of the Southeast-quarter (NE/4 SE/4) containing 40.0	

Invoice #	Invoice Amt
acres in the shape of a square surrounding the Columbia 7 #8 Well. API No. 42-109-32262 from the surface to 3,046 feet subsurface; Tract No. 3: The Southwest-quarter of the Southeast-quarter (SW/4 SE/4) containing 40.0 acres in the shape of a square surrounding the Columbia 7 #2 Well. API No. 42-109-32221 from the surface to 2,640 feet subsurface; Tract No. 4: The Southeast-quarter of the Southeast-quarter (SE/4 SE/4) containing 40.0 acres in the shape of a square surrounding the Columbia 7 #1 Well. API No. 42-109-31740 from the surface to 4,137 feet subsurface; containing 480.0 acres, more or less.	

MF112848

RENTAL PAYMENT

4th & 5th yr.

Ⓟ

14708016

CAPITAN ENERGY INC
HB OPERATING
PO BOX 2476
CARLSBAD, NM 88221

THE CARLSBAD NATIONAL BANK
P.O. BOX 1359
CARLSBAD, NEW MEXICO 88221-1359

14708016

1030

1030

PAY

One hundred twenty thousand two hundred forty dollars and no cents

01/18/2014

\$**120,240.00*

TO THE
ORDER
OF

Commissioner of the General Land Office
PO Box 12873
Austin, TX 78711

Shelly Blair
Cal Webster

AUTHORIZED SIGNATURE

⑈001030⑈

From: Capitan Energy Inc HB Op/Rev

To: Commissioner of the General Land Office
PO Box 12873
Austin, TX 78711

Vendor Code
COMGLA

Check Date
01/18/2014

Check Amount
+ \$120,240.00

Check Number
A-1030

1030

Invoice #	Invoice Amt
CS 2010 PROSPECT	120,240.00
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Invoice #	Invoice Amt
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121
14708016

Slate Land & Right-of-Way Services

INCLUDING LAND ADMINISTRATIVE ASSISTANCE

P. O. Box 550

BIG SPRING, TEXAS 79721-0550

(432) 267-3601

February 21, 2014

UPS:

1Z F70 964 22 1003 5170

Texas General Land Office
Attn: Linda Price
1700 N. Congress Ave., Suite 840
Austin, TX 78701

RE: Delay Rental Receipt for Oil and Gas Lease MF#112848 covering all of the South-half and Northwest-quarter (S/2 and NW/4) of Section 2, Abstract No. 5092, Block 113, Public School Land Survey, Culberson County, Texas. **Save and Except** the following four (4) tracts of land:

Tract No. 1: The Northwest Quarter of the Southeast Quarter (NW/4 SE/4) containing 40.0 acres in the shape of a square surrounding the Columbia 7 #5 Well. API No. 42-109-32225 from the surface to 2,848 feet subsurface.

Tract No. 2: The Northeast Quarter of the Southeast Quarter (NE/4 SE/4) containing 40.0 acres in the shape of a square surrounding the Columbia 7 #8 Well. API No. 42-109-32262 from the surface to 3,046 feet subsurface.

Tract No. 3: The Southwest Quarter of the Southeast Quarter (SW/4 SE/4) containing 40.0 acres in the shape of a square surrounding the Columbia 7 #2 Well. API No. 42-109-32221 from the surface to 2,640 feet subsurface.

Tract No. 4: The Southeast Quarter of the Southeast Quarter (SE/4 SE/4) containing 40.0 acres in the shape of a square surrounding the Columbia 7 #1 Well. API No. 42-109-31740 from the surface to 4,137 feet subsurface.

Containing 480.0 acres, more or less.

Dear Ms. Price:

Please find enclosed two (2) Receipts for Delay Rental and our Client's check #1030 in the amount of \$120,240.00. The check represents payment for the Delay Rental due on or before March 1, 2014. Please execute one (1) Receipt; then return in the enclosed self-addressed, stamped envelope and retain the Receipt marked "For Your Records".

If you have any questions, please do not hesitate to call; our toll-free number is 1-877-589-8858.

Sincerely,

Augustine Hernandez
Slate Land Services

AH/jb

Encl: As stated above

RECEIPT FOR DELAY RENTAL

Commissioner of the Texas General Land Office:

The attached check #1030 dated January 18, 2014 in the amount of \$120,240.00 is the delay rental due on March 1, 2014 pursuant to that certain Oil & Gas Lease ("Lease") – MF#112848, dated March 1, 2011 from the State of Texas, acting by and through its agent, Diane Davidson Claiborne, et al, P.O. Box 5637, Midland, Texas 79704-5637 "Lessor", to Thunderhead Petroleum, LP, P.O. Box 2476, Carlsbad, New Mexico 88221, "Lessee" covering the following land situated in Culberson County, Texas, to wit:

All of the South-half and Northwest-quarter (S/2 and NW/4) of Section 2, Abstract 5092, Block 113, Public School Land Survey, Culberson County, Texas; **Save and Except** the following four (4) tracts of land:

- Tract No. 1: The Northwest-quarter of the Southeast-quarter (NW/4 SE/4) containing 40.0 acres in the shape of a square surrounding the Columbia 7 #5 Well. API No. 42-109-32225 from the surface to 2,848 feet subsurface;
- Tract No. 2: The Northeast-quarter of the Southeast-quarter (NE/4 SE/4) containing 40.0 acres in the shape of a square surrounding the Columbia 7 #8 Well. API No. 42-109-32262 from the surface to 3,046 feet subsurface;
- Tract No. 3: The Southwest-quarter of the Southeast-quarter (SW/4 SE/4) containing 40.0 acres in the shape of a square surrounding the Columbia 7 #2 Well. API No. 42-109-32221 from the surface to 2,640 feet subsurface;
- Tract No. 4: The Southeast-quarter of the Southeast-quarter (SE/4 SE/4) containing 40.0 acres in the shape of a square surrounding the Columbia 7 #1 Well. API No. 42-109-31740 from the surface to 4,137 feet subsurface;

containing 480.0 acres, more or less.

Please be so kind as to acknowledge your receipt of this payment by signing this receipt in the space provided for below and return the receipt in the self-addressed stamped envelope.

The above Delay Rental was received this 24th day of February, 2014.

Name: 

Title:

File No. MF112848

(6)

Rentals - 4th & 5th yr.

Date Filed: 02/24/2014

Jerry E. Patterson, Commissioner

By JEP

35474

RAILROAD COMMISSION OF TEXAS
OIL & GAS DIVISION

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

PERMIT NUMBER 810754	DATE PERMIT ISSUED OR AMENDED Sep 30, 2015	DISTRICT * 08
API NUMBER 42-109-32894	FORM W-1 RECEIVED Sep 29, 2015	COUNTY CULBERSON
TYPE OF OPERATION NEW DRILL	WELLBORE PROFILE(S) Horizontal	ACRES 480
OPERATOR CAPITAN ENERGY, INCORPORATED PO BOX 2476 CARLSBAD, NM 88221-2476		NOTICE This permit and any allowable assigned may be revoked if payment for fee(s) submitted to the Commission is not honored. District Office Telephone No: (432) 684-5581
LEASE NAME STATE MATTIE 2		WELL NUMBER 1H
LOCATION 48 miles NE direction from KENT		TOTAL DEPTH 10200
Section, Block and/or Survey SECTION ◀ 47 BLOCK ◀ 59 T2S ABSTRACT ◀ 2733 SURVEY ◀ T&P RR CO		
DISTANCE TO SURVEY LINES 467 ft. S 2267 ft. E		DISTANCE TO NEAREST LEASE LINE 200 ft.
DISTANCE TO LEASE LINES 467 ft. S (OFF LEASE) 2267 ft. E (OFF LEASE)		DISTANCE TO NEAREST WELL ON LEASE See FIELD(s) Below
FIELD(s) and LIMITATIONS: * SEE FIELD DISTRICT FOR REPORTING PURPOSES *		
FIELD NAME LEASE NAME	ACRES NEAREST LEASE	DEPTH NEAREST WE
FORD, WEST (WOLFCAMP)	480.00	9,500
STATE MATTIE 2	200	0
WELLBORE PROFILE(s) FOR FIELD: Horizontal		
RESTRICTIONS: Lateral: TH1 Penetration Point Location Lease Lines: 200.0 F NORTH L 500.0 F WEST L Terminus Location BH County: CULBERSON Section: 2 Block: 113 Abstract: 5092 Survey: PSL/COLLIER, H T Lease Lines: 200.0 F SOUTH L 500.0 F WEST L Survey Lines: 200.0 F SOUTH L 500.0 F WEST L		
THE FOLLOWING RESTRICTIONS APPLY TO ALL FIELDS		
This well shall be completed and produced in compliance with applicable special field or statewide spacing and density rules. If this well is to be used for brine mining, underground storage of liquid hydrocarbons in salt formations, or underground storage of gas in salt formations, a permit for that specific purpose must be obtained from Environmental Services prior to construction, including drilling, of the well in accordance with Statewide Rules 81, 95, and 97.		

RAILROAD COMMISSION OF TEXAS
OIL & GAS DIVISION

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

PERMIT NUMBER 810754	DATE PERMIT ISSUED OR AMENDED Sep 30, 2015	DISTRICT * 08
API NUMBER 42-109-32894	FORM W-1 RECEIVED Sep 29, 2015	COUNTY CULBERSON
TYPE OF OPERATION NEW DRILL	WELLBORE PROFILE(S) Horizontal	ACRES 480
OPERATOR CAPITAN ENERGY, INCORPORATED PO BOX 2476 CARLSBAD, NM 88221-2476		130061 NOTICE This permit and any allowable assigned may be revoked if payment for fee(s) submitted to the Commission is not honored. District Office Telephone No: (432) 684-5581
LEASE NAME STATE MATTIE 2		WELL NUMBER 1H
LOCATION 48 miles NE direction from KENT		TOTAL DEPTH 10200
Section, Block and/or Survey SECTION 47 BLOCK 59 T2S ABSTRACT 2733 SURVEY T&P RR CO		
DISTANCE TO SURVEY LINES 467 ft. S 2267 ft. E		DISTANCE TO NEAREST LEASE LINE 200 ft.
DISTANCE TO LEASE LINES 467 ft. S (OFF LEASE) 2267 ft. E (OFF LEASE)		DISTANCE TO NEAREST WELL ON LEASE See FIELD(s) Below
FIELD(s) and LIMITATIONS: * SEE FIELD DISTRICT FOR REPORTING PURPOSES *		
FIELD NAME LEASE NAME	ACRES NEAREST LEASE	DEPTH NEAREST WE
WELL # DIST		
This well must comply to the new SWR 3.13 requirements concerning the isolation of any potential flow zones and zones with corrosive formation fluids. See approved permit for those formations that have been identified for the county in which you are drilling the well in.		

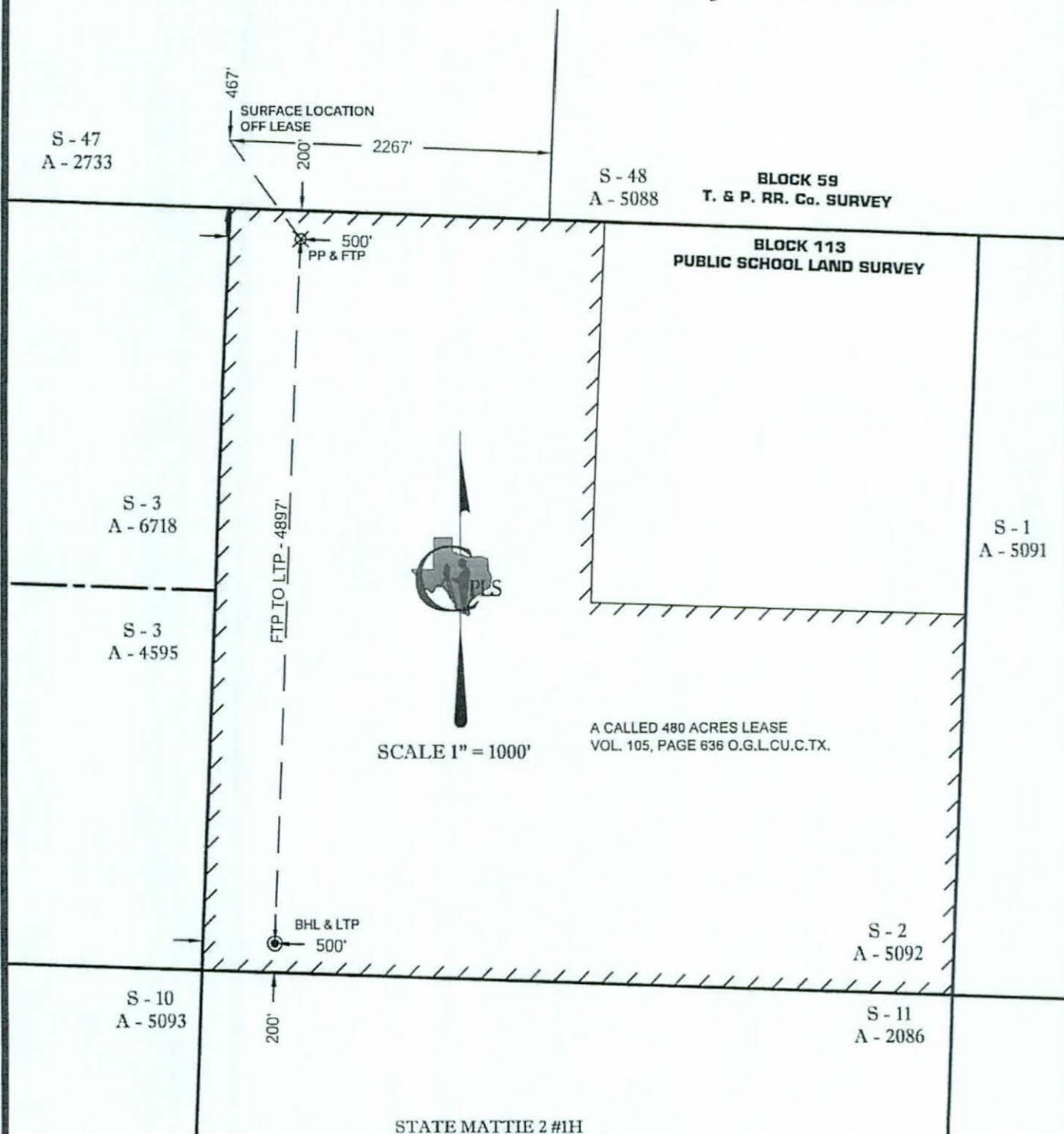
**RAILROAD COMMISSION OF TEXAS
OIL & GAS DIVISION
SWR #13 Formation Data**

CULBERSON (109) County

Formation	Shallow Top	Deep Top	Remarks	Geological Order	Effective Date
RUSTLER	450	450		1	12/17/2013
FORD-DELAWARE	2,500	2,500		2	12/17/2013
DELAWARE	2,600	3,400		3	12/17/2013
CHERRY CANYON	3,600	5,400		4	12/17/2013
BONE SPRINGS	6,150	6,150		5	12/17/2013
MISSISSIPPIAN	8,900	8,900		6	12/17/2013
WOLFCAMP	7,900	9,100		7	12/17/2013
ATOKA	11,600	11,600		8	12/17/2013
MORROW	11,800	11,800		9	12/17/2013
STRAWN	5,750	12,800		10	12/17/2013
SILURIAN	15,400	15,400		11	12/17/2013

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

CULBERSON COUNTY, TEXAS



STATE MATTIE 2 #1H FORD, WEST (WOLFCAMP)

Description	Northing	Easting	Elevation	Latitude (DMS)	Longitude (DMS)
SL	10624199.18	1115216.67	3,347	31°45'37.43"	-104°08'06.00"
PP & FTP	10623514.74	1115712.21		31°45'30.83"	-104°07'59.99"
BHL & LTP	10618621.29	1115536.67		31°44'42.37"	-104°08'00.09"

PERMIT PLAT
STATE OF TEXAS
COUNTY OF CULBERSON
APPROX. 48 MILES NNE FROM KENT, TX

I hereby certify that the above and foregoing plat is true and correct to the best of my knowledge and represents an on the ground survey conducted in September of 2015.

Original signed and stamped in green ink.

DATE OF SIGNATURE: October 9, 2015

Anthony Ray Crowley
ANTHONY RAY CROWLEY R.P.L.S. NO. 6484

FOR CROWLEY PIPELINE & LAND SURVEYING, L.L.C.
FRN:100465-00
117 W. ARCHER
JACKSBORO, TEXAS 76458
(940) 567-2234 OFFICE
(940) 567-2155 FAX



= LEASE BOUNDARY

NOTES:
1) BEARINGS AND DISTANCES ARE BASED ON U. S. STATE PLANE NAD 1983 COORDINATES, TEXAS CENTRAL ZONE - 4203
2) SURVEY BASED UPON J. W. LUCHINI'S RECONSTRUCTION OF THE P. S. L. BLOCKS 45 & 109-115
3) THIS SURVEY IS NOT TO BE CONSIDERED A BOUNDARY SURVEY

0' 1000' 2000'

DRAWN BY: ARC
DATE: September 15, 2015
DWG. NO.: STATE MATTIE 2 #1H_R2.dwg
BOOK NO.: FS
TRACT NO.:
PROJECT AFE:
REVISION #2

**CAPITAN
ENERGY INC**

PROJECT: STATE MATTIE 2 #1H
PLAT SHOWING THE STATE MATTIE 2 #1H IN SECTION 2, BLOCK 113 OF THE PUBLIC SCHOOL LAND SURVEY LOCATED IN CULBERSON COUNTY, TEXAS.

PAGE #:

1
OF
1

Slate Land & Right-of-Way Services

INCLUDING LAND ADMINISTRATIVE ASSISTANCE

P. O. Box 550

BIG SPRING, TEXAS 79721-0550

(432) 267-3601

October 22, 2015

Certified Mail: 7014 3490 0001 9673 9236

Return Rct: 9590 9403 0539 5173 8267 96

Texas General Land Office
Energy Resources
Attn: Drew Reid
P.O. Box 12873
Austin, TX 78711-2873

RE: **MF-112848 Notice of Operations** on Section 2, A-5092, Block 113, Public School Land Survey, Culberson County, Texas; Save and Except the Northeast Quarter (NE/4) containing 480 acres, more or less.

Dear Mr. Reid:

In reference to the tract of land described above and on behalf of our client, Thunderhead Petroleum II, LP, this letter is to serve as written notice that our client began operations on the State Mattie 2-1H (API# 42-109-32897) on October 1, 2015. Please find enclosed a copy of the approved drilling permit and well plat.

Please note that the surface location will be located on Section 47, Block 59, Twp. 2, T&P Ry. Co. Survey, Culberson County.

On behalf of our client, we will forward any additional information relating to the lease operations as they become available or are filed with the Railroad Commission of Texas.

If you have any questions, please do not hesitate to call; our toll-free number is 1-877-589-8858.

Sincerely,



Kyle Conley
Petroleum Landman

KC/df

Encl: As stated above

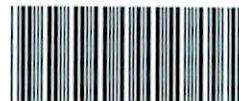
7.

File No. MF112848
Culberson County
Drilling Permit API 109-32894
Date Filed: 11/20/2015
By: [Signature] George P. Bush, Commissioner

11.20.15

MF 112848

(KEEP THIS COPY FOR YOUR RECORDS)



DIVISION ORDER

To: Plains Marketing L.P.
P.O. Box 4648
Houston, TX 77210-4648

Property Name: STATE MATTIE 2
Operator: CAPITAN ENERGY INC
County and State: CULBERSON, TX
Production: OIL / CONDENSATE (GAS)

Date: 11/07/2017
Property Descr: SEE EXHIBIT 'A'
Effective 7 A.M.: 11/01/2017
Decimal Interest: 0.12500000
Type of Interest: RI
ROYALTY INTEREST

Owner Number

0062639

Property Number:

01 217033

Owner Name and Address: COMMISSIONER GENERAL LD OFFICE
STATE OF TEXAS
1700 NORTH CONGRESS AVENUE
AUSTIN, TX 78701-1495

COMMISSIONER GENERAL LD OFFICE
STATE OF TEXAS
1700 NORTH CONGRESS AVENUE
AUSTIN, TX 78701-1495

[Correspondence Address]

[Remittance Address]

The undersigned severally and not jointly certifies the ownership of their decimal interest in production or proceeds as described above payable by Plains Marketing, L.P. (hereinafter called "Payor").

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

Payor is authorized to withhold payment pending resolution of a title dispute or adverse claim asserted regarding the interest in production claimed herein by the undersigned. The undersigned agrees to reimburse Payor any amount attributable to an interest to which the undersigned is not entitled. Unless otherwise required by law, Payor shall not be required to pay interest on payments withheld due to a title dispute or adverse claim.

Payments of less than \$25.00 may be accrued before disbursement until the total amount equals \$25.00 or more, or until December 31 of each year, whichever occurs first.

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

The undersigned will be paid in accordance with the division of interests set out above. As to oil and/or condensate, the Payor shall pay all parties at the price agreed to by the operator for oil and/or condensate to be sold pursuant to this division order. Payor shall compute quantity and make corrections for gravity and temperature and make deductions for impurities. As to gas, the undersigned will be paid in accordance with the division of interest set forth herein. The Payor will pay all parties for their respective interest in the gas proceeds paid to Payor by the operator for disbursement at the price and upon the terms agreed to by the operator for the gas marketed by the operator. Payor is a disbursement service provider only and does not purchase the gas nor take title to the gas. The operator is responsible for marketing gas produced from the property described in the attached property description. Payor does not assume any obligations of the lessee or operator under any oil and gas lease, gas sales contract or other agreement to which Payor is not a party.

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

Special Clauses/Requirements: If applicable, see Exhibit 'A'.

Owner Social Security #
or Taxpayer ID #:

Owner Daytime Telephone #:

Owner FAX #:

Email Address:

Owner BY:

Signature:

OWNER #: 0062639

Signature of two

Witnesses/Attest

TITLE:

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.



(KEEP THIS COPY FOR YOUR RECORDS)

EXHIBIT 'A'

PROPERTY NUMBER: 01 217033

OWNER: 0062639

OWNER	NAME/ADDRESS	SSN/TIN	INTEREST	TYPE	PAY ST	EFFECTIVE	CLAUSES	REQUIREMENTS
0062639	COMMISSIONER GENERAL LD OFFICE STATE OF TEXAS 1700 NORTH CONGRESS AVENUE AUSTIN, TX 78701-1495		0.12500000	RI	3U	11/01/2017	1	N/A

CLAUSES

- 1 EFFECTIVE NOV. 1, 2017 PRODUCTION, PLAINS MARKETING, L.P. WAS DESIGNATED AS OIL PURCHASER FOR THE STATE MATTIE 2 LEASE BY THE OPERATOR, CAPITAN ENERGY INC. THIS DIVISION ORDER WAS PREPARED BASED ON A CONTRACT BRIEF EXHIBIT.

LEGAL DESCRIPTION

SECTION 47 BLOCK 59 T-2-S T&P RR CO SURVEY
CULBERSON COUNTY, TX.

217033



TEXAS GENERAL LAND OFFICE
GEORGE P. BUSH, COMMISSIONER

January 4, 2018

Barbara Woods
Division Order Analyst
Plains Marketing L.P.
P.O. Box 4648
Houston, TX 77210-4648

Re: State Lease No. MF112848 State Mattie 2

Dear Mrs. Woods:

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

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

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

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

Thank you,

Vivian Hernandez
Landman, Energy Resources
512-475-0428
512-475-1543 (fax)
vivian.hernandez@glo.texas.gov

File No. MF112848

____ County

Division Order

Date Filed: 1-5-2018

George P. Bush, Commissioner

By V.H.

7016 0600 0000 6595 7657

U.S. Postal Service™
CERTIFIED MAIL® RECEIPT
Domestic Mail Only

For delivery information, visit our website at www.usps.com®.

OFFICIAL USE

Certified Mail Fee

\$

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 \$ _____

MF112848

Postmark
Here

Postage

\$

Total Postage and Fees

\$

Sent To

Capitan Energy Inc.

Street and Apt. No., or PO Box No.

PO BOX 2476

City, State, ZIP+4®

Carlsbad, NM 88221-2476

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:

Capitan Energy Incorporated
PO BOX 2476
Carlsbad, NM 88221-2476



9590 9402 1749 6074 7582 57

7016 0600 0000 6595 7657

COMPLETE THIS SECTION ON DELIVERY**A. Signature****X**

Becky Fierro

☐ Agent☐ Addressee**B. Received by (Printed Name)**

BECKY FIERRO

C. Date of Delivery

10-18-18

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
- ☐ Signature Confirmation™
- ☐ Signature Confirmation Restricted Delivery
- ☐ Registered Mail™
- ☐ Registered Mail Restricted Delivery
- ☐ Return Receipt for Merchandise
- ☐ Priority Mail Express®

(over \$500)

- ☐ Priority Mail Express®
- ☐ Registered Mail™
- ☐ Registered Mail Restricted Delivery
- ☐ Return Receipt for Merchandise
- ☐ Signature Confirmation™
- ☐ Signature Confirmation Restricted Delivery

USPS TRACKING #



First-Class Mail
Postage & Fees Paid
USPS
Permit No. G-10

9590 9402 1749 6074 7582 57

United States
Postal Service



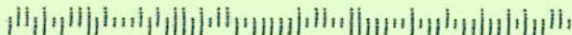
Texas General Land Office

George P. Bush, Commissioner

P.O. Box 12873

Austin, Texas 78711-2873

ATTN: Aurora Jordan 8th Energy
MF 112848





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

Capitan Energy Incorporated
PO Box 2476
Carlsbad, NM 88221-2476

Billing Date: 10/5/2018
Billing Due Date: 11/4/2018
Customer Number: C000045321

Invoice	Mineral File	Gas Royalty	Oil Royalty	Penalty	Interest	Total Due
19I00063	MF112848	\$1,097.69	\$0.00	\$109.77	\$52.02	\$1,259.48
Total Due		\$1,097.69	\$0.00	\$109.77	\$52.02	\$1,259.48

Penalty and interest have been calculated thru 10/31/2018. Payment remitted after 10/31/2018 will result in additional penalty and interest charges.

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

NOTICE

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

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

Detach and return with payment

Reconciliation Billing

Capitan Energy Incorporated

Billing Date: 10/5/2018

Billing Due Date: 11/4/2018

Customer Number: C000045321

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
19I00063	MF112848	\$1,097.69	\$0.00	\$109.77	\$52.02	\$1,259.48
Total Due		\$1,097.69	\$0.00	\$109.77	\$52.02	\$1,259.48
Amt. Paid						

Customer ID: C000045321
 Invoice Number:
 GLO Lease: MF112848
 GLO Review: CAPITAN ENERGY INCORPORATED
 Review Period: September 2016 Through August 2017

Category Gas
 Auditor/AE: DJACQUET
 Billing Date: 10/2/2018
 P&I Calculation Date: 10/31/2018
 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 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
Jun-17	08-279784	1,246	1	\$2.60	1.0668	\$3,459.56	\$432.45	\$0.00	\$432.45	442	4.75%	\$43.25	\$21.55	\$497.25
Jul-17	08-279784	1,951	1	\$2.55	1.0696	\$5,321.95	\$665.24	\$0.00	\$665.24	411	4.75%	\$66.52	\$30.47	\$762.23
TOTALS		3,197				\$8,781.52	\$1,097.69	\$0.00	\$1,097.69			\$109.77	\$52.02	\$1,259.48

COMMENTS: BILLING ON UNDERPAID ROYALTIES ON VOLUMES REPORTED TO THE RRC VS REPORTED TO THE GLO FOR RRC ID # 08-279274.

COLUMN (3) VOLUME - REPRESENTS UNDER REPORTED SALES VOLUMES TO THE GLO.
 COLUMNS (5) & (6) THE PRICES AND BTU FACTORS WERE DETERMINED BY CALCULATING AN AVERAGE PRICE AND BTU REPORTED FOR RESIDUE GAS PER GLO2 REPORTS.
 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/rac/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.

ATTN: CHRISTY LOGSDON
 CERTIFIED MAIL: 7016 0600 0000 6595 7657

File No. MF 112848

⑨

County

Recon Billing

Date Filed: 10/5/18

George P. Bush, Commissioner

By AT

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

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

Status: Approved
Date: 04/29/2016
Tracking No.: 153264

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

OPERATOR INFORMATION	
Operator Name: CAPITAN ENERGY, INCORPORATED	Operator No.: 130061
Operator Address: PO BOX 2476 CARLSBAD, NM 88221-2476	

WELL INFORMATION	
API No.: 42-109-32894	County: CULBERSON
Well No.: 1H	RRC District No.: 08
Lease Name: STATE MATTIE 2	Field Name: FORD, WEST (WOLFCAMP)
RRC Gas ID No.: 279784	Field No.: 31913800
Location: Section: 47, Block: 59 T2S, Survey: T&P RR CO, Abstract: 2733	
Latitude: 31	Longitude: -104
This well is located 48 miles in a NE direction from KENT, which is the nearest town in the county.	

FILING INFORMATION		
Purpose of filing: Initial Potential		
Type of completion: New Well		
Well Type: Producing	Completion or Recompletion Date:	01/28/2016
Type of Permit	Date	Permit No.
Permit to Drill, Plug Back, or Deepen	09/30/2015	810754
Rule 37 Exception		
Fluid Injection Permit		
O&G Waste Disposal Permit		
Other:		

COMPLETION INFORMATION		
Spud date: 10/24/2015	Date of first production after rig released:	01/28/2016
Date plug back, deepening, recompletion, or drilling operation commenced: 10/24/2015	Date plug back, deepening, recompletion, or drilling operation ended:	11/15/2015
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: 480.00	Elevation (ft.):	3347 GL
Total depth TVD (ft.): 9139	Total depth MD (ft.):	14160
Plug back depth TVD (ft.):	Plug back depth MD (ft.):	
Was directional survey made other than inclination (Form W-12)? Yes	Rotation time within surface casing (hours):	143.0
Recompletion or reclass? No	Is Cementing Affidavit (Form W-15) attached?	Yes
Type(s) of electric or other log(s) run: Other	Multiple completion?	No
Electric Log Other Description: VARIOUS		
Location of well, relative to nearest lease boundaries of lease on which this well is located:	Off Lease: Yes	
	467.0 Feet from the South Line and	
	2267.0 Feet from the East Line of the	
	STATE MATTIE 2 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
 SWR 13 Exception

Depth (ft.): 350.0
 Depth (ft.): 2500.0

Date: 09/29/2015

GAS MEASUREMENT DATA

Date of test: 02/08/2016

Gas measurement method(s):

Gas production during test (MCF): 12102

Orifice Meter

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	4.000	.875	0.88	0.9	198.0	113.0	40.0000	0.7170	165.000	5092.0

FIELD DATA AND PRESSURE CALCULATIONS

Gravity (dry gas): 0.717

Gravity (liquid hydrocarbons) (Deg. API): 51.1

Gas-Liquid Hydro Ratio (CF/Bbl): 6305

Gravity (mixture): Gmix= 1.653

Avg. shut in temp. (°F): 65.0

Bottom hole temp. and depth: 130.0 °F@ 8000.0 FT

Run No.	Time of Run (Min.)	Choke Size (in.)	Wellhead Pressure (PSIA)	Wellhead Flow Temp (°F)
SHUT-IN	1440	.875	2250	10.0
1	4320	.875	1635	113.0

CASING RECORD

Row	Type of Casing	Casing Size (in.)	Hole Size (in.)	Setting Depth (ft.)	Multi - Stage Depth (ft.)	Multi - Stage Shoe Depth (ft.)	Cement Class	Cement Amount (sacks)	Slurry Volume (cu. ft.)	Top of Cement (ft.)	TOC Determined By
1	Surface	9 5/8	12 1/4	2182			C	1035	1751.6	0	Circulated to Surface
2	Other	7	8 1/2	9478		9478	C & H	490	1443.0	3222	Calculation
3	Other	7	8 1/2	9478	3222		C & H	220	603.0	0	Circulated to Surface

LINER RECORD

Row	Liner Size (in.)	Hole Size (in.)	Liner Top (ft.)	Liner Bottom (ft.)	Cement Class	Cement Amount (sacks)	Slurry Volume (cu. ft.)	Top of Cement (ft.)	TOC Determined By
1	4 1/2	6 1/8	8579	14150	H	275	723.2	8579	Calculation

TUBING RECORD

Row	Size (in.)	Depth Size (ft.)	Packer Depth (ft.)/Type
1	2 7/8	8610	8617 / 4 1/2" VERSA SET

PRODUCING/INJECTION/DISPOSAL INTERVAL

Row	Open hole?	From (ft.)	To (ft.)
1	No	L1 9565	13994

ACID, FRACTURING, 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): 8023.0

Production casing test pressure (PSIG) prior to

hydraulic fracturing treatment: 8790

Actual maximum pressure (PSIG) during hydraulic

fracturing: 8790

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

Yes

Row Type of Operation

1

Fracture

Amount and Kind of Material Used

REPORTED TO FRAC FOCUS

Depth Interval (ft.)

9565.0 13994.0

FORMATION RECORD

Formations	Encountered	Depth TVD (ft.)	Depth MD (ft.)	Is formation isolated?	Remarks
RUSTLER	Yes	20.0	20.0	Yes	
FORD-DELAWARE	Yes	2200.0	2200.0	Yes	
DELAWARE	Yes	2600.0	2600.0	Yes	
CHERRY CANYON	Yes	3600.0	3600.0	Yes	
BONE SPRINGS	Yes	5841.0	5949.0	Yes	
MISSISSIPPIAN	No			No	NOT GEOLOGICALLY PRESENT
WOLFCAMP	Yes	9145.0	9510.0	No	PRODUCING FORMATION
ATOKA	No			No	KOP @ 8700
MORROW	No			No	KOP @ 8700
STRAWN	No			No	KOP @ 8700
SILURIAN	No			No	KOP @ 8700

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

PERMANENT GAS CLASSIFICATION PER DOCKET 08-0297138. NO G-5 DISTILLATION REQUIRED. NO OTHER LOGS RUN. LOGS FILED WITH RRC. INFORMATION PROVIDED BY OPERATOR.
EMAIL - JACKIEK27@AUSTIN.RR.COM

RRC REMARKS**PUBLIC COMMENTS:**

[RRC Staff 2016-04-14 16:43:17.331] EDL=4429 feet, max acres=1000, FORD, WEST (WOLFCAMP) gas well

CASING RECORD :**TUBING RECORD:****PRODUCING/INJECTION/DISPOSAL INTERVAL :****ACID, FRACTURE, CEMENT SQUEEZE, CAST IRON BRIDGE PLUG, RETAINER, ETC. :****GAS MEASUREMENT DATE REMARK:****OPERATOR'S CERTIFICATION**

Printed Name: Jackie Kelm

Title: Consultant

Telephone No.: (512) 633-9722

Date Certified: 03/31/2016

RAILROAD COMMISSION OF TEXAS
Oil and Gas Division

GAS WELL
CLASSIFICATION REPORT

Form G-5

Tracking No.: 153264

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

1. OPERATOR NAME (Exactly as shown on Form P5 Organization Report) CAPITAN ENERGY, INCORPORATED		3. RRC DISTRICT NO. 08	4. OIL LEASE NO OR GAS WELL ID NO. 279784				
2. MAILING ADDRESS PO BOX 2476 CARLSBAD, NM 88221-2476		5. WELL NO. 1H	6. API NO. 42- 109-32894				
		7. COUNTY OF WELL SITE CULBERSON					
8. FIELD NAME (as per RRC Records) FORD, WEST (WOLFCAMP)		9. LEASE NAME STATE MATTIE 2					
10. LOCATION (Section, Block and Survey) 47 , 59 T2S , T&P RR CO , A-2733		11. PIPELINE CONNECTION OR USE OF GAS CAPITAN ENERGY, INCORPORATED					
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>02/08/2016</u> B. Gas Volume <u>5092.0</u> (Mcf) C. Oil or Condensate Volume <u>808.0</u> (Bbl) D. Water Volume <u>3234.0</u> (Bbl) E. Gas/Liquid Hydrocarbon Ratio <u>6305</u> (Cf/Bbl) F. Flowing Tubing Pressure <u>1635</u> (psia) G. Choke Size <u>.875</u> (in.) H. Casing Pressure <u>500.0</u> (psia) I. Shut-in Wellhead Pressure-- Tubing <u>2250</u> (psia) J. Separator Operating Pressure <u>350.0</u> (psia) K. Color of Stock Tank Liquid <u>Pale Yellow</u> L. Gravity of Separator Liquid <u>50.1</u> °API M. Gravity of Stock Tank Liquid <u>52.2</u> °API N. Specific Gravity of the Gas (Air = 1) <u>0.717</u>		Date Liquid Sample Obtained _____ Where Obtained: ☐ Separator ☐ Stock Tank <table style="width:100%;"> <tr> <td style="width:50%;"> % Over Temp. (deg. F) Initial Boiling Temp. _____ 10 _____ 20 _____ 30 _____ 40 _____ 50 _____ </td> <td style="width:50%;"> % Over Temp. (deg. F) 60 _____ 70 _____ 80 _____ 90 _____ 95 _____ End Point _____ </td> </tr> </table> Total Recovery _____ percent Residue _____ percent Loss _____ percent		% Over Temp. (deg. F) Initial Boiling Temp. _____ 10 _____ 20 _____ 30 _____ 40 _____ 50 _____	% Over Temp. (deg. F) 60 _____ 70 _____ 80 _____ 90 _____ 95 _____ End Point _____		
% Over Temp. (deg. F) Initial Boiling Temp. _____ 10 _____ 20 _____ 30 _____ 40 _____ 50 _____	% Over Temp. (deg. F) 60 _____ 70 _____ 80 _____ 90 _____ 95 _____ End Point _____						
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>03/31/2016</u> DATE		RRC USE ONLY <table style="width:100%;"> <tr> <td style="width:50%;"> NAME (Type or Print) <u>Jackie Kelm</u> SIGNATURE <u>Consultant</u> TITLE </td> <td style="width:50%;"> PHONE NUMBER <u>(512) 633-9722</u> </td> </tr> <tr> <td colspan="2"> CONTACT PERSON </td> </tr> </table>		NAME (Type or Print) <u>Jackie Kelm</u> SIGNATURE <u>Consultant</u> TITLE	PHONE NUMBER <u>(512) 633-9722</u>	CONTACT PERSON	
NAME (Type or Print) <u>Jackie Kelm</u> SIGNATURE <u>Consultant</u> TITLE	PHONE NUMBER <u>(512) 633-9722</u>						
CONTACT PERSON							

Tracking No.: 153264

OPERATOR NAME AND ADDRESS including city, state and zip

CAPITAN ENERGY, INCORPORATED

PO BOX 2476

CARLSBAD, NM 88221-2476

**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

☐

Survey

☐

Retest

☒

Initial Test

☐

Correction

Operator P-5 Organization No.

130061

RRC Dist. No.

08

G-10

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
FORD, WEST (WOLFCAMP) STATE MATTIE 2	279784	02/08/2016	5092 MCF	808.0 BBL	3234.0 BBL	2250
	1H		0.717	51.1		1635
			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.

Signature: Jackie Kelm

Title: Consultant

Phone: (512) 633-9722

Date: 03/31/2016

* 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

Tracking No.: 153264

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

Instructions

When to File Form L-1:

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

When is Form L-1 NOT required:

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

Where to File Form L-1:

- with the appropriate Commission district office

Filling out Form L-1:

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

Type of log required:

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

SECTION I. IDENTIFICATION

Operator Name: CAPITAN ENERGY, INCORPORATED	District No. 08	Completion Date: 01/28/2016
Field Name FORD, WEST (WOLFCAMP)	Drilling Permit No. 810754	
Lease Name STATE MATTIE 2	Lease/ID No. 279784	Well No. 1H
County CULBERSON	API No. 42- 109-32894	

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

☐ A. BASIC ELECTRIC LOG NOT RUN

☒ B. BASIC ELECTRIC LOG RUN. (Select one)

- ☐ 1. Confidentiality is requested and a copy of the header for each log that has been run on the well is attached.
- ☐ 2. Confidentiality already granted on basic electric log covering this interval (applicable to deepened wells only).
- ☐ 3. Basic electric log covering this interval already on file with Commission (applicable to deepened wells only).
- ☒ 4. Log attached to (select one):

☒ (a) Form L-1 (this form). If the company/lease name on log is different from that shown in Section I, please enter name on log here: _____

Check here if attached log is being submitted after being held confidential. ☐

☐ (b) Form P-7, Application for Discovery Allowable and New Field Designation.

☐ (c) Form W-4, Application for Multiple Completion:

Lease or ID No(s). _____

Well No(s). _____

Jackie Kelm

Signature

Name (print)

Consultant

Title

(512) 633-9722

Phone

03/31/2016

Date

-FOR RAILROAD COMMISSION USE ONLY-

Capitan Energy

State Mattie 2 #1H

Culberson County, TX

McVay Rig 1

API# 42-109-32894

October 24, 2015 - November 07, 2015

MO-XX-902830779

Sperry Drilling

MWD Survey Report

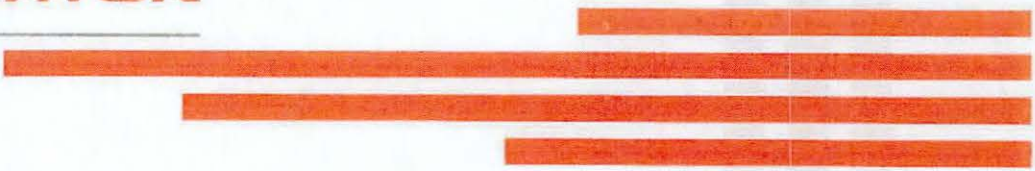
Submitted by: Sampson Olowo

3950 Interwood South Parkway Houston, TX 77032

Ph: 281.986.4400

HALLIBURTON

Sperry Drilling



Survey Report for Capitan Energy, Incorporated

Rig	:	McVay 1
Well Name	:	State Mattie 2 #1H
Field Name	:	Ford, West (Wolfcamp)
County	:	Culberson County, TX
Job Number	:	MO-XX-0902830779
Job Start Date	:	24-Oct-15
API Number	:	42-109-32894-0000

TABLE OF CONTENTS

1. Directional Survey Data

DIRECTIONAL SURVEY DATA

Tie-in

0.00

0.00

0.00

0.00

0.00 N

0.00 E

Measured Depth (ft)	Inclination (deg)	Direction (deg)	Vertical Depth (ft)	Latitude (ft)	Departure (ft)	Vertical Section (ft)	Dogleg (°/100')
154.00	1.57	90.36	153.98	0.01 S	2.11 E	-0.06	1.02
212.00	1.83	96.32	211.96	0.12 S	3.82 E	-0.02	0.54
307.00	2.08	99.54	306.90	0.57 S	7.03 E	0.32	0.29
397.00	0.80	101.46	396.87	0.97 S	9.25 E	0.64	1.42
488.00	0.57	104.40	487.86	1.21 S	10.31 E	0.84	0.26
582.00	0.81	97.83	581.86	1.41 S	11.42 E	1.00	0.27
677.00	0.71	78.72	676.85	1.39 S	12.67 E	0.94	0.29
771.00	0.97	86.96	770.84	1.23 S	14.03 E	0.73	0.30
866.00	0.99	77.20	865.82	1.01 S	15.64 E	0.45	0.18
961.00	1.10	79.84	960.81	0.66 S	17.34 E	0.04	0.12
1056.00	0.64	211.84	1,055.80	0.96 S	17.95 E	0.31	1.69
1151.00	0.66	225.43	1,150.80	1.79 S	17.28 E	1.17	0.16
1247.00	0.53	246.53	1,246.79	2.36 S	16.48 E	1.77	0.26
1343.00	0.42	240.73	1,342.79	2.71 S	15.77 E	2.14	0.13
1438.00	0.20	284.90	1,437.79	2.83 S	15.31 E	2.28	0.33
1533.00	0.66	217.37	1,532.78	3.23 S	14.81 E	2.70	0.65
1628.00	1.10	210.73	1,627.77	4.45 S	14.01 E	3.95	0.48
1723.00	0.99	198.69	1,722.76	6.01 S	13.29 E	5.53	0.26
1818.00	0.57	201.61	1,817.75	7.22 S	12.85 E	6.76	0.45
1913.00	0.42	194.06	1,912.74	8.00 S	12.59 E	7.54	0.17
2008.00	0.40	190.49	2,007.74	8.66 S	12.45 E	8.21	0.03
2103.00	0.47	202.59	2,102.74	9.35 S	12.24 E	8.91	0.12
2220.00	0.28	160.15	2,219.74	10.06 S	12.15 E	9.62	0.28
2315.00	2.01	149.96	2,314.71	11.72 S	13.06 E	11.24	1.83
2411.00	3.63	143.57	2,410.60	15.62 S	15.71 E	15.05	1.71
2507.00	4.09	140.53	2,506.38	20.71 S	19.69 E	20.00	0.53
2602.00	3.74	138.67	2,601.16	25.66 S	23.89 E	24.79	0.40
2697.00	4.63	146.04	2,695.90	31.16 S	28.08 E	30.14	1.09
2793.00	5.93	144.63	2,791.49	38.42 S	33.12 E	37.21	1.36
2888.00	8.11	138.77	2,885.78	47.46 S	40.37 E	45.99	2.41
2984.00	10.06	137.66	2,980.57	58.76 S	50.49 E	56.91	2.04
3079.00	11.93	139.46	3,073.82	72.35 S	62.46 E	70.07	1.99
3174.00	12.88	138.65	3,166.60	87.76 S	75.83 E	84.99	1.02
3269.00	14.76	138.87	3,258.85	104.82 S	90.79 E	101.51	1.98
3364.00	15.26	138.46	3,350.60	123.30 S	107.04 E	119.39	0.54
3459.00	15.99	138.76	3,442.09	142.50 S	123.96 E	137.97	0.77
3554.00	16.66	139.53	3,533.26	162.70 S	141.42 E	157.53	0.74
3650.00	16.86	139.48	3,625.18	183.75 S	159.40 E	177.93	0.21
3745.00	16.79	139.17	3,716.12	204.60 S	177.32 E	198.13	0.12
3841.00	16.39	139.33	3,808.12	225.37 S	195.21 E	218.24	0.41
3936.00	16.45	138.56	3,899.25	245.62 S	212.85 E	237.85	0.24

DIRECTIONAL SURVEY DATA

Measured Depth (ft)	Inclination (deg)	Direction (deg)	Vertical Depth (ft)	Latitude (ft)	Departure (ft)	Vertical Section (ft)	Decline (°/100')
4031.00	16.15	139.28	3,990.43	265.71 S	230.37 E	257.30	0.38
4126.00	15.56	138.73	4,081.81	285.31 S	247.40 E	276.27	0.64
4221.00	15.94	140.42	4,173.25	304.94 S	264.12 E	295.30	0.63
4317.00	16.51	143.00	4,265.42	325.99 S	280.72 E	315.74	0.95
4412.00	16.09	143.08	4,356.61	347.29 S	296.75 E	336.46	0.44
4507.00	16.41	141.70	4,447.81	368.35 S	312.98 E	356.92	0.53
4602.00	15.93	140.40	4,539.05	388.93 S	329.61 E	376.89	0.63
4698.00	15.70	138.66	4,631.42	408.83 S	346.59 E	396.17	0.55
4793.00	17.37	138.91	4,722.49	429.17 S	364.40 E	415.86	1.77
4889.00	17.72	139.35	4,814.02	451.06 S	383.34 E	437.06	0.38
4984.00	16.70	139.29	4,904.77	472.38 S	401.66 E	457.71	1.07
5079.00	15.04	140.00	4,996.14	492.17 S	418.48 E	476.88	1.76
5175.00	14.47	140.69	5,088.98	510.99 S	434.09 E	495.13	0.62
5270.00	13.17	139.94	5,181.22	528.46 S	448.57 E	512.07	1.38
5365.00	11.20	139.61	5,274.08	543.77 S	461.52 E	526.91	2.08
5460.00	9.19	139.21	5,367.57	556.54 S	472.45 E	539.29	2.11
5555.00	6.94	140.17	5,461.63	566.70 S	481.09 E	549.12	2.38
5650.00	5.88	142.43	5,556.03	574.96 S	487.73 E	557.14	1.15
5745.00	5.58	141.37	5,650.56	582.42 S	493.58 E	564.39	0.33
5840.00	4.54	141.17	5,745.19	588.95 S	498.82 E	570.73	1.10
5936.00	2.04	148.62	5,841.02	593.37 S	502.08 E	575.03	2.64
6032.00	0.69	78.84	5,937.00	594.71 S	503.54 E	576.32	1.99
6129.00	0.89	342.05	6,033.99	593.88 S	503.89 E	575.48	1.23
6225.00	1.01	301.60	6,129.98	592.73 S	502.94 E	574.36	0.69
6321.00	1.68	269.45	6,225.95	592.31 S	500.81 E	574.01	1.03
6417.00	2.30	255.61	6,321.90	592.80 S	497.54 E	574.62	0.82
6513.00	1.67	261.81	6,417.84	593.48 S	494.29 E	575.42	0.70
6609.00	1.01	336.07	6,513.82	592.91 S	492.56 E	574.91	1.77
6705.00	1.56	17.45	6,609.79	590.89 S	492.61 E	572.89	1.09
6798.00	0.67	288.51	6,702.78	589.51 S	492.48 E	571.52	1.81
6894.00	1.48	252.41	6,798.76	589.71 S	490.77 E	571.77	1.06
6990.00	0.68	294.45	6,894.75	589.85 S	489.07 E	571.98	1.12
7086.00	0.63	312.62	6,990.74	589.25 S	488.16 E	571.42	0.22
7181.00	0.81	295.92	7,085.73	588.61 S	487.17 E	570.80	0.29
7276.00	0.91	269.77	7,180.72	588.31 S	485.81 E	570.56	0.42
7372.00	1.12	263.69	7,276.71	588.42 S	484.12 E	570.73	0.25
7468.00	0.13	300.75	7,372.70	588.47 S	483.09 E	570.81	1.06
7563.00	0.13	357.89	7,467.70	588.30 S	482.99 E	570.65	0.13
7659.00	0.38	281.56	7,563.70	588.13 S	482.67 E	570.49	0.39
7755.00	0.26	316.95	7,659.70	587.91 S	482.21 E	570.28	0.24
7851.00	0.37	336.99	7,755.70	587.46 S	481.94 E	569.84	0.16
7947.00	0.90	84.71	7,851.69	587.10 S	482.56 E	569.46	1.12
8042.00	1.86	105.95	7,946.67	587.45 S	484.78 E	569.73	1.13
8139.00	1.37	113.52	8,043.63	588.35 S	487.36 E	570.54	0.55
8235.00	1.26	124.10	8,139.60	589.40 S	489.28 E	571.52	0.27

DIRECTIONAL SURVEY DATA

Measured Depth (ft)	Inclination (deg)	Direction (deg)	Vertical Depth (ft)	Latitude (ft)	Departure (ft)	Vertical Section (ft)	Dogleg (°/100')
8331.00	1.28	145.95	8,235.58	590.88 S	490.76 E	572.94	0.50
8427.00	1.12	152.38	8,331.56	592.60 S	491.79 E	574.63	0.21
8523.00	1.31	166.85	8,427.54	594.50 S	492.48 E	576.50	0.37
8619.00	1.18	161.42	8,523.51	596.51 S	493.05 E	578.49	0.18
8644.00	1.14	161.26	8,548.51	596.99 S	493.21 E	578.96	0.16
8713.00	1.49	178.00	8,617.49	598.54 S	493.46 E	580.50	0.75
8778.00	5.46	188.02	8,682.36	602.45 S	493.06 E	584.42	6.14
8810.00	8.37	181.59	8,714.12	606.28 S	492.78 E	588.27	9.41
8841.00	11.78	180.54	8,744.64	611.70 S	492.69 E	593.69	11.01
8872.00	15.03	177.52	8,774.79	618.89 S	492.83 E	600.86	10.72
8904.00	18.03	176.92	8,805.46	627.98 S	493.28 E	609.93	9.39
8936.00	21.27	175.58	8,835.60	638.71 S	493.99 E	620.63	10.22
8968.00	25.31	176.46	8,864.98	651.33 S	494.86 E	633.21	12.68
9000.00	28.36	176.93	8,893.53	665.75 S	495.69 E	647.60	9.55
9032.00	31.82	177.69	8,921.22	681.78 S	496.44 E	663.58	10.86
9064.00	35.33	178.92	8,947.88	699.46 S	496.95 E	681.24	11.19
9096.00	39.11	180.36	8,973.35	718.81 S	497.06 E	700.57	12.13
9127.00	42.45	181.21	8,996.82	739.06 S	496.78 E	720.81	10.91
9159.00	46.32	181.56	9,019.69	761.43 S	496.24 E	743.19	12.11
9191.00	50.21	182.27	9,040.99	785.29 S	495.44 E	767.06	12.26
9223.00	54.14	181.38	9,060.61	810.55 S	494.64 E	792.33	12.49
9255.00	58.62	181.38	9,078.32	837.18 S	493.99 E	818.97	14.01
9287.00	63.28	181.56	9,093.85	865.14 S	493.28 E	846.94	14.56
9319.00	66.88	182.61	9,107.33	894.14 S	492.22 E	875.96	11.65
9350.00	71.23	183.07	9,118.41	923.04 S	490.78 E	904.90	14.08
9382.00	75.59	182.96	9,127.55	953.66 S	489.17 E	935.55	13.62
9423.00	81.45	182.25	9,135.71	993.78 S	487.34 E	975.71	14.41
9478.00	81.45	182.25	9,143.88	1,048.13 S	485.21 E	1030.10	0.01

SURVEY FOOTER

SURVEYS CALCULATED USING SHORT COLLAR METHOD
 TIE-ON SURVEY ASSUMED VERTICAL AT SURFACE
 SURVEYS FROM 154' MD TO 9423' MD PROVIDED BY SPERRY DRILLING SERVICES
 SURVEY AT 9423' MD IS A PROJECTED TD AT 9478' MD
 SPERRY ENGINEERS: S. OLOWO, K. STOLARSKI, JJ PETERS

DIRECTIONAL SURVEY DATA NOTES

- Calculation based on minimum curvature method
- Survey coordinates relative to well system reference point
- TVD values given relative to drilling measurement point
- Vertical section relative to well head
- Vertical section is computed along a direction of 182.05 degrees (Grid)
- A total correction of 9.47 deg from Magnetic north to Grid north has been applied
- Horizontal displacement is relative to the well head
- Horizontal displacement (closure) at 9,478.00 feet is 1,154.99 feet along 155.16 degrees (Grid)

WARRANTY

HALLIBURTON ENERGY SERVICES, INC. WILL USE ITS BEST EFFORTS TO FURNISH CUSTOMERS WITH ACCURATE INFORMATION AND INTERPRETATIONS THAT ARE PART OF, AND INCIDENT TO, THE SERVICES PROVIDED. HOWEVER, HALLIBURTON ENERGY SERVICES, INC. CANNOT AND DOES NOT WARRANT THE ACCURACY OR CORRECTNESS OF SUCH INFORMATION AND INTERPRETATIONS. UNDER NO CIRCUMSTANCES SHOULD ANY SUCH INFORMATION OR INTERPRETATION BE RELIED UPON AS THE SOLE BASIS FOR ANY DRILLING, COMPLETION, PRODUCTION, OR FINANCIAL DECISION OR ANY PROCEDURE INVOLVING ANY RISK TO THE SAFETY OF ANY DRILLING VENTURE, DRILLING RIG OR ITS CREW OR ANY THIRD PARTY. THE CUSTOMER HAS FULL RESPONSIBILITY FOR ALL DRILLING, COMPLETION, AND PRODUCTION OPERATION. HALLIBURTON ENERGY SERVICES, INC. MAKES NO REPRESENTATIONS OR WARRANTIES, EITHER EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, WITH RESPECT TO THE SERVICES RENDERED. IN NO EVENT WILL HALLIBURTON ENERGY SERVICES, INC. SERVICES BE LIABLE FOR FAILURE TO OBTAIN ANY PARTICULAR RESULTS OR FOR ANY DAMAGES, INCLUDING, BUT NOT LIMITED TO, INDIRECT, SPECIAL OR CONSEQUENTIAL DAMAGES, RESULTING FROM THE USE OF ANY INFORMATION OR INTERPRETATION PROVIDED BY HALLIBURTON ENERGY SERVICES, INC.

HALLIBURTON Sperry Drilling

SPERRY DRILLING / HALLIBURTON
3950 INTERWOOD SOUTH PARKWAY
HOUSTON, TEXAS 77032-3346

PHONE 281-986-4400
FAX 281-986-4498

Reservoir Development

PathFinder, a Schlumberger Company
9200 West Reno Avenue
Oklahoma City, Oklahoma 73127 USA
Phone: (405) 789-1515
Fax: (405) 789-1519

PATHFINDER
A Schlumberger Company

December 8, 2015

Railroad Commission of Texas
Oil and Gas Division
PO Box 12967
Capital Station
Austin, Texas 78711

Attention: Pam Johns

Re:

CLIENT: Capitan Energy Incorporated
WELL: State Mattie 2 #1H
FIELD: Ford, West (Wolfcamp)
RIG: McVay 1
COUNTY: Culberson
API NO: 42-109-32894
JOB NO: 15MLD2654

Enclosed, please find the original copy of the survey performed on the referenced well by PathFinder, a division of Schlumberger Technology Corporation (P-5 No. 754900). Other information required by your office is as follows.

<u>Name & Title of Surveyor</u>	<u>Drainhole Number</u>	<u>Surveyed Depths</u>	<u>Dates Performed</u>	<u>Type of Survey</u>
Kasin Luu FE	State Mattie 2 #1H Original Hole	9525.00 Ft to 14119.00 Ft	November 9, 2015 to November 13, 2015	SlimPulse

A plat of the bottom hole location is oriented both to the surface location and to the lease lines (or until line in case of pooling), is attached to the survey report.

If any other information is required, please contact the undersigned at the above letterhead and phone number.
Sincerely,

Qun Xu
Field Service Manager

CC: Capitan Energy Incorporated
Enclosures: [2]
County of Culberson
State of Texas

Capitan State Mattie 2 #1H MWD 0ft to Update Survey Report

(Non-Def Survey)

Report Date: November 13, 2015 - 12:46 PM
 Client: Capitan Energy Incorporated
 Field: TX Culberson County (NAD 83)
 Structure / Slot: Capitan State Mattie 2 #1H / Capitan State Mattie 2 #1H
 Well: State Mattie 2 #1H
 Borehole: Original Borehole
 UWI / API#: Unknown / 42-109-32894
 Survey Name: Capitan State Mattie 2 #1H MWD 0ft to Update
 Survey Date: November 07, 2015
 Tort / AHD / DDI / ERD Ratio: 235.901' / 5972.678 ft / 6.339 / 0.653
 Coordinate Reference System: NAD83 Texas State Plane, Central Zone, US Feet
 Location Lat / Long: N 31° 45' 37.42996", W 104° 8' 5.99905"
 Location Grid N/E Y/X: N 10624199.180 NUS, E 1115216.670 NUS
 CRS Grid Convergence Angle: -1.9581°
 Grid Scale Factor: 0.99996929
 Version / Patch: 2.8.551.0

Survey / DLS Computation: Minimum Curvature / Lubinski
 Vertical Section Azimuth: 176.717° (Grid North)
 Vertical Section Origin: 0.000 ft, 0.000 ft
 TVD Reference Datum: KB
 TVD Reference Elevation: 3387.000 ft above MSL
 Seabed / Ground Elevation: 3347.000 ft above MSL
 Magnetic Declination: 7.506°
 Total Gravity Field Strength: 998.4048mgm (9.80865 Based)
 Gravity Model: GARM
 Total Magnetic Field Strength: 47822.707 nT
 Magnetic Dip Angle: 59.580°
 Declination Date: November 07, 2015
 Magnetic Declination Model: BGGM 2015
 North Reference: Grid North
 Grid Convergence Used: -1.9581°
 Total Corr Mag North->Grid: 9.4637°
 North:
 Local Coord Referenced To: Structure Reference Point

Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	VSEC (ft)	NS (N/S ft)	EW (E/W ft)	Closure (ft)	Closure Azimuth (°)	DLS (°/100ft)	TF (°)
SHL State Mattie 2 #1H	0.00	0.00	0.00	0.00	0.00	N 0.00	E 0.00	0.00	0.00	N/A	90.38M
	154.00	1.57	90.36	153.98	0.13	S 0.01	E 2.11	2.11	90.36	1.02	96.32M
	212.00	1.83	96.32	211.96	0.34	S 0.12	E 3.82	3.83	91.80	0.54	99.54M
	307.00	2.08	99.54	306.90	0.97	S 0.57	E 7.03	7.06	94.66	0.29	101.46M
	397.00	0.80	101.46	396.87	1.50	S 0.97	E 9.26	9.31	95.97	1.42	104.4M
	488.00	0.57	104.40	487.86	1.80	S 1.21	E 10.32	10.39	96.87	0.26	97.83M
	582.00	0.81	97.83	581.86	2.07	S 1.41	E 11.43	11.52	97.05	0.27	78.72M
	677.00	0.71	78.72	676.85	2.11	S 1.39	E 12.67	12.75	96.26	0.29	86.98M
	771.00	0.97	86.96	770.84	2.04	S 1.23	E 14.04	14.09	95.02	0.30	77.2M
	866.00	0.99	77.20	865.82	1.90	S 1.01	E 15.64	15.68	93.69	0.18	79.84M
	961.00	1.10	79.84	960.81	1.66	S 0.67	E 17.34	17.35	92.20	0.13	211.84M
	1056.00	0.64	211.84	1055.80	1.98	S 0.96	E 17.98	17.98	93.05	1.68	225.43M
	1151.00	0.66	225.43	1150.80	2.78	S 1.79	E 17.29	17.38	95.92	0.16	246.53M
	1247.00	0.53	246.53	1246.79	3.30	S 2.36	E 16.49	16.66	98.13	0.28	240.73M
	1343.00	0.42	240.73	1342.79	3.60	S 2.71	E 15.77	16.00	99.73	0.12	284.9M
	1438.00	0.20	284.90	1437.79	3.71	S 2.83	E 15.31	15.57	100.48	0.33	217.37M
	1533.00	0.66	217.37	1532.78	4.07	S 3.23	E 14.82	15.16	102.28	0.64	210.73M
	1628.00	1.10	210.73	1627.77	5.24	S 4.44	E 14.02	14.71	107.59	0.47	198.89M
	1723.00	0.99	198.89	1722.76	6.78	S 6.01	E 13.29	14.58	114.32	0.26	201.61M
	1818.00	0.57	201.61	1817.75	7.95	S 7.22	E 12.85	14.74	119.33	0.44	194.06M
	1913.00	0.42	194.06	1912.74	8.71	S 8.00	E 12.59	14.92	122.42	0.17	190.49M
	2008.00	0.40	190.49	2007.74	9.36	S 8.66	E 12.45	15.17	124.83	0.03	202.59M
	2103.00	0.47	202.59	2102.74	10.03	S 9.35	E 12.24	15.40	127.37	0.12	160.15M
	2220.00	0.28	160.15	2219.74	10.74	S 10.06	E 12.15	15.78	129.62	0.28	149.96M
	2315.00	2.01	149.96	2314.71	12.45	S 11.72	E 13.06	17.55	131.90	1.83	143.57M
	2411.00	3.83	143.57	2410.60	16.50	S 15.62	E 15.71	22.16	134.84	1.72	140.53M
	2507.00	4.09	140.53	2506.38	21.81	S 20.71	E 19.69	28.58	136.44	0.52	138.67M
	2602.00	3.74	138.67	2601.16	26.98	S 25.65	E 23.89	35.06	137.04	0.39	146.04M
	2697.00	4.83	146.04	2695.90	32.72	S 31.16	E 28.08	41.95	137.98	1.09	144.63M
	2793.00	5.93	144.63	2791.49	40.25	S 38.42	E 33.12	50.72	139.24	1.36	138.77M
	2888.00	8.11	138.77	2885.78	49.70	S 47.46	E 40.37	62.31	139.61	2.41	5.68L
	2984.00	10.06	137.66	2980.57	61.55	S 58.75	E 50.49	77.46	139.33	2.04	11.29R
	3079.00	11.93	139.46	3073.82	75.81	S 72.35	E 62.46	95.58	139.20	2.00	10.78L
	3174.00	12.88	138.65	3168.60	91.96	S 87.76	E 75.84	115.99	139.17	1.02	1.71R
	3269.00	14.76	138.87	3258.85	109.85	S 104.82	E 90.79	138.68	139.10	1.98	12.19L
	3364.00	15.26	138.46	3350.60	129.23	S 123.30	E 107.04	163.28	139.04	0.54	6.46R
	3459.00	15.99	138.76	3442.09	149.36	S 142.49	E 123.96	188.87	138.98	0.77	18.27R
	3554.00	16.86	139.53	3533.26	170.53	S 162.69	E 141.42	215.57	139.00	0.74	4.15L
	3650.00	16.86	139.48	3625.18	192.57	S 183.75	E 159.40	243.25	139.06	0.21	128.11L
	3745.00	16.79	139.17	3716.12	214.42	S 204.60	E 177.32	270.75	139.09	0.12	173.56R
	3841.00	16.39	139.33	3808.12	236.17	S 225.37	E 195.22	298.16	139.10	0.42	74.96L
	3936.00	16.45	138.56	3899.25	257.40	S 245.61	E 212.85	325.01	139.09	0.24	148.38R
	4031.00	16.15	139.28	3990.43	278.47	S 265.71	E 230.37	351.67	139.07	0.38	165.98L
	4126.00	15.56	138.73	4081.81	299.00	S 285.30	E 247.40	377.63	139.07	0.64	51.18R
	4221.00	15.94	140.42	4173.25	319.56	S 304.93	E 264.11	403.41	139.10	0.63	52.91R
	4317.00	16.51	143.00	4265.43	341.53	S 325.99	E 280.72	430.20	139.27	0.96	176.98R
	4412.00	16.09	143.08	4356.61	363.72	S 347.29	E 296.75	456.81	139.49	0.44	51.02L
	4507.00	16.41	141.70	4447.81	385.67	S 368.35	E 312.98	483.36	139.65	0.53	143.6L
	4602.00	15.93	140.40	4539.05	407.16	S 388.93	E 329.61	509.81	139.72	0.63	116.71L
	4698.00	15.70	138.66	4631.42	428.01	S 408.83	E 346.58	535.97	139.71	0.55	2.56R
	4793.00	17.37	138.91	4722.49	449.33	S 429.17	E 364.40	563.00	139.67	1.76	20.97R
	4889.00	17.72	139.35	4814.02	472.27	S 451.05	E 383.33	591.94	139.64	0.39	179.03L
	4984.00	16.70	139.29	4904.77	494.60	S 472.37	E 401.65	620.05	139.63	1.07	173.67R
	5079.00	15.04	140.00	4996.14	515.32	S 492.16	E 418.48	646.02	139.63	1.76	163.2R
	5175.00	14.47	140.69	5088.98	535.00	S 510.98	E 434.08	670.47	139.65	0.62	172.52L
	5270.00	13.17	139.94	5181.23	553.27	S 528.45	E 448.57	693.16	139.67	1.38	178.14L

Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	VSEC (ft)	NS (N/S ft)	EW (E/W ft)	Closure (ft)	Closure Azimuth (°)	DLS (°/100ft)	TF (°)
	5365.00	11.20	139.61	5274.08	569.30	S 543.76	E 461.51	713.21	139.68	2.07	178.18L
	5480.00	9.19	139.21	5367.58	562.68	S 556.53	E 472.45	730.03	139.67	2.12	177.05R
	5555.00	8.94	140.17	5461.63	593.31	S 568.68	E 481.08	743.35	139.67	2.37	142.43M
	5650.00	5.88	142.43	5556.03	601.94	S 574.95	E 487.73	753.95	139.69	1.15	141.37M
	5745.00	5.58	141.37	5650.56	609.72	S 582.41	E 493.58	763.43	139.72	0.33	141.17M
	5840.00	4.54	141.17	5745.19	616.55	S 588.95	E 498.82	771.81	139.74	1.09	148.62M
	5936.00	2.04	148.62	5841.02	621.15	S 593.37	E 502.09	777.29	139.76	2.64	78.84M
	6032.00	0.69	78.84	5937.00	622.58	S 594.72	E 503.55	779.26	139.75	1.99	342.05M
	6129.00	0.89	342.05	6033.99	621.77	S 593.89	E 503.89	778.85	139.69	1.23	301.6M
	6225.00	1.01	301.60	6129.98	620.57	S 592.74	E 502.94	777.36	139.69	0.89	269.45M
	6321.00	1.68	269.45	6225.95	620.01	S 592.31	E 500.81	775.65	139.78	1.03	255.61M
	6417.00	2.30	255.61	6321.90	620.32	S 592.80	E 497.54	773.92	139.98	0.81	261.61M
	6513.00	1.67	261.61	6417.84	620.81	S 593.48	E 494.29	772.36	140.21	0.89	336.07M
	6609.00	1.01	336.07	6513.82	620.14	S 592.90	E 492.56	770.81	140.28	1.77	17.45M
	6705.00	1.56	17.45	6609.80	618.12	S 590.88	E 492.61	769.29	140.18	1.09	288.51M
	6798.00	0.67	288.51	6702.78	616.74	S 589.50	E 492.47	768.14	140.12	1.81	252.41M
	6894.00	1.48	252.41	6798.76	616.84	S 589.70	E 490.76	767.19	140.23	1.08	294.45M
	6990.00	0.68	294.45	6894.75	616.88	S 589.84	E 489.06	766.21	140.34	1.12	312.62M
	7086.00	0.63	312.62	6990.74	616.23	S 589.24	E 488.15	765.18	140.36	0.22	295.92M
	7181.00	0.81	295.92	7085.73	615.53	S 588.60	E 487.16	764.05	140.39	0.29	269.77M
	7276.00	0.91	269.77	7180.72	615.16	S 588.31	E 485.80	762.96	140.45	0.42	262.69M
	7372.00	1.12	263.69	7276.71	615.17	S 588.41	E 484.11	761.96	140.55	0.25	300.75M
	7468.00	0.13	300.75	7372.70	615.16	S 588.46	E 483.08	761.35	140.62	1.08	357.89M
	7563.00	0.13	357.89	7467.70	614.99	S 588.30	E 482.98	761.16	140.61	0.13	281.56M
	7659.00	0.38	281.56	7563.70	614.80	S 588.12	E 482.67	760.83	140.62	0.39	316.95M
	7755.00	0.26	316.95	7659.70	614.55	S 587.90	E 482.21	760.38	140.64	0.24	336.99M
	7851.00	0.37	336.99	7755.70	614.09	S 587.46	E 481.94	759.85	140.84	0.16	84.71M
	7947.00	0.90	84.71	7851.69	613.77	S 587.10	E 482.57	759.97	140.58	1.12	105.95M
	8042.00	1.86	105.95	7946.67	614.26	S 587.46	E 484.79	761.66	140.47	1.13	113.52M
	8139.00	1.37	113.52	8043.63	615.30	S 588.35	E 487.37	764.00	140.36	0.55	124.1M
	8235.00	1.26	124.10	8139.60	616.46	S 589.40	E 489.30	766.03	140.30	0.28	145.95M
	8331.00	1.28	145.95	8235.58	618.02	S 590.88	E 490.77	768.11	140.29	0.50	152.38M
	8427.00	1.12	152.38	8331.56	619.79	S 592.60	E 491.81	770.10	140.31	0.22	166.85M
	8523.00	1.31	166.85	8427.54	621.73	S 594.50	E 492.49	772.00	140.35	0.37	161.42M
	8619.00	1.18	161.42	8523.51	623.76	S 596.51	E 493.06	773.90	140.42	0.18	161.28M
	8644.00	1.14	161.28	8548.51	624.25	S 596.99	E 493.22	774.38	140.44	0.16	178M
	8713.00	1.49	178.00	8617.49	625.81	S 598.53	E 493.47	775.73	140.50	0.75	188.02M
	8778.00	5.46	188.02	8682.36	629.69	S 602.44	E 493.07	778.49	140.70	6.16	181.59M
	8810.00	8.37	181.59	8714.12	633.50	S 606.28	E 492.79	781.29	140.90	9.40	3.6L
	8841.00	11.78	180.54	8744.64	638.91	S 611.70	E 492.70	785.45	141.15	11.02	13.63L
	8872.00	15.03	177.52	8774.79	646.09	S 618.88	E 492.84	791.14	141.47	10.72	3.54L
	8904.00	18.03	176.92	8805.47	655.19	S 627.97	E 493.29	798.55	141.85	9.39	8.55L
	8938.00	21.27	175.58	8835.60	665.95	S 638.71	E 494.00	807.46	142.28	10.22	5.33R
	8968.00	25.31	176.46	8864.99	676.60	S 651.33	E 494.87	818.00	142.77	12.67	4.19R
	9000.00	28.36	176.93	8893.54	693.04	S 665.75	E 495.70	830.02	143.33	9.55	6.61R
	9032.00	31.82	177.69	8921.22	709.08	S 681.77	E 496.45	843.37	143.94	10.88	11.48R
	9064.00	35.33	178.92	8947.88	726.77	S 699.46	E 496.96	858.03	144.61	11.17	13.55R
	9096.00	39.11	180.36	8973.36	746.10	S 718.81	E 497.07	873.94	145.34	12.12	9.76R
	9127.00	42.45	181.21	8996.83	766.29	S 739.05	E 496.79	890.50	146.09	10.92	3.75R
	9159.00	46.32	181.56	9019.69	788.59	S 761.42	E 496.25	908.86	146.91	12.12	7.99R
	9191.00	50.21	182.27	9040.99	812.37	S 785.28	E 495.45	928.51	147.75	12.27	10.42L
	9223.00	54.14	181.38	9060.61	837.54	S 810.54	E 494.65	949.56	148.61	12.48	HS
	9255.00	58.62	181.38	9078.32	864.09	S 837.18	E 494.00	972.06	149.46	14.00	1.98R
	9287.00	63.28	181.56	9093.86	891.96	S 865.13	E 493.29	995.88	150.31	14.57	15.04R
	9319.00	66.88	182.81	9107.34	920.85	S 894.13	E 492.23	1020.66	151.17	11.64	5.72R
	9350.00	71.23	183.07	9118.42	949.63	S 923.04	E 490.79	1045.41	152.00	14.10	1.4L
	9382.00	75.59	182.96	9127.55	980.11	S 953.66	E 489.18	1071.80	152.84	13.63	6.85L
	9423.00	81.45	182.25	9135.71	1020.06	S 993.78	E 487.38	1106.85	153.88	14.39	7.75L
First SLB Survey	9525.00	88.59	181.28	9144.56	1121.21	S 1095.28	E 484.23	1197.54	156.15	7.06	45.89R
	9620.00	89.41	182.12	9146.21	1215.84	S 1190.22	E 481.41	1283.89	157.98	1.24	18.26L
	9715.00	90.38	181.80	9146.39	1310.44	S 1285.16	E 478.17	1371.23	159.59	1.08	132.67R
	9809.00	89.79	182.44	9146.25	1404.02	S 1379.10	E 474.69	1458.50	161.01	0.93	52.37R
	9904.00	91.00	184.01	9145.59	1498.40	S 1473.94	E 469.34	1546.86	162.34	2.09	93.58L
	9999.00	90.89	182.26	9144.03	1592.79	S 1568.78	E 464.15	1636.00	163.52	1.85	120.4L
	10094.00	90.45	181.51	9142.92	1687.39	S 1683.72	E 461.03	1726.42	164.51	0.92	71.22R
	10188.00	90.62	182.01	9142.04	1781.02	S 1757.67	E 458.14	1816.40	165.39	0.56	114.64R
	10283.00	89.62	184.19	9141.84	1875.43	S 1852.53	E 453.00	1907.11	166.26	2.52	12.66L
	10378.00	90.89	183.90	9141.42	1969.65	S 1947.29	E 446.30	1997.78	167.09	1.37	95.84L
	10472.00	90.72	182.24	9140.10	2063.06	S 2041.14	E 441.27	2088.29	167.80	1.78	99.65L
	10567.00	90.48	180.83	9139.10	2157.72	S 2136.10	E 438.72	2180.69	168.39	1.51	76.25R
	10662.00	90.93	182.67	9137.93	2252.34	S 2231.04	E 435.82	2273.21	168.95	1.99	98.17R
	10757.00	90.69	184.34	9136.59	2346.66	S 2325.85	E 430.01	2365.27	169.53	1.78	94.44L
	10851.00	90.45	181.26	9135.65	2440.11	S 2419.72	E 425.42	2456.84	170.03	3.29	106.16L
	10947.00	89.21	176.98	9135.94	2536.01	S 2515.69	E 426.90	2551.65	170.37	4.64	96.96L
	11041.00	89.11	176.16	9137.32	2629.99	S 2609.51	E 432.52	2645.11	170.59	0.88	100.98R
	11136.00	88.93	177.09	9138.94	2724.98	S 2704.33	E 438.11	2739.59	170.80	1.00	48.09L
	11231.00	89.28	176.70	9140.43	2819.97	S 2799.18	E 443.26	2834.05	171.00	0.55	88.34R
	11326.00	89.35	179.10	9141.56	2914.93	S 2894.10	E 446.74	2928.38	171.22	2.53	165.55R
	11421.00	87.76	179.51	9143.96	3009.80	S 2989.06	E 447.89	3022.43	171.48	1.73	30.55R
	11516.00	89.93	180.79	9145.87	3104.61	S 3084.03	E 447.64	3116.35	171.74	2.65	60.81R
	11611.00	91.17	183.01	9144.96	3199.20	S 3178.97	E 444.49	3209.89	172.04	2.68	89.01R

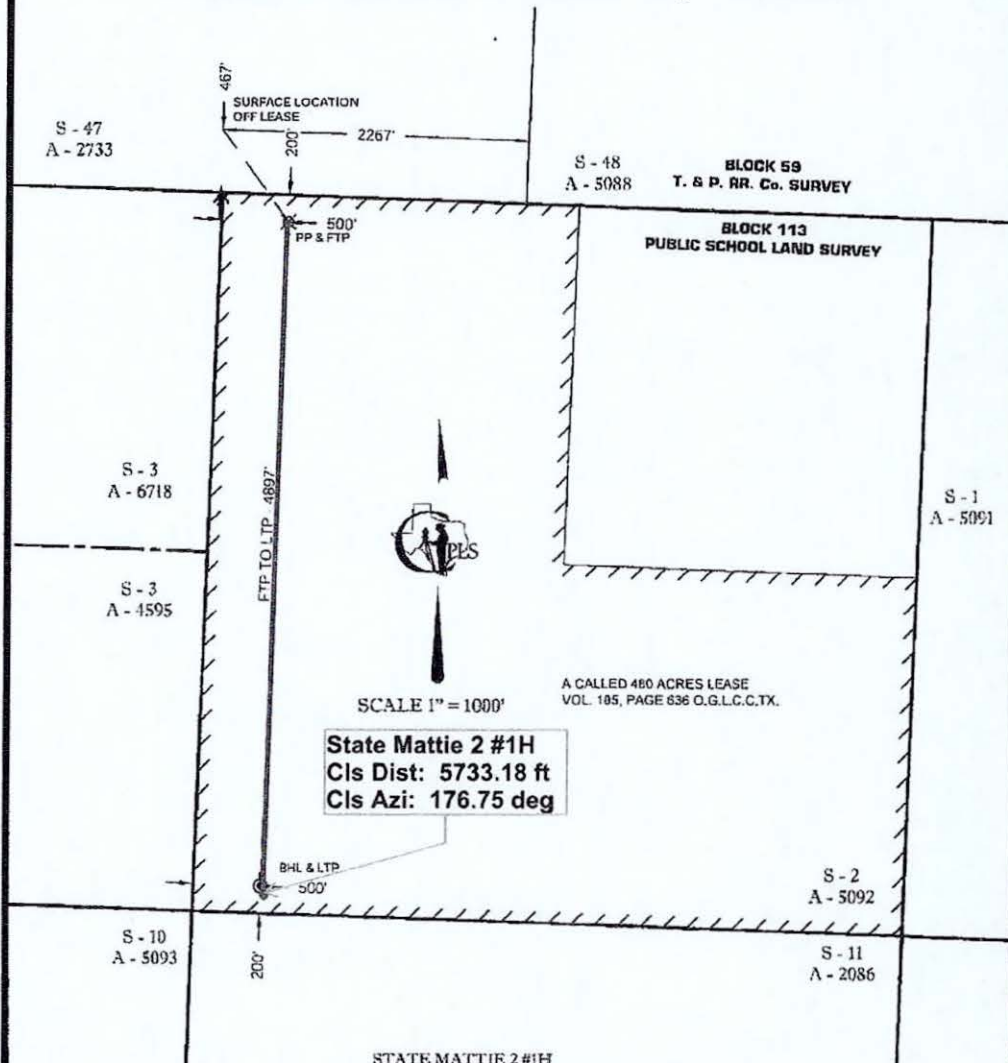
Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	VSEC (ft)	NS (N/S ft)	EW (E/W ft)	Closure (ft)	Closure Azimuth (°)	DLS ("/100ft)	TF (°)
	11705.00	91.20	184.77	9143.02	3292.45	S 3272.73	E 438.12	3301.92	172.38	1.87	173.29L
	11800.00	91.03	184.75	9141.17	3386.49	S 3367.38	E 430.23	3394.75	172.72	0.18	92.45R
	11895.00	91.00	185.45	9139.48	3480.46	S 3461.99	E 421.79	3487.59	173.05	0.74	64.53R
	11990.00	91.10	185.66	9137.74	3574.32	S 3556.53	E 412.60	3580.38	173.38	0.24	104.63L
	12085.00	90.52	183.44	9136.40	3668.42	S 3651.21	E 405.06	3673.61	173.67	2.42	102.66L
	12180.00	89.76	180.06	9136.17	3763.04	S 3746.15	E 402.16	3767.68	173.87	3.65	96.09R
	12274.00	89.52	182.31	9136.76	3856.74	S 3840.13	E 400.22	3860.92	174.05	2.41	41.42L
	12369.00	89.86	182.01	9137.27	3951.31	S 3935.06	E 396.64	3955.00	174.24	0.48	81.93L
	12464.00	90.07	180.53	9137.33	4046.01	S 4030.03	E 394.53	4049.30	174.41	1.57	106.01R
	12558.00	89.35	183.04	9137.81	4139.63	S 4123.98	E 391.60	4142.53	174.58	2.78	71.95R
	12653.00	90.10	185.34	9138.26	4233.82	S 4218.71	E 384.66	4236.21	174.79	2.55	96.55R
	12748.00	90.03	185.95	9138.16	4327.67	S 4313.25	E 375.32	4329.55	175.03	0.65	86.13L
	12843.00	90.17	183.88	9137.99	4421.69	S 4407.90	E 367.18	4423.16	175.24	2.18	116.27L
	12937.00	89.79	183.11	9138.02	4515.03	S 4501.72	E 361.45	4516.21	175.41	0.91	79.9R
	13032.00	89.97	184.12	9138.22	4609.34	S 4596.53	E 355.46	4610.25	175.58	1.08	100.71L
	13127.00	89.66	182.48	9138.53	4703.71	S 4691.37	E 349.99	4704.41	175.73	1.76	88.87L
	13222.00	89.89	180.96	9139.07	4798.35	S 4786.32	E 347.14	4798.89	175.85	1.60	90R
	13317.00	89.69	181.19	9139.58	4893.07	S 4881.30	E 345.36	4893.51	175.95	0.24	100.18R
	13412.00	89.48	182.36	9140.27	4987.70	S 4976.25	E 342.41	4988.02	176.06	1.25	64.34L
	13507.00	89.97	181.34	9140.73	5082.31	S 5071.20	E 339.35	5082.54	176.17	1.19	97.52R
	13602.00	89.83	182.40	9140.89	5176.93	S 5166.15	E 336.25	5177.08	176.28	1.13	90L
	13697.00	89.83	181.87	9141.17	5271.50	S 5261.08	E 332.71	5271.59	176.38	0.56	110.21L
	13792.00	88.69	178.77	9142.40	5366.29	S 5356.06	E 332.18	5366.35	176.45	3.48	80.34R
	13887.00	89.31	182.40	9144.06	5461.05	S 5451.03	E 331.21	5461.08	176.52	3.88	73.81L
	13981.00	89.83	180.61	9144.76	5554.71	S 5544.98	E 328.74	5554.72	176.61	1.98	109.59R
	14076.00	89.62	181.20	9145.22	5649.46	S 5639.97	E 327.24	5649.46	176.68	0.66	135R
	14119.00	89.45	181.37	9145.57	5692.32	S 5682.96	E 326.27	5692.32	176.71	0.56	HS
Prj To TD	14160.00	89.45	181.37	9145.96	5733.18	S 5723.95	E 325.29	5733.18	176.75	0.00	

Survey Type: Non-Def Survey

Survey Error Model: ISCWSA Rev 0 *** 3-D 95.000% Confidence 2.7955 sigma
Survey Program:

Description	Part	MD From (ft)	MD To (ft)	EOU Freq (ft)	Hole Size (in)	Casing Diameter (in)	Survey Tool Type	Borehole / Survey
	1	0.000	20.000	1/98.425	30.000	30.000	SLB_MWD-STD-Depth Only	Original Borehole / Capitan State
	1	20.000	20.000	Act Stns	30.000	30.000	SLB_MWD-STD-Depth Only	Mattie 2 #1H MWD 0ft to Update
	1	20.000	14160.000	Act Stns	30.000	30.000	SLB_MWD-STD	Original Borehole / Capitan State
								Mattie 2 #1H MWD 0ft to Update
								Original Borehole / Capitan State
								Mattie 2 #1H MWD 0ft to Update

CULBERSON COUNTY, TEXAS



State Mattie 2 #1H
 CIs Dist: 5733.18 ft
 CIs Azi: 176.75 deg

A CALLED 480 ACRES LEASE
 VOL. 185, PAGE 636 O.G.L.C.TX.

STATE MATTIE 2 #1H
FORD, WEST (WOLF CAMP)

Description	Northing	Easting	Elevation	Latitude (DMS)	Longitude (DMS)
SL	10624199.18	1115216.67	3347	31°45'37.44"	-104°08'05.65"
PP & FTP	10623514.74	1115712.21		31°45'30.83"	-104°07'59.99"
BHL & LTP	10618621.29	1115536.67		31°44'42.37"	-104°08'00.09"

PERMIT PLAT
 STATE OF TEXAS
 COUNTY OF CULBERSON
 APPROX. 48 MILES NNE FROM KENT, TX

I hereby certify that the above and foregoing plat is true and correct to the best of my knowledge and represents an on the ground survey conducted in September of 2015.

Original signed and stamped in green ink
 DATE OF SIGNATURE September 29, 2015

ANTHONY RAY CROWLEY R.P.L.S. NO. 6484
 FOR CROWLEY PIPELINE & LAND SURVEYING, L.L.C.
 FRN 100465-00
 117 W. ARCHER
 JACKSBORO, TEXAS 76458
 (940) 587-2234 OFFICE
 (940) 567-2155 FAX



NOTES:
 1) BEARINGS AND DISTANCES ARE BASED ON U.S. STATE PLANE NAD 1983 COORDINATES, TEXAS CENTRAL ZONE - 4203
 2) SURVEY BASED UPON J. W. LUCHINI'S RECONSTRUCTION OF THE P. S. L. BLOCKS 45 & 109-115
 3) THIS SURVEY IS NOT TO BE CONSIDERED A BOUNDARY SURVEY



DRAWN BY: ARC
 DATE: September 15, 2015
 DWG. NO.: STATE MATTIE 2 #1H_R1.dwg
 BOOK NO.: FS
 TRACT NO.:
 PROJECT AFE:
 REVISION #1

CAPITAN
ENERGY INC

PROJECT: STATE MATTIE 2 #1H
 PLAT SHOWING THE STATE MATTIE 2 #1H IN SECTION 2, BLOCK 113 OF THE PUBLIC SCHOOL LAND SURVEY LOCATED IN CULBERSON COUNTY, TEXAS.

PAGE #:

1
OF
1

HALLIBURTON

3 950 Interwood South Parkway Houston, TX 77032
Phone: 281-986-4416 Fax: 281-986-4499

11-Nov-15

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

Company: Capitan Energy
RRC Operator #: 130061
Well Name: State Mattie 2 #1H
Drilling Permit #: 810754
Abstract #: 480
County: Culberson County, TX
API #: 42-109-32894-0000
Sperry DS Job #: 902830779

Final Survey for:

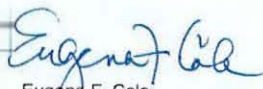
Dear Ms. Johns:

Enclosed you will find the original survey performed by Halliburton Energy Services, Inc. (AKA Sperry Drilling Services) on the above referenced well. In addition to the survey, I have included a certified plat on which the bottom hole location is oriented to both the surface location and the nearest lease line (or unit of lines in case of pooling) and a signed letter from the surveyor.

Other information required by your office is as follows:

Name & Title of Surveyor:	Sampson Olowo
Type of Survey:	MWD
Dates Performed:	10/24/2015 thru 11/7/2015
Drainhole Number:	Original
Surveyed Depths:	154 to 9423

Should you have any questions or require additional information, please do not hesitate to contact me @ 281-986-4416


Eugene F. Cole
Sperry Drilling Services

DRILLING PROGRAM STATE MATTIE 2 #1H

6.6 Drilling Permit

RAILROAD COMMISSION OF TEXAS
OIL & GAS DIVISION

PERMIT TO DRILL, DEEPEN, PLUG BACK, OR RE-ENTER ON A REGULAR OR ABANDONMENT EXCEPTED LOCATION

PERMIT NUMBER 810754	DATE PERMIT ISSUED OR AMENDED Sep 30, 2015	DISTRICT # 08
API NUMBER 42-109-32894	FORWARD RECEIVED Sep 29, 2015	COUNTY CULBERSON
TYPE OF OPERATION NEW DRILL	WELLBORE PROFILE Horizontal	ACRES 480
OPERATOR CAPITAN ENERGY, INCORPORATED PO BOX 2476 CARLSBAD, NM 88221-2476		NOTICE This permit will not be effective until signed by the Inspector of the Railroad Commission of Texas. If no signature is sent within 10 days, the permit will be void. Please call the District Office for more information. District Office Telephone No. (432) 654-5501
LEASE NAME STATE MATTIE 2	WELL NUMBER 1H	
LOCATION 48 miles NE direction from KEN	TOTAL DEPTH 10200	
Section, Township and Range SECTION 47 T25N R25E ARKANSAS 2733		
DISTANCE TO SURVEY LINES 467 ft S 2267 ft E		
DISTANCE TO NEAREST LEASE LINE 200 ft		
DISTANCE TO NEAREST WELL ON LEASE See FIELD DISTRICT		
FIELD NO. AND LIMITATIONS SEE FIELD DISTRICT FOR REPORTING PURPOSES		
FIELD NAME LEASE NAME	ACRES LEASED ACRES	WELL # LEASED WELLS
FORD, WEST (WOLF CAMP) STATE MATTIE 2	880.00 200	1H 08
WELLBORE PROFILE (FOR FIELD) Horizontal		
RESTRICTIONS This well shall be drilled and produced in compliance with applicable local, state or federal rules and regulations. If the well is to be used for underground storage of liquid hydrocarbons, or underground storage of gas, a permit for that specific purpose must be obtained from the Railroad Commission of Texas prior to construction, including drilling of the well in accordance with the rules and regulations of the Railroad Commission of Texas.		

Date of Address Transmittal: Sep 30, 2015 11:13 PM C:\Users\T\Documents\

Page 7 of 9

Figure 6-6: State Mattie 2 #1H Drilling Permit

6.5 Surface Plat



Figure 6-5: State Mattie 2 #1H Survey Plat

BHL

TVD. . . . 9,135.71
MD. . . . 9,423.00

STP

F Surfloc. . . . 493.78 S
487.34 E

SPERRY DRILLING JOB NO. 902830779
DATE SURVEYED 10-24-2015 TO 9423
SURVEYED FROM 154' TO 9423
TIE-ON COORDINATES FROM Surface
BHL AT 9,478.0 FT. (NG) = 1,151.49 FT.
AT 155.16 SE
FROM SURFACE LOCATION SE
= TO SE LEASE LINE

File No. MF112848

Culberson County

Completion Report API 42-109-32894

Date Filed: 9/19/19

George P. Bush, Commissioner

By Jm



Texas General Land Office

Reconciliation Billing

Commissioner Dawn Buckingham, M.D.

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

Capitan Energy, Incorporated
PO Box 2476
Carlsbad, NM 88221-2476

Billing Date: 3/25/2023
Billing Due Date: 4/24/2023
Customer Number: C000045321

Invoice	Mineral File	Gas Royalty	Oil Royalty	Penalty	Interest	Total Due
23I00875	MF112848	\$0.00	\$13,518.79	\$1,351.88	\$185.74	\$15,056.41
Total Due		\$0.00	\$13,518.79	\$1,351.88	\$185.74	\$15,056.41

Penalty and interest have been calculated thru 3/31/2023. Payment remitted after 3/31/2023 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

Capitan Energy, Incorporated

Billing Date: 3/25/2023

Billing Due Date: 4/24/2023

Customer Number: C000045321

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
23I00875	MF112848	\$0.00	\$13,518.79	\$1,351.88	\$185.74	\$15,056.41
Total Due		\$0.00	\$13,518.79	\$1,351.88	\$185.74	\$15,056.41
Amt. Paid						

Category Oil
Auditor/AE: ECortez
Billing Date: 3/22/2023
P&I Calculation Date: 3/31/2023
Royalty Rate: 12.50%

COMMENTS:	BILLING ON UNPAID OIL ROYALTIES TO THE GLO FOR RRC ID 08-279784
COLUMN (8)	ROYALTY DUE PER SUBMITTED GLO1 REPORTS
COLUMN (9)	ROYALTY PAID
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/rac/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.
ATTN:	Christy W. Logsdon
E-MAIL:	Christy_Logsdon@ncopa.com

File No. MF112848 11

County
Recon Billing

Date Filed: 3/28/2023
Commissioner Dawn Buckingham, M.D.

By: VD